

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-3000	2,739687E+21	2,739474E+21	7,856061E+18	7,857239E+18	5,479161E+21	1,571330E+19	5,494875E+21
-2999	2,739434E+21	2,739574E+21	7,857773E+18	7,858426E+18	5,479008E+21	1,571620E+19	5,494724E+21
-2998	2,739384E+21	2,739432E+21	7,862451E+18	7,862279E+18	5,478816E+21	1,572473E+19	5,494541E+21
-2997	2,739414E+21	2,739225E+21	7,855851E+18	7,857608E+18	5,478639E+21	1,571346E+19	5,494352E+21
-2996	2,739124E+21	2,739271E+21	7,862011E+18	7,859993E+18	5,478395E+21	1,572200E+19	5,494117E+21
-2995	2,739169E+21	2,739054E+21	7,860177E+18	7,862256E+18	5,478223E+21	1,572243E+19	5,493946E+21
-2994	2,739102E+21	2,739023E+21	7,857150E+18	7,857995E+18	5,478126E+21	1,571514E+19	5,493841E+21
-2993	2,738942E+21	2,739093E+21	7,862994E+18	7,863001E+18	5,478035E+21	1,572599E+19	5,493761E+21
-2992	2,739123E+21	2,738922E+21	7,857839E+18	7,861078E+18	5,478045E+21	1,571892E+19	5,493764E+21
-2991	2,739014E+21	2,739081E+21	7,859221E+18	7,857402E+18	5,478095E+21	1,571662E+19	5,493811E+21
-2990	2,739045E+21	2,739144E+21	7,862876E+18	7,863535E+18	5,478189E+21	1,572641E+19	5,493915E+21
-2989	2,739238E+21	2,739071E+21	7,857680E+18	7,857476E+18	5,478309E+21	1,571516E+19	5,494024E+21
-2988	2,739101E+21	2,739294E+21	7,859526E+18	7,859233E+18	5,478395E+21	1,571876E+19	5,494114E+21
-2987	2,739271E+21	2,739261E+21	7,860422E+18	7,863405E+18	5,478532E+21	1,572383E+19	5,494256E+21
-2986	2,739412E+21	2,739299E+21	7,855807E+18	7,856492E+18	5,478711E+21	1,571230E+19	5,494423E+21
-2985	2,739343E+21	2,739483E+21	7,860306E+18	7,861646E+18	5,478826E+21	1,572195E+19	5,494548E+21
-2984	2,739545E+21	2,739362E+21	7,858959E+18	7,859072E+18	5,478907E+21	1,571803E+19	5,494625E+21
-2983	2,739460E+21	2,739456E+21	7,856201E+18	7,856375E+18	5,478916E+21	1,571258E+19	5,494628E+21
-2982	2,739347E+21	2,739499E+21	7,862899E+18	7,862339E+18	5,478846E+21	1,572524E+19	5,494571E+21
-2981	2,739452E+21	2,739281E+21	7,857094E+18	7,858237E+18	5,478733E+21	1,571533E+19	5,494448E+21
-2980	2,739215E+21	2,739323E+21	7,858466E+18	7,858998E+18	5,478538E+21	1,571746E+19	5,494255E+21
-2979	2,739174E+21	2,739182E+21	7,862593E+18	7,862882E+18	5,478356E+21	1,572548E+19	5,494082E+21
-2978	2,739201E+21	2,739003E+21	7,856299E+18	7,858408E+18	5,478205E+21	1,571471E+19	5,493919E+21
-2977	2,738933E+21	2,739065E+21	7,862177E+18	7,860868E+18	5,477998E+21	1,572305E+19	5,493722E+21
-2976	2,738979E+21	2,738866E+21	7,860182E+18	7,862967E+18	5,477845E+21	1,572315E+19	5,493568E+21
-2975	2,738901E+21	2,738833E+21	7,857849E+18	7,858589E+18	5,477734E+21	1,571644E+19	5,493450E+21
-2974	2,738757E+21	2,738932E+21	7,863804E+18	7,863144E+18	5,477689E+21	1,572695E+19	5,493416E+21
-2973	2,738946E+21	2,738766E+21	7,859267E+18	7,861294E+18	5,477712E+21	1,572056E+19	5,493432E+21
-2972	2,738840E+21	2,738890E+21	7,859847E+18	7,857738E+18	5,477730E+21	1,571759E+19	5,493447E+21
-2971	2,738859E+21	2,738964E+21	7,862664E+18	7,864523E+18	5,477824E+21	1,572719E+19	5,493551E+21
-2970	2,739064E+21	2,738910E+21	7,857637E+18	7,858701E+18	5,477974E+21	1,571634E+19	5,493690E+21
-2969	2,738978E+21	2,739130E+21	7,859451E+18	7,860080E+18	5,478108E+21	1,571953E+19	5,493828E+21
-2968	2,739159E+21	2,739116E+21	7,860923E+18	7,863043E+18	5,478275E+21	1,572397E+19	5,493999E+21
-2967	2,739275E+21	2,739147E+21	7,856914E+18	7,856081E+18	5,478422E+21	1,571299E+19	5,494135E+21
-2966	2,739175E+21	2,739355E+21	7,861475E+18	7,861252E+18	5,478530E+21	1,572273E+19	5,494253E+21
-2965	2,739342E+21	2,739221E+21	7,860083E+18	7,859665E+18	5,478564E+21	1,571975E+19	5,494283E+21
-2964	2,739248E+21	2,739246E+21	7,856429E+18	7,857527E+18	5,478494E+21	1,571396E+19	5,494208E+21
-2963	2,739132E+21	2,739274E+21	7,862676E+18	7,863565E+18	5,478406E+21	1,572624E+19	5,494132E+21
-2962	2,739249E+21	2,739060E+21	7,857341E+18	7,859428E+18	5,478309E+21	1,571677E+19	5,494026E+21
-2961	2,739047E+21	2,739093E+21	7,859040E+18	7,859521E+18	5,478139E+21	1,571856E+19	5,493858E+21
-2960	2,738983E+21	2,738972E+21	7,863101E+18	7,862931E+18	5,477955E+21	1,572603E+19	5,493681E+21
-2959	2,738965E+21	2,738790E+21	7,857209E+18	7,859013E+18	5,477756E+21	1,571622E+19	5,493472E+21
-2958	2,738702E+21	2,738878E+21	7,862911E+18	7,861355E+18	5,477579E+21	1,572427E+19	5,493304E+21
-2957	2,738765E+21	2,738681E+21	7,861196E+18	7,863839E+18	5,477446E+21	1,572503E+19	5,493171E+21
-2956	2,738715E+21	2,738615E+21	7,858568E+18	7,858971E+18	5,477331E+21	1,571754E+19	5,493048E+21
-2955	2,738585E+21	2,738735E+21	7,863858E+18	7,863553E+18	5,477320E+21	1,572741E+19	5,493047E+21
-2954	2,738768E+21	2,738602E+21	7,859675E+18	7,861974E+18	5,477371E+21	1,572165E+19	5,493092E+21
-2953	2,738690E+21	2,738731E+21	7,859795E+18	7,858571E+18	5,477421E+21	1,571837E+19	5,493140E+21
-2952	2,738712E+21	2,738814E+21	7,862628E+18	7,864841E+18	5,477526E+21	1,572747E+19	5,493254E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2951	2,738901E+21	2,738757E+21	7,858342E+18	7,859010E+18	5,477658E+21	1,571735E+19	5,493375E+21
-2950	2,738838E+21	2,739000E+21	7,860340E+18	7,859921E+18	5,477837E+21	1,572026E+19	5,493557E+21
-2949	2,739016E+21	2,738980E+21	7,862470E+18	7,862998E+18	5,477995E+21	1,572547E+19	5,493721E+21
-2948	2,739109E+21	2,738969E+21	7,857590E+18	7,856522E+18	5,478078E+21	1,571411E+19	5,493792E+21
-2947	2,738980E+21	2,739170E+21	7,861377E+18	7,862275E+18	5,478151E+21	1,572365E+19	5,493874E+21
-2946	2,739139E+21	2,739035E+21	7,860096E+18	7,861131E+18	5,478174E+21	1,572123E+19	5,493896E+21
-2945	2,739082E+21	2,739037E+21	7,856374E+18	7,858699E+18	5,478119E+21	1,571507E+19	5,493834E+21
-2944	2,738963E+21	2,739068E+21	7,863082E+18	7,863423E+18	5,478031E+21	1,572651E+19	5,493757E+21
-2943	2,739045E+21	2,738849E+21	7,858366E+18	7,859555E+18	5,477893E+21	1,571792E+19	5,493611E+21
-2942	2,738826E+21	2,738902E+21	7,860132E+18	7,859431E+18	5,477728E+21	1,571956E+19	5,493448E+21
-2941	2,738749E+21	2,738777E+21	7,864137E+18	7,863725E+18	5,477526E+21	1,572786E+19	5,493254E+21
-2940	2,738737E+21	2,738554E+21	7,857695E+18	7,860106E+18	5,477291E+21	1,571780E+19	5,493009E+21
-2939	2,738490E+21	2,738653E+21	7,862884E+18	7,862305E+18	5,477143E+21	1,572519E+19	5,492868E+21
-2938	2,738579E+21	2,738485E+21	7,861761E+18	7,864765E+18	5,477064E+21	1,572653E+19	5,492790E+21
-2937	2,738567E+21	2,738422E+21	7,859241E+18	7,859292E+18	5,476989E+21	1,571853E+19	5,492707E+21
-2936	2,738412E+21	2,738570E+21	7,864268E+18	7,863319E+18	5,476982E+21	1,572759E+19	5,492710E+21
-2935	2,738560E+21	2,738438E+21	7,860476E+18	7,862433E+18	5,476998E+21	1,572291E+19	5,492721E+21
-2934	2,738499E+21	2,738582E+21	7,860473E+18	7,858764E+18	5,477081E+21	1,571924E+19	5,492800E+21
-2933	2,738547E+21	2,738667E+21	7,863694E+18	7,865252E+18	5,477215E+21	1,572895E+19	5,492944E+21
-2932	2,738758E+21	2,738577E+21	7,859108E+18	7,859169E+18	5,477334E+21	1,571828E+19	5,493053E+21
-2931	2,738699E+21	2,738832E+21	7,860319E+18	7,860404E+18	5,477531E+21	1,572072E+19	5,493252E+21
-2930	2,738862E+21	2,738835E+21	7,862639E+18	7,863954E+18	5,477697E+21	1,572659E+19	5,493423E+21
-2929	2,738967E+21	2,738806E+21	7,857190E+18	7,857874E+18	5,477773E+21	1,571506E+19	5,493488E+21
-2928	2,738821E+21	2,739003E+21	7,861206E+18	7,862743E+18	5,477824E+21	1,572395E+19	5,493548E+21
-2927	2,738944E+21	2,738853E+21	7,860740E+18	7,861715E+18	5,477798E+21	1,572246E+19	5,493520E+21
-2926	2,738894E+21	2,738858E+21	7,857614E+18	7,858538E+18	5,477752E+21	1,571615E+19	5,493468E+21
-2925	2,738762E+21	2,738875E+21	7,864809E+18	7,863389E+18	5,477637E+21	1,572820E+19	5,493365E+21
-2924	2,738812E+21	2,738615E+21	7,859258E+18	7,860175E+18	5,477427E+21	1,571943E+19	5,493146E+21
-2923	2,738587E+21	2,738665E+21	7,860202E+18	7,860569E+18	5,477252E+21	1,572077E+19	5,492973E+21
-2922	2,738522E+21	2,738555E+21	7,864286E+18	7,865180E+18	5,477076E+21	1,572947E+19	5,492806E+21
-2921	2,738561E+21	2,738333E+21	7,857954E+18	7,861116E+18	5,476894E+21	1,571907E+19	5,492613E+21
-2920	2,738322E+21	2,738456E+21	7,863393E+18	7,861915E+18	5,476778E+21	1,572531E+19	5,492503E+21
-2919	2,738374E+21	2,738305E+21	7,862889E+18	7,864815E+18	5,476679E+21	1,572770E+19	5,492407E+21
-2918	2,738356E+21	2,738271E+21	7,860276E+18	7,859182E+18	5,476627E+21	1,571946E+19	5,492346E+21
-2917	2,738203E+21	2,738409E+21	7,865056E+18	7,864016E+18	5,476612E+21	1,572907E+19	5,492341E+21
-2916	2,738363E+21	2,738240E+21	7,860791E+18	7,863417E+18	5,476603E+21	1,572421E+19	5,492327E+21
-2915	2,738340E+21	2,738391E+21	7,860184E+18	7,859739E+18	5,476732E+21	1,571992E+19	5,492452E+21
-2914	2,738421E+21	2,738504E+21	7,864005E+18	7,866123E+18	5,476924E+21	1,573013E+19	5,492655E+21
-2913	2,738660E+21	2,738421E+21	7,859397E+18	7,859759E+18	5,477082E+21	1,571916E+19	5,492801E+21
-2912	2,738567E+21	2,738696E+21	7,860352E+18	7,860407E+18	5,477263E+21	1,572076E+19	5,492984E+21
-2911	2,738676E+21	2,738694E+21	7,863231E+18	7,864489E+18	5,477369E+21	1,572772E+19	5,493097E+21
-2910	2,738780E+21	2,738662E+21	7,857926E+18	7,858119E+18	5,477441E+21	1,571605E+19	5,493157E+21
-2909	2,738635E+21	2,738835E+21	7,862586E+18	7,862832E+18	5,477470E+21	1,572542E+19	5,493195E+21
-2908	2,738746E+21	2,738637E+21	7,861823E+18	7,861819E+18	5,477383E+21	1,572364E+19	5,493106E+21
-2907	2,738686E+21	2,738635E+21	7,858116E+18	7,858989E+18	5,477321E+21	1,571711E+19	5,493038E+21
-2906	2,738544E+21	2,738664E+21	7,865212E+18	7,864446E+18	5,477208E+21	1,572966E+19	5,492937E+21
-2905	2,738616E+21	2,738388E+21	7,859141E+18	7,861673E+18	5,477004E+21	1,572081E+19	5,492725E+21
-2904	2,738388E+21	2,738451E+21	7,860208E+18	7,861081E+18	5,476839E+21	1,572129E+19	5,492560E+21
-2903	2,738308E+21	2,738353E+21	7,864931E+18	7,865884E+18	5,476660E+21	1,573081E+19	5,492391E+21

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	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2902	2,738361E+21	2,738152E+21	7,859371E+18	7,860974E+18	5,476513E+21	1,572034E+19	5,492233E+21
-2901	2,738114E+21	2,738276E+21	7,864969E+18	7,861883E+18	5,476390E+21	1,572685E+19	5,492117E+21
-2900	2,738136E+21	2,738093E+21	7,863667E+18	7,865457E+18	5,476230E+21	1,572912E+19	5,491959E+21
-2899	2,738130E+21	2,738056E+21	7,860165E+18	7,860292E+18	5,476186E+21	1,572046E+19	5,491907E+21
-2898	2,738020E+21	2,738212E+21	7,864871E+18	7,865483E+18	5,476232E+21	1,573035E+19	5,491963E+21
-2897	2,738245E+21	2,738054E+21	7,860796E+18	7,864354E+18	5,476299E+21	1,572515E+19	5,492024E+21
-2896	2,738242E+21	2,738241E+21	7,860278E+18	7,859468E+18	5,476483E+21	1,571975E+19	5,492202E+21
-2895	2,738285E+21	2,738381E+21	7,864714E+18	7,866211E+18	5,476666E+21	1,573092E+19	5,492397E+21
-2894	2,738505E+21	2,738323E+21	7,860321E+18	7,859610E+18	5,476828E+21	1,571993E+19	5,492548E+21
-2893	2,738395E+21	2,738572E+21	7,861218E+18	7,860799E+18	5,476967E+21	1,572202E+19	5,492689E+21
-2892	2,738474E+21	2,738515E+21	7,863843E+18	7,865041E+18	5,476989E+21	1,572888E+19	5,492718E+21
-2891	2,738591E+21	2,738461E+21	7,858084E+18	7,858968E+18	5,477052E+21	1,571705E+19	5,492769E+21
-2890	2,738459E+21	2,738625E+21	7,863302E+18	7,863600E+18	5,477085E+21	1,572690E+19	5,492811E+21
-2889	2,738579E+21	2,738420E+21	7,862189E+18	7,862762E+18	5,476999E+21	1,572495E+19	5,492724E+21
-2888	2,738494E+21	2,738425E+21	7,858198E+18	7,859468E+18	5,476919E+21	1,571767E+19	5,492636E+21
-2887	2,738312E+21	2,738457E+21	7,865573E+18	7,865371E+18	5,476769E+21	1,573094E+19	5,492500E+21
-2886	2,738399E+21	2,738201E+21	7,859966E+18	7,862160E+18	5,476600E+21	1,572213E+19	5,492322E+21
-2885	2,738183E+21	2,738255E+21	7,861650E+18	7,861183E+18	5,476439E+21	1,572283E+19	5,492161E+21
-2884	2,738083E+21	2,738129E+21	7,865986E+18	7,866044E+18	5,476212E+21	1,573203E+19	5,491944E+21
-2883	2,738132E+21	2,737932E+21	7,859832E+18	7,861655E+18	5,476064E+21	1,572149E+19	5,491785E+21
-2882	2,737890E+21	2,738064E+21	7,865124E+18	7,863149E+18	5,475954E+21	1,572827E+19	5,491682E+21
-2881	2,737950E+21	2,737877E+21	7,863343E+18	7,866991E+18	5,475828E+21	1,573033E+19	5,491558E+21
-2880	2,737969E+21	2,737864E+21	7,859932E+18	7,860723E+18	5,475833E+21	1,572066E+19	5,491553E+21
-2879	2,737870E+21	2,738050E+21	7,865303E+18	7,865929E+18	5,475920E+21	1,573123E+19	5,491651E+21
-2878	2,738117E+21	2,737934E+21	7,862286E+18	7,863816E+18	5,476051E+21	1,572610E+19	5,491777E+21
-2877	2,738101E+21	2,738128E+21	7,861698E+18	7,859211E+18	5,476229E+21	1,572091E+19	5,491950E+21
-2876	2,738093E+21	2,738233E+21	7,865484E+18	7,866549E+18	5,476326E+21	1,573203E+19	5,492058E+21
-2875	2,738304E+21	2,738152E+21	7,860347E+18	7,860523E+18	5,476456E+21	1,572087E+19	5,492176E+21
-2874	2,738215E+21	2,738387E+21	7,861309E+18	7,862054E+18	5,476602E+21	1,572336E+19	5,492326E+21
-2873	2,738328E+21	2,738312E+21	7,864026E+18	7,865843E+18	5,476640E+21	1,572987E+19	5,492370E+21
-2872	2,738442E+21	2,738267E+21	7,858263E+18	7,859008E+18	5,476709E+21	1,571727E+19	5,492426E+21
-2871	2,738277E+21	2,738444E+21	7,863740E+18	7,864130E+18	5,476721E+21	1,572787E+19	5,492449E+21
-2870	2,738383E+21	2,738256E+21	7,862926E+18	7,863155E+18	5,476639E+21	1,572608E+19	5,492365E+21
-2869	2,738290E+21	2,738243E+21	7,859046E+18	7,860158E+18	5,476534E+21	1,571920E+19	5,492253E+21
-2868	2,738081E+21	2,738237E+21	7,866165E+18	7,866004E+18	5,476318E+21	1,573217E+19	5,492050E+21
-2867	2,738177E+21	2,737973E+21	7,860456E+18	7,863031E+18	5,476150E+21	1,572349E+19	5,491874E+21
-2866	2,737976E+21	2,738027E+21	7,862641E+18	7,861992E+18	5,476004E+21	1,572463E+19	5,491728E+21
-2865	2,737879E+21	2,737899E+21	7,866327E+18	7,866997E+18	5,475778E+21	1,573332E+19	5,491511E+21
-2864	2,737915E+21	2,737714E+21	7,859891E+18	7,862248E+18	5,475629E+21	1,572214E+19	5,491351E+21
-2863	2,737671E+21	2,737857E+21	7,865230E+18	7,864075E+18	5,475528E+21	1,572931E+19	5,491257E+21
-2862	2,737771E+21	2,737710E+21	7,864225E+18	7,867147E+18	5,475481E+21	1,573137E+19	5,491212E+21
-2861	2,737823E+21	2,737712E+21	7,861323E+18	7,860447E+18	5,475535E+21	1,572177E+19	5,491256E+21
-2860	2,737704E+21	2,737890E+21	7,866277E+18	7,865760E+18	5,475594E+21	1,573204E+19	5,491326E+21
-2859	2,737944E+21	2,737787E+21	7,862792E+18	7,864223E+18	5,475731E+21	1,572701E+19	5,491458E+21
-2858	2,737928E+21	2,737973E+21	7,861728E+18	7,860450E+18	5,475901E+21	1,572218E+19	5,491623E+21
-2857	2,737934E+21	2,738057E+21	7,865079E+18	7,867850E+18	5,475991E+21	1,573293E+19	5,491724E+21
-2856	2,738154E+21	2,737974E+21	7,859909E+18	7,861173E+18	5,476128E+21	1,572108E+19	5,491849E+21
-2855	2,738063E+21	2,738210E+21	7,861592E+18	7,862676E+18	5,476273E+21	1,572427E+19	5,491997E+21
-2854	2,738183E+21	2,738161E+21	7,865377E+18	7,865568E+18	5,476344E+21	1,573094E+19	5,492075E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2853	2,738274E+21	2,738110E+21	7,859596E+18	7,859054E+18	5,476383E+21	1,571865E+19	5,492102E+21
-2852	2,738051E+21	2,738247E+21	7,864447E+18	7,864567E+18	5,476298E+21	1,572901E+19	5,492027E+21
-2851	2,738154E+21	2,738042E+21	7,863128E+18	7,864174E+18	5,476196E+21	1,572730E+19	5,491924E+21
-2850	2,738080E+21	2,738019E+21	7,859549E+18	7,861384E+18	5,476099E+21	1,572093E+19	5,491820E+21
-2849	2,737892E+21	2,738003E+21	7,866598E+18	7,866648E+18	5,475895E+21	1,573325E+19	5,491628E+21
-2848	2,737978E+21	2,737751E+21	7,860896E+18	7,863292E+18	5,475729E+21	1,572419E+19	5,491454E+21
-2847	2,737748E+21	2,737819E+21	7,863284E+18	7,862579E+18	5,475567E+21	1,572586E+19	5,491293E+21
-2846	2,737653E+21	2,737713E+21	7,867133E+18	7,867355E+18	5,475366E+21	1,573449E+19	5,491101E+21
-2845	2,737702E+21	2,737524E+21	7,860830E+18	7,862750E+18	5,475226E+21	1,572358E+19	5,490950E+21
-2844	2,737459E+21	2,737648E+21	7,865712E+18	7,864534E+18	5,475107E+21	1,573025E+19	5,490837E+21
-2843	2,737592E+21	2,737515E+21	7,864873E+18	7,867640E+18	5,475107E+21	1,573251E+19	5,490840E+21
-2842	2,737669E+21	2,737538E+21	7,862195E+18	7,861168E+18	5,475207E+21	1,572336E+19	5,490930E+21
-2841	2,737555E+21	2,737719E+21	7,866328E+18	7,866596E+18	5,475274E+21	1,573292E+19	5,491007E+21
-2840	2,737776E+21	2,737626E+21	7,862578E+18	7,864812E+18	5,475402E+21	1,572739E+19	5,491129E+21
-2839	2,737758E+21	2,737814E+21	7,861468E+18	7,861460E+18	5,475572E+21	1,572293E+19	5,491295E+21
-2838	2,737789E+21	2,737917E+21	7,865875E+18	7,867768E+18	5,475706E+21	1,573364E+19	5,491440E+21
-2837	2,738020E+21	2,737831E+21	7,861159E+18	7,860852E+18	5,475851E+21	1,572201E+19	5,491573E+21
-2836	2,737892E+21	2,738037E+21	7,862505E+18	7,862595E+18	5,475929E+21	1,572510E+19	5,491655E+21
-2835	2,737992E+21	2,737986E+21	7,865987E+18	7,866028E+18	5,475977E+21	1,573201E+19	5,491709E+21
-2834	2,738078E+21	2,737919E+21	7,859898E+18	7,860462E+18	5,475998E+21	1,572036E+19	5,491718E+21
-2833	2,737862E+21	2,738031E+21	7,864318E+18	7,865749E+18	5,475892E+21	1,573007E+19	5,491622E+21
-2832	2,737962E+21	2,737828E+21	7,863074E+18	7,864919E+18	5,475790E+21	1,572799E+19	5,491518E+21
-2831	2,737884E+21	2,737805E+21	7,860214E+18	7,862101E+18	5,475689E+21	1,572232E+19	5,491411E+21
-2830	2,737692E+21	2,737814E+21	7,868062E+18	7,866446E+18	5,475506E+21	1,573451E+19	5,491240E+21
-2829	2,737751E+21	2,737557E+21	7,862210E+18	7,863640E+18	5,475308E+21	1,572585E+19	5,491034E+21
-2828	2,737478E+21	2,737583E+21	7,864011E+18	7,863100E+18	5,475062E+21	1,572711E+19	5,490789E+21
-2827	2,737407E+21	2,737479E+21	7,867408E+18	7,868272E+18	5,474886E+21	1,573568E+19	5,490622E+21
-2826	2,737504E+21	2,737299E+21	7,861515E+18	7,863779E+18	5,474803E+21	1,572529E+19	5,490528E+21
-2825	2,737302E+21	2,737436E+21	7,865936E+18	7,865052E+18	5,474738E+21	1,573099E+19	5,490469E+21
-2824	2,737442E+21	2,737342E+21	7,865025E+18	7,867978E+18	5,474784E+21	1,573300E+19	5,490517E+21
-2823	2,737504E+21	2,737390E+21	7,862355E+18	7,861900E+18	5,474894E+21	1,572426E+19	5,490618E+21
-2822	2,737396E+21	2,737597E+21	7,866801E+18	7,866755E+18	5,474993E+21	1,573356E+19	5,490726E+21
-2821	2,737617E+21	2,737495E+21	7,863341E+18	7,864946E+18	5,475112E+21	1,572829E+19	5,490840E+21
-2820	2,737579E+21	2,737645E+21	7,862070E+18	7,861569E+18	5,475224E+21	1,572364E+19	5,490947E+21
-2819	2,737627E+21	2,737746E+21	7,866884E+18	7,867789E+18	5,475372E+21	1,573467E+19	5,491107E+21
-2818	2,737861E+21	2,737659E+21	7,862230E+18	7,861548E+18	5,475520E+21	1,572378E+19	5,491243E+21
-2817	2,737724E+21	2,737848E+21	7,862658E+18	7,863535E+18	5,475571E+21	1,572619E+19	5,491298E+21
-2816	2,737804E+21	2,737792E+21	7,865768E+18	7,866903E+18	5,475596E+21	1,573267E+19	5,491328E+21
-2815	2,737887E+21	2,737725E+21	7,859812E+18	7,861703E+18	5,475612E+21	1,572151E+19	5,491333E+21
-2814	2,737688E+21	2,737852E+21	7,865361E+18	7,865648E+18	5,475540E+21	1,573101E+19	5,491271E+21
-2813	2,737776E+21	2,737647E+21	7,864476E+18	7,864774E+18	5,475423E+21	1,572925E+19	5,491152E+21
-2812	2,737646E+21	2,737592E+21	7,861373E+18	7,862258E+18	5,475237E+21	1,572363E+19	5,490961E+21
-2811	2,737436E+21	2,737590E+21	7,868807E+18	7,866972E+18	5,475026E+21	1,573578E+19	5,490762E+21
-2810	2,737504E+21	2,737321E+21	7,862655E+18	7,865214E+18	5,474824E+21	1,572787E+19	5,490552E+21
-2809	2,737265E+21	2,737329E+21	7,863786E+18	7,864292E+18	5,474594E+21	1,572808E+19	5,490322E+21
-2808	2,737221E+21	2,737248E+21	7,867228E+18	7,869043E+18	5,474469E+21	1,573627E+19	5,490205E+21
-2807	2,737342E+21	2,737108E+21	7,862143E+18	7,864393E+18	5,474450E+21	1,572654E+19	5,490176E+21
-2806	2,737155E+21	2,737293E+21	7,867115E+18	7,864745E+18	5,474447E+21	1,573186E+19	5,490179E+21
-2805	2,737269E+21	2,737214E+21	7,866144E+18	7,868038E+18	5,474482E+21	1,573418E+19	5,490217E+21

1	14	15	16	17	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							
-2804	2,737290E+21	2,737227E+21	7,862929E+18	7,862235E+18	5,474516E+21	1,572516E+19	5,490242E+21
-2803	2,737199E+21	2,737425E+21	7,867190E+18	7,867147E+18	5,474624E+21	1,573434E+19	5,490358E+21
-2802	2,737450E+21	2,737321E+21	7,864150E+18	7,865665E+18	5,474771E+21	1,572981E+19	5,490501E+21
-2801	2,737440E+21	2,737456E+21	7,862305E+18	7,862043E+18	5,474895E+21	1,572435E+19	5,490620E+21
-2800	2,737483E+21	2,737573E+21	7,866976E+18	7,868262E+18	5,475056E+21	1,573524E+19	5,490791E+21
-2799	2,737700E+21	2,737501E+21	7,862232E+18	7,862681E+18	5,475201E+21	1,572491E+19	5,490926E+21
-2798	2,737569E+21	2,737701E+21	7,863025E+18	7,864039E+18	5,475269E+21	1,572706E+19	5,490996E+21
-2797	2,737635E+21	2,737637E+21	7,866357E+18	7,867271E+18	5,475272E+21	1,573363E+19	5,491006E+21
-2796	2,737677E+21	2,737527E+21	7,860604E+18	7,862048E+18	5,475204E+21	1,572265E+19	5,490927E+21
-2795	2,737476E+21	2,737645E+21	7,866740E+18	7,865587E+18	5,475121E+21	1,573233E+19	5,490853E+21
-2794	2,737548E+21	2,737429E+21	7,865744E+18	7,865669E+18	5,474977E+21	1,573141E+19	5,490708E+21
-2793	2,737401E+21	2,737341E+21	7,861765E+18	7,863261E+18	5,474741E+21	1,572503E+19	5,490466E+21
-2792	2,737196E+21	2,737335E+21	7,868563E+18	7,868023E+18	5,474531E+21	1,573659E+19	5,490267E+21
-2791	2,737287E+21	2,737085E+21	7,862710E+18	7,866426E+18	5,474372E+21	1,572914E+19	5,490101E+21
-2790	2,737096E+21	2,737134E+21	7,864765E+18	7,864134E+18	5,474230E+21	1,572890E+19	5,489959E+21
-2789	2,737058E+21	2,737084E+21	7,868415E+18	7,868789E+18	5,474142E+21	1,573720E+19	5,489879E+21
-2788	2,737131E+21	2,736940E+21	7,863320E+18	7,864376E+18	5,474071E+21	1,572770E+19	5,489799E+21
-2787	2,736939E+21	2,737131E+21	7,867829E+18	7,865003E+18	5,474070E+21	1,573283E+19	5,489803E+21
-2786	2,737061E+21	2,737041E+21	7,866679E+18	7,869279E+18	5,474103E+21	1,573596E+19	5,489839E+21
-2785	2,737107E+21	2,737028E+21	7,862699E+18	7,863214E+18	5,474136E+21	1,572591E+19	5,489862E+21
-2784	2,737048E+21	2,737230E+21	7,866915E+18	7,867908E+18	5,474278E+21	1,573482E+19	5,490013E+21
-2783	2,737319E+21	2,737155E+21	7,864569E+18	7,866436E+18	5,474475E+21	1,573100E+19	5,490206E+21
-2782	2,737323E+21	2,737322E+21	7,863096E+18	7,862181E+18	5,474645E+21	1,572528E+19	5,490371E+21
-2781	2,737334E+21	2,737445E+21	7,867661E+18	7,868472E+18	5,474779E+21	1,573613E+19	5,490515E+21
-2780	2,737502E+21	2,737338E+21	7,862732E+18	7,863194E+18	5,474840E+21	1,572593E+19	5,490566E+21
-2779	2,737376E+21	2,737522E+21	7,863790E+18	7,864161E+18	5,474897E+21	1,572795E+19	5,490625E+21
-2778	2,737442E+21	2,737446E+21	7,867524E+18	7,867772E+18	5,474889E+21	1,573530E+19	5,490624E+21
-2777	2,737481E+21	2,737305E+21	7,861124E+18	7,862664E+18	5,474787E+21	1,572379E+19	5,490510E+21
-2776	2,737260E+21	2,737416E+21	7,866986E+18	7,866281E+18	5,474676E+21	1,573327E+19	5,490409E+21
-2775	2,737318E+21	2,737209E+21	7,865742E+18	7,867086E+18	5,474528E+21	1,573283E+19	5,490260E+21
-2774	2,737197E+21	2,737126E+21	7,862265E+18	7,863893E+18	5,474323E+21	1,572616E+19	5,490049E+21
-2773	2,736997E+21	2,737129E+21	7,869056E+18	7,868309E+18	5,474126E+21	1,573736E+19	5,489863E+21
-2772	2,737068E+21	2,736871E+21	7,863746E+18	7,866701E+18	5,473938E+21	1,573045E+19	5,489669E+21
-2771	2,736892E+21	2,736938E+21	7,866230E+18	7,863997E+18	5,473830E+21	1,573023E+19	5,489561E+21
-2770	2,736844E+21	2,736903E+21	7,869567E+18	7,869751E+18	5,473747E+21	1,573932E+19	5,489486E+21
-2769	2,736908E+21	2,736735E+21	7,863504E+18	7,865456E+18	5,473642E+21	1,572896E+19	5,489371E+21
-2768	2,736735E+21	2,736919E+21	7,867280E+18	7,866143E+18	5,473653E+21	1,573342E+19	5,489387E+21
-2767	2,736888E+21	2,736852E+21	7,866547E+18	7,870360E+18	5,473740E+21	1,573691E+19	5,489477E+21
-2766	2,736987E+21	2,736869E+21	7,863359E+18	7,863122E+18	5,473856E+21	1,572648E+19	5,489582E+21
-2765	2,736935E+21	2,737097E+21	7,867615E+18	7,867726E+18	5,474032E+21	1,573534E+19	5,489767E+21
-2764	2,737151E+21	2,737017E+21	7,865556E+18	7,866484E+18	5,474168E+21	1,573204E+19	5,489900E+21
-2763	2,737150E+21	2,737184E+21	7,863825E+18	7,862402E+18	5,474334E+21	1,572623E+19	5,490060E+21
-2762	2,737155E+21	2,737290E+21	7,868289E+18	7,869427E+18	5,474444E+21	1,573772E+19	5,490182E+21
-2761	2,737315E+21	2,737143E+21	7,862826E+18	7,863972E+18	5,474458E+21	1,572680E+19	5,490185E+21
-2760	2,737200E+21	2,737309E+21	7,863962E+18	7,864761E+18	5,474509E+21	1,572872E+19	5,490238E+21
-2759	2,737257E+21	2,737247E+21	7,868176E+18	7,868470E+18	5,474504E+21	1,573665E+19	5,490241E+21
-2758	2,737292E+21	2,737115E+21	7,862039E+18	7,863153E+18	5,474406E+21	1,572519E+19	5,490132E+21
-2757	2,737044E+21	2,737214E+21	7,867538E+18	7,866739E+18	5,474258E+21	1,573428E+19	5,489992E+21
-2756	2,737062E+21	2,736978E+21	7,866229E+18	7,867865E+18	5,474040E+21	1,573409E+19	5,489774E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2755	2,736969E+21	2,736899E+21	7,863295E+18	7,864064E+18	5,473868E+21	1,572736E+19	5,489596E+21
-2754	2,736788E+21	2,736913E+21	7,870157E+18	7,868897E+18	5,473701E+21	1,573905E+19	5,489440E+21
-2753	2,736857E+21	2,736650E+21	7,864392E+18	7,867386E+18	5,473507E+21	1,573178E+19	5,489239E+21
-2752	2,736682E+21	2,736724E+21	7,866287E+18	7,864953E+18	5,473406E+21	1,573124E+19	5,489138E+21
-2751	2,736636E+21	2,736712E+21	7,869331E+18	7,871201E+18	5,473348E+21	1,574053E+19	5,489089E+21
-2750	2,736737E+21	2,736557E+21	7,863694E+18	7,866195E+18	5,473294E+21	1,572989E+19	5,489024E+21
-2749	2,736579E+21	2,736749E+21	7,867440E+18	7,866288E+18	5,473328E+21	1,573373E+19	5,489062E+21
-2748	2,736717E+21	2,736683E+21	7,867592E+18	7,870310E+18	5,473400E+21	1,573790E+19	5,489138E+21
-2747	2,736836E+21	2,736720E+21	7,864878E+18	7,862655E+18	5,473556E+21	1,572753E+19	5,489283E+21
-2746	2,736768E+21	2,736958E+21	7,868715E+18	7,868376E+18	5,473727E+21	1,573709E+19	5,489464E+21
-2745	2,736967E+21	2,736849E+21	7,865814E+18	7,867292E+18	5,473817E+21	1,573311E+19	5,489550E+21
-2744	2,736978E+21	2,736993E+21	7,863336E+18	7,863483E+18	5,473971E+21	1,572682E+19	5,489698E+21
-2743	2,736993E+21	2,737113E+21	7,868261E+18	7,870250E+18	5,474105E+21	1,573851E+19	5,489844E+21
-2742	2,737177E+21	2,736973E+21	7,863504E+18	7,864143E+18	5,474150E+21	1,572765E+19	5,489878E+21
-2741	2,737038E+21	2,737138E+21	7,864659E+18	7,864761E+18	5,474175E+21	1,572942E+19	5,489905E+21
-2740	2,737025E+21	2,737057E+21	7,869051E+18	7,868908E+18	5,474082E+21	1,573796E+19	5,489820E+21
-2739	2,737057E+21	2,736910E+21	7,862911E+18	7,863715E+18	5,473966E+21	1,572663E+19	5,489693E+21
-2738	2,736814E+21	2,736991E+21	7,868121E+18	7,867886E+18	5,473805E+21	1,573601E+19	5,489541E+21
-2737	2,736835E+21	2,736728E+21	7,866398E+18	7,868858E+18	5,473563E+21	1,573526E+19	5,489299E+21
-2736	2,736772E+21	2,736649E+21	7,863621E+18	7,864894E+18	5,473420E+21	1,572852E+19	5,489149E+21
-2735	2,736592E+21	2,736702E+21	7,870646E+18	7,869749E+18	5,473294E+21	1,574040E+19	5,489034E+21
-2734	2,736663E+21	2,736464E+21	7,865225E+18	7,868078E+18	5,473128E+21	1,573330E+19	5,488861E+21
-2733	2,736478E+21	2,736539E+21	7,866693E+18	7,865329E+18	5,473017E+21	1,573202E+19	5,488749E+21
-2732	2,736402E+21	2,736513E+21	7,869960E+18	7,871484E+18	5,472915E+21	1,574144E+19	5,488656E+21
-2731	2,736538E+21	2,736374E+21	7,865014E+18	7,865792E+18	5,472913E+21	1,573081E+19	5,488643E+21
-2730	2,736412E+21	2,736577E+21	7,868537E+18	7,866524E+18	5,472988E+21	1,573506E+19	5,488723E+21
-2729	2,736544E+21	2,736506E+21	7,868330E+18	7,870632E+18	5,473050E+21	1,573896E+19	5,488789E+21
-2728	2,736674E+21	2,736549E+21	7,864777E+18	7,863612E+18	5,473223E+21	1,572839E+19	5,488951E+21
-2727	2,736613E+21	2,736804E+21	7,868320E+18	7,869685E+18	5,473418E+21	1,573800E+19	5,489156E+21
-2726	2,736834E+21	2,736702E+21	7,865867E+18	7,868008E+18	5,473536E+21	1,573388E+19	5,489270E+21
-2725	2,736845E+21	2,736838E+21	7,863318E+18	7,863752E+18	5,473683E+21	1,572707E+19	5,489410E+21
-2724	2,736813E+21	2,736942E+21	7,869282E+18	7,870173E+18	5,473755E+21	1,573946E+19	5,489494E+21
-2723	2,736987E+21	2,736806E+21	7,864983E+18	7,864063E+18	5,473793E+21	1,572905E+19	5,489522E+21
-2722	2,736822E+21	2,736949E+21	7,865721E+18	7,865698E+18	5,473771E+21	1,573142E+19	5,489502E+21
-2721	2,736784E+21	2,736822E+21	7,869363E+18	7,869929E+18	5,473606E+21	1,573929E+19	5,489345E+21
-2720	2,736839E+21	2,736652E+21	7,862708E+18	7,864982E+18	5,473491E+21	1,572769E+19	5,489219E+21
-2719	2,736620E+21	2,736758E+21	7,868220E+18	7,868701E+18	5,473378E+21	1,573692E+19	5,489115E+21
-2718	2,736670E+21	2,736523E+21	7,867144E+18	7,869282E+18	5,473193E+21	1,573643E+19	5,488930E+21
-2717	2,736585E+21	2,736459E+21	7,864406E+18	7,864977E+18	5,473044E+21	1,572938E+19	5,488773E+21
-2716	2,736344E+21	2,736513E+21	7,871541E+18	7,870037E+18	5,472857E+21	1,574158E+19	5,488599E+21
-2715	2,736423E+21	2,736273E+21	7,866395E+18	7,868391E+18	5,472697E+21	1,573479E+19	5,488432E+21
-2714	2,736248E+21	2,736335E+21	7,867528E+18	7,866063E+18	5,472584E+21	1,573359E+19	5,488318E+21
-2713	2,736187E+21	2,736288E+21	7,870389E+18	7,872012E+18	5,472475E+21	1,574240E+19	5,488217E+21
-2712	2,736369E+21	2,736154E+21	7,865393E+18	7,866461E+18	5,472522E+21	1,573185E+19	5,488254E+21
-2711	2,736261E+21	2,736403E+21	7,868618E+18	7,867496E+18	5,472664E+21	1,573611E+19	5,488401E+21
-2710	2,736408E+21	2,736362E+21	7,868647E+18	7,871524E+18	5,472770E+21	1,574017E+19	5,488510E+21
-2709	2,736533E+21	2,736404E+21	7,864575E+18	7,864187E+18	5,472938E+21	1,572876E+19	5,488667E+21
-2708	2,736440E+21	2,736651E+21	7,868665E+18	7,869877E+18	5,473091E+21	1,573854E+19	5,488830E+21
-2707	2,736674E+21	2,736556E+21	7,867145E+18	7,867508E+18	5,473231E+21	1,573465E+19	5,488965E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2706	2,736680E+21	2,736681E+21	7,864470E+18	7,864024E+18	5,473361E+21	1,572849E+19	5,489090E+21
-2705	2,736609E+21	2,736751E+21	7,870142E+18	7,870474E+18	5,473360E+21	1,574062E+19	5,489100E+21
-2704	2,736781E+21	2,736591E+21	7,864980E+18	7,865318E+18	5,473372E+21	1,573030E+19	5,489102E+21
-2703	2,736623E+21	2,736734E+21	7,865452E+18	7,867118E+18	5,473357E+21	1,573257E+19	5,489089E+21
-2702	2,736606E+21	2,736610E+21	7,869532E+18	7,870773E+18	5,473216E+21	1,574030E+19	5,488956E+21
-2701	2,736667E+21	2,736443E+21	7,863095E+18	7,865222E+18	5,473110E+21	1,572832E+19	5,488839E+21
-2700	2,736406E+21	2,736550E+21	7,869634E+18	7,868421E+18	5,472957E+21	1,573806E+19	5,488695E+21
-2699	2,736438E+21	2,736339E+21	7,869039E+18	7,869168E+18	5,472777E+21	1,573821E+19	5,488515E+21
-2698	2,736330E+21	2,736261E+21	7,865716E+18	7,865908E+18	5,472592E+21	1,573162E+19	5,488323E+21
-2697	2,736069E+21	2,736270E+21	7,871936E+18	7,870883E+18	5,472339E+21	1,574282E+19	5,488082E+21
-2696	2,736191E+21	2,736015E+21	7,866286E+18	7,869617E+18	5,472206E+21	1,573590E+19	5,487942E+21
-2695	2,736065E+21	2,736107E+21	7,867473E+18	7,866851E+18	5,472172E+21	1,573432E+19	5,487906E+21
-2694	2,736048E+21	2,736099E+21	7,870782E+18	7,872532E+18	5,472147E+21	1,574331E+19	5,487890E+21
-2693	2,736232E+21	2,736001E+21	7,865695E+18	7,866715E+18	5,472232E+21	1,573241E+19	5,487965E+21
-2692	2,736087E+21	2,736264E+21	7,868978E+18	7,867927E+18	5,472351E+21	1,573691E+19	5,488088E+21
-2691	2,736244E+21	2,736239E+21	7,869583E+18	7,871675E+18	5,472483E+21	1,574126E+19	5,488224E+21
-2690	2,736370E+21	2,736267E+21	7,865201E+18	7,864809E+18	5,472638E+21	1,573001E+19	5,488368E+21
-2689	2,736263E+21	2,736473E+21	7,869311E+18	7,869931E+18	5,472737E+21	1,573924E+19	5,488476E+21
-2688	2,736511E+21	2,736361E+21	7,867699E+18	7,868028E+18	5,472872E+21	1,573573E+19	5,488607E+21
-2687	2,736507E+21	2,736500E+21	7,864752E+18	7,865027E+18	5,473006E+21	1,572978E+19	5,488736E+21
-2686	2,736437E+21	2,736567E+21	7,870546E+18	7,871441E+18	5,473004E+21	1,574199E+19	5,488745E+21
-2685	2,736599E+21	2,736392E+21	7,864941E+18	7,865990E+18	5,472990E+21	1,573093E+19	5,488721E+21
-2684	2,736414E+21	2,736528E+21	7,866086E+18	7,867304E+18	5,472942E+21	1,573339E+19	5,488675E+21
-2683	2,736411E+21	2,736421E+21	7,871018E+18	7,870361E+18	5,472832E+21	1,574138E+19	5,488574E+21
-2682	2,736455E+21	2,736251E+21	7,864530E+18	7,865656E+18	5,472706E+21	1,573019E+19	5,488436E+21
-2681	2,736150E+21	2,736328E+21	7,870641E+18	7,868826E+18	5,472479E+21	1,573947E+19	5,488218E+21
-2680	2,736186E+21	2,736093E+21	7,869144E+18	7,870707E+18	5,472278E+21	1,573985E+19	5,488018E+21
-2679	2,736094E+21	2,736020E+21	7,865510E+18	7,867491E+18	5,472114E+21	1,573300E+19	5,487847E+21
-2678	2,735875E+21	2,736035E+21	7,871832E+18	7,871932E+18	5,471910E+21	1,574376E+19	5,487653E+21
-2677	2,736021E+21	2,735798E+21	7,866459E+18	7,869958E+18	5,471819E+21	1,573642E+19	5,487556E+21
-2676	2,735886E+21	2,735918E+21	7,868436E+18	7,866740E+18	5,471804E+21	1,573518E+19	5,487539E+21
-2675	2,735874E+21	2,735958E+21	7,872281E+18	7,872409E+18	5,471832E+21	1,574469E+19	5,487577E+21
-2674	2,736045E+21	2,735866E+21	7,866851E+18	7,867343E+18	5,471911E+21	1,573419E+19	5,487646E+21
-2673	2,735887E+21	2,736090E+21	7,869404E+18	7,868284E+18	5,471977E+21	1,573769E+19	5,487715E+21
-2672	2,736073E+21	2,736051E+21	7,869755E+18	7,872309E+18	5,472124E+21	1,574206E+19	5,487866E+21
-2671	2,736220E+21	2,736095E+21	7,865314E+18	7,865410E+18	5,472316E+21	1,573072E+19	5,488047E+21
-2670	2,736125E+21	2,736307E+21	7,869791E+18	7,870332E+18	5,472433E+21	1,574012E+19	5,488173E+21
-2669	2,736352E+21	2,736202E+21	7,867907E+18	7,868430E+18	5,472554E+21	1,573634E+19	5,488290E+21
-2668	2,736312E+21	2,736326E+21	7,865194E+18	7,865628E+18	5,472637E+21	1,573082E+19	5,488368E+21
-2667	2,736245E+21	2,736398E+21	7,871575E+18	7,871587E+18	5,472643E+21	1,574316E+19	5,488386E+21
-2666	2,736404E+21	2,736211E+21	7,865745E+18	7,866748E+18	5,472615E+21	1,573249E+19	5,488348E+21
-2665	2,736201E+21	2,736303E+21	7,867053E+18	7,867441E+18	5,472503E+21	1,573449E+19	5,488238E+21
-2664	2,736202E+21	2,736188E+21	7,871622E+18	7,871201E+18	5,472389E+21	1,574282E+19	5,488132E+21
-2663	2,736227E+21	2,736032E+21	7,864852E+18	7,867141E+18	5,472260E+21	1,573199E+19	5,487992E+21
-2662	2,735926E+21	2,736097E+21	7,870896E+18	7,870082E+18	5,472023E+21	1,574098E+19	5,487764E+21
-2661	2,735964E+21	2,735857E+21	7,868954E+18	7,871586E+18	5,471821E+21	1,574054E+19	5,487561E+21
-2660	2,735869E+21	2,735788E+21	7,866174E+18	7,867635E+18	5,471657E+21	1,573381E+19	5,487391E+21
-2659	2,735684E+21	2,735841E+21	7,873252E+18	7,871431E+18	5,471526E+21	1,574468E+19	5,487270E+21
-2658	2,735830E+21	2,735630E+21	7,867917E+18	7,870207E+18	5,471461E+21	1,573812E+19	5,487199E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2657	2,735672E+21	2,735737E+21	7,869319E+18	7,866992E+18	5,471409E+21	1,573631E+19	5,487146E+21
-2656	2,735683E+21	2,735771E+21	7,872306E+18	7,873681E+18	5,471454E+21	1,574599E+19	5,487200E+21
-2655	2,735868E+21	2,735697E+21	7,866701E+18	7,868593E+18	5,471565E+21	1,573529E+19	5,487300E+21
-2654	2,735747E+21	2,735918E+21	7,869274E+18	7,869044E+18	5,471665E+21	1,573832E+19	5,487403E+21
-2653	2,735938E+21	2,735881E+21	7,869985E+18	7,872307E+18	5,471819E+21	1,574229E+19	5,487562E+21
-2652	2,736054E+21	2,735937E+21	7,866163E+18	7,865433E+18	5,471992E+21	1,573160E+19	5,487723E+21
-2651	2,735954E+21	2,736168E+21	7,871041E+18	7,870446E+18	5,472122E+21	1,574149E+19	5,487863E+21
-2650	2,736155E+21	2,736048E+21	7,868787E+18	7,869338E+18	5,472203E+21	1,573812E+19	5,487941E+21
-2649	2,736101E+21	2,736118E+21	7,865628E+18	7,866204E+18	5,472219E+21	1,573183E+19	5,487951E+21
-2648	2,736063E+21	2,736172E+21	7,871742E+18	7,872288E+18	5,472234E+21	1,574403E+19	5,487978E+21
-2647	2,736225E+21	2,736004E+21	7,866054E+18	7,867609E+18	5,472229E+21	1,573366E+19	5,487962E+21
-2646	2,736022E+21	2,736096E+21	7,867617E+18	7,868145E+18	5,472118E+21	1,573576E+19	5,487854E+21
-2645	2,735990E+21	2,735983E+21	7,871744E+18	7,871866E+18	5,471973E+21	1,574361E+19	5,487717E+21
-2644	2,735981E+21	2,735819E+21	7,865383E+18	7,868026E+18	5,471800E+21	1,573341E+19	5,487534E+21
-2643	2,735693E+21	2,735889E+21	7,872016E+18	7,870235E+18	5,471582E+21	1,574225E+19	5,487324E+21
-2642	2,735734E+21	2,735646E+21	7,870005E+18	7,872088E+18	5,471380E+21	1,574209E+19	5,487122E+21
-2641	2,735639E+21	2,735546E+21	7,867490E+18	7,867492E+18	5,471185E+21	1,573498E+19	5,486920E+21
-2640	2,735479E+21	2,735614E+21	7,873878E+18	7,872129E+18	5,471092E+21	1,574601E+19	5,486838E+21
-2639	2,735625E+21	2,735443E+21	7,868351E+18	7,871591E+18	5,471068E+21	1,573994E+19	5,486808E+21
-2638	2,735491E+21	2,735547E+21	7,869320E+18	7,868210E+18	5,471038E+21	1,573753E+19	5,486775E+21
-2637	2,735516E+21	2,735591E+21	7,871906E+18	7,874340E+18	5,471108E+21	1,574625E+19	5,486854E+21
-2636	2,735703E+21	2,735528E+21	7,867136E+18	7,868624E+18	5,471231E+21	1,573576E+19	5,486967E+21
-2635	2,735600E+21	2,735777E+21	7,870435E+18	7,868536E+18	5,471377E+21	1,573897E+19	5,487116E+21
-2634	2,735771E+21	2,735753E+21	7,871177E+18	7,872486E+18	5,471524E+21	1,574366E+19	5,487268E+21
-2633	2,735856E+21	2,735766E+21	7,866881E+18	7,865824E+18	5,471622E+21	1,573271E+19	5,487355E+21
-2632	2,735776E+21	2,735974E+21	7,870915E+18	7,871725E+18	5,471750E+21	1,574264E+19	5,487492E+21
-2631	2,735983E+21	2,735863E+21	7,868668E+18	7,870726E+18	5,471846E+21	1,573939E+19	5,487585E+21
-2630	2,735955E+21	2,735916E+21	7,865628E+18	7,867096E+18	5,471871E+21	1,573272E+19	5,487604E+21
-2629	2,735909E+21	2,735974E+21	7,871978E+18	7,872372E+18	5,471883E+21	1,574435E+19	5,487628E+21
-2628	2,736023E+21	2,735819E+21	7,866990E+18	7,867980E+18	5,471842E+21	1,573497E+19	5,487577E+21
-2627	2,735799E+21	2,735919E+21	7,869159E+18	7,868342E+18	5,471718E+21	1,573750E+19	5,487455E+21
-2626	2,735735E+21	2,735786E+21	7,872789E+18	7,872633E+18	5,471521E+21	1,574542E+19	5,487266E+21
-2625	2,735712E+21	2,735563E+21	7,866262E+18	7,868511E+18	5,471275E+21	1,573477E+19	5,487010E+21
-2624	2,735465E+21	2,735618E+21	7,872384E+18	7,870867E+18	5,471084E+21	1,574325E+19	5,486827E+21
-2623	2,735519E+21	2,735410E+21	7,870481E+18	7,873040E+18	5,470929E+21	1,574352E+19	5,486673E+21
-2622	2,735451E+21	2,735326E+21	7,867929E+18	7,868412E+18	5,470777E+21	1,573634E+19	5,486513E+21
-2621	2,735291E+21	2,735416E+21	7,873592E+18	7,872950E+18	5,470707E+21	1,574654E+19	5,486453E+21
-2620	2,735423E+21	2,735268E+21	7,868672E+18	7,872442E+18	5,470691E+21	1,574111E+19	5,486432E+21
-2619	2,735320E+21	2,735395E+21	7,870059E+18	7,868368E+18	5,470715E+21	1,573843E+19	5,486453E+21
-2618	2,735344E+21	2,735443E+21	7,872789E+18	7,874424E+18	5,470787E+21	1,574721E+19	5,486535E+21
-2617	2,735517E+21	2,735346E+21	7,868302E+18	7,868317E+18	5,470863E+21	1,573662E+19	5,486600E+21
-2616	2,735431E+21	2,735590E+21	7,870877E+18	7,869182E+18	5,471021E+21	1,574006E+19	5,486761E+21
-2615	2,735586E+21	2,735588E+21	7,871595E+18	7,873744E+18	5,471174E+21	1,574534E+19	5,486919E+21
-2614	2,735698E+21	2,735578E+21	7,866837E+18	7,867043E+18	5,471276E+21	1,573388E+19	5,487010E+21
-2613	2,735629E+21	2,735785E+21	7,870517E+18	7,872216E+18	5,471414E+21	1,574273E+19	5,487157E+21
-2612	2,735824E+21	2,735692E+21	7,869270E+18	7,870750E+18	5,471515E+21	1,574002E+19	5,487255E+21
-2611	2,735796E+21	2,735763E+21	7,866963E+18	7,866771E+18	5,471560E+21	1,573373E+19	5,487294E+21
-2610	2,735702E+21	2,735822E+21	7,873273E+18	7,872477E+18	5,471524E+21	1,574575E+19	5,487270E+21
-2609	2,735765E+21	2,735607E+21	7,867951E+18	7,868652E+18	5,471372E+21	1,573660E+19	5,487109E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2608	2,735554E+21	2,735669E+21	7,869432E+18	7,869615E+18	5,471223E+21	1,573905E+19	5,486962E+21
-2607	2,735493E+21	2,735541E+21	7,872927E+18	7,874093E+18	5,471034E+21	1,574702E+19	5,486781E+21
-2606	2,735507E+21	2,735296E+21	7,866594E+18	7,869481E+18	5,470803E+21	1,573608E+19	5,486539E+21
-2605	2,735277E+21	2,735372E+21	7,872452E+18	7,871153E+18	5,470648E+21	1,574360E+19	5,486392E+21
-2604	2,735312E+21	2,735208E+21	7,871148E+18	7,873721E+18	5,470519E+21	1,574487E+19	5,486264E+21
-2603	2,735248E+21	2,735155E+21	7,869140E+18	7,868803E+18	5,470403E+21	1,573794E+19	5,486141E+21
-2602	2,735080E+21	2,735254E+21	7,874289E+18	7,873458E+18	5,470334E+21	1,574775E+19	5,486082E+21
-2601	2,735205E+21	2,735068E+21	7,869629E+18	7,872494E+18	5,470274E+21	1,574212E+19	5,486016E+21
-2600	2,735141E+21	2,735191E+21	7,870519E+18	7,868572E+18	5,470332E+21	1,573909E+19	5,486071E+21
-2599	2,735166E+21	2,735270E+21	7,873404E+18	7,874991E+18	5,470437E+21	1,574840E+19	5,486185E+21
-2598	2,735354E+21	2,735168E+21	7,868620E+18	7,869141E+18	5,470522E+21	1,573776E+19	5,486260E+21
-2597	2,735278E+21	2,735416E+21	7,870305E+18	7,870110E+18	5,470694E+21	1,574042E+19	5,486435E+21
-2596	2,735426E+21	2,735431E+21	7,871754E+18	7,874580E+18	5,470857E+21	1,574633E+19	5,486603E+21
-2595	2,735560E+21	2,735437E+21	7,867570E+18	7,867244E+18	5,470997E+21	1,573481E+19	5,486732E+21
-2594	2,735477E+21	2,735640E+21	7,871522E+18	7,872048E+18	5,471118E+21	1,574357E+19	5,486861E+21
-2593	2,735627E+21	2,735507E+21	7,870645E+18	7,870541E+18	5,471134E+21	1,574119E+19	5,486875E+21
-2592	2,735588E+21	2,735560E+21	7,867593E+18	7,867685E+18	5,471147E+21	1,573528E+19	5,486883E+21
-2591	2,735454E+21	2,735614E+21	7,873840E+18	7,873844E+18	5,471068E+21	1,574768E+19	5,486816E+21
-2590	2,735536E+21	2,735355E+21	7,867994E+18	7,870194E+18	5,470892E+21	1,573819E+19	5,486630E+21
-2589	2,735349E+21	2,735401E+21	7,869147E+18	7,870220E+18	5,470751E+21	1,573937E+19	5,486490E+21
-2588	2,735285E+21	2,735303E+21	7,873519E+18	7,874303E+18	5,470588E+21	1,574782E+19	5,486336E+21
-2587	2,735317E+21	2,735099E+21	7,867990E+18	7,869387E+18	5,470416E+21	1,573738E+19	5,486154E+21
-2586	2,735060E+21	2,735197E+21	7,873546E+18	7,871234E+18	5,470257E+21	1,574478E+19	5,486002E+21
-2585	2,735062E+21	2,735005E+21	7,872185E+18	7,874281E+18	5,470068E+21	1,574647E+19	5,485814E+21
-2584	2,735025E+21	2,734942E+21	7,869575E+18	7,869765E+18	5,469968E+21	1,573934E+19	5,485707E+21
-2583	2,734863E+21	2,735056E+21	7,874631E+18	7,874354E+18	5,469920E+21	1,574899E+19	5,485669E+21
-2582	2,735027E+21	2,734852E+21	7,870127E+18	7,873111E+18	5,469880E+21	1,574324E+19	5,485623E+21
-2581	2,734982E+21	2,734986E+21	7,870501E+18	7,868805E+18	5,469968E+21	1,573931E+19	5,485708E+21
-2580	2,734990E+21	2,735109E+21	7,873940E+18	7,875617E+18	5,470098E+21	1,574956E+19	5,485848E+21
-2579	2,735194E+21	2,735031E+21	7,869517E+18	7,869666E+18	5,470225E+21	1,573918E+19	5,485964E+21
-2578	2,735120E+21	2,735279E+21	7,870708E+18	7,870564E+18	5,470399E+21	1,574127E+19	5,486140E+21
-2577	2,735253E+21	2,735258E+21	7,872662E+18	7,874520E+18	5,470512E+21	1,574718E+19	5,486259E+21
-2576	2,735406E+21	2,735257E+21	7,868099E+18	7,867484E+18	5,470662E+21	1,573558E+19	5,486398E+21
-2575	2,735296E+21	2,735475E+21	7,872320E+18	7,872555E+18	5,470771E+21	1,574487E+19	5,486516E+21
-2574	2,735432E+21	2,735307E+21	7,871070E+18	7,871530E+18	5,470739E+21	1,574260E+19	5,486481E+21
-2573	2,735383E+21	2,735339E+21	7,867214E+18	7,868826E+18	5,470722E+21	1,573604E+19	5,486458E+21
-2572	2,735238E+21	2,735400E+21	7,874054E+18	7,874788E+18	5,470638E+21	1,574884E+19	5,486387E+21
-2571	2,735340E+21	2,735148E+21	7,868840E+18	7,870607E+18	5,470488E+21	1,573945E+19	5,486227E+21
-2570	2,735152E+21	2,735194E+21	7,870232E+18	7,869985E+18	5,470346E+21	1,574022E+19	5,486086E+21
-2569	2,735053E+21	2,735074E+21	7,874971E+18	7,874179E+18	5,470127E+21	1,574915E+19	5,485876E+21
-2568	2,735080E+21	2,734878E+21	7,868970E+18	7,870200E+18	5,469958E+21	1,573917E+19	5,485697E+21
-2567	2,734806E+21	2,734988E+21	7,874273E+18	7,872447E+18	5,469795E+21	1,574672E+19	5,485541E+21
-2566	2,734835E+21	2,734768E+21	7,872440E+18	7,875640E+18	5,469603E+21	1,574808E+19	5,485351E+21
-2565	2,734831E+21	2,734708E+21	7,869362E+18	7,870331E+18	5,469539E+21	1,573969E+19	5,485279E+21
-2564	2,734678E+21	2,734859E+21	7,874989E+18	7,874601E+18	5,469537E+21	1,574959E+19	5,485287E+21
-2563	2,734863E+21	2,734695E+21	7,871189E+18	7,873193E+18	5,469557E+21	1,574438E+19	5,485302E+21
-2562	2,734810E+21	2,734844E+21	7,871065E+18	7,869008E+18	5,469654E+21	1,574007E+19	5,485394E+21
-2561	2,734798E+21	2,734940E+21	7,874693E+18	7,876139E+18	5,469739E+21	1,575083E+19	5,485489E+21
-2560	2,735031E+21	2,734864E+21	7,869865E+18	7,870500E+18	5,469895E+21	1,574037E+19	5,485636E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2559	2,734958E+21	2,735119E+21	7,871171E+18	7,871240E+18	5,470077E+21	1,574241E+19	5,485819E+21
-2558	2,735106E+21	2,735072E+21	7,873272E+18	7,874901E+18	5,470179E+21	1,574817E+19	5,485927E+21
-2557	2,735252E+21	2,735066E+21	7,868075E+18	7,867944E+18	5,470318E+21	1,573602E+19	5,486054E+21
-2556	2,735096E+21	2,735302E+21	7,872913E+18	7,873182E+18	5,470399E+21	1,574609E+19	5,486145E+21
-2555	2,735230E+21	2,735135E+21	7,871927E+18	7,872207E+18	5,470365E+21	1,574413E+19	5,486109E+21
-2554	2,735177E+21	2,735143E+21	7,867889E+18	7,869103E+18	5,470320E+21	1,573699E+19	5,486057E+21
-2553	2,735010E+21	2,735165E+21	7,875300E+18	7,874577E+18	5,470175E+21	1,574988E+19	5,485925E+21
-2552	2,735126E+21	2,734916E+21	7,869818E+18	7,870868E+18	5,470041E+21	1,574069E+19	5,485782E+21
-2551	2,734916E+21	2,734980E+21	7,871273E+18	7,870647E+18	5,469896E+21	1,574192E+19	5,485637E+21
-2550	2,734817E+21	2,734839E+21	7,875307E+18	7,875498E+18	5,469656E+21	1,575081E+19	5,485407E+21
-2549	2,734854E+21	2,734638E+21	7,868620E+18	7,871661E+18	5,469492E+21	1,574028E+19	5,485233E+21
-2548	2,734585E+21	2,734773E+21	7,874387E+18	7,873457E+18	5,469358E+21	1,574784E+19	5,485106E+21
-2547	2,734647E+21	2,734573E+21	7,873236E+18	7,876110E+18	5,469220E+21	1,574935E+19	5,484969E+21
-2546	2,734650E+21	2,734523E+21	7,870292E+18	7,870029E+18	5,469173E+21	1,574032E+19	5,484914E+21
-2545	2,734470E+21	2,734664E+21	7,876151E+18	7,874578E+18	5,469134E+21	1,575073E+19	5,484885E+21
-2544	2,734659E+21	2,734518E+21	7,872050E+18	7,873901E+18	5,469177E+21	1,574595E+19	5,484923E+21
-2543	2,734615E+21	2,734678E+21	7,871573E+18	7,870115E+18	5,469293E+21	1,574169E+19	5,485035E+21
-2542	2,734640E+21	2,734746E+21	7,874863E+18	7,877064E+18	5,469386E+21	1,575193E+19	5,485138E+21
-2541	2,734896E+21	2,734678E+21	7,869732E+18	7,870785E+18	5,469575E+21	1,574052E+19	5,485315E+21
-2540	2,734818E+21	2,734968E+21	7,871551E+18	7,871331E+18	5,469786E+21	1,574288E+19	5,485529E+21
-2539	2,734955E+21	2,734941E+21	7,874269E+18	7,874927E+18	5,469896E+21	1,574920E+19	5,485645E+21
-2538	2,735067E+21	2,734925E+21	7,868551E+18	7,868273E+18	5,469991E+21	1,573682E+19	5,485728E+21
-2537	2,734872E+21	2,735107E+21	7,873783E+18	7,873706E+18	5,469979E+21	1,574749E+19	5,485727E+21
-2536	2,735012E+21	2,734926E+21	7,872479E+18	7,873061E+18	5,469938E+21	1,574554E+19	5,485683E+21
-2535	2,734961E+21	2,734922E+21	7,868734E+18	7,869904E+18	5,469884E+21	1,573864E+19	5,485622E+21
-2534	2,734809E+21	2,734909E+21	7,875946E+18	7,875179E+18	5,469718E+21	1,575113E+19	5,485470E+21
-2533	2,734918E+21	2,734673E+21	7,869845E+18	7,871900E+18	5,469591E+21	1,574175E+19	5,485333E+21
-2532	2,734683E+21	2,734766E+21	7,871705E+18	7,871803E+18	5,469449E+21	1,574351E+19	5,485192E+21
-2531	2,734597E+21	2,734638E+21	7,875877E+18	7,876569E+18	5,469235E+21	1,575245E+19	5,484987E+21
-2530	2,734640E+21	2,734433E+21	7,869186E+18	7,872012E+18	5,469073E+21	1,574120E+19	5,484814E+21
-2529	2,734356E+21	2,734545E+21	7,875587E+18	7,873184E+18	5,468902E+21	1,574877E+19	5,484651E+21
-2528	2,734433E+21	2,734367E+21	7,874364E+18	7,876139E+18	5,468800E+21	1,575050E+19	5,484551E+21
-2527	2,734428E+21	2,734334E+21	7,871434E+18	7,870448E+18	5,468762E+21	1,574188E+19	5,484504E+21
-2526	2,734267E+21	2,734456E+21	7,876396E+18	7,875627E+18	5,468723E+21	1,575202E+19	5,484475E+21
-2525	2,734487E+21	2,734321E+21	7,871720E+18	7,875102E+18	5,468808E+21	1,574682E+19	5,484555E+21
-2524	2,734460E+21	2,734514E+21	7,871534E+18	7,870932E+18	5,468974E+21	1,574247E+19	5,484717E+21
-2523	2,734518E+21	2,734606E+21	7,875497E+18	7,877263E+18	5,469124E+21	1,575276E+19	5,484877E+21
-2522	2,734763E+21	2,734544E+21	7,870512E+18	7,870318E+18	5,469307E+21	1,574083E+19	5,485048E+21
-2521	2,734628E+21	2,734808E+21	7,872680E+18	7,871284E+18	5,469436E+21	1,574396E+19	5,485180E+21
-2520	2,734740E+21	2,734778E+21	7,875159E+18	7,875545E+18	5,469518E+21	1,575070E+19	5,485269E+21
-2519	2,734841E+21	2,734736E+21	7,869153E+18	7,869550E+18	5,469577E+21	1,573870E+19	5,485316E+21
-2518	2,734674E+21	2,734865E+21	7,873968E+18	7,874730E+18	5,469539E+21	1,574870E+19	5,485287E+21
-2517	2,734834E+21	2,734682E+21	7,872288E+18	7,873842E+18	5,469515E+21	1,574613E+19	5,485261E+21
-2516	2,734779E+21	2,734710E+21	7,869164E+18	7,870483E+18	5,469488E+21	1,573965E+19	5,485228E+21
-2515	2,734623E+21	2,734721E+21	7,876629E+18	7,875705E+18	5,469344E+21	1,575233E+19	5,485096E+21
-2514	2,734704E+21	2,734488E+21	7,870293E+18	7,872522E+18	5,469191E+21	1,574282E+19	5,484934E+21
-2513	2,734435E+21	2,734547E+21	7,872734E+18	7,872382E+18	5,468982E+21	1,574512E+19	5,484727E+21
-2512	2,734351E+21	2,734423E+21	7,876780E+18	7,877052E+18	5,468774E+21	1,575383E+19	5,484528E+21
-2511	2,734402E+21	2,734212E+21	7,870488E+18	7,872521E+18	5,468614E+21	1,574301E+19	5,484357E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2510	2,734141E+21	2,734289E+21	7,876379E+18	7,873541E+18	5,468429E+21	1,574992E+19	5,484179E+21
-2509	2,734218E+21	2,734134E+21	7,874470E+18	7,877057E+18	5,468352E+21	1,575153E+19	5,484104E+21
-2508	2,734222E+21	2,734140E+21	7,871672E+18	7,871560E+18	5,468363E+21	1,574323E+19	5,484106E+21
-2507	2,734106E+21	2,734285E+21	7,876564E+18	7,876609E+18	5,468391E+21	1,575317E+19	5,484144E+21
-2506	2,734343E+21	2,734171E+21	7,872111E+18	7,875086E+18	5,468513E+21	1,574720E+19	5,484260E+21
-2505	2,734303E+21	2,734353E+21	7,872440E+18	7,870633E+18	5,468655E+21	1,574307E+19	5,484398E+21
-2504	2,734350E+21	2,734467E+21	7,876483E+18	7,877080E+18	5,468817E+21	1,575356E+19	5,484571E+21
-2503	2,734567E+21	2,734400E+21	7,871395E+18	7,870966E+18	5,468967E+21	1,574236E+19	5,484709E+21
-2502	2,734433E+21	2,734605E+21	7,872729E+18	7,872508E+18	5,469037E+21	1,574524E+19	5,484783E+21
-2501	2,734552E+21	2,734565E+21	7,874742E+18	7,876918E+18	5,469118E+21	1,575166E+19	5,484869E+21
-2500	2,734666E+21	2,734535E+21	7,869159E+18	7,870644E+18	5,469200E+21	1,573980E+19	5,484940E+21
-2499	2,734530E+21	2,734668E+21	7,874523E+18	7,875093E+18	5,469198E+21	1,574962E+19	5,484948E+21
-2498	2,734669E+21	2,734497E+21	7,873038E+18	7,873641E+18	5,469167E+21	1,574668E+19	5,484913E+21
-2497	2,734551E+21	2,734509E+21	7,870493E+18	7,870666E+18	5,469060E+21	1,574116E+19	5,484802E+21
-2496	2,734370E+21	2,734528E+21	7,877756E+18	7,876172E+18	5,468897E+21	1,575393E+19	5,484651E+21
-2495	2,734439E+21	2,734270E+21	7,871459E+18	7,873595E+18	5,468709E+21	1,574505E+19	5,484454E+21
-2494	2,734190E+21	2,734276E+21	7,873538E+18	7,872990E+18	5,468466E+21	1,574653E+19	5,484213E+21
-2493	2,734125E+21	2,734160E+21	7,876902E+18	7,877652E+18	5,468285E+21	1,575455E+19	5,484040E+21
-2492	2,734180E+21	2,733983E+21	7,871038E+18	7,873196E+18	5,468162E+21	1,574423E+19	5,483907E+21
-2491	2,733947E+21	2,734086E+21	7,876615E+18	7,874356E+18	5,468033E+21	1,575097E+19	5,483784E+21
-2490	2,734031E+21	2,733953E+21	7,874565E+18	7,877710E+18	5,467984E+21	1,575227E+19	5,483736E+21
-2489	2,734028E+21	2,733956E+21	7,872328E+18	7,872122E+18	5,467985E+21	1,574445E+19	5,483729E+21
-2488	2,733934E+21	2,734130E+21	7,877228E+18	7,876833E+18	5,468064E+21	1,575406E+19	5,483818E+21
-2487	2,734175E+21	2,734019E+21	7,873354E+18	7,875304E+18	5,468193E+21	1,574866E+19	5,483942E+21
-2486	2,734138E+21	2,734165E+21	7,872978E+18	7,871009E+18	5,468303E+21	1,574399E+19	5,484047E+21
-2485	2,734167E+21	2,734284E+21	7,876388E+18	7,877982E+18	5,468451E+21	1,575437E+19	5,484206E+21
-2484	2,734377E+21	2,734227E+21	7,871412E+18	7,872244E+18	5,468604E+21	1,574366E+19	5,484348E+21
-2483	2,734283E+21	2,734421E+21	7,872733E+18	7,873562E+18	5,468703E+21	1,574629E+19	5,484449E+21
-2482	2,734406E+21	2,734387E+21	7,875182E+18	7,876782E+18	5,468793E+21	1,575196E+19	5,484545E+21
-2481	2,734494E+21	2,734345E+21	7,870343E+18	7,870402E+18	5,468839E+21	1,574074E+19	5,484579E+21
-2480	2,734332E+21	2,734499E+21	7,875845E+18	7,874720E+18	5,468831E+21	1,575057E+19	5,484582E+21
-2479	2,734431E+21	2,734322E+21	7,874294E+18	7,874332E+18	5,468753E+21	1,574863E+19	5,484502E+21
-2478	2,734308E+21	2,734267E+21	7,870956E+18	7,871907E+18	5,468576E+21	1,574286E+19	5,484318E+21
-2477	2,734124E+21	2,734274E+21	7,877578E+18	7,877461E+18	5,468398E+21	1,575504E+19	5,484153E+21
-2476	2,734207E+21	2,734027E+21	7,871694E+18	7,874912E+18	5,468234E+21	1,574661E+19	5,483980E+21
-2475	2,734000E+21	2,734029E+21	7,874148E+18	7,873542E+18	5,468029E+21	1,574769E+19	5,483777E+21
-2474	2,733923E+21	2,733939E+21	7,877426E+18	7,877664E+18	5,467862E+21	1,575509E+19	5,483617E+21
-2473	2,733940E+21	2,733768E+21	7,872116E+18	7,873691E+18	5,467708E+21	1,574581E+19	5,483454E+21
-2472	2,733717E+21	2,733899E+21	7,877308E+18	7,874884E+18	5,467615E+21	1,575219E+19	5,483368E+21
-2471	2,733821E+21	2,733772E+21	7,875523E+18	7,878622E+18	5,467594E+21	1,575415E+19	5,483348E+21
-2470	2,733853E+21	2,733743E+21	7,872910E+18	7,872517E+18	5,467596E+21	1,574543E+19	5,483342E+21
-2469	2,733774E+21	2,733938E+21	7,877264E+18	7,877108E+18	5,467713E+21	1,575437E+19	5,483467E+21
-2468	2,734006E+21	2,733861E+21	7,873823E+18	7,875804E+18	5,467867E+21	1,574963E+19	5,483617E+21
-2467	2,733985E+21	2,734008E+21	7,873038E+18	7,871838E+18	5,467993E+21	1,574488E+19	5,483738E+21
-2466	2,734004E+21	2,734130E+21	7,876497E+18	7,878336E+18	5,468134E+21	1,575483E+19	5,483889E+21
-2465	2,734190E+21	2,734056E+21	7,872180E+18	7,872662E+18	5,468245E+21	1,574484E+19	5,483990E+21
-2464	2,734111E+21	2,734259E+21	7,873684E+18	7,873516E+18	5,468369E+21	1,574720E+19	5,484117E+21
-2463	2,734229E+21	2,734212E+21	7,876751E+18	7,876820E+18	5,468441E+21	1,575357E+19	5,484194E+21
-2462	2,734295E+21	2,734126E+21	7,871221E+18	7,870872E+18	5,468421E+21	1,574209E+19	5,484163E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2461	2,734107E+21	2,734279E+21	7,875927E+18	7,875776E+18	5,468387E+21	1,575170E+19	5,484138E+21
-2460	2,734193E+21	2,734103E+21	7,874415E+18	7,875963E+18	5,468296E+21	1,575038E+19	5,484046E+21
-2459	2,734106E+21	2,734031E+21	7,871051E+18	7,873253E+18	5,468136E+21	1,574430E+19	5,483881E+21
-2458	2,733924E+21	2,734043E+21	7,877938E+18	7,877440E+18	5,467966E+21	1,575538E+19	5,483722E+21
-2457	2,733979E+21	2,733793E+21	7,872830E+18	7,875020E+18	5,467772E+21	1,574785E+19	5,483520E+21
-2456	2,733765E+21	2,733824E+21	7,875316E+18	7,873377E+18	5,467589E+21	1,574869E+19	5,483338E+21
-2455	2,733677E+21	2,733737E+21	7,878496E+18	7,878462E+18	5,467415E+21	1,575696E+19	5,483172E+21
-2454	2,733711E+21	2,733531E+21	7,872659E+18	7,874786E+18	5,467242E+21	1,574745E+19	5,482990E+21
-2453	2,733515E+21	2,733679E+21	7,877048E+18	7,875963E+18	5,467194E+21	1,575301E+19	5,482947E+21
-2452	2,733645E+21	2,733585E+21	7,875889E+18	7,879580E+18	5,467231E+21	1,575547E+19	5,482986E+21
-2451	2,733720E+21	2,733564E+21	7,873387E+18	7,872934E+18	5,467284E+21	1,574632E+19	5,483030E+21
-2450	2,733618E+21	2,733785E+21	7,877649E+18	7,876831E+18	5,467403E+21	1,575448E+19	5,483157E+21
-2449	2,733803E+21	2,733706E+21	7,874773E+18	7,876167E+18	5,467509E+21	1,575094E+19	5,483260E+21
-2448	2,733787E+21	2,733854E+21	7,873791E+18	7,872119E+18	5,467641E+21	1,574591E+19	5,483387E+21
-2447	2,733815E+21	2,733965E+21	7,877664E+18	7,878833E+18	5,467781E+21	1,575650E+19	5,483537E+21
-2446	2,734021E+21	2,733845E+21	7,872896E+18	7,873013E+18	5,467867E+21	1,574591E+19	5,483613E+21
-2445	2,733945E+21	2,734054E+21	7,873745E+18	7,874032E+18	5,467999E+21	1,574778E+19	5,483746E+21
-2444	2,734043E+21	2,734032E+21	7,877019E+18	7,87775E+18	5,468075E+21	1,575479E+19	5,483830E+21
-2443	2,734119E+21	2,733930E+21	7,871077E+18	7,872304E+18	5,468049E+21	1,574338E+19	5,483792E+21
-2442	2,733911E+21	2,734079E+21	7,875979E+18	7,876281E+18	5,467990E+21	1,575226E+19	5,483742E+21
-2441	2,733962E+21	2,733889E+21	7,875202E+18	7,876676E+18	5,467850E+21	1,575188E+19	5,483602E+21
-2440	2,733880E+21	2,733819E+21	7,872342E+18	7,873196E+18	5,467699E+21	1,574554E+19	5,483445E+21
-2439	2,733691E+21	2,733821E+21	7,879653E+18	7,877462E+18	5,467512E+21	1,575711E+19	5,483270E+21
-2438	2,733727E+21	2,733535E+21	7,873879E+18	7,875611E+18	5,467262E+21	1,574949E+19	5,483011E+21
-2437	2,733513E+21	2,733573E+21	7,875442E+18	7,874445E+18	5,467086E+21	1,574989E+19	5,482836E+21
-2436	2,733444E+21	2,733510E+21	7,878614E+18	7,880013E+18	5,466954E+21	1,575863E+19	5,482713E+21
-2435	2,733536E+21	2,733313E+21	7,872909E+18	7,875857E+18	5,466849E+21	1,574877E+19	5,482598E+21
-2434	2,733357E+21	2,733492E+21	7,877386E+18	7,875638E+18	5,466849E+21	1,575302E+19	5,482602E+21
-2433	2,733456E+21	2,733417E+21	7,877110E+18	7,879448E+18	5,466873E+21	1,575656E+19	5,482629E+21
-2432	2,733520E+21	2,733427E+21	7,874472E+18	7,872679E+18	5,466946E+21	1,574715E+19	5,482693E+21
-2431	2,733411E+21	2,733632E+21	7,878567E+18	7,877457E+18	5,467043E+21	1,575602E+19	5,482799E+21
-2430	2,733598E+21	2,733505E+21	7,875200E+18	7,877121E+18	5,467103E+21	1,575232E+19	5,482855E+21
-2429	2,733616E+21	2,733652E+21	7,873414E+18	7,873236E+18	5,467268E+21	1,574665E+19	5,483015E+21
-2428	2,733670E+21	2,733779E+21	7,877954E+18	7,879753E+18	5,467449E+21	1,575771E+19	5,483206E+21
-2427	2,733903E+21	2,733663E+21	7,873197E+18	7,873711E+18	5,467566E+21	1,574691E+19	5,483313E+21
-2426	2,733792E+21	2,733889E+21	7,873979E+18	7,874059E+18	5,467681E+21	1,574804E+19	5,483429E+21
-2425	2,733827E+21	2,733861E+21	7,877804E+18	7,878391E+18	5,467688E+21	1,575619E+19	5,483444E+21
-2424	2,733895E+21	2,733754E+21	7,871922E+18	7,872795E+18	5,467650E+21	1,574472E+19	5,483394E+21
-2423	2,733684E+21	2,733875E+21	7,877425E+18	7,876573E+18	5,467559E+21	1,575400E+19	5,483313E+21
-2422	2,733728E+21	2,733635E+21	7,876293E+18	7,876939E+18	5,467363E+21	1,575323E+19	5,483116E+21
-2421	2,733645E+21	2,733563E+21	7,872865E+18	7,873714E+18	5,467208E+21	1,574658E+19	5,482955E+21
-2420	2,733447E+21	2,733584E+21	7,880054E+18	7,878568E+18	5,467032E+21	1,575862E+19	5,482790E+21
-2419	2,733513E+21	2,733296E+21	7,873849E+18	7,877245E+18	5,466808E+21	1,575109E+19	5,482559E+21
-2418	2,733307E+21	2,733352E+21	7,875409E+18	7,875038E+18	5,466659E+21	1,575045E+19	5,482410E+21
-2417	2,733231E+21	2,733309E+21	7,879259E+18	7,880768E+18	5,466540E+21	1,576003E+19	5,482300E+21
-2416	2,733343E+21	2,733138E+21	7,874282E+18	7,875617E+18	5,466481E+21	1,574990E+19	5,482231E+21
-2415	2,733158E+21	2,733321E+21	7,878930E+18	7,875486E+18	5,466479E+21	1,575442E+19	5,482234E+21
-2414	2,733232E+21	2,733217E+21	7,878001E+18	7,879938E+18	5,466448E+21	1,575794E+19	5,482206E+21
-2413	2,733299E+21	2,733221E+21	7,874340E+18	7,873782E+18	5,466520E+21	1,574812E+19	5,482268E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2412	2,733222E+21	2,733436E+21	7,878399E+18	7,879006E+18	5,466658E+21	1,575740E+19	5,482415E+21
-2411	2,733470E+21	2,733311E+21	7,875206E+18	7,878161E+18	5,466780E+21	1,575337E+19	5,482534E+21
-2410	2,733503E+21	2,733483E+21	7,873536E+18	7,872985E+18	5,466986E+21	1,574652E+19	5,482732E+21
-2409	2,733517E+21	2,733632E+21	7,878891E+18	7,879704E+18	5,467149E+21	1,575859E+19	5,482908E+21
-2408	2,733721E+21	2,733537E+21	7,874266E+18	7,873573E+18	5,467258E+21	1,574784E+19	5,483006E+21
-2407	2,733584E+21	2,733736E+21	7,875117E+18	7,874530E+18	5,467320E+21	1,574965E+19	5,483070E+21
-2406	2,733591E+21	2,733647E+21	7,878527E+18	7,879117E+18	5,467237E+21	1,575764E+19	5,482995E+21
-2405	2,733667E+21	2,733517E+21	7,872071E+18	7,873892E+18	5,467184E+21	1,574596E+19	5,482930E+21
-2404	2,733469E+21	2,733629E+21	7,878115E+18	7,877513E+18	5,467099E+21	1,575563E+19	5,482854E+21
-2403	2,733530E+21	2,733384E+21	7,876665E+18	7,877988E+18	5,466914E+21	1,575465E+19	5,482669E+21
-2402	2,733429E+21	2,733327E+21	7,873134E+18	7,874155E+18	5,466756E+21	1,574729E+19	5,482503E+21
-2401	2,733196E+21	2,733357E+21	7,880598E+18	7,879488E+18	5,466554E+21	1,576009E+19	5,482314E+21
-2400	2,733278E+21	2,733097E+21	7,874816E+18	7,877753E+18	5,466375E+21	1,575257E+19	5,482127E+21
-2399	2,733096E+21	2,733151E+21	7,876793E+18	7,875208E+18	5,466247E+21	1,575200E+19	5,481999E+21
-2398	2,733011E+21	2,733085E+21	7,880307E+18	7,880879E+18	5,466095E+21	1,576119E+19	5,481857E+21
-2397	2,733126E+21	2,732928E+21	7,874702E+18	7,876141E+18	5,466054E+21	1,575084E+19	5,481805E+21
-2396	2,732945E+21	2,733123E+21	7,879057E+18	7,876653E+18	5,466067E+21	1,575571E+19	5,481823E+21
-2395	2,733051E+21	2,733015E+21	7,877772E+18	7,881400E+18	5,466066E+21	1,575917E+19	5,481825E+21
-2394	2,733142E+21	2,733036E+21	7,874050E+18	7,874274E+18	5,466178E+21	1,574832E+19	5,481926E+21
-2393	2,733068E+21	2,733271E+21	7,878808E+18	7,879559E+18	5,466339E+21	1,575837E+19	5,482097E+21
-2392	2,733334E+21	2,733179E+21	7,876587E+18	7,877725E+18	5,466513E+21	1,575431E+19	5,482267E+21
-2391	2,733352E+21	2,733349E+21	7,874967E+18	7,872813E+18	5,466701E+21	1,574778E+19	5,482449E+21
-2390	2,733310E+21	2,733459E+21	7,879797E+18	7,880034E+18	5,466770E+21	1,575983E+19	5,482530E+21
-2389	2,733498E+21	2,733341E+21	7,874291E+18	7,874752E+18	5,466839E+21	1,574904E+19	5,482588E+21
-2388	2,733370E+21	2,733520E+21	7,875296E+18	7,876025E+18	5,466889E+21	1,575132E+19	5,482641E+21
-2387	2,733408E+21	2,733411E+21	7,878674E+18	7,880185E+18	5,466819E+21	1,575886E+19	5,482578E+21
-2386	2,733483E+21	2,733286E+21	7,872355E+18	7,874012E+18	5,466769E+21	1,574637E+19	5,482515E+21
-2385	2,733251E+21	2,733412E+21	7,878864E+18	7,877916E+18	5,466663E+21	1,575678E+19	5,482419E+21
-2384	2,733298E+21	2,733187E+21	7,877600E+18	7,878330E+18	5,466485E+21	1,575593E+19	5,482241E+21
-2383	2,733190E+21	2,733117E+21	7,874270E+18	7,874791E+18	5,466308E+21	1,574906E+19	5,482057E+21
-2382	2,732945E+21	2,733117E+21	7,881203E+18	7,880216E+18	5,466062E+21	1,576142E+19	5,481824E+21
-2381	2,733046E+21	2,732858E+21	7,875270E+18	7,878677E+18	5,465904E+21	1,575395E+19	5,481658E+21
-2380	2,732885E+21	2,732923E+21	7,877666E+18	7,875982E+18	5,465808E+21	1,575365E+19	5,481562E+21
-2379	2,732816E+21	2,732863E+21	7,880677E+18	7,881710E+18	5,465678E+21	1,576239E+19	5,481441E+21
-2378	2,732917E+21	2,732724E+21	7,874830E+18	7,876535E+18	5,465641E+21	1,575136E+19	5,481392E+21
-2377	2,732730E+21	2,732928E+21	7,879256E+18	7,877569E+18	5,465658E+21	1,575682E+19	5,481415E+21
-2376	2,732869E+21	2,732852E+21	7,878697E+18	7,881580E+18	5,465722E+21	1,576028E+19	5,481482E+21
-2375	2,732992E+21	2,732881E+21	7,875358E+18	7,874097E+18	5,465873E+21	1,574945E+19	5,481622E+21
-2374	2,732904E+21	2,733098E+21	7,879752E+18	7,879447E+18	5,466002E+21	1,575920E+19	5,481761E+21
-2373	2,733157E+21	2,733018E+21	7,877063E+18	7,878130E+18	5,466174E+21	1,575519E+19	5,481930E+21
-2372	2,733166E+21	2,733180E+21	7,875018E+18	7,874188E+18	5,466345E+21	1,574921E+19	5,482095E+21
-2371	2,733133E+21	2,733264E+21	7,879491E+18	7,881445E+18	5,466397E+21	1,576094E+19	5,482158E+21
-2370	2,733322E+21	2,733140E+21	7,873925E+18	7,875570E+18	5,466462E+21	1,574949E+19	5,482211E+21
-2369	2,733184E+21	2,733310E+21	7,875820E+18	7,876678E+18	5,466494E+21	1,575250E+19	5,482247E+21
-2368	2,733221E+21	2,733223E+21	7,880130E+18	7,879894E+18	5,466444E+21	1,576002E+19	5,482204E+21
-2367	2,733276E+21	2,733090E+21	7,873871E+18	7,874093E+18	5,466366E+21	1,574796E+19	5,482114E+21
-2366	2,732990E+21	2,733175E+21	7,879708E+18	7,878385E+18	5,466166E+21	1,575809E+19	5,481924E+21
-2365	2,733037E+21	2,732944E+21	7,877777E+18	7,879588E+18	5,465981E+21	1,575736E+19	5,481739E+21
-2364	2,732957E+21	2,732869E+21	7,874797E+18	7,876193E+18	5,465826E+21	1,575099E+19	5,481577E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2363	2,732746E+21	2,732868E+21	7,881493E+18	7,881001E+18	5,465614E+21	1,576249E+19	5,481377E+21
-2362	2,732848E+21	2,732633E+21	7,875718E+18	7,878849E+18	5,465481E+21	1,575457E+19	5,481236E+21
-2361	2,732660E+21	2,732719E+21	7,878352E+18	7,876450E+18	5,465380E+21	1,575480E+19	5,481134E+21
-2360	2,732590E+21	2,732689E+21	7,881520E+18	7,881984E+18	5,465279E+21	1,576350E+19	5,481043E+21
-2359	2,732707E+21	2,732543E+21	7,875770E+18	7,877053E+18	5,465249E+21	1,575282E+19	5,481002E+21
-2358	2,732523E+21	2,732723E+21	7,879617E+18	7,878165E+18	5,465246E+21	1,575778E+19	5,481003E+21
-2357	2,732698E+21	2,732659E+21	7,879166E+18	7,882214E+18	5,465358E+21	1,576138E+19	5,481119E+21
-2356	2,732844E+21	2,732702E+21	7,876068E+18	7,874880E+18	5,465547E+21	1,575095E+19	5,481298E+21
-2355	2,732760E+21	2,732923E+21	7,879846E+18	7,880285E+18	5,465684E+21	1,576013E+19	5,481444E+21
-2354	2,732984E+21	2,732849E+21	7,876978E+18	7,878628E+18	5,465833E+21	1,575561E+19	5,481589E+21
-2353	2,732975E+21	2,733005E+21	7,875022E+18	7,875243E+18	5,465980E+21	1,575026E+19	5,481730E+21
-2352	2,732954E+21	2,733099E+21	7,880465E+18	7,881395E+18	5,466053E+21	1,576186E+19	5,481815E+21
-2351	2,733145E+21	2,732960E+21	7,875325E+18	7,875342E+18	5,466105E+21	1,575067E+19	5,481855E+21
-2350	2,732974E+21	2,733094E+21	7,876937E+18	7,876551E+18	5,466068E+21	1,575349E+19	5,481822E+21
-2349	2,732989E+21	2,733006E+21	7,880844E+18	7,880351E+18	5,465995E+21	1,576119E+19	5,481756E+21
-2348	2,733037E+21	2,732862E+21	7,874378E+18	7,875536E+18	5,465898E+21	1,574991E+19	5,481648E+21
-2347	2,732769E+21	2,732927E+21	7,879639E+18	7,879697E+18	5,465695E+21	1,575934E+19	5,481455E+21
-2346	2,732820E+21	2,732705E+21	7,877695E+18	7,880492E+18	5,465525E+21	1,575819E+19	5,481283E+21
-2345	2,732742E+21	2,732640E+21	7,875530E+18	7,876968E+18	5,465382E+21	1,575250E+19	5,481135E+21
-2344	2,732535E+21	2,732670E+21	7,882889E+18	7,880747E+18	5,465205E+21	1,576364E+19	5,480969E+21
-2343	2,732618E+21	2,732438E+21	7,877165E+18	7,879065E+18	5,465056E+21	1,575623E+19	5,480812E+21
-2342	2,732394E+21	2,732488E+21	7,879062E+18	7,876987E+18	5,464882E+21	1,575605E+19	5,480638E+21
-2341	2,732348E+21	2,732461E+21	7,881716E+18	7,883026E+18	5,464808E+21	1,576474E+19	5,480573E+21
-2340	2,732513E+21	2,732326E+21	7,876319E+18	7,878245E+18	5,464840E+21	1,575456E+19	5,480594E+21
-2339	2,732381E+21	2,732517E+21	7,879669E+18	7,878800E+18	5,464897E+21	1,575847E+19	5,480656E+21
-2338	2,732563E+21	2,732492E+21	7,879381E+18	7,882356E+18	5,465055E+21	1,576174E+19	5,480816E+21
-2337	2,732686E+21	2,732556E+21	7,876361E+18	7,875446E+18	5,465242E+21	1,575181E+19	5,480994E+21
-2336	2,732591E+21	2,732797E+21	7,880554E+18	7,880301E+18	5,465388E+21	1,576085E+19	5,481148E+21
-2335	2,732807E+21	2,732706E+21	7,877843E+18	7,878860E+18	5,465513E+21	1,575670E+19	5,481270E+21
-2334	2,732770E+21	2,732812E+21	7,875633E+18	7,875594E+18	5,465582E+21	1,575123E+19	5,481333E+21
-2333	2,732759E+21	2,732896E+21	7,881397E+18	7,881615E+18	5,465655E+21	1,576301E+19	5,481418E+21
-2332	2,732952E+21	2,732749E+21	7,876365E+18	7,876195E+18	5,465701E+21	1,575256E+19	5,481453E+21
-2331	2,732773E+21	2,732864E+21	7,877167E+18	7,877536E+18	5,465637E+21	1,575470E+19	5,481391E+21
-2330	2,732768E+21	2,732775E+21	7,880686E+18	7,881329E+18	5,465544E+21	1,576202E+19	5,481306E+21
-2329	2,732810E+21	2,732632E+21	7,874465E+18	7,876946E+18	5,465442E+21	1,575141E+19	5,481193E+21
-2328	2,732562E+21	2,732720E+21	7,880694E+18	7,879759E+18	5,465281E+21	1,576045E+19	5,481042E+21
-2327	2,732611E+21	2,732500E+21	7,879141E+18	7,880492E+18	5,465111E+21	1,575963E+19	5,480871E+21
-2326	2,732490E+21	2,732409E+21	7,876778E+18	7,877068E+18	5,464899E+21	1,575385E+19	5,480653E+21
-2325	2,732271E+21	2,732442E+21	7,883545E+18	7,881317E+18	5,464713E+21	1,576486E+19	5,480478E+21
-2324	2,732364E+21	2,732202E+21	7,877680E+18	7,880621E+18	5,464566E+21	1,575830E+19	5,480324E+21
-2323	2,732184E+21	2,732240E+21	7,878795E+18	7,878233E+18	5,464423E+21	1,575703E+19	5,480180E+21
-2322	2,732170E+21	2,732238E+21	7,881576E+18	7,883743E+18	5,464408E+21	1,576532E+19	5,480173E+21
-2321	2,732358E+21	2,732143E+21	7,877033E+18	7,878707E+18	5,464501E+21	1,575574E+19	5,480257E+21
-2320	2,732243E+21	2,732379E+21	7,880862E+18	7,878356E+18	5,464622E+21	1,575922E+19	5,480381E+21
-2319	2,732392E+21	2,732366E+21	7,880681E+18	7,882213E+18	5,464758E+21	1,576289E+19	5,480521E+21
-2318	2,732467E+21	2,732391E+21	7,876957E+18	7,875837E+18	5,464858E+21	1,575279E+19	5,480611E+21
-2317	2,732380E+21	2,732614E+21	7,881000E+18	7,880824E+18	5,464994E+21	1,576182E+19	5,480756E+21
-2316	2,732616E+21	2,732511E+21	7,878643E+18	7,879725E+18	5,465126E+21	1,575837E+19	5,480885E+21
-2315	2,732606E+21	2,732593E+21	7,875892E+18	7,876219E+18	5,465199E+21	1,575211E+19	5,480951E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,732584E+21	2,732689E+21	7,881620E+18	7,882027E+18	5,465273E+21	1,576365E+19	5,481036E+21
-2313	2,732753E+21	2,732556E+21	7,876508E+18	7,877366E+18	5,465309E+21	1,575387E+19	5,481063E+21
-2312	2,732577E+21	2,732679E+21	7,877711E+18	7,878085E+18	5,465256E+21	1,575580E+19	5,481012E+21
-2311	2,732563E+21	2,732584E+21	7,881369E+18	7,881866E+18	5,465147E+21	1,576324E+19	5,480910E+21
-2310	2,732572E+21	2,732403E+21	7,875294E+18	7,877544E+18	5,464975E+21	1,575284E+19	5,480728E+21
-2309	2,732328E+21	2,732487E+21	7,881974E+18	7,879869E+18	5,464815E+21	1,576184E+19	5,480577E+21
-2308	2,732368E+21	2,732266E+21	7,880437E+18	7,881464E+18	5,464635E+21	1,576190E+19	5,480396E+21
-2307	2,732238E+21	2,732152E+21	7,877240E+18	7,878035E+18	5,464389E+21	1,575527E+19	5,480145E+21
-2306	2,732023E+21	2,732187E+21	7,883363E+18	7,882359E+18	5,464211E+21	1,576572E+19	5,479976E+21
-2305	2,732142E+21	2,731967E+21	7,877842E+18	7,881850E+18	5,464109E+21	1,575969E+19	5,479869E+21
-2304	2,732014E+21	2,732046E+21	7,879701E+18	7,878077E+18	5,464060E+21	1,575778E+19	5,479818E+21
-2303	2,732017E+21	2,732078E+21	7,882766E+18	7,883464E+18	5,464096E+21	1,576623E+19	5,479862E+21
-2302	2,732162E+21	2,731981E+21	7,878212E+18	7,878565E+18	5,464143E+21	1,575678E+19	5,479900E+21
-2301	2,732037E+21	2,732225E+21	7,881481E+18	7,878614E+18	5,464262E+21	1,576010E+19	5,480022E+21
-2300	2,732187E+21	2,732197E+21	7,881245E+18	7,883442E+18	5,464384E+21	1,576469E+19	5,480148E+21
-2299	2,732281E+21	2,732188E+21	7,876612E+18	7,877017E+18	5,464469E+21	1,575363E+19	5,480222E+21
-2298	2,732216E+21	2,732407E+21	7,880755E+18	7,881685E+18	5,464623E+21	1,576244E+19	5,480385E+21
-2297	2,732460E+21	2,732320E+21	7,879070E+18	7,880552E+18	5,464781E+21	1,575962E+19	5,480540E+21
-2296	2,732459E+21	2,732427E+21	7,876819E+18	7,876322E+18	5,464886E+21	1,575314E+19	5,480639E+21
-2295	2,732402E+21	2,732523E+21	7,882512E+18	7,882236E+18	5,464925E+21	1,576475E+19	5,480690E+21
-2294	2,732515E+21	2,732353E+21	7,877123E+18	7,878082E+18	5,464868E+21	1,575520E+19	5,480624E+21
-2293	2,732346E+21	2,732463E+21	7,878531E+18	7,878531E+18	5,464809E+21	1,575706E+19	5,480566E+21
-2292	2,732336E+21	2,732359E+21	7,882542E+18	7,882617E+18	5,464695E+21	1,576516E+19	5,480460E+21
-2291	2,732352E+21	2,732154E+21	7,875976E+18	7,878206E+18	5,464506E+21	1,575418E+19	5,480260E+21
-2290	2,732091E+21	2,732238E+21	7,882459E+18	7,880358E+18	5,464328E+21	1,576282E+19	5,480091E+21
-2289	2,732112E+21	2,732032E+21	7,880719E+18	7,882696E+18	5,464144E+21	1,576341E+19	5,479907E+21
-2288	2,732011E+21	2,731928E+21	7,877855E+18	7,878589E+18	5,463939E+21	1,575644E+19	5,479696E+21
-2287	2,731811E+21	2,731974E+21	7,883894E+18	7,882732E+18	5,463785E+21	1,576663E+19	5,479552E+21
-2286	2,731921E+21	2,731752E+21	7,878839E+18	7,882207E+18	5,463673E+21	1,576105E+19	5,479434E+21
-2285	2,731822E+21	2,731853E+21	7,880938E+18	7,878003E+18	5,463675E+21	1,575894E+19	5,479434E+21
-2284	2,731821E+21	2,731904E+21	7,883878E+18	7,884330E+18	5,463725E+21	1,576821E+19	5,479493E+21
-2283	2,731957E+21	2,731789E+21	7,878346E+18	7,879557E+18	5,463746E+21	1,575790E+19	5,479504E+21
-2282	2,731840E+21	2,732023E+21	7,880919E+18	7,879769E+18	5,463863E+21	1,576069E+19	5,479624E+21
-2281	2,732009E+21	2,732010E+21	7,881151E+18	7,884559E+18	5,464019E+21	1,576571E+19	5,479785E+21
-2280	2,732147E+21	2,732020E+21	7,877204E+18	7,877054E+18	5,464167E+21	1,575426E+19	5,479921E+21
-2279	2,732084E+21	2,732253E+21	7,881619E+18	7,881491E+18	5,464336E+21	1,576311E+19	5,480099E+21
-2278	2,732269E+21	2,732155E+21	7,880087E+18	7,880708E+18	5,464424E+21	1,576080E+19	5,480185E+21
-2277	2,732255E+21	2,732255E+21	7,877603E+18	7,876710E+18	5,464511E+21	1,575431E+19	5,480265E+21
-2276	2,732190E+21	2,732333E+21	7,883209E+18	7,883383E+18	5,464523E+21	1,576659E+19	5,480289E+21
-2275	2,732300E+21	2,732123E+21	7,877238E+18	7,879141E+18	5,464423E+21	1,575638E+19	5,480180E+21
-2274	2,732139E+21	2,732221E+21	7,878882E+18	7,879241E+18	5,464360E+21	1,575812E+19	5,480118E+21
-2273	2,732122E+21	2,732129E+21	7,883265E+18	7,883372E+18	5,464251E+21	1,576664E+19	5,480018E+21
-2272	2,732132E+21	2,731936E+21	7,877063E+18	7,878621E+18	5,464068E+21	1,575568E+19	5,479824E+21
-2271	2,731847E+21	2,732015E+21	7,883165E+18	7,880803E+18	5,463863E+21	1,576397E+19	5,479626E+21
-2270	2,731832E+21	2,731783E+21	7,881281E+18	7,883580E+18	5,463615E+21	1,576486E+19	5,479380E+21
-2269	2,731769E+21	2,731688E+21	7,878799E+18	7,878914E+18	5,463456E+21	1,575771E+19	5,479214E+21
-2268	2,731602E+21	2,731752E+21	7,884880E+18	7,883454E+18	5,463354E+21	1,576833E+19	5,479122E+21
-2267	2,731724E+21	2,731533E+21	7,879456E+18	7,882796E+18	5,463257E+21	1,576225E+19	5,479020E+21
-2266	2,731628E+21	2,731653E+21	7,880954E+18	7,878802E+18	5,463281E+21	1,575976E+19	5,479041E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2265	2,731624E+21	2,731726E+21	7,883713E+18	7,885614E+18	5,463349E+21	1,576933E+19	5,479119E+21
-2264	2,731790E+21	2,731623E+21	7,878536E+18	7,880175E+18	5,463412E+21	1,575871E+19	5,479171E+21
-2263	2,731684E+21	2,731857E+21	7,881100E+18	7,880020E+18	5,463542E+21	1,576112E+19	5,479303E+21
-2262	2,731827E+21	2,731835E+21	7,882209E+18	7,884568E+18	5,463662E+21	1,576678E+19	5,479429E+21
-2261	2,731982E+21	2,731855E+21	7,878653E+18	7,876745E+18	5,463838E+21	1,575540E+19	5,479593E+21
-2260	2,731899E+21	2,732088E+21	7,882850E+18	7,882134E+18	5,463988E+21	1,576498E+19	5,479753E+21
-2259	2,732061E+21	2,731958E+21	7,880445E+18	7,881596E+18	5,464019E+21	1,576204E+19	5,479781E+21
-2258	2,732052E+21	2,732032E+21	7,877359E+18	7,877877E+18	5,464084E+21	1,575524E+19	5,479839E+21
-2257	2,731988E+21	2,732119E+21	7,883354E+18	7,884294E+18	5,464107E+21	1,576765E+19	5,479875E+21
-2256	2,732124E+21	2,731919E+21	7,877989E+18	7,879477E+18	5,464044E+21	1,575747E+19	5,479801E+21
-2255	2,731942E+21	2,732015E+21	7,879861E+18	7,879218E+18	5,463957E+21	1,575908E+19	5,479716E+21
-2254	2,731855E+21	2,731909E+21	7,884234E+18	7,883795E+18	5,463764E+21	1,576803E+19	5,479532E+21
-2253	2,731865E+21	2,731705E+21	7,878026E+18	7,879253E+18	5,463569E+21	1,575728E+19	5,479327E+21
-2252	2,731592E+21	2,731768E+21	7,883747E+18	7,882060E+18	5,463360E+21	1,576581E+19	5,479125E+21
-2251	2,731596E+21	2,731518E+21	7,881367E+18	7,884743E+18	5,463114E+21	1,576611E+19	5,478880E+21
-2250	2,731570E+21	2,731433E+21	7,879074E+18	7,879759E+18	5,463003E+21	1,575883E+19	5,478762E+21
-2249	2,731416E+21	2,731544E+21	7,885288E+18	7,884249E+18	5,462960E+21	1,576954E+19	5,478729E+21
-2248	2,731545E+21	2,731360E+21	7,880282E+18	7,883300E+18	5,462905E+21	1,576358E+19	5,478669E+21
-2247	2,731435E+21	2,731484E+21	7,881299E+18	7,879152E+18	5,462919E+21	1,576045E+19	5,478679E+21
-2246	2,731397E+21	2,731541E+21	7,884262E+18	7,886041E+18	5,462938E+21	1,577030E+19	5,478708E+21
-2245	2,731595E+21	2,731444E+21	7,879652E+18	7,879994E+18	5,463040E+21	1,575965E+19	5,478799E+21
-2244	2,731519E+21	2,731681E+21	7,882156E+18	7,880421E+18	5,463199E+21	1,576258E+19	5,478962E+21
-2243	2,731654E+21	2,731646E+21	7,883015E+18	7,884840E+18	5,463300E+21	1,576786E+19	5,479068E+21
-2242	2,731806E+21	2,731668E+21	7,878709E+18	7,877627E+18	5,463474E+21	1,575634E+19	5,479230E+21
-2241	2,731720E+21	2,731909E+21	7,882591E+18	7,883436E+18	5,463629E+21	1,576603E+19	5,479395E+21
-2240	2,731896E+21	2,731780E+21	7,880548E+18	7,882435E+18	5,463675E+21	1,576298E+19	5,479438E+21
-2239	2,731884E+21	2,731845E+21	7,877467E+18	7,878364E+18	5,463729E+21	1,575583E+19	5,479485E+21
-2238	2,731775E+21	2,731913E+21	7,884431E+18	7,884355E+18	5,463687E+21	1,576879E+19	5,479456E+21
-2237	2,731901E+21	2,731714E+21	7,879541E+18	7,879520E+18	5,463616E+21	1,575906E+19	5,479375E+21
-2236	2,731693E+21	2,731792E+21	7,881141E+18	7,880139E+18	5,463485E+21	1,576128E+19	5,479246E+21
-2235	2,731580E+21	2,731644E+21	7,884558E+18	7,884894E+18	5,463223E+21	1,576945E+19	5,478993E+21
-2234	2,731616E+21	2,731422E+21	7,877952E+18	7,880611E+18	5,463038E+21	1,575856E+19	5,478796E+21
-2233	2,731376E+21	2,731512E+21	7,883795E+18	7,882976E+18	5,462888E+21	1,576677E+19	5,478655E+21
-2232	2,731420E+21	2,731301E+21	7,882143E+18	7,885124E+18	5,462721E+21	1,576727E+19	5,478489E+21
-2231	2,731387E+21	2,731244E+21	7,879949E+18	7,879718E+18	5,462631E+21	1,575967E+19	5,478391E+21
-2230	2,731174E+21	2,731363E+21	7,886172E+18	7,884440E+18	5,462538E+21	1,577061E+19	5,478308E+21
-2229	2,731311E+21	2,731185E+21	7,881447E+18	7,883561E+18	5,462495E+21	1,576501E+19	5,478260E+21
-2228	2,731213E+21	2,731293E+21	7,882065E+18	7,879961E+18	5,462506E+21	1,576203E+19	5,478268E+21
-2227	2,731188E+21	2,731327E+21	7,884672E+18	7,886611E+18	5,462515E+21	1,577128E+19	5,478286E+21
-2226	2,731429E+21	2,731227E+21	7,880014E+18	7,880643E+18	5,462656E+21	1,576066E+19	5,478417E+21
-2225	2,731365E+21	2,731498E+21	7,882317E+18	7,881306E+18	5,462862E+21	1,576362E+19	5,478626E+21
-2224	2,731508E+21	2,731489E+21	7,883434E+18	7,885614E+18	5,462998E+21	1,576905E+19	5,478767E+21
-2223	2,731646E+21	2,731504E+21	7,878623E+18	7,878266E+18	5,463151E+21	1,575689E+19	5,478908E+21
-2222	2,731519E+21	2,731731E+21	7,883033E+18	7,883779E+18	5,463250E+21	1,576681E+19	5,479016E+21
-2221	2,731707E+21	2,731604E+21	7,881810E+18	7,882193E+18	5,463310E+21	1,576400E+19	5,479074E+21
-2220	2,731689E+21	2,731653E+21	7,878743E+18	7,878814E+18	5,463342E+21	1,575756E+19	5,479100E+21
-2219	2,731541E+21	2,731689E+21	7,885355E+18	7,884700E+18	5,463229E+21	1,577005E+19	5,479000E+21
-2218	2,731658E+21	2,731467E+21	7,879668E+18	7,880826E+18	5,463125E+21	1,576049E+19	5,478886E+21
-2217	2,731456E+21	2,731541E+21	7,880985E+18	7,881567E+18	5,462997E+21	1,576255E+19	5,478760E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2216	2,731371E+21	2,731401E+21	7,884669E+18	7,885913E+18	5,462772E+21	1,577058E+19	5,478542E+21
-2215	2,731419E+21	2,731190E+21	7,878378E+18	7,881011E+18	5,462610E+21	1,575939E+19	5,478369E+21
-2214	2,731152E+21	2,731292E+21	7,885030E+18	7,882899E+18	5,462445E+21	1,576793E+19	5,478213E+21
-2213	2,731192E+21	2,731113E+21	7,883973E+18	7,885058E+18	5,462305E+21	1,576903E+19	5,478074E+21
-2212	2,731141E+21	2,731053E+21	7,881311E+18	7,880584E+18	5,462194E+21	1,576189E+19	5,477956E+21
-2211	2,730911E+21	2,731130E+21	7,886519E+18	7,885247E+18	5,462041E+21	1,577177E+19	5,477813E+21
-2210	2,731083E+21	2,730939E+21	7,881407E+18	7,884718E+18	5,462021E+21	1,576613E+19	5,477788E+21
-2209	2,731034E+21	2,731071E+21	7,881907E+18	7,880816E+18	5,462105E+21	1,576272E+19	5,477868E+21
-2208	2,731053E+21	2,731139E+21	7,885146E+18	7,887039E+18	5,462192E+21	1,577218E+19	5,477964E+21
-2207	2,731291E+21	2,731073E+21	7,880394E+18	7,880804E+18	5,462363E+21	1,576120E+19	5,478125E+21
-2206	2,731184E+21	2,731349E+21	7,882747E+18	7,881724E+18	5,462532E+21	1,576447E+19	5,478297E+21
-2205	2,731329E+21	2,731348E+21	7,884415E+18	7,885768E+18	5,462676E+21	1,577018E+19	5,478446E+21
-2204	2,731464E+21	2,731343E+21	7,879291E+18	7,879094E+18	5,462807E+21	1,575839E+19	5,478565E+21
-2203	2,731317E+21	2,731525E+21	7,883731E+18	7,883974E+18	5,462842E+21	1,576771E+19	5,478610E+21
-2202	2,731513E+21	2,731379E+21	7,882454E+18	7,882808E+18	5,462892E+21	1,576526E+19	5,478658E+21
-2201	2,731482E+21	2,731435E+21	7,879202E+18	7,879823E+18	5,462917E+21	1,575902E+19	5,478676E+21
-2200	2,731327E+21	2,731469E+21	7,885912E+18	7,885631E+18	5,462796E+21	1,577154E+19	5,478567E+21
-2199	2,731434E+21	2,731233E+21	7,879719E+18	7,881702E+18	5,462667E+21	1,576142E+19	5,478428E+21
-2198	2,731209E+21	2,731299E+21	7,881605E+18	7,881963E+18	5,462508E+21	1,576357E+19	5,478271E+21
-2197	2,731150E+21	2,731183E+21	7,886086E+18	7,885749E+18	5,462333E+21	1,577184E+19	5,478105E+21
-2196	2,731195E+21	2,730979E+21	7,879989E+18	7,881448E+18	5,462174E+21	1,576144E+19	5,477935E+21
-2195	2,730893E+21	2,731064E+21	7,886066E+18	7,883202E+18	5,461957E+21	1,576927E+19	5,477727E+21
-2194	2,730940E+21	2,730871E+21	7,884193E+18	7,886477E+18	5,461811E+21	1,577067E+19	5,477582E+21
-2193	2,730904E+21	2,730817E+21	7,881106E+18	7,882053E+18	5,461721E+21	1,576316E+19	5,477484E+21
-2192	2,730720E+21	2,730908E+21	7,886320E+18	7,886324E+18	5,461628E+21	1,577264E+19	5,477400E+21
-2191	2,730919E+21	2,730733E+21	7,881577E+18	7,885063E+18	5,461652E+21	1,576664E+19	5,477419E+21
-2190	2,730863E+21	2,730888E+21	7,882757E+18	7,880730E+18	5,461752E+21	1,576349E+19	5,477515E+21
-2189	2,730888E+21	2,730999E+21	7,886692E+18	7,886850E+18	5,461887E+21	1,577354E+19	5,477661E+21
-2188	2,731105E+21	2,730934E+21	7,881558E+18	7,881474E+18	5,462040E+21	1,576303E+19	5,477803E+21
-2187	2,730978E+21	2,731166E+21	7,883115E+18	7,882265E+18	5,462144E+21	1,576538E+19	5,477909E+21
-2186	2,731143E+21	2,731143E+21	7,884552E+18	7,886581E+18	5,462286E+21	1,577113E+19	5,478058E+21
-2185	2,731294E+21	2,731146E+21	7,879362E+18	7,879899E+18	5,462440E+21	1,575926E+19	5,478199E+21
-2184	2,731158E+21	2,731331E+21	7,884348E+18	7,884432E+18	5,462488E+21	1,576878E+19	5,478257E+21
-2183	2,731321E+21	2,731190E+21	7,882789E+18	7,883255E+18	5,462511E+21	1,576604E+19	5,478277E+21
-2182	2,731246E+21	2,731228E+21	7,879757E+18	7,880546E+18	5,462474E+21	1,576030E+19	5,478234E+21
-2181	2,731095E+21	2,731260E+21	7,887008E+18	7,885909E+18	5,462355E+21	1,577292E+19	5,478128E+21
-2180	2,731202E+21	2,731015E+21	7,880632E+18	7,882678E+18	5,462217E+21	1,576331E+19	5,477980E+21
-2179	2,730970E+21	2,731040E+21	7,882599E+18	7,882224E+18	5,462010E+21	1,576482E+19	5,477775E+21
-2178	2,730921E+21	2,730925E+21	7,886782E+18	7,886610E+18	5,461847E+21	1,577339E+19	5,477620E+21
-2177	2,730957E+21	2,730747E+21	7,880438E+18	7,882808E+18	5,461704E+21	1,576325E+19	5,477467E+21
-2176	2,730661E+21	2,730831E+21	7,886366E+18	7,884348E+18	5,461492E+21	1,577071E+19	5,477262E+21
-2175	2,730711E+21	2,730640E+21	7,884117E+18	7,887308E+18	5,461351E+21	1,577143E+19	5,477122E+21
-2174	2,730676E+21	2,730592E+21	7,881697E+18	7,882232E+18	5,461268E+21	1,576393E+19	5,477032E+21
-2173	2,730532E+21	2,730719E+21	7,887690E+18	7,885879E+18	5,461251E+21	1,577357E+19	5,477024E+21
-2172	2,730737E+21	2,730571E+21	7,883135E+18	7,885243E+18	5,461308E+21	1,576838E+19	5,477076E+21
-2171	2,730659E+21	2,730710E+21	7,883598E+18	7,880930E+18	5,461369E+21	1,576453E+19	5,477134E+21
-2170	2,730699E+21	2,730814E+21	7,886798E+18	7,888033E+18	5,461513E+21	1,577483E+19	5,477288E+21
-2169	2,730925E+21	2,730758E+21	7,881339E+18	7,882766E+18	5,461683E+21	1,576410E+19	5,477447E+21
-2168	2,730826E+21	2,730983E+21	7,882985E+18	7,883155E+18	5,461809E+21	1,576614E+19	5,477576E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2167	2,730992E+21	2,730960E+21	7,884781E+18	7,886749E+18	5,461952E+21	1,577153E+19	5,477724E+21
-2166	2,731106E+21	2,730965E+21	7,880210E+18	7,880105E+18	5,462071E+21	1,576032E+19	5,477831E+21
-2165	2,730957E+21	2,731163E+21	7,885831E+18	7,884531E+18	5,462120E+21	1,577036E+19	5,477890E+21
-2164	2,731089E+21	2,731000E+21	7,883832E+18	7,884230E+18	5,462089E+21	1,576806E+19	5,477857E+21
-2163	2,730993E+21	2,730980E+21	7,880354E+18	7,881218E+18	5,461973E+21	1,576157E+19	5,477735E+21
-2162	2,730875E+21	2,730995E+21	7,887209E+18	7,886788E+18	5,461869E+21	1,577400E+19	5,477643E+21
-2161	2,730991E+21	2,730770E+21	7,880992E+18	7,883664E+18	5,461761E+21	1,576466E+19	5,477526E+21
-2160	2,730770E+21	2,730810E+21	7,883279E+18	7,882940E+18	5,461581E+21	1,576622E+19	5,477347E+21
-2159	2,730696E+21	2,730708E+21	7,887014E+18	7,887270E+18	5,461404E+21	1,577428E+19	5,477178E+21
-2158	2,730698E+21	2,730526E+21	7,881024E+18	7,883658E+18	5,461224E+21	1,576468E+19	5,476989E+21
-2157	2,730421E+21	2,730621E+21	7,887410E+18	7,884561E+18	5,461042E+21	1,577197E+19	5,476814E+21
-2156	2,730478E+21	2,730431E+21	7,885130E+18	7,887915E+18	5,460910E+21	1,577305E+19	5,476683E+21
-2155	2,730453E+21	2,730356E+21	7,882826E+18	7,882182E+18	5,460808E+21	1,576501E+19	5,476573E+21
-2154	2,730342E+21	2,730496E+21	7,888245E+18	7,886622E+18	5,460838E+21	1,577487E+19	5,476612E+21
-2153	2,730545E+21	2,730388E+21	7,883554E+18	7,886501E+18	5,460933E+21	1,577006E+19	5,476704E+21
-2152	2,730489E+21	2,730527E+21	7,883485E+18	7,882221E+18	5,461016E+21	1,576571E+19	5,476782E+21
-2151	2,730535E+21	2,730635E+21	7,886388E+18	7,888773E+18	5,461170E+21	1,577516E+19	5,476945E+21
-2150	2,730754E+21	2,730586E+21	7,881671E+18	7,882986E+18	5,461340E+21	1,576466E+19	5,477104E+21
-2149	2,730669E+21	2,730828E+21	7,884271E+18	7,882701E+18	5,461497E+21	1,576697E+19	5,477264E+21
-2148	2,730804E+21	2,730812E+21	7,886216E+18	7,886857E+18	5,461616E+21	1,577307E+19	5,477389E+21
-2147	2,730878E+21	2,730764E+21	7,881092E+18	7,880506E+18	5,461642E+21	1,576160E+19	5,477404E+21
-2146	2,730737E+21	2,730930E+21	7,885967E+18	7,885760E+18	5,461667E+21	1,577173E+19	5,477439E+21
-2145	2,730873E+21	2,730772E+21	7,883712E+18	7,885756E+18	5,461645E+21	1,576947E+19	5,477414E+21
-2144	2,730807E+21	2,730738E+21	7,880487E+18	7,882242E+18	5,461545E+21	1,576273E+19	5,477308E+21
-2143	2,730687E+21	2,730763E+21	7,887525E+18	7,886957E+18	5,461450E+21	1,577448E+19	5,477225E+21
-2142	2,730764E+21	2,730558E+21	7,882077E+18	7,884061E+18	5,461322E+21	1,576614E+19	5,477088E+21
-2141	2,730524E+21	2,730614E+21	7,885003E+18	7,883075E+18	5,461138E+21	1,576808E+19	5,476906E+21
-2140	2,730421E+21	2,730498E+21	7,888128E+18	7,888098E+18	5,460919E+21	1,577623E+19	5,476695E+21
-2139	2,730413E+21	2,730261E+21	7,881875E+18	7,884224E+18	5,460673E+21	1,576610E+19	5,476440E+21
-2138	2,730186E+21	2,730345E+21	7,887700E+18	7,885304E+18	5,460531E+21	1,577300E+19	5,476304E+21
-2137	2,730268E+21	2,730194E+21	7,885559E+18	7,888875E+18	5,460462E+21	1,577443E+19	5,476237E+21
-2136	2,730276E+21	2,730143E+21	7,883228E+18	7,883018E+18	5,460419E+21	1,576625E+19	5,476185E+21
-2135	2,730168E+21	2,730312E+21	7,887951E+18	7,887439E+18	5,460480E+21	1,577539E+19	5,476256E+21
-2134	2,730355E+21	2,730225E+21	7,883860E+18	7,887265E+18	5,460580E+21	1,577113E+19	5,476351E+21
-2133	2,730325E+21	2,730383E+21	7,884178E+18	7,882410E+18	5,460708E+21	1,576659E+19	5,476475E+21
-2132	2,730364E+21	2,730487E+21	7,887328E+18	7,888882E+18	5,460852E+21	1,577621E+19	5,476628E+21
-2131	2,730560E+21	2,730395E+21	7,882825E+18	7,882729E+18	5,460956E+21	1,576555E+19	5,476721E+21
-2130	2,730487E+21	2,730624E+21	7,884846E+18	7,883388E+18	5,461111E+21	1,576823E+19	5,476880E+21
-2129	2,730593E+21	2,730619E+21	7,886709E+18	7,888099E+18	5,461212E+21	1,577481E+19	5,476987E+21
-2128	2,730684E+21	2,730545E+21	7,881089E+18	7,881898E+18	5,461229E+21	1,576299E+19	5,476992E+21
-2127	2,730554E+21	2,730702E+21	7,885617E+18	7,886433E+18	5,461256E+21	1,577205E+19	5,477028E+21
-2126	2,730677E+21	2,730559E+21	7,884251E+18	7,886046E+18	5,461235E+21	1,577030E+19	5,477006E+21
-2125	2,730618E+21	2,730549E+21	7,881996E+18	7,882036E+18	5,461167E+21	1,576403E+19	5,476931E+21
-2124	2,730453E+21	2,730580E+21	7,888921E+18	7,887131E+18	5,461033E+21	1,577605E+19	5,476809E+21
-2123	2,730480E+21	2,730324E+21	7,883132E+18	7,884790E+18	5,460804E+21	1,576792E+19	5,476572E+21
-2122	2,730257E+21	2,730344E+21	7,885364E+18	7,884401E+18	5,460601E+21	1,576977E+19	5,476370E+21
-2121	2,730159E+21	2,730237E+21	7,888161E+18	7,889623E+18	5,460396E+21	1,577778E+19	5,476174E+21
-2120	2,730199E+21	2,729989E+21	7,882095E+18	7,885362E+18	5,460188E+21	1,576746E+19	5,475955E+21
-2119	2,730000E+21	2,730098E+21	7,887667E+18	7,885688E+18	5,460098E+21	1,577336E+19	5,475871E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2118	2,730072E+21	2,729998E+21	7,886295E+18	7,889473E+18	5,460070E+21	1,577577E+19	5,475845E+21
-2117	2,730085E+21	2,729984E+21	7,884534E+18	7,883212E+18	5,460070E+21	1,576775E+19	5,475837E+21
-2116	2,729965E+21	2,730161E+21	7,888746E+18	7,887861E+18	5,460126E+21	1,577661E+19	5,475903E+21
-2115	2,730142E+21	2,730032E+21	7,884775E+18	7,887261E+18	5,460175E+21	1,577204E+19	5,475947E+21
-2114	2,730146E+21	2,730177E+21	7,884605E+18	7,882683E+18	5,460323E+21	1,576729E+19	5,476091E+21
-2113	2,730181E+21	2,730308E+21	7,887997E+18	7,889379E+18	5,460488E+21	1,577738E+19	5,476266E+21
-2112	2,730386E+21	2,730205E+21	7,883222E+18	7,883543E+18	5,460591E+21	1,576676E+19	5,476358E+21
-2111	2,730309E+21	2,730430E+21	7,884461E+18	7,884293E+18	5,460739E+21	1,576875E+19	5,476508E+21
-2110	2,730400E+21	2,730432E+21	7,886959E+18	7,888968E+18	5,460831E+21	1,577593E+19	5,476607E+21
-2109	2,730507E+21	2,730368E+21	7,881899E+18	7,882247E+18	5,460875E+21	1,576415E+19	5,476639E+21
-2108	2,730365E+21	2,730520E+21	7,886650E+18	7,886467E+18	5,460885E+21	1,577312E+19	5,476658E+21
-2107	2,730450E+21	2,730336E+21	7,885593E+18	7,886049E+18	5,460786E+21	1,577164E+19	5,476558E+21
-2106	2,730384E+21	2,730312E+21	7,882840E+18	7,883005E+18	5,460695E+21	1,576585E+19	5,476461E+21
-2105	2,730181E+21	2,730345E+21	7,889480E+18	7,888564E+18	5,460526E+21	1,577804E+19	5,476304E+21
-2104	2,730225E+21	2,730052E+21	7,883206E+18	7,886496E+18	5,460277E+21	1,576970E+19	5,476046E+21
-2103	2,730030E+21	2,730063E+21	7,885073E+18	7,885161E+18	5,460093E+21	1,577023E+19	5,475863E+21
-2102	2,729937E+21	2,729989E+21	7,888710E+18	7,889922E+18	5,459926E+21	1,577863E+19	5,475705E+21
-2101	2,730005E+21	2,729790E+21	7,883661E+18	7,885161E+18	5,459794E+21	1,576882E+19	5,475563E+21
-2100	2,729791E+21	2,729926E+21	7,888785E+18	7,885703E+18	5,459717E+21	1,577449E+19	5,475491E+21
-2099	2,729830E+21	2,729803E+21	7,887378E+18	7,889904E+18	5,459633E+21	1,577728E+19	5,475410E+21
-2098	2,729875E+21	2,729781E+21	7,884863E+18	7,884176E+18	5,459656E+21	1,576904E+19	5,475425E+21
-2097	2,729760E+21	2,729971E+21	7,888929E+18	7,888783E+18	5,459731E+21	1,577771E+19	5,475509E+21
-2096	2,729972E+21	2,729825E+21	7,885142E+18	7,887916E+18	5,459798E+21	1,577306E+19	5,475571E+21
-2095	2,729992E+21	2,729976E+21	7,884539E+18	7,883000E+18	5,459968E+21	1,576754E+19	5,475736E+21
-2094	2,729998E+21	2,730139E+21	7,888640E+18	7,889944E+18	5,460137E+21	1,577858E+19	5,475916E+21
-2093	2,730207E+21	2,730053E+21	7,884211E+18	7,884095E+18	5,460260E+21	1,576831E+19	5,476028E+21
-2092	2,730122E+21	2,730263E+21	7,884930E+18	7,884895E+18	5,460385E+21	1,576983E+19	5,476155E+21
-2091	2,730193E+21	2,730222E+21	7,887823E+18	7,889090E+18	5,460415E+21	1,577691E+19	5,476192E+21
-2090	2,730322E+21	2,730146E+21	7,882474E+18	7,882728E+18	5,460468E+21	1,576520E+19	5,476233E+21
-2089	2,730153E+21	2,730315E+21	7,887553E+18	7,887035E+18	5,460468E+21	1,577459E+19	5,476242E+21
-2088	2,730225E+21	2,730108E+21	7,886107E+18	7,887214E+18	5,460333E+21	1,577332E+19	5,476106E+21
-2087	2,730148E+21	2,730065E+21	7,882670E+18	7,884204E+18	5,460213E+21	1,576687E+19	5,475980E+21
-2086	2,729932E+21	2,730106E+21	7,889781E+18	7,889534E+18	5,460038E+21	1,577932E+19	5,475817E+21
-2085	2,729999E+21	2,729821E+21	7,884234E+18	7,886902E+18	5,459820E+21	1,577114E+19	5,475592E+21
-2084	2,729808E+21	2,729836E+21	7,886246E+18	7,884901E+18	5,459644E+21	1,577115E+19	5,475415E+21
-2083	2,729695E+21	2,729748E+21	7,890181E+18	7,889788E+18	5,459443E+21	1,577997E+19	5,475223E+21
-2082	2,729767E+21	2,729564E+21	7,884787E+18	7,885855E+18	5,459331E+21	1,577064E+19	5,475102E+21
-2081	2,729542E+21	2,729723E+21	7,889386E+18	7,886900E+18	5,459265E+21	1,577629E+19	5,475041E+21
-2080	2,729613E+21	2,729576E+21	7,887568E+18	7,891280E+18	5,459190E+21	1,577885E+19	5,474968E+21
-2079	2,729692E+21	2,729558E+21	7,884492E+18	7,884791E+18	5,459250E+21	1,576928E+19	5,475020E+21
-2078	2,729586E+21	2,729784E+21	7,889236E+18	7,889022E+18	5,459369E+21	1,577826E+19	5,475147E+21
-2077	2,729811E+21	2,729674E+21	7,886305E+18	7,887859E+18	5,459485E+21	1,577416E+19	5,475259E+21
-2076	2,729816E+21	2,729833E+21	7,885174E+18	7,883215E+18	5,459648E+21	1,576839E+19	5,475417E+21
-2075	2,729792E+21	2,729957E+21	7,889486E+18	7,890446E+18	5,459749E+21	1,577993E+19	5,475529E+21
-2074	2,730022E+21	2,729860E+21	7,884537E+18	7,885078E+18	5,459883E+21	1,576962E+19	5,475652E+21
-2073	2,729936E+21	2,730073E+21	7,885293E+18	7,885838E+18	5,460009E+21	1,577113E+19	5,475780E+21
-2072	2,730023E+21	2,730004E+21	7,888329E+18	7,889748E+18	5,460027E+21	1,577808E+19	5,475805E+21
-2071	2,730145E+21	2,729928E+21	7,882535E+18	7,883405E+18	5,460073E+21	1,576594E+19	5,475839E+21
-2070	2,729927E+21	2,730114E+21	7,888374E+18	7,887647E+18	5,460041E+21	1,577602E+19	5,475817E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2069	2,729987E+21	2,729910E+21	7,887223E+18	7,887911E+18	5,459897E+21	1,577513E+19	5,475672E+21
-2068	2,729904E+21	2,729839E+21	7,883495E+18	7,884589E+18	5,459742E+21	1,576808E+19	5,475511E+21
-2067	2,729667E+21	2,729839E+21	7,891006E+18	7,889451E+18	5,459506E+21	1,578046E+19	5,475286E+21
-2066	2,729761E+21	2,729562E+21	7,885233E+18	7,887304E+18	5,459323E+21	1,577254E+19	5,475096E+21
-2065	2,729561E+21	2,729604E+21	7,887245E+18	7,885559E+18	5,459165E+21	1,577280E+19	5,474938E+21
-2064	2,729459E+21	2,729509E+21	7,890520E+18	7,891119E+18	5,458967E+21	1,578164E+19	5,474749E+21
-2063	2,729548E+21	2,729330E+21	7,884497E+18	7,887213E+18	5,458878E+21	1,577171E+19	5,474650E+21
-2062	2,729329E+21	2,729517E+21	7,889354E+18	7,887885E+18	5,458846E+21	1,577724E+19	5,474624E+21
-2061	2,729434E+21	2,729397E+21	7,888355E+18	7,891694E+18	5,458831E+21	1,578005E+19	5,474611E+21
-2060	2,729520E+21	2,729384E+21	7,885302E+18	7,884523E+18	5,458905E+21	1,576983E+19	5,474674E+21
-2059	2,729385E+21	2,729594E+21	7,890430E+18	7,888955E+18	5,458979E+21	1,577938E+19	5,474758E+21
-2058	2,729610E+21	2,729496E+21	7,887213E+18	7,888558E+18	5,459106E+21	1,577577E+19	5,474881E+21
-2057	2,729610E+21	2,729656E+21	7,885657E+18	7,884400E+18	5,459265E+21	1,577006E+19	5,475035E+21
-2056	2,729617E+21	2,729746E+21	7,889665E+18	7,891529E+18	5,459363E+21	1,578119E+19	5,475144E+21
-2055	2,729867E+21	2,729651E+21	7,884391E+18	7,885552E+18	5,459518E+21	1,576994E+19	5,475288E+21
-2054	2,729772E+21	2,729893E+21	7,885885E+18	7,885962E+18	5,459665E+21	1,577185E+19	5,475437E+21
-2053	2,729844E+21	2,729844E+21	7,889637E+18	7,889696E+18	5,459688E+21	1,577933E+19	5,475467E+21
-2052	2,729922E+21	2,729755E+21	7,883336E+18	7,883741E+18	5,459677E+21	1,576708E+19	5,475444E+21
-2051	2,729661E+21	2,729886E+21	7,889459E+18	7,888171E+18	5,459547E+21	1,577763E+19	5,475324E+21
-2050	2,729728E+21	2,729662E+21	7,887830E+18	7,888893E+18	5,459390E+21	1,577672E+19	5,475167E+21
-2049	2,729649E+21	2,729583E+21	7,884298E+18	7,885527E+18	5,459233E+21	1,576983E+19	5,475003E+21
-2048	2,729443E+21	2,729555E+21	7,891589E+18	7,890219E+18	5,458997E+21	1,578181E+19	5,474779E+21
-2047	2,729541E+21	2,729301E+21	7,885352E+18	7,888350E+18	5,458842E+21	1,577370E+19	5,474616E+21
-2046	2,729326E+21	2,729384E+21	7,887694E+18	7,886665E+18	5,458710E+21	1,577436E+19	5,474484E+21
-2045	2,729239E+21	2,729311E+21	7,891136E+18	7,892172E+18	5,458549E+21	1,578331E+19	5,474333E+21
-2044	2,729337E+21	2,729135E+21	7,885033E+18	7,887540E+18	5,458472E+21	1,577257E+19	5,474244E+21
-2043	2,729109E+21	2,729299E+21	7,890371E+18	7,887667E+18	5,458408E+21	1,577804E+19	5,474187E+21
-2042	2,729232E+21	2,729200E+21	7,889464E+18	7,891689E+18	5,458432E+21	1,578115E+19	5,474213E+21
-2041	2,729309E+21	2,729207E+21	7,886281E+18	7,885020E+18	5,458515E+21	1,577130E+19	5,474287E+21
-2040	2,729189E+21	2,729392E+21	7,890659E+18	7,890125E+18	5,458581E+21	1,578078E+19	5,474362E+21
-2039	2,729438E+21	2,729299E+21	7,886890E+18	7,889840E+18	5,458737E+21	1,577673E+19	5,474513E+21
-2038	2,729449E+21	2,729479E+21	7,885605E+18	7,885293E+18	5,458928E+21	1,577090E+19	5,474699E+21
-2037	2,729478E+21	2,729588E+21	7,890419E+18	7,891718E+18	5,459066E+21	1,578214E+19	5,474849E+21
-2036	2,729715E+21	2,729492E+21	7,885214E+18	7,885218E+18	5,459207E+21	1,577043E+19	5,474977E+21
-2035	2,729556E+21	2,729703E+21	7,887257E+18	7,885928E+18	5,459259E+21	1,577319E+19	5,475032E+21
-2034	2,729597E+21	2,729650E+21	7,890650E+18	7,890406E+18	5,459247E+21	1,578106E+19	5,475028E+21
-2033	2,729658E+21	2,729531E+21	7,883991E+18	7,885224E+18	5,459189E+21	1,576922E+19	5,474958E+21
-2032	2,729422E+21	2,729604E+21	7,889702E+18	7,889378E+18	5,459026E+21	1,577908E+19	5,474806E+21
-2031	2,729513E+21	2,729381E+21	7,887625E+18	7,889840E+18	5,458894E+21	1,577747E+19	5,474672E+21
-2030	2,729437E+21	2,729336E+21	7,884828E+18	7,886104E+18	5,458773E+21	1,577093E+19	5,474544E+21
-2029	2,729235E+21	2,729345E+21	7,892407E+18	7,890701E+18	5,458580E+21	1,578311E+19	5,474363E+21
-2028	2,729313E+21	2,729103E+21	7,885976E+18	7,888911E+18	5,458416E+21	1,577489E+19	5,474191E+21
-2027	2,729070E+21	2,729160E+21	7,888762E+18	7,887175E+18	5,458230E+21	1,577594E+19	5,474006E+21
-2026	2,728995E+21	2,729097E+21	7,891938E+18	7,892749E+18	5,458092E+21	1,578469E+19	5,473877E+21
-2025	2,729102E+21	2,728921E+21	7,886134E+18	7,888091E+18	5,458024E+21	1,577422E+19	5,473798E+21
-2024	2,728906E+21	2,729056E+21	7,891027E+18	7,888133E+18	5,457962E+21	1,577916E+19	5,473741E+21
-2023	2,729031E+21	2,728981E+21	7,889693E+18	7,892477E+18	5,458012E+21	1,578217E+19	5,473794E+21
-2022	2,729110E+21	2,729023E+21	7,886598E+18	7,886016E+18	5,458132E+21	1,577261E+19	5,473905E+21
-2021	2,729027E+21	2,729221E+21	7,890980E+18	7,891059E+18	5,458248E+21	1,578204E+19	5,474031E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-2020	2,729283E+21	2,729137E+21	7,887337E+18	7,889840E+18	5,458420E+21	1,577718E+19	5,474197E+21
-2019	2,729278E+21	2,729300E+21	7,886503E+18	7,885109E+18	5,458578E+21	1,577161E+19	5,474350E+21
-2018	2,729296E+21	2,729425E+21	7,891494E+18	7,891558E+18	5,458721E+21	1,578305E+19	5,474504E+21
-2017	2,729495E+21	2,729325E+21	7,886129E+18	7,885972E+18	5,458820E+21	1,577210E+19	5,474593E+21
-2016	2,729333E+21	2,729474E+21	7,887522E+18	7,887238E+18	5,458807E+21	1,577476E+19	5,474582E+21
-2015	2,729374E+21	2,729405E+21	7,890301E+18	7,891850E+18	5,458780E+21	1,578215E+19	5,474562E+21
-2014	2,729443E+21	2,729294E+21	7,884021E+18	7,886479E+18	5,458737E+21	1,577050E+19	5,474508E+21
-2013	2,729240E+21	2,729370E+21	7,890303E+18	7,889843E+18	5,458610E+21	1,578015E+19	5,474390E+21
-2012	2,729318E+21	2,729163E+21	7,888381E+18	7,889778E+18	5,458481E+21	1,577816E+19	5,474259E+21
-2011	2,729189E+21	2,729109E+21	7,886303E+18	7,886312E+18	5,458298E+21	1,577261E+19	5,474071E+21
-2010	2,728967E+21	2,729134E+21	7,893510E+18	7,891270E+18	5,458101E+21	1,578478E+19	5,473886E+21
-2009	2,729038E+21	2,728880E+21	7,887032E+18	7,890169E+18	5,457918E+21	1,577720E+19	5,473696E+21
-2008	2,728825E+21	2,728890E+21	7,889390E+18	7,887965E+18	5,457716E+21	1,577735E+19	5,473493E+21
-2007	2,728778E+21	2,728842E+21	7,892008E+18	7,893373E+18	5,457620E+21	1,578538E+19	5,473405E+21
-2006	2,728893E+21	2,728702E+21	7,886716E+18	7,888598E+18	5,457595E+21	1,577531E+19	5,473370E+21
-2005	2,728719E+21	2,728866E+21	7,891416E+18	7,888795E+18	5,457585E+21	1,578021E+19	5,473366E+21
-2004	2,728848E+21	2,728809E+21	7,889924E+18	7,893015E+18	5,457657E+21	1,578294E+19	5,473440E+21
-2003	2,728915E+21	2,728838E+21	7,887271E+18	7,886538E+18	5,457753E+21	1,577381E+19	5,473527E+21
-2002	2,728853E+21	2,729059E+21	7,891564E+18	7,891386E+18	5,457912E+21	1,578295E+19	5,473695E+21
-2001	2,729109E+21	2,728974E+21	7,888427E+18	7,890168E+18	5,458083E+21	1,577860E+19	5,473861E+21
-2000	2,729107E+21	2,729095E+21	7,887032E+18	7,885629E+18	5,458202E+21	1,577266E+19	5,473975E+21
-1999	2,729100E+21	2,729225E+21	7,891559E+18	7,892435E+18	5,458324E+21	1,578399E+19	5,474108E+21
-1998	2,729277E+21	2,729127E+21	7,886257E+18	7,887310E+18	5,458404E+21	1,577357E+19	5,474178E+21
-1997	2,729143E+21	2,729259E+21	7,887772E+18	7,888327E+18	5,458402E+21	1,577610E+19	5,474178E+21
-1996	2,729183E+21	2,729187E+21	7,890778E+18	7,891832E+18	5,458371E+21	1,578261E+19	5,474153E+21
-1995	2,729227E+21	2,729060E+21	7,885352E+18	7,886311E+18	5,458287E+21	1,577166E+19	5,474059E+21
-1994	2,729009E+21	2,729161E+21	7,891659E+18	7,889596E+18	5,458170E+21	1,578125E+19	5,473951E+21
-1993	2,729052E+21	2,728957E+21	7,889626E+18	7,890650E+18	5,458009E+21	1,578028E+19	5,473790E+21
-1992	2,728927E+21	2,728850E+21	7,886900E+18	7,887668E+18	5,457777E+21	1,577457E+19	5,473552E+21
-1991	2,728712E+21	2,728870E+21	7,893340E+18	7,892577E+18	5,457582E+21	1,578592E+19	5,473368E+21
-1990	2,728798E+21	2,728635E+21	7,887321E+18	7,891421E+18	5,457432E+21	1,577874E+19	5,473211E+21
-1989	2,728633E+21	2,728648E+21	7,889994E+18	7,888458E+18	5,457281E+21	1,577845E+19	5,473059E+21
-1988	2,728577E+21	2,728627E+21	7,892597E+18	7,893266E+18	5,457204E+21	1,578586E+19	5,472990E+21
-1987	2,728660E+21	2,728498E+21	7,887870E+18	7,888974E+18	5,457158E+21	1,577684E+19	5,472935E+21
-1986	2,728499E+21	2,728685E+21	7,892066E+18	7,889379E+18	5,457185E+21	1,578144E+19	5,472966E+21
-1985	2,728644E+21	2,728633E+21	7,890798E+18	7,893975E+18	5,457277E+21	1,578477E+19	5,473061E+21
-1984	2,728748E+21	2,728626E+21	7,887682E+18	7,887075E+18	5,457374E+21	1,577476E+19	5,473149E+21
-1983	2,728698E+21	2,728864E+21	7,891560E+18	7,891703E+18	5,457562E+21	1,578326E+19	5,473345E+21
-1982	2,728938E+21	2,728810E+21	7,888905E+18	7,890626E+18	5,457748E+21	1,577953E+19	5,473527E+21
-1981	2,728940E+21	2,728927E+21	7,887228E+18	7,886510E+18	5,457867E+21	1,577374E+19	5,473640E+21
-1980	2,728910E+21	2,729050E+21	7,891812E+18	7,892800E+18	5,457960E+21	1,578461E+19	5,473744E+21
-1979	2,729057E+21	2,728924E+21	7,887042E+18	7,887929E+18	5,457981E+21	1,577497E+19	5,473756E+21
-1978	2,728933E+21	2,729056E+21	7,888702E+18	7,888483E+18	5,457989E+21	1,577719E+19	5,473766E+21
-1977	2,728968E+21	2,728973E+21	7,892196E+18	7,892154E+18	5,457941E+21	1,578435E+19	5,473725E+21
-1976	2,729001E+21	2,728804E+21	7,886323E+18	7,886952E+18	5,457805E+21	1,577327E+19	5,473578E+21
-1975	2,728762E+21	2,728914E+21	7,891892E+18	7,890677E+18	5,457675E+21	1,578257E+19	5,473458E+21
-1974	2,728791E+21	2,728716E+21	7,889887E+18	7,892319E+18	5,457507E+21	1,578221E+19	5,473289E+21
-1973	2,728701E+21	2,728596E+21	7,887212E+18	7,888994E+18	5,457297E+21	1,577621E+19	5,473073E+21
-1972	2,728494E+21	2,728629E+21	7,893629E+18	7,892592E+18	5,457123E+21	1,578622E+19	5,472909E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,728560E+21	2,728393E+21	7,888566E+18	7,891445E+18	5,456953E+21	1,578001E+19	5,472733E+21
-1970	2,728396E+21	2,728441E+21	7,891178E+18	7,888226E+18	5,456838E+21	1,577940E+19	5,472617E+21
-1969	2,728334E+21	2,728432E+21	7,893715E+18	7,894024E+18	5,456766E+21	1,578774E+19	5,472553E+21
-1968	2,728438E+21	2,728269E+21	7,888434E+18	7,890033E+18	5,456707E+21	1,577847E+19	5,472485E+21
-1967	2,728310E+21	2,728474E+21	7,891699E+18	7,890505E+18	5,456783E+21	1,578220E+19	5,472565E+21
-1966	2,728475E+21	2,728450E+21	7,891066E+18	7,894877E+18	5,456925E+21	1,578594E+19	5,472711E+21
-1965	2,728618E+21	2,728450E+21	7,888098E+18	7,887486E+18	5,457068E+21	1,577558E+19	5,472844E+21
-1964	2,728542E+21	2,728706E+21	7,892044E+18	7,891348E+18	5,457248E+21	1,578339E+19	5,473032E+21
-1963	2,728722E+21	2,728644E+21	7,890013E+18	7,890926E+18	5,457366E+21	1,578094E+19	5,473147E+21
-1962	2,728718E+21	2,728755E+21	7,888035E+18	7,887023E+18	5,457473E+21	1,577506E+19	5,473248E+21
-1961	2,728688E+21	2,728855E+21	7,892971E+18	7,893521E+18	5,457543E+21	1,578649E+19	5,473329E+21
-1960	2,728854E+21	2,728678E+21	7,887718E+18	7,888560E+18	5,457532E+21	1,577628E+19	5,473308E+21
-1959	2,728737E+21	2,728811E+21	7,888876E+18	7,889033E+18	5,457548E+21	1,577791E+19	5,473326E+21
-1958	2,728750E+21	2,728756E+21	7,892613E+18	7,893071E+18	5,457505E+21	1,578568E+19	5,473291E+21
-1957	2,728794E+21	2,728579E+21	7,886468E+18	7,888383E+18	5,457373E+21	1,577485E+19	5,473147E+21
-1956	2,728534E+21	2,728687E+21	7,892102E+18	7,891174E+18	5,457221E+21	1,578328E+19	5,473004E+21
-1955	2,728534E+21	2,728481E+21	7,890756E+18	7,893139E+18	5,457015E+21	1,578390E+19	5,472799E+21
-1954	2,728456E+21	2,728369E+21	7,888473E+18	7,889058E+18	5,456826E+21	1,577753E+19	5,472603E+21
-1953	2,728249E+21	2,728398E+21	7,895171E+18	7,892748E+18	5,456647E+21	1,578792E+19	5,472435E+21
-1952	2,728310E+21	2,728133E+21	7,889629E+18	7,892062E+18	5,456443E+21	1,578169E+19	5,472225E+21
-1951	2,728152E+21	2,728195E+21	7,891220E+18	7,889287E+18	5,456347E+21	1,578051E+19	5,472128E+21
-1950	2,728110E+21	2,728213E+21	7,893799E+18	7,895585E+18	5,456323E+21	1,578938E+19	5,472112E+21
-1949	2,728273E+21	2,728060E+21	7,888635E+18	7,891107E+18	5,456333E+21	1,577974E+19	5,472113E+21
-1948	2,728163E+21	2,728294E+21	7,891880E+18	7,890214E+18	5,456456E+21	1,578209E+19	5,472238E+21
-1947	2,728298E+21	2,728287E+21	7,892257E+18	7,894719E+18	5,456584E+21	1,578698E+19	5,472371E+21
-1946	2,728423E+21	2,728313E+21	7,889115E+18	7,887320E+18	5,456736E+21	1,577643E+19	5,472512E+21
-1945	2,728327E+21	2,728551E+21	7,893044E+18	7,892073E+18	5,456879E+21	1,578512E+19	5,472664E+21
-1944	2,728502E+21	2,728429E+21	7,890514E+18	7,891956E+18	5,456931E+21	1,578247E+19	5,472714E+21
-1943	2,728522E+21	2,728529E+21	7,887745E+18	7,888240E+18	5,457051E+21	1,577599E+19	5,472827E+21
-1942	2,728510E+21	2,728633E+21	7,893330E+18	7,894453E+18	5,457143E+21	1,578778E+19	5,472931E+21
-1941	2,728699E+21	2,728456E+21	7,888155E+18	7,889322E+18	5,457154E+21	1,577748E+19	5,472932E+21
-1940	2,728550E+21	2,728609E+21	7,889299E+18	7,889074E+18	5,457159E+21	1,577837E+19	5,472937E+21
-1939	2,728500E+21	2,728550E+21	7,893597E+18	7,893738E+18	5,457050E+21	1,578734E+19	5,472837E+21
-1938	2,728534E+21	2,728373E+21	7,887498E+18	7,889004E+18	5,456907E+21	1,577650E+19	5,472684E+21
-1937	2,728275E+21	2,728457E+21	7,893596E+18	7,891600E+18	5,456732E+21	1,578520E+19	5,472517E+21
-1936	2,728276E+21	2,728204E+21	7,891878E+18	7,893497E+18	5,456481E+21	1,578537E+19	5,472266E+21
-1935	2,728207E+21	2,728099E+21	7,889030E+18	7,889537E+18	5,456306E+21	1,577857E+19	5,472084E+21
-1934	2,727996E+21	2,728153E+21	7,895589E+18	7,893803E+18	5,456148E+21	1,578939E+19	5,471938E+21
-1933	2,728091E+21	2,727896E+21	7,889761E+18	7,893610E+18	5,455987E+21	1,578337E+19	5,471770E+21
-1932	2,727952E+21	2,727980E+21	7,891099E+18	7,889872E+18	5,455932E+21	1,578097E+19	5,471713E+21
-1931	2,727907E+21	2,728018E+21	7,894395E+18	7,896342E+18	5,455925E+21	1,579074E+19	5,471716E+21
-1930	2,728093E+21	2,727897E+21	7,889822E+18	7,890940E+18	5,455990E+21	1,578076E+19	5,471771E+21
-1929	2,727979E+21	2,728133E+21	7,893283E+18	7,890134E+18	5,456112E+21	1,578342E+19	5,471896E+21
-1928	2,728087E+21	2,728096E+21	7,893247E+18	7,895125E+18	5,456183E+21	1,578837E+19	5,471971E+21
-1927	2,728206E+21	2,728110E+21	7,889027E+18	7,888431E+18	5,456316E+21	1,577746E+19	5,472094E+21
-1926	2,728122E+21	2,728345E+21	7,893052E+18	7,893596E+18	5,456467E+21	1,578665E+19	5,472254E+21
-1925	2,728349E+21	2,728214E+21	7,890539E+18	7,893119E+18	5,456563E+21	1,578366E+19	5,472347E+21
-1924	2,728379E+21	2,728326E+21	7,887922E+18	7,888071E+18	5,456705E+21	1,577599E+19	5,472481E+21
-1923	2,728326E+21	2,728449E+21	7,894395E+18	7,894407E+18	5,456775E+21	1,578880E+19	5,472564E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1922	2,728485E+21	2,728295E+21	7,889326E+18	7,889340E+18	5,456780E+21	1,577867E+19	5,472559E+21
-1921	2,728308E+21	2,728423E+21	7,890619E+18	7,889709E+18	5,456731E+21	1,578033E+19	5,472511E+21
-1920	2,728235E+21	2,728305E+21	7,894369E+18	7,894682E+18	5,456540E+21	1,578905E+19	5,472329E+21
-1919	2,728278E+21	2,728108E+21	7,887633E+18	7,890293E+18	5,456386E+21	1,577793E+19	5,472164E+21
-1918	2,728034E+21	2,728188E+21	7,894230E+18	7,892602E+18	5,456221E+21	1,578683E+19	5,472008E+21
-1917	2,728060E+21	2,727934E+21	7,892290E+18	7,894562E+18	5,455994E+21	1,578685E+19	5,471781E+21
-1916	2,727977E+21	2,727852E+21	7,889373E+18	7,889881E+18	5,455829E+21	1,577925E+19	5,471608E+21
-1915	2,727740E+21	2,727922E+21	7,896149E+18	7,894816E+18	5,455663E+21	1,579096E+19	5,471453E+21
-1914	2,727857E+21	2,727698E+21	7,890711E+18	7,894226E+18	5,455555E+21	1,578494E+19	5,471340E+21
-1913	2,727749E+21	2,727787E+21	7,892304E+18	7,890196E+18	5,455535E+21	1,578250E+19	5,471318E+21
-1912	2,727705E+21	2,727803E+21	7,895412E+18	7,896421E+18	5,455507E+21	1,579183E+19	5,471299E+21
-1911	2,727893E+21	2,727699E+21	7,890257E+18	7,891260E+18	5,455592E+21	1,578152E+19	5,471373E+21
-1910	2,727774E+21	2,727945E+21	7,893482E+18	7,891144E+18	5,455719E+21	1,578463E+19	5,471503E+21
-1909	2,727901E+21	2,727897E+21	7,893242E+18	7,896419E+18	5,455798E+21	1,578966E+19	5,471588E+21
-1908	2,728035E+21	2,727919E+21	7,888774E+18	7,888952E+18	5,455954E+21	1,577773E+19	5,471732E+21
-1907	2,727947E+21	2,728160E+21	7,893574E+18	7,894201E+18	5,456107E+21	1,578778E+19	5,471895E+21
-1906	2,728185E+21	2,728054E+21	7,891870E+18	7,892829E+18	5,456239E+21	1,578470E+19	5,472024E+21
-1905	2,728200E+21	2,728159E+21	7,889461E+18	7,888020E+18	5,456359E+21	1,577748E+19	5,472136E+21
-1904	2,728092E+21	2,728242E+21	7,895445E+18	7,894781E+18	5,456334E+21	1,579023E+19	5,472124E+21
-1903	2,728232E+21	2,728067E+21	7,889450E+18	7,890694E+18	5,456300E+21	1,578014E+19	5,472080E+21
-1902	2,728058E+21	2,728173E+21	7,890960E+18	7,891320E+18	5,456231E+21	1,578228E+19	5,472014E+21
-1901	2,728017E+21	2,728038E+21	7,894542E+18	7,895888E+18	5,456056E+21	1,579043E+19	5,471846E+21
-1900	2,728065E+21	2,727849E+21	7,887946E+18	7,890516E+18	5,455914E+21	1,577846E+19	5,471692E+21
-1899	2,727791E+21	2,727944E+21	7,895077E+18	7,892993E+18	5,455735E+21	1,578807E+19	5,471523E+21
-1898	2,727808E+21	2,727724E+21	7,893275E+18	7,894982E+18	5,455532E+21	1,578826E+19	5,471320E+21
-1897	2,727729E+21	2,727635E+21	7,890588E+18	7,890545E+18	5,455364E+21	1,578113E+19	5,471145E+21
-1896	2,727493E+21	2,727681E+21	7,896762E+18	7,895592E+18	5,455175E+21	1,579235E+19	5,470967E+21
-1895	2,727638E+21	2,727467E+21	7,891118E+18	7,895095E+18	5,455104E+21	1,578621E+19	5,470891E+21
-1894	2,727549E+21	2,727569E+21	7,893013E+18	7,890897E+18	5,455118E+21	1,578391E+19	5,470902E+21
-1893	2,727527E+21	2,727596E+21	7,895748E+18	7,897172E+18	5,455123E+21	1,579292E+19	5,470916E+21
-1892	2,727697E+21	2,727509E+21	7,890371E+18	7,891524E+18	5,455206E+21	1,578189E+19	5,470988E+21
-1891	2,727562E+21	2,727758E+21	7,893744E+18	7,892093E+18	5,455320E+21	1,578584E+19	5,471106E+21
-1890	2,727711E+21	2,727733E+21	7,894190E+18	7,896677E+18	5,455444E+21	1,579087E+19	5,471235E+21
-1889	2,727870E+21	2,727748E+21	7,890009E+18	7,888971E+18	5,455618E+21	1,577898E+19	5,471397E+21
-1888	2,727769E+21	2,727962E+21	7,894542E+18	7,894185E+18	5,455731E+21	1,578873E+19	5,471519E+21
-1887	2,727989E+21	2,727863E+21	7,892338E+18	7,893312E+18	5,455852E+21	1,578565E+19	5,471638E+21
-1886	2,727987E+21	2,727960E+21	7,889670E+18	7,889441E+18	5,455947E+21	1,577911E+19	5,471726E+21
-1885	2,727885E+21	2,728016E+21	7,895280E+18	7,896278E+18	5,455901E+21	1,579156E+19	5,471692E+21
-1884	2,728021E+21	2,727835E+21	7,889173E+18	7,891666E+18	5,455855E+21	1,578084E+19	5,471636E+21
-1883	2,727836E+21	2,727933E+21	7,891612E+18	7,892135E+18	5,455769E+21	1,578375E+19	5,471552E+21
-1882	2,727794E+21	2,727819E+21	7,895945E+18	7,895732E+18	5,455614E+21	1,579168E+19	5,471405E+21
-1881	2,727829E+21	2,727625E+21	7,889614E+18	7,890659E+18	5,455454E+21	1,578027E+19	5,471235E+21
-1880	2,727512E+21	2,727685E+21	7,896086E+18	7,893412E+18	5,455197E+21	1,578950E+19	5,470986E+21
-1879	2,727532E+21	2,727467E+21	7,893603E+18	7,896219E+18	5,454999E+21	1,578982E+19	5,470788E+21
-1878	2,727487E+21	2,727380E+21	7,891157E+18	7,891900E+18	5,454867E+21	1,578306E+19	5,470650E+21
-1877	2,727294E+21	2,727432E+21	7,896998E+18	7,896363E+18	5,454727E+21	1,579336E+19	5,470520E+21
-1876	2,727447E+21	2,727252E+21	7,891562E+18	7,895084E+18	5,454699E+21	1,578665E+19	5,470485E+21
-1875	2,727336E+21	2,727379E+21	7,893707E+18	7,891241E+18	5,454715E+21	1,578495E+19	5,470500E+21
-1874	2,727307E+21	2,727437E+21	7,896656E+18	7,897343E+18	5,454744E+21	1,579400E+19	5,470538E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1873	2,727488E+21	2,727338E+21	7,891317E+18	7,892057E+18	5,454827E+21	1,578337E+19	5,470610E+21
-1872	2,727355E+21	2,727550E+21	7,894085E+18	7,892804E+18	5,454905E+21	1,578689E+19	5,470692E+21
-1871	2,727534E+21	2,727531E+21	7,894583E+18	7,897380E+18	5,455065E+21	1,579196E+19	5,470857E+21
-1870	2,727711E+21	2,727551E+21	7,890630E+18	7,889815E+18	5,455262E+21	1,578045E+19	5,471042E+21
-1869	2,727612E+21	2,727765E+21	7,894716E+18	7,895022E+18	5,455377E+21	1,578974E+19	5,471167E+21
-1868	2,727798E+21	2,727674E+21	7,892278E+18	7,893935E+18	5,455472E+21	1,578621E+19	5,471258E+21
-1867	2,727767E+21	2,727759E+21	7,889842E+18	7,890710E+18	5,455527E+21	1,578055E+19	5,471307E+21
-1866	2,727671E+21	2,727823E+21	7,896283E+18	7,896457E+18	5,455494E+21	1,579274E+19	5,471286E+21
-1865	2,727808E+21	2,727621E+21	7,890630E+18	7,891670E+18	5,455430E+21	1,578230E+19	5,471212E+21
-1864	2,727593E+21	2,727681E+21	7,892938E+18	7,891996E+18	5,455274E+21	1,578493E+19	5,471059E+21
-1863	2,727534E+21	2,727569E+21	7,896720E+18	7,896189E+18	5,455103E+21	1,579291E+19	5,470896E+21
-1862	2,727559E+21	2,727369E+21	7,890313E+18	7,892060E+18	5,454928E+21	1,578237E+19	5,470710E+21
-1861	2,727272E+21	2,727419E+21	7,895970E+18	7,894830E+18	5,454690E+21	1,579080E+19	5,470481E+21
-1860	2,727307E+21	2,727219E+21	7,893471E+18	7,897208E+18	5,454526E+21	1,579068E+19	5,470317E+21
-1859	2,727271E+21	2,727151E+21	7,891842E+18	7,892682E+18	5,454422E+21	1,578452E+19	5,470207E+21
-1858	2,727091E+21	2,727243E+21	7,898262E+18	7,896076E+18	5,454334E+21	1,579434E+19	5,470128E+21
-1857	2,727229E+21	2,727069E+21	7,893031E+18	7,895165E+18	5,454298E+21	1,578820E+19	5,470086E+21
-1856	2,727083E+21	2,727163E+21	7,894405E+18	7,891763E+18	5,454245E+21	1,578617E+19	5,470032E+21
-1855	2,727071E+21	2,727218E+21	7,896863E+18	7,898426E+18	5,454289E+21	1,579529E+19	5,470084E+21
-1854	2,727294E+21	2,727123E+21	7,891786E+18	7,893297E+18	5,454417E+21	1,578508E+19	5,470202E+21
-1853	2,727214E+21	2,727336E+21	7,894022E+18	7,893587E+18	5,454549E+21	1,578761E+19	5,470337E+21
-1852	2,727394E+21	2,727349E+21	7,894802E+18	7,897447E+18	5,454743E+21	1,579225E+19	5,470536E+21
-1851	2,727540E+21	2,727390E+21	7,891013E+18	7,890436E+18	5,454931E+21	1,578145E+19	5,470712E+21
-1850	2,727421E+21	2,727620E+21	7,895628E+18	7,895043E+18	5,455041E+21	1,579067E+19	5,470832E+21
-1849	2,727593E+21	2,727507E+21	7,893354E+18	7,894258E+18	5,455100E+21	1,578761E+19	5,470888E+21
-1848	2,727531E+21	2,727535E+21	7,890682E+18	7,891170E+18	5,455065E+21	1,578185E+19	5,470847E+21
-1847	2,727435E+21	2,727585E+21	7,897304E+18	7,896728E+18	5,455019E+21	1,579403E+19	5,470813E+21
-1846	2,727575E+21	2,727372E+21	7,891721E+18	7,892588E+18	5,454947E+21	1,578431E+19	5,470731E+21
-1845	2,727359E+21	2,727412E+21	7,893293E+18	7,892944E+18	5,454770E+21	1,578624E+19	5,470557E+21
-1844	2,727282E+21	2,727310E+21	7,896623E+18	7,897200E+18	5,454592E+21	1,579382E+19	5,470386E+21
-1843	2,727307E+21	2,727118E+21	7,890597E+18	7,893541E+18	5,454425E+21	1,578414E+19	5,470209E+21
-1842	2,727047E+21	2,727198E+21	7,896945E+18	7,895015E+18	5,454245E+21	1,579196E+19	5,470037E+21
-1841	2,727095E+21	2,727009E+21	7,894896E+18	7,897282E+18	5,454104E+21	1,579218E+19	5,469896E+21
-1840	2,727025E+21	2,726923E+21	7,893077E+18	7,892692E+18	5,453948E+21	1,578577E+19	5,469734E+21
-1839	2,726837E+21	2,727026E+21	7,898854E+18	7,896560E+18	5,453863E+21	1,579541E+19	5,469658E+21
-1838	2,726982E+21	2,726846E+21	7,893584E+18	7,896596E+18	5,453828E+21	1,579018E+19	5,469618E+21
-1837	2,726881E+21	2,726925E+21	7,894052E+18	7,893050E+18	5,453806E+21	1,578710E+19	5,469593E+21
-1836	2,726901E+21	2,727006E+21	7,896641E+18	7,899241E+18	5,453907E+21	1,579588E+19	5,469703E+21
-1835	2,727143E+21	2,726943E+21	7,892373E+18	7,893899E+18	5,454085E+21	1,578627E+19	5,469871E+21
-1834	2,727077E+21	2,727196E+21	7,895148E+18	7,893247E+18	5,454273E+21	1,578839E+19	5,470062E+21
-1833	2,727223E+21	2,727214E+21	7,896204E+18	7,897252E+18	5,454437E+21	1,579346E+19	5,470231E+21
-1832	2,727309E+21	2,727210E+21	7,891759E+18	7,890896E+18	5,454519E+21	1,578266E+19	5,470302E+21
-1831	2,727189E+21	2,727413E+21	7,896217E+18	7,895665E+18	5,454602E+21	1,579188E+19	5,470394E+21
-1830	2,727366E+21	2,727279E+21	7,894223E+18	7,895253E+18	5,454645E+21	1,578948E+19	5,470435E+21
-1829	2,727331E+21	2,727280E+21	7,890987E+18	7,891958E+18	5,454612E+21	1,578294E+19	5,470395E+21
-1828	2,727225E+21	2,727340E+21	7,897613E+18	7,897136E+18	5,454564E+21	1,579475E+19	5,470359E+21
-1827	2,727338E+21	2,727142E+21	7,892020E+18	7,893816E+18	5,454480E+21	1,578584E+19	5,470265E+21
-1826	2,727127E+21	2,727195E+21	7,893966E+18	7,893529E+18	5,454322E+21	1,578749E+19	5,470110E+21
-1825	2,727049E+21	2,727091E+21	7,897358E+18	7,897873E+18	5,454139E+21	1,579523E+19	5,469935E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1824	2,727052E+21	2,726870E+21	7,891511E+18	7,894214E+18	5,453922E+21	1,578573E+19	5,469708E+21
-1823	2,726805E+21	2,726954E+21	7,898088E+18	7,895184E+18	5,453759E+21	1,579327E+19	5,469552E+21
-1822	2,726850E+21	2,726772E+21	7,896224E+18	7,898163E+18	5,453622E+21	1,579439E+19	5,469417E+21
-1821	2,726781E+21	2,726673E+21	7,893484E+18	7,893615E+18	5,453454E+21	1,578710E+19	5,469241E+21
-1820	2,726595E+21	2,726784E+21	7,898643E+18	7,897598E+18	5,453379E+21	1,579624E+19	5,469175E+21
-1819	2,726764E+21	2,726625E+21	7,893788E+18	7,897887E+18	5,453389E+21	1,579168E+19	5,469180E+21
-1818	2,726716E+21	2,726741E+21	7,894883E+18	7,892949E+18	5,453456E+21	1,578783E+19	5,469244E+21
-1817	2,726756E+21	2,726848E+21	7,897961E+18	7,898869E+18	5,453604E+21	1,579683E+19	5,469401E+21
-1816	2,726953E+21	2,726777E+21	7,893659E+18	7,893611E+18	5,453730E+21	1,578727E+19	5,469517E+21
-1815	2,726866E+21	2,727034E+21	7,895900E+18	7,893438E+18	5,453900E+21	1,578934E+19	5,469689E+21
-1814	2,727002E+21	2,727034E+21	7,896868E+18	7,898474E+18	5,454035E+21	1,579534E+19	5,469831E+21
-1813	2,727105E+21	2,726986E+21	7,891431E+18	7,892271E+18	5,454091E+21	1,578370E+19	5,469875E+21
-1812	2,726996E+21	2,727183E+21	7,896062E+18	7,896601E+18	5,454179E+21	1,579266E+19	5,469972E+21
-1811	2,727177E+21	2,727057E+21	7,894674E+18	7,896188E+18	5,454235E+21	1,579086E+19	5,470026E+21
-1810	2,727148E+21	2,727077E+21	7,892037E+18	7,892073E+18	5,454225E+21	1,578411E+19	5,470009E+21
-1809	2,727009E+21	2,727138E+21	7,898669E+18	7,897359E+18	5,454147E+21	1,579603E+19	5,469943E+21
-1808	2,727066E+21	2,726905E+21	7,892769E+18	7,894678E+18	5,453971E+21	1,578745E+19	5,469758E+21
-1807	2,726867E+21	2,726949E+21	7,894817E+18	7,894162E+18	5,453816E+21	1,578898E+19	5,469605E+21
-1806	2,726802E+21	2,726841E+21	7,898451E+18	7,898849E+18	5,453643E+21	1,579730E+19	5,469440E+21
-1805	2,726822E+21	2,726606E+21	7,892178E+18	7,894935E+18	5,453428E+21	1,578711E+19	5,469215E+21
-1804	2,726566E+21	2,726705E+21	7,898487E+18	7,895667E+18	5,453271E+21	1,579415E+19	5,469065E+21
-1803	2,726593E+21	2,726544E+21	7,896583E+18	7,899355E+18	5,453138E+21	1,579594E+19	5,468934E+21
-1802	2,726555E+21	2,726462E+21	7,894115E+18	7,894137E+18	5,453018E+21	1,578825E+19	5,468806E+21
-1801	2,726391E+21	2,726581E+21	7,899228E+18	7,898004E+18	5,452972E+21	1,579723E+19	5,468769E+21
-1800	2,726550E+21	2,726418E+21	7,894831E+18	7,898206E+18	5,452968E+21	1,579304E+19	5,468761E+21
-1799	2,726536E+21	2,726551E+21	7,895936E+18	7,892917E+18	5,453087E+21	1,578885E+19	5,468876E+21
-1798	2,726569E+21	2,726672E+21	7,899097E+18	7,899620E+18	5,453241E+21	1,579872E+19	5,469039E+21
-1797	2,726754E+21	2,726584E+21	7,893768E+18	7,894580E+18	5,453338E+21	1,578835E+19	5,469126E+21
-1796	2,726664E+21	2,726828E+21	7,895438E+18	7,894640E+18	5,453492E+21	1,579008E+19	5,469283E+21
-1795	2,726804E+21	2,726833E+21	7,896859E+18	7,899683E+18	5,453637E+21	1,579654E+19	5,469433E+21
-1794	2,726943E+21	2,726796E+21	7,892042E+18	7,892492E+18	5,453739E+21	1,578453E+19	5,469524E+21
-1793	2,726831E+21	2,726994E+21	7,897128E+18	7,896405E+18	5,453825E+21	1,579353E+19	5,469619E+21
-1792	2,726950E+21	2,726854E+21	7,895812E+18	7,896340E+18	5,453804E+21	1,579215E+19	5,469596E+21
-1791	2,726905E+21	2,726864E+21	7,892993E+18	7,892480E+18	5,453769E+21	1,578547E+19	5,469554E+21
-1790	2,726756E+21	2,726907E+21	7,899501E+18	7,898550E+18	5,453663E+21	1,579805E+19	5,469462E+21
-1789	2,726822E+21	2,726643E+21	7,892906E+18	7,896008E+18	5,453465E+21	1,578891E+19	5,469254E+21
-1788	2,726634E+21	2,726685E+21	7,895177E+18	7,895037E+18	5,453320E+21	1,579021E+19	5,469110E+21
-1787	2,726570E+21	2,726597E+21	7,899151E+18	7,899736E+18	5,453166E+21	1,579889E+19	5,468965E+21
-1786	2,726593E+21	2,726381E+21	7,893377E+18	7,895239E+18	5,452974E+21	1,578862E+19	5,468762E+21
-1785	2,726317E+21	2,726482E+21	7,899362E+18	7,895975E+18	5,452798E+21	1,579534E+19	5,468594E+21
-1784	2,726310E+21	2,726298E+21	7,897311E+18	7,900161E+18	5,452608E+21	1,579747E+19	5,468406E+21
-1783	2,726311E+21	2,726223E+21	7,895012E+18	7,894480E+18	5,452534E+21	1,578949E+19	5,468323E+21
-1782	2,726188E+21	2,726362E+21	7,900108E+18	7,898824E+18	5,452550E+21	1,579893E+19	5,468349E+21
-1781	2,726371E+21	2,726204E+21	7,895396E+18	7,898735E+18	5,452575E+21	1,579413E+19	5,468369E+21
-1780	2,726358E+21	2,726361E+21	7,895882E+18	7,893621E+18	5,452718E+21	1,578950E+19	5,468508E+21
-1779	2,726379E+21	2,726502E+21	7,899008E+18	7,900805E+18	5,452880E+21	1,579981E+19	5,468680E+21
-1778	2,726583E+21	2,726420E+21	7,893952E+18	7,895197E+18	5,453002E+21	1,578915E+19	5,468791E+21
-1777	2,726498E+21	2,726655E+21	7,895736E+18	7,894992E+18	5,453154E+21	1,579073E+19	5,468944E+21
-1776	2,726601E+21	2,726639E+21	7,897931E+18	7,899791E+18	5,453240E+21	1,579772E+19	5,469038E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,726751E+21	2,726602E+21	7,893432E+18	7,892354E+18	5,453352E+21	1,578579E+19	5,469138E+21
-1774	2,726619E+21	2,726792E+21	7,898411E+18	7,897129E+18	5,453411E+21	1,579554E+19	5,469206E+21
-1773	2,726711E+21	2,726619E+21	7,896130E+18	7,897448E+18	5,453331E+21	1,579358E+19	5,469124E+21
-1772	2,726669E+21	2,726610E+21	7,892853E+18	7,893887E+18	5,453278E+21	1,578674E+19	5,469065E+21
-1771	2,726524E+21	2,726662E+21	7,899659E+18	7,899690E+18	5,453186E+21	1,579935E+19	5,468985E+21
-1770	2,726619E+21	2,726415E+21	7,893763E+18	7,896467E+18	5,453034E+21	1,579023E+19	5,468824E+21
-1769	2,726419E+21	2,726458E+21	7,896407E+18	7,894920E+18	5,452878E+21	1,579133E+19	5,468669E+21
-1768	2,726282E+21	2,726363E+21	7,900306E+18	7,900011E+18	5,452645E+21	1,580032E+19	5,468445E+21
-1767	2,726309E+21	2,726141E+21	7,894404E+18	7,895826E+18	5,452450E+21	1,579023E+19	5,468240E+21
-1766	2,726050E+21	2,726227E+21	7,899960E+18	7,897258E+18	5,452277E+21	1,579722E+19	5,468074E+21
-1765	2,726075E+21	2,726033E+21	7,897362E+18	7,901393E+18	5,452108E+21	1,579876E+19	5,467907E+21
-1764	2,726121E+21	2,725977E+21	7,895192E+18	7,895309E+18	5,452099E+21	1,579050E+19	5,467889E+21
-1763	2,726017E+21	2,726161E+21	7,900446E+18	7,899573E+18	5,452179E+21	1,580002E+19	5,467979E+21
-1762	2,726207E+21	2,726045E+21	7,896246E+18	7,899008E+18	5,452252E+21	1,579525E+19	5,468047E+21
-1761	2,726173E+21	2,726202E+21	7,896273E+18	7,893892E+18	5,452376E+21	1,579017E+19	5,468166E+21
-1760	2,726149E+21	2,726321E+21	7,899675E+18	7,901194E+18	5,452471E+21	1,580087E+19	5,468271E+21
-1759	2,726377E+21	2,726233E+21	7,894992E+18	7,895155E+18	5,452610E+21	1,579015E+19	5,468400E+21
-1758	2,726312E+21	2,726457E+21	7,896859E+18	7,895497E+18	5,452769E+21	1,579236E+19	5,468562E+21
-1757	2,726407E+21	2,726424E+21	7,898730E+18	7,900166E+18	5,452831E+21	1,579890E+19	5,468629E+21
-1756	2,726546E+21	2,726385E+21	7,893580E+18	7,893323E+18	5,452931E+21	1,578690E+19	5,468718E+21
-1755	2,726405E+21	2,726581E+21	7,898286E+18	7,898500E+18	5,452986E+21	1,579679E+19	5,468782E+21
-1754	2,726512E+21	2,726408E+21	7,896337E+18	7,898400E+18	5,452920E+21	1,579474E+19	5,468715E+21
-1753	2,726467E+21	2,726391E+21	7,893254E+18	7,894447E+18	5,452858E+21	1,578770E+19	5,468646E+21
-1752	2,726281E+21	2,726426E+21	7,900801E+18	7,899821E+18	5,452707E+21	1,580062E+19	5,468508E+21
-1751	2,726369E+21	2,726181E+21	7,895405E+18	7,896540E+18	5,452550E+21	1,579194E+19	5,468342E+21
-1750	2,726148E+21	2,726215E+21	7,897813E+18	7,895796E+18	5,452362E+21	1,579361E+19	5,468156E+21
-1749	2,725992E+21	2,726085E+21	7,900624E+18	7,901168E+18	5,452077E+21	1,580179E+19	5,467878E+21
-1748	2,726047E+21	2,725854E+21	7,894368E+18	7,897257E+18	5,451900E+21	1,579163E+19	5,467692E+21
-1747	2,725832E+21	2,725969E+21	7,899872E+18	7,898323E+18	5,451801E+21	1,579820E+19	5,467599E+21
-1746	2,725907E+21	2,725820E+21	7,898078E+18	7,901756E+18	5,451727E+21	1,579983E+19	5,467527E+21
-1745	2,725955E+21	2,725799E+21	7,896060E+18	7,895122E+18	5,451754E+21	1,579118E+19	5,467545E+21
-1744	2,725792E+21	2,725993E+21	7,901338E+18	7,899638E+18	5,451786E+21	1,580098E+19	5,467587E+21
-1743	2,725982E+21	2,725881E+21	7,897371E+18	7,899158E+18	5,451863E+21	1,579653E+19	5,467660E+21
-1742	2,725958E+21	2,726017E+21	7,896900E+18	7,894894E+18	5,451975E+21	1,579179E+19	5,467766E+21
-1741	2,725940E+21	2,726105E+21	7,899970E+18	7,901948E+18	5,452046E+21	1,580192E+19	5,467847E+21
-1740	2,726202E+21	2,726010E+21	7,895225E+18	7,896020E+18	5,452211E+21	1,579124E+19	5,468002E+21
-1739	2,726145E+21	2,726253E+21	7,897071E+18	7,896422E+18	5,452398E+21	1,579349E+19	5,468191E+21
-1738	2,726240E+21	2,726241E+21	7,899319E+18	7,900827E+18	5,452481E+21	1,580015E+19	5,468281E+21
-1737	2,726357E+21	2,726191E+21	7,893764E+18	7,893964E+18	5,452547E+21	1,578773E+19	5,468335E+21
-1736	2,726165E+21	2,726366E+21	7,898957E+18	7,898913E+18	5,452530E+21	1,579787E+19	5,468328E+21
-1735	2,726285E+21	2,726196E+21	7,897599E+18	7,898422E+18	5,452480E+21	1,579602E+19	5,468276E+21
-1734	2,726238E+21	2,726162E+21	7,894702E+18	7,895022E+18	5,452400E+21	1,578972E+19	5,468190E+21
-1733	2,726019E+21	2,726172E+21	7,901763E+18	7,900166E+18	5,452191E+21	1,580193E+19	5,467993E+21
-1732	2,726099E+21	2,725913E+21	7,895719E+18	7,897808E+18	5,452011E+21	1,579353E+19	5,467805E+21
-1731	2,725883E+21	2,725945E+21	7,897789E+18	7,897154E+18	5,451828E+21	1,579494E+19	5,467623E+21
-1730	2,725764E+21	2,725830E+21	7,900780E+18	7,902196E+18	5,451595E+21	1,580298E+19	5,467398E+21
-1729	2,725840E+21	2,725617E+21	7,894880E+18	7,897659E+18	5,451457E+21	1,579254E+19	5,467250E+21
-1728	2,725609E+21	2,725751E+21	7,900986E+18	7,898275E+18	5,451360E+21	1,579926E+19	5,467159E+21
-1727	2,725692E+21	2,725636E+21	7,899824E+18	7,901635E+18	5,451329E+21	1,580146E+19	5,467130E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,725725E+21	2,725618E+21	7,897347E+18	7,895901E+18	5,451342E+21	1,579325E+19	5,467136E+21
-1725	2,725545E+21	2,725777E+21	7,901564E+18	7,900512E+18	5,451322E+21	1,580208E+19	5,467124E+21
-1724	2,725763E+21	2,725649E+21	7,897292E+18	7,900370E+18	5,451412E+21	1,579766E+19	5,467210E+21
-1723	2,725780E+21	2,725800E+21	7,896701E+18	7,895886E+18	5,451580E+21	1,579259E+19	5,467373E+21
-1722	2,725801E+21	2,725913E+21	7,900590E+18	7,902266E+18	5,451714E+21	1,580286E+19	5,467517E+21
-1721	2,726049E+21	2,725841E+21	7,895808E+18	7,896043E+18	5,451890E+21	1,579185E+19	5,467682E+21
-1720	2,725941E+21	2,726081E+21	7,897668E+18	7,896793E+18	5,452022E+21	1,579446E+19	5,467817E+21
-1719	2,726028E+21	2,726067E+21	7,900383E+18	7,901019E+18	5,452096E+21	1,580140E+19	5,467897E+21
-1718	2,726141E+21	2,725996E+21	7,894521E+18	7,895020E+18	5,452137E+21	1,578954E+19	5,467926E+21
-1717	2,725934E+21	2,726128E+21	7,899672E+18	7,899334E+18	5,452062E+21	1,579901E+19	5,467861E+21
-1716	2,726061E+21	2,725941E+21	7,898255E+18	7,899255E+18	5,452002E+21	1,579751E+19	5,467800E+21
-1715	2,726004E+21	2,725914E+21	7,895280E+18	7,896088E+18	5,451919E+21	1,579137E+19	5,467710E+21
-1714	2,725778E+21	2,725927E+21	7,902367E+18	7,901080E+18	5,451705E+21	1,580345E+19	5,467508E+21
-1713	2,725846E+21	2,725658E+21	7,895914E+18	7,898730E+18	5,451504E+21	1,579464E+19	5,467299E+21
-1712	2,725614E+21	2,725681E+21	7,898395E+18	7,897647E+18	5,451295E+21	1,579604E+19	5,467091E+21
-1711	2,725530E+21	2,725596E+21	7,902111E+18	7,902175E+18	5,451126E+21	1,580429E+19	5,466931E+21
-1710	2,725618E+21	2,725401E+21	7,896473E+18	7,898159E+18	5,451019E+21	1,579463E+19	5,466814E+21
-1709	2,725365E+21	2,725528E+21	7,901836E+18	7,898605E+18	5,450893E+21	1,580044E+19	5,466694E+21
-1708	2,725455E+21	2,725414E+21	7,900049E+18	7,902994E+18	5,450869E+21	1,580304E+19	5,466672E+21
-1707	2,725501E+21	2,725399E+21	7,897110E+18	7,897288E+18	5,450900E+21	1,579440E+19	5,466694E+21
-1706	2,725362E+21	2,725569E+21	7,901442E+18	7,901497E+18	5,450931E+21	1,580294E+19	5,466734E+21
-1705	2,725601E+21	2,725452E+21	7,897551E+18	7,900616E+18	5,451053E+21	1,579817E+19	5,466851E+21
-1704	2,725602E+21	2,725612E+21	7,897614E+18	7,895769E+18	5,451214E+21	1,579338E+19	5,467007E+21
-1703	2,725625E+21	2,725759E+21	7,902250E+18	7,901989E+18	5,451384E+21	1,580424E+19	5,467188E+21
-1702	2,725846E+21	2,725681E+21	7,897070E+18	7,896757E+18	5,451527E+21	1,579383E+19	5,467321E+21
-1701	2,725710E+21	2,725872E+21	7,898109E+18	7,897484E+18	5,451583E+21	1,579559E+19	5,467378E+21
-1700	2,725814E+21	2,725834E+21	7,900565E+18	7,902032E+18	5,451649E+21	1,580260E+19	5,467451E+21
-1699	2,725939E+21	2,725764E+21	7,894656E+18	7,896041E+18	5,451703E+21	1,579070E+19	5,467494E+21
-1698	2,725744E+21	2,725901E+21	7,900484E+18	7,899771E+18	5,451645E+21	1,580026E+19	5,467446E+21
-1697	2,725836E+21	2,725720E+21	7,898806E+18	7,899647E+18	5,451556E+21	1,579845E+19	5,467354E+21
-1696	2,725728E+21	2,725677E+21	7,896036E+18	7,896770E+18	5,451406E+21	1,579281E+19	5,467199E+21
-1695	2,725511E+21	2,725688E+21	7,903458E+18	7,901489E+18	5,451199E+21	1,580495E+19	5,467004E+21
-1694	2,725587E+21	2,725413E+21	7,896844E+18	7,899925E+18	5,451000E+21	1,579677E+19	5,466797E+21
-1693	2,725364E+21	2,725409E+21	7,899182E+18	7,898144E+18	5,450773E+21	1,579733E+19	5,466570E+21
-1692	2,725306E+21	2,725335E+21	7,902726E+18	7,903120E+18	5,450642E+21	1,580585E+19	5,466447E+21
-1691	2,725394E+21	2,725175E+21	7,897020E+18	7,899317E+18	5,450569E+21	1,579634E+19	5,466365E+21
-1690	2,725148E+21	2,725312E+21	7,902165E+18	7,899548E+18	5,450460E+21	1,580171E+19	5,466262E+21
-1689	2,725233E+21	2,725201E+21	7,900148E+18	7,903653E+18	5,450434E+21	1,580380E+19	5,466238E+21
-1688	2,725278E+21	2,725188E+21	7,897590E+18	7,897532E+18	5,450466E+21	1,579512E+19	5,466261E+21
-1687	2,725177E+21	2,725384E+21	7,902760E+18	7,901152E+18	5,450561E+21	1,580391E+19	5,466365E+21
-1686	2,725421E+21	2,725287E+21	7,899112E+18	7,900823E+18	5,450708E+21	1,579994E+19	5,466508E+21
-1685	2,725399E+21	2,725426E+21	7,898414E+18	7,896006E+18	5,450825E+21	1,579442E+19	5,466619E+21
-1684	2,725426E+21	2,725561E+21	7,902431E+18	7,903157E+18	5,450987E+21	1,580559E+19	5,466793E+21
-1683	2,725650E+21	2,725484E+21	7,896846E+18	7,898182E+18	5,451134E+21	1,579503E+19	5,466929E+21
-1682	2,725537E+21	2,725666E+21	7,898072E+18	7,898522E+18	5,451203E+21	1,579659E+19	5,467000E+21
-1681	2,725635E+21	2,725626E+21	7,900865E+18	7,902330E+18	5,451261E+21	1,580319E+19	5,467064E+21
-1680	2,725722E+21	2,725550E+21	7,895577E+18	7,896397E+18	5,451272E+21	1,579197E+19	5,467064E+21
-1679	2,725509E+21	2,725697E+21	7,902147E+18	7,899834E+18	5,451206E+21	1,580198E+19	5,467008E+21
-1678	2,725566E+21	2,725497E+21	7,899921E+18	7,900782E+18	5,451064E+21	1,580070E+19	5,466864E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1677	2,725441E+21	2,725397E+21	7,896654E+18	7,897636E+18	5,450838E+21	1,579429E+19	5,466632E+21
-1676	2,725262E+21	2,725396E+21	7,903656E+18	7,902585E+18	5,450658E+21	1,580624E+19	5,466464E+21
-1675	2,725360E+21	2,725147E+21	7,897314E+18	7,900937E+18	5,450507E+21	1,579825E+19	5,466305E+21
-1674	2,725159E+21	2,725170E+21	7,900017E+18	7,898673E+18	5,450328E+21	1,579869E+19	5,466127E+21
-1673	2,725082E+21	2,725121E+21	7,903137E+18	7,903573E+18	5,450202E+21	1,580671E+19	5,466009E+21
-1672	2,725132E+21	2,724963E+21	7,897745E+18	7,899910E+18	5,450095E+21	1,579766E+19	5,465892E+21
-1671	2,724908E+21	2,725113E+21	7,903174E+18	7,899708E+18	5,450021E+21	1,580288E+19	5,465824E+21
-1670	2,725004E+21	2,725003E+21	7,901203E+18	7,904283E+18	5,450007E+21	1,580549E+19	5,465813E+21
-1669	2,725059E+21	2,724961E+21	7,898528E+18	7,897588E+18	5,450020E+21	1,579612E+19	5,465816E+21
-1668	2,724996E+21	2,725164E+21	7,903296E+18	7,901948E+18	5,450160E+21	1,580524E+19	5,465965E+21
-1667	2,725234E+21	2,725100E+21	7,899536E+18	7,901997E+18	5,450334E+21	1,580153E+19	5,466135E+21
-1666	2,725227E+21	2,725236E+21	7,898350E+18	7,897289E+18	5,450463E+21	1,579564E+19	5,466259E+21
-1665	2,725249E+21	2,725367E+21	7,902141E+18	7,903913E+18	5,450616E+21	1,580605E+19	5,466422E+21
-1664	2,725455E+21	2,725291E+21	7,897182E+18	7,898569E+18	5,450746E+21	1,579575E+19	5,466542E+21
-1663	2,725355E+21	2,725485E+21	7,899457E+18	7,898247E+18	5,450839E+21	1,579770E+19	5,466637E+21
-1662	2,725419E+21	2,725446E+21	7,902394E+18	7,902547E+18	5,450866E+21	1,580494E+19	5,466670E+21
-1661	2,725461E+21	2,725321E+21	7,896521E+18	7,896968E+18	5,450782E+21	1,579349E+19	5,466575E+21
-1660	2,725254E+21	2,725431E+21	7,902456E+18	7,901097E+18	5,450685E+21	1,580355E+19	5,466489E+21
-1659	2,725315E+21	2,725234E+21	7,899878E+18	7,902385E+18	5,450549E+21	1,580226E+19	5,466351E+21
-1658	2,725227E+21	2,725125E+21	7,896919E+18	7,898713E+18	5,450352E+21	1,579563E+19	5,466147E+21
-1657	2,725051E+21	2,725142E+21	7,904027E+18	7,902806E+18	5,450193E+21	1,580683E+19	5,466000E+21
-1656	2,725122E+21	2,724922E+21	7,898448E+18	7,901329E+18	5,450043E+21	1,579978E+19	5,465843E+21
-1655	2,724910E+21	2,724970E+21	7,901754E+18	7,898731E+18	5,449880E+21	1,580049E+19	5,465681E+21
-1654	2,724807E+21	2,724916E+21	7,904255E+18	7,904429E+18	5,449723E+21	1,580868E+19	5,465532E+21
-1653	2,724851E+21	2,724707E+21	7,898471E+18	7,900540E+18	5,449559E+21	1,579901E+19	5,465358E+21
-1652	2,724681E+21	2,724846E+21	7,903313E+18	7,900597E+18	5,449527E+21	1,580391E+19	5,465331E+21
-1651	2,724805E+21	2,724774E+21	7,901607E+18	7,905203E+18	5,449579E+21	1,580681E+19	5,465386E+21
-1650	2,724895E+21	2,724755E+21	7,898922E+18	7,898316E+18	5,449650E+21	1,579724E+19	5,465447E+21
-1649	2,724828E+21	2,724985E+21	7,903123E+18	7,902646E+18	5,449813E+21	1,580577E+19	5,465619E+21
-1648	2,725041E+21	2,724933E+21	7,899862E+18	7,902713E+18	5,449974E+21	1,580258E+19	5,465777E+21
-1647	2,725051E+21	2,725080E+21	7,899046E+18	7,897578E+18	5,450131E+21	1,579662E+19	5,465927E+21
-1646	2,725062E+21	2,725204E+21	7,903088E+18	7,904220E+18	5,450267E+21	1,580731E+19	5,466074E+21
-1645	2,725243E+21	2,725079E+21	7,898278E+18	7,898545E+18	5,450322E+21	1,579682E+19	5,466118E+21
-1644	2,725150E+21	2,725254E+21	7,900287E+18	7,898946E+18	5,450404E+21	1,579923E+19	5,466203E+21
-1643	2,725177E+21	2,725222E+21	7,903084E+18	7,903655E+18	5,450399E+21	1,580674E+19	5,466206E+21
-1642	2,725224E+21	2,725068E+21	7,896796E+18	7,898331E+18	5,450292E+21	1,579513E+19	5,466087E+21
-1641	2,725027E+21	2,725167E+21	7,902266E+18	7,901833E+18	5,450193E+21	1,580410E+19	5,465997E+21
-1640	2,725078E+21	2,724982E+21	7,900449E+18	7,902851E+18	5,450060E+21	1,580330E+19	5,465864E+21
-1639	2,725009E+21	2,724905E+21	7,898576E+18	7,898538E+18	5,449914E+21	1,579711E+19	5,465711E+21
-1638	2,724803E+21	2,724939E+21	7,905501E+18	7,902989E+18	5,449742E+21	1,580849E+19	5,465550E+21
-1637	2,724828E+21	2,724681E+21	7,899567E+18	7,902013E+18	5,449509E+21	1,580158E+19	5,465310E+21
-1636	2,724638E+21	2,724702E+21	7,902115E+18	7,900043E+18	5,449340E+21	1,580216E+19	5,465143E+21
-1635	2,724545E+21	2,724660E+21	7,904212E+18	7,905939E+18	5,449205E+21	1,581015E+19	5,465015E+21
-1634	2,724643E+21	2,724447E+21	7,898601E+18	7,901675E+18	5,449091E+21	1,580028E+19	5,464891E+21
-1633	2,724507E+21	2,724608E+21	7,903220E+18	7,900998E+18	5,449116E+21	1,580422E+19	5,464920E+21
-1632	2,724622E+21	2,724585E+21	7,902410E+18	7,905641E+18	5,449206E+21	1,580805E+19	5,465015E+21
-1631	2,724716E+21	2,724606E+21	7,900187E+18	7,898466E+18	5,449322E+21	1,579865E+19	5,465120E+21
-1630	2,724630E+21	2,724837E+21	7,903908E+18	7,903189E+18	5,449467E+21	1,580710E+19	5,465274E+21
-1629	2,724826E+21	2,724739E+21	7,900654E+18	7,902900E+18	5,449565E+21	1,580355E+19	5,465369E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1628	2,724867E+21	2,724863E+21	7,899449E+18	7,898071E+18	5,449730E+21	1,579752E+19	5,465527E+21
-1627	2,724865E+21	2,725005E+21	7,903871E+18	7,904674E+18	5,449871E+21	1,580854E+19	5,465679E+21
-1626	2,725049E+21	2,724866E+21	7,898809E+18	7,899348E+18	5,449914E+21	1,579816E+19	5,465712E+21
-1625	2,724936E+21	2,725029E+21	7,900206E+18	7,899762E+18	5,449965E+21	1,579997E+19	5,465765E+21
-1624	2,724940E+21	2,724998E+21	7,903404E+18	7,904585E+18	5,449938E+21	1,580799E+19	5,465746E+21
-1623	2,725005E+21	2,724851E+21	7,897712E+18	7,898836E+18	5,449855E+21	1,579655E+19	5,465652E+21
-1622	2,724801E+21	2,724948E+21	7,903266E+18	7,902098E+18	5,449749E+21	1,580536E+19	5,465554E+21
-1621	2,724827E+21	2,724730E+21	7,901717E+18	7,903084E+18	5,449556E+21	1,580480E+19	5,465361E+21
-1620	2,724760E+21	2,724645E+21	7,899556E+18	7,899519E+18	5,449405E+21	1,579907E+19	5,465204E+21
-1619	2,724521E+21	2,724693E+21	7,906058E+18	7,904345E+18	5,449213E+21	1,581040E+19	5,465023E+21
-1618	2,724563E+21	2,724405E+21	7,899726E+18	7,903685E+18	5,448969E+21	1,580341E+19	5,464772E+21
-1617	2,724402E+21	2,724423E+21	7,901844E+18	7,900812E+18	5,448825E+21	1,580266E+19	5,464628E+21
-1616	2,724322E+21	2,724414E+21	7,904701E+18	7,906315E+18	5,448737E+21	1,581102E+19	5,464548E+21
-1615	2,724454E+21	2,724253E+21	7,900180E+18	7,901400E+18	5,448707E+21	1,580158E+19	5,464509E+21
-1614	2,724311E+21	2,724447E+21	7,904309E+18	7,901039E+18	5,448757E+21	1,580535E+19	5,464563E+21
-1613	2,724392E+21	2,724400E+21	7,903532E+18	7,905953E+18	5,448792E+21	1,580949E+19	5,464601E+21
-1612	2,724514E+21	2,724408E+21	7,900557E+18	7,899379E+18	5,448922E+21	1,579994E+19	5,464722E+21
-1611	2,724427E+21	2,724646E+21	7,904137E+18	7,904054E+18	5,449073E+21	1,580819E+19	5,464881E+21
-1610	2,724647E+21	2,724528E+21	7,901052E+18	7,903542E+18	5,449175E+21	1,580459E+19	5,464979E+21
-1609	2,724698E+21	2,724650E+21	7,899448E+18	7,898489E+18	5,449349E+21	1,579794E+19	5,465147E+21
-1608	2,724661E+21	2,724813E+21	7,904672E+18	7,905176E+18	5,449474E+21	1,580985E+19	5,465284E+21
-1607	2,724835E+21	2,724686E+21	7,899912E+18	7,899930E+18	5,449521E+21	1,579984E+19	5,465321E+21
-1606	2,724711E+21	2,724826E+21	7,900800E+18	7,900490E+18	5,449537E+21	1,580129E+19	5,465338E+21
-1605	2,724694E+21	2,724747E+21	7,904206E+18	7,904931E+18	5,449441E+21	1,580914E+19	5,465250E+21
-1604	2,724788E+21	2,724590E+21	7,898375E+18	7,899531E+18	5,449378E+21	1,579791E+19	5,465176E+21
-1603	2,724564E+21	2,724709E+21	7,904213E+18	7,902698E+18	5,449273E+21	1,580691E+19	5,465080E+21
-1602	2,724583E+21	2,724482E+21	7,902346E+18	7,904263E+18	5,449065E+21	1,580661E+19	5,464871E+21
-1601	2,724506E+21	2,724386E+21	7,899565E+18	7,900675E+18	5,448892E+21	1,580024E+19	5,464692E+21
-1600	2,724253E+21	2,724443E+21	7,906328E+18	7,905320E+18	5,448696E+21	1,581165E+19	5,464508E+21
-1599	2,724326E+21	2,724174E+21	7,900733E+18	7,904204E+18	5,448499E+21	1,580494E+19	5,464304E+21
-1598	2,724179E+21	2,724199E+21	7,902857E+18	7,900729E+18	5,448377E+21	1,580359E+19	5,464181E+21
-1597	2,724090E+21	2,724180E+21	7,906107E+18	7,906247E+18	5,448270E+21	1,581235E+19	5,464083E+21
-1596	2,724237E+21	2,724037E+21	7,901378E+18	7,901972E+18	5,448274E+21	1,580335E+19	5,464077E+21
-1595	2,724077E+21	2,724255E+21	7,904880E+18	7,902130E+18	5,448332E+21	1,580701E+19	5,464139E+21
-1594	2,724188E+21	2,724184E+21	7,903686E+18	7,907290E+18	5,448372E+21	1,581098E+19	5,464183E+21
-1593	2,724334E+21	2,724189E+21	7,900111E+18	7,900067E+18	5,448522E+21	1,580018E+19	5,464323E+21
-1592	2,724250E+21	2,724455E+21	7,904459E+18	7,904320E+18	5,448704E+21	1,580878E+19	5,464513E+21
-1591	2,724477E+21	2,724367E+21	7,902339E+18	7,903410E+18	5,448844E+21	1,580575E+19	5,464650E+21
-1590	2,724502E+21	2,724490E+21	7,900238E+18	7,898738E+18	5,448992E+21	1,579898E+19	5,464791E+21
-1589	2,724424E+21	2,724606E+21	7,905658E+18	7,905667E+18	5,449030E+21	1,581132E+19	5,464841E+21
-1588	2,724615E+21	2,724456E+21	7,900295E+18	7,901070E+18	5,449071E+21	1,580136E+19	5,464872E+21
-1587	2,724488E+21	2,724595E+21	7,901186E+18	7,901551E+18	5,449083E+21	1,580274E+19	5,464886E+21
-1586	2,724491E+21	2,724492E+21	7,904691E+18	7,905757E+18	5,448983E+21	1,581045E+19	5,464793E+21
-1585	2,724582E+21	2,724340E+21	7,898646E+18	7,900245E+18	5,448921E+21	1,579889E+19	5,464720E+21
-1584	2,724315E+21	2,724483E+21	7,905173E+18	7,903304E+18	5,448797E+21	1,580848E+19	5,464606E+21
-1583	2,724319E+21	2,724265E+21	7,903628E+18	7,905002E+18	5,448584E+21	1,580863E+19	5,464393E+21
-1582	2,724236E+21	2,724148E+21	7,900460E+18	7,901210E+18	5,448384E+21	1,580167E+19	5,464185E+21
-1581	2,723971E+21	2,724165E+21	7,907467E+18	7,905384E+18	5,448136E+21	1,581285E+19	5,463948E+21
-1580	2,724082E+21	2,723906E+21	7,901833E+18	7,904619E+18	5,447988E+21	1,580645E+19	5,463795E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1579	2,723939E+21	2,723964E+21	7,903839E+18	7,901247E+18	5,447902E+21	1,580509E+19	5,463708E+21
-1578	2,723864E+21	2,723948E+21	7,906556E+18	7,907421E+18	5,447812E+21	1,581398E+19	5,463626E+21
-1577	2,724027E+21	2,723819E+21	7,901133E+18	7,903176E+18	5,447846E+21	1,580431E+19	5,463651E+21
-1576	2,723875E+21	2,724060E+21	7,904764E+18	7,903095E+18	5,447935E+21	1,580786E+19	5,463743E+21
-1575	2,724014E+21	2,724016E+21	7,904449E+18	7,907673E+18	5,448030E+21	1,581212E+19	5,463842E+21
-1574	2,724166E+21	2,724021E+21	7,900799E+18	7,899931E+18	5,448187E+21	1,580073E+19	5,463987E+21
-1573	2,724048E+21	2,724260E+21	7,905711E+18	7,904237E+18	5,448308E+21	1,580995E+19	5,464118E+21
-1572	2,724268E+21	2,724177E+21	7,903339E+18	7,904082E+18	5,448444E+21	1,580742E+19	5,464252E+21
-1571	2,724273E+21	2,724290E+21	7,900782E+18	7,899983E+18	5,448563E+21	1,580076E+19	5,464364E+21
-1570	2,724218E+21	2,724364E+21	7,905882E+18	7,906879E+18	5,448583E+21	1,581276E+19	5,464395E+21
-1569	2,724428E+21	2,724210E+21	7,900097E+18	7,901856E+18	5,448638E+21	1,580195E+19	5,464440E+21
-1568	2,724293E+21	2,724376E+21	7,901830E+18	7,901864E+18	5,448669E+21	1,580369E+19	5,464473E+21
-1567	2,724284E+21	2,724302E+21	7,906076E+18	7,905864E+18	5,448586E+21	1,581194E+19	5,464398E+21
-1566	2,724333E+21	2,724142E+21	7,899629E+18	7,900700E+18	5,448475E+21	1,580033E+19	5,464275E+21
-1565	2,724021E+21	2,724233E+21	7,906404E+18	7,903829E+18	5,448254E+21	1,581023E+19	5,464064E+21
-1564	2,724036E+21	2,723996E+21	7,904356E+18	7,906024E+18	5,448032E+21	1,581038E+19	5,463842E+21
-1563	2,723958E+21	2,723875E+21	7,901272E+18	7,902156E+18	5,447833E+21	1,580343E+19	5,463637E+21
-1562	2,723737E+21	2,723871E+21	7,907943E+18	7,906279E+18	5,447608E+21	1,581422E+19	5,463422E+21
-1561	2,723864E+21	2,723641E+21	7,902051E+18	7,905585E+18	5,447505E+21	1,580764E+19	5,463313E+21
-1560	2,723713E+21	2,723748E+21	7,904253E+18	7,902228E+18	5,447462E+21	1,580648E+19	5,463268E+21
-1559	2,723655E+21	2,723763E+21	7,907246E+18	7,908378E+18	5,447418E+21	1,581562E+19	5,463234E+21
-1558	2,723825E+21	2,723636E+21	7,901626E+18	7,903472E+18	5,447461E+21	1,580510E+19	5,463266E+21
-1557	2,723664E+21	2,723852E+21	7,905668E+18	7,902926E+18	5,447517E+21	1,580859E+19	5,463325E+21
-1556	2,723819E+21	2,723822E+21	7,905604E+18	7,907596E+18	5,447641E+21	1,581320E+19	5,463454E+21
-1555	2,723955E+21	2,723842E+21	7,901791E+18	7,900366E+18	5,447796E+21	1,580216E+19	5,463598E+21
-1554	2,723843E+21	2,724049E+21	7,906109E+18	7,905364E+18	5,447892E+21	1,581147E+19	5,463704E+21
-1553	2,724071E+21	2,723960E+21	7,903117E+18	7,905360E+18	5,448031E+21	1,580848E+19	5,463840E+21
-1552	2,724083E+21	2,724085E+21	7,900748E+18	7,901054E+18	5,448168E+21	1,580180E+19	5,463970E+21
-1551	2,724046E+21	2,724175E+21	7,906660E+18	7,907232E+18	5,448221E+21	1,581389E+19	5,464035E+21
-1550	2,724244E+21	2,724021E+21	7,900953E+18	7,901803E+18	5,448265E+21	1,580276E+19	5,464068E+21
-1549	2,724052E+21	2,724154E+21	7,903452E+18	7,901848E+18	5,448206E+21	1,580530E+19	5,464012E+21
-1548	2,724011E+21	2,724078E+21	7,907318E+18	7,906559E+18	5,448089E+21	1,581388E+19	5,463903E+21
-1547	2,724037E+21	2,723891E+21	7,900430E+18	7,902232E+18	5,447927E+21	1,580266E+19	5,463730E+21
-1546	2,723749E+21	2,723924E+21	7,906724E+18	7,905120E+18	5,447673E+21	1,581184E+19	5,463485E+21
-1545	2,723794E+21	2,723694E+21	7,904148E+18	7,907082E+18	5,447488E+21	1,581123E+19	5,463299E+21
-1544	2,723732E+21	2,723612E+21	7,901830E+18	7,902695E+18	5,447343E+21	1,580453E+19	5,463148E+21
-1543	2,723525E+21	2,723658E+21	7,908846E+18	7,906686E+18	5,447183E+21	1,581553E+19	5,462999E+21
-1542	2,723640E+21	2,723451E+21	7,902802E+18	7,906045E+18	5,447090E+21	1,580885E+19	5,462899E+21
-1541	2,723466E+21	2,723535E+21	7,905228E+18	7,902680E+18	5,447001E+21	1,580791E+19	5,462809E+21
-1540	2,723427E+21	2,723560E+21	7,907964E+18	7,908970E+18	5,446987E+21	1,581693E+19	5,462804E+21
-1539	2,723602E+21	2,723436E+21	7,902504E+18	7,904039E+18	5,447038E+21	1,580654E+19	5,462845E+21
-1538	2,723473E+21	2,723620E+21	7,906195E+18	7,903482E+18	5,447093E+21	1,580968E+19	5,462903E+21
-1537	2,723628E+21	2,723609E+21	7,905848E+18	7,908368E+18	5,447237E+21	1,581422E+19	5,463051E+21
-1536	2,723753E+21	2,723655E+21	7,902062E+18	7,901422E+18	5,447407E+21	1,580348E+19	5,463211E+21
-1535	2,723666E+21	2,723868E+21	7,906498E+18	7,906440E+18	5,447534E+21	1,581294E+19	5,463347E+21
-1534	2,723895E+21	2,723776E+21	7,903529E+18	7,905601E+18	5,447671E+21	1,580913E+19	5,463480E+21
-1533	2,723888E+21	2,723876E+21	7,901751E+18	7,901016E+18	5,447763E+21	1,580277E+19	5,463566E+21
-1532	2,723842E+21	2,723976E+21	7,907898E+18	7,907079E+18	5,447818E+21	1,581498E+19	5,463633E+21
-1531	2,723994E+21	2,723821E+21	7,902073E+18	7,902555E+18	5,447815E+21	1,580463E+19	5,463620E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1530	2,723795E+21	2,723898E+21	7,903981E+18	7,903186E+18	5,447693E+21	1,580717E+19	5,463500E+21
-1529	2,723751E+21	2,723803E+21	7,907090E+18	7,908041E+18	5,447554E+21	1,581513E+19	5,463369E+21
-1528	2,723785E+21	2,723622E+21	7,900513E+18	7,903580E+18	5,447407E+21	1,580409E+19	5,463211E+21
-1527	2,723535E+21	2,723665E+21	7,907378E+18	7,905644E+18	5,447200E+21	1,581302E+19	5,463013E+21
-1526	2,723578E+21	2,723455E+21	7,904958E+18	7,907074E+18	5,447032E+21	1,581203E+19	5,462844E+21
-1525	2,723478E+21	2,723373E+21	7,903441E+18	7,902772E+18	5,446851E+21	1,580621E+19	5,462657E+21
-1524	2,723260E+21	2,723443E+21	7,909983E+18	7,907205E+18	5,446704E+21	1,581719E+19	5,462521E+21
-1523	2,723367E+21	2,723235E+21	7,903848E+18	7,907228E+18	5,446603E+21	1,581108E+19	5,462414E+21
-1522	2,723231E+21	2,723276E+21	7,905646E+18	7,903594E+18	5,446506E+21	1,580924E+19	5,462315E+21
-1521	2,723220E+21	2,723316E+21	7,907933E+18	7,909628E+18	5,446537E+21	1,581756E+19	5,462354E+21
-1520	2,723406E+21	2,723229E+21	7,902948E+18	7,904539E+18	5,446635E+21	1,580749E+19	5,462442E+21
-1519	2,723295E+21	2,723440E+21	7,906657E+18	7,904126E+18	5,446736E+21	1,581078E+19	5,462546E+21
-1518	2,723443E+21	2,723443E+21	7,906245E+18	7,908830E+18	5,446885E+21	1,581508E+19	5,462700E+21
-1517	2,723550E+21	2,723461E+21	7,902843E+18	7,901914E+18	5,447010E+21	1,580476E+19	5,462815E+21
-1516	2,723475E+21	2,723685E+21	7,907174E+18	7,906798E+18	5,447160E+21	1,581397E+19	5,462974E+21
-1515	2,723700E+21	2,723588E+21	7,904530E+18	7,906073E+18	5,447288E+21	1,581060E+19	5,463098E+21
-1514	2,723695E+21	2,723640E+21	7,902397E+18	7,901667E+18	5,447335E+21	1,580406E+19	5,463139E+21
-1513	2,723623E+21	2,723749E+21	7,908123E+18	7,907951E+18	5,447371E+21	1,581607E+19	5,463187E+21
-1512	2,723746E+21	2,723596E+21	7,902332E+18	7,903986E+18	5,447342E+21	1,580632E+19	5,463148E+21
-1511	2,723565E+21	2,723654E+21	7,904450E+18	7,904352E+18	5,447219E+21	1,580880E+19	5,463027E+21
-1510	2,723520E+21	2,723554E+21	7,907536E+18	7,908218E+18	5,447075E+21	1,581575E+19	5,462890E+21
-1509	2,723535E+21	2,723355E+21	7,901890E+18	7,903545E+18	5,446891E+21	1,580543E+19	5,462696E+21
-1508	2,723286E+21	2,723427E+21	7,908725E+18	7,905448E+18	5,446713E+21	1,581417E+19	5,462527E+21
-1507	2,723303E+21	2,723232E+21	7,906225E+18	7,907959E+18	5,446535E+21	1,581418E+19	5,462349E+21
-1506	2,723212E+21	2,723110E+21	7,904092E+18	7,904098E+18	5,446322E+21	1,580819E+19	5,462130E+21
-1505	2,723010E+21	2,723185E+21	7,909679E+18	7,908600E+18	5,446196E+21	1,581828E+19	5,462014E+21
-1504	2,723136E+21	2,723000E+21	7,903965E+18	7,908506E+18	5,446136E+21	1,581247E+19	5,461948E+21
-1503	2,723049E+21	2,723052E+21	7,906075E+18	7,904186E+18	5,446101E+21	1,581026E+19	5,461911E+21
-1502	2,723035E+21	2,723117E+21	7,908562E+18	7,909445E+18	5,446153E+21	1,581801E+19	5,461971E+21
-1501	2,723185E+21	2,723035E+21	7,904252E+18	7,904712E+18	5,446220E+21	1,580896E+19	5,462029E+21
-1500	2,723081E+21	2,723260E+21	7,907424E+18	7,904656E+18	5,446341E+21	1,581208E+19	5,462153E+21
-1499	2,723226E+21	2,723257E+21	7,907194E+18	7,909749E+18	5,446484E+21	1,581694E+19	5,462301E+21
-1498	2,723367E+21	2,723233E+21	7,903190E+18	7,902626E+18	5,446600E+21	1,580582E+19	5,462406E+21
-1497	2,723305E+21	2,723467E+21	7,907235E+18	7,907188E+18	5,446772E+21	1,581442E+19	5,462586E+21
-1496	2,723509E+21	2,723398E+21	7,905076E+18	7,906535E+18	5,446907E+21	1,581161E+19	5,462719E+21
-1495	2,723501E+21	2,723449E+21	7,902879E+18	7,902554E+18	5,446950E+21	1,580543E+19	5,462756E+21
-1494	2,723396E+21	2,723546E+21	7,908578E+18	7,908296E+18	5,446941E+21	1,581687E+19	5,462758E+21
-1493	2,723485E+21	2,723358E+21	7,903265E+18	7,904708E+18	5,446843E+21	1,580797E+19	5,462651E+21
-1492	2,723314E+21	2,723410E+21	7,905448E+18	7,904620E+18	5,446724E+21	1,581007E+19	5,462534E+21
-1491	2,723266E+21	2,723304E+21	7,908851E+18	7,908703E+18	5,446570E+21	1,581755E+19	5,462388E+21
-1490	2,723287E+21	2,723069E+21	7,902909E+18	7,904324E+18	5,446356E+21	1,580723E+19	5,462163E+21
-1489	2,723027E+21	2,723161E+21	7,908934E+18	7,906578E+18	5,446188E+21	1,581551E+19	5,462004E+21
-1488	2,723036E+21	2,722986E+21	7,906439E+18	7,909742E+18	5,446023E+21	1,581618E+19	5,461839E+21
-1487	2,722985E+21	2,722862E+21	7,904411E+18	7,905457E+18	5,445847E+21	1,580987E+19	5,461656E+21
-1486	2,722798E+21	2,722954E+21	7,909895E+18	7,908619E+18	5,445752E+21	1,581851E+19	5,461571E+21
-1485	2,722909E+21	2,722770E+21	7,905307E+18	7,908345E+18	5,445679E+21	1,581365E+19	5,461493E+21
-1484	2,722824E+21	2,722857E+21	7,907338E+18	7,903799E+18	5,445681E+21	1,581114E+19	5,461492E+21
-1483	2,722799E+21	2,722935E+21	7,909760E+18	7,910114E+18	5,445735E+21	1,581987E+19	5,461554E+21
-1482	2,722967E+21	2,722812E+21	7,904826E+18	7,905770E+18	5,445778E+21	1,581060E+19	5,461589E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1481	2,722892E+21	2,723046E+21	7,906976E+18	7,905899E+18	5,445938E+21	1,581287E+19	5,461751E+21
-1480	2,723055E+21	2,723066E+21	7,907333E+18	7,910724E+18	5,446121E+21	1,581806E+19	5,461939E+21
-1479	2,723228E+21	2,723044E+21	7,903532E+18	7,903189E+18	5,446273E+21	1,580672E+19	5,462079E+21
-1478	2,723138E+21	2,723293E+21	7,907840E+18	7,906844E+18	5,446431E+21	1,581468E+19	5,462246E+21
-1477	2,723274E+21	2,723211E+21	7,906352E+18	7,906838E+18	5,446484E+21	1,581319E+19	5,462298E+21
-1476	2,723249E+21	2,723250E+21	7,903854E+18	7,903208E+18	5,446498E+21	1,580706E+19	5,462305E+21
-1475	2,723134E+21	2,723314E+21	7,909729E+18	7,909219E+18	5,446448E+21	1,581895E+19	5,462267E+21
-1474	2,723241E+21	2,723070E+21	7,903889E+18	7,905607E+18	5,446311E+21	1,580950E+19	5,462121E+21
-1473	2,723087E+21	2,723127E+21	7,905584E+18	7,905339E+18	5,446213E+21	1,581092E+19	5,462024E+21
-1472	2,723025E+21	2,723053E+21	7,909253E+18	7,909698E+18	5,446078E+21	1,581895E+19	5,461897E+21
-1471	2,723060E+21	2,722829E+21	7,903314E+18	7,905728E+18	5,445888E+21	1,580904E+19	5,461697E+21
-1470	2,722787E+21	2,722926E+21	7,909263E+18	7,907000E+18	5,445712E+21	1,581626E+19	5,461529E+21
-1469	2,722770E+21	2,722748E+21	7,907489E+18	7,910469E+18	5,445517E+21	1,581796E+19	5,461335E+21
-1468	2,722737E+21	2,722636E+21	7,905660E+18	7,905480E+18	5,445373E+21	1,581114E+19	5,461185E+21
-1467	2,722551E+21	2,722728E+21	7,911359E+18	7,908751E+18	5,445279E+21	1,582011E+19	5,461099E+21
-1466	2,722667E+21	2,722520E+21	7,906417E+18	7,908852E+18	5,445187E+21	1,581527E+19	5,461002E+21
-1465	2,722591E+21	2,722623E+21	7,907393E+18	7,904786E+18	5,445214E+21	1,581218E+19	5,461027E+21
-1464	2,722580E+21	2,722724E+21	7,909893E+18	7,911628E+18	5,445304E+21	1,582152E+19	5,461126E+21
-1463	2,722802E+21	2,722607E+21	7,905000E+18	7,906909E+18	5,445409E+21	1,581191E+19	5,461221E+21
-1462	2,722743E+21	2,722861E+21	7,907071E+18	7,905724E+18	5,445604E+21	1,581279E+19	5,461417E+21
-1461	2,722874E+21	2,722891E+21	7,908568E+18	7,910520E+18	5,445765E+21	1,581909E+19	5,461584E+21
-1460	2,723025E+21	2,722890E+21	7,904628E+18	7,903076E+18	5,445915E+21	1,580770E+19	5,461722E+21
-1459	2,722900E+21	2,723119E+21	7,909037E+18	7,907550E+18	5,446019E+21	1,581659E+19	5,461835E+21
-1458	2,723025E+21	2,722970E+21	7,906898E+18	7,908026E+18	5,445995E+21	1,581492E+19	5,461810E+21
-1457	2,723017E+21	2,722990E+21	7,903581E+18	7,904641E+18	5,446007E+21	1,580822E+19	5,461815E+21
-1456	2,722917E+21	2,723058E+21	7,909995E+18	7,910352E+18	5,445975E+21	1,582035E+19	5,461796E+21
-1455	2,723053E+21	2,722814E+21	7,904380E+18	7,906534E+18	5,445867E+21	1,581091E+19	5,461678E+21
-1454	2,722876E+21	2,722894E+21	7,906203E+18	7,905321E+18	5,445771E+21	1,581152E+19	5,461582E+21
-1453	2,722756E+21	2,722825E+21	7,910441E+18	7,910318E+18	5,445581E+21	1,582076E+19	5,461402E+21
-1452	2,722778E+21	2,722606E+21	7,904572E+18	7,906345E+18	5,445385E+21	1,581092E+19	5,461196E+21
-1451	2,722510E+21	2,722687E+21	7,910639E+18	7,907581E+18	5,445197E+21	1,581822E+19	5,461015E+21
-1450	2,722506E+21	2,722465E+21	7,908539E+18	7,910959E+18	5,444971E+21	1,581950E+19	5,460790E+21
-1449	2,722492E+21	2,722368E+21	7,906098E+18	7,905963E+18	5,444860E+21	1,581206E+19	5,460672E+21
-1448	2,722309E+21	2,722491E+21	7,911721E+18	7,909770E+18	5,444800E+21	1,582149E+19	5,460622E+21
-1447	2,722457E+21	2,722297E+21	7,906634E+18	7,910320E+18	5,444754E+21	1,581695E+19	5,460571E+21
-1446	2,722402E+21	2,722419E+21	7,907199E+18	7,905354E+18	5,444821E+21	1,581255E+19	5,460633E+21
-1445	2,722386E+21	2,722534E+21	7,910490E+18	7,912356E+18	5,444920E+21	1,582285E+19	5,460743E+21
-1444	2,722626E+21	2,722445E+21	7,906066E+18	7,906795E+18	5,445071E+21	1,581286E+19	5,460884E+21
-1443	2,722562E+21	2,722694E+21	7,908393E+18	7,905770E+18	5,445256E+21	1,581416E+19	5,461070E+21
-1442	2,722661E+21	2,722688E+21	7,909615E+18	7,910926E+18	5,445349E+21	1,582054E+19	5,461170E+21
-1441	2,722796E+21	2,722675E+21	7,904555E+18	7,904373E+18	5,445471E+21	1,580893E+19	5,461280E+21
-1440	2,722669E+21	2,722890E+21	7,909168E+18	7,909166E+18	5,445559E+21	1,581833E+19	5,461377E+21
-1439	2,722835E+21	2,722727E+21	7,907002E+18	7,909343E+18	5,445562E+21	1,581634E+19	5,461378E+21
-1438	2,722837E+21	2,722749E+21	7,903920E+18	7,904489E+18	5,445586E+21	1,580841E+19	5,461394E+21
-1437	2,722696E+21	2,722833E+21	7,911329E+18	7,910183E+18	5,445528E+21	1,582151E+19	5,461350E+21
-1436	2,722806E+21	2,722617E+21	7,905787E+18	7,906565E+18	5,445423E+21	1,581235E+19	5,461236E+21
-1435	2,722600E+21	2,722678E+21	7,907748E+18	7,905981E+18	5,445278E+21	1,581373E+19	5,461091E+21
-1434	2,722465E+21	2,722557E+21	7,911268E+18	7,911403E+18	5,445022E+21	1,582267E+19	5,460845E+21
-1433	2,722505E+21	2,722327E+21	7,904706E+18	7,907731E+18	5,444832E+21	1,581244E+19	5,460644E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,722255E+21	2,722410E+21	7,911116E+18	7,908630E+18	5,444665E+21	1,581975E+19	5,460485E+21
-1431	2,722287E+21	2,722196E+21	7,908988E+18	7,911991E+18	5,444484E+21	1,582098E+19	5,460305E+21
-1430	2,722269E+21	2,722127E+21	7,906446E+18	7,906163E+18	5,444396E+21	1,581261E+19	5,460209E+21
-1429	2,722063E+21	2,722272E+21	7,912366E+18	7,910717E+18	5,444335E+21	1,582308E+19	5,460158E+21
-1428	2,722232E+21	2,722108E+21	7,907618E+18	7,910925E+18	5,444340E+21	1,581854E+19	5,460159E+21
-1427	2,722205E+21	2,722232E+21	7,908230E+18	7,905792E+18	5,444437E+21	1,581402E+19	5,460251E+21
-1426	2,722197E+21	2,722322E+21	7,911362E+18	7,912554E+18	5,444519E+21	1,582392E+19	5,460343E+21
-1425	2,722437E+21	2,722249E+21	7,906379E+18	7,907139E+18	5,444687E+21	1,581352E+19	5,460500E+21
-1424	2,722358E+21	2,722508E+21	7,908661E+18	7,906784E+18	5,444866E+21	1,581544E+19	5,460681E+21
-1423	2,722465E+21	2,722486E+21	7,909806E+18	7,912168E+18	5,444951E+21	1,582197E+19	5,460773E+21
-1422	2,722602E+21	2,722467E+21	7,904442E+18	7,904946E+18	5,445069E+21	1,580939E+19	5,460878E+21
-1421	2,722463E+21	2,722674E+21	7,909858E+18	7,909796E+18	5,445137E+21	1,581965E+19	5,460957E+21
-1420	2,722630E+21	2,722528E+21	7,908321E+18	7,909210E+18	5,445158E+21	1,581753E+19	5,460975E+21
-1419	2,722622E+21	2,722542E+21	7,905537E+18	7,904590E+18	5,445164E+21	1,581013E+19	5,460974E+21
-1418	2,722436E+21	2,722588E+21	7,912469E+18	7,910644E+18	5,445024E+21	1,582311E+19	5,460847E+21
-1417	2,722526E+21	2,722362E+21	7,905999E+18	7,908082E+18	5,444889E+21	1,581408E+19	5,460703E+21
-1416	2,722324E+21	2,722406E+21	7,908158E+18	7,907716E+18	5,444730E+21	1,581587E+19	5,460546E+21
-1415	2,722226E+21	2,722272E+21	7,911408E+18	7,912772E+18	5,444498E+21	1,582418E+19	5,460322E+21
-1414	2,722279E+21	2,722055E+21	7,905018E+18	7,907960E+18	5,444333E+21	1,581298E+19	5,460146E+21
-1413	2,722006E+21	2,722158E+21	7,912033E+18	7,908911E+18	5,444164E+21	1,582094E+19	5,459985E+21
-1412	2,722031E+21	2,721988E+21	7,910126E+18	7,912268E+18	5,444019E+21	1,582239E+19	5,459841E+21
-1411	2,722022E+21	2,721917E+21	7,907663E+18	7,906821E+18	5,443938E+21	1,581448E+19	5,459753E+21
-1410	2,721825E+21	2,722035E+21	7,912906E+18	7,911593E+18	5,443861E+21	1,582450E+19	5,459685E+21
-1409	2,722026E+21	2,721888E+21	7,907863E+18	7,911866E+18	5,443914E+21	1,581973E+19	5,459734E+21
-1408	2,722021E+21	2,722024E+21	7,908725E+18	7,906528E+18	5,444045E+21	1,581525E+19	5,459860E+21
-1407	2,722033E+21	2,722124E+21	7,911801E+18	7,913172E+18	5,444157E+21	1,582497E+19	5,459982E+21
-1406	2,722248E+21	2,722064E+21	7,906627E+18	7,907209E+18	5,444312E+21	1,581384E+19	5,460126E+21
-1405	2,722132E+21	2,722316E+21	7,909231E+18	7,907633E+18	5,444448E+21	1,581686E+19	5,460265E+21
-1404	2,722246E+21	2,722305E+21	7,910847E+18	7,912500E+18	5,444551E+21	1,582335E+19	5,460375E+21
-1403	2,722400E+21	2,722264E+21	7,905672E+18	7,905214E+18	5,444664E+21	1,581089E+19	5,460475E+21
-1402	2,722252E+21	2,722435E+21	7,910842E+18	7,909923E+18	5,444687E+21	1,582077E+19	5,460508E+21
-1401	2,722408E+21	2,722297E+21	7,908780E+18	7,909840E+18	5,444705E+21	1,581862E+19	5,460524E+21
-1400	2,722377E+21	2,722309E+21	7,905930E+18	7,906035E+18	5,444686E+21	1,581197E+19	5,460498E+21
-1399	2,722199E+21	2,722335E+21	7,912443E+18	7,912196E+18	5,444535E+21	1,582464E+19	5,460359E+21
-1398	2,722287E+21	2,722105E+21	7,905833E+18	7,909141E+18	5,444392E+21	1,581497E+19	5,460207E+21
-1397	2,722074E+21	2,722146E+21	7,908921E+18	7,908562E+18	5,444220E+21	1,581748E+19	5,460038E+21
-1396	2,721981E+21	2,722036E+21	7,912745E+18	7,912691E+18	5,444017E+21	1,582544E+19	5,459843E+21
-1395	2,722029E+21	2,721818E+21	7,906726E+18	7,908112E+18	5,443847E+21	1,581484E+19	5,459662E+21
-1394	2,721728E+21	2,721896E+21	7,912999E+18	7,909425E+18	5,443623E+21	1,582242E+19	5,459446E+21
-1393	2,721762E+21	2,721735E+21	7,910418E+18	7,913612E+18	5,443497E+21	1,582403E+19	5,459321E+21
-1392	2,721788E+21	2,721673E+21	7,908107E+18	7,908232E+18	5,443461E+21	1,581634E+19	5,459277E+21
-1391	2,721645E+21	2,721798E+21	7,913043E+18	7,912416E+18	5,443443E+21	1,582546E+19	5,459268E+21
-1390	2,721854E+21	2,721685E+21	7,908302E+18	7,911655E+18	5,443539E+21	1,581996E+19	5,459359E+21
-1389	2,721824E+21	2,721845E+21	7,909433E+18	7,906755E+18	5,443668E+21	1,581619E+19	5,459485E+21
-1388	2,721813E+21	2,721972E+21	7,912855E+18	7,913211E+18	5,443785E+21	1,582607E+19	5,459611E+21
-1387	2,722028E+21	2,721892E+21	7,907591E+18	7,907808E+18	5,443920E+21	1,581540E+19	5,459735E+21
-1386	2,721911E+21	2,722091E+21	7,909628E+18	7,908491E+18	5,444002E+21	1,581812E+19	5,459820E+21
-1385	2,722046E+21	2,722078E+21	7,911158E+18	7,913344E+18	5,444124E+21	1,582450E+19	5,459948E+21
-1384	2,722214E+21	2,722035E+21	7,906252E+18	7,906186E+18	5,444249E+21	1,581244E+19	5,460061E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1383	2,722071E+21	2,722203E+21	7,911115E+18	7,910785E+18	5,444274E+21	1,582190E+19	5,460095E+21
-1382	2,722190E+21	2,722078E+21	7,908852E+18	7,910496E+18	5,444268E+21	1,581935E+19	5,460088E+21
-1381	2,722125E+21	2,722078E+21	7,906405E+18	7,907370E+18	5,444203E+21	1,581378E+19	5,460017E+21
-1380	2,721947E+21	2,722113E+21	7,913527E+18	7,912483E+18	5,444059E+21	1,582601E+19	5,459885E+21
-1379	2,722041E+21	2,721864E+21	7,907300E+18	7,909387E+18	5,443904E+21	1,581669E+19	5,459721E+21
-1378	2,721807E+21	2,721866E+21	7,910307E+18	7,908489E+18	5,443674E+21	1,581880E+19	5,459492E+21
-1377	2,721704E+21	2,721770E+21	7,913512E+18	7,913204E+18	5,443474E+21	1,582672E+19	5,459301E+21
-1376	2,721747E+21	2,721555E+21	7,907558E+18	7,909429E+18	5,443302E+21	1,581699E+19	5,459119E+21
-1375	2,721486E+21	2,721629E+21	7,912940E+18	7,910816E+18	5,443115E+21	1,582376E+19	5,458939E+21
-1374	2,721544E+21	2,721492E+21	7,910335E+18	7,914509E+18	5,443036E+21	1,582484E+19	5,458861E+21
-1373	2,721579E+21	2,721454E+21	7,908767E+18	7,908907E+18	5,443033E+21	1,581767E+19	5,458850E+21
-1372	2,721452E+21	2,721622E+21	7,914186E+18	7,912089E+18	5,443074E+21	1,582628E+19	5,458900E+21
-1371	2,721649E+21	2,721514E+21	7,909770E+18	7,911598E+18	5,443164E+21	1,582137E+19	5,458985E+21
-1370	2,721581E+21	2,721638E+21	7,910125E+18	7,907299E+18	5,443219E+21	1,581742E+19	5,459036E+21
-1369	2,721578E+21	2,721757E+21	7,913104E+18	7,914351E+18	5,443335E+21	1,582746E+19	5,459162E+21
-1368	2,721821E+21	2,721667E+21	7,907965E+18	7,909182E+18	5,443488E+21	1,581715E+19	5,459305E+21
-1367	2,721754E+21	2,721857E+21	7,909529E+18	7,909421E+18	5,443612E+21	1,581895E+19	5,459431E+21
-1366	2,721887E+21	2,721869E+21	7,911403E+18	7,913374E+18	5,443756E+21	1,582478E+19	5,459581E+21
-1365	2,722018E+21	2,721846E+21	7,906830E+18	7,906806E+18	5,443865E+21	1,581364E+19	5,459678E+21
-1364	2,721849E+21	2,722030E+21	7,912186E+18	7,910885E+18	5,443879E+21	1,582307E+19	5,459702E+21
-1363	2,721950E+21	2,721880E+21	7,909996E+18	7,911058E+18	5,443830E+21	1,582105E+19	5,459651E+21
-1362	2,721858E+21	2,721823E+21	7,907297E+18	7,908144E+18	5,443681E+21	1,581544E+19	5,459496E+21
-1361	2,721683E+21	2,721846E+21	7,914387E+18	7,913004E+18	5,443529E+21	1,582739E+19	5,459356E+21
-1360	2,721782E+21	2,721589E+21	7,908394E+18	7,910408E+18	5,443371E+21	1,581880E+19	5,459190E+21
-1359	2,721560E+21	2,721577E+21	7,910774E+18	7,909348E+18	5,443136E+21	1,582012E+19	5,458957E+21
-1358	2,721439E+21	2,721501E+21	7,913562E+18	7,914108E+18	5,442940E+21	1,582767E+19	5,458768E+21
-1357	2,721486E+21	2,721300E+21	7,907995E+18	7,910894E+18	5,442787E+21	1,581889E+19	5,458606E+21
-1356	2,721258E+21	2,721408E+21	7,913783E+18	7,911098E+18	5,442666E+21	1,582488E+19	5,458491E+21
-1355	2,721338E+21	2,721288E+21	7,911649E+18	7,914637E+18	5,442626E+21	1,582629E+19	5,458453E+21
-1354	2,721352E+21	2,721234E+21	7,909908E+18	7,908847E+18	5,442586E+21	1,581875E+19	5,458405E+21
-1353	2,721215E+21	2,721418E+21	7,914746E+18	7,912461E+18	5,442634E+21	1,582721E+19	5,458461E+21
-1352	2,721410E+21	2,721307E+21	7,910382E+18	7,912866E+18	5,442717E+21	1,582325E+19	5,458540E+21
-1351	2,721381E+21	2,721406E+21	7,909785E+18	7,908627E+18	5,442787E+21	1,581841E+19	5,458605E+21
-1350	2,721402E+21	2,721541E+21	7,912956E+18	7,915128E+18	5,442942E+21	1,582808E+19	5,458770E+21
-1349	2,721654E+21	2,721471E+21	7,908544E+18	7,909862E+18	5,443125E+21	1,581841E+19	5,458943E+21
-1348	2,721596E+21	2,721692E+21	7,910701E+18	7,909124E+18	5,443289E+21	1,581982E+19	5,459108E+21
-1347	2,721695E+21	2,721707E+21	7,912851E+18	7,913266E+18	5,443402E+21	1,582612E+19	5,459228E+21
-1346	2,721763E+21	2,721638E+21	7,907708E+18	7,907463E+18	5,443400E+21	1,581517E+19	5,459215E+21
-1345	2,721585E+21	2,721796E+21	7,912895E+18	7,911716E+18	5,443381E+21	1,582461E+19	5,459206E+21
-1344	2,721689E+21	2,721620E+21	7,910931E+18	7,912250E+18	5,443309E+21	1,582318E+19	5,459132E+21
-1343	2,721626E+21	2,721536E+21	7,907750E+18	7,909017E+18	5,443162E+21	1,581677E+19	5,458979E+21
-1342	2,721445E+21	2,721570E+21	7,914784E+18	7,913340E+18	5,443015E+21	1,582812E+19	5,458843E+21
-1341	2,721515E+21	2,721332E+21	7,908942E+18	7,911546E+18	5,442847E+21	1,582049E+19	5,458667E+21
-1340	2,721301E+21	2,721344E+21	7,911518E+18	7,909891E+18	5,442646E+21	1,582141E+19	5,458467E+21
-1339	2,721194E+21	2,721270E+21	7,914332E+18	7,914859E+18	5,442463E+21	1,582919E+19	5,458293E+21
-1338	2,721230E+21	2,721051E+21	7,908918E+18	7,911579E+18	5,442280E+21	1,582050E+19	5,458101E+21
-1337	2,721026E+21	2,721172E+21	7,914687E+18	7,911337E+18	5,442197E+21	1,582602E+19	5,458023E+21
-1336	2,721109E+21	2,721062E+21	7,912906E+18	7,915427E+18	5,442171E+21	1,582833E+19	5,458000E+21
-1335	2,721129E+21	2,721003E+21	7,910229E+18	7,909684E+18	5,442132E+21	1,581991E+19	5,457952E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1334	2,720987E+21	2,721195E+21	7,914560E+18	7,913439E+18	5,442183E+21	1,582800E+19	5,458011E+21
-1333	2,721193E+21	2,721096E+21	7,910630E+18	7,914160E+18	5,442289E+21	1,582479E+19	5,458114E+21
-1332	2,721211E+21	2,721220E+21	7,910467E+18	7,908744E+18	5,442431E+21	1,581921E+19	5,458250E+21
-1331	2,721249E+21	2,721369E+21	7,914225E+18	7,914883E+18	5,442618E+21	1,582911E+19	5,458447E+21
-1330	2,721458E+21	2,721287E+21	7,909772E+18	7,909737E+18	5,442745E+21	1,581951E+19	5,458564E+21
-1329	2,721374E+21	2,721510E+21	7,911530E+18	7,909426E+18	5,442884E+21	1,582096E+19	5,458705E+21
-1328	2,721452E+21	2,721504E+21	7,913660E+18	7,914535E+18	5,442956E+21	1,582820E+19	5,458784E+21
-1327	2,721534E+21	2,721386E+21	7,907532E+18	7,908997E+18	5,442920E+21	1,581653E+19	5,458737E+21
-1326	2,721357E+21	2,721535E+21	7,912934E+18	7,912642E+18	5,442893E+21	1,582558E+19	5,458718E+21
-1325	2,721461E+21	2,721366E+21	7,911435E+18	7,913280E+18	5,442827E+21	1,582472E+19	5,458652E+21
-1324	2,721405E+21	2,721297E+21	7,908923E+18	7,909134E+18	5,442702E+21	1,581806E+19	5,458520E+21
-1323	2,721198E+21	2,721337E+21	7,915946E+18	7,913577E+18	5,442535E+21	1,582952E+19	5,458365E+21
-1322	2,721220E+21	2,721071E+21	7,909853E+18	7,912488E+18	5,442291E+21	1,582234E+19	5,458113E+21
-1321	2,721025E+21	2,721081E+21	7,912325E+18	7,910651E+18	5,442105E+21	1,582298E+19	5,457928E+21
-1320	2,720940E+21	2,721012E+21	7,915342E+18	7,915946E+18	5,441952E+21	1,583129E+19	5,457783E+21
-1319	2,721006E+21	2,720787E+21	7,909552E+18	7,912231E+18	5,441792E+21	1,582178E+19	5,457614E+21
-1318	2,720799E+21	2,720934E+21	7,915045E+18	7,911637E+18	5,441732E+21	1,582668E+19	5,457559E+21
-1317	2,720863E+21	2,720850E+21	7,913397E+18	7,916438E+18	5,441713E+21	1,582983E+19	5,457542E+21
-1316	2,720905E+21	2,720808E+21	7,910841E+18	7,910154E+18	5,441713E+21	1,582099E+19	5,457534E+21
-1315	2,720787E+21	2,721001E+21	7,915108E+18	7,914021E+18	5,441789E+21	1,582913E+19	5,457618E+21
-1314	2,720982E+21	2,720890E+21	7,911567E+18	7,914628E+18	5,441873E+21	1,582619E+19	5,457699E+21
-1313	2,721033E+21	2,721026E+21	7,911375E+18	7,908864E+18	5,442058E+21	1,582024E+19	5,457878E+21
-1312	2,721062E+21	2,721179E+21	7,915440E+18	7,915531E+18	5,442241E+21	1,583097E+19	5,458072E+21
-1311	2,721253E+21	2,721080E+21	7,910013E+18	7,910673E+18	5,442332E+21	1,582069E+19	5,458153E+21
-1310	2,721155E+21	2,721288E+21	7,911297E+18	7,910634E+18	5,442443E+21	1,582193E+19	5,458265E+21
-1309	2,721222E+21	2,721277E+21	7,913814E+18	7,915846E+18	5,442499E+21	1,582966E+19	5,458329E+21
-1308	2,721333E+21	2,721167E+21	7,908183E+18	7,909444E+18	5,442500E+21	1,581763E+19	5,458317E+21
-1307	2,721157E+21	2,721310E+21	7,914139E+18	7,912498E+18	5,442467E+21	1,582664E+19	5,458294E+21
-1306	2,721200E+21	2,721125E+21	7,912652E+18	7,913464E+18	5,442325E+21	1,582612E+19	5,458151E+21
-1305	2,721130E+21	2,721053E+21	7,909991E+18	7,909573E+18	5,442183E+21	1,581956E+19	5,458003E+21
-1304	2,720917E+21	2,721078E+21	7,916814E+18	7,914851E+18	5,441996E+21	1,583166E+19	5,457827E+21
-1303	2,720961E+21	2,720791E+21	7,910021E+18	7,913971E+18	5,441752E+21	1,582399E+19	5,457576E+21
-1302	2,720786E+21	2,720809E+21	7,912588E+18	7,911597E+18	5,441595E+21	1,582418E+19	5,457419E+21
-1301	2,720708E+21	2,720766E+21	7,915963E+18	7,916866E+18	5,441474E+21	1,583283E+19	5,457307E+21
-1300	2,720784E+21	2,720572E+21	7,910663E+18	7,912472E+18	5,441356E+21	1,582314E+19	5,457179E+21
-1299	2,720561E+21	2,720725E+21	7,915854E+18	7,911942E+18	5,441286E+21	1,582780E+19	5,457114E+21
-1298	2,720589E+21	2,720621E+21	7,914167E+18	7,917285E+18	5,441210E+21	1,583145E+19	5,457042E+21
-1297	2,720670E+21	2,720580E+21	7,911614E+18	7,910611E+18	5,441250E+21	1,582223E+19	5,457072E+21
-1296	2,720592E+21	2,720785E+21	7,915984E+18	7,914911E+18	5,441376E+21	1,583089E+19	5,457207E+21
-1295	2,720813E+21	2,720673E+21	7,912130E+18	7,915109E+18	5,441486E+21	1,582724E+19	5,457313E+21
-1294	2,720854E+21	2,720828E+21	7,911426E+18	7,909433E+18	5,441683E+21	1,582086E+19	5,457503E+21
-1293	2,720860E+21	2,721000E+21	7,915511E+18	7,916622E+18	5,441860E+21	1,583213E+19	5,457692E+21
-1292	2,721059E+21	2,720900E+21	7,910307E+18	7,911335E+18	5,441959E+21	1,582164E+19	5,457780E+21
-1291	2,720960E+21	2,721091E+21	7,911808E+18	7,911089E+18	5,442051E+21	1,582290E+19	5,457874E+21
-1290	2,720986E+21	2,721054E+21	7,914944E+18	7,916066E+18	5,442040E+21	1,583101E+19	5,457871E+21
-1289	2,721103E+21	2,720935E+21	7,909572E+18	7,909473E+18	5,442038E+21	1,581904E+19	5,457857E+21
-1288	2,720910E+21	2,721068E+21	7,915554E+18	7,913204E+18	5,441978E+21	1,582876E+19	5,457807E+21
-1287	2,720929E+21	2,720855E+21	7,913031E+18	7,914669E+18	5,441785E+21	1,582770E+19	5,457612E+21
-1286	2,720862E+21	2,720770E+21	7,910025E+18	7,911028E+18	5,441632E+21	1,582105E+19	5,457454E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,720661E+21	2,720808E+21	7,916932E+18	7,916204E+18	5,441469E+21	1,583314E+19	5,457302E+21
-1284	2,720740E+21	2,720547E+21	7,910848E+18	7,914557E+18	5,441286E+21	1,582541E+19	5,457112E+21
-1283	2,720567E+21	2,720577E+21	7,913761E+18	7,911549E+18	5,441144E+21	1,582531E+19	5,456970E+21
-1282	2,720426E+21	2,720537E+21	7,917125E+18	7,917101E+18	5,440962E+21	1,583423E+19	5,456797E+21
-1281	2,720507E+21	2,720344E+21	7,911707E+18	7,912957E+18	5,440851E+21	1,582466E+19	5,456675E+21
-1280	2,720303E+21	2,720481E+21	7,916497E+18	7,913164E+18	5,440785E+21	1,582966E+19	5,456614E+21
-1279	2,720363E+21	2,720367E+21	7,914294E+18	7,918453E+18	5,440730E+21	1,583275E+19	5,456563E+21
-1278	2,720491E+21	2,720345E+21	7,911673E+18	7,911441E+18	5,440835E+21	1,582311E+19	5,456659E+21
-1277	2,720429E+21	2,720585E+21	7,916280E+18	7,915667E+18	5,441015E+21	1,583195E+19	5,456846E+21
-1276	2,720655E+21	2,720514E+21	7,912960E+18	7,915284E+18	5,441169E+21	1,582824E+19	5,456997E+21
-1275	2,720671E+21	2,720667E+21	7,911880E+18	7,909757E+18	5,441338E+21	1,582164E+19	5,457159E+21
-1274	2,720619E+21	2,720809E+21	7,916260E+18	7,917092E+18	5,441427E+21	1,583335E+19	5,457261E+21
-1273	2,720833E+21	2,720693E+21	7,911259E+18	7,911566E+18	5,441526E+21	1,582282E+19	5,457349E+21
-1272	2,720746E+21	2,720862E+21	7,912995E+18	7,911757E+18	5,441608E+21	1,582475E+19	5,457433E+21
-1271	2,720764E+21	2,720804E+21	7,915735E+18	7,916515E+18	5,441567E+21	1,583225E+19	5,457399E+21
-1270	2,720867E+21	2,720682E+21	7,909848E+18	7,910485E+18	5,441549E+21	1,582033E+19	5,457369E+21
-1269	2,720659E+21	2,720820E+21	7,915533E+18	7,914620E+18	5,441478E+21	1,583015E+19	5,457309E+21
-1268	2,720697E+21	2,720614E+21	7,913217E+18	7,915861E+18	5,441311E+21	1,582908E+19	5,457140E+21
-1267	2,720637E+21	2,720526E+21	7,910520E+18	7,911765E+18	5,441163E+21	1,582228E+19	5,456985E+21
-1266	2,720401E+21	2,720557E+21	7,918011E+18	7,916482E+18	5,440958E+21	1,583449E+19	5,456793E+21
-1265	2,720484E+21	2,720303E+21	7,912514E+18	7,914617E+18	5,440787E+21	1,582713E+19	5,456614E+21
-1264	2,720294E+21	2,720332E+21	7,915296E+18	7,912252E+18	5,440625E+21	1,582755E+19	5,456453E+21
-1263	2,720139E+21	2,720265E+21	7,917520E+18	7,918167E+18	5,440404E+21	1,583569E+19	5,456239E+21
-1262	2,720243E+21	2,720066E+21	7,911757E+18	7,914310E+18	5,440309E+21	1,582607E+19	5,456135E+21
-1261	2,720087E+21	2,720231E+21	7,916320E+18	7,914330E+18	5,440318E+21	1,583065E+19	5,456148E+21
-1260	2,720203E+21	2,720161E+21	7,915001E+18	7,918752E+18	5,440363E+21	1,583375E+19	5,456197E+21
-1259	2,720336E+21	2,720171E+21	7,912540E+18	7,911124E+18	5,440507E+21	1,582366E+19	5,456331E+21
-1258	2,720213E+21	2,720422E+21	7,917265E+18	7,915618E+18	5,440635E+21	1,583288E+19	5,456468E+21
-1257	2,720428E+21	2,720349E+21	7,914089E+18	7,915376E+18	5,440777E+21	1,582947E+19	5,456606E+21
-1256	2,720445E+21	2,720473E+21	7,912546E+18	7,910888E+18	5,440918E+21	1,582343E+19	5,456742E+21
-1255	2,720394E+21	2,720576E+21	7,916564E+18	7,917959E+18	5,440970E+21	1,583452E+19	5,456804E+21
-1254	2,720631E+21	2,720447E+21	7,911460E+18	7,912572E+18	5,441078E+21	1,582403E+19	5,456902E+21
-1253	2,720551E+21	2,720624E+21	7,913247E+18	7,912784E+18	5,441174E+21	1,582603E+19	5,457000E+21
-1252	2,720564E+21	2,720585E+21	7,916348E+18	7,917206E+18	5,441149E+21	1,583355E+19	5,456982E+21
-1251	2,720643E+21	2,720457E+21	7,910204E+18	7,911272E+18	5,441100E+21	1,582148E+19	5,456922E+21
-1250	2,720387E+21	2,720574E+21	7,916299E+18	7,915201E+18	5,440961E+21	1,583150E+19	5,456793E+21
-1249	2,720442E+21	2,720373E+21	7,914491E+18	7,916124E+18	5,440816E+21	1,583062E+19	5,456646E+21
-1248	2,720389E+21	2,720273E+21	7,912116E+18	7,912379E+18	5,440663E+21	1,582449E+19	5,456487E+21
-1247	2,720128E+21	2,720288E+21	7,919002E+18	7,916752E+18	5,440415E+21	1,583575E+19	5,456251E+21
-1246	2,720205E+21	2,720032E+21	7,912935E+18	7,915799E+18	5,440237E+21	1,582873E+19	5,456066E+21
-1245	2,720021E+21	2,720061E+21	7,915296E+18	7,913581E+18	5,440082E+21	1,582888E+19	5,455911E+21
-1244	2,719909E+21	2,720016E+21	7,917657E+18	7,919231E+18	5,439924E+21	1,583689E+19	5,455761E+21
-1243	2,720044E+21	2,719839E+21	7,912234E+18	7,914749E+18	5,439883E+21	1,582698E+19	5,455710E+21
-1242	2,719877E+21	2,720021E+21	7,917243E+18	7,914375E+18	5,439898E+21	1,583162E+19	5,455730E+21
-1241	2,720008E+21	2,719985E+21	7,916628E+18	7,918574E+18	5,439993E+21	1,583520E+19	5,455828E+21
-1240	2,720122E+21	2,719998E+21	7,913751E+18	7,911842E+18	5,440119E+21	1,582559E+19	5,455945E+21
-1239	2,719975E+21	2,720212E+21	7,917503E+18	7,916488E+18	5,440187E+21	1,583399E+19	5,456021E+21
-1238	2,720206E+21	2,720117E+21	7,914000E+18	7,916670E+18	5,440323E+21	1,583067E+19	5,456154E+21
-1237	2,720252E+21	2,720242E+21	7,912306E+18	7,912122E+18	5,440494E+21	1,582443E+19	5,456318E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,720233E+21	2,720363E+21	7,917170E+18	7,918416E+18	5,440597E+21	1,583559E+19	5,456432E+21
-1235	2,720454E+21	2,720250E+21	7,912103E+18	7,912674E+18	5,440703E+21	1,582478E+19	5,456528E+21
-1234	2,720315E+21	2,720420E+21	7,914044E+18	7,913134E+18	5,440735E+21	1,582718E+19	5,456562E+21
-1233	2,720318E+21	2,720375E+21	7,917546E+18	7,917410E+18	5,440693E+21	1,583496E+19	5,456528E+21
-1232	2,720391E+21	2,720225E+21	7,911236E+18	7,912399E+18	5,440616E+21	1,582363E+19	5,456440E+21
-1231	2,720128E+21	2,720304E+21	7,917063E+18	7,915756E+18	5,440432E+21	1,583282E+19	5,456265E+21
-1230	2,720191E+21	2,720093E+21	7,915220E+18	7,917072E+18	5,440284E+21	1,583229E+19	5,456116E+21
-1229	2,720133E+21	2,720006E+21	7,912790E+18	7,913436E+18	5,440139E+21	1,582623E+19	5,455965E+21
-1228	2,719870E+21	2,720032E+21	7,919625E+18	7,917601E+18	5,439903E+21	1,583723E+19	5,455740E+21
-1227	2,719938E+21	2,719774E+21	7,913273E+18	7,916677E+18	5,439712E+21	1,582995E+19	5,455542E+21
-1226	2,719745E+21	2,719797E+21	7,915874E+18	7,914125E+18	5,439542E+21	1,583000E+19	5,455372E+21
-1225	2,719676E+21	2,719781E+21	7,918898E+18	7,919311E+18	5,439458E+21	1,583821E+19	5,455296E+21
-1224	2,719835E+21	2,719628E+21	7,913792E+18	7,915211E+18	5,439463E+21	1,582900E+19	5,455292E+21
-1223	2,719655E+21	2,719807E+21	7,917952E+18	7,914676E+18	5,439463E+21	1,583263E+19	5,455295E+21
-1222	2,719786E+21	2,719777E+21	7,916865E+18	7,919778E+18	5,439562E+21	1,583664E+19	5,455399E+21
-1221	2,719907E+21	2,719790E+21	7,913390E+18	7,913301E+18	5,439698E+21	1,582669E+19	5,455524E+21
-1220	2,719795E+21	2,720008E+21	7,917368E+18	7,917533E+18	5,439803E+21	1,583490E+19	5,455638E+21
-1219	2,720037E+21	2,719919E+21	7,914249E+18	7,917011E+18	5,439956E+21	1,583126E+19	5,455788E+21
-1218	2,720060E+21	2,720040E+21	7,913270E+18	7,912106E+18	5,440099E+21	1,582538E+19	5,455925E+21
-1217	2,720037E+21	2,720183E+21	7,918982E+18	7,918072E+18	5,440220E+21	1,583705E+19	5,456057E+21
-1216	2,720224E+21	2,720059E+21	7,913496E+18	7,913462E+18	5,440283E+21	1,582696E+19	5,456110E+21
-1215	2,720051E+21	2,720176E+21	7,914613E+18	7,913943E+18	5,440227E+21	1,582856E+19	5,456055E+21
-1214	2,720069E+21	2,720109E+21	7,917711E+18	7,918684E+18	5,440179E+21	1,583639E+19	5,456015E+21
-1213	2,720158E+21	2,719959E+21	7,911422E+18	7,913668E+18	5,440117E+21	1,582509E+19	5,455942E+21
-1212	2,719912E+21	2,720050E+21	7,917924E+18	7,916235E+18	5,439962E+21	1,583416E+19	5,455796E+21
-1211	2,719946E+21	2,719852E+21	7,915932E+18	7,917437E+18	5,439798E+21	1,583337E+19	5,455631E+21
-1210	2,719835E+21	2,719754E+21	7,913679E+18	7,914060E+18	5,439589E+21	1,582774E+19	5,455416E+21
-1209	2,719585E+21	2,719783E+21	7,920696E+18	7,918063E+18	5,439368E+21	1,583876E+19	5,455207E+21
-1208	2,719669E+21	2,719521E+21	7,914252E+18	7,917954E+18	5,439190E+21	1,583221E+19	5,455022E+21
-1207	2,719497E+21	2,719525E+21	7,916466E+18	7,914703E+18	5,439022E+21	1,583117E+19	5,454853E+21
-1206	2,719467E+21	2,719526E+21	7,919386E+18	7,920317E+18	5,438993E+21	1,583970E+19	5,454833E+21
-1205	2,719628E+21	2,719411E+21	7,914271E+18	7,916240E+18	5,439039E+21	1,583051E+19	5,454870E+21
-1204	2,719457E+21	2,719610E+21	7,918184E+18	7,915593E+18	5,439067E+21	1,583378E+19	5,454901E+21
-1203	2,719576E+21	2,719581E+21	7,917041E+18	7,920380E+18	5,439157E+21	1,583742E+19	5,454994E+21
-1202	2,719686E+21	2,719588E+21	7,913874E+18	7,913619E+18	5,439274E+21	1,582749E+19	5,455101E+21
-1201	2,719604E+21	2,719818E+21	7,918792E+18	7,917197E+18	5,439423E+21	1,583599E+19	5,455259E+21
-1200	2,719840E+21	2,719738E+21	7,915956E+18	7,917160E+18	5,439579E+21	1,583312E+19	5,455412E+21
-1199	2,719837E+21	2,719830E+21	7,914143E+18	7,912358E+18	5,439667E+21	1,582650E+19	5,455494E+21
-1198	2,719809E+21	2,719955E+21	7,919319E+18	7,919218E+18	5,439763E+21	1,583854E+19	5,455602E+21
-1197	2,719993E+21	2,719827E+21	7,913329E+18	7,915060E+18	5,439820E+21	1,582839E+19	5,455648E+21
-1196	2,719846E+21	2,719937E+21	7,914698E+18	7,915149E+18	5,439783E+21	1,582985E+19	5,455613E+21
-1195	2,719859E+21	2,719871E+21	7,918053E+18	7,919155E+18	5,439730E+21	1,583721E+19	5,455567E+21
-1194	2,719913E+21	2,719717E+21	7,912444E+18	7,914136E+18	5,439630E+21	1,582658E+19	5,455456E+21
-1193	2,719651E+21	2,719819E+21	7,919689E+18	7,916241E+18	5,439470E+21	1,583593E+19	5,455306E+21
-1192	2,719651E+21	2,719609E+21	7,917181E+18	7,918571E+18	5,439260E+21	1,583575E+19	5,455096E+21
-1191	2,719528E+21	2,719457E+21	7,914299E+18	7,915013E+18	5,438984E+21	1,582931E+19	5,454814E+21
-1190	2,719323E+21	2,719478E+21	7,920809E+18	7,919353E+18	5,438801E+21	1,584016E+19	5,454641E+21
-1189	2,719442E+21	2,719251E+21	7,914616E+18	7,919132E+18	5,438693E+21	1,583375E+19	5,454527E+21
-1188	2,719306E+21	2,719292E+21	7,917124E+18	7,915246E+18	5,438598E+21	1,583237E+19	5,454430E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,719263E+21	2,719329E+21	7,919818E+18	7,920675E+18	5,438592E+21	1,584049E+19	5,454433E+21
-1186	2,719384E+21	2,719219E+21	7,915037E+18	7,916625E+18	5,438604E+21	1,583166E+19	5,454435E+21
-1185	2,719229E+21	2,719427E+21	7,919223E+18	7,915671E+18	5,438656E+21	1,583489E+19	5,454491E+21
-1184	2,719354E+21	2,719393E+21	7,918150E+18	7,921008E+18	5,438747E+21	1,583916E+19	5,454586E+21
-1183	2,719465E+21	2,719361E+21	7,914677E+18	7,913809E+18	5,438826E+21	1,582849E+19	5,454655E+21
-1182	2,719417E+21	2,719590E+21	7,919322E+18	7,918083E+18	5,439007E+21	1,583741E+19	5,454844E+21
-1181	2,719642E+21	2,719532E+21	7,916367E+18	7,918349E+18	5,439174E+21	1,583472E+19	5,455009E+21
-1180	2,719646E+21	2,719618E+21	7,914174E+18	7,913681E+18	5,439264E+21	1,582786E+19	5,455092E+21
-1179	2,719606E+21	2,719736E+21	7,919167E+18	7,920039E+18	5,439342E+21	1,583921E+19	5,455181E+21
-1178	2,719767E+21	2,719602E+21	7,913726E+18	7,915678E+18	5,439369E+21	1,582940E+19	5,455198E+21
-1177	2,719632E+21	2,719723E+21	7,916244E+18	7,915004E+18	5,439355E+21	1,583125E+19	5,455186E+21
-1176	2,719613E+21	2,719657E+21	7,919707E+18	7,919444E+18	5,439271E+21	1,583915E+19	5,455110E+21
-1175	2,719621E+21	2,719458E+21	7,913505E+18	7,914738E+18	5,439079E+21	1,582824E+19	5,454907E+21
-1174	2,719366E+21	2,719528E+21	7,920073E+18	7,917562E+18	5,438893E+21	1,583763E+19	5,454731E+21
-1173	2,719372E+21	2,719321E+21	7,917138E+18	7,920270E+18	5,438692E+21	1,583741E+19	5,454530E+21
-1172	2,719296E+21	2,719172E+21	7,914553E+18	7,916191E+18	5,438468E+21	1,583074E+19	5,454299E+21
-1171	2,719109E+21	2,719220E+21	7,921166E+18	7,919635E+18	5,438329E+21	1,584080E+19	5,454170E+21
-1170	2,719210E+21	2,719029E+21	7,915876E+18	7,919378E+18	5,438239E+21	1,583525E+19	5,454074E+21
-1169	2,719072E+21	2,719102E+21	7,918880E+18	7,915093E+18	5,438174E+21	1,583397E+19	5,454008E+21
-1168	2,718998E+21	2,719139E+21	7,921059E+18	7,921389E+18	5,438137E+21	1,584245E+19	5,453979E+21
-1167	2,719112E+21	2,718980E+21	7,915636E+18	7,917258E+18	5,438092E+21	1,583289E+19	5,453925E+21
-1166	2,719008E+21	2,719168E+21	7,919266E+18	7,916704E+18	5,438177E+21	1,583597E+19	5,454013E+21
-1165	2,719157E+21	2,719165E+21	7,918518E+18	7,921930E+18	5,438322E+21	1,584045E+19	5,454162E+21
-1164	2,719303E+21	2,719152E+21	7,915055E+18	7,914530E+18	5,438455E+21	1,582958E+19	5,454285E+21
-1163	2,719241E+21	2,719400E+21	7,919279E+18	7,918717E+18	5,438642E+21	1,583800E+19	5,454480E+21
-1162	2,719433E+21	2,719348E+21	7,916756E+18	7,919077E+18	5,438781E+21	1,583583E+19	5,454616E+21
-1161	2,719446E+21	2,719436E+21	7,914987E+18	7,914064E+18	5,438883E+21	1,582905E+19	5,454712E+21
-1160	2,719392E+21	2,719545E+21	7,920195E+18	7,920485E+18	5,438937E+21	1,584068E+19	5,454778E+21
-1159	2,719528E+21	2,719360E+21	7,914762E+18	7,915939E+18	5,438888E+21	1,583070E+19	5,454719E+21
-1158	2,719399E+21	2,719460E+21	7,917197E+18	7,915829E+18	5,438859E+21	1,583303E+19	5,454692E+21
-1157	2,719342E+21	2,719404E+21	7,920349E+18	7,920678E+18	5,438746E+21	1,584103E+19	5,454587E+21
-1156	2,719355E+21	2,719181E+21	7,913835E+18	7,916250E+18	5,438536E+21	1,583008E+19	5,454366E+21
-1155	2,719112E+21	2,719241E+21	7,919960E+18	7,918412E+18	5,438353E+21	1,583837E+19	5,454191E+21
-1154	2,719117E+21	2,719049E+21	7,917754E+18	7,920851E+18	5,438165E+21	1,583860E+19	5,454004E+21
-1153	2,719068E+21	2,718939E+21	7,916325E+18	7,915932E+18	5,438008E+21	1,583226E+19	5,453840E+21
-1152	2,718865E+21	2,719014E+21	7,922655E+18	7,919783E+18	5,437879E+21	1,584244E+19	5,453721E+21
-1151	2,718923E+21	2,718795E+21	7,917016E+18	7,919923E+18	5,437718E+21	1,583694E+19	5,453555E+21
-1150	2,718808E+21	2,718849E+21	7,919128E+18	7,916396E+18	5,437657E+21	1,583552E+19	5,453493E+21
-1149	2,718748E+21	2,718896E+21	7,920946E+18	7,922882E+18	5,437643E+21	1,584383E+19	5,453487E+21
-1148	2,718914E+21	2,718734E+21	7,915636E+18	7,918393E+18	5,437648E+21	1,583403E+19	5,453482E+21
-1147	2,718844E+21	2,718940E+21	7,919147E+18	7,917149E+18	5,437784E+21	1,583630E+19	5,453620E+21
-1146	2,718977E+21	2,718975E+21	7,919391E+18	7,922248E+18	5,437951E+21	1,584164E+19	5,453793E+21
-1145	2,719120E+21	2,718996E+21	7,916393E+18	7,914590E+18	5,438116E+21	1,583098E+19	5,453947E+21
-1144	2,719031E+21	2,719237E+21	7,920192E+18	7,919311E+18	5,438267E+21	1,583950E+19	5,454107E+21
-1143	2,719195E+21	2,719132E+21	7,917518E+18	7,919426E+18	5,438327E+21	1,583694E+19	5,454164E+21
-1142	2,719238E+21	2,719193E+21	7,915391E+18	7,914888E+18	5,438432E+21	1,583028E+19	5,454262E+21
-1141	2,719169E+21	2,719314E+21	7,920973E+18	7,921067E+18	5,438483E+21	1,584204E+19	5,454325E+21
-1140	2,719306E+21	2,719120E+21	7,915391E+18	7,916854E+18	5,438426E+21	1,583225E+19	5,454258E+21
-1139	2,719153E+21	2,719206E+21	7,917440E+18	7,916553E+18	5,438359E+21	1,583399E+19	5,454193E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1138	2,719065E+21	2,719150E+21	7,920857E+18	7,921559E+18	5,438215E+21	1,584242E+19	5,454057E+21
-1137	2,719100E+21	2,718932E+21	7,914948E+18	7,916779E+18	5,438032E+21	1,583173E+19	5,453864E+21
-1136	2,718857E+21	2,718994E+21	7,920994E+18	7,918780E+18	5,437851E+21	1,583977E+19	5,453691E+21
-1135	2,718851E+21	2,718779E+21	7,918933E+18	7,921231E+18	5,437630E+21	1,584016E+19	5,453470E+21
-1134	2,718821E+21	2,718672E+21	7,917324E+18	7,916877E+18	5,437492E+21	1,583420E+19	5,453327E+21
-1133	2,718590E+21	2,718772E+21	7,923130E+18	7,921035E+18	5,437361E+21	1,584416E+19	5,453206E+21
-1132	2,718670E+21	2,718536E+21	7,917186E+18	7,921488E+18	5,437205E+21	1,583867E+19	5,453044E+21
-1131	2,718581E+21	2,718588E+21	7,918793E+18	7,917192E+18	5,437169E+21	1,583598E+19	5,453005E+21
-1130	2,718534E+21	2,718666E+21	7,921406E+18	7,923286E+18	5,437199E+21	1,584469E+19	5,453044E+21
-1129	2,718733E+21	2,718550E+21	7,917182E+18	7,918066E+18	5,437283E+21	1,583525E+19	5,453118E+21
-1128	2,718655E+21	2,718781E+21	7,920251E+18	7,917195E+18	5,437436E+21	1,583745E+19	5,453273E+21
-1127	2,718750E+21	2,718787E+21	7,920467E+18	7,922553E+18	5,437537E+21	1,584302E+19	5,453380E+21
-1126	2,718913E+21	2,718787E+21	7,916688E+18	7,915654E+18	5,437700E+21	1,583234E+19	5,453532E+21
-1125	2,718818E+21	2,719030E+21	7,920351E+18	7,920375E+18	5,437848E+21	1,584073E+19	5,453689E+21
-1124	2,719003E+21	2,718905E+21	7,917841E+18	7,920287E+18	5,437908E+21	1,583813E+19	5,453746E+21
-1123	2,719051E+21	2,718960E+21	7,915553E+18	7,915435E+18	5,438011E+21	1,583099E+19	5,453842E+21
-1122	2,718940E+21	2,719094E+21	7,921964E+18	7,921480E+18	5,438034E+21	1,584344E+19	5,453877E+21
-1121	2,719055E+21	2,718908E+21	7,916727E+18	7,917386E+18	5,437963E+21	1,583411E+19	5,453797E+21
-1120	2,718887E+21	2,718968E+21	7,918196E+18	7,917349E+18	5,437855E+21	1,583554E+19	5,453691E+21
-1119	2,718781E+21	2,718860E+21	7,921623E+18	7,922101E+18	5,437641E+21	1,584372E+19	5,453485E+21
-1118	2,718853E+21	2,718640E+21	7,915666E+18	7,917675E+18	5,437493E+21	1,583334E+19	5,453326E+21
-1117	2,718605E+21	2,718733E+21	7,921858E+18	7,919453E+18	5,437338E+21	1,584131E+19	5,453179E+21
-1116	2,718602E+21	2,718523E+21	7,919588E+18	7,922395E+18	5,437125E+21	1,584198E+19	5,452967E+21
-1115	2,718566E+21	2,718418E+21	7,917444E+18	7,917885E+18	5,436984E+21	1,583533E+19	5,452819E+21
-1114	2,718323E+21	2,718530E+21	7,923389E+18	7,921900E+18	5,436852E+21	1,584529E+19	5,452698E+21
-1113	2,718433E+21	2,718316E+21	7,918253E+18	7,921886E+18	5,436749E+21	1,584014E+19	5,452590E+21
-1112	2,718364E+21	2,718374E+21	7,919723E+18	7,917182E+18	5,436738E+21	1,583690E+19	5,452575E+21
-1111	2,718309E+21	2,718438E+21	7,922772E+18	7,923239E+18	5,436748E+21	1,584601E+19	5,452594E+21
-1110	2,718528E+21	2,718340E+21	7,918293E+18	7,918699E+18	5,436868E+21	1,583699E+19	5,452705E+21
-1109	2,718430E+21	2,718591E+21	7,920704E+18	7,918358E+18	5,437021E+21	1,583906E+19	5,452860E+21
-1108	2,718548E+21	2,718572E+21	7,920592E+18	7,923938E+18	5,437120E+21	1,584453E+19	5,452965E+21
-1107	2,718729E+21	2,718560E+21	7,916286E+18	7,916447E+18	5,437289E+21	1,583273E+19	5,453122E+21
-1106	2,718626E+21	2,718823E+21	7,920864E+18	7,920615E+18	5,437449E+21	1,584148E+19	5,453290E+21
-1105	2,718812E+21	2,718723E+21	7,919298E+18	7,920123E+18	5,437535E+21	1,583942E+19	5,453374E+21
-1104	2,718822E+21	2,718771E+21	7,916589E+18	7,915715E+18	5,437593E+21	1,583230E+19	5,453426E+21
-1103	2,718663E+21	2,718855E+21	7,923039E+18	7,921998E+18	5,437518E+21	1,584504E+19	5,453363E+21
-1102	2,718796E+21	2,718641E+21	7,917170E+18	7,918695E+18	5,437437E+21	1,583587E+19	5,453273E+21
-1101	2,718629E+21	2,718699E+21	7,918548E+18	7,918524E+18	5,437328E+21	1,583707E+19	5,453165E+21
-1100	2,718553E+21	2,718577E+21	7,922017E+18	7,923123E+18	5,437130E+21	1,584514E+19	5,452975E+21
-1099	2,718631E+21	2,718368E+21	7,916067E+18	7,918426E+18	5,437000E+21	1,583449E+19	5,452834E+21
-1098	2,718349E+21	2,718496E+21	7,922839E+18	7,920004E+18	5,436845E+21	1,584284E+19	5,452687E+21
-1097	2,718332E+21	2,718306E+21	7,920976E+18	7,923089E+18	5,436638E+21	1,584406E+19	5,452482E+21
-1096	2,718290E+21	2,718184E+21	7,918335E+18	7,918448E+18	5,436475E+21	1,583678E+19	5,452311E+21
-1095	2,718043E+21	2,718258E+21	7,924306E+18	7,922168E+18	5,436301E+21	1,584647E+19	5,452147E+21
-1094	2,718199E+21	2,718055E+21	7,919236E+18	7,922414E+18	5,436254E+21	1,584165E+19	5,452096E+21
-1093	2,718140E+21	2,718149E+21	7,920522E+18	7,917748E+18	5,436289E+21	1,583827E+19	5,452127E+21
-1092	2,718104E+21	2,718219E+21	7,923265E+18	7,924334E+18	5,436322E+21	1,584760E+19	5,452170E+21
-1091	2,718331E+21	2,718133E+21	7,918166E+18	7,919756E+18	5,436464E+21	1,583792E+19	5,452302E+21
-1090	2,718233E+21	2,718398E+21	7,920660E+18	7,919267E+18	5,436631E+21	1,583993E+19	5,452471E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-1089	2,718365E+21	2,718400E+21	7,921468E+18	7,924241E+18	5,436765E+21	1,584571E+19	5,452611E+21
-1088	2,718547E+21	2,718382E+21	7,916950E+18	7,916502E+18	5,436929E+21	1,583345E+19	5,452762E+21
-1087	2,718406E+21	2,718607E+21	7,922233E+18	7,920552E+18	5,437012E+21	1,584278E+19	5,452855E+21
-1086	2,718578E+21	2,718504E+21	7,920396E+18	7,920806E+18	5,437082E+21	1,584120E+19	5,452923E+21
-1085	2,718560E+21	2,718540E+21	7,917247E+18	7,917009E+18	5,437099E+21	1,583426E+19	5,452933E+21
-1084	2,718418E+21	2,718577E+21	7,923326E+18	7,923318E+18	5,436996E+21	1,584664E+19	5,452843E+21
-1083	2,718571E+21	2,718360E+21	7,917051E+18	7,919681E+18	5,436931E+21	1,583673E+19	5,452768E+21
-1082	2,718402E+21	2,718444E+21	7,919282E+18	7,918916E+18	5,436846E+21	1,583820E+19	5,452684E+21
-1081	2,718322E+21	2,718361E+21	7,923523E+18	7,923229E+18	5,436683E+21	1,584675E+19	5,452530E+21
-1080	2,718364E+21	2,718154E+21	7,917228E+18	7,918883E+18	5,436518E+21	1,583611E+19	5,452355E+21
-1079	2,718038E+21	2,718236E+21	7,924064E+18	7,920522E+18	5,436274E+21	1,584459E+19	5,452119E+21
-1078	2,718042E+21	2,718033E+21	7,921683E+18	7,924237E+18	5,436075E+21	1,584592E+19	5,451921E+21
-1077	2,718012E+21	2,717915E+21	7,918975E+18	7,919484E+18	5,435927E+21	1,583846E+19	5,451765E+21
-1076	2,717818E+21	2,717975E+21	7,924671E+18	7,923173E+18	5,435793E+21	1,584784E+19	5,451641E+21
-1075	2,717999E+21	2,717802E+21	7,919555E+18	7,923243E+18	5,435801E+21	1,584280E+19	5,451644E+21
-1074	2,717931E+21	2,717946E+21	7,920975E+18	7,918522E+18	5,435877E+21	1,583950E+19	5,451716E+21
-1073	2,717907E+21	2,718046E+21	7,924052E+18	7,925143E+18	5,435953E+21	1,584919E+19	5,451803E+21
-1072	2,718132E+21	2,717956E+21	7,918652E+18	7,920064E+18	5,436088E+21	1,583872E+19	5,451927E+21
-1071	2,718020E+21	2,718190E+21	7,921490E+18	7,919242E+18	5,436210E+21	1,584073E+19	5,452051E+21
-1070	2,718168E+21	2,718197E+21	7,922617E+18	7,924253E+18	5,436365E+21	1,584687E+19	5,452212E+21
-1069	2,718324E+21	2,718188E+21	7,917902E+18	7,917041E+18	5,436512E+21	1,583494E+19	5,452347E+21
-1068	2,718183E+21	2,718376E+21	7,922760E+18	7,921693E+18	5,436559E+21	1,584445E+19	5,452403E+21
-1067	2,718351E+21	2,718260E+21	7,920241E+18	7,922143E+18	5,436611E+21	1,584238E+19	5,452453E+21
-1066	2,718334E+21	2,718299E+21	7,917313E+18	7,918160E+18	5,436633E+21	1,583547E+19	5,452469E+21
-1065	2,718211E+21	2,718352E+21	7,924156E+18	7,923782E+18	5,436563E+21	1,584794E+19	5,452411E+21
-1064	2,718355E+21	2,718137E+21	7,917955E+18	7,919861E+18	5,436491E+21	1,583782E+19	5,452329E+21
-1063	2,718139E+21	2,718195E+21	7,920938E+18	7,919058E+18	5,436334E+21	1,584000E+19	5,452174E+21
-1062	2,718035E+21	2,718115E+21	7,924765E+18	7,924069E+18	5,436150E+21	1,584883E+19	5,451999E+21
-1061	2,718053E+21	2,717892E+21	7,918053E+18	7,920487E+18	5,435945E+21	1,583854E+19	5,451784E+21
-1060	2,717758E+21	2,717921E+21	7,924366E+18	7,921868E+18	5,435679E+21	1,584623E+19	5,451525E+21
-1059	2,717794E+21	2,717731E+21	7,921593E+18	7,925270E+18	5,435524E+21	1,584686E+19	5,451371E+21
-1058	2,717788E+21	2,717653E+21	7,919545E+18	7,919920E+18	5,435440E+21	1,583946E+19	5,451280E+21
-1057	2,717612E+21	2,717767E+21	7,925699E+18	7,923447E+18	5,435379E+21	1,584915E+19	5,451228E+21
-1056	2,717783E+21	2,717624E+21	7,920404E+18	7,923564E+18	5,435407E+21	1,584397E+19	5,451251E+21
-1055	2,717695E+21	2,717742E+21	7,921884E+18	7,918904E+18	5,435436E+21	1,584079E+19	5,451277E+21
-1054	2,717689E+21	2,717849E+21	7,924748E+18	7,925712E+18	5,435538E+21	1,585046E+19	5,451389E+21
-1053	2,717915E+21	2,717761E+21	7,919396E+18	7,920641E+18	5,435675E+21	1,584004E+19	5,451515E+21
-1052	2,717830E+21	2,717956E+21	7,922007E+18	7,919892E+18	5,435786E+21	1,584190E+19	5,451628E+21
-1051	2,717970E+21	2,717977E+21	7,922981E+18	7,924960E+18	5,435947E+21	1,584794E+19	5,451795E+21
-1050	2,718103E+21	2,717983E+21	7,918262E+18	7,918111E+18	5,436086E+21	1,583637E+19	5,451922E+21
-1049	2,717972E+21	2,718169E+21	7,923350E+18	7,922756E+18	5,436142E+21	1,584611E+19	5,451988E+21
-1048	2,718138E+21	2,718041E+21	7,920618E+18	7,922651E+18	5,436179E+21	1,584327E+19	5,452022E+21
-1047	2,718103E+21	2,718049E+21	7,918353E+18	7,918349E+18	5,436151E+21	1,583670E+19	5,451988E+21
-1046	2,717981E+21	2,718116E+21	7,925386E+18	7,923850E+18	5,436096E+21	1,584924E+19	5,451946E+21
-1045	2,718083E+21	2,717909E+21	7,919160E+18	7,920729E+18	5,435992E+21	1,583989E+19	5,451831E+21
-1044	2,717861E+21	2,717921E+21	7,921693E+18	7,920382E+18	5,435783E+21	1,584207E+19	5,451625E+21
-1043	2,717755E+21	2,717827E+21	7,924689E+18	7,925497E+18	5,435582E+21	1,585019E+19	5,451432E+21
-1042	2,717780E+21	2,717611E+21	7,918247E+18	7,921775E+18	5,435391E+21	1,584002E+19	5,451231E+21
-1041	2,717529E+21	2,717658E+21	7,925001E+18	7,922422E+18	5,435186E+21	1,584742E+19	5,451034E+21

1	14	15	16	17	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	2,717573E+21	2,717489E+21	7,922426E+18	7,925296E+18	5,435062E+21	1,584772E+19	5,450910E+21
-1039	2,717541E+21	2,717418E+21	7,921111E+18	7,919928E+18	5,434960E+21	1,584104E+19	5,450801E+21
-1038	2,717365E+21	2,717563E+21	7,926778E+18	7,923987E+18	5,434928E+21	1,585077E+19	5,450779E+21
-1037	2,717526E+21	2,717422E+21	7,921353E+18	7,924687E+18	5,434949E+21	1,584604E+19	5,450795E+21
-1036	2,717477E+21	2,717497E+21	7,922089E+18	7,919936E+18	5,434974E+21	1,584202E+19	5,450816E+21
-1035	2,717495E+21	2,717615E+21	7,924660E+18	7,926388E+18	5,435110E+21	1,585105E+19	5,450961E+21
-1034	2,717724E+21	2,717556E+21	7,919770E+18	7,921101E+18	5,435281E+21	1,584087E+19	5,451122E+21
-1033	2,717648E+21	2,717772E+21	7,922621E+18	7,920507E+18	5,435421E+21	1,584313E+19	5,451264E+21
-1032	2,717764E+21	2,717797E+21	7,923502E+18	7,925398E+18	5,435562E+21	1,584890E+19	5,451411E+21
-1031	2,717872E+21	2,717765E+21	7,919050E+18	7,918787E+18	5,435637E+21	1,583784E+19	5,451475E+21
-1030	2,717754E+21	2,717951E+21	7,924008E+18	7,923324E+18	5,435705E+21	1,584733E+19	5,451552E+21
-1029	2,717913E+21	2,717819E+21	7,921534E+18	7,923379E+18	5,435732E+21	1,584491E+19	5,451577E+21
-1028	2,717888E+21	2,717780E+21	7,919173E+18	7,919113E+18	5,435668E+21	1,583829E+19	5,451506E+21
-1027	2,717737E+21	2,717860E+21	7,925843E+18	7,924639E+18	5,435598E+21	1,585048E+19	5,451448E+21
-1026	2,717808E+21	2,717660E+21	7,919614E+18	7,922148E+18	5,435468E+21	1,584176E+19	5,451309E+21
-1025	2,717597E+21	2,717656E+21	7,922425E+18	7,921496E+18	5,435253E+21	1,584392E+19	5,451097E+21
-1024	2,717492E+21	2,717560E+21	7,925149E+18	7,925778E+18	5,435052E+21	1,585093E+19	5,450903E+21
-1023	2,717510E+21	2,717327E+21	7,919661E+18	7,921796E+18	5,434837E+21	1,584146E+19	5,450679E+21
-1022	2,717274E+21	2,717407E+21	7,926308E+18	7,922260E+18	5,434681E+21	1,584857E+19	5,450530E+21
-1021	2,717303E+21	2,717266E+21	7,923726E+18	7,926106E+18	5,434569E+21	1,584983E+19	5,450419E+21
-1020	2,717287E+21	2,717165E+21	7,921750E+18	7,921143E+18	5,434452E+21	1,584289E+19	5,450295E+21
-1019	2,717131E+21	2,717320E+21	7,926442E+18	7,925320E+18	5,434451E+21	1,585176E+19	5,450303E+21
-1018	2,717309E+21	2,717202E+21	7,921371E+18	7,925859E+18	5,434510E+21	1,584723E+19	5,450357E+21
-1017	2,717303E+21	2,717289E+21	7,922406E+18	7,920553E+18	5,434592E+21	1,584296E+19	5,450435E+21
-1016	2,717318E+21	2,717425E+21	7,925253E+18	7,926253E+18	5,434743E+21	1,585151E+19	5,450594E+21
-1015	2,717505E+21	2,717362E+21	7,921040E+18	7,921282E+18	5,434867E+21	1,584232E+19	5,450709E+21
-1014	2,717427E+21	2,717583E+21	7,923441E+18	7,921152E+18	5,435011E+21	1,584459E+19	5,450855E+21
-1013	2,717531E+21	2,717593E+21	7,924479E+18	7,926380E+18	5,435124E+21	1,585086E+19	5,450975E+21
-1012	2,717666E+21	2,717512E+21	7,919469E+18	7,919671E+18	5,435178E+21	1,583914E+19	5,451017E+21
-1011	2,717560E+21	2,717703E+21	7,924172E+18	7,923802E+18	5,435263E+21	1,584797E+19	5,451111E+21
-1010	2,717694E+21	2,717597E+21	7,922173E+18	7,923908E+18	5,435291E+21	1,584608E+19	5,451137E+21
-1009	2,717664E+21	2,717564E+21	7,919909E+18	7,920044E+18	5,435227E+21	1,583995E+19	5,451067E+21
-1008	2,717478E+21	2,717632E+21	7,926415E+18	7,925011E+18	5,435110E+21	1,585143E+19	5,450961E+21
-1007	2,717514E+21	2,717395E+21	7,920653E+18	7,922949E+18	5,434909E+21	1,584360E+19	5,450753E+21
-1006	2,717320E+21	2,717387E+21	7,923457E+18	7,921862E+18	5,434707E+21	1,584532E+19	5,450553E+21
-1005	2,717217E+21	2,717290E+21	7,926347E+18	7,926398E+18	5,434507E+21	1,585275E+19	5,450359E+21
-1004	2,717256E+21	2,717031E+21	7,920705E+18	7,922618E+18	5,434287E+21	1,584332E+19	5,450130E+21
-1003	2,717022E+21	2,717140E+21	7,926469E+18	7,923361E+18	5,434161E+21	1,584983E+19	5,450011E+21
-1002	2,717046E+21	2,717028E+21	7,923935E+18	7,927797E+18	5,434074E+21	1,585173E+19	5,449926E+21
-1001	2,717071E+21	2,716931E+21	7,922004E+18	7,922468E+18	5,434002E+21	1,584447E+19	5,449846E+21
-1000	2,716930E+21	2,717101E+21	7,926536E+18	7,925382E+18	5,434031E+21	1,585192E+19	5,449883E+21
-999	2,717094E+21	2,716986E+21	7,922620E+18	7,925694E+18	5,434080E+21	1,584831E+19	5,449928E+21
-998	2,717092E+21	2,717103E+21	7,923615E+18	7,920234E+18	5,434194E+21	1,584385E+19	5,450038E+21
-997	2,717084E+21	2,717249E+21	7,926586E+18	7,926837E+18	5,434333E+21	1,585342E+19	5,450187E+21
-996	2,717281E+21	2,717134E+21	7,921725E+18	7,922286E+18	5,434416E+21	1,584401E+19	5,450260E+21
-995	2,717222E+21	2,717352E+21	7,923152E+18	7,922358E+18	5,434574E+21	1,584551E+19	5,450420E+21
-994	2,717336E+21	2,717376E+21	7,924613E+18	7,927372E+18	5,434713E+21	1,585198E+19	5,450565E+21
-993	2,717498E+21	2,717294E+21	7,919914E+18	7,920362E+18	5,434792E+21	1,584028E+19	5,450633E+21
-992	2,717365E+21	2,717499E+21	7,924928E+18	7,923520E+18	5,434863E+21	1,584845E+19	5,450712E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-991	2,717431E+21	2,717380E+21	7,923616E+18	7,924273E+18	5,434811E+21	1,584789E+19	5,450659E+21
-990	2,717378E+21	2,717334E+21	7,921073E+18	7,920814E+18	5,434712E+21	1,584189E+19	5,450554E+21
-989	2,717181E+21	2,717371E+21	7,927551E+18	7,926068E+18	5,434551E+21	1,585362E+19	5,450405E+21
-988	2,717239E+21	2,717077E+21	7,921274E+18	7,924033E+18	5,434316E+21	1,584531E+19	5,450161E+21
-987	2,717072E+21	2,717079E+21	7,923602E+18	7,922608E+18	5,434150E+21	1,584621E+19	5,449997E+21
-986	2,716965E+21	2,717022E+21	7,926744E+18	7,927392E+18	5,433986E+21	1,585414E+19	5,449840E+21
-985	2,717022E+21	2,716788E+21	7,921275E+18	7,923913E+18	5,433810E+21	1,584519E+19	5,449655E+21
-984	2,716784E+21	2,716912E+21	7,926680E+18	7,923838E+18	5,433696E+21	1,585052E+19	5,449547E+21
-983	2,716790E+21	2,716800E+21	7,924912E+18	7,928540E+18	5,433590E+21	1,585345E+19	5,449444E+21
-982	2,716839E+21	2,716722E+21	7,923071E+18	7,922562E+18	5,433561E+21	1,584563E+19	5,449407E+21
-981	2,716701E+21	2,716892E+21	7,927885E+18	7,925520E+18	5,433594E+21	1,585341E+19	5,449447E+21
-980	2,716869E+21	2,716751E+21	7,923791E+18	7,926077E+18	5,433620E+21	1,584987E+19	5,449470E+21
-979	2,716871E+21	2,716879E+21	7,923713E+18	7,921176E+18	5,433750E+21	1,584489E+19	5,449595E+21
-978	2,716861E+21	2,717036E+21	7,926826E+18	7,928275E+18	5,433897E+21	1,585510E+19	5,449753E+21
-977	2,717103E+21	2,716922E+21	7,921880E+18	7,923553E+18	5,434024E+21	1,584543E+19	5,449870E+21
-976	2,717057E+21	2,717147E+21	7,923230E+18	7,922351E+18	5,434204E+21	1,584558E+19	5,450049E+21
-975	2,717137E+21	2,717176E+21	7,925871E+18	7,927222E+18	5,434312E+21	1,585309E+19	5,450165E+21
-974	2,717276E+21	2,717112E+21	7,921143E+18	7,920364E+18	5,434388E+21	1,584151E+19	5,450230E+21
-973	2,717098E+21	2,717297E+21	7,926322E+18	7,924232E+18	5,434395E+21	1,585055E+19	5,450246E+21
-972	2,717150E+21	2,717111E+21	7,924297E+18	7,925556E+18	5,434262E+21	1,584985E+19	5,450111E+21
-971	2,717112E+21	2,717043E+21	7,920931E+18	7,922339E+18	5,434154E+21	1,584327E+19	5,449998E+21
-970	2,716927E+21	2,717082E+21	7,927774E+18	7,927279E+18	5,434009E+21	1,585505E+19	5,449864E+21
-969	2,717023E+21	2,716794E+21	7,921781E+18	7,925121E+18	5,433816E+21	1,584690E+19	5,449663E+21
-968	2,716845E+21	2,716824E+21	7,924214E+18	7,922603E+18	5,433669E+21	1,584682E+19	5,449515E+21
-967	2,716690E+21	2,716785E+21	7,927972E+18	7,928044E+18	5,433475E+21	1,585602E+19	5,449331E+21
-966	2,716741E+21	2,716567E+21	7,922651E+18	7,924479E+18	5,433309E+21	1,584713E+19	5,449156E+21
-965	2,716511E+21	2,716682E+21	7,928002E+18	7,924412E+18	5,433193E+21	1,585241E+19	5,449045E+21
-964	2,716538E+21	2,716529E+21	7,925992E+18	7,928984E+18	5,433067E+21	1,585498E+19	5,448922E+21
-963	2,716605E+21	2,716467E+21	7,923497E+18	7,922926E+18	5,433072E+21	1,584642E+19	5,448919E+21
-962	2,716470E+21	2,716669E+21	7,928249E+18	7,926452E+18	5,433139E+21	1,585470E+19	5,448993E+21
-961	2,716663E+21	2,716538E+21	7,924124E+18	7,927418E+18	5,433201E+21	1,585154E+19	5,449053E+21
-960	2,716679E+21	2,716677E+21	7,923522E+18	7,921741E+18	5,433356E+21	1,584526E+19	5,449201E+21
-959	2,716662E+21	2,716838E+21	7,927490E+18	7,928984E+18	5,433500E+21	1,585647E+19	5,449356E+21
-958	2,716915E+21	2,716745E+21	7,922879E+18	7,923576E+18	5,433660E+21	1,584646E+19	5,449507E+21
-957	2,716862E+21	2,716962E+21	7,924571E+18	7,922543E+18	5,433823E+21	1,584711E+19	5,449671E+21
-956	2,716910E+21	2,716950E+21	7,926994E+18	7,927687E+18	5,433860E+21	1,585468E+19	5,449715E+21
-955	2,717026E+21	2,716875E+21	7,921207E+18	7,921764E+18	5,433901E+21	1,584297E+19	5,449744E+21
-954	2,716836E+21	2,717040E+21	7,926585E+18	7,925890E+18	5,433876E+21	1,585248E+19	5,449728E+21
-953	2,716920E+21	2,716837E+21	7,924432E+18	7,927036E+18	5,433756E+21	1,585147E+19	5,449608E+21
-952	2,716894E+21	2,716770E+21	7,921241E+18	7,922411E+18	5,433664E+21	1,584365E+19	5,449508E+21
-951	2,716679E+21	2,716824E+21	7,929101E+18	7,927242E+18	5,433504E+21	1,585634E+19	5,449360E+21
-950	2,716758E+21	2,716575E+21	7,923326E+18	7,925236E+18	5,433333E+21	1,584856E+19	5,449182E+21
-949	2,716559E+21	2,716596E+21	7,925849E+18	7,923234E+18	5,433154E+21	1,584908E+19	5,449003E+21
-948	2,716396E+21	2,716512E+21	7,928880E+18	7,929116E+18	5,432908E+21	1,585800E+19	5,448766E+21
-947	2,716473E+21	2,716292E+21	7,922773E+18	7,925812E+18	5,432765E+21	1,584858E+19	5,448614E+21
-946	2,716261E+21	2,716414E+21	7,928310E+18	7,925435E+18	5,432675E+21	1,585375E+19	5,448529E+21
-945	2,716328E+21	2,716276E+21	7,926441E+18	7,929956E+18	5,432604E+21	1,585640E+19	5,448461E+21
-944	2,716396E+21	2,716243E+21	7,923788E+18	7,923039E+18	5,432639E+21	1,584683E+19	5,448486E+21
-943	2,716235E+21	2,716461E+21	7,928965E+18	7,927359E+18	5,432696E+21	1,585632E+19	5,448552E+21

1	14	15	16	17	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	2,716444E+21	2,716355E+21	7,925133E+18	7,928028E+18	5,432799E+21	1,585316E+19	5,448652E+21
-941	2,716482E+21	2,716484E+21	7,924465E+18	7,922306E+18	5,432966E+21	1,584677E+19	5,448813E+21
-940	2,716471E+21	2,716615E+21	7,928345E+18	7,929242E+18	5,433085E+21	1,585759E+19	5,448943E+21
-939	2,716721E+21	2,716533E+21	7,923197E+18	7,923980E+18	5,433255E+21	1,584718E+19	5,449102E+21
-938	2,716641E+21	2,716757E+21	7,925021E+18	7,923520E+18	5,433398E+21	1,584854E+19	5,449246E+21
-937	2,716688E+21	2,716729E+21	7,927319E+18	7,928987E+18	5,433416E+21	1,585631E+19	5,449273E+21
-936	2,716797E+21	2,716639E+21	7,921172E+18	7,922498E+18	5,433437E+21	1,584367E+19	5,449280E+21
-935	2,716592E+21	2,716791E+21	7,927413E+18	7,926606E+18	5,433383E+21	1,585402E+19	5,449237E+21
-934	2,716678E+21	2,716602E+21	7,925776E+18	7,927047E+18	5,433280E+21	1,585282E+19	5,449132E+21
-933	2,716646E+21	2,716528E+21	7,923036E+18	7,922539E+18	5,433174E+21	1,584558E+19	5,449020E+21
-932	2,716400E+21	2,716551E+21	7,930368E+18	7,927693E+18	5,432951E+21	1,585806E+19	5,448809E+21
-931	2,716461E+21	2,716303E+21	7,923732E+18	7,926741E+18	5,432763E+21	1,585047E+19	5,448614E+21
-930	2,716269E+21	2,716316E+21	7,926244E+18	7,924983E+18	5,432585E+21	1,585123E+19	5,448436E+21
-929	2,716151E+21	2,716226E+21	7,928983E+18	7,930556E+18	5,432377E+21	1,585954E+19	5,448237E+21
-928	2,716248E+21	2,716026E+21	7,923010E+18	7,925974E+18	5,432274E+21	1,584898E+19	5,448123E+21
-927	2,716023E+21	2,716173E+21	7,929219E+18	7,925629E+18	5,432196E+21	1,585485E+19	5,448051E+21
-926	2,716082E+21	2,716082E+21	7,927695E+18	7,930091E+18	5,432164E+21	1,585779E+19	5,448022E+21
-925	2,716157E+21	2,716048E+21	7,924999E+18	7,923637E+18	5,432205E+21	1,584864E+19	5,448054E+21
-924	2,716008E+21	2,716231E+21	7,929500E+18	7,928279E+18	5,432239E+21	1,585778E+19	5,448097E+21
-923	2,716246E+21	2,716138E+21	7,925289E+18	7,928987E+18	5,432384E+21	1,585428E+19	5,448238E+21
-922	2,716301E+21	2,716273E+21	7,924767E+18	7,923171E+18	5,432575E+21	1,584794E+19	5,448423E+21
-921	2,716306E+21	2,716409E+21	7,928771E+18	7,929905E+18	5,432715E+21	1,585868E+19	5,448574E+21
-920	2,716526E+21	2,716340E+21	7,923420E+18	7,924164E+18	5,432866E+21	1,584758E+19	5,448714E+21
-919	2,716398E+21	2,716550E+21	7,925806E+18	7,924441E+18	5,432949E+21	1,585025E+19	5,448799E+21
-918	2,716439E+21	2,716525E+21	7,928490E+18	7,929410E+18	5,432964E+21	1,585790E+19	5,448822E+21
-917	2,716559E+21	2,716403E+21	7,922500E+18	7,922940E+18	5,432962E+21	1,584544E+19	5,448808E+21
-916	2,716345E+21	2,716511E+21	7,928527E+18	7,926771E+18	5,432855E+21	1,585530E+19	5,448711E+21
-915	2,716426E+21	2,716334E+21	7,926263E+18	7,927789E+18	5,432760E+21	1,585405E+19	5,448614E+21
-914	2,716373E+21	2,716264E+21	7,923619E+18	7,923945E+18	5,432637E+21	1,584756E+19	5,448484E+21
-913	2,716139E+21	2,716279E+21	7,930426E+18	7,929284E+18	5,432419E+21	1,585971E+19	5,448278E+21
-912	2,716205E+21	2,716034E+21	7,923655E+18	7,927811E+18	5,432240E+21	1,585147E+19	5,448091E+21
-911	2,716008E+21	2,716051E+21	7,927014E+18	7,925821E+18	5,432059E+21	1,585283E+19	5,447912E+21
-910	2,715902E+21	2,715993E+21	7,930266E+18	7,930491E+18	5,431895E+21	1,586076E+19	5,447756E+21
-909	2,716001E+21	2,715794E+21	7,924703E+18	7,926053E+18	5,431796E+21	1,585076E+19	5,447646E+21
-908	2,715756E+21	2,715919E+21	7,930204E+18	7,926078E+18	5,431676E+21	1,585628E+19	5,447532E+21
-907	2,715825E+21	2,715841E+21	7,928052E+18	7,931367E+18	5,431666E+21	1,585942E+19	5,447525E+21
-906	2,715929E+21	2,715812E+21	7,925351E+18	7,925019E+18	5,431742E+21	1,585037E+19	5,447592E+21
-905	2,715836E+21	2,716001E+21	7,929508E+18	7,929274E+18	5,431837E+21	1,585878E+19	5,447695E+21
-904	2,716081E+21	2,715938E+21	7,925605E+18	7,928785E+18	5,432018E+21	1,585439E+19	5,447873E+21
-903	2,716108E+21	2,716093E+21	7,925524E+18	7,923431E+18	5,432201E+21	1,584895E+19	5,448050E+21
-902	2,716081E+21	2,716250E+21	7,930035E+18	7,929833E+18	5,432331E+21	1,585987E+19	5,448191E+21
-901	2,716284E+21	2,716153E+21	7,924569E+18	7,924770E+18	5,432438E+21	1,584934E+19	5,448287E+21
-900	2,716150E+21	2,716298E+21	7,926406E+18	7,925348E+18	5,432448E+21	1,585175E+19	5,448299E+21
-899	2,716201E+21	2,716263E+21	7,928819E+18	7,930338E+18	5,432464E+21	1,585916E+19	5,448323E+21
-898	2,716333E+21	2,716137E+21	7,923074E+18	7,924055E+18	5,432470E+21	1,584713E+19	5,448318E+21
-897	2,716135E+21	2,716242E+21	7,928855E+18	7,927702E+18	5,432377E+21	1,585656E+19	5,448233E+21
-896	2,716185E+21	2,716086E+21	7,926406E+18	7,928505E+18	5,432270E+21	1,585491E+19	5,448125E+21
-895	2,716100E+21	2,716012E+21	7,924337E+18	7,925293E+18	5,432112E+21	1,584963E+19	5,447962E+21
-894	2,715865E+21	2,716041E+21	7,931516E+18	7,929658E+18	5,431907E+21	1,586117E+19	5,447768E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-893	2,715944E+21	2,715783E+21	7,925128E+18	7,928171E+18	5,431727E+21	1,585330E+19	5,447580E+21
-892	2,715736E+21	2,715766E+21	7,928372E+18	7,925772E+18	5,431502E+21	1,585414E+19	5,447356E+21
-891	2,715628E+21	2,715729E+21	7,931010E+18	7,930978E+18	5,431357E+21	1,586199E+19	5,447219E+21
-890	2,715726E+21	2,715541E+21	7,925478E+18	7,927339E+18	5,431267E+21	1,585282E+19	5,447120E+21
-889	2,715526E+21	2,715664E+21	7,930035E+18	7,927552E+18	5,431190E+21	1,585759E+19	5,447048E+21
-888	2,715624E+21	2,715612E+21	7,927893E+18	7,932272E+18	5,431236E+21	1,586016E+19	5,447096E+21
-887	2,715737E+21	2,715606E+21	7,925907E+18	7,925686E+18	5,431344E+21	1,585159E+19	5,447195E+21
-886	2,715656E+21	2,715834E+21	7,930667E+18	7,928901E+18	5,431491E+21	1,585957E+19	5,447350E+21
-885	2,715885E+21	2,715771E+21	7,927147E+18	7,928598E+18	5,431656E+21	1,585575E+19	5,447511E+21
-884	2,715863E+21	2,715882E+21	7,926374E+18	7,923956E+18	5,431745E+21	1,585033E+19	5,447595E+21
-883	2,715830E+21	2,716025E+21	7,930379E+18	7,931006E+18	5,431854E+21	1,586139E+19	5,447716E+21
-882	2,716048E+21	2,715904E+21	7,924929E+18	7,926279E+18	5,431951E+21	1,585121E+19	5,447803E+21
-881	2,715960E+21	2,716030E+21	7,926350E+18	7,926417E+18	5,431991E+21	1,585277E+19	5,447843E+21
-880	2,716011E+21	2,716017E+21	7,929094E+18	7,930395E+18	5,432029E+21	1,585949E+19	5,447888E+21
-879	2,716105E+21	2,715912E+21	7,923890E+18	7,924673E+18	5,432018E+21	1,584856E+19	5,447866E+21
-878	2,715880E+21	2,716041E+21	7,930113E+18	7,927800E+18	5,431920E+21	1,585791E+19	5,447778E+21
-877	2,715912E+21	2,715861E+21	7,927689E+18	7,929187E+18	5,431774E+21	1,585688E+19	5,447631E+21
-876	2,715807E+21	2,715735E+21	7,925392E+18	7,926122E+18	5,431542E+21	1,585151E+19	5,447393E+21
-875	2,715583E+21	2,715757E+21	7,932251E+18	7,930293E+18	5,431340E+21	1,586254E+19	5,447202E+21
-874	2,715669E+21	2,715496E+21	7,926177E+18	7,929226E+18	5,431165E+21	1,585540E+19	5,447020E+21
-873	2,715486E+21	2,715475E+21	7,928774E+18	7,926684E+18	5,430961E+21	1,585546E+19	5,446816E+21
-872	2,715369E+21	2,715467E+21	7,931076E+18	7,931870E+18	5,430836E+21	1,586295E+19	5,446699E+21
-871	2,715473E+21	2,715300E+21	7,926023E+18	7,928748E+18	5,430773E+21	1,585477E+19	5,446628E+21
-870	2,715311E+21	2,715455E+21	7,930814E+18	7,927846E+18	5,430766E+21	1,585866E+19	5,446625E+21
-869	2,715431E+21	2,715418E+21	7,929210E+18	7,932318E+18	5,430849E+21	1,586153E+19	5,446711E+21
-868	2,715527E+21	2,715395E+21	7,926974E+18	7,925564E+18	5,430923E+21	1,585254E+19	5,446775E+21
-867	2,715429E+21	2,715636E+21	7,931285E+18	7,929166E+18	5,431066E+21	1,586045E+19	5,446926E+21
-866	2,715641E+21	2,715567E+21	7,927802E+18	7,929766E+18	5,431208E+21	1,585757E+19	5,447066E+21
-865	2,715652E+21	2,715645E+21	7,926094E+18	7,925406E+18	5,431297E+21	1,585150E+19	5,447149E+21
-864	2,715633E+21	2,715792E+21	7,930287E+18	7,931812E+18	5,431425E+21	1,586210E+19	5,447287E+21
-863	2,715854E+21	2,715682E+21	7,925496E+18	7,927108E+18	5,431536E+21	1,585260E+19	5,447388E+21
-862	2,715772E+21	2,715832E+21	7,927549E+18	7,926212E+18	5,431604E+21	1,585376E+19	5,447458E+21
-861	2,715793E+21	2,715821E+21	7,930591E+18	7,930361E+18	5,431614E+21	1,586095E+19	5,447475E+21
-860	2,715824E+21	2,715672E+21	7,924962E+18	7,925447E+18	5,431497E+21	1,585041E+19	5,447347E+21
-859	2,715587E+21	2,715779E+21	7,930898E+18	7,928772E+18	5,431367E+21	1,585967E+19	5,447226E+21
-858	2,715624E+21	2,715578E+21	7,928552E+18	7,930661E+18	5,431202E+21	1,585921E+19	5,447061E+21
-857	2,715555E+21	2,715427E+21	7,925795E+18	7,927200E+18	5,430982E+21	1,585300E+19	5,446835E+21
-856	2,715333E+21	2,715470E+21	7,932575E+18	7,930680E+18	5,430803E+21	1,586326E+19	5,446666E+21
-855	2,715396E+21	2,715234E+21	7,926918E+18	7,930247E+18	5,430630E+21	1,585717E+19	5,446488E+21
-854	2,715223E+21	2,715245E+21	7,929644E+18	7,927073E+18	5,430468E+21	1,585672E+19	5,446325E+21
-853	2,715127E+21	2,715240E+21	7,931958E+18	7,932563E+18	5,430368E+21	1,586452E+19	5,446232E+21
-852	2,715224E+21	2,715057E+21	7,927007E+18	7,929324E+18	5,430281E+21	1,585633E+19	5,446138E+21
-851	2,715092E+21	2,715231E+21	7,931497E+18	7,928141E+18	5,430323E+21	1,585964E+19	5,446183E+21
-850	2,715217E+21	2,715203E+21	7,930382E+18	7,933006E+18	5,430420E+21	1,586339E+19	5,446284E+21
-849	2,715321E+21	2,715175E+21	7,927230E+18	7,926351E+18	5,430496E+21	1,585358E+19	5,446349E+21
-848	2,715208E+21	2,715423E+21	7,931229E+18	7,930040E+18	5,430632E+21	1,586127E+19	5,446493E+21
-847	2,715414E+21	2,715355E+21	7,928175E+18	7,931016E+18	5,430769E+21	1,585919E+19	5,446628E+21
-846	2,715460E+21	2,715446E+21	7,926825E+18	7,925642E+18	5,430906E+21	1,585247E+19	5,446759E+21
-845	2,715454E+21	2,715592E+21	7,931629E+18	7,931625E+18	5,431046E+21	1,586325E+19	5,446909E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-844	2,715631E+21	2,715463E+21	7,926795E+18	7,927082E+18	5,431094E+21	1,585388E+19	5,446948E+21
-843	2,715524E+21	2,715614E+21	7,928468E+18	7,926634E+18	5,431139E+21	1,585510E+19	5,446994E+21
-842	2,715517E+21	2,715585E+21	7,931440E+18	7,931751E+18	5,431102E+21	1,586319E+19	5,446965E+21
-841	2,715567E+21	2,715395E+21	7,924868E+18	7,927248E+18	5,430962E+21	1,585212E+19	5,446814E+21
-840	2,715334E+21	2,715496E+21	7,931000E+18	7,929769E+18	5,430830E+21	1,586077E+19	5,446691E+21
-839	2,715371E+21	2,715305E+21	7,929181E+18	7,931730E+18	5,430675E+21	1,586091E+19	5,446536E+21
-838	2,715314E+21	2,715172E+21	7,927112E+18	7,927219E+18	5,430486E+21	1,585433E+19	5,446340E+21
-837	2,715071E+21	2,715224E+21	7,933879E+18	7,930816E+18	5,430295E+21	1,586469E+19	5,446160E+21
-836	2,715095E+21	2,714969E+21	7,927980E+18	7,931163E+18	5,430064E+21	1,585914E+19	5,445923E+21
-835	2,714947E+21	2,714981E+21	7,930348E+18	7,927887E+18	5,429928E+21	1,585824E+19	5,445786E+21
-834	2,714881E+21	2,714988E+21	7,932823E+18	7,933731E+18	5,429868E+21	1,586655E+19	5,445735E+21
-833	2,715019E+21	2,714806E+21	7,927505E+18	7,929952E+18	5,429825E+21	1,585746E+19	5,445683E+21
-832	2,714887E+21	2,715010E+21	7,931745E+18	7,928344E+18	5,429897E+21	1,586009E+19	5,445758E+21
-831	2,714987E+21	2,715010E+21	7,930969E+18	7,933852E+18	5,429997E+21	1,586482E+19	5,445862E+21
-830	2,715100E+21	2,714993E+21	7,927835E+18	7,926790E+18	5,430094E+21	1,585462E+19	5,445949E+21
-829	2,715005E+21	2,715230E+21	7,931874E+18	7,930654E+18	5,430235E+21	1,586253E+19	5,446097E+21
-828	2,715193E+21	2,715137E+21	7,929077E+18	7,931593E+18	5,430330E+21	1,586067E+19	5,446190E+21
-827	2,715263E+21	2,715228E+21	7,927643E+18	7,925936E+18	5,430491E+21	1,585358E+19	5,446345E+21
-826	2,715248E+21	2,715375E+21	7,932791E+18	7,932384E+18	5,430622E+21	1,586517E+19	5,446487E+21
-825	2,715409E+21	2,715229E+21	7,927046E+18	7,928222E+18	5,430637E+21	1,585527E+19	5,446493E+21
-824	2,715282E+21	2,715370E+21	7,928455E+18	7,927936E+18	5,430652E+21	1,585639E+19	5,446509E+21
-823	2,715260E+21	2,715332E+21	7,931789E+18	7,933164E+18	5,430591E+21	1,586495E+19	5,446456E+21
-822	2,715330E+21	2,715147E+21	7,925716E+18	7,927783E+18	5,430478E+21	1,585350E+19	5,446331E+21
-821	2,715103E+21	2,715241E+21	7,932349E+18	7,929607E+18	5,430344E+21	1,586196E+19	5,446206E+21
-820	2,715079E+21	2,715036E+21	7,930572E+18	7,931841E+18	5,430115E+21	1,586241E+19	5,445977E+21
-819	2,715014E+21	2,714908E+21	7,928270E+18	7,927611E+18	5,429922E+21	1,585588E+19	5,445778E+21
-818	2,714774E+21	2,714952E+21	7,934779E+18	7,932109E+18	5,429726E+21	1,586689E+19	5,445593E+21
-817	2,714833E+21	2,714684E+21	7,928193E+18	7,932675E+18	5,429517E+21	1,586087E+19	5,445378E+21
-816	2,714717E+21	2,714716E+21	7,930481E+18	7,928810E+18	5,429433E+21	1,585929E+19	5,445292E+21
-815	2,714661E+21	2,714754E+21	7,933373E+18	7,934622E+18	5,429415E+21	1,586799E+19	5,445283E+21
-814	2,714813E+21	2,714609E+21	7,928564E+18	7,930002E+18	5,429423E+21	1,585857E+19	5,445281E+21
-813	2,714666E+21	2,714818E+21	7,932572E+18	7,928553E+18	5,429484E+21	1,586112E+19	5,445345E+21
-812	2,714720E+21	2,714795E+21	7,931853E+18	7,934609E+18	5,429515E+21	1,586646E+19	5,445381E+21
-811	2,714866E+21	2,714768E+21	7,928448E+18	7,927458E+18	5,429634E+21	1,585591E+19	5,445490E+21
-810	2,714802E+21	2,715001E+21	7,932655E+18	7,931734E+18	5,429804E+21	1,586439E+19	5,445668E+21
-809	2,715017E+21	2,714904E+21	7,929519E+18	7,932257E+18	5,429921E+21	1,586178E+19	5,445783E+21
-808	2,715077E+21	2,715012E+21	7,927805E+18	7,926502E+18	5,430090E+21	1,585431E+19	5,445944E+21
-807	2,715027E+21	2,715176E+21	7,933125E+18	7,933375E+18	5,430203E+21	1,586650E+19	5,446069E+21
-806	2,715187E+21	2,715028E+21	7,927568E+18	7,928912E+18	5,430215E+21	1,585648E+19	5,446071E+21
-805	2,715053E+21	2,715145E+21	7,929280E+18	7,928418E+18	5,430198E+21	1,585770E+19	5,446056E+21
-804	2,714988E+21	2,715080E+21	7,932951E+18	7,933523E+18	5,430068E+21	1,586647E+19	5,445934E+21
-803	2,715068E+21	2,714881E+21	7,927080E+18	7,928003E+18	5,429950E+21	1,585508E+19	5,445805E+21
-802	2,714828E+21	2,714967E+21	7,933785E+18	7,930333E+18	5,429795E+21	1,586412E+19	5,445659E+21
-801	2,714793E+21	2,714744E+21	7,930983E+18	7,933115E+18	5,429537E+21	1,586410E+19	5,445401E+21
-800	2,714733E+21	2,714615E+21	7,928390E+18	7,929055E+18	5,429348E+21	1,585745E+19	5,445205E+21
-799	2,714513E+21	2,714677E+21	7,934866E+18	7,933575E+18	5,429190E+21	1,586844E+19	5,445058E+21
-798	2,714613E+21	2,714443E+21	7,928999E+18	7,933254E+18	5,429056E+21	1,586225E+19	5,444918E+21
-797	2,714509E+21	2,714494E+21	7,931562E+18	7,928678E+18	5,429003E+21	1,586024E+19	5,444864E+21
-796	2,714398E+21	2,714537E+21	7,934538E+18	7,934744E+18	5,428935E+21	1,586928E+19	5,444804E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,714548E+21	2,714397E+21	7,929524E+18	7,930392E+18	5,428945E+21	1,585992E+19	5,444805E+21
-794	2,714416E+21	2,714589E+21	7,933144E+18	7,929876E+18	5,429005E+21	1,586302E+19	5,444868E+21
-793	2,714501E+21	2,714549E+21	7,931958E+18	7,935843E+18	5,429050E+21	1,586780E+19	5,444918E+21
-792	2,714687E+21	2,714536E+21	7,928469E+18	7,928334E+18	5,429223E+21	1,585680E+19	5,445080E+21
-791	2,714637E+21	2,714792E+21	7,933043E+18	7,932463E+18	5,429429E+21	1,586551E+19	5,445294E+21
-790	2,714847E+21	2,714729E+21	7,930504E+18	7,932295E+18	5,429576E+21	1,586280E+19	5,445439E+21
-789	2,714877E+21	2,714832E+21	7,928494E+18	7,926806E+18	5,429708E+21	1,585530E+19	5,445564E+21
-788	2,714756E+21	2,714959E+21	7,934091E+18	7,933860E+18	5,429715E+21	1,586795E+19	5,445583E+21
-787	2,714924E+21	2,714791E+21	7,928542E+18	7,929400E+18	5,429715E+21	1,585794E+19	5,445573E+21
-786	2,714802E+21	2,714881E+21	7,930588E+18	7,929237E+18	5,429682E+21	1,585983E+19	5,445542E+21
-785	2,714733E+21	2,714794E+21	7,933724E+18	7,934074E+18	5,429526E+21	1,586780E+19	5,445394E+21
-784	2,714802E+21	2,714600E+21	7,927500E+18	7,929009E+18	5,429402E+21	1,585651E+19	5,445259E+21
-783	2,714548E+21	2,714691E+21	7,933880E+18	7,931731E+18	5,429240E+21	1,586561E+19	5,445105E+21
-782	2,714537E+21	2,714485E+21	7,931259E+18	7,934347E+18	5,429022E+21	1,586561E+19	5,444887E+21
-781	2,714496E+21	2,714360E+21	7,928974E+18	7,929780E+18	5,428856E+21	1,585875E+19	5,444714E+21
-780	2,714249E+21	2,714425E+21	7,935853E+18	7,933887E+18	5,428674E+21	1,586974E+19	5,444544E+21
-779	2,714366E+21	2,714206E+21	7,930494E+18	7,933360E+18	5,428572E+21	1,586385E+19	5,444436E+21
-778	2,714252E+21	2,714261E+21	7,932937E+18	7,929369E+18	5,428513E+21	1,586231E+19	5,444375E+21
-777	2,714131E+21	2,714287E+21	7,934906E+18	7,935813E+18	5,428418E+21	1,587072E+19	5,444289E+21
-776	2,714301E+21	2,714141E+21	7,929587E+18	7,931684E+18	5,428442E+21	1,586127E+19	5,444303E+21
-775	2,714208E+21	2,714349E+21	7,932999E+18	7,931105E+18	5,428557E+21	1,586410E+19	5,444421E+21
-774	2,714345E+21	2,714345E+21	7,932692E+18	7,936087E+18	5,428689E+21	1,586878E+19	5,444558E+21
-773	2,714531E+21	2,714356E+21	7,929391E+18	7,927950E+18	5,428886E+21	1,585734E+19	5,444743E+21
-772	2,714415E+21	2,714618E+21	7,934119E+18	7,932388E+18	5,429032E+21	1,586651E+19	5,444899E+21
-771	2,714606E+21	2,714548E+21	7,931635E+18	7,932453E+18	5,429154E+21	1,586409E+19	5,445018E+21
-770	2,714629E+21	2,714615E+21	7,929260E+18	7,928110E+18	5,429244E+21	1,585737E+19	5,445102E+21
-769	2,714509E+21	2,714701E+21	7,934415E+18	7,934876E+18	5,429210E+21	1,586929E+19	5,445079E+21
-768	2,714692E+21	2,714518E+21	7,928743E+18	7,930569E+18	5,429209E+21	1,585931E+19	5,445069E+21
-767	2,714574E+21	2,714609E+21	7,930967E+18	7,930294E+18	5,429183E+21	1,586126E+19	5,445044E+21
-766	2,714501E+21	2,714543E+21	7,934417E+18	7,934725E+18	5,429043E+21	1,586914E+19	5,444913E+21
-765	2,714548E+21	2,714347E+21	7,928099E+18	7,929775E+18	5,428895E+21	1,585787E+19	5,444753E+21
-764	2,714252E+21	2,714422E+21	7,934656E+18	7,932457E+18	5,428674E+21	1,586711E+19	5,444541E+21
-763	2,714265E+21	2,714224E+21	7,932424E+18	7,934857E+18	5,428489E+21	1,586728E+19	5,444356E+21
-762	2,714242E+21	2,714099E+21	7,930501E+18	7,930515E+18	5,428341E+21	1,586102E+19	5,444202E+21
-761	2,713986E+21	2,714157E+21	7,936749E+18	7,934134E+18	5,428143E+21	1,587088E+19	5,444014E+21
-760	2,714098E+21	2,713952E+21	7,931074E+18	7,934290E+18	5,428049E+21	1,586536E+19	5,443915E+21
-759	2,713988E+21	2,714009E+21	7,933048E+18	7,930530E+18	5,427997E+21	1,586358E+19	5,443860E+21
-758	2,713903E+21	2,714053E+21	7,935221E+18	7,936721E+18	5,427956E+21	1,587194E+19	5,443828E+21
-757	2,714105E+21	2,713925E+21	7,930077E+18	7,932081E+18	5,428030E+21	1,586216E+19	5,443893E+21
-756	2,714001E+21	2,714140E+21	7,933843E+18	7,931222E+18	5,428142E+21	1,586506E+19	5,444007E+21
-755	2,714152E+21	2,714163E+21	7,934226E+18	7,935879E+18	5,428316E+21	1,587011E+19	5,444186E+21
-754	2,714319E+21	2,714174E+21	7,930591E+18	7,928674E+18	5,428493E+21	1,585927E+19	5,444352E+21
-753	2,714172E+21	2,714399E+21	7,934444E+18	7,933294E+18	5,428571E+21	1,586774E+19	5,444439E+21
-752	2,714369E+21	2,714305E+21	7,931614E+18	7,933847E+18	5,428674E+21	1,586546E+19	5,444539E+21
-751	2,714410E+21	2,714361E+21	7,929099E+18	7,929557E+18	5,428770E+21	1,585866E+19	5,444629E+21
-750	2,714317E+21	2,714460E+21	7,935088E+18	7,935354E+18	5,428777E+21	1,587044E+19	5,444647E+21
-749	2,714483E+21	2,714286E+21	7,929501E+18	7,930703E+18	5,428769E+21	1,586020E+19	5,444629E+21
-748	2,714301E+21	2,714370E+21	7,931935E+18	7,930590E+18	5,428671E+21	1,586253E+19	5,444534E+21
-747	2,714221E+21	2,714301E+21	7,935577E+18	7,935100E+18	5,428522E+21	1,587068E+19	5,444393E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-746	2,714268E+21	2,714088E+21	7,929224E+18	7,931096E+18	5,428357E+21	1,586032E+19	5,444217E+21
-745	2,713979E+21	2,714137E+21	7,935328E+18	7,933215E+18	5,428116E+21	1,586854E+19	5,443985E+21
-744	2,714011E+21	2,713938E+21	7,933149E+18	7,935884E+18	5,427949E+21	1,586903E+19	5,443818E+21
-743	2,713987E+21	2,713831E+21	7,931244E+18	7,931454E+18	5,427818E+21	1,586270E+19	5,443681E+21
-742	2,713736E+21	2,713912E+21	7,937367E+18	7,934825E+18	5,427648E+21	1,587219E+19	5,443521E+21
-741	2,713835E+21	2,713707E+21	7,931558E+18	7,935008E+18	5,427542E+21	1,586657E+19	5,443409E+21
-740	2,713715E+21	2,713758E+21	7,933575E+18	7,931120E+18	5,427473E+21	1,586470E+19	5,443338E+21
-739	2,713679E+21	2,713826E+21	7,936376E+18	7,936916E+18	5,427506E+21	1,587329E+19	5,443379E+21
-738	2,713907E+21	2,713718E+21	7,931534E+18	7,932579E+18	5,427624E+21	1,586411E+19	5,443488E+21
-737	2,713797E+21	2,713929E+21	7,934463E+18	7,931541E+18	5,427726E+21	1,586600E+19	5,443592E+21
-736	2,713938E+21	2,713958E+21	7,934509E+18	7,936955E+18	5,427896E+21	1,587146E+19	5,443767E+21
-735	2,714100E+21	2,713964E+21	7,930275E+18	7,930162E+18	5,428063E+21	1,586044E+19	5,443924E+21
-734	2,713977E+21	2,714184E+21	7,934473E+18	7,934317E+18	5,428160E+21	1,586879E+19	5,444029E+21
-733	2,714174E+21	2,714088E+21	7,931966E+18	7,934220E+18	5,428263E+21	1,586619E+19	5,444129E+21
-732	2,714186E+21	2,714131E+21	7,930103E+18	7,929735E+18	5,428317E+21	1,585984E+19	5,444177E+21
-731	2,714087E+21	2,714241E+21	7,936902E+18	7,935088E+18	5,428328E+21	1,587199E+19	5,444200E+21
-730	2,714220E+21	2,714059E+21	7,930975E+18	7,931645E+18	5,428279E+21	1,586262E+19	5,444142E+21
-729	2,714009E+21	2,714094E+21	7,932617E+18	7,931496E+18	5,428103E+21	1,586411E+19	5,443967E+21
-728	2,713943E+21	2,714010E+21	7,935846E+18	7,936506E+18	5,427953E+21	1,587235E+19	5,443825E+21
-727	2,714012E+21	2,713799E+21	7,929563E+18	7,932448E+18	5,427811E+21	1,586201E+19	5,443673E+21
-726	2,713745E+21	2,713867E+21	7,936247E+18	7,933627E+18	5,427612E+21	1,586987E+19	5,443482E+21
-725	2,713757E+21	2,713692E+21	7,933989E+18	7,936160E+18	5,427449E+21	1,587015E+19	5,443319E+21
-724	2,713684E+21	2,713581E+21	7,932218E+18	7,931947E+18	5,427265E+21	1,586416E+19	5,443129E+21
-723	2,713448E+21	2,713668E+21	7,938387E+18	7,935299E+18	5,427116E+21	1,587369E+19	5,442989E+21
-722	2,713571E+21	2,713463E+21	7,932559E+18	7,936294E+18	5,427034E+21	1,586885E+19	5,442903E+21
-721	2,713479E+21	2,713497E+21	7,933969E+18	7,931767E+18	5,426976E+21	1,586574E+19	5,442842E+21
-720	2,713488E+21	2,713584E+21	7,936800E+18	7,937908E+18	5,427072E+21	1,587471E+19	5,442946E+21
-719	2,713718E+21	2,713509E+21	7,931970E+18	7,933477E+18	5,427227E+21	1,586545E+19	5,443093E+21
-718	2,713611E+21	2,713741E+21	7,934735E+18	7,932343E+18	5,427353E+21	1,586708E+19	5,443220E+21
-717	2,713731E+21	2,713767E+21	7,934769E+18	7,937532E+18	5,427498E+21	1,587230E+19	5,443370E+21
-716	2,713866E+21	2,713754E+21	7,930726E+18	7,930704E+18	5,427620E+21	1,586143E+19	5,443482E+21
-715	2,713767E+21	2,713977E+21	7,935859E+18	7,934218E+18	5,427744E+21	1,587008E+19	5,443614E+21
-714	2,713955E+21	2,713881E+21	7,933642E+18	7,934531E+18	5,427836E+21	1,586817E+19	5,443704E+21
-713	2,713940E+21	2,713891E+21	7,931084E+18	7,930052E+18	5,427831E+21	1,586114E+19	5,443692E+21
-712	2,713831E+21	2,713982E+21	7,937427E+18	7,936184E+18	5,427813E+21	1,587361E+19	5,443687E+21
-711	2,713954E+21	2,713793E+21	7,931004E+18	7,933316E+18	5,427747E+21	1,586432E+19	5,443611E+21
-710	2,713774E+21	2,713825E+21	7,932819E+18	7,932789E+18	5,427599E+21	1,586561E+19	5,443465E+21
-709	2,713706E+21	2,713746E+21	7,936228E+18	7,937104E+18	5,427452E+21	1,587333E+19	5,443326E+21
-708	2,713746E+21	2,713538E+21	7,930654E+18	7,932973E+18	5,427284E+21	1,586363E+19	5,443147E+21
-707	2,713474E+21	2,713623E+21	7,938005E+18	7,933572E+18	5,427097E+21	1,587158E+19	5,442969E+21
-706	2,713455E+21	2,713445E+21	7,935359E+18	7,937224E+18	5,426901E+21	1,587258E+19	5,442773E+21
-705	2,713375E+21	2,713288E+21	7,932814E+18	7,932908E+18	5,426663E+21	1,586572E+19	5,442529E+21
-704	2,713188E+21	2,713369E+21	7,938444E+18	7,936717E+18	5,426557E+21	1,587516E+19	5,442433E+21
-703	2,713352E+21	2,713199E+21	7,932889E+18	7,937477E+18	5,426551E+21	1,587037E+19	5,442422E+21
-702	2,713306E+21	2,713272E+21	7,934516E+18	7,932215E+18	5,426578E+21	1,586673E+19	5,442445E+21
-701	2,713300E+21	2,713397E+21	7,937315E+18	7,938060E+18	5,426697E+21	1,587538E+19	5,442572E+21
-700	2,713482E+21	2,713330E+21	7,932723E+18	7,933784E+18	5,426813E+21	1,586651E+19	5,442679E+21
-699	2,713383E+21	2,713562E+21	7,935767E+18	7,932502E+18	5,426945E+21	1,586827E+19	5,442814E+21
-698	2,713502E+21	2,713576E+21	7,935928E+18	7,938264E+18	5,427078E+21	1,587419E+19	5,442952E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-697	2,713635E+21	2,713516E+21	7,931473E+18	7,931091E+18	5,427151E+21	1,586256E+19	5,443013E+21
-696	2,713560E+21	2,713726E+21	7,936539E+18	7,935117E+18	5,427286E+21	1,587166E+19	5,443158E+21
-695	2,713733E+21	2,713643E+21	7,934118E+18	7,935704E+18	5,427376E+21	1,586982E+19	5,443246E+21
-694	2,713715E+21	2,713647E+21	7,931335E+18	7,931320E+18	5,427362E+21	1,586265E+19	5,443225E+21
-693	2,713592E+21	2,713732E+21	7,937415E+18	7,937068E+18	5,427324E+21	1,587448E+19	5,443198E+21
-692	2,713693E+21	2,713536E+21	7,931494E+18	7,934175E+18	5,427229E+21	1,586567E+19	5,443095E+21
-691	2,713532E+21	2,713580E+21	7,934438E+18	7,932781E+18	5,427112E+21	1,586722E+19	5,442979E+21
-690	2,713442E+21	2,713510E+21	7,937943E+18	7,937467E+18	5,426952E+21	1,587541E+19	5,442827E+21
-689	2,713440E+21	2,713265E+21	7,931792E+18	7,933535E+18	5,426706E+21	1,586533E+19	5,442571E+21
-688	2,713176E+21	2,713328E+21	7,938448E+18	7,934838E+18	5,426504E+21	1,587329E+19	5,442377E+21
-687	2,713166E+21	2,713154E+21	7,935378E+18	7,938901E+18	5,426320E+21	1,587428E+19	5,442194E+21
-686	2,713142E+21	2,713008E+21	7,933018E+18	7,934060E+18	5,426150E+21	1,586708E+19	5,442018E+21
-685	2,712985E+21	2,713120E+21	7,938661E+18	7,937130E+18	5,426105E+21	1,587579E+19	5,441980E+21
-684	2,713137E+21	2,712986E+21	7,934053E+18	7,937708E+18	5,426124E+21	1,587176E+19	5,441995E+21
-683	2,713095E+21	2,713097E+21	7,936084E+18	7,932061E+18	5,426192E+21	1,586815E+19	5,442060E+21
-682	2,713056E+21	2,713224E+21	7,938576E+18	7,938735E+18	5,426280E+21	1,587731E+19	5,442157E+21
-681	2,713222E+21	2,713105E+21	7,933283E+18	7,934422E+18	5,426327E+21	1,586771E+19	5,442194E+21
-680	2,713165E+21	2,713307E+21	7,935864E+18	7,933646E+18	5,426472E+21	1,586951E+19	5,442342E+21
-679	2,713294E+21	2,713337E+21	7,936365E+18	7,939161E+18	5,426631E+21	1,587553E+19	5,442506E+21
-678	2,713457E+21	2,713289E+21	7,931888E+18	7,931831E+18	5,426745E+21	1,586372E+19	5,442609E+21
-677	2,713361E+21	2,713510E+21	7,936702E+18	7,935659E+18	5,426871E+21	1,587236E+19	5,442743E+21
-676	2,713489E+21	2,713428E+21	7,934605E+18	7,936484E+18	5,426917E+21	1,587109E+19	5,442788E+21
-675	2,713481E+21	2,713431E+21	7,932337E+18	7,931797E+18	5,426912E+21	1,586413E+19	5,442776E+21
-674	2,713345E+21	2,713508E+21	7,938535E+18	7,937660E+18	5,426852E+21	1,587619E+19	5,442728E+21
-673	2,713426E+21	2,713267E+21	7,932551E+18	7,934635E+18	5,426693E+21	1,586719E+19	5,442560E+21
-672	2,713274E+21	2,713292E+21	7,935533E+18	7,933634E+18	5,426567E+21	1,586917E+19	5,442436E+21
-671	2,713151E+21	2,713236E+21	7,938658E+18	7,938621E+18	5,426387E+21	1,587728E+19	5,442264E+21
-670	2,713157E+21	2,712975E+21	7,932230E+18	7,935010E+18	5,426132E+21	1,586724E+19	5,441999E+21
-669	2,712904E+21	2,713032E+21	7,938379E+18	7,935732E+18	5,425936E+21	1,587411E+19	5,441810E+21
-668	2,712902E+21	2,712879E+21	7,935935E+18	7,939669E+18	5,425780E+21	1,587560E+19	5,441656E+21
-667	2,712919E+21	2,712776E+21	7,934666E+18	7,933858E+18	5,425695E+21	1,586852E+19	5,441564E+21
-666	2,712759E+21	2,712923E+21	7,940125E+18	7,937283E+18	5,425681E+21	1,587741E+19	5,441559E+21
-665	2,712874E+21	2,712769E+21	7,935231E+18	7,938025E+18	5,425643E+21	1,587326E+19	5,441517E+21
-664	2,712847E+21	2,712863E+21	7,936344E+18	7,933252E+18	5,425710E+21	1,586960E+19	5,441579E+21
-663	2,712815E+21	2,712993E+21	7,938482E+18	7,940142E+18	5,425808E+21	1,587862E+19	5,441686E+21
-662	2,713024E+21	2,712866E+21	7,933229E+18	7,935534E+18	5,425890E+21	1,586876E+19	5,441759E+21
-661	2,712993E+21	2,713077E+21	7,935775E+18	7,934151E+18	5,426071E+21	1,586993E+19	5,441941E+21
-660	2,713101E+21	2,713133E+21	7,937305E+18	7,939425E+18	5,426234E+21	1,587673E+19	5,442111E+21
-659	2,713255E+21	2,713111E+21	7,933321E+18	7,931880E+18	5,426366E+21	1,586520E+19	5,442231E+21
-658	2,713127E+21	2,713321E+21	7,937757E+18	7,936331E+18	5,426447E+21	1,587409E+19	5,442322E+21
-657	2,713223E+21	2,713182E+21	7,935340E+18	7,937088E+18	5,426405E+21	1,587243E+19	5,442277E+21
-656	2,713244E+21	2,713157E+21	7,932823E+18	7,932897E+18	5,426401E+21	1,586572E+19	5,442267E+21
-655	2,713096E+21	2,713243E+21	7,939290E+18	7,938361E+18	5,426339E+21	1,587765E+19	5,442217E+21
-654	2,713180E+21	2,712999E+21	7,933268E+18	7,935597E+18	5,426180E+21	1,586886E+19	5,442049E+21
-653	2,713005E+21	2,713020E+21	7,935922E+18	7,934357E+18	5,426025E+21	1,587028E+19	5,441895E+21
-652	2,712848E+21	2,712963E+21	7,939166E+18	7,939584E+18	5,425811E+21	1,587875E+19	5,441690E+21
-651	2,712882E+21	2,712715E+21	7,933378E+18	7,935664E+18	5,425596E+21	1,586904E+19	5,441465E+21
-650	2,712645E+21	2,712778E+21	7,939350E+18	7,936242E+18	5,425423E+21	1,587559E+19	5,441298E+21
-649	2,712642E+21	2,712610E+21	7,937092E+18	7,940068E+18	5,425253E+21	1,587716E+19	5,441130E+21

1	14	15	16	17	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							
-648	2,712689E+21	2,712517E+21	7,935659E+18	7,934647E+18	5,425207E+21	1,587031E+19	5,441077E+21
-647	2,712502E+21	2,712693E+21	7,940612E+18	7,938317E+18	5,425195E+21	1,587893E+19	5,441074E+21
-646	2,712636E+21	2,712532E+21	7,935397E+18	7,939421E+18	5,425167E+21	1,587482E+19	5,441042E+21
-645	2,712629E+21	2,712618E+21	7,935967E+18	7,934091E+18	5,425247E+21	1,587006E+19	5,441117E+21
-644	2,712602E+21	2,712770E+21	7,938946E+18	7,940588E+18	5,425372E+21	1,587953E+19	5,441251E+21
-643	2,712842E+21	2,712679E+21	7,934755E+18	7,935199E+18	5,425521E+21	1,586995E+19	5,441391E+21
-642	2,712797E+21	2,712906E+21	7,936999E+18	7,934184E+18	5,425703E+21	1,587118E+19	5,441574E+21
-641	2,712859E+21	2,712929E+21	7,938472E+18	7,939645E+18	5,425788E+21	1,587812E+19	5,441666E+21
-640	2,713023E+21	2,712878E+21	7,933733E+18	7,933028E+18	5,425900E+21	1,586676E+19	5,441767E+21
-639	2,712885E+21	2,713084E+21	7,937996E+18	7,937485E+18	5,425968E+21	1,587548E+19	5,441844E+21
-638	2,713004E+21	2,712926E+21	7,935608E+18	7,938212E+18	5,425929E+21	1,587382E+19	5,441803E+21
-637	2,713027E+21	2,712894E+21	7,933085E+18	7,933641E+18	5,425921E+21	1,586673E+19	5,441788E+21
-636	2,712839E+21	2,712995E+21	7,940283E+18	7,938862E+18	5,425834E+21	1,587915E+19	5,441714E+21
-635	2,712903E+21	2,712764E+21	7,934728E+18	7,936157E+18	5,425667E+21	1,587088E+19	5,441538E+21
-634	2,712712E+21	2,712762E+21	7,936885E+18	7,935163E+18	5,425474E+21	1,587205E+19	5,441346E+21
-633	2,712543E+21	2,712656E+21	7,939969E+18	7,940222E+18	5,425199E+21	1,588019E+19	5,441079E+21
-632	2,712621E+21	2,712408E+21	7,934212E+18	7,936599E+18	5,425029E+21	1,587081E+19	5,440900E+21
-631	2,712395E+21	2,712510E+21	7,940076E+18	7,936915E+18	5,424905E+21	1,587699E+19	5,440782E+21
-630	2,712406E+21	2,712360E+21	7,937756E+18	7,941107E+18	5,424766E+21	1,587886E+19	5,440645E+21
-629	2,712447E+21	2,712282E+21	7,935793E+18	7,935465E+18	5,424729E+21	1,587126E+19	5,440600E+21
-628	2,712248E+21	2,712471E+21	7,940853E+18	7,939084E+18	5,424719E+21	1,587994E+19	5,440599E+21
-627	2,712408E+21	2,712330E+21	7,936453E+18	7,939722E+18	5,424738E+21	1,587618E+19	5,440615E+21
-626	2,712420E+21	2,712418E+21	7,936807E+18	7,934223E+18	5,424838E+21	1,587103E+19	5,440709E+21
-625	2,712383E+21	2,712546E+21	7,940268E+18	7,940598E+18	5,424929E+21	1,588087E+19	5,440810E+21
-624	2,712639E+21	2,712464E+21	7,935828E+18	7,935853E+18	5,425103E+21	1,587168E+19	5,440975E+21
-623	2,712569E+21	2,712701E+21	7,937436E+18	7,935364E+18	5,425270E+21	1,587280E+19	5,441143E+21
-622	2,712642E+21	2,712697E+21	7,938587E+18	7,941085E+18	5,425338E+21	1,587967E+19	5,441218E+21
-621	2,712817E+21	2,712630E+21	7,933317E+18	7,934138E+18	5,425447E+21	1,586746E+19	5,441314E+21
-620	2,712668E+21	2,712848E+21	7,938532E+18	7,937947E+18	5,425516E+21	1,587648E+19	5,441392E+21
-619	2,712787E+21	2,712716E+21	7,937161E+18	7,938179E+18	5,425503E+21	1,587534E+19	5,441378E+21
-618	2,712773E+21	2,712677E+21	7,934411E+18	7,933930E+18	5,425450E+21	1,586834E+19	5,441318E+21
-617	2,712529E+21	2,712729E+21	7,941542E+18	7,939301E+18	5,425258E+21	1,588084E+19	5,441139E+21
-616	2,712611E+21	2,712468E+21	7,935333E+18	7,937508E+18	5,425078E+21	1,587284E+19	5,440951E+21
-615	2,712422E+21	2,712463E+21	7,937270E+18	7,936327E+18	5,424886E+21	1,587360E+19	5,440759E+21
-614	2,712296E+21	2,712355E+21	7,940281E+18	7,941363E+18	5,424652E+21	1,588164E+19	5,440533E+21
-613	2,712394E+21	2,712130E+21	7,934705E+18	7,937308E+18	5,424524E+21	1,587201E+19	5,440396E+21
-612	2,712144E+21	2,712275E+21	7,941014E+18	7,937356E+18	5,424419E+21	1,587837E+19	5,440298E+21
-611	2,712147E+21	2,712157E+21	7,939228E+18	7,941645E+18	5,424304E+21	1,588087E+19	5,440185E+21
-610	2,712180E+21	2,712066E+21	7,936659E+18	7,936006E+18	5,424246E+21	1,587267E+19	5,440119E+21
-609	2,711976E+21	2,712215E+21	7,941660E+18	7,939440E+18	5,424191E+21	1,588110E+19	5,440072E+21
-608	2,712183E+21	2,712078E+21	7,937363E+18	7,940289E+18	5,424261E+21	1,587765E+19	5,440138E+21
-607	2,712204E+21	2,712195E+21	7,937500E+18	7,934784E+18	5,424399E+21	1,587228E+19	5,440271E+21
-606	2,712185E+21	2,712325E+21	7,940767E+18	7,941666E+18	5,424511E+21	1,588243E+19	5,440393E+21
-605	2,712438E+21	2,712252E+21	7,935712E+18	7,936951E+18	5,424689E+21	1,587266E+19	5,440562E+21
-604	2,712360E+21	2,712496E+21	7,937413E+18	7,936425E+18	5,424856E+21	1,587384E+19	5,440730E+21
-603	2,712443E+21	2,712508E+21	7,939508E+18	7,941465E+18	5,424951E+21	1,588097E+19	5,440832E+21
-602	2,712613E+21	2,712433E+21	7,934109E+18	7,934382E+18	5,425046E+21	1,586849E+19	5,440914E+21
-601	2,712425E+21	2,712606E+21	7,940095E+18	7,937850E+18	5,425031E+21	1,587795E+19	5,440909E+21
-600	2,712524E+21	2,712467E+21	7,938469E+18	7,938808E+18	5,424991E+21	1,587728E+19	5,440868E+21

1	14	15	16	17	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							
-599	2,712476E+21	2,712416E+21	7,935197E+18	7,935231E+18	5,424892E+21	1,587043E+19	5,440762E+21
-598	2,712250E+21	2,712422E+21	7,941843E+18	7,940753E+18	5,424672E+21	1,588260E+19	5,440554E+21
-597	2,712354E+21	2,712160E+21	7,935241E+18	7,938730E+18	5,424513E+21	1,587397E+19	5,440387E+21
-596	2,712178E+21	2,712185E+21	7,937936E+18	7,936837E+18	5,424363E+21	1,587477E+19	5,440238E+21
-595	2,712060E+21	2,712127E+21	7,941783E+18	7,941475E+18	5,424187E+21	1,588326E+19	5,440070E+21
-594	2,712131E+21	2,711918E+21	7,935991E+18	7,937640E+18	5,424049E+21	1,587363E+19	5,439923E+21
-593	2,711839E+21	2,712025E+21	7,942180E+18	7,937786E+18	5,423865E+21	1,587997E+19	5,439745E+21
-592	2,711866E+21	2,711897E+21	7,939961E+18	7,942756E+18	5,423762E+21	1,588272E+19	5,439645E+21
-591	2,711913E+21	2,711810E+21	7,937090E+18	7,937081E+18	5,423723E+21	1,587417E+19	5,439597E+21
-590	2,711763E+21	2,711945E+21	7,941860E+18	7,940570E+18	5,423709E+21	1,588243E+19	5,439591E+21
-589	2,711996E+21	2,711837E+21	7,937607E+18	7,941160E+18	5,423834E+21	1,587877E+19	5,439712E+21
-588	2,712009E+21	2,711996E+21	7,937904E+18	7,935531E+18	5,424005E+21	1,587344E+19	5,439878E+21
-587	2,711992E+21	2,712156E+21	7,941712E+18	7,942357E+18	5,424148E+21	1,588407E+19	5,440032E+21
-586	2,712233E+21	2,712069E+21	7,936324E+18	7,937299E+18	5,424302E+21	1,587362E+19	5,440176E+21
-585	2,712130E+21	2,712271E+21	7,938399E+18	7,936491E+18	5,424402E+21	1,587489E+19	5,440277E+21
-584	2,712226E+21	2,712281E+21	7,940730E+18	7,941580E+18	5,424507E+21	1,588231E+19	5,440389E+21
-583	2,712365E+21	2,712207E+21	7,935165E+18	7,934971E+18	5,424571E+21	1,587014E+19	5,440442E+21
-582	2,712170E+21	2,712347E+21	7,940816E+18	7,938931E+18	5,424516E+21	1,587975E+19	5,440396E+21
-581	2,712257E+21	2,712193E+21	7,938456E+18	7,940163E+18	5,424451E+21	1,587862E+19	5,440329E+21
-580	2,712208E+21	2,712140E+21	7,935390E+18	7,936445E+18	5,424348E+21	1,587183E+19	5,440220E+21
-579	2,712008E+21	2,712165E+21	7,942712E+18	7,941323E+18	5,424172E+21	1,588404E+19	5,440056E+21
-578	2,712112E+21	2,711911E+21	7,936199E+18	7,939094E+18	5,424023E+21	1,587529E+19	5,439898E+21
-577	2,711904E+21	2,711919E+21	7,939589E+18	7,936988E+18	5,423823E+21	1,587658E+19	5,439700E+21
-576	2,711774E+21	2,711874E+21	7,943039E+18	7,942298E+18	5,423647E+21	1,588534E+19	5,439533E+21
-575	2,711820E+21	2,711661E+21	7,936815E+18	7,939118E+18	5,423481E+21	1,587593E+19	5,439357E+21
-574	2,711565E+21	2,711724E+21	7,942289E+18	7,939258E+18	5,423289E+21	1,588155E+19	5,439171E+21
-573	2,711626E+21	2,711608E+21	7,939802E+18	7,943885E+18	5,423234E+21	1,588369E+19	5,439118E+21
-572	2,711702E+21	2,711563E+21	7,937510E+18	7,937578E+18	5,423264E+21	1,587509E+19	5,439139E+21
-571	2,711577E+21	2,711751E+21	7,942969E+18	7,940767E+18	5,423327E+21	1,588374E+19	5,439211E+21
-570	2,711793E+21	2,711671E+21	7,938629E+18	7,941302E+18	5,423464E+21	1,587993E+19	5,439344E+21
-569	2,711777E+21	2,711796E+21	7,938857E+18	7,935841E+18	5,423574E+21	1,587470E+19	5,439448E+21
-568	2,711770E+21	2,711951E+21	7,942481E+18	7,942914E+18	5,423721E+21	1,588539E+19	5,439607E+21
-567	2,712005E+21	2,711863E+21	7,936939E+18	7,938021E+18	5,423868E+21	1,587496E+19	5,439743E+21
-566	2,711928E+21	2,712022E+21	7,938924E+18	7,937323E+18	5,423950E+21	1,587625E+19	5,439826E+21
-565	2,712010E+21	2,712040E+21	7,941158E+18	7,942330E+18	5,424050E+21	1,588349E+19	5,439934E+21
-564	2,712120E+21	2,711977E+21	7,935614E+18	7,936112E+18	5,424096E+21	1,587173E+19	5,439968E+21
-563	2,711925E+21	2,712110E+21	7,941593E+18	7,939984E+18	5,424035E+21	1,588158E+19	5,439917E+21
-562	2,712006E+21	2,711941E+21	7,938863E+18	7,940882E+18	5,423947E+21	1,587975E+19	5,439827E+21
-561	2,711943E+21	2,711852E+21	7,936489E+18	7,936796E+18	5,423796E+21	1,587328E+19	5,439669E+21
-560	2,711755E+21	2,711895E+21	7,943932E+18	7,941520E+18	5,423651E+21	1,588545E+19	5,439536E+21
-559	2,711828E+21	2,711661E+21	7,937441E+18	7,940014E+18	5,423490E+21	1,587745E+19	5,439367E+21
-558	2,711619E+21	2,711638E+21	7,940363E+18	7,938294E+18	5,423257E+21	1,587866E+19	5,439135E+21
-557	2,711489E+21	2,711590E+21	7,942964E+18	7,943773E+18	5,423078E+21	1,588674E+19	5,438965E+21
-556	2,711548E+21	2,711386E+21	7,936974E+18	7,940382E+18	5,422934E+21	1,587736E+19	5,438811E+21
-555	2,711339E+21	2,711474E+21	7,942932E+18	7,939781E+18	5,422813E+21	1,588271E+19	5,438696E+21
-554	2,711415E+21	2,711379E+21	7,940756E+18	7,943806E+18	5,422794E+21	1,588456E+19	5,438679E+21
-553	2,711467E+21	2,711338E+21	7,939149E+18	7,937377E+18	5,422805E+21	1,587653E+19	5,438682E+21
-552	2,711345E+21	2,711554E+21	7,944086E+18	7,941255E+18	5,422899E+21	1,588534E+19	5,438784E+21
-551	2,711541E+21	2,711474E+21	7,939557E+18	7,942353E+18	5,423015E+21	1,588191E+19	5,438897E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-550	2,711560E+21	2,711552E+21	7,938935E+18	7,937040E+18	5,423111E+21	1,587598E+19	5,438987E+21
-549	2,711573E+21	2,711711E+21	7,942369E+18	7,943696E+18	5,423284E+21	1,588607E+19	5,439170E+21
-548	2,711805E+21	2,711644E+21	7,937263E+18	7,938568E+18	5,423450E+21	1,587583E+19	5,439326E+21
-547	2,711730E+21	2,711821E+21	7,939770E+18	7,937897E+18	5,423551E+21	1,587767E+19	5,439429E+21
-546	2,711776E+21	2,711837E+21	7,941851E+18	7,942724E+18	5,423613E+21	1,588457E+19	5,439497E+21
-545	2,711850E+21	2,711728E+21	7,936543E+18	7,936851E+18	5,423579E+21	1,587339E+19	5,439452E+21
-544	2,711671E+21	2,711852E+21	7,942298E+18	7,940680E+18	5,423523E+21	1,588298E+19	5,439405E+21
-543	2,711746E+21	2,711682E+21	7,939678E+18	7,941832E+18	5,423428E+21	1,588151E+19	5,439309E+21
-542	2,711705E+21	2,711557E+21	7,937302E+18	7,937780E+18	5,423262E+21	1,587508E+19	5,439137E+21
-541	2,711501E+21	2,711621E+21	7,944387E+18	7,942385E+18	5,423121E+21	1,588677E+19	5,439008E+21
-540	2,711545E+21	2,711405E+21	7,937998E+18	7,941434E+18	5,422951E+21	1,587943E+19	5,438830E+21
-539	2,711347E+21	2,711374E+21	7,941246E+18	7,939346E+18	5,422721E+21	1,588059E+19	5,438602E+21
-538	2,711218E+21	2,711326E+21	7,943486E+18	7,944099E+18	5,422544E+21	1,588759E+19	5,438432E+21
-537	2,711277E+21	2,711106E+21	7,938337E+18	7,940418E+18	5,422383E+21	1,587876E+19	5,438262E+21
-536	2,711095E+21	2,711224E+21	7,944169E+18	7,939644E+18	5,422318E+21	1,588381E+19	5,438202E+21
-535	2,711159E+21	2,711166E+21	7,942043E+18	7,944507E+18	5,422325E+21	1,588655E+19	5,438211E+21
-534	2,711230E+21	2,711099E+21	7,939718E+18	7,938512E+18	5,422329E+21	1,587823E+19	5,438207E+21
-533	2,711125E+21	2,711322E+21	7,943730E+18	7,942589E+18	5,422447E+21	1,588632E+19	5,438333E+21
-532	2,711333E+21	2,711260E+21	7,939476E+18	7,943498E+18	5,422594E+21	1,588297E+19	5,438477E+21
-531	2,711387E+21	2,711347E+21	7,939193E+18	7,937768E+18	5,422734E+21	1,587696E+19	5,438611E+21
-530	2,711391E+21	2,711517E+21	7,943023E+18	7,943565E+18	5,422908E+21	1,588659E+19	5,438794E+21
-529	2,711574E+21	2,711434E+21	7,938607E+18	7,938713E+18	5,423008E+21	1,587732E+19	5,438886E+21
-528	2,711486E+21	2,711607E+21	7,940783E+18	7,938531E+18	5,423093E+21	1,587931E+19	5,438972E+21
-527	2,711508E+21	2,711602E+21	7,942809E+18	7,943839E+18	5,423110E+21	1,588665E+19	5,438997E+21
-526	2,711607E+21	2,711438E+21	7,936949E+18	7,938044E+18	5,423045E+21	1,587499E+19	5,438920E+21
-525	2,711445E+21	2,711569E+21	7,942428E+18	7,941422E+18	5,423013E+21	1,588385E+19	5,438897E+21
-524	2,711505E+21	2,711427E+21	7,940344E+18	7,942500E+18	5,422932E+21	1,588284E+19	5,438815E+21
-523	2,711460E+21	2,711320E+21	7,938390E+18	7,938602E+18	5,422780E+21	1,587699E+19	5,438657E+21
-522	2,711221E+21	2,711379E+21	7,945146E+18	7,942642E+18	5,422599E+21	1,588779E+19	5,438487E+21
-521	2,711228E+21	2,711127E+21	7,939241E+18	7,942149E+18	5,422355E+21	1,588139E+19	5,438237E+21
-520	2,711054E+21	2,711097E+21	7,942261E+18	7,939772E+18	5,422151E+21	1,588203E+19	5,438033E+21
-519	2,710934E+21	2,711053E+21	7,944560E+18	7,944826E+18	5,421987E+21	1,588939E+19	5,437876E+21
-518	2,711028E+21	2,710814E+21	7,939292E+18	7,941279E+18	5,421842E+21	1,588057E+19	5,437722E+21
-517	2,710862E+21	2,710967E+21	7,944249E+18	7,940709E+18	5,421829E+21	1,588496E+19	5,437714E+21
-516	2,710922E+21	2,710943E+21	7,942241E+18	7,946047E+18	5,421865E+21	1,588829E+19	5,437753E+21
-515	2,711029E+21	2,710884E+21	7,939936E+18	7,939762E+18	5,421913E+21	1,587970E+19	5,437792E+21
-514	2,710933E+21	2,711116E+21	7,943796E+18	7,942682E+18	5,422049E+21	1,588648E+19	5,437935E+21
-513	2,711124E+21	2,711050E+21	7,940694E+18	7,943284E+18	5,422173E+21	1,588398E+19	5,438057E+21
-512	2,711179E+21	2,711156E+21	7,940386E+18	7,937561E+18	5,422334E+21	1,587795E+19	5,438212E+21
-511	2,711146E+21	2,711330E+21	7,944425E+18	7,944110E+18	5,422476E+21	1,588854E+19	5,438364E+21
-510	2,711329E+21	2,711192E+21	7,939255E+18	7,939896E+18	5,422521E+21	1,587915E+19	5,438400E+21
-509	2,711254E+21	2,711350E+21	7,940536E+18	7,939891E+18	5,422604E+21	1,588043E+19	5,438484E+21
-508	2,711285E+21	2,711353E+21	7,942912E+18	7,944960E+18	5,422638E+21	1,588787E+19	5,438526E+21
-507	2,711412E+21	2,711190E+21	7,937553E+18	7,938857E+18	5,422602E+21	1,587641E+19	5,438478E+21
-506	2,711224E+21	2,711335E+21	7,943363E+18	7,941161E+18	5,422558E+21	1,588452E+19	5,438443E+21
-505	2,711221E+21	2,711186E+21	7,941926E+18	7,942904E+18	5,422407E+21	1,588483E+19	5,438292E+21
-504	2,711152E+21	2,711069E+21	7,939745E+18	7,939391E+18	5,422221E+21	1,587914E+19	5,438100E+21
-503	2,710897E+21	2,711102E+21	7,946206E+18	7,943797E+18	5,422000E+21	1,589000E+19	5,437890E+21
-502	2,710937E+21	2,710797E+21	7,939821E+18	7,943399E+18	5,421734E+21	1,588322E+19	5,437617E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-501	2,710800E+21	2,710781E+21	7,942331E+18	7,940570E+18	5,421580E+21	1,588290E+19	5,437463E+21
-500	2,710690E+21	2,710784E+21	7,944953E+18	7,945770E+18	5,421473E+21	1,589072E+19	5,437364E+21
-499	2,710805E+21	2,710582E+21	7,940001E+18	7,942378E+18	5,421387E+21	1,588238E+19	5,437269E+21
-498	2,710636E+21	2,710757E+21	7,944443E+18	7,941095E+18	5,421393E+21	1,588554E+19	5,437279E+21
-497	2,710679E+21	2,710728E+21	7,943221E+18	7,946671E+18	5,421407E+21	1,588989E+19	5,437297E+21
-496	2,710807E+21	2,710685E+21	7,940864E+18	7,939866E+18	5,421492E+21	1,588073E+19	5,437373E+21
-495	2,710712E+21	2,710915E+21	7,944997E+18	7,942923E+18	5,421627E+21	1,588792E+19	5,437515E+21
-494	2,710904E+21	2,710815E+21	7,941800E+18	7,943704E+18	5,421720E+21	1,588550E+19	5,437605E+21
-493	2,710957E+21	2,710929E+21	7,940551E+18	7,938592E+18	5,421886E+21	1,587914E+19	5,437765E+21
-492	2,710909E+21	2,711104E+21	7,944809E+18	7,945510E+18	5,422013E+21	1,589032E+19	5,437903E+21
-491	2,711122E+21	2,710957E+21	7,939550E+18	7,941264E+18	5,422079E+21	1,588081E+19	5,437960E+21
-490	2,711058E+21	2,711111E+21	7,940690E+18	7,940031E+18	5,422169E+21	1,588072E+19	5,438050E+21
-489	2,711053E+21	2,711113E+21	7,944225E+18	7,944891E+18	5,422166E+21	1,588912E+19	5,438055E+21
-488	2,711162E+21	2,710973E+21	7,938926E+18	7,938979E+18	5,422135E+21	1,587791E+19	5,438013E+21
-487	2,710930E+21	2,711105E+21	7,944902E+18	7,941868E+18	5,422036E+21	1,588677E+19	5,437922E+21
-486	2,710912E+21	2,710895E+21	7,942714E+18	7,944288E+18	5,421807E+21	1,588700E+19	5,437694E+21
-485	2,710861E+21	2,710760E+21	7,939697E+18	7,940990E+18	5,421621E+21	1,588069E+19	5,437501E+21
-484	2,710623E+21	2,710798E+21	7,946316E+18	7,945088E+18	5,421421E+21	1,589140E+19	5,437312E+21
-483	2,710708E+21	2,710508E+21	7,940367E+18	7,944513E+18	5,421216E+21	1,588488E+19	5,437101E+21
-482	2,710574E+21	2,710523E+21	7,942910E+18	7,940486E+18	5,421098E+21	1,588340E+19	5,436981E+21
-481	2,710426E+21	2,710552E+21	7,946245E+18	7,946303E+18	5,420979E+21	1,589255E+19	5,436871E+21
-480	2,710540E+21	2,710374E+21	7,941353E+18	7,942908E+18	5,420914E+21	1,588426E+19	5,436799E+21
-479	2,710377E+21	2,710541E+21	7,945520E+18	7,941815E+18	5,420917E+21	1,588733E+19	5,436805E+21
-478	2,710444E+21	2,710473E+21	7,944079E+18	7,947310E+18	5,420917E+21	1,589139E+19	5,436809E+21
-477	2,710594E+21	2,710444E+21	7,941094E+18	7,940351E+18	5,421038E+21	1,588144E+19	5,436919E+21
-476	2,710495E+21	2,710700E+21	7,945425E+18	7,943772E+18	5,421195E+21	1,588920E+19	5,437084E+21
-475	2,710699E+21	2,710608E+21	7,942316E+18	7,944867E+18	5,421307E+21	1,588718E+19	5,437194E+21
-474	2,710748E+21	2,710718E+21	7,940539E+18	7,939106E+18	5,421466E+21	1,587964E+19	5,437346E+21
-473	2,710686E+21	2,710883E+21	7,945574E+18	7,946225E+18	5,421569E+21	1,589180E+19	5,437461E+21
-472	2,710907E+21	2,710749E+21	7,940527E+18	7,941504E+18	5,421656E+21	1,588203E+19	5,437538E+21
-471	2,710834E+21	2,710894E+21	7,942052E+18	7,940405E+18	5,421728E+21	1,588246E+19	5,437610E+21
-470	2,710806E+21	2,710857E+21	7,945398E+18	7,945471E+18	5,421662E+21	1,589087E+19	5,437553E+21
-469	2,710890E+21	2,710711E+21	7,939178E+18	7,940454E+18	5,421600E+21	1,587963E+19	5,437480E+21
-468	2,710640E+21	2,710825E+21	7,945312E+18	7,943500E+18	5,421465E+21	1,588881E+19	5,437354E+21
-467	2,710648E+21	2,710598E+21	7,942971E+18	7,945839E+18	5,421246E+21	1,588881E+19	5,437135E+21
-466	2,710614E+21	2,710465E+21	7,940054E+18	7,941125E+18	5,421079E+21	1,588118E+19	5,436960E+21
-465	2,710358E+21	2,710519E+21	7,947639E+18	7,945097E+18	5,420877E+21	1,589274E+19	5,436770E+21
-464	2,710436E+21	2,710277E+21	7,942022E+18	7,944459E+18	5,420712E+21	1,588662E+19	5,436599E+21
-463	2,710289E+21	2,710298E+21	7,944442E+18	7,941135E+18	5,420587E+21	1,588558E+19	5,436472E+21
-462	2,710143E+21	2,710288E+21	7,947062E+18	7,947450E+18	5,420431E+21	1,589451E+19	5,436326E+21
-461	2,710287E+21	2,710116E+21	7,941401E+18	7,944214E+18	5,420403E+21	1,588562E+19	5,436289E+21
-460	2,710146E+21	2,710290E+21	7,945682E+18	7,942815E+18	5,420436E+21	1,588850E+19	5,436325E+21
-459	2,710248E+21	2,710239E+21	7,944614E+18	7,948148E+18	5,420487E+21	1,589276E+19	5,436380E+21
-458	2,710398E+21	2,710232E+21	7,941376E+18	7,940367E+18	5,420629E+21	1,588174E+19	5,436511E+21
-457	2,710262E+21	2,710493E+21	7,946317E+18	7,944456E+18	5,420755E+21	1,589088E+19	5,436646E+21
-456	2,710468E+21	2,710418E+21	7,943358E+18	7,945515E+18	5,420886E+21	1,588887E+19	5,436774E+21
-455	2,710532E+21	2,710507E+21	7,941456E+18	7,939847E+18	5,421039E+21	1,588130E+19	5,436920E+21
-454	2,710476E+21	2,710633E+21	7,946400E+18	7,946632E+18	5,421109E+21	1,589303E+19	5,437002E+21
-453	2,710696E+21	2,710511E+21	7,940870E+18	7,942086E+18	5,421207E+21	1,588296E+19	5,437090E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-452	2,710593E+21	2,710663E+21	7,942690E+18	7,941391E+18	5,421255E+21	1,588408E+19	5,437139E+21
-451	2,710556E+21	2,710615E+21	7,945907E+18	7,946783E+18	5,421170E+21	1,589269E+19	5,437063E+21
-450	2,710628E+21	2,710449E+21	7,939284E+18	7,941280E+18	5,421077E+21	1,588056E+19	5,436958E+21
-449	2,710361E+21	2,710546E+21	7,946232E+18	7,944245E+18	5,420907E+21	1,589048E+19	5,436798E+21
-448	2,710377E+21	2,710337E+21	7,944209E+18	7,946081E+18	5,420714E+21	1,589029E+19	5,436604E+21
-447	2,710345E+21	2,710200E+21	7,941758E+18	7,941414E+18	5,420545E+21	1,588317E+19	5,436429E+21
-446	2,710077E+21	2,710234E+21	7,948820E+18	7,945701E+18	5,420311E+21	1,589452E+19	5,436205E+21
-445	2,710148E+21	2,710007E+21	7,942510E+18	7,946088E+18	5,420155E+21	1,588860E+19	5,436043E+21
-444	2,710010E+21	2,710029E+21	7,944796E+18	7,942804E+18	5,420039E+21	1,588760E+19	5,435927E+21
-443	2,709912E+21	2,710018E+21	7,947157E+18	7,948867E+18	5,419930E+21	1,589602E+19	5,435826E+21
-442	2,710074E+21	2,709865E+21	7,941575E+18	7,944235E+18	5,419939E+21	1,588581E+19	5,435825E+21
-441	2,709922E+21	2,710064E+21	7,946553E+18	7,942942E+18	5,419986E+21	1,588950E+19	5,435875E+21
-440	2,710013E+21	2,710056E+21	7,945987E+18	7,948138E+18	5,420069E+21	1,589412E+19	5,435963E+21
-439	2,710158E+21	2,710044E+21	7,942593E+18	7,940947E+18	5,420201E+21	1,588354E+19	5,436085E+21
-438	2,710032E+21	2,710258E+21	7,946904E+18	7,945550E+18	5,420290E+21	1,589245E+19	5,436182E+21
-437	2,710260E+21	2,710187E+21	7,943466E+18	7,946564E+18	5,420447E+21	1,589003E+19	5,436337E+21
-436	2,710337E+21	2,710277E+21	7,941724E+18	7,940818E+18	5,420613E+21	1,588254E+19	5,436496E+21
-435	2,710294E+21	2,710404E+21	7,946923E+18	7,947312E+18	5,420698E+21	1,589423E+19	5,436592E+21
-434	2,710480E+21	2,710294E+21	7,941237E+18	7,942287E+18	5,420774E+21	1,588352E+19	5,436658E+21
-433	2,710322E+21	2,710431E+21	7,943742E+18	7,942349E+18	5,420753E+21	1,588609E+19	5,436639E+21
-432	2,710268E+21	2,710381E+21	7,947130E+18	7,947366E+18	5,420648E+21	1,589450E+19	5,436543E+21
-431	2,710350E+21	2,710181E+21	7,940548E+18	7,942077E+18	5,420531E+21	1,588262E+19	5,436413E+21
-430	2,710086E+21	2,710231E+21	7,947276E+18	7,944626E+18	5,420317E+21	1,589190E+19	5,436209E+21
-429	2,710109E+21	2,710043E+21	7,944723E+18	7,946924E+18	5,420152E+21	1,589165E+19	5,436044E+21
-428	2,710065E+21	2,709921E+21	7,942510E+18	7,942654E+18	5,419986E+21	1,588516E+19	5,435871E+21
-427	2,709811E+21	2,709961E+21	7,949030E+18	7,947179E+18	5,419772E+21	1,589621E+19	5,435668E+21
-426	2,709894E+21	2,709745E+21	7,942507E+18	7,947044E+18	5,419639E+21	1,588955E+19	5,435529E+21
-425	2,709753E+21	2,709774E+21	7,945495E+18	7,943570E+18	5,419528E+21	1,588906E+19	5,435417E+21
-424	2,709671E+21	2,709800E+21	7,948340E+18	7,948796E+18	5,419471E+21	1,589714E+19	5,435368E+21
-423	2,709842E+21	2,709650E+21	7,943158E+18	7,944256E+18	5,419492E+21	1,588741E+19	5,435380E+21
-422	2,709675E+21	2,709823E+21	7,947521E+18	7,943372E+18	5,419498E+21	1,589089E+19	5,435389E+21
-421	2,709769E+21	2,709828E+21	7,946409E+18	7,949352E+18	5,419597E+21	1,589576E+19	5,435492E+21
-420	2,709931E+21	2,709811E+21	7,942867E+18	7,942384E+18	5,419742E+21	1,588525E+19	5,435627E+21
-419	2,709855E+21	2,710023E+21	7,946866E+18	7,946702E+18	5,419878E+21	1,589357E+19	5,435772E+21
-418	2,710090E+21	2,709971E+21	7,943686E+18	7,946452E+18	5,420061E+21	1,589014E+19	5,435951E+21
-417	2,710132E+21	2,710076E+21	7,942579E+18	7,941133E+18	5,420208E+21	1,588371E+19	5,436092E+21
-416	2,710051E+21	2,710226E+21	7,948267E+18	7,947297E+18	5,420278E+21	1,589556E+19	5,436173E+21
-415	2,710211E+21	2,710084E+21	7,942436E+18	7,943098E+18	5,420294E+21	1,588553E+19	5,436180E+21
-414	2,710042E+21	2,710150E+21	7,944502E+18	7,943418E+18	5,420192E+21	1,588792E+19	5,436080E+21
-413	2,709999E+21	2,710088E+21	7,947461E+18	7,948426E+18	5,420087E+21	1,589589E+19	5,435983E+21
-412	2,710090E+21	2,709884E+21	7,941213E+18	7,943251E+18	5,419974E+21	1,588446E+19	5,435859E+21
-411	2,709854E+21	2,709935E+21	7,947682E+18	7,945547E+18	5,419789E+21	1,589323E+19	5,435682E+21
-410	2,709851E+21	2,709774E+21	7,945013E+18	7,947568E+18	5,419626E+21	1,589258E+19	5,435518E+21
-409	2,709779E+21	2,709662E+21	7,943405E+18	7,943897E+18	5,419441E+21	1,588730E+19	5,435328E+21
-408	2,709530E+21	2,709721E+21	7,950101E+18	7,947584E+18	5,419252E+21	1,589769E+19	5,435149E+21
-407	2,709629E+21	2,709499E+21	7,943922E+18	7,947454E+18	5,419128E+21	1,589138E+19	5,435019E+21
-406	2,709491E+21	2,709498E+21	7,946726E+18	7,943555E+18	5,418989E+21	1,589028E+19	5,434880E+21
-405	2,709412E+21	2,709549E+21	7,949077E+18	7,949223E+18	5,418961E+21	1,589830E+19	5,434859E+21
-404	2,709579E+21	2,709413E+21	7,943926E+18	7,945377E+18	5,418992E+21	1,588930E+19	5,434882E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,709453E+21	2,709579E+21	7,947371E+18	7,944847E+18	5,419033E+21	1,589222E+19	5,434925E+21
-402	2,709571E+21	2,709602E+21	7,946270E+18	7,950170E+18	5,419174E+21	1,589644E+19	5,435070E+21
-401	2,709739E+21	2,709601E+21	7,943306E+18	7,943154E+18	5,419340E+21	1,588646E+19	5,435227E+21
-400	2,709670E+21	2,709846E+21	7,947942E+18	7,946483E+18	5,419515E+21	1,589443E+19	5,435410E+21
-399	2,709886E+21	2,709792E+21	7,945152E+18	7,946426E+18	5,419679E+21	1,589158E+19	5,435570E+21
-398	2,709879E+21	2,709850E+21	7,943550E+18	7,941787E+18	5,419729E+21	1,588534E+19	5,435614E+21
-397	2,709781E+21	2,709983E+21	7,948785E+18	7,948481E+18	5,419763E+21	1,589727E+19	5,435661E+21
-396	2,709943E+21	2,709807E+21	7,942888E+18	7,944687E+18	5,419750E+21	1,588758E+19	5,435638E+21
-395	2,709816E+21	2,709847E+21	7,944607E+18	7,944547E+18	5,419663E+21	1,588915E+19	5,435552E+21
-394	2,709776E+21	2,709807E+21	7,947725E+18	7,948552E+18	5,419583E+21	1,589628E+19	5,435479E+21
-393	2,709835E+21	2,709626E+21	7,942235E+18	7,943862E+18	5,419461E+21	1,588610E+19	5,435347E+21
-392	2,709575E+21	2,709712E+21	7,948998E+18	7,945665E+18	5,419287E+21	1,589466E+19	5,435182E+21
-391	2,709563E+21	2,709538E+21	7,946330E+18	7,948378E+18	5,419101E+21	1,589471E+19	5,434996E+21
-390	2,709480E+21	2,709378E+21	7,944469E+18	7,944776E+18	5,418858E+21	1,588925E+19	5,434747E+21
-389	2,709251E+21	2,709441E+21	7,950653E+18	7,948289E+18	5,418692E+21	1,589894E+19	5,434591E+21
-388	2,709362E+21	2,709219E+21	7,944874E+18	7,948452E+18	5,418581E+21	1,589333E+19	5,434475E+21
-387	2,709257E+21	2,709222E+21	7,947069E+18	7,944422E+18	5,418479E+21	1,589149E+19	5,434370E+21
-386	2,709172E+21	2,709305E+21	7,949182E+18	7,950033E+18	5,418476E+21	1,589921E+19	5,434376E+21
-385	2,709336E+21	2,709187E+21	7,944490E+18	7,946731E+18	5,418523E+21	1,589122E+19	5,434414E+21
-384	2,709245E+21	2,709381E+21	7,947976E+18	7,945346E+18	5,418626E+21	1,589332E+19	5,434519E+21
-383	2,709385E+21	2,709409E+21	7,947426E+18	7,950345E+18	5,418794E+21	1,589777E+19	5,434692E+21
-382	2,709538E+21	2,709386E+21	7,944310E+18	7,943136E+18	5,418924E+21	1,588745E+19	5,434812E+21
-381	2,709449E+21	2,709640E+21	7,948724E+18	7,946669E+18	5,419089E+21	1,589539E+19	5,434984E+21
-380	2,709629E+21	2,709579E+21	7,946014E+18	7,947450E+18	5,419208E+21	1,589346E+19	5,435101E+21
-379	2,709644E+21	2,709595E+21	7,943475E+18	7,943317E+18	5,419239E+21	1,588679E+19	5,435126E+21
-378	2,709548E+21	2,709721E+21	7,948829E+18	7,949269E+18	5,419269E+21	1,589810E+19	5,435167E+21
-377	2,709707E+21	2,709551E+21	7,943493E+18	7,945637E+18	5,419258E+21	1,588913E+19	5,435147E+21
-376	2,709589E+21	2,709611E+21	7,945857E+18	7,944401E+18	5,419200E+21	1,589026E+19	5,435090E+21
-375	2,709527E+21	2,709575E+21	7,949263E+18	7,948585E+18	5,419102E+21	1,589785E+19	5,434999E+21
-374	2,709532E+21	2,709361E+21	7,943523E+18	7,944685E+18	5,418894E+21	1,588821E+19	5,434782E+21
-373	2,709264E+21	2,709434E+21	7,949802E+18	7,946742E+18	5,418698E+21	1,589654E+19	5,434595E+21
-372	2,709260E+21	2,709244E+21	7,947157E+18	7,949984E+18	5,418504E+21	1,589714E+19	5,434401E+21
-371	2,709224E+21	2,709065E+21	7,944798E+18	7,945938E+18	5,418289E+21	1,589074E+19	5,434180E+21
-370	2,709004E+21	2,709155E+21	7,950867E+18	7,948631E+18	5,418159E+21	1,589950E+19	5,434059E+21
-369	2,709098E+21	2,708968E+21	7,945645E+18	7,949383E+18	5,418066E+21	1,589503E+19	5,433961E+21
-368	2,709002E+21	2,709007E+21	7,947882E+18	7,944776E+18	5,418009E+21	1,589266E+19	5,433902E+21
-367	2,708941E+21	2,709093E+21	7,950070E+18	7,950786E+18	5,418034E+21	1,590086E+19	5,433935E+21
-366	2,709104E+21	2,708956E+21	7,945445E+18	7,947312E+18	5,418060E+21	1,589276E+19	5,433953E+21
-365	2,709041E+21	2,709165E+21	7,948564E+18	7,945694E+18	5,418207E+21	1,589426E+19	5,434101E+21
-364	2,709183E+21	2,709197E+21	7,948554E+18	7,950932E+18	5,418380E+21	1,589949E+19	5,434280E+21
-363	2,709336E+21	2,709164E+21	7,944609E+18	7,943907E+18	5,418500E+21	1,588852E+19	5,434389E+21
-362	2,709221E+21	2,709424E+21	7,948823E+18	7,947471E+18	5,418645E+21	1,589629E+19	5,434541E+21
-361	2,709380E+21	2,709352E+21	7,946499E+18	7,948752E+18	5,418732E+21	1,589525E+19	5,434627E+21
-360	2,709418E+21	2,709371E+21	7,944240E+18	7,943769E+18	5,418789E+21	1,588801E+19	5,434677E+21
-359	2,709335E+21	2,709486E+21	7,950152E+18	7,949250E+18	5,418821E+21	1,589940E+19	5,434721E+21
-358	2,709455E+21	2,709294E+21	7,944813E+18	7,945792E+18	5,418749E+21	1,589061E+19	5,434639E+21
-357	2,709318E+21	2,709360E+21	7,946854E+18	7,944878E+18	5,418678E+21	1,589173E+19	5,434569E+21
-356	2,709227E+21	2,709312E+21	7,950156E+18	7,950020E+18	5,418539E+21	1,590018E+19	5,434439E+21
-355	2,709254E+21	2,709064E+21	7,943585E+18	7,946561E+18	5,418319E+21	1,589015E+19	5,434209E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-354	2,708997E+21	2,709138E+21	7,949857E+18	7,947797E+18	5,418135E+21	1,589765E+19	5,434033E+21
-353	2,708993E+21	2,708963E+21	7,947772E+18	7,951133E+18	5,417956E+21	1,589891E+19	5,433855E+21
-352	2,708975E+21	2,708813E+21	7,946018E+18	7,946009E+18	5,417788E+21	1,589203E+19	5,433680E+21
-351	2,708749E+21	2,708916E+21	7,952130E+18	7,948786E+18	5,417665E+21	1,590092E+19	5,433566E+21
-350	2,708809E+21	2,708716E+21	7,946856E+18	7,950200E+18	5,417525E+21	1,589706E+19	5,433422E+21
-349	2,708741E+21	2,708756E+21	7,948559E+18	7,945544E+18	5,417497E+21	1,589410E+19	5,433391E+21
-348	2,708705E+21	2,708850E+21	7,950944E+18	7,951900E+18	5,417554E+21	1,590284E+19	5,433457E+21
-347	2,708913E+21	2,708714E+21	7,945837E+18	7,947925E+18	5,417627E+21	1,589376E+19	5,433521E+21
-346	2,708849E+21	2,708950E+21	7,948801E+18	7,945826E+18	5,417798E+21	1,589463E+19	5,433693E+21
-345	2,708954E+21	2,709008E+21	7,949259E+18	7,951647E+18	5,417962E+21	1,590091E+19	5,433863E+21
-344	2,709105E+21	2,708981E+21	7,945275E+18	7,944384E+18	5,418086E+21	1,588966E+19	5,433976E+21
-343	2,708997E+21	2,709215E+21	7,949617E+18	7,948128E+18	5,418211E+21	1,589774E+19	5,434109E+21
-342	2,709133E+21	2,709110E+21	7,947411E+18	7,949442E+18	5,418242E+21	1,589685E+19	5,434139E+21
-341	2,709190E+21	2,709120E+21	7,945036E+18	7,944240E+18	5,418309E+21	1,588928E+19	5,434199E+21
-340	2,709099E+21	2,709232E+21	7,951323E+18	7,950044E+18	5,418330E+21	1,590137E+19	5,434232E+21
-339	2,709210E+21	2,709026E+21	7,945152E+18	7,947065E+18	5,418236E+21	1,589222E+19	5,434128E+21
-338	2,709051E+21	2,709090E+21	7,947019E+18	7,946194E+18	5,418141E+21	1,589321E+19	5,434034E+21
-337	2,708944E+21	2,709039E+21	7,950523E+18	7,951647E+18	5,417983E+21	1,590217E+19	5,433885E+21
-336	2,708995E+21	2,708800E+21	7,944433E+18	7,947289E+18	5,417795E+21	1,589172E+19	5,433687E+21
-335	2,708751E+21	2,708872E+21	7,951164E+18	7,947728E+18	5,417623E+21	1,589889E+19	5,433522E+21
-334	2,708700E+21	2,708688E+21	7,949286E+18	7,951178E+18	5,417388E+21	1,590046E+19	5,433289E+21
-333	2,708677E+21	2,708552E+21	7,947264E+18	7,946273E+18	5,417229E+21	1,589354E+19	5,433122E+21
-332	2,708457E+21	2,708651E+21	7,953044E+18	7,950049E+18	5,417108E+21	1,590309E+19	5,433011E+21
-331	2,708557E+21	2,708440E+21	7,947105E+18	7,951676E+18	5,416996E+21	1,589878E+19	5,432895E+21
-330	2,708527E+21	2,708506E+21	7,948490E+18	7,946456E+18	5,417032E+21	1,589495E+19	5,432927E+21
-329	2,708504E+21	2,708629E+21	7,951391E+18	7,952777E+18	5,417132E+21	1,590417E+19	5,433037E+21
-328	2,708722E+21	2,708531E+21	7,946799E+18	7,947876E+18	5,417253E+21	1,589467E+19	5,433148E+21
-327	2,708640E+21	2,708769E+21	7,949682E+18	7,945995E+18	5,417409E+21	1,589568E+19	5,433305E+21
-326	2,708688E+21	2,708796E+21	7,950270E+18	7,952351E+18	5,417484E+21	1,590262E+19	5,433386E+21
-325	2,708858E+21	2,708748E+21	7,945851E+18	7,945236E+18	5,417606E+21	1,589109E+19	5,433498E+21
-324	2,708772E+21	2,708962E+21	7,950406E+18	7,949334E+18	5,417734E+21	1,589974E+19	5,433633E+21
-323	2,708933E+21	2,708844E+21	7,947786E+18	7,950262E+18	5,417777E+21	1,589805E+19	5,433675E+21
-322	2,708981E+21	2,708870E+21	7,945276E+18	7,944880E+18	5,417851E+21	1,589016E+19	5,433742E+21
-321	2,708850E+21	2,709000E+21	7,951775E+18	7,951079E+18	5,417850E+21	1,590285E+19	5,433753E+21
-320	2,708955E+21	2,708801E+21	7,945800E+18	7,947946E+18	5,417756E+21	1,589375E+19	5,433650E+21
-319	2,708794E+21	2,708842E+21	7,948047E+18	7,946770E+18	5,417636E+21	1,589482E+19	5,433530E+21
-318	2,708648E+21	2,708766E+21	7,951792E+18	7,952071E+18	5,417414E+21	1,590386E+19	5,433318E+21
-317	2,708713E+21	2,708516E+21	7,945840E+18	7,947546E+18	5,417229E+21	1,589339E+19	5,433123E+21
-316	2,708460E+21	2,708581E+21	7,952667E+18	7,948349E+18	5,417041E+21	1,590102E+19	5,432942E+21
-315	2,708408E+21	2,708392E+21	7,949761E+18	7,952432E+18	5,416800E+21	1,590219E+19	5,432702E+21
-314	2,708395E+21	2,708262E+21	7,947414E+18	7,947643E+18	5,416657E+21	1,589506E+19	5,432552E+21
-313	2,708199E+21	2,708382E+21	7,953063E+18	7,951621E+18	5,416581E+21	1,590468E+19	5,432486E+21
-312	2,708348E+21	2,708211E+21	7,947823E+18	7,952255E+18	5,416559E+21	1,590008E+19	5,432459E+21
-311	2,708338E+21	2,708296E+21	7,949392E+18	7,946306E+18	5,416634E+21	1,589570E+19	5,432529E+21
-310	2,708263E+21	2,708426E+21	7,952567E+18	7,952767E+18	5,416689E+21	1,590533E+19	5,432595E+21
-309	2,708471E+21	2,708332E+21	7,947713E+18	7,948155E+18	5,416802E+21	1,589587E+19	5,432698E+21
-308	2,708391E+21	2,708545E+21	7,950319E+18	7,947320E+18	5,416936E+21	1,589764E+19	5,432834E+21
-307	2,708463E+21	2,708545E+21	7,950383E+18	7,953653E+18	5,417008E+21	1,590404E+19	5,432912E+21
-306	2,708662E+21	2,708502E+21	7,945810E+18	7,946242E+18	5,417164E+21	1,589205E+19	5,433056E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-305	2,708585E+21	2,708729E+21	7,950736E+18	7,950248E+18	5,417314E+21	1,590098E+19	5,433215E+21
-304	2,708742E+21	2,708642E+21	7,948730E+18	7,950443E+18	5,417384E+21	1,589917E+19	5,433283E+21
-303	2,708760E+21	2,708665E+21	7,946196E+18	7,945247E+18	5,417425E+21	1,589144E+19	5,433316E+21
-302	2,708557E+21	2,708759E+21	7,952952E+18	7,951600E+18	5,417317E+21	1,590455E+19	5,433221E+21
-301	2,708664E+21	2,708538E+21	7,946895E+18	7,948624E+18	5,417202E+21	1,589552E+19	5,433097E+21
-300	2,708514E+21	2,708551E+21	7,949423E+18	7,947717E+18	5,417065E+21	1,589714E+19	5,432962E+21
-299	2,708371E+21	2,708455E+21	7,952527E+18	7,952716E+18	5,416825E+21	1,590524E+19	5,432731E+21
-298	2,708430E+21	2,708219E+21	7,946327E+18	7,948508E+18	5,416649E+21	1,589484E+19	5,432544E+21
-297	2,708169E+21	2,708297E+21	7,952818E+18	7,949706E+18	5,416466E+21	1,590252E+19	5,432369E+21
-296	2,708145E+21	2,708132E+21	7,950120E+18	7,953632E+18	5,416277E+21	1,590375E+19	5,432181E+21
-295	2,708163E+21	2,708013E+21	7,948008E+18	7,948303E+18	5,416176E+21	1,589631E+19	5,432073E+21
-294	2,707949E+21	2,708141E+21	7,953956E+18	7,951948E+18	5,416090E+21	1,590590E+19	5,431996E+21
-293	2,708120E+21	2,707989E+21	7,949190E+18	7,952268E+18	5,416109E+21	1,590146E+19	5,432010E+21
-292	2,708102E+21	2,708077E+21	7,950637E+18	7,946926E+18	5,416179E+21	1,589756E+19	5,432077E+21
-291	2,708013E+21	2,708192E+21	7,952962E+18	7,953744E+18	5,416205E+21	1,590671E+19	5,432112E+21
-290	2,708230E+21	2,708088E+21	7,947711E+18	7,949471E+18	5,416318E+21	1,589718E+19	5,432215E+21
-289	2,708177E+21	2,708302E+21	7,950153E+18	7,948744E+18	5,416478E+21	1,589890E+19	5,432377E+21
-288	2,708291E+21	2,708330E+21	7,951086E+18	7,954003E+18	5,416622E+21	1,590509E+19	5,432527E+21
-287	2,708491E+21	2,708300E+21	7,946816E+18	7,945914E+18	5,416791E+21	1,589273E+19	5,432684E+21
-286	2,708344E+21	2,708529E+21	7,952039E+18	7,950114E+18	5,416874E+21	1,590215E+19	5,432776E+21
-285	2,708477E+21	2,708433E+21	7,949971E+18	7,950657E+18	5,416911E+21	1,590063E+19	5,432811E+21
-284	2,708479E+21	2,708417E+21	7,947205E+18	7,946638E+18	5,416895E+21	1,589384E+19	5,432789E+21
-283	2,708280E+21	2,708472E+21	7,953290E+18	7,952759E+18	5,416751E+21	1,590605E+19	5,432657E+21
-282	2,708401E+21	2,708238E+21	7,947114E+18	7,949949E+18	5,416639E+21	1,589706E+19	5,432536E+21
-281	2,708257E+21	2,708253E+21	7,949874E+18	7,948819E+18	5,416509E+21	1,589869E+19	5,432408E+21
-280	2,708117E+21	2,708185E+21	7,953254E+18	7,953341E+18	5,416302E+21	1,590659E+19	5,432208E+21
-279	2,708160E+21	2,707955E+21	7,947096E+18	7,949220E+18	5,416115E+21	1,589632E+19	5,432011E+21
-278	2,707866E+21	2,708023E+21	7,953600E+18	7,950464E+18	5,415889E+21	1,590406E+19	5,431793E+21
-277	2,707876E+21	2,707870E+21	7,951205E+18	7,954244E+18	5,415746E+21	1,590545E+19	5,431651E+21
-276	2,707919E+21	2,707759E+21	7,949409E+18	7,949019E+18	5,415678E+21	1,589843E+19	5,431576E+21
-275	2,707710E+21	2,707886E+21	7,954656E+18	7,952225E+18	5,415596E+21	1,590688E+19	5,431503E+21
-274	2,707873E+21	2,707755E+21	7,949709E+18	7,953050E+18	5,415627E+21	1,590276E+19	5,431530E+21
-273	2,707852E+21	2,707848E+21	7,950641E+18	7,948166E+18	5,415700E+21	1,589881E+19	5,431599E+21
-272	2,707793E+21	2,707975E+21	7,953304E+18	7,954668E+18	5,415768E+21	1,590797E+19	5,431676E+21
-271	2,708037E+21	2,707879E+21	7,948218E+18	7,949884E+18	5,415916E+21	1,589810E+19	5,431814E+21
-270	2,707970E+21	2,708086E+21	7,951034E+18	7,948895E+18	5,416056E+21	1,589933E+19	5,431956E+21
-269	2,708089E+21	2,708131E+21	7,952643E+18	7,953745E+18	5,416220E+21	1,590639E+19	5,432127E+21
-268	2,708266E+21	2,708098E+21	7,948074E+18	7,946690E+18	5,416363E+21	1,589476E+19	5,432258E+21
-267	2,708084E+21	2,708287E+21	7,952491E+18	7,951091E+18	5,416371E+21	1,590358E+19	5,432274E+21
-266	2,708213E+21	2,708168E+21	7,950018E+18	7,952224E+18	5,416380E+21	1,590224E+19	5,432283E+21
-265	2,708229E+21	2,708134E+21	7,947157E+18	7,948316E+18	5,416363E+21	1,589547E+19	5,432258E+21
-264	2,708054E+21	2,708201E+21	7,953968E+18	7,953309E+18	5,416255E+21	1,590728E+19	5,432162E+21
-263	2,708164E+21	2,707977E+21	7,947997E+18	7,950095E+18	5,416141E+21	1,589809E+19	5,432039E+21
-262	2,707958E+21	2,707987E+21	7,951021E+18	7,949015E+18	5,415945E+21	1,590004E+19	5,431845E+21
-261	2,707813E+21	2,707923E+21	7,954470E+18	7,953727E+18	5,415737E+21	1,590820E+19	5,431645E+21
-260	2,707865E+21	2,707681E+21	7,948343E+18	7,950562E+18	5,415546E+21	1,589890E+19	5,431445E+21
-259	2,707590E+21	2,707732E+21	7,954117E+18	7,951327E+18	5,415322E+21	1,590544E+19	5,431228E+21
-258	2,707629E+21	2,707592E+21	7,951757E+18	7,955386E+18	5,415221E+21	1,590714E+19	5,431128E+21
-257	2,707680E+21	2,707503E+21	7,949990E+18	7,949941E+18	5,415183E+21	1,589993E+19	5,431083E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-256	2,707479E+21	2,707663E+21	7,955240E+18	7,952798E+18	5,415142E+21	1,590804E+19	5,431050E+21
-255	2,707627E+21	2,707535E+21	7,950338E+18	7,953561E+18	5,415162E+21	1,590390E+19	5,431066E+21
-254	2,707586E+21	2,707614E+21	7,951264E+18	7,948741E+18	5,415200E+21	1,590000E+19	5,431100E+21
-253	2,707572E+21	2,707751E+21	7,954461E+18	7,954926E+18	5,415323E+21	1,590939E+19	5,431232E+21
-252	2,707834E+21	2,707662E+21	7,949625E+18	7,950437E+18	5,415496E+21	1,590006E+19	5,431396E+21
-251	2,707762E+21	2,707861E+21	7,951593E+18	7,949294E+18	5,415623E+21	1,590089E+19	5,431524E+21
-250	2,707868E+21	2,707911E+21	7,952974E+18	7,954760E+18	5,415779E+21	1,590773E+19	5,431686E+21
-249	2,708028E+21	2,707869E+21	7,947866E+18	7,948276E+18	5,415897E+21	1,589614E+19	5,431793E+21
-248	2,707864E+21	2,708053E+21	7,952711E+18	7,952130E+18	5,415917E+21	1,590484E+19	5,431822E+21
-247	2,707989E+21	2,707928E+21	7,950490E+18	7,952688E+18	5,415917E+21	1,590318E+19	5,431820E+21
-246	2,707972E+21	2,707878E+21	7,948279E+18	7,948617E+18	5,415849E+21	1,589690E+19	5,431746E+21
-245	2,707794E+21	2,707948E+21	7,955768E+18	7,953096E+18	5,415743E+21	1,590886E+19	5,431651E+21
-244	2,707873E+21	2,707720E+21	7,949561E+18	7,951078E+18	5,415593E+21	1,590064E+19	5,431494E+21
-243	2,707647E+21	2,707688E+21	7,951650E+18	7,950055E+18	5,415335E+21	1,590171E+19	5,431237E+21
-242	2,707522E+21	2,707617E+21	7,954640E+18	7,955360E+18	5,415138E+21	1,591000E+19	5,431048E+21
-241	2,707603E+21	2,707386E+21	7,948625E+18	7,952099E+18	5,414990E+21	1,590072E+19	5,430891E+21
-240	2,707365E+21	2,707467E+21	7,954894E+18	7,951758E+18	5,414832E+21	1,590665E+19	5,430739E+21
-239	2,707392E+21	2,707359E+21	7,952710E+18	7,955495E+18	5,414751E+21	1,590821E+19	5,430659E+21
-238	2,707393E+21	2,707272E+21	7,951036E+18	7,950214E+18	5,414666E+21	1,590125E+19	5,430567E+21
-237	2,707201E+21	2,707435E+21	7,956313E+18	7,953170E+18	5,414636E+21	1,590948E+19	5,430545E+21
-236	2,707370E+21	2,707303E+21	7,951350E+18	7,954807E+18	5,414673E+21	1,590616E+19	5,430580E+21
-235	2,707359E+21	2,707358E+21	7,951513E+18	7,949490E+18	5,414717E+21	1,590100E+19	5,430618E+21
-234	2,707384E+21	2,707510E+21	7,954836E+18	7,955947E+18	5,414894E+21	1,591078E+19	5,430805E+21
-233	2,707648E+21	2,707447E+21	7,950013E+18	7,951354E+18	5,415096E+21	1,590137E+19	5,430997E+21
-232	2,707574E+21	2,707665E+21	7,951960E+18	7,950060E+18	5,415239E+21	1,590202E+19	5,431141E+21
-231	2,707649E+21	2,707709E+21	7,953389E+18	7,955301E+18	5,415358E+21	1,590869E+19	5,431267E+21
-230	2,707770E+21	2,707640E+21	7,948449E+18	7,948994E+18	5,415410E+21	1,589744E+19	5,431307E+21
-229	2,707623E+21	2,707817E+21	7,954200E+18	7,952134E+18	5,415440E+21	1,590633E+19	5,431347E+21
-228	2,707736E+21	2,707685E+21	7,952184E+18	7,953132E+18	5,415421E+21	1,590532E+19	5,431327E+21
-227	2,707693E+21	2,707601E+21	7,949316E+18	7,949028E+18	5,415294E+21	1,589834E+19	5,431192E+21
-226	2,707506E+21	2,707660E+21	7,956297E+18	7,954312E+18	5,415166E+21	1,591061E+19	5,431076E+21
-225	2,707578E+21	2,707427E+21	7,949648E+18	7,952936E+18	5,415005E+21	1,590258E+19	5,430908E+21
-224	2,707394E+21	2,707402E+21	7,951911E+18	7,951391E+18	5,414795E+21	1,590330E+19	5,430698E+21
-223	2,707279E+21	2,707345E+21	7,955073E+18	7,955970E+18	5,414624E+21	1,591104E+19	5,430535E+21
-222	2,707334E+21	2,707126E+21	7,949839E+18	7,952502E+18	5,414460E+21	1,590234E+19	5,430362E+21
-221	2,707101E+21	2,707230E+21	7,956569E+18	7,951595E+18	5,414331E+21	1,590816E+19	5,430239E+21
-220	2,707099E+21	2,707125E+21	7,954182E+18	7,956415E+18	5,414224E+21	1,591060E+19	5,430134E+21
-219	2,707095E+21	2,706998E+21	7,951536E+18	7,951157E+18	5,414093E+21	1,590269E+19	5,429996E+21
-218	2,706953E+21	2,707152E+21	7,956305E+18	7,954702E+18	5,414105E+21	1,591101E+19	5,430016E+21
-217	2,707162E+21	2,707048E+21	7,951589E+18	7,956044E+18	5,414210E+21	1,590763E+19	5,430118E+21
-216	2,707199E+21	2,707140E+21	7,951954E+18	7,949927E+18	5,414339E+21	1,590188E+19	5,430241E+21
-215	2,707207E+21	2,707325E+21	7,955429E+18	7,955965E+18	5,414531E+21	1,591139E+19	5,430443E+21
-214	2,707412E+21	2,707268E+21	7,950839E+18	7,951605E+18	5,414680E+21	1,590244E+19	5,430583E+21
-213	2,707336E+21	2,707475E+21	7,953095E+18	7,950292E+18	5,414811E+21	1,590339E+19	5,430715E+21
-212	2,707400E+21	2,707500E+21	7,954615E+18	7,956132E+18	5,414901E+21	1,591075E+19	5,430811E+21
-211	2,707518E+21	2,707379E+21	7,949076E+18	7,949708E+18	5,414896E+21	1,589878E+19	5,430795E+21
-210	2,707390E+21	2,707537E+21	7,954878E+18	7,953184E+18	5,414927E+21	1,590806E+19	5,430835E+21
-209	2,707485E+21	2,707416E+21	7,952635E+18	7,954434E+18	5,414902E+21	1,590707E+19	5,430809E+21
-208	2,707442E+21	2,707329E+21	7,949760E+18	7,950260E+18	5,414771E+21	1,590002E+19	5,430671E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-207	2,707240E+21	2,707386E+21	7,956499E+18	7,955177E+18	5,414626E+21	1,591168E+19	5,430537E+21
-206	2,707294E+21	2,707148E+21	7,950311E+18	7,953909E+18	5,414442E+21	1,590422E+19	5,430346E+21
-205	2,707133E+21	2,707137E+21	7,953570E+18	7,951426E+18	5,414269E+21	1,590500E+19	5,430174E+21
-204	2,707008E+21	2,707098E+21	7,956769E+18	7,956384E+18	5,414105E+21	1,591315E+19	5,430018E+21
-203	2,707032E+21	2,706853E+21	7,950973E+18	7,952960E+18	5,413885E+21	1,590393E+19	5,429789E+21
-202	2,706806E+21	2,706946E+21	7,956986E+18	7,952786E+18	5,413752E+21	1,590977E+19	5,429662E+21
-201	2,706815E+21	2,706847E+21	7,954268E+18	7,958014E+18	5,413662E+21	1,591228E+19	5,429575E+21
-200	2,706870E+21	2,706733E+21	7,951682E+18	7,952251E+18	5,413603E+21	1,590393E+19	5,429507E+21
-199	2,706762E+21	2,706916E+21	7,956497E+18	7,955136E+18	5,413678E+21	1,591163E+19	5,429590E+21
-198	2,706958E+21	2,706842E+21	7,952740E+18	7,956191E+18	5,413801E+21	1,590893E+19	5,429710E+21
-197	2,706999E+21	2,706967E+21	7,953467E+18	7,949708E+18	5,413965E+21	1,590317E+19	5,429869E+21
-196	2,706968E+21	2,707151E+21	7,956715E+18	7,956653E+18	5,414119E+21	1,591337E+19	5,430033E+21
-195	2,707146E+21	2,707037E+21	7,951312E+18	7,952405E+18	5,414183E+21	1,590372E+19	5,430087E+21
-194	2,707103E+21	2,707210E+21	7,953195E+18	7,951727E+18	5,414313E+21	1,590492E+19	5,430218E+21
-193	2,707173E+21	2,707240E+21	7,955014E+18	7,957189E+18	5,414413E+21	1,591220E+19	5,430325E+21
-192	2,707316E+21	2,707126E+21	7,949586E+18	7,950516E+18	5,414442E+21	1,590010E+19	5,430342E+21
-191	2,707166E+21	2,707290E+21	7,955306E+18	7,953577E+18	5,414456E+21	1,590888E+19	5,430365E+21
-190	2,707205E+21	2,707169E+21	7,953325E+18	7,955184E+18	5,414374E+21	1,590851E+19	5,430283E+21
-189	2,707173E+21	2,707082E+21	7,950939E+18	7,950785E+18	5,414255E+21	1,590172E+19	5,430157E+21
-188	2,706965E+21	2,707132E+21	7,957667E+18	7,955904E+18	5,414097E+21	1,591357E+19	5,430011E+21
-187	2,707008E+21	2,706861E+21	7,951333E+18	7,954547E+18	5,413869E+21	1,590588E+19	5,429775E+21
-186	2,706868E+21	2,706841E+21	7,954633E+18	7,952327E+18	5,413709E+21	1,590696E+19	5,429615E+21
-185	2,706716E+21	2,706822E+21	7,957447E+18	7,957491E+18	5,413538E+21	1,591494E+19	5,429453E+21
-184	2,706753E+21	2,706574E+21	7,951429E+18	7,954322E+18	5,413328E+21	1,590575E+19	5,429233E+21
-183	2,706540E+21	2,706663E+21	7,956922E+18	7,953671E+18	5,413204E+21	1,591059E+19	5,429114E+21
-182	2,706558E+21	2,706585E+21	7,954850E+18	7,958791E+18	5,413142E+21	1,591364E+19	5,429056E+21
-181	2,706660E+21	2,706511E+21	7,953188E+18	7,952056E+18	5,413171E+21	1,590524E+19	5,429076E+21
-180	2,706553E+21	2,706727E+21	7,957895E+18	7,955322E+18	5,413280E+21	1,591322E+19	5,429193E+21
-179	2,706714E+21	2,706636E+21	7,953789E+18	7,956482E+18	5,413351E+21	1,591027E+19	5,429261E+21
-178	2,706762E+21	2,706741E+21	7,953639E+18	7,950983E+18	5,413504E+21	1,590462E+19	5,429408E+21
-177	2,706730E+21	2,706921E+21	7,956660E+18	7,958069E+18	5,413652E+21	1,591473E+19	5,429566E+21
-176	2,706944E+21	2,706794E+21	7,951296E+18	7,953542E+18	5,413739E+21	1,590484E+19	5,429644E+21
-175	2,706914E+21	2,706967E+21	7,953335E+18	7,952221E+18	5,413881E+21	1,590556E+19	5,429786E+21
-174	2,706953E+21	2,707011E+21	7,956071E+18	7,957408E+18	5,413965E+21	1,591348E+19	5,429878E+21
-173	2,707080E+21	2,706914E+21	7,951193E+18	7,950543E+18	5,413994E+21	1,590174E+19	5,429896E+21
-172	2,706895E+21	2,707066E+21	7,956502E+18	7,954296E+18	5,413961E+21	1,591080E+19	5,429872E+21
-171	2,706907E+21	2,706889E+21	7,954073E+18	7,956007E+18	5,413796E+21	1,591008E+19	5,429706E+21
-170	2,706906E+21	2,706778E+21	7,951538E+18	7,952069E+18	5,413685E+21	1,590361E+19	5,429588E+21
-169	2,706695E+21	2,706844E+21	7,958386E+18	7,956697E+18	5,413539E+21	1,591508E+19	5,429454E+21
-168	2,706749E+21	2,706579E+21	7,952133E+18	7,955491E+18	5,413328E+21	1,590762E+19	5,429236E+21
-167	2,706588E+21	2,706565E+21	7,955169E+18	7,952912E+18	5,413153E+21	1,590808E+19	5,429061E+21
-166	2,706403E+21	2,706550E+21	7,958033E+18	7,958395E+18	5,412953E+21	1,591643E+19	5,428869E+21
-165	2,706472E+21	2,706316E+21	7,952613E+18	7,954916E+18	5,412788E+21	1,590753E+19	5,428695E+21
-164	2,706286E+21	2,706415E+21	7,957747E+18	7,954342E+18	5,412702E+21	1,591209E+19	5,428614E+21
-163	2,706313E+21	2,706325E+21	7,955839E+18	7,959276E+18	5,412638E+21	1,591512E+19	5,428553E+21
-162	2,706452E+21	2,706267E+21	7,954006E+18	7,952860E+18	5,412719E+21	1,590687E+19	5,428626E+21
-161	2,706323E+21	2,706512E+21	7,958340E+18	7,956263E+18	5,412835E+21	1,591460E+19	5,428750E+21
-160	2,706493E+21	2,706418E+21	7,954023E+18	7,957693E+18	5,412911E+21	1,591172E+19	5,428822E+21
-159	2,706552E+21	2,706507E+21	7,953345E+18	7,951841E+18	5,413059E+21	1,590519E+19	5,428964E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-158	2,706508E+21	2,706694E+21	7,957246E+18	7,958508E+18	5,413202E+21	1,591575E+19	5,429118E+21
-157	2,706744E+21	2,706594E+21	7,952789E+18	7,953288E+18	5,413338E+21	1,590608E+19	5,429244E+21
-156	2,706696E+21	2,706769E+21	7,954677E+18	7,952317E+18	5,413465E+21	1,590699E+19	5,429372E+21
-155	2,706684E+21	2,706778E+21	7,957259E+18	7,957651E+18	5,413462E+21	1,591491E+19	5,429377E+21
-154	2,706818E+21	2,706651E+21	7,951717E+18	7,951833E+18	5,413469E+21	1,590355E+19	5,429372E+21
-153	2,706623E+21	2,706796E+21	7,956765E+18	7,955575E+18	5,413419E+21	1,591234E+19	5,429332E+21
-152	2,706664E+21	2,706608E+21	7,954320E+18	7,957328E+18	5,413272E+21	1,591165E+19	5,429183E+21
-151	2,706669E+21	2,706494E+21	7,951938E+18	7,952893E+18	5,413163E+21	1,590483E+19	5,429068E+21
-150	2,706421E+21	2,706579E+21	7,959404E+18	7,957164E+18	5,413000E+21	1,591657E+19	5,428916E+21
-149	2,706458E+21	2,706333E+21	7,953682E+18	7,956010E+18	5,412791E+21	1,590969E+19	5,428701E+21
-148	2,706281E+21	2,706301E+21	7,956193E+18	7,953749E+18	5,412582E+21	1,590994E+19	5,428492E+21
-147	2,706092E+21	2,706243E+21	7,958719E+18	7,959249E+18	5,412335E+21	1,591797E+19	5,428253E+21
-146	2,706217E+21	2,706013E+21	7,953354E+18	7,955998E+18	5,412230E+21	1,590935E+19	5,428140E+21
-145	2,706055E+21	2,706155E+21	7,958316E+18	7,955043E+18	5,412210E+21	1,591336E+19	5,428123E+21
-144	2,706105E+21	2,706090E+21	7,956538E+18	7,960111E+18	5,412194E+21	1,591665E+19	5,428111E+21
-143	2,706229E+21	2,706052E+21	7,954233E+18	7,953418E+18	5,412281E+21	1,590765E+19	5,428189E+21
-142	2,706079E+21	2,706306E+21	7,958659E+18	7,956894E+18	5,412385E+21	1,591555E+19	5,428301E+21
-141	2,706265E+21	2,706223E+21	7,955145E+18	7,957866E+18	5,412488E+21	1,591301E+19	5,428402E+21
-140	2,706334E+21	2,706307E+21	7,954180E+18	7,952130E+18	5,412642E+21	1,590631E+19	5,428548E+21
-139	2,706277E+21	2,706459E+21	7,958566E+18	7,958578E+18	5,412736E+21	1,591714E+19	5,428653E+21
-138	2,706525E+21	2,706357E+21	7,953854E+18	7,954019E+18	5,412882E+21	1,590787E+19	5,428789E+21
-137	2,706447E+21	2,706537E+21	7,955174E+18	7,953494E+18	5,412984E+21	1,590867E+19	5,428893E+21
-136	2,706440E+21	2,706517E+21	7,957418E+18	7,959137E+18	5,412957E+21	1,591655E+19	5,428874E+21
-135	2,706581E+21	2,706376E+21	7,951461E+18	7,953115E+18	5,412957E+21	1,590458E+19	5,428861E+21
-134	2,706377E+21	2,706529E+21	7,957379E+18	7,956186E+18	5,412906E+21	1,591357E+19	5,428820E+21
-133	2,706420E+21	2,706370E+21	7,955940E+18	7,957404E+18	5,412789E+21	1,591334E+19	5,428703E+21
-132	2,706393E+21	2,706256E+21	7,953375E+18	7,953289E+18	5,412649E+21	1,590666E+19	5,428556E+21
-131	2,706092E+21	2,706297E+21	7,960606E+18	7,957654E+18	5,412389E+21	1,591826E+19	5,428307E+21
-130	2,706150E+21	2,706028E+21	7,954346E+18	7,957450E+18	5,412178E+21	1,591180E+19	5,428089E+21
-129	2,705987E+21	2,705998E+21	7,956560E+18	7,954882E+18	5,411984E+21	1,591144E+19	5,427896E+21
-128	2,705850E+21	2,705947E+21	7,959048E+18	7,960386E+18	5,411797E+21	1,591943E+19	5,427716E+21
-127	2,706004E+21	2,705747E+21	7,953899E+18	7,956598E+18	5,411751E+21	1,591050E+19	5,427661E+21
-126	2,705822E+21	2,705933E+21	7,959191E+18	7,955360E+18	5,411754E+21	1,591455E+19	5,427669E+21
-125	2,705864E+21	2,705907E+21	7,958001E+18	7,960483E+18	5,411771E+21	1,591848E+19	5,427690E+21
-124	2,705977E+21	2,705856E+21	7,955032E+18	7,953959E+18	5,411833E+21	1,590899E+19	5,427742E+21
-123	2,705817E+21	2,706063E+21	7,959399E+18	7,957320E+18	5,411880E+21	1,591672E+19	5,427796E+21
-122	2,706044E+21	2,705976E+21	7,955996E+18	7,958493E+18	5,412021E+21	1,591449E+19	5,427935E+21
-121	2,706117E+21	2,706077E+21	7,954826E+18	7,952754E+18	5,412193E+21	1,590758E+19	5,428101E+21
-120	2,706072E+21	2,706227E+21	7,959154E+18	7,959570E+18	5,412299E+21	1,591872E+19	5,428217E+21
-119	2,706304E+21	2,706126E+21	7,953851E+18	7,955137E+18	5,412430E+21	1,590899E+19	5,428339E+21
-118	2,706210E+21	2,706305E+21	7,955291E+18	7,954606E+18	5,412515E+21	1,590990E+19	5,428425E+21
-117	2,706213E+21	2,706298E+21	7,958346E+18	7,959664E+18	5,412511E+21	1,591801E+19	5,428429E+21
-116	2,706347E+21	2,706148E+21	7,952323E+18	7,953633E+18	5,412495E+21	1,590596E+19	5,428401E+21
-115	2,706108E+21	2,706261E+21	7,958955E+18	7,956245E+18	5,412369E+21	1,591520E+19	5,428284E+21
-114	2,706137E+21	2,706096E+21	7,957339E+18	7,958117E+18	5,412233E+21	1,591546E+19	5,428149E+21
-113	2,706075E+21	2,705976E+21	7,954333E+18	7,954517E+18	5,412051E+21	1,590885E+19	5,427960E+21
-112	2,705795E+21	2,705975E+21	7,960986E+18	7,959089E+18	5,411771E+21	1,592008E+19	5,427691E+21
-111	2,705875E+21	2,705709E+21	7,954429E+18	7,958683E+18	5,411583E+21	1,591311E+19	5,427496E+21
-110	2,705734E+21	2,705714E+21	7,957139E+18	7,955420E+18	5,411448E+21	1,591256E+19	5,427360E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-109	2,705618E+21	2,705718E+21	7,960540E+18	7,960452E+18	5,411336E+21	1,592099E+19	5,427257E+21
-108	2,705752E+21	2,705546E+21	7,955231E+18	7,956772E+18	5,411299E+21	1,591200E+19	5,427211E+21
-107	2,705533E+21	2,705701E+21	7,960261E+18	7,955709E+18	5,411235E+21	1,591597E+19	5,427151E+21
-106	2,705597E+21	2,705663E+21	7,958728E+18	7,961543E+18	5,411261E+21	1,592027E+19	5,427181E+21
-105	2,705724E+21	2,705614E+21	7,955307E+18	7,955043E+18	5,411337E+21	1,591035E+19	5,427248E+21
-104	2,705613E+21	2,705803E+21	7,959544E+18	7,958507E+18	5,411416E+21	1,591805E+19	5,427334E+21
-103	2,705858E+21	2,705738E+21	7,956252E+18	7,959319E+18	5,411597E+21	1,591557E+19	5,427512E+21
-102	2,705916E+21	2,705868E+21	7,955256E+18	7,953497E+18	5,411784E+21	1,590875E+19	5,427693E+21
-101	2,705862E+21	2,706041E+21	7,960216E+18	7,960195E+18	5,411903E+21	1,592041E+19	5,427824E+21
-100	2,706077E+21	2,705923E+21	7,954470E+18	7,955759E+18	5,412001E+21	1,591023E+19	5,427911E+21
-99	2,705958E+21	2,706053E+21	7,956303E+18	7,954942E+18	5,412012E+21	1,591125E+19	5,427923E+21
-98	2,705975E+21	2,706044E+21	7,959580E+18	7,960021E+18	5,412019E+21	1,591960E+19	5,427939E+21
-97	2,706080E+21	2,705895E+21	7,953499E+18	7,954308E+18	5,411975E+21	1,590781E+19	5,427883E+21
-96	2,705830E+21	2,705979E+21	7,959893E+18	7,957209E+18	5,411809E+21	1,591710E+19	5,427726E+21
-95	2,705842E+21	2,705804E+21	7,957495E+18	7,959429E+18	5,411646E+21	1,591692E+19	5,427563E+21
-94	2,705777E+21	2,705677E+21	7,954650E+18	7,955714E+18	5,411454E+21	1,591036E+19	5,427364E+21
-93	2,705531E+21	2,705702E+21	7,961843E+18	7,959727E+18	5,411233E+21	1,592157E+19	5,427154E+21
-92	2,705625E+21	2,705452E+21	7,955430E+18	7,959140E+18	5,411077E+21	1,591457E+19	5,426992E+21
-91	2,705466E+21	2,705447E+21	7,958676E+18	7,955534E+18	5,410914E+21	1,591421E+19	5,426828E+21
-90	2,705351E+21	2,705475E+21	7,961764E+18	7,961209E+18	5,410826E+21	1,592297E+19	5,426749E+21
-89	2,705459E+21	2,705308E+21	7,956013E+18	7,958053E+18	5,410767E+21	1,591407E+19	5,426681E+21
-88	2,705276E+21	2,705423E+21	7,960273E+18	7,957167E+18	5,410700E+21	1,591744E+19	5,426617E+21
-87	2,705371E+21	2,705393E+21	7,958596E+18	7,962645E+18	5,410764E+21	1,592124E+19	5,426685E+21
-86	2,705520E+21	2,705375E+21	7,955628E+18	7,955557E+18	5,410895E+21	1,591118E+19	5,426806E+21
-85	2,705431E+21	2,705610E+21	7,960663E+18	7,958740E+18	5,411041E+21	1,591940E+19	5,426960E+21
-84	2,705652E+21	2,705566E+21	7,957296E+18	7,959479E+18	5,411218E+21	1,591678E+19	5,427135E+21
-83	2,705673E+21	2,705657E+21	7,956246E+18	7,953882E+18	5,411330E+21	1,591013E+19	5,427240E+21
-82	2,705627E+21	2,705816E+21	7,961091E+18	7,960799E+18	5,411443E+21	1,592189E+19	5,427365E+21
-81	2,705829E+21	2,705695E+21	7,955170E+18	7,956588E+18	5,411524E+21	1,591176E+19	5,427435E+21
-80	2,705734E+21	2,705781E+21	7,957002E+18	7,955860E+18	5,411515E+21	1,591286E+19	5,427427E+21
-79	2,705731E+21	2,705775E+21	7,960188E+18	7,960759E+18	5,411506E+21	1,592095E+19	5,427427E+21
-78	2,705803E+21	2,705637E+21	7,954068E+18	7,955496E+18	5,411440E+21	1,590956E+19	5,427350E+21
-77	2,705549E+21	2,705716E+21	7,960838E+18	7,958221E+18	5,411265E+21	1,591906E+19	5,427184E+21
-76	2,705556E+21	2,705525E+21	7,957958E+18	7,960297E+18	5,411081E+21	1,591826E+19	5,426999E+21
-75	2,705487E+21	2,705367E+21	7,955767E+18	7,956163E+18	5,410855E+21	1,591193E+19	5,426767E+21
-74	2,705270E+21	2,705415E+21	7,962991E+18	7,960050E+18	5,410685E+21	1,592304E+19	5,426608E+21
-73	2,705346E+21	2,705198E+21	7,956692E+18	7,959995E+18	5,410544E+21	1,591669E+19	5,426461E+21
-72	2,705194E+21	2,705175E+21	7,959393E+18	7,956719E+18	5,410369E+21	1,591611E+19	5,426285E+21
-71	2,705079E+21	2,705209E+21	7,961718E+18	7,962571E+18	5,410288E+21	1,592429E+19	5,426213E+21
-70	2,705200E+21	2,705052E+21	7,956062E+18	7,959235E+18	5,410252E+21	1,591530E+19	5,426167E+21
-69	2,705062E+21	2,705191E+21	7,960807E+18	7,957736E+18	5,410252E+21	1,591854E+19	5,426171E+21
-68	2,705170E+21	2,705182E+21	7,959482E+18	7,962667E+18	5,410352E+21	1,592215E+19	5,426274E+21
-67	2,705298E+21	2,705159E+21	7,957157E+18	7,955393E+18	5,410457E+21	1,591255E+19	5,426369E+21
-66	2,705212E+21	2,705413E+21	7,961839E+18	7,959234E+18	5,410625E+21	1,592107E+19	5,426546E+21
-65	2,705403E+21	2,705363E+21	7,958263E+18	7,960477E+18	5,410766E+21	1,591874E+19	5,426685E+21
-64	2,705446E+21	2,705401E+21	7,956411E+18	7,955178E+18	5,410847E+21	1,591159E+19	5,426759E+21
-63	2,705414E+21	2,705560E+21	7,961034E+18	7,961685E+18	5,410974E+21	1,592272E+19	5,426896E+21
-62	2,705607E+21	2,705451E+21	7,955529E+18	7,957267E+18	5,411058E+21	1,591280E+19	5,426971E+21
-61	2,705508E+21	2,705555E+21	7,958084E+18	7,956428E+18	5,411063E+21	1,591451E+19	5,426978E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-60	2,705464E+21	2,705547E+21	7,961024E+18	7,961155E+18	5,411011E+21	1,592218E+19	5,426933E+21
-59	2,705497E+21	2,705358E+21	7,955136E+18	7,956292E+18	5,410855E+21	1,591143E+19	5,426766E+21
-58	2,705265E+21	2,705424E+21	7,961605E+18	7,958996E+18	5,410689E+21	1,592060E+19	5,426610E+21
-57	2,705270E+21	2,705239E+21	7,958734E+18	7,961375E+18	5,410509E+21	1,592011E+19	5,426429E+21
-56	2,705236E+21	2,705056E+21	7,956607E+18	7,957185E+18	5,410292E+21	1,591379E+19	5,426206E+21
-55	2,705015E+21	2,705134E+21	7,963441E+18	7,960902E+18	5,410149E+21	1,592434E+19	5,426073E+21
-54	2,705067E+21	2,704946E+21	7,957300E+18	7,961274E+18	5,410013E+21	1,591857E+19	5,425931E+21
-53	2,704927E+21	2,704928E+21	7,960208E+18	7,957750E+18	5,409856E+21	1,591796E+19	5,425774E+21
-52	2,704816E+21	2,704962E+21	7,962180E+18	7,962985E+18	5,409778E+21	1,592516E+19	5,425703E+21
-51	2,704940E+21	2,704789E+21	7,957312E+18	7,959303E+18	5,409729E+21	1,591661E+19	5,425646E+21
-50	2,704835E+21	2,704952E+21	7,962019E+18	7,957631E+18	5,409787E+21	1,591965E+19	5,425707E+21
-49	2,704927E+21	2,704977E+21	7,960885E+18	7,963170E+18	5,409904E+21	1,592406E+19	5,425828E+21
-48	2,705069E+21	2,704926E+21	7,957752E+18	7,956437E+18	5,409995E+21	1,591419E+19	5,425909E+21
-47	2,704988E+21	2,705178E+21	7,961596E+18	7,960539E+18	5,410166E+21	1,592214E+19	5,426088E+21
-46	2,705185E+21	2,705140E+21	7,958143E+18	7,961649E+18	5,410325E+21	1,591979E+19	5,426245E+21
-45	2,705259E+21	2,705183E+21	7,956723E+18	7,956036E+18	5,410443E+21	1,591276E+19	5,426355E+21
-44	2,705212E+21	2,705347E+21	7,961763E+18	7,961603E+18	5,410559E+21	1,592337E+19	5,426482E+21
-43	2,705354E+21	2,705218E+21	7,956965E+18	7,957449E+18	5,410572E+21	1,591441E+19	5,426486E+21
-42	2,705236E+21	2,705312E+21	7,959313E+18	7,957052E+18	5,410549E+21	1,591636E+19	5,426465E+21
-41	2,705162E+21	2,705283E+21	7,962024E+18	7,962311E+18	5,410445E+21	1,592433E+19	5,426369E+21
-40	2,705221E+21	2,705036E+21	7,955611E+18	7,957672E+18	5,410257E+21	1,591328E+19	5,426170E+21
-39	2,705013E+21	2,705112E+21	7,961715E+18	7,959887E+18	5,410125E+21	1,592160E+19	5,426047E+21
-38	2,705016E+21	2,704962E+21	7,959306E+18	7,962232E+18	5,409978E+21	1,592154E+19	5,425899E+21
-37	2,704984E+21	2,704811E+21	7,957775E+18	7,957970E+18	5,409795E+21	1,591574E+19	5,425710E+21
-36	2,704734E+21	2,704897E+21	7,964157E+18	7,961178E+18	5,409631E+21	1,592534E+19	5,425557E+21
-35	2,704754E+21	2,704679E+21	7,958583E+18	7,961920E+18	5,409433E+21	1,592050E+19	5,425353E+21
-34	2,704645E+21	2,704664E+21	7,961211E+18	7,958150E+18	5,409310E+21	1,591936E+19	5,425229E+21
-33	2,704546E+21	2,704705E+21	7,963239E+18	7,963667E+18	5,409251E+21	1,592691E+19	5,425177E+21
-32	2,704705E+21	2,704511E+21	7,958246E+18	7,960089E+18	5,409217E+21	1,591834E+19	5,425135E+21
-31	2,704620E+21	2,704708E+21	7,962053E+18	7,958673E+18	5,409328E+21	1,592073E+19	5,425249E+21
-30	2,704703E+21	2,704761E+21	7,961100E+18	7,964563E+18	5,409464E+21	1,592566E+19	5,425389E+21
-29	2,704870E+21	2,704717E+21	7,957973E+18	7,957665E+18	5,409587E+21	1,591564E+19	5,425503E+21
-28	2,704794E+21	2,704970E+21	7,961702E+18	7,960727E+18	5,409763E+21	1,592243E+19	5,425686E+21
-27	2,704966E+21	2,704918E+21	7,959349E+18	7,961502E+18	5,409884E+21	1,592085E+19	5,425805E+21
-26	2,705040E+21	2,704973E+21	7,958003E+18	7,955964E+18	5,410013E+21	1,591397E+19	5,425927E+21
-25	2,704945E+21	2,705136E+21	7,963285E+18	7,962087E+18	5,410081E+21	1,592537E+19	5,426006E+21
-24	2,705077E+21	2,704949E+21	7,957712E+18	7,958675E+18	5,410027E+21	1,591639E+19	5,425943E+21
-23	2,704969E+21	2,705021E+21	7,959206E+18	7,958466E+18	5,409990E+21	1,591767E+19	5,425908E+21
-22	2,704901E+21	2,704996E+21	7,962095E+18	7,963544E+18	5,409897E+21	1,592564E+19	5,425822E+21
-21	2,704992E+21	2,704762E+21	7,956273E+18	7,958691E+18	5,409753E+21	1,591496E+19	5,425668E+21
-20	2,704773E+21	2,704855E+21	7,962616E+18	7,959779E+18	5,409628E+21	1,592240E+19	5,425550E+21
-19	2,704723E+21	2,704708E+21	7,960962E+18	7,962682E+18	5,409431E+21	1,592364E+19	5,425354E+21
-18	2,704675E+21	2,704556E+21	7,959287E+18	7,958664E+18	5,409231E+21	1,591795E+19	5,425149E+21
-17	2,704407E+21	2,704625E+21	7,965231E+18	7,962252E+18	5,409031E+21	1,592748E+19	5,424959E+21
-16	2,704465E+21	2,704357E+21	7,959146E+18	7,963183E+18	5,408822E+21	1,592233E+19	5,424745E+21
-15	2,704397E+21	2,704357E+21	7,961217E+18	7,958963E+18	5,408754E+21	1,592018E+19	5,424674E+21
-14	2,704314E+21	2,704447E+21	7,963603E+18	7,964570E+18	5,408760E+21	1,592817E+19	5,424689E+21
-13	2,704498E+21	2,704297E+21	7,959014E+18	7,961024E+18	5,408794E+21	1,592004E+19	5,424714E+21
-12	2,704408E+21	2,704512E+21	7,962227E+18	7,959014E+18	5,408920E+21	1,592124E+19	5,424841E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
-11	2,704470E+21	2,704555E+21	7,962087E+18	7,965077E+18	5,409024E+21	1,592716E+19	5,424952E+21
-10	2,704653E+21	2,704519E+21	7,958830E+18	7,957842E+18	5,409173E+21	1,591667E+19	5,425090E+21
-9	2,704570E+21	2,704766E+21	7,962907E+18	7,961002E+18	5,409336E+21	1,592391E+19	5,425260E+21
-8	2,704741E+21	2,704673E+21	7,960458E+18	7,961974E+18	5,409414E+21	1,592243E+19	5,425336E+21
-7	2,704802E+21	2,704730E+21	7,958288E+18	7,957071E+18	5,409532E+21	1,591536E+19	5,425447E+21
-6	2,704684E+21	2,704887E+21	7,963684E+18	7,963557E+18	5,409571E+21	1,592724E+19	5,425498E+21
-5	2,704835E+21	2,704687E+21	7,958024E+18	7,960246E+18	5,409522E+21	1,591827E+19	5,425440E+21
-4	2,704739E+21	2,704751E+21	7,959368E+18	7,958814E+18	5,409491E+21	1,591818E+19	5,425409E+21
-3	2,704644E+21	2,704724E+21	7,963423E+18	7,963594E+18	5,409368E+21	1,592702E+19	5,425295E+21
-2	2,704725E+21	2,704518E+21	7,957896E+18	7,958825E+18	5,409243E+21	1,591672E+19	5,425160E+21
-1	2,704465E+21	2,704610E+21	7,964289E+18	7,960387E+18	5,409075E+21	1,592468E+19	5,425000E+21
1	2,704400E+21	2,704407E+21	7,961911E+18	7,964038E+18	5,408808E+21	1,592595E+19	5,424734E+21
2	2,704373E+21	2,704245E+21	7,959282E+18	7,960256E+18	5,408618E+21	1,591954E+19	5,424538E+21
3	2,704128E+21	2,704321E+21	7,965219E+18	7,963569E+18	5,408449E+21	1,592879E+19	5,424378E+21
4	2,704236E+21	2,704077E+21	7,959705E+18	7,964248E+18	5,408313E+21	1,592395E+19	5,424237E+21
5	2,704183E+21	2,704112E+21	7,961735E+18	7,958800E+18	5,408296E+21	1,592054E+19	5,424216E+21
6	2,704068E+21	2,704227E+21	7,964969E+18	7,964954E+18	5,408296E+21	1,592992E+19	5,424226E+21
7	2,704250E+21	2,704103E+21	7,960401E+18	7,961431E+18	5,408353E+21	1,592183E+19	5,424275E+21
8	2,704159E+21	2,704306E+21	7,963236E+18	7,959763E+18	5,408465E+21	1,592300E+19	5,424387E+21
9	2,704241E+21	2,704305E+21	7,962874E+18	7,965766E+18	5,408547E+21	1,592864E+19	5,424475E+21
10	2,704444E+21	2,704277E+21	7,958937E+18	7,958509E+18	5,408721E+21	1,591745E+19	5,424638E+21
11	2,704347E+21	2,704540E+21	7,963368E+18	7,961864E+18	5,408887E+21	1,592523E+19	5,424812E+21
12	2,704517E+21	2,704455E+21	7,961040E+18	7,963156E+18	5,408972E+21	1,592420E+19	5,424896E+21
13	2,704567E+21	2,704498E+21	7,958396E+18	7,957675E+18	5,409065E+21	1,591607E+19	5,424981E+21
14	2,704429E+21	2,704636E+21	7,964609E+18	7,964267E+18	5,409065E+21	1,592888E+19	5,424994E+21
15	2,704591E+21	2,704443E+21	7,959104E+18	7,960645E+18	5,409035E+21	1,591975E+19	5,424954E+21
16	2,704484E+21	2,704501E+21	7,960849E+18	7,959253E+18	5,408985E+21	1,592010E+19	5,424905E+21
17	2,704376E+21	2,704441E+21	7,964606E+18	7,964287E+18	5,408817E+21	1,592889E+19	5,424746E+21
18	2,704436E+21	2,704236E+21	7,958326E+18	7,960312E+18	5,408672E+21	1,591864E+19	5,424590E+21
19	2,704157E+21	2,704319E+21	7,964725E+18	7,961982E+18	5,408475E+21	1,592671E+19	5,424402E+21
20	2,704121E+21	2,704107E+21	7,962255E+18	7,965626E+18	5,408228E+21	1,592788E+19	5,424156E+21
21	2,704117E+21	2,703949E+21	7,959598E+18	7,960430E+18	5,408066E+21	1,592003E+19	5,423986E+21
22	2,703866E+21	2,704044E+21	7,966473E+18	7,963622E+18	5,407911E+21	1,593010E+19	5,423841E+21
23	2,703977E+21	2,703852E+21	7,961406E+18	7,964265E+18	5,407829E+21	1,592567E+19	5,423754E+21
24	2,703913E+21	2,703902E+21	7,963181E+18	7,959342E+18	5,407815E+21	1,592252E+19	5,423738E+21
25	2,703806E+21	2,703978E+21	7,965736E+18	7,966076E+18	5,407784E+21	1,593181E+19	5,423716E+21
26	2,704014E+21	2,703860E+21	7,960361E+18	7,962683E+18	5,407873E+21	1,592304E+19	5,423796E+21
27	2,703942E+21	2,704069E+21	7,963191E+18	7,960887E+18	5,408011E+21	1,592408E+19	5,423935E+21
28	2,704054E+21	2,704080E+21	7,963360E+18	7,966650E+18	5,408134E+21	1,593001E+19	5,424064E+21
29	2,704250E+21	2,704067E+21	7,959206E+18	7,958593E+18	5,408317E+21	1,591780E+19	5,424235E+21
30	2,704109E+21	2,704325E+21	7,964493E+18	7,962537E+18	5,408434E+21	1,592703E+19	5,424361E+21
31	2,704264E+21	2,704247E+21	7,962252E+18	7,963783E+18	5,408511E+21	1,592604E+19	5,424437E+21
32	2,704319E+21	2,704258E+21	7,959422E+18	7,958528E+18	5,408577E+21	1,591795E+19	5,424495E+21
33	2,704187E+21	2,704347E+21	7,965486E+18	7,964799E+18	5,408534E+21	1,593029E+19	5,424464E+21
34	2,704352E+21	2,704171E+21	7,959503E+18	7,961432E+18	5,408523E+21	1,592093E+19	5,424444E+21
35	2,704219E+21	2,704239E+21	7,961637E+18	7,960253E+18	5,408459E+21	1,592189E+19	5,424380E+21
36	2,704101E+21	2,704179E+21	7,965272E+18	7,965590E+18	5,408280E+21	1,593086E+19	5,424211E+21
37	2,704150E+21	2,703960E+21	7,958603E+18	7,961119E+18	5,408110E+21	1,591972E+19	5,424030E+21
38	2,703855E+21	2,704026E+21	7,965728E+18	7,962669E+18	5,407881E+21	1,592840E+19	5,423809E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
39	2,703834E+21	2,703837E+21	7,963531E+18	7,965898E+18	5,407671E+21	1,592943E+19	5,423600E+21
40	2,703841E+21	2,703680E+21	7,961252E+18	7,960729E+18	5,407521E+21	1,592198E+19	5,423443E+21
41	2,703593E+21	2,703760E+21	7,967604E+18	7,964256E+18	5,407353E+21	1,593186E+19	5,423285E+21
42	2,703707E+21	2,703594E+21	7,961872E+18	7,965736E+18	5,407301E+21	1,592761E+19	5,423229E+21
43	2,703652E+21	2,703648E+21	7,963327E+18	7,961005E+18	5,407300E+21	1,592433E+19	5,423224E+21
44	2,703592E+21	2,703728E+21	7,965720E+18	7,967567E+18	5,407320E+21	1,593329E+19	5,423254E+21
45	2,703820E+21	2,703626E+21	7,960415E+18	7,962669E+18	5,407445E+21	1,592308E+19	5,423369E+21
46	2,703733E+21	2,703853E+21	7,964154E+18	7,960941E+18	5,407586E+21	1,592509E+19	5,423511E+21
47	2,703825E+21	2,703901E+21	7,964926E+18	7,966466E+18	5,407726E+21	1,593139E+19	5,423657E+21
48	2,703997E+21	2,703874E+21	7,960555E+18	7,959136E+18	5,407871E+21	1,591969E+19	5,423791E+21
49	2,703858E+21	2,704073E+21	7,965172E+18	7,963583E+18	5,407931E+21	1,592875E+19	5,423860E+21
50	2,704032E+21	2,703988E+21	7,962338E+18	7,964977E+18	5,408020E+21	1,592731E+19	5,423947E+21
51	2,704095E+21	2,703997E+21	7,959689E+18	7,959639E+18	5,408093E+21	1,591933E+19	5,424012E+21
52	2,703981E+21	2,704091E+21	7,966058E+18	7,965575E+18	5,408072E+21	1,593163E+19	5,424004E+21
53	2,704115E+21	2,703929E+21	7,959990E+18	7,961718E+18	5,408044E+21	1,592171E+19	5,423966E+21
54	2,703928E+21	2,703988E+21	7,962939E+18	7,961167E+18	5,407915E+21	1,592411E+19	5,423840E+21
55	2,703788E+21	2,703926E+21	7,966585E+18	7,966240E+18	5,407714E+21	1,593283E+19	5,423647E+21
56	2,703844E+21	2,703675E+21	7,959890E+18	7,962053E+18	5,407519E+21	1,592194E+19	5,423441E+21
57	2,703566E+21	2,703693E+21	7,966679E+18	7,963197E+18	5,407259E+21	1,592988E+19	5,423189E+21
58	2,703561E+21	2,703532E+21	7,964019E+18	7,966812E+18	5,407093E+21	1,593083E+19	5,423024E+21
59	2,703565E+21	2,703403E+21	7,961928E+18	7,961924E+18	5,406968E+21	1,592385E+19	5,422892E+21
60	2,703341E+21	2,703500E+21	7,967787E+18	7,965741E+18	5,406841E+21	1,593353E+19	5,422775E+21
61	2,703470E+21	2,703352E+21	7,961918E+18	7,966555E+18	5,406822E+21	1,592847E+19	5,422750E+21
62	2,703417E+21	2,703412E+21	7,963989E+18	7,961638E+18	5,406829E+21	1,592563E+19	5,422755E+21
63	2,703366E+21	2,703528E+21	7,966946E+18	7,967379E+18	5,406894E+21	1,593433E+19	5,422828E+21
64	2,703597E+21	2,703425E+21	7,961922E+18	7,962621E+18	5,407022E+21	1,592454E+19	5,422947E+21
65	2,703492E+21	2,703615E+21	7,965195E+18	7,961353E+18	5,407107E+21	1,592655E+19	5,423033E+21
66	2,703575E+21	2,703671E+21	7,965443E+18	7,967622E+18	5,407247E+21	1,593306E+19	5,423180E+21
67	2,703754E+21	2,703628E+21	7,960841E+18	7,960632E+18	5,407382E+21	1,592147E+19	5,423304E+21
68	2,703659E+21	2,703815E+21	7,965170E+18	7,964873E+18	5,407474E+21	1,593004E+19	5,423404E+21
69	2,703838E+21	2,703746E+21	7,962528E+18	7,965013E+18	5,407584E+21	1,592754E+19	5,423511E+21
70	2,703868E+21	2,703766E+21	7,960733E+18	7,960008E+18	5,407633E+21	1,592074E+19	5,423554E+21
71	2,703713E+21	2,703887E+21	7,967570E+18	7,965539E+18	5,407600E+21	1,593311E+19	5,423533E+21
72	2,703815E+21	2,703694E+21	7,961334E+18	7,962635E+18	5,407509E+21	1,592397E+19	5,423433E+21
73	2,703617E+21	2,703680E+21	7,963865E+18	7,962303E+18	5,407296E+21	1,592617E+19	5,423222E+21
74	2,703492E+21	2,703611E+21	7,966815E+18	7,967502E+18	5,407103E+21	1,593432E+19	5,423037E+21
75	2,703564E+21	2,703358E+21	7,960461E+18	7,963365E+18	5,406921E+21	1,592383E+19	5,422845E+21
76	2,703326E+21	2,703387E+21	7,967025E+18	7,964202E+18	5,406713E+21	1,593123E+19	5,422644E+21
77	2,703311E+21	2,703264E+21	7,964404E+18	7,967361E+18	5,406575E+21	1,593177E+19	5,422507E+21
78	2,703290E+21	2,703156E+21	7,962999E+18	7,962920E+18	5,406446E+21	1,592592E+19	5,422372E+21
79	2,703074E+21	2,703277E+21	7,968877E+18	7,966077E+18	5,406351E+21	1,593495E+19	5,422286E+21
80	2,703216E+21	2,703121E+21	7,963299E+18	7,966897E+18	5,406337E+21	1,593020E+19	5,422268E+21
81	2,703171E+21	2,703153E+21	7,965017E+18	7,961714E+18	5,406324E+21	1,592673E+19	5,422251E+21
82	2,703125E+21	2,703291E+21	7,967647E+18	7,967788E+18	5,406417E+21	1,593543E+19	5,422352E+21
83	2,703344E+21	2,703200E+21	7,962635E+18	7,963618E+18	5,406543E+21	1,592625E+19	5,422470E+21
84	2,703272E+21	2,703377E+21	7,965115E+18	7,962836E+18	5,406649E+21	1,592795E+19	5,422577E+21
85	2,703370E+21	2,703439E+21	7,965365E+18	7,968370E+18	5,406809E+21	1,593373E+19	5,422743E+21
86	2,703548E+21	2,703403E+21	7,961332E+18	7,961452E+18	5,406952E+21	1,592278E+19	5,422875E+21
87	2,703454E+21	2,703616E+21	7,966296E+18	7,964754E+18	5,407070E+21	1,593105E+19	5,423001E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
88	2,703614E+21	2,703541E+21	7,964017E+18	7,965115E+18	5,407155E+21	1,592913E+19	5,423084E+21
89	2,703597E+21	2,703514E+21	7,961841E+18	7,960819E+18	5,407110E+21	1,592266E+19	5,423033E+21
90	2,703416E+21	2,703618E+21	7,968145E+18	7,966813E+18	5,407034E+21	1,593496E+19	5,422969E+21
91	2,703515E+21	2,703393E+21	7,961777E+18	7,964425E+18	5,406908E+21	1,592620E+19	5,422834E+21
92	2,703361E+21	2,703352E+21	7,964040E+18	7,963570E+18	5,406713E+21	1,592761E+19	5,422641E+21
93	2,703247E+21	2,703308E+21	7,967124E+18	7,967661E+18	5,406555E+21	1,593479E+19	5,422490E+21
94	2,703295E+21	2,703084E+21	7,961733E+18	7,963852E+18	5,406379E+21	1,592558E+19	5,422305E+21
95	2,703037E+21	2,703158E+21	7,968468E+18	7,964188E+18	5,406195E+21	1,593266E+19	5,422128E+21
96	2,703019E+21	2,703031E+21	7,965773E+18	7,968148E+18	5,406050E+21	1,593392E+19	5,421984E+21
97	2,702997E+21	2,702877E+21	7,964039E+18	7,963738E+18	5,405874E+21	1,592778E+19	5,421802E+21
98	2,702806E+21	2,703010E+21	7,969268E+18	7,966795E+18	5,405816E+21	1,593606E+19	5,421752E+21
99	2,702964E+21	2,702859E+21	7,964123E+18	7,967796E+18	5,405823E+21	1,593192E+19	5,421755E+21
100	2,702954E+21	2,702894E+21	7,965277E+18	7,962581E+18	5,405848E+21	1,592786E+19	5,421776E+21
101	2,702901E+21	2,703063E+21	7,967831E+18	7,968477E+18	5,405964E+21	1,593631E+19	5,421900E+21
102	2,703105E+21	2,702981E+21	7,963262E+18	7,964899E+18	5,406086E+21	1,592816E+19	5,422014E+21
103	2,703058E+21	2,703175E+21	7,965728E+18	7,963416E+18	5,406232E+21	1,592914E+19	5,422162E+21
104	2,703173E+21	2,703230E+21	7,966449E+18	7,968645E+18	5,406404E+21	1,593509E+19	5,422339E+21
105	2,703334E+21	2,703166E+21	7,962307E+18	7,961607E+18	5,406500E+21	1,592391E+19	5,422424E+21
106	2,703221E+21	2,703390E+21	7,967114E+18	7,965079E+18	5,406610E+21	1,593219E+19	5,422542E+21
107	2,703338E+21	2,703307E+21	7,964918E+18	7,966232E+18	5,406644E+21	1,593115E+19	5,422575E+21
108	2,703335E+21	2,703240E+21	7,961962E+18	7,962500E+18	5,406575E+21	1,592446E+19	5,422500E+21
109	2,703156E+21	2,703332E+21	7,968312E+18	7,967577E+18	5,406488E+21	1,593589E+19	5,422424E+21
110	2,703246E+21	2,703110E+21	7,962538E+18	7,965399E+18	5,406356E+21	1,592794E+19	5,422284E+21
111	2,703105E+21	2,703090E+21	7,965345E+18	7,963433E+18	5,406195E+21	1,592878E+19	5,422124E+21
112	2,702977E+21	2,703051E+21	7,968700E+18	7,967729E+18	5,406028E+21	1,593643E+19	5,421965E+21
113	2,702985E+21	2,702807E+21	7,963148E+18	7,964657E+18	5,405792E+21	1,592781E+19	5,421720E+21
114	2,702729E+21	2,702880E+21	7,969190E+18	7,965317E+18	5,405609E+21	1,593451E+19	5,421543E+21
115	2,702721E+21	2,702744E+21	7,966503E+18	7,969796E+18	5,405465E+21	1,593630E+19	5,421401E+21
116	2,702754E+21	2,702581E+21	7,964229E+18	7,964908E+18	5,405334E+21	1,592914E+19	5,421264E+21
117	2,702578E+21	2,702742E+21	7,969385E+18	7,967052E+18	5,405320E+21	1,593644E+19	5,421256E+21
118	2,702718E+21	2,702628E+21	7,964983E+18	7,968499E+18	5,405346E+21	1,593348E+19	5,421280E+21
119	2,702711E+21	2,702697E+21	7,966143E+18	7,962834E+18	5,405408E+21	1,592898E+19	5,421336E+21
120	2,702672E+21	2,702860E+21	7,968826E+18	7,969188E+18	5,405532E+21	1,593801E+19	5,421470E+21
121	2,702874E+21	2,702748E+21	7,964132E+18	7,965606E+18	5,405622E+21	1,592974E+19	5,421552E+21
122	2,702851E+21	2,702949E+21	7,966171E+18	7,963972E+18	5,405800E+21	1,593014E+19	5,421731E+21
123	2,702963E+21	2,703006E+21	7,967450E+18	7,969321E+18	5,405969E+21	1,593677E+19	5,421906E+21
124	2,703127E+21	2,702929E+21	7,962689E+18	7,962481E+18	5,406056E+21	1,592517E+19	5,421981E+21
125	2,702979E+21	2,703158E+21	7,967526E+18	7,965733E+18	5,406137E+21	1,593326E+19	5,422070E+21
126	2,703061E+21	2,703060E+21	7,965679E+18	7,967488E+18	5,406121E+21	1,593317E+19	5,422054E+21
127	2,703066E+21	2,702986E+21	7,962950E+18	7,963043E+18	5,406053E+21	1,592599E+19	5,421979E+21
128	2,702902E+21	2,703063E+21	7,969622E+18	7,967720E+18	5,405964E+21	1,593734E+19	5,421901E+21
129	2,702962E+21	2,702815E+21	7,963894E+18	7,965710E+18	5,405777E+21	1,592960E+19	5,421707E+21
130	2,702813E+21	2,702810E+21	7,966349E+18	7,963938E+18	5,405623E+21	1,593029E+19	5,421553E+21
131	2,702664E+21	2,702772E+21	7,969589E+18	7,969170E+18	5,405436E+21	1,593876E+19	5,421375E+21
132	2,702701E+21	2,702505E+21	7,963325E+18	7,966509E+18	5,405206E+21	1,592983E+19	5,421136E+21
133	2,702464E+21	2,702589E+21	7,969176E+18	7,966308E+18	5,405054E+21	1,593548E+19	5,420989E+21
134	2,702461E+21	2,702474E+21	7,967127E+18	7,970897E+18	5,404935E+21	1,593802E+19	5,420873E+21
135	2,702515E+21	2,702346E+21	7,965365E+18	7,964893E+18	5,404860E+21	1,593026E+19	5,420791E+21
136	2,702340E+21	2,702519E+21	7,970591E+18	7,967193E+18	5,404859E+21	1,593778E+19	5,420797E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
137	2,702444E+21	2,702392E+21	7,966218E+18	7,969233E+18	5,404836E+21	1,593545E+19	5,420772E+21
138	2,702462E+21	2,702460E+21	7,966664E+18	7,963744E+18	5,404922E+21	1,593041E+19	5,420852E+21
139	2,702445E+21	2,702620E+21	7,969586E+18	7,970409E+18	5,405066E+21	1,594000E+19	5,421006E+21
140	2,702691E+21	2,702507E+21	7,964438E+18	7,966354E+18	5,405198E+21	1,593079E+19	5,421129E+21
141	2,702666E+21	2,702729E+21	7,966491E+18	7,964080E+18	5,405395E+21	1,593057E+19	5,421325E+21
142	2,702729E+21	2,702808E+21	7,968374E+18	7,969899E+18	5,405537E+21	1,593827E+19	5,421475E+21
143	2,702876E+21	2,702735E+21	7,963502E+18	7,963019E+18	5,405611E+21	1,592652E+19	5,421538E+21
144	2,702723E+21	2,702924E+21	7,968529E+18	7,966398E+18	5,405647E+21	1,593493E+19	5,421582E+21
145	2,702778E+21	2,702786E+21	7,966628E+18	7,968281E+18	5,405564E+21	1,593491E+19	5,421499E+21
146	2,702805E+21	2,702701E+21	7,963748E+18	7,963677E+18	5,405506E+21	1,592743E+19	5,421433E+21
147	2,702635E+21	2,702772E+21	7,970756E+18	7,968582E+18	5,405408E+21	1,593934E+19	5,421347E+21
148	2,702699E+21	2,702522E+21	7,964337E+18	7,967075E+18	5,405221E+21	1,593141E+19	5,421153E+21
149	2,702533E+21	2,702525E+21	7,966639E+18	7,965177E+18	5,405058E+21	1,593182E+19	5,420990E+21
150	2,702370E+21	2,702493E+21	7,970035E+18	7,970820E+18	5,404863E+21	1,594086E+19	5,420804E+21
151	2,702432E+21	2,702241E+21	7,964210E+18	7,967243E+18	5,404673E+21	1,593145E+19	5,420604E+21
152	2,702216E+21	2,702326E+21	7,970380E+18	7,966250E+18	5,404542E+21	1,593663E+19	5,420479E+21
153	2,702177E+21	2,702208E+21	7,968618E+18	7,970942E+18	5,404385E+21	1,593956E+19	5,420325E+21
154	2,702230E+21	2,702098E+21	7,966500E+18	7,965134E+18	5,404328E+21	1,593163E+19	5,420260E+21
155	2,702060E+21	2,702271E+21	7,971469E+18	7,968479E+18	5,404331E+21	1,593995E+19	5,420271E+21
156	2,702208E+21	2,702130E+21	7,966514E+18	7,970666E+18	5,404338E+21	1,593718E+19	5,420275E+21
157	2,702260E+21	2,702219E+21	7,966587E+18	7,964568E+18	5,404479E+21	1,593116E+19	5,420410E+21
158	2,702252E+21	2,702403E+21	7,970057E+18	7,971223E+18	5,404655E+21	1,594128E+19	5,420596E+21
159	2,702498E+21	2,702320E+21	7,965425E+18	7,966255E+18	5,404818E+21	1,593168E+19	5,420750E+21
160	2,702452E+21	2,702540E+21	7,967495E+18	7,964264E+18	5,404993E+21	1,593176E+19	5,420924E+21
161	2,702449E+21	2,702583E+21	7,969527E+18	7,970597E+18	5,405033E+21	1,594012E+19	5,420973E+21
162	2,702603E+21	2,702481E+21	7,964096E+18	7,964075E+18	5,405084E+21	1,592817E+19	5,421012E+21
163	2,702467E+21	2,702641E+21	7,969354E+18	7,967704E+18	5,405107E+21	1,593706E+19	5,421045E+21
164	2,702547E+21	2,702486E+21	7,966953E+18	7,969274E+18	5,405033E+21	1,593623E+19	5,420969E+21
165	2,702570E+21	2,702420E+21	7,964134E+18	7,964284E+18	5,404990E+21	1,592842E+19	5,420918E+21
166	2,702363E+21	2,702514E+21	7,971366E+18	7,969574E+18	5,404877E+21	1,594094E+19	5,420817E+21
167	2,702419E+21	2,702280E+21	7,965177E+18	7,967994E+18	5,404699E+21	1,593317E+19	5,420632E+21
168	2,702259E+21	2,702264E+21	7,967716E+18	7,965840E+18	5,404523E+21	1,593356E+19	5,420456E+21
169	2,702065E+21	2,702211E+21	7,971227E+18	7,971369E+18	5,404276E+21	1,594260E+19	5,420219E+21
170	2,702150E+21	2,701959E+21	7,965437E+18	7,967628E+18	5,404108E+21	1,593306E+19	5,420041E+21
171	2,701935E+21	2,702042E+21	7,971736E+18	7,966876E+18	5,403977E+21	1,593861E+19	5,419916E+21
172	2,701904E+21	2,701928E+21	7,969196E+18	7,972088E+18	5,403832E+21	1,594128E+19	5,419774E+21
173	2,701968E+21	2,701830E+21	7,966720E+18	7,966316E+18	5,403798E+21	1,593304E+19	5,419731E+21
174	2,701815E+21	2,702018E+21	7,971560E+18	7,970040E+18	5,403833E+21	1,594160E+19	5,419775E+21
175	2,702009E+21	2,701914E+21	7,967164E+18	7,971235E+18	5,403924E+21	1,593840E+19	5,419862E+21
176	2,702083E+21	2,702013E+21	7,967369E+18	7,964455E+18	5,404096E+21	1,593182E+19	5,420028E+21
177	2,702021E+21	2,702200E+21	7,971261E+18	7,971137E+18	5,404222E+21	1,594240E+19	5,420164E+21
178	2,702249E+21	2,702120E+21	7,966345E+18	7,966499E+18	5,404369E+21	1,593284E+19	5,420302E+21
179	2,702189E+21	2,702308E+21	7,968278E+18	7,965612E+18	5,404497E+21	1,593389E+19	5,420431E+21
180	2,702204E+21	2,702316E+21	7,969718E+18	7,971958E+18	5,404520E+21	1,594168E+19	5,420461E+21
181	2,702378E+21	2,702209E+21	7,964106E+18	7,965184E+18	5,404587E+21	1,592929E+19	5,420516E+21
182	2,702246E+21	2,702375E+21	7,969760E+18	7,968661E+18	5,404621E+21	1,593842E+19	5,420559E+21
183	2,702325E+21	2,702248E+21	7,967917E+18	7,969551E+18	5,404573E+21	1,593747E+19	5,420511E+21
184	2,702320E+21	2,702183E+21	7,965263E+18	7,964660E+18	5,404503E+21	1,592992E+19	5,420433E+21
185	2,702046E+21	2,702250E+21	7,972596E+18	7,970238E+18	5,404296E+21	1,594283E+19	5,420239E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
186	2,702107E+21	2,701999E+21	7,966259E+18	7,968929E+18	5,404106E+21	1,593519E+19	5,420041E+21
187	2,701963E+21	2,701962E+21	7,969053E+18	7,966931E+18	5,403925E+21	1,593598E+19	5,419861E+21
188	2,701786E+21	2,701894E+21	7,971922E+18	7,972074E+18	5,403681E+21	1,594400E+19	5,419625E+21
189	2,701870E+21	2,701664E+21	7,966002E+18	7,968391E+18	5,403534E+21	1,593439E+19	5,419468E+21
190	2,701651E+21	2,701767E+21	7,971918E+18	7,968097E+18	5,403417E+21	1,594002E+19	5,419357E+21
191	2,701644E+21	2,701679E+21	7,969657E+18	7,973133E+18	5,403324E+21	1,594279E+19	5,419267E+21
192	2,701744E+21	2,701595E+21	7,967245E+18	7,966882E+18	5,403339E+21	1,593413E+19	5,419273E+21
193	2,701582E+21	2,701788E+21	7,972363E+18	7,970380E+18	5,403370E+21	1,594274E+19	5,419313E+21
194	2,701797E+21	2,701704E+21	7,968350E+18	7,971180E+18	5,403500E+21	1,593953E+19	5,419440E+21
195	2,701863E+21	2,701804E+21	7,968511E+18	7,965054E+18	5,403666E+21	1,593356E+19	5,419600E+21
196	2,701782E+21	2,701973E+21	7,971723E+18	7,972029E+18	5,403755E+21	1,594375E+19	5,419699E+21
197	2,702004E+21	2,701880E+21	7,966403E+18	7,967790E+18	5,403885E+21	1,593419E+19	5,419819E+21
198	2,701957E+21	2,702051E+21	7,968237E+18	7,967157E+18	5,404008E+21	1,593539E+19	5,419944E+21
199	2,702002E+21	2,702077E+21	7,970423E+18	7,972404E+18	5,404079E+21	1,594283E+19	5,420022E+21
200	2,702179E+21	2,701976E+21	7,965093E+18	7,965075E+18	5,404155E+21	1,593017E+19	5,420085E+21
201	2,701981E+21	2,702140E+21	7,971093E+18	7,968631E+18	5,404120E+21	1,593972E+19	5,420060E+21
202	2,702036E+21	2,702012E+21	7,969143E+18	7,969973E+18	5,404048E+21	1,593912E+19	5,419987E+21
203	2,702017E+21	2,701911E+21	7,966459E+18	7,966129E+18	5,403928E+21	1,593259E+19	5,419860E+21
204	2,701752E+21	2,701944E+21	7,973011E+18	7,971419E+18	5,403696E+21	1,594443E+19	5,419641E+21
205	2,701831E+21	2,701688E+21	7,966578E+18	7,970241E+18	5,403518E+21	1,593682E+19	5,419455E+21
206	2,701690E+21	2,701654E+21	7,969578E+18	7,967953E+18	5,403344E+21	1,593753E+19	5,419282E+21
207	2,701523E+21	2,701624E+21	7,972647E+18	7,972618E+18	5,403148E+21	1,594527E+19	5,419093E+21
208	2,701601E+21	2,701405E+21	7,966878E+18	7,968976E+18	5,403005E+21	1,593585E+19	5,418941E+21
209	2,701353E+21	2,701501E+21	7,972687E+18	7,968847E+18	5,402855E+21	1,594153E+19	5,418796E+21
210	2,701388E+21	2,701428E+21	7,970676E+18	7,973776E+18	5,402816E+21	1,594445E+19	5,418760E+21
211	2,701516E+21	2,701351E+21	7,968485E+18	7,967566E+18	5,402867E+21	1,593605E+19	5,418803E+21
212	2,701367E+21	2,701547E+21	7,972943E+18	7,970635E+18	5,402914E+21	1,594358E+19	5,418857E+21
213	2,701568E+21	2,701484E+21	7,968898E+18	7,971753E+18	5,403052E+21	1,594065E+19	5,418993E+21
214	2,701617E+21	2,701585E+21	7,968554E+18	7,966249E+18	5,403203E+21	1,593480E+19	5,419138E+21
215	2,701554E+21	2,701757E+21	7,972134E+18	7,972921E+18	5,403311E+21	1,594505E+19	5,419256E+21
216	2,701792E+21	2,701657E+21	7,966894E+18	7,968272E+18	5,403449E+21	1,593517E+19	5,419385E+21
217	2,701725E+21	2,701813E+21	7,969082E+18	7,967517E+18	5,403539E+21	1,593660E+19	5,419475E+21
218	2,701777E+21	2,701845E+21	7,971852E+18	7,972271E+18	5,403623E+21	1,594412E+19	5,419567E+21
219	2,701932E+21	2,701742E+21	7,966480E+18	7,965931E+18	5,403673E+21	1,593241E+19	5,419606E+21
220	2,701704E+21	2,701871E+21	7,971691E+18	7,969608E+18	5,403575E+21	1,594130E+19	5,419516E+21
221	2,701746E+21	2,701726E+21	7,969369E+18	7,971603E+18	5,403472E+21	1,594097E+19	5,419413E+21
222	2,701739E+21	2,701607E+21	7,966525E+18	7,967940E+18	5,403346E+21	1,593446E+19	5,419281E+21
223	2,701500E+21	2,701652E+21	7,973640E+18	7,972018E+18	5,403152E+21	1,594566E+19	5,419098E+21
224	2,701575E+21	2,701411E+21	7,967511E+18	7,970362E+18	5,402986E+21	1,593787E+19	5,418923E+21
225	2,701382E+21	2,701380E+21	7,970835E+18	7,968034E+18	5,402762E+21	1,593887E+19	5,418701E+21
226	2,701214E+21	2,701362E+21	7,973893E+18	7,972999E+18	5,402576E+21	1,594689E+19	5,418523E+21
227	2,701307E+21	2,701138E+21	7,968178E+18	7,970277E+18	5,402444E+21	1,593846E+19	5,418383E+21
228	2,701093E+21	2,701221E+21	7,973021E+18	7,969783E+18	5,402314E+21	1,594280E+19	5,418256E+21
229	2,701161E+21	2,701169E+21	7,971094E+18	7,974884E+18	5,402330E+21	1,594598E+19	5,418276E+21
230	2,701300E+21	2,701112E+21	7,968890E+18	7,968449E+18	5,402413E+21	1,593734E+19	5,418350E+21
231	2,701156E+21	2,701341E+21	7,973511E+18	7,971069E+18	5,402498E+21	1,594458E+19	5,418442E+21
232	2,701337E+21	2,701282E+21	7,969530E+18	7,972183E+18	5,402619E+21	1,594171E+19	5,418561E+21
233	2,701352E+21	2,701359E+21	7,969163E+18	7,967002E+18	5,402711E+21	1,593616E+19	5,418647E+21
234	2,701324E+21	2,701527E+21	7,973255E+18	7,973357E+18	5,402850E+21	1,594661E+19	5,418797E+21

1	14	15	16	17	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							
235	2,701576E+21	2,701422E+21	7,968241E+18	7,968960E+18	5,402998E+21	1,593720E+19	5,418935E+21
236	2,701506E+21	2,701562E+21	7,969702E+18	7,967914E+18	5,403068E+21	1,593762E+19	5,419005E+21
237	2,701538E+21	2,701601E+21	7,972310E+18	7,973202E+18	5,403139E+21	1,594551E+19	5,419085E+21
238	2,701664E+21	2,701486E+21	7,966505E+18	7,967541E+18	5,403150E+21	1,593405E+19	5,419084E+21
239	2,701450E+21	2,701613E+21	7,972096E+18	7,970681E+18	5,403062E+21	1,594278E+19	5,419005E+21
240	2,701492E+21	2,701461E+21	7,969938E+18	7,972170E+18	5,402952E+21	1,594211E+19	5,418895E+21
241	2,701452E+21	2,701327E+21	7,967750E+18	7,968322E+18	5,402779E+21	1,593607E+19	5,418715E+21
242	2,701218E+21	2,701378E+21	7,975384E+18	7,971834E+18	5,402596E+21	1,594722E+19	5,418543E+21
243	2,701268E+21	2,701137E+21	7,969184E+18	7,971285E+18	5,402405E+21	1,594047E+19	5,418346E+21
244	2,701066E+21	2,701076E+21	7,971480E+18	7,969020E+18	5,402142E+21	1,594050E+19	5,418082E+21
245	2,700923E+21	2,701056E+21	7,974081E+18	7,974685E+18	5,401980E+21	1,594877E+19	5,417928E+21
246	2,701049E+21	2,700849E+21	7,968427E+18	7,971853E+18	5,401898E+21	1,594028E+19	5,417839E+21
247	2,700882E+21	2,700969E+21	7,973546E+18	7,970300E+18	5,401851E+21	1,594385E+19	5,417795E+21
248	2,700946E+21	2,700950E+21	7,971954E+18	7,974921E+18	5,401897E+21	1,594688E+19	5,417843E+21
249	2,701033E+21	2,700903E+21	7,969835E+18	7,968672E+18	5,401936E+21	1,593851E+19	5,417875E+21
250	2,700893E+21	2,701130E+21	7,974590E+18	7,971413E+18	5,402023E+21	1,594600E+19	5,417969E+21
251	2,701083E+21	2,701060E+21	7,970646E+18	7,973342E+18	5,402143E+21	1,594399E+19	5,418087E+21
252	2,701126E+21	2,701102E+21	7,969426E+18	7,967809E+18	5,402228E+21	1,593724E+19	5,418165E+21
253	2,701124E+21	2,701274E+21	7,973718E+18	7,974341E+18	5,402398E+21	1,594806E+19	5,418346E+21
254	2,701375E+21	2,701187E+21	7,968615E+18	7,969983E+18	5,402562E+21	1,593860E+19	5,418500E+21
255	2,701300E+21	2,701342E+21	7,970210E+18	7,968666E+18	5,402642E+21	1,593888E+19	5,418580E+21
256	2,701296E+21	2,701377E+21	7,972853E+18	7,973759E+18	5,402674E+21	1,594661E+19	5,418620E+21
257	2,701379E+21	2,701233E+21	7,967252E+18	7,968453E+18	5,402612E+21	1,593571E+19	5,418548E+21
258	2,701179E+21	2,701348E+21	7,973631E+18	7,970835E+18	5,402527E+21	1,594447E+19	5,418472E+21
259	2,701212E+21	2,701191E+21	7,971651E+18	7,972751E+18	5,402403E+21	1,594440E+19	5,418347E+21
260	2,701153E+21	2,701026E+21	7,968834E+18	7,968772E+18	5,402179E+21	1,593761E+19	5,418117E+21
261	2,700912E+21	2,701075E+21	7,975949E+18	7,973026E+18	5,401987E+21	1,594898E+19	5,417936E+21
262	2,700961E+21	2,700833E+21	7,969340E+18	7,973210E+18	5,401794E+21	1,594255E+19	5,417736E+21
263	2,700807E+21	2,700785E+21	7,971675E+18	7,970357E+18	5,401591E+21	1,594203E+19	5,417534E+21
264	2,700688E+21	2,700791E+21	7,974378E+18	7,975400E+18	5,401479E+21	1,594978E+19	5,417429E+21
265	2,700796E+21	2,700602E+21	7,969540E+18	7,972223E+18	5,401398E+21	1,594176E+19	5,417340E+21
266	2,700642E+21	2,700750E+21	7,975082E+18	7,970083E+18	5,401392E+21	1,594516E+19	5,417337E+21
267	2,700679E+21	2,700739E+21	7,973544E+18	7,975635E+18	5,401418E+21	1,594918E+19	5,417367E+21
268	2,700753E+21	2,700651E+21	7,970362E+18	7,969516E+18	5,401404E+21	1,593988E+19	5,417344E+21
269	2,700652E+21	2,700861E+21	7,974621E+18	7,972999E+18	5,401513E+21	1,594762E+19	5,417461E+21
270	2,700869E+21	2,700801E+21	7,970847E+18	7,974645E+18	5,401671E+21	1,594549E+19	5,417616E+21
271	2,700957E+21	2,700872E+21	7,969826E+18	7,968300E+18	5,401829E+21	1,593813E+19	5,417768E+21
272	2,700938E+21	2,701072E+21	7,974423E+18	7,974271E+18	5,402010E+21	1,594869E+19	5,417959E+21
273	2,701120E+21	2,700989E+21	7,969578E+18	7,970253E+18	5,402109E+21	1,593983E+19	5,418049E+21
274	2,701037E+21	2,701130E+21	7,971527E+18	7,968980E+18	5,402167E+21	1,594051E+19	5,418108E+21
275	2,701018E+21	2,701141E+21	7,974183E+18	7,974719E+18	5,402159E+21	1,594890E+19	5,418108E+21
276	2,701098E+21	2,700945E+21	7,967894E+18	7,969396E+18	5,402043E+21	1,593729E+19	5,417980E+21
277	2,700916E+21	2,701039E+21	7,974345E+18	7,971956E+18	5,401955E+21	1,594630E+19	5,417902E+21
278	2,700933E+21	2,700891E+21	7,972112E+18	7,974099E+18	5,401824E+21	1,594621E+19	5,417770E+21
279	2,700881E+21	2,700734E+21	7,969318E+18	7,970028E+18	5,401615E+21	1,593935E+19	5,417555E+21
280	2,700631E+21	2,700786E+21	7,976158E+18	7,973983E+18	5,401417E+21	1,595014E+19	5,417367E+21
281	2,700667E+21	2,700548E+21	7,970048E+18	7,974342E+18	5,401215E+21	1,594439E+19	5,417160E+21
282	2,700551E+21	2,700521E+21	7,973211E+18	7,970437E+18	5,401072E+21	1,594365E+19	5,417015E+21
283	2,700432E+21	2,700552E+21	7,976075E+18	7,975750E+18	5,400984E+21	1,595183E+19	5,416936E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
284	2,700519E+21	2,700347E+21	7,970678E+18	7,972445E+18	5,400866E+21	1,594312E+19	5,416809E+21
285	2,700364E+21	2,700490E+21	7,975535E+18	7,971114E+18	5,400853E+21	1,594665E+19	5,416800E+21
286	2,700404E+21	2,700482E+21	7,973675E+18	7,977159E+18	5,400887E+21	1,595083E+19	5,416838E+21
287	2,700535E+21	2,700400E+21	7,970428E+18	7,970617E+18	5,400935E+21	1,594104E+19	5,416876E+21
288	2,700466E+21	2,700630E+21	7,974779E+18	7,973498E+18	5,401096E+21	1,594828E+19	5,417044E+21
289	2,700668E+21	2,700593E+21	7,971945E+18	7,974812E+18	5,401261E+21	1,594676E+19	5,417208E+21
290	2,700756E+21	2,700687E+21	7,971331E+18	7,968082E+18	5,401443E+21	1,593941E+19	5,417382E+21
291	2,700695E+21	2,700885E+21	7,975827E+18	7,974914E+18	5,401580E+21	1,595074E+19	5,417531E+21
292	2,700841E+21	2,700743E+21	7,970114E+18	7,971206E+18	5,401584E+21	1,594132E+19	5,417525E+21
293	2,700780E+21	2,700846E+21	7,971776E+18	7,970597E+18	5,401626E+21	1,594237E+19	5,417568E+21
294	2,700763E+21	2,700852E+21	7,974522E+18	7,975995E+18	5,401615E+21	1,595052E+19	5,417565E+21
295	2,700867E+21	2,700661E+21	7,968401E+18	7,970354E+18	5,401528E+21	1,593875E+19	5,417466E+21
296	2,700666E+21	2,700764E+21	7,974868E+18	7,972342E+18	5,401430E+21	1,594721E+19	5,417377E+21
297	2,700627E+21	2,700621E+21	7,972915E+18	7,974883E+18	5,401248E+21	1,594780E+19	5,417195E+21
298	2,700589E+21	2,700468E+21	7,970690E+18	7,970524E+18	5,401057E+21	1,594121E+19	5,416998E+21
299	2,700345E+21	2,700520E+21	7,977413E+18	7,974744E+18	5,400865E+21	1,595216E+19	5,416817E+21
300	2,700377E+21	2,700258E+21	7,971128E+18	7,974979E+18	5,400636E+21	1,594611E+19	5,416582E+21
301	2,700292E+21	2,700232E+21	7,974161E+18	7,971303E+18	5,400524E+21	1,594546E+19	5,416469E+21
302	2,700154E+21	2,700285E+21	7,976717E+18	7,976739E+18	5,400439E+21	1,595346E+19	5,416392E+21
303	2,700253E+21	2,700089E+21	7,971103E+18	7,973609E+18	5,400342E+21	1,594471E+19	5,416287E+21
304	2,700111E+21	2,700228E+21	7,975482E+18	7,971985E+18	5,400339E+21	1,594747E+19	5,416286E+21
305	2,700152E+21	2,700233E+21	7,974285E+18	7,977966E+18	5,400386E+21	1,595225E+19	5,416338E+21
306	2,700331E+21	2,700183E+21	7,971797E+18	7,970495E+18	5,400514E+21	1,594229E+19	5,416456E+21
307	2,700264E+21	2,700436E+21	7,976142E+18	7,973755E+18	5,400700E+21	1,594990E+19	5,416650E+21
308	2,700430E+21	2,700380E+21	7,972960E+18	7,975055E+18	5,400810E+21	1,594801E+19	5,416758E+21
309	2,700516E+21	2,700453E+21	7,971560E+18	7,969416E+18	5,400969E+21	1,594098E+19	5,416910E+21
310	2,700440E+21	2,700639E+21	7,975838E+18	7,976363E+18	5,401079E+21	1,595220E+19	5,417031E+21
311	2,700618E+21	2,700483E+21	7,970048E+18	7,972562E+18	5,401101E+21	1,594261E+19	5,417043E+21
312	2,700564E+21	2,700580E+21	7,972009E+18	7,971251E+18	5,401145E+21	1,594326E+19	5,417088E+21
313	2,700514E+21	2,700597E+21	7,975614E+18	7,976301E+18	5,401111E+21	1,595192E+19	5,417063E+21
314	2,700606E+21	2,700420E+21	7,970179E+18	7,970361E+18	5,401025E+21	1,594054E+19	5,416966E+21
315	2,700369E+21	2,700514E+21	7,976277E+18	7,973003E+18	5,400883E+21	1,594928E+19	5,416833E+21
316	2,700307E+21	2,700319E+21	7,973713E+18	7,975852E+18	5,400627E+21	1,594957E+19	5,416576E+21
317	2,700304E+21	2,700147E+21	7,971368E+18	7,971918E+18	5,400450E+21	1,594329E+19	5,416394E+21
318	2,700068E+21	2,700221E+21	7,977969E+18	7,975671E+18	5,400289E+21	1,595364E+19	5,416243E+21
319	2,700125E+21	2,699979E+21	7,971888E+18	7,975872E+18	5,400104E+21	1,594776E+19	5,416052E+21
320	2,700023E+21	2,699970E+21	7,974685E+18	7,971743E+18	5,399994E+21	1,594643E+19	5,415940E+21
321	2,699852E+21	2,700034E+21	7,977359E+18	7,977539E+18	5,399885E+21	1,595490E+19	5,415840E+21
322	2,699981E+21	2,699849E+21	7,972274E+18	7,974099E+18	5,399829E+21	1,594637E+19	5,415776E+21
323	2,699870E+21	2,699994E+21	7,976252E+18	7,972713E+18	5,399864E+21	1,594897E+19	5,415813E+21
324	2,699923E+21	2,699983E+21	7,975200E+18	7,978443E+18	5,399906E+21	1,595364E+19	5,415860E+21
325	2,700135E+21	2,699945E+21	7,972524E+18	7,971286E+18	5,400080E+21	1,594381E+19	5,416024E+21
326	2,700045E+21	2,700222E+21	7,976528E+18	7,974712E+18	5,400267E+21	1,595124E+19	5,416218E+21
327	2,700210E+21	2,700161E+21	7,973168E+18	7,976247E+18	5,400372E+21	1,594942E+19	5,416321E+21
328	2,700296E+21	2,700214E+21	7,971326E+18	7,970477E+18	5,400510E+21	1,594180E+19	5,416452E+21
329	2,700200E+21	2,700397E+21	7,976509E+18	7,976908E+18	5,400596E+21	1,595342E+19	5,416550E+21
330	2,700392E+21	2,700258E+21	7,971638E+18	7,972383E+18	5,400650E+21	1,594402E+19	5,416594E+21
331	2,700320E+21	2,700351E+21	7,973606E+18	7,971309E+18	5,400671E+21	1,594491E+19	5,416616E+21
332	2,700211E+21	2,700330E+21	7,976951E+18	7,976477E+18	5,400541E+21	1,595343E+19	5,416494E+21

1	14	15	16	17	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							
333	2,700305E+21	2,700127E+21	7,970869E+18	7,971749E+18	5,400433E+21	1,594262E+19	5,416375E+21
334	2,700066E+21	2,700211E+21	7,976539E+18	7,974395E+18	5,400277E+21	1,595093E+19	5,416228E+21
335	2,700043E+21	2,700016E+21	7,973897E+18	7,977347E+18	5,400059E+21	1,595124E+19	5,416010E+21
336	2,700056E+21	2,699853E+21	7,971797E+18	7,972776E+18	5,399908E+21	1,594457E+19	5,415853E+21
337	2,699792E+21	2,699952E+21	7,978930E+18	7,976089E+18	5,399744E+21	1,595502E+19	5,415699E+21
338	2,699841E+21	2,699740E+21	7,973507E+18	7,976220E+18	5,399581E+21	1,594973E+19	5,415531E+21
339	2,699723E+21	2,699722E+21	7,975754E+18	7,972507E+18	5,399445E+21	1,594826E+19	5,415393E+21
340	2,699548E+21	2,699744E+21	7,978029E+18	7,978438E+18	5,399292E+21	1,595647E+19	5,415248E+21
341	2,699738E+21	2,699560E+21	7,972888E+18	7,975289E+18	5,399298E+21	1,594818E+19	5,415246E+21
342	2,699654E+21	2,699741E+21	7,976599E+18	7,973505E+18	5,399394E+21	1,595010E+19	5,415344E+21
343	2,699735E+21	2,699758E+21	7,975774E+18	7,979223E+18	5,399494E+21	1,595500E+19	5,415449E+21
344	2,699929E+21	2,699742E+21	7,972723E+18	7,971787E+18	5,399670E+21	1,594451E+19	5,415615E+21
345	2,699805E+21	2,700023E+21	7,976986E+18	7,975310E+18	5,399829E+21	1,595230E+19	5,415781E+21
346	2,699978E+21	2,699965E+21	7,974410E+18	7,976379E+18	5,399944E+21	1,595079E+19	5,415895E+21
347	2,700063E+21	2,700003E+21	7,972303E+18	7,970909E+18	5,400066E+21	1,594321E+19	5,416009E+21
348	2,699948E+21	2,700141E+21	7,977823E+18	7,977058E+18	5,400089E+21	1,595488E+19	5,416044E+21
349	2,700146E+21	2,699989E+21	7,972716E+18	7,973215E+18	5,400135E+21	1,594593E+19	5,416081E+21
350	2,700043E+21	2,700084E+21	7,974161E+18	7,972469E+18	5,400127E+21	1,594663E+19	5,416074E+21
351	2,699940E+21	2,700042E+21	7,977142E+18	7,978019E+18	5,399981E+21	1,595516E+19	5,415937E+21
352	2,700040E+21	2,699827E+21	7,970773E+18	7,973183E+18	5,399867E+21	1,594396E+19	5,415811E+21
353	2,699798E+21	2,699923E+21	7,977149E+18	7,975168E+18	5,399721E+21	1,595232E+19	5,415673E+21
354	2,699785E+21	2,699761E+21	7,975523E+18	7,977524E+18	5,399546E+21	1,595305E+19	5,415499E+21
355	2,699776E+21	2,699608E+21	7,973345E+18	7,973097E+18	5,399383E+21	1,594644E+19	5,415330E+21
356	2,699463E+21	2,699672E+21	7,980112E+18	7,976477E+18	5,399135E+21	1,595659E+19	5,415092E+21
357	2,699530E+21	2,699443E+21	7,974244E+18	7,977595E+18	5,398972E+21	1,595184E+19	5,414924E+21
358	2,699433E+21	2,699427E+21	7,975971E+18	7,973712E+18	5,398860E+21	1,594968E+19	5,414809E+21
359	2,699319E+21	2,699460E+21	7,978228E+18	7,979683E+18	5,398778E+21	1,595791E+19	5,414736E+21
360	2,699541E+21	2,699310E+21	7,973342E+18	7,975902E+18	5,398851E+21	1,594924E+19	5,414801E+21
361	2,699445E+21	2,699531E+21	7,977418E+18	7,973764E+18	5,398975E+21	1,595118E+19	5,414927E+21
362	2,699513E+21	2,699589E+21	7,977345E+18	7,979355E+18	5,399102E+21	1,595670E+19	5,415058E+21
363	2,699685E+21	2,699555E+21	7,973595E+18	7,972315E+18	5,399240E+21	1,594591E+19	5,415186E+21
364	2,699537E+21	2,699777E+21	7,977813E+18	7,975791E+18	5,399314E+21	1,595360E+19	5,415267E+21
365	2,699741E+21	2,699707E+21	7,975203E+18	7,977178E+18	5,399448E+21	1,595238E+19	5,415401E+21
366	2,699826E+21	2,699748E+21	7,972910E+18	7,971707E+18	5,399574E+21	1,594462E+19	5,415519E+21
367	2,699721E+21	2,699881E+21	7,978449E+18	7,978030E+18	5,399602E+21	1,595648E+19	5,415558E+21
368	2,699898E+21	2,699732E+21	7,972828E+18	7,974363E+18	5,399630E+21	1,594719E+19	5,415577E+21
369	2,699773E+21	2,699821E+21	7,974419E+18	7,973607E+18	5,399594E+21	1,594803E+19	5,415542E+21
370	2,699683E+21	2,699794E+21	7,978126E+18	7,978618E+18	5,399477E+21	1,595674E+19	5,415433E+21
371	2,699781E+21	2,699576E+21	7,971784E+18	7,973849E+18	5,399357E+21	1,594563E+19	5,415303E+21
372	2,699511E+21	2,699637E+21	7,978721E+18	7,975263E+18	5,399148E+21	1,595398E+19	5,415102E+21
373	2,699494E+21	2,699476E+21	7,976935E+18	7,978313E+18	5,398971E+21	1,595525E+19	5,414926E+21
374	2,699452E+21	2,699323E+21	7,974283E+18	7,974279E+18	5,398776E+21	1,594856E+19	5,414724E+21
375	2,699165E+21	2,699359E+21	7,980365E+18	7,978029E+18	5,398524E+21	1,595839E+19	5,414482E+21
376	2,699260E+21	2,699135E+21	7,974323E+18	7,978914E+18	5,398395E+21	1,595324E+19	5,414348E+21
377	2,699193E+21	2,699155E+21	7,976439E+18	7,974287E+18	5,398348E+21	1,595073E+19	5,414298E+21
378	2,699110E+21	2,699244E+21	7,979735E+18	7,979656E+18	5,398354E+21	1,595939E+19	5,414314E+21
379	2,699312E+21	2,699126E+21	7,974771E+18	7,975864E+18	5,398438E+21	1,595064E+19	5,414389E+21
380	2,699175E+21	2,699317E+21	7,978437E+18	7,974033E+18	5,398492E+21	1,595247E+19	5,414445E+21
381	2,699256E+21	2,699355E+21	7,978086E+18	7,980378E+18	5,398610E+21	1,595846E+19	5,414569E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude ^o	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
382	2,699432E+21	2,699315E+21	7,973745E+18	7,973490E+18	5,398747E+21	1,594723E+19	5,414694E+21
383	2,699330E+21	2,699514E+21	7,977956E+18	7,977041E+18	5,398844E+21	1,595500E+19	5,414799E+21
384	2,699542E+21	2,699457E+21	7,975483E+18	7,978008E+18	5,398999E+21	1,595349E+19	5,414952E+21
385	2,699607E+21	2,699518E+21	7,973453E+18	7,972438E+18	5,399124E+21	1,594589E+19	5,415070E+21
386	2,699485E+21	2,699669E+21	7,979688E+18	7,978556E+18	5,399154E+21	1,595824E+19	5,415112E+21
387	2,699639E+21	2,699501E+21	7,973606E+18	7,975158E+18	5,399141E+21	1,594876E+19	5,415089E+21
388	2,699490E+21	2,699537E+21	7,975503E+18	7,974143E+18	5,399027E+21	1,594965E+19	5,414977E+21
389	2,699418E+21	2,699506E+21	7,979312E+18	7,979220E+18	5,398924E+21	1,595853E+19	5,414883E+21
390	2,699494E+21	2,699298E+21	7,972928E+18	7,974700E+18	5,398792E+21	1,594763E+19	5,414740E+21
391	2,699220E+21	2,699341E+21	7,979653E+18	7,976230E+18	5,398561E+21	1,595588E+19	5,414517E+21
392	2,699186E+21	2,699181E+21	7,977232E+18	7,979597E+18	5,398367E+21	1,595683E+19	5,414323E+21
393	2,699144E+21	2,699022E+21	7,974696E+18	7,975421E+18	5,398167E+21	1,595012E+19	5,414117E+21
394	2,698896E+21	2,699086E+21	7,981262E+18	7,978662E+18	5,397983E+21	1,595992E+19	5,413943E+21
395	2,699017E+21	2,698884E+21	7,975340E+18	7,979402E+18	5,397901E+21	1,595474E+19	5,413855E+21
396	2,698940E+21	2,698895E+21	7,977823E+18	7,974336E+18	5,397835E+21	1,595216E+19	5,413787E+21
397	2,698867E+21	2,699013E+21	7,980875E+18	7,980343E+18	5,397880E+21	1,596122E+19	5,413842E+21
398	2,699042E+21	2,698906E+21	7,975470E+18	7,976964E+18	5,397948E+21	1,595243E+19	5,413900E+21
399	2,698933E+21	2,699059E+21	7,978387E+18	7,975513E+18	5,397992E+21	1,595390E+19	5,413946E+21
400	2,699036E+21	2,699098E+21	7,977981E+18	7,981500E+18	5,398134E+21	1,595948E+19	5,414094E+21
401	2,699227E+21	2,699075E+21	7,973988E+18	7,974111E+18	5,398302E+21	1,594810E+19	5,414250E+21
402	2,699140E+21	2,699310E+21	7,979182E+18	7,977221E+18	5,398451E+21	1,595640E+19	5,414407E+21
403	2,699319E+21	2,699266E+21	7,976630E+18	7,978152E+18	5,398586E+21	1,595478E+19	5,414541E+21
404	2,699336E+21	2,699283E+21	7,974578E+18	7,972848E+18	5,398619E+21	1,594743E+19	5,414567E+21
405	2,699222E+21	2,699414E+21	7,980565E+18	7,979350E+18	5,398635E+21	1,595992E+19	5,414595E+21
406	2,699363E+21	2,699240E+21	7,974233E+18	7,976286E+18	5,398604E+21	1,595052E+19	5,414554E+21
407	2,699244E+21	2,699242E+21	7,976188E+18	7,975315E+18	5,398485E+21	1,595150E+19	5,414437E+21
408	2,699159E+21	2,699219E+21	7,979959E+18	7,980058E+18	5,398378E+21	1,596002E+19	5,414338E+21
409	2,699205E+21	2,699024E+21	7,973676E+18	7,975819E+18	5,398229E+21	1,594950E+19	5,414178E+21
410	2,698926E+21	2,699070E+21	7,980777E+18	7,977080E+18	5,397995E+21	1,595786E+19	5,413953E+21
411	2,698881E+21	2,698897E+21	7,977870E+18	7,980478E+18	5,397777E+21	1,595835E+19	5,413735E+21
412	2,698843E+21	2,698710E+21	7,975757E+18	7,975945E+18	5,397553E+21	1,595170E+19	5,413505E+21
413	2,698641E+21	2,698796E+21	7,982274E+18	7,979134E+18	5,397437E+21	1,596141E+19	5,413398E+21
414	2,698755E+21	2,698636E+21	7,976537E+18	7,980149E+18	5,397391E+21	1,595669E+19	5,413347E+21
415	2,698694E+21	2,698642E+21	7,978425E+18	7,975366E+18	5,397336E+21	1,595379E+19	5,413290E+21
416	2,698615E+21	2,698771E+21	7,980875E+18	7,981552E+18	5,397387E+21	1,596243E+19	5,413349E+21
417	2,698796E+21	2,698670E+21	7,975482E+18	7,978010E+18	5,397467E+21	1,595349E+19	5,413420E+21
418	2,698724E+21	2,698840E+21	7,978936E+18	7,976084E+18	5,397564E+21	1,595502E+19	5,413519E+21
419	2,698832E+21	2,698892E+21	7,978915E+18	7,981522E+18	5,397724E+21	1,596044E+19	5,413685E+21
420	2,698999E+21	2,698850E+21	7,975466E+18	7,974023E+18	5,397848E+21	1,594949E+19	5,413798E+21
421	2,698910E+21	2,699092E+21	7,980398E+18	7,977759E+18	5,398001E+21	1,595816E+19	5,413960E+21
422	2,699051E+21	2,699041E+21	7,977514E+18	7,979298E+18	5,398092E+21	1,595681E+19	5,414049E+21
423	2,699088E+21	2,699002E+21	7,974766E+18	7,974406E+18	5,398090E+21	1,594917E+19	5,414039E+21
424	2,698985E+21	2,699132E+21	7,980566E+18	7,980444E+18	5,398116E+21	1,596101E+19	5,414077E+21
425	2,699121E+21	2,698969E+21	7,974676E+18	7,977134E+18	5,398090E+21	1,595181E+19	5,414042E+21
426	2,698994E+21	2,698992E+21	7,977549E+18	7,975804E+18	5,397986E+21	1,595335E+19	5,413939E+21
427	2,698868E+21	2,698971E+21	7,980930E+18	7,980419E+18	5,397839E+21	1,596135E+19	5,413800E+21
428	2,698869E+21	2,698725E+21	7,974882E+18	7,976600E+18	5,397594E+21	1,595148E+19	5,413546E+21
429	2,698619E+21	2,698758E+21	7,981553E+18	7,977913E+18	5,397377E+21	1,595947E+19	5,413337E+21
430	2,698584E+21	2,698599E+21	7,978588E+18	7,981626E+18	5,397183E+21	1,596021E+19	5,413143E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
431	2,698594E+21	2,698400E+21	7,976506E+18	7,976969E+18	5,396994E+21	1,595347E+19	5,412948E+21
432	2,698404E+21	2,698526E+21	7,982669E+18	7,979950E+18	5,396930E+21	1,596262E+19	5,412893E+21
433	2,698498E+21	2,698402E+21	7,977158E+18	7,981217E+18	5,396900E+21	1,595838E+19	5,412858E+21
434	2,698447E+21	2,698423E+21	7,979183E+18	7,976264E+18	5,396869E+21	1,595545E+19	5,412825E+21
435	2,698369E+21	2,698546E+21	7,981319E+18	7,981989E+18	5,396914E+21	1,596331E+19	5,412878E+21
436	2,698545E+21	2,698421E+21	7,976574E+18	7,978132E+18	5,396966E+21	1,595471E+19	5,412920E+21
437	2,698508E+21	2,698604E+21	7,979983E+18	7,976216E+18	5,397112E+21	1,595620E+19	5,413068E+21
438	2,698594E+21	2,698682E+21	7,980236E+18	7,982030E+18	5,397276E+21	1,596227E+19	5,413238E+21
439	2,698768E+21	2,698612E+21	7,976040E+18	7,975139E+18	5,397380E+21	1,595118E+19	5,413331E+21
440	2,698677E+21	2,698845E+21	7,980286E+18	7,979097E+18	5,397522E+21	1,595938E+19	5,413481E+21
441	2,698816E+21	2,698797E+21	7,977484E+18	7,980527E+18	5,397613E+21	1,595801E+19	5,413571E+21
442	2,698879E+21	2,698763E+21	7,975255E+18	7,975346E+18	5,397642E+21	1,595060E+19	5,413592E+21
443	2,698756E+21	2,698892E+21	7,981424E+18	7,980404E+18	5,397648E+21	1,596183E+19	5,413609E+21
444	2,698840E+21	2,698710E+21	7,976206E+18	7,977388E+18	5,397550E+21	1,595359E+19	5,413503E+21
445	2,698698E+21	2,698722E+21	7,978973E+18	7,976409E+18	5,397420E+21	1,595538E+19	5,413375E+21
446	2,698535E+21	2,698684E+21	7,981955E+18	7,981601E+18	5,397220E+21	1,596356E+19	5,413183E+21
447	2,698570E+21	2,698385E+21	7,975399E+18	7,978119E+18	5,396955E+21	1,595352E+19	5,412908E+21
448	2,698353E+21	2,698431E+21	7,981601E+18	7,978933E+18	5,396784E+21	1,596053E+19	5,412744E+21
449	2,698330E+21	2,698314E+21	7,979121E+18	7,982524E+18	5,396644E+21	1,596165E+19	5,412606E+21
450	2,698351E+21	2,698160E+21	7,977737E+18	7,977557E+18	5,396511E+21	1,595529E+19	5,412467E+21
451	2,698135E+21	2,698306E+21	7,983399E+18	7,980101E+18	5,396441E+21	1,596350E+19	5,412404E+21
452	2,698198E+21	2,698154E+21	7,978389E+18	7,981782E+18	5,396352E+21	1,596017E+19	5,412312E+21
453	2,698178E+21	2,698172E+21	7,979993E+18	7,976788E+18	5,396350E+21	1,595678E+19	5,412307E+21
454	2,698110E+21	2,698304E+21	7,982195E+18	7,982798E+18	5,396414E+21	1,596499E+19	5,412379E+21
455	2,698325E+21	2,698155E+21	7,977336E+18	7,978986E+18	5,396480E+21	1,595632E+19	5,412437E+21
456	2,698306E+21	2,698365E+21	7,980075E+18	7,977239E+18	5,396671E+21	1,595731E+19	5,412628E+21
457	2,698375E+21	2,698464E+21	7,980574E+18	7,983228E+18	5,396839E+21	1,596380E+19	5,412803E+21
458	2,698555E+21	2,698397E+21	7,976452E+18	7,976305E+18	5,396952E+21	1,595276E+19	5,412905E+21
459	2,698462E+21	2,698622E+21	7,980484E+18	7,979423E+18	5,397084E+21	1,595991E+19	5,413044E+21
460	2,698573E+21	2,698549E+21	7,978683E+18	7,980564E+18	5,397122E+21	1,595925E+19	5,413082E+21
461	2,698637E+21	2,698523E+21	7,976623E+18	7,975464E+18	5,397160E+21	1,595209E+19	5,413112E+21
462	2,698467E+21	2,698654E+21	7,983016E+18	7,980847E+18	5,397121E+21	1,596386E+19	5,413085E+21
463	2,698536E+21	2,698418E+21	7,977053E+18	7,978655E+18	5,396954E+21	1,595571E+19	5,412910E+21
464	2,698400E+21	2,698409E+21	7,979022E+18	7,977843E+18	5,396809E+21	1,595687E+19	5,412766E+21
465	2,698247E+21	2,698373E+21	7,982006E+18	7,982929E+18	5,396621E+21	1,596493E+19	5,412586E+21
466	2,698321E+21	2,698097E+21	7,976143E+18	7,979191E+18	5,396417E+21	1,595533E+19	5,412373E+21
467	2,698108E+21	2,698165E+21	7,982388E+18	7,978912E+18	5,396274E+21	1,596130E+19	5,412235E+21
468	2,698045E+21	2,698058E+21	7,980738E+18	7,982943E+18	5,396103E+21	1,596368E+19	5,412067E+21
469	2,698058E+21	2,697918E+21	7,979155E+18	7,978227E+18	5,395976E+21	1,595738E+19	5,411934E+21
470	2,697824E+21	2,698053E+21	7,984316E+18	7,981190E+18	5,395877E+21	1,596551E+19	5,411843E+21
471	2,697927E+21	2,697856E+21	7,978867E+18	7,983076E+18	5,395783E+21	1,596194E+19	5,411745E+21
472	2,697950E+21	2,697886E+21	7,979935E+18	7,977661E+18	5,395836E+21	1,595760E+19	5,411794E+21
473	2,697895E+21	2,698058E+21	7,982631E+18	7,983606E+18	5,395953E+21	1,596624E+19	5,411919E+21
474	2,698128E+21	2,697950E+21	7,978194E+18	7,979750E+18	5,396078E+21	1,595794E+19	5,412036E+21
475	2,698092E+21	2,698168E+21	7,980353E+18	7,977510E+18	5,396260E+21	1,595786E+19	5,412218E+21
476	2,698131E+21	2,698248E+21	7,981601E+18	7,983685E+18	5,396379E+21	1,596529E+19	5,412344E+21
477	2,698326E+21	2,698181E+21	7,977316E+18	7,976650E+18	5,396507E+21	1,595397E+19	5,412461E+21
478	2,698218E+21	2,698398E+21	7,981727E+18	7,979792E+18	5,396616E+21	1,596152E+19	5,412578E+21
479	2,698329E+21	2,698283E+21	7,979817E+18	7,981158E+18	5,396612E+21	1,596097E+19	5,412573E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
480	2,698377E+21	2,698254E+21	7,977085E+18	7,976643E+18	5,396631E+21	1,595373E+19	5,412585E+21
481	2,698176E+21	2,698379E+21	7,983501E+18	7,982279E+18	5,396555E+21	1,596578E+19	5,412521E+21
482	2,698257E+21	2,698129E+21	7,977484E+18	7,980324E+18	5,396387E+21	1,595781E+19	5,412344E+21
483	2,698135E+21	2,698110E+21	7,979200E+18	7,978325E+18	5,396245E+21	1,595753E+19	5,412203E+21
484	2,697970E+21	2,698075E+21	7,983186E+18	7,983221E+18	5,396044E+21	1,596641E+19	5,412011E+21
485	2,698048E+21	2,697834E+21	7,977757E+18	7,979450E+18	5,395881E+21	1,595721E+19	5,411838E+21
486	2,697804E+21	2,697919E+21	7,983948E+18	7,979527E+18	5,395723E+21	1,596348E+19	5,411687E+21
487	2,697735E+21	2,697770E+21	7,981705E+18	7,984265E+18	5,395505E+21	1,596597E+19	5,411471E+21
488	2,697770E+21	2,697626E+21	7,979203E+18	7,979692E+18	5,395395E+21	1,595889E+19	5,411354E+21
489	2,697561E+21	2,697769E+21	7,984244E+18	7,982428E+18	5,395330E+21	1,596667E+19	5,411296E+21
490	2,697706E+21	2,697598E+21	7,979485E+18	7,983996E+18	5,395304E+21	1,596348E+19	5,411268E+21
491	2,697749E+21	2,697659E+21	7,980380E+18	7,977469E+18	5,395407E+21	1,595785E+19	5,411365E+21
492	2,697664E+21	2,697847E+21	7,984061E+18	7,983872E+18	5,395511E+21	1,596793E+19	5,411479E+21
493	2,697889E+21	2,697761E+21	7,979571E+18	7,980144E+18	5,395650E+21	1,595971E+19	5,411610E+21
494	2,697845E+21	2,697961E+21	7,981321E+18	7,978369E+18	5,395806E+21	1,595969E+19	5,411765E+21
495	2,697899E+21	2,697990E+21	7,982299E+18	7,984526E+18	5,395889E+21	1,596683E+19	5,411856E+21
496	2,698109E+21	2,697926E+21	7,977388E+18	7,977544E+18	5,396035E+21	1,595493E+19	5,411990E+21
497	2,697984E+21	2,698152E+21	7,982292E+18	7,980640E+18	5,396135E+21	1,596293E+19	5,412098E+21
498	2,698082E+21	2,698047E+21	7,980575E+18	7,982263E+18	5,396129E+21	1,596284E+19	5,412092E+21
499	2,698110E+21	2,697999E+21	7,977349E+18	7,977315E+18	5,396108E+21	1,595466E+19	5,412063E+21
500	2,697885E+21	2,698094E+21	7,984473E+18	7,983056E+18	5,395978E+21	1,596753E+19	5,411946E+21
501	2,697982E+21	2,697854E+21	7,978519E+18	7,981007E+18	5,395836E+21	1,595953E+19	5,411795E+21
502	2,697859E+21	2,697833E+21	7,980603E+18	7,978916E+18	5,395692E+21	1,595952E+19	5,411652E+21
503	2,697696E+21	2,697776E+21	7,984353E+18	7,984001E+18	5,395472E+21	1,596835E+19	5,411440E+21
504	2,697763E+21	2,697550E+21	7,978398E+18	7,980786E+18	5,395313E+21	1,595918E+19	5,411272E+21
505	2,697497E+21	2,697636E+21	7,984452E+18	7,980940E+18	5,395133E+21	1,596539E+19	5,411098E+21
506	2,697457E+21	2,697485E+21	7,982146E+18	7,985800E+18	5,394941E+21	1,596795E+19	5,410909E+21
507	2,697516E+21	2,697342E+21	7,979445E+18	7,979865E+18	5,394857E+21	1,595931E+19	5,410816E+21
508	2,697308E+21	2,697502E+21	7,985398E+18	7,982525E+18	5,394810E+21	1,596792E+19	5,410777E+21
509	2,697464E+21	2,697382E+21	7,981178E+18	7,983942E+18	5,394846E+21	1,596512E+19	5,410811E+21
510	2,697492E+21	2,697459E+21	7,981764E+18	7,977927E+18	5,394951E+21	1,595969E+19	5,410911E+21
511	2,697413E+21	2,697607E+21	7,984837E+18	7,984967E+18	5,395020E+21	1,596980E+19	5,410990E+21
512	2,697658E+21	2,697519E+21	7,979503E+18	7,981431E+18	5,395177E+21	1,596093E+19	5,411138E+21
513	2,697627E+21	2,697719E+21	7,981224E+18	7,979585E+18	5,395346E+21	1,596081E+19	5,411307E+21
514	2,697704E+21	2,697757E+21	7,982794E+18	7,985462E+18	5,395461E+21	1,596826E+19	5,411429E+21
515	2,697902E+21	2,697700E+21	7,977687E+18	7,977737E+18	5,395601E+21	1,595542E+19	5,411557E+21
516	2,697725E+21	2,697916E+21	7,983532E+18	7,981310E+18	5,395641E+21	1,596484E+19	5,411606E+21
517	2,697800E+21	2,697812E+21	7,981806E+18	7,983008E+18	5,395612E+21	1,596481E+19	5,411577E+21
518	2,697826E+21	2,697731E+21	7,978430E+18	7,978366E+18	5,395556E+21	1,595680E+19	5,411513E+21
519	2,697616E+21	2,697773E+21	7,985348E+18	7,983776E+18	5,395390E+21	1,596912E+19	5,411359E+21
520	2,697724E+21	2,697554E+21	7,979043E+18	7,981945E+18	5,395278E+21	1,596099E+19	5,411239E+21
521	2,697586E+21	2,697552E+21	7,981475E+18	7,979849E+18	5,395138E+21	1,596132E+19	5,411099E+21
522	2,697410E+21	2,697508E+21	7,985154E+18	7,985222E+18	5,394918E+21	1,597038E+19	5,410889E+21
523	2,697467E+21	2,697277E+21	7,978755E+18	7,981528E+18	5,394744E+21	1,596028E+19	5,410705E+21
524	2,697193E+21	2,697347E+21	7,985403E+18	7,981592E+18	5,394540E+21	1,596699E+19	5,410507E+21
525	2,697172E+21	2,697223E+21	7,983383E+18	7,986091E+18	5,394396E+21	1,596947E+19	5,410365E+21
526	2,697251E+21	2,697087E+21	7,980941E+18	7,980172E+18	5,394338E+21	1,596111E+19	5,410299E+21
527	2,697058E+21	2,697230E+21	7,986442E+18	7,983195E+18	5,394288E+21	1,596964E+19	5,410257E+21
528	2,697220E+21	2,697142E+21	7,981669E+18	7,985287E+18	5,394362E+21	1,596696E+19	5,410329E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
529	2,697250E+21	2,697220E+21	7,981817E+18	7,979517E+18	5,394470E+21	1,596133E+19	5,410432E+21
530	2,697208E+21	2,697369E+21	7,984823E+18	7,986453E+18	5,394577E+21	1,597128E+19	5,410548E+21
531	2,697468E+21	2,697289E+21	7,979420E+18	7,981548E+18	5,394757E+21	1,596097E+19	5,410718E+21
532	2,697416E+21	2,697495E+21	7,982192E+18	7,979751E+18	5,394911E+21	1,596194E+19	5,410873E+21
533	2,697467E+21	2,697566E+21	7,984405E+18	7,985318E+18	5,395033E+21	1,596972E+19	5,411003E+21
534	2,697630E+21	2,697490E+21	7,979122E+18	7,978355E+18	5,395120E+21	1,595748E+19	5,411078E+21
535	2,697448E+21	2,697638E+21	7,984418E+18	7,982357E+18	5,395086E+21	1,596678E+19	5,411053E+21
536	2,697537E+21	2,697523E+21	7,981986E+18	7,984297E+18	5,395059E+21	1,596628E+19	5,411026E+21
537	2,697567E+21	2,697436E+21	7,978827E+18	7,979510E+18	5,395003E+21	1,595834E+19	5,410961E+21
538	2,697381E+21	2,697490E+21	7,985949E+18	7,984641E+18	5,394872E+21	1,597059E+19	5,410842E+21
539	2,697468E+21	2,697289E+21	7,979650E+18	7,982293E+18	5,394756E+21	1,596194E+19	5,410718E+21
540	2,697279E+21	2,697286E+21	7,982916E+18	7,980687E+18	5,394565E+21	1,596360E+19	5,410529E+21
541	2,697086E+21	2,697249E+21	7,986502E+18	7,985911E+18	5,394335E+21	1,597241E+19	5,410308E+21
542	2,697151E+21	2,696990E+21	7,979989E+18	7,982540E+18	5,394141E+21	1,596253E+19	5,410104E+21
543	2,696906E+21	2,697017E+21	7,986204E+18	7,982247E+18	5,393923E+21	1,596845E+19	5,409891E+21
544	2,696910E+21	2,696926E+21	7,983854E+18	7,987019E+18	5,393836E+21	1,597087E+19	5,409807E+21
545	2,696993E+21	2,696824E+21	7,981551E+18	7,981199E+18	5,393816E+21	1,596275E+19	5,409779E+21
546	2,696826E+21	2,696989E+21	7,986619E+18	7,984626E+18	5,393815E+21	1,597124E+19	5,409786E+21
547	2,696998E+21	2,696916E+21	7,981703E+18	7,985978E+18	5,393914E+21	1,596768E+19	5,409881E+21
548	2,697028E+21	2,696997E+21	7,982328E+18	7,980214E+18	5,394025E+21	1,596254E+19	5,409988E+21
549	2,696993E+21	2,697176E+21	7,985955E+18	7,986336E+18	5,394168E+21	1,597229E+19	5,410141E+21
550	2,697248E+21	2,697093E+21	7,980852E+18	7,981563E+18	5,394341E+21	1,596241E+19	5,410303E+21
551	2,697178E+21	2,697253E+21	7,983389E+18	7,980175E+18	5,394430E+21	1,596356E+19	5,410394E+21
552	2,697205E+21	2,697326E+21	7,985116E+18	7,986395E+18	5,394531E+21	1,597151E+19	5,410502E+21
553	2,697362E+21	2,697224E+21	7,979475E+18	7,979930E+18	5,394585E+21	1,595940E+19	5,410545E+21
554	2,697216E+21	2,697348E+21	7,984483E+18	7,983771E+18	5,394564E+21	1,596825E+19	5,410532E+21
555	2,697312E+21	2,697246E+21	7,982101E+18	7,984562E+18	5,394559E+21	1,596666E+19	5,410525E+21
556	2,697317E+21	2,697173E+21	7,980011E+18	7,979948E+18	5,394490E+21	1,595996E+19	5,410450E+21
557	2,697095E+21	2,697262E+21	7,987553E+18	7,984606E+18	5,394357E+21	1,597216E+19	5,410330E+21
558	2,697149E+21	2,697041E+21	7,981128E+18	7,983240E+18	5,394190E+21	1,596437E+19	5,410154E+21
559	2,696952E+21	2,696969E+21	7,983937E+18	7,981845E+18	5,393921E+21	1,596578E+19	5,409886E+21
560	2,696780E+21	2,696930E+21	7,986711E+18	7,987231E+18	5,393710E+21	1,597394E+19	5,409684E+21
561	2,696867E+21	2,696673E+21	7,980483E+18	7,983843E+18	5,393539E+21	1,596433E+19	5,409503E+21
562	2,696670E+21	2,696717E+21	7,986481E+18	7,983245E+18	5,393387E+21	1,596973E+19	5,409356E+21
563	2,696677E+21	2,696670E+21	7,984217E+18	7,987505E+18	5,393347E+21	1,597172E+19	5,409319E+21
564	2,696736E+21	2,696594E+21	7,982586E+18	7,982065E+18	5,393330E+21	1,596465E+19	5,409294E+21
565	2,696576E+21	2,696785E+21	7,987643E+18	7,985026E+18	5,393362E+21	1,597267E+19	5,409335E+21
566	2,696761E+21	2,696702E+21	7,983000E+18	7,986316E+18	5,393463E+21	1,596932E+19	5,409432E+21
567	2,696799E+21	2,696748E+21	7,983276E+18	7,980384E+18	5,393546E+21	1,596366E+19	5,409510E+21
568	2,696764E+21	2,696944E+21	7,986714E+18	7,986694E+18	5,393707E+21	1,597341E+19	5,409681E+21
569	2,696990E+21	2,696863E+21	7,981625E+18	7,982436E+18	5,393853E+21	1,596406E+19	5,409817E+21
570	2,696939E+21	2,697006E+21	7,983447E+18	7,981681E+18	5,393945E+21	1,596513E+19	5,409910E+21
571	2,696972E+21	2,697070E+21	7,985097E+18	7,987153E+18	5,394043E+21	1,597225E+19	5,410015E+21
572	2,697123E+21	2,696968E+21	7,980026E+18	7,980880E+18	5,394091E+21	1,596091E+19	5,410052E+21
573	2,696983E+21	2,697117E+21	7,985612E+18	7,983799E+18	5,394099E+21	1,596941E+19	5,410069E+21
574	2,697063E+21	2,697011E+21	7,983579E+18	7,984843E+18	5,394074E+21	1,596842E+19	5,410042E+21
575	2,697030E+21	2,696896E+21	7,981293E+18	7,980811E+18	5,393926E+21	1,596210E+19	5,409888E+21
576	2,696782E+21	2,696978E+21	7,988211E+18	7,985870E+18	5,393760E+21	1,597408E+19	5,409734E+21
577	2,696827E+21	2,696728E+21	7,981642E+18	7,985064E+18	5,393556E+21	1,596671E+19	5,409522E+21

1	14	15	16	17	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							
578	2,696679E+21	2,696633E+21	7,984103E+18	7,983229E+18	5,393312E+21	1,596733E+19	5,409279E+21
579	2,696526E+21	2,696619E+21	7,986913E+18	7,987501E+18	5,393145E+21	1,597441E+19	5,409120E+21
580	2,696601E+21	2,696400E+21	7,981739E+18	7,984344E+18	5,393001E+21	1,596608E+19	5,408967E+21
581	2,696397E+21	2,696497E+21	7,987855E+18	7,983214E+18	5,392894E+21	1,597107E+19	5,408865E+21
582	2,696404E+21	2,696455E+21	7,985631E+18	7,988209E+18	5,392859E+21	1,597384E+19	5,408833E+21
583	2,696466E+21	2,696335E+21	7,983595E+18	7,982772E+18	5,392801E+21	1,596637E+19	5,408768E+21
584	2,696329E+21	2,696537E+21	7,987995E+18	7,985697E+18	5,392866E+21	1,597369E+19	5,408840E+21
585	2,696524E+21	2,696458E+21	7,983690E+18	7,987125E+18	5,392982E+21	1,597082E+19	5,408953E+21
586	2,696593E+21	2,696499E+21	7,983487E+18	7,981294E+18	5,393092E+21	1,596478E+19	5,409057E+21
587	2,696544E+21	2,696719E+21	7,986984E+18	7,987268E+18	5,393262E+21	1,597425E+19	5,409237E+21
588	2,696743E+21	2,696641E+21	7,982332E+18	7,983671E+18	5,393384E+21	1,596600E+19	5,409350E+21
589	2,696704E+21	2,696787E+21	7,984142E+18	7,982350E+18	5,393490E+21	1,596649E+19	5,409457E+21
590	2,696750E+21	2,696836E+21	7,986162E+18	7,987557E+18	5,393586E+21	1,597372E+19	5,409560E+21
591	2,696887E+21	2,696698E+21	7,981051E+18	7,981234E+18	5,393585E+21	1,596228E+19	5,409547E+21
592	2,696729E+21	2,696862E+21	7,986531E+18	7,984198E+18	5,393591E+21	1,597073E+19	5,409562E+21
593	2,696766E+21	2,696751E+21	7,984566E+18	7,986006E+18	5,393517E+21	1,597057E+19	5,409488E+21
594	2,696741E+21	2,696603E+21	7,981616E+18	7,982550E+18	5,393344E+21	1,596417E+19	5,409308E+21
595	2,696495E+21	2,696674E+21	7,988335E+18	7,986721E+18	5,393169E+21	1,597506E+19	5,409144E+21
596	2,696535E+21	2,696428E+21	7,982405E+18	7,986142E+18	5,392963E+21	1,596855E+19	5,408932E+21
597	2,696408E+21	2,696360E+21	7,985386E+18	7,983159E+18	5,392768E+21	1,596855E+19	5,408737E+21
598	2,696256E+21	2,696357E+21	7,988522E+18	7,987588E+18	5,392614E+21	1,597611E+19	5,408590E+21
599	2,696302E+21	2,696128E+21	7,983310E+18	7,985008E+18	5,392429E+21	1,596832E+19	5,408398E+21
600	2,696106E+21	2,696233E+21	7,988497E+18	7,984322E+18	5,392339E+21	1,597282E+19	5,408312E+21
601	2,696119E+21	2,696182E+21	7,986270E+18	7,989818E+18	5,392302E+21	1,597609E+19	5,408278E+21
602	2,696239E+21	2,696057E+21	7,983572E+18	7,983997E+18	5,392296E+21	1,596757E+19	5,408264E+21
603	2,696121E+21	2,696286E+21	7,987995E+18	7,985923E+18	5,392407E+21	1,597392E+19	5,408381E+21
604	2,696293E+21	2,696240E+21	7,984580E+18	7,987654E+18	5,392532E+21	1,597223E+19	5,408505E+21
605	2,696354E+21	2,696312E+21	7,984423E+18	7,981513E+18	5,392666E+21	1,596594E+19	5,408632E+21
606	2,696307E+21	2,696513E+21	7,988105E+18	7,987946E+18	5,392820E+21	1,597605E+19	5,408796E+21
607	2,696499E+21	2,696394E+21	7,983216E+18	7,984472E+18	5,392893E+21	1,596769E+19	5,408860E+21
608	2,696480E+21	2,696538E+21	7,984559E+18	7,983058E+18	5,393019E+21	1,596762E+19	5,408986E+21
609	2,696519E+21	2,696586E+21	7,987083E+18	7,988301E+18	5,393104E+21	1,597538E+19	5,409080E+21
610	2,696662E+21	2,696438E+21	7,981477E+18	7,982321E+18	5,393100E+21	1,596380E+19	5,409064E+21
611	2,696469E+21	2,696608E+21	7,987064E+18	7,984866E+18	5,393078E+21	1,597193E+19	5,409049E+21
612	2,696465E+21	2,696487E+21	7,985432E+18	7,987398E+18	5,392951E+21	1,597283E+19	5,408924E+21
613	2,696446E+21	2,696330E+21	7,982715E+18	7,983250E+18	5,392776E+21	1,596597E+19	5,408742E+21
614	2,696218E+21	2,696384E+21	7,989640E+18	7,986988E+18	5,392602E+21	1,597663E+19	5,408579E+21
615	2,696241E+21	2,696116E+21	7,983834E+18	7,986497E+18	5,392357E+21	1,597033E+19	5,408327E+21
616	2,696111E+21	2,696071E+21	7,986421E+18	7,983568E+18	5,392182E+21	1,596999E+19	5,408152E+21
617	2,695946E+21	2,696081E+21	7,989390E+18	7,988961E+18	5,392027E+21	1,597835E+19	5,408005E+21
618	2,696026E+21	2,695837E+21	7,983543E+18	7,986766E+18	5,391864E+21	1,597031E+19	5,407834E+21
619	2,695856E+21	2,695959E+21	7,988352E+18	7,985239E+18	5,391815E+21	1,597359E+19	5,407789E+21
620	2,695879E+21	2,695933E+21	7,986851E+18	7,990831E+18	5,391812E+21	1,597768E+19	5,407790E+21
621	2,696017E+21	2,695843E+21	7,984582E+18	7,983927E+18	5,391860E+21	1,596851E+19	5,407829E+21
622	2,695901E+21	2,696080E+21	7,989222E+18	7,986000E+18	5,391980E+21	1,597522E+19	5,407955E+21
623	2,696029E+21	2,696015E+21	7,985901E+18	7,988247E+18	5,392044E+21	1,597415E+19	5,408018E+21
624	2,696104E+21	2,696078E+21	7,984966E+18	7,982463E+18	5,392182E+21	1,596743E+19	5,408149E+21
625	2,696069E+21	2,696261E+21	7,988832E+18	7,989241E+18	5,392330E+21	1,597807E+19	5,408309E+21
626	2,696301E+21	2,696131E+21	7,983434E+18	7,985469E+18	5,392432E+21	1,596890E+19	5,408401E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
627	2,696281E+21	2,696295E+21	7,984860E+18	7,983349E+18	5,392576E+21	1,596821E+19	5,408544E+21
628	2,696269E+21	2,696363E+21	7,988071E+18	7,988946E+18	5,392633E+21	1,597702E+19	5,408610E+21
629	2,696387E+21	2,696225E+21	7,982493E+18	7,982963E+18	5,392612E+21	1,596546E+19	5,408577E+21
630	2,696186E+21	2,696352E+21	7,988316E+18	7,985514E+18	5,392537E+21	1,597383E+19	5,408511E+21
631	2,696149E+21	2,696186E+21	7,986541E+18	7,988223E+18	5,392336E+21	1,597476E+19	5,408310E+21
632	2,696155E+21	2,696019E+21	7,983520E+18	7,983993E+18	5,392175E+21	1,596751E+19	5,408142E+21
633	2,695928E+21	2,696068E+21	7,990700E+18	7,987896E+18	5,391996E+21	1,597860E+19	5,407974E+21
634	2,695969E+21	2,695808E+21	7,984326E+18	7,987912E+18	5,391777E+21	1,597224E+19	5,407749E+21
635	2,695835E+21	2,695786E+21	7,986716E+18	7,984676E+18	5,391621E+21	1,597139E+19	5,407592E+21
636	2,695659E+21	2,695811E+21	7,989855E+18	7,990567E+18	5,391469E+21	1,598042E+19	5,407450E+21
637	2,695768E+21	2,695591E+21	7,984409E+18	7,987418E+18	5,391358E+21	1,597183E+19	5,407330E+21
638	2,695624E+21	2,695714E+21	7,989408E+18	7,985200E+18	5,391337E+21	1,597461E+19	5,407312E+21
639	2,695617E+21	2,695686E+21	7,988341E+18	7,990791E+18	5,391303E+21	1,597913E+19	5,407282E+21
640	2,695754E+21	2,695614E+21	7,985623E+18	7,984108E+18	5,391368E+21	1,596973E+19	5,407337E+21
641	2,695631E+21	2,695844E+21	7,990086E+18	7,987256E+18	5,391475E+21	1,597734E+19	5,407453E+21
642	2,695798E+21	2,695760E+21	7,986106E+18	7,989793E+18	5,391557E+21	1,597590E+19	5,407533E+21
643	2,695902E+21	2,695833E+21	7,984781E+18	7,983403E+18	5,391735E+21	1,596818E+19	5,407703E+21
644	2,695871E+21	2,696035E+21	7,989265E+18	7,990148E+18	5,391905E+21	1,597941E+19	5,407885E+21
645	2,696101E+21	2,695932E+21	7,984458E+18	7,985462E+18	5,392033E+21	1,596992E+19	5,408003E+21
646	2,696057E+21	2,696090E+21	7,986135E+18	7,983517E+18	5,392147E+21	1,596965E+19	5,408117E+21
647	2,695973E+21	2,696121E+21	7,989439E+18	7,989615E+18	5,392095E+21	1,597905E+19	5,408074E+21
648	2,696084E+21	2,695947E+21	7,983234E+18	7,984153E+18	5,392031E+21	1,596739E+19	5,407998E+21
649	2,695893E+21	2,696039E+21	7,989160E+18	7,986905E+18	5,391932E+21	1,597606E+19	5,407908E+21
650	2,695889E+21	2,695855E+21	7,986813E+18	7,989400E+18	5,391744E+21	1,597621E+19	5,407721E+21
651	2,695898E+21	2,695712E+21	7,983971E+18	7,984591E+18	5,391610E+21	1,596856E+19	5,407579E+21
652	2,695644E+21	2,695792E+21	7,991390E+18	7,988849E+18	5,391436E+21	1,598024E+19	5,407416E+21
653	2,695678E+21	2,695562E+21	7,985329E+18	7,988778E+18	5,391240E+21	1,597411E+19	5,407214E+21
654	2,695559E+21	2,695528E+21	7,987808E+18	7,985280E+18	5,391087E+21	1,597309E+19	5,407060E+21
655	2,695361E+21	2,695537E+21	7,991010E+18	7,991102E+18	5,390898E+21	1,598211E+19	5,406880E+21
656	2,695496E+21	2,695324E+21	7,985496E+18	7,987738E+18	5,390820E+21	1,597323E+19	5,406793E+21
657	2,695359E+21	2,695446E+21	7,990554E+18	7,985841E+18	5,390805E+21	1,597639E+19	5,406781E+21
658	2,695363E+21	2,695423E+21	7,988891E+18	7,991899E+18	5,390786E+21	1,598079E+19	5,406767E+21
659	2,695507E+21	2,695366E+21	7,985756E+18	7,985294E+18	5,390872E+21	1,597105E+19	5,406844E+21
660	2,695397E+21	2,695601E+21	7,990168E+18	7,988929E+18	5,390998E+21	1,597910E+19	5,406977E+21
661	2,695601E+21	2,695546E+21	7,986741E+18	7,990407E+18	5,391147E+21	1,597715E+19	5,407124E+21
662	2,695727E+21	2,695619E+21	7,985580E+18	7,983347E+18	5,391346E+21	1,596893E+19	5,407315E+21
663	2,695636E+21	2,695818E+21	7,990609E+18	7,989988E+18	5,391454E+21	1,598060E+19	5,407434E+21
664	2,695840E+21	2,695718E+21	7,985439E+18	7,985756E+18	5,391558E+21	1,597119E+19	5,407529E+21
665	2,695769E+21	2,695837E+21	7,987111E+18	7,984876E+18	5,391607E+21	1,597199E+19	5,407579E+21
666	2,695698E+21	2,695829E+21	7,989693E+18	7,991062E+18	5,391527E+21	1,598076E+19	5,407508E+21
667	2,695827E+21	2,695649E+21	7,983300E+18	7,985379E+18	5,391476E+21	1,596868E+19	5,407445E+21
668	2,695640E+21	2,695743E+21	7,989617E+18	7,987904E+18	5,391384E+21	1,597752E+19	5,407361E+21
669	2,695640E+21	2,695593E+21	7,987809E+18	7,989736E+18	5,391234E+21	1,597754E+19	5,407211E+21
670	2,695632E+21	2,695456E+21	7,985268E+18	7,984902E+18	5,391089E+21	1,597017E+19	5,407059E+21
671	2,695319E+21	2,695521E+21	7,992687E+18	7,989511E+18	5,390840E+21	1,598220E+19	5,406822E+21
672	2,695366E+21	2,695279E+21	7,986409E+18	7,989808E+18	5,390645E+21	1,597622E+19	5,406621E+21
673	2,695265E+21	2,695229E+21	7,988967E+18	7,986423E+18	5,390495E+21	1,597539E+19	5,406470E+21
674	2,695097E+21	2,695233E+21	7,991480E+18	7,991955E+18	5,390330E+21	1,598343E+19	5,406314E+21
675	2,695238E+21	2,695048E+21	7,985956E+18	7,988440E+18	5,390286E+21	1,597440E+19	5,406260E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
676	2,695095E+21	2,695194E+21	7,990768E+18	7,987031E+18	5,390289E+21	1,597780E+19	5,406267E+21
677	2,695119E+21	2,695198E+21	7,989540E+18	7,992797E+18	5,390317E+21	1,598234E+19	5,406299E+21
678	2,695293E+21	2,695144E+21	7,986391E+18	7,985767E+18	5,390437E+21	1,597216E+19	5,406409E+21
679	2,695172E+21	2,695375E+21	7,990983E+18	7,989310E+18	5,390547E+21	1,598029E+19	5,406528E+21
680	2,695390E+21	2,695330E+21	7,987880E+18	7,990386E+18	5,390720E+21	1,597827E+19	5,406698E+21
681	2,695503E+21	2,695401E+21	7,986681E+18	7,983999E+18	5,390904E+21	1,597068E+19	5,406874E+21
682	2,695393E+21	2,695580E+21	7,991152E+18	7,990854E+18	5,390972E+21	1,598201E+19	5,406954E+21
683	2,695578E+21	2,695466E+21	7,985602E+18	7,987077E+18	5,391043E+21	1,597268E+19	5,407016E+21
684	2,695508E+21	2,695560E+21	7,987272E+18	7,986519E+18	5,391068E+21	1,597379E+19	5,407042E+21
685	2,695459E+21	2,695561E+21	7,990435E+18	7,991614E+18	5,391020E+21	1,598205E+19	5,407002E+21
686	2,695595E+21	2,695382E+21	7,984369E+18	7,985390E+18	5,390977E+21	1,596976E+19	5,406947E+21
687	2,695349E+21	2,695474E+21	7,991021E+18	7,987901E+18	5,390823E+21	1,597892E+19	5,406801E+21
688	2,695330E+21	2,695331E+21	7,989060E+18	7,990259E+18	5,390660E+21	1,597932E+19	5,406640E+21
689	2,695311E+21	2,695169E+21	7,986503E+18	7,986444E+18	5,390480E+21	1,597295E+19	5,406453E+21
690	2,695018E+21	2,695205E+21	7,992964E+18	7,990868E+18	5,390223E+21	1,598383E+19	5,406207E+21
691	2,695090E+21	2,694973E+21	7,986633E+18	7,991223E+18	5,390062E+21	1,597786E+19	5,406040E+21
692	2,695002E+21	2,694933E+21	7,989429E+18	7,987480E+18	5,389935E+21	1,597691E+19	5,405912E+21
693	2,694848E+21	2,694981E+21	7,992295E+18	7,992401E+18	5,389829E+21	1,598470E+19	5,405814E+21
694	2,694988E+21	2,694811E+21	7,986932E+18	7,988798E+18	5,389799E+21	1,597573E+19	5,405774E+21
695	2,694812E+21	2,694947E+21	7,991613E+18	7,987692E+18	5,389759E+21	1,597931E+19	5,405738E+21
696	2,694874E+21	2,694959E+21	7,990505E+18	7,993444E+18	5,389833E+21	1,598395E+19	5,405817E+21
697	2,695075E+21	2,694905E+21	7,987468E+18	7,986495E+18	5,389980E+21	1,597396E+19	5,405954E+21
698	2,694970E+21	2,695135E+21	7,991478E+18	7,989657E+18	5,390105E+21	1,598113E+19	5,406086E+21
699	2,695172E+21	2,695113E+21	7,988418E+18	7,990880E+18	5,390284E+21	1,597930E+19	5,406264E+21
700	2,695255E+21	2,695180E+21	7,986848E+18	7,985282E+18	5,390435E+21	1,597213E+19	5,406407E+21
701	2,695147E+21	2,695357E+21	7,991736E+18	7,991727E+18	5,390504E+21	1,598346E+19	5,406487E+21
702	2,695340E+21	2,695223E+21	7,986176E+18	7,987639E+18	5,390563E+21	1,597381E+19	5,406537E+21
703	2,695246E+21	2,695294E+21	7,988225E+18	7,986934E+18	5,390539E+21	1,597516E+19	5,406514E+21
704	2,695205E+21	2,695295E+21	7,991808E+18	7,991638E+18	5,390501E+21	1,598345E+19	5,406484E+21
705	2,695320E+21	2,695113E+21	7,985831E+18	7,986337E+18	5,390433E+21	1,597217E+19	5,406405E+21
706	2,695056E+21	2,695182E+21	7,991610E+18	7,989054E+18	5,390238E+21	1,598066E+19	5,406219E+21
707	2,695028E+21	2,695032E+21	7,989301E+18	7,992072E+18	5,390060E+21	1,598137E+19	5,406041E+21
708	2,695023E+21	2,694859E+21	7,986705E+18	7,988359E+18	5,389882E+21	1,597506E+19	5,405857E+21
709	2,694763E+21	2,694914E+21	7,993612E+18	7,991433E+18	5,389677E+21	1,598505E+19	5,405662E+21
710	2,694835E+21	2,694700E+21	7,987723E+18	7,991195E+18	5,389535E+21	1,597892E+19	5,405514E+21
711	2,694701E+21	2,694669E+21	7,990741E+18	7,987418E+18	5,389370E+21	1,597816E+19	5,405348E+21
712	2,694547E+21	2,694729E+21	7,993597E+18	7,992711E+18	5,389276E+21	1,598631E+19	5,405263E+21
713	2,694700E+21	2,694557E+21	7,988229E+18	7,990024E+18	5,389257E+21	1,597825E+19	5,405235E+21
714	2,694568E+21	2,694679E+21	7,991796E+18	7,988691E+18	5,389247E+21	1,598049E+19	5,405227E+21
715	2,694663E+21	2,694713E+21	7,990821E+18	7,994484E+18	5,389376E+21	1,598531E+19	5,405361E+21
716	2,694873E+21	2,694676E+21	7,987764E+18	7,987379E+18	5,389549E+21	1,597514E+19	5,405524E+21
717	2,694767E+21	2,694935E+21	7,992128E+18	7,989992E+18	5,389703E+21	1,598212E+19	5,405685E+21
718	2,694940E+21	2,694914E+21	7,989179E+18	7,991187E+18	5,389854E+21	1,598037E+19	5,405834E+21
719	2,694976E+21	2,694945E+21	7,987581E+18	7,986161E+18	5,389921E+21	1,597374E+19	5,405895E+21
720	2,694891E+21	2,695103E+21	7,992859E+18	7,992294E+18	5,389994E+21	1,598515E+19	5,405979E+21
721	2,695094E+21	2,694957E+21	7,987406E+18	7,988598E+18	5,390050E+21	1,597600E+19	5,406026E+21
722	2,695002E+21	2,695006E+21	7,988793E+18	7,987534E+18	5,390008E+21	1,597633E+19	5,405984E+21
723	2,694945E+21	2,695022E+21	7,992272E+18	7,992633E+18	5,389967E+21	1,598490E+19	5,405952E+21
724	2,695033E+21	2,694835E+21	7,986115E+18	7,988022E+18	5,389868E+21	1,597414E+19	5,405842E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
725	2,694781E+21	2,694909E+21	7,992230E+18	7,990082E+18	5,389690E+21	1,598231E+19	5,405672E+21
726	2,694759E+21	2,694756E+21	7,990033E+18	7,992669E+18	5,389515E+21	1,598270E+19	5,405497E+21
727	2,694721E+21	2,694571E+21	7,988024E+18	7,988710E+18	5,389292E+21	1,597673E+19	5,405269E+21
728	2,694474E+21	2,694638E+21	7,995210E+18	7,991272E+18	5,389111E+21	1,598648E+19	5,405098E+21
729	2,694531E+21	2,694430E+21	7,989415E+18	7,992028E+18	5,388961E+21	1,598144E+19	5,404943E+21
730	2,694397E+21	2,694378E+21	7,991319E+18	7,988353E+18	5,388775E+21	1,597967E+19	5,404754E+21
731	2,694273E+21	2,694443E+21	7,993792E+18	7,994398E+18	5,388716E+21	1,598819E+19	5,404704E+21
732	2,694461E+21	2,694285E+21	7,988411E+18	7,991612E+18	5,388745E+21	1,598002E+19	5,404725E+21
733	2,694379E+21	2,694444E+21	7,992169E+18	7,989229E+18	5,388823E+21	1,598140E+19	5,404805E+21
734	2,694470E+21	2,694508E+21	7,991657E+18	7,994389E+18	5,388979E+21	1,598605E+19	5,404965E+21
735	2,694620E+21	2,694479E+21	7,988719E+18	7,987507E+18	5,389099E+21	1,597623E+19	5,405075E+21
736	2,694507E+21	2,694729E+21	7,993248E+18	7,990334E+18	5,389236E+21	1,598358E+19	5,405220E+21
737	2,694674E+21	2,694684E+21	7,990315E+18	7,992374E+18	5,389357E+21	1,598269E+19	5,405340E+21
738	2,694733E+21	2,694672E+21	7,987800E+18	7,987214E+18	5,389406E+21	1,597501E+19	5,405381E+21
739	2,694671E+21	2,694828E+21	7,993323E+18	7,993369E+18	5,389500E+21	1,598669E+19	5,405486E+21
740	2,694869E+21	2,694693E+21	7,987844E+18	7,989752E+18	5,389563E+21	1,597760E+19	5,405540E+21
741	2,694775E+21	2,694760E+21	7,989512E+18	7,988215E+18	5,389534E+21	1,597773E+19	5,405512E+21
742	2,694678E+21	2,694776E+21	7,993029E+18	7,993132E+18	5,389453E+21	1,598616E+19	5,405439E+21
743	2,694719E+21	2,694564E+21	7,987077E+18	7,989029E+18	5,389283E+21	1,597611E+19	5,405259E+21
744	2,694484E+21	2,694622E+21	7,993779E+18	7,990330E+18	5,389106E+21	1,598411E+19	5,405090E+21
745	2,694458E+21	2,694467E+21	7,991745E+18	7,993355E+18	5,388926E+21	1,598510E+19	5,404911E+21
746	2,694416E+21	2,694260E+21	7,989082E+18	7,989181E+18	5,388676E+21	1,597826E+19	5,404654E+21
747	2,694167E+21	2,694335E+21	7,995751E+18	7,992433E+18	5,388501E+21	1,598818E+19	5,404489E+21
748	2,694226E+21	2,694134E+21	7,989637E+18	7,993904E+18	5,388360E+21	1,598354E+19	5,404343E+21
749	2,694145E+21	2,694099E+21	7,991455E+18	7,989611E+18	5,388244E+21	1,598107E+19	5,404225E+21
750	2,694055E+21	2,694192E+21	7,994055E+18	7,995057E+18	5,388247E+21	1,598911E+19	5,404236E+21
751	2,694227E+21	2,694054E+21	7,989440E+18	7,991887E+18	5,388282E+21	1,598133E+19	5,404263E+21
752	2,694159E+21	2,694239E+21	7,993546E+18	7,988991E+18	5,388397E+21	1,598254E+19	5,404380E+21
753	2,694221E+21	2,694311E+21	7,993187E+18	7,995064E+18	5,388532E+21	1,598825E+19	5,404521E+21
754	2,694352E+21	2,694239E+21	7,989145E+18	7,988455E+18	5,388590E+21	1,597760E+19	5,404568E+21
755	2,694266E+21	2,694464E+21	7,993361E+18	7,991995E+18	5,388730E+21	1,598536E+19	5,404715E+21
756	2,694450E+21	2,694416E+21	7,990538E+18	7,993754E+18	5,388865E+21	1,598429E+19	5,404850E+21
757	2,694545E+21	2,694424E+21	7,988310E+18	7,987739E+18	5,388969E+21	1,597605E+19	5,404945E+21
758	2,694467E+21	2,694600E+21	7,994157E+18	7,993238E+18	5,389067E+21	1,598740E+19	5,405054E+21
759	2,694589E+21	2,694466E+21	7,988989E+18	7,990080E+18	5,389055E+21	1,597907E+19	5,405034E+21
760	2,694483E+21	2,694521E+21	7,990968E+18	7,988602E+18	5,389004E+21	1,597957E+19	5,404984E+21
761	2,694374E+21	2,694513E+21	7,994418E+18	7,994209E+18	5,388887E+21	1,598863E+19	5,404876E+21
762	2,694417E+21	2,694254E+21	7,987751E+18	7,990127E+18	5,388672E+21	1,597788E+19	5,404649E+21
763	2,694205E+21	2,694300E+21	7,994497E+18	7,991462E+18	5,388505E+21	1,598596E+19	5,404491E+21
764	2,694167E+21	2,694157E+21	7,992253E+18	7,994681E+18	5,388324E+21	1,598693E+19	5,404311E+21
765	2,694139E+21	2,693968E+21	7,989648E+18	7,990300E+18	5,388107E+21	1,597995E+19	5,404087E+21
766	2,693888E+21	2,694051E+21	7,996016E+18	7,993357E+18	5,387938E+21	1,598937E+19	5,403928E+21
767	2,693937E+21	2,693858E+21	7,990422E+18	7,995021E+18	5,387794E+21	1,598544E+19	5,403780E+21
768	2,693904E+21	2,693846E+21	7,992731E+18	7,989773E+18	5,387750E+21	1,598250E+19	5,403732E+21
769	2,693821E+21	2,693965E+21	7,995566E+18	7,995461E+18	5,387785E+21	1,599103E+19	5,403776E+21
770	2,693977E+21	2,693819E+21	7,990418E+18	7,992049E+18	5,387796E+21	1,598247E+19	5,403778E+21
771	2,693904E+21	2,694001E+21	7,994010E+18	7,989958E+18	5,387905E+21	1,598397E+19	5,403889E+21
772	2,693956E+21	2,694071E+21	7,993471E+18	7,996467E+18	5,388027E+21	1,598994E+19	5,404017E+21
773	2,694133E+21	2,693994E+21	7,989266E+18	7,989530E+18	5,388127E+21	1,597880E+19	5,404106E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
774	2,694067E+21	2,694224E+21	7,993652E+18	7,992471E+18	5,388290E+21	1,598612E+19	5,404277E+21
775	2,694227E+21	2,694188E+21	7,991614E+18	7,993998E+18	5,388415E+21	1,598561E+19	5,404401E+21
776	2,694322E+21	2,694209E+21	7,989859E+18	7,987579E+18	5,388531E+21	1,597744E+19	5,404509E+21
777	2,694200E+21	2,694384E+21	7,995652E+18	7,993899E+18	5,388584E+21	1,598955E+19	5,404574E+21
778	2,694288E+21	2,694196E+21	7,989605E+18	7,991234E+18	5,388484E+21	1,598084E+19	5,404465E+21
779	2,694200E+21	2,694214E+21	7,991365E+18	7,990390E+18	5,388414E+21	1,598175E+19	5,404395E+21
780	2,694094E+21	2,694201E+21	7,994734E+18	7,995652E+18	5,388295E+21	1,599039E+19	5,404285E+21
781	2,694165E+21	2,693950E+21	7,988292E+18	7,991142E+18	5,388114E+21	1,597943E+19	5,404094E+21
782	2,693938E+21	2,694010E+21	7,995114E+18	7,991738E+18	5,387947E+21	1,598685E+19	5,403934E+21
783	2,693847E+21	2,693878E+21	7,993151E+18	7,995443E+18	5,387725E+21	1,598859E+19	5,403714E+21
784	2,693836E+21	2,693697E+21	7,991039E+18	7,990759E+18	5,387533E+21	1,598180E+19	5,403515E+21
785	2,693604E+21	2,693788E+21	7,997156E+18	7,994265E+18	5,387392E+21	1,599142E+19	5,403384E+21
786	2,693666E+21	2,693580E+21	7,991372E+18	7,995716E+18	5,387247E+21	1,598709E+19	5,403234E+21
787	2,693670E+21	2,693579E+21	7,993519E+18	7,990608E+18	5,387249E+21	1,598413E+19	5,403233E+21
788	2,693574E+21	2,693721E+21	7,996192E+18	7,996294E+18	5,387294E+21	1,599249E+19	5,403287E+21
789	2,693734E+21	2,693588E+21	7,990885E+18	7,992937E+18	5,387323E+21	1,598382E+19	5,403306E+21
790	2,693665E+21	2,693762E+21	7,994023E+18	7,990783E+18	5,387427E+21	1,598481E+19	5,403412E+21
791	2,693703E+21	2,693829E+21	7,994174E+18	7,997258E+18	5,387532E+21	1,599143E+19	5,403523E+21
792	2,693920E+21	2,693771E+21	7,990556E+18	7,989515E+18	5,387691E+21	1,598007E+19	5,403671E+21
793	2,693857E+21	2,694013E+21	7,995021E+18	7,992799E+18	5,387870E+21	1,598782E+19	5,403858E+21
794	2,693979E+21	2,693955E+21	7,992617E+18	7,994274E+18	5,387934E+21	1,598689E+19	5,403921E+21
795	2,694067E+21	2,693957E+21	7,990259E+18	7,988955E+18	5,388024E+21	1,597921E+19	5,404003E+21
796	2,693922E+21	2,694115E+21	7,995795E+18	7,995381E+18	5,388038E+21	1,599118E+19	5,404029E+21
797	2,694039E+21	2,693916E+21	7,989658E+18	7,992686E+18	5,387954E+21	1,598234E+19	5,403937E+21
798	2,693958E+21	2,693926E+21	7,991768E+18	7,991092E+18	5,387884E+21	1,598286E+19	5,403866E+21
799	2,693815E+21	2,693922E+21	7,995862E+18	7,996006E+18	5,387736E+21	1,599187E+19	5,403728E+21
800	2,693879E+21	2,693687E+21	7,990081E+18	7,991226E+18	5,387566E+21	1,598131E+19	5,403547E+21
801	2,693625E+21	2,693742E+21	7,996538E+18	7,992435E+18	5,387367E+21	1,598897E+19	5,403356E+21
802	2,693521E+21	2,693570E+21	7,993950E+18	7,996537E+18	5,387090E+21	1,599049E+19	5,403081E+21
803	2,693554E+21	2,693378E+21	7,991755E+18	7,992168E+18	5,386932E+21	1,598392E+19	5,402916E+21
804	2,693339E+21	2,693496E+21	7,997649E+18	7,995210E+18	5,386836E+21	1,599286E+19	5,402828E+21
805	2,693434E+21	2,693318E+21	7,992107E+18	7,996450E+18	5,386752E+21	1,598856E+19	5,402741E+21
806	2,693421E+21	2,693338E+21	7,994009E+18	7,990873E+18	5,386759E+21	1,598488E+19	5,402744E+21
807	2,693284E+21	2,693492E+21	7,996866E+18	7,996975E+18	5,386777E+21	1,599384E+19	5,402771E+21
808	2,693470E+21	2,693364E+21	7,992009E+18	7,993340E+18	5,386834E+21	1,598535E+19	5,402819E+21
809	2,693428E+21	2,693534E+21	7,994774E+18	7,991589E+18	5,386962E+21	1,598636E+19	5,402948E+21
810	2,693476E+21	2,693579E+21	7,995035E+18	7,997743E+18	5,387055E+21	1,599278E+19	5,403047E+21
811	2,693721E+21	2,693525E+21	7,991248E+18	7,990374E+18	5,387246E+21	1,598162E+19	5,403228E+21
812	2,693633E+21	2,693784E+21	7,995438E+18	7,993762E+18	5,387417E+21	1,598920E+19	5,403407E+21
813	2,693749E+21	2,693723E+21	7,992887E+18	7,995463E+18	5,387472E+21	1,598835E+19	5,403460E+21
814	2,693826E+21	2,693703E+21	7,990215E+18	7,990111E+18	5,387529E+21	1,598033E+19	5,403509E+21
815	2,693656E+21	2,693850E+21	7,996504E+18	7,996078E+18	5,387506E+21	1,599258E+19	5,403499E+21
816	2,693784E+21	2,693661E+21	7,991223E+18	7,992723E+18	5,387445E+21	1,598395E+19	5,403429E+21
817	2,693687E+21	2,693669E+21	7,993445E+18	7,991282E+18	5,387356E+21	1,598473E+19	5,403341E+21
818	2,693493E+21	2,693632E+21	7,997197E+18	7,996246E+18	5,387125E+21	1,599344E+19	5,403119E+21
819	2,693561E+21	2,693380E+21	7,990958E+18	7,992630E+18	5,386942E+21	1,598359E+19	5,402925E+21
820	2,693313E+21	2,693428E+21	7,996829E+18	7,993817E+18	5,386741E+21	1,599065E+19	5,402731E+21
821	2,693254E+21	2,693264E+21	7,994182E+18	7,998010E+18	5,386518E+21	1,599219E+19	5,402510E+21
822	2,693313E+21	2,693094E+21	7,992155E+18	7,992927E+18	5,386407E+21	1,598508E+19	5,402392E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
823	2,693077E+21	2,693240E+21	7,998537E+18	7,995531E+18	5,386317E+21	1,599407E+19	5,402311E+21
824	2,693168E+21	2,693098E+21	7,993730E+18	7,996585E+18	5,386266E+21	1,599032E+19	5,402256E+21
825	2,693140E+21	2,693114E+21	7,995066E+18	7,991575E+18	5,386255E+21	1,598664E+19	5,402241E+21
826	2,692996E+21	2,693224E+21	7,997544E+18	7,997886E+18	5,386219E+21	1,599543E+19	5,402215E+21
827	2,693237E+21	2,693089E+21	7,992546E+18	7,994577E+18	5,386326E+21	1,598712E+19	5,402314E+21
828	2,693219E+21	2,693280E+21	7,995018E+18	7,992463E+18	5,386500E+21	1,598748E+19	5,402487E+21
829	2,693294E+21	2,693350E+21	7,995604E+18	7,998410E+18	5,386643E+21	1,599401E+19	5,402637E+21
830	2,693513E+21	2,693314E+21	7,991517E+18	7,990840E+18	5,386827E+21	1,598236E+19	5,402810E+21
831	2,693378E+21	2,693572E+21	7,996047E+18	7,994375E+18	5,386950E+21	1,599042E+19	5,402940E+21
832	2,693494E+21	2,693509E+21	7,994148E+18	7,995757E+18	5,387004E+21	1,598991E+19	5,402993E+21
833	2,693568E+21	2,693469E+21	7,991281E+18	7,990804E+18	5,387037E+21	1,598208E+19	5,403019E+21
834	2,693378E+21	2,693570E+21	7,997820E+18	7,996338E+18	5,386948E+21	1,599416E+19	5,402942E+21
835	2,693513E+21	2,693366E+21	7,992389E+18	7,993621E+18	5,386879E+21	1,598601E+19	5,402865E+21
836	2,693384E+21	2,693374E+21	7,994173E+18	7,992343E+18	5,386758E+21	1,598652E+19	5,402745E+21
837	2,693200E+21	2,693324E+21	7,997456E+18	7,997785E+18	5,386523E+21	1,599524E+19	5,402519E+21
838	2,693275E+21	2,693064E+21	7,991043E+18	7,994099E+18	5,386338E+21	1,598514E+19	5,402324E+21
839	2,693032E+21	2,693129E+21	7,997349E+18	7,994697E+18	5,386161E+21	1,599205E+19	5,402153E+21
840	2,692998E+21	2,693007E+21	7,995733E+18	7,998233E+18	5,386005E+21	1,599397E+19	5,401999E+21
841	2,693044E+21	2,692857E+21	7,993686E+18	7,993144E+18	5,385901E+21	1,598683E+19	5,401888E+21
842	2,692766E+21	2,692979E+21	7,999658E+18	7,995780E+18	5,385745E+21	1,599544E+19	5,401741E+21
843	2,692872E+21	2,692824E+21	7,994516E+18	7,997810E+18	5,385695E+21	1,599233E+19	5,401688E+21
844	2,692863E+21	2,692840E+21	7,995222E+18	7,992750E+18	5,385703E+21	1,598797E+19	5,401691E+21
845	2,692781E+21	2,692956E+21	7,997723E+18	7,999129E+18	5,385737E+21	1,599685E+19	5,401734E+21
846	2,693050E+21	2,692851E+21	7,992941E+18	7,995173E+18	5,385901E+21	1,598811E+19	5,401889E+21
847	2,693020E+21	2,693073E+21	7,995714E+18	7,992809E+18	5,386092E+21	1,598852E+19	5,402081E+21
848	2,693076E+21	2,693176E+21	7,997123E+18	7,998487E+18	5,386252E+21	1,599561E+19	5,402248E+21
849	2,693267E+21	2,693124E+21	7,992433E+18	7,991529E+18	5,386390E+21	1,598396E+19	5,402374E+21
850	2,693101E+21	2,693316E+21	7,997007E+18	7,994941E+18	5,386417E+21	1,599195E+19	5,402409E+21
851	2,693240E+21	2,693234E+21	7,995056E+18	7,996678E+18	5,386474E+21	1,599173E+19	5,402466E+21
852	2,693309E+21	2,693189E+21	7,991987E+18	7,991706E+18	5,386499E+21	1,598369E+19	5,402482E+21
853	2,693124E+21	2,693281E+21	7,998559E+18	7,997239E+18	5,386405E+21	1,599580E+19	5,402401E+21
854	2,693234E+21	2,693084E+21	7,992630E+18	7,994772E+18	5,386318E+21	1,598740E+19	5,402305E+21
855	2,693083E+21	2,693083E+21	7,994540E+18	7,993463E+18	5,386167E+21	1,598800E+19	5,402155E+21
856	2,692918E+21	2,693052E+21	7,998466E+18	7,998435E+18	5,385970E+21	1,599690E+19	5,401967E+21
857	2,693004E+21	2,692800E+21	7,992175E+18	7,994831E+18	5,385804E+21	1,598701E+19	5,401791E+21
858	2,692742E+21	2,692841E+21	7,998824E+18	7,994813E+18	5,385583E+21	1,599364E+19	5,401576E+21
859	2,692716E+21	2,692729E+21	7,997143E+18	7,998994E+18	5,385445E+21	1,599614E+19	5,401441E+21
860	2,692733E+21	2,692587E+21	7,994576E+18	7,994165E+18	5,385320E+21	1,598874E+19	5,401309E+21
861	2,692482E+21	2,692687E+21	7,999867E+18	7,997263E+18	5,385169E+21	1,599713E+19	5,401166E+21
862	2,692614E+21	2,692536E+21	7,994587E+18	7,999112E+18	5,385150E+21	1,599370E+19	5,401144E+21
863	2,692634E+21	2,692579E+21	7,995537E+18	7,993407E+18	5,385212E+21	1,598894E+19	5,401201E+21
864	2,692585E+21	2,692748E+21	7,999125E+18	7,999177E+18	5,385334E+21	1,599830E+19	5,401332E+21
865	2,692836E+21	2,692672E+21	7,994329E+18	7,995164E+18	5,385508E+21	1,598949E+19	5,401498E+21
866	2,692760E+21	2,692863E+21	7,996779E+18	7,993071E+18	5,385623E+21	1,598985E+19	5,401613E+21
867	2,692821E+21	2,692941E+21	7,997965E+18	7,999472E+18	5,385762E+21	1,599744E+19	5,401759E+21
868	2,693003E+21	2,692872E+21	7,992647E+18	7,992775E+18	5,385875E+21	1,598542E+19	5,401860E+21
869	2,692877E+21	2,693038E+21	7,997230E+18	7,996221E+18	5,385915E+21	1,599345E+19	5,401908E+21
870	2,693014E+21	2,692961E+21	7,995408E+18	7,997525E+18	5,385975E+21	1,599293E+19	5,401968E+21
871	2,693058E+21	2,692930E+21	7,992641E+18	7,992462E+18	5,385988E+21	1,598510E+19	5,401973E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern 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	2,692858E+21	2,693041E+21	7,999910E+18	7,997702E+18	5,385899E+21	1,599761E+19	5,401897E+21
873	2,692945E+21	2,692827E+21	7,993559E+18	7,995712E+18	5,385772E+21	1,598927E+19	5,401761E+21
874	2,692778E+21	2,692778E+21	7,995674E+18	7,994104E+18	5,385556E+21	1,598978E+19	5,401546E+21
875	2,692640E+21	2,692747E+21	7,999596E+18	7,999210E+18	5,385388E+21	1,599881E+19	5,401386E+21
876	2,692713E+21	2,692514E+21	7,993325E+18	7,995662E+18	5,385227E+21	1,598899E+19	5,401216E+21
877	2,692458E+21	2,692549E+21	7,999696E+18	7,995693E+18	5,385007E+21	1,599539E+19	5,401002E+21
878	2,692413E+21	2,692447E+21	7,997534E+18	8,000160E+18	5,384860E+21	1,599769E+19	5,400858E+21
879	2,692431E+21	2,692304E+21	7,994899E+18	7,995297E+18	5,384735E+21	1,599020E+19	5,400725E+21
880	2,692225E+21	2,692431E+21	8,000659E+18	7,997959E+18	5,384656E+21	1,599862E+19	5,400655E+21
881	2,692387E+21	2,692304E+21	7,995574E+18	7,999633E+18	5,384691E+21	1,599521E+19	5,400686E+21
882	2,692404E+21	2,692335E+21	7,996834E+18	7,993396E+18	5,384739E+21	1,599023E+19	5,400730E+21
883	2,692365E+21	2,692529E+21	8,000339E+18	7,999731E+18	5,384895E+21	1,600007E+19	5,400895E+21
884	2,692582E+21	2,692462E+21	7,995040E+18	7,996109E+18	5,385044E+21	1,599115E+19	5,401036E+21
885	2,692521E+21	2,692609E+21	7,996822E+18	7,994555E+18	5,385131E+21	1,599138E+19	5,401122E+21
886	2,692591E+21	2,692682E+21	7,997925E+18	8,000646E+18	5,385273E+21	1,599857E+19	5,401272E+21
887	2,692780E+21	2,692617E+21	7,992878E+18	7,993565E+18	5,385398E+21	1,598644E+19	5,401384E+21
888	2,692664E+21	2,692810E+21	7,998572E+18	7,996372E+18	5,385474E+21	1,599494E+19	5,401469E+21
889	2,692765E+21	2,692743E+21	7,996660E+18	7,997680E+18	5,385508E+21	1,599434E+19	5,401502E+21
890	2,692755E+21	2,692665E+21	7,993944E+18	7,992878E+18	5,385420E+21	1,598682E+19	5,401407E+21
891	2,692564E+21	2,692754E+21	8,000880E+18	7,998580E+18	5,385318E+21	1,599946E+19	5,401318E+21
892	2,692643E+21	2,692537E+21	7,994237E+18	7,996995E+18	5,385180E+21	1,599123E+19	5,401171E+21
893	2,692513E+21	2,692463E+21	7,996366E+18	7,995360E+18	5,384976E+21	1,599173E+19	5,400968E+21
894	2,692372E+21	2,692449E+21	8,000172E+18	8,000165E+18	5,384821E+21	1,600034E+19	5,400822E+21
895	2,692419E+21	2,692234E+21	7,994057E+18	7,996758E+18	5,384653E+21	1,599081E+19	5,400644E+21
896	2,692164E+21	2,692285E+21	8,000778E+18	7,996497E+18	5,384448E+21	1,599727E+19	5,400445E+21
897	2,692113E+21	2,692176E+21	7,998252E+18	8,001066E+18	5,384289E+21	1,599932E+19	5,400288E+21
898	2,692140E+21	2,692005E+21	7,995940E+18	7,995816E+18	5,384146E+21	1,599176E+19	5,400137E+21
899	2,691990E+21	2,692153E+21	8,001604E+18	7,998509E+18	5,384143E+21	1,600011E+19	5,400143E+21
900	2,692146E+21	2,692067E+21	7,996753E+18	8,000220E+18	5,384213E+21	1,599697E+19	5,400210E+21
901	2,692181E+21	2,692099E+21	7,997311E+18	7,994317E+18	5,384281E+21	1,599163E+19	5,400272E+21
902	2,692129E+21	2,692301E+21	8,000386E+18	8,000816E+18	5,384430E+21	1,600120E+19	5,400431E+21
903	2,692340E+21	2,692234E+21	7,995040E+18	7,997103E+18	5,384574E+21	1,599214E+19	5,400566E+21
904	2,692309E+21	2,692393E+21	7,997451E+18	7,995160E+18	5,384701E+21	1,599261E+19	5,400694E+21
905	2,692375E+21	2,692469E+21	7,998918E+18	8,000716E+18	5,384844E+21	1,599963E+19	5,400844E+21
906	2,692534E+21	2,692375E+21	7,994369E+18	7,993574E+18	5,384910E+21	1,598794E+19	5,400898E+21
907	2,692414E+21	2,692564E+21	7,999892E+18	7,996908E+18	5,384977E+21	1,599680E+19	5,400974E+21
908	2,692471E+21	2,692490E+21	7,997563E+18	7,998858E+18	5,384961E+21	1,599642E+19	5,400957E+21
909	2,692482E+21	2,692357E+21	7,994230E+18	7,994565E+18	5,384839E+21	1,598879E+19	5,400828E+21
910	2,692302E+21	2,692446E+21	8,000901E+18	7,999847E+18	5,384748E+21	1,600075E+19	5,400749E+21
911	2,692381E+21	2,692246E+21	7,994651E+18	7,998105E+18	5,384626E+21	1,599276E+19	5,400619E+21
912	2,692252E+21	2,692201E+21	7,997791E+18	7,995861E+18	5,384453E+21	1,599365E+19	5,400447E+21
913	2,692075E+21	2,692198E+21	8,001245E+18	8,000493E+18	5,384273E+21	1,600174E+19	5,400275E+21
914	2,692081E+21	2,691938E+21	7,995403E+18	7,997409E+18	5,384019E+21	1,599281E+19	5,400012E+21
915	2,691856E+21	2,691977E+21	8,001636E+18	7,997276E+18	5,383833E+21	1,599891E+19	5,399831E+21
916	2,691821E+21	2,691886E+21	7,998975E+18	8,002166E+18	5,383707E+21	1,600114E+19	5,399709E+21
917	2,691903E+21	2,691708E+21	7,996589E+18	7,996776E+18	5,383611E+21	1,599337E+19	5,399604E+21
918	2,691772E+21	2,691898E+21	8,001921E+18	7,999310E+18	5,383671E+21	1,600123E+19	5,399672E+21
919	2,691913E+21	2,691850E+21	7,997354E+18	8,001090E+18	5,383764E+21	1,599844E+19	5,399762E+21
920	2,691950E+21	2,691899E+21	7,998043E+18	7,995092E+18	5,383850E+21	1,599314E+19	5,399843E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
921	2,691891E+21	2,692090E+21	8,000896E+18	8,001225E+18	5,383981E+21	1,600212E+19	5,399984E+21
922	2,692088E+21	2,691987E+21	7,996086E+18	7,997271E+18	5,384075E+21	1,599336E+19	5,400068E+21
923	2,692086E+21	2,692147E+21	7,998532E+18	7,995442E+18	5,384233E+21	1,599397E+19	5,400227E+21
924	2,692123E+21	2,692239E+21	8,000248E+18	8,001214E+18	5,384362E+21	1,600146E+19	5,400364E+21
925	2,692282E+21	2,692114E+21	7,994988E+18	7,994744E+18	5,384396E+21	1,598973E+19	5,400386E+21
926	2,692153E+21	2,692291E+21	7,999809E+18	7,998372E+18	5,384444E+21	1,599818E+19	5,400442E+21
927	2,692207E+21	2,692213E+21	7,997479E+18	8,000308E+18	5,384420E+21	1,599779E+19	5,400417E+21
928	2,692246E+21	2,692093E+21	7,994839E+18	7,995652E+18	5,384339E+21	1,599049E+19	5,400329E+21
929	2,692055E+21	2,692187E+21	8,001833E+18	7,999889E+18	5,384241E+21	1,600172E+19	5,400243E+21
930	2,692085E+21	2,691971E+21	7,996347E+18	7,998355E+18	5,384056E+21	1,599470E+19	5,400050E+21
931	2,691946E+21	2,691921E+21	7,999386E+18	7,996384E+18	5,383868E+21	1,599577E+19	5,399863E+21
932	2,691728E+21	2,691907E+21	8,002338E+18	8,001607E+18	5,383635E+21	1,600395E+19	5,399639E+21
933	2,691773E+21	2,691601E+21	7,995900E+18	7,998963E+18	5,383374E+21	1,599486E+19	5,399369E+21
934	2,691592E+21	2,691653E+21	8,001566E+18	7,998389E+18	5,383245E+21	1,599995E+19	5,399245E+21
935	2,691581E+21	2,691608E+21	7,999429E+18	8,003063E+18	5,383188E+21	1,600249E+19	5,399191E+21
936	2,691682E+21	2,691487E+21	7,997778E+18	7,997166E+18	5,383169E+21	1,599494E+19	5,399164E+21
937	2,691528E+21	2,691701E+21	8,002655E+18	7,999356E+18	5,383229E+21	1,600201E+19	5,399231E+21
938	2,691632E+21	2,691626E+21	7,998571E+18	8,001465E+18	5,383258E+21	1,600004E+19	5,399258E+21
939	2,691697E+21	2,691664E+21	7,998779E+18	7,995679E+18	5,383361E+21	1,599446E+19	5,399355E+21
940	2,691639E+21	2,691856E+21	8,001740E+18	8,002006E+18	5,383496E+21	1,600375E+19	5,399499E+21
941	2,691869E+21	2,691723E+21	7,996711E+18	7,998205E+18	5,383592E+21	1,599492E+19	5,399587E+21
942	2,691877E+21	2,691896E+21	7,998655E+18	7,996530E+18	5,383772E+21	1,599519E+19	5,399768E+21
943	2,691890E+21	2,692004E+21	8,000586E+18	8,002422E+18	5,383893E+21	1,600301E+19	5,399896E+21
944	2,692048E+21	2,691881E+21	7,995539E+18	7,995996E+18	5,383929E+21	1,599154E+19	5,399921E+21
945	2,691915E+21	2,692045E+21	8,000169E+18	7,998828E+18	5,383959E+21	1,599900E+19	5,399958E+21
946	2,691942E+21	2,691939E+21	7,998753E+18	8,000505E+18	5,383881E+21	1,599926E+19	5,399881E+21
947	2,691982E+21	2,691825E+21	7,996400E+18	7,995874E+18	5,383807E+21	1,599227E+19	5,399799E+21
948	2,691745E+21	2,691927E+21	8,003443E+18	8,000284E+18	5,383672E+21	1,600373E+19	5,399676E+21
949	2,691760E+21	2,691662E+21	7,997307E+18	7,999602E+18	5,383423E+21	1,599691E+19	5,399420E+21
950	2,691626E+21	2,691597E+21	7,999543E+18	7,997781E+18	5,383223E+21	1,599732E+19	5,399220E+21
951	2,691426E+21	2,691587E+21	8,002378E+18	8,002971E+18	5,383013E+21	1,600535E+19	5,399019E+21
952	2,691517E+21	2,691313E+21	7,996691E+18	8,000016E+18	5,382830E+21	1,599671E+19	5,398827E+21
953	2,691356E+21	2,691395E+21	8,002236E+18	7,998381E+18	5,382751E+21	1,600062E+19	5,398752E+21
954	2,691315E+21	2,691364E+21	8,000997E+18	8,003356E+18	5,382679E+21	1,600435E+19	5,398683E+21
955	2,691415E+21	2,691263E+21	7,999126E+18	7,997681E+18	5,382678E+21	1,599681E+19	5,398675E+21
956	2,691239E+21	2,691470E+21	8,003486E+18	8,000370E+18	5,382708E+21	1,600386E+19	5,398712E+21
957	2,691375E+21	2,691348E+21	7,998960E+18	8,002743E+18	5,382723E+21	1,600170E+19	5,398725E+21
958	2,691479E+21	2,691392E+21	7,998543E+18	7,996777E+18	5,382870E+21	1,599532E+19	5,398866E+21
959	2,691430E+21	2,691612E+21	8,002103E+18	8,002871E+18	5,383041E+21	1,600497E+19	5,399046E+21
960	2,691669E+21	2,691516E+21	7,997604E+18	7,998939E+18	5,383184E+21	1,599654E+19	5,399181E+21
961	2,691654E+21	2,691689E+21	7,999109E+18	7,996748E+18	5,383343E+21	1,599586E+19	5,399339E+21
962	2,691625E+21	2,691769E+21	8,001776E+18	8,002785E+18	5,383394E+21	1,600456E+19	5,399399E+21
963	2,691797E+21	2,691640E+21	7,996534E+18	7,996489E+18	5,383436E+21	1,599302E+19	5,399430E+21
964	2,691644E+21	2,691794E+21	8,001506E+18	7,999276E+18	5,383437E+21	1,600078E+19	5,399438E+21
965	2,691674E+21	2,691650E+21	7,999886E+18	8,001278E+18	5,383324E+21	1,600116E+19	5,399326E+21
966	2,691703E+21	2,691536E+21	7,997005E+18	7,997095E+18	5,383239E+21	1,599410E+19	5,399233E+21
967	2,691435E+21	2,691633E+21	8,003956E+18	8,001640E+18	5,383068E+21	1,600560E+19	5,399074E+21
968	2,691461E+21	2,691364E+21	7,997889E+18	8,001231E+18	5,382825E+21	1,599912E+19	5,398824E+21
969	2,691344E+21	2,691289E+21	7,999778E+18	7,998288E+18	5,382633E+21	1,599807E+19	5,398631E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
970	2,691143E+21	2,691283E+21	8,003523E+18	8,003332E+18	5,382426E+21	1,600685E+19	5,398433E+21
971	2,691253E+21	2,691050E+21	7,998319E+18	8,000244E+18	5,382304E+21	1,599856E+19	5,398302E+21
972	2,691069E+21	2,691160E+21	8,003681E+18	7,998891E+18	5,382229E+21	1,600257E+19	5,398232E+21
973	2,691028E+21	2,691097E+21	8,001859E+18	8,004642E+18	5,382125E+21	1,600650E+19	5,398131E+21
974	2,691145E+21	2,690993E+21	7,999045E+18	7,999116E+18	5,382139E+21	1,599816E+19	5,398137E+21
975	2,690993E+21	2,691205E+21	8,003287E+18	8,001624E+18	5,382199E+21	1,600491E+19	5,398204E+21
976	2,691169E+21	2,691110E+21	7,999586E+18	8,003576E+18	5,382279E+21	1,600316E+19	5,398282E+21
977	2,691285E+21	2,691175E+21	7,999062E+18	7,996581E+18	5,382460E+21	1,599564E+19	5,398456E+21
978	2,691202E+21	2,691399E+21	8,003686E+18	8,002985E+18	5,382601E+21	1,600667E+19	5,398607E+21
979	2,691421E+21	2,691314E+21	7,999092E+18	7,999302E+18	5,382735E+21	1,599839E+19	5,398734E+21
980	2,691388E+21	2,691464E+21	8,000114E+18	7,997703E+18	5,382852E+21	1,599782E+19	5,398850E+21
981	2,691373E+21	2,691485E+21	8,002429E+18	8,003791E+18	5,382858E+21	1,600622E+19	5,398864E+21
982	2,691557E+21	2,691358E+21	7,996645E+18	7,997643E+18	5,382915E+21	1,599429E+19	5,398909E+21
983	2,691388E+21	2,691521E+21	8,002142E+18	8,000157E+18	5,382909E+21	1,600230E+19	5,398911E+21
984	2,691401E+21	2,691393E+21	8,000797E+18	8,002353E+18	5,382794E+21	1,600315E+19	5,398797E+21
985	2,691407E+21	2,691261E+21	7,997447E+18	7,997774E+18	5,382668E+21	1,599522E+19	5,398663E+21
986	2,691115E+21	2,691325E+21	8,004981E+18	8,002424E+18	5,382440E+21	1,600741E+19	5,398447E+21
987	2,691164E+21	2,691068E+21	7,998950E+18	8,002007E+18	5,382232E+21	1,600096E+19	5,398233E+21
988	2,691059E+21	2,691000E+21	8,001050E+18	7,998925E+18	5,382059E+21	1,599997E+19	5,398059E+21
989	2,690875E+21	2,690981E+21	8,004558E+18	8,004195E+18	5,381855E+21	1,600875E+19	5,397864E+21
990	2,690985E+21	2,690780E+21	7,998932E+18	8,001528E+18	5,381764E+21	1,600046E+19	5,397765E+21
991	2,690786E+21	2,690898E+21	8,004034E+18	8,000228E+18	5,381684E+21	1,600426E+19	5,397688E+21
992	2,690770E+21	2,690841E+21	8,002359E+18	8,006084E+18	5,381612E+21	1,600844E+19	5,397620E+21
993	2,690912E+21	2,690736E+21	7,999242E+18	7,999252E+18	5,381648E+21	1,599849E+19	5,397647E+21
994	2,690756E+21	2,690955E+21	8,004465E+18	8,001687E+18	5,381712E+21	1,600615E+19	5,397718E+21
995	2,690940E+21	2,690903E+21	8,001274E+18	8,003455E+18	5,381843E+21	1,600473E+19	5,397848E+21
996	2,691032E+21	2,690976E+21	8,000450E+18	7,996971E+18	5,382008E+21	1,599742E+19	5,398005E+21
997	2,690947E+21	2,691154E+21	8,004497E+18	8,004063E+18	5,382101E+21	1,600856E+19	5,398110E+21
998	2,691181E+21	2,691062E+21	7,999061E+18	8,000697E+18	5,382242E+21	1,599976E+19	5,398242E+21
999	2,691156E+21	2,691204E+21	8,000050E+18	7,998997E+18	5,382361E+21	1,599905E+19	5,398360E+21
1000	2,691160E+21	2,691237E+21	8,002995E+18	8,004768E+18	5,382397E+21	1,600776E+19	5,398405E+21
1001	2,691329E+21	2,691112E+21	7,997075E+18	7,997922E+18	5,382440E+21	1,599500E+19	5,398435E+21
1002	2,691107E+21	2,691262E+21	8,003606E+18	8,000703E+18	5,382368E+21	1,600431E+19	5,398373E+21
1003	2,691091E+21	2,691134E+21	8,002156E+18	8,003105E+18	5,382225E+21	1,600526E+19	5,398231E+21
1004	2,691089E+21	2,690968E+21	7,998613E+18	7,998896E+18	5,382057E+21	1,599751E+19	5,398055E+21
1005	2,690823E+21	2,690982E+21	8,005717E+18	8,003407E+18	5,381805E+21	1,600912E+19	5,397814E+21
1006	2,690896E+21	2,690750E+21	7,999430E+18	8,003170E+18	5,381646E+21	1,600260E+19	5,397649E+21
1007	2,690788E+21	2,690713E+21	8,001826E+18	7,999843E+18	5,381501E+21	1,600167E+19	5,397503E+21
1008	2,690602E+21	2,690724E+21	8,005430E+18	8,005286E+18	5,381326E+21	1,601072E+19	5,397337E+21
1009	2,690701E+21	2,690527E+21	7,999434E+18	8,002036E+18	5,381228E+21	1,600147E+19	5,397230E+21
1010	2,690494E+21	2,690630E+21	8,004986E+18	8,000756E+18	5,381124E+21	1,600574E+19	5,397130E+21
1011	2,690497E+21	2,690596E+21	8,003637E+18	8,006301E+18	5,381093E+21	1,600994E+19	5,397103E+21
1012	2,690656E+21	2,690498E+21	8,000557E+18	7,999573E+18	5,381154E+21	1,600013E+19	5,397154E+21
1013	2,690522E+21	2,690691E+21	8,005417E+18	8,002428E+18	5,381213E+21	1,600784E+19	5,397221E+21
1014	2,690708E+21	2,690668E+21	8,001756E+18	8,004744E+18	5,381375E+21	1,600650E+19	5,397382E+21
1015	2,690796E+21	2,690738E+21	8,000480E+18	7,998531E+18	5,381534E+21	1,599901E+19	5,397533E+21
1016	2,690736E+21	2,690912E+21	8,004550E+18	8,005564E+18	5,381649E+21	1,601011E+19	5,397659E+21
1017	2,690980E+21	2,690822E+21	7,998982E+18	8,000959E+18	5,381802E+21	1,599994E+19	5,397802E+21
1018	2,690931E+21	2,690962E+21	8,001152E+18	7,999250E+18	5,381893E+21	1,600040E+19	5,397893E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1019	2,690905E+21	2,691023E+21	8,004709E+18	8,004635E+18	5,381928E+21	1,600934E+19	5,397937E+21
1020	2,691031E+21	2,690879E+21	7,998565E+18	7,998647E+18	5,381910E+21	1,599721E+19	5,397907E+21
1021	2,690798E+21	2,690956E+21	8,004562E+18	8,001818E+18	5,381754E+21	1,600638E+19	5,397760E+21
1022	2,690797E+21	2,690818E+21	8,002303E+18	8,004618E+18	5,381615E+21	1,600692E+19	5,397622E+21
1023	2,690808E+21	2,690650E+21	7,999009E+18	8,000144E+18	5,381458E+21	1,599915E+19	5,397457E+21
1024	2,690576E+21	2,690686E+21	8,006350E+18	8,004329E+18	5,381262E+21	1,601068E+19	5,397273E+21
1025	2,690641E+21	2,690481E+21	8,000174E+18	8,003467E+18	5,381122E+21	1,600364E+19	5,397126E+21
1026	2,690488E+21	2,690452E+21	8,003376E+18	8,000469E+18	5,380940E+21	1,600384E+19	5,396944E+21
1027	2,690288E+21	2,690479E+21	8,006785E+18	8,005906E+18	5,380767E+21	1,601269E+19	5,396780E+21
1028	2,690393E+21	2,690256E+21	8,000596E+18	8,002978E+18	5,380650E+21	1,600357E+19	5,396653E+21
1029	2,690220E+21	2,690317E+21	8,005609E+18	8,001511E+18	5,380537E+21	1,600712E+19	5,396544E+21
1030	2,690254E+21	2,690317E+21	8,004087E+18	8,007224E+18	5,380572E+21	1,601131E+19	5,396583E+21
1031	2,690417E+21	2,690250E+21	8,001094E+18	8,000482E+18	5,380667E+21	1,600158E+19	5,396668E+21
1032	2,690306E+21	2,690465E+21	8,005654E+18	8,003779E+18	5,380771E+21	1,600943E+19	5,396780E+21
1033	2,690492E+21	2,690448E+21	8,001839E+18	8,005325E+18	5,380940E+21	1,600716E+19	5,396947E+21
1034	2,690573E+21	2,690512E+21	8,001036E+18	7,999223E+18	5,381085E+21	1,600026E+19	5,397085E+21
1035	2,690516E+21	2,690709E+21	8,005698E+18	8,005498E+18	5,381224E+21	1,601120E+19	5,397236E+21
1036	2,690745E+21	2,690610E+21	8,000382E+18	8,001100E+18	5,381355E+21	1,600148E+19	5,397356E+21
1037	2,690676E+21	2,690700E+21	8,002407E+18	7,999841E+18	5,381377E+21	1,600225E+19	5,397379E+21
1038	2,690622E+21	2,690761E+21	8,005464E+18	8,005791E+18	5,381383E+21	1,601126E+19	5,397394E+21
1039	2,690733E+21	2,690588E+21	7,999000E+18	8,000337E+18	5,381321E+21	1,599934E+19	5,397321E+21
1040	2,690536E+21	2,690639E+21	8,004761E+18	8,003286E+18	5,381175E+21	1,600805E+19	5,397183E+21
1041	2,690546E+21	2,690513E+21	8,002476E+18	8,005013E+18	5,381059E+21	1,600749E+19	5,397067E+21
1042	2,690540E+21	2,690363E+21	8,000323E+18	8,000589E+18	5,380903E+21	1,600091E+19	5,396904E+21
1043	2,690280E+21	2,690441E+21	8,008002E+18	8,004280E+18	5,380721E+21	1,601228E+19	5,396733E+21
1044	2,690316E+21	2,690232E+21	8,001706E+18	8,004381E+18	5,380547E+21	1,600609E+19	5,396553E+21
1045	2,690162E+21	2,690140E+21	8,004343E+18	8,001609E+18	5,380303E+21	1,600595E+19	5,396309E+21
1046	2,689989E+21	2,690171E+21	8,006928E+18	8,007238E+18	5,380160E+21	1,601417E+19	5,396174E+21
1047	2,690121E+21	2,689956E+21	8,000967E+18	8,004190E+18	5,380077E+21	1,600516E+19	5,396082E+21
1048	2,690001E+21	2,690037E+21	8,005830E+18	8,002479E+18	5,380038E+21	1,600831E+19	5,396046E+21
1049	2,690042E+21	2,690081E+21	8,004513E+18	8,007532E+18	5,380123E+21	1,601204E+19	5,396135E+21
1050	2,690179E+21	2,690037E+21	8,002165E+18	8,001168E+18	5,380216E+21	1,600333E+19	5,396219E+21
1051	2,690067E+21	2,690273E+21	8,006701E+18	8,004187E+18	5,380340E+21	1,601089E+19	5,396351E+21
1052	2,690259E+21	2,690238E+21	8,002996E+18	8,005783E+18	5,380497E+21	1,600878E+19	5,396506E+21
1053	2,690346E+21	2,690256E+21	8,001820E+18	7,999665E+18	5,380602E+21	1,600149E+19	5,396603E+21
1054	2,690286E+21	2,690468E+21	8,006420E+18	8,005979E+18	5,380754E+21	1,601240E+19	5,396766E+21
1055	2,690480E+21	2,690368E+21	8,001193E+18	8,001986E+18	5,380849E+21	1,600318E+19	5,396852E+21
1056	2,690418E+21	2,690440E+21	8,002763E+18	8,001293E+18	5,380858E+21	1,600406E+19	5,396862E+21
1057	2,690360E+21	2,690484E+21	8,005608E+18	8,006501E+18	5,380844E+21	1,601211E+19	5,396856E+21
1058	2,690459E+21	2,690301E+21	7,999748E+18	8,001316E+18	5,380760E+21	1,600106E+19	5,396761E+21
1059	2,690273E+21	2,690377E+21	8,005885E+18	8,003418E+18	5,380650E+21	1,600930E+19	5,396659E+21
1060	2,690275E+21	2,690251E+21	8,003935E+18	8,005443E+18	5,380526E+21	1,600938E+19	5,396535E+21
1061	2,690242E+21	2,690070E+21	8,001709E+18	8,001438E+18	5,380312E+21	1,600315E+19	5,396315E+21
1062	2,689965E+21	2,690154E+21	8,008680E+18	8,005507E+18	5,380119E+21	1,601419E+19	5,396133E+21
1063	2,689991E+21	2,689924E+21	8,002265E+18	8,006159E+18	5,379915E+21	1,600842E+19	5,395923E+21
1064	2,689890E+21	2,689817E+21	8,004491E+18	8,003012E+18	5,379707E+21	1,600750E+19	5,395715E+21
1065	2,689742E+21	2,689872E+21	8,007081E+18	8,007532E+18	5,379614E+21	1,601461E+19	5,395629E+21
1066	2,689869E+21	2,689696E+21	8,002218E+18	8,004560E+18	5,379565E+21	1,600678E+19	5,395572E+21
1067	2,689748E+21	2,689831E+21	8,007140E+18	8,002410E+18	5,379578E+21	1,600955E+19	5,395588E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1068	2,689782E+21	2,689879E+21	8,005914E+18	8,008154E+18	5,379661E+21	1,601407E+19	5,395675E+21
1069	2,689921E+21	2,689791E+21	8,003021E+18	8,001956E+18	5,379712E+21	1,600498E+19	5,395717E+21
1070	2,689832E+21	2,690032E+21	8,006952E+18	8,004993E+18	5,379864E+21	1,601195E+19	5,395876E+21
1071	2,690029E+21	2,689998E+21	8,003598E+18	8,006606E+18	5,380027E+21	1,601020E+19	5,396037E+21
1072	2,690143E+21	2,690008E+21	8,002098E+18	8,000667E+18	5,380150E+21	1,600276E+19	5,396153E+21
1073	2,690058E+21	2,690233E+21	8,006874E+18	8,006412E+18	5,380291E+21	1,601329E+19	5,396304E+21
1074	2,690212E+21	2,690130E+21	8,002021E+18	8,003174E+18	5,380342E+21	1,600520E+19	5,396347E+21
1075	2,690148E+21	2,690193E+21	8,003606E+18	8,002019E+18	5,380341E+21	1,600562E+19	5,396346E+21
1076	2,690100E+21	2,690215E+21	8,006646E+18	8,007066E+18	5,380316E+21	1,601371E+19	5,396330E+21
1077	2,690195E+21	2,689998E+21	8,000819E+18	8,001874E+18	5,380193E+21	1,600269E+19	5,396196E+21
1078	2,690002E+21	2,690095E+21	8,006817E+18	8,003913E+18	5,380097E+21	1,601073E+19	5,396107E+21
1079	2,689966E+21	2,689976E+21	8,004964E+18	8,006619E+18	5,379942E+21	1,601158E+19	5,395953E+21
1080	2,689942E+21	2,689771E+21	8,002209E+18	8,003131E+18	5,379714E+21	1,600534E+19	5,395719E+21
1081	2,689669E+21	2,689850E+21	8,008813E+18	8,006286E+18	5,379520E+21	1,601510E+19	5,395535E+21
1082	2,689695E+21	2,689627E+21	8,003071E+18	8,007177E+18	5,379322E+21	1,601025E+19	5,395332E+21
1083	2,689618E+21	2,689553E+21	8,005704E+18	8,002940E+18	5,379171E+21	1,600864E+19	5,395180E+21
1084	2,689484E+21	2,689623E+21	8,008575E+18	8,007723E+18	5,379107E+21	1,601630E+19	5,395123E+21
1085	2,689593E+21	2,689439E+21	8,003712E+18	8,005193E+18	5,379032E+21	1,600891E+19	5,395041E+21
1086	2,689483E+21	2,689588E+21	8,007651E+18	8,003545E+18	5,379072E+21	1,601120E+19	5,395083E+21
1087	2,689524E+21	2,689627E+21	8,006496E+18	8,009665E+18	5,379150E+21	1,601616E+19	5,395166E+21
1088	2,689713E+21	2,689530E+21	8,002966E+18	8,003195E+18	5,379243E+21	1,600616E+19	5,395249E+21
1089	2,689638E+21	2,689791E+21	8,006987E+18	8,005166E+18	5,379429E+21	1,601215E+19	5,395441E+21
1090	2,689799E+21	2,689780E+21	8,004618E+18	8,006973E+18	5,379579E+21	1,601159E+19	5,395591E+21
1091	2,689892E+21	2,689815E+21	8,003154E+18	8,000903E+18	5,379708E+21	1,600406E+19	5,395712E+21
1092	2,689797E+21	2,690011E+21	8,008127E+18	8,007071E+18	5,379808E+21	1,601520E+19	5,395823E+21
1093	2,689938E+21	2,689854E+21	8,002943E+18	8,004099E+18	5,379792E+21	1,600704E+19	5,395799E+21
1094	2,689897E+21	2,689913E+21	8,004043E+18	8,002846E+18	5,379810E+21	1,600689E+19	5,395817E+21
1095	2,689842E+21	2,689934E+21	8,007508E+18	8,007891E+18	5,379775E+21	1,601540E+19	5,395791E+21
1096	2,689950E+21	2,689714E+21	8,001398E+18	8,003068E+18	5,379664E+21	1,600447E+19	5,395668E+21
1097	2,689726E+21	2,689823E+21	8,007495E+18	8,004513E+18	5,379550E+21	1,601201E+19	5,395562E+21
1098	2,689647E+21	2,689700E+21	8,005988E+18	8,008004E+18	5,379347E+21	1,601399E+19	5,395361E+21
1099	2,689629E+21	2,689492E+21	8,003329E+18	8,003938E+18	5,379121E+21	1,600727E+19	5,395128E+21
1100	2,689378E+21	2,689553E+21	8,009942E+18	8,006740E+18	5,378931E+21	1,601668E+19	5,394948E+21
1101	2,689400E+21	2,689313E+21	8,004383E+18	8,007692E+18	5,378713E+21	1,601207E+19	5,394725E+21
1102	2,689337E+21	2,689269E+21	8,006608E+18	8,003364E+18	5,378606E+21	1,600997E+19	5,394616E+21
1103	2,689195E+21	2,689361E+21	8,009458E+18	8,008984E+18	5,378556E+21	1,601844E+19	5,394574E+21
1104	2,689341E+21	2,689171E+21	8,004013E+18	8,006806E+18	5,378512E+21	1,601082E+19	5,394523E+21
1105	2,689254E+21	2,689334E+21	8,007475E+18	8,004360E+18	5,378587E+21	1,601183E+19	5,394599E+21
1106	2,689299E+21	2,689395E+21	8,007017E+18	8,010585E+18	5,378694E+21	1,601760E+19	5,394712E+21
1107	2,689501E+21	2,689328E+21	8,003864E+18	8,003131E+18	5,378829E+21	1,600699E+19	5,394836E+21
1108	2,689422E+21	2,689589E+21	8,008257E+18	8,005212E+18	5,379010E+21	1,601347E+19	5,395024E+21
1109	2,689534E+21	2,689554E+21	8,006019E+18	8,007479E+18	5,379088E+21	1,601350E+19	5,395102E+21
1110	2,689628E+21	2,689571E+21	8,003776E+18	8,001937E+18	5,379200E+21	1,600571E+19	5,395205E+21
1111	2,689537E+21	2,689739E+21	8,008869E+18	8,008420E+18	5,379276E+21	1,601729E+19	5,395293E+21
1112	2,689716E+21	2,689564E+21	8,003133E+18	8,005368E+18	5,379280E+21	1,600850E+19	5,395289E+21
1113	2,689677E+21	2,689640E+21	8,004398E+18	8,003232E+18	5,379317E+21	1,600763E+19	5,395325E+21
1114	2,689576E+21	2,689684E+21	8,008549E+18	8,008582E+18	5,379260E+21	1,601713E+19	5,395278E+21
1115	2,689652E+21	2,689483E+21	8,002588E+18	8,003756E+18	5,379135E+21	1,600634E+19	5,395141E+21
1116	2,689419E+21	2,689554E+21	8,008799E+18	8,005244E+18	5,378973E+21	1,601404E+19	5,394987E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1117	2,689315E+21	2,689386E+21	8,007114E+18	8,008954E+18	5,378702E+21	1,601607E+19	5,394718E+21
1118	2,689329E+21	2,689174E+21	8,004103E+18	8,004765E+18	5,378503E+21	1,600887E+19	5,394512E+21
1119	2,689090E+21	2,689234E+21	8,010926E+18	8,007638E+18	5,378324E+21	1,601856E+19	5,394343E+21
1120	2,689139E+21	2,689011E+21	8,004998E+18	8,009010E+18	5,378150E+21	1,601401E+19	5,394164E+21
1121	2,689080E+21	2,689001E+21	8,006897E+18	8,004269E+18	5,378081E+21	1,601117E+19	5,394092E+21
1122	2,688925E+21	2,689109E+21	8,009979E+18	8,010467E+18	5,378033E+21	1,602045E+19	5,394054E+21
1123	2,689095E+21	2,688946E+21	8,004829E+18	8,007357E+18	5,378042E+21	1,601219E+19	5,394054E+21
1124	2,689038E+21	2,689105E+21	8,008388E+18	8,004373E+18	5,378143E+21	1,601276E+19	5,394156E+21
1125	2,689054E+21	2,689160E+21	8,008475E+18	8,010500E+18	5,378214E+21	1,601898E+19	5,394233E+21
1126	2,689251E+21	2,689108E+21	8,004856E+18	8,003296E+18	5,378359E+21	1,600815E+19	5,394367E+21
1127	2,689152E+21	2,689354E+21	8,009204E+18	8,006391E+18	5,378505E+21	1,601559E+19	5,394521E+21
1128	2,689289E+21	2,689292E+21	8,006270E+18	8,009057E+18	5,378581E+21	1,601533E+19	5,394597E+21
1129	2,689405E+21	2,689307E+21	8,003648E+18	8,002955E+18	5,378712E+21	1,600660E+19	5,394719E+21
1130	2,689313E+21	2,689484E+21	8,009325E+18	8,009393E+18	5,378797E+21	1,601872E+19	5,394816E+21
1131	2,689491E+21	2,689338E+21	8,004108E+18	8,005621E+18	5,378828E+21	1,600973E+19	5,394838E+21
1132	2,689432E+21	2,689406E+21	8,005754E+18	8,003534E+18	5,378839E+21	1,600929E+19	5,394848E+21
1133	2,689263E+21	2,689421E+21	8,009976E+18	8,009354E+18	5,378684E+21	1,601933E+19	5,394703E+21
1134	2,689332E+21	2,689189E+21	8,003448E+18	8,005081E+18	5,378521E+21	1,600853E+19	5,394529E+21
1135	2,689105E+21	2,689226E+21	8,009717E+18	8,006634E+18	5,378331E+21	1,601635E+19	5,394348E+21
1136	2,689041E+21	2,689044E+21	8,007412E+18	8,010215E+18	5,378084E+21	1,601763E+19	5,394102E+21
1137	2,689063E+21	2,688858E+21	8,004620E+18	8,005275E+18	5,377921E+21	1,600989E+19	5,393931E+21
1138	2,688807E+21	2,688959E+21	8,011625E+18	8,008540E+18	5,377766E+21	1,602017E+19	5,393786E+21
1139	2,688856E+21	2,688775E+21	8,006099E+18	8,009751E+18	5,377630E+21	1,601585E+19	5,393646E+21
1140	2,688816E+21	2,688759E+21	8,007902E+18	8,004785E+18	5,377574E+21	1,601269E+19	5,393587E+21
1141	2,688648E+21	2,688854E+21	8,011049E+18	8,010970E+18	5,377502E+21	1,602202E+19	5,393524E+21
1142	2,688845E+21	2,688701E+21	8,005751E+18	8,007615E+18	5,377547E+21	1,601337E+19	5,393560E+21
1143	2,688794E+21	2,688859E+21	8,009390E+18	8,004994E+18	5,377652E+21	1,601438E+19	5,393667E+21
1144	2,688819E+21	2,688912E+21	8,009057E+18	8,011521E+18	5,377732E+21	1,602058E+19	5,393752E+21
1145	2,689012E+21	2,688871E+21	8,005012E+18	8,004400E+18	5,377883E+21	1,600941E+19	5,393893E+21
1146	2,688914E+21	2,689108E+21	8,009344E+18	8,008126E+18	5,378021E+21	1,601747E+19	5,394039E+21
1147	2,689076E+21	2,689063E+21	8,006847E+18	8,009822E+18	5,378138E+21	1,601667E+19	5,394155E+21
1148	2,689212E+21	2,689072E+21	8,004394E+18	8,003142E+18	5,378284E+21	1,600754E+19	5,394291E+21
1149	2,689066E+21	2,689242E+21	8,010691E+18	8,009341E+18	5,378308E+21	1,602003E+19	5,394328E+21
1150	2,689217E+21	2,689102E+21	8,005231E+18	8,006024E+18	5,378320E+21	1,601126E+19	5,394331E+21
1151	2,689126E+21	2,689135E+21	8,006995E+18	8,004844E+18	5,378261E+21	1,601184E+19	5,394273E+21
1152	2,688961E+21	2,689109E+21	8,010390E+18	8,010833E+18	5,378070E+21	1,602122E+19	5,394091E+21
1153	2,689048E+21	2,688870E+21	8,003584E+18	8,006366E+18	5,377919E+21	1,600995E+19	5,393929E+21
1154	2,688826E+21	2,688908E+21	8,010204E+18	8,007649E+18	5,377735E+21	1,601785E+19	5,393752E+21
1155	2,688772E+21	2,688767E+21	8,008427E+18	8,010580E+18	5,377539E+21	1,601901E+19	5,393558E+21
1156	2,688793E+21	2,688597E+21	8,005991E+18	8,005475E+18	5,377390E+21	1,601147E+19	5,393401E+21
1157	2,688490E+21	2,688692E+21	8,012930E+18	8,009174E+18	5,377182E+21	1,602210E+19	5,393204E+21
1158	2,688556E+21	2,688506E+21	8,007161E+18	8,010773E+18	5,377062E+21	1,601793E+19	5,393080E+21
1159	2,688538E+21	2,688475E+21	8,008844E+18	8,005943E+18	5,377014E+21	1,601479E+19	5,393028E+21
1160	2,688408E+21	2,688568E+21	8,011350E+18	8,011873E+18	5,376976E+21	1,602322E+19	5,392999E+21
1161	2,688611E+21	2,688446E+21	8,006070E+18	8,008201E+18	5,377057E+21	1,601427E+19	5,393071E+21
1162	2,688546E+21	2,688623E+21	8,009608E+18	8,006147E+18	5,377168E+21	1,601576E+19	5,393184E+21
1163	2,688578E+21	2,688701E+21	8,009731E+18	8,012395E+18	5,377279E+21	1,602213E+19	5,393301E+21
1164	2,688794E+21	2,688648E+21	8,005601E+18	8,004964E+18	5,377442E+21	1,601056E+19	5,393453E+21
1165	2,688683E+21	2,688871E+21	8,010139E+18	8,008631E+18	5,377554E+21	1,601877E+19	5,393572E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1166	2,688859E+21	2,688831E+21	8,007939E+18	8,009900E+18	5,377690E+21	1,601784E+19	5,393708E+21
1167	2,688977E+21	2,688834E+21	8,005632E+18	8,003819E+18	5,377811E+21	1,600945E+19	5,393820E+21
1168	2,688812E+21	2,688986E+21	8,011380E+18	8,010180E+18	5,377799E+21	1,602156E+19	5,393820E+21
1169	2,688932E+21	2,688833E+21	8,005585E+18	8,007356E+18	5,377766E+21	1,601294E+19	5,393779E+21
1170	2,688832E+21	2,688838E+21	8,007346E+18	8,006580E+18	5,377671E+21	1,601393E+19	5,393685E+21
1171	2,688689E+21	2,688818E+21	8,011125E+18	8,011522E+18	5,377507E+21	1,602265E+19	5,393529E+21
1172	2,688789E+21	2,688578E+21	8,004672E+18	8,006491E+18	5,377367E+21	1,601116E+19	5,393379E+21
1173	2,688524E+21	2,688618E+21	8,011616E+18	8,007637E+18	5,377142E+21	1,601925E+19	5,393161E+21
1174	2,688458E+21	2,688495E+21	8,009712E+18	8,011107E+18	5,376953E+21	1,602082E+19	5,392974E+21
1175	2,688473E+21	2,688314E+21	8,007284E+18	8,006891E+18	5,376787E+21	1,601417E+19	5,392801E+21
1176	2,688200E+21	2,688387E+21	8,013132E+18	8,010551E+18	5,376588E+21	1,602368E+19	5,392611E+21
1177	2,688296E+21	2,688218E+21	8,007318E+18	8,012076E+18	5,376514E+21	1,601939E+19	5,392534E+21
1178	2,688295E+21	2,688202E+21	8,009089E+18	8,007035E+18	5,376496E+21	1,601612E+19	5,392512E+21
1179	2,688178E+21	2,688338E+21	8,012098E+18	8,012268E+18	5,376516E+21	1,602437E+19	5,392540E+21
1180	2,688380E+21	2,688231E+21	8,007003E+18	8,008449E+18	5,376611E+21	1,601545E+19	5,392626E+21
1181	2,688278E+21	2,688392E+21	8,010507E+18	8,006801E+18	5,376670E+21	1,601731E+19	5,392688E+21
1182	2,688338E+21	2,688468E+21	8,010769E+18	8,013019E+18	5,376806E+21	1,602379E+19	5,392830E+21
1183	2,688574E+21	2,688404E+21	8,006663E+18	8,005761E+18	5,376978E+21	1,601242E+19	5,392990E+21
1184	2,688475E+21	2,688616E+21	8,010653E+18	8,009084E+18	5,377091E+21	1,601974E+19	5,393111E+21
1185	2,688632E+21	2,688598E+21	8,008481E+18	8,010414E+18	5,377230E+21	1,601890E+19	5,393249E+21
1186	2,688712E+21	2,688594E+21	8,005967E+18	8,005177E+18	5,377305E+21	1,601114E+19	5,393316E+21
1187	2,688536E+21	2,688744E+21	8,012106E+18	8,011046E+18	5,377280E+21	1,602315E+19	5,393303E+21
1188	2,688661E+21	2,688566E+21	8,006261E+18	8,008024E+18	5,377227E+21	1,601429E+19	5,393241E+21
1189	2,688536E+21	2,688542E+21	8,008399E+18	8,007073E+18	5,377078E+21	1,601547E+19	5,393093E+21
1190	2,688407E+21	2,688523E+21	8,012411E+18	8,011683E+18	5,376930E+21	1,602409E+19	5,392954E+21
1191	2,688494E+21	2,688284E+21	8,006191E+18	8,007483E+18	5,376778E+21	1,601367E+19	5,392792E+21
1192	2,688226E+21	2,688313E+21	8,012168E+18	8,008801E+18	5,376539E+21	1,602097E+19	5,392560E+21
1193	2,688159E+21	2,688197E+21	8,009944E+18	8,012952E+18	5,376355E+21	1,602290E+19	5,392378E+21
1194	2,688187E+21	2,688011E+21	8,007447E+18	8,008821E+18	5,376198E+21	1,601627E+19	5,392214E+21
1195	2,687953E+21	2,688112E+21	8,013572E+18	8,011209E+18	5,376065E+21	1,602478E+19	5,392090E+21
1196	2,688061E+21	2,687965E+21	8,008312E+18	8,012003E+18	5,376026E+21	1,602032E+19	5,392046E+21
1197	2,688018E+21	2,687961E+21	8,010376E+18	8,006891E+18	5,375979E+21	1,601727E+19	5,391996E+21
1198	2,687901E+21	2,688109E+21	8,013489E+18	8,012461E+18	5,376011E+21	1,602595E+19	5,392037E+21
1199	2,688104E+21	2,687994E+21	8,008371E+18	8,009551E+18	5,376098E+21	1,601792E+19	5,392116E+21
1200	2,688045E+21	2,688131E+21	8,010616E+18	8,007888E+18	5,376176E+21	1,601850E+19	5,392195E+21
1201	2,688131E+21	2,688221E+21	8,011029E+18	8,014015E+18	5,376352E+21	1,602504E+19	5,392377E+21
1202	2,688369E+21	2,688169E+21	8,006875E+18	8,006747E+18	5,376539E+21	1,601362E+19	5,392552E+21
1203	2,688269E+21	2,688408E+21	8,011403E+18	8,009399E+18	5,376677E+21	1,602080E+19	5,392697E+21
1204	2,688391E+21	2,688388E+21	8,009383E+18	8,010676E+18	5,376779E+21	1,602006E+19	5,392799E+21
1205	2,688414E+21	2,688345E+21	8,006910E+18	8,006137E+18	5,376759E+21	1,601305E+19	5,392772E+21
1206	2,688252E+21	2,688466E+21	8,013280E+18	8,011707E+18	5,376718E+21	1,602499E+19	5,392743E+21
1207	2,688383E+21	2,688270E+21	8,007477E+18	8,009135E+18	5,376653E+21	1,601661E+19	5,392669E+21
1208	2,688269E+21	2,688223E+21	8,008972E+18	8,007761E+18	5,376492E+21	1,601673E+19	5,392509E+21
1209	2,688128E+21	2,688225E+21	8,012908E+18	8,012667E+18	5,376353E+21	1,602557E+19	5,392379E+21
1210	2,688192E+21	2,687993E+21	8,006586E+18	8,009221E+18	5,376185E+21	1,601581E+19	5,392201E+21
1211	2,687940E+21	2,688035E+21	8,012764E+18	8,009878E+18	5,375974E+21	1,602264E+19	5,391997E+21
1212	2,687889E+21	2,687923E+21	8,010661E+18	8,013628E+18	5,375811E+21	1,602429E+19	5,391836E+21
1213	2,687895E+21	2,687734E+21	8,008749E+18	8,009110E+18	5,375628E+21	1,601786E+19	5,391646E+21
1214	2,687679E+21	2,687851E+21	8,015096E+18	8,010973E+18	5,375530E+21	1,602607E+19	5,391556E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1215	2,687775E+21	2,687714E+21	8,010055E+18	8,012631E+18	5,375489E+21	1,602269E+19	5,391512E+21
1216	2,687732E+21	2,687690E+21	8,010962E+18	8,007737E+18	5,375421E+21	1,601870E+19	5,391440E+21
1217	2,687640E+21	2,687842E+21	8,013703E+18	8,014145E+18	5,375482E+21	1,602785E+19	5,391510E+21
1218	2,687873E+21	2,687730E+21	8,008454E+18	8,011232E+18	5,375602E+21	1,601969E+19	5,391622E+21
1219	2,687861E+21	2,687898E+21	8,010841E+18	8,008554E+18	5,375759E+21	1,601940E+19	5,391778E+21
1220	2,687946E+21	2,688013E+21	8,011799E+18	8,013893E+18	5,375959E+21	1,602569E+19	5,391985E+21
1221	2,688118E+21	2,687966E+21	8,007886E+18	8,006891E+18	5,376083E+21	1,601478E+19	5,392098E+21
1222	2,687999E+21	2,688193E+21	8,012672E+18	8,009695E+18	5,376192E+21	1,602237E+19	5,392215E+21
1223	2,688102E+21	2,688141E+21	8,010633E+18	8,011876E+18	5,376244E+21	1,602251E+19	5,392266E+21
1224	2,688144E+21	2,688048E+21	8,007196E+18	8,007362E+18	5,376192E+21	1,601456E+19	5,392207E+21
1225	2,688003E+21	2,688163E+21	8,013697E+18	8,012885E+18	5,376166E+21	1,602658E+19	5,392193E+21
1226	2,688128E+21	2,687974E+21	8,007871E+18	8,010471E+18	5,376102E+21	1,601834E+19	5,392120E+21
1227	2,688018E+21	2,687953E+21	8,009709E+18	8,008483E+18	5,375971E+21	1,601819E+19	5,391989E+21
1228	2,687850E+21	2,687964E+21	8,013718E+18	8,013191E+18	5,375814E+21	1,602691E+19	5,391841E+21
1229	2,687870E+21	2,687716E+21	8,007776E+18	8,010242E+18	5,375586E+21	1,601802E+19	5,391604E+21
1230	2,687642E+21	2,687747E+21	8,014284E+18	8,010164E+18	5,375389E+21	1,602445E+19	5,391413E+21
1231	2,687591E+21	2,687637E+21	8,012375E+18	8,014335E+18	5,375228E+21	1,602671E+19	5,391255E+21
1232	2,687604E+21	2,687433E+21	8,009673E+18	8,009566E+18	5,375038E+21	1,601924E+19	5,391057E+21
1233	2,687390E+21	2,687564E+21	8,015581E+18	8,012055E+18	5,374954E+21	1,602764E+19	5,390981E+21
1234	2,687483E+21	2,687438E+21	8,010302E+18	8,014392E+18	5,374921E+21	1,602469E+19	5,390946E+21
1235	2,687493E+21	2,687432E+21	8,011047E+18	8,008921E+18	5,374925E+21	1,601997E+19	5,390945E+21
1236	2,687437E+21	2,687605E+21	8,013962E+18	8,014754E+18	5,375042E+21	1,602872E+19	5,391071E+21
1237	2,687654E+21	2,687511E+21	8,009436E+18	8,011463E+18	5,375165E+21	1,602090E+19	5,391186E+21
1238	2,687654E+21	2,687694E+21	8,012166E+18	8,008322E+18	5,375348E+21	1,602049E+19	5,391369E+21
1239	2,687704E+21	2,687816E+21	8,013387E+18	8,014453E+18	5,375519E+21	1,602784E+19	5,391547E+21
1240	2,687849E+21	2,687723E+21	8,008341E+18	8,007933E+18	5,375572E+21	1,601627E+19	5,391588E+21
1241	2,687740E+21	2,687918E+21	8,012930E+18	8,011401E+18	5,375657E+21	1,602433E+19	5,391681E+21
1242	2,687849E+21	2,687852E+21	8,010779E+18	8,013490E+18	5,375701E+21	1,602427E+19	5,391725E+21
1243	2,687925E+21	2,687770E+21	8,007675E+18	8,008091E+18	5,375695E+21	1,601577E+19	5,391710E+21
1244	2,687774E+21	2,687902E+21	8,014575E+18	8,012804E+18	5,375676E+21	1,602738E+19	5,391704E+21
1245	2,687829E+21	2,687720E+21	8,009219E+18	8,010852E+18	5,375548E+21	1,602007E+19	5,391568E+21
1246	2,687706E+21	2,687693E+21	8,011360E+18	8,008846E+18	5,375399E+21	1,602021E+19	5,391420E+21
1247	2,687528E+21	2,687686E+21	8,015153E+18	8,014347E+18	5,375213E+21	1,602950E+19	5,391243E+21
1248	2,687556E+21	2,687396E+21	8,008462E+18	8,011420E+18	5,374952E+21	1,601988E+19	5,390972E+21
1249	2,687357E+21	2,687425E+21	8,014864E+18	8,011333E+18	5,374782E+21	1,602620E+19	5,390808E+21
1250	2,687303E+21	2,687331E+21	8,012842E+18	8,015650E+18	5,374634E+21	1,602849E+19	5,390663E+21
1251	2,687337E+21	2,687155E+21	8,010202E+18	8,010522E+18	5,374492E+21	1,602072E+19	5,390513E+21
1252	2,687129E+21	2,687301E+21	8,015865E+18	8,012898E+18	5,374429E+21	1,602876E+19	5,390458E+21
1253	2,687209E+21	2,687182E+21	8,011150E+18	8,015452E+18	5,374391E+21	1,602660E+19	5,390417E+21
1254	2,687269E+21	2,687194E+21	8,012161E+18	8,009100E+18	5,374463E+21	1,602126E+19	5,390484E+21
1255	2,687222E+21	2,687387E+21	8,015369E+18	8,015158E+18	5,374610E+21	1,603053E+19	5,390640E+21
1256	2,687423E+21	2,687284E+21	8,010313E+18	8,011565E+18	5,374708E+21	1,602188E+19	5,390730E+21
1257	2,687412E+21	2,687467E+21	8,012633E+18	8,009320E+18	5,374879E+21	1,602195E+19	5,390901E+21
1258	2,687435E+21	2,687575E+21	8,013700E+18	8,015890E+18	5,375011E+21	1,602959E+19	5,391040E+21
1259	2,687614E+21	2,687472E+21	8,008441E+18	8,009183E+18	5,375086E+21	1,601762E+19	5,391104E+21
1260	2,687523E+21	2,687659E+21	8,013304E+18	8,011925E+18	5,375182E+21	1,602523E+19	5,391208E+21
1261	2,687602E+21	2,687601E+21	8,011915E+18	8,013810E+18	5,375202E+21	1,602572E+19	5,391228E+21
1262	2,687679E+21	2,687526E+21	8,009363E+18	8,007940E+18	5,375205E+21	1,601730E+19	5,391223E+21
1263	2,687485E+21	2,687657E+21	8,016225E+18	8,013412E+18	5,375143E+21	1,602964E+19	5,391172E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1264	2,687509E+21	2,687431E+21	8,009927E+18	8,012148E+18	5,374940E+21	1,602208E+19	5,390962E+21
1265	2,687405E+21	2,687370E+21	8,011856E+18	8,010737E+18	5,374775E+21	1,602259E+19	5,390798E+21
1266	2,687232E+21	2,687360E+21	8,015392E+18	8,015954E+18	5,374592E+21	1,603135E+19	5,390623E+21
1267	2,687297E+21	2,687087E+21	8,008975E+18	8,012433E+18	5,374384E+21	1,602141E+19	5,390406E+21
1268	2,687092E+21	2,687137E+21	8,015488E+18	8,011483E+18	5,374229E+21	1,602697E+19	5,390256E+21
1269	2,686989E+21	2,687063E+21	8,013884E+18	8,016261E+18	5,374053E+21	1,603015E+19	5,390083E+21
1270	2,687041E+21	2,686898E+21	8,011625E+18	8,010865E+18	5,373939E+21	1,602249E+19	5,389962E+21
1271	2,686857E+21	2,687050E+21	8,016965E+18	8,013837E+18	5,373907E+21	1,603080E+19	5,389938E+21
1272	2,686960E+21	2,686918E+21	8,011948E+18	8,016160E+18	5,373877E+21	1,602811E+19	5,389906E+21
1273	2,687055E+21	2,686942E+21	8,012720E+18	8,009971E+18	5,373997E+21	1,602269E+19	5,390020E+21
1274	2,686995E+21	2,687156E+21	8,015838E+18	8,016025E+18	5,374151E+21	1,603186E+19	5,390183E+21
1275	2,687197E+21	2,687068E+21	8,010710E+18	8,012376E+18	5,374264E+21	1,602309E+19	5,390287E+21
1276	2,687178E+21	2,687237E+21	8,012777E+18	8,010166E+18	5,374415E+21	1,602294E+19	5,390438E+21
1277	2,687174E+21	2,687330E+21	8,014543E+18	8,016713E+18	5,374504E+21	1,603126E+19	5,390535E+21
1278	2,687381E+21	2,687228E+21	8,009756E+18	8,009335E+18	5,374609E+21	1,601909E+19	5,390628E+21
1279	2,687291E+21	2,687417E+21	8,014665E+18	8,012370E+18	5,374708E+21	1,602703E+19	5,390735E+21
1280	2,687333E+21	2,687332E+21	8,012872E+18	8,014197E+18	5,374665E+21	1,602707E+19	5,390692E+21
1281	2,687398E+21	2,687248E+21	8,009908E+18	8,009360E+18	5,374647E+21	1,601927E+19	5,390666E+21
1282	2,687183E+21	2,687365E+21	8,016438E+18	8,014967E+18	5,374548E+21	1,603141E+19	5,390579E+21
1283	2,687236E+21	2,687132E+21	8,010076E+18	8,013706E+18	5,374368E+21	1,602378E+19	5,390392E+21
1284	2,687146E+21	2,687071E+21	8,012350E+18	8,011434E+18	5,374217E+21	1,602378E+19	5,390241E+21
1285	2,686940E+21	2,687073E+21	8,016532E+18	8,016315E+18	5,374012E+21	1,603285E+19	5,390045E+21
1286	2,687006E+21	2,686821E+21	8,010806E+18	8,012435E+18	5,373827E+21	1,602324E+19	5,389851E+21
1287	2,686782E+21	2,686873E+21	8,016941E+18	8,012098E+18	5,373655E+21	1,602904E+19	5,389685E+21
1288	2,686670E+21	2,686767E+21	8,014700E+18	8,017354E+18	5,373437E+21	1,603205E+19	5,389469E+21
1289	2,686772E+21	2,686597E+21	8,012180E+18	8,012370E+18	5,373369E+21	1,602455E+19	5,389393E+21
1290	2,686614E+21	2,686772E+21	8,017188E+18	8,014977E+18	5,373386E+21	1,603217E+19	5,389418E+21
1291	2,686757E+21	2,686675E+21	8,012517E+18	8,016846E+18	5,373432E+21	1,602936E+19	5,389462E+21
1292	2,686840E+21	2,686724E+21	8,013148E+18	8,010112E+18	5,373564E+21	1,602326E+19	5,389587E+21
1293	2,686726E+21	2,686950E+21	8,016682E+18	8,016502E+18	5,373676E+21	1,603318E+19	5,389709E+21
1294	2,686937E+21	2,686855E+21	8,011908E+18	8,012675E+18	5,373793E+21	1,602458E+19	5,389817E+21
1295	2,686930E+21	2,687004E+21	8,013666E+18	8,011022E+18	5,373934E+21	1,602469E+19	5,389959E+21
1296	2,686930E+21	2,687066E+21	8,015360E+18	8,017257E+18	5,373996E+21	1,603262E+19	5,390029E+21
1297	2,687162E+21	2,686960E+21	8,010441E+18	8,010308E+18	5,374122E+21	1,602075E+19	5,390143E+21
1298	2,687048E+21	2,687159E+21	8,015112E+18	8,013359E+18	5,374207E+21	1,602847E+19	5,390235E+21
1299	2,687084E+21	2,687079E+21	8,013226E+18	8,015405E+18	5,374163E+21	1,602863E+19	5,390192E+21
1300	2,687134E+21	2,686976E+21	8,010115E+18	8,010554E+18	5,374110E+21	1,602067E+19	5,390131E+21
1301	2,686891E+21	2,687081E+21	8,017246E+18	8,015754E+18	5,373972E+21	1,603300E+19	5,390005E+21
1302	2,686958E+21	2,686856E+21	8,011681E+18	8,013895E+18	5,373814E+21	1,602558E+19	5,389840E+21
1303	2,686856E+21	2,686796E+21	8,014105E+18	8,011659E+18	5,373652E+21	1,602576E+19	5,389677E+21
1304	2,686609E+21	2,686772E+21	8,017798E+18	8,016618E+18	5,373381E+21	1,603442E+19	5,389415E+21
1305	2,686681E+21	2,686511E+21	8,011694E+18	8,013863E+18	5,373192E+21	1,602556E+19	5,389218E+21
1306	2,686469E+21	2,686561E+21	8,017073E+18	8,013616E+18	5,373030E+21	1,603069E+19	5,389061E+21
1307	2,686417E+21	2,686471E+21	8,014835E+18	8,018877E+18	5,372888E+21	1,603371E+19	5,388922E+21
1308	2,686552E+21	2,686332E+21	8,012501E+18	8,013028E+18	5,372884E+21	1,602553E+19	5,388910E+21
1309	2,686380E+21	2,686537E+21	8,018022E+18	8,015204E+18	5,372917E+21	1,603323E+19	5,388950E+21
1310	2,686515E+21	2,686476E+21	8,014168E+18	8,016729E+18	5,372991E+21	1,603090E+19	5,389022E+21
1311	2,686577E+21	2,686522E+21	8,014184E+18	8,010783E+18	5,373099E+21	1,602497E+19	5,389124E+21
1312	2,686445E+21	2,686693E+21	8,017387E+18	8,017414E+18	5,373138E+21	1,603480E+19	5,389173E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1313	2,686698E+21	2,686583E+21	8,012364E+18	8,014012E+18	5,373281E+21	1,602638E+19	5,389308E+21
1314	2,686713E+21	2,686738E+21	8,013834E+18	8,012039E+18	5,373451E+21	1,602587E+19	5,389477E+21
1315	2,686737E+21	2,686819E+21	8,015918E+18	8,017889E+18	5,373555E+21	1,603381E+19	5,389589E+21
1316	2,686942E+21	2,686731E+21	8,010855E+18	8,010758E+18	5,373673E+21	1,602161E+19	5,389694E+21
1317	2,686771E+21	2,686927E+21	8,015908E+18	8,013981E+18	5,373698E+21	1,602989E+19	5,389728E+21
1318	2,686803E+21	2,686843E+21	8,014579E+18	8,015827E+18	5,373646E+21	1,603041E+19	5,389677E+21
1319	2,686852E+21	2,686717E+21	8,011302E+18	8,011454E+18	5,373569E+21	1,602276E+19	5,389592E+21
1320	2,686589E+21	2,686778E+21	8,018477E+18	8,016124E+18	5,373368E+21	1,603460E+19	5,389402E+21
1321	2,686668E+21	2,686545E+21	8,012775E+18	8,014956E+18	5,373212E+21	1,602773E+19	5,389240E+21
1322	2,686543E+21	2,686486E+21	8,014806E+18	8,012722E+18	5,373029E+21	1,602753E+19	5,389057E+21
1323	2,686314E+21	2,686462E+21	8,018087E+18	8,018147E+18	5,372776E+21	1,603623E+19	5,388812E+21
1324	2,686399E+21	2,686203E+21	8,011952E+18	8,015268E+18	5,372602E+21	1,602722E+19	5,388629E+21
1325	2,686197E+21	2,686273E+21	8,017557E+18	8,014513E+18	5,372470E+21	1,603207E+19	5,388502E+21
1326	2,686180E+21	2,686227E+21	8,016290E+18	8,019076E+18	5,372408E+21	1,603537E+19	5,388443E+21
1327	2,686306E+21	2,686111E+21	8,013966E+18	8,013113E+18	5,372417E+21	1,602708E+19	5,388445E+21
1328	2,686094E+21	2,686299E+21	8,019079E+18	8,015308E+18	5,372393E+21	1,603439E+19	5,388427E+21
1329	2,686236E+21	2,686227E+21	8,014987E+18	8,017789E+18	5,372463E+21	1,603278E+19	5,388495E+21
1330	2,686307E+21	2,686262E+21	8,014291E+18	8,011997E+18	5,372568E+21	1,602629E+19	5,388595E+21
1331	2,686233E+21	2,686432E+21	8,017577E+18	8,018656E+18	5,372665E+21	1,603623E+19	5,388701E+21
1332	2,686506E+21	2,686341E+21	8,012731E+18	8,014644E+18	5,372848E+21	1,602738E+19	5,388875E+21
1333	2,686503E+21	2,686516E+21	8,014554E+18	8,012411E+18	5,373020E+21	1,602696E+19	5,389047E+21
1334	2,686507E+21	2,686624E+21	8,017484E+18	8,017893E+18	5,373132E+21	1,603538E+19	5,389167E+21
1335	2,686675E+21	2,686521E+21	8,011923E+18	8,011579E+18	5,373196E+21	1,602350E+19	5,389219E+21
1336	2,686471E+21	2,686649E+21	8,016912E+18	8,014769E+18	5,373120E+21	1,603168E+19	5,389152E+21
1337	2,686523E+21	2,686541E+21	8,015424E+18	8,017081E+18	5,373064E+21	1,603250E+19	5,389097E+21
1338	2,686569E+21	2,686410E+21	8,011935E+18	8,012627E+18	5,372979E+21	1,602456E+19	5,389004E+21
1339	2,686321E+21	2,686468E+21	8,019172E+18	8,017047E+18	5,372789E+21	1,603622E+19	5,388825E+21
1340	2,686375E+21	2,686249E+21	8,013207E+18	8,016011E+18	5,372624E+21	1,602922E+19	5,388653E+21
1341	2,686229E+21	2,686188E+21	8,015321E+18	8,013715E+18	5,372417E+21	1,602904E+19	5,388446E+21
1342	2,686022E+21	2,686184E+21	8,019185E+18	8,018764E+18	5,372206E+21	1,603795E+19	5,388244E+21
1343	2,686128E+21	2,685942E+21	8,013115E+18	8,016004E+18	5,372071E+21	1,602912E+19	5,388100E+21
1344	2,685922E+21	2,685994E+21	8,018834E+18	8,014635E+18	5,371916E+21	1,603347E+19	5,387949E+21
1345	2,685920E+21	2,685966E+21	8,017604E+18	8,019778E+18	5,371886E+21	1,603738E+19	5,387924E+21
1346	2,686022E+21	2,685866E+21	8,014728E+18	8,013955E+18	5,371888E+21	1,602868E+19	5,387917E+21
1347	2,685832E+21	2,686037E+21	8,019270E+18	8,016688E+18	5,371869E+21	1,603596E+19	5,387905E+21
1348	2,685992E+21	2,685964E+21	8,015099E+18	8,019018E+18	5,371956E+21	1,603412E+19	5,387990E+21
1349	2,686083E+21	2,686010E+21	8,014548E+18	8,012763E+18	5,372093E+21	1,602731E+19	5,388120E+21
1350	2,686040E+21	2,686221E+21	8,018957E+18	8,018715E+18	5,372261E+21	1,603767E+19	5,388299E+21
1351	2,686294E+21	2,686152E+21	8,014080E+18	8,014737E+18	5,372446E+21	1,602882E+19	5,388475E+21
1352	2,686238E+21	2,686292E+21	8,015650E+18	8,012732E+18	5,372531E+21	1,602838E+19	5,388559E+21
1353	2,686238E+21	2,686375E+21	8,018313E+18	8,019016E+18	5,372613E+21	1,603733E+19	5,388650E+21
1354	2,686393E+21	2,686249E+21	8,012154E+18	8,013045E+18	5,372643E+21	1,602520E+19	5,388668E+21
1355	2,686228E+21	2,686353E+21	8,017250E+18	8,016095E+18	5,372581E+21	1,603335E+19	5,388614E+21
1356	2,686277E+21	2,686249E+21	8,015918E+18	8,017932E+18	5,372526E+21	1,603385E+19	5,388560E+21
1357	2,686294E+21	2,686127E+21	8,012805E+18	8,013331E+18	5,372421E+21	1,602614E+19	5,388447E+21
1358	2,686033E+21	2,686206E+21	8,020613E+18	8,017421E+18	5,372240E+21	1,603803E+19	5,388278E+21
1359	2,686063E+21	2,685976E+21	8,014293E+18	8,017007E+18	5,372039E+21	1,603130E+19	5,388071E+21
1360	2,685908E+21	2,685872E+21	8,016416E+18	8,014425E+18	5,371780E+21	1,603084E+19	5,387811E+21
1361	2,685744E+21	2,685875E+21	8,020185E+18	8,019705E+18	5,371618E+21	1,603989E+19	5,387658E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1362	2,685848E+21	2,685660E+21	8,014164E+18	8,016781E+18	5,371508E+21	1,603095E+19	5,387539E+21
1363	2,685661E+21	2,685720E+21	8,019564E+18	8,015394E+18	5,371380E+21	1,603496E+19	5,387415E+21
1364	2,685639E+21	2,685710E+21	8,018064E+18	8,020775E+18	5,371348E+21	1,603884E+19	5,387387E+21
1365	2,685735E+21	2,685608E+21	8,015010E+18	8,015007E+18	5,371343E+21	1,603002E+19	5,387373E+21
1366	2,685587E+21	2,685796E+21	8,020009E+18	8,017419E+18	5,371383E+21	1,603743E+19	5,387420E+21
1367	2,685771E+21	2,685741E+21	8,016005E+18	8,019589E+18	5,371512E+21	1,603559E+19	5,387548E+21
1368	2,685860E+21	2,685768E+21	8,015632E+18	8,012908E+18	5,371628E+21	1,602854E+19	5,387657E+21
1369	2,685828E+21	2,685994E+21	8,020075E+18	8,019337E+18	5,371822E+21	1,603941E+19	5,387861E+21
1370	2,686043E+21	2,685934E+21	8,014753E+18	8,015717E+18	5,371978E+21	1,603047E+19	5,388008E+21
1371	2,685998E+21	2,686034E+21	8,015838E+18	8,014252E+18	5,372032E+21	1,603009E+19	5,388062E+21
1372	2,685994E+21	2,686107E+21	8,018450E+18	8,020237E+18	5,372100E+21	1,603869E+19	5,388139E+21
1373	2,686149E+21	2,685976E+21	8,012475E+18	8,014021E+18	5,372125E+21	1,602650E+19	5,388151E+21
1374	2,685987E+21	2,686097E+21	8,018744E+18	8,016201E+18	5,372084E+21	1,603494E+19	5,388119E+21
1375	2,685998E+21	2,686005E+21	8,017248E+18	8,018105E+18	5,372004E+21	1,603535E+19	5,388039E+21
1376	2,685963E+21	2,685838E+21	8,014233E+18	8,013732E+18	5,371801E+21	1,602796E+19	5,387829E+21
1377	2,685715E+21	2,685898E+21	8,021608E+18	8,018398E+18	5,371613E+21	1,604001E+19	5,387653E+21
1378	2,685749E+21	2,685670E+21	8,014982E+18	8,018399E+18	5,371419E+21	1,603338E+19	5,387452E+21
1379	2,685643E+21	2,685555E+21	8,017006E+18	8,015686E+18	5,371198E+21	1,603269E+19	5,387231E+21
1380	2,685486E+21	2,685586E+21	8,020695E+18	8,020633E+18	5,371073E+21	1,604133E+19	5,387114E+21
1381	2,685572E+21	2,685395E+21	8,014901E+18	8,017684E+18	5,370967E+21	1,603259E+19	5,387000E+21
1382	2,685384E+21	2,685481E+21	8,020631E+18	8,016005E+18	5,370865E+21	1,603664E+19	5,386901E+21
1383	2,685355E+21	2,685466E+21	8,018827E+18	8,021652E+18	5,370822E+21	1,604048E+19	5,386862E+21
1384	2,685456E+21	2,685329E+21	8,015897E+18	8,015607E+18	5,370785E+21	1,603150E+19	5,386817E+21
1385	2,685368E+21	2,685529E+21	8,020773E+18	8,018210E+18	5,370897E+21	1,603898E+19	5,386936E+21
1386	2,685550E+21	2,685509E+21	8,017056E+18	8,020168E+18	5,371059E+21	1,603722E+19	5,387096E+21
1387	2,685655E+21	2,685538E+21	8,016126E+18	8,013728E+18	5,371193E+21	1,602985E+19	5,387223E+21
1388	2,685599E+21	2,685771E+21	8,020303E+18	8,020269E+18	5,371369E+21	1,604057E+19	5,387410E+21
1389	2,685790E+21	2,685701E+21	8,014918E+18	8,016705E+18	5,371491E+21	1,603162E+19	5,387522E+21
1390	2,685765E+21	2,685804E+21	8,016621E+18	8,014932E+18	5,371569E+21	1,603155E+19	5,387601E+21
1391	2,685751E+21	2,685871E+21	8,019498E+18	8,020416E+18	5,371623E+21	1,603991E+19	5,387662E+21
1392	2,685872E+21	2,685705E+21	8,013962E+18	8,014176E+18	5,371578E+21	1,602814E+19	5,387606E+21
1393	2,685710E+21	2,685819E+21	8,020143E+18	8,016750E+18	5,371529E+21	1,603689E+19	5,387566E+21
1394	2,685678E+21	2,685723E+21	8,018164E+18	8,019325E+18	5,371401E+21	1,603749E+19	5,387438E+21
1395	2,685666E+21	2,685511E+21	8,014613E+18	8,015482E+18	5,371177E+21	1,603010E+19	5,387207E+21
1396	2,685436E+21	2,685572E+21	8,021613E+18	8,019832E+18	5,371008E+21	1,604145E+19	5,387049E+21
1397	2,685479E+21	2,685367E+21	8,015368E+18	8,019662E+18	5,370846E+21	1,603503E+19	5,386881E+21
1398	2,685386E+21	2,685291E+21	8,018352E+18	8,016160E+18	5,370677E+21	1,603451E+19	5,386712E+21
1399	2,685199E+21	2,685344E+21	8,021738E+18	8,020899E+18	5,370543E+21	1,604264E+19	5,386585E+21
1400	2,685244E+21	2,685120E+21	8,016150E+18	8,018252E+18	5,370364E+21	1,603440E+19	5,386398E+21
1401	2,685090E+21	2,685192E+21	8,021373E+18	8,016864E+18	5,370282E+21	1,603824E+19	5,386320E+21
1402	2,685080E+21	2,685195E+21	8,019514E+18	8,022731E+18	5,370275E+21	1,604225E+19	5,386317E+21
1403	2,685242E+21	2,685052E+21	8,016457E+18	8,016508E+18	5,370294E+21	1,603297E+19	5,386327E+21
1404	2,685171E+21	2,685290E+21	8,021113E+18	8,018971E+18	5,370461E+21	1,604008E+19	5,386501E+21
1405	2,685335E+21	2,685302E+21	8,017663E+18	8,020886E+18	5,370636E+21	1,603855E+19	5,386675E+21
1406	2,685430E+21	2,685344E+21	8,016932E+18	8,014421E+18	5,370774E+21	1,603135E+19	5,386805E+21
1407	2,685355E+21	2,685561E+21	8,020896E+18	8,020716E+18	5,370916E+21	1,604161E+19	5,386958E+21
1408	2,685525E+21	2,685445E+21	8,015929E+18	8,017033E+18	5,370970E+21	1,603296E+19	5,387003E+21
1409	2,685526E+21	2,685538E+21	8,017745E+18	8,015414E+18	5,371063E+21	1,603316E+19	5,387097E+21
1410	2,685480E+21	2,685617E+21	8,020819E+18	8,020929E+18	5,371097E+21	1,604175E+19	5,387139E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1411	2,685598E+21	2,685420E+21	8,014678E+18	8,015364E+18	5,371018E+21	1,603004E+19	5,387048E+21
1412	2,685423E+21	2,685524E+21	8,020201E+18	8,018176E+18	5,370947E+21	1,603838E+19	5,386985E+21
1413	2,685387E+21	2,685420E+21	8,018130E+18	8,020887E+18	5,370807E+21	1,603902E+19	5,386846E+21
1414	2,685407E+21	2,685227E+21	8,015362E+18	8,016585E+18	5,370634E+21	1,603195E+19	5,386666E+21
1415	2,685177E+21	2,685303E+21	8,022465E+18	8,020016E+18	5,370480E+21	1,604248E+19	5,386522E+21
1416	2,685181E+21	2,685087E+21	8,017026E+18	8,019952E+18	5,370268E+21	1,603698E+19	5,386305E+21
1417	2,685088E+21	2,685017E+21	8,019901E+18	8,016666E+18	5,370105E+21	1,603657E+19	5,386142E+21
1418	2,684865E+21	2,685069E+21	8,022832E+18	8,021924E+18	5,369934E+21	1,604476E+19	5,385979E+21
1419	2,684949E+21	2,684805E+21	8,016689E+18	8,019731E+18	5,369754E+21	1,603642E+19	5,385790E+21
1420	2,684843E+21	2,684887E+21	8,021273E+18	8,018018E+18	5,369730E+21	1,603929E+19	5,385770E+21
1421	2,684855E+21	2,684928E+21	8,019953E+18	8,023579E+18	5,369783E+21	1,604353E+19	5,385827E+21
1422	2,685038E+21	2,684845E+21	8,017581E+18	8,016794E+18	5,369883E+21	1,603437E+19	5,385917E+21
1423	2,684943E+21	2,685103E+21	8,021858E+18	8,018979E+18	5,370046E+21	1,604084E+19	5,386087E+21
1424	2,685060E+21	2,685085E+21	8,018866E+18	8,021189E+18	5,370145E+21	1,604006E+19	5,386185E+21
1425	2,685177E+21	2,685108E+21	8,017623E+18	8,015171E+18	5,370285E+21	1,603279E+19	5,386318E+21
1426	2,685095E+21	2,685318E+21	8,021709E+18	8,021533E+18	5,370413E+21	1,604324E+19	5,386456E+21
1427	2,685294E+21	2,685168E+21	8,016487E+18	8,018070E+18	5,370462E+21	1,603456E+19	5,386496E+21
1428	2,685297E+21	2,685265E+21	8,017989E+18	8,016531E+18	5,370562E+21	1,603452E+19	5,386597E+21
1429	2,685223E+21	2,685354E+21	8,021227E+18	8,022073E+18	5,370578E+21	1,604330E+19	5,386621E+21
1430	2,685335E+21	2,685164E+21	8,015382E+18	8,016670E+18	5,370498E+21	1,603205E+19	5,386530E+21
1431	2,685154E+21	2,685251E+21	8,020609E+18	8,018802E+18	5,370405E+21	1,603941E+19	5,386445E+21
1432	2,685099E+21	2,685124E+21	8,019297E+18	8,021389E+18	5,370223E+21	1,604069E+19	5,386263E+21
1433	2,685135E+21	2,684941E+21	8,016916E+18	8,016979E+18	5,370075E+21	1,603389E+19	5,386109E+21
1434	2,684868E+21	2,685036E+21	8,024056E+18	8,020354E+18	5,369903E+21	1,604441E+19	5,385948E+21
1435	2,684864E+21	2,684786E+21	8,018114E+18	8,021071E+18	5,369650E+21	1,603919E+19	5,385689E+21
1436	2,684769E+21	2,684707E+21	8,020205E+18	8,017955E+18	5,369476E+21	1,603816E+19	5,385514E+21
1437	2,684567E+21	2,684762E+21	8,022849E+18	8,023320E+18	5,369330E+21	1,604617E+19	5,385376E+21
1438	2,684701E+21	2,684532E+21	8,017450E+18	8,020721E+18	5,369233E+21	1,603817E+19	5,385271E+21
1439	2,684623E+21	2,684646E+21	8,021794E+18	8,018048E+18	5,369269E+21	1,603984E+19	5,385309E+21
1440	2,684615E+21	2,684700E+21	8,021471E+18	8,023734E+18	5,369315E+21	1,604521E+19	5,385360E+21
1441	2,684797E+21	2,684637E+21	8,018862E+18	8,017176E+18	5,369434E+21	1,603604E+19	5,385470E+21
1442	2,684673E+21	2,684889E+21	8,022717E+18	8,019896E+18	5,369562E+21	1,604261E+19	5,385605E+21
1443	2,684812E+21	2,684818E+21	8,019255E+18	8,022471E+18	5,369630E+21	1,604173E+19	5,385671E+21
1444	2,684957E+21	2,684838E+21	8,017397E+18	8,016462E+18	5,369795E+21	1,603386E+19	5,385829E+21
1445	2,684878E+21	2,685060E+21	8,022066E+18	8,022448E+18	5,369938E+21	1,604451E+19	5,385983E+21
1446	2,685074E+21	2,684943E+21	8,017442E+18	8,018773E+18	5,370017E+21	1,603622E+19	5,386053E+21
1447	2,685050E+21	2,685036E+21	8,018537E+18	8,016802E+18	5,370086E+21	1,603534E+19	5,386121E+21
1448	2,684929E+21	2,685090E+21	8,022448E+18	8,022511E+18	5,370019E+21	1,604496E+19	5,386064E+21
1449	2,685056E+21	2,684892E+21	8,016474E+18	8,017388E+18	5,369948E+21	1,603386E+19	5,385982E+21
1450	2,684864E+21	2,684975E+21	8,021972E+18	8,019357E+18	5,369839E+21	1,604133E+19	5,385881E+21
1451	2,684818E+21	2,684818E+21	8,020472E+18	8,022297E+18	5,369636E+21	1,604277E+19	5,385679E+21
1452	2,684848E+21	2,684642E+21	8,017654E+18	8,018191E+18	5,369490E+21	1,603584E+19	5,385526E+21
1453	2,684549E+21	2,684737E+21	8,024574E+18	8,021610E+18	5,369286E+21	1,604618E+19	5,385332E+21
1454	2,684554E+21	2,684494E+21	8,018775E+18	8,022636E+18	5,369048E+21	1,604141E+19	5,385090E+21
1455	2,684485E+21	2,684405E+21	8,020406E+18	8,018516E+18	5,368890E+21	1,603892E+19	5,384929E+21
1456	2,684292E+21	2,684464E+21	8,023903E+18	8,023785E+18	5,368755E+21	1,604769E+19	5,384803E+21
1457	2,684459E+21	2,684279E+21	8,018984E+18	8,020946E+18	5,368738E+21	1,603993E+19	5,384778E+21
1458	2,684364E+21	2,684426E+21	8,023076E+18	8,018469E+18	5,368790E+21	1,604155E+19	5,384832E+21
1459	2,684357E+21	2,684456E+21	8,022280E+18	8,024862E+18	5,368813E+21	1,604714E+19	5,384860E+21

1	14	15	16	17	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	2,684546E+21	2,684389E+21	8,018756E+18	8,018551E+18	5,368935E+21	1,603731E+19	5,384972E+21
1461	2,684436E+21	2,684637E+21	8,022524E+18	8,021114E+18	5,369073E+21	1,604364E+19	5,385117E+21
1462	2,684605E+21	2,684588E+21	8,019854E+18	8,023284E+18	5,369193E+21	1,604314E+19	5,385236E+21
1463	2,684755E+21	2,684616E+21	8,017901E+18	8,016426E+18	5,369371E+21	1,603433E+19	5,385405E+21
1464	2,684637E+21	2,684832E+21	8,023690E+18	8,022570E+18	5,369469E+21	1,604626E+19	5,385515E+21
1465	2,684813E+21	2,684721E+21	8,018972E+18	8,019232E+18	5,369534E+21	1,603820E+19	5,385572E+21
1466	2,684762E+21	2,684790E+21	8,019674E+18	8,017785E+18	5,369551E+21	1,603746E+19	5,385589E+21
1467	2,684657E+21	2,684784E+21	8,023130E+18	8,023669E+18	5,369441E+21	1,604680E+19	5,385487E+21
1468	2,684795E+21	2,684587E+21	8,016743E+18	8,018733E+18	5,369382E+21	1,603548E+19	5,385417E+21
1469	2,684593E+21	2,684682E+21	8,022638E+18	8,020286E+18	5,369275E+21	1,604292E+19	5,385317E+21
1470	2,684531E+21	2,684548E+21	8,021528E+18	8,023329E+18	5,369079E+21	1,604486E+19	5,385124E+21
1471	2,684536E+21	2,684363E+21	8,018245E+18	8,018792E+18	5,368899E+21	1,603704E+19	5,384936E+21
1472	2,684217E+21	2,684426E+21	8,025618E+18	8,022351E+18	5,368643E+21	1,604797E+19	5,384691E+21
1473	2,684254E+21	2,684196E+21	8,019880E+18	8,023420E+18	5,368449E+21	1,604330E+19	5,384493E+21
1474	2,684205E+21	2,684124E+21	8,021545E+18	8,019098E+18	5,368329E+21	1,604064E+19	5,384370E+21
1475	2,684043E+21	2,684174E+21	8,024856E+18	8,024643E+18	5,368217E+21	1,604950E+19	5,384266E+21
1476	2,684217E+21	2,684029E+21	8,019616E+18	8,022057E+18	5,368246E+21	1,604167E+19	5,384288E+21
1477	2,684108E+21	2,684188E+21	8,023316E+18	8,019699E+18	5,368296E+21	1,604301E+19	5,384339E+21
1478	2,684115E+21	2,684225E+21	8,022785E+18	8,026205E+18	5,368340E+21	1,604899E+19	5,384389E+21
1479	2,684322E+21	2,684150E+21	8,018784E+18	8,018848E+18	5,368472E+21	1,603763E+19	5,384510E+21
1480	2,684206E+21	2,684390E+21	8,023628E+18	8,021305E+18	5,368596E+21	1,604493E+19	5,384641E+21
1481	2,684377E+21	2,684376E+21	8,021521E+18	8,023202E+18	5,368753E+21	1,604472E+19	5,384798E+21
1482	2,684497E+21	2,684405E+21	8,019373E+18	8,016801E+18	5,368902E+21	1,603617E+19	5,384938E+21
1483	2,684366E+21	2,684570E+21	8,024636E+18	8,023622E+18	5,368936E+21	1,604826E+19	5,384984E+21
1484	2,684549E+21	2,684445E+21	8,019012E+18	8,020833E+18	5,368994E+21	1,603985E+19	5,385034E+21
1485	2,684503E+21	2,684499E+21	8,019673E+18	8,019224E+18	5,369002E+21	1,603890E+19	5,385041E+21
1486	2,684418E+21	2,684511E+21	8,023682E+18	8,024758E+18	5,368929E+21	1,604844E+19	5,384977E+21
1487	2,684547E+21	2,684319E+21	8,017269E+18	8,019131E+18	5,368866E+21	1,603640E+19	5,384902E+21
1488	2,684294E+21	2,684404E+21	8,024231E+18	8,020721E+18	5,368698E+21	1,604495E+19	5,384743E+21
1489	2,684207E+21	2,684278E+21	8,023014E+18	8,024031E+18	5,368485E+21	1,604705E+19	5,384532E+21
1490	2,684201E+21	2,684064E+21	8,019477E+18	8,019898E+18	5,368265E+21	1,603937E+19	5,384304E+21
1491	2,683919E+21	2,684079E+21	8,026258E+18	8,023476E+18	5,367999E+21	1,604973E+19	5,384048E+21
1492	2,683991E+21	2,683880E+21	8,020332E+18	8,024687E+18	5,367871E+21	1,604502E+19	5,383916E+21
1493	2,683952E+21	2,683845E+21	8,022161E+18	8,019933E+18	5,367797E+21	1,604209E+19	5,383839E+21
1494	2,683796E+21	2,683939E+21	8,025640E+18	8,025654E+18	5,367735E+21	1,605129E+19	5,383786E+21
1495	2,683957E+21	2,683803E+21	8,020052E+18	8,022418E+18	5,367760E+21	1,604247E+19	5,383802E+21
1496	2,683837E+21	2,683945E+21	8,024172E+18	8,020233E+18	5,367782E+21	1,604441E+19	5,383827E+21
1497	2,683863E+21	2,684000E+21	8,024055E+18	8,026397E+18	5,367863E+21	1,605045E+19	5,383913E+21
1498	2,684079E+21	2,683927E+21	8,020038E+18	8,019153E+18	5,368007E+21	1,603919E+19	5,384046E+21
1499	2,683982E+21	2,684131E+21	8,024608E+18	8,022040E+18	5,368112E+21	1,604665E+19	5,384159E+21
1500	2,684143E+21	2,684134E+21	8,022098E+18	8,024420E+18	5,368277E+21	1,604652E+19	5,384324E+21
1501	2,684248E+21	2,684156E+21	8,019471E+18	8,018349E+18	5,368405E+21	1,603782E+19	5,384443E+21
1502	2,684136E+21	2,684311E+21	8,024802E+18	8,025143E+18	5,368447E+21	1,604994E+19	5,384497E+21
1503	2,684324E+21	2,684182E+21	8,018975E+18	8,021314E+18	5,368506E+21	1,604029E+19	5,384547E+21
1504	2,684258E+21	2,684231E+21	8,020900E+18	8,019584E+18	5,368489E+21	1,604048E+19	5,384530E+21
1505	2,684145E+21	2,684271E+21	8,025469E+18	8,024676E+18	5,368416E+21	1,605014E+19	5,384466E+21
1506	2,684229E+21	2,684068E+21	8,018893E+18	8,019840E+18	5,368297E+21	1,603873E+19	5,384335E+21
1507	2,683963E+21	2,684082E+21	8,025294E+18	8,021801E+18	5,368045E+21	1,604710E+19	5,384092E+21
1508	2,683890E+21	2,683948E+21	8,023234E+18	8,025615E+18	5,367838E+21	1,604885E+19	5,383886E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1509	2,683906E+21	2,683734E+21	8,019807E+18	8,021218E+18	5,367640E+21	1,604103E+19	5,383681E+21
1510	2,683668E+21	2,683781E+21	8,026771E+18	8,024503E+18	5,367449E+21	1,605127E+19	5,383500E+21
1511	2,683748E+21	2,683618E+21	8,021005E+18	8,025013E+18	5,367365E+21	1,604602E+19	5,383411E+21
1512	2,683676E+21	2,683600E+21	8,023597E+18	8,020428E+18	5,367275E+21	1,604402E+19	5,383319E+21
1513	2,683509E+21	2,683718E+21	8,026988E+18	8,026179E+18	5,367226E+21	1,605317E+19	5,383279E+21
1514	2,683672E+21	2,683559E+21	8,021169E+18	8,023233E+18	5,367231E+21	1,604440E+19	5,383275E+21
1515	2,683582E+21	2,683652E+21	8,024702E+18	8,021076E+18	5,367234E+21	1,604578E+19	5,383279E+21
1516	2,683635E+21	2,683735E+21	8,024450E+18	8,027369E+18	5,367370E+21	1,605182E+19	5,383422E+21
1517	2,683848E+21	2,683682E+21	8,020487E+18	8,020043E+18	5,367530E+21	1,604053E+19	5,383570E+21
1518	2,683764E+21	2,683904E+21	8,024912E+18	8,023327E+18	5,367668E+21	1,604824E+19	5,383716E+21
1519	2,683919E+21	2,683907E+21	8,022226E+18	8,024961E+18	5,367826E+21	1,604719E+19	5,383873E+21
1520	2,684008E+21	2,683913E+21	8,020141E+18	8,019072E+18	5,367921E+21	1,603921E+19	5,383960E+21
1521	2,683898E+21	2,684087E+21	8,026013E+18	8,025143E+18	5,367985E+21	1,605116E+19	5,384036E+21
1522	2,684068E+21	2,683950E+21	8,020425E+18	8,021609E+18	5,368018E+21	1,604203E+19	5,384060E+21
1523	2,683985E+21	2,683949E+21	8,022296E+18	8,020244E+18	5,367934E+21	1,604254E+19	5,383976E+21
1524	2,683843E+21	2,683990E+21	8,026294E+18	8,025867E+18	5,367834E+21	1,605216E+19	5,383886E+21
1525	2,683905E+21	2,683759E+21	8,019387E+18	8,021587E+18	5,367664E+21	1,604097E+19	5,383705E+21
1526	2,683677E+21	2,683751E+21	8,025476E+18	8,023401E+18	5,367428E+21	1,604888E+19	5,383477E+21
1527	2,683625E+21	2,683629E+21	8,023312E+18	8,026211E+18	5,367254E+21	1,604952E+19	5,383303E+21
1528	2,683637E+21	2,683441E+21	8,021119E+18	8,021662E+18	5,367079E+21	1,604278E+19	5,383121E+21
1529	2,683390E+21	2,683541E+21	8,028422E+18	8,024405E+18	5,366930E+21	1,605283E+19	5,382983E+21
1530	2,683441E+21	2,683387E+21	8,022659E+18	8,025722E+18	5,366828E+21	1,604838E+19	5,382877E+21
1531	2,683371E+21	2,683314E+21	8,024496E+18	8,021461E+18	5,366685E+21	1,604596E+19	5,382731E+21
1532	2,683227E+21	2,683431E+21	8,027117E+18	8,027455E+18	5,366659E+21	1,605457E+19	5,382713E+21
1533	2,683415E+21	2,683281E+21	8,021374E+18	8,024349E+18	5,366696E+21	1,604572E+19	5,382741E+21
1534	2,683378E+21	2,683391E+21	8,024873E+18	8,022050E+18	5,366768E+21	1,604692E+19	5,382815E+21
1535	2,683434E+21	2,683509E+21	8,024935E+18	8,027536E+18	5,366943E+21	1,605247E+19	5,382996E+21
1536	2,683616E+21	2,683474E+21	8,021623E+18	8,020597E+18	5,367090E+21	1,604222E+19	5,383132E+21
1537	2,683522E+21	2,683708E+21	8,026041E+18	8,023756E+18	5,367230E+21	1,604980E+19	5,383279E+21
1538	2,683673E+21	2,683687E+21	8,023379E+18	8,025523E+18	5,367360E+21	1,604890E+19	5,383409E+21
1539	2,683768E+21	2,683637E+21	8,020928E+18	8,019758E+18	5,367405E+21	1,604069E+19	5,383446E+21
1540	2,683652E+21	2,683823E+21	8,026755E+18	8,025742E+18	5,367475E+21	1,605250E+19	5,383528E+21
1541	2,683786E+21	2,683685E+21	8,021214E+18	8,022628E+18	5,367471E+21	1,604384E+19	5,383515E+21
1542	2,683699E+21	2,683667E+21	8,022812E+18	8,021757E+18	5,367366E+21	1,604457E+19	5,383411E+21
1543	2,683550E+21	2,683692E+21	8,026442E+18	8,026694E+18	5,367242E+21	1,605314E+19	5,383295E+21
1544	2,683605E+21	2,683448E+21	8,020217E+18	8,022652E+18	5,367053E+21	1,604287E+19	5,383096E+21
1545	2,683397E+21	2,683469E+21	8,026608E+18	8,023582E+18	5,366867E+21	1,605019E+19	5,382917E+21
1546	2,683349E+21	2,683357E+21	8,024781E+18	8,026687E+18	5,366706E+21	1,605147E+19	5,382757E+21
1547	2,683346E+21	2,683147E+21	8,022591E+18	8,022379E+18	5,366492E+21	1,604497E+19	5,382537E+21
1548	2,683089E+21	2,683267E+21	8,029054E+18	8,025553E+18	5,366356E+21	1,605461E+19	5,382411E+21
1549	2,683130E+21	2,683100E+21	8,023189E+18	8,027365E+18	5,366230E+21	1,605055E+19	5,382280E+21
1550	2,683112E+21	2,683016E+21	8,024538E+18	8,022873E+18	5,366128E+21	1,604741E+19	5,382175E+21
1551	2,682999E+21	2,683157E+21	8,027196E+18	8,027753E+18	5,366156E+21	1,605495E+19	5,382210E+21
1552	2,683181E+21	2,683039E+21	8,022569E+18	8,024594E+18	5,366220E+21	1,604716E+19	5,382267E+21
1553	2,683143E+21	2,683199E+21	8,026179E+18	8,021919E+18	5,366341E+21	1,604810E+19	5,382389E+21
1554	2,683183E+21	2,683316E+21	8,026408E+18	8,028018E+18	5,366500E+21	1,605443E+19	5,382554E+21
1555	2,683360E+21	2,683228E+21	8,022487E+18	8,021423E+18	5,366589E+21	1,604391E+19	5,382633E+21
1556	2,683286E+21	2,683459E+21	8,026273E+18	8,024712E+18	5,366745E+21	1,605098E+19	5,382796E+21
1557	2,683433E+21	2,683434E+21	8,023869E+18	8,026448E+18	5,366867E+21	1,605032E+19	5,382918E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1558	2,683553E+21	2,683377E+21	8,021211E+18	8,020985E+18	5,366929E+21	1,604220E+19	5,382972E+21
1559	2,683411E+21	2,683572E+21	8,027281E+18	8,026146E+18	5,366983E+21	1,605343E+19	5,383036E+21
1560	2,683497E+21	2,683429E+21	8,022224E+18	8,023764E+18	5,366926E+21	1,604599E+19	5,382972E+21
1561	2,683404E+21	2,683400E+21	8,023905E+18	8,022446E+18	5,366804E+21	1,604635E+19	5,382850E+21
1562	2,683260E+21	2,683399E+21	8,027576E+18	8,027349E+18	5,366659E+21	1,605493E+19	5,382714E+21
1563	2,683320E+21	2,683122E+21	8,021348E+18	8,023378E+18	5,366442E+21	1,604473E+19	5,382487E+21
1564	2,683117E+21	2,683168E+21	8,027481E+18	8,024158E+18	5,366285E+21	1,605164E+19	5,382336E+21
1565	2,683040E+21	2,683076E+21	8,025760E+18	8,027835E+18	5,366115E+21	1,605359E+19	5,382169E+21
1566	2,683051E+21	2,682859E+21	8,023152E+18	8,023940E+18	5,365910E+21	1,604709E+19	5,381957E+21
1567	2,682801E+21	2,682979E+21	8,029153E+18	8,026221E+18	5,365780E+21	1,605537E+19	5,381835E+21
1568	2,682845E+21	2,682822E+21	8,024021E+18	8,028239E+18	5,365667E+21	1,605226E+19	5,381720E+21
1569	2,682853E+21	2,682772E+21	8,025661E+18	8,022793E+18	5,365625E+21	1,604845E+19	5,381673E+21
1570	2,682756E+21	2,682926E+21	8,028661E+18	8,027943E+18	5,365682E+21	1,605660E+19	5,381738E+21
1571	2,682925E+21	2,682795E+21	8,024012E+18	8,025179E+18	5,365720E+21	1,604919E+19	5,381769E+21
1572	2,682894E+21	2,682966E+21	8,026614E+18	8,023083E+18	5,365860E+21	1,604970E+19	5,381910E+21
1573	2,682933E+21	2,683068E+21	8,026828E+18	8,029567E+18	5,366001E+21	1,605639E+19	5,382057E+21
1574	2,683154E+21	2,682966E+21	8,022290E+18	8,022898E+18	5,366120E+21	1,604519E+19	5,382165E+21
1575	2,683091E+21	2,683212E+21	8,026291E+18	8,025024E+18	5,366302E+21	1,605132E+19	5,382353E+21
1576	2,683200E+21	2,683205E+21	8,024985E+18	8,026807E+18	5,366405E+21	1,605179E+19	5,382457E+21
1577	2,683289E+21	2,683171E+21	8,022503E+18	8,021220E+18	5,366459E+21	1,604372E+19	5,382503E+21
1578	2,683125E+21	2,683331E+21	8,028709E+18	8,026734E+18	5,366456E+21	1,605544E+19	5,382511E+21
1579	2,683188E+21	2,683125E+21	8,023267E+18	8,024764E+18	5,366313E+21	1,604803E+19	5,382361E+21
1580	2,683121E+21	2,683090E+21	8,024359E+18	8,023366E+18	5,366211E+21	1,604772E+19	5,382259E+21
1581	2,682978E+21	2,683090E+21	8,028345E+18	8,028257E+18	5,366068E+21	1,605660E+19	5,382124E+21
1582	2,683061E+21	2,682822E+21	8,022018E+18	8,024633E+18	5,365883E+21	1,604665E+19	5,381930E+21
1583	2,682842E+21	2,682893E+21	8,028184E+18	8,024668E+18	5,365735E+21	1,605285E+19	5,381788E+21
1584	2,682725E+21	2,682807E+21	8,026885E+18	8,029134E+18	5,365532E+21	1,605602E+19	5,381588E+21
1585	2,682743E+21	2,682595E+21	8,024296E+18	8,024665E+18	5,365338E+21	1,604896E+19	5,381387E+21
1586	2,682518E+21	2,682697E+21	8,030170E+18	8,026709E+18	5,365216E+21	1,605688E+19	5,381272E+21
1587	2,682566E+21	2,682524E+21	8,025278E+18	8,028724E+18	5,365091E+21	1,605400E+19	5,381145E+21
1588	2,682595E+21	2,682507E+21	8,026422E+18	8,023235E+18	5,365102E+21	1,604966E+19	5,381151E+21
1589	2,682489E+21	2,682680E+21	8,029487E+18	8,029126E+18	5,365169E+21	1,605861E+19	5,381228E+21
1590	2,682691E+21	2,682547E+21	8,024258E+18	8,026787E+18	5,365238E+21	1,605104E+19	5,381289E+21
1591	2,682681E+21	2,682724E+21	8,026392E+18	8,023919E+18	5,365405E+21	1,605031E+19	5,381455E+21
1592	2,682719E+21	2,682843E+21	8,027390E+18	8,030397E+18	5,365561E+21	1,605779E+19	5,381619E+21
1593	2,682945E+21	2,682766E+21	8,023239E+18	8,022857E+18	5,365711E+21	1,604610E+19	5,381757E+21
1594	2,682866E+21	2,683002E+21	8,027764E+18	8,024995E+18	5,365868E+21	1,605276E+19	5,381921E+21
1595	2,682921E+21	2,682965E+21	8,026503E+18	8,027275E+18	5,365886E+21	1,605378E+19	5,381940E+21
1596	2,682998E+21	2,682906E+21	8,023264E+18	8,022347E+18	5,365904E+21	1,604561E+19	5,381949E+21
1597	2,682830E+21	2,683029E+21	8,029459E+18	8,028137E+18	5,365859E+21	1,605760E+19	5,381917E+21
1598	2,682936E+21	2,682804E+21	8,023437E+18	8,026281E+18	5,365740E+21	1,604972E+19	5,381790E+21
1599	2,682877E+21	2,682788E+21	8,024724E+18	8,023839E+18	5,365665E+21	1,604856E+19	5,381714E+21
1600	2,682699E+21	2,682819E+21	8,029411E+18	8,028969E+18	5,365518E+21	1,605838E+19	5,381577E+21
1601	2,682753E+21	2,682580E+21	8,023387E+18	8,025273E+18	5,365334E+21	1,604866E+19	5,381382E+21
1602	2,682525E+21	2,682624E+21	8,029520E+18	8,025358E+18	5,365149E+21	1,605488E+19	5,381204E+21
1603	2,682391E+21	2,682495E+21	8,028011E+18	8,030140E+18	5,364886E+21	1,605815E+19	5,380944E+21
1604	2,682446E+21	2,682284E+21	8,024931E+18	8,025538E+18	5,364730E+21	1,605047E+19	5,380780E+21
1605	2,682241E+21	2,682392E+21	8,030881E+18	8,027706E+18	5,364633E+21	1,605859E+19	5,380692E+21
1606	2,682327E+21	2,682239E+21	8,025793E+18	8,030035E+18	5,364566E+21	1,605583E+19	5,380622E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1607	2,682365E+21	2,682261E+21	8,026645E+18	8,024004E+18	5,364626E+21	1,605065E+19	5,380677E+21
1608	2,682247E+21	2,682451E+21	8,030101E+18	8,030463E+18	5,364698E+21	1,606056E+19	5,380758E+21
1609	2,682461E+21	2,682342E+21	8,025146E+18	8,027240E+18	5,364803E+21	1,605239E+19	5,380855E+21
1610	2,682476E+21	2,682506E+21	8,027261E+18	8,024007E+18	5,364983E+21	1,605127E+19	5,381034E+21
1611	2,682479E+21	2,682606E+21	8,028842E+18	8,030325E+18	5,365086E+21	1,605917E+19	5,381145E+21
1612	2,682694E+21	2,682541E+21	8,024190E+18	8,023126E+18	5,365235E+21	1,604732E+19	5,381283E+21
1613	2,682585E+21	2,682756E+21	8,028808E+18	8,026093E+18	5,365341E+21	1,605490E+19	5,381396E+21
1614	2,682653E+21	2,682686E+21	8,026813E+18	8,028888E+18	5,365339E+21	1,605570E+19	5,381395E+21
1615	2,682748E+21	2,682618E+21	8,023239E+18	8,023418E+18	5,365366E+21	1,604666E+19	5,381412E+21
1616	2,682579E+21	2,682746E+21	8,029975E+18	8,029142E+18	5,365325E+21	1,605912E+19	5,381384E+21
1617	2,682686E+21	2,682553E+21	8,024497E+18	8,026668E+18	5,365240E+21	1,605116E+19	5,381291E+21
1618	2,682617E+21	2,682533E+21	8,026206E+18	8,024135E+18	5,365150E+21	1,605034E+19	5,381200E+21
1619	2,682376E+21	2,682543E+21	8,030912E+18	8,029727E+18	5,364919E+21	1,606064E+19	5,380980E+21
1620	2,682425E+21	2,682284E+21	8,024286E+18	8,026673E+18	5,364710E+21	1,605096E+19	5,380761E+21
1621	2,682203E+21	2,682295E+21	8,030323E+18	8,026800E+18	5,364499E+21	1,605712E+19	5,380556E+21
1622	2,682117E+21	2,682159E+21	8,028225E+18	8,031541E+18	5,364277E+21	1,605977E+19	5,380336E+21
1623	2,682194E+21	2,681981E+21	8,025373E+18	8,025996E+18	5,364175E+21	1,605137E+19	5,380226E+21
1624	2,681981E+21	2,682132E+21	8,031631E+18	8,028514E+18	5,364112E+21	1,606014E+19	5,380173E+21
1625	2,682066E+21	2,682026E+21	8,027030E+18	8,030566E+18	5,364092E+21	1,605760E+19	5,380149E+21
1626	2,682117E+21	2,682038E+21	8,027655E+18	8,024374E+18	5,364155E+21	1,605203E+19	5,380207E+21
1627	2,681986E+21	2,682210E+21	8,031110E+18	8,030940E+18	5,364197E+21	1,606205E+19	5,380259E+21
1628	2,682224E+21	2,682107E+21	8,025927E+18	8,027504E+18	5,364332E+21	1,605343E+19	5,380385E+21
1629	2,682238E+21	2,682265E+21	8,028172E+18	8,024671E+18	5,364503E+21	1,605284E+19	5,380556E+21
1630	2,682249E+21	2,682360E+21	8,029451E+18	8,031319E+18	5,364609E+21	1,606077E+19	5,380670E+21
1631	2,682449E+21	2,682299E+21	8,024391E+18	8,024222E+18	5,364748E+21	1,604861E+19	5,380796E+21
1632	2,682329E+21	2,682495E+21	8,029091E+18	8,027819E+18	5,364823E+21	1,605691E+19	5,380880E+21
1633	2,682410E+21	2,682432E+21	8,027418E+18	8,029786E+18	5,364842E+21	1,605720E+19	5,380900E+21
1634	2,682524E+21	2,682353E+21	8,024054E+18	8,023751E+18	5,364877E+21	1,604780E+19	5,380925E+21
1635	2,682311E+21	2,682472E+21	8,031323E+18	8,029228E+18	5,364784E+21	1,606055E+19	5,380844E+21
1636	2,682395E+21	2,682293E+21	8,025659E+18	8,027237E+18	5,364688E+21	1,605290E+19	5,380741E+21
1637	2,682293E+21	2,682248E+21	8,027497E+18	8,025489E+18	5,364542E+21	1,605299E+19	5,380595E+21
1638	2,682064E+21	2,682223E+21	8,031313E+18	8,031307E+18	5,364287E+21	1,606262E+19	5,380349E+21
1639	2,682134E+21	2,681964E+21	8,024477E+18	8,027933E+18	5,364098E+21	1,605241E+19	5,380151E+21
1640	2,681925E+21	2,681980E+21	8,030845E+18	8,027747E+18	5,363906E+21	1,605859E+19	5,379964E+21
1641	2,681850E+21	2,681892E+21	8,029356E+18	8,031821E+18	5,363742E+21	1,606118E+19	5,379804E+21
1642	2,681936E+21	2,681734E+21	8,026764E+18	8,026050E+18	5,363670E+21	1,605281E+19	5,379723E+21
1643	2,681683E+21	2,681881E+21	8,032922E+18	8,029085E+18	5,363564E+21	1,606201E+19	5,379626E+21
1644	2,681788E+21	2,681778E+21	8,028035E+18	8,031512E+18	5,363566E+21	1,605955E+19	5,379625E+21
1645	2,681861E+21	2,681775E+21	8,028394E+18	8,025517E+18	5,363636E+21	1,605391E+19	5,379690E+21
1646	2,681769E+21	2,681942E+21	8,031296E+18	8,031860E+18	5,363711E+21	1,606316E+19	5,379774E+21
1647	2,682010E+21	2,681868E+21	8,026179E+18	8,027966E+18	5,363878E+21	1,605415E+19	5,379932E+21
1648	2,681999E+21	2,682038E+21	8,028509E+18	8,025772E+18	5,364037E+21	1,605428E+19	5,380091E+21
1649	2,681999E+21	2,682152E+21	8,030294E+18	8,032074E+18	5,364151E+21	1,606237E+19	5,380213E+21
1650	2,682212E+21	2,682063E+21	8,025081E+18	8,024841E+18	5,364275E+21	1,604992E+19	5,380325E+21
1651	2,682074E+21	2,682231E+21	8,029932E+18	8,028392E+18	5,364305E+21	1,605832E+19	5,380363E+21
1652	2,682170E+21	2,682172E+21	8,028362E+18	8,030109E+18	5,364342E+21	1,605847E+19	5,380401E+21
1653	2,682268E+21	2,682085E+21	8,025308E+18	8,024572E+18	5,364353E+21	1,604988E+19	5,380403E+21
1654	2,682044E+21	2,682195E+21	8,032055E+18	8,030166E+18	5,364239E+21	1,606222E+19	5,380301E+21
1655	2,682099E+21	2,682013E+21	8,026192E+18	8,028583E+18	5,364112E+21	1,605478E+19	5,380167E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1656	2,681982E+21	2,681943E+21	8,028090E+18	8,027201E+18	5,363925E+21	1,605529E+19	5,379980E+21
1657	2,681772E+21	2,681925E+21	8,032091E+18	8,032058E+18	5,363697E+21	1,606415E+19	5,379761E+21
1658	2,681860E+21	2,681662E+21	8,025601E+18	8,028097E+18	5,363522E+21	1,605370E+19	5,379576E+21
1659	2,681620E+21	2,681685E+21	8,032182E+18	8,027745E+18	5,363305E+21	1,605993E+19	5,379365E+21
1660	2,681547E+21	2,681623E+21	8,030618E+18	8,032323E+18	5,363170E+21	1,606294E+19	5,379233E+21
1661	2,681628E+21	2,681465E+21	8,027995E+18	8,027332E+18	5,363092E+21	1,605533E+19	5,379148E+21
1662	2,681416E+21	2,681596E+21	8,033009E+18	8,030495E+18	5,363012E+21	1,606350E+19	5,379076E+21
1663	2,681551E+21	2,681512E+21	8,028096E+18	8,032684E+18	5,363064E+21	1,606078E+19	5,379124E+21
1664	2,681640E+21	2,681524E+21	8,028472E+18	8,026593E+18	5,363164E+21	1,605507E+19	5,379219E+21
1665	2,681556E+21	2,681730E+21	8,032050E+18	8,032148E+18	5,363287E+21	1,606420E+19	5,379351E+21
1666	2,681788E+21	2,681665E+21	8,027145E+18	8,028070E+18	5,363453E+21	1,605522E+19	5,379508E+21
1667	2,681732E+21	2,681810E+21	8,029480E+18	8,026457E+18	5,363542E+21	1,605594E+19	5,379598E+21
1668	2,681746E+21	2,681909E+21	8,031319E+18	8,032777E+18	5,363655E+21	1,606410E+19	5,379719E+21
1669	2,681971E+21	2,681801E+21	8,026056E+18	8,025867E+18	5,363772E+21	1,605192E+19	5,379824E+21
1670	2,681854E+21	2,681952E+21	8,030389E+18	8,029064E+18	5,363806E+21	1,605945E+19	5,379866E+21
1671	2,681933E+21	2,681918E+21	8,028962E+18	8,030693E+18	5,363851E+21	1,605966E+19	5,379911E+21
1672	2,681991E+21	2,681828E+21	8,025903E+18	8,025915E+18	5,363819E+21	1,605182E+19	5,379871E+21
1673	2,681744E+21	2,681939E+21	8,033006E+18	8,030941E+18	5,363683E+21	1,606395E+19	5,379747E+21
1674	2,681802E+21	2,681731E+21	8,027015E+18	8,029306E+18	5,363533E+21	1,605632E+19	5,379590E+21
1675	2,681663E+21	2,681629E+21	8,029253E+18	8,027697E+18	5,363292E+21	1,605695E+19	5,379349E+21
1676	2,681474E+21	2,681617E+21	8,033302E+18	8,032289E+18	5,363091E+21	1,606559E+19	5,379156E+21
1677	2,681561E+21	2,681362E+21	8,027135E+18	8,029028E+18	5,362923E+21	1,605616E+19	5,378979E+21
1678	2,681333E+21	2,681384E+21	8,032679E+18	8,028858E+18	5,362717E+21	1,606154E+19	5,378779E+21
1679	2,681266E+21	2,681342E+21	8,030893E+18	8,034033E+18	5,362609E+21	1,606493E+19	5,378674E+21
1680	2,681361E+21	2,681183E+21	8,028143E+18	8,029140E+18	5,362545E+21	1,605728E+19	5,378602E+21
1681	2,681188E+21	2,681346E+21	8,033366E+18	8,031114E+18	5,362534E+21	1,606448E+19	5,378599E+21
1682	2,681339E+21	2,681281E+21	8,029016E+18	8,032519E+18	5,362620E+21	1,606153E+19	5,378682E+21
1683	2,681383E+21	2,681301E+21	8,029688E+18	8,026444E+18	5,362683E+21	1,605613E+19	5,378739E+21
1684	2,681292E+21	2,681516E+21	8,033395E+18	8,032354E+18	5,362808E+21	1,606575E+19	5,378873E+21
1685	2,681512E+21	2,681433E+21	8,028444E+18	8,029171E+18	5,362945E+21	1,605762E+19	5,379003E+21
1686	2,681495E+21	2,681542E+21	8,029589E+18	8,027679E+18	5,363037E+21	1,605727E+19	5,379094E+21
1687	2,681532E+21	2,681648E+21	8,031613E+18	8,033748E+18	5,363180E+21	1,606536E+19	5,379245E+21
1688	2,681751E+21	2,681548E+21	8,026368E+18	8,026952E+18	5,363299E+21	1,605332E+19	5,379352E+21
1689	2,681629E+21	2,681725E+21	8,031264E+18	8,029413E+18	5,363354E+21	1,606068E+19	5,379415E+21
1690	2,681671E+21	2,681686E+21	8,030003E+18	8,030998E+18	5,363357E+21	1,606100E+19	5,379418E+21
1691	2,681668E+21	2,681559E+21	8,027030E+18	8,026970E+18	5,363227E+21	1,605400E+19	5,379281E+21
1692	2,681433E+21	2,681639E+21	8,034170E+18	8,031693E+18	5,363072E+21	1,606586E+19	5,379138E+21
1693	2,681496E+21	2,681412E+21	8,028199E+18	8,030524E+18	5,362908E+21	1,605872E+19	5,378967E+21
1694	2,681381E+21	2,681293E+21	8,029792E+18	8,028456E+18	5,362674E+21	1,605825E+19	5,378732E+21
1695	2,681190E+21	2,681310E+21	8,033807E+18	8,033258E+18	5,362500E+21	1,606707E+19	5,378567E+21
1696	2,681261E+21	2,681074E+21	8,027654E+18	8,030667E+18	5,362335E+21	1,605832E+19	5,378393E+21
1697	2,681054E+21	2,681118E+21	8,033231E+18	8,029864E+18	5,362172E+21	1,606310E+19	5,378235E+21
1698	2,681011E+21	2,681084E+21	8,031578E+18	8,034642E+18	5,362095E+21	1,606622E+19	5,378161E+21
1699	2,681090E+21	2,680928E+21	8,029278E+18	8,029395E+18	5,362018E+21	1,605867E+19	5,378077E+21
1700	2,680937E+21	2,681107E+21	8,034680E+18	8,030895E+18	5,362044E+21	1,606558E+19	5,378110E+21
1701	2,681075E+21	2,681053E+21	8,030673E+18	8,033031E+18	5,362129E+21	1,606370E+19	5,378192E+21
1702	2,681122E+21	2,681051E+21	8,030248E+18	8,027288E+18	5,362174E+21	1,605754E+19	5,378231E+21
1703	2,681045E+21	2,681265E+21	8,033763E+18	8,033936E+18	5,362310E+21	1,606770E+19	5,378378E+21
1704	2,681283E+21	2,681172E+21	8,028568E+18	8,030890E+18	5,362456E+21	1,605946E+19	5,378515E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1705	2,681302E+21	2,681300E+21	8,029854E+18	8,028397E+18	5,362602E+21	1,605825E+19	5,378660E+21
1706	2,681338E+21	2,681425E+21	8,032375E+18	8,033625E+18	5,362762E+21	1,606600E+19	5,378828E+21
1707	2,681488E+21	2,681325E+21	8,027517E+18	8,027165E+18	5,362813E+21	1,605468E+19	5,378868E+21
1708	2,681341E+21	2,681491E+21	8,032713E+18	8,029682E+18	5,362832E+21	1,606240E+19	5,378895E+21
1709	2,681357E+21	2,681420E+21	8,031393E+18	8,032217E+18	5,362777E+21	1,606361E+19	5,378841E+21
1710	2,681372E+21	2,681240E+21	8,027420E+18	8,028324E+18	5,362611E+21	1,605574E+19	5,378667E+21
1711	2,681161E+21	2,681315E+21	8,034590E+18	8,032883E+18	5,362475E+21	1,606747E+19	5,378543E+21
1712	2,681220E+21	2,681095E+21	8,028639E+18	8,031921E+18	5,362316E+21	1,606056E+19	5,378376E+21
1713	2,681116E+21	2,681010E+21	8,030583E+18	8,029076E+18	5,362126E+21	1,605966E+19	5,378186E+21
1714	2,680911E+21	2,681045E+21	8,034642E+18	8,033758E+18	5,361956E+21	1,606840E+19	5,378024E+21
1715	2,680940E+21	2,680803E+21	8,028941E+18	8,031642E+18	5,361743E+21	1,606058E+19	5,377804E+21
1716	2,680766E+21	2,680843E+21	8,034538E+18	8,030260E+18	5,361609E+21	1,606480E+19	5,377674E+21
1717	2,680733E+21	2,680814E+21	8,033126E+18	8,035403E+18	5,361547E+21	1,606853E+19	5,377615E+21
1718	2,680827E+21	2,680650E+21	8,030030E+18	8,029835E+18	5,361477E+21	1,605986E+19	5,377537E+21
1719	2,680678E+21	2,680845E+21	8,035169E+18	8,031862E+18	5,361523E+21	1,606703E+19	5,377590E+21
1720	2,680799E+21	2,680800E+21	8,031024E+18	8,034632E+18	5,361600E+21	1,606566E+19	5,377665E+21
1721	2,680888E+21	2,680810E+21	8,030333E+18	8,028446E+18	5,361698E+21	1,605878E+19	5,377756E+21
1722	2,680842E+21	2,681027E+21	8,034056E+18	8,034519E+18	5,361869E+21	1,606857E+19	5,377937E+21
1723	2,681060E+21	2,680945E+21	8,029503E+18	8,031196E+18	5,362005E+21	1,606070E+19	5,378066E+21
1724	2,681090E+21	2,681083E+21	8,031167E+18	8,028242E+18	5,362173E+21	1,605941E+19	5,378233E+21
1725	2,681086E+21	2,681211E+21	8,034006E+18	8,034137E+18	5,362298E+21	1,606814E+19	5,378366E+21
1726	2,681209E+21	2,681070E+21	8,028075E+18	8,028302E+18	5,362279E+21	1,605638E+19	5,378335E+21
1727	2,681060E+21	2,681202E+21	8,033183E+18	8,031375E+18	5,362262E+21	1,606456E+19	5,378327E+21
1728	2,681074E+21	2,681110E+21	8,031610E+18	8,033943E+18	5,362185E+21	1,606555E+19	5,378250E+21
1729	2,681122E+21	2,680938E+21	8,027952E+18	8,029162E+18	5,362060E+21	1,605711E+19	5,378117E+21
1730	2,680909E+21	2,681028E+21	8,035462E+18	8,032835E+18	5,361937E+21	1,606830E+19	5,378005E+21
1731	2,680907E+21	2,680824E+21	8,030022E+18	8,032409E+18	5,361730E+21	1,606243E+19	5,377793E+21
1732	2,680798E+21	2,680741E+21	8,032205E+18	8,029450E+18	5,361539E+21	1,606166E+19	5,377601E+21
1733	2,680590E+21	2,680768E+21	8,036032E+18	8,034958E+18	5,361358E+21	1,607099E+19	5,377429E+21
1734	2,680643E+21	2,680495E+21	8,029627E+18	8,032755E+18	5,361137E+21	1,606238E+19	5,377200E+21
1735	2,680501E+21	2,680544E+21	8,035060E+18	8,031320E+18	5,361045E+21	1,606638E+19	5,377111E+21
1736	2,680468E+21	2,680533E+21	8,033610E+18	8,036606E+18	5,361001E+21	1,607022E+19	5,377071E+21
1737	2,680579E+21	2,680397E+21	8,030557E+18	8,030585E+18	5,360976E+21	1,606114E+19	5,377037E+21
1738	2,680436E+21	2,680606E+21	8,035476E+18	8,032606E+18	5,361041E+21	1,606808E+19	5,377109E+21
1739	2,680537E+21	2,680560E+21	8,031923E+18	8,035623E+18	5,361097E+21	1,606755E+19	5,377165E+21
1740	2,680669E+21	2,680576E+21	8,031360E+18	8,028690E+18	5,361246E+21	1,606005E+19	5,377306E+21
1741	2,680632E+21	2,680807E+21	8,035407E+18	8,034949E+18	5,361439E+21	1,607036E+19	5,377509E+21
1742	2,680835E+21	2,680712E+21	8,030329E+18	8,031366E+18	5,361546E+21	1,606170E+19	5,377608E+21
1743	2,680847E+21	2,680849E+21	8,031762E+18	8,029239E+18	5,361696E+21	1,606100E+19	5,377757E+21
1744	2,680804E+21	2,680959E+21	8,034438E+18	8,035584E+18	5,361763E+21	1,607002E+19	5,377833E+21
1745	2,680947E+21	2,680802E+21	8,028291E+18	8,029653E+18	5,361749E+21	1,605794E+19	5,377807E+21
1746	2,680814E+21	2,680919E+21	8,033626E+18	8,031957E+18	5,361733E+21	1,606558E+19	5,377798E+21
1747	2,680794E+21	2,680828E+21	8,032701E+18	8,034417E+18	5,361622E+21	1,606712E+19	5,377689E+21
1748	2,680849E+21	2,680665E+21	8,029632E+18	8,029155E+18	5,361513E+21	1,605879E+19	5,377572E+21
1749	2,680606E+21	2,680759E+21	8,037117E+18	8,033489E+18	5,361365E+21	1,607061E+19	5,377436E+21
1750	2,680584E+21	2,680524E+21	8,030844E+18	8,033771E+18	5,361108E+21	1,606461E+19	5,377172E+21
1751	2,680499E+21	2,680420E+21	8,032761E+18	8,031306E+18	5,360918E+21	1,606407E+19	5,376982E+21
1752	2,680298E+21	2,680447E+21	8,036232E+18	8,036613E+18	5,360745E+21	1,607284E+19	5,376817E+21
1753	2,680392E+21	2,680201E+21	8,030051E+18	8,033697E+18	5,360593E+21	1,606375E+19	5,376657E+21

1	14	15	16	17	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	2,680252E+21	2,680274E+21	8,035598E+18	8,031360E+18	5,360525E+21	1,606696E+19	5,376592E+21
1755	2,680169E+21	2,680288E+21	8,034731E+18	8,037054E+18	5,360457E+21	1,607178E+19	5,376529E+21
1756	2,680299E+21	2,680163E+21	8,031951E+18	8,030812E+18	5,360461E+21	1,606276E+19	5,376524E+21
1757	2,680178E+21	2,680369E+21	8,036560E+18	8,033556E+18	5,360547E+21	1,607012E+19	5,376617E+21
1758	2,680305E+21	2,680306E+21	8,032638E+18	8,036300E+18	5,360612E+21	1,606894E+19	5,376681E+21
1759	2,680468E+21	2,680332E+21	8,031831E+18	8,029568E+18	5,360801E+21	1,606140E+19	5,376862E+21
1760	2,680413E+21	2,680577E+21	8,035867E+18	8,035790E+18	5,360990E+21	1,607166E+19	5,377062E+21
1761	2,680610E+21	2,680496E+21	8,030766E+18	8,032146E+18	5,361106E+21	1,606291E+19	5,377169E+21
1762	2,680603E+21	2,680615E+21	8,032088E+18	8,030088E+18	5,361218E+21	1,606218E+19	5,377280E+21
1763	2,680521E+21	2,680702E+21	8,035335E+18	8,036524E+18	5,361222E+21	1,607186E+19	5,377294E+21
1764	2,680688E+21	2,680534E+21	8,029575E+18	8,030034E+18	5,361222E+21	1,605961E+19	5,377281E+21
1765	2,680557E+21	2,680647E+21	8,035046E+18	8,032470E+18	5,361204E+21	1,606752E+19	5,377271E+21
1766	2,680510E+21	2,680534E+21	8,033703E+18	8,034873E+18	5,361043E+21	1,606858E+19	5,377112E+21
1767	2,680551E+21	2,680369E+21	8,030431E+18	8,030491E+18	5,360920E+21	1,606092E+19	5,376981E+21
1768	2,680288E+21	2,680455E+21	8,037398E+18	8,035076E+18	5,360743E+21	1,607247E+19	5,376816E+21
1769	2,680298E+21	2,680218E+21	8,031109E+18	8,035347E+18	5,360516E+21	1,606646E+19	5,376583E+21
1770	2,680235E+21	2,680122E+21	8,033239E+18	8,031942E+18	5,360357E+21	1,606518E+19	5,376422E+21
1771	2,680010E+21	2,680167E+21	8,037326E+18	8,036931E+18	5,360177E+21	1,607426E+19	5,376251E+21
1772	2,680111E+21	2,679947E+21	8,031834E+18	8,033561E+18	5,360058E+21	1,606539E+19	5,376123E+21
1773	2,679959E+21	2,680029E+21	8,037044E+18	8,031874E+18	5,359987E+21	1,606892E+19	5,376056E+21
1774	2,679869E+21	2,680013E+21	8,035599E+18	8,038071E+18	5,359881E+21	1,607367E+19	5,375955E+21
1775	2,680045E+21	2,679883E+21	8,032453E+18	8,032286E+18	5,359928E+21	1,606474E+19	5,375993E+21
1776	2,679952E+21	2,680102E+21	8,036627E+18	8,034835E+18	5,360054E+21	1,607146E+19	5,376126E+21
1777	2,680117E+21	2,680072E+21	8,033081E+18	8,036954E+18	5,360190E+21	1,607004E+19	5,376260E+21
1778	2,680267E+21	2,680120E+21	8,032144E+18	8,029771E+18	5,360387E+21	1,606192E+19	5,376449E+21
1779	2,680147E+21	2,680370E+21	8,036739E+18	8,036258E+18	5,360518E+21	1,607300E+19	5,376591E+21
1780	2,680340E+21	2,680279E+21	8,031957E+18	8,032539E+18	5,360619E+21	1,606450E+19	5,376684E+21
1781	2,680339E+21	2,680367E+21	8,033127E+18	8,031058E+18	5,360706E+21	1,606419E+19	5,376770E+21
1782	2,680257E+21	2,680416E+21	8,036203E+18	8,037124E+18	5,360673E+21	1,607333E+19	5,376746E+21
1783	2,680445E+21	2,680241E+21	8,030334E+18	8,031096E+18	5,360686E+21	1,606143E+19	5,376748E+21
1784	2,680289E+21	2,680357E+21	8,035550E+18	8,033460E+18	5,360646E+21	1,606901E+19	5,376715E+21
1785	2,680240E+21	2,680258E+21	8,034095E+18	8,036120E+18	5,360498E+21	1,607021E+19	5,376569E+21
1786	2,680269E+21	2,680083E+21	8,030840E+18	8,031660E+18	5,360352E+21	1,606250E+19	5,376414E+21
1787	2,679980E+21	2,680162E+21	8,038242E+18	8,035916E+18	5,360142E+21	1,607416E+19	5,376216E+21
1788	2,680013E+21	2,679939E+21	8,032708E+18	8,035602E+18	5,359952E+21	1,606831E+19	5,376020E+21
1789	2,679946E+21	2,679848E+21	8,034967E+18	8,032163E+18	5,359794E+21	1,606713E+19	5,375862E+21
1790	2,679692E+21	2,679878E+21	8,038543E+18	8,037192E+18	5,359569E+21	1,607574E+19	5,375645E+21
1791	2,679800E+21	2,679657E+21	8,032756E+18	8,034845E+18	5,359456E+21	1,606760E+19	5,375524E+21
1792	2,679660E+21	2,679736E+21	8,037109E+18	8,033361E+18	5,359396E+21	1,607047E+19	5,375467E+21
1793	2,679635E+21	2,679737E+21	8,035686E+18	8,039533E+18	5,359373E+21	1,607522E+19	5,375448E+21
1794	2,679846E+21	2,679637E+21	8,032659E+18	8,032868E+18	5,359483E+21	1,606553E+19	5,375549E+21
1795	2,679738E+21	2,679884E+21	8,037360E+18	8,035097E+18	5,359622E+21	1,607246E+19	5,375695E+21
1796	2,679896E+21	2,679886E+21	8,034681E+18	8,036720E+18	5,359781E+21	1,607140E+19	5,375853E+21
1797	2,680018E+21	2,679928E+21	8,033272E+18	8,030439E+18	5,359946E+21	1,606371E+19	5,376010E+21
1798	2,679870E+21	2,680118E+21	8,037602E+18	8,037111E+18	5,359988E+21	1,607471E+19	5,376063E+21
1799	2,680086E+21	2,680000E+21	8,032510E+18	8,033937E+18	5,360086E+21	1,606645E+19	5,376152E+21
1800	2,680098E+21	2,680080E+21	8,033302E+18	8,032215E+18	5,360178E+21	1,606552E+19	5,376244E+21
1801	2,680038E+21	2,680139E+21	8,036755E+18	8,037785E+18	5,360176E+21	1,607454E+19	5,376251E+21
1802	2,680199E+21	2,679983E+21	8,030880E+18	8,031580E+18	5,360182E+21	1,606246E+19	5,376245E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1803	2,679988E+21	2,680100E+21	8,036469E+18	8,034096E+18	5,360088E+21	1,607056E+19	5,376158E+21
1804	2,679935E+21	2,680000E+21	8,035508E+18	8,036649E+18	5,359935E+21	1,607216E+19	5,376007E+21
1805	2,679968E+21	2,679808E+21	8,032150E+18	8,032642E+18	5,359776E+21	1,606479E+19	5,375841E+21
1806	2,679668E+21	2,679849E+21	8,039393E+18	8,036340E+18	5,359517E+21	1,607573E+19	5,375593E+21
1807	2,679717E+21	2,679626E+21	8,033807E+18	8,036681E+18	5,359343E+21	1,607049E+19	5,375413E+21
1808	2,679635E+21	2,679542E+21	8,035603E+18	8,033191E+18	5,359177E+21	1,606879E+19	5,375246E+21
1809	2,679404E+21	2,679580E+21	8,038802E+18	8,038687E+18	5,358984E+21	1,607749E+19	5,375061E+21
1810	2,679531E+21	2,679367E+21	8,032963E+18	8,036261E+18	5,358898E+21	1,606922E+19	5,374967E+21
1811	2,679407E+21	2,679463E+21	8,037399E+18	8,034375E+18	5,358870E+21	1,607177E+19	5,374942E+21
1812	2,679423E+21	2,679510E+21	8,036977E+18	8,039740E+18	5,358933E+21	1,607672E+19	5,375010E+21
1813	2,679630E+21	2,679435E+21	8,034031E+18	8,032892E+18	5,359065E+21	1,606692E+19	5,375132E+21
1814	2,679478E+21	2,679665E+21	8,038469E+18	8,035081E+18	5,359143E+21	1,607355E+19	5,375217E+21
1815	2,679629E+21	2,679654E+21	8,035580E+18	8,037658E+18	5,359283E+21	1,607324E+19	5,375356E+21
1816	2,679744E+21	2,679669E+21	8,033411E+18	8,031735E+18	5,359413E+21	1,606515E+19	5,375478E+21
1817	2,679645E+21	2,679849E+21	8,037806E+18	8,038345E+18	5,359495E+21	1,607615E+19	5,375571E+21
1818	2,679876E+21	2,679742E+21	8,032866E+18	8,034621E+18	5,359618E+21	1,606749E+19	5,375685E+21
1819	2,679865E+21	2,679833E+21	8,034089E+18	8,032618E+18	5,359698E+21	1,606671E+19	5,375765E+21
1820	2,679788E+21	2,679919E+21	8,038379E+18	8,037736E+18	5,359707E+21	1,607611E+19	5,375783E+21
1821	2,679912E+21	2,679752E+21	8,032160E+18	8,032466E+18	5,359663E+21	1,606463E+19	5,375728E+21
1822	2,679669E+21	2,679806E+21	8,037596E+18	8,034953E+18	5,359475E+21	1,607255E+19	5,375548E+21
1823	2,679639E+21	2,679682E+21	8,036405E+18	8,038093E+18	5,359321E+21	1,607450E+19	5,375395E+21
1824	2,679672E+21	2,679487E+21	8,032788E+18	8,033892E+18	5,359159E+21	1,606668E+19	5,375226E+21
1825	2,679394E+21	2,679533E+21	8,039961E+18	8,037277E+18	5,358928E+21	1,607724E+19	5,375005E+21
1826	2,679422E+21	2,679332E+21	8,034288E+18	8,037657E+18	5,358754E+21	1,607194E+19	5,374826E+21
1827	2,679321E+21	2,679253E+21	8,036133E+18	8,034136E+18	5,358575E+21	1,607027E+19	5,374645E+21
1828	2,679123E+21	2,679313E+21	8,039920E+18	8,039293E+18	5,358437E+21	1,607921E+19	5,374516E+21
1829	2,679279E+21	2,679123E+21	8,034186E+18	8,036916E+18	5,358402E+21	1,607110E+19	5,374473E+21
1830	2,679160E+21	2,679205E+21	8,038536E+18	8,034455E+18	5,358366E+21	1,607299E+19	5,374439E+21
1831	2,679189E+21	2,679269E+21	8,038257E+18	8,040326E+18	5,358458E+21	1,607858E+19	5,374536E+21
1832	2,679369E+21	2,679209E+21	8,034664E+18	8,033631E+18	5,358578E+21	1,606829E+19	5,374646E+21
1833	2,679231E+21	2,679420E+21	8,038689E+18	8,036350E+18	5,358652E+21	1,607504E+19	5,374727E+21
1834	2,679385E+21	2,679402E+21	8,035758E+18	8,038813E+18	5,358786E+21	1,607457E+19	5,374861E+21
1835	2,679510E+21	2,679413E+21	8,033690E+18	8,032647E+18	5,358923E+21	1,606634E+19	5,374990E+21
1836	2,679437E+21	2,679619E+21	8,039190E+18	8,038448E+18	5,359056E+21	1,607764E+19	5,375134E+21
1837	2,679647E+21	2,679528E+21	8,034220E+18	8,034846E+18	5,359175E+21	1,606907E+19	5,375244E+21
1838	2,679582E+21	2,679583E+21	8,035263E+18	8,032989E+18	5,359165E+21	1,606825E+19	5,375233E+21
1839	2,679495E+21	2,679647E+21	8,039256E+18	8,038944E+18	5,359142E+21	1,607820E+19	5,375220E+21
1840	2,679606E+21	2,679456E+21	8,032461E+18	8,034117E+18	5,359063E+21	1,606658E+19	5,375129E+21
1841	2,679404E+21	2,679490E+21	8,037955E+18	8,036336E+18	5,358894E+21	1,607429E+19	5,374968E+21
1842	2,679374E+21	2,679378E+21	8,036875E+18	8,039063E+18	5,358752E+21	1,607594E+19	5,374828E+21
1843	2,679384E+21	2,679193E+21	8,033685E+18	8,034626E+18	5,358577E+21	1,606831E+19	5,374645E+21
1844	2,679103E+21	2,679268E+21	8,041428E+18	8,037568E+18	5,358370E+21	1,607900E+19	5,374449E+21
1845	2,679114E+21	2,679065E+21	8,035547E+18	8,038578E+18	5,358180E+21	1,607413E+19	5,374254E+21
1846	2,679008E+21	2,678949E+21	8,037240E+18	8,034780E+18	5,357957E+21	1,607202E+19	5,374029E+21
1847	2,678861E+21	2,679019E+21	8,040828E+18	8,040315E+18	5,357880E+21	1,608114E+19	5,373962E+21
1848	2,679021E+21	2,678855E+21	8,035118E+18	8,037601E+18	5,357876E+21	1,607272E+19	5,373949E+21
1849	2,678928E+21	2,678954E+21	8,039085E+18	8,035108E+18	5,357882E+21	1,607419E+19	5,373956E+21
1850	2,678935E+21	2,679040E+21	8,038745E+18	8,041121E+18	5,357975E+21	1,607987E+19	5,374055E+21
1851	2,679096E+21	2,678975E+21	8,034935E+18	8,034597E+18	5,358071E+21	1,606953E+19	5,374140E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
1852	2,678992E+21	2,679192E+21	8,039506E+18	8,037024E+18	5,358185E+21	1,607653E+19	5,374261E+21
1853	2,679161E+21	2,679180E+21	8,036711E+18	8,039368E+18	5,358341E+21	1,607608E+19	5,374417E+21
1854	2,679279E+21	2,679164E+21	8,034775E+18	8,032840E+18	5,358443E+21	1,606761E+19	5,374511E+21
1855	2,679214E+21	2,679374E+21	8,040351E+18	8,039082E+18	5,358588E+21	1,607943E+19	5,374668E+21
1856	2,679382E+21	2,679288E+21	8,034935E+18	8,035896E+18	5,358670E+21	1,607083E+19	5,374741E+21
1857	2,679326E+21	2,679307E+21	8,035534E+18	8,034609E+18	5,358633E+21	1,607014E+19	5,374703E+21
1858	2,679231E+21	2,679359E+21	8,039427E+18	8,040327E+18	5,358590E+21	1,607975E+19	5,374670E+21
1859	2,679339E+21	2,679163E+21	8,032831E+18	8,035335E+18	5,358502E+21	1,606817E+19	5,374570E+21
1860	2,679145E+21	2,679216E+21	8,039545E+18	8,036435E+18	5,358361E+21	1,607598E+19	5,374437E+21
1861	2,679080E+21	2,679120E+21	8,038372E+18	8,039203E+18	5,358200E+21	1,607757E+19	5,374278E+21
1862	2,679042E+21	2,678896E+21	8,035232E+18	8,034940E+18	5,357937E+21	1,607017E+19	5,374008E+21
1863	2,678774E+21	2,678952E+21	8,042460E+18	8,038582E+18	5,357726E+21	1,608104E+19	5,373807E+21
1864	2,678797E+21	2,678757E+21	8,036208E+18	8,040014E+18	5,357555E+21	1,607622E+19	5,373631E+21
1865	2,678755E+21	2,678640E+21	8,037646E+18	8,036004E+18	5,357395E+21	1,607365E+19	5,373469E+21
1866	2,678624E+21	2,678747E+21	8,041207E+18	8,041204E+18	5,357372E+21	1,608241E+19	5,373454E+21
1867	2,678770E+21	2,678614E+21	8,035774E+18	8,038316E+18	5,357385E+21	1,607409E+19	5,373459E+21
1868	2,678676E+21	2,678741E+21	8,040106E+18	8,035576E+18	5,357417E+21	1,607568E+19	5,373493E+21
1869	2,678671E+21	2,678822E+21	8,039587E+18	8,041902E+18	5,357493E+21	1,608149E+19	5,373574E+21
1870	2,678827E+21	2,678710E+21	8,035746E+18	8,035241E+18	5,357537E+21	1,607099E+19	5,373608E+21
1871	2,678776E+21	2,678926E+21	8,040205E+18	8,037959E+18	5,357703E+21	1,607816E+19	5,373781E+21
1872	2,678939E+21	2,678938E+21	8,037605E+18	8,040041E+18	5,357877E+21	1,607765E+19	5,373955E+21
1873	2,679068E+21	2,678921E+21	8,035241E+18	8,033703E+18	5,357989E+21	1,606894E+19	5,374058E+21
1874	2,678974E+21	2,679139E+21	8,040631E+18	8,040037E+18	5,358113E+21	1,608067E+19	5,374194E+21
1875	2,679113E+21	2,679039E+21	8,035189E+18	8,037033E+18	5,358151E+21	1,607222E+19	5,374224E+21
1876	2,679074E+21	2,679060E+21	8,036555E+18	8,035335E+18	5,358133E+21	1,607189E+19	5,374205E+21
1877	2,678970E+21	2,679106E+21	8,040607E+18	8,040560E+18	5,358076E+21	1,608117E+19	5,374158E+21
1878	2,679039E+21	2,678874E+21	8,034431E+18	8,035546E+18	5,357913E+21	1,606998E+19	5,373983E+21
1879	2,678849E+21	2,678918E+21	8,041001E+18	8,036966E+18	5,357767E+21	1,607797E+19	5,373845E+21
1880	2,678742E+21	2,678821E+21	8,039327E+18	8,040386E+18	5,357563E+21	1,607971E+19	5,373643E+21
1881	2,678733E+21	2,678564E+21	8,035686E+18	8,036634E+18	5,357296E+21	1,607232E+19	5,373369E+21
1882	2,678495E+21	2,678628E+21	8,042448E+18	8,040068E+18	5,357123E+21	1,608252E+19	5,373205E+21
1883	2,678537E+21	2,678461E+21	8,036579E+18	8,041275E+18	5,356998E+21	1,607785E+19	5,373076E+21
1884	2,678519E+21	2,678394E+21	8,038892E+18	8,036334E+18	5,356913E+21	1,607523E+19	5,372988E+21
1885	2,678362E+21	2,678529E+21	8,042260E+18	8,041325E+18	5,356892E+21	1,608358E+19	5,372975E+21
1886	2,678464E+21	2,678369E+21	8,037010E+18	8,038643E+18	5,356833E+21	1,607565E+19	5,372909E+21
1887	2,678400E+21	2,678476E+21	8,040799E+18	8,036463E+18	5,356875E+21	1,607726E+19	5,372953E+21
1888	2,678405E+21	2,678564E+21	8,040244E+18	8,042945E+18	5,356969E+21	1,608319E+19	5,373052E+21
1889	2,678620E+21	2,678444E+21	8,036131E+18	8,036239E+18	5,357064E+21	1,607237E+19	5,373136E+21
1890	2,678585E+21	2,678686E+21	8,040472E+18	8,038810E+18	5,357271E+21	1,607928E+19	5,373350E+21
1891	2,678725E+21	2,678723E+21	8,038194E+18	8,040751E+18	5,357448E+21	1,607895E+19	5,373527E+21
1892	2,678840E+21	2,678719E+21	8,036223E+18	8,034346E+18	5,357560E+21	1,607057E+19	5,373630E+21
1893	2,678716E+21	2,678919E+21	8,041456E+18	8,040494E+18	5,357635E+21	1,608195E+19	5,373717E+21
1894	2,678827E+21	2,678765E+21	8,036285E+18	8,037547E+18	5,357592E+21	1,607383E+19	5,373666E+21
1895	2,678808E+21	2,678766E+21	8,037772E+18	8,036009E+18	5,357574E+21	1,607378E+19	5,373648E+21
1896	2,678673E+21	2,678822E+21	8,041851E+18	8,041168E+18	5,357495E+21	1,608302E+19	5,373578E+21
1897	2,678743E+21	2,678564E+21	8,035179E+18	8,036787E+18	5,357307E+21	1,607197E+19	5,373379E+21
1898	2,678540E+21	2,678604E+21	8,041135E+18	8,038362E+18	5,357144E+21	1,607950E+19	5,373223E+21
1899	2,678435E+21	2,678504E+21	8,039323E+18	8,042010E+18	5,356939E+21	1,608133E+19	5,373020E+21
1900	2,678464E+21	2,678274E+21	8,036510E+18	8,037674E+18	5,356739E+21	1,607418E+19	5,372813E+21

1	14	15	16	17	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	2,678240E+21	2,678365E+21	8,043238E+18	8,040281E+18	5,356605E+21	1,608352E+19	5,372688E+21
1902	2,678255E+21	2,678193E+21	8,038201E+18	8,041477E+18	5,356448E+21	1,607968E+19	5,372528E+21
1903	2,678242E+21	2,678139E+21	8,040319E+18	8,036738E+18	5,356381E+21	1,607706E+19	5,372458E+21
1904	2,678053E+21	2,678280E+21	8,043235E+18	8,042275E+18	5,356333E+21	1,608551E+19	5,372419E+21
1905	2,678189E+21	2,678081E+21	8,037423E+18	8,040085E+18	5,356271E+21	1,607751E+19	5,372348E+21
1906	2,678168E+21	2,678194E+21	8,040602E+18	8,037758E+18	5,356363E+21	1,607836E+19	5,372441E+21
1907	2,678197E+21	2,678309E+21	8,040638E+18	8,043798E+18	5,356507E+21	1,608444E+19	5,372591E+21
1908	2,678430E+21	2,678244E+21	8,037288E+18	8,036439E+18	5,356673E+21	1,607373E+19	5,372747E+21
1909	2,678368E+21	2,678502E+21	8,041338E+18	8,038768E+18	5,356869E+21	1,608011E+19	5,372949E+21
1910	2,678446E+21	2,678502E+21	8,039510E+18	8,040980E+18	5,356948E+21	1,608049E+19	5,373028E+21
1911	2,678575E+21	2,678471E+21	8,036985E+18	8,035247E+18	5,357047E+21	1,607223E+19	5,373119E+21
1912	2,678438E+21	2,678656E+21	8,042300E+18	8,041330E+18	5,357094E+21	1,608363E+19	5,373178E+21
1913	2,678574E+21	2,678470E+21	8,036853E+18	8,038688E+18	5,357043E+21	1,607554E+19	5,373119E+21
1914	2,678556E+21	2,678473E+21	8,038192E+18	8,037131E+18	5,357029E+21	1,607532E+19	5,373104E+21
1915	2,678391E+21	2,678536E+21	8,042337E+18	8,042265E+18	5,356927E+21	1,608460E+19	5,373012E+21
1916	2,678456E+21	2,678291E+21	8,036081E+18	8,038026E+18	5,356747E+21	1,607411E+19	5,372821E+21
1917	2,678252E+21	2,678316E+21	8,041627E+18	8,039039E+18	5,356568E+21	1,608067E+19	5,372648E+21
1918	2,678135E+21	2,678197E+21	8,040475E+18	8,042643E+18	5,356331E+21	1,608312E+19	5,372415E+21
1919	2,678194E+21	2,677983E+21	8,038000E+18	8,038136E+18	5,356178E+21	1,607614E+19	5,372254E+21
1920	2,677942E+21	2,678101E+21	8,044658E+18	8,040587E+18	5,356043E+21	1,608525E+19	5,372128E+21
1921	2,677955E+21	2,677912E+21	8,039200E+18	8,042531E+18	5,355867E+21	1,608173E+19	5,371949E+21
1922	2,677942E+21	2,677855E+21	8,040563E+18	8,038002E+18	5,355797E+21	1,607857E+19	5,371876E+21
1923	2,677773E+21	2,677996E+21	8,043250E+18	8,043661E+18	5,355769E+21	1,608691E+19	5,371856E+21
1924	2,677959E+21	2,677831E+21	8,038184E+18	8,040955E+18	5,355790E+21	1,607914E+19	5,371869E+21
1925	2,677963E+21	2,677968E+21	8,041105E+18	8,037807E+18	5,355931E+21	1,607891E+19	5,372010E+21
1926	2,677970E+21	2,678088E+21	8,042123E+18	8,043857E+18	5,356058E+21	1,608598E+19	5,372144E+21
1927	2,678197E+21	2,678034E+21	8,038538E+18	8,036808E+18	5,356231E+21	1,607535E+19	5,372307E+21
1928	2,678098E+21	2,678285E+21	8,042211E+18	8,039671E+18	5,356382E+21	1,608188E+19	5,372464E+21
1929	2,678193E+21	2,678230E+21	8,039897E+18	8,042344E+18	5,356423E+21	1,608224E+19	5,372505E+21
1930	2,678341E+21	2,678189E+21	8,036825E+18	8,036759E+18	5,356530E+21	1,607358E+19	5,372603E+21
1931	2,678203E+21	2,678379E+21	8,042678E+18	8,042279E+18	5,356582E+21	1,608496E+19	5,372667E+21
1932	2,678329E+21	2,678223E+21	8,037906E+18	8,039356E+18	5,356552E+21	1,607726E+19	5,372630E+21
1933	2,678281E+21	2,678223E+21	8,038933E+18	8,037340E+18	5,356503E+21	1,607627E+19	5,372580E+21
1934	2,678069E+21	2,678247E+21	8,043638E+18	8,042716E+18	5,356316E+21	1,608635E+19	5,372403E+21
1935	2,678153E+21	2,677994E+21	8,037287E+18	8,038870E+18	5,356147E+21	1,607616E+19	5,372223E+21
1936	2,677949E+21	2,678024E+21	8,042829E+18	8,039733E+18	5,355974E+21	1,608256E+19	5,372056E+21
1937	2,677855E+21	2,677887E+21	8,041486E+18	8,043720E+18	5,355742E+21	1,608521E+19	5,371828E+21
1938	2,677917E+21	2,677694E+21	8,038723E+18	8,039322E+18	5,355611E+21	1,607804E+19	5,371689E+21
1939	2,677644E+21	2,677821E+21	8,045147E+18	8,041677E+18	5,355464E+21	1,608682E+19	5,371551E+21
1940	2,677663E+21	2,677649E+21	8,040040E+18	8,043829E+18	5,355312E+21	1,608387E+19	5,371396E+21
1941	2,677674E+21	2,677582E+21	8,040800E+18	8,038512E+18	5,355256E+21	1,607931E+19	5,371336E+21
1942	2,677512E+21	2,677715E+21	8,044318E+18	8,044131E+18	5,355227E+21	1,608845E+19	5,371316E+21
1943	2,677736E+21	2,677590E+21	8,039607E+18	8,041197E+18	5,355326E+21	1,608080E+19	5,371407E+21
1944	2,677725E+21	2,677757E+21	8,042253E+18	8,038184E+18	5,355482E+21	1,608044E+19	5,371563E+21
1945	2,677728E+21	2,677854E+21	8,042892E+18	8,044853E+18	5,355582E+21	1,608775E+19	5,371670E+21
1946	2,677953E+21	2,677794E+21	8,038475E+18	8,038201E+18	5,355747E+21	1,607668E+19	5,371824E+21
1947	2,677857E+21	2,678029E+21	8,042123E+18	8,040888E+18	5,355887E+21	1,608301E+19	5,371970E+21
1948	2,677973E+21	2,677994E+21	8,040587E+18	8,043123E+18	5,355967E+21	1,608371E+19	5,372051E+21
1949	2,678120E+21	2,677951E+21	8,037426E+18	8,036850E+18	5,356071E+21	1,607428E+19	5,372145E+21

1	14	15	16	17	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							
1950	2,677937E+21	2,678125E+21	8,044381E+18	8,042362E+18	5,356062E+21	1,608674E+19	5,372148E+21
1951	2,678042E+21	2,677972E+21	8,039444E+18	8,039937E+18	5,356014E+21	1,607938E+19	5,372094E+21
1952	2,677963E+21	2,677947E+21	8,040088E+18	8,038383E+18	5,355910E+21	1,607847E+19	5,371989E+21
1953	2,677774E+21	2,677917E+21	8,044211E+18	8,044126E+18	5,355691E+21	1,608834E+19	5,371780E+21
1954	2,677880E+21	2,677672E+21	8,037593E+18	8,040449E+18	5,355552E+21	1,607804E+19	5,371630E+21
1955	2,677677E+21	2,677721E+21	8,043457E+18	8,040712E+18	5,355398E+21	1,608417E+19	5,371482E+21
1956	2,677575E+21	2,677621E+21	8,042635E+18	8,044664E+18	5,355196E+21	1,608730E+19	5,371283E+21
1957	2,677611E+21	2,677427E+21	8,039410E+18	8,039767E+18	5,355038E+21	1,607918E+19	5,371117E+21
1958	2,677316E+21	2,677526E+21	8,046133E+18	8,042363E+18	5,354842E+21	1,608850E+19	5,370930E+21
1959	2,677371E+21	2,677363E+21	8,041126E+18	8,044581E+18	5,354734E+21	1,608571E+19	5,370819E+21
1960	2,677407E+21	2,677316E+21	8,041771E+18	8,039045E+18	5,354723E+21	1,608082E+19	5,370804E+21
1961	2,677287E+21	2,677443E+21	8,045169E+18	8,044978E+18	5,354730E+21	1,609015E+19	5,370820E+21
1962	2,677519E+21	2,677357E+21	8,040219E+18	8,042200E+18	5,354875E+21	1,608242E+19	5,370958E+21
1963	2,677493E+21	2,677536E+21	8,042463E+18	8,039314E+18	5,355028E+21	1,608178E+19	5,371110E+21
1964	2,677497E+21	2,677640E+21	8,043478E+18	8,046059E+18	5,355137E+21	1,608954E+19	5,371226E+21
1965	2,677729E+21	2,677564E+21	8,038518E+18	8,038597E+18	5,355293E+21	1,607711E+19	5,371370E+21
1966	2,677620E+21	2,677777E+21	8,043272E+18	8,041146E+18	5,355396E+21	1,608442E+19	5,371481E+21
1967	2,677732E+21	2,677763E+21	8,042240E+18	8,043115E+18	5,355495E+21	1,608535E+19	5,371580E+21
1968	2,677842E+21	2,677719E+21	8,038900E+18	8,037322E+18	5,355561E+21	1,607622E+19	5,371638E+21
1969	2,677646E+21	2,677838E+21	8,045341E+18	8,043457E+18	5,355485E+21	1,608880E+19	5,371573E+21
1970	2,677755E+21	2,677673E+21	8,039578E+18	8,041727E+18	5,355427E+21	1,608130E+19	5,371508E+21
1971	2,677687E+21	2,677633E+21	8,040206E+18	8,039861E+18	5,355320E+21	1,608007E+19	5,371400E+21
1972	2,677519E+21	2,677631E+21	8,044864E+18	8,045212E+18	5,355150E+21	1,609008E+19	5,371240E+21
1973	2,677622E+21	2,677398E+21	8,038261E+18	8,040839E+18	5,355020E+21	1,607910E+19	5,371099E+21
1974	2,677372E+21	2,677439E+21	8,045123E+18	8,040997E+18	5,354810E+21	1,608612E+19	5,370896E+21
1975	2,677250E+21	2,677354E+21	8,044202E+18	8,045282E+18	5,354605E+21	1,608948E+19	5,370694E+21
1976	2,677278E+21	2,677139E+21	8,040640E+18	8,040781E+18	5,354417E+21	1,608142E+19	5,370498E+21
1977	2,677026E+21	2,677191E+21	8,046650E+18	8,043588E+18	5,354218E+21	1,609024E+19	5,370308E+21
1978	2,677125E+21	2,677063E+21	8,041523E+18	8,045883E+18	5,354188E+21	1,608741E+19	5,370275E+21
1979	2,677177E+21	2,677053E+21	8,042231E+18	8,039814E+18	5,354230E+21	1,608204E+19	5,370312E+21
1980	2,677066E+21	2,677229E+21	8,045957E+18	8,045831E+18	5,354295E+21	1,609179E+19	5,370387E+21
1981	2,677279E+21	2,677151E+21	8,040668E+18	8,042405E+18	5,354430E+21	1,608307E+19	5,370513E+21
1982	2,677231E+21	2,677304E+21	8,043312E+18	8,039838E+18	5,354535E+21	1,608315E+19	5,370618E+21
1983	2,677250E+21	2,677416E+21	8,044659E+18	8,046359E+18	5,354666E+21	1,609102E+19	5,370757E+21
1984	2,677481E+21	2,677335E+21	8,039605E+18	8,039094E+18	5,354816E+21	1,607870E+19	5,370894E+21
1985	2,677386E+21	2,677504E+21	8,044201E+18	8,042016E+18	5,354890E+21	1,608622E+19	5,370976E+21
1986	2,677487E+21	2,677504E+21	8,042835E+18	8,044389E+18	5,354990E+21	1,608722E+19	5,371077E+21
1987	2,677574E+21	2,677450E+21	8,039154E+18	8,038860E+18	5,355024E+21	1,607801E+19	5,371102E+21
1988	2,677392E+21	2,677560E+21	8,045664E+18	8,044973E+18	5,354952E+21	1,609064E+19	5,371043E+21
1989	2,677503E+21	2,677386E+21	8,039667E+18	8,042405E+18	5,354889E+21	1,608207E+19	5,370971E+21
1990	2,677420E+21	2,677343E+21	8,041474E+18	8,040322E+18	5,354763E+21	1,608180E+19	5,370845E+21
1991	2,677235E+21	2,677371E+21	8,046627E+18	8,045208E+18	5,354606E+21	1,609183E+19	5,370698E+21
1992	2,677293E+21	2,677138E+21	8,039950E+18	8,041484E+18	5,354431E+21	1,608143E+19	5,370513E+21
1993	2,677036E+21	2,677118E+21	8,046202E+18	8,042010E+18	5,354154E+21	1,608821E+19	5,370242E+21
1994	2,676930E+21	2,677029E+21	8,044492E+18	8,046872E+18	5,353959E+21	1,609136E+19	5,370050E+21
1995	2,676988E+21	2,676819E+21	8,040898E+18	8,042057E+18	5,353807E+21	1,608295E+19	5,369890E+21
1996	2,676790E+21	2,676909E+21	8,047086E+18	8,044626E+18	5,353699E+21	1,609171E+19	5,369791E+21
1997	2,676904E+21	2,676820E+21	8,042181E+18	8,046095E+18	5,353724E+21	1,608828E+19	5,369813E+21
1998	2,676930E+21	2,676829E+21	8,043540E+18	8,040144E+18	5,353759E+21	1,608368E+19	5,369842E+21

1	14	15	16	17	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	2,676805E+21	2,677029E+21	8,047256E+18	8,046260E+18	5,353834E+21	1,609352E+19	5,369928E+21
2000	2,677010E+21	2,676931E+21	8,041673E+18	8,043196E+18	5,353941E+21	1,608487E+19	5,370026E+21
2001	2,676991E+21	2,677025E+21	8,043751E+18	8,040852E+18	5,354015E+21	1,608460E+19	5,370100E+21
2002	2,677029E+21	2,677157E+21	8,045082E+18	8,047389E+18	5,354186E+21	1,609247E+19	5,370278E+21
2003	2,677252E+21	2,677084E+21	8,040073E+18	8,039992E+18	5,354336E+21	1,608006E+19	5,370416E+21
2004	2,677157E+21	2,677267E+21	8,044724E+18	8,043179E+18	5,354424E+21	1,608790E+19	5,370512E+21
2005	2,677239E+21	2,677260E+21	8,043059E+18	8,044941E+18	5,354499E+21	1,608800E+19	5,370587E+21
2006	2,677304E+21	2,677178E+21	8,039998E+18	8,039615E+18	5,354482E+21	1,607961E+19	5,370561E+21
2007	2,677127E+21	2,677305E+21	8,046903E+18	8,045078E+18	5,354432E+21	1,609198E+19	5,370524E+21
2008	2,677225E+21	2,677130E+21	8,041154E+18	8,042857E+18	5,354355E+21	1,608401E+19	5,370439E+21
2009	2,677131E+21	2,677041E+21	8,042958E+18	8,041037E+18	5,354173E+21	1,608400E+19	5,370257E+21
2010	2,676923E+21	2,677080E+21	8,047498E+18	8,046399E+18	5,354003E+21	1,609390E+19	5,370097E+21
2011	2,676959E+21	2,676825E+21	8,040499E+18	8,043185E+18	5,353784E+21	1,608368E+19	5,369868E+21
2012	2,676739E+21	2,676790E+21	8,046423E+18	8,043606E+18	5,353529E+21	1,609003E+19	5,369619E+21
2013	2,676663E+21	2,676714E+21	8,044543E+18	8,047571E+18	5,353377E+21	1,609211E+19	5,369469E+21
2014	2,676727E+21	2,676531E+21	8,042111E+18	8,042474E+18	5,353257E+21	1,608459E+19	5,369342E+21
2015	2,676535E+21	2,676680E+21	8,048522E+18	8,044628E+18	5,353214E+21	1,609315E+19	5,369307E+21
2016	2,676625E+21	2,676609E+21	8,043711E+18	8,046709E+18	5,353234E+21	1,609042E+19	5,369324E+21
2017	2,676652E+21	2,676568E+21	8,044266E+18	8,041180E+18	5,353220E+21	1,608545E+19	5,369305E+21
2018	2,676549E+21	2,676766E+21	8,047369E+18	8,047506E+18	5,353315E+21	1,609488E+19	5,369410E+21
2019	2,676769E+21	2,676671E+21	8,041817E+18	8,044213E+18	5,353440E+21	1,608603E+19	5,369526E+21
2020	2,676794E+21	2,676777E+21	8,043967E+18	8,041844E+18	5,353570E+21	1,608581E+19	5,369656E+21
2021	2,676824E+21	2,676929E+21	8,045675E+18	8,047456E+18	5,353753E+21	1,609313E+19	5,369846E+21
2022	2,677008E+21	2,676866E+21	8,041289E+18	8,040487E+18	5,353873E+21	1,608178E+19	5,369955E+21
2023	2,676898E+21	2,677051E+21	8,045930E+18	8,043626E+18	5,353949E+21	1,608956E+19	5,370039E+21
2024	2,676968E+21	2,677016E+21	8,044208E+18	8,045651E+18	5,353985E+21	1,608986E+19	5,370074E+21
2025	2,677043E+21	2,676879E+21	8,040844E+18	8,040522E+18	5,353922E+21	1,608137E+19	5,370003E+21
2026	2,676866E+21	2,677018E+21	8,047669E+18	8,045818E+18	5,353884E+21	1,609349E+19	5,369977E+21
2027	2,676930E+21	2,676847E+21	8,041995E+18	8,043925E+18	5,353777E+21	1,608592E+19	5,369863E+21
2028	2,676831E+21	2,676750E+21	8,043670E+18	8,042477E+18	5,353581E+21	1,608615E+19	5,369667E+21
2029	2,676611E+21	2,676776E+21	8,047717E+18	8,047209E+18	5,353387E+21	1,609493E+19	5,369481E+21
2030	2,676644E+21	2,676508E+21	8,041365E+18	8,044274E+18	5,353152E+21	1,608564E+19	5,369238E+21
2031	2,676455E+21	2,676504E+21	8,047436E+18	8,043851E+18	5,352959E+21	1,609129E+19	5,369050E+21
2032	2,676395E+21	2,676447E+21	8,045904E+18	8,048108E+18	5,352842E+21	1,609401E+19	5,368936E+21
2033	2,676460E+21	2,676251E+21	8,043520E+18	8,043096E+18	5,352712E+21	1,608662E+19	5,368798E+21
2034	2,676267E+21	2,676432E+21	8,049161E+18	8,045661E+18	5,352698E+21	1,609482E+19	5,368793E+21
2035	2,676345E+21	2,676353E+21	8,044255E+18	8,048122E+18	5,352698E+21	1,609238E+19	5,368790E+21
2036	2,676413E+21	2,676300E+21	8,044272E+18	8,042576E+18	5,352713E+21	1,608685E+19	5,368799E+21
2037	2,676335E+21	2,676512E+21	8,047386E+18	8,047821E+18	5,352847E+21	1,609521E+19	5,368942E+21
2038	2,676543E+21	2,676436E+21	8,042951E+18	8,044396E+18	5,352979E+21	1,608735E+19	5,369066E+21
2039	2,676560E+21	2,676581E+21	8,045290E+18	8,041713E+18	5,353141E+21	1,608700E+19	5,369228E+21
2040	2,676566E+21	2,676728E+21	8,047214E+18	8,047844E+18	5,353294E+21	1,609506E+19	5,369389E+21
2041	2,676736E+21	2,676603E+21	8,042207E+18	8,041433E+18	5,353339E+21	1,608364E+19	5,369423E+21
2042	2,676644E+21	2,676781E+21	8,046198E+18	8,044755E+18	5,353425E+21	1,609095E+19	5,369516E+21
2043	2,676710E+21	2,676739E+21	8,044623E+18	8,046746E+18	5,353449E+21	1,609137E+19	5,369540E+21
2044	2,676808E+21	2,676599E+21	8,041213E+18	8,041901E+18	5,353407E+21	1,608311E+19	5,369490E+21
2045	2,676607E+21	2,676747E+21	8,048231E+18	8,046219E+18	5,353354E+21	1,609445E+19	5,369449E+21
2046	2,676620E+21	2,676573E+21	8,043125E+18	8,045032E+18	5,353193E+21	1,608816E+19	5,369282E+21
2047	2,676513E+21	2,676470E+21	8,044839E+18	8,043216E+18	5,352984E+21	1,608806E+19	5,369072E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2048	2,676303E+21	2,676470E+21	8,048784E+18	8,048031E+18	5,352773E+21	1,609681E+19	5,368870E+21
2049	2,676355E+21	2,676174E+21	8,042475E+18	8,045148E+18	5,352529E+21	1,608762E+19	5,368616E+21
2050	2,676189E+21	2,676205E+21	8,048220E+18	8,044467E+18	5,352393E+21	1,609269E+19	5,368486E+21
2051	2,676107E+21	2,676179E+21	8,046880E+18	8,049112E+18	5,352286E+21	1,609599E+19	5,368382E+21
2052	2,676189E+21	2,675992E+21	8,044086E+18	8,044449E+18	5,352180E+21	1,608853E+19	5,368269E+21
2053	2,675998E+21	2,676170E+21	8,049235E+18	8,046199E+18	5,352168E+21	1,609543E+19	5,368264E+21
2054	2,676077E+21	2,676099E+21	8,045071E+18	8,048833E+18	5,352176E+21	1,609390E+19	5,368270E+21
2055	2,676171E+21	2,676077E+21	8,045288E+18	8,042511E+18	5,352249E+21	1,608780E+19	5,368336E+21
2056	2,676104E+21	2,676295E+21	8,048831E+18	8,047986E+18	5,352399E+21	1,609682E+19	5,368496E+21
2057	2,676298E+21	2,676199E+21	8,044362E+18	8,044927E+18	5,352497E+21	1,608929E+19	5,368586E+21
2058	2,676316E+21	2,676349E+21	8,045786E+18	8,042863E+18	5,352665E+21	1,608865E+19	5,368753E+21
2059	2,676310E+21	2,676474E+21	8,047661E+18	8,049313E+18	5,352784E+21	1,609697E+19	5,368881E+21
2060	2,676517E+21	2,676330E+21	8,042069E+18	8,043076E+18	5,352847E+21	1,608514E+19	5,368932E+21
2061	2,676433E+21	2,676515E+21	8,046283E+18	8,045182E+18	5,352948E+21	1,609146E+19	5,369039E+21
2062	2,676462E+21	2,676489E+21	8,045751E+18	8,047247E+18	5,352951E+21	1,609300E+19	5,369044E+21
2063	2,676526E+21	2,676371E+21	8,042626E+18	8,042231E+18	5,352897E+21	1,608486E+19	5,368982E+21
2064	2,676297E+21	2,676489E+21	8,049721E+18	8,046812E+18	5,352786E+21	1,609653E+19	5,368882E+21
2065	2,676289E+21	2,676251E+21	8,044259E+18	8,046108E+18	5,352540E+21	1,609037E+19	5,368631E+21
2066	2,676211E+21	2,676144E+21	8,045391E+18	8,044170E+18	5,352356E+21	1,608956E+19	5,368445E+21
2067	2,676013E+21	2,676150E+21	8,049500E+18	8,048972E+18	5,352163E+21	1,609847E+19	5,368261E+21
2068	2,676095E+21	2,675871E+21	8,043234E+18	8,046376E+18	5,351967E+21	1,608961E+19	5,368056E+21
2069	2,675925E+21	2,675938E+21	8,048804E+18	8,044902E+18	5,351863E+21	1,609371E+19	5,367957E+21
2070	2,675811E+21	2,675927E+21	8,047993E+18	8,050286E+18	5,351738E+21	1,609828E+19	5,367836E+21
2071	2,675896E+21	2,675751E+21	8,045158E+18	8,045079E+18	5,351647E+21	1,609024E+19	5,367738E+21
2072	2,675733E+21	2,675912E+21	8,050113E+18	8,046722E+18	5,351645E+21	1,609684E+19	5,367742E+21
2073	2,675818E+21	2,675820E+21	8,046211E+18	8,049325E+18	5,351638E+21	1,609554E+19	5,367733E+21
2074	2,675934E+21	2,675827E+21	8,045925E+18	8,043029E+18	5,351761E+21	1,608895E+19	5,367850E+21
2075	2,675853E+21	2,676057E+21	8,049629E+18	8,049095E+18	5,351910E+21	1,609872E+19	5,368009E+21
2076	2,676068E+21	2,675957E+21	8,044603E+18	8,046536E+18	5,352025E+21	1,609114E+19	5,368116E+21
2077	2,676099E+21	2,676102E+21	8,045529E+18	8,043791E+18	5,352202E+21	1,608932E+19	5,368291E+21
2078	2,676085E+21	2,676234E+21	8,048177E+18	8,050181E+18	5,352319E+21	1,609836E+19	5,368417E+21
2079	2,676294E+21	2,676115E+21	8,042994E+18	8,043255E+18	5,352410E+21	1,608625E+19	5,368496E+21
2080	2,676195E+21	2,676288E+21	8,047863E+18	8,045198E+18	5,352483E+21	1,609306E+19	5,368576E+21
2081	2,676169E+21	2,676231E+21	8,047422E+18	8,047715E+18	5,352401E+21	1,609514E+19	5,368496E+21
2082	2,676218E+21	2,676092E+21	8,043592E+18	8,043392E+18	5,352310E+21	1,608698E+19	5,368397E+21
2083	2,675976E+21	2,676168E+21	8,050546E+18	8,048209E+18	5,352144E+21	1,609876E+19	5,368243E+21
2084	2,676012E+21	2,675913E+21	8,044432E+18	8,047813E+18	5,351925E+21	1,609224E+19	5,368018E+21
2085	2,675954E+21	2,675824E+21	8,045694E+18	8,044682E+18	5,351778E+21	1,609038E+19	5,367868E+21
2086	2,675734E+21	2,675869E+21	8,050525E+18	8,049673E+18	5,351603E+21	1,610020E+19	5,367703E+21
2087	2,675797E+21	2,675637E+21	8,044722E+18	8,046851E+18	5,351434E+21	1,609157E+19	5,367526E+21
2088	2,675620E+21	2,675687E+21	8,050119E+18	8,045464E+18	5,351307E+21	1,609558E+19	5,367402E+21
2089	2,675495E+21	2,675637E+21	8,049125E+18	8,051225E+18	5,351131E+21	1,610035E+19	5,367232E+21
2090	2,675619E+21	2,675464E+21	8,045668E+18	8,045908E+18	5,351083E+21	1,609158E+19	5,367175E+21
2091	2,675477E+21	2,675630E+21	8,050683E+18	8,047672E+18	5,351107E+21	1,609835E+19	5,367206E+21
2092	2,675600E+21	2,675556E+21	8,046699E+18	8,050546E+18	5,351156E+21	1,609724E+19	5,367253E+21
2093	2,675721E+21	2,675597E+21	8,046125E+18	8,043674E+18	5,351318E+21	1,608980E+19	5,367408E+21
2094	2,675622E+21	2,675838E+21	8,050263E+18	8,050380E+18	5,351460E+21	1,610064E+19	5,367561E+21
2095	2,675840E+21	2,675753E+21	8,045472E+18	8,047101E+18	5,351593E+21	1,609257E+19	5,367685E+21
2096	2,675890E+21	2,675878E+21	8,046396E+18	8,044070E+18	5,351769E+21	1,609047E+19	5,367859E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2097	2,675845E+21	2,675984E+21	8,049634E+18	8,050206E+18	5,351829E+21	1,609984E+19	5,367929E+21
2098	2,676036E+21	2,675875E+21	8,044040E+18	8,043657E+18	5,351911E+21	1,608770E+19	5,367999E+21
2099	2,675897E+21	2,676025E+21	8,049061E+18	8,046212E+18	5,351922E+21	1,609527E+19	5,368017E+21
2100	2,675870E+21	2,675931E+21	8,047849E+18	8,049366E+18	5,351802E+21	1,609722E+19	5,367899E+21
2101	2,675933E+21	2,675777E+21	8,043632E+18	8,044555E+18	5,351710E+21	1,608819E+19	5,367799E+21
2102	2,675697E+21	2,675856E+21	8,051025E+18	8,049305E+18	5,351552E+21	1,610033E+19	5,367652E+21
2103	2,675742E+21	2,675640E+21	8,045489E+18	8,048352E+18	5,351382E+21	1,609384E+19	5,367476E+21
2104	2,675687E+21	2,675558E+21	8,047175E+18	8,044956E+18	5,351245E+21	1,609213E+19	5,367337E+21
2105	2,675418E+21	2,675592E+21	8,052008E+18	8,050387E+18	5,351010E+21	1,610239E+19	5,367112E+21
2106	2,675481E+21	2,675356E+21	8,045649E+18	8,048143E+18	5,350836E+21	1,609379E+19	5,366930E+21
2107	2,675311E+21	2,675377E+21	8,050796E+18	8,046861E+18	5,350688E+21	1,609766E+19	5,366786E+21
2108	2,675236E+21	2,675323E+21	8,049270E+18	8,052665E+18	5,350559E+21	1,610194E+19	5,366661E+21
2109	2,675388E+21	2,675184E+21	8,045901E+18	8,046369E+18	5,350572E+21	1,609227E+19	5,366664E+21
2110	2,675240E+21	2,675387E+21	8,051326E+18	8,048482E+18	5,350627E+21	1,609981E+19	5,366727E+21
2111	2,675357E+21	2,675363E+21	8,047922E+18	8,050996E+18	5,350720E+21	1,609892E+19	5,366819E+21
2112	2,675488E+21	2,675389E+21	8,047128E+18	8,044019E+18	5,350877E+21	1,609115E+19	5,366968E+21
2113	2,675373E+21	2,675603E+21	8,051323E+18	8,050844E+18	5,350975E+21	1,610217E+19	5,367078E+21
2114	2,675611E+21	2,675520E+21	8,046224E+18	8,047433E+18	5,351131E+21	1,609366E+19	5,367224E+21
2115	2,675650E+21	2,675631E+21	8,047350E+18	8,044779E+18	5,351281E+21	1,609213E+19	5,367373E+21
2116	2,675607E+21	2,675730E+21	8,050274E+18	8,051228E+18	5,351337E+21	1,610150E+19	5,367438E+21
2117	2,675776E+21	2,675619E+21	8,044333E+18	8,044754E+18	5,351394E+21	1,608909E+19	5,367483E+21
2118	2,675614E+21	2,675744E+21	8,049520E+18	8,047857E+18	5,351359E+21	1,609738E+19	5,367456E+21
2119	2,675596E+21	2,675655E+21	8,048522E+18	8,050360E+18	5,351251E+21	1,609888E+19	5,367350E+21
2120	2,675680E+21	2,675486E+21	8,044548E+18	8,045003E+18	5,351166E+21	1,608955E+19	5,367255E+21
2121	2,675414E+21	2,675558E+21	8,052358E+18	8,049484E+18	5,350972E+21	1,610184E+19	5,367074E+21
2122	2,675447E+21	2,675365E+21	8,046716E+18	8,048989E+18	5,350812E+21	1,609571E+19	5,366908E+21
2123	2,675362E+21	2,675272E+21	8,048495E+18	8,046184E+18	5,350634E+21	1,609468E+19	5,366729E+21
2124	2,675108E+21	2,675281E+21	8,052370E+18	8,051993E+18	5,350389E+21	1,610436E+19	5,366494E+21
2125	2,675194E+21	2,675047E+21	8,045789E+18	8,049330E+18	5,350241E+21	1,609512E+19	5,366336E+21
2126	2,675042E+21	2,675080E+21	8,051140E+18	8,047849E+18	5,350122E+21	1,609899E+19	5,366221E+21
2127	2,674985E+21	2,675076E+21	8,050352E+18	8,052939E+18	5,350061E+21	1,610329E+19	5,366164E+21
2128	2,675152E+21	2,674958E+21	8,047259E+18	8,046340E+18	5,350110E+21	1,609360E+19	5,366203E+21
2129	2,674972E+21	2,675156E+21	8,052638E+18	8,048994E+18	5,350128E+21	1,610163E+19	5,366230E+21
2130	2,675099E+21	2,675133E+21	8,048950E+18	8,051864E+18	5,350232E+21	1,610081E+19	5,366333E+21
2131	2,675244E+21	2,675136E+21	8,047716E+18	8,045231E+18	5,350380E+21	1,609295E+19	5,366473E+21
2132	2,675162E+21	2,675334E+21	8,051403E+18	8,051893E+18	5,350497E+21	1,610330E+19	5,366600E+21
2133	2,675399E+21	2,675276E+21	8,046386E+18	8,047951E+18	5,350675E+21	1,609434E+19	5,366769E+21
2134	2,675407E+21	2,675395E+21	8,047791E+18	8,045891E+18	5,350802E+21	1,609368E+19	5,366896E+21
2135	2,675337E+21	2,675510E+21	8,051245E+18	8,051926E+18	5,350847E+21	1,610317E+19	5,366951E+21
2136	2,675509E+21	2,675365E+21	8,045144E+18	8,045451E+18	5,350874E+21	1,609059E+19	5,366965E+21
2137	2,675329E+21	2,675451E+21	8,050451E+18	8,048472E+18	5,350780E+21	1,609892E+19	5,366879E+21
2138	2,675330E+21	2,675366E+21	8,049411E+18	8,050837E+18	5,350696E+21	1,610025E+19	5,366796E+21
2139	2,675404E+21	2,675194E+21	8,045852E+18	8,045851E+18	5,350597E+21	1,609170E+19	5,366689E+21
2140	2,675137E+21	2,675265E+21	8,053098E+18	8,050462E+18	5,350403E+21	1,610356E+19	5,366506E+21
2141	2,675148E+21	2,675084E+21	8,047293E+18	8,050363E+18	5,350233E+21	1,609766E+19	5,366330E+21
2142	2,675049E+21	2,674972E+21	8,049094E+18	8,047901E+18	5,350021E+21	1,609700E+19	5,366118E+21
2143	2,674816E+21	2,674995E+21	8,053072E+18	8,052837E+18	5,349811E+21	1,610591E+19	5,365917E+21
2144	2,674931E+21	2,674759E+21	8,046856E+18	8,049495E+18	5,349691E+21	1,609635E+19	5,365787E+21
2145	2,674759E+21	2,674801E+21	8,052458E+18	8,047802E+18	5,349560E+21	1,610026E+19	5,365660E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2146	2,674710E+21	2,674828E+21	8,051665E+18	8,053305E+18	5,349538E+21	1,610497E+19	5,365643E+21
2147	2,674864E+21	2,674711E+21	8,048483E+18	8,047415E+18	5,349575E+21	1,609590E+19	5,365671E+21
2148	2,674725E+21	2,674892E+21	8,052637E+18	8,050452E+18	5,349616E+21	1,610309E+19	5,365719E+21
2149	2,674881E+21	2,674881E+21	8,048932E+18	8,052940E+18	5,349762E+21	1,610187E+19	5,365864E+21
2150	2,675034E+21	2,674894E+21	8,047695E+18	8,046333E+18	5,349929E+21	1,609403E+19	5,366023E+21
2151	2,674955E+21	2,675129E+21	8,052207E+18	8,052093E+18	5,350084E+21	1,610430E+19	5,366189E+21
2152	2,675174E+21	2,675072E+21	8,047444E+18	8,047975E+18	5,350246E+21	1,609542E+19	5,366341E+21
2153	2,675128E+21	2,675159E+21	8,048978E+18	8,046540E+18	5,350287E+21	1,609552E+19	5,366383E+21
2154	2,675061E+21	2,675249E+21	8,052356E+18	8,052680E+18	5,350310E+21	1,610504E+19	5,366415E+21
2155	2,675236E+21	2,675075E+21	8,046126E+18	8,046642E+18	5,350311E+21	1,609277E+19	5,366404E+21
2156	2,675086E+21	2,675141E+21	8,050781E+18	8,049401E+18	5,350226E+21	1,610018E+19	5,366327E+21
2157	2,675076E+21	2,675083E+21	8,049918E+18	8,051607E+18	5,350158E+21	1,610153E+19	5,366260E+21
2158	2,675113E+21	2,674919E+21	8,046538E+18	8,047264E+18	5,350032E+21	1,609380E+19	5,366126E+21
2159	2,674827E+21	2,675003E+21	8,054092E+18	8,051249E+18	5,349829E+21	1,610534E+19	5,365935E+21
2160	2,674843E+21	2,674800E+21	8,048236E+18	8,051128E+18	5,349643E+21	1,609936E+19	5,365742E+21
2161	2,674728E+21	2,674660E+21	8,050294E+18	8,048407E+18	5,349389E+21	1,609870E+19	5,365487E+21
2162	2,674521E+21	2,674693E+21	8,054201E+18	8,053131E+18	5,349214E+21	1,610733E+19	5,365321E+21
2163	2,674642E+21	2,674470E+21	8,048271E+18	8,050364E+18	5,349112E+21	1,609863E+19	5,365211E+21
2164	2,674494E+21	2,674513E+21	8,052808E+18	8,048887E+18	5,349007E+21	1,610170E+19	5,365109E+21
2165	2,674454E+21	2,674569E+21	8,051926E+18	8,054843E+18	5,349023E+21	1,610677E+19	5,365130E+21
2166	2,674621E+21	2,674454E+21	8,048587E+18	8,049113E+18	5,349075E+21	1,609770E+19	5,365172E+21
2167	2,674514E+21	2,674663E+21	8,052939E+18	8,051086E+18	5,349176E+21	1,610402E+19	5,365280E+21
2168	2,674685E+21	2,674666E+21	8,049785E+18	8,052721E+18	5,349351E+21	1,610251E+19	5,365454E+21
2169	2,674791E+21	2,674679E+21	8,048897E+18	8,046232E+18	5,349470E+21	1,609513E+19	5,365565E+21
2170	2,674695E+21	2,674917E+21	8,053627E+18	8,052213E+18	5,349612E+21	1,610584E+19	5,365717E+21
2171	2,674886E+21	2,674833E+21	8,048759E+18	8,049045E+18	5,349719E+21	1,609780E+19	5,365817E+21
2172	2,674869E+21	2,674873E+21	8,049122E+18	8,047891E+18	5,349741E+21	1,609701E+19	5,365838E+21
2173	2,674824E+21	2,674963E+21	8,052568E+18	8,053770E+18	5,349787E+21	1,610634E+19	5,365894E+21
2174	2,674995E+21	2,674795E+21	8,046437E+18	8,047936E+18	5,349790E+21	1,609437E+19	5,365885E+21
2175	2,674843E+21	2,674892E+21	8,051721E+18	8,049823E+18	5,349736E+21	1,610154E+19	5,365837E+21
2176	2,674807E+21	2,674836E+21	8,051097E+18	8,051922E+18	5,349643E+21	1,610302E+19	5,365746E+21
2177	2,674782E+21	2,674644E+21	8,047948E+18	8,048248E+18	5,349426E+21	1,609620E+19	5,365522E+21
2178	2,674506E+21	2,674700E+21	8,055291E+18	8,052001E+18	5,349206E+21	1,610729E+19	5,365313E+21
2179	2,674524E+21	2,674476E+21	8,049448E+18	8,052356E+18	5,349000E+21	1,610180E+19	5,365102E+21
2180	2,674446E+21	2,674324E+21	8,050726E+18	8,049221E+18	5,348770E+21	1,609995E+19	5,364870E+21
2181	2,674250E+21	2,674393E+21	8,054669E+18	8,054060E+18	5,348643E+21	1,610873E+19	5,364752E+21
2182	2,674358E+21	2,674198E+21	8,048850E+18	8,051848E+18	5,348557E+21	1,610070E+19	5,364657E+21
2183	2,674233E+21	2,674272E+21	8,053320E+18	8,049784E+18	5,348506E+21	1,610310E+19	5,364609E+21
2184	2,674219E+21	2,674332E+21	8,052590E+18	8,055343E+18	5,348552E+21	1,610793E+19	5,364660E+21
2185	2,674371E+21	2,674220E+21	8,049611E+18	8,049301E+18	5,348591E+21	1,609891E+19	5,364689E+21
2186	2,674284E+21	2,674439E+21	8,054157E+18	8,050859E+18	5,348723E+21	1,610502E+19	5,364828E+21
2187	2,674434E+21	2,674449E+21	8,051404E+18	8,053114E+18	5,348882E+21	1,610452E+19	5,364987E+21
2188	2,674538E+21	2,674435E+21	8,049371E+18	8,047214E+18	5,348974E+21	1,609658E+19	5,365070E+21
2189	2,674442E+21	2,674663E+21	8,054009E+18	8,053819E+18	5,349105E+21	1,610783E+19	5,365213E+21
2190	2,674639E+21	2,674559E+21	8,048815E+18	8,050992E+18	5,349198E+21	1,609981E+19	5,365298E+21
2191	2,674656E+21	2,674608E+21	8,049378E+18	8,048789E+18	5,349265E+21	1,609817E+19	5,365363E+21
2192	2,674614E+21	2,674713E+21	8,053339E+18	8,053728E+18	5,349327E+21	1,610707E+19	5,365434E+21
2193	2,674721E+21	2,674548E+21	8,047747E+18	8,048239E+18	5,349269E+21	1,609599E+19	5,365365E+21
2194	2,674539E+21	2,674639E+21	8,053339E+18	8,050079E+18	5,349179E+21	1,610342E+19	5,365282E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2195	2,674471E+21	2,674557E+21	8,052558E+18	8,053200E+18	5,349027E+21	1,610576E+19	5,365133E+21
2196	2,674467E+21	2,674310E+21	8,048369E+18	8,049703E+18	5,348776E+21	1,609807E+19	5,364874E+21
2197	2,674218E+21	2,674366E+21	8,055616E+18	8,053197E+18	5,348584E+21	1,610881E+19	5,364693E+21
2198	2,674242E+21	2,674157E+21	8,049882E+18	8,053747E+18	5,348399E+21	1,610363E+19	5,364502E+21
2199	2,674183E+21	2,674047E+21	8,051531E+18	8,049708E+18	5,348230E+21	1,610124E+19	5,364331E+21
2200	2,673987E+21	2,674143E+21	8,055554E+18	8,054438E+18	5,348130E+21	1,610999E+19	5,364240E+21
2201	2,674059E+21	2,673949E+21	8,050216E+18	8,052688E+18	5,348008E+21	1,610290E+19	5,364111E+21
2202	2,673969E+21	2,674020E+21	8,054455E+18	8,050214E+18	5,347989E+21	1,610467E+19	5,364093E+21
2203	2,673966E+21	2,674083E+21	8,053928E+18	8,056134E+18	5,348049E+21	1,611006E+19	5,364160E+21
2204	2,674136E+21	2,673960E+21	8,050097E+18	8,049805E+18	5,348096E+21	1,609990E+19	5,364196E+21
2205	2,674049E+21	2,674197E+21	8,054549E+18	8,051807E+18	5,348246E+21	1,610636E+19	5,364353E+21
2206	2,674171E+21	2,674210E+21	8,051776E+18	8,054629E+18	5,348382E+21	1,610641E+19	5,364488E+21
2207	2,674301E+21	2,674201E+21	8,049574E+18	8,048390E+18	5,348502E+21	1,609796E+19	5,364600E+21
2208	2,674232E+21	2,674417E+21	8,054437E+18	8,054359E+18	5,348649E+21	1,610880E+19	5,364758E+21
2209	2,674401E+21	2,674314E+21	8,049818E+18	8,051395E+18	5,348715E+21	1,610121E+19	5,364816E+21
2210	2,674429E+21	2,674369E+21	8,050718E+18	8,048734E+18	5,348798E+21	1,609945E+19	5,364897E+21
2211	2,674345E+21	2,674474E+21	8,055006E+18	8,054235E+18	5,348819E+21	1,610924E+19	5,364928E+21
2212	2,674426E+21	2,674274E+21	8,048429E+18	8,049457E+18	5,348700E+21	1,609789E+19	5,364798E+21
2213	2,674239E+21	2,674338E+21	8,053974E+18	8,051734E+18	5,348577E+21	1,610571E+19	5,364683E+21
2214	2,674163E+21	2,674232E+21	8,052843E+18	8,055051E+18	5,348396E+21	1,610789E+19	5,364504E+21
2215	2,674196E+21	2,673996E+21	8,048923E+18	8,050627E+18	5,348192E+21	1,609955E+19	5,364292E+21
2216	2,673957E+21	2,674067E+21	8,056426E+18	8,053188E+18	5,348024E+21	1,610961E+19	5,364134E+21
2217	2,673929E+21	2,673882E+21	8,051320E+18	8,054200E+18	5,347811E+21	1,610552E+19	5,363916E+21
2218	2,673874E+21	2,673784E+21	8,053079E+18	8,050013E+18	5,347657E+21	1,610309E+19	5,363760E+21
2219	2,673678E+21	2,673877E+21	8,056850E+18	8,055646E+18	5,347555E+21	1,611250E+19	5,363667E+21
2220	2,673782E+21	2,673659E+21	8,050693E+18	8,053846E+18	5,347441E+21	1,610454E+19	5,363546E+21
2221	2,673729E+21	2,673744E+21	8,054684E+18	8,051329E+18	5,347473E+21	1,610601E+19	5,363579E+21
2222	2,673728E+21	2,673826E+21	8,054265E+18	8,057342E+18	5,347554E+21	1,611161E+19	5,363665E+21
2223	2,673914E+21	2,673732E+21	8,050567E+18	8,050447E+18	5,347646E+21	1,610101E+19	5,363747E+21
2224	2,673825E+21	2,673977E+21	8,055001E+18	8,052397E+18	5,347802E+21	1,610740E+19	5,363909E+21
2225	2,673912E+21	2,673980E+21	8,052794E+18	8,055537E+18	5,347892E+21	1,610833E+19	5,364001E+21
2226	2,674072E+21	2,673960E+21	8,050629E+18	8,048737E+18	5,348032E+21	1,609937E+19	5,364131E+21
2227	2,674008E+21	2,674178E+21	8,055722E+18	8,054886E+18	5,348186E+21	1,611061E+19	5,364296E+21
2228	2,674166E+21	2,674058E+21	8,050587E+18	8,051760E+18	5,348224E+21	1,610235E+19	5,364326E+21
2229	2,674174E+21	2,674116E+21	8,051441E+18	8,049741E+18	5,348290E+21	1,610118E+19	5,364391E+21
2230	2,674046E+21	2,674207E+21	8,055539E+18	8,055706E+18	5,348253E+21	1,611124E+19	5,364364E+21
2231	2,674138E+21	2,673992E+21	8,048804E+18	8,050901E+18	5,348131E+21	1,609971E+19	5,364230E+21
2232	2,673969E+21	2,674037E+21	8,054538E+18	8,052292E+18	5,348007E+21	1,610683E+19	5,364113E+21
2233	2,673861E+21	2,673934E+21	8,053964E+18	8,055576E+18	5,347795E+21	1,610954E+19	5,363905E+21
2234	2,673908E+21	2,673708E+21	8,050605E+18	8,050632E+18	5,347616E+21	1,610124E+19	5,363717E+21
2235	2,673653E+21	2,673791E+21	8,058003E+18	8,053860E+18	5,347443E+21	1,611186E+19	5,363555E+21
2236	2,673617E+21	2,673586E+21	8,052137E+18	8,055568E+18	5,347202E+21	1,610771E+19	5,363310E+21
2237	2,673589E+21	2,673482E+21	8,053530E+18	8,051833E+18	5,347070E+21	1,610536E+19	5,363176E+21
2238	2,673410E+21	2,673577E+21	8,056911E+18	8,057363E+18	5,346987E+21	1,611427E+19	5,363101E+21
2239	2,673558E+21	2,673394E+21	8,051049E+18	8,054658E+18	5,346952E+21	1,610571E+19	5,363058E+21
2240	2,673514E+21	2,673503E+21	8,055182E+18	8,051251E+18	5,347016E+21	1,610643E+19	5,363123E+21
2241	2,673453E+21	2,673607E+21	8,055533E+18	8,057580E+18	5,347060E+21	1,611311E+19	5,363173E+21
2242	2,673645E+21	2,673518E+21	8,051929E+18	8,050603E+18	5,347163E+21	1,610253E+19	5,363265E+21
2243	2,673567E+21	2,673742E+21	8,056091E+18	8,053386E+18	5,347310E+21	1,610948E+19	5,363419E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2244	2,673677E+21	2,673719E+21	8,053405E+18	8,056296E+18	5,347396E+21	1,610970E+19	5,363506E+21
2245	2,673865E+21	2,673706E+21	8,051061E+18	8,049689E+18	5,347571E+21	1,610075E+19	5,363672E+21
2246	2,673780E+21	2,673932E+21	8,056178E+18	8,055789E+18	5,347711E+21	1,611197E+19	5,363823E+21
2247	2,673930E+21	2,673829E+21	8,051106E+18	8,052595E+18	5,347760E+21	1,610370E+19	5,363863E+21
2248	2,673914E+21	2,673868E+21	8,051994E+18	8,050598E+18	5,347782E+21	1,610259E+19	5,363885E+21
2249	2,673738E+21	2,673932E+21	8,056537E+18	8,056734E+18	5,347670E+21	1,611327E+19	5,363783E+21
2250	2,673851E+21	2,673699E+21	8,050048E+18	8,051525E+18	5,347551E+21	1,610157E+19	5,363652E+21
2251	2,673686E+21	2,673736E+21	8,055888E+18	8,052928E+18	5,347422E+21	1,610882E+19	5,363531E+21
2252	2,673565E+21	2,673617E+21	8,054808E+18	8,056233E+18	5,347182E+21	1,611104E+19	5,363293E+21
2253	2,673606E+21	2,673404E+21	8,051427E+18	8,051951E+18	5,347010E+21	1,610338E+19	5,363113E+21
2254	2,673338E+21	2,673489E+21	8,058248E+18	8,055490E+18	5,346827E+21	1,611374E+19	5,362941E+21
2255	2,673342E+21	2,673294E+21	8,052476E+18	8,057078E+18	5,346636E+21	1,610955E+19	5,362746E+21
2256	2,673343E+21	2,673204E+21	8,053975E+18	8,052335E+18	5,346547E+21	1,610631E+19	5,362653E+21
2257	2,673144E+21	2,673322E+21	8,057936E+18	8,057587E+18	5,346466E+21	1,611552E+19	5,362582E+21
2258	2,673299E+21	2,673162E+21	8,052753E+18	8,054331E+18	5,346461E+21	1,610708E+19	5,362568E+21
2259	2,673241E+21	2,673281E+21	8,056577E+18	8,051675E+18	5,346522E+21	1,610825E+19	5,362631E+21
2260	2,673172E+21	2,673355E+21	8,056439E+18	8,058505E+18	5,346527E+21	1,611494E+19	5,362642E+21
2261	2,673400E+21	2,673254E+21	8,052415E+18	8,052084E+18	5,346655E+21	1,610450E+19	5,362759E+21
2262	2,673348E+21	2,673478E+21	8,056058E+18	8,054810E+18	5,346826E+21	1,611087E+19	5,362937E+21
2263	2,673493E+21	2,673481E+21	8,053763E+18	8,056979E+18	5,346973E+21	1,611074E+19	5,363084E+21
2264	2,673668E+21	2,673486E+21	8,051435E+18	8,049887E+18	5,347154E+21	1,610132E+19	5,363255E+21
2265	2,673509E+21	2,673716E+21	8,057221E+18	8,056169E+18	5,347225E+21	1,611339E+19	5,363339E+21
2266	2,673642E+21	2,673600E+21	8,052430E+18	8,053033E+18	5,347242E+21	1,610546E+19	5,363348E+21
2267	2,673623E+21	2,673602E+21	8,053154E+18	8,051710E+18	5,347225E+21	1,610486E+19	5,363330E+21
2268	2,673448E+21	2,673621E+21	8,057324E+18	8,057497E+18	5,347069E+21	1,611482E+19	5,363184E+21
2269	2,673583E+21	2,673385E+21	8,050801E+18	8,052734E+18	5,346968E+21	1,610353E+19	5,363072E+21
2270	2,673405E+21	2,673425E+21	8,056401E+18	8,053926E+18	5,346829E+21	1,611033E+19	5,362940E+21
2271	2,673289E+21	2,673332E+21	8,055326E+18	8,057408E+18	5,346622E+21	1,611273E+19	5,362734E+21
2272	2,673325E+21	2,673121E+21	8,052050E+18	8,052959E+18	5,346446E+21	1,610501E+19	5,362551E+21
2273	2,673030E+21	2,673203E+21	8,059147E+18	8,056335E+18	5,346233E+21	1,611548E+19	5,362349E+21
2274	2,673064E+21	2,673025E+21	8,053984E+18	8,057373E+18	5,346089E+21	1,611136E+19	5,362200E+21
2275	2,673070E+21	2,672943E+21	8,055501E+18	8,052575E+18	5,346013E+21	1,610808E+19	5,362121E+21
2276	2,672850E+21	2,673051E+21	8,059010E+18	8,057819E+18	5,345900E+21	1,611683E+19	5,362017E+21
2277	2,673010E+21	2,672898E+21	8,053631E+18	8,055462E+18	5,345909E+21	1,610909E+19	5,362018E+21
2278	2,672959E+21	2,673009E+21	8,056585E+18	8,053188E+18	5,345967E+21	1,610977E+19	5,362077E+21
2279	2,672951E+21	2,673094E+21	8,056510E+18	8,059920E+18	5,346044E+21	1,611643E+19	5,362161E+21
2280	2,673211E+21	2,673015E+21	8,052527E+18	8,052684E+18	5,346226E+21	1,610521E+19	5,362331E+21
2281	2,673140E+21	2,673260E+21	8,056739E+18	8,055140E+18	5,346400E+21	1,611188E+19	5,362511E+21
2282	2,673274E+21	2,673287E+21	8,055280E+18	8,056761E+18	5,346561E+21	1,611204E+19	5,362673E+21
2283	2,673414E+21	2,673284E+21	8,052604E+18	8,050636E+18	5,346698E+21	1,610324E+19	5,362802E+21
2284	2,673221E+21	2,673455E+21	8,058114E+18	8,057073E+18	5,346676E+21	1,611519E+19	5,362791E+21
2285	2,673368E+21	2,673307E+21	8,053036E+18	8,054598E+18	5,346674E+21	1,610763E+19	5,362782E+21
2286	2,673357E+21	2,673292E+21	8,053422E+18	8,053009E+18	5,346650E+21	1,610643E+19	5,362756E+21
2287	2,673209E+21	2,673322E+21	8,057909E+18	8,058186E+18	5,346530E+21	1,611610E+19	5,362647E+21
2288	2,673320E+21	2,673107E+21	8,051544E+18	8,053172E+18	5,346427E+21	1,610472E+19	5,362532E+21
2289	2,673090E+21	2,673154E+21	8,057402E+18	8,054519E+18	5,346244E+21	1,611192E+19	5,362356E+21
2290	2,672972E+21	2,673063E+21	8,056783E+18	8,057977E+18	5,346036E+21	1,611476E+19	5,362151E+21
2291	2,673018E+21	2,672844E+21	8,053400E+18	8,053917E+18	5,345862E+21	1,610732E+19	5,361970E+21
2292	2,672727E+21	2,672899E+21	8,060149E+18	8,056749E+18	5,345626E+21	1,611690E+19	5,361743E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2293	2,672782E+21	2,672730E+21	8,055059E+18	8,058364E+18	5,345513E+21	1,611342E+19	5,361626E+21
2294	2,672781E+21	2,672660E+21	8,056073E+18	8,053482E+18	5,345441E+21	1,610955E+19	5,361550E+21
2295	2,672587E+21	2,672782E+21	8,059321E+18	8,059142E+18	5,345369E+21	1,611846E+19	5,361487E+21
2296	2,672762E+21	2,672639E+21	8,053898E+18	8,056689E+18	5,345402E+21	1,611059E+19	5,361512E+21
2297	2,672722E+21	2,672755E+21	8,056839E+18	8,054230E+18	5,345477E+21	1,611107E+19	5,361588E+21
2298	2,672752E+21	2,672874E+21	8,057722E+18	8,060089E+18	5,345626E+21	1,611781E+19	5,361744E+21
2299	2,673008E+21	2,672817E+21	8,053760E+18	8,052801E+18	5,345825E+21	1,610656E+19	5,361932E+21
2300	2,672892E+21	2,673041E+21	8,057825E+18	8,055153E+18	5,345934E+21	1,611298E+19	5,362046E+21
2301	2,673009E+21	2,673057E+21	8,056260E+18	8,057690E+18	5,346066E+21	1,611395E+19	5,362180E+21
2302	2,673131E+21	2,673019E+21	8,052878E+18	8,052052E+18	5,346150E+21	1,610493E+19	5,362255E+21
2303	2,672976E+21	2,673172E+21	8,058463E+18	8,058284E+18	5,346148E+21	1,611675E+19	5,362265E+21
2304	2,673133E+21	2,673028E+21	8,053430E+18	8,055331E+18	5,346161E+21	1,610876E+19	5,362270E+21
2305	2,673094E+21	2,673016E+21	8,054308E+18	8,053438E+18	5,346110E+21	1,610775E+19	5,362217E+21
2306	2,672934E+21	2,673071E+21	8,059529E+18	8,058159E+18	5,346005E+21	1,611769E+19	5,362123E+21
2307	2,673014E+21	2,672853E+21	8,052970E+18	8,054108E+18	5,345867E+21	1,610708E+19	5,361974E+21
2308	2,672758E+21	2,672848E+21	8,058505E+18	8,055468E+18	5,345606E+21	1,611397E+19	5,361720E+21
2309	2,672670E+21	2,672742E+21	8,057620E+18	8,059613E+18	5,345413E+21	1,611723E+19	5,361530E+21
2310	2,672725E+21	2,672523E+21	8,053925E+18	8,055238E+18	5,345248E+21	1,610916E+19	5,361357E+21
2311	2,672467E+21	2,672594E+21	8,060555E+18	8,057629E+18	5,345061E+21	1,611818E+19	5,361180E+21
2312	2,672507E+21	2,672456E+21	8,055574E+18	8,059144E+18	5,344963E+21	1,611472E+19	5,361078E+21
2313	2,672482E+21	2,672397E+21	8,056608E+18	8,054302E+18	5,344879E+21	1,611091E+19	5,360989E+21
2314	2,672321E+21	2,672536E+21	8,060402E+18	8,059758E+18	5,344858E+21	1,612016E+19	5,360978E+21
2315	2,672526E+21	2,672410E+21	8,055026E+18	8,057372E+18	5,344936E+21	1,611240E+19	5,361048E+21
2316	2,672496E+21	2,672512E+21	8,057731E+18	8,054421E+18	5,345008E+21	1,611215E+19	5,361120E+21
2317	2,672541E+21	2,672646E+21	8,058889E+18	8,060646E+18	5,345187E+21	1,611954E+19	5,361307E+21
2318	2,672766E+21	2,672601E+21	8,054390E+18	8,053502E+18	5,345367E+21	1,610789E+19	5,361475E+21
2319	2,672657E+21	2,672808E+21	8,058224E+18	8,056279E+18	5,345465E+21	1,611450E+19	5,361579E+21
2320	2,672757E+21	2,672808E+21	8,056629E+18	8,058773E+18	5,345565E+21	1,611540E+19	5,361680E+21
2321	2,672876E+21	2,672752E+21	8,053214E+18	8,053160E+18	5,345628E+21	1,610637E+19	5,361734E+21
2322	2,672743E+21	2,672914E+21	8,059828E+18	8,058459E+18	5,345657E+21	1,611829E+19	5,361775E+21
2323	2,672880E+21	2,672783E+21	8,054779E+18	8,055679E+18	5,345663E+21	1,611046E+19	5,361773E+21
2324	2,672794E+21	2,672740E+21	8,055560E+18	8,053776E+18	5,345533E+21	1,610934E+19	5,361643E+21
2325	2,672623E+21	2,672781E+21	8,060487E+18	8,059394E+18	5,345404E+21	1,611988E+19	5,361524E+21
2326	2,672693E+21	2,672546E+21	8,053411E+18	8,055826E+18	5,345239E+21	1,610924E+19	5,361348E+21
2327	2,672484E+21	2,672527E+21	8,058884E+18	8,056834E+18	5,345011E+21	1,611572E+19	5,361127E+21
2328	2,672404E+21	2,672441E+21	8,058109E+18	8,060563E+18	5,344846E+21	1,611867E+19	5,360964E+21
2329	2,672441E+21	2,672236E+21	8,054790E+18	8,055903E+18	5,344677E+21	1,611069E+19	5,360788E+21
2330	2,672185E+21	2,672339E+21	8,061960E+18	8,057811E+18	5,344524E+21	1,611977E+19	5,360644E+21
2331	2,672212E+21	2,672210E+21	8,056850E+18	8,060008E+18	5,344422E+21	1,611686E+19	5,360539E+21
2332	2,672186E+21	2,672114E+21	8,057594E+18	8,054970E+18	5,344300E+21	1,611256E+19	5,360412E+21
2333	2,672081E+21	2,672262E+21	8,061210E+18	8,060905E+18	5,344343E+21	1,612212E+19	5,360465E+21
2334	2,672298E+21	2,672158E+21	8,055823E+18	8,058057E+18	5,344456E+21	1,611388E+19	5,360569E+21
2335	2,672293E+21	2,672277E+21	8,058198E+18	8,055028E+18	5,344569E+21	1,611323E+19	5,360683E+21
2336	2,672309E+21	2,672433E+21	8,059391E+18	8,061299E+18	5,344742E+21	1,612069E+19	5,360863E+21
2337	2,672496E+21	2,672373E+21	8,054678E+18	8,054491E+18	5,344868E+21	1,610917E+19	5,360977E+21
2338	2,672406E+21	2,672575E+21	8,059112E+18	8,056976E+18	5,344981E+21	1,611609E+19	5,361097E+21
2339	2,672514E+21	2,672571E+21	8,057578E+18	8,059414E+18	5,345085E+21	1,611699E+19	5,361202E+21
2340	2,672621E+21	2,672480E+21	8,054278E+18	8,053485E+18	5,345101E+21	1,610776E+19	5,361209E+21
2341	2,672499E+21	2,672641E+21	8,060989E+18	8,059136E+18	5,345141E+21	1,612012E+19	5,361261E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2342	2,672596E+21	2,672515E+21	8,055528E+18	8,056818E+18	5,345112E+21	1,611235E+19	5,361224E+21
2343	2,672521E+21	2,672448E+21	8,055979E+18	8,055357E+18	5,344969E+21	1,611134E+19	5,361080E+21
2344	2,672343E+21	2,672482E+21	8,060729E+18	8,060840E+18	5,344825E+21	1,612157E+19	5,360947E+21
2345	2,672409E+21	2,672242E+21	8,053852E+18	8,057166E+18	5,344651E+21	1,611102E+19	5,360762E+21
2346	2,672217E+21	2,672247E+21	8,060373E+18	8,056996E+18	5,344464E+21	1,611737E+19	5,360582E+21
2347	2,672111E+21	2,672182E+21	8,059585E+18	8,060737E+18	5,344293E+21	1,612032E+19	5,360413E+21
2348	2,672106E+21	2,671950E+21	8,056302E+18	8,056149E+18	5,344055E+21	1,611245E+19	5,360168E+21
2349	2,671871E+21	2,672040E+21	8,062962E+18	8,058847E+18	5,343911E+21	1,612181E+19	5,360033E+21
2350	2,671914E+21	2,671920E+21	8,057536E+18	8,061384E+18	5,343833E+21	1,611892E+19	5,359952E+21
2351	2,671960E+21	2,671829E+21	8,057870E+18	8,056100E+18	5,343789E+21	1,611397E+19	5,359903E+21
2352	2,671872E+21	2,672013E+21	8,061535E+18	8,061695E+18	5,343885E+21	1,612323E+19	5,360008E+21
2353	2,672071E+21	2,671940E+21	8,056404E+18	8,058606E+18	5,344011E+21	1,611501E+19	5,360126E+21
2354	2,672062E+21	2,672082E+21	8,059216E+18	8,055356E+18	5,344145E+21	1,611457E+19	5,360259E+21
2355	2,672054E+21	2,672230E+21	8,060344E+18	8,061966E+18	5,344284E+21	1,612231E+19	5,360406E+21
2356	2,672225E+21	2,672115E+21	8,055504E+18	8,055201E+18	5,344340E+21	1,611071E+19	5,360451E+21
2357	2,672179E+21	2,672298E+21	8,059850E+18	8,058023E+18	5,344477E+21	1,611787E+19	5,360595E+21
2358	2,672277E+21	2,672309E+21	8,058396E+18	8,060177E+18	5,344586E+21	1,611857E+19	5,360705E+21
2359	2,672395E+21	2,672214E+21	8,054820E+18	8,054368E+18	5,344609E+21	1,610919E+19	5,360719E+21
2360	2,672240E+21	2,672386E+21	8,061393E+18	8,060041E+18	5,344626E+21	1,612143E+19	5,360748E+21
2361	2,672304E+21	2,672246E+21	8,055881E+18	8,058123E+18	5,344550E+21	1,611400E+19	5,360664E+21
2362	2,672244E+21	2,672178E+21	8,057098E+18	8,056179E+18	5,344422E+21	1,611328E+19	5,360536E+21
2363	2,672063E+21	2,672213E+21	8,061838E+18	8,061266E+18	5,344276E+21	1,612310E+19	5,360399E+21
2364	2,672099E+21	2,671942E+21	8,055410E+18	8,057486E+18	5,344041E+21	1,611290E+19	5,360154E+21
2365	2,671918E+21	2,671945E+21	8,061832E+18	8,057526E+18	5,343863E+21	1,611936E+19	5,359982E+21
2366	2,671778E+21	2,671888E+21	8,060585E+18	8,061843E+18	5,343666E+21	1,612243E+19	5,359788E+21
2367	2,671804E+21	2,671632E+21	8,056800E+18	8,057752E+18	5,343436E+21	1,611455E+19	5,359551E+21
2368	2,671605E+21	2,671733E+21	8,062849E+18	8,060428E+18	5,343338E+21	1,612328E+19	5,359462E+21
2369	2,671672E+21	2,671636E+21	8,057789E+18	8,062667E+18	5,343308E+21	1,612046E+19	5,359429E+21
2370	2,671749E+21	2,671600E+21	8,058882E+18	8,056351E+18	5,343349E+21	1,611523E+19	5,359464E+21
2371	2,671641E+21	2,671817E+21	8,062522E+18	8,061704E+18	5,343458E+21	1,612423E+19	5,359582E+21
2372	2,671788E+21	2,671718E+21	8,057615E+18	8,058737E+18	5,343506E+21	1,611635E+19	5,359623E+21
2373	2,671798E+21	2,671837E+21	8,059940E+18	8,056263E+18	5,343635E+21	1,611620E+19	5,359751E+21
2374	2,671789E+21	2,671977E+21	8,061022E+18	8,062983E+18	5,343766E+21	1,612400E+19	5,359890E+21
2375	2,672013E+21	2,671846E+21	8,055826E+18	8,056266E+18	5,343859E+21	1,611209E+19	5,359971E+21
2376	2,671978E+21	2,672045E+21	8,060131E+18	8,058905E+18	5,344022E+21	1,611904E+19	5,360141E+21
2377	2,672048E+21	2,672071E+21	8,058985E+18	8,060914E+18	5,344120E+21	1,611990E+19	5,360239E+21
2378	2,672149E+21	2,671995E+21	8,055906E+18	8,055037E+18	5,344145E+21	1,611094E+19	5,360255E+21
2379	2,671964E+21	2,672149E+21	8,062312E+18	8,060610E+18	5,344113E+21	1,612292E+19	5,360236E+21
2380	2,671998E+21	2,671957E+21	8,057046E+18	8,058877E+18	5,343956E+21	1,611592E+19	5,360071E+21
2381	2,671966E+21	2,671869E+21	8,058410E+18	8,057000E+18	5,343835E+21	1,611541E+19	5,359951E+21
2382	2,671757E+21	2,671915E+21	8,063073E+18	8,061891E+18	5,343673E+21	1,612496E+19	5,359798E+21
2383	2,671801E+21	2,671628E+21	8,056218E+18	8,058652E+18	5,343429E+21	1,611487E+19	5,359544E+21
2384	2,671604E+21	2,671632E+21	8,062084E+18	8,058784E+18	5,343236E+21	1,612087E+19	5,359357E+21
2385	2,671467E+21	2,671577E+21	8,060651E+18	8,063433E+18	5,343044E+21	1,612408E+19	5,359168E+21
2386	2,671541E+21	2,671354E+21	8,057642E+18	8,058656E+18	5,342894E+21	1,611630E+19	5,359011E+21
2387	2,671367E+21	2,671486E+21	8,063536E+18	8,060646E+18	5,342853E+21	1,612418E+19	5,358977E+21
2388	2,671417E+21	2,671391E+21	8,059337E+18	8,062715E+18	5,342808E+21	1,612205E+19	5,358930E+21
2389	2,671503E+21	2,671369E+21	8,060193E+18	8,056643E+18	5,342872E+21	1,611684E+19	5,358989E+21
2390	2,671359E+21	2,671594E+21	8,063478E+18	8,062462E+18	5,342953E+21	1,612594E+19	5,359079E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2391	2,671530E+21	2,671457E+21	8,057998E+18	8,060078E+18	5,342987E+21	1,611808E+19	5,359105E+21
2392	2,671570E+21	2,671568E+21	8,059759E+18	8,057679E+18	5,343138E+21	1,611744E+19	5,359256E+21
2393	2,671577E+21	2,671720E+21	8,061325E+18	8,063959E+18	5,343297E+21	1,612528E+19	5,359422E+21
2394	2,671813E+21	2,671631E+21	8,056901E+18	8,056569E+18	5,343444E+21	1,611347E+19	5,359557E+21
2395	2,671750E+21	2,671842E+21	8,060978E+18	8,058976E+18	5,343592E+21	1,611995E+19	5,359712E+21
2396	2,671757E+21	2,671831E+21	8,060312E+18	8,061233E+18	5,343589E+21	1,612155E+19	5,359710E+21
2397	2,671867E+21	2,671727E+21	8,056846E+18	8,056104E+18	5,343594E+21	1,611295E+19	5,359707E+21
2398	2,671669E+21	2,671865E+21	8,063200E+18	8,061521E+18	5,343534E+21	1,612472E+19	5,359658E+21
2399	2,671726E+21	2,671643E+21	8,057649E+18	8,060151E+18	5,343370E+21	1,611780E+19	5,359487E+21
2400	2,671695E+21	2,671562E+21	8,058896E+18	8,058161E+18	5,343257E+21	1,611706E+19	5,359374E+21
2401	2,671461E+21	2,671613E+21	8,063552E+18	8,062966E+18	5,343074E+21	1,612652E+19	5,359200E+21
2402	2,671500E+21	2,671350E+21	8,057238E+18	8,059757E+18	5,342850E+21	1,611700E+19	5,358967E+21
2403	2,671312E+21	2,671346E+21	8,062602E+18	8,059441E+18	5,342658E+21	1,612204E+19	5,358780E+21
2404	2,671172E+21	2,671274E+21	8,061780E+18	8,064118E+18	5,342446E+21	1,612590E+19	5,358572E+21
2405	2,671288E+21	2,671075E+21	8,059033E+18	8,059107E+18	5,342364E+21	1,611814E+19	5,358482E+21
2406	2,671097E+21	2,671241E+21	8,064788E+18	8,060890E+18	5,342338E+21	1,612568E+19	5,358464E+21
2407	2,671150E+21	2,671139E+21	8,060267E+18	8,063567E+18	5,342289E+21	1,612383E+19	5,358413E+21
2408	2,671230E+21	2,671118E+21	8,060345E+18	8,057865E+18	5,342348E+21	1,611821E+19	5,358466E+21
2409	2,671094E+21	2,671332E+21	8,063467E+18	8,063826E+18	5,342427E+21	1,612729E+19	5,358554E+21
2410	2,671307E+21	2,671223E+21	8,058657E+18	8,060927E+18	5,342529E+21	1,611958E+19	5,358649E+21
2411	2,671371E+21	2,671347E+21	8,060201E+18	8,057833E+18	5,342718E+21	1,611803E+19	5,358836E+21
2412	2,671352E+21	2,671494E+21	8,062835E+18	8,063949E+18	5,342846E+21	1,612678E+19	5,358973E+21
2413	2,671583E+21	2,671412E+21	8,058263E+18	8,056939E+18	5,342995E+21	1,611520E+19	5,359111E+21
2414	2,671474E+21	2,671614E+21	8,062025E+18	8,059821E+18	5,343088E+21	1,612185E+19	5,359210E+21
2415	2,671492E+21	2,671549E+21	8,060765E+18	8,062707E+18	5,343041E+21	1,612347E+19	5,359165E+21
2416	2,671612E+21	2,671426E+21	8,056820E+18	8,057810E+18	5,343038E+21	1,611463E+19	5,359153E+21
2417	2,671411E+21	2,671565E+21	8,063574E+18	8,062529E+18	5,342976E+21	1,612610E+19	5,359102E+21
2418	2,671461E+21	2,671379E+21	8,058797E+18	8,060782E+18	5,342839E+21	1,611958E+19	5,358959E+21
2419	2,671400E+21	2,671296E+21	8,059813E+18	8,058278E+18	5,342696E+21	1,611809E+19	5,358814E+21
2420	2,671121E+21	2,671314E+21	8,064932E+18	8,063385E+18	5,342435E+21	1,612832E+19	5,358564E+21
2421	2,671187E+21	2,671043E+21	8,058544E+18	8,060662E+18	5,342230E+21	1,611921E+19	5,358349E+21
2422	2,671010E+21	2,671053E+21	8,063655E+18	8,060160E+18	5,342063E+21	1,612382E+19	5,358187E+21
2423	2,670909E+21	2,670974E+21	8,062624E+18	8,065235E+18	5,341883E+21	1,612786E+19	5,358010E+21
2424	2,671033E+21	2,670805E+21	8,059645E+18	8,060200E+18	5,341838E+21	1,611985E+19	5,357958E+21
2425	2,670826E+21	2,670986E+21	8,065098E+18	8,061912E+18	5,341812E+21	1,612701E+19	5,357939E+21
2426	2,670880E+21	2,670907E+21	8,061086E+18	8,064692E+18	5,341787E+21	1,612578E+19	5,357913E+21
2427	2,670979E+21	2,670873E+21	8,060508E+18	8,058468E+18	5,341852E+21	1,611898E+19	5,357971E+21
2428	2,670850E+21	2,671067E+21	8,064495E+18	8,064363E+18	5,341917E+21	1,612886E+19	5,358046E+21
2429	2,671098E+21	2,670986E+21	8,060011E+18	8,061237E+18	5,342084E+21	1,612125E+19	5,358205E+21
2430	2,671144E+21	2,671134E+21	8,061305E+18	8,058197E+18	5,342278E+21	1,611950E+19	5,358397E+21
2431	2,671112E+21	2,671255E+21	8,063633E+18	8,064836E+18	5,342367E+21	1,612847E+19	5,358496E+21
2432	2,671329E+21	2,671166E+21	8,058282E+18	8,058417E+18	5,342495E+21	1,611670E+19	5,358612E+21
2433	2,671216E+21	2,671344E+21	8,062056E+18	8,061092E+18	5,342560E+21	1,612315E+19	5,358683E+21
2434	2,671249E+21	2,671297E+21	8,061545E+18	8,063524E+18	5,342546E+21	1,612507E+19	5,358671E+21
2435	2,671369E+21	2,671171E+21	8,057542E+18	8,058000E+18	5,342540E+21	1,611554E+19	5,358655E+21
2436	2,671122E+21	2,671289E+21	8,065345E+18	8,062550E+18	5,342411E+21	1,612789E+19	5,358539E+21
2437	2,671155E+21	2,671108E+21	8,060421E+18	8,061357E+18	5,342263E+21	1,612178E+19	5,358384E+21
2438	2,671064E+21	2,671007E+21	8,061054E+18	8,059245E+18	5,342071E+21	1,612030E+19	5,358191E+21
2439	2,670816E+21	2,670977E+21	8,065477E+18	8,064896E+18	5,341792E+21	1,613037E+19	5,357923E+21

1	14	15	16	17	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							
2440	2,670914E+21	2,670721E+21	8,058839E+18	8,062369E+18	5,341635E+21	1,612121E+19	5,357756E+21
2441	2,670751E+21	2,670754E+21	8,064065E+18	8,061191E+18	5,341504E+21	1,612526E+19	5,357629E+21
2442	2,670651E+21	2,670727E+21	8,063690E+18	8,066098E+18	5,341378E+21	1,612979E+19	5,357508E+21
2443	2,670755E+21	2,670568E+21	8,060316E+18	8,060455E+18	5,341323E+21	1,612077E+19	5,357443E+21
2444	2,670523E+21	2,670723E+21	8,066118E+18	8,062448E+18	5,341246E+21	1,612857E+19	5,357374E+21
2445	2,670610E+21	2,670648E+21	8,062240E+18	8,065324E+18	5,341258E+21	1,612756E+19	5,357386E+21
2446	2,670727E+21	2,670626E+21	8,061439E+18	8,058956E+18	5,341353E+21	1,612039E+19	5,357473E+21
2447	2,670641E+21	2,670807E+21	8,065269E+18	8,065216E+18	5,341448E+21	1,613049E+19	5,357578E+21
2448	2,670891E+21	2,670755E+21	8,060595E+18	8,062233E+18	5,341646E+21	1,612283E+19	5,357769E+21
2449	2,670916E+21	2,670909E+21	8,061513E+18	8,059287E+18	5,341826E+21	1,612080E+19	5,357947E+21
2450	2,670878E+21	2,671040E+21	8,064314E+18	8,065939E+18	5,341918E+21	1,613025E+19	5,358048E+21
2451	2,671091E+21	2,670928E+21	8,058439E+18	8,058982E+18	5,342019E+21	1,611742E+19	5,358136E+21
2452	2,670960E+21	2,671075E+21	8,063315E+18	8,061423E+18	5,342034E+21	1,612474E+19	5,358159E+21
2453	2,670988E+21	2,671041E+21	8,063213E+18	8,063646E+18	5,342029E+21	1,612686E+19	5,358155E+21
2454	2,671068E+21	2,670914E+21	8,059063E+18	8,058529E+18	5,341982E+21	1,611759E+19	5,358099E+21
2455	2,670811E+21	2,670979E+21	8,066286E+18	8,063685E+18	5,341789E+21	1,612997E+19	5,357919E+21
2456	2,670843E+21	2,670787E+21	8,060589E+18	8,063307E+18	5,341629E+21	1,612390E+19	5,357753E+21
2457	2,670771E+21	2,670676E+21	8,061059E+18	8,060865E+18	5,341447E+21	1,612192E+19	5,357569E+21
2458	2,670556E+21	2,670684E+21	8,066001E+18	8,066083E+18	5,341240E+21	1,613208E+19	5,357372E+21
2459	2,670663E+21	2,670453E+21	8,059523E+18	8,062739E+18	5,341116E+21	1,612226E+19	5,357238E+21
2460	2,670466E+21	2,670487E+21	8,065697E+18	8,061306E+18	5,340953E+21	1,612700E+19	5,357080E+21
2461	2,670351E+21	2,670484E+21	8,065346E+18	8,066543E+18	5,340835E+21	1,613189E+19	5,356966E+21
2462	2,670442E+21	2,670310E+21	8,061504E+18	8,061308E+18	5,340753E+21	1,612281E+19	5,356875E+21
2463	2,670251E+21	2,670413E+21	8,066551E+18	8,063721E+18	5,340664E+21	1,613027E+19	5,356795E+21
2464	2,670381E+21	2,670368E+21	8,062552E+18	8,066658E+18	5,340749E+21	1,612921E+19	5,356878E+21
2465	2,670517E+21	2,670375E+21	8,061738E+18	8,059718E+18	5,340892E+21	1,612146E+19	5,357013E+21
2466	2,670436E+21	2,670604E+21	8,066078E+18	8,065930E+18	5,341041E+21	1,613201E+19	5,357173E+21
2467	2,670663E+21	2,670560E+21	8,061112E+18	8,062345E+18	5,341223E+21	1,612346E+19	5,357346E+21
2468	2,670655E+21	2,670679E+21	8,062482E+18	8,059793E+18	5,341334E+21	1,612228E+19	5,357457E+21
2469	2,670625E+21	2,670809E+21	8,065546E+18	8,066270E+18	5,341434E+21	1,613182E+19	5,357566E+21
2470	2,670829E+21	2,670687E+21	8,059521E+18	8,059604E+18	5,341516E+21	1,611912E+19	5,357635E+21
2471	2,670709E+21	2,670785E+21	8,064322E+18	8,062302E+18	5,341494E+21	1,612662E+19	5,357621E+21
2472	2,670721E+21	2,670762E+21	8,063830E+18	8,064977E+18	5,341484E+21	1,612881E+19	5,357612E+21
2473	2,670777E+21	2,670622E+21	8,059395E+18	8,060077E+18	5,341399E+21	1,611947E+19	5,357518E+21
2474	2,670533E+21	2,670684E+21	8,066682E+18	8,065227E+18	5,341217E+21	1,613191E+19	5,357349E+21
2475	2,670577E+21	2,670486E+21	8,060781E+18	8,064152E+18	5,341064E+21	1,612493E+19	5,357188E+21
2476	2,670499E+21	2,670376E+21	8,062412E+18	8,061311E+18	5,340875E+21	1,612372E+19	5,356999E+21
2477	2,670281E+21	2,670423E+21	8,067741E+18	8,066091E+18	5,340704E+21	1,613383E+19	5,356838E+21
2478	2,670344E+21	2,670203E+21	8,061271E+18	8,063202E+18	5,340547E+21	1,612447E+19	5,356672E+21
2479	2,670142E+21	2,670188E+21	8,066692E+18	8,062236E+18	5,340330E+21	1,612893E+19	5,356459E+21
2480	2,670041E+21	2,670180E+21	8,065664E+18	8,068100E+18	5,340221E+21	1,613376E+19	5,356355E+21
2481	2,670165E+21	2,670009E+21	8,061615E+18	8,062543E+18	5,340173E+21	1,612416E+19	5,356297E+21
2482	2,670033E+21	2,670151E+21	8,066880E+18	8,064770E+18	5,340184E+21	1,613165E+19	5,356316E+21
2483	2,670180E+21	2,670142E+21	8,063165E+18	8,066800E+18	5,340322E+21	1,612996E+19	5,356452E+21
2484	2,670289E+21	2,670165E+21	8,062996E+18	8,059925E+18	5,340455E+21	1,612292E+19	5,356577E+21
2485	2,670193E+21	2,670413E+21	8,067383E+18	8,066295E+18	5,340605E+21	1,613368E+19	5,356739E+21
2486	2,670398E+21	2,670346E+21	8,062088E+18	8,063152E+18	5,340744E+21	1,612524E+19	5,356869E+21
2487	2,670413E+21	2,670397E+21	8,062868E+18	8,061039E+18	5,340810E+21	1,612391E+19	5,356934E+21
2488	2,670395E+21	2,670535E+21	8,065902E+18	8,067473E+18	5,340931E+21	1,613338E+19	5,357064E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2489	2,670587E+21	2,670418E+21	8,059872E+18	8,060695E+18	5,341004E+21	1,612057E+19	5,357125E+21
2490	2,670461E+21	2,670529E+21	8,064936E+18	8,063427E+18	5,340990E+21	1,612836E+19	5,357118E+21
2491	2,670450E+21	2,670499E+21	8,064157E+18	8,065560E+18	5,340949E+21	1,612972E+19	5,357079E+21
2492	2,670482E+21	2,670330E+21	8,060477E+18	8,060806E+18	5,340812E+21	1,612128E+19	5,356933E+21
2493	2,670249E+21	2,670408E+21	8,067996E+18	8,065401E+18	5,340657E+21	1,613340E+19	5,356791E+21
2494	2,670288E+21	2,670218E+21	8,062271E+18	8,064711E+18	5,340506E+21	1,612698E+19	5,356633E+21
2495	2,670208E+21	2,670069E+21	8,063870E+18	8,062028E+18	5,340277E+21	1,612590E+19	5,356403E+21
2496	2,669974E+21	2,670137E+21	8,068579E+18	8,067233E+18	5,340112E+21	1,613581E+19	5,356248E+21
2497	2,670020E+21	2,669907E+21	8,061822E+18	8,064731E+18	5,339927E+21	1,612655E+19	5,356053E+21
2498	2,669854E+21	2,669885E+21	8,066922E+18	8,063748E+18	5,339739E+21	1,613067E+19	5,355870E+21
2499	2,669789E+21	2,669889E+21	8,065745E+18	8,068773E+18	5,339678E+21	1,613452E+19	5,355812E+21
2500	2,669924E+21	2,669741E+21	8,062774E+18	8,062865E+18	5,339665E+21	1,612564E+19	5,355790E+21
2501	2,669807E+21	2,669939E+21	8,068229E+18	8,064746E+18	5,339746E+21	1,613298E+19	5,355879E+21
2502	2,669928E+21	2,669949E+21	8,064665E+18	8,067213E+18	5,339877E+21	1,613188E+19	5,356009E+21
2503	2,670031E+21	2,669922E+21	8,063654E+18	8,060924E+18	5,339953E+21	1,612458E+19	5,356078E+21
2504	2,669947E+21	2,670163E+21	8,067470E+18	8,067600E+18	5,340109E+21	1,613507E+19	5,356245E+21
2505	2,670159E+21	2,670087E+21	8,062130E+18	8,064233E+18	5,340246E+21	1,612636E+19	5,356373E+21
2506	2,670209E+21	2,670148E+21	8,063142E+18	8,062120E+18	5,340357E+21	1,612526E+19	5,356483E+21
2507	2,670181E+21	2,670298E+21	8,066600E+18	8,067502E+18	5,340479E+21	1,613410E+19	5,356613E+21
2508	2,670325E+21	2,670181E+21	8,061288E+18	8,061122E+18	5,340506E+21	1,612241E+19	5,356629E+21
2509	2,670182E+21	2,670291E+21	8,066300E+18	8,063828E+18	5,340473E+21	1,613013E+19	5,356603E+21
2510	2,670151E+21	2,670230E+21	8,065362E+18	8,066393E+18	5,340381E+21	1,613176E+19	5,356513E+21
2511	2,670198E+21	2,670007E+21	8,061351E+18	8,061911E+18	5,340205E+21	1,612326E+19	5,356328E+21
2512	2,669975E+21	2,670102E+21	8,068692E+18	8,066322E+18	5,340076E+21	1,613501E+19	5,356211E+21
2513	2,669987E+21	2,669924E+21	8,063084E+18	8,065840E+18	5,339911E+21	1,612892E+19	5,356040E+21
2514	2,669907E+21	2,669782E+21	8,064637E+18	8,063366E+18	5,339689E+21	1,612800E+19	5,355817E+21
2515	2,669663E+21	2,669842E+21	8,068809E+18	8,067998E+18	5,339505E+21	1,613681E+19	5,355642E+21
2516	2,669708E+21	2,669601E+21	8,062703E+18	8,065735E+18	5,339309E+21	1,612844E+19	5,355437E+21
2517	2,669582E+21	2,669609E+21	8,067836E+18	8,064009E+18	5,339191E+21	1,613184E+19	5,355323E+21
2518	2,669538E+21	2,669639E+21	8,067033E+18	8,069254E+18	5,339177E+21	1,613629E+19	5,355313E+21
2519	2,669684E+21	2,669481E+21	8,064008E+18	8,063441E+18	5,339165E+21	1,612745E+19	5,355293E+21
2520	2,669569E+21	2,669711E+21	8,068754E+18	8,065774E+18	5,339280E+21	1,613453E+19	5,355414E+21
2521	2,669673E+21	2,669716E+21	8,065101E+18	8,068515E+18	5,339389E+21	1,613362E+19	5,355523E+21
2522	2,669810E+21	2,669675E+21	8,063613E+18	8,062381E+18	5,339485E+21	1,612599E+19	5,355611E+21
2523	2,669742E+21	2,669920E+21	8,067541E+18	8,067915E+18	5,339662E+21	1,613546E+19	5,355798E+21
2524	2,669935E+21	2,669854E+21	8,063311E+18	8,064389E+18	5,339789E+21	1,612770E+19	5,355917E+21
2525	2,669968E+21	2,669942E+21	8,064629E+18	8,061983E+18	5,339909E+21	1,612661E+19	5,356036E+21
2526	2,669903E+21	2,670081E+21	8,068212E+18	8,067826E+18	5,339985E+21	1,613604E+19	5,356121E+21
2527	2,670028E+21	2,669895E+21	8,062284E+18	8,062171E+18	5,339924E+21	1,612446E+19	5,356048E+21
2528	2,669902E+21	2,669993E+21	8,066597E+18	8,065083E+18	5,339895E+21	1,613168E+19	5,356027E+21
2529	2,669874E+21	2,669929E+21	8,065725E+18	8,067615E+18	5,339803E+21	1,613334E+19	5,355936E+21
2530	2,669947E+21	2,669714E+21	8,061863E+18	8,063314E+18	5,339661E+21	1,612518E+19	5,355786E+21
2531	2,669709E+21	2,669824E+21	8,069325E+18	8,066630E+18	5,339533E+21	1,613596E+19	5,355669E+21
2532	2,669672E+21	2,669649E+21	8,064395E+18	8,066804E+18	5,339321E+21	1,613120E+19	5,355453E+21
2533	2,669586E+21	2,669508E+21	8,065941E+18	8,063992E+18	5,339094E+21	1,612993E+19	5,355224E+21
2534	2,669353E+21	2,669546E+21	8,069854E+18	8,068869E+18	5,338899E+21	1,613872E+19	5,355038E+21
2535	2,669426E+21	2,669275E+21	8,063724E+18	8,066671E+18	5,338701E+21	1,613040E+19	5,354832E+21
2536	2,669336E+21	2,669325E+21	8,068368E+18	8,064763E+18	5,338660E+21	1,613313E+19	5,354793E+21
2537	2,669282E+21	2,669388E+21	8,067852E+18	8,070186E+18	5,338670E+21	1,613804E+19	5,354808E+21

1	14	15	16	17	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							
2538	2,669443E+21	2,669250E+21	8,064537E+18	8,064627E+18	5,338693E+21	1,612916E+19	5,354822E+21
2539	2,669328E+21	2,669478E+21	8,068861E+18	8,066205E+18	5,338806E+21	1,613507E+19	5,354941E+21
2540	2,669422E+21	2,669482E+21	8,065989E+18	8,069078E+18	5,338905E+21	1,613507E+19	5,355040E+21
2541	2,669579E+21	2,669463E+21	8,064574E+18	8,062413E+18	5,339042E+21	1,612699E+19	5,355169E+21
2542	2,669509E+21	2,669701E+21	8,068992E+18	8,068076E+18	5,339210E+21	1,613707E+19	5,355347E+21
2543	2,669681E+21	2,669607E+21	8,064655E+18	8,064957E+18	5,339288E+21	1,612961E+19	5,355418E+21
2544	2,669710E+21	2,669694E+21	8,065169E+18	8,063177E+18	5,339403E+21	1,612835E+19	5,355532E+21
2545	2,669627E+21	2,669806E+21	8,068666E+18	8,069292E+18	5,339433E+21	1,613796E+19	5,355571E+21
2546	2,669787E+21	2,669601E+21	8,062243E+18	8,063990E+18	5,339388E+21	1,612623E+19	5,355514E+21
2547	2,669672E+21	2,669704E+21	8,066724E+18	8,065646E+18	5,339376E+21	1,613237E+19	5,355508E+21
2548	2,669612E+21	2,669659E+21	8,066881E+18	8,068220E+18	5,339271E+21	1,613510E+19	5,355406E+21
2549	2,669655E+21	2,669471E+21	8,063410E+18	8,063650E+18	5,339126E+21	1,612706E+19	5,355253E+21
2550	2,669383E+21	2,669560E+21	8,070857E+18	8,067135E+18	5,338944E+21	1,613799E+19	5,355082E+21
2551	2,669329E+21	2,669325E+21	8,065541E+18	8,067924E+18	5,338655E+21	1,613346E+19	5,354788E+21
2552	2,669277E+21	2,669181E+21	8,066427E+18	8,065021E+18	5,338458E+21	1,613145E+19	5,354590E+21
2553	2,669069E+21	2,669230E+21	8,070418E+18	8,069884E+18	5,338299E+21	1,614030E+19	5,354440E+21
2554	2,669187E+21	2,668990E+21	8,064483E+18	8,067831E+18	5,338177E+21	1,613231E+19	5,354310E+21
2555	2,669104E+21	2,669082E+21	8,068905E+18	8,065047E+18	5,338186E+21	1,613395E+19	5,354320E+21
2556	2,669020E+21	2,669167E+21	8,069006E+18	8,071111E+18	5,338187E+21	1,614012E+19	5,354327E+21
2557	2,669176E+21	2,669040E+21	8,065625E+18	8,065097E+18	5,338216E+21	1,613072E+19	5,354347E+21
2558	2,669080E+21	2,669246E+21	8,069699E+18	8,066701E+18	5,338326E+21	1,613640E+19	5,354462E+21
2559	2,669177E+21	2,669217E+21	8,067072E+18	8,069537E+18	5,338393E+21	1,613661E+19	5,354530E+21
2560	2,669350E+21	2,669218E+21	8,065155E+18	8,063025E+18	5,338568E+21	1,612818E+19	5,354696E+21
2561	2,669261E+21	2,669460E+21	8,069829E+18	8,069064E+18	5,338721E+21	1,613889E+19	5,354860E+21
2562	2,669441E+21	2,669358E+21	8,064984E+18	8,066552E+18	5,338799E+21	1,613154E+19	5,354931E+21
2563	2,669476E+21	2,669433E+21	8,065044E+18	8,064106E+18	5,338909E+21	1,612915E+19	5,355038E+21
2564	2,669382E+21	2,669543E+21	8,069255E+18	8,070164E+18	5,338925E+21	1,613942E+19	5,355064E+21
2565	2,669543E+21	2,669366E+21	8,063279E+18	8,064309E+18	5,338908E+21	1,612759E+19	5,355036E+21
2566	2,669415E+21	2,669458E+21	8,068389E+18	8,065720E+18	5,338873E+21	1,613411E+19	5,355007E+21
2567	2,669304E+21	2,669382E+21	8,068601E+18	8,068755E+18	5,338686E+21	1,613736E+19	5,354823E+21
2568	2,669332E+21	2,669182E+21	8,064419E+18	8,064898E+18	5,338514E+21	1,612932E+19	5,354643E+21
2569	2,669050E+21	2,669231E+21	8,071605E+18	8,068576E+18	5,338282E+21	1,614018E+19	5,354422E+21
2570	2,669044E+21	2,668986E+21	8,065741E+18	8,069733E+18	5,338030E+21	1,613547E+19	5,354165E+21
2571	2,669026E+21	2,668864E+21	8,066682E+18	8,065524E+18	5,337890E+21	1,613221E+19	5,354022E+21
2572	2,668806E+21	2,668957E+21	8,071424E+18	8,070560E+18	5,337763E+21	1,614198E+19	5,353905E+21
2573	2,668913E+21	2,668773E+21	8,065964E+18	8,068171E+18	5,337686E+21	1,613414E+19	5,353820E+21
2574	2,668821E+21	2,668853E+21	8,070095E+18	8,065524E+18	5,337674E+21	1,613562E+19	5,353810E+21
2575	2,668726E+21	2,668898E+21	8,070031E+18	8,072002E+18	5,337625E+21	1,614203E+19	5,353767E+21
2576	2,668920E+21	2,668777E+21	8,065950E+18	8,065939E+18	5,337697E+21	1,613189E+19	5,353828E+21
2577	2,668841E+21	2,668981E+21	8,070139E+18	8,067624E+18	5,337822E+21	1,613776E+19	5,353960E+21
2578	2,668970E+21	2,668968E+21	8,067547E+18	8,070675E+18	5,337938E+21	1,613822E+19	5,354076E+21
2579	2,669141E+21	2,668992E+21	8,065413E+18	8,063601E+18	5,338133E+21	1,612901E+19	5,354262E+21
2580	2,669025E+21	2,669237E+21	8,070583E+18	8,070217E+18	5,338263E+21	1,614080E+19	5,354403E+21
2581	2,669201E+21	2,669142E+21	8,065913E+18	8,067236E+18	5,338343E+21	1,613315E+19	5,354476E+21
2582	2,669247E+21	2,669190E+21	8,065974E+18	8,064549E+18	5,338437E+21	1,613052E+19	5,354567E+21
2583	2,669126E+21	2,669273E+21	8,070606E+18	8,070409E+18	5,338398E+21	1,614102E+19	5,354539E+21
2584	2,669272E+21	2,669105E+21	8,064328E+18	8,064940E+18	5,338377E+21	1,612927E+19	5,354506E+21
2585	2,669103E+21	2,669180E+21	8,069666E+18	8,066686E+18	5,338283E+21	1,613635E+19	5,354419E+21
2586	2,668991E+21	2,669075E+21	8,069170E+18	8,070392E+18	5,338066E+21	1,613956E+19	5,354205E+21

1	14	15	16	17	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							
2587	2,669031E+21	2,668859E+21	8,064643E+18	8,066009E+18	5,337890E+21	1,613065E+19	5,354021E+21
2588	2,668762E+21	2,668911E+21	8,072111E+18	8,069650E+18	5,337672E+21	1,614176E+19	5,353814E+21
2589	2,668770E+21	2,668709E+21	8,066863E+18	8,070268E+18	5,337479E+21	1,613713E+19	5,353616E+21
2590	2,668764E+21	2,668605E+21	8,068105E+18	8,065691E+18	5,337370E+21	1,613380E+19	5,353503E+21
2591	2,668512E+21	2,668694E+21	8,072865E+18	8,071157E+18	5,337206E+21	1,614402E+19	5,353350E+21
2592	2,668621E+21	2,668519E+21	8,066905E+18	8,069254E+18	5,337139E+21	1,613616E+19	5,353275E+21
2593	2,668537E+21	2,668574E+21	8,070645E+18	8,066810E+18	5,337111E+21	1,613746E+19	5,353248E+21
2594	2,668491E+21	2,668613E+21	8,070146E+18	8,073413E+18	5,337104E+21	1,614356E+19	5,353248E+21
2595	2,668711E+21	2,668519E+21	8,066064E+18	8,066359E+18	5,337231E+21	1,613242E+19	5,353363E+21
2596	2,668622E+21	2,668751E+21	8,070786E+18	8,068386E+18	5,337373E+21	1,613917E+19	5,353512E+21
2597	2,668733E+21	2,668782E+21	8,068819E+18	8,071022E+18	5,337514E+21	1,613984E+19	5,353654E+21
2598	2,668902E+21	2,668784E+21	8,066428E+18	8,064002E+18	5,337685E+21	1,613043E+19	5,353816E+21
2599	2,668765E+21	2,668986E+21	8,071623E+18	8,070782E+18	5,337752E+21	1,614240E+19	5,353894E+21
2600	2,668959E+21	2,668891E+21	8,066584E+18	8,067831E+18	5,337850E+21	1,613441E+19	5,353984E+21
2601	2,668996E+21	2,668923E+21	8,066930E+18	8,065384E+18	5,337919E+21	1,613231E+19	5,354051E+21
2602	2,668877E+21	2,669002E+21	8,071312E+18	8,071507E+18	5,337878E+21	1,614282E+19	5,354021E+21
2603	2,668999E+21	2,668835E+21	8,064770E+18	8,066053E+18	5,337834E+21	1,613082E+19	5,353965E+21
2604	2,668798E+21	2,668884E+21	8,070340E+18	8,068232E+18	5,337682E+21	1,613857E+19	5,353821E+21
2605	2,668689E+21	2,668784E+21	8,069887E+18	8,071477E+18	5,337473E+21	1,614136E+19	5,353614E+21
2606	2,668756E+21	2,668549E+21	8,065569E+18	8,066556E+18	5,337305E+21	1,613213E+19	5,353437E+21
2607	2,668473E+21	2,668598E+21	8,073324E+18	8,069933E+18	5,337071E+21	1,614326E+19	5,353214E+21
2608	2,668484E+21	2,668434E+21	8,068078E+18	8,070915E+18	5,336918E+21	1,613899E+19	5,353057E+21
2609	2,668455E+21	2,668333E+21	8,069346E+18	8,066730E+18	5,336789E+21	1,613608E+19	5,352925E+21
2610	2,668224E+21	2,668409E+21	8,073181E+18	8,072677E+18	5,336633E+21	1,614586E+19	5,352779E+21
2611	2,668355E+21	2,668238E+21	8,067008E+18	8,070257E+18	5,336593E+21	1,613726E+19	5,352731E+21
2612	2,668290E+21	2,668305E+21	8,070898E+18	8,067731E+18	5,336594E+21	1,613863E+19	5,352733E+21
2613	2,668260E+21	2,668392E+21	8,071210E+18	8,073616E+18	5,336651E+21	1,614483E+19	5,352796E+21
2614	2,668490E+21	2,668311E+21	8,067353E+18	8,066276E+18	5,336801E+21	1,613363E+19	5,352934E+21
2615	2,668369E+21	2,668530E+21	8,072036E+18	8,068927E+18	5,336899E+21	1,614096E+19	5,353040E+21
2616	2,668484E+21	2,668557E+21	8,069808E+18	8,071906E+18	5,337040E+21	1,614171E+19	5,353182E+21
2617	2,668658E+21	2,668529E+21	8,067015E+18	8,065267E+18	5,337187E+21	1,613228E+19	5,353319E+21
2618	2,668556E+21	2,668713E+21	8,071748E+18	8,071916E+18	5,337268E+21	1,614366E+19	5,353412E+21
2619	2,668743E+21	2,668638E+21	8,066843E+18	8,068420E+18	5,337381E+21	1,613526E+19	5,353516E+21
2620	2,668744E+21	2,668674E+21	8,067578E+18	8,066482E+18	5,337418E+21	1,613406E+19	5,353552E+21
2621	2,668585E+21	2,668766E+21	8,072446E+18	8,072144E+18	5,337351E+21	1,614459E+19	5,353496E+21
2622	2,668701E+21	2,668563E+21	8,065709E+18	8,066805E+18	5,337264E+21	1,613251E+19	5,353396E+21
2623	2,668486E+21	2,668566E+21	8,071352E+18	8,068855E+18	5,337052E+21	1,614021E+19	5,353192E+21
2624	2,668402E+21	2,668473E+21	8,070750E+18	8,072067E+18	5,336875E+21	1,614282E+19	5,353018E+21
2625	2,668468E+21	2,668246E+21	8,066900E+18	8,067343E+18	5,336714E+21	1,613424E+19	5,352848E+21
2626	2,668200E+21	2,668304E+21	8,074019E+18	8,070922E+18	5,336504E+21	1,614494E+19	5,352649E+21
2627	2,668200E+21	2,668165E+21	8,068705E+18	8,072154E+18	5,336365E+21	1,614086E+19	5,352506E+21
2628	2,668159E+21	2,668054E+21	8,069917E+18	8,068326E+18	5,336213E+21	1,613824E+19	5,352351E+21
2629	2,667946E+21	2,668148E+21	8,073819E+18	8,073500E+18	5,336094E+21	1,614732E+19	5,352241E+21
2630	2,668110E+21	2,667975E+21	8,067889E+18	8,070441E+18	5,336085E+21	1,613833E+19	5,352223E+21
2631	2,668029E+21	2,668043E+21	8,072022E+18	8,067795E+18	5,336072E+21	1,613982E+19	5,352212E+21
2632	2,668007E+21	2,668161E+21	8,072451E+18	8,073981E+18	5,336168E+21	1,614643E+19	5,352315E+21
2633	2,668222E+21	2,668079E+21	8,068520E+18	8,067255E+18	5,336301E+21	1,613578E+19	5,352437E+21
2634	2,668135E+21	2,668275E+21	8,072043E+18	8,070444E+18	5,336410E+21	1,614249E+19	5,352552E+21
2635	2,668273E+21	2,668308E+21	8,069766E+18	8,072964E+18	5,336581E+21	1,614273E+19	5,352723E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2636	2,668447E+21	2,668282E+21	8,067025E+18	8,066439E+18	5,336728E+21	1,613346E+19	5,352862E+21
2637	2,668338E+21	2,668499E+21	8,072604E+18	8,072107E+18	5,336838E+21	1,614471E+19	5,352982E+21
2638	2,668503E+21	2,668419E+21	8,067995E+18	8,068461E+18	5,336922E+21	1,613646E+19	5,353058E+21
2639	2,668444E+21	2,668421E+21	8,068960E+18	8,067104E+18	5,336865E+21	1,613606E+19	5,353001E+21
2640	2,668284E+21	2,668486E+21	8,073637E+18	8,072929E+18	5,336769E+21	1,614657E+19	5,352916E+21
2641	2,668398E+21	2,668249E+21	8,066753E+18	8,068084E+18	5,336648E+21	1,613484E+19	5,352783E+21
2642	2,668223E+21	2,668234E+21	8,071630E+18	8,069909E+18	5,336457E+21	1,614154E+19	5,352599E+21
2643	2,668141E+21	2,668174E+21	8,071222E+18	8,072917E+18	5,336315E+21	1,614414E+19	5,352459E+21
2644	2,668178E+21	2,667967E+21	8,067697E+18	8,068649E+18	5,336146E+21	1,613635E+19	5,352282E+21
2645	2,667894E+21	2,668052E+21	8,075009E+18	8,071643E+18	5,335947E+21	1,614665E+19	5,352093E+21
2646	2,667902E+21	2,667895E+21	8,069680E+18	8,072854E+18	5,335797E+21	1,614253E+19	5,351940E+21
2647	2,667852E+21	2,667762E+21	8,070988E+18	8,068837E+18	5,335614E+21	1,613983E+19	5,351754E+21
2648	2,667673E+21	2,667869E+21	8,074815E+18	8,073812E+18	5,335542E+21	1,614863E+19	5,351691E+21
2649	2,667844E+21	2,667712E+21	8,069251E+18	8,071136E+18	5,335556E+21	1,614039E+19	5,351697E+21
2650	2,667795E+21	2,667782E+21	8,072368E+18	8,068799E+18	5,335577E+21	1,614117E+19	5,351718E+21
2651	2,667776E+21	2,667925E+21	8,072838E+18	8,075286E+18	5,335702E+21	1,614812E+19	5,351850E+21
2652	2,667993E+21	2,667840E+21	8,068639E+18	8,068894E+18	5,335833E+21	1,613753E+19	5,351971E+21
2653	2,667929E+21	2,668051E+21	8,072365E+18	8,071132E+18	5,335980E+21	1,614350E+19	5,352123E+21
2654	2,668078E+21	2,668089E+21	8,070574E+18	8,072783E+18	5,336167E+21	1,614336E+19	5,352310E+21
2655	2,668202E+21	2,668058E+21	8,068244E+18	8,066458E+18	5,336260E+21	1,613470E+19	5,352394E+21
2656	2,668068E+21	2,668275E+21	8,074112E+18	8,072185E+18	5,336343E+21	1,614630E+19	5,352490E+21
2657	2,668194E+21	2,668166E+21	8,069392E+18	8,069495E+18	5,336360E+21	1,613889E+19	5,352499E+21
2658	2,668157E+21	2,668112E+21	8,069238E+18	8,068539E+18	5,336269E+21	1,613778E+19	5,352407E+21
2659	2,668019E+21	2,668174E+21	8,073853E+18	8,074078E+18	5,336193E+21	1,614793E+19	5,352340E+21
2660	2,668134E+21	2,667943E+21	8,067094E+18	8,069523E+18	5,336077E+21	1,613662E+19	5,352214E+21
2661	2,667963E+21	2,667966E+21	8,072541E+18	8,070405E+18	5,335929E+21	1,614295E+19	5,352072E+21
2662	2,667866E+21	2,667918E+21	8,072328E+18	8,073346E+18	5,335784E+21	1,614567E+19	5,351930E+21
2663	2,667849E+21	2,667693E+21	8,069134E+18	8,069609E+18	5,335542E+21	1,613874E+19	5,351681E+21
2664	2,667580E+21	2,667760E+21	8,076108E+18	8,072425E+18	5,335340E+21	1,614853E+19	5,351489E+21
2665	2,667597E+21	2,667587E+21	8,070866E+18	8,074031E+18	5,335184E+21	1,614490E+19	5,351329E+21
2666	2,667591E+21	2,667447E+21	8,071339E+18	8,069669E+18	5,335037E+21	1,614101E+19	5,351178E+21
2667	2,667430E+21	2,667593E+21	8,075235E+18	8,074692E+18	5,335023E+21	1,614993E+19	5,351172E+21
2668	2,667584E+21	2,667462E+21	8,069834E+18	8,072475E+18	5,335046E+21	1,614231E+19	5,351188E+21
2669	2,667551E+21	2,667565E+21	8,072825E+18	8,069619E+18	5,335116E+21	1,614244E+19	5,351258E+21
2670	2,667557E+21	2,667704E+21	8,073491E+18	8,075663E+18	5,335261E+21	1,614915E+19	5,351410E+21
2671	2,667755E+21	2,667614E+21	8,069606E+18	8,069070E+18	5,335369E+21	1,613868E+19	5,351508E+21
2672	2,667708E+21	2,667833E+21	8,073572E+18	8,070912E+18	5,335542E+21	1,614448E+19	5,351686E+21
2673	2,667828E+21	2,667871E+21	8,072227E+18	8,073095E+18	5,335699E+21	1,614532E+19	5,351844E+21
2674	2,667947E+21	2,667811E+21	8,068800E+18	8,067508E+18	5,335758E+21	1,613631E+19	5,351894E+21
2675	2,667804E+21	2,668012E+21	8,074632E+18	8,073688E+18	5,335815E+21	1,614832E+19	5,351963E+21
2676	2,667920E+21	2,667875E+21	8,069521E+18	8,071507E+18	5,335796E+21	1,614103E+19	5,351937E+21
2677	2,667914E+21	2,667826E+21	8,069534E+18	8,069543E+18	5,335741E+21	1,613908E+19	5,351880E+21
2678	2,667786E+21	2,667896E+21	8,074583E+18	8,074147E+18	5,335682E+21	1,614873E+19	5,351831E+21
2679	2,667846E+21	2,667676E+21	8,068505E+18	8,069924E+18	5,335522E+21	1,613843E+19	5,351661E+21
2680	2,667656E+21	2,667703E+21	8,074214E+18	8,070652E+18	5,335359E+21	1,614487E+19	5,351504E+21
2681	2,667528E+21	2,667639E+21	8,073899E+18	8,074591E+18	5,335167E+21	1,614849E+19	5,351315E+21
2682	2,667539E+21	2,667367E+21	8,069627E+18	8,071032E+18	5,334906E+21	1,614066E+19	5,351047E+21
2683	2,667298E+21	2,667438E+21	8,076389E+18	8,073541E+18	5,334737E+21	1,614993E+19	5,350887E+21
2684	2,667323E+21	2,667286E+21	8,071263E+18	8,075349E+18	5,334609E+21	1,614661E+19	5,350756E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2685	2,667340E+21	2,667189E+21	8,072087E+18	8,070043E+18	5,334528E+21	1,614213E+19	5,350671E+21
2686	2,667187E+21	2,667362E+21	8,076133E+18	8,074946E+18	5,334549E+21	1,615108E+19	5,350700E+21
2687	2,667308E+21	2,667236E+21	8,071237E+18	8,073162E+18	5,334543E+21	1,614440E+19	5,350688E+21
2688	2,667307E+21	2,667331E+21	8,073853E+18	8,070083E+18	5,334637E+21	1,614394E+19	5,350781E+21
2689	2,667321E+21	2,667468E+21	8,074703E+18	8,076428E+18	5,334789E+21	1,615113E+19	5,350940E+21
2690	2,667537E+21	2,667362E+21	8,069947E+18	8,069697E+18	5,334898E+21	1,613964E+19	5,351038E+21
2691	2,667483E+21	2,667596E+21	8,074001E+18	8,071816E+18	5,335079E+21	1,614582E+19	5,351224E+21
2692	2,667562E+21	2,667631E+21	8,072636E+18	8,074578E+18	5,335193E+21	1,614721E+19	5,351340E+21
2693	2,667689E+21	2,667566E+21	8,069082E+18	8,068781E+18	5,335255E+21	1,613786E+19	5,351393E+21
2694	2,667568E+21	2,667744E+21	8,075060E+18	8,074314E+18	5,335311E+21	1,614937E+19	5,351461E+21
2695	2,667658E+21	2,667602E+21	8,070482E+18	8,072106E+18	5,335260E+21	1,614259E+19	5,351402E+21
2696	2,667667E+21	2,667560E+21	8,070903E+18	8,069582E+18	5,335227E+21	1,614048E+19	5,351368E+21
2697	2,667506E+21	2,667636E+21	8,076294E+18	8,074644E+18	5,335142E+21	1,615094E+19	5,351293E+21
2698	2,667546E+21	2,667392E+21	8,069384E+18	8,071148E+18	5,334938E+21	1,614053E+19	5,351078E+21
2699	2,667351E+21	2,667403E+21	8,074963E+18	8,072214E+18	5,334754E+21	1,614718E+19	5,350901E+21
2700	2,667213E+21	2,667315E+21	8,074246E+18	8,076483E+18	5,334529E+21	1,615073E+19	5,350679E+21
2701	2,667262E+21	2,667061E+21	8,070135E+18	8,071950E+18	5,334323E+21	1,614209E+19	5,350465E+21
2702	2,667046E+21	2,667149E+21	8,077098E+18	8,073512E+18	5,334194E+21	1,615061E+19	5,350345E+21
2703	2,667027E+21	2,667025E+21	8,072748E+18	8,075667E+18	5,334052E+21	1,614841E+19	5,350200E+21
2704	2,667054E+21	2,666948E+21	8,073589E+18	8,070185E+18	5,334001E+21	1,614377E+19	5,350145E+21
2705	2,666902E+21	2,667119E+21	8,077427E+18	8,076038E+18	5,334021E+21	1,615347E+19	5,350174E+21
2706	2,667058E+21	2,666969E+21	8,071658E+18	8,074232E+18	5,334027E+21	1,614589E+19	5,350173E+21
2707	2,667093E+21	2,667076E+21	8,073971E+18	8,071155E+18	5,334170E+21	1,614513E+19	5,350315E+21
2708	2,667101E+21	2,667227E+21	8,074988E+18	8,077565E+18	5,334328E+21	1,615255E+19	5,350481E+21
2709	2,667323E+21	2,667149E+21	8,070346E+18	8,070352E+18	5,334472E+21	1,614070E+19	5,350613E+21
2710	2,667261E+21	2,667378E+21	8,074555E+18	8,072330E+18	5,334639E+21	1,614688E+19	5,350785E+21
2711	2,667292E+21	2,667396E+21	8,073754E+18	8,075471E+18	5,334688E+21	1,614922E+19	5,350837E+21
2712	2,667443E+21	2,667309E+21	8,070234E+18	8,069242E+18	5,334752E+21	1,613948E+19	5,350891E+21
2713	2,667323E+21	2,667480E+21	8,076402E+18	8,074894E+18	5,334803E+21	1,615130E+19	5,350954E+21
2714	2,667411E+21	2,667321E+21	8,071250E+18	8,072701E+18	5,334731E+21	1,614395E+19	5,350875E+21
2715	2,667397E+21	2,667286E+21	8,071778E+18	8,070588E+18	5,334684E+21	1,614237E+19	5,350826E+21
2716	2,667191E+21	2,667355E+21	8,076851E+18	8,076161E+18	5,334546E+21	1,615301E+19	5,350699E+21
2717	2,667239E+21	2,667102E+21	8,069876E+18	8,072624E+18	5,334341E+21	1,614250E+19	5,350483E+21
2718	2,667065E+21	2,667095E+21	8,075559E+18	8,072737E+18	5,334160E+21	1,614830E+19	5,350308E+21
2719	2,666903E+21	2,667014E+21	8,075382E+18	8,077003E+18	5,333918E+21	1,615239E+19	5,350070E+21
2720	2,666974E+21	2,666774E+21	8,071764E+18	8,071934E+18	5,333748E+21	1,614370E+19	5,349892E+21
2721	2,666752E+21	2,666880E+21	8,078575E+18	8,074160E+18	5,333632E+21	1,615273E+19	5,349785E+21
2722	2,666738E+21	2,666746E+21	8,073533E+18	8,076975E+18	5,333483E+21	1,615051E+19	5,349634E+21
2723	2,666793E+21	2,666672E+21	8,073942E+18	8,071889E+18	5,333465E+21	1,614583E+19	5,349610E+21
2724	2,666660E+21	2,666843E+21	8,077313E+18	8,077813E+18	5,333502E+21	1,615513E+19	5,349657E+21
2725	2,666857E+21	2,666726E+21	8,071841E+18	8,074996E+18	5,333583E+21	1,614684E+19	5,349730E+21
2726	2,666901E+21	2,666855E+21	8,074318E+18	8,071118E+18	5,333757E+21	1,614544E+19	5,349902E+21
2727	2,666845E+21	2,667023E+21	8,076290E+18	8,077713E+18	5,333869E+21	1,615400E+19	5,350023E+21
2728	2,667061E+21	2,666943E+21	8,071760E+18	8,070486E+18	5,334003E+21	1,614225E+19	5,350146E+21
2729	2,666997E+21	2,667141E+21	8,075774E+18	8,073287E+18	5,334138E+21	1,614906E+19	5,350287E+21
2730	2,667043E+21	2,667119E+21	8,074380E+18	8,076321E+18	5,334162E+21	1,615070E+19	5,350313E+21
2731	2,667218E+21	2,667036E+21	8,070707E+18	8,070274E+18	5,334254E+21	1,614098E+19	5,350395E+21
2732	2,667076E+21	2,667208E+21	8,076865E+18	8,075863E+18	5,334285E+21	1,615273E+19	5,350438E+21
2733	2,667156E+21	2,667074E+21	8,071865E+18	8,073601E+18	5,334230E+21	1,614547E+19	5,350375E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2734	2,667124E+21	2,667027E+21	8,072539E+18	8,071371E+18	5,334151E+21	1,614391E+19	5,350295E+21
2735	2,666866E+21	2,667072E+21	8,077981E+18	8,077180E+18	5,333938E+21	1,615516E+19	5,350093E+21
2736	2,666936E+21	2,666801E+21	8,071197E+18	8,073299E+18	5,333738E+21	1,614450E+19	5,349882E+21
2737	2,666771E+21	2,666786E+21	8,076913E+18	8,073365E+18	5,333557E+21	1,615028E+19	5,349707E+21
2738	2,666608E+21	2,666697E+21	8,076199E+18	8,077691E+18	5,333306E+21	1,615389E+19	5,349460E+21
2739	2,666683E+21	2,666480E+21	8,072609E+18	8,073132E+18	5,333162E+21	1,614574E+19	5,349308E+21
2740	2,666453E+21	2,666593E+21	8,078747E+18	8,075791E+18	5,333046E+21	1,615454E+19	5,349201E+21
2741	2,666482E+21	2,666478E+21	8,073804E+18	8,078435E+18	5,332960E+21	1,615224E+19	5,349112E+21
2742	2,666574E+21	2,666417E+21	8,074188E+18	8,072332E+18	5,332991E+21	1,614652E+19	5,349138E+21
2743	2,666421E+21	2,666613E+21	8,078242E+18	8,077973E+18	5,333035E+21	1,615622E+19	5,349191E+21
2744	2,666626E+21	2,666519E+21	8,073490E+18	8,074515E+18	5,333145E+21	1,614800E+19	5,349293E+21
2745	2,666648E+21	2,666653E+21	8,075778E+18	8,071470E+18	5,333301E+21	1,614725E+19	5,349449E+21
2746	2,666576E+21	2,666784E+21	8,077258E+18	8,078584E+18	5,333361E+21	1,615584E+19	5,349517E+21
2747	2,666810E+21	2,666680E+21	8,072276E+18	8,072033E+18	5,333489E+21	1,614431E+19	5,349634E+21
2748	2,666763E+21	2,666861E+21	8,075669E+18	8,074876E+18	5,333625E+21	1,615054E+19	5,349775E+21
2749	2,666842E+21	2,666860E+21	8,074640E+18	8,077139E+18	5,333702E+21	1,615178E+19	5,349854E+21
2750	2,667006E+21	2,666793E+21	8,071137E+18	8,070549E+18	5,333799E+21	1,614169E+19	5,349941E+21
2751	2,666792E+21	2,666974E+21	8,078019E+18	8,076243E+18	5,333766E+21	1,615426E+19	5,349920E+21
2752	2,666850E+21	2,666826E+21	8,073313E+18	8,074136E+18	5,333676E+21	1,614745E+19	5,349824E+21
2753	2,666811E+21	2,666744E+21	8,073846E+18	8,072537E+18	5,333556E+21	1,614638E+19	5,349702E+21
2754	2,666559E+21	2,666745E+21	8,078696E+18	8,078064E+18	5,333303E+21	1,615676E+19	5,349460E+21
2755	2,666653E+21	2,666476E+21	8,071929E+18	8,074561E+18	5,333129E+21	1,614649E+19	5,349276E+21
2756	2,666483E+21	2,666468E+21	8,077319E+18	8,074408E+18	5,332952E+21	1,615173E+19	5,349103E+21
2757	2,666336E+21	2,666415E+21	8,076699E+18	8,078826E+18	5,332752E+21	1,615552E+19	5,348907E+21
2758	2,666415E+21	2,666214E+21	8,073261E+18	8,073989E+18	5,332629E+21	1,614725E+19	5,348776E+21
2759	2,666168E+21	2,666331E+21	8,079612E+18	8,076620E+18	5,332499E+21	1,615623E+19	5,348655E+21
2760	2,666231E+21	2,666235E+21	8,075282E+18	8,078642E+18	5,332465E+21	1,615392E+19	5,348619E+21
2761	2,666332E+21	2,666186E+21	8,075569E+18	8,072527E+18	5,332517E+21	1,614810E+19	5,348665E+21
2762	2,666159E+21	2,666368E+21	8,079258E+18	8,078123E+18	5,332527E+21	1,615738E+19	5,348684E+21
2763	2,666358E+21	2,666282E+21	8,074329E+18	8,075486E+18	5,332641E+21	1,614982E+19	5,348791E+21
2764	2,666375E+21	2,666395E+21	8,075803E+18	8,072985E+18	5,332770E+21	1,614879E+19	5,348918E+21
2765	2,666351E+21	2,666527E+21	8,077399E+18	8,079898E+18	5,332879E+21	1,615730E+19	5,349036E+21
2766	2,666615E+21	2,666435E+21	8,072421E+18	8,072617E+18	5,333050E+21	1,614504E+19	5,349195E+21
2767	2,666545E+21	2,666630E+21	8,076403E+18	8,075234E+18	5,333175E+21	1,615164E+19	5,349327E+21
2768	2,666614E+21	2,666650E+21	8,076192E+18	8,076932E+18	5,333264E+21	1,615312E+19	5,349417E+21
2769	2,666739E+21	2,666576E+21	8,072505E+18	8,071310E+18	5,333315E+21	1,614381E+19	5,349459E+21
2770	2,666488E+21	2,666700E+21	8,079044E+18	8,077134E+18	5,333188E+21	1,615618E+19	5,349344E+21
2771	2,666554E+21	2,666520E+21	8,074016E+18	8,075843E+18	5,333074E+21	1,614986E+19	5,349224E+21
2772	2,666521E+21	2,666414E+21	8,074148E+18	8,073979E+18	5,332935E+21	1,614813E+19	5,349083E+21
2773	2,666301E+21	2,666430E+21	8,079157E+18	8,078896E+18	5,332731E+21	1,615805E+19	5,348889E+21
2774	2,666383E+21	2,666188E+21	8,072694E+18	8,075007E+18	5,332571E+21	1,614770E+19	5,348719E+21
2775	2,666169E+21	2,666197E+21	8,078332E+18	8,074952E+18	5,332366E+21	1,615328E+19	5,348520E+21
2776	2,666031E+21	2,666154E+21	8,078198E+18	8,079354E+18	5,332185E+21	1,615755E+19	5,348343E+21
2777	2,666122E+21	2,665951E+21	8,074652E+18	8,074844E+18	5,332073E+21	1,614950E+19	5,348223E+21
2778	2,665889E+21	2,666047E+21	8,080421E+18	8,077054E+18	5,331936E+21	1,615747E+19	5,348094E+21
2779	2,665974E+21	2,665963E+21	8,076240E+18	8,079555E+18	5,331937E+21	1,615580E+19	5,348093E+21
2780	2,666067E+21	2,665926E+21	8,075935E+18	8,073436E+18	5,331992E+21	1,614937E+19	5,348142E+21
2781	2,665918E+21	2,666124E+21	8,079542E+18	8,079320E+18	5,332043E+21	1,615886E+19	5,348202E+21
2782	2,666124E+21	2,666044E+21	8,074606E+18	8,076568E+18	5,332168E+21	1,615117E+19	5,348319E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2783	2,666143E+21	2,666151E+21	8,076069E+18	8,074073E+18	5,332294E+21	1,615014E+19	5,348444E+21
2784	2,666152E+21	2,666302E+21	8,078586E+18	8,080066E+18	5,332454E+21	1,615865E+19	5,348613E+21
2785	2,666409E+21	2,666226E+21	8,073638E+18	8,072840E+18	5,332636E+21	1,614648E+19	5,348782E+21
2786	2,666296E+21	2,666398E+21	8,077519E+18	8,075329E+18	5,332693E+21	1,615285E+19	5,348846E+21
2787	2,666338E+21	2,666409E+21	8,077233E+18	8,077930E+18	5,332746E+21	1,615516E+19	5,348901E+21
2788	2,666437E+21	2,666296E+21	8,072819E+18	8,072937E+18	5,332734E+21	1,614576E+19	5,348879E+21
2789	2,666220E+21	2,666398E+21	8,079402E+18	8,078394E+18	5,332619E+21	1,615780E+19	5,348776E+21
2790	2,666297E+21	2,666224E+21	8,074434E+18	8,076628E+18	5,332520E+21	1,615106E+19	5,348672E+21
2791	2,666240E+21	2,666122E+21	8,075148E+18	8,074383E+18	5,332362E+21	1,614953E+19	5,348512E+21
2792	2,666016E+21	2,666166E+21	8,080869E+18	8,078819E+18	5,332182E+21	1,615969E+19	5,348342E+21
2793	2,666077E+21	2,665932E+21	8,074301E+18	8,075862E+18	5,332009E+21	1,615016E+19	5,348159E+21
2794	2,665845E+21	2,665897E+21	8,079428E+18	8,075865E+18	5,331741E+21	1,615529E+19	5,347897E+21
2795	2,665740E+21	2,665848E+21	8,078965E+18	8,081029E+18	5,331589E+21	1,615999E+19	5,347749E+21
2796	2,665848E+21	2,665648E+21	8,075024E+18	8,076118E+18	5,331495E+21	1,615114E+19	5,347647E+21
2797	2,665654E+21	2,665768E+21	8,080683E+18	8,077810E+18	5,331422E+21	1,615849E+19	5,347581E+21
2798	2,665728E+21	2,665720E+21	8,076800E+18	8,080058E+18	5,331447E+21	1,615686E+19	5,347604E+21
2799	2,665789E+21	2,665692E+21	8,076513E+18	8,074137E+18	5,331481E+21	1,615065E+19	5,347631E+21
2800	2,665668E+21	2,665899E+21	8,080684E+18	8,079862E+18	5,331567E+21	1,616055E+19	5,347727E+21
2801	2,665896E+21	2,665822E+21	8,075717E+18	8,077261E+18	5,331718E+21	1,615298E+19	5,347871E+21
2802	2,665923E+21	2,665907E+21	8,076866E+18	8,074341E+18	5,331830E+21	1,615121E+19	5,347981E+21
2803	2,665944E+21	2,666069E+21	8,079646E+18	8,080660E+18	5,332014E+21	1,616031E+19	5,348174E+21
2804	2,666165E+21	2,665998E+21	8,074215E+18	8,073674E+18	5,332163E+21	1,614789E+19	5,348311E+21
2805	2,666052E+21	2,666157E+21	8,078013E+18	8,076457E+18	5,332210E+21	1,615447E+19	5,348364E+21
2806	2,666073E+21	2,666150E+21	8,077727E+18	8,079053E+18	5,332223E+21	1,615678E+19	5,348380E+21
2807	2,666159E+21	2,666013E+21	8,073313E+18	8,074212E+18	5,332173E+21	1,614753E+19	5,348320E+21
2808	2,665965E+21	2,666117E+21	8,080786E+18	8,078634E+18	5,332082E+21	1,615942E+19	5,348242E+21
2809	2,666021E+21	2,665953E+21	8,075811E+18	8,077099E+18	5,331974E+21	1,615291E+19	5,348127E+21
2810	2,665925E+21	2,665826E+21	8,076384E+18	8,074738E+18	5,331751E+21	1,615112E+19	5,347902E+21
2811	2,665696E+21	2,665863E+21	8,081800E+18	8,080111E+18	5,331559E+21	1,616191E+19	5,347721E+21
2812	2,665751E+21	2,665619E+21	8,074760E+18	8,077610E+18	5,331370E+21	1,615237E+19	5,347522E+21
2813	2,665578E+21	2,665583E+21	8,079676E+18	8,077198E+18	5,331161E+21	1,615687E+19	5,347318E+21
2814	2,665490E+21	2,665564E+21	8,079388E+18	8,081904E+18	5,331054E+21	1,616129E+19	5,347215E+21
2815	2,665584E+21	2,665386E+21	8,075816E+18	8,076632E+18	5,330970E+21	1,615245E+19	5,347123E+21
2816	2,665396E+21	2,665539E+21	8,082036E+18	8,077841E+18	5,330934E+21	1,615988E+19	5,347094E+21
2817	2,665454E+21	2,665503E+21	8,078141E+18	8,080735E+18	5,330957E+21	1,615888E+19	5,347116E+21
2818	2,665513E+21	2,665433E+21	8,077444E+18	8,074795E+18	5,330946E+21	1,615224E+19	5,347098E+21
2819	2,665442E+21	2,665637E+21	8,081424E+18	8,081100E+18	5,331079E+21	1,616252E+19	5,347241E+21
2820	2,665680E+21	2,665576E+21	8,076292E+18	8,078112E+18	5,331256E+21	1,615440E+19	5,347410E+21
2821	2,665734E+21	2,665674E+21	8,077201E+18	8,075033E+18	5,331408E+21	1,615223E+19	5,347560E+21
2822	2,665722E+21	2,665858E+21	8,080180E+18	8,081223E+18	5,331580E+21	1,616140E+19	5,347741E+21
2823	2,665894E+21	2,665771E+21	8,074675E+18	8,074679E+18	5,331665E+21	1,614935E+19	5,347814E+21
2824	2,665788E+21	2,665916E+21	8,079172E+18	8,077079E+18	5,331703E+21	1,615625E+19	5,347860E+21
2825	2,665808E+21	2,665897E+21	8,078792E+18	8,079736E+18	5,331706E+21	1,615853E+19	5,347864E+21
2826	2,665878E+21	2,665717E+21	8,074443E+18	8,074629E+18	5,331595E+21	1,614907E+19	5,347744E+21
2827	2,665697E+21	2,665819E+21	8,081940E+18	8,079349E+18	5,331516E+21	1,616129E+19	5,347677E+21
2828	2,665720E+21	2,665662E+21	8,076581E+18	8,078294E+18	5,331382E+21	1,615487E+19	5,347537E+21
2829	2,665642E+21	2,665524E+21	8,076884E+18	8,076223E+18	5,331166E+21	1,615311E+19	5,347319E+21
2830	2,665413E+21	2,665564E+21	8,082091E+18	8,081536E+18	5,330977E+21	1,616363E+19	5,347141E+21
2831	2,665468E+21	2,665321E+21	8,075288E+18	8,078932E+18	5,330789E+21	1,615422E+19	5,346943E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2832	2,665320E+21	2,665316E+21	8,081059E+18	8,077314E+18	5,330636E+21	1,615837E+19	5,346794E+21
2833	2,665214E+21	2,665322E+21	8,080835E+18	8,082045E+18	5,330536E+21	1,616288E+19	5,346699E+21
2834	2,665269E+21	2,665122E+21	8,077226E+18	8,076765E+18	5,330392E+21	1,615399E+19	5,346546E+21
2835	2,665102E+21	2,665264E+21	8,082900E+18	8,078948E+18	5,330366E+21	1,616185E+19	5,346528E+21
2836	2,665173E+21	2,665229E+21	8,078695E+18	8,082143E+18	5,330402E+21	1,616084E+19	5,346562E+21
2837	2,665305E+21	2,665165E+21	8,077514E+18	8,075975E+18	5,330469E+21	1,615349E+19	5,346623E+21
2838	2,665255E+21	2,665402E+21	8,081659E+18	8,081880E+18	5,330656E+21	1,616354E+19	5,346820E+21
2839	2,665470E+21	2,665367E+21	8,076881E+18	8,078625E+18	5,330837E+21	1,615551E+19	5,346992E+21
2840	2,665516E+21	2,665484E+21	8,078299E+18	8,075304E+18	5,331000E+21	1,615360E+19	5,347154E+21
2841	2,665465E+21	2,665655E+21	8,081269E+18	8,081846E+18	5,331120E+21	1,616312E+19	5,347284E+21
2842	2,665610E+21	2,665506E+21	8,075508E+18	8,075551E+18	5,331116E+21	1,615106E+19	5,347267E+21
2843	2,665538E+21	2,665619E+21	8,079958E+18	8,078237E+18	5,331157E+21	1,615820E+19	5,347315E+21
2844	2,665546E+21	2,665607E+21	8,079520E+18	8,080617E+18	5,331152E+21	1,616014E+19	5,347313E+21
2845	2,665632E+21	2,665427E+21	8,075037E+18	8,075537E+18	5,331059E+21	1,615057E+19	5,347209E+21
2846	2,665420E+21	2,665543E+21	8,082426E+18	8,080210E+18	5,330964E+21	1,616264E+19	5,347126E+21
2847	2,665412E+21	2,665380E+21	8,077069E+18	8,079662E+18	5,330792E+21	1,615673E+19	5,346949E+21
2848	2,665353E+21	2,665246E+21	8,078110E+18	8,077003E+18	5,330599E+21	1,615511E+19	5,346754E+21
2849	2,665131E+21	2,665294E+21	8,083168E+18	8,082001E+18	5,330425E+21	1,616517E+19	5,346590E+21
2850	2,665164E+21	2,665029E+21	8,076767E+18	8,079230E+18	5,330193E+21	1,615600E+19	5,346349E+21
2851	2,665032E+21	2,665027E+21	8,082406E+18	8,077815E+18	5,330060E+21	1,616022E+19	5,346220E+21
2852	2,664900E+21	2,665049E+21	8,081767E+18	8,083075E+18	5,329949E+21	1,616484E+19	5,346114E+21
2853	2,664992E+21	2,664834E+21	8,077666E+18	8,078242E+18	5,329827E+21	1,615591E+19	5,345982E+21
2854	2,664862E+21	2,664986E+21	8,082781E+18	8,080522E+18	5,329848E+21	1,616330E+19	5,346011E+21
2855	2,664959E+21	2,664969E+21	8,078957E+18	8,083349E+18	5,329928E+21	1,616231E+19	5,346090E+21
2856	2,665118E+21	2,664954E+21	8,078485E+18	8,076126E+18	5,330072E+21	1,615461E+19	5,346227E+21
2857	2,665046E+21	2,665220E+21	8,082648E+18	8,081822E+18	5,330266E+21	1,616447E+19	5,346431E+21
2858	2,665199E+21	2,665154E+21	8,078105E+18	8,078669E+18	5,330353E+21	1,615677E+19	5,346509E+21
2859	2,665249E+21	2,665242E+21	8,079099E+18	8,076276E+18	5,330491E+21	1,615538E+19	5,346646E+21
2860	2,665188E+21	2,665394E+21	8,081967E+18	8,082881E+18	5,330581E+21	1,616485E+19	5,346746E+21
2861	2,665378E+21	2,665222E+21	8,075811E+18	8,076722E+18	5,330599E+21	1,615253E+19	5,346752E+21
2862	2,665315E+21	2,665344E+21	8,080300E+18	8,079111E+18	5,330660E+21	1,615941E+19	5,346819E+21
2863	2,665293E+21	2,665343E+21	8,080143E+18	8,081409E+18	5,330636E+21	1,616155E+19	5,346797E+21
2864	2,665364E+21	2,665186E+21	8,076313E+18	8,076137E+18	5,330550E+21	1,615245E+19	5,346702E+21
2865	2,665127E+21	2,665290E+21	8,083428E+18	8,080858E+18	5,330416E+21	1,616429E+19	5,346581E+21
2866	2,665091E+21	2,665079E+21	8,078255E+18	8,080615E+18	5,330170E+21	1,615887E+19	5,346329E+21
2867	2,665068E+21	2,664930E+21	8,079293E+18	8,078041E+18	5,329998E+21	1,615733E+19	5,346155E+21
2868	2,664828E+21	2,664992E+21	8,084152E+18	8,082765E+18	5,329820E+21	1,616692E+19	5,345987E+21
2869	2,664878E+21	2,664725E+21	8,077461E+18	8,080367E+18	5,329603E+21	1,615783E+19	5,345761E+21
2870	2,664738E+21	2,664734E+21	8,082649E+18	8,078979E+18	5,329472E+21	1,616163E+19	5,345634E+21
2871	2,664606E+21	2,664761E+21	8,081935E+18	8,084583E+18	5,329367E+21	1,616652E+19	5,345533E+21
2872	2,664747E+21	2,664580E+21	8,078496E+18	8,079027E+18	5,329327E+21	1,615752E+19	5,345485E+21
2873	2,664646E+21	2,664757E+21	8,083369E+18	8,080779E+18	5,329403E+21	1,616415E+19	5,345567E+21
2874	2,664727E+21	2,664742E+21	8,080356E+18	8,083301E+18	5,329469E+21	1,616366E+19	5,345633E+21
2875	2,664896E+21	2,664738E+21	8,079654E+18	8,076395E+18	5,329634E+21	1,615605E+19	5,345790E+21
2876	2,664781E+21	2,665010E+21	8,083592E+18	8,082431E+18	5,329791E+21	1,616602E+19	5,345957E+21
2877	2,664949E+21	2,664906E+21	8,078525E+18	8,079928E+18	5,329855E+21	1,615845E+19	5,346013E+21
2878	2,665015E+21	2,664976E+21	8,079040E+18	8,077785E+18	5,329991E+21	1,615682E+19	5,346148E+21
2879	2,664961E+21	2,665125E+21	8,082296E+18	8,083922E+18	5,330087E+21	1,616622E+19	5,346253E+21
2880	2,665160E+21	2,664986E+21	8,076922E+18	8,077082E+18	5,330146E+21	1,615400E+19	5,346300E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude [⊙]	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2881	2,665069E+21	2,665118E+21	8,081225E+18	8,079186E+18	5,330187E+21	1,616041E+19	5,346347E+21
2882	2,664984E+21	2,665082E+21	8,081466E+18	8,081818E+18	5,330066E+21	1,616328E+19	5,346229E+21
2883	2,665062E+21	2,664898E+21	8,077374E+18	8,077323E+18	5,329959E+21	1,615470E+19	5,346114E+21
2884	2,664816E+21	2,664991E+21	8,084278E+18	8,081867E+18	5,329807E+21	1,616615E+19	5,345973E+21
2885	2,664815E+21	2,664760E+21	8,078868E+18	8,081969E+18	5,329575E+21	1,616084E+19	5,345736E+21
2886	2,664797E+21	2,664626E+21	8,079879E+18	8,079139E+18	5,329424E+21	1,615902E+19	5,345583E+21
2887	2,664538E+21	2,664700E+21	8,084676E+18	8,083742E+18	5,329238E+21	1,616842E+19	5,345406E+21
2888	2,664585E+21	2,664462E+21	8,078628E+18	8,081238E+18	5,329047E+21	1,615987E+19	5,345207E+21
2889	2,664457E+21	2,664469E+21	8,083178E+18	8,079584E+18	5,328926E+21	1,616276E+19	5,345089E+21
2890	2,664326E+21	2,664475E+21	8,083041E+18	8,085248E+18	5,328801E+21	1,616829E+19	5,344969E+21
2891	2,664517E+21	2,664318E+21	8,079727E+18	8,079475E+18	5,328835E+21	1,615920E+19	5,344994E+21
2892	2,664406E+21	2,664531E+21	8,084426E+18	8,081013E+18	5,328936E+21	1,616544E+19	5,345102E+21
2893	2,664489E+21	2,664513E+21	8,081200E+18	8,083992E+18	5,329002E+21	1,616519E+19	5,345167E+21
2894	2,664643E+21	2,664510E+21	8,079770E+18	8,077596E+18	5,329153E+21	1,615737E+19	5,345310E+21
2895	2,664523E+21	2,664759E+21	8,083629E+18	8,083765E+18	5,329282E+21	1,616739E+19	5,345449E+21
2896	2,664719E+21	2,664673E+21	8,079184E+18	8,080754E+18	5,329391E+21	1,615994E+19	5,345551E+21
2897	2,664803E+21	2,664743E+21	8,079497E+18	8,078073E+18	5,329547E+21	1,615757E+19	5,345704E+21
2898	2,664718E+21	2,664877E+21	8,083758E+18	8,083965E+18	5,329594E+21	1,616772E+19	5,345762E+21
2899	2,664912E+21	2,664743E+21	8,078235E+18	8,077650E+18	5,329654E+21	1,615589E+19	5,345810E+21
2900	2,664778E+21	2,664866E+21	8,082240E+18	8,080108E+18	5,329644E+21	1,616235E+19	5,345806E+21
2901	2,664705E+21	2,664784E+21	8,081920E+18	8,083455E+18	5,329489E+21	1,616538E+19	5,345654E+21
2902	2,664796E+21	2,664586E+21	8,077509E+18	8,079155E+18	5,329382E+21	1,615666E+19	5,345539E+21
2903	2,664548E+21	2,664681E+21	8,084676E+18	8,082917E+18	5,329229E+21	1,616759E+19	5,345397E+21
2904	2,664543E+21	2,664492E+21	8,080089E+18	8,082567E+18	5,329035E+21	1,616266E+19	5,345197E+21
2905	2,664497E+21	2,664361E+21	8,080898E+18	8,079168E+18	5,328858E+21	1,616007E+19	5,345018E+21
2906	2,664196E+21	2,664407E+21	8,086048E+18	8,084123E+18	5,328603E+21	1,617017E+19	5,344773E+21
2907	2,664276E+21	2,664165E+21	8,079937E+18	8,082135E+18	5,328442E+21	1,616207E+19	5,344604E+21
2908	2,664170E+21	2,664188E+21	8,084036E+18	8,080290E+18	5,328358E+21	1,616433E+19	5,344522E+21
2909	2,664093E+21	2,664196E+21	8,083735E+18	8,086289E+18	5,328289E+21	1,617002E+19	5,344459E+21
2910	2,664293E+21	2,664075E+21	8,080261E+18	8,080421E+18	5,328368E+21	1,616068E+19	5,344529E+21
2911	2,664167E+21	2,664304E+21	8,084697E+18	8,081877E+18	5,328471E+21	1,616657E+19	5,344637E+21
2912	2,664244E+21	2,664310E+21	8,082098E+18	8,084854E+18	5,328554E+21	1,616695E+19	5,344721E+21
2913	2,664404E+21	2,664287E+21	8,079980E+18	8,078234E+18	5,328690E+21	1,615821E+19	5,344849E+21
2914	2,664280E+21	2,664500E+21	8,084628E+18	8,084369E+18	5,328780E+21	1,616900E+19	5,344949E+21
2915	2,664505E+21	2,664427E+21	8,080406E+18	8,081221E+18	5,328931E+21	1,616163E+19	5,345093E+21
2916	2,664568E+21	2,664513E+21	8,080541E+18	8,078504E+18	5,329081E+21	1,615904E+19	5,345240E+21
2917	2,664473E+21	2,664621E+21	8,084595E+18	8,084803E+18	5,329095E+21	1,616940E+19	5,345264E+21
2918	2,664645E+21	2,664483E+21	8,078484E+18	8,079197E+18	5,329128E+21	1,615768E+19	5,345286E+21
2919	2,664504E+21	2,664580E+21	8,082437E+18	8,081450E+18	5,329084E+21	1,616389E+19	5,345248E+21
2920	2,664441E+21	2,664515E+21	8,082808E+18	8,084352E+18	5,328956E+21	1,616716E+19	5,345123E+21
2921	2,664533E+21	2,664317E+21	8,078296E+18	8,079439E+18	5,328851E+21	1,615774E+19	5,345009E+21
2922	2,664244E+21	2,664390E+21	8,086417E+18	8,082897E+18	5,328634E+21	1,616931E+19	5,344803E+21
2923	2,664227E+21	2,664210E+21	8,081747E+18	8,083103E+18	5,328437E+21	1,616485E+19	5,344602E+21
2924	2,664157E+21	2,664072E+21	8,082139E+18	8,080031E+18	5,328229E+21	1,616217E+19	5,344392E+21
2925	2,663895E+21	2,664077E+21	8,086547E+18	8,085708E+18	5,327972E+21	1,617226E+19	5,344145E+21
2926	2,664018E+21	2,663856E+21	8,080201E+18	8,083888E+18	5,327874E+21	1,616409E+19	5,344038E+21
2927	2,663936E+21	2,663904E+21	8,084191E+18	8,081379E+18	5,327840E+21	1,616557E+19	5,344006E+21
2928	2,663866E+21	2,663973E+21	8,084666E+18	8,087032E+18	5,327839E+21	1,617170E+19	5,344011E+21
2929	2,664046E+21	2,663867E+21	8,080801E+18	8,080564E+18	5,327913E+21	1,616136E+19	5,344075E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude \odot	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2930	2,663884E+21	2,664066E+21	8,085663E+18	8,082332E+18	5,327950E+21	1,616800E+19	5,344118E+21
2931	2,663986E+21	2,664068E+21	8,083181E+18	8,085497E+18	5,328055E+21	1,616868E+19	5,344223E+21
2932	2,664159E+21	2,664047E+21	8,080782E+18	8,078826E+18	5,328206E+21	1,615961E+19	5,344365E+21
2933	2,664075E+21	2,664239E+21	8,085372E+18	8,085236E+18	5,328315E+21	1,617061E+19	5,344486E+21
2934	2,664299E+21	2,664189E+21	8,081028E+18	8,082259E+18	5,328488E+21	1,616329E+19	5,344651E+21
2935	2,664334E+21	2,664276E+21	8,080882E+18	8,079561E+18	5,328610E+21	1,616044E+19	5,344771E+21
2936	2,664225E+21	2,664397E+21	8,085387E+18	8,085835E+18	5,328622E+21	1,617122E+19	5,344793E+21
2937	2,664386E+21	2,664231E+21	8,078806E+18	8,079926E+18	5,328616E+21	1,615873E+19	5,344775E+21
2938	2,664224E+21	2,664292E+21	8,083796E+18	8,081842E+18	5,328516E+21	1,616564E+19	5,344682E+21
2939	2,664164E+21	2,664239E+21	8,084484E+18	8,084593E+18	5,328403E+21	1,616908E+19	5,344572E+21
2940	2,664218E+21	2,664044E+21	8,079855E+18	8,079958E+18	5,328262E+21	1,615981E+19	5,344422E+21
2941	2,663925E+21	2,664072E+21	8,087356E+18	8,083964E+18	5,327997E+21	1,617132E+19	5,344169E+21
2942	2,663907E+21	2,663889E+21	8,082034E+18	8,085034E+18	5,327796E+21	1,616707E+19	5,343963E+21
2943	2,663863E+21	2,663744E+21	8,082145E+18	8,081591E+18	5,327607E+21	1,616374E+19	5,343770E+21
2944	2,663647E+21	2,663796E+21	8,087016E+18	8,086864E+18	5,327442E+21	1,617388E+19	5,343616E+21
2945	2,663787E+21	2,663608E+21	8,080864E+18	8,084142E+18	5,327394E+21	1,616501E+19	5,343559E+21
2946	2,663678E+21	2,663664E+21	8,085637E+18	8,081397E+18	5,327342E+21	1,616703E+19	5,343509E+21
2947	2,663599E+21	2,663756E+21	8,086237E+18	8,087360E+18	5,327355E+21	1,617360E+19	5,343528E+21
2948	2,663759E+21	2,663641E+21	8,081886E+18	8,081299E+18	5,327401E+21	1,616319E+19	5,343564E+21
2949	2,663637E+21	2,663782E+21	8,086072E+18	8,083628E+18	5,327420E+21	1,616970E+19	5,343589E+21
2950	2,663770E+21	2,663805E+21	8,083523E+18	8,086851E+18	5,327575E+21	1,617037E+19	5,343745E+21
2951	2,663956E+21	2,663800E+21	8,081016E+18	8,079677E+18	5,327756E+21	1,616069E+19	5,343917E+21
2952	2,663870E+21	2,664031E+21	8,086219E+18	8,085888E+18	5,327900E+21	1,617211E+19	5,344073E+21
2953	2,664063E+21	2,663985E+21	8,081562E+18	8,082450E+18	5,328047E+21	1,616401E+19	5,344211E+21
2954	2,664057E+21	2,664030E+21	8,081948E+18	8,080127E+18	5,328087E+21	1,616208E+19	5,344249E+21
2955	2,663953E+21	2,664142E+21	8,086611E+18	8,086304E+18	5,328096E+21	1,617292E+19	5,344268E+21
2956	2,664105E+21	2,663968E+21	8,079881E+18	8,080722E+18	5,328073E+21	1,616060E+19	5,344234E+21
2957	2,663955E+21	2,663983E+21	8,084828E+18	8,082785E+18	5,327938E+21	1,616761E+19	5,344106E+21
2958	2,663880E+21	2,663944E+21	8,085131E+18	8,085971E+18	5,327824E+21	1,617110E+19	5,343995E+21
2959	2,663912E+21	2,663738E+21	8,080248E+18	8,081476E+18	5,327650E+21	1,616172E+19	5,343812E+21
2960	2,663634E+21	2,663772E+21	8,087784E+18	8,085475E+18	5,327406E+21	1,617326E+19	5,343579E+21
2961	2,663637E+21	2,663587E+21	8,082211E+18	8,086024E+18	5,327224E+21	1,616824E+19	5,343392E+21
2962	2,663596E+21	2,663446E+21	8,083356E+18	8,082056E+18	5,327042E+21	1,616541E+19	5,343207E+21
2963	2,663392E+21	2,663545E+21	8,088554E+18	8,086940E+18	5,326938E+21	1,617549E+19	5,343113E+21
2964	2,663499E+21	2,663382E+21	8,082537E+18	8,084410E+18	5,326881E+21	1,616695E+19	5,343048E+21
2965	2,663388E+21	2,663399E+21	8,086556E+18	8,082207E+18	5,326786E+21	1,616876E+19	5,342955E+21
2966	2,663317E+21	2,663488E+21	8,086621E+18	8,088824E+18	5,326805E+21	1,617545E+19	5,342981E+21
2967	2,663501E+21	2,663364E+21	8,081928E+18	8,082491E+18	5,326865E+21	1,616442E+19	5,343029E+21
2968	2,663433E+21	2,663539E+21	8,086331E+18	8,084674E+18	5,326972E+21	1,617100E+19	5,343143E+21
2969	2,663578E+21	2,663586E+21	8,084099E+18	8,086949E+18	5,327164E+21	1,617105E+19	5,343335E+21
2970	2,663732E+21	2,663588E+21	8,082293E+18	8,079791E+18	5,327320E+21	1,616208E+19	5,343482E+21
2971	2,663629E+21	2,663835E+21	8,087603E+18	8,086158E+18	5,327464E+21	1,617376E+19	5,343637E+21
2972	2,663790E+21	2,663765E+21	8,082642E+18	8,083277E+18	5,327555E+21	1,616592E+19	5,343721E+21
2973	2,663804E+21	2,663738E+21	8,082447E+18	8,081504E+18	5,327542E+21	1,616395E+19	5,343706E+21
2974	2,663709E+21	2,663853E+21	8,087009E+18	8,087641E+18	5,327562E+21	1,617465E+19	5,343737E+21
2975	2,663845E+21	2,663680E+21	8,080253E+18	8,081922E+18	5,327525E+21	1,616218E+19	5,343687E+21
2976	2,663689E+21	2,663710E+21	8,085579E+18	8,083815E+18	5,327399E+21	1,616939E+19	5,343568E+21
2977	2,663586E+21	2,663666E+21	8,085535E+18	8,086571E+18	5,327252E+21	1,617211E+19	5,343424E+21
2978	2,663595E+21	2,663433E+21	8,081403E+18	8,082243E+18	5,327029E+21	1,616365E+19	5,343192E+21

1	14	15	16	17	18	19	20
	Astronomical season (northern hemisphere)				Summer half year (northern hemisphere)	Winter half year (northern hemisphere)	Tropical year
	Spring	Summer	Autumn	Winter			
Longitude ☉	0° - 90°	90° - 180°	180° - 270°	270° - 360°	0° - 180°	180° - 360°	0° - 360°
Years							
2979	2,663343E+21	2,663483E+21	8,088999E+18	8,085790E+18	5,326826E+21	1,617479E+19	5,343000E+21
2980	2,663351E+21	2,663318E+21	8,083651E+18	8,086630E+18	5,326670E+21	1,617028E+19	5,342840E+21
2981	2,663326E+21	2,663152E+21	8,084709E+18	8,082716E+18	5,326478E+21	1,616742E+19	5,342645E+21
2982	2,663112E+21	2,663281E+21	8,089364E+18	8,087999E+18	5,326394E+21	1,617736E+19	5,342571E+21
2983	2,663201E+21	2,663116E+21	8,083019E+18	8,085746E+18	5,326317E+21	1,616876E+19	5,342486E+21
2984	2,663118E+21	2,663128E+21	8,086742E+18	8,083673E+18	5,326246E+21	1,617042E+19	5,342416E+21
2985	2,663079E+21	2,663222E+21	8,086660E+18	8,089525E+18	5,326301E+21	1,617618E+19	5,342477E+21
2986	2,663275E+21	2,663111E+21	8,082929E+18	8,082838E+18	5,326386E+21	1,616577E+19	5,342552E+21
2987	2,663225E+21	2,663330E+21	8,087536E+18	8,084733E+18	5,326555E+21	1,617227E+19	5,342727E+21
2988	2,663340E+21	2,663396E+21	8,085529E+18	8,087263E+18	5,326736E+21	1,617279E+19	5,342909E+21
2989	2,663481E+21	2,663346E+21	8,082949E+18	8,080817E+18	5,326827E+21	1,616377E+19	5,342991E+21
2990	2,663379E+21	2,663582E+21	8,087755E+18	8,087530E+18	5,326961E+21	1,617529E+19	5,343136E+21
2991	2,663541E+21	2,663495E+21	8,082661E+18	8,084500E+18	5,327036E+21	1,616716E+19	5,343203E+21
2992	2,663583E+21	2,663477E+21	8,082821E+18	8,082661E+18	5,327060E+21	1,616548E+19	5,343225E+21
2993	2,663474E+21	2,663600E+21	8,087681E+18	8,087755E+18	5,327074E+21	1,617544E+19	5,343249E+21
2994	2,663561E+21	2,663421E+21	8,081713E+18	8,082385E+18	5,326982E+21	1,616410E+19	5,343146E+21
2995	2,663390E+21	2,663452E+21	8,087018E+18	8,084190E+18	5,326841E+21	1,617121E+19	5,343013E+21
2996	2,663271E+21	2,663383E+21	8,086797E+18	8,087474E+18	5,326654E+21	1,617427E+19	5,342828E+21
2997	2,663304E+21	2,663102E+21	8,082384E+18	8,083423E+18	5,326406E+21	1,616581E+19	5,342572E+21
2998	2,663074E+21	2,663177E+21	8,089616E+18	8,086844E+18	5,326251E+21	1,617646E+19	5,342428E+21
2999	2,663066E+21	2,663030E+21	8,084421E+18	8,087731E+18	5,326096E+21	1,617215E+19	5,342268E+21