

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1000 BC	30 Mar 15:58	2 Jul 22:00	2 Oct 13:05	29 Dec 23:15	07:03
999 BC	30 Mar 21:49	3 Jul 03:50	2 Oct 18:56	30 Dec 05:13	07:03
998 BC	31 Mar 03:41	3 Jul 09:40	3 Oct 00:45	30 Dec 10:53	07:03
997 BC	30 Mar 09:19	2 Jul 15:29	2 Oct 06:39	29 Dec 16:43	07:03
996 BC	30 Mar 15:12	2 Jul 21:21	2 Oct 12:28	29 Dec 22:35	07:02
995 BC	30 Mar 21:05	3 Jul 03:04	2 Oct 18:17	30 Dec 04:22	07:02
994 BC	31 Mar 02:39	3 Jul 08:44	3 Oct 00:11	30 Dec 10:18	07:02
993 BC	30 Mar 08:32	2 Jul 14:38	2 Oct 05:56	29 Dec 16:06	07:01
992 BC	30 Mar 14:20	2 Jul 20:23	2 Oct 11:40	29 Dec 21:55	07:01
991 BC	30 Mar 20:10	3 Jul 02:06	2 Oct 17:28	30 Dec 03:48	07:01
990 BC	31 Mar 02:04	3 Jul 07:53	2 Oct 23:15	30 Dec 09:26	07:00
989 BC	30 Mar 07:42	2 Jul 13:41	2 Oct 05:06	29 Dec 15:15	07:00
988 BC	30 Mar 13:35	2 Jul 19:35	2 Oct 10:52	29 Dec 21:08	07:00
987 BC	30 Mar 19:28	3 Jul 01:23	2 Oct 16:38	30 Dec 02:54	07:00
986 BC	31 Mar 01:04	3 Jul 07:06	2 Oct 22:33	30 Dec 08:47	06:59
985 BC	30 Mar 06:58	2 Jul 13:05	2 Oct 04:26	29 Dec 14:33	06:59
984 BC	30 Mar 12:49	2 Jul 18:53	2 Oct 10:17	29 Dec 20:23	06:59
983 BC	30 Mar 18:37	3 Jul 00:38	2 Oct 16:12	30 Dec 02:23	06:58
982 BC	31 Mar 00:30	3 Jul 06:28	2 Oct 22:04	30 Dec 08:11	06:58
981 BC	30 Mar 06:10	2 Jul 12:16	2 Oct 03:54	29 Dec 14:07	06:58
980 BC	30 Mar 12:06	2 Jul 18:11	2 Oct 09:43	29 Dec 20:03	06:58
979 BC	30 Mar 18:07	2 Jul 23:59	2 Oct 15:31	30 Dec 01:50	06:57
978 BC	30 Mar 23:48	3 Jul 05:40	2 Oct 21:26	30 Dec 07:42	06:57
977 BC	30 Mar 05:42	2 Jul 11:38	2 Oct 03:15	29 Dec 13:30	06:57
976 BC	30 Mar 11:35	2 Jul 17:28	2 Oct 09:00	29 Dec 19:17	06:56
975 BC	30 Mar 17:19	2 Jul 23:10	2 Oct 14:46	30 Dec 01:10	06:56
974 BC	30 Mar 23:09	3 Jul 05:02	2 Oct 20:35	30 Dec 06:50	06:56
973 BC	30 Mar 04:48	2 Jul 10:47	2 Oct 02:24	29 Dec 12:34	06:55
972 BC	30 Mar 10:35	2 Jul 16:37	2 Oct 08:14	29 Dec 18:25	06:55
971 BC	30 Mar 16:29	2 Jul 22:23	2 Oct 14:04	30 Dec 00:14	06:55
970 BC	30 Mar 22:02	3 Jul 04:00	2 Oct 19:55	30 Dec 06:07	06:55
969 BC	30 Mar 03:51	2 Jul 09:56	2 Oct 01:44	29 Dec 12:00	06:54
968 BC	30 Mar 09:47	2 Jul 15:46	2 Oct 07:31	29 Dec 17:50	06:54
967 BC	30 Mar 15:35	2 Jul 21:25	2 Oct 13:20	29 Dec 23:43	06:54
966 BC	30 Mar 21:31	3 Jul 03:19	2 Oct 19:14	30 Dec 05:30	06:53
965 BC	30 Mar 03:17	2 Jul 09:09	2 Oct 01:03	29 Dec 11:18	06:53
964 BC	30 Mar 09:07	2 Jul 15:02	2 Oct 06:51	29 Dec 17:15	06:53
963 BC	30 Mar 15:07	2 Jul 20:57	2 Oct 12:43	29 Dec 23:06	06:52
962 BC	30 Mar 20:45	3 Jul 02:39	2 Oct 18:35	30 Dec 04:54	06:52
961 BC	30 Mar 02:36	2 Jul 08:38	2 Oct 00:31	29 Dec 10:44	06:52
960 BC	30 Mar 08:33	2 Jul 14:29	2 Oct 06:22	29 Dec 16:35	06:52
959 BC	30 Mar 14:17	2 Jul 20:07	2 Oct 12:11	29 Dec 22:29	06:51
958 BC	30 Mar 20:06	3 Jul 01:59	2 Oct 18:04	30 Dec 04:19	06:51
957 BC	30 Mar 01:50	2 Jul 07:46	1 Oct 23:49	29 Dec 10:07	06:51
956 BC	30 Mar 07:39	2 Jul 13:34	2 Oct 05:33	29 Dec 15:59	06:50
955 BC	30 Mar 13:37	2 Jul 19:24	2 Oct 11:24	29 Dec 21:46	06:50
954 BC	30 Mar 19:15	3 Jul 01:00	2 Oct 17:12	30 Dec 03:31	06:50
953 BC	30 Mar 01:02	2 Jul 06:56	1 Oct 23:02	29 Dec 09:19	06:49
952 BC	30 Mar 06:56	2 Jul 12:48	2 Oct 04:48	29 Dec 15:09	06:49
951 BC	30 Mar 12:39	2 Jul 18:25	2 Oct 10:32	29 Dec 20:59	06:49

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
950 BC	30 Mar 18:25	3 Jul 00:17	2 Oct 16:26	30 Dec 02:43	06:49
949 BC	30 Mar 00:11	2 Jul 06:06	1 Oct 22:15	29 Dec 08:30	06:48
948 BC	30 Mar 06:00	2 Jul 11:53	2 Oct 04:04	29 Dec 14:23	06:48
947 BC	30 Mar 11:55	2 Jul 17:46	2 Oct 10:00	29 Dec 20:19	06:48
946 BC	30 Mar 17:36	2 Jul 23:27	2 Oct 15:51	30 Dec 02:12	06:47
945 BC	29 Mar 23:26	2 Jul 05:24	1 Oct 21:43	29 Dec 08:07	06:47
944 BC	30 Mar 05:28	2 Jul 11:21	2 Oct 03:35	29 Dec 14:03	06:47
943 BC	30 Mar 11:20	2 Jul 16:58	2 Oct 09:22	29 Dec 19:52	06:47
942 BC	30 Mar 17:12	2 Jul 22:54	2 Oct 15:19	30 Dec 01:41	06:46
941 BC	29 Mar 23:02	2 Jul 04:48	1 Oct 21:07	29 Dec 07:29	06:46
940 BC	30 Mar 04:50	2 Jul 10:35	2 Oct 02:49	29 Dec 13:19	06:46
939 BC	30 Mar 10:43	2 Jul 16:30	2 Oct 08:43	29 Dec 19:10	06:45
938 BC	30 Mar 16:22	2 Jul 22:10	2 Oct 14:31	30 Dec 00:52	06:45
937 BC	29 Mar 22:05	2 Jul 04:01	1 Oct 20:22	29 Dec 06:38	06:45
936 BC	30 Mar 03:59	2 Jul 09:53	2 Oct 02:15	29 Dec 12:31	06:44
935 BC	30 Mar 09:41	2 Jul 15:24	2 Oct 07:57	29 Dec 18:19	06:44
934 BC	30 Mar 15:23	2 Jul 21:13	2 Oct 13:50	30 Dec 00:11	06:44
933 BC	29 Mar 21:11	2 Jul 03:03	1 Oct 19:36	29 Dec 06:00	06:44
932 BC	30 Mar 03:00	2 Jul 08:44	2 Oct 01:16	29 Dec 11:49	06:43
931 BC	30 Mar 08:57	2 Jul 14:37	2 Oct 07:13	29 Dec 17:41	06:43
930 BC	30 Mar 14:42	2 Jul 20:20	2 Oct 13:02	29 Dec 23:28	06:43
929 BC	29 Mar 20:30	2 Jul 02:15	1 Oct 18:51	29 Dec 05:18	06:42
928 BC	30 Mar 02:28	2 Jul 08:15	2 Oct 00:45	29 Dec 11:16	06:42
927 BC	30 Mar 08:17	2 Jul 13:55	2 Oct 06:30	29 Dec 17:04	06:42
926 BC	30 Mar 14:03	2 Jul 19:50	2 Oct 12:28	29 Dec 22:52	06:42
925 BC	29 Mar 19:55	2 Jul 01:46	1 Oct 18:23	29 Dec 04:43	06:41
924 BC	30 Mar 01:46	2 Jul 07:30	2 Oct 00:09	29 Dec 10:33	06:41
923 BC	30 Mar 07:36	2 Jul 13:23	2 Oct 06:08	29 Dec 16:31	06:41
922 BC	30 Mar 13:19	2 Jul 19:06	2 Oct 11:56	29 Dec 22:23	06:40
921 BC	29 Mar 19:06	2 Jul 00:57	1 Oct 17:42	29 Dec 04:11	06:40
920 BC	30 Mar 01:03	2 Jul 06:51	1 Oct 23:35	29 Dec 10:06	06:40
919 BC	30 Mar 06:54	2 Jul 12:25	2 Oct 05:18	29 Dec 15:50	06:39
918 BC	30 Mar 12:37	2 Jul 18:13	2 Oct 11:08	29 Dec 21:34	06:39
917 BC	29 Mar 18:24	2 Jul 00:07	1 Oct 16:56	29 Dec 03:25	06:39
916 BC	30 Mar 00:13	2 Jul 05:48	1 Oct 22:33	29 Dec 09:09	06:39
915 BC	30 Mar 05:59	2 Jul 11:39	2 Oct 04:27	29 Dec 14:59	06:38
914 BC	30 Mar 11:42	2 Jul 17:24	2 Oct 10:18	29 Dec 20:45	06:38
913 BC	29 Mar 17:27	1 Jul 23:12	1 Oct 16:05	29 Dec 02:29	06:38
912 BC	29 Mar 23:20	2 Jul 05:08	1 Oct 22:03	29 Dec 08:29	06:37
911 BC	30 Mar 05:10	2 Jul 10:46	2 Oct 03:48	29 Dec 14:20	06:37
910 BC	30 Mar 10:54	2 Jul 16:36	2 Oct 09:41	29 Dec 20:11	06:37
909 BC	29 Mar 16:46	1 Jul 22:35	1 Oct 15:36	29 Dec 02:09	06:37
908 BC	29 Mar 22:44	2 Jul 04:19	1 Oct 21:17	29 Dec 07:56	06:36
907 BC	30 Mar 04:37	2 Jul 10:12	2 Oct 03:17	29 Dec 13:50	06:36
906 BC	30 Mar 10:26	2 Jul 16:03	2 Oct 09:11	29 Dec 19:42	06:36
905 BC	29 Mar 16:15	1 Jul 21:54	1 Oct 14:55	29 Dec 01:27	06:35
904 BC	29 Mar 22:08	2 Jul 03:52	1 Oct 20:52	29 Dec 07:26	06:35
903 BC	30 Mar 03:58	2 Jul 09:32	2 Oct 02:35	29 Dec 13:11	06:35
902 BC	30 Mar 09:39	2 Jul 15:17	2 Oct 08:26	29 Dec 18:53	06:35
901 BC	29 Mar 15:25	1 Jul 21:12	1 Oct 14:21	29 Dec 00:45	06:34

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
900 BC	29 Mar 21:16	2 Jul 02:51	1 Oct 20:00	29 Dec 06:30	06:34
899 BC	30 Mar 03:00	2 Jul 08:37	2 Oct 01:54	29 Dec 12:24	06:34
898 BC	30 Mar 08:41	2 Jul 14:23	2 Oct 07:44	29 Dec 18:18	06:33
897 BC	29 Mar 14:30	1 Jul 20:09	1 Oct 13:23	29 Dec 00:00	06:33
896 BC	29 Mar 20:23	2 Jul 02:02	1 Oct 19:18	29 Dec 05:56	06:33
895 BC	30 Mar 02:17	2 Jul 07:42	2 Oct 01:03	29 Dec 11:44	06:33
894 BC	30 Mar 08:02	2 Jul 13:29	2 Oct 06:52	29 Dec 17:26	06:32
893 BC	29 Mar 13:49	1 Jul 19:29	1 Oct 12:47	28 Dec 23:22	06:32
892 BC	29 Mar 19:45	2 Jul 01:15	1 Oct 18:26	29 Dec 05:09	06:32
891 BC	30 Mar 01:31	2 Jul 07:06	2 Oct 00:23	29 Dec 10:59	06:31
890 BC	30 Mar 07:16	2 Jul 12:59	2 Oct 06:22	29 Dec 16:53	06:31
889 BC	29 Mar 13:09	1 Jul 18:49	1 Oct 12:10	28 Dec 22:37	06:31
888 BC	29 Mar 18:59	2 Jul 00:42	1 Oct 18:09	29 Dec 04:39	06:30
887 BC	30 Mar 00:50	2 Jul 06:24	1 Oct 23:58	29 Dec 10:36	06:30
886 BC	30 Mar 06:37	2 Jul 12:09	2 Oct 05:44	29 Dec 16:20	06:30
885 BC	29 Mar 12:24	1 Jul 18:06	1 Oct 11:39	28 Dec 22:18	06:30
884 BC	29 Mar 18:25	1 Jul 23:51	1 Oct 17:19	29 Dec 04:04	06:29
883 BC	30 Mar 00:13	2 Jul 05:36	1 Oct 23:11	29 Dec 09:49	06:29
882 BC	30 Mar 05:56	2 Jul 11:27	2 Oct 05:05	29 Dec 15:43	06:29
881 BC	29 Mar 11:47	1 Jul 17:16	1 Oct 10:43	28 Dec 21:23	06:28
880 BC	29 Mar 17:33	1 Jul 23:07	1 Oct 16:35	29 Dec 03:17	06:28
879 BC	29 Mar 23:21	2 Jul 04:49	1 Oct 22:22	29 Dec 09:06	06:28
878 BC	30 Mar 05:05	2 Jul 10:33	2 Oct 04:09	29 Dec 14:42	06:28
877 BC	29 Mar 10:47	1 Jul 16:27	1 Oct 10:06	28 Dec 20:37	06:27
876 BC	29 Mar 16:42	1 Jul 22:12	1 Oct 15:49	29 Dec 02:26	06:27
875 BC	29 Mar 22:26	2 Jul 03:55	1 Oct 21:40	29 Dec 08:17	06:27
874 BC	30 Mar 04:07	2 Jul 09:48	2 Oct 03:37	29 Dec 14:17	06:26
873 BC	29 Mar 10:03	1 Jul 15:38	1 Oct 09:20	28 Dec 20:01	06:26
872 BC	29 Mar 15:57	1 Jul 21:29	1 Oct 15:16	29 Dec 01:58	06:26
871 BC	29 Mar 21:51	2 Jul 03:14	1 Oct 21:08	29 Dec 07:53	06:26
870 BC	30 Mar 03:41	2 Jul 09:02	2 Oct 02:55	29 Dec 13:35	06:25
869 BC	29 Mar 09:27	1 Jul 15:01	1 Oct 08:50	28 Dec 19:32	06:25
868 BC	29 Mar 15:26	1 Jul 20:51	1 Oct 14:33	29 Dec 01:23	06:25
867 BC	29 Mar 21:14	2 Jul 02:37	1 Oct 20:24	29 Dec 07:06	06:24
866 BC	30 Mar 02:53	2 Jul 08:29	2 Oct 02:24	29 Dec 13:00	06:24
865 BC	29 Mar 08:48	1 Jul 14:20	1 Oct 08:09	28 Dec 18:44	06:24
864 BC	29 Mar 14:35	1 Jul 20:05	1 Oct 14:01	29 Dec 00:39	06:24
863 BC	29 Mar 20:19	2 Jul 01:48	1 Oct 19:51	29 Dec 06:36	06:23
862 BC	30 Mar 02:08	2 Jul 07:32	2 Oct 01:32	29 Dec 12:16	06:23
861 BC	29 Mar 07:51	1 Jul 13:24	1 Oct 07:24	28 Dec 18:09	06:23
860 BC	29 Mar 13:50	1 Jul 19:10	1 Oct 13:07	28 Dec 23:57	06:22
859 BC	29 Mar 19:39	2 Jul 00:52	1 Oct 18:54	29 Dec 05:38	06:22
858 BC	30 Mar 01:15	2 Jul 06:43	2 Oct 00:50	29 Dec 11:33	06:22
857 BC	29 Mar 07:10	1 Jul 12:37	1 Oct 06:33	28 Dec 17:18	06:22
856 BC	29 Mar 12:57	1 Jul 18:24	1 Oct 12:22	28 Dec 23:09	06:21
855 BC	29 Mar 18:42	2 Jul 00:10	1 Oct 18:18	29 Dec 05:06	06:21
854 BC	30 Mar 00:35	2 Jul 05:59	2 Oct 00:06	29 Dec 10:45	06:21
853 BC	29 Mar 06:18	1 Jul 11:50	1 Oct 06:03	28 Dec 16:41	06:20
852 BC	29 Mar 12:17	1 Jul 17:41	1 Oct 11:52	28 Dec 22:40	06:20
851 BC	29 Mar 18:08	1 Jul 23:26	1 Oct 17:41	29 Dec 04:28	06:20

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
850 BC	29 Mar 23:47	2 Jul 05:19	1 Oct 23:39	29 Dec 10:27	06:20
849 BC	29 Mar 05:48	1 Jul 11:15	1 Oct 05:24	28 Dec 16:15	06:19
848 BC	29 Mar 11:43	1 Jul 17:02	1 Oct 11:15	28 Dec 22:05	06:19
847 BC	29 Mar 17:30	1 Jul 22:47	1 Oct 17:09	29 Dec 04:00	06:19
846 BC	29 Mar 23:23	2 Jul 04:37	1 Oct 22:53	29 Dec 09:39	06:18
845 BC	29 Mar 05:04	1 Jul 10:28	1 Oct 04:42	28 Dec 15:30	06:18
844 BC	29 Mar 10:56	1 Jul 16:17	1 Oct 10:27	28 Dec 21:21	06:18
843 BC	29 Mar 16:44	1 Jul 22:00	1 Oct 16:13	29 Dec 02:59	06:18
842 BC	29 Mar 22:17	2 Jul 03:46	1 Oct 22:11	29 Dec 08:50	06:17
841 BC	29 Mar 04:09	1 Jul 09:38	1 Oct 03:57	28 Dec 14:37	06:17
840 BC	29 Mar 09:57	1 Jul 15:20	1 Oct 09:45	28 Dec 20:29	06:17
839 BC	29 Mar 15:36	1 Jul 21:00	1 Oct 15:37	29 Dec 02:28	06:16
838 BC	29 Mar 21:29	2 Jul 02:50	1 Oct 21:21	29 Dec 08:12	06:16
837 BC	29 Mar 03:17	1 Jul 08:39	1 Oct 03:11	28 Dec 14:03	06:16
836 BC	29 Mar 09:14	1 Jul 14:28	1 Oct 09:01	28 Dec 19:58	06:16
835 BC	29 Mar 15:11	1 Jul 20:17	1 Oct 14:50	29 Dec 01:43	06:15
834 BC	29 Mar 20:50	2 Jul 02:08	1 Oct 20:45	29 Dec 07:38	06:15
833 BC	29 Mar 02:47	1 Jul 08:09	1 Oct 02:34	28 Dec 13:30	06:15
832 BC	29 Mar 08:42	1 Jul 13:59	1 Oct 08:23	28 Dec 19:19	06:14
831 BC	29 Mar 14:24	1 Jul 19:44	1 Oct 14:20	29 Dec 01:14	06:14
830 BC	29 Mar 20:19	2 Jul 01:38	1 Oct 20:12	29 Dec 06:57	06:14
829 BC	29 Mar 02:04	1 Jul 07:26	1 Oct 02:04	28 Dec 12:47	06:14
828 BC	29 Mar 07:53	1 Jul 13:13	1 Oct 07:54	28 Dec 18:46	06:13
827 BC	29 Mar 13:45	1 Jul 18:59	1 Oct 13:40	29 Dec 00:32	06:13
826 BC	29 Mar 19:20	2 Jul 00:43	1 Oct 19:30	29 Dec 06:23	06:13
825 BC	29 Mar 01:15	1 Jul 06:37	1 Oct 01:17	28 Dec 12:12	06:13
824 BC	29 Mar 07:11	1 Jul 12:20	1 Oct 07:02	28 Dec 17:56	06:12
823 BC	29 Mar 12:49	1 Jul 17:58	1 Oct 12:52	28 Dec 23:49	06:12
822 BC	29 Mar 18:40	1 Jul 23:52	1 Oct 18:38	29 Dec 05:32	06:12
821 BC	29 Mar 00:25	1 Jul 05:39	1 Oct 00:23	28 Dec 11:19	06:11
820 BC	29 Mar 06:14	1 Jul 11:27	1 Oct 06:11	28 Dec 17:13	06:11
819 BC	29 Mar 12:07	1 Jul 17:16	1 Oct 12:02	28 Dec 22:55	06:11
818 BC	29 Mar 17:44	1 Jul 23:02	1 Oct 17:57	29 Dec 04:45	06:11
817 BC	28 Mar 23:37	1 Jul 04:59	30 Sep 23:50	28 Dec 10:41	06:10
816 BC	29 Mar 05:34	1 Jul 10:48	1 Oct 05:40	28 Dec 16:35	06:10
815 BC	29 Mar 11:14	1 Jul 16:29	1 Oct 11:33	28 Dec 22:34	06:10
814 BC	29 Mar 17:10	1 Jul 22:27	1 Oct 17:25	29 Dec 04:24	06:09
813 BC	28 Mar 23:05	1 Jul 04:18	30 Sep 23:15	28 Dec 10:12	06:09
812 BC	29 Mar 04:58	1 Jul 10:05	1 Oct 05:06	28 Dec 16:07	06:09
811 BC	29 Mar 10:54	1 Jul 15:57	1 Oct 10:57	28 Dec 21:53	06:09
810 BC	29 Mar 16:32	1 Jul 21:44	1 Oct 16:46	29 Dec 03:42	06:08
809 BC	28 Mar 22:21	1 Jul 03:39	30 Sep 22:34	28 Dec 09:33	06:08
808 BC	29 Mar 04:16	1 Jul 09:27	1 Oct 04:21	28 Dec 15:21	06:08
807 BC	29 Mar 09:52	1 Jul 15:03	1 Oct 10:10	28 Dec 21:07	06:07
806 BC	29 Mar 15:40	1 Jul 20:54	1 Oct 16:02	29 Dec 02:53	06:07
805 BC	28 Mar 21:28	1 Jul 02:41	30 Sep 21:49	28 Dec 08:40	06:07
804 BC	29 Mar 03:12	1 Jul 08:21	1 Oct 03:34	28 Dec 14:36	06:07
803 BC	29 Mar 09:03	1 Jul 14:11	1 Oct 09:23	28 Dec 20:25	06:06
802 BC	29 Mar 14:44	1 Jul 19:54	1 Oct 15:10	29 Dec 02:12	06:06
801 BC	28 Mar 20:36	1 Jul 01:48	30 Sep 21:00	28 Dec 08:03	06:06

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
800 BC	29 Mar 02:38	1 Jul 07:39	1 Oct 02:50	28 Dec 13:54	06:05
799 BC	29 Mar 08:19	1 Jul 13:18	1 Oct 08:40	28 Dec 19:45	06:05
798 BC	29 Mar 14:10	1 Jul 19:18	1 Oct 14:34	29 Dec 01:36	06:05
797 BC	28 Mar 20:04	1 Jul 01:13	30 Sep 20:22	28 Dec 07:25	06:05
796 BC	29 Mar 01:53	1 Jul 06:58	1 Oct 02:11	28 Dec 13:18	06:04
795 BC	29 Mar 07:46	1 Jul 12:54	1 Oct 08:10	28 Dec 19:07	06:04
794 BC	29 Mar 13:28	1 Jul 18:40	1 Oct 14:02	29 Dec 00:54	06:04
793 BC	28 Mar 19:17	1 Jul 00:32	30 Sep 19:55	28 Dec 06:51	06:04
792 BC	29 Mar 01:13	1 Jul 06:23	1 Oct 01:45	28 Dec 12:47	06:03
791 BC	29 Mar 06:52	1 Jul 11:57	1 Oct 07:30	28 Dec 18:38	06:03
790 BC	29 Mar 12:42	1 Jul 17:51	1 Oct 13:22	29 Dec 00:26	06:03
789 BC	28 Mar 18:38	30 Jun 23:41	30 Sep 19:07	28 Dec 06:13	06:02
788 BC	29 Mar 00:27	1 Jul 05:20	1 Oct 00:50	28 Dec 12:01	06:02
787 BC	29 Mar 06:17	1 Jul 11:12	1 Oct 06:42	28 Dec 17:48	06:02
786 BC	29 Mar 11:57	1 Jul 16:59	1 Oct 12:27	28 Dec 23:32	06:02
785 BC	28 Mar 17:43	30 Jun 22:49	30 Sep 18:13	28 Dec 05:20	06:01
784 BC	28 Mar 23:37	1 Jul 04:42	1 Oct 00:04	28 Dec 11:11	06:01
783 BC	29 Mar 05:17	1 Jul 10:18	1 Oct 05:53	28 Dec 16:56	06:01
782 BC	29 Mar 11:02	1 Jul 16:11	1 Oct 11:49	28 Dec 22:45	06:00
781 BC	28 Mar 16:56	30 Jun 22:04	30 Sep 17:41	28 Dec 04:40	06:00
780 BC	28 Mar 22:43	1 Jul 03:43	30 Sep 23:25	28 Dec 10:35	06:00
779 BC	29 Mar 04:33	1 Jul 09:38	1 Oct 05:21	28 Dec 16:29	06:00
778 BC	29 Mar 10:22	1 Jul 15:28	1 Oct 11:12	28 Dec 22:19	05:59
777 BC	28 Mar 16:15	30 Jun 21:18	30 Sep 17:00	28 Dec 04:09	05:59
776 BC	28 Mar 22:15	1 Jul 03:14	30 Sep 22:56	28 Dec 10:07	05:59
775 BC	29 Mar 04:00	1 Jul 08:53	1 Oct 04:43	28 Dec 15:54	05:59
774 BC	29 Mar 09:46	1 Jul 14:48	1 Oct 10:34	28 Dec 21:43	05:58
773 BC	28 Mar 15:42	30 Jun 20:46	30 Sep 16:24	28 Dec 03:35	05:58
772 BC	28 Mar 21:30	1 Jul 02:23	30 Sep 22:06	28 Dec 09:20	05:58
771 BC	29 Mar 03:17	1 Jul 08:15	1 Oct 04:03	28 Dec 15:07	05:57
770 BC	29 Mar 09:01	1 Jul 14:03	1 Oct 09:53	28 Dec 20:53	05:57
769 BC	28 Mar 14:46	30 Jun 19:47	30 Sep 15:37	28 Dec 02:43	05:57
768 BC	28 Mar 20:36	1 Jul 01:38	30 Sep 21:30	28 Dec 08:41	05:57
767 BC	29 Mar 02:18	1 Jul 07:15	1 Oct 03:13	28 Dec 14:28	05:56
766 BC	29 Mar 08:04	1 Jul 13:04	1 Oct 09:03	28 Dec 20:14	05:56
765 BC	28 Mar 14:01	30 Jun 19:00	30 Sep 14:55	28 Dec 02:05	05:56
764 BC	28 Mar 19:52	1 Jul 00:36	30 Sep 20:35	28 Dec 07:52	05:56
763 BC	29 Mar 01:38	1 Jul 06:29	1 Oct 02:31	28 Dec 13:42	05:55
762 BC	29 Mar 07:24	1 Jul 12:24	1 Oct 08:20	28 Dec 19:32	05:55
761 BC	28 Mar 13:14	30 Jun 18:12	30 Sep 14:05	28 Dec 01:20	05:55
760 BC	28 Mar 19:07	1 Jul 00:08	30 Sep 20:03	28 Dec 07:16	05:54
759 BC	29 Mar 00:52	1 Jul 05:48	1 Oct 01:55	28 Dec 13:04	05:54
758 BC	29 Mar 06:40	1 Jul 11:40	1 Oct 07:49	28 Dec 18:53	05:54
757 BC	28 Mar 12:34	30 Jun 17:37	30 Sep 13:45	28 Dec 00:54	05:54
756 BC	28 Mar 18:27	30 Jun 23:16	30 Sep 19:26	28 Dec 06:46	05:53
755 BC	29 Mar 00:13	1 Jul 05:06	1 Oct 01:20	28 Dec 12:37	05:53
754 BC	29 Mar 06:03	1 Jul 11:00	1 Oct 07:11	28 Dec 18:27	05:53
753 BC	28 Mar 11:57	30 Jun 16:45	30 Sep 12:53	28 Dec 00:10	05:52
752 BC	28 Mar 17:49	30 Jun 22:38	30 Sep 18:48	28 Dec 06:05	05:52
751 BC	28 Mar 23:33	1 Jul 04:19	1 Oct 00:33	28 Dec 11:51	05:52

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
750 BC	29 Mar 05:15	1 Jul 10:08	1 Oct 06:19	28 Dec 17:33	05:52
749 BC	28 Mar 11:04	30 Jun 16:04	30 Sep 12:11	27 Dec 23:27	05:51
748 BC	28 Mar 16:54	30 Jun 21:41	30 Sep 17:52	28 Dec 05:10	05:51
747 BC	28 Mar 22:35	1 Jul 03:27	30 Sep 23:46	28 Dec 10:55	05:51
746 BC	29 Mar 04:19	1 Jul 09:19	1 Oct 05:42	28 Dec 16:48	05:51
745 BC	28 Mar 10:08	30 Jun 15:01	30 Sep 11:22	27 Dec 22:35	05:50
744 BC	28 Mar 15:56	30 Jun 20:52	30 Sep 17:17	28 Dec 04:37	05:50
743 BC	28 Mar 21:45	1 Jul 02:36	30 Sep 23:06	28 Dec 10:29	05:50
742 BC	29 Mar 03:35	1 Jul 08:24	1 Oct 04:53	28 Dec 16:13	05:49
741 BC	28 Mar 09:33	30 Jun 14:24	30 Sep 10:52	27 Dec 22:12	05:49
740 BC	28 Mar 15:31	30 Jun 20:07	30 Sep 16:35	28 Dec 04:02	05:49
739 BC	28 Mar 21:18	1 Jul 01:58	30 Sep 22:29	28 Dec 09:50	05:49
738 BC	29 Mar 03:05	1 Jul 07:58	1 Oct 04:24	28 Dec 15:45	05:48
737 BC	28 Mar 09:00	30 Jun 13:46	30 Sep 10:05	27 Dec 21:28	05:48
736 BC	28 Mar 14:48	30 Jun 19:38	30 Sep 16:02	28 Dec 03:22	05:48
735 BC	28 Mar 20:33	1 Jul 01:23	30 Sep 21:56	28 Dec 09:11	05:48
734 BC	29 Mar 02:18	1 Jul 07:08	1 Oct 03:43	28 Dec 14:53	05:47
733 BC	28 Mar 08:05	30 Jun 13:02	30 Sep 09:38	27 Dec 20:53	05:47
732 BC	28 Mar 13:57	30 Jun 18:40	30 Sep 15:17	28 Dec 02:43	05:47
731 BC	28 Mar 19:40	1 Jul 00:23	30 Sep 21:05	28 Dec 08:27	05:46
730 BC	29 Mar 01:24	1 Jul 06:16	1 Oct 02:58	28 Dec 14:18	05:46
729 BC	28 Mar 07:20	30 Jun 11:59	30 Sep 08:37	27 Dec 20:01	05:46
728 BC	28 Mar 13:07	30 Jun 17:46	30 Sep 14:28	28 Dec 01:53	05:46
727 BC	28 Mar 18:50	30 Jun 23:33	30 Sep 20:19	28 Dec 07:45	05:45
726 BC	29 Mar 00:39	1 Jul 05:22	1 Oct 02:02	28 Dec 13:26	05:45
725 BC	28 Mar 06:27	30 Jun 11:19	30 Sep 07:59	27 Dec 19:23	05:45
724 BC	28 Mar 12:24	30 Jun 17:04	30 Sep 13:45	28 Dec 01:13	05:45
723 BC	28 Mar 18:10	30 Jun 22:49	30 Sep 19:39	28 Dec 06:56	05:44
722 BC	28 Mar 23:54	1 Jul 04:47	1 Oct 01:40	28 Dec 12:56	05:44
721 BC	28 Mar 05:51	30 Jun 10:35	30 Sep 07:23	27 Dec 18:48	05:44
720 BC	28 Mar 11:40	30 Jun 16:24	30 Sep 13:16	28 Dec 00:45	05:43
719 BC	28 Mar 17:27	30 Jun 22:14	30 Sep 19:11	28 Dec 06:41	05:43
718 BC	28 Mar 23:23	1 Jul 04:03	1 Oct 00:56	28 Dec 12:21	05:43
717 BC	28 Mar 05:14	30 Jun 09:57	30 Sep 06:52	27 Dec 18:17	05:43
716 BC	28 Mar 11:09	30 Jun 15:42	30 Sep 12:37	28 Dec 00:08	05:42
715 BC	28 Mar 16:53	30 Jun 21:25	30 Sep 18:22	28 Dec 05:47	05:42
714 BC	28 Mar 22:32	1 Jul 03:21	1 Oct 00:17	28 Dec 11:41	05:42
713 BC	28 Mar 04:26	30 Jun 09:06	30 Sep 05:55	27 Dec 17:23	05:42
712 BC	28 Mar 10:10	30 Jun 14:48	30 Sep 11:45	27 Dec 23:10	05:41
711 BC	28 Mar 15:50	30 Jun 20:33	30 Sep 17:41	28 Dec 05:03	05:41
710 BC	28 Mar 21:39	1 Jul 02:19	30 Sep 23:24	28 Dec 10:44	05:41
709 BC	28 Mar 03:24	30 Jun 08:09	30 Sep 05:17	27 Dec 16:44	05:41
708 BC	28 Mar 09:17	30 Jun 13:53	30 Sep 11:02	27 Dec 22:40	05:40
707 BC	28 Mar 15:07	30 Jun 19:38	30 Sep 16:48	28 Dec 04:20	05:40
706 BC	28 Mar 20:52	1 Jul 01:34	30 Sep 22:47	28 Dec 10:16	05:40
705 BC	28 Mar 02:55	30 Jun 07:26	30 Sep 04:31	27 Dec 16:05	05:39
704 BC	28 Mar 08:45	30 Jun 13:14	30 Sep 10:22	27 Dec 21:56	05:39
703 BC	28 Mar 14:28	30 Jun 19:06	30 Sep 16:21	28 Dec 03:54	05:39
702 BC	28 Mar 20:23	1 Jul 01:01	30 Sep 22:06	28 Dec 09:37	05:39
701 BC	28 Mar 02:12	30 Jun 06:55	30 Sep 04:01	27 Dec 15:31	05:38

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
700 BC	28 Mar 08:05	30 Jun 12:41	30 Sep 09:53	27 Dec 21:25	05:38
699 BC	28 Mar 13:54	30 Jun 18:26	30 Sep 15:43	28 Dec 03:05	05:38
698 BC	28 Mar 19:31	1 Jul 00:17	30 Sep 21:40	28 Dec 09:01	05:38
697 BC	28 Mar 01:26	30 Jun 06:05	30 Sep 03:22	27 Dec 14:55	05:37
696 BC	28 Mar 07:14	30 Jun 11:46	30 Sep 09:06	27 Dec 20:42	05:37
695 BC	28 Mar 12:52	30 Jun 17:30	30 Sep 15:00	28 Dec 02:36	05:37
694 BC	28 Mar 18:50	30 Jun 23:20	30 Sep 20:43	28 Dec 08:16	05:36
693 BC	28 Mar 00:38	30 Jun 05:07	30 Sep 02:32	27 Dec 14:06	05:36
692 BC	28 Mar 06:28	30 Jun 10:52	30 Sep 08:19	27 Dec 20:01	05:36
691 BC	28 Mar 12:17	30 Jun 16:39	30 Sep 14:02	28 Dec 01:38	05:36
690 BC	28 Mar 17:54	30 Jun 22:32	30 Sep 19:56	28 Dec 07:30	05:35
689 BC	27 Mar 23:50	30 Jun 04:24	30 Sep 01:42	27 Dec 13:20	05:35
688 BC	28 Mar 05:40	30 Jun 10:09	30 Sep 07:32	27 Dec 19:05	05:35
687 BC	28 Mar 11:17	30 Jun 15:56	30 Sep 13:34	28 Dec 01:02	05:35
686 BC	28 Mar 17:13	30 Jun 21:51	30 Sep 19:23	28 Dec 06:52	05:34
685 BC	27 Mar 23:03	30 Jun 03:40	30 Sep 01:14	27 Dec 12:50	05:34
684 BC	28 Mar 04:54	30 Jun 09:27	30 Sep 07:06	27 Dec 18:51	05:34
683 BC	28 Mar 10:50	30 Jun 15:15	30 Sep 12:54	28 Dec 00:32	05:34
682 BC	28 Mar 16:36	30 Jun 21:07	30 Sep 18:50	28 Dec 06:25	05:33
681 BC	27 Mar 22:35	30 Jun 03:00	30 Sep 00:36	27 Dec 12:17	05:33
680 BC	28 Mar 04:27	30 Jun 08:45	30 Sep 06:21	27 Dec 18:03	05:33
679 BC	28 Mar 10:03	30 Jun 14:32	30 Sep 12:17	27 Dec 23:57	05:32
678 BC	28 Mar 15:57	30 Jun 20:28	30 Sep 18:01	28 Dec 05:40	05:32
677 BC	27 Mar 21:45	30 Jun 02:14	29 Sep 23:49	27 Dec 11:27	05:32
676 BC	28 Mar 03:30	30 Jun 07:56	30 Sep 05:41	27 Dec 17:20	05:32
675 BC	28 Mar 09:20	30 Jun 13:42	30 Sep 11:28	27 Dec 23:00	05:31
674 BC	28 Mar 14:57	30 Jun 19:28	30 Sep 17:19	28 Dec 04:51	05:31
673 BC	27 Mar 20:48	30 Jun 01:18	29 Sep 23:04	27 Dec 10:48	05:31
672 BC	28 Mar 02:41	30 Jun 07:02	30 Sep 04:48	27 Dec 16:33	05:31
671 BC	28 Mar 08:18	30 Jun 12:46	30 Sep 10:44	27 Dec 22:26	05:30
670 BC	28 Mar 14:16	30 Jun 18:42	30 Sep 16:33	28 Dec 04:13	05:30
669 BC	27 Mar 20:10	30 Jun 00:31	29 Sep 22:22	27 Dec 10:04	05:30
668 BC	28 Mar 01:56	30 Jun 06:16	30 Sep 04:14	27 Dec 16:02	05:30
667 BC	28 Mar 07:50	30 Jun 12:11	30 Sep 10:04	27 Dec 21:46	05:29
666 BC	28 Mar 13:33	30 Jun 18:02	30 Sep 15:55	28 Dec 03:35	05:29
665 BC	27 Mar 19:26	29 Jun 23:54	29 Sep 21:46	27 Dec 09:31	05:29
664 BC	28 Mar 01:23	30 Jun 05:43	30 Sep 03:37	27 Dec 15:16	05:28
663 BC	28 Mar 06:59	30 Jun 11:26	30 Sep 09:34	27 Dec 21:10	05:28
662 BC	28 Mar 12:52	30 Jun 17:23	30 Sep 15:26	28 Dec 03:04	05:28
661 BC	27 Mar 18:45	29 Jun 23:10	29 Sep 21:11	27 Dec 08:57	05:28
660 BC	28 Mar 00:30	30 Jun 04:50	30 Sep 03:00	27 Dec 14:53	05:27
659 BC	28 Mar 06:25	30 Jun 10:41	30 Sep 08:48	27 Dec 20:35	05:27
658 BC	28 Mar 12:11	30 Jun 16:28	30 Sep 14:36	28 Dec 02:20	05:27
657 BC	27 Mar 18:02	29 Jun 22:17	29 Sep 20:22	27 Dec 08:12	05:27
656 BC	27 Mar 23:55	30 Jun 04:05	30 Sep 02:07	27 Dec 13:56	05:26
655 BC	28 Mar 05:28	30 Jun 09:47	30 Sep 07:57	27 Dec 19:44	05:26
654 BC	28 Mar 11:17	30 Jun 15:44	30 Sep 13:47	28 Dec 01:32	05:26
653 BC	27 Mar 17:10	29 Jun 21:32	29 Sep 19:34	27 Dec 07:18	05:26
652 BC	27 Mar 22:52	30 Jun 03:10	30 Sep 01:27	27 Dec 13:12	05:25
651 BC	28 Mar 04:42	30 Jun 09:02	30 Sep 07:21	27 Dec 18:59	05:25

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
650 BC	28 Mar 10:26	30 Jun 14:49	30 Sep 13:10	28 Dec 00:52	05:25
649 BC	27 Mar 16:17	29 Jun 20:38	29 Sep 18:58	27 Dec 06:52	05:25
648 BC	27 Mar 22:15	30 Jun 02:29	30 Sep 00:47	27 Dec 12:43	05:24
647 BC	28 Mar 03:58	30 Jun 08:13	30 Sep 06:41	27 Dec 18:33	05:24
646 BC	28 Mar 09:55	30 Jun 14:13	30 Sep 12:35	28 Dec 00:25	05:24
645 BC	27 Mar 15:56	29 Jun 20:07	29 Sep 18:23	27 Dec 06:16	05:23
644 BC	27 Mar 21:40	30 Jun 01:47	30 Sep 00:12	27 Dec 12:10	05:23
643 BC	28 Mar 03:31	30 Jun 07:44	30 Sep 06:05	27 Dec 17:56	05:23
642 BC	28 Mar 09:17	30 Jun 13:35	30 Sep 11:52	27 Dec 23:41	05:23
641 BC	27 Mar 15:05	29 Jun 19:21	29 Sep 17:40	27 Dec 05:32	05:22
640 BC	27 Mar 20:58	30 Jun 01:10	29 Sep 23:32	27 Dec 11:18	05:22
639 BC	28 Mar 02:32	30 Jun 06:49	30 Sep 05:23	27 Dec 17:05	05:22
638 BC	28 Mar 08:18	30 Jun 12:41	30 Sep 11:12	27 Dec 22:58	05:22
637 BC	27 Mar 14:12	29 Jun 18:31	29 Sep 16:57	27 Dec 04:51	05:21
636 BC	27 Mar 19:54	30 Jun 00:04	29 Sep 22:42	27 Dec 10:41	05:21
635 BC	28 Mar 01:44	30 Jun 05:56	30 Sep 04:36	27 Dec 16:27	05:21
634 BC	28 Mar 07:35	30 Jun 11:44	30 Sep 10:21	27 Dec 22:11	05:21
633 BC	27 Mar 13:23	29 Jun 17:29	29 Sep 16:06	27 Dec 04:06	05:20
632 BC	27 Mar 19:18	29 Jun 23:23	29 Sep 21:58	27 Dec 09:56	05:20
631 BC	28 Mar 00:58	30 Jun 05:07	30 Sep 03:47	27 Dec 15:43	05:20
630 BC	28 Mar 06:47	30 Jun 11:06	30 Sep 09:40	27 Dec 21:35	05:20
629 BC	27 Mar 12:48	29 Jun 17:01	29 Sep 15:33	27 Dec 03:28	05:19
628 BC	27 Mar 18:33	29 Jun 22:39	29 Sep 21:25	27 Dec 09:19	05:19
627 BC	28 Mar 00:22	30 Jun 04:34	30 Sep 03:23	27 Dec 15:12	05:19
626 BC	28 Mar 06:13	30 Jun 10:27	30 Sep 09:13	27 Dec 21:05	05:18
625 BC	27 Mar 12:02	29 Jun 16:11	29 Sep 14:56	27 Dec 03:00	05:18
624 BC	27 Mar 17:57	29 Jun 22:04	29 Sep 20:50	27 Dec 08:51	05:18
623 BC	27 Mar 23:41	30 Jun 03:46	30 Sep 02:39	27 Dec 14:36	05:18
622 BC	28 Mar 05:31	30 Jun 09:39	30 Sep 08:28	27 Dec 20:24	05:17
621 BC	27 Mar 11:27	29 Jun 15:33	29 Sep 14:17	27 Dec 02:16	05:17
620 BC	27 Mar 17:09	29 Jun 21:07	29 Sep 19:59	27 Dec 08:03	05:17
619 BC	27 Mar 22:51	30 Jun 02:59	30 Sep 01:50	27 Dec 13:47	05:17
618 BC	28 Mar 04:39	30 Jun 08:50	30 Sep 07:37	27 Dec 19:33	05:16
617 BC	27 Mar 10:26	29 Jun 14:29	29 Sep 13:20	27 Dec 01:20	05:16
616 BC	27 Mar 16:14	29 Jun 20:19	29 Sep 19:16	27 Dec 07:10	05:16
615 BC	27 Mar 21:55	30 Jun 02:02	30 Sep 01:06	27 Dec 12:59	05:16
614 BC	28 Mar 03:41	30 Jun 07:52	30 Sep 06:54	27 Dec 18:53	05:15
613 BC	27 Mar 09:39	29 Jun 13:49	29 Sep 12:46	27 Dec 00:53	05:15
612 BC	27 Mar 15:29	29 Jun 19:25	29 Sep 18:32	27 Dec 06:42	05:15
611 BC	27 Mar 21:19	30 Jun 01:21	30 Sep 00:29	27 Dec 12:31	05:15
610 BC	28 Mar 03:17	30 Jun 07:19	30 Sep 06:22	27 Dec 18:23	05:14
609 BC	27 Mar 09:10	29 Jun 13:03	29 Sep 12:05	27 Dec 00:14	05:14
608 BC	27 Mar 15:00	29 Jun 18:59	29 Sep 18:02	27 Dec 06:07	05:14
607 BC	27 Mar 20:45	30 Jun 00:49	29 Sep 23:52	27 Dec 11:54	05:14
606 BC	28 Mar 02:31	30 Jun 06:40	30 Sep 05:41	27 Dec 17:41	05:13
605 BC	27 Mar 08:27	29 Jun 12:36	29 Sep 11:37	26 Dec 23:36	05:13
604 BC	27 Mar 14:11	29 Jun 18:08	29 Sep 17:23	27 Dec 05:22	05:13
603 BC	27 Mar 19:52	29 Jun 23:56	29 Sep 23:16	27 Dec 11:11	05:13
602 BC	28 Mar 01:41	30 Jun 05:49	30 Sep 05:04	27 Dec 17:05	05:12
601 BC	27 Mar 07:29	29 Jun 11:25	29 Sep 10:39	26 Dec 22:53	05:12

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
600 BC	27 Mar 13:17	29 Jun 17:14	29 Sep 16:33	27 Dec 04:42	05:12
599 BC	27 Mar 19:04	29 Jun 23:00	29 Sep 22:22	27 Dec 10:27	05:11
598 BC	28 Mar 00:53	30 Jun 04:47	30 Sep 04:05	27 Dec 16:12	05:11
597 BC	27 Mar 06:46	29 Jun 10:43	29 Sep 09:58	26 Dec 22:10	05:11
596 BC	27 Mar 12:33	29 Jun 16:22	29 Sep 15:42	27 Dec 03:56	05:11
595 BC	27 Mar 18:17	29 Jun 22:14	29 Sep 21:34	27 Dec 09:42	05:10
594 BC	28 Mar 00:09	30 Jun 04:14	30 Sep 03:29	27 Dec 15:35	05:10
593 BC	27 Mar 06:03	29 Jun 09:55	29 Sep 09:13	26 Dec 21:22	05:10
592 BC	27 Mar 11:50	29 Jun 15:47	29 Sep 15:14	27 Dec 03:16	05:10
591 BC	27 Mar 17:36	29 Jun 21:38	29 Sep 21:10	27 Dec 09:11	05:09
590 BC	27 Mar 23:26	30 Jun 03:27	30 Sep 02:55	27 Dec 15:03	05:09
589 BC	27 Mar 05:20	29 Jun 09:24	29 Sep 08:51	26 Dec 21:04	05:09
588 BC	27 Mar 11:13	29 Jun 15:03	29 Sep 14:38	27 Dec 02:53	05:09
587 BC	27 Mar 17:00	29 Jun 20:50	29 Sep 20:28	27 Dec 08:36	05:08
586 BC	27 Mar 22:52	30 Jun 02:47	30 Sep 02:21	27 Dec 14:31	05:08
585 BC	27 Mar 04:46	29 Jun 08:28	29 Sep 07:57	26 Dec 20:15	05:08
584 BC	27 Mar 10:29	29 Jun 14:16	29 Sep 13:48	27 Dec 02:03	05:08
583 BC	27 Mar 16:12	29 Jun 20:08	29 Sep 19:40	27 Dec 07:51	05:07
582 BC	27 Mar 21:59	30 Jun 01:53	30 Sep 01:21	27 Dec 13:31	05:07
581 BC	27 Mar 03:47	29 Jun 07:44	29 Sep 07:17	26 Dec 19:26	05:07
580 BC	27 Mar 09:33	29 Jun 13:22	29 Sep 13:05	27 Dec 01:14	05:07
579 BC	27 Mar 15:15	29 Jun 19:07	29 Sep 18:53	27 Dec 06:59	05:06
578 BC	27 Mar 21:02	30 Jun 01:03	30 Sep 00:47	27 Dec 12:59	05:06
577 BC	27 Mar 02:59	29 Jun 06:44	29 Sep 06:25	26 Dec 18:48	05:06
576 BC	27 Mar 08:46	29 Jun 12:32	29 Sep 12:20	27 Dec 00:36	05:06
575 BC	27 Mar 14:36	29 Jun 18:27	29 Sep 18:17	27 Dec 06:30	05:05
574 BC	27 Mar 20:30	30 Jun 00:16	30 Sep 00:00	27 Dec 12:15	05:05
573 BC	27 Mar 02:22	29 Jun 06:13	29 Sep 05:58	26 Dec 18:15	05:05
572 BC	27 Mar 08:12	29 Jun 11:58	29 Sep 11:47	27 Dec 00:07	05:05
571 BC	27 Mar 13:58	29 Jun 17:47	29 Sep 17:36	27 Dec 05:50	05:04
570 BC	27 Mar 19:47	29 Jun 23:45	29 Sep 23:34	27 Dec 11:46	05:04
569 BC	27 Mar 01:44	29 Jun 05:27	29 Sep 05:15	26 Dec 17:33	05:04
568 BC	27 Mar 07:28	29 Jun 11:11	29 Sep 11:09	26 Dec 23:21	05:04
567 BC	27 Mar 13:10	29 Jun 17:03	29 Sep 17:05	27 Dec 05:17	05:03
566 BC	27 Mar 19:02	29 Jun 22:50	29 Sep 22:43	27 Dec 11:03	05:03
565 BC	27 Mar 00:50	29 Jun 04:39	29 Sep 04:35	26 Dec 16:59	05:03
564 BC	27 Mar 06:40	29 Jun 10:20	29 Sep 10:23	26 Dec 22:48	05:03
563 BC	27 Mar 12:28	29 Jun 16:05	29 Sep 16:08	27 Dec 04:25	05:02
562 BC	27 Mar 18:14	29 Jun 22:00	29 Sep 22:02	27 Dec 10:20	05:02
561 BC	27 Mar 00:10	29 Jun 03:44	29 Sep 03:40	26 Dec 16:08	05:02
560 BC	27 Mar 05:52	29 Jun 09:29	29 Sep 09:29	26 Dec 21:51	05:02
559 BC	27 Mar 11:32	29 Jun 15:24	29 Sep 15:26	27 Dec 03:44	05:01
558 BC	27 Mar 17:27	29 Jun 21:13	29 Sep 21:09	27 Dec 09:27	05:01
557 BC	26 Mar 23:15	29 Jun 03:02	29 Sep 03:06	26 Dec 15:22	05:01
556 BC	27 Mar 05:01	29 Jun 08:47	29 Sep 09:03	26 Dec 21:20	05:01
555 BC	27 Mar 10:50	29 Jun 14:34	29 Sep 14:49	27 Dec 03:05	05:00
554 BC	27 Mar 16:37	29 Jun 20:29	29 Sep 20:45	27 Dec 09:08	05:00
553 BC	26 Mar 22:39	29 Jun 02:16	29 Sep 02:27	26 Dec 15:01	05:00
552 BC	27 Mar 04:30	29 Jun 08:01	29 Sep 08:18	26 Dec 20:44	04:59
551 BC	27 Mar 10:16	29 Jun 13:57	29 Sep 14:17	27 Dec 02:40	04:59

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
550 BC	27 Mar 16:14	29 Jun 19:49	29 Sep 19:58	27 Dec 08:25	04:59
549 BC	26 Mar 22:03	29 Jun 01:38	29 Sep 01:48	26 Dec 14:17	04:59
548 BC	27 Mar 03:46	29 Jun 07:24	29 Sep 07:41	26 Dec 20:10	04:58
547 BC	27 Mar 09:35	29 Jun 13:12	29 Sep 13:24	27 Dec 01:46	04:58
546 BC	27 Mar 15:17	29 Jun 19:04	29 Sep 19:19	27 Dec 07:38	04:58
545 BC	26 Mar 21:11	29 Jun 00:47	29 Sep 01:03	26 Dec 13:28	04:58
544 BC	27 Mar 02:54	29 Jun 06:26	29 Sep 06:51	26 Dec 19:09	04:57
543 BC	27 Mar 08:29	29 Jun 12:16	29 Sep 12:48	27 Dec 01:07	04:57
542 BC	27 Mar 14:24	29 Jun 18:06	29 Sep 18:26	27 Dec 06:55	04:57
541 BC	26 Mar 20:14	28 Jun 23:50	29 Sep 00:15	26 Dec 12:47	04:57
540 BC	27 Mar 01:59	29 Jun 05:34	29 Sep 06:10	26 Dec 18:41	04:56
539 BC	27 Mar 07:54	29 Jun 11:23	29 Sep 11:55	27 Dec 00:22	04:56
538 BC	27 Mar 13:42	29 Jun 17:17	29 Sep 17:49	27 Dec 06:18	04:56
537 BC	26 Mar 19:38	28 Jun 23:06	28 Sep 23:34	26 Dec 12:13	04:56
536 BC	27 Mar 01:29	29 Jun 04:54	29 Sep 05:23	26 Dec 17:55	04:55
535 BC	27 Mar 07:08	29 Jun 10:50	29 Sep 11:23	26 Dec 23:51	04:55
534 BC	27 Mar 13:08	29 Jun 16:45	29 Sep 17:10	27 Dec 05:39	04:55
533 BC	26 Mar 18:59	28 Jun 22:31	28 Sep 23:03	26 Dec 11:30	04:55
532 BC	27 Mar 00:41	29 Jun 04:16	29 Sep 05:02	26 Dec 17:29	04:54
531 BC	27 Mar 06:34	29 Jun 10:07	29 Sep 10:47	26 Dec 23:14	04:54
530 BC	27 Mar 12:19	29 Jun 15:57	29 Sep 16:36	27 Dec 05:09	04:54
529 BC	26 Mar 18:14	28 Jun 21:43	28 Sep 22:22	26 Dec 11:03	04:54
528 BC	27 Mar 00:06	29 Jun 03:26	29 Sep 04:08	26 Dec 16:40	04:53
527 BC	27 Mar 05:44	29 Jun 09:15	29 Sep 10:03	26 Dec 22:32	04:53
526 BC	27 Mar 11:39	29 Jun 15:08	29 Sep 15:45	27 Dec 04:19	04:53
525 BC	26 Mar 17:26	28 Jun 20:51	28 Sep 21:28	26 Dec 10:05	04:53
524 BC	26 Mar 23:03	29 Jun 02:34	29 Sep 03:23	26 Dec 15:59	04:52
523 BC	27 Mar 04:55	29 Jun 08:26	29 Sep 09:07	26 Dec 21:38	04:52
522 BC	27 Mar 10:39	29 Jun 14:12	29 Sep 14:58	27 Dec 03:28	04:52
521 BC	26 Mar 16:31	28 Jun 19:58	28 Sep 20:50	26 Dec 09:24	04:52
520 BC	26 Mar 22:21	29 Jun 01:43	29 Sep 02:39	26 Dec 15:08	04:51
519 BC	27 Mar 03:59	29 Jun 07:34	29 Sep 08:35	26 Dec 21:07	04:51
518 BC	27 Mar 09:57	29 Jun 13:30	29 Sep 14:21	27 Dec 03:03	04:51
517 BC	26 Mar 15:55	28 Jun 19:17	28 Sep 20:10	26 Dec 08:53	04:51
516 BC	26 Mar 21:40	29 Jun 01:03	29 Sep 02:09	26 Dec 14:49	04:50
515 BC	27 Mar 03:39	29 Jun 07:00	29 Sep 07:58	26 Dec 20:34	04:50
514 BC	27 Mar 09:29	29 Jun 12:52	29 Sep 13:47	27 Dec 02:26	04:50
513 BC	26 Mar 15:19	28 Jun 18:40	28 Sep 19:36	26 Dec 08:22	04:50
512 BC	26 Mar 21:11	29 Jun 00:29	29 Sep 01:23	26 Dec 14:01	04:49
511 BC	27 Mar 02:47	29 Jun 06:18	29 Sep 07:17	26 Dec 19:50	04:49
510 BC	27 Mar 08:39	29 Jun 12:10	29 Sep 13:05	27 Dec 01:39	04:49
509 BC	26 Mar 14:30	28 Jun 17:52	28 Sep 18:53	26 Dec 07:26	04:49
508 BC	26 Mar 20:03	28 Jun 23:29	29 Sep 00:46	26 Dec 13:20	04:48
507 BC	27 Mar 01:53	29 Jun 05:20	29 Sep 06:30	26 Dec 19:09	04:48
506 BC	27 Mar 07:42	29 Jun 11:05	29 Sep 12:14	27 Dec 00:58	04:48
505 BC	26 Mar 13:31	28 Jun 16:48	28 Sep 18:01	26 Dec 06:52	04:48
504 BC	26 Mar 19:27	28 Jun 22:36	28 Sep 23:49	26 Dec 12:32	04:47
503 BC	27 Mar 01:08	29 Jun 04:24	29 Sep 05:41	26 Dec 18:22	04:47
502 BC	27 Mar 07:01	29 Jun 10:21	29 Sep 11:29	27 Dec 00:16	04:47
501 BC	26 Mar 12:58	28 Jun 16:11	28 Sep 17:16	26 Dec 06:04	04:47

Equinox and Solstice are in UT, $TT = UT + \Delta T$

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
500 BC	26 Mar 18:35	28 Jun 21:55	28 Sep 23:12	26 Dec 11:58	04:46
499 BC	27 Mar 00:30	29 Jun 03:55	29 Sep 05:06	26 Dec 17:46	04:46
498 BC	27 Mar 06:23	29 Jun 09:45	29 Sep 10:57	26 Dec 23:36	04:46
497 BC	26 Mar 12:11	28 Jun 15:30	28 Sep 16:51	26 Dec 05:35	04:46
496 BC	26 Mar 18:05	28 Jun 21:22	28 Sep 22:44	26 Dec 11:23	04:45
495 BC	26 Mar 23:45	29 Jun 03:09	29 Sep 04:34	26 Dec 17:16	04:45
494 BC	27 Mar 05:38	29 Jun 09:03	29 Sep 10:22	26 Dec 23:12	04:45
493 BC	26 Mar 11:36	28 Jun 14:49	28 Sep 16:09	26 Dec 04:58	04:44
492 BC	26 Mar 17:15	28 Jun 20:27	28 Sep 22:01	26 Dec 10:48	04:44
491 BC	26 Mar 23:07	29 Jun 02:22	29 Sep 03:50	26 Dec 16:34	04:44
490 BC	27 Mar 04:58	29 Jun 08:10	29 Sep 09:32	26 Dec 22:21	04:43
489 BC	26 Mar 10:42	28 Jun 13:51	28 Sep 15:17	26 Dec 04:13	04:43
488 BC	26 Mar 16:32	28 Jun 19:42	28 Sep 21:06	26 Dec 09:54	04:43
487 BC	26 Mar 22:11	29 Jun 01:27	29 Sep 02:55	26 Dec 15:38	04:43
486 BC	27 Mar 04:00	29 Jun 07:18	29 Sep 08:45	26 Dec 21:30	04:42
485 BC	26 Mar 09:54	28 Jun 13:06	28 Sep 14:35	26 Dec 03:20	04:42
484 BC	26 Mar 15:30	28 Jun 18:43	28 Sep 20:27	26 Dec 09:14	04:42
483 BC	26 Mar 21:20	29 Jun 00:41	29 Sep 02:19	26 Dec 15:08	04:41
482 BC	27 Mar 03:17	29 Jun 06:32	29 Sep 08:06	26 Dec 21:01	04:41
481 BC	26 Mar 09:08	28 Jun 12:14	28 Sep 13:56	26 Dec 02:55	04:41
480 BC	26 Mar 15:05	28 Jun 18:09	28 Sep 19:52	26 Dec 08:43	04:41
479 BC	26 Mar 20:53	29 Jun 00:00	29 Sep 01:42	26 Dec 14:32	04:40
478 BC	27 Mar 02:43	29 Jun 05:54	29 Sep 07:31	26 Dec 20:27	04:40
477 BC	26 Mar 08:41	28 Jun 11:49	28 Sep 13:22	26 Dec 02:18	04:40
476 BC	26 Mar 14:19	28 Jun 17:27	28 Sep 19:12	26 Dec 08:05	04:39
475 BC	26 Mar 20:06	28 Jun 23:23	29 Sep 01:06	26 Dec 13:53	04:39
474 BC	27 Mar 02:02	29 Jun 05:13	29 Sep 06:55	26 Dec 19:42	04:39
473 BC	26 Mar 07:45	28 Jun 10:48	28 Sep 12:40	26 Dec 01:34	04:38
472 BC	26 Mar 13:33	28 Jun 16:39	28 Sep 18:33	26 Dec 07:24	04:38
471 BC	26 Mar 19:16	28 Jun 22:25	29 Sep 00:17	26 Dec 13:11	04:38
470 BC	27 Mar 01:04	29 Jun 04:12	29 Sep 06:01	26 Dec 19:03	04:38
469 BC	26 Mar 07:02	28 Jun 10:03	28 Sep 11:51	26 Dec 00:51	04:37
468 BC	26 Mar 12:43	28 Jun 15:40	28 Sep 17:39	26 Dec 06:36	04:37
467 BC	26 Mar 18:30	28 Jun 21:36	28 Sep 23:30	26 Dec 12:25	04:37
466 BC	27 Mar 00:26	29 Jun 03:30	29 Sep 05:18	26 Dec 18:17	04:36
465 BC	26 Mar 06:10	28 Jun 09:09	28 Sep 11:02	26 Dec 00:07	04:36
464 BC	26 Mar 11:59	28 Jun 15:04	28 Sep 16:59	26 Dec 05:55	04:36
463 BC	26 Mar 17:47	28 Jun 20:56	28 Sep 22:51	26 Dec 11:42	04:36
462 BC	26 Mar 23:36	29 Jun 02:44	29 Sep 04:41	26 Dec 17:35	04:35
461 BC	26 Mar 05:31	28 Jun 08:37	28 Sep 10:38	25 Dec 23:31	04:35
460 BC	26 Mar 11:12	28 Jun 14:16	28 Sep 16:28	26 Dec 05:25	04:35
459 BC	26 Mar 17:01	28 Jun 20:11	28 Sep 22:20	26 Dec 11:19	04:34
458 BC	26 Mar 23:00	29 Jun 02:06	29 Sep 04:09	26 Dec 17:14	04:34
457 BC	26 Mar 04:52	28 Jun 07:43	28 Sep 09:53	25 Dec 23:02	04:34
456 BC	26 Mar 10:43	28 Jun 13:36	28 Sep 15:49	26 Dec 04:49	04:34
455 BC	26 Mar 16:32	28 Jun 19:28	28 Sep 21:36	26 Dec 10:36	04:33
454 BC	26 Mar 22:19	29 Jun 01:14	29 Sep 03:17	26 Dec 16:25	04:33
453 BC	26 Mar 04:10	28 Jun 07:07	28 Sep 09:09	25 Dec 22:15	04:33
452 BC	26 Mar 09:49	28 Jun 12:47	28 Sep 14:56	26 Dec 03:58	04:33
451 BC	26 Mar 15:33	28 Jun 18:38	28 Sep 20:46	26 Dec 09:42	04:32

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
450 BC	26 Mar 21:26	29 Jun 00:30	29 Sep 02:39	26 Dec 15:36	04:32
449 BC	26 Mar 03:11	28 Jun 06:03	28 Sep 08:22	25 Dec 21:24	04:32
448 BC	26 Mar 08:53	28 Jun 11:53	28 Sep 14:17	26 Dec 03:16	04:31
447 BC	26 Mar 14:42	28 Jun 17:46	28 Sep 20:05	26 Dec 09:09	04:31
446 BC	26 Mar 20:33	28 Jun 23:29	29 Sep 01:47	26 Dec 14:58	04:31
445 BC	26 Mar 02:29	28 Jun 05:22	28 Sep 07:45	25 Dec 20:53	04:31
444 BC	26 Mar 08:18	28 Jun 11:06	28 Sep 13:35	26 Dec 02:41	04:30
443 BC	26 Mar 14:06	28 Jun 17:00	28 Sep 19:24	26 Dec 08:31	04:30
442 BC	26 Mar 20:04	28 Jun 23:01	29 Sep 01:19	26 Dec 14:30	04:30
441 BC	26 Mar 01:55	28 Jun 04:40	28 Sep 07:02	25 Dec 20:17	04:29
440 BC	26 Mar 07:41	28 Jun 10:34	28 Sep 12:59	26 Dec 02:05	04:29
439 BC	26 Mar 13:31	28 Jun 16:30	28 Sep 18:53	26 Dec 07:55	04:29
438 BC	26 Mar 19:21	28 Jun 22:13	29 Sep 00:36	26 Dec 13:42	04:29
437 BC	26 Mar 01:10	28 Jun 04:03	28 Sep 06:34	25 Dec 19:38	04:28
436 BC	26 Mar 06:52	28 Jun 09:46	28 Sep 12:22	26 Dec 01:29	04:28
435 BC	26 Mar 12:37	28 Jun 15:34	28 Sep 18:06	26 Dec 07:16	04:28
434 BC	26 Mar 18:32	28 Jun 21:28	28 Sep 23:58	26 Dec 13:11	04:28
433 BC	26 Mar 00:24	28 Jun 03:03	28 Sep 05:39	25 Dec 18:54	04:27
432 BC	26 Mar 06:08	28 Jun 08:51	28 Sep 11:31	26 Dec 00:38	04:27
431 BC	26 Mar 11:54	28 Jun 14:46	28 Sep 17:21	26 Dec 06:30	04:27
430 BC	26 Mar 17:44	28 Jun 20:28	28 Sep 22:59	26 Dec 12:15	04:27
429 BC	25 Mar 23:30	28 Jun 02:19	28 Sep 04:53	25 Dec 18:07	04:26
428 BC	26 Mar 05:13	28 Jun 08:04	28 Sep 10:44	25 Dec 23:55	04:26
427 BC	26 Mar 11:01	28 Jun 13:53	28 Sep 16:33	26 Dec 05:39	04:26
426 BC	26 Mar 16:54	28 Jun 19:49	28 Sep 22:31	26 Dec 11:40	04:25
425 BC	25 Mar 22:46	28 Jun 01:28	28 Sep 04:17	25 Dec 17:32	04:25
424 BC	26 Mar 04:31	28 Jun 07:18	28 Sep 10:11	25 Dec 23:24	04:25
423 BC	26 Mar 10:23	28 Jun 13:18	28 Sep 16:05	26 Dec 05:22	04:25
422 BC	26 Mar 16:22	28 Jun 19:02	28 Sep 21:46	26 Dec 11:09	04:24
421 BC	25 Mar 22:14	28 Jun 00:53	28 Sep 03:44	25 Dec 17:02	04:24
420 BC	26 Mar 04:02	28 Jun 06:43	28 Sep 09:37	25 Dec 22:53	04:24
419 BC	26 Mar 09:52	28 Jun 12:33	28 Sep 15:20	26 Dec 04:36	04:24
418 BC	26 Mar 15:42	28 Jun 18:30	28 Sep 21:14	26 Dec 10:34	04:23
417 BC	25 Mar 21:32	28 Jun 00:10	28 Sep 02:57	25 Dec 16:19	04:23
416 BC	26 Mar 03:13	28 Jun 05:54	28 Sep 08:47	25 Dec 21:59	04:23
415 BC	26 Mar 08:57	28 Jun 11:49	28 Sep 14:43	26 Dec 03:51	04:23
414 BC	26 Mar 14:48	28 Jun 17:28	28 Sep 20:21	26 Dec 09:34	04:22
413 BC	25 Mar 20:30	27 Jun 23:12	28 Sep 02:14	25 Dec 15:29	04:22
412 BC	26 Mar 02:12	28 Jun 04:58	28 Sep 08:05	25 Dec 21:23	04:22
411 BC	26 Mar 08:01	28 Jun 10:44	28 Sep 13:44	26 Dec 03:07	04:21
410 BC	26 Mar 13:54	28 Jun 16:37	28 Sep 19:40	26 Dec 09:05	04:21
409 BC	25 Mar 19:51	27 Jun 22:19	28 Sep 01:26	25 Dec 14:54	04:21
408 BC	26 Mar 01:39	28 Jun 04:07	28 Sep 07:16	25 Dec 20:37	04:21
407 BC	26 Mar 07:27	28 Jun 10:08	28 Sep 13:13	26 Dec 02:35	04:20
406 BC	26 Mar 13:25	28 Jun 15:58	28 Sep 18:53	26 Dec 08:23	04:20
405 BC	25 Mar 19:12	27 Jun 21:48	28 Sep 00:49	25 Dec 14:13	04:20
404 BC	26 Mar 00:57	28 Jun 03:41	28 Sep 06:48	25 Dec 20:07	04:20
403 BC	26 Mar 06:50	28 Jun 09:31	28 Sep 12:35	26 Dec 01:50	04:19
402 BC	26 Mar 12:39	28 Jun 15:24	28 Sep 18:34	26 Dec 07:50	04:19
401 BC	25 Mar 18:30	27 Jun 21:05	28 Sep 00:21	25 Dec 13:45	04:19

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
400 BC	26 Mar 00:15	28 Jun 02:49	28 Sep 06:08	25 Dec 19:29	04:19
399 BC	26 Mar 05:59	28 Jun 08:44	28 Sep 12:01	26 Dec 01:25	04:18
398 BC	26 Mar 11:58	28 Jun 14:28	28 Sep 17:40	26 Dec 07:10	04:18
397 BC	25 Mar 17:45	27 Jun 20:09	27 Sep 23:29	25 Dec 12:54	04:18
396 BC	25 Mar 23:25	28 Jun 01:58	28 Sep 05:22	25 Dec 18:48	04:18
395 BC	26 Mar 05:17	28 Jun 07:47	28 Sep 11:01	26 Dec 00:28	04:17
394 BC	26 Mar 11:02	28 Jun 13:37	28 Sep 16:51	26 Dec 06:22	04:17
393 BC	25 Mar 16:51	27 Jun 19:20	27 Sep 22:39	25 Dec 12:13	04:17
392 BC	25 Mar 22:38	28 Jun 01:05	28 Sep 04:26	25 Dec 17:50	04:17
391 BC	26 Mar 04:20	28 Jun 07:00	28 Sep 10:25	25 Dec 23:46	04:16
390 BC	26 Mar 10:18	28 Jun 12:47	28 Sep 16:09	26 Dec 05:36	04:16
389 BC	25 Mar 16:05	27 Jun 18:32	27 Sep 22:01	25 Dec 11:28	04:16
388 BC	25 Mar 21:45	28 Jun 00:24	28 Sep 03:59	25 Dec 17:29	04:16
387 BC	26 Mar 03:44	28 Jun 06:18	28 Sep 09:43	25 Dec 23:15	04:15
386 BC	26 Mar 09:38	28 Jun 12:09	28 Sep 15:38	26 Dec 05:12	04:15
385 BC	25 Mar 15:33	27 Jun 17:56	27 Sep 21:32	25 Dec 11:07	04:15
384 BC	25 Mar 21:25	27 Jun 23:44	28 Sep 03:18	25 Dec 16:47	04:15
383 BC	26 Mar 03:09	28 Jun 05:41	28 Sep 09:14	25 Dec 22:44	04:14
382 BC	26 Mar 09:05	28 Jun 11:30	28 Sep 14:54	26 Dec 04:33	04:14
381 BC	25 Mar 14:51	27 Jun 17:13	27 Sep 20:42	25 Dec 10:16	04:14
380 BC	25 Mar 20:28	27 Jun 23:02	28 Sep 02:40	25 Dec 16:08	04:13
379 BC	26 Mar 02:21	28 Jun 04:51	28 Sep 08:23	25 Dec 21:49	04:13
378 BC	26 Mar 08:08	28 Jun 10:35	28 Sep 14:14	26 Dec 03:43	04:13
377 BC	25 Mar 13:51	27 Jun 16:17	27 Sep 20:04	25 Dec 09:40	04:13
376 BC	25 Mar 19:40	27 Jun 22:02	28 Sep 01:46	25 Dec 15:21	04:12
375 BC	26 Mar 01:23	28 Jun 03:52	28 Sep 07:37	25 Dec 21:14	04:12
374 BC	26 Mar 07:22	28 Jun 09:40	28 Sep 13:21	26 Dec 03:04	04:12
373 BC	25 Mar 13:14	27 Jun 15:23	27 Sep 19:09	25 Dec 08:46	04:12
372 BC	25 Mar 18:52	27 Jun 21:15	28 Sep 01:06	25 Dec 14:42	04:11
371 BC	26 Mar 00:48	28 Jun 03:12	28 Sep 06:50	25 Dec 20:29	04:11
370 BC	26 Mar 06:39	28 Jun 09:02	28 Sep 12:42	26 Dec 02:22	04:11
369 BC	25 Mar 12:25	27 Jun 14:49	27 Sep 18:38	25 Dec 08:18	04:11
368 BC	25 Mar 18:19	27 Jun 20:40	28 Sep 00:28	25 Dec 13:59	04:11
367 BC	26 Mar 00:02	28 Jun 02:31	28 Sep 06:25	25 Dec 19:54	04:10
366 BC	26 Mar 05:58	28 Jun 08:20	28 Sep 12:14	26 Dec 01:52	04:10
365 BC	25 Mar 11:49	27 Jun 14:03	27 Sep 18:01	25 Dec 07:39	04:10
364 BC	25 Mar 17:25	27 Jun 19:52	27 Sep 23:56	25 Dec 13:37	04:10
363 BC	25 Mar 23:25	28 Jun 01:47	28 Sep 05:40	25 Dec 19:24	04:09
362 BC	26 Mar 05:19	28 Jun 07:31	28 Sep 11:28	26 Dec 01:12	04:09
361 BC	25 Mar 11:04	27 Jun 13:14	27 Sep 17:20	25 Dec 07:06	04:09
360 BC	25 Mar 16:57	27 Jun 19:05	27 Sep 23:04	25 Dec 12:45	04:09
359 BC	25 Mar 22:37	28 Jun 00:54	28 Sep 04:52	25 Dec 18:35	04:08
358 BC	26 Mar 04:29	28 Jun 06:43	28 Sep 10:36	26 Dec 00:26	04:08
357 BC	25 Mar 10:18	27 Jun 12:27	27 Sep 16:22	25 Dec 06:04	04:08
356 BC	25 Mar 15:51	27 Jun 18:12	27 Sep 22:19	25 Dec 11:56	04:08
355 BC	25 Mar 21:45	28 Jun 00:07	28 Sep 04:07	25 Dec 17:44	04:07
354 BC	26 Mar 03:35	28 Jun 05:51	28 Sep 09:56	25 Dec 23:36	04:07
353 BC	25 Mar 09:16	27 Jun 11:33	27 Sep 15:51	25 Dec 05:37	04:07
352 BC	25 Mar 15:10	27 Jun 17:26	27 Sep 21:38	25 Dec 11:23	04:07
351 BC	25 Mar 20:59	27 Jun 23:16	28 Sep 03:30	25 Dec 17:16	04:06

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
350 BC	26 Mar 02:57	28 Jun 05:05	28 Sep 09:19	25 Dec 23:11	04:06
349 BC	25 Mar 08:54	27 Jun 10:53	27 Sep 15:08	25 Dec 04:56	04:06
348 BC	25 Mar 14:33	27 Jun 16:43	27 Sep 21:03	25 Dec 10:51	04:06
347 BC	25 Mar 20:29	27 Jun 22:43	28 Sep 02:51	25 Dec 16:42	04:05
346 BC	26 Mar 02:24	28 Jun 04:32	28 Sep 08:38	25 Dec 22:30	04:05
345 BC	25 Mar 08:05	27 Jun 10:15	27 Sep 14:33	25 Dec 04:23	04:05
344 BC	25 Mar 13:58	27 Jun 16:08	27 Sep 20:24	25 Dec 10:05	04:05
343 BC	25 Mar 19:42	27 Jun 21:54	28 Sep 02:13	25 Dec 15:53	04:04
342 BC	26 Mar 01:30	28 Jun 03:39	28 Sep 08:01	25 Dec 21:50	04:04
341 BC	25 Mar 07:20	27 Jun 09:24	27 Sep 13:47	25 Dec 03:35	04:04
340 BC	25 Mar 12:55	27 Jun 15:07	27 Sep 19:36	25 Dec 09:27	04:04
339 BC	25 Mar 18:48	27 Jun 21:01	28 Sep 01:22	25 Dec 15:16	04:03
338 BC	26 Mar 00:46	28 Jun 02:46	28 Sep 07:09	25 Dec 21:01	04:03
337 BC	25 Mar 06:26	27 Jun 08:25	27 Sep 13:00	25 Dec 02:54	04:03
336 BC	25 Mar 12:18	27 Jun 14:21	27 Sep 18:49	25 Dec 08:40	04:03
335 BC	25 Mar 18:03	27 Jun 20:10	28 Sep 00:34	25 Dec 14:27	04:03
334 BC	25 Mar 23:52	28 Jun 01:57	28 Sep 06:23	25 Dec 20:23	04:02
333 BC	25 Mar 05:47	27 Jun 07:48	27 Sep 12:15	25 Dec 02:07	04:02
332 BC	25 Mar 11:25	27 Jun 13:33	27 Sep 18:09	25 Dec 07:58	04:02
331 BC	25 Mar 17:19	27 Jun 19:30	28 Sep 00:04	25 Dec 13:53	04:02
330 BC	25 Mar 23:17	28 Jun 01:20	28 Sep 05:54	25 Dec 19:47	04:01
329 BC	25 Mar 04:58	27 Jun 07:00	27 Sep 11:46	25 Dec 01:46	04:01
328 BC	25 Mar 10:53	27 Jun 12:57	27 Sep 17:37	25 Dec 07:36	04:01
327 BC	25 Mar 16:47	27 Jun 18:47	27 Sep 23:25	25 Dec 13:23	04:01
326 BC	25 Mar 22:39	28 Jun 00:32	28 Sep 05:13	25 Dec 19:16	04:00
325 BC	25 Mar 04:34	27 Jun 06:24	27 Sep 11:03	25 Dec 01:01	04:00
324 BC	25 Mar 10:11	27 Jun 12:09	27 Sep 16:51	25 Dec 06:48	04:00
323 BC	25 Mar 15:59	27 Jun 18:04	27 Sep 22:38	25 Dec 12:38	04:00
322 BC	25 Mar 21:54	27 Jun 23:53	28 Sep 04:24	25 Dec 18:24	03:59
321 BC	25 Mar 03:30	27 Jun 05:28	27 Sep 10:14	25 Dec 00:12	03:59
320 BC	25 Mar 09:17	27 Jun 11:20	27 Sep 16:07	25 Dec 05:57	03:59
319 BC	25 Mar 15:05	27 Jun 17:07	27 Sep 21:54	25 Dec 11:45	03:59
318 BC	25 Mar 20:50	27 Jun 22:46	28 Sep 03:39	25 Dec 17:40	03:59
317 BC	25 Mar 02:40	27 Jun 04:36	27 Sep 09:29	24 Dec 23:32	03:58
316 BC	25 Mar 08:22	27 Jun 10:20	27 Sep 15:17	25 Dec 05:21	03:58
315 BC	25 Mar 14:15	27 Jun 16:14	27 Sep 21:07	25 Dec 11:13	03:58
314 BC	25 Mar 20:19	27 Jun 22:08	28 Sep 02:59	25 Dec 17:05	03:58
313 BC	25 Mar 02:03	27 Jun 03:47	27 Sep 08:49	24 Dec 22:57	03:57
312 BC	25 Mar 07:54	27 Jun 09:48	27 Sep 14:44	25 Dec 04:48	03:57
311 BC	25 Mar 13:49	27 Jun 15:44	27 Sep 20:33	25 Dec 10:38	03:57
310 BC	25 Mar 19:37	27 Jun 21:28	28 Sep 02:19	25 Dec 16:30	03:57
309 BC	25 Mar 01:30	27 Jun 03:22	27 Sep 08:16	24 Dec 22:17	03:56
308 BC	25 Mar 07:12	27 Jun 09:08	27 Sep 14:08	25 Dec 04:03	03:56
307 BC	25 Mar 12:58	27 Jun 14:58	27 Sep 19:59	25 Dec 09:56	03:56
306 BC	25 Mar 18:53	27 Jun 20:49	28 Sep 01:49	25 Dec 15:52	03:56
305 BC	25 Mar 00:32	27 Jun 02:22	27 Sep 07:33	24 Dec 21:42	03:56
304 BC	25 Mar 06:19	27 Jun 08:14	27 Sep 13:24	25 Dec 03:31	03:55
303 BC	25 Mar 12:13	27 Jun 14:04	27 Sep 19:09	25 Dec 09:16	03:55
302 BC	25 Mar 18:02	27 Jun 19:39	28 Sep 00:50	25 Dec 15:04	03:55
301 BC	24 Mar 23:51	27 Jun 01:31	27 Sep 06:42	24 Dec 20:52	03:55

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
300 BC	25 Mar 05:33	27 Jun 07:18	27 Sep 12:27	25 Dec 02:37	03:54
299 BC	25 Mar 11:20	27 Jun 13:09	27 Sep 18:13	25 Dec 08:26	03:54
298 BC	25 Mar 17:15	27 Jun 19:04	28 Sep 00:06	25 Dec 14:19	03:54
297 BC	24 Mar 22:58	27 Jun 00:41	27 Sep 05:55	24 Dec 20:06	03:54
296 BC	25 Mar 04:44	27 Jun 06:35	27 Sep 11:53	25 Dec 01:56	03:54
295 BC	25 Mar 10:40	27 Jun 12:31	27 Sep 17:46	25 Dec 07:51	03:53
294 BC	25 Mar 16:29	27 Jun 18:11	27 Sep 23:30	25 Dec 13:46	03:53
293 BC	24 Mar 22:19	27 Jun 00:05	27 Sep 05:27	24 Dec 19:41	03:53
292 BC	25 Mar 04:09	27 Jun 05:57	27 Sep 11:17	25 Dec 01:31	03:53
291 BC	25 Mar 10:02	27 Jun 11:47	27 Sep 17:05	25 Dec 07:20	03:52
290 BC	25 Mar 16:01	27 Jun 17:42	27 Sep 23:00	25 Dec 13:15	03:52
289 BC	24 Mar 21:46	26 Jun 23:21	27 Sep 04:47	24 Dec 19:02	03:52
288 BC	25 Mar 03:30	27 Jun 05:14	27 Sep 10:37	25 Dec 00:50	03:52
287 BC	25 Mar 09:22	27 Jun 11:09	27 Sep 16:26	25 Dec 06:41	03:51
286 BC	25 Mar 15:09	27 Jun 16:44	27 Sep 22:05	25 Dec 12:24	03:51
285 BC	24 Mar 20:53	26 Jun 22:32	27 Sep 03:59	24 Dec 18:10	03:51
284 BC	25 Mar 02:37	27 Jun 04:20	27 Sep 09:49	24 Dec 23:56	03:51
283 BC	25 Mar 08:22	27 Jun 10:03	27 Sep 15:32	25 Dec 05:44	03:51
282 BC	25 Mar 14:12	27 Jun 15:55	27 Sep 21:26	25 Dec 11:43	03:50
281 BC	24 Mar 19:55	26 Jun 21:32	27 Sep 03:09	24 Dec 17:32	03:50
280 BC	25 Mar 01:42	27 Jun 03:22	27 Sep 09:00	24 Dec 23:19	03:50
279 BC	25 Mar 07:39	27 Jun 09:19	27 Sep 14:53	25 Dec 05:13	03:50
278 BC	25 Mar 13:34	27 Jun 14:58	27 Sep 20:34	25 Dec 11:00	03:49
277 BC	24 Mar 19:22	26 Jun 20:52	27 Sep 02:31	24 Dec 16:52	03:49
276 BC	25 Mar 01:10	27 Jun 02:49	27 Sep 08:23	24 Dec 22:43	03:49
275 BC	25 Mar 07:01	27 Jun 08:38	27 Sep 14:07	25 Dec 04:31	03:49
274 BC	25 Mar 12:54	27 Jun 14:35	27 Sep 20:07	25 Dec 10:28	03:49
273 BC	24 Mar 18:41	26 Jun 20:16	27 Sep 01:58	24 Dec 16:15	03:48
272 BC	25 Mar 00:26	27 Jun 02:06	27 Sep 07:52	24 Dec 22:03	03:48
271 BC	25 Mar 06:18	27 Jun 08:01	27 Sep 13:47	25 Dec 04:01	03:48
270 BC	25 Mar 12:08	27 Jun 13:37	27 Sep 19:25	25 Dec 09:52	03:48
269 BC	24 Mar 17:53	26 Jun 19:24	27 Sep 01:16	24 Dec 15:42	03:48
268 BC	24 Mar 23:41	27 Jun 01:16	27 Sep 07:05	24 Dec 21:31	03:47
267 BC	25 Mar 05:35	27 Jun 07:00	27 Sep 12:45	25 Dec 03:13	03:47
266 BC	25 Mar 11:26	27 Jun 12:51	27 Sep 18:39	25 Dec 09:07	03:47
265 BC	24 Mar 17:11	26 Jun 18:33	27 Sep 00:25	24 Dec 14:53	03:47
264 BC	24 Mar 22:54	27 Jun 00:22	27 Sep 06:10	24 Dec 20:36	03:46
263 BC	25 Mar 04:42	27 Jun 06:19	27 Sep 12:03	25 Dec 02:30	03:46
262 BC	25 Mar 10:34	27 Jun 11:58	27 Sep 17:44	25 Dec 08:14	03:46
261 BC	24 Mar 16:17	26 Jun 17:44	26 Sep 23:40	24 Dec 14:00	03:46
260 BC	24 Mar 22:02	26 Jun 23:39	27 Sep 05:36	24 Dec 19:55	03:46
259 BC	25 Mar 03:54	27 Jun 05:24	27 Sep 11:19	25 Dec 01:43	03:45
258 BC	25 Mar 09:43	27 Jun 11:16	27 Sep 17:16	25 Dec 07:45	03:45
257 BC	24 Mar 15:32	26 Jun 17:02	26 Sep 23:07	24 Dec 13:40	03:45
256 BC	24 Mar 21:23	26 Jun 22:50	27 Sep 04:55	24 Dec 19:24	03:45
255 BC	25 Mar 03:18	27 Jun 04:48	27 Sep 10:53	25 Dec 01:23	03:44
254 BC	25 Mar 09:18	27 Jun 10:31	27 Sep 16:35	25 Dec 07:11	03:44
253 BC	24 Mar 15:02	26 Jun 16:18	26 Sep 22:26	24 Dec 12:58	03:44
252 BC	24 Mar 20:48	26 Jun 22:17	27 Sep 04:20	24 Dec 18:52	03:44
251 BC	25 Mar 02:42	27 Jun 04:03	27 Sep 09:59	25 Dec 00:34	03:44

Equinox and Solstice are in UT, $TT = UT + \Delta T$

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
250 BC	25 Mar 08:28	27 Jun 09:53	27 Sep 15:53	25 Dec 06:26	03:43
249 BC	24 Mar 14:12	26 Jun 15:36	26 Sep 21:45	24 Dec 12:14	03:43
248 BC	24 Mar 19:58	26 Jun 21:20	27 Sep 03:31	24 Dec 17:55	03:43
247 BC	25 Mar 01:43	27 Jun 03:13	27 Sep 09:26	24 Dec 23:53	03:43
246 BC	25 Mar 07:35	27 Jun 08:52	27 Sep 15:04	25 Dec 05:44	03:43
245 BC	24 Mar 13:18	26 Jun 14:34	26 Sep 20:52	24 Dec 11:28	03:42
244 BC	24 Mar 19:03	26 Jun 20:29	27 Sep 02:47	24 Dec 17:22	03:42
243 BC	25 Mar 01:01	27 Jun 02:14	27 Sep 08:27	24 Dec 23:04	03:42
242 BC	25 Mar 06:50	27 Jun 08:03	27 Sep 14:21	25 Dec 04:58	03:42
241 BC	24 Mar 12:35	26 Jun 13:52	26 Sep 20:13	24 Dec 10:52	03:41
240 BC	24 Mar 18:25	26 Jun 19:42	27 Sep 01:58	24 Dec 16:35	03:41
239 BC	25 Mar 00:13	27 Jun 01:39	27 Sep 07:55	24 Dec 22:33	03:41
238 BC	25 Mar 06:10	27 Jun 07:23	27 Sep 13:41	25 Dec 04:23	03:41
237 BC	24 Mar 11:58	26 Jun 13:09	26 Sep 19:34	24 Dec 10:07	03:41
236 BC	24 Mar 17:41	26 Jun 19:06	27 Sep 01:35	24 Dec 16:05	03:40
235 BC	24 Mar 23:38	27 Jun 00:55	27 Sep 07:17	24 Dec 21:55	03:40
234 BC	25 Mar 05:26	27 Jun 06:41	27 Sep 13:08	25 Dec 03:52	03:40
233 BC	24 Mar 11:11	26 Jun 12:29	26 Sep 19:02	24 Dec 09:47	03:40
232 BC	24 Mar 17:06	26 Jun 18:17	27 Sep 00:45	24 Dec 15:26	03:40
231 BC	24 Mar 22:56	27 Jun 00:09	27 Sep 06:39	24 Dec 21:20	03:39
230 BC	25 Mar 04:50	27 Jun 05:53	27 Sep 12:21	25 Dec 03:10	03:39
229 BC	24 Mar 10:35	26 Jun 11:36	26 Sep 18:06	24 Dec 08:48	03:39
228 BC	24 Mar 16:12	26 Jun 17:31	27 Sep 00:00	24 Dec 14:42	03:39
227 BC	24 Mar 22:07	26 Jun 23:19	27 Sep 05:40	24 Dec 20:24	03:39
226 BC	25 Mar 03:51	27 Jun 05:02	27 Sep 11:30	25 Dec 02:11	03:38
225 BC	24 Mar 09:30	26 Jun 10:47	26 Sep 17:29	24 Dec 08:06	03:38
224 BC	24 Mar 15:21	26 Jun 16:34	26 Sep 23:13	24 Dec 13:47	03:38
223 BC	24 Mar 21:05	26 Jun 22:23	27 Sep 05:06	24 Dec 19:48	03:38
222 BC	25 Mar 03:00	27 Jun 04:08	27 Sep 10:52	25 Dec 01:46	03:38
221 BC	24 Mar 08:51	26 Jun 09:53	26 Sep 16:38	24 Dec 07:28	03:37
220 BC	24 Mar 14:37	26 Jun 15:49	26 Sep 22:38	24 Dec 13:25	03:37
219 BC	24 Mar 20:41	26 Jun 21:42	27 Sep 04:22	24 Dec 19:14	03:37
218 BC	25 Mar 02:33	27 Jun 03:30	27 Sep 10:13	25 Dec 01:05	03:37
217 BC	24 Mar 08:15	26 Jun 09:22	26 Sep 16:11	24 Dec 07:03	03:36
216 BC	24 Mar 14:10	26 Jun 15:16	26 Sep 21:55	24 Dec 12:45	03:36
215 BC	24 Mar 19:58	26 Jun 21:08	27 Sep 03:48	24 Dec 18:37	03:36
214 BC	25 Mar 01:49	27 Jun 02:53	27 Sep 09:38	25 Dec 00:30	03:36
213 BC	24 Mar 07:38	26 Jun 08:36	26 Sep 15:26	24 Dec 06:08	03:36
212 BC	24 Mar 13:15	26 Jun 14:27	26 Sep 21:22	24 Dec 12:02	03:35
211 BC	24 Mar 19:08	26 Jun 20:15	27 Sep 03:04	24 Dec 17:54	03:35
210 BC	25 Mar 00:55	27 Jun 01:56	27 Sep 08:48	24 Dec 23:42	03:35
209 BC	24 Mar 06:32	26 Jun 07:39	26 Sep 14:42	24 Dec 05:36	03:35
208 BC	24 Mar 12:28	26 Jun 13:29	26 Sep 20:26	24 Dec 11:17	03:35
207 BC	24 Mar 18:18	26 Jun 19:15	27 Sep 02:14	24 Dec 17:07	03:34
206 BC	25 Mar 00:07	27 Jun 00:59	27 Sep 08:01	24 Dec 23:03	03:34
205 BC	24 Mar 05:59	26 Jun 06:48	26 Sep 13:46	24 Dec 04:43	03:34
204 BC	24 Mar 11:38	26 Jun 12:41	26 Sep 19:40	24 Dec 10:36	03:34
203 BC	24 Mar 17:36	26 Jun 18:36	27 Sep 01:27	24 Dec 16:27	03:34
202 BC	24 Mar 23:28	27 Jun 00:22	27 Sep 07:18	24 Dec 22:13	03:33
201 BC	24 Mar 05:06	26 Jun 06:10	26 Sep 13:20	24 Dec 04:10	03:33

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
200 BC	24 Mar 11:03	26 Jun 12:06	26 Sep 19:11	24 Dec 10:00	03:33
199 BC	24 Mar 16:53	26 Jun 17:55	27 Sep 01:01	24 Dec 15:57	03:33
198 BC	24 Mar 22:43	26 Jun 23:40	27 Sep 06:52	24 Dec 21:57	03:33
197 BC	24 Mar 04:39	26 Jun 05:30	26 Sep 12:39	24 Dec 03:38	03:32
196 BC	24 Mar 10:23	26 Jun 11:19	26 Sep 18:32	24 Dec 09:29	03:32
195 BC	24 Mar 16:20	26 Jun 17:12	27 Sep 00:19	24 Dec 15:20	03:32
194 BC	24 Mar 22:12	26 Jun 22:57	27 Sep 06:03	24 Dec 21:04	03:32
193 BC	24 Mar 03:45	26 Jun 04:41	26 Sep 11:58	24 Dec 02:57	03:32
192 BC	24 Mar 09:37	26 Jun 10:35	26 Sep 17:41	24 Dec 08:40	03:31
191 BC	24 Mar 15:23	26 Jun 16:19	26 Sep 23:26	24 Dec 14:26	03:31
190 BC	24 Mar 21:08	26 Jun 21:59	27 Sep 05:17	24 Dec 20:19	03:31
189 BC	24 Mar 02:58	26 Jun 03:45	26 Sep 11:05	24 Dec 01:59	03:31
188 BC	24 Mar 08:37	26 Jun 09:32	26 Sep 16:56	24 Dec 07:51	03:31
187 BC	24 Mar 14:28	26 Jun 15:22	26 Sep 22:42	24 Dec 13:48	03:30
186 BC	24 Mar 20:23	26 Jun 21:09	27 Sep 04:27	24 Dec 19:37	03:30
185 BC	24 Mar 02:02	26 Jun 02:53	26 Sep 10:23	24 Dec 01:31	03:30
184 BC	24 Mar 08:01	26 Jun 08:51	26 Sep 16:15	24 Dec 07:19	03:30
183 BC	24 Mar 13:58	26 Jun 14:42	26 Sep 22:04	24 Dec 13:10	03:30
182 BC	24 Mar 19:46	26 Jun 20:27	27 Sep 03:56	24 Dec 19:09	03:29
181 BC	24 Mar 01:41	26 Jun 02:23	26 Sep 09:47	24 Dec 00:54	03:29
180 BC	24 Mar 07:24	26 Jun 08:15	26 Sep 15:38	24 Dec 06:43	03:29
179 BC	24 Mar 13:17	26 Jun 14:08	26 Sep 21:28	24 Dec 12:37	03:29
178 BC	24 Mar 19:12	26 Jun 19:56	27 Sep 03:19	24 Dec 18:22	03:29
177 BC	24 Mar 00:46	26 Jun 01:35	26 Sep 09:14	24 Dec 00:13	03:28
176 BC	24 Mar 06:36	26 Jun 07:30	26 Sep 15:04	24 Dec 06:05	03:28
175 BC	24 Mar 12:28	26 Jun 13:15	26 Sep 20:48	24 Dec 11:56	03:28
174 BC	24 Mar 18:10	26 Jun 18:52	27 Sep 02:33	24 Dec 17:51	03:28
173 BC	24 Mar 00:05	26 Jun 00:43	26 Sep 08:21	23 Dec 23:34	03:28
172 BC	24 Mar 05:50	26 Jun 06:28	26 Sep 14:08	24 Dec 05:18	03:27
171 BC	24 Mar 11:42	26 Jun 12:17	26 Sep 19:54	24 Dec 11:10	03:27
170 BC	24 Mar 17:36	26 Jun 18:07	27 Sep 01:40	24 Dec 16:55	03:27
169 BC	23 Mar 23:10	25 Jun 23:49	26 Sep 07:30	23 Dec 22:44	03:27
168 BC	24 Mar 05:00	26 Jun 05:48	26 Sep 13:21	24 Dec 04:33	03:27
167 BC	24 Mar 10:55	26 Jun 11:38	26 Sep 19:10	24 Dec 10:21	03:26
166 BC	24 Mar 16:39	26 Jun 17:17	27 Sep 01:03	24 Dec 16:15	03:26
165 BC	23 Mar 22:31	25 Jun 23:12	26 Sep 07:00	23 Dec 22:04	03:26
164 BC	24 Mar 04:17	26 Jun 05:01	26 Sep 12:50	24 Dec 03:57	03:26
163 BC	24 Mar 10:07	26 Jun 10:50	26 Sep 18:39	24 Dec 09:57	03:26
162 BC	24 Mar 16:05	26 Jun 16:42	27 Sep 00:29	24 Dec 15:49	03:25
161 BC	23 Mar 21:47	25 Jun 22:24	26 Sep 06:22	23 Dec 21:39	03:25
160 BC	24 Mar 03:42	26 Jun 04:20	26 Sep 12:14	24 Dec 03:29	03:25
159 BC	24 Mar 09:41	26 Jun 10:12	26 Sep 18:00	24 Dec 09:19	03:25
158 BC	24 Mar 15:25	26 Jun 15:50	26 Sep 23:46	24 Dec 15:11	03:25
157 BC	23 Mar 21:13	25 Jun 21:45	26 Sep 05:37	23 Dec 20:56	03:24
156 BC	24 Mar 02:59	26 Jun 03:34	26 Sep 11:22	24 Dec 02:40	03:24
155 BC	24 Mar 08:46	26 Jun 09:19	26 Sep 17:08	24 Dec 08:29	03:24
154 BC	24 Mar 14:38	26 Jun 15:08	26 Sep 22:59	24 Dec 14:15	03:24
153 BC	23 Mar 20:13	25 Jun 20:46	26 Sep 04:49	23 Dec 20:02	03:24
152 BC	24 Mar 01:58	26 Jun 02:38	26 Sep 10:40	24 Dec 01:55	03:24
151 BC	24 Mar 07:54	26 Jun 08:29	26 Sep 16:26	24 Dec 07:48	03:23

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
150 BC	24 Mar 13:37	26 Jun 14:03	26 Sep 22:10	24 Dec 13:40	03:23
149 BC	23 Mar 19:29	25 Jun 19:57	26 Sep 04:05	23 Dec 19:28	03:23
148 BC	24 Mar 01:22	26 Jun 01:49	26 Sep 09:55	24 Dec 01:14	03:23
147 BC	24 Mar 07:13	26 Jun 07:36	26 Sep 15:41	24 Dec 07:08	03:23
146 BC	24 Mar 13:07	26 Jun 13:32	26 Sep 21:35	24 Dec 13:02	03:22
145 BC	23 Mar 18:49	25 Jun 19:16	26 Sep 03:24	23 Dec 18:49	03:22
144 BC	24 Mar 00:37	26 Jun 01:12	26 Sep 09:17	24 Dec 00:41	03:22
143 BC	24 Mar 06:37	26 Jun 07:08	26 Sep 15:09	24 Dec 06:34	03:22
142 BC	24 Mar 12:22	26 Jun 12:43	26 Sep 20:58	24 Dec 12:23	03:22
141 BC	23 Mar 18:10	25 Jun 18:38	26 Sep 02:56	23 Dec 18:14	03:21
140 BC	24 Mar 00:00	26 Jun 00:30	26 Sep 08:44	24 Dec 00:05	03:21
139 BC	24 Mar 05:48	26 Jun 06:11	26 Sep 14:25	24 Dec 05:59	03:21
138 BC	24 Mar 11:40	26 Jun 12:03	26 Sep 20:17	24 Dec 11:50	03:21
137 BC	23 Mar 17:24	25 Jun 17:44	26 Sep 02:04	23 Dec 17:33	03:21
136 BC	23 Mar 23:12	25 Jun 23:34	26 Sep 07:53	23 Dec 23:20	03:20
135 BC	24 Mar 05:08	26 Jun 05:29	26 Sep 13:41	24 Dec 05:12	03:20
134 BC	24 Mar 10:51	26 Jun 11:03	26 Sep 19:22	24 Dec 10:58	03:20
133 BC	23 Mar 16:34	25 Jun 16:56	26 Sep 01:16	23 Dec 16:44	03:20
132 BC	23 Mar 22:23	25 Jun 22:50	26 Sep 07:04	23 Dec 22:31	03:20
131 BC	24 Mar 04:11	26 Jun 04:30	26 Sep 12:48	24 Dec 04:19	03:20
130 BC	24 Mar 09:59	26 Jun 10:20	26 Sep 18:45	24 Dec 10:10	03:19
129 BC	23 Mar 15:41	25 Jun 16:04	26 Sep 00:37	23 Dec 16:01	03:19
128 BC	23 Mar 21:28	25 Jun 21:54	26 Sep 06:26	23 Dec 21:55	03:19
127 BC	24 Mar 03:25	26 Jun 03:50	26 Sep 12:18	24 Dec 03:56	03:19
126 BC	24 Mar 09:17	26 Jun 09:28	26 Sep 18:03	24 Dec 09:47	03:19
125 BC	23 Mar 15:08	25 Jun 15:21	26 Sep 00:00	23 Dec 15:35	03:18
124 BC	23 Mar 21:06	25 Jun 21:20	26 Sep 05:52	23 Dec 21:27	03:18
123 BC	24 Mar 02:59	26 Jun 03:04	26 Sep 11:33	24 Dec 03:16	03:18
122 BC	24 Mar 08:48	26 Jun 08:59	26 Sep 17:29	24 Dec 09:08	03:18
121 BC	23 Mar 14:32	25 Jun 14:47	25 Sep 23:18	23 Dec 14:54	03:18
120 BC	23 Mar 20:18	25 Jun 20:36	26 Sep 05:04	23 Dec 20:39	03:17
119 BC	24 Mar 02:10	26 Jun 02:30	26 Sep 10:58	24 Dec 02:33	03:17
118 BC	24 Mar 07:56	26 Jun 08:04	26 Sep 16:43	24 Dec 08:17	03:17
117 BC	23 Mar 13:36	25 Jun 13:50	25 Sep 22:36	23 Dec 14:05	03:17
116 BC	23 Mar 19:24	25 Jun 19:44	26 Sep 04:26	23 Dec 19:59	03:17
115 BC	24 Mar 01:13	26 Jun 01:21	26 Sep 10:01	24 Dec 01:47	03:17
114 BC	24 Mar 06:59	26 Jun 07:09	26 Sep 15:55	24 Dec 07:39	03:16
113 BC	23 Mar 12:47	25 Jun 12:56	25 Sep 21:45	23 Dec 13:24	03:16
112 BC	23 Mar 18:36	25 Jun 18:42	26 Sep 03:29	23 Dec 19:10	03:16
111 BC	24 Mar 00:31	26 Jun 00:40	26 Sep 09:23	24 Dec 01:09	03:16
110 BC	24 Mar 06:20	26 Jun 06:20	26 Sep 15:07	24 Dec 06:57	03:16
109 BC	23 Mar 12:06	25 Jun 12:13	25 Sep 21:01	23 Dec 12:44	03:15
108 BC	23 Mar 17:58	25 Jun 18:13	26 Sep 02:57	23 Dec 18:38	03:15
107 BC	23 Mar 23:54	25 Jun 23:56	26 Sep 08:40	24 Dec 00:25	03:15
106 BC	24 Mar 05:41	26 Jun 05:47	26 Sep 14:40	24 Dec 06:18	03:15
105 BC	23 Mar 11:26	25 Jun 11:38	25 Sep 20:35	23 Dec 12:12	03:15
104 BC	23 Mar 17:15	25 Jun 17:26	26 Sep 02:19	23 Dec 18:02	03:15
103 BC	23 Mar 23:07	25 Jun 23:20	26 Sep 08:13	24 Dec 00:03	03:14
102 BC	24 Mar 04:59	26 Jun 04:58	26 Sep 13:58	24 Dec 05:50	03:14
101 BC	23 Mar 10:46	25 Jun 10:45	25 Sep 19:48	23 Dec 11:32	03:14

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
100 BC	23 Mar 16:36	25 Jun 16:41	26 Sep 01:40	23 Dec 17:25	03:14
99 BC	23 Mar 22:30	25 Jun 22:21	26 Sep 07:16	23 Dec 23:10	03:14
98 BC	24 Mar 04:11	26 Jun 04:07	26 Sep 13:06	24 Dec 04:56	03:13
97 BC	23 Mar 09:52	25 Jun 09:57	25 Sep 18:57	23 Dec 10:46	03:13
96 BC	23 Mar 15:40	25 Jun 15:42	26 Sep 00:37	23 Dec 16:25	03:13
95 BC	23 Mar 21:28	25 Jun 21:33	26 Sep 06:33	23 Dec 22:20	03:13
94 BC	24 Mar 03:16	26 Jun 03:12	26 Sep 12:22	24 Dec 04:10	03:13
93 BC	23 Mar 09:00	25 Jun 08:58	25 Sep 18:12	23 Dec 09:56	03:12
92 BC	23 Mar 14:48	25 Jun 14:56	26 Sep 00:07	23 Dec 15:58	03:12
91 BC	23 Mar 20:47	25 Jun 20:39	26 Sep 05:46	23 Dec 21:48	03:12
90 BC	24 Mar 02:36	26 Jun 02:28	26 Sep 11:41	24 Dec 03:38	03:12
89 BC	23 Mar 08:26	25 Jun 08:23	25 Sep 17:39	23 Dec 09:32	03:12
88 BC	23 Mar 14:23	25 Jun 14:14	25 Sep 23:22	23 Dec 15:17	03:12
87 BC	23 Mar 20:14	25 Jun 20:10	26 Sep 05:19	23 Dec 21:16	03:11
86 BC	24 Mar 02:04	26 Jun 01:56	26 Sep 11:08	24 Dec 03:08	03:11
85 BC	23 Mar 07:50	25 Jun 07:44	25 Sep 16:56	23 Dec 08:49	03:11
84 BC	23 Mar 13:37	25 Jun 13:42	25 Sep 22:53	23 Dec 14:44	03:11
83 BC	23 Mar 19:32	25 Jun 19:23	26 Sep 04:34	23 Dec 20:29	03:11
82 BC	24 Mar 01:14	26 Jun 01:04	26 Sep 10:26	24 Dec 02:15	03:11
81 BC	23 Mar 06:53	25 Jun 06:53	25 Sep 16:20	23 Dec 08:10	03:10
80 BC	23 Mar 12:43	25 Jun 12:38	25 Sep 21:56	23 Dec 13:55	03:10
79 BC	23 Mar 18:31	25 Jun 18:25	26 Sep 03:46	23 Dec 19:50	03:10
78 BC	24 Mar 00:20	26 Jun 00:06	26 Sep 09:34	24 Dec 01:40	03:10
77 BC	23 Mar 06:10	25 Jun 05:51	25 Sep 15:20	23 Dec 07:18	03:10
76 BC	23 Mar 11:57	25 Jun 11:47	25 Sep 21:14	23 Dec 13:14	03:09
75 BC	23 Mar 17:54	25 Jun 17:33	26 Sep 02:54	23 Dec 19:03	03:09
74 BC	23 Mar 23:39	25 Jun 23:19	26 Sep 08:43	24 Dec 00:48	03:09
73 BC	23 Mar 05:20	25 Jun 05:15	25 Sep 14:42	23 Dec 06:43	03:09
72 BC	23 Mar 11:16	25 Jun 11:07	25 Sep 20:26	23 Dec 12:26	03:09
71 BC	23 Mar 17:06	25 Jun 16:56	26 Sep 02:23	23 Dec 18:22	03:09
70 BC	23 Mar 22:53	25 Jun 22:42	26 Sep 08:20	24 Dec 00:20	03:08
69 BC	23 Mar 04:43	25 Jun 04:31	25 Sep 14:08	23 Dec 06:05	03:08
68 BC	23 Mar 10:29	25 Jun 10:26	25 Sep 20:04	23 Dec 12:06	03:08
67 BC	23 Mar 16:28	25 Jun 16:12	26 Sep 01:46	23 Dec 18:00	03:08
66 BC	23 Mar 22:19	25 Jun 21:53	26 Sep 07:34	23 Dec 23:41	03:08
65 BC	23 Mar 04:01	25 Jun 03:45	25 Sep 13:31	23 Dec 05:36	03:07
64 BC	23 Mar 09:59	25 Jun 09:36	25 Sep 19:10	23 Dec 11:19	03:07
63 BC	23 Mar 15:46	25 Jun 15:23	26 Sep 00:58	23 Dec 17:10	03:07
62 BC	23 Mar 21:29	25 Jun 21:08	26 Sep 06:49	23 Dec 23:02	03:07
61 BC	23 Mar 03:17	25 Jun 02:55	25 Sep 12:31	23 Dec 04:38	03:07
60 BC	23 Mar 09:00	25 Jun 08:46	25 Sep 18:25	23 Dec 10:30	03:07
59 BC	23 Mar 14:53	25 Jun 14:30	26 Sep 00:10	23 Dec 16:19	03:06
58 BC	23 Mar 20:38	25 Jun 20:11	26 Sep 05:58	23 Dec 22:01	03:06
57 BC	23 Mar 02:14	25 Jun 02:01	25 Sep 11:56	23 Dec 04:00	03:06
56 BC	23 Mar 08:10	25 Jun 07:53	25 Sep 17:36	23 Dec 09:50	03:06
55 BC	23 Mar 14:01	25 Jun 13:39	25 Sep 23:25	23 Dec 15:43	03:06
54 BC	23 Mar 19:49	25 Jun 19:25	26 Sep 05:23	23 Dec 21:39	03:06
53 BC	23 Mar 01:46	25 Jun 01:17	25 Sep 11:10	23 Dec 03:20	03:05
52 BC	23 Mar 07:35	25 Jun 07:12	25 Sep 17:06	23 Dec 09:17	03:05
51 BC	23 Mar 13:31	25 Jun 13:02	25 Sep 22:51	23 Dec 15:13	03:05

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
50 BC	23 Mar 19:21	25 Jun 18:48	26 Sep 04:39	23 Dec 20:55	03:05
49 BC	23 Mar 01:00	25 Jun 00:41	25 Sep 10:38	23 Dec 02:50	03:05
48 BC	23 Mar 06:57	25 Jun 06:35	25 Sep 16:22	23 Dec 08:36	03:04
47 BC	23 Mar 12:48	25 Jun 12:19	25 Sep 22:13	23 Dec 14:25	03:04
46 BC	23 Mar 18:27	25 Jun 18:01	26 Sep 04:09	23 Dec 20:22	03:04
45 BC	23 Mar 00:19	24 Jun 23:52	25 Sep 09:54	23 Dec 02:05	03:04
44 BC	23 Mar 06:02	25 Jun 05:39	25 Sep 15:41	23 Dec 08:00	03:04
43 BC	23 Mar 11:55	25 Jun 11:24	25 Sep 21:25	23 Dec 13:53	03:04
42 BC	23 Mar 17:48	25 Jun 17:06	26 Sep 03:10	23 Dec 19:30	03:03
41 BC	22 Mar 23:26	24 Jun 22:54	25 Sep 09:05	23 Dec 01:21	03:03
40 BC	23 Mar 05:21	25 Jun 04:48	25 Sep 14:47	23 Dec 07:09	03:03
39 BC	23 Mar 11:11	25 Jun 10:33	25 Sep 20:32	23 Dec 12:57	03:03
38 BC	23 Mar 16:48	25 Jun 16:17	26 Sep 02:27	23 Dec 18:52	03:03
37 BC	22 Mar 22:42	24 Jun 22:12	25 Sep 08:15	23 Dec 00:33	03:03
36 BC	23 Mar 04:28	25 Jun 04:01	25 Sep 14:07	23 Dec 06:23	03:02
35 BC	23 Mar 10:20	25 Jun 09:47	25 Sep 20:00	23 Dec 12:22	03:02
34 BC	23 Mar 16:13	25 Jun 15:33	26 Sep 01:50	23 Dec 18:06	03:02
33 BC	22 Mar 21:50	24 Jun 21:22	25 Sep 07:45	23 Dec 00:05	03:02
32 BC	23 Mar 03:48	25 Jun 03:19	25 Sep 13:32	23 Dec 06:01	03:02
31 BC	23 Mar 09:45	25 Jun 09:05	25 Sep 19:18	23 Dec 11:50	03:02
30 BC	23 Mar 15:30	25 Jun 14:49	26 Sep 01:16	23 Dec 17:46	03:01
29 BC	22 Mar 21:28	24 Jun 20:46	25 Sep 07:04	22 Dec 23:29	03:01
28 BC	23 Mar 03:18	25 Jun 02:35	25 Sep 12:52	23 Dec 05:19	03:01
27 BC	23 Mar 09:06	25 Jun 08:22	25 Sep 18:38	23 Dec 11:14	03:01
26 BC	23 Mar 14:57	25 Jun 14:11	26 Sep 00:24	23 Dec 16:52	03:01
25 BC	22 Mar 20:32	24 Jun 19:57	25 Sep 06:16	22 Dec 22:40	03:00
24 BC	23 Mar 02:23	25 Jun 01:49	25 Sep 12:04	23 Dec 04:28	03:00
23 BC	23 Mar 08:14	25 Jun 07:32	25 Sep 17:50	23 Dec 10:13	03:00
22 BC	23 Mar 13:48	25 Jun 13:09	25 Sep 23:45	23 Dec 16:09	03:00
21 BC	22 Mar 19:38	24 Jun 19:03	25 Sep 05:32	22 Dec 21:57	03:00
20 BC	23 Mar 01:27	25 Jun 00:49	25 Sep 11:17	23 Dec 03:48	03:00
19 BC	23 Mar 07:16	25 Jun 06:31	25 Sep 17:04	23 Dec 09:43	02:59
18 BC	23 Mar 13:13	25 Jun 12:20	25 Sep 22:54	23 Dec 15:26	02:59
17 BC	22 Mar 18:56	24 Jun 18:07	25 Sep 04:46	22 Dec 21:16	02:59
16 BC	23 Mar 00:50	25 Jun 00:05	25 Sep 10:34	23 Dec 03:11	02:59
15 BC	23 Mar 06:48	25 Jun 05:57	25 Sep 16:22	23 Dec 09:01	02:59
14 BC	23 Mar 12:26	25 Jun 11:39	25 Sep 22:17	23 Dec 14:55	02:59
13 BC	22 Mar 18:21	24 Jun 17:40	25 Sep 04:11	22 Dec 20:43	02:58
12 BC	23 Mar 00:14	24 Jun 23:30	25 Sep 10:01	23 Dec 02:31	02:58
11 BC	23 Mar 06:02	25 Jun 05:12	25 Sep 15:53	23 Dec 08:28	02:58
10 BC	23 Mar 11:54	25 Jun 11:03	25 Sep 21:44	23 Dec 14:15	02:58
9 BC	22 Mar 17:33	24 Jun 16:48	25 Sep 03:33	22 Dec 20:06	02:58
8 BC	22 Mar 23:23	24 Jun 22:40	25 Sep 09:19	23 Dec 02:00	02:58
7 BC	23 Mar 05:21	25 Jun 04:28	25 Sep 15:05	23 Dec 07:46	02:57
6 BC	23 Mar 11:00	25 Jun 10:03	25 Sep 20:55	23 Dec 13:34	02:57
5 BC	22 Mar 16:51	24 Jun 15:59	25 Sep 02:46	22 Dec 19:21	02:57
4 BC	22 Mar 22:42	24 Jun 21:47	25 Sep 08:28	23 Dec 01:07	02:57
3 BC	23 Mar 04:25	25 Jun 03:26	25 Sep 14:13	23 Dec 07:01	02:57
2 BC	23 Mar 10:15	25 Jun 09:18	25 Sep 20:02	23 Dec 12:43	02:57
1 BC	22 Mar 15:55	24 Jun 15:03	25 Sep 01:50	22 Dec 18:28	02:56

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1 AD	22 Mar 21:45	24 Jun 20:54	25 Sep 07:41	23 Dec 00:20	02:56
2 AD	23 Mar 03:41	25 Jun 02:45	25 Sep 13:32	23 Dec 06:11	02:56
3 AD	23 Mar 09:19	25 Jun 08:23	25 Sep 19:25	23 Dec 12:06	02:56
4 AD	22 Mar 15:10	24 Jun 14:21	25 Sep 01:19	22 Dec 18:02	02:56
5 AD	22 Mar 21:08	24 Jun 20:15	25 Sep 07:07	22 Dec 23:55	02:56
6 AD	23 Mar 02:59	25 Jun 01:55	25 Sep 12:55	23 Dec 05:49	02:55
7 AD	23 Mar 08:57	25 Jun 07:51	25 Sep 18:51	23 Dec 11:37	02:55
8 AD	22 Mar 14:44	24 Jun 13:41	25 Sep 00:40	22 Dec 17:24	02:55
9 AD	22 Mar 20:34	24 Jun 19:34	25 Sep 06:28	22 Dec 23:17	02:55
10 AD	23 Mar 02:30	25 Jun 01:28	25 Sep 12:17	23 Dec 05:07	02:55
11 AD	23 Mar 08:07	25 Jun 07:06	25 Sep 18:06	23 Dec 10:53	02:55
12 AD	22 Mar 13:53	24 Jun 13:01	24 Sep 23:59	22 Dec 16:40	02:54
13 AD	22 Mar 19:46	24 Jun 18:50	25 Sep 05:48	22 Dec 22:28	02:54
14 AD	23 Mar 01:28	25 Jun 00:22	25 Sep 11:31	23 Dec 04:18	02:54
15 AD	23 Mar 07:13	25 Jun 06:10	25 Sep 17:23	23 Dec 10:07	02:54
16 AD	22 Mar 12:57	24 Jun 11:56	24 Sep 23:07	22 Dec 15:55	02:54
17 AD	22 Mar 18:44	24 Jun 17:41	25 Sep 04:49	22 Dec 21:47	02:54
18 AD	23 Mar 00:42	24 Jun 23:33	25 Sep 10:40	23 Dec 03:37	02:53
19 AD	23 Mar 06:26	25 Jun 05:11	25 Sep 16:29	23 Dec 09:23	02:53
20 AD	22 Mar 12:15	24 Jun 11:08	24 Sep 22:22	22 Dec 15:14	02:53
21 AD	22 Mar 18:12	24 Jun 17:05	25 Sep 04:11	22 Dec 21:06	02:53
22 AD	22 Mar 23:59	24 Jun 22:45	25 Sep 09:55	23 Dec 02:58	02:53
23 AD	23 Mar 05:49	25 Jun 04:41	25 Sep 15:53	23 Dec 08:47	02:53
24 AD	22 Mar 11:38	24 Jun 10:34	24 Sep 21:45	22 Dec 14:35	02:52
25 AD	22 Mar 17:28	24 Jun 16:22	25 Sep 03:34	22 Dec 20:27	02:52
26 AD	22 Mar 23:23	24 Jun 22:16	25 Sep 09:32	23 Dec 02:23	02:52
27 AD	23 Mar 05:04	25 Jun 03:55	25 Sep 15:22	23 Dec 08:14	02:52
28 AD	22 Mar 10:51	24 Jun 09:49	24 Sep 21:13	22 Dec 14:07	02:52
29 AD	22 Mar 16:48	24 Jun 15:43	25 Sep 03:01	22 Dec 20:00	02:52
30 AD	22 Mar 22:37	24 Jun 21:15	25 Sep 08:42	23 Dec 01:48	02:51
31 AD	23 Mar 04:26	25 Jun 03:06	25 Sep 14:36	23 Dec 07:33	02:51
32 AD	22 Mar 10:14	24 Jun 08:56	24 Sep 20:21	22 Dec 13:19	02:51
33 AD	22 Mar 16:01	24 Jun 14:41	25 Sep 02:00	22 Dec 19:07	02:51
34 AD	22 Mar 21:50	24 Jun 20:33	25 Sep 07:52	23 Dec 00:57	02:51
35 AD	23 Mar 03:31	25 Jun 02:14	25 Sep 13:39	23 Dec 06:41	02:51
36 AD	22 Mar 09:15	24 Jun 08:04	24 Sep 19:30	22 Dec 12:26	02:50
37 AD	22 Mar 15:09	24 Jun 13:59	25 Sep 01:23	22 Dec 18:19	02:50
38 AD	22 Mar 20:56	24 Jun 19:33	25 Sep 07:07	23 Dec 00:09	02:50
39 AD	23 Mar 02:40	25 Jun 01:24	25 Sep 13:04	23 Dec 06:02	02:50
40 AD	22 Mar 08:29	24 Jun 07:19	24 Sep 18:54	22 Dec 11:57	02:50
41 AD	22 Mar 14:23	24 Jun 13:04	25 Sep 00:36	22 Dec 17:47	02:50
42 AD	22 Mar 20:19	24 Jun 18:58	25 Sep 06:34	22 Dec 23:43	02:49
43 AD	23 Mar 02:09	25 Jun 00:44	25 Sep 12:27	23 Dec 05:31	02:49
44 AD	22 Mar 07:58	24 Jun 06:37	24 Sep 18:16	22 Dec 11:20	02:49
45 AD	22 Mar 13:53	24 Jun 12:37	25 Sep 00:10	22 Dec 17:19	02:49
46 AD	22 Mar 19:44	24 Jun 18:14	25 Sep 05:51	22 Dec 23:05	02:49
47 AD	23 Mar 01:27	25 Jun 00:04	25 Sep 11:45	23 Dec 04:51	02:49
48 AD	22 Mar 07:16	24 Jun 05:58	24 Sep 17:37	22 Dec 10:40	02:48
49 AD	22 Mar 13:05	24 Jun 11:39	24 Sep 23:18	22 Dec 16:24	02:48

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
50 AD	22 Mar 18:51	24 Jun 17:28	25 Sep 05:13	22 Dec 22:19	02:48
51 AD	23 Mar 00:33	24 Jun 23:09	25 Sep 11:01	23 Dec 04:09	02:48
52 AD	22 Mar 06:18	24 Jun 04:56	24 Sep 16:44	22 Dec 09:55	02:48
53 AD	22 Mar 12:11	24 Jun 10:50	24 Sep 22:35	22 Dec 15:51	02:48
54 AD	22 Mar 18:04	24 Jun 16:26	25 Sep 04:16	22 Dec 21:35	02:47
55 AD	22 Mar 23:50	24 Jun 22:13	25 Sep 10:09	23 Dec 03:20	02:47
56 AD	22 Mar 05:38	24 Jun 04:11	24 Sep 16:01	22 Dec 09:12	02:47
57 AD	22 Mar 11:29	24 Jun 09:56	24 Sep 21:39	22 Dec 14:58	02:47
58 AD	22 Mar 17:17	24 Jun 15:48	25 Sep 03:36	22 Dec 20:53	02:47
59 AD	22 Mar 23:03	24 Jun 21:37	25 Sep 09:29	23 Dec 02:42	02:47
60 AD	22 Mar 04:51	24 Jun 03:26	24 Sep 15:19	22 Dec 08:28	02:46
61 AD	22 Mar 10:44	24 Jun 09:22	24 Sep 21:18	22 Dec 14:27	02:46
62 AD	22 Mar 16:36	24 Jun 15:01	25 Sep 03:03	22 Dec 20:20	02:46
63 AD	22 Mar 22:22	24 Jun 20:48	25 Sep 08:56	23 Dec 02:11	02:46
64 AD	22 Mar 04:10	24 Jun 02:46	24 Sep 14:49	22 Dec 08:08	02:46
65 AD	22 Mar 10:09	24 Jun 08:31	24 Sep 20:27	22 Dec 13:53	02:46
66 AD	22 Mar 16:00	24 Jun 14:19	25 Sep 02:23	22 Dec 19:45	02:45
67 AD	22 Mar 21:47	24 Jun 20:08	25 Sep 08:15	23 Dec 01:34	02:45
68 AD	22 Mar 03:36	24 Jun 01:56	24 Sep 13:56	22 Dec 07:16	02:45
69 AD	22 Mar 09:23	24 Jun 07:51	24 Sep 19:49	22 Dec 13:12	02:45
70 AD	22 Mar 15:13	24 Jun 13:31	25 Sep 01:30	22 Dec 18:57	02:45
71 AD	22 Mar 20:55	24 Jun 19:15	25 Sep 07:19	23 Dec 00:37	02:45
72 AD	22 Mar 02:38	24 Jun 01:09	24 Sep 13:15	22 Dec 06:29	02:44
73 AD	22 Mar 08:31	24 Jun 06:51	24 Sep 18:55	22 Dec 12:13	02:44
74 AD	22 Mar 14:13	24 Jun 12:35	25 Sep 00:49	22 Dec 18:07	02:44
75 AD	22 Mar 19:55	24 Jun 18:23	25 Sep 06:43	23 Dec 00:04	02:44
76 AD	22 Mar 01:46	24 Jun 00:10	24 Sep 12:24	22 Dec 05:49	02:44
77 AD	22 Mar 07:38	24 Jun 06:03	24 Sep 18:20	22 Dec 11:49	02:44
78 AD	22 Mar 13:37	24 Jun 11:46	25 Sep 00:06	22 Dec 17:39	02:44
79 AD	22 Mar 19:26	24 Jun 17:33	25 Sep 05:56	22 Dec 23:23	02:43
80 AD	22 Mar 01:14	23 Jun 23:34	24 Sep 11:53	22 Dec 05:21	02:43
81 AD	22 Mar 07:13	24 Jun 05:24	24 Sep 17:32	22 Dec 11:08	02:43
82 AD	22 Mar 13:01	24 Jun 11:13	24 Sep 23:27	22 Dec 16:58	02:43
83 AD	22 Mar 18:44	24 Jun 17:05	25 Sep 05:25	22 Dec 22:51	02:43
84 AD	22 Mar 00:37	23 Jun 22:54	24 Sep 11:10	22 Dec 04:32	02:43
85 AD	22 Mar 06:24	24 Jun 04:45	24 Sep 17:06	22 Dec 10:29	02:42
86 AD	22 Mar 12:14	24 Jun 10:25	24 Sep 22:52	22 Dec 16:23	02:42
87 AD	22 Mar 17:58	24 Jun 16:08	25 Sep 04:37	22 Dec 22:06	02:42
88 AD	21 Mar 23:40	23 Jun 22:02	24 Sep 10:30	22 Dec 04:02	02:42
89 AD	22 Mar 05:39	24 Jun 03:46	24 Sep 16:07	22 Dec 09:45	02:42
90 AD	22 Mar 11:27	24 Jun 09:28	24 Sep 21:57	22 Dec 15:30	02:42
91 AD	22 Mar 17:07	24 Jun 15:17	25 Sep 03:52	22 Dec 21:24	02:41
92 AD	21 Mar 22:59	23 Jun 21:08	24 Sep 09:32	22 Dec 03:05	02:41
93 AD	22 Mar 04:45	24 Jun 02:57	24 Sep 15:23	22 Dec 09:00	02:41
94 AD	22 Mar 10:34	24 Jun 08:40	24 Sep 21:11	22 Dec 14:53	02:41
95 AD	22 Mar 16:23	24 Jun 14:26	25 Sep 02:59	22 Dec 20:31	02:41
96 AD	21 Mar 22:06	23 Jun 20:21	24 Sep 08:58	22 Dec 02:27	02:41
97 AD	22 Mar 04:05	24 Jun 02:11	24 Sep 14:43	22 Dec 08:19	02:40
98 AD	22 Mar 09:53	24 Jun 07:55	24 Sep 20:35	22 Dec 14:11	02:40
99 AD	22 Mar 15:34	24 Jun 13:48	25 Sep 02:34	22 Dec 20:12	02:40

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
100 AD	21 Mar 21:33	23 Jun 19:42	24 Sep 08:17	22 Dec 01:58	02:40
101 AD	22 Mar 03:26	24 Jun 01:31	24 Sep 14:11	22 Dec 07:53	02:40
102 AD	22 Mar 09:20	24 Jun 07:17	24 Sep 20:03	22 Dec 13:47	02:40
103 AD	22 Mar 15:12	24 Jun 13:05	25 Sep 01:48	22 Dec 19:26	02:39
104 AD	21 Mar 20:53	23 Jun 18:59	24 Sep 07:42	22 Dec 01:21	02:39
105 AD	22 Mar 02:49	24 Jun 00:49	24 Sep 13:22	22 Dec 07:09	02:39
106 AD	22 Mar 08:34	24 Jun 06:30	24 Sep 19:08	22 Dec 12:50	02:39
107 AD	22 Mar 14:09	24 Jun 12:18	25 Sep 01:06	22 Dec 18:43	02:39
108 AD	21 Mar 20:02	23 Jun 18:07	24 Sep 06:49	22 Dec 00:23	02:39
109 AD	22 Mar 01:46	23 Jun 23:49	24 Sep 12:39	22 Dec 06:16	02:39
110 AD	22 Mar 07:30	24 Jun 05:29	24 Sep 18:28	22 Dec 12:14	02:38
111 AD	22 Mar 13:19	24 Jun 11:14	25 Sep 00:10	22 Dec 17:55	02:38
112 AD	21 Mar 19:03	23 Jun 17:05	24 Sep 06:02	21 Dec 23:51	02:38
113 AD	22 Mar 01:04	23 Jun 22:55	24 Sep 11:47	22 Dec 05:42	02:38
114 AD	22 Mar 06:58	24 Jun 04:40	24 Sep 17:36	22 Dec 11:26	02:38
115 AD	22 Mar 12:38	24 Jun 10:32	24 Sep 23:35	22 Dec 17:23	02:38
116 AD	21 Mar 18:36	23 Jun 16:32	24 Sep 05:20	21 Dec 23:10	02:37
117 AD	22 Mar 00:28	23 Jun 22:22	24 Sep 11:11	22 Dec 05:03	02:37
118 AD	22 Mar 06:15	24 Jun 04:09	24 Sep 17:06	22 Dec 11:00	02:37
119 AD	22 Mar 12:09	24 Jun 10:01	24 Sep 22:57	22 Dec 16:40	02:37
120 AD	21 Mar 17:52	23 Jun 15:51	24 Sep 04:53	21 Dec 22:34	02:37
121 AD	21 Mar 23:46	23 Jun 21:41	24 Sep 10:40	22 Dec 04:29	02:37
122 AD	22 Mar 05:36	24 Jun 03:24	24 Sep 16:27	22 Dec 10:15	02:36
123 AD	22 Mar 11:10	24 Jun 09:09	24 Sep 22:21	22 Dec 16:12	02:36
124 AD	21 Mar 17:06	23 Jun 15:02	24 Sep 04:04	21 Dec 21:58	02:36
125 AD	21 Mar 22:59	23 Jun 20:44	24 Sep 09:49	22 Dec 03:44	02:36
126 AD	22 Mar 04:43	24 Jun 02:24	24 Sep 15:39	22 Dec 09:38	02:36
127 AD	22 Mar 10:36	24 Jun 08:15	24 Sep 21:24	22 Dec 15:17	02:36
128 AD	21 Mar 16:16	23 Jun 14:03	24 Sep 03:10	21 Dec 21:06	02:35
129 AD	21 Mar 22:08	23 Jun 19:53	24 Sep 08:55	22 Dec 02:59	02:35
130 AD	22 Mar 03:59	24 Jun 01:38	24 Sep 14:42	22 Dec 08:39	02:35
131 AD	22 Mar 09:34	24 Jun 07:24	24 Sep 20:39	22 Dec 14:31	02:35
132 AD	21 Mar 15:29	23 Jun 13:20	24 Sep 02:29	21 Dec 20:20	02:35
133 AD	21 Mar 21:21	23 Jun 19:06	24 Sep 08:19	22 Dec 02:13	02:35
134 AD	22 Mar 03:03	24 Jun 00:49	24 Sep 14:14	22 Dec 08:15	02:35
135 AD	22 Mar 08:58	24 Jun 06:44	24 Sep 20:03	22 Dec 14:02	02:34
136 AD	21 Mar 14:47	23 Jun 12:34	24 Sep 01:54	21 Dec 19:55	02:34
137 AD	21 Mar 20:45	23 Jun 18:25	24 Sep 07:44	22 Dec 01:51	02:34
138 AD	22 Mar 02:43	24 Jun 00:13	24 Sep 13:33	22 Dec 07:35	02:34
139 AD	22 Mar 08:21	24 Jun 06:01	24 Sep 19:28	22 Dec 13:29	02:34
140 AD	21 Mar 14:14	23 Jun 11:58	24 Sep 01:14	21 Dec 19:17	02:34
141 AD	21 Mar 20:07	23 Jun 17:45	24 Sep 06:59	22 Dec 01:05	02:33
142 AD	22 Mar 01:47	23 Jun 23:24	24 Sep 12:50	22 Dec 06:56	02:33
143 AD	22 Mar 07:38	24 Jun 05:16	24 Sep 18:39	22 Dec 12:37	02:33
144 AD	21 Mar 13:22	23 Jun 11:01	24 Sep 00:27	21 Dec 18:24	02:33
145 AD	21 Mar 19:09	23 Jun 16:45	24 Sep 06:14	22 Dec 00:19	02:33
146 AD	22 Mar 00:59	23 Jun 22:31	24 Sep 12:00	22 Dec 06:05	02:33
147 AD	22 Mar 06:34	24 Jun 04:13	24 Sep 17:49	22 Dec 11:57	02:32
148 AD	21 Mar 12:28	23 Jun 10:08	23 Sep 23:36	21 Dec 17:47	02:32
149 AD	21 Mar 18:27	23 Jun 15:55	24 Sep 05:23	21 Dec 23:34	02:32

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
150 AD	22 Mar 00:10	23 Jun 21:34	24 Sep 11:15	22 Dec 05:28	02:32
151 AD	22 Mar 06:03	24 Jun 03:33	24 Sep 17:07	22 Dec 11:15	02:32
152 AD	21 Mar 11:52	23 Jun 09:25	23 Sep 22:55	21 Dec 17:04	02:32
153 AD	21 Mar 17:41	23 Jun 15:14	24 Sep 04:44	21 Dec 23:00	02:31
154 AD	21 Mar 23:37	23 Jun 21:07	24 Sep 10:37	22 Dec 04:46	02:31
155 AD	22 Mar 05:16	24 Jun 02:51	24 Sep 16:32	22 Dec 10:36	02:31
156 AD	21 Mar 11:07	23 Jun 08:46	23 Sep 22:26	21 Dec 16:30	02:31
157 AD	21 Mar 17:05	23 Jun 14:35	24 Sep 04:14	21 Dec 22:23	02:31
158 AD	21 Mar 22:44	23 Jun 20:11	24 Sep 10:03	22 Dec 04:20	02:31
159 AD	22 Mar 04:36	24 Jun 02:07	24 Sep 15:54	22 Dec 10:09	02:31
160 AD	21 Mar 10:29	23 Jun 07:55	23 Sep 21:39	21 Dec 15:54	02:30
161 AD	21 Mar 16:20	23 Jun 13:38	24 Sep 03:24	21 Dec 21:46	02:30
162 AD	21 Mar 22:14	23 Jun 19:29	24 Sep 09:14	22 Dec 03:30	02:30
163 AD	22 Mar 03:51	24 Jun 01:12	24 Sep 15:00	22 Dec 09:16	02:30
164 AD	21 Mar 09:38	23 Jun 07:06	23 Sep 20:47	21 Dec 15:06	02:30
165 AD	21 Mar 15:33	23 Jun 12:56	24 Sep 02:33	21 Dec 20:53	02:30
166 AD	21 Mar 21:10	23 Jun 18:31	24 Sep 08:21	22 Dec 02:41	02:29
167 AD	22 Mar 02:58	24 Jun 00:25	24 Sep 14:17	22 Dec 08:27	02:29
168 AD	21 Mar 08:48	23 Jun 06:14	23 Sep 20:05	21 Dec 14:15	02:29
169 AD	21 Mar 14:34	23 Jun 11:55	24 Sep 01:52	21 Dec 20:12	02:29
170 AD	21 Mar 20:26	23 Jun 17:47	24 Sep 07:45	22 Dec 02:05	02:29
171 AD	22 Mar 02:09	23 Jun 23:33	24 Sep 13:34	22 Dec 07:57	02:29
172 AD	21 Mar 08:02	23 Jun 05:26	23 Sep 19:25	21 Dec 13:49	02:28
173 AD	21 Mar 14:05	23 Jun 11:19	24 Sep 01:16	21 Dec 19:42	02:28
174 AD	21 Mar 19:51	23 Jun 16:58	24 Sep 07:05	22 Dec 01:33	02:28
175 AD	22 Mar 01:41	23 Jun 22:57	24 Sep 12:59	22 Dec 07:24	02:28
176 AD	21 Mar 07:36	23 Jun 04:53	23 Sep 18:46	21 Dec 13:13	02:28
177 AD	21 Mar 13:24	23 Jun 10:35	24 Sep 00:30	21 Dec 19:03	02:28
178 AD	21 Mar 19:15	23 Jun 16:28	24 Sep 06:26	22 Dec 00:49	02:28
179 AD	22 Mar 00:56	23 Jun 22:12	24 Sep 12:15	22 Dec 06:33	02:27
180 AD	21 Mar 06:41	23 Jun 04:01	23 Sep 18:04	21 Dec 12:24	02:27
181 AD	21 Mar 12:34	23 Jun 09:51	23 Sep 23:54	21 Dec 18:18	02:27
182 AD	21 Mar 18:13	23 Jun 15:24	24 Sep 05:37	22 Dec 00:08	02:27
183 AD	21 Mar 23:59	23 Jun 21:15	24 Sep 11:28	22 Dec 05:57	02:27
184 AD	21 Mar 05:54	23 Jun 03:07	23 Sep 17:15	21 Dec 11:43	02:27
185 AD	21 Mar 11:44	23 Jun 08:44	23 Sep 22:56	21 Dec 17:31	02:26
186 AD	21 Mar 17:34	23 Jun 14:37	24 Sep 04:51	21 Dec 23:21	02:26
187 AD	21 Mar 23:17	23 Jun 20:25	24 Sep 10:37	22 Dec 05:07	02:26
188 AD	21 Mar 05:03	23 Jun 02:15	23 Sep 16:24	21 Dec 10:58	02:26
189 AD	21 Mar 11:00	23 Jun 08:11	23 Sep 22:17	21 Dec 16:52	02:26
190 AD	21 Mar 16:44	23 Jun 13:48	24 Sep 04:06	21 Dec 22:39	02:26
191 AD	21 Mar 22:32	23 Jun 19:43	24 Sep 10:05	22 Dec 04:30	02:25
192 AD	21 Mar 04:27	23 Jun 01:40	23 Sep 15:58	21 Dec 10:25	02:25
193 AD	21 Mar 10:18	23 Jun 07:19	23 Sep 21:41	21 Dec 16:19	02:25
194 AD	21 Mar 16:07	23 Jun 13:12	24 Sep 03:37	21 Dec 22:14	02:25
195 AD	21 Mar 21:55	23 Jun 19:03	24 Sep 09:25	22 Dec 04:03	02:25
196 AD	21 Mar 03:47	23 Jun 00:50	23 Sep 15:11	21 Dec 09:50	02:25
197 AD	21 Mar 09:45	23 Jun 06:44	23 Sep 21:05	21 Dec 15:44	02:24
198 AD	21 Mar 15:29	23 Jun 12:22	24 Sep 02:49	21 Dec 21:29	02:24
199 AD	21 Mar 21:13	23 Jun 18:14	24 Sep 08:39	22 Dec 03:16	02:24

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
200 AD	21 Mar 03:03	23 Jun 00:09	23 Sep 14:28	21 Dec 09:06	02:24
201 AD	21 Mar 08:51	23 Jun 05:45	23 Sep 20:06	21 Dec 14:50	02:24
202 AD	21 Mar 14:34	23 Jun 11:33	24 Sep 02:01	21 Dec 20:36	02:24
203 AD	21 Mar 20:17	23 Jun 17:21	24 Sep 07:52	22 Dec 02:23	02:24
204 AD	21 Mar 02:03	22 Jun 23:03	23 Sep 13:35	21 Dec 08:10	02:23
205 AD	21 Mar 07:52	23 Jun 04:54	23 Sep 19:28	21 Dec 14:10	02:23
206 AD	21 Mar 13:39	23 Jun 10:33	24 Sep 01:13	21 Dec 20:01	02:23
207 AD	21 Mar 19:26	23 Jun 16:24	24 Sep 07:04	22 Dec 01:50	02:23
208 AD	21 Mar 01:25	22 Jun 22:23	23 Sep 12:59	21 Dec 07:45	02:23
209 AD	21 Mar 07:23	23 Jun 04:03	23 Sep 18:41	21 Dec 13:33	02:23
210 AD	21 Mar 13:11	23 Jun 09:57	24 Sep 00:38	21 Dec 19:25	02:22
211 AD	21 Mar 19:00	23 Jun 15:55	24 Sep 06:30	22 Dec 01:17	02:22
212 AD	21 Mar 00:51	22 Jun 21:44	23 Sep 12:13	21 Dec 07:03	02:22
213 AD	21 Mar 06:43	23 Jun 03:39	23 Sep 18:11	21 Dec 12:59	02:22
214 AD	21 Mar 12:30	23 Jun 09:21	24 Sep 00:01	21 Dec 18:45	02:22
215 AD	21 Mar 18:14	23 Jun 15:09	24 Sep 05:53	22 Dec 00:30	02:22
216 AD	21 Mar 00:03	22 Jun 21:04	23 Sep 11:48	21 Dec 06:27	02:21
217 AD	21 Mar 05:53	23 Jun 02:40	23 Sep 17:25	21 Dec 12:16	02:21
218 AD	21 Mar 11:35	23 Jun 08:24	23 Sep 23:17	21 Dec 18:07	02:21
219 AD	21 Mar 17:21	23 Jun 14:14	24 Sep 05:05	21 Dec 23:55	02:21
220 AD	20 Mar 23:13	22 Jun 19:55	23 Sep 10:43	21 Dec 05:37	02:21
221 AD	21 Mar 05:04	23 Jun 01:46	23 Sep 16:36	21 Dec 11:30	02:21
222 AD	21 Mar 10:50	23 Jun 07:28	23 Sep 22:21	21 Dec 17:18	02:21
223 AD	21 Mar 16:35	23 Jun 13:17	24 Sep 04:07	21 Dec 23:02	02:20
224 AD	20 Mar 22:24	22 Jun 19:15	23 Sep 10:02	21 Dec 04:57	02:20
225 AD	21 Mar 04:18	23 Jun 00:57	23 Sep 15:43	21 Dec 10:43	02:20
226 AD	21 Mar 10:03	23 Jun 06:44	23 Sep 21:40	21 Dec 16:31	02:20
227 AD	21 Mar 15:49	23 Jun 12:40	24 Sep 03:38	21 Dec 22:26	02:20
228 AD	20 Mar 21:43	22 Jun 18:27	23 Sep 09:21	21 Dec 04:14	02:20
229 AD	21 Mar 03:33	23 Jun 00:19	23 Sep 15:18	21 Dec 10:16	02:19
230 AD	21 Mar 09:22	23 Jun 06:05	23 Sep 21:09	21 Dec 16:11	02:19
231 AD	21 Mar 15:14	23 Jun 11:54	24 Sep 02:57	21 Dec 21:55	02:19
232 AD	20 Mar 21:07	22 Jun 17:51	23 Sep 08:54	21 Dec 03:52	02:19
233 AD	21 Mar 03:06	22 Jun 23:34	23 Sep 14:35	21 Dec 09:39	02:19
234 AD	21 Mar 08:50	23 Jun 05:19	23 Sep 20:25	21 Dec 15:24	02:19
235 AD	21 Mar 14:32	23 Jun 11:14	24 Sep 02:18	21 Dec 21:18	02:18
236 AD	20 Mar 20:25	22 Jun 16:59	23 Sep 07:54	21 Dec 02:58	02:18
237 AD	21 Mar 02:09	22 Jun 22:45	23 Sep 13:46	21 Dec 08:49	02:18
238 AD	21 Mar 07:53	23 Jun 04:29	23 Sep 19:37	21 Dec 14:37	02:18
239 AD	21 Mar 13:39	23 Jun 10:13	24 Sep 01:22	21 Dec 20:17	02:18
240 AD	20 Mar 19:23	22 Jun 16:06	23 Sep 07:18	21 Dec 02:16	02:18
241 AD	21 Mar 01:17	22 Jun 21:46	23 Sep 12:57	21 Dec 08:07	02:17
242 AD	21 Mar 07:01	23 Jun 03:29	23 Sep 18:45	21 Dec 13:53	02:17
243 AD	21 Mar 12:46	23 Jun 09:25	24 Sep 00:41	21 Dec 19:48	02:17
244 AD	20 Mar 18:47	22 Jun 15:13	23 Sep 06:22	21 Dec 01:32	02:17
245 AD	21 Mar 00:38	22 Jun 21:03	23 Sep 12:17	21 Dec 07:27	02:17
246 AD	21 Mar 06:25	23 Jun 02:53	23 Sep 18:12	21 Dec 13:22	02:17
247 AD	21 Mar 12:17	23 Jun 08:45	23 Sep 23:58	21 Dec 19:05	02:17
248 AD	20 Mar 18:05	22 Jun 14:43	23 Sep 05:56	21 Dec 01:03	02:16
249 AD	21 Mar 00:01	22 Jun 20:29	23 Sep 11:41	21 Dec 06:53	02:16

Equinox and Solstice are in UT, $TT = UT + \Delta T$

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
250 AD	21 Mar 05:48	23 Jun 02:12	23 Sep 17:34	21 Dec 12:37	02:16
251 AD	21 Mar 11:29	23 Jun 08:06	23 Sep 23:33	21 Dec 18:33	02:16
252 AD	20 Mar 17:24	22 Jun 13:52	23 Sep 05:12	21 Dec 00:21	02:16
253 AD	20 Mar 23:10	22 Jun 19:36	23 Sep 11:01	21 Dec 06:15	02:16
254 AD	21 Mar 04:53	23 Jun 01:21	23 Sep 16:52	21 Dec 12:10	02:15
255 AD	21 Mar 10:47	23 Jun 07:08	23 Sep 22:34	21 Dec 17:48	02:15
256 AD	20 Mar 16:36	22 Jun 12:58	23 Sep 04:26	20 Dec 23:41	02:15
257 AD	20 Mar 22:31	22 Jun 18:42	23 Sep 10:09	21 Dec 05:30	02:15
258 AD	21 Mar 04:16	23 Jun 00:26	23 Sep 15:53	21 Dec 11:10	02:15
259 AD	21 Mar 09:54	23 Jun 06:20	23 Sep 21:48	21 Dec 17:04	02:15
260 AD	20 Mar 15:49	22 Jun 12:11	23 Sep 03:28	20 Dec 22:47	02:14
261 AD	20 Mar 21:36	22 Jun 17:55	23 Sep 09:19	21 Dec 04:36	02:14
262 AD	21 Mar 03:16	22 Jun 23:41	23 Sep 15:18	21 Dec 10:31	02:14
263 AD	21 Mar 09:10	23 Jun 05:32	23 Sep 21:06	21 Dec 16:15	02:14
264 AD	20 Mar 14:56	22 Jun 11:23	23 Sep 03:01	20 Dec 22:15	02:14
265 AD	20 Mar 20:51	22 Jun 17:09	23 Sep 08:49	21 Dec 04:15	02:14
266 AD	21 Mar 02:42	22 Jun 22:54	23 Sep 14:36	21 Dec 09:58	02:13
267 AD	21 Mar 08:27	23 Jun 04:48	23 Sep 20:34	21 Dec 15:55	02:13
268 AD	20 Mar 14:31	22 Jun 10:41	23 Sep 02:18	20 Dec 21:43	02:13
269 AD	20 Mar 20:23	22 Jun 16:27	23 Sep 08:05	21 Dec 03:32	02:13
270 AD	21 Mar 02:03	22 Jun 22:16	23 Sep 14:02	21 Dec 09:29	02:13
271 AD	21 Mar 07:58	23 Jun 04:11	23 Sep 19:45	21 Dec 15:09	02:13
272 AD	20 Mar 13:44	22 Jun 10:00	23 Sep 01:36	20 Dec 21:00	02:13
273 AD	20 Mar 19:34	22 Jun 15:44	23 Sep 07:24	21 Dec 02:51	02:12
274 AD	21 Mar 01:22	22 Jun 21:27	23 Sep 13:10	21 Dec 08:28	02:12
275 AD	21 Mar 06:57	23 Jun 03:15	23 Sep 19:05	21 Dec 14:22	02:12
276 AD	20 Mar 12:51	22 Jun 09:04	23 Sep 00:48	20 Dec 20:12	02:12
277 AD	20 Mar 18:38	22 Jun 14:45	23 Sep 06:31	21 Dec 02:01	02:12
278 AD	21 Mar 00:15	22 Jun 20:29	23 Sep 12:27	21 Dec 07:57	02:12
279 AD	21 Mar 06:13	23 Jun 02:21	23 Sep 18:12	21 Dec 13:39	02:11
280 AD	20 Mar 12:04	22 Jun 08:09	23 Sep 00:03	20 Dec 19:31	02:11
281 AD	20 Mar 17:55	22 Jun 13:55	23 Sep 05:51	21 Dec 01:27	02:11
282 AD	20 Mar 23:47	22 Jun 19:44	23 Sep 11:38	21 Dec 07:10	02:11
283 AD	21 Mar 05:27	23 Jun 01:37	23 Sep 17:32	21 Dec 13:04	02:11
284 AD	20 Mar 11:24	22 Jun 07:32	22 Sep 23:19	20 Dec 18:55	02:11
285 AD	20 Mar 17:19	22 Jun 13:19	23 Sep 05:09	21 Dec 00:41	02:10
286 AD	20 Mar 22:57	22 Jun 19:04	23 Sep 11:10	21 Dec 06:38	02:10
287 AD	21 Mar 04:53	23 Jun 01:01	23 Sep 17:00	21 Dec 12:26	02:10
288 AD	20 Mar 10:42	22 Jun 06:48	22 Sep 22:49	20 Dec 18:21	02:10
289 AD	20 Mar 16:30	22 Jun 12:32	23 Sep 04:38	21 Dec 00:21	02:10
290 AD	20 Mar 22:25	22 Jun 18:20	23 Sep 10:23	21 Dec 06:02	02:10
291 AD	21 Mar 04:08	23 Jun 00:07	23 Sep 16:14	21 Dec 11:50	02:09
292 AD	20 Mar 10:04	22 Jun 05:59	22 Sep 22:00	20 Dec 17:40	02:09
293 AD	20 Mar 15:57	22 Jun 11:44	23 Sep 03:43	20 Dec 23:23	02:09
294 AD	20 Mar 21:30	22 Jun 17:27	23 Sep 09:36	21 Dec 05:16	02:09
295 AD	21 Mar 03:21	22 Jun 23:23	23 Sep 15:23	21 Dec 10:59	02:09
296 AD	20 Mar 09:09	22 Jun 05:09	22 Sep 21:08	20 Dec 16:46	02:09
297 AD	20 Mar 14:53	22 Jun 10:49	23 Sep 03:00	20 Dec 22:40	02:09
298 AD	20 Mar 20:44	22 Jun 16:36	23 Sep 08:49	21 Dec 04:21	02:08
299 AD	21 Mar 02:23	22 Jun 22:22	23 Sep 14:40	21 Dec 10:14	02:08

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
300 AD	20 Mar 08:16	22 Jun 04:13	22 Sep 20:27	20 Dec 16:12	02:08
301 AD	20 Mar 14:11	22 Jun 10:01	23 Sep 02:13	20 Dec 22:02	02:08
302 AD	20 Mar 19:52	22 Jun 15:45	23 Sep 08:09	21 Dec 03:58	02:08
303 AD	21 Mar 01:52	22 Jun 21:45	23 Sep 14:02	21 Dec 09:46	02:08
304 AD	20 Mar 07:50	22 Jun 03:36	22 Sep 19:51	20 Dec 15:37	02:07
305 AD	20 Mar 13:38	22 Jun 09:21	23 Sep 01:42	20 Dec 21:35	02:07
306 AD	20 Mar 19:32	22 Jun 15:17	23 Sep 07:32	21 Dec 03:19	02:07
307 AD	21 Mar 01:15	22 Jun 21:06	23 Sep 13:22	21 Dec 09:07	02:07
308 AD	20 Mar 07:06	22 Jun 02:58	22 Sep 19:10	20 Dec 14:59	02:07
309 AD	20 Mar 13:00	22 Jun 08:45	23 Sep 00:58	20 Dec 20:42	02:07
310 AD	20 Mar 18:34	22 Jun 14:24	23 Sep 06:53	21 Dec 02:33	02:06
311 AD	21 Mar 00:22	22 Jun 20:18	23 Sep 12:43	21 Dec 08:22	02:06
312 AD	20 Mar 06:13	22 Jun 02:03	22 Sep 18:27	20 Dec 14:13	02:06
313 AD	20 Mar 11:54	22 Jun 07:38	23 Sep 00:11	20 Dec 20:08	02:06
314 AD	20 Mar 17:46	22 Jun 13:27	23 Sep 06:00	21 Dec 01:53	02:06
315 AD	20 Mar 23:33	22 Jun 19:12	23 Sep 11:46	21 Dec 07:37	02:06
316 AD	20 Mar 05:24	22 Jun 01:00	22 Sep 17:31	20 Dec 13:29	02:05
317 AD	20 Mar 11:21	22 Jun 06:52	22 Sep 23:18	20 Dec 19:17	02:05
318 AD	20 Mar 16:57	22 Jun 12:35	23 Sep 05:09	21 Dec 01:07	02:05
319 AD	20 Mar 22:49	22 Jun 18:35	23 Sep 11:02	21 Dec 06:58	02:05
320 AD	20 Mar 04:46	22 Jun 00:28	22 Sep 16:52	20 Dec 12:47	02:05
321 AD	20 Mar 10:31	22 Jun 06:08	22 Sep 22:44	20 Dec 18:41	02:05
322 AD	20 Mar 16:24	22 Jun 12:03	23 Sep 04:42	21 Dec 00:31	02:04
323 AD	20 Mar 22:11	22 Jun 17:53	23 Sep 10:32	21 Dec 06:22	02:04
324 AD	20 Mar 04:00	21 Jun 23:42	22 Sep 16:20	20 Dec 12:21	02:04
325 AD	20 Mar 09:57	22 Jun 05:34	22 Sep 22:10	20 Dec 18:13	02:04
326 AD	20 Mar 15:39	22 Jun 11:14	23 Sep 04:00	21 Dec 00:01	02:04
327 AD	20 Mar 21:32	22 Jun 17:10	23 Sep 09:53	21 Dec 05:50	02:04
328 AD	20 Mar 03:30	21 Jun 23:01	22 Sep 15:38	20 Dec 11:38	02:03
329 AD	20 Mar 09:12	22 Jun 04:36	22 Sep 21:22	20 Dec 17:29	02:03
330 AD	20 Mar 14:59	22 Jun 10:29	23 Sep 03:13	20 Dec 23:14	02:03
331 AD	20 Mar 20:43	22 Jun 16:17	23 Sep 08:56	21 Dec 04:57	02:03
332 AD	20 Mar 02:29	21 Jun 22:00	22 Sep 14:40	20 Dec 10:46	02:03
333 AD	20 Mar 08:21	22 Jun 03:49	22 Sep 20:31	20 Dec 16:32	02:03
334 AD	20 Mar 13:58	22 Jun 09:28	23 Sep 02:22	20 Dec 22:19	02:02
335 AD	20 Mar 19:44	22 Jun 15:21	23 Sep 08:14	21 Dec 04:12	02:02
336 AD	20 Mar 01:40	21 Jun 21:14	22 Sep 14:01	20 Dec 10:08	02:02
337 AD	20 Mar 07:26	22 Jun 02:49	22 Sep 19:46	20 Dec 16:01	02:02
338 AD	20 Mar 13:18	22 Jun 08:44	23 Sep 01:43	20 Dec 21:51	02:02
339 AD	20 Mar 19:13	22 Jun 14:38	23 Sep 07:33	21 Dec 03:39	02:02
340 AD	20 Mar 01:06	21 Jun 20:26	22 Sep 13:19	20 Dec 09:32	02:02
341 AD	20 Mar 07:01	22 Jun 02:22	22 Sep 19:14	20 Dec 15:26	02:01
342 AD	20 Mar 12:44	22 Jun 08:08	23 Sep 01:04	20 Dec 21:14	02:01
343 AD	20 Mar 18:31	22 Jun 14:04	23 Sep 06:56	21 Dec 03:04	02:01
344 AD	20 Mar 00:29	21 Jun 19:59	22 Sep 12:48	20 Dec 08:56	02:01
345 AD	20 Mar 06:14	22 Jun 01:31	22 Sep 18:34	20 Dec 14:43	02:01
346 AD	20 Mar 11:58	22 Jun 07:22	23 Sep 00:30	20 Dec 20:33	02:01
347 AD	20 Mar 17:47	22 Jun 13:12	23 Sep 06:16	21 Dec 02:22	02:00
348 AD	19 Mar 23:32	21 Jun 18:51	22 Sep 11:54	20 Dec 08:14	02:00
349 AD	20 Mar 05:23	22 Jun 00:41	22 Sep 17:45	20 Dec 14:05	02:00

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
350 AD	20 Mar 11:08	22 Jun 06:22	22 Sep 23:32	20 Dec 19:49	02:00
351 AD	20 Mar 16:56	22 Jun 12:12	23 Sep 05:20	21 Dec 01:35	02:00
352 AD	19 Mar 22:53	21 Jun 18:07	22 Sep 11:09	20 Dec 07:28	02:00
353 AD	20 Mar 04:38	21 Jun 23:43	22 Sep 16:51	20 Dec 13:15	01:59
354 AD	20 Mar 10:22	22 Jun 05:36	22 Sep 22:45	20 Dec 19:03	01:59
355 AD	20 Mar 16:12	22 Jun 11:33	23 Sep 04:35	21 Dec 00:51	01:59
356 AD	19 Mar 22:02	21 Jun 17:15	22 Sep 10:19	20 Dec 06:40	01:59
357 AD	20 Mar 03:53	21 Jun 23:08	22 Sep 16:19	20 Dec 12:33	01:59
358 AD	20 Mar 09:37	22 Jun 04:54	22 Sep 22:12	20 Dec 18:24	01:59
359 AD	20 Mar 15:25	22 Jun 10:46	23 Sep 04:03	21 Dec 00:18	01:58
360 AD	19 Mar 21:20	21 Jun 16:42	22 Sep 09:56	20 Dec 06:19	01:58
361 AD	20 Mar 03:11	21 Jun 22:18	22 Sep 15:40	20 Dec 12:10	01:58
362 AD	20 Mar 09:01	22 Jun 04:09	22 Sep 21:35	20 Dec 17:57	01:58
363 AD	20 Mar 14:56	22 Jun 10:05	23 Sep 03:25	20 Dec 23:47	01:58
364 AD	19 Mar 20:50	21 Jun 15:47	22 Sep 09:03	20 Dec 05:34	01:58
365 AD	20 Mar 02:36	21 Jun 21:39	22 Sep 14:57	20 Dec 11:25	01:57
366 AD	20 Mar 08:19	22 Jun 03:27	22 Sep 20:45	20 Dec 17:11	01:57
367 AD	20 Mar 14:04	22 Jun 09:14	23 Sep 02:29	20 Dec 22:54	01:57
368 AD	19 Mar 19:55	21 Jun 15:08	22 Sep 08:23	20 Dec 04:47	01:57
369 AD	20 Mar 01:41	21 Jun 20:41	22 Sep 14:06	20 Dec 10:31	01:57
370 AD	20 Mar 07:22	22 Jun 02:27	22 Sep 19:59	20 Dec 16:19	01:57
371 AD	20 Mar 13:09	22 Jun 08:22	23 Sep 01:50	20 Dec 22:13	01:56
372 AD	19 Mar 19:00	21 Jun 14:01	22 Sep 07:26	20 Dec 04:02	01:56
373 AD	20 Mar 00:48	21 Jun 19:50	22 Sep 13:21	20 Dec 09:56	01:56
374 AD	20 Mar 06:37	22 Jun 01:39	22 Sep 19:14	20 Dec 15:44	01:56
375 AD	20 Mar 12:29	22 Jun 07:28	23 Sep 01:00	20 Dec 21:30	01:56
376 AD	19 Mar 18:24	21 Jun 13:26	22 Sep 06:57	20 Dec 03:31	01:56
377 AD	20 Mar 00:15	21 Jun 19:07	22 Sep 12:41	20 Dec 09:20	01:55
378 AD	20 Mar 06:00	22 Jun 00:57	22 Sep 18:33	20 Dec 15:08	01:55
379 AD	20 Mar 11:52	22 Jun 06:58	23 Sep 00:29	20 Dec 21:02	01:55
380 AD	19 Mar 17:48	21 Jun 12:40	22 Sep 06:09	20 Dec 02:47	01:55
381 AD	19 Mar 23:34	21 Jun 18:29	22 Sep 12:07	20 Dec 08:39	01:55
382 AD	20 Mar 05:19	22 Jun 00:19	22 Sep 18:02	20 Dec 14:31	01:55
383 AD	20 Mar 11:07	22 Jun 06:06	22 Sep 23:44	20 Dec 20:18	01:54
384 AD	19 Mar 16:56	21 Jun 11:58	22 Sep 05:36	20 Dec 02:18	01:54
385 AD	19 Mar 22:47	21 Jun 17:36	22 Sep 11:19	20 Dec 08:05	01:54
386 AD	20 Mar 04:34	21 Jun 23:20	22 Sep 17:08	20 Dec 13:46	01:54
387 AD	20 Mar 10:23	22 Jun 05:17	22 Sep 23:01	20 Dec 19:38	01:54
388 AD	19 Mar 16:17	21 Jun 10:58	22 Sep 04:36	20 Dec 01:22	01:54
389 AD	19 Mar 21:59	21 Jun 16:45	22 Sep 10:27	20 Dec 07:10	01:53
390 AD	20 Mar 03:41	21 Jun 22:37	22 Sep 16:20	20 Dec 13:00	01:53
391 AD	20 Mar 09:31	22 Jun 04:24	22 Sep 22:02	20 Dec 18:42	01:53
392 AD	19 Mar 15:19	21 Jun 10:15	22 Sep 03:59	20 Dec 00:38	01:53
393 AD	19 Mar 21:07	21 Jun 15:55	22 Sep 09:49	20 Dec 06:30	01:53
394 AD	20 Mar 02:54	21 Jun 21:40	22 Sep 15:39	20 Dec 12:16	01:53
395 AD	20 Mar 08:41	22 Jun 03:38	22 Sep 21:35	20 Dec 18:18	01:52
396 AD	19 Mar 14:41	21 Jun 09:23	22 Sep 03:14	20 Dec 00:09	01:52
397 AD	19 Mar 20:30	21 Jun 15:10	22 Sep 09:08	20 Dec 06:00	01:52
398 AD	20 Mar 02:20	21 Jun 21:05	22 Sep 15:06	20 Dec 11:54	01:52
399 AD	20 Mar 08:18	22 Jun 02:56	22 Sep 20:48	20 Dec 17:36	01:52

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
400 AD	19 Mar 14:08	21 Jun 08:50	22 Sep 02:43	19 Dec 23:34	01:52
401 AD	19 Mar 19:57	21 Jun 14:35	22 Sep 08:30	20 Dec 05:25	01:51
402 AD	20 Mar 01:42	21 Jun 20:22	22 Sep 14:16	20 Dec 11:04	01:51
403 AD	20 Mar 07:26	22 Jun 02:17	22 Sep 20:12	20 Dec 16:58	01:51
404 AD	19 Mar 13:22	21 Jun 07:59	22 Sep 01:51	19 Dec 22:42	01:51
405 AD	19 Mar 19:03	21 Jun 13:39	22 Sep 07:42	20 Dec 04:27	01:51
406 AD	20 Mar 00:41	21 Jun 19:29	22 Sep 13:38	20 Dec 10:22	01:51
407 AD	20 Mar 06:32	22 Jun 01:14	22 Sep 19:16	20 Dec 16:06	01:50
408 AD	19 Mar 12:18	21 Jun 07:00	22 Sep 01:06	19 Dec 22:04	01:50
409 AD	19 Mar 18:08	21 Jun 12:41	22 Sep 06:54	20 Dec 03:55	01:50
410 AD	19 Mar 23:59	21 Jun 18:26	22 Sep 12:39	20 Dec 09:34	01:50
411 AD	20 Mar 05:47	22 Jun 00:23	22 Sep 18:35	20 Dec 15:31	01:50
412 AD	19 Mar 11:46	21 Jun 06:11	22 Sep 00:15	19 Dec 21:21	01:50
413 AD	19 Mar 17:33	21 Jun 11:58	22 Sep 06:06	20 Dec 03:08	01:50
414 AD	19 Mar 23:16	21 Jun 17:55	22 Sep 12:05	20 Dec 09:04	01:49
415 AD	20 Mar 05:14	21 Jun 23:49	22 Sep 17:50	20 Dec 14:47	01:49
416 AD	19 Mar 11:03	21 Jun 05:38	21 Sep 23:46	19 Dec 20:42	01:49
417 AD	19 Mar 16:51	21 Jun 11:23	22 Sep 05:42	20 Dec 02:39	01:49
418 AD	19 Mar 22:41	21 Jun 17:12	22 Sep 11:29	20 Dec 08:22	01:49
419 AD	20 Mar 04:25	21 Jun 23:05	22 Sep 17:24	20 Dec 14:22	01:49
420 AD	19 Mar 10:22	21 Jun 04:50	21 Sep 23:04	19 Dec 20:14	01:48
421 AD	19 Mar 16:12	21 Jun 10:32	22 Sep 04:51	20 Dec 01:56	01:48
422 AD	19 Mar 21:53	21 Jun 16:22	22 Sep 10:48	20 Dec 07:48	01:48
423 AD	20 Mar 03:49	21 Jun 22:13	22 Sep 16:28	20 Dec 13:31	01:48
424 AD	19 Mar 09:35	21 Jun 03:57	21 Sep 22:13	19 Dec 19:21	01:48
425 AD	19 Mar 15:16	21 Jun 09:39	22 Sep 04:04	20 Dec 01:14	01:48
426 AD	19 Mar 21:06	21 Jun 15:27	22 Sep 09:46	20 Dec 06:50	01:47
427 AD	20 Mar 02:47	21 Jun 21:17	22 Sep 15:39	20 Dec 12:42	01:47
428 AD	19 Mar 08:42	21 Jun 03:03	21 Sep 21:25	19 Dec 18:33	01:47
429 AD	19 Mar 14:29	21 Jun 08:45	22 Sep 03:13	20 Dec 00:16	01:47
430 AD	19 Mar 20:06	21 Jun 14:36	22 Sep 09:13	20 Dec 06:16	01:47
431 AD	20 Mar 02:04	21 Jun 20:30	22 Sep 14:55	20 Dec 12:07	01:47
432 AD	19 Mar 07:56	21 Jun 02:17	21 Sep 20:44	19 Dec 18:02	01:46
433 AD	19 Mar 13:45	21 Jun 08:03	22 Sep 02:42	19 Dec 23:59	01:46
434 AD	19 Mar 19:45	21 Jun 13:57	22 Sep 08:30	20 Dec 05:40	01:46
435 AD	20 Mar 01:33	21 Jun 19:51	22 Sep 14:24	20 Dec 11:36	01:46
436 AD	19 Mar 07:29	21 Jun 01:42	21 Sep 20:11	19 Dec 17:31	01:46
437 AD	19 Mar 13:19	21 Jun 07:29	22 Sep 01:57	19 Dec 23:13	01:46
438 AD	19 Mar 18:56	21 Jun 13:19	22 Sep 07:55	20 Dec 05:06	01:45
439 AD	20 Mar 00:51	21 Jun 19:12	22 Sep 13:39	20 Dec 10:50	01:45
440 AD	19 Mar 06:40	21 Jun 00:54	21 Sep 19:27	19 Dec 16:38	01:45
441 AD	19 Mar 12:18	21 Jun 06:33	22 Sep 01:21	19 Dec 22:33	01:45
442 AD	19 Mar 18:08	21 Jun 12:22	22 Sep 07:04	20 Dec 04:16	01:45
443 AD	19 Mar 23:51	21 Jun 18:08	22 Sep 12:51	20 Dec 10:10	01:45
444 AD	19 Mar 05:43	20 Jun 23:52	21 Sep 18:34	19 Dec 16:03	01:44
445 AD	19 Mar 11:37	21 Jun 05:36	22 Sep 00:20	19 Dec 21:42	01:44
446 AD	19 Mar 17:17	21 Jun 11:24	22 Sep 06:15	20 Dec 03:34	01:44
447 AD	19 Mar 23:13	21 Jun 17:20	22 Sep 11:59	20 Dec 09:22	01:44
448 AD	19 Mar 05:05	20 Jun 23:08	21 Sep 17:45	19 Dec 15:11	01:44
449 AD	19 Mar 10:45	21 Jun 04:52	21 Sep 23:41	19 Dec 21:08	01:44

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
450 AD	19 Mar 16:40	21 Jun 10:50	22 Sep 05:31	20 Dec 02:51	01:43
451 AD	19 Mar 22:28	21 Jun 16:40	22 Sep 11:24	20 Dec 08:42	01:43
452 AD	19 Mar 04:20	20 Jun 22:27	21 Sep 17:16	19 Dec 14:40	01:43
453 AD	19 Mar 10:14	21 Jun 04:16	21 Sep 23:08	19 Dec 20:25	01:43
454 AD	19 Mar 15:51	21 Jun 10:03	22 Sep 05:04	20 Dec 02:22	01:43
455 AD	19 Mar 21:46	21 Jun 15:59	22 Sep 10:50	20 Dec 08:18	01:43
456 AD	19 Mar 03:42	20 Jun 21:43	21 Sep 16:34	19 Dec 14:06	01:42
457 AD	19 Mar 09:23	21 Jun 03:22	21 Sep 22:28	19 Dec 20:00	01:42
458 AD	19 Mar 15:21	21 Jun 09:17	22 Sep 04:16	20 Dec 01:42	01:42
459 AD	19 Mar 21:09	21 Jun 15:05	22 Sep 10:00	20 Dec 07:30	01:42
460 AD	19 Mar 02:57	20 Jun 20:50	21 Sep 15:45	19 Dec 13:24	01:42
461 AD	19 Mar 08:47	21 Jun 02:39	21 Sep 21:30	19 Dec 19:03	01:42
462 AD	19 Mar 14:23	21 Jun 08:23	22 Sep 03:21	20 Dec 00:50	01:41
463 AD	19 Mar 20:13	21 Jun 14:16	22 Sep 09:09	20 Dec 06:38	01:41
464 AD	19 Mar 02:06	20 Jun 20:01	21 Sep 14:56	19 Dec 12:24	01:41
465 AD	19 Mar 07:41	21 Jun 01:38	21 Sep 20:51	19 Dec 18:20	01:41
466 AD	19 Mar 13:32	21 Jun 07:33	22 Sep 02:41	20 Dec 00:10	01:41
467 AD	19 Mar 19:22	21 Jun 13:22	22 Sep 08:27	20 Dec 06:02	01:41
468 AD	19 Mar 01:14	20 Jun 19:06	21 Sep 14:16	19 Dec 12:00	01:40
469 AD	19 Mar 07:13	21 Jun 00:58	21 Sep 20:07	19 Dec 17:44	01:40
470 AD	19 Mar 12:57	21 Jun 06:46	22 Sep 02:01	19 Dec 23:35	01:40
471 AD	19 Mar 18:51	21 Jun 12:44	22 Sep 07:50	20 Dec 05:30	01:40
472 AD	19 Mar 00:48	20 Jun 18:35	21 Sep 13:37	19 Dec 11:20	01:40
473 AD	19 Mar 06:27	21 Jun 00:16	21 Sep 19:30	19 Dec 17:13	01:40
474 AD	19 Mar 12:20	21 Jun 06:14	22 Sep 01:23	19 Dec 22:59	01:39
475 AD	19 Mar 18:12	21 Jun 12:04	22 Sep 07:11	20 Dec 04:46	01:39
476 AD	18 Mar 23:59	20 Jun 17:43	21 Sep 12:59	19 Dec 10:40	01:39
477 AD	19 Mar 05:50	20 Jun 23:34	21 Sep 18:50	19 Dec 16:26	01:39
478 AD	19 Mar 11:28	21 Jun 05:17	22 Sep 00:37	19 Dec 22:16	01:39
479 AD	19 Mar 17:16	21 Jun 11:08	22 Sep 06:22	20 Dec 04:09	01:39
480 AD	18 Mar 23:13	20 Jun 16:55	21 Sep 12:07	19 Dec 09:55	01:38
481 AD	19 Mar 04:53	20 Jun 22:30	21 Sep 17:57	19 Dec 15:43	01:38
482 AD	19 Mar 10:44	21 Jun 04:26	21 Sep 23:48	19 Dec 21:30	01:38
483 AD	19 Mar 16:36	21 Jun 10:17	22 Sep 05:33	20 Dec 03:18	01:38
484 AD	18 Mar 22:21	20 Jun 15:57	21 Sep 11:18	19 Dec 09:12	01:38
485 AD	19 Mar 04:12	20 Jun 21:51	21 Sep 17:11	19 Dec 14:58	01:38
486 AD	19 Mar 09:54	21 Jun 03:38	21 Sep 23:00	19 Dec 20:43	01:37
487 AD	19 Mar 15:43	21 Jun 09:30	22 Sep 04:52	20 Dec 02:37	01:37
488 AD	18 Mar 21:41	20 Jun 15:21	21 Sep 10:44	19 Dec 08:28	01:37
489 AD	19 Mar 03:20	20 Jun 20:57	21 Sep 16:36	19 Dec 14:23	01:37
490 AD	19 Mar 09:10	21 Jun 02:56	21 Sep 22:30	19 Dec 20:19	01:37
491 AD	19 Mar 15:08	21 Jun 08:49	22 Sep 04:17	20 Dec 02:11	01:37
492 AD	18 Mar 20:59	20 Jun 14:28	21 Sep 10:03	19 Dec 08:06	01:36
493 AD	19 Mar 02:55	20 Jun 20:22	21 Sep 15:58	19 Dec 13:52	01:36
494 AD	19 Mar 08:43	21 Jun 02:12	21 Sep 21:46	19 Dec 19:38	01:36
495 AD	19 Mar 14:31	21 Jun 08:03	22 Sep 03:31	20 Dec 01:29	01:36
496 AD	18 Mar 20:26	20 Jun 13:56	21 Sep 09:19	19 Dec 07:18	01:36
497 AD	19 Mar 02:03	20 Jun 19:32	21 Sep 15:06	19 Dec 13:03	01:36
498 AD	19 Mar 07:48	21 Jun 01:26	21 Sep 20:59	19 Dec 18:49	01:35
499 AD	19 Mar 13:40	21 Jun 07:17	22 Sep 02:46	20 Dec 00:35	01:35

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
500 AD	18 Mar 19:24	20 Jun 12:50	21 Sep 08:31	19 Dec 06:26	01:35
501 AD	19 Mar 01:09	20 Jun 18:39	21 Sep 14:25	19 Dec 12:16	01:35
502 AD	19 Mar 06:53	21 Jun 00:26	21 Sep 20:11	19 Dec 18:07	01:35
503 AD	19 Mar 12:40	21 Jun 06:11	22 Sep 01:53	19 Dec 23:59	01:35
504 AD	18 Mar 18:38	20 Jun 12:03	21 Sep 07:44	19 Dec 05:51	01:35
505 AD	19 Mar 00:25	20 Jun 17:42	21 Sep 13:34	19 Dec 11:38	01:34
506 AD	19 Mar 06:15	20 Jun 23:39	21 Sep 19:28	19 Dec 17:29	01:34
507 AD	19 Mar 12:14	21 Jun 05:39	22 Sep 01:18	19 Dec 23:23	01:34
508 AD	18 Mar 18:03	20 Jun 11:19	21 Sep 07:02	19 Dec 05:15	01:34
509 AD	18 Mar 23:52	20 Jun 17:15	21 Sep 13:00	19 Dec 11:05	01:34
510 AD	19 Mar 05:42	20 Jun 23:08	21 Sep 18:52	19 Dec 16:52	01:34
511 AD	19 Mar 11:31	21 Jun 04:55	22 Sep 00:39	19 Dec 22:41	01:33
512 AD	18 Mar 17:24	20 Jun 10:47	21 Sep 06:35	19 Dec 04:36	01:33
513 AD	18 Mar 23:05	20 Jun 16:26	21 Sep 12:23	19 Dec 10:25	01:33
514 AD	19 Mar 04:49	20 Jun 22:17	21 Sep 18:13	19 Dec 16:17	01:33
515 AD	19 Mar 10:44	21 Jun 04:11	22 Sep 00:01	19 Dec 22:10	01:33
516 AD	18 Mar 16:34	20 Jun 09:43	21 Sep 05:40	19 Dec 03:55	01:33
517 AD	18 Mar 22:21	20 Jun 15:32	21 Sep 11:35	19 Dec 09:42	01:32
518 AD	19 Mar 04:09	20 Jun 21:23	21 Sep 17:21	19 Dec 15:28	01:32
519 AD	19 Mar 09:55	21 Jun 03:06	21 Sep 22:59	19 Dec 21:15	01:32
520 AD	18 Mar 15:45	20 Jun 08:58	21 Sep 04:51	19 Dec 03:07	01:32
521 AD	18 Mar 21:27	20 Jun 14:38	21 Sep 10:37	19 Dec 08:52	01:32
522 AD	19 Mar 03:13	20 Jun 20:30	21 Sep 16:29	19 Dec 14:38	01:32
523 AD	19 Mar 09:07	21 Jun 02:26	21 Sep 22:24	19 Dec 20:33	01:31
524 AD	18 Mar 14:58	20 Jun 08:03	21 Sep 04:08	19 Dec 02:23	01:31
525 AD	18 Mar 20:43	20 Jun 13:54	21 Sep 10:06	19 Dec 08:18	01:31
526 AD	19 Mar 02:33	20 Jun 19:51	21 Sep 15:57	19 Dec 14:13	01:31
527 AD	19 Mar 08:27	21 Jun 01:36	21 Sep 21:39	19 Dec 20:03	01:31
528 AD	18 Mar 14:23	20 Jun 07:30	21 Sep 03:37	19 Dec 01:59	01:31
529 AD	18 Mar 20:14	20 Jun 13:15	21 Sep 09:28	19 Dec 07:47	01:30
530 AD	19 Mar 02:03	20 Jun 19:08	21 Sep 15:17	19 Dec 13:34	01:30
531 AD	19 Mar 07:56	21 Jun 01:07	21 Sep 21:10	19 Dec 19:30	01:30
532 AD	18 Mar 13:46	20 Jun 06:45	21 Sep 02:50	19 Dec 01:16	01:30
533 AD	18 Mar 19:28	20 Jun 12:33	21 Sep 08:43	19 Dec 07:01	01:30
534 AD	19 Mar 01:14	20 Jun 18:26	21 Sep 14:35	19 Dec 12:50	01:30
535 AD	19 Mar 07:03	21 Jun 00:05	21 Sep 20:13	19 Dec 18:32	01:29
536 AD	18 Mar 12:47	20 Jun 05:51	21 Sep 02:07	19 Dec 00:26	01:29
537 AD	18 Mar 18:29	20 Jun 11:32	21 Sep 07:55	19 Dec 06:16	01:29
538 AD	19 Mar 00:14	20 Jun 17:18	21 Sep 13:37	19 Dec 12:03	01:29
539 AD	19 Mar 06:07	20 Jun 23:13	21 Sep 19:30	19 Dec 18:00	01:29
540 AD	18 Mar 12:03	20 Jun 04:50	21 Sep 01:10	18 Dec 23:45	01:29
541 AD	18 Mar 17:50	20 Jun 10:39	21 Sep 07:05	19 Dec 05:32	01:28
542 AD	18 Mar 23:40	20 Jun 16:38	21 Sep 12:59	19 Dec 11:26	01:28
543 AD	19 Mar 05:33	20 Jun 22:26	21 Sep 18:38	19 Dec 17:12	01:28
544 AD	18 Mar 11:22	20 Jun 04:19	21 Sep 00:35	18 Dec 23:08	01:28
545 AD	18 Mar 17:09	20 Jun 10:09	21 Sep 06:30	19 Dec 04:59	01:28
546 AD	18 Mar 22:59	20 Jun 15:59	21 Sep 12:19	19 Dec 10:43	01:28
547 AD	19 Mar 04:51	20 Jun 21:55	21 Sep 18:19	19 Dec 16:42	01:27
548 AD	18 Mar 10:44	20 Jun 03:35	21 Sep 00:03	18 Dec 22:33	01:27
549 AD	18 Mar 16:27	20 Jun 09:20	21 Sep 05:56	19 Dec 04:23	01:27

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
550 AD	18 Mar 22:13	20 Jun 15:15	21 Sep 11:47	19 Dec 10:20	01:27
551 AD	19 Mar 04:08	20 Jun 20:57	21 Sep 17:23	19 Dec 16:04	01:27
552 AD	18 Mar 09:58	20 Jun 02:42	20 Sep 23:15	18 Dec 21:53	01:27
553 AD	18 Mar 15:44	20 Jun 08:28	21 Sep 05:06	19 Dec 03:42	01:27
554 AD	18 Mar 21:33	20 Jun 14:16	21 Sep 10:46	19 Dec 09:23	01:26
555 AD	19 Mar 03:20	20 Jun 20:10	21 Sep 16:39	19 Dec 15:19	01:26
556 AD	18 Mar 09:11	20 Jun 01:51	20 Sep 22:19	18 Dec 21:05	01:26
557 AD	18 Mar 14:54	20 Jun 07:35	21 Sep 04:09	19 Dec 02:45	01:26
558 AD	18 Mar 20:37	20 Jun 13:31	21 Sep 10:06	19 Dec 08:38	01:26
559 AD	19 Mar 02:32	20 Jun 19:16	21 Sep 15:46	19 Dec 14:23	01:26
560 AD	18 Mar 08:17	20 Jun 01:01	20 Sep 21:41	18 Dec 20:18	01:25
561 AD	18 Mar 14:00	20 Jun 06:51	21 Sep 03:37	19 Dec 02:17	01:25
562 AD	18 Mar 19:53	20 Jun 12:41	21 Sep 09:20	19 Dec 08:03	01:25
563 AD	19 Mar 01:46	20 Jun 18:35	21 Sep 15:17	19 Dec 14:03	01:25
564 AD	18 Mar 07:45	20 Jun 00:20	20 Sep 21:05	18 Dec 19:55	01:25
565 AD	18 Mar 13:36	20 Jun 06:06	21 Sep 02:55	19 Dec 01:38	01:25
566 AD	18 Mar 19:22	20 Jun 12:06	21 Sep 08:53	19 Dec 07:37	01:24
567 AD	19 Mar 01:20	20 Jun 17:55	21 Sep 14:30	19 Dec 13:22	01:24
568 AD	18 Mar 07:05	19 Jun 23:40	20 Sep 20:20	18 Dec 19:10	01:24
569 AD	18 Mar 12:48	20 Jun 05:30	21 Sep 02:17	19 Dec 01:02	01:24
570 AD	18 Mar 18:39	20 Jun 11:18	21 Sep 08:00	19 Dec 06:40	01:24
571 AD	19 Mar 00:24	20 Jun 17:06	21 Sep 13:54	19 Dec 12:36	01:24
572 AD	18 Mar 06:13	19 Jun 22:46	20 Sep 19:40	18 Dec 18:29	01:23
573 AD	18 Mar 11:57	20 Jun 04:28	21 Sep 01:24	19 Dec 00:11	01:23
574 AD	18 Mar 17:38	20 Jun 10:20	21 Sep 07:16	19 Dec 06:08	01:23
575 AD	18 Mar 23:37	20 Jun 16:06	21 Sep 12:54	19 Dec 11:52	01:23
576 AD	18 Mar 05:26	19 Jun 21:48	20 Sep 18:43	18 Dec 17:38	01:23
577 AD	18 Mar 11:08	20 Jun 03:39	21 Sep 00:40	18 Dec 23:32	01:23
578 AD	18 Mar 17:02	20 Jun 09:32	21 Sep 06:22	19 Dec 05:15	01:22
579 AD	18 Mar 22:50	20 Jun 15:23	21 Sep 12:15	19 Dec 11:12	01:22
580 AD	18 Mar 04:40	19 Jun 21:09	20 Sep 18:05	18 Dec 17:06	01:22
581 AD	18 Mar 10:31	20 Jun 02:57	20 Sep 23:55	18 Dec 22:47	01:22
582 AD	18 Mar 16:14	20 Jun 08:51	21 Sep 05:54	19 Dec 04:43	01:22
583 AD	18 Mar 22:13	20 Jun 14:40	21 Sep 11:38	19 Dec 10:34	01:22
584 AD	18 Mar 04:02	19 Jun 20:23	20 Sep 17:28	18 Dec 16:25	01:22
585 AD	18 Mar 09:41	20 Jun 02:13	20 Sep 23:26	18 Dec 22:25	01:21
586 AD	18 Mar 15:39	20 Jun 08:07	21 Sep 05:08	19 Dec 04:10	01:21
587 AD	18 Mar 21:31	20 Jun 13:54	21 Sep 10:59	19 Dec 10:03	01:21
588 AD	18 Mar 03:24	19 Jun 19:39	20 Sep 16:49	18 Dec 15:56	01:21
589 AD	18 Mar 09:16	20 Jun 01:26	20 Sep 22:34	18 Dec 21:34	01:21
590 AD	18 Mar 14:56	20 Jun 07:18	21 Sep 04:26	19 Dec 03:28	01:21
591 AD	18 Mar 20:50	20 Jun 13:08	21 Sep 10:05	19 Dec 09:15	01:20
592 AD	18 Mar 02:36	19 Jun 18:50	20 Sep 15:50	18 Dec 14:56	01:20
593 AD	18 Mar 08:11	20 Jun 00:36	20 Sep 21:48	18 Dec 20:48	01:20
594 AD	18 Mar 14:05	20 Jun 06:29	21 Sep 03:33	19 Dec 02:29	01:20
595 AD	18 Mar 19:51	20 Jun 12:12	21 Sep 09:23	19 Dec 08:22	01:20
596 AD	18 Mar 01:35	19 Jun 17:54	20 Sep 15:16	18 Dec 14:22	01:20
597 AD	18 Mar 07:25	19 Jun 23:41	20 Sep 21:01	18 Dec 20:05	01:19
598 AD	18 Mar 13:08	20 Jun 05:31	21 Sep 02:53	19 Dec 02:03	01:19
599 AD	18 Mar 19:10	20 Jun 11:22	21 Sep 08:38	19 Dec 07:55	01:19

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
600 AD	18 Mar 01:06	19 Jun 17:06	20 Sep 14:26	18 Dec 13:39	01:19
601 AD	18 Mar 06:48	19 Jun 22:58	20 Sep 20:26	18 Dec 19:37	01:19
602 AD	18 Mar 12:46	20 Jun 04:58	21 Sep 02:11	19 Dec 01:24	01:19
603 AD	18 Mar 18:37	20 Jun 10:48	21 Sep 08:01	19 Dec 07:16	01:19
604 AD	18 Mar 00:23	19 Jun 16:34	20 Sep 13:55	18 Dec 13:12	01:18
605 AD	18 Mar 06:17	19 Jun 22:25	20 Sep 19:43	18 Dec 18:51	01:18
606 AD	18 Mar 11:59	20 Jun 04:13	21 Sep 01:37	19 Dec 00:43	01:18
607 AD	18 Mar 17:51	20 Jun 10:01	21 Sep 07:23	19 Dec 06:35	01:18
608 AD	17 Mar 23:40	19 Jun 15:43	20 Sep 13:08	18 Dec 12:20	01:18
609 AD	18 Mar 05:13	19 Jun 21:27	20 Sep 19:01	18 Dec 18:17	01:18
610 AD	18 Mar 11:08	20 Jun 03:20	21 Sep 00:44	19 Dec 00:02	01:17
611 AD	18 Mar 17:01	20 Jun 09:03	21 Sep 06:29	19 Dec 05:49	01:17
612 AD	17 Mar 22:45	19 Jun 14:43	20 Sep 12:20	18 Dec 11:43	01:17
613 AD	18 Mar 04:39	19 Jun 20:34	20 Sep 18:07	18 Dec 17:24	01:17
614 AD	18 Mar 10:20	20 Jun 02:22	20 Sep 23:54	18 Dec 23:14	01:17
615 AD	18 Mar 16:11	20 Jun 08:12	21 Sep 05:38	19 Dec 05:07	01:17
616 AD	17 Mar 22:05	19 Jun 13:59	20 Sep 11:26	18 Dec 10:50	01:16
617 AD	18 Mar 03:41	19 Jun 19:45	20 Sep 17:23	18 Dec 16:43	01:16
618 AD	18 Mar 09:38	20 Jun 01:44	20 Sep 23:15	18 Dec 22:33	01:16
619 AD	18 Mar 15:32	20 Jun 07:31	21 Sep 05:05	19 Dec 04:25	01:16
620 AD	17 Mar 21:15	19 Jun 13:14	20 Sep 11:00	18 Dec 10:27	01:16
621 AD	18 Mar 03:11	19 Jun 19:09	20 Sep 16:50	18 Dec 16:15	01:16
622 AD	18 Mar 08:59	20 Jun 00:59	20 Sep 22:39	18 Dec 22:07	01:16
623 AD	18 Mar 14:55	20 Jun 06:48	21 Sep 04:28	19 Dec 04:01	01:15
624 AD	17 Mar 20:53	19 Jun 12:37	20 Sep 10:16	18 Dec 09:44	01:15
625 AD	18 Mar 02:30	19 Jun 18:22	20 Sep 16:08	18 Dec 15:35	01:15
626 AD	18 Mar 08:22	20 Jun 00:20	20 Sep 21:55	18 Dec 21:24	01:15
627 AD	18 Mar 14:14	20 Jun 06:06	21 Sep 03:39	19 Dec 03:09	01:15
628 AD	17 Mar 19:52	19 Jun 11:43	20 Sep 09:29	18 Dec 09:01	01:15
629 AD	18 Mar 01:42	19 Jun 17:34	20 Sep 15:18	18 Dec 14:41	01:14
630 AD	18 Mar 07:24	19 Jun 23:18	20 Sep 21:05	18 Dec 20:28	01:14
631 AD	18 Mar 13:11	20 Jun 05:01	21 Sep 02:51	19 Dec 02:23	01:14
632 AD	17 Mar 19:02	19 Jun 10:47	20 Sep 08:37	18 Dec 08:10	01:14
633 AD	18 Mar 00:39	19 Jun 16:29	20 Sep 14:27	18 Dec 14:04	01:14
634 AD	18 Mar 06:32	19 Jun 22:25	20 Sep 20:16	18 Dec 19:55	01:14
635 AD	18 Mar 12:34	20 Jun 04:15	21 Sep 02:04	19 Dec 01:43	01:13
636 AD	17 Mar 18:19	19 Jun 09:55	20 Sep 07:56	18 Dec 07:38	01:13
637 AD	18 Mar 00:14	19 Jun 15:55	20 Sep 13:50	18 Dec 13:27	01:13
638 AD	18 Mar 06:04	19 Jun 21:48	20 Sep 19:38	18 Dec 19:17	01:13
639 AD	18 Mar 11:54	20 Jun 03:37	21 Sep 01:27	19 Dec 01:12	01:13
640 AD	17 Mar 17:50	19 Jun 09:31	20 Sep 07:19	18 Dec 06:58	01:13
641 AD	17 Mar 23:30	19 Jun 15:15	20 Sep 13:14	18 Dec 12:47	01:13
642 AD	18 Mar 05:19	19 Jun 21:10	20 Sep 19:06	18 Dec 18:39	01:12
643 AD	18 Mar 11:15	20 Jun 02:59	21 Sep 00:55	19 Dec 00:30	01:12
644 AD	17 Mar 16:53	19 Jun 08:32	20 Sep 06:42	18 Dec 06:25	01:12
645 AD	17 Mar 22:42	19 Jun 14:25	20 Sep 12:32	18 Dec 12:15	01:12
646 AD	18 Mar 04:33	19 Jun 20:11	20 Sep 18:14	18 Dec 17:59	01:12
647 AD	18 Mar 10:23	20 Jun 01:51	20 Sep 23:57	18 Dec 23:49	01:12
648 AD	17 Mar 16:18	19 Jun 07:42	20 Sep 05:46	18 Dec 05:34	01:11
649 AD	17 Mar 21:56	19 Jun 13:25	20 Sep 11:32	18 Dec 11:19	01:11

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
650 AD	18 Mar 03:42	19 Jun 19:20	20 Sep 17:20	18 Dec 17:10	01:11
651 AD	18 Mar 09:38	20 Jun 01:12	20 Sep 23:07	18 Dec 22:58	01:11
652 AD	17 Mar 15:18	19 Jun 06:47	20 Sep 04:56	18 Dec 04:47	01:11
653 AD	17 Mar 21:07	19 Jun 12:43	20 Sep 10:53	18 Dec 10:35	01:11
654 AD	18 Mar 02:59	19 Jun 18:35	20 Sep 16:43	18 Dec 16:24	01:11
655 AD	18 Mar 08:47	20 Jun 00:17	20 Sep 22:30	18 Dec 22:21	01:10
656 AD	17 Mar 14:40	19 Jun 06:11	20 Sep 04:25	18 Dec 04:16	01:10
657 AD	17 Mar 20:24	19 Jun 11:57	20 Sep 10:14	18 Dec 10:07	01:10
658 AD	18 Mar 02:17	19 Jun 17:51	20 Sep 16:06	18 Dec 16:00	01:10
659 AD	18 Mar 08:19	19 Jun 23:45	20 Sep 21:57	18 Dec 21:52	01:10
660 AD	17 Mar 14:05	19 Jun 05:22	20 Sep 03:46	18 Dec 03:43	01:10
661 AD	17 Mar 19:53	19 Jun 11:18	20 Sep 09:39	18 Dec 09:32	01:09
662 AD	18 Mar 01:44	19 Jun 17:11	20 Sep 15:23	18 Dec 15:20	01:09
663 AD	18 Mar 07:32	19 Jun 22:51	20 Sep 21:04	18 Dec 21:08	01:09
664 AD	17 Mar 13:20	19 Jun 04:41	20 Sep 02:57	18 Dec 02:53	01:09
665 AD	17 Mar 19:02	19 Jun 10:25	20 Sep 08:45	18 Dec 08:37	01:09
666 AD	18 Mar 00:46	19 Jun 16:12	20 Sep 14:33	18 Dec 14:25	01:09
667 AD	18 Mar 06:39	19 Jun 22:03	20 Sep 20:23	18 Dec 20:19	01:09
668 AD	17 Mar 12:19	19 Jun 03:36	20 Sep 02:06	18 Dec 02:10	01:08
669 AD	17 Mar 18:04	19 Jun 09:27	20 Sep 07:58	18 Dec 08:00	01:08
670 AD	18 Mar 00:00	19 Jun 15:21	20 Sep 13:45	18 Dec 13:49	01:08
671 AD	18 Mar 05:53	19 Jun 20:59	20 Sep 19:27	18 Dec 19:37	01:08
672 AD	17 Mar 11:44	19 Jun 02:53	20 Sep 01:24	18 Dec 01:28	01:08
673 AD	17 Mar 17:31	19 Jun 08:45	20 Sep 07:13	18 Dec 07:17	01:08
674 AD	17 Mar 23:19	19 Jun 14:38	20 Sep 13:01	18 Dec 13:08	01:07
675 AD	18 Mar 05:15	19 Jun 20:35	20 Sep 18:56	18 Dec 19:04	01:07
676 AD	17 Mar 11:01	19 Jun 02:13	20 Sep 00:45	18 Dec 00:51	01:07
677 AD	17 Mar 16:47	19 Jun 08:05	20 Sep 06:43	18 Dec 06:42	01:07
678 AD	17 Mar 22:42	19 Jun 14:01	20 Sep 12:35	18 Dec 12:35	01:07
679 AD	18 Mar 04:31	19 Jun 19:38	20 Sep 18:15	18 Dec 18:26	01:07
680 AD	17 Mar 10:19	19 Jun 01:28	20 Sep 00:09	18 Dec 00:21	01:07
681 AD	17 Mar 16:06	19 Jun 07:18	20 Sep 05:56	18 Dec 06:08	01:06
682 AD	17 Mar 21:56	19 Jun 13:04	20 Sep 11:39	18 Dec 11:54	01:06
683 AD	18 Mar 03:52	19 Jun 18:56	20 Sep 17:32	18 Dec 17:46	01:06
684 AD	17 Mar 09:38	19 Jun 00:34	19 Sep 23:15	17 Dec 23:31	01:06
685 AD	17 Mar 15:20	19 Jun 06:24	20 Sep 05:05	18 Dec 05:17	01:06
686 AD	17 Mar 21:10	19 Jun 12:21	20 Sep 10:54	18 Dec 11:07	01:06
687 AD	18 Mar 02:59	19 Jun 17:58	20 Sep 16:31	18 Dec 16:52	01:06
688 AD	17 Mar 08:43	18 Jun 23:46	19 Sep 22:28	17 Dec 22:39	01:05
689 AD	17 Mar 14:28	19 Jun 05:37	20 Sep 04:20	18 Dec 04:27	01:05
690 AD	17 Mar 20:15	19 Jun 11:22	20 Sep 10:06	18 Dec 10:16	01:05
691 AD	18 Mar 02:06	19 Jun 17:14	20 Sep 16:01	18 Dec 16:16	01:05
692 AD	17 Mar 07:52	18 Jun 22:54	19 Sep 21:48	17 Dec 22:10	01:05
693 AD	17 Mar 13:41	19 Jun 04:44	20 Sep 03:39	18 Dec 04:00	01:05
694 AD	17 Mar 19:38	19 Jun 10:42	20 Sep 09:33	18 Dec 09:55	01:04
695 AD	18 Mar 01:38	19 Jun 16:23	20 Sep 15:14	18 Dec 15:42	01:04
696 AD	17 Mar 07:26	18 Jun 22:14	19 Sep 21:10	17 Dec 21:34	01:04
697 AD	17 Mar 13:14	19 Jun 04:12	20 Sep 03:02	18 Dec 03:26	01:04
698 AD	17 Mar 19:05	19 Jun 10:00	20 Sep 08:43	18 Dec 09:10	01:04
699 AD	18 Mar 00:55	19 Jun 15:53	20 Sep 14:38	18 Dec 15:04	01:04

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
700 AD	17 Mar 06:41	18 Jun 21:34	19 Sep 20:26	17 Dec 20:49	01:04
701 AD	17 Mar 12:25	19 Jun 03:20	20 Sep 02:16	18 Dec 02:32	01:03
702 AD	17 Mar 18:12	19 Jun 09:14	20 Sep 08:11	18 Dec 08:28	01:03
703 AD	18 Mar 00:03	19 Jun 14:50	20 Sep 13:47	18 Dec 14:15	01:03
704 AD	17 Mar 05:44	18 Jun 20:34	19 Sep 19:38	17 Dec 20:06	01:03
705 AD	17 Mar 11:29	19 Jun 02:26	20 Sep 01:28	18 Dec 01:57	01:03
706 AD	17 Mar 17:23	19 Jun 08:09	20 Sep 07:07	18 Dec 07:38	01:03
707 AD	17 Mar 23:14	19 Jun 13:59	20 Sep 13:02	18 Dec 13:34	01:03
708 AD	17 Mar 05:02	18 Jun 19:43	19 Sep 18:49	17 Dec 19:23	01:02
709 AD	17 Mar 10:48	19 Jun 01:32	20 Sep 00:36	18 Dec 01:08	01:02
710 AD	17 Mar 16:38	19 Jun 07:31	20 Sep 06:31	18 Dec 07:05	01:02
711 AD	17 Mar 22:34	19 Jun 13:14	20 Sep 12:12	18 Dec 12:51	01:02
712 AD	17 Mar 04:21	18 Jun 19:01	19 Sep 18:09	17 Dec 18:40	01:02
713 AD	17 Mar 10:07	19 Jun 00:58	20 Sep 00:08	18 Dec 00:35	01:02
714 AD	17 Mar 16:02	19 Jun 06:46	20 Sep 05:51	18 Dec 06:22	01:01
715 AD	17 Mar 21:50	19 Jun 12:36	20 Sep 11:46	18 Dec 12:23	01:01
716 AD	17 Mar 03:38	18 Jun 18:22	19 Sep 17:36	17 Dec 18:17	01:01
717 AD	17 Mar 09:29	19 Jun 00:09	19 Sep 23:22	18 Dec 00:00	01:01
718 AD	17 Mar 15:21	19 Jun 06:05	20 Sep 05:18	18 Dec 05:55	01:01
719 AD	17 Mar 21:19	19 Jun 11:47	20 Sep 10:57	18 Dec 11:40	01:01
720 AD	17 Mar 03:03	18 Jun 17:31	19 Sep 16:46	17 Dec 17:25	01:01
721 AD	17 Mar 08:43	18 Jun 23:25	19 Sep 22:39	17 Dec 23:18	01:00
722 AD	17 Mar 14:35	19 Jun 05:12	20 Sep 04:16	18 Dec 04:58	01:00
723 AD	17 Mar 20:18	19 Jun 10:56	20 Sep 10:07	18 Dec 10:49	01:00
724 AD	17 Mar 02:01	18 Jun 16:39	19 Sep 15:59	17 Dec 16:39	01:00
725 AD	17 Mar 07:49	18 Jun 22:23	19 Sep 21:44	17 Dec 22:18	01:00
726 AD	17 Mar 13:33	19 Jun 04:14	20 Sep 03:39	18 Dec 04:17	01:00
727 AD	17 Mar 19:28	19 Jun 09:57	20 Sep 09:19	18 Dec 10:10	01:00
728 AD	17 Mar 01:14	18 Jun 15:41	19 Sep 15:08	17 Dec 15:58	00:59
729 AD	17 Mar 07:01	18 Jun 21:37	19 Sep 21:06	17 Dec 21:56	00:59
730 AD	17 Mar 13:04	19 Jun 03:28	20 Sep 02:48	18 Dec 03:39	00:59
731 AD	17 Mar 18:56	19 Jun 09:18	20 Sep 08:42	18 Dec 09:34	00:59
732 AD	17 Mar 00:44	18 Jun 15:09	19 Sep 14:37	17 Dec 15:31	00:59
733 AD	17 Mar 06:37	18 Jun 21:02	19 Sep 20:23	17 Dec 21:13	00:59
734 AD	17 Mar 12:24	19 Jun 02:58	20 Sep 02:19	18 Dec 03:10	00:59
735 AD	17 Mar 18:20	19 Jun 08:44	20 Sep 08:04	18 Dec 08:59	00:58
736 AD	17 Mar 00:06	18 Jun 14:26	19 Sep 13:54	17 Dec 14:40	00:58
737 AD	17 Mar 05:45	18 Jun 20:19	19 Sep 19:53	17 Dec 20:35	00:58
738 AD	17 Mar 11:39	19 Jun 02:06	20 Sep 01:32	18 Dec 02:20	00:58
739 AD	17 Mar 17:23	19 Jun 07:47	20 Sep 07:20	18 Dec 08:15	00:58
740 AD	16 Mar 23:04	18 Jun 13:29	19 Sep 13:10	17 Dec 14:10	00:58
741 AD	17 Mar 04:57	18 Jun 19:15	19 Sep 18:51	17 Dec 19:48	00:58
742 AD	17 Mar 10:45	19 Jun 01:04	20 Sep 00:42	18 Dec 01:40	00:57
743 AD	17 Mar 16:41	19 Jun 06:49	20 Sep 06:24	18 Dec 07:30	00:57
744 AD	16 Mar 22:28	18 Jun 12:34	19 Sep 12:10	17 Dec 13:11	00:57
745 AD	17 Mar 04:07	18 Jun 18:28	19 Sep 18:06	17 Dec 19:06	00:57
746 AD	17 Mar 10:04	19 Jun 00:22	19 Sep 23:48	18 Dec 00:51	00:57
747 AD	17 Mar 15:53	19 Jun 06:07	20 Sep 05:39	18 Dec 06:41	00:57
748 AD	16 Mar 21:35	18 Jun 11:55	19 Sep 11:40	17 Dec 12:37	00:57
749 AD	17 Mar 03:30	18 Jun 17:48	19 Sep 17:28	17 Dec 18:21	00:56

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
750 AD	17 Mar 09:17	18 Jun 23:39	19 Sep 23:24	18 Dec 00:21	00:56
751 AD	17 Mar 15:11	19 Jun 05:25	20 Sep 05:11	18 Dec 06:21	00:56
752 AD	16 Mar 21:03	18 Jun 11:12	19 Sep 10:59	17 Dec 12:05	00:56
753 AD	17 Mar 02:47	18 Jun 17:04	19 Sep 16:55	17 Dec 18:00	00:56
754 AD	17 Mar 08:49	18 Jun 22:57	19 Sep 22:39	17 Dec 23:47	00:56
755 AD	17 Mar 14:40	19 Jun 04:40	20 Sep 04:25	18 Dec 05:34	00:56
756 AD	16 Mar 20:17	18 Jun 10:25	19 Sep 10:20	17 Dec 11:30	00:55
757 AD	17 Mar 02:11	18 Jun 16:18	19 Sep 16:01	17 Dec 17:09	00:55
758 AD	17 Mar 07:55	18 Jun 22:05	19 Sep 21:48	17 Dec 22:59	00:55
759 AD	17 Mar 13:44	19 Jun 03:48	20 Sep 03:35	18 Dec 04:50	00:55
760 AD	16 Mar 19:33	18 Jun 09:31	19 Sep 09:21	17 Dec 10:27	00:55
761 AD	17 Mar 01:09	18 Jun 15:19	19 Sep 15:16	17 Dec 16:20	00:55
762 AD	17 Mar 07:03	18 Jun 21:09	19 Sep 20:59	17 Dec 22:11	00:55
763 AD	17 Mar 12:52	19 Jun 02:52	20 Sep 02:44	18 Dec 04:01	00:54
764 AD	16 Mar 18:30	18 Jun 08:36	19 Sep 08:40	17 Dec 09:59	00:54
765 AD	17 Mar 00:29	18 Jun 14:32	19 Sep 14:27	17 Dec 15:42	00:54
766 AD	17 Mar 06:22	18 Jun 20:21	19 Sep 20:18	17 Dec 21:34	00:54
767 AD	17 Mar 12:16	19 Jun 02:09	20 Sep 02:10	18 Dec 03:32	00:54
768 AD	16 Mar 18:10	18 Jun 08:01	19 Sep 07:58	17 Dec 09:16	00:54
769 AD	16 Mar 23:51	18 Jun 13:54	19 Sep 13:53	17 Dec 15:11	00:54
770 AD	17 Mar 05:47	18 Jun 19:49	19 Sep 19:40	17 Dec 21:01	00:53
771 AD	17 Mar 11:41	19 Jun 01:35	20 Sep 01:29	18 Dec 02:47	00:53
772 AD	16 Mar 17:18	18 Jun 07:17	19 Sep 07:28	17 Dec 08:42	00:53
773 AD	16 Mar 23:11	18 Jun 13:12	19 Sep 13:16	17 Dec 14:28	00:53
774 AD	17 Mar 05:00	18 Jun 18:57	19 Sep 19:03	17 Dec 20:21	00:53
775 AD	17 Mar 10:45	19 Jun 00:38	20 Sep 00:49	18 Dec 02:19	00:53
776 AD	16 Mar 16:39	18 Jun 06:26	19 Sep 06:34	17 Dec 08:00	00:53
777 AD	16 Mar 22:21	18 Jun 12:11	19 Sep 12:23	17 Dec 13:47	00:52
778 AD	17 Mar 04:16	18 Jun 18:02	19 Sep 18:08	17 Dec 19:36	00:52
779 AD	17 Mar 10:09	18 Jun 23:48	19 Sep 23:51	18 Dec 01:19	00:52
780 AD	16 Mar 15:43	18 Jun 05:30	19 Sep 05:44	17 Dec 07:13	00:52
781 AD	16 Mar 21:35	18 Jun 11:28	19 Sep 11:31	17 Dec 12:58	00:52
782 AD	17 Mar 03:25	18 Jun 17:16	19 Sep 17:18	17 Dec 18:45	00:52
783 AD	17 Mar 09:10	18 Jun 22:57	19 Sep 23:10	18 Dec 00:41	00:52
784 AD	16 Mar 15:04	18 Jun 04:48	19 Sep 05:03	17 Dec 06:24	00:51
785 AD	16 Mar 20:44	18 Jun 10:35	19 Sep 10:56	17 Dec 12:17	00:51
786 AD	17 Mar 02:37	18 Jun 16:28	19 Sep 16:45	17 Dec 18:17	00:51
787 AD	17 Mar 08:33	18 Jun 22:16	19 Sep 22:31	18 Dec 00:07	00:51
788 AD	16 Mar 14:13	18 Jun 03:57	19 Sep 04:25	17 Dec 06:04	00:51
789 AD	16 Mar 20:13	18 Jun 09:56	19 Sep 10:17	17 Dec 11:51	00:51
790 AD	17 Mar 02:11	18 Jun 15:46	19 Sep 16:04	17 Dec 17:40	00:51
791 AD	17 Mar 07:58	18 Jun 21:29	19 Sep 21:53	17 Dec 23:36	00:50
792 AD	16 Mar 13:51	18 Jun 03:23	19 Sep 03:43	17 Dec 05:20	00:50
793 AD	16 Mar 19:33	18 Jun 09:12	19 Sep 09:30	17 Dec 11:07	00:50
794 AD	17 Mar 01:22	18 Jun 15:02	19 Sep 15:16	17 Dec 16:56	00:50
795 AD	17 Mar 07:16	18 Jun 20:49	19 Sep 21:03	17 Dec 22:39	00:50
796 AD	16 Mar 12:50	18 Jun 02:26	19 Sep 02:56	17 Dec 04:28	00:50
797 AD	16 Mar 18:37	18 Jun 08:20	19 Sep 08:47	17 Dec 10:17	00:50
798 AD	17 Mar 00:28	18 Jun 14:07	19 Sep 14:30	17 Dec 16:08	00:50
799 AD	17 Mar 06:10	18 Jun 19:43	19 Sep 20:16	17 Dec 22:04	00:49

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
800 AD	16 Mar 12:03	18 Jun 01:34	19 Sep 02:07	17 Dec 03:50	00:49
801 AD	16 Mar 17:51	18 Jun 07:21	19 Sep 07:55	17 Dec 09:36	00:49
802 AD	16 Mar 23:43	18 Jun 13:10	19 Sep 13:42	17 Dec 15:29	00:49
803 AD	17 Mar 05:40	18 Jun 19:03	19 Sep 19:31	17 Dec 21:20	00:49
804 AD	16 Mar 11:20	18 Jun 00:46	19 Sep 01:22	17 Dec 03:11	00:49
805 AD	16 Mar 17:10	18 Jun 06:45	19 Sep 07:15	17 Dec 09:02	00:49
806 AD	16 Mar 23:09	18 Jun 12:40	19 Sep 13:04	17 Dec 14:51	00:48
807 AD	17 Mar 04:55	18 Jun 18:18	19 Sep 18:55	17 Dec 20:45	00:48
808 AD	16 Mar 10:47	18 Jun 00:13	19 Sep 00:53	17 Dec 02:33	00:48
809 AD	16 Mar 16:33	18 Jun 06:02	19 Sep 06:42	17 Dec 08:23	00:48
810 AD	16 Mar 22:21	18 Jun 11:49	19 Sep 12:28	17 Dec 14:19	00:48
811 AD	17 Mar 04:16	18 Jun 17:39	19 Sep 18:15	17 Dec 20:11	00:48
812 AD	16 Mar 09:57	17 Jun 23:18	19 Sep 00:03	17 Dec 01:58	00:48
813 AD	16 Mar 15:48	18 Jun 05:11	19 Sep 05:54	17 Dec 07:45	00:48
814 AD	16 Mar 21:46	18 Jun 11:03	19 Sep 11:40	17 Dec 13:32	00:47
815 AD	17 Mar 03:28	18 Jun 16:38	19 Sep 17:22	17 Dec 19:22	00:47
816 AD	16 Mar 09:14	17 Jun 22:32	18 Sep 23:15	17 Dec 01:09	00:47
817 AD	16 Mar 14:59	18 Jun 04:21	19 Sep 04:59	17 Dec 06:52	00:47
818 AD	16 Mar 20:45	18 Jun 10:04	19 Sep 10:44	17 Dec 12:42	00:47
819 AD	17 Mar 02:38	18 Jun 15:53	19 Sep 16:36	17 Dec 18:30	00:47
820 AD	16 Mar 08:16	17 Jun 21:32	18 Sep 22:26	17 Dec 00:18	00:47
821 AD	16 Mar 14:04	18 Jun 03:25	19 Sep 04:19	17 Dec 06:12	00:46
822 AD	16 Mar 20:01	18 Jun 09:20	19 Sep 10:07	17 Dec 12:08	00:46
823 AD	17 Mar 01:48	18 Jun 14:56	19 Sep 15:52	17 Dec 18:03	00:46
824 AD	16 Mar 07:42	17 Jun 20:52	18 Sep 21:50	16 Dec 23:54	00:46
825 AD	16 Mar 13:38	18 Jun 02:47	19 Sep 03:40	17 Dec 05:42	00:46
826 AD	16 Mar 19:31	18 Jun 08:34	19 Sep 09:26	17 Dec 11:34	00:46
827 AD	17 Mar 01:26	18 Jun 14:31	19 Sep 15:19	17 Dec 17:27	00:46
828 AD	16 Mar 07:08	17 Jun 20:16	18 Sep 21:08	16 Dec 23:14	00:46
829 AD	16 Mar 12:54	18 Jun 02:09	19 Sep 02:59	17 Dec 05:02	00:45
830 AD	16 Mar 18:50	18 Jun 08:04	19 Sep 08:49	17 Dec 10:52	00:45
831 AD	17 Mar 00:34	18 Jun 13:36	19 Sep 14:34	17 Dec 16:39	00:45
832 AD	16 Mar 06:17	17 Jun 19:25	18 Sep 20:29	16 Dec 22:27	00:45
833 AD	16 Mar 12:04	18 Jun 01:16	19 Sep 02:17	17 Dec 04:16	00:45
834 AD	16 Mar 17:49	18 Jun 06:53	19 Sep 07:54	17 Dec 10:06	00:45
835 AD	16 Mar 23:37	18 Jun 12:41	19 Sep 13:44	17 Dec 15:59	00:45
836 AD	16 Mar 05:23	17 Jun 18:22	18 Sep 19:30	16 Dec 21:43	00:45
837 AD	16 Mar 11:12	18 Jun 00:11	19 Sep 01:18	17 Dec 03:29	00:44
838 AD	16 Mar 17:10	18 Jun 06:08	19 Sep 07:09	17 Dec 09:24	00:44
839 AD	16 Mar 22:57	18 Jun 11:45	19 Sep 12:51	17 Dec 15:13	00:44
840 AD	16 Mar 04:43	17 Jun 17:40	18 Sep 18:47	16 Dec 21:03	00:44
841 AD	16 Mar 10:35	17 Jun 23:39	19 Sep 00:38	17 Dec 02:52	00:44
842 AD	16 Mar 16:27	18 Jun 05:22	19 Sep 06:22	17 Dec 08:40	00:44
843 AD	16 Mar 22:18	18 Jun 11:15	19 Sep 12:22	17 Dec 14:35	00:44
844 AD	16 Mar 04:04	17 Jun 17:02	18 Sep 18:15	16 Dec 20:25	00:43
845 AD	16 Mar 09:50	17 Jun 22:52	19 Sep 00:05	17 Dec 02:17	00:43
846 AD	16 Mar 15:45	18 Jun 04:49	19 Sep 05:58	17 Dec 08:18	00:43
847 AD	16 Mar 21:35	18 Jun 10:24	19 Sep 11:40	17 Dec 14:07	00:43
848 AD	16 Mar 03:23	17 Jun 16:13	18 Sep 17:34	16 Dec 19:54	00:43
849 AD	16 Mar 09:17	17 Jun 22:08	18 Sep 23:24	17 Dec 01:42	00:43

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
850 AD	16 Mar 15:09	18 Jun 03:48	19 Sep 05:01	17 Dec 07:28	00:43
851 AD	16 Mar 20:54	18 Jun 09:38	19 Sep 10:52	17 Dec 13:18	00:43
852 AD	16 Mar 02:36	17 Jun 15:24	18 Sep 16:38	16 Dec 19:03	00:42
853 AD	16 Mar 08:21	17 Jun 21:11	18 Sep 22:22	17 Dec 00:46	00:42
854 AD	16 Mar 14:11	18 Jun 03:03	19 Sep 04:15	17 Dec 06:39	00:42
855 AD	16 Mar 19:59	18 Jun 08:39	19 Sep 09:59	17 Dec 12:24	00:42
856 AD	16 Mar 01:41	17 Jun 14:25	18 Sep 15:53	16 Dec 18:12	00:42
857 AD	16 Mar 07:29	17 Jun 20:22	18 Sep 21:46	17 Dec 00:08	00:42
858 AD	16 Mar 13:22	18 Jun 02:03	19 Sep 03:23	17 Dec 05:58	00:42
859 AD	16 Mar 19:11	18 Jun 07:53	19 Sep 09:18	17 Dec 11:54	00:42
860 AD	16 Mar 01:02	17 Jun 13:44	18 Sep 15:12	16 Dec 17:44	00:41
861 AD	16 Mar 06:56	17 Jun 19:35	18 Sep 20:59	16 Dec 23:29	00:41
862 AD	16 Mar 12:51	18 Jun 01:33	19 Sep 02:56	17 Dec 05:29	00:41
863 AD	16 Mar 18:43	18 Jun 07:16	19 Sep 08:42	17 Dec 11:20	00:41
864 AD	16 Mar 00:28	17 Jun 13:06	18 Sep 14:34	16 Dec 17:06	00:41
865 AD	16 Mar 06:18	17 Jun 19:05	18 Sep 20:30	16 Dec 23:00	00:41
866 AD	16 Mar 12:12	18 Jun 00:46	19 Sep 02:08	17 Dec 04:42	00:41
867 AD	16 Mar 17:55	18 Jun 06:30	19 Sep 08:02	17 Dec 10:33	00:41
868 AD	15 Mar 23:39	17 Jun 12:18	18 Sep 13:55	16 Dec 16:24	00:40
869 AD	16 Mar 05:25	17 Jun 18:02	18 Sep 19:35	16 Dec 22:08	00:40
870 AD	16 Mar 11:13	17 Jun 23:53	19 Sep 01:26	17 Dec 04:07	00:40
871 AD	16 Mar 17:03	18 Jun 05:31	19 Sep 07:08	17 Dec 09:55	00:40
872 AD	15 Mar 22:50	17 Jun 11:14	18 Sep 12:56	16 Dec 15:36	00:40
873 AD	16 Mar 04:40	17 Jun 17:11	18 Sep 18:49	16 Dec 21:29	00:40
874 AD	16 Mar 10:36	17 Jun 22:54	19 Sep 00:25	17 Dec 03:13	00:40
875 AD	16 Mar 16:19	18 Jun 04:42	19 Sep 06:17	17 Dec 09:03	00:40
876 AD	15 Mar 22:03	17 Jun 10:35	18 Sep 12:12	16 Dec 14:55	00:40
877 AD	16 Mar 03:54	17 Jun 16:25	18 Sep 17:55	16 Dec 20:37	00:39
878 AD	16 Mar 09:44	17 Jun 22:18	18 Sep 23:54	17 Dec 02:35	00:39
879 AD	16 Mar 15:35	18 Jun 04:01	19 Sep 05:45	17 Dec 08:27	00:39
880 AD	15 Mar 21:22	17 Jun 09:48	18 Sep 11:37	16 Dec 14:15	00:39
881 AD	16 Mar 03:09	17 Jun 15:44	18 Sep 17:34	16 Dec 20:16	00:39
882 AD	16 Mar 09:07	17 Jun 21:29	18 Sep 23:12	17 Dec 02:08	00:39
883 AD	16 Mar 14:56	18 Jun 03:13	19 Sep 05:03	17 Dec 07:57	00:39
884 AD	15 Mar 20:44	17 Jun 09:05	18 Sep 10:58	16 Dec 13:49	00:39
885 AD	16 Mar 02:42	17 Jun 14:56	18 Sep 16:39	16 Dec 19:30	00:38
886 AD	16 Mar 08:30	17 Jun 20:47	18 Sep 22:31	17 Dec 01:25	00:38
887 AD	16 Mar 14:18	18 Jun 02:31	19 Sep 04:17	17 Dec 07:16	00:38
888 AD	15 Mar 20:03	17 Jun 08:17	18 Sep 10:02	16 Dec 12:54	00:38
889 AD	16 Mar 01:45	17 Jun 14:11	18 Sep 15:57	16 Dec 18:47	00:38
890 AD	16 Mar 07:40	17 Jun 19:54	18 Sep 21:36	17 Dec 00:30	00:38
891 AD	16 Mar 13:23	18 Jun 01:34	19 Sep 03:26	17 Dec 06:15	00:38
892 AD	15 Mar 19:01	17 Jun 07:23	18 Sep 09:23	16 Dec 12:11	00:38
893 AD	16 Mar 00:53	17 Jun 13:12	18 Sep 15:02	16 Dec 17:56	00:37
894 AD	16 Mar 06:40	17 Jun 18:58	18 Sep 20:53	16 Dec 23:54	00:37
895 AD	16 Mar 12:30	18 Jun 00:42	19 Sep 02:44	17 Dec 05:48	00:37
896 AD	15 Mar 18:24	17 Jun 06:29	18 Sep 08:31	16 Dec 11:29	00:37
897 AD	16 Mar 00:13	17 Jun 12:26	18 Sep 14:29	16 Dec 17:27	00:37
898 AD	16 Mar 06:13	17 Jun 18:15	18 Sep 20:10	16 Dec 23:18	00:37
899 AD	16 Mar 12:00	18 Jun 00:01	19 Sep 01:59	17 Dec 05:05	00:37

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
900 AD	15 Mar 17:42	17 Jun 05:56	18 Sep 07:58	16 Dec 11:01	00:37
901 AD	15 Mar 23:40	17 Jun 11:50	18 Sep 13:41	16 Dec 16:43	00:37
902 AD	16 Mar 05:29	17 Jun 17:37	18 Sep 19:34	16 Dec 22:37	00:36
903 AD	16 Mar 11:16	17 Jun 23:21	19 Sep 01:29	17 Dec 04:31	00:36
904 AD	15 Mar 17:05	17 Jun 05:08	18 Sep 07:15	16 Dec 10:13	00:36
905 AD	15 Mar 22:47	17 Jun 10:59	18 Sep 13:08	16 Dec 16:11	00:36
906 AD	16 Mar 04:42	17 Jun 16:44	18 Sep 18:47	16 Dec 22:02	00:36
907 AD	16 Mar 10:31	17 Jun 22:24	19 Sep 00:31	17 Dec 03:43	00:36
908 AD	15 Mar 16:11	17 Jun 04:13	18 Sep 06:28	16 Dec 09:35	00:36
909 AD	15 Mar 22:09	17 Jun 10:05	18 Sep 12:08	16 Dec 15:17	00:36
910 AD	16 Mar 03:55	17 Jun 15:50	18 Sep 17:54	16 Dec 21:08	00:36
911 AD	16 Mar 09:37	17 Jun 21:34	18 Sep 23:46	17 Dec 03:02	00:35
912 AD	15 Mar 15:28	17 Jun 03:25	18 Sep 05:32	16 Dec 08:41	00:35
913 AD	15 Mar 21:11	17 Jun 09:14	18 Sep 11:25	16 Dec 14:33	00:35
914 AD	16 Mar 03:05	17 Jun 15:01	18 Sep 17:11	16 Dec 20:26	00:35
915 AD	16 Mar 08:56	17 Jun 20:44	18 Sep 23:00	17 Dec 02:10	00:35
916 AD	15 Mar 14:33	17 Jun 02:34	18 Sep 05:00	16 Dec 08:10	00:35
917 AD	15 Mar 20:31	17 Jun 08:31	18 Sep 10:44	16 Dec 14:02	00:35
918 AD	16 Mar 02:24	17 Jun 14:17	18 Sep 16:32	16 Dec 19:56	00:35
919 AD	16 Mar 08:13	17 Jun 20:03	18 Sep 22:28	17 Dec 01:54	00:35
920 AD	15 Mar 14:13	17 Jun 01:57	18 Sep 04:17	16 Dec 07:34	00:34
921 AD	15 Mar 20:01	17 Jun 07:49	18 Sep 10:09	16 Dec 13:27	00:34
922 AD	16 Mar 01:55	17 Jun 13:39	18 Sep 15:54	16 Dec 19:21	00:34
923 AD	16 Mar 07:44	17 Jun 19:25	18 Sep 21:39	17 Dec 01:01	00:34
924 AD	15 Mar 13:19	17 Jun 01:13	18 Sep 03:34	16 Dec 06:53	00:34
925 AD	15 Mar 19:13	17 Jun 07:06	18 Sep 09:18	16 Dec 12:36	00:34
926 AD	16 Mar 01:01	17 Jun 12:47	18 Sep 15:04	16 Dec 18:23	00:34
927 AD	16 Mar 06:39	17 Jun 18:26	18 Sep 21:00	17 Dec 00:18	00:34
928 AD	15 Mar 12:29	17 Jun 00:15	18 Sep 02:44	16 Dec 06:01	00:34
929 AD	15 Mar 18:11	17 Jun 06:00	18 Sep 08:31	16 Dec 11:56	00:33
930 AD	16 Mar 00:03	17 Jun 11:44	18 Sep 14:14	16 Dec 17:50	00:33
931 AD	16 Mar 05:57	17 Jun 17:28	18 Sep 19:58	16 Dec 23:31	00:33
932 AD	15 Mar 11:39	16 Jun 23:16	18 Sep 01:54	16 Dec 05:23	00:33
933 AD	15 Mar 17:37	17 Jun 05:14	18 Sep 07:41	16 Dec 11:13	00:33
934 AD	15 Mar 23:31	17 Jun 11:04	18 Sep 13:27	16 Dec 17:03	00:33
935 AD	16 Mar 05:12	17 Jun 16:48	18 Sep 19:24	16 Dec 23:01	00:33
936 AD	15 Mar 11:08	16 Jun 22:47	18 Sep 01:15	16 Dec 04:45	00:33
937 AD	15 Mar 16:57	17 Jun 04:37	18 Sep 07:07	16 Dec 10:35	00:33
938 AD	15 Mar 22:49	17 Jun 10:25	18 Sep 12:58	16 Dec 16:31	00:32
939 AD	16 Mar 04:43	17 Jun 16:13	18 Sep 18:48	16 Dec 22:16	00:32
940 AD	15 Mar 10:20	16 Jun 21:59	18 Sep 00:43	16 Dec 04:11	00:32
941 AD	15 Mar 16:12	17 Jun 03:53	18 Sep 06:28	16 Dec 10:04	00:32
942 AD	15 Mar 22:07	17 Jun 09:38	18 Sep 12:11	16 Dec 15:52	00:32
943 AD	16 Mar 03:47	17 Jun 15:15	18 Sep 18:04	16 Dec 21:45	00:32
944 AD	15 Mar 09:43	16 Jun 21:09	17 Sep 23:52	16 Dec 03:27	00:32
945 AD	15 Mar 15:30	17 Jun 02:55	18 Sep 05:35	16 Dec 09:13	00:32
946 AD	15 Mar 21:16	17 Jun 08:38	18 Sep 11:19	16 Dec 15:08	00:32
947 AD	16 Mar 03:08	17 Jun 14:27	18 Sep 17:04	16 Dec 20:48	00:31
948 AD	15 Mar 08:44	16 Jun 20:11	17 Sep 22:54	16 Dec 02:35	00:31
949 AD	15 Mar 14:35	17 Jun 02:06	18 Sep 04:43	16 Dec 08:24	00:31

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
950 AD	15 Mar 20:29	17 Jun 07:52	18 Sep 10:30	16 Dec 14:10	00:31
951 AD	16 Mar 02:06	17 Jun 13:30	18 Sep 16:26	16 Dec 20:07	00:31
952 AD	15 Mar 07:59	16 Jun 19:27	17 Sep 22:19	16 Dec 01:59	00:31
953 AD	15 Mar 13:50	17 Jun 01:18	18 Sep 04:06	16 Dec 07:52	00:31
954 AD	15 Mar 19:42	17 Jun 07:02	18 Sep 09:54	16 Dec 13:51	00:31
955 AD	16 Mar 01:42	17 Jun 12:55	18 Sep 15:46	16 Dec 19:36	00:31
956 AD	15 Mar 07:27	16 Jun 18:43	17 Sep 21:39	16 Dec 01:26	00:31
957 AD	15 Mar 13:21	17 Jun 00:41	18 Sep 03:29	16 Dec 07:19	00:30
958 AD	15 Mar 19:18	17 Jun 06:33	18 Sep 09:15	16 Dec 13:08	00:30
959 AD	16 Mar 00:55	17 Jun 12:12	18 Sep 15:07	16 Dec 19:01	00:30
960 AD	15 Mar 06:45	16 Jun 18:07	17 Sep 20:59	16 Dec 00:46	00:30
961 AD	15 Mar 12:35	16 Jun 23:55	18 Sep 02:45	16 Dec 06:31	00:30
962 AD	15 Mar 18:21	17 Jun 05:31	18 Sep 08:30	16 Dec 12:23	00:30
963 AD	16 Mar 00:09	17 Jun 11:19	18 Sep 14:19	16 Dec 18:08	00:30
964 AD	15 Mar 05:48	16 Jun 17:02	17 Sep 20:05	15 Dec 23:57	00:30
965 AD	15 Mar 11:35	16 Jun 22:51	18 Sep 01:50	16 Dec 05:50	00:30
966 AD	15 Mar 17:32	17 Jun 04:40	18 Sep 07:34	16 Dec 11:38	00:30
967 AD	15 Mar 23:14	17 Jun 10:15	18 Sep 13:24	16 Dec 17:26	00:29
968 AD	15 Mar 05:06	16 Jun 16:12	17 Sep 19:18	15 Dec 23:14	00:29
969 AD	15 Mar 11:01	16 Jun 22:06	18 Sep 01:04	16 Dec 05:03	00:29
970 AD	15 Mar 16:47	17 Jun 03:48	18 Sep 06:49	16 Dec 10:58	00:29
971 AD	15 Mar 22:39	17 Jun 09:44	18 Sep 12:43	16 Dec 16:46	00:29
972 AD	15 Mar 04:24	16 Jun 15:33	17 Sep 18:35	15 Dec 22:33	00:29
973 AD	15 Mar 10:14	16 Jun 21:26	18 Sep 00:26	16 Dec 04:26	00:29
974 AD	15 Mar 16:13	17 Jun 03:19	18 Sep 06:20	16 Dec 10:18	00:29
975 AD	15 Mar 21:52	17 Jun 08:55	18 Sep 12:12	16 Dec 16:11	00:29
976 AD	15 Mar 03:40	16 Jun 14:51	17 Sep 18:07	15 Dec 22:07	00:29
977 AD	15 Mar 09:36	16 Jun 20:43	17 Sep 23:51	16 Dec 03:58	00:28
978 AD	15 Mar 15:24	17 Jun 02:19	18 Sep 05:33	16 Dec 09:50	00:28
979 AD	15 Mar 21:19	17 Jun 08:10	18 Sep 11:26	16 Dec 15:36	00:28
980 AD	15 Mar 03:06	16 Jun 13:58	17 Sep 17:12	15 Dec 21:19	00:28
981 AD	15 Mar 08:53	16 Jun 19:47	17 Sep 22:56	16 Dec 03:09	00:28
982 AD	15 Mar 14:47	17 Jun 01:40	18 Sep 04:43	16 Dec 08:58	00:28
983 AD	15 Mar 20:25	17 Jun 07:16	18 Sep 10:29	16 Dec 14:43	00:28
984 AD	15 Mar 02:09	16 Jun 13:09	17 Sep 16:22	15 Dec 20:29	00:28
985 AD	15 Mar 08:02	16 Jun 19:02	17 Sep 22:10	16 Dec 02:16	00:28
986 AD	15 Mar 13:47	17 Jun 00:35	18 Sep 03:54	16 Dec 08:06	00:28
987 AD	15 Mar 19:33	17 Jun 06:26	18 Sep 09:50	16 Dec 13:58	00:27
988 AD	15 Mar 01:18	16 Jun 12:15	17 Sep 15:38	15 Dec 19:49	00:27
989 AD	15 Mar 07:07	16 Jun 18:03	17 Sep 21:23	16 Dec 01:43	00:27
990 AD	15 Mar 13:06	16 Jun 23:57	18 Sep 03:16	16 Dec 07:38	00:27
991 AD	15 Mar 18:55	17 Jun 05:37	18 Sep 09:07	16 Dec 13:27	00:27
992 AD	15 Mar 00:46	16 Jun 11:32	17 Sep 15:01	15 Dec 19:17	00:27
993 AD	15 Mar 06:43	16 Jun 17:31	17 Sep 20:51	16 Dec 01:11	00:27
994 AD	15 Mar 12:33	16 Jun 23:10	18 Sep 02:32	16 Dec 07:02	00:27
995 AD	15 Mar 18:20	17 Jun 05:03	18 Sep 08:28	16 Dec 12:51	00:27
996 AD	15 Mar 00:09	16 Jun 10:56	17 Sep 14:18	15 Dec 18:36	00:27
997 AD	15 Mar 05:57	16 Jun 16:41	17 Sep 20:02	16 Dec 00:23	00:27
998 AD	15 Mar 11:48	16 Jun 22:32	18 Sep 01:57	16 Dec 06:16	00:26
999 AD	15 Mar 17:30	17 Jun 04:09	18 Sep 07:43	16 Dec 12:04	00:26

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1000 AD	14 Mar 23:12	16 Jun 09:58	17 Sep 13:32	15 Dec 17:54	00:26
1001 AD	15 Mar 05:05	16 Jun 15:52	17 Sep 19:19	15 Dec 23:47	00:26
1002 AD	15 Mar 10:56	16 Jun 21:25	18 Sep 00:57	16 Dec 05:33	00:26
1003 AD	15 Mar 16:43	17 Jun 03:14	18 Sep 06:52	16 Dec 11:19	00:26
1004 AD	14 Mar 22:32	16 Jun 09:08	17 Sep 12:41	15 Dec 17:06	00:26
1005 AD	15 Mar 04:20	16 Jun 14:53	17 Sep 18:20	15 Dec 22:54	00:26
1006 AD	15 Mar 10:10	16 Jun 20:47	18 Sep 00:15	16 Dec 04:49	00:26
1007 AD	15 Mar 15:55	17 Jun 02:29	18 Sep 06:03	16 Dec 10:35	00:26
1008 AD	14 Mar 21:41	16 Jun 08:20	17 Sep 11:56	15 Dec 16:23	00:26
1009 AD	15 Mar 03:36	16 Jun 14:17	17 Sep 17:52	15 Dec 22:18	00:25
1010 AD	15 Mar 09:28	16 Jun 19:54	17 Sep 23:34	16 Dec 04:08	00:25
1011 AD	15 Mar 15:14	17 Jun 01:44	18 Sep 05:32	16 Dec 10:03	00:25
1012 AD	14 Mar 21:03	16 Jun 07:40	17 Sep 11:24	15 Dec 15:58	00:25
1013 AD	15 Mar 02:56	16 Jun 13:26	17 Sep 17:03	15 Dec 21:47	00:25
1014 AD	15 Mar 08:51	16 Jun 19:17	17 Sep 22:59	16 Dec 03:41	00:25
1015 AD	15 Mar 14:41	17 Jun 01:02	18 Sep 04:49	16 Dec 09:28	00:25
1016 AD	14 Mar 20:29	16 Jun 06:52	17 Sep 10:36	15 Dec 15:13	00:25
1017 AD	15 Mar 02:20	16 Jun 12:49	17 Sep 16:28	15 Dec 21:08	00:25
1018 AD	15 Mar 08:10	16 Jun 18:27	17 Sep 22:05	16 Dec 02:52	00:25
1019 AD	15 Mar 13:51	17 Jun 00:13	18 Sep 03:58	16 Dec 08:37	00:25
1020 AD	14 Mar 19:36	16 Jun 06:07	17 Sep 09:50	15 Dec 14:24	00:24
1021 AD	15 Mar 01:25	16 Jun 11:47	17 Sep 15:28	15 Dec 20:07	00:24
1022 AD	15 Mar 07:09	16 Jun 17:33	17 Sep 21:23	16 Dec 02:01	00:24
1023 AD	15 Mar 12:52	16 Jun 23:16	18 Sep 03:13	16 Dec 07:53	00:24
1024 AD	14 Mar 18:38	16 Jun 05:01	17 Sep 08:56	15 Dec 13:40	00:24
1025 AD	15 Mar 00:29	16 Jun 10:55	17 Sep 14:49	15 Dec 19:40	00:24
1026 AD	15 Mar 06:28	16 Jun 16:35	17 Sep 20:30	16 Dec 01:27	00:24
1027 AD	15 Mar 12:17	16 Jun 22:23	18 Sep 02:24	16 Dec 07:14	00:24
1028 AD	14 Mar 18:08	16 Jun 04:24	17 Sep 08:20	15 Dec 13:09	00:24
1029 AD	15 Mar 00:04	16 Jun 10:13	17 Sep 13:59	15 Dec 18:55	00:24
1030 AD	15 Mar 05:53	16 Jun 16:06	17 Sep 19:56	16 Dec 00:51	00:24
1031 AD	15 Mar 11:40	16 Jun 21:56	18 Sep 01:50	16 Dec 06:42	00:23
1032 AD	14 Mar 17:30	16 Jun 03:45	17 Sep 07:38	15 Dec 12:24	00:23
1033 AD	14 Mar 23:20	16 Jun 09:40	17 Sep 13:36	15 Dec 18:22	00:23
1034 AD	15 Mar 05:12	16 Jun 15:19	17 Sep 19:18	16 Dec 00:11	00:23
1035 AD	15 Mar 10:54	16 Jun 21:02	18 Sep 01:09	16 Dec 05:59	00:23
1036 AD	14 Mar 16:38	16 Jun 02:57	17 Sep 07:01	15 Dec 11:54	00:23
1037 AD	14 Mar 22:33	16 Jun 08:40	17 Sep 12:35	15 Dec 17:37	00:23
1038 AD	15 Mar 04:21	16 Jun 14:23	17 Sep 18:27	15 Dec 23:27	00:23
1039 AD	15 Mar 10:06	16 Jun 20:08	18 Sep 00:19	16 Dec 05:16	00:23
1040 AD	14 Mar 15:55	16 Jun 01:56	17 Sep 05:59	15 Dec 10:57	00:23
1041 AD	14 Mar 21:42	16 Jun 07:49	17 Sep 11:51	15 Dec 16:53	00:23
1042 AD	15 Mar 03:33	16 Jun 13:30	17 Sep 17:31	15 Dec 22:40	00:23
1043 AD	15 Mar 09:18	16 Jun 19:15	17 Sep 23:21	16 Dec 04:22	00:22
1044 AD	14 Mar 15:02	16 Jun 01:11	17 Sep 05:20	15 Dec 10:16	00:22
1045 AD	14 Mar 21:00	16 Jun 06:59	17 Sep 11:01	15 Dec 16:02	00:22
1046 AD	15 Mar 02:46	16 Jun 12:45	17 Sep 16:56	15 Dec 21:57	00:22
1047 AD	15 Mar 08:30	16 Jun 18:35	17 Sep 22:54	16 Dec 03:57	00:22
1048 AD	14 Mar 14:24	16 Jun 00:27	17 Sep 04:37	15 Dec 09:43	00:22
1049 AD	14 Mar 20:16	16 Jun 06:20	17 Sep 10:33	15 Dec 15:43	00:22

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1050 AD	15 Mar 02:15	16 Jun 12:04	17 Sep 16:20	15 Dec 21:34	00:22
1051 AD	15 Mar 08:06	16 Jun 17:51	17 Sep 22:09	16 Dec 03:16	00:22
1052 AD	14 Mar 13:51	15 Jun 23:48	17 Sep 04:05	15 Dec 09:12	00:22
1053 AD	14 Mar 19:48	16 Jun 05:38	17 Sep 09:43	15 Dec 14:57	00:22
1054 AD	15 Mar 01:32	16 Jun 11:21	17 Sep 15:31	15 Dec 20:44	00:22
1055 AD	15 Mar 07:11	16 Jun 17:08	17 Sep 21:27	16 Dec 02:36	00:21
1056 AD	14 Mar 13:02	15 Jun 22:55	17 Sep 03:08	15 Dec 08:12	00:21
1057 AD	14 Mar 18:45	16 Jun 04:40	17 Sep 09:00	15 Dec 14:07	00:21
1058 AD	15 Mar 00:35	16 Jun 10:21	17 Sep 14:45	15 Dec 19:59	00:21
1059 AD	15 Mar 06:19	16 Jun 16:02	17 Sep 20:29	16 Dec 01:42	00:21
1060 AD	14 Mar 12:00	15 Jun 21:55	17 Sep 02:22	15 Dec 07:40	00:21
1061 AD	14 Mar 18:00	16 Jun 03:43	17 Sep 08:00	15 Dec 13:25	00:21
1062 AD	14 Mar 23:51	16 Jun 09:26	17 Sep 13:50	15 Dec 19:12	00:21
1063 AD	15 Mar 05:35	16 Jun 15:17	17 Sep 19:49	16 Dec 01:08	00:21
1064 AD	14 Mar 11:32	15 Jun 21:14	17 Sep 01:33	15 Dec 06:52	00:21
1065 AD	14 Mar 17:20	16 Jun 03:06	17 Sep 07:26	15 Dec 12:49	00:21
1066 AD	14 Mar 23:12	16 Jun 08:54	17 Sep 13:17	15 Dec 18:44	00:21
1067 AD	15 Mar 05:04	16 Jun 14:42	17 Sep 19:07	16 Dec 00:25	00:21
1068 AD	14 Mar 10:47	15 Jun 20:36	17 Sep 01:07	15 Dec 06:21	00:20
1069 AD	14 Mar 16:45	16 Jun 02:27	17 Sep 06:51	15 Dec 12:10	00:20
1070 AD	14 Mar 22:33	16 Jun 08:09	17 Sep 12:40	15 Dec 18:00	00:20
1071 AD	15 Mar 04:10	16 Jun 13:55	17 Sep 18:36	15 Dec 23:59	00:20
1072 AD	14 Mar 10:04	15 Jun 19:46	17 Sep 00:16	15 Dec 05:43	00:20
1073 AD	14 Mar 15:54	16 Jun 01:30	17 Sep 06:04	15 Dec 11:34	00:20
1074 AD	14 Mar 21:45	16 Jun 07:11	17 Sep 11:51	15 Dec 17:25	00:20
1075 AD	15 Mar 03:37	16 Jun 12:59	17 Sep 17:35	15 Dec 23:03	00:20
1076 AD	14 Mar 09:17	15 Jun 18:49	16 Sep 23:26	15 Dec 04:56	00:20
1077 AD	14 Mar 15:11	16 Jun 00:40	17 Sep 05:06	15 Dec 10:43	00:20
1078 AD	14 Mar 20:58	16 Jun 06:23	17 Sep 10:51	15 Dec 16:26	00:20
1079 AD	15 Mar 02:34	16 Jun 12:09	17 Sep 16:49	15 Dec 22:19	00:20
1080 AD	14 Mar 08:29	15 Jun 18:04	16 Sep 22:35	15 Dec 04:01	00:20
1081 AD	14 Mar 14:17	15 Jun 23:49	17 Sep 04:26	15 Dec 09:54	00:20
1082 AD	14 Mar 20:03	16 Jun 05:32	17 Sep 10:20	15 Dec 15:55	00:19
1083 AD	15 Mar 01:56	16 Jun 11:22	17 Sep 16:08	15 Dec 21:40	00:19
1084 AD	14 Mar 07:39	15 Jun 17:13	16 Sep 22:01	15 Dec 03:38	00:19
1085 AD	14 Mar 13:40	15 Jun 23:06	17 Sep 03:47	15 Dec 09:32	00:19
1086 AD	14 Mar 19:38	16 Jun 04:51	17 Sep 09:35	15 Dec 15:16	00:19
1087 AD	15 Mar 01:18	16 Jun 10:39	17 Sep 15:34	15 Dec 21:14	00:19
1088 AD	14 Mar 07:16	15 Jun 16:39	16 Sep 21:19	15 Dec 02:59	00:19
1089 AD	14 Mar 13:05	15 Jun 22:26	17 Sep 03:04	15 Dec 08:49	00:19
1090 AD	14 Mar 18:50	16 Jun 04:09	17 Sep 08:56	15 Dec 14:44	00:19
1091 AD	15 Mar 00:43	16 Jun 09:59	17 Sep 14:43	15 Dec 20:21	00:19
1092 AD	14 Mar 06:23	15 Jun 15:46	16 Sep 20:34	15 Dec 02:10	00:19
1093 AD	14 Mar 12:14	15 Jun 21:33	17 Sep 02:19	15 Dec 08:02	00:19
1094 AD	14 Mar 18:03	16 Jun 03:15	17 Sep 08:04	15 Dec 13:46	00:19
1095 AD	14 Mar 23:36	16 Jun 08:57	17 Sep 13:57	15 Dec 19:42	00:18
1096 AD	14 Mar 05:30	15 Jun 14:51	16 Sep 19:40	15 Dec 01:28	00:18
1097 AD	14 Mar 11:23	15 Jun 20:35	17 Sep 01:25	15 Dec 07:16	00:18
1098 AD	14 Mar 17:09	16 Jun 02:16	17 Sep 07:17	15 Dec 13:10	00:18
1099 AD	14 Mar 23:05	16 Jun 08:10	17 Sep 13:06	15 Dec 18:53	00:18

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1100 AD	14 Mar 04:48	15 Jun 14:01	16 Sep 18:56	15 Dec 00:45	00:18
1101 AD	14 Mar 10:40	15 Jun 19:52	17 Sep 00:42	15 Dec 06:39	00:18
1102 AD	14 Mar 16:35	16 Jun 01:41	17 Sep 06:32	15 Dec 12:24	00:18
1103 AD	14 Mar 22:13	16 Jun 07:25	17 Sep 12:29	15 Dec 18:17	00:18
1104 AD	14 Mar 04:07	15 Jun 13:23	16 Sep 18:20	15 Dec 00:07	00:18
1105 AD	14 Mar 10:03	15 Jun 19:11	17 Sep 00:09	15 Dec 05:58	00:18
1106 AD	14 Mar 15:45	16 Jun 00:50	17 Sep 06:01	15 Dec 11:58	00:18
1107 AD	14 Mar 21:39	16 Jun 06:45	17 Sep 11:50	15 Dec 17:46	00:18
1108 AD	14 Mar 03:26	15 Jun 12:33	16 Sep 17:37	14 Dec 23:36	00:18
1109 AD	14 Mar 09:20	15 Jun 18:20	16 Sep 23:23	15 Dec 05:28	00:18
1110 AD	14 Mar 15:18	16 Jun 00:08	17 Sep 05:10	15 Dec 11:10	00:17
1111 AD	14 Mar 20:54	16 Jun 05:51	17 Sep 11:00	15 Dec 17:00	00:17
1112 AD	14 Mar 02:44	15 Jun 11:48	16 Sep 16:47	14 Dec 22:48	00:17
1113 AD	14 Mar 08:36	15 Jun 17:35	16 Sep 22:30	15 Dec 04:33	00:17
1114 AD	14 Mar 14:14	15 Jun 23:11	17 Sep 04:19	15 Dec 10:25	00:17
1115 AD	14 Mar 20:05	16 Jun 05:04	17 Sep 10:11	15 Dec 16:07	00:17
1116 AD	14 Mar 01:49	15 Jun 10:50	16 Sep 15:58	14 Dec 21:53	00:17
1117 AD	14 Mar 07:36	15 Jun 16:34	16 Sep 21:46	15 Dec 03:49	00:17
1118 AD	14 Mar 13:29	15 Jun 22:22	17 Sep 03:35	15 Dec 09:38	00:17
1119 AD	14 Mar 19:06	16 Jun 04:04	17 Sep 09:25	15 Dec 15:33	00:17
1120 AD	14 Mar 01:00	15 Jun 10:00	16 Sep 15:14	14 Dec 21:26	00:17
1121 AD	14 Mar 07:02	15 Jun 15:50	16 Sep 21:01	15 Dec 03:15	00:17
1122 AD	14 Mar 12:50	15 Jun 21:30	17 Sep 02:53	15 Dec 09:10	00:17
1123 AD	14 Mar 18:45	16 Jun 03:30	17 Sep 08:48	15 Dec 14:59	00:17
1124 AD	14 Mar 00:36	15 Jun 09:25	16 Sep 14:35	14 Dec 20:48	00:17
1125 AD	14 Mar 06:25	15 Jun 15:12	16 Sep 20:22	15 Dec 02:42	00:16
1126 AD	14 Mar 12:20	15 Jun 21:05	17 Sep 02:14	15 Dec 08:27	00:16
1127 AD	14 Mar 17:59	16 Jun 02:48	17 Sep 08:05	15 Dec 14:13	00:16
1128 AD	13 Mar 23:46	15 Jun 08:41	16 Sep 13:57	14 Dec 20:03	00:16
1129 AD	14 Mar 05:40	15 Jun 14:29	16 Sep 19:44	15 Dec 01:52	00:16
1130 AD	14 Mar 11:18	15 Jun 20:01	17 Sep 01:30	15 Dec 07:46	00:16
1131 AD	14 Mar 17:05	16 Jun 01:53	17 Sep 07:20	15 Dec 13:35	00:16
1132 AD	13 Mar 22:55	15 Jun 07:41	16 Sep 13:03	14 Dec 19:21	00:16
1133 AD	14 Mar 04:45	15 Jun 13:20	16 Sep 18:46	15 Dec 01:10	00:16
1134 AD	14 Mar 10:39	15 Jun 19:10	17 Sep 00:36	15 Dec 06:57	00:16
1135 AD	14 Mar 16:20	16 Jun 00:54	17 Sep 06:23	15 Dec 12:43	00:16
1136 AD	13 Mar 22:06	15 Jun 06:47	16 Sep 12:10	14 Dec 18:34	00:16
1137 AD	14 Mar 04:03	15 Jun 12:42	16 Sep 17:58	15 Dec 00:24	00:16
1138 AD	14 Mar 09:45	15 Jun 18:17	16 Sep 23:46	15 Dec 06:15	00:16
1139 AD	14 Mar 15:36	16 Jun 00:14	17 Sep 05:45	15 Dec 12:04	00:16
1140 AD	13 Mar 21:29	15 Jun 06:08	16 Sep 11:36	14 Dec 17:53	00:16
1141 AD	14 Mar 03:18	15 Jun 11:50	16 Sep 17:22	14 Dec 23:49	00:15
1142 AD	14 Mar 09:11	15 Jun 17:44	16 Sep 23:18	15 Dec 05:44	00:15
1143 AD	14 Mar 14:55	15 Jun 23:31	17 Sep 05:06	15 Dec 11:35	00:15
1144 AD	13 Mar 20:46	15 Jun 05:23	16 Sep 10:55	14 Dec 17:26	00:15
1145 AD	14 Mar 02:48	15 Jun 11:16	16 Sep 16:46	14 Dec 23:17	00:15
1146 AD	14 Mar 08:33	15 Jun 16:52	16 Sep 22:31	15 Dec 05:05	00:15
1147 AD	14 Mar 14:20	15 Jun 22:47	17 Sep 04:25	15 Dec 10:54	00:15
1148 AD	13 Mar 20:10	15 Jun 04:41	16 Sep 10:10	14 Dec 16:40	00:15
1149 AD	14 Mar 01:56	15 Jun 10:19	16 Sep 15:49	14 Dec 22:28	00:15

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1150 AD	14 Mar 07:43	15 Jun 16:07	16 Sep 21:41	15 Dec 04:13	00:15
1151 AD	14 Mar 13:24	15 Jun 21:50	17 Sep 03:28	15 Dec 09:57	00:15
1152 AD	13 Mar 19:09	15 Jun 03:36	16 Sep 09:15	14 Dec 15:44	00:15
1153 AD	14 Mar 01:01	15 Jun 09:27	16 Sep 15:05	14 Dec 21:38	00:15
1154 AD	14 Mar 06:43	15 Jun 15:01	16 Sep 20:49	15 Dec 03:30	00:15
1155 AD	14 Mar 12:29	15 Jun 20:53	17 Sep 02:42	15 Dec 09:22	00:15
1156 AD	13 Mar 18:26	15 Jun 02:49	16 Sep 08:32	14 Dec 15:13	00:15
1157 AD	14 Mar 00:21	15 Jun 08:29	16 Sep 14:14	14 Dec 21:02	00:15
1158 AD	14 Mar 06:14	15 Jun 14:24	16 Sep 20:12	15 Dec 02:54	00:14
1159 AD	14 Mar 12:02	15 Jun 20:18	17 Sep 02:02	15 Dec 08:44	00:14
1160 AD	13 Mar 17:51	15 Jun 02:10	16 Sep 07:49	14 Dec 14:34	00:14
1161 AD	13 Mar 23:46	15 Jun 08:08	16 Sep 13:44	14 Dec 20:29	00:14
1162 AD	14 Mar 05:33	15 Jun 13:46	16 Sep 19:32	15 Dec 02:16	00:14
1163 AD	14 Mar 11:19	15 Jun 19:37	17 Sep 01:29	15 Dec 08:04	00:14
1164 AD	13 Mar 17:11	15 Jun 01:32	16 Sep 07:22	14 Dec 13:57	00:14
1165 AD	13 Mar 22:59	15 Jun 07:07	16 Sep 12:59	14 Dec 19:46	00:14
1166 AD	14 Mar 04:42	15 Jun 12:54	16 Sep 18:52	15 Dec 01:40	00:14
1167 AD	14 Mar 10:28	15 Jun 18:41	17 Sep 00:37	15 Dec 07:27	00:14
1168 AD	13 Mar 16:17	15 Jun 00:24	16 Sep 06:16	14 Dec 13:10	00:14
1169 AD	13 Mar 22:12	15 Jun 06:16	16 Sep 12:09	14 Dec 19:02	00:14
1170 AD	14 Mar 03:59	15 Jun 11:54	16 Sep 17:51	15 Dec 00:47	00:14
1171 AD	14 Mar 09:42	15 Jun 17:44	16 Sep 23:42	15 Dec 06:34	00:14
1172 AD	13 Mar 15:33	14 Jun 23:42	16 Sep 05:32	14 Dec 12:26	00:14
1173 AD	13 Mar 21:23	15 Jun 05:22	16 Sep 11:10	14 Dec 18:11	00:14
1174 AD	14 Mar 03:09	15 Jun 11:11	16 Sep 17:07	15 Dec 00:01	00:14
1175 AD	14 Mar 08:56	15 Jun 17:03	16 Sep 23:01	15 Dec 05:50	00:14
1176 AD	13 Mar 14:45	14 Jun 22:50	16 Sep 04:47	14 Dec 11:38	00:14
1177 AD	13 Mar 20:37	15 Jun 04:44	16 Sep 10:45	14 Dec 17:39	00:13
1178 AD	14 Mar 02:25	15 Jun 10:26	16 Sep 16:32	14 Dec 23:33	00:13
1179 AD	14 Mar 08:14	15 Jun 16:16	16 Sep 22:24	15 Dec 05:24	00:13
1180 AD	13 Mar 14:09	14 Jun 22:14	16 Sep 04:19	14 Dec 11:19	00:13
1181 AD	13 Mar 20:08	15 Jun 03:55	16 Sep 09:58	14 Dec 17:05	00:13
1182 AD	14 Mar 01:56	15 Jun 09:43	16 Sep 15:52	14 Dec 22:55	00:13
1183 AD	14 Mar 07:41	15 Jun 15:37	16 Sep 21:42	15 Dec 04:46	00:13
1184 AD	13 Mar 13:31	14 Jun 21:24	16 Sep 03:20	14 Dec 10:27	00:13
1185 AD	13 Mar 19:18	15 Jun 03:14	16 Sep 09:13	14 Dec 16:20	00:13
1186 AD	14 Mar 01:05	15 Jun 08:55	16 Sep 15:00	14 Dec 22:05	00:13
1187 AD	14 Mar 06:48	15 Jun 14:39	16 Sep 20:48	15 Dec 03:46	00:13
1188 AD	13 Mar 12:34	14 Jun 20:33	16 Sep 02:43	14 Dec 09:41	00:13
1189 AD	13 Mar 18:25	15 Jun 02:11	16 Sep 08:19	14 Dec 15:28	00:13
1190 AD	14 Mar 00:07	15 Jun 07:54	16 Sep 14:10	14 Dec 21:20	00:13
1191 AD	14 Mar 05:52	15 Jun 13:47	16 Sep 20:02	15 Dec 03:13	00:13
1192 AD	13 Mar 11:48	14 Jun 19:32	16 Sep 01:41	14 Dec 08:55	00:13
1193 AD	13 Mar 17:40	15 Jun 01:23	16 Sep 07:37	14 Dec 14:51	00:13
1194 AD	13 Mar 23:31	15 Jun 07:10	16 Sep 13:28	14 Dec 20:43	00:13
1195 AD	14 Mar 05:19	15 Jun 13:01	16 Sep 19:16	15 Dec 02:29	00:13
1196 AD	13 Mar 11:08	14 Jun 19:01	16 Sep 01:14	14 Dec 08:28	00:12
1197 AD	13 Mar 17:06	15 Jun 00:45	16 Sep 06:54	14 Dec 14:14	00:12
1198 AD	13 Mar 22:51	15 Jun 06:30	16 Sep 12:49	14 Dec 20:03	00:12
1199 AD	14 Mar 04:37	15 Jun 12:24	16 Sep 18:47	15 Dec 01:56	00:12

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1200 AD	13 Mar 10:31	14 Jun 18:11	16 Sep 00:27	14 Dec 07:40	00:12
1201 AD	13 Mar 16:18	14 Jun 23:59	16 Sep 06:20	14 Dec 13:39	00:12
1202 AD	13 Mar 22:04	15 Jun 05:42	16 Sep 12:09	14 Dec 19:33	00:12
1203 AD	14 Mar 03:54	15 Jun 11:28	16 Sep 17:52	15 Dec 01:14	00:12
1204 AD	13 Mar 09:43	14 Jun 17:22	15 Sep 23:46	14 Dec 07:08	00:12
1205 AD	13 Mar 15:41	14 Jun 23:04	16 Sep 05:24	14 Dec 12:52	00:12
1206 AD	13 Mar 21:26	15 Jun 04:47	16 Sep 11:12	14 Dec 18:36	00:12
1207 AD	14 Mar 03:05	15 Jun 10:42	16 Sep 17:06	15 Dec 00:29	00:12
1208 AD	13 Mar 08:58	14 Jun 16:30	15 Sep 22:43	14 Dec 06:09	00:12
1209 AD	13 Mar 14:43	14 Jun 22:16	16 Sep 04:35	14 Dec 12:01	00:12
1210 AD	13 Mar 20:27	15 Jun 04:00	16 Sep 10:28	14 Dec 17:53	00:12
1211 AD	14 Mar 02:17	15 Jun 09:47	16 Sep 16:16	14 Dec 23:34	00:12
1212 AD	13 Mar 08:02	14 Jun 15:40	15 Sep 22:13	14 Dec 05:33	00:12
1213 AD	13 Mar 13:57	14 Jun 21:24	16 Sep 03:56	14 Dec 11:28	00:12
1214 AD	13 Mar 19:45	15 Jun 03:07	16 Sep 09:44	14 Dec 17:17	00:12
1215 AD	14 Mar 01:30	15 Jun 09:02	16 Sep 15:41	14 Dec 23:15	00:12
1216 AD	13 Mar 07:34	14 Jun 14:54	15 Sep 21:23	14 Dec 04:58	00:12
1217 AD	13 Mar 13:26	14 Jun 20:42	16 Sep 03:15	14 Dec 10:52	00:11
1218 AD	13 Mar 19:14	15 Jun 02:32	16 Sep 09:10	14 Dec 16:48	00:11
1219 AD	14 Mar 01:06	15 Jun 08:25	16 Sep 14:55	14 Dec 22:29	00:11
1220 AD	13 Mar 06:51	14 Jun 14:18	15 Sep 20:48	14 Dec 04:24	00:11
1221 AD	13 Mar 12:46	14 Jun 20:03	16 Sep 02:31	14 Dec 10:11	00:11
1222 AD	13 Mar 18:32	15 Jun 01:45	16 Sep 08:19	14 Dec 15:51	00:11
1223 AD	14 Mar 00:09	15 Jun 07:35	16 Sep 14:16	14 Dec 21:45	00:11
1224 AD	13 Mar 06:02	14 Jun 13:23	15 Sep 19:56	14 Dec 03:28	00:11
1225 AD	13 Mar 11:46	14 Jun 19:03	16 Sep 01:42	14 Dec 09:22	00:11
1226 AD	13 Mar 17:26	15 Jun 00:46	16 Sep 07:35	14 Dec 15:18	00:11
1227 AD	13 Mar 23:19	15 Jun 06:34	16 Sep 13:16	14 Dec 20:57	00:11
1228 AD	13 Mar 05:08	14 Jun 12:22	15 Sep 19:09	14 Dec 02:51	00:11
1229 AD	13 Mar 11:05	14 Jun 18:07	16 Sep 00:52	14 Dec 08:42	00:11
1230 AD	13 Mar 16:54	14 Jun 23:53	16 Sep 06:38	14 Dec 14:25	00:11
1231 AD	13 Mar 22:34	15 Jun 05:47	16 Sep 12:34	14 Dec 20:22	00:11
1232 AD	13 Mar 04:32	14 Jun 11:43	15 Sep 18:17	14 Dec 02:07	00:11
1233 AD	13 Mar 10:23	14 Jun 17:29	16 Sep 00:08	14 Dec 07:57	00:11
1234 AD	13 Mar 16:06	14 Jun 23:16	16 Sep 06:08	14 Dec 13:54	00:11
1235 AD	13 Mar 22:02	15 Jun 05:11	16 Sep 11:58	14 Dec 19:37	00:11
1236 AD	13 Mar 03:48	14 Jun 11:00	15 Sep 17:51	14 Dec 01:35	00:11
1237 AD	13 Mar 09:41	14 Jun 16:47	15 Sep 23:38	14 Dec 07:34	00:11
1238 AD	13 Mar 15:33	14 Jun 22:32	16 Sep 05:23	14 Dec 13:17	00:11
1239 AD	13 Mar 21:14	15 Jun 04:22	16 Sep 11:18	14 Dec 19:11	00:11
1240 AD	13 Mar 03:14	14 Jun 10:14	15 Sep 17:00	14 Dec 00:55	00:10
1241 AD	13 Mar 09:06	14 Jun 15:57	15 Sep 22:45	14 Dec 06:41	00:10
1242 AD	13 Mar 14:42	14 Jun 21:41	16 Sep 04:40	14 Dec 12:36	00:10
1243 AD	13 Mar 20:35	15 Jun 03:35	16 Sep 10:23	14 Dec 18:16	00:10
1244 AD	13 Mar 02:18	14 Jun 09:20	15 Sep 16:09	14 Dec 00:05	00:10
1245 AD	13 Mar 08:06	14 Jun 15:02	15 Sep 21:56	14 Dec 05:57	00:10
1246 AD	13 Mar 13:56	14 Jun 20:46	16 Sep 03:42	14 Dec 11:35	00:10
1247 AD	13 Mar 19:32	15 Jun 02:32	16 Sep 09:36	14 Dec 17:28	00:10
1248 AD	13 Mar 01:27	14 Jun 08:25	15 Sep 15:21	13 Dec 23:20	00:10
1249 AD	13 Mar 07:18	14 Jun 14:09	15 Sep 21:06	14 Dec 05:11	00:10

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1250 AD	13 Mar 12:57	14 Jun 19:54	16 Sep 03:03	14 Dec 11:11	00:10
1251 AD	13 Mar 18:58	15 Jun 01:51	16 Sep 08:52	14 Dec 16:56	00:10
1252 AD	13 Mar 00:52	14 Jun 07:41	15 Sep 14:43	13 Dec 22:48	00:10
1253 AD	13 Mar 06:46	14 Jun 13:28	15 Sep 20:34	14 Dec 04:46	00:10
1254 AD	13 Mar 12:41	14 Jun 19:22	16 Sep 02:23	14 Dec 10:29	00:10
1255 AD	13 Mar 18:21	15 Jun 01:13	16 Sep 08:16	14 Dec 16:23	00:10
1256 AD	13 Mar 00:16	14 Jun 07:08	15 Sep 14:02	13 Dec 22:12	00:10
1257 AD	13 Mar 06:09	14 Jun 12:54	15 Sep 19:49	14 Dec 03:56	00:10
1258 AD	13 Mar 11:45	14 Jun 18:34	16 Sep 01:47	14 Dec 09:50	00:10
1259 AD	13 Mar 17:37	15 Jun 00:28	16 Sep 07:35	14 Dec 15:34	00:10
1260 AD	12 Mar 23:23	14 Jun 06:12	15 Sep 13:20	13 Dec 21:25	00:10
1261 AD	13 Mar 05:07	14 Jun 11:49	15 Sep 19:05	14 Dec 03:22	00:10
1262 AD	13 Mar 10:59	14 Jun 17:35	16 Sep 00:48	14 Dec 09:04	00:10
1263 AD	13 Mar 16:41	14 Jun 23:20	16 Sep 06:36	14 Dec 14:52	00:10
1264 AD	12 Mar 22:36	14 Jun 05:10	15 Sep 12:20	13 Dec 20:40	00:09
1265 AD	13 Mar 04:32	14 Jun 10:58	15 Sep 18:05	14 Dec 02:25	00:09
1266 AD	13 Mar 10:08	14 Jun 16:41	15 Sep 23:58	14 Dec 08:19	00:09
1267 AD	13 Mar 16:01	14 Jun 22:41	16 Sep 05:48	14 Dec 14:06	00:09
1268 AD	12 Mar 21:52	14 Jun 04:31	15 Sep 11:36	13 Dec 19:54	00:09
1269 AD	13 Mar 03:39	14 Jun 10:13	15 Sep 17:28	14 Dec 01:50	00:09
1270 AD	13 Mar 09:34	14 Jun 16:07	15 Sep 23:22	14 Dec 07:36	00:09
1271 AD	13 Mar 15:17	14 Jun 21:55	16 Sep 05:15	14 Dec 13:28	00:09
1272 AD	12 Mar 21:09	14 Jun 03:47	15 Sep 11:05	13 Dec 19:26	00:09
1273 AD	13 Mar 03:05	14 Jun 09:37	15 Sep 16:52	14 Dec 01:17	00:09
1274 AD	13 Mar 08:45	14 Jun 15:17	15 Sep 22:45	14 Dec 07:12	00:09
1275 AD	13 Mar 14:41	14 Jun 21:15	16 Sep 04:37	14 Dec 13:00	00:09
1276 AD	12 Mar 20:38	14 Jun 03:03	15 Sep 10:22	13 Dec 18:46	00:09
1277 AD	13 Mar 02:23	14 Jun 08:41	15 Sep 16:08	14 Dec 00:41	00:09
1278 AD	13 Mar 08:15	14 Jun 14:35	15 Sep 21:56	14 Dec 06:24	00:09
1279 AD	13 Mar 13:55	14 Jun 20:20	16 Sep 03:40	14 Dec 12:09	00:09
1280 AD	12 Mar 19:43	14 Jun 02:09	15 Sep 09:25	13 Dec 17:57	00:09
1281 AD	13 Mar 01:36	14 Jun 07:56	15 Sep 15:11	13 Dec 23:40	00:09
1282 AD	13 Mar 07:11	14 Jun 13:33	15 Sep 21:03	14 Dec 05:30	00:09
1283 AD	13 Mar 12:59	14 Jun 19:27	16 Sep 02:55	14 Dec 11:18	00:09
1284 AD	12 Mar 18:51	14 Jun 01:16	15 Sep 08:40	13 Dec 17:09	00:09
1285 AD	13 Mar 00:34	14 Jun 06:52	15 Sep 14:26	13 Dec 23:07	00:09
1286 AD	13 Mar 06:28	14 Jun 12:46	15 Sep 20:18	14 Dec 04:56	00:09
1287 AD	13 Mar 12:18	14 Jun 18:35	16 Sep 02:07	14 Dec 10:43	00:09
1288 AD	12 Mar 18:12	14 Jun 00:25	15 Sep 07:57	13 Dec 16:36	00:09
1289 AD	13 Mar 00:11	14 Jun 06:21	15 Sep 13:47	13 Dec 22:27	00:09
1290 AD	13 Mar 05:52	14 Jun 12:04	15 Sep 19:39	14 Dec 04:20	00:09
1291 AD	13 Mar 11:42	14 Jun 18:03	16 Sep 01:33	14 Dec 10:10	00:09
1292 AD	12 Mar 17:39	13 Jun 23:57	15 Sep 07:21	13 Dec 16:00	00:08
1293 AD	12 Mar 23:25	14 Jun 05:32	15 Sep 13:08	13 Dec 21:51	00:08
1294 AD	13 Mar 05:14	14 Jun 11:24	15 Sep 19:03	14 Dec 03:38	00:08
1295 AD	13 Mar 11:00	14 Jun 17:13	16 Sep 00:51	14 Dec 09:25	00:08
1296 AD	12 Mar 16:46	13 Jun 22:56	15 Sep 06:34	13 Dec 15:19	00:08
1297 AD	12 Mar 22:39	14 Jun 04:47	15 Sep 12:21	13 Dec 21:10	00:08
1298 AD	13 Mar 04:19	14 Jun 10:23	15 Sep 18:07	14 Dec 02:57	00:08
1299 AD	13 Mar 10:09	14 Jun 16:16	15 Sep 23:57	14 Dec 08:43	00:08

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1300 AD	12 Mar 16:07	13 Jun 22:09	15 Sep 05:43	13 Dec 14:30	00:08
1301 AD	12 Mar 21:51	14 Jun 03:44	15 Sep 11:25	13 Dec 20:20	00:08
1302 AD	13 Mar 03:37	14 Jun 09:38	15 Sep 17:18	14 Dec 02:08	00:08
1303 AD	13 Mar 09:24	14 Jun 15:30	15 Sep 23:05	14 Dec 07:53	00:08
1304 AD	12 Mar 15:11	13 Jun 21:14	15 Sep 04:50	13 Dec 13:43	00:08
1305 AD	12 Mar 21:05	14 Jun 03:07	15 Sep 10:45	13 Dec 19:34	00:08
1306 AD	13 Mar 02:46	14 Jun 08:48	15 Sep 16:37	14 Dec 01:23	00:08
1307 AD	13 Mar 08:34	14 Jun 14:41	15 Sep 22:32	14 Dec 07:17	00:08
1308 AD	12 Mar 14:30	13 Jun 20:36	15 Sep 04:21	13 Dec 13:14	00:08
1309 AD	12 Mar 20:18	14 Jun 02:11	15 Sep 10:04	13 Dec 19:09	00:08
1310 AD	13 Mar 02:10	14 Jun 08:05	15 Sep 16:01	14 Dec 01:00	00:08
1311 AD	13 Mar 08:05	14 Jun 13:59	15 Sep 21:49	14 Dec 06:46	00:08
1312 AD	12 Mar 13:59	13 Jun 19:44	15 Sep 03:32	13 Dec 12:36	00:08
1313 AD	12 Mar 19:52	14 Jun 01:38	15 Sep 09:24	13 Dec 18:28	00:08
1314 AD	13 Mar 01:33	14 Jun 07:23	15 Sep 15:11	14 Dec 00:14	00:08
1315 AD	13 Mar 07:18	14 Jun 13:14	15 Sep 21:00	14 Dec 06:00	00:08
1316 AD	12 Mar 13:12	13 Jun 19:08	15 Sep 02:49	13 Dec 11:49	00:08
1317 AD	12 Mar 18:56	14 Jun 00:40	15 Sep 08:31	13 Dec 17:34	00:08
1318 AD	13 Mar 00:39	14 Jun 06:28	15 Sep 14:27	13 Dec 23:22	00:08
1319 AD	13 Mar 06:26	14 Jun 12:19	15 Sep 20:14	14 Dec 05:10	00:08
1320 AD	12 Mar 12:12	13 Jun 17:58	15 Sep 01:53	13 Dec 11:01	00:08
1321 AD	12 Mar 18:00	13 Jun 23:48	15 Sep 07:45	13 Dec 16:56	00:08
1322 AD	12 Mar 23:47	14 Jun 05:31	15 Sep 13:33	13 Dec 22:43	00:07
1323 AD	13 Mar 05:37	14 Jun 11:20	15 Sep 19:22	14 Dec 04:29	00:07
1324 AD	12 Mar 11:35	13 Jun 17:17	15 Sep 01:15	13 Dec 10:26	00:07
1325 AD	12 Mar 17:26	13 Jun 22:56	15 Sep 06:57	13 Dec 16:15	00:07
1326 AD	12 Mar 23:12	14 Jun 04:49	15 Sep 12:52	13 Dec 22:06	00:07
1327 AD	13 Mar 05:05	14 Jun 10:49	15 Sep 18:44	14 Dec 03:57	00:07
1328 AD	12 Mar 10:58	13 Jun 16:33	15 Sep 00:27	13 Dec 09:43	00:07
1329 AD	12 Mar 16:48	13 Jun 22:26	15 Sep 06:26	13 Dec 15:37	00:07
1330 AD	12 Mar 22:34	14 Jun 04:13	15 Sep 12:18	13 Dec 21:26	00:07
1331 AD	13 Mar 04:20	14 Jun 10:01	15 Sep 18:06	14 Dec 03:15	00:07
1332 AD	12 Mar 10:11	13 Jun 15:55	14 Sep 23:58	13 Dec 09:14	00:07
1333 AD	12 Mar 16:01	13 Jun 21:30	15 Sep 05:37	13 Dec 15:02	00:07
1334 AD	12 Mar 21:47	14 Jun 03:16	15 Sep 11:30	13 Dec 20:48	00:07
1335 AD	13 Mar 03:39	14 Jun 09:11	15 Sep 17:20	14 Dec 02:36	00:07
1336 AD	12 Mar 09:31	13 Jun 14:52	14 Sep 22:55	13 Dec 08:19	00:07
1337 AD	12 Mar 15:16	13 Jun 20:41	15 Sep 04:48	13 Dec 14:11	00:07
1338 AD	12 Mar 20:58	14 Jun 02:28	15 Sep 10:35	13 Dec 19:57	00:07
1339 AD	13 Mar 02:43	14 Jun 08:15	15 Sep 16:19	14 Dec 01:41	00:07
1340 AD	12 Mar 08:33	13 Jun 14:07	14 Sep 22:13	13 Dec 07:34	00:07
1341 AD	12 Mar 14:22	13 Jun 19:43	15 Sep 03:56	13 Dec 13:21	00:07
1342 AD	12 Mar 20:06	14 Jun 01:30	15 Sep 09:51	13 Dec 19:10	00:07
1343 AD	13 Mar 01:55	14 Jun 07:27	15 Sep 15:45	14 Dec 01:07	00:07
1344 AD	12 Mar 07:50	13 Jun 13:11	14 Sep 21:23	13 Dec 06:57	00:07
1345 AD	12 Mar 13:39	13 Jun 19:00	15 Sep 03:18	13 Dec 12:54	00:07
1346 AD	12 Mar 19:31	14 Jun 00:52	15 Sep 09:12	13 Dec 18:45	00:07
1347 AD	13 Mar 01:26	14 Jun 06:43	15 Sep 14:59	14 Dec 00:29	00:07
1348 AD	12 Mar 07:20	13 Jun 12:40	14 Sep 20:55	13 Dec 06:27	00:07
1349 AD	12 Mar 13:12	13 Jun 18:23	15 Sep 02:39	13 Dec 12:17	00:07

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1350 AD	12 Mar 18:56	14 Jun 00:11	15 Sep 08:29	13 Dec 18:02	00:07
1351 AD	13 Mar 00:43	14 Jun 06:09	15 Sep 14:23	13 Dec 23:54	00:07
1352 AD	12 Mar 06:37	13 Jun 11:50	14 Sep 20:01	13 Dec 05:35	00:07
1353 AD	12 Mar 12:20	13 Jun 17:33	15 Sep 01:54	13 Dec 11:25	00:07
1354 AD	12 Mar 18:02	13 Jun 23:20	15 Sep 07:47	13 Dec 17:15	00:07
1355 AD	12 Mar 23:48	14 Jun 05:04	15 Sep 13:26	13 Dec 22:58	00:07
1356 AD	12 Mar 05:32	13 Jun 10:52	14 Sep 19:17	13 Dec 04:57	00:06
1357 AD	12 Mar 11:24	13 Jun 16:30	15 Sep 00:58	13 Dec 10:46	00:06
1358 AD	12 Mar 17:11	13 Jun 22:13	15 Sep 06:45	13 Dec 16:28	00:06
1359 AD	12 Mar 23:01	14 Jun 04:10	15 Sep 12:40	13 Dec 22:22	00:06
1360 AD	12 Mar 05:00	13 Jun 09:57	14 Sep 18:18	13 Dec 04:07	00:06
1361 AD	12 Mar 10:46	13 Jun 15:45	15 Sep 00:10	13 Dec 09:59	00:06
1362 AD	12 Mar 16:31	13 Jun 21:40	15 Sep 06:07	13 Dec 15:53	00:06
1363 AD	12 Mar 22:24	14 Jun 03:32	15 Sep 11:51	13 Dec 21:35	00:06
1364 AD	12 Mar 04:14	13 Jun 09:25	14 Sep 17:49	13 Dec 03:32	00:06
1365 AD	12 Mar 10:06	13 Jun 15:09	14 Sep 23:40	13 Dec 09:24	00:06
1366 AD	12 Mar 15:54	13 Jun 20:55	15 Sep 05:32	13 Dec 15:10	00:06
1367 AD	12 Mar 21:39	14 Jun 02:52	15 Sep 11:29	13 Dec 21:11	00:06
1368 AD	12 Mar 03:36	13 Jun 08:37	14 Sep 17:06	13 Dec 03:00	00:06
1369 AD	12 Mar 09:23	13 Jun 14:19	14 Sep 22:55	13 Dec 08:50	00:06
1370 AD	12 Mar 15:08	13 Jun 20:08	15 Sep 04:50	13 Dec 14:41	00:06
1371 AD	12 Mar 21:04	14 Jun 01:57	15 Sep 10:30	13 Dec 20:20	00:06
1372 AD	12 Mar 02:51	13 Jun 07:44	14 Sep 16:18	13 Dec 02:14	00:06
1373 AD	12 Mar 08:37	13 Jun 13:27	14 Sep 22:03	13 Dec 08:04	00:06
1374 AD	12 Mar 14:23	13 Jun 19:12	15 Sep 03:47	13 Dec 13:43	00:06
1375 AD	12 Mar 20:05	14 Jun 01:05	15 Sep 09:41	13 Dec 19:35	00:06
1376 AD	12 Mar 02:01	13 Jun 06:50	14 Sep 15:20	13 Dec 01:19	00:06
1377 AD	12 Mar 07:45	13 Jun 12:31	14 Sep 21:10	13 Dec 07:05	00:06
1378 AD	12 Mar 13:24	13 Jun 18:21	15 Sep 03:09	13 Dec 13:02	00:06
1379 AD	12 Mar 19:19	14 Jun 00:12	15 Sep 08:50	13 Dec 18:47	00:06
1380 AD	12 Mar 01:06	13 Jun 06:00	14 Sep 14:41	13 Dec 00:46	00:06
1381 AD	12 Mar 06:58	13 Jun 11:45	14 Sep 20:33	13 Dec 06:43	00:06
1382 AD	12 Mar 12:55	13 Jun 17:35	15 Sep 02:22	13 Dec 12:24	00:06
1383 AD	12 Mar 18:43	13 Jun 23:31	15 Sep 08:20	13 Dec 18:21	00:06
1384 AD	12 Mar 00:44	13 Jun 05:23	14 Sep 14:03	13 Dec 00:13	00:06
1385 AD	12 Mar 06:32	13 Jun 11:09	14 Sep 19:51	13 Dec 06:00	00:06
1386 AD	12 Mar 12:12	13 Jun 17:01	15 Sep 01:50	13 Dec 11:56	00:06
1387 AD	12 Mar 18:08	13 Jun 22:54	15 Sep 07:31	13 Dec 17:35	00:06
1388 AD	11 Mar 23:55	13 Jun 04:37	14 Sep 13:20	12 Dec 23:27	00:06
1389 AD	12 Mar 05:40	13 Jun 10:19	14 Sep 19:13	13 Dec 05:20	00:06
1390 AD	12 Mar 11:29	13 Jun 16:05	15 Sep 00:57	13 Dec 10:59	00:06
1391 AD	12 Mar 17:08	13 Jun 21:54	15 Sep 06:48	13 Dec 16:56	00:06
1392 AD	11 Mar 23:03	13 Jun 03:39	14 Sep 12:27	12 Dec 22:47	00:06
1393 AD	12 Mar 04:52	13 Jun 09:19	14 Sep 18:11	13 Dec 04:29	00:06
1394 AD	12 Mar 10:32	13 Jun 15:06	15 Sep 00:07	13 Dec 10:21	00:06
1395 AD	12 Mar 16:30	13 Jun 21:01	15 Sep 05:49	13 Dec 16:03	00:05
1396 AD	11 Mar 22:19	13 Jun 02:47	14 Sep 11:35	12 Dec 21:55	00:05
1397 AD	12 Mar 04:02	13 Jun 08:32	14 Sep 17:29	13 Dec 03:51	00:05
1398 AD	12 Mar 09:55	13 Jun 14:25	14 Sep 23:16	13 Dec 09:31	00:05
1399 AD	12 Mar 15:39	13 Jun 20:17	15 Sep 05:11	13 Dec 15:25	00:05

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1400 AD	11 Mar 21:35	13 Jun 02:06	14 Sep 10:59	12 Dec 21:18	00:05
1401 AD	12 Mar 03:27	13 Jun 07:51	14 Sep 16:50	13 Dec 03:04	00:05
1402 AD	12 Mar 09:04	13 Jun 13:39	14 Sep 22:49	13 Dec 09:03	00:05
1403 AD	12 Mar 15:01	13 Jun 19:35	15 Sep 04:33	13 Dec 14:54	00:05
1404 AD	11 Mar 20:53	13 Jun 01:19	14 Sep 10:19	12 Dec 20:48	00:05
1405 AD	12 Mar 02:39	13 Jun 07:01	14 Sep 16:12	13 Dec 02:44	00:05
1406 AD	12 Mar 08:39	13 Jun 12:54	14 Sep 21:59	13 Dec 08:23	00:05
1407 AD	12 Mar 14:25	13 Jun 18:43	15 Sep 03:48	13 Dec 14:14	00:05
1408 AD	11 Mar 20:18	13 Jun 00:33	14 Sep 09:31	12 Dec 20:06	00:05
1409 AD	12 Mar 02:08	13 Jun 06:19	14 Sep 15:15	13 Dec 01:46	00:05
1410 AD	12 Mar 07:42	13 Jun 12:05	14 Sep 21:09	13 Dec 07:37	00:05
1411 AD	12 Mar 13:35	13 Jun 17:58	15 Sep 02:53	13 Dec 13:19	00:05
1412 AD	11 Mar 19:23	12 Jun 23:41	14 Sep 08:39	12 Dec 19:05	00:05
1413 AD	12 Mar 01:01	13 Jun 05:19	14 Sep 14:33	13 Dec 01:01	00:05
1414 AD	12 Mar 06:53	13 Jun 11:11	14 Sep 20:21	13 Dec 06:45	00:05
1415 AD	12 Mar 12:36	13 Jun 16:57	15 Sep 02:09	13 Dec 12:40	00:05
1416 AD	11 Mar 18:28	12 Jun 22:43	14 Sep 07:55	12 Dec 18:37	00:05
1417 AD	12 Mar 00:25	13 Jun 04:31	14 Sep 13:41	13 Dec 00:20	00:05
1418 AD	12 Mar 06:07	13 Jun 10:17	14 Sep 19:38	13 Dec 06:14	00:05
1419 AD	12 Mar 12:06	13 Jun 16:16	15 Sep 01:26	13 Dec 12:04	00:05
1420 AD	11 Mar 18:01	12 Jun 22:05	14 Sep 07:11	12 Dec 17:54	00:05
1421 AD	11 Mar 23:43	13 Jun 03:49	14 Sep 13:06	12 Dec 23:52	00:05
1422 AD	12 Mar 05:38	13 Jun 09:47	14 Sep 18:57	13 Dec 05:35	00:05
1423 AD	12 Mar 11:27	13 Jun 15:37	15 Sep 00:47	13 Dec 11:24	00:05
1424 AD	11 Mar 17:18	12 Jun 21:22	14 Sep 06:36	12 Dec 17:18	00:05
1425 AD	11 Mar 23:10	13 Jun 03:11	14 Sep 12:25	12 Dec 23:01	00:05
1426 AD	12 Mar 04:46	13 Jun 08:53	14 Sep 18:17	13 Dec 04:54	00:05
1427 AD	12 Mar 10:36	13 Jun 14:47	15 Sep 00:02	13 Dec 10:46	00:05
1428 AD	11 Mar 16:29	12 Jun 20:31	14 Sep 05:43	12 Dec 16:33	00:05
1429 AD	11 Mar 22:09	13 Jun 02:06	14 Sep 11:34	12 Dec 22:25	00:05
1430 AD	12 Mar 04:04	13 Jun 08:00	14 Sep 17:23	13 Dec 04:07	00:05
1431 AD	12 Mar 09:53	13 Jun 13:48	14 Sep 23:08	13 Dec 09:54	00:05
1432 AD	11 Mar 15:39	12 Jun 19:32	14 Sep 04:52	12 Dec 15:49	00:05
1433 AD	11 Mar 21:31	13 Jun 01:23	14 Sep 10:40	12 Dec 21:32	00:05
1434 AD	12 Mar 03:09	13 Jun 07:07	14 Sep 16:30	13 Dec 03:20	00:05
1435 AD	12 Mar 08:59	13 Jun 13:01	14 Sep 22:20	13 Dec 09:10	00:05
1436 AD	11 Mar 14:57	12 Jun 18:50	14 Sep 04:08	12 Dec 14:58	00:05
1437 AD	11 Mar 20:35	13 Jun 00:27	14 Sep 10:02	12 Dec 20:55	00:05
1438 AD	12 Mar 02:29	13 Jun 06:25	14 Sep 15:57	13 Dec 02:47	00:05
1439 AD	12 Mar 08:21	13 Jun 12:16	14 Sep 21:44	13 Dec 08:40	00:04
1440 AD	11 Mar 14:12	12 Jun 18:00	14 Sep 03:31	12 Dec 14:39	00:04
1441 AD	11 Mar 20:12	12 Jun 23:53	14 Sep 09:22	12 Dec 20:24	00:04
1442 AD	12 Mar 01:57	13 Jun 05:40	14 Sep 15:14	13 Dec 02:12	00:04
1443 AD	12 Mar 07:50	13 Jun 11:36	14 Sep 21:02	13 Dec 08:03	00:04
1444 AD	11 Mar 13:45	12 Jun 17:28	14 Sep 02:47	12 Dec 13:50	00:04
1445 AD	11 Mar 19:22	12 Jun 23:05	14 Sep 08:36	12 Dec 19:41	00:04
1446 AD	12 Mar 01:11	13 Jun 05:00	14 Sep 14:29	13 Dec 01:26	00:04
1447 AD	12 Mar 07:00	13 Jun 10:48	14 Sep 20:14	13 Dec 07:10	00:04
1448 AD	11 Mar 12:44	12 Jun 16:25	14 Sep 01:59	12 Dec 13:02	00:04
1449 AD	11 Mar 18:33	12 Jun 22:12	14 Sep 07:49	12 Dec 18:47	00:04

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1450 AD	12 Mar 00:11	13 Jun 03:54	14 Sep 13:36	13 Dec 00:37	00:04
1451 AD	12 Mar 05:58	13 Jun 09:43	14 Sep 19:20	13 Dec 06:30	00:04
1452 AD	11 Mar 11:55	12 Jun 15:32	14 Sep 01:04	12 Dec 12:19	00:04
1453 AD	11 Mar 17:39	12 Jun 21:08	14 Sep 06:54	12 Dec 18:09	00:04
1454 AD	11 Mar 23:32	13 Jun 03:05	14 Sep 12:49	12 Dec 23:58	00:04
1455 AD	12 Mar 05:29	13 Jun 09:02	14 Sep 18:37	13 Dec 05:48	00:04
1456 AD	11 Mar 11:18	12 Jun 14:45	14 Sep 00:22	12 Dec 11:44	00:04
1457 AD	11 Mar 17:10	12 Jun 20:42	14 Sep 06:18	12 Dec 17:33	00:04
1458 AD	11 Mar 22:56	13 Jun 02:31	14 Sep 12:09	12 Dec 23:20	00:04
1459 AD	12 Mar 04:46	13 Jun 08:23	14 Sep 17:59	13 Dec 05:11	00:04
1460 AD	11 Mar 10:43	12 Jun 14:16	13 Sep 23:51	12 Dec 11:02	00:04
1461 AD	11 Mar 16:23	12 Jun 19:52	14 Sep 05:42	12 Dec 16:54	00:04
1462 AD	11 Mar 22:09	13 Jun 01:46	14 Sep 11:36	12 Dec 22:46	00:04
1463 AD	12 Mar 04:02	13 Jun 07:38	14 Sep 17:21	13 Dec 04:37	00:04
1464 AD	11 Mar 09:50	12 Jun 13:12	13 Sep 23:00	12 Dec 10:28	00:04
1465 AD	11 Mar 15:42	12 Jun 19:01	14 Sep 04:53	12 Dec 16:15	00:04
1466 AD	11 Mar 21:29	13 Jun 00:47	14 Sep 10:38	12 Dec 21:57	00:04
1467 AD	12 Mar 03:14	13 Jun 06:34	14 Sep 16:19	13 Dec 03:45	00:04
1468 AD	11 Mar 09:08	12 Jun 12:27	13 Sep 22:06	12 Dec 09:35	00:04
1469 AD	11 Mar 14:47	12 Jun 18:03	14 Sep 03:51	12 Dec 15:20	00:04
1470 AD	11 Mar 20:33	12 Jun 23:57	14 Sep 09:45	12 Dec 21:07	00:04
1471 AD	12 Mar 02:27	13 Jun 05:52	14 Sep 15:35	13 Dec 02:55	00:04
1472 AD	11 Mar 08:14	12 Jun 11:27	13 Sep 21:19	12 Dec 08:47	00:04
1473 AD	11 Mar 14:02	12 Jun 17:19	14 Sep 03:17	12 Dec 14:40	00:04
1474 AD	11 Mar 19:49	12 Jun 23:11	14 Sep 09:07	12 Dec 20:32	00:04
1475 AD	12 Mar 01:39	13 Jun 04:59	14 Sep 14:51	13 Dec 02:26	00:04
1476 AD	11 Mar 07:38	12 Jun 10:54	13 Sep 20:45	12 Dec 08:22	00:04
1477 AD	11 Mar 13:28	12 Jun 16:34	14 Sep 02:35	12 Dec 14:10	00:04
1478 AD	11 Mar 19:19	12 Jun 22:30	14 Sep 08:30	12 Dec 20:00	00:04
1479 AD	12 Mar 01:15	13 Jun 04:30	14 Sep 14:21	13 Dec 01:53	00:04
1480 AD	11 Mar 07:04	12 Jun 10:08	13 Sep 20:01	12 Dec 07:42	00:04
1481 AD	11 Mar 12:49	12 Jun 15:58	14 Sep 01:55	12 Dec 13:30	00:04
1482 AD	11 Mar 18:35	12 Jun 21:48	14 Sep 07:44	12 Dec 19:15	00:04
1483 AD	12 Mar 00:22	13 Jun 03:30	14 Sep 13:24	13 Dec 00:59	00:04
1484 AD	11 Mar 06:11	12 Jun 09:19	13 Sep 19:16	12 Dec 06:51	00:04
1485 AD	11 Mar 11:53	12 Jun 14:56	14 Sep 01:02	12 Dec 12:38	00:04
1486 AD	11 Mar 17:35	12 Jun 20:43	14 Sep 06:50	12 Dec 18:27	00:04
1487 AD	11 Mar 23:27	13 Jun 02:38	14 Sep 12:38	13 Dec 00:21	00:04
1488 AD	11 Mar 05:19	12 Jun 08:12	13 Sep 18:16	12 Dec 06:08	00:04
1489 AD	11 Mar 11:07	12 Jun 14:01	14 Sep 00:12	12 Dec 11:56	00:03
1490 AD	11 Mar 16:58	12 Jun 19:56	14 Sep 06:02	12 Dec 17:44	00:03
1491 AD	11 Mar 22:48	13 Jun 01:44	14 Sep 11:43	12 Dec 23:32	00:03
1492 AD	11 Mar 04:39	12 Jun 07:39	13 Sep 17:38	12 Dec 05:29	00:03
1493 AD	11 Mar 10:26	12 Jun 13:24	13 Sep 23:29	12 Dec 11:17	00:03
1494 AD	11 Mar 16:14	12 Jun 19:16	14 Sep 05:22	12 Dec 17:05	00:03
1495 AD	11 Mar 22:09	13 Jun 01:14	14 Sep 11:19	12 Dec 23:01	00:03
1496 AD	11 Mar 04:01	12 Jun 06:52	13 Sep 17:01	12 Dec 04:50	00:03
1497 AD	11 Mar 09:46	12 Jun 12:40	13 Sep 22:59	12 Dec 10:44	00:03
1498 AD	11 Mar 15:34	12 Jun 18:34	14 Sep 04:49	12 Dec 16:37	00:03
1499 AD	11 Mar 21:24	13 Jun 00:16	14 Sep 10:25	12 Dec 22:24	00:03

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1500 AD	11 Mar 03:17	12 Jun 06:05	13 Sep 16:18	12 Dec 04:18	00:03
1501 AD	11 Mar 09:07	12 Jun 11:48	13 Sep 22:05	12 Dec 10:02	00:03
1502 AD	11 Mar 14:54	12 Jun 17:37	14 Sep 03:51	12 Dec 15:46	00:03
1503 AD	11 Mar 20:44	12 Jun 23:33	14 Sep 09:42	12 Dec 21:40	00:03
1504 AD	11 Mar 02:34	12 Jun 05:12	13 Sep 15:19	12 Dec 03:24	00:03
1505 AD	11 Mar 08:15	12 Jun 10:58	13 Sep 21:11	12 Dec 09:09	00:03
1506 AD	11 Mar 14:00	12 Jun 16:52	14 Sep 03:04	12 Dec 14:57	00:03
1507 AD	11 Mar 19:51	12 Jun 22:34	14 Sep 08:43	12 Dec 20:40	00:03
1508 AD	11 Mar 01:37	12 Jun 04:21	13 Sep 14:39	12 Dec 02:35	00:03
1509 AD	11 Mar 07:21	12 Jun 10:06	13 Sep 20:31	12 Dec 08:28	00:03
1510 AD	11 Mar 13:08	12 Jun 15:54	14 Sep 02:17	12 Dec 14:17	00:03
1511 AD	11 Mar 19:00	12 Jun 21:50	14 Sep 08:12	12 Dec 20:18	00:03
1512 AD	11 Mar 01:00	12 Jun 03:32	13 Sep 13:54	12 Dec 02:07	00:03
1513 AD	11 Mar 06:50	12 Jun 09:18	13 Sep 19:48	12 Dec 07:54	00:03
1514 AD	11 Mar 12:40	12 Jun 15:17	14 Sep 01:44	12 Dec 13:50	00:03
1515 AD	11 Mar 18:37	12 Jun 21:07	14 Sep 07:21	12 Dec 19:35	00:03
1516 AD	11 Mar 00:24	12 Jun 02:57	13 Sep 13:15	12 Dec 01:29	00:03
1517 AD	11 Mar 06:10	12 Jun 08:46	13 Sep 19:08	12 Dec 07:19	00:03
1518 AD	11 Mar 11:59	12 Jun 14:33	14 Sep 00:54	12 Dec 12:59	00:03
1519 AD	11 Mar 17:46	12 Jun 20:26	14 Sep 06:50	12 Dec 18:54	00:03
1520 AD	10 Mar 23:39	12 Jun 02:05	13 Sep 12:31	12 Dec 00:42	00:03
1521 AD	11 Mar 05:20	12 Jun 07:46	13 Sep 18:19	12 Dec 06:28	00:03
1522 AD	11 Mar 11:02	12 Jun 13:39	14 Sep 00:11	12 Dec 12:24	00:03
1523 AD	11 Mar 16:56	12 Jun 19:23	14 Sep 05:45	12 Dec 18:06	00:03
1524 AD	10 Mar 22:44	12 Jun 01:06	13 Sep 11:36	11 Dec 23:57	00:03
1525 AD	11 Mar 04:31	12 Jun 06:53	13 Sep 17:29	12 Dec 05:47	00:03
1526 AD	11 Mar 10:22	12 Jun 12:43	13 Sep 23:12	12 Dec 11:28	00:03
1527 AD	11 Mar 16:09	12 Jun 18:37	14 Sep 05:06	12 Dec 17:26	00:03
1528 AD	10 Mar 22:02	12 Jun 00:21	13 Sep 10:48	11 Dec 23:16	00:03
1529 AD	11 Mar 03:48	12 Jun 06:06	13 Sep 16:39	12 Dec 05:00	00:03
1530 AD	11 Mar 09:34	12 Jun 12:02	13 Sep 22:38	12 Dec 10:55	00:03
1531 AD	11 Mar 15:32	12 Jun 17:51	14 Sep 04:18	12 Dec 16:40	00:03
1532 AD	10 Mar 21:20	11 Jun 23:36	13 Sep 10:13	11 Dec 22:35	00:03
1533 AD	11 Mar 03:04	12 Jun 05:26	13 Sep 16:10	12 Dec 04:34	00:03
1534 AD	11 Mar 08:57	12 Jun 11:18	13 Sep 21:53	12 Dec 10:19	00:03
1535 AD	11 Mar 14:47	12 Jun 17:09	14 Sep 03:47	12 Dec 16:18	00:03
1536 AD	10 Mar 20:45	11 Jun 22:53	13 Sep 09:32	11 Dec 22:08	00:03
1537 AD	11 Mar 02:36	12 Jun 04:37	13 Sep 15:20	12 Dec 03:48	00:03
1538 AD	11 Mar 08:19	12 Jun 10:33	13 Sep 21:14	12 Dec 09:42	00:03
1539 AD	11 Mar 14:14	12 Jun 16:23	14 Sep 02:50	12 Dec 15:25	00:03
1540 AD	10 Mar 19:58	11 Jun 22:05	13 Sep 08:37	11 Dec 21:12	00:03
1541 AD	11 Mar 01:37	12 Jun 03:52	13 Sep 14:33	12 Dec 03:03	00:03
1542 AD	11 Mar 07:28	12 Jun 09:41	13 Sep 20:16	12 Dec 08:40	00:03
1543 AD	11 Mar 13:11	12 Jun 15:26	14 Sep 02:08	12 Dec 14:34	00:03
1544 AD	10 Mar 19:00	11 Jun 21:06	13 Sep 07:55	11 Dec 20:29	00:03
1545 AD	11 Mar 00:46	12 Jun 02:48	13 Sep 13:40	12 Dec 02:12	00:03
1546 AD	11 Mar 06:26	12 Jun 08:39	13 Sep 19:33	12 Dec 08:11	00:03
1547 AD	11 Mar 12:28	12 Jun 14:30	14 Sep 01:12	12 Dec 13:59	00:03
1548 AD	10 Mar 18:21	11 Jun 20:13	13 Sep 07:01	11 Dec 19:47	00:03
1549 AD	11 Mar 00:07	12 Jun 02:05	13 Sep 13:01	12 Dec 01:44	00:03

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1550 AD	11 Mar 06:05	12 Jun 08:03	13 Sep 18:46	12 Dec 07:27	00:03
1551 AD	11 Mar 11:54	12 Jun 13:55	14 Sep 00:38	12 Dec 13:24	00:03
1552 AD	10 Mar 17:45	11 Jun 19:43	13 Sep 06:29	11 Dec 19:19	00:03
1553 AD	10 Mar 23:37	12 Jun 01:32	13 Sep 12:18	12 Dec 00:59	00:02
1554 AD	11 Mar 05:19	12 Jun 07:23	13 Sep 18:15	12 Dec 06:53	00:02
1555 AD	11 Mar 11:16	12 Jun 13:13	13 Sep 23:58	12 Dec 12:40	00:02
1556 AD	10 Mar 17:03	11 Jun 18:54	13 Sep 05:45	11 Dec 18:28	00:02
1557 AD	10 Mar 22:38	12 Jun 00:39	13 Sep 11:41	12 Dec 00:26	00:02
1558 AD	11 Mar 04:32	12 Jun 06:31	13 Sep 17:21	12 Dec 06:08	00:02
1559 AD	11 Mar 10:20	12 Jun 12:14	13 Sep 23:08	12 Dec 12:00	00:02
1560 AD	10 Mar 16:09	11 Jun 17:53	13 Sep 04:55	11 Dec 17:52	00:02
1561 AD	10 Mar 22:02	11 Jun 23:40	13 Sep 10:39	11 Dec 23:30	00:02
1562 AD	11 Mar 03:42	12 Jun 05:30	13 Sep 16:29	12 Dec 05:22	00:02
1563 AD	11 Mar 09:36	12 Jun 11:21	13 Sep 22:09	12 Dec 11:11	00:02
1564 AD	10 Mar 15:26	11 Jun 17:06	13 Sep 03:55	11 Dec 16:55	00:02
1565 AD	10 Mar 21:03	11 Jun 22:52	13 Sep 09:54	11 Dec 22:49	00:02
1566 AD	11 Mar 03:00	12 Jun 04:50	13 Sep 15:42	12 Dec 04:33	00:02
1567 AD	11 Mar 08:50	12 Jun 10:37	13 Sep 21:33	12 Dec 10:26	00:02
1568 AD	10 Mar 14:37	11 Jun 16:21	13 Sep 03:28	11 Dec 16:27	00:02
1569 AD	10 Mar 20:31	11 Jun 22:12	13 Sep 09:17	11 Dec 22:13	00:02
1570 AD	11 Mar 02:14	12 Jun 04:03	13 Sep 15:10	12 Dec 04:11	00:02
1571 AD	11 Mar 08:14	12 Jun 09:55	13 Sep 20:55	12 Dec 10:03	00:02
1572 AD	10 Mar 14:11	11 Jun 15:40	13 Sep 02:42	11 Dec 15:47	00:02
1573 AD	10 Mar 19:51	11 Jun 21:26	13 Sep 08:39	11 Dec 21:42	00:02
1574 AD	11 Mar 01:47	12 Jun 03:26	13 Sep 14:25	12 Dec 03:27	00:02
1575 AD	11 Mar 07:35	12 Jun 09:12	13 Sep 20:09	12 Dec 09:15	00:02
1576 AD	10 Mar 13:17	11 Jun 14:51	13 Sep 01:58	11 Dec 15:10	00:02
1577 AD	10 Mar 19:09	11 Jun 20:40	13 Sep 07:44	11 Dec 20:46	00:02
1578 AD	11 Mar 00:48	12 Jun 02:23	13 Sep 13:33	12 Dec 02:34	00:02
1579 AD	11 Mar 06:38	12 Jun 08:10	13 Sep 19:17	12 Dec 08:25	00:02
1580 AD	10 Mar 12:28	11 Jun 13:53	13 Sep 01:01	11 Dec 14:09	00:02
1581 AD	10 Mar 18:01	11 Jun 19:34	13 Sep 06:54	11 Dec 20:06	00:02
1582 AD	10 Mar 23:56	12 Jun 01:30	13 Sep 12:39	22 Dec 01:54	00:02
1583 AD	21 Mar 05:51	22 Jun 07:16	23 Sep 18:24	22 Dec 07:42	00:02
1584 AD	20 Mar 11:39	21 Jun 12:57	23 Sep 00:17	21 Dec 13:38	00:02
1585 AD	20 Mar 17:37	21 Jun 18:54	23 Sep 06:08	21 Dec 19:22	00:02
1586 AD	20 Mar 23:22	22 Jun 00:46	23 Sep 11:58	22 Dec 01:15	00:02
1587 AD	21 Mar 05:15	22 Jun 06:40	23 Sep 17:47	22 Dec 07:10	00:02
1588 AD	20 Mar 11:11	21 Jun 12:31	22 Sep 23:36	21 Dec 12:55	00:02
1589 AD	20 Mar 16:49	21 Jun 18:15	23 Sep 05:33	21 Dec 18:49	00:02
1590 AD	20 Mar 22:43	22 Jun 00:12	23 Sep 11:25	22 Dec 00:37	00:02
1591 AD	21 Mar 04:37	22 Jun 06:00	23 Sep 17:13	22 Dec 06:27	00:02
1592 AD	20 Mar 10:18	21 Jun 11:36	22 Sep 23:03	21 Dec 12:25	00:02
1593 AD	20 Mar 16:09	21 Jun 17:27	23 Sep 04:51	21 Dec 18:12	00:02
1594 AD	20 Mar 21:54	21 Jun 23:13	23 Sep 10:34	22 Dec 00:00	00:02
1595 AD	21 Mar 03:46	22 Jun 04:58	23 Sep 16:17	22 Dec 05:50	00:02
1596 AD	20 Mar 09:43	21 Jun 10:46	22 Sep 22:03	21 Dec 11:32	00:02
1597 AD	20 Mar 15:21	21 Jun 16:27	23 Sep 03:53	21 Dec 17:21	00:02
1598 AD	20 Mar 21:10	21 Jun 22:24	23 Sep 09:40	21 Dec 23:09	00:02
1599 AD	21 Mar 03:03	22 Jun 04:14	23 Sep 15:23	22 Dec 04:55	00:02

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1600 AD	20 Mar 08:42	21 Jun 09:50	22 Sep 21:12	21 Dec 10:47	00:02
1601 AD	20 Mar 14:34	21 Jun 15:44	23 Sep 03:06	21 Dec 16:31	00:02
1602 AD	20 Mar 20:20	21 Jun 21:32	23 Sep 08:55	21 Dec 22:18	00:02
1603 AD	21 Mar 02:08	22 Jun 03:18	23 Sep 14:44	22 Dec 04:14	00:02
1604 AD	20 Mar 08:03	21 Jun 09:09	22 Sep 20:35	21 Dec 10:05	00:02
1605 AD	20 Mar 13:41	21 Jun 14:52	23 Sep 02:27	21 Dec 16:01	00:02
1606 AD	20 Mar 19:35	21 Jun 20:49	23 Sep 08:18	21 Dec 21:55	00:02
1607 AD	21 Mar 01:37	22 Jun 02:40	23 Sep 14:05	22 Dec 03:44	00:02
1608 AD	20 Mar 07:24	21 Jun 08:17	22 Sep 19:55	21 Dec 09:39	00:02
1609 AD	20 Mar 13:19	21 Jun 14:14	23 Sep 01:49	21 Dec 15:27	00:02
1610 AD	20 Mar 19:08	21 Jun 20:07	23 Sep 07:33	21 Dec 21:14	00:02
1611 AD	21 Mar 00:56	22 Jun 01:53	23 Sep 13:17	22 Dec 03:06	00:02
1612 AD	20 Mar 06:49	21 Jun 07:44	22 Sep 19:07	21 Dec 08:50	00:02
1613 AD	20 Mar 12:28	21 Jun 13:25	23 Sep 00:57	21 Dec 14:35	00:02
1614 AD	20 Mar 18:14	21 Jun 19:16	23 Sep 06:47	21 Dec 20:22	00:02
1615 AD	21 Mar 00:07	22 Jun 01:05	23 Sep 12:33	22 Dec 02:11	00:02
1616 AD	20 Mar 05:45	21 Jun 06:36	22 Sep 18:17	21 Dec 08:04	00:02
1617 AD	20 Mar 11:32	21 Jun 12:28	23 Sep 00:09	21 Dec 13:54	00:02
1618 AD	20 Mar 17:22	21 Jun 18:18	23 Sep 05:53	21 Dec 19:41	00:02
1619 AD	20 Mar 23:13	21 Jun 23:58	23 Sep 11:35	22 Dec 01:31	00:02
1620 AD	20 Mar 05:09	21 Jun 05:51	22 Sep 17:28	21 Dec 07:19	00:02
1621 AD	20 Mar 10:53	21 Jun 11:37	22 Sep 23:18	21 Dec 13:08	00:02
1622 AD	20 Mar 16:40	21 Jun 17:33	23 Sep 05:07	21 Dec 18:59	00:02
1623 AD	20 Mar 22:37	21 Jun 23:29	23 Sep 10:58	22 Dec 00:52	00:02
1624 AD	20 Mar 04:22	21 Jun 05:04	22 Sep 16:45	21 Dec 06:43	00:01
1625 AD	20 Mar 10:11	21 Jun 10:59	22 Sep 22:43	21 Dec 12:32	00:01
1626 AD	20 Mar 16:06	21 Jun 16:54	23 Sep 04:34	21 Dec 18:21	00:01
1627 AD	20 Mar 21:54	21 Jun 22:34	23 Sep 10:17	22 Dec 00:15	00:01
1628 AD	20 Mar 03:46	21 Jun 04:27	22 Sep 16:12	21 Dec 06:09	00:01
1629 AD	20 Mar 09:29	21 Jun 10:13	22 Sep 21:59	21 Dec 11:58	00:01
1630 AD	20 Mar 15:18	21 Jun 16:03	23 Sep 03:46	21 Dec 17:47	00:01
1631 AD	20 Mar 21:17	21 Jun 21:55	23 Sep 09:35	21 Dec 23:37	00:01
1632 AD	20 Mar 03:03	21 Jun 03:29	22 Sep 15:18	21 Dec 05:23	00:01
1633 AD	20 Mar 08:49	21 Jun 09:22	22 Sep 21:11	21 Dec 11:11	00:01
1634 AD	20 Mar 14:38	21 Jun 15:17	23 Sep 02:56	21 Dec 16:57	00:01
1635 AD	20 Mar 20:24	21 Jun 20:55	23 Sep 08:34	21 Dec 22:44	00:01
1636 AD	20 Mar 02:11	21 Jun 02:45	22 Sep 14:29	21 Dec 04:32	00:01
1637 AD	20 Mar 07:54	21 Jun 08:29	22 Sep 20:17	21 Dec 10:16	00:01
1638 AD	20 Mar 13:39	21 Jun 14:16	23 Sep 02:06	21 Dec 16:05	00:01
1639 AD	20 Mar 19:32	21 Jun 20:08	23 Sep 07:57	21 Dec 22:00	00:01
1640 AD	20 Mar 01:15	21 Jun 01:43	22 Sep 13:41	21 Dec 03:53	00:01
1641 AD	20 Mar 07:03	21 Jun 07:34	22 Sep 19:35	21 Dec 09:47	00:01
1642 AD	20 Mar 12:59	21 Jun 13:31	23 Sep 01:25	21 Dec 15:38	00:01
1643 AD	20 Mar 18:57	21 Jun 19:12	23 Sep 07:06	21 Dec 21:28	00:01
1644 AD	20 Mar 00:51	21 Jun 01:07	22 Sep 13:04	21 Dec 03:20	00:01
1645 AD	20 Mar 06:40	21 Jun 07:01	22 Sep 18:55	21 Dec 09:09	00:01
1646 AD	20 Mar 12:29	21 Jun 12:53	23 Sep 00:40	21 Dec 14:58	00:01
1647 AD	20 Mar 18:22	21 Jun 18:49	23 Sep 06:34	21 Dec 20:52	00:01
1648 AD	20 Mar 00:09	21 Jun 00:27	22 Sep 12:20	21 Dec 02:37	00:01
1649 AD	20 Mar 05:53	21 Jun 06:16	22 Sep 18:15	21 Dec 08:24	00:01

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1650 AD	20 Mar 11:43	21 Jun 12:10	23 Sep 00:06	21 Dec 14:14	00:01
1651 AD	20 Mar 17:31	21 Jun 17:46	23 Sep 05:43	21 Dec 20:01	00:01
1652 AD	19 Mar 23:13	20 Jun 23:32	22 Sep 11:35	21 Dec 01:55	00:01
1653 AD	20 Mar 04:58	21 Jun 05:19	22 Sep 17:22	21 Dec 07:43	00:01
1654 AD	20 Mar 10:46	21 Jun 11:02	22 Sep 23:01	21 Dec 13:27	00:01
1655 AD	20 Mar 16:40	21 Jun 16:53	23 Sep 04:54	21 Dec 19:20	00:01
1656 AD	19 Mar 22:30	20 Jun 22:31	22 Sep 10:37	21 Dec 01:06	00:01
1657 AD	20 Mar 04:14	21 Jun 04:21	22 Sep 16:27	21 Dec 06:53	00:01
1658 AD	20 Mar 10:05	21 Jun 10:21	22 Sep 22:19	21 Dec 12:47	00:01
1659 AD	20 Mar 15:58	21 Jun 16:02	23 Sep 03:57	21 Dec 18:33	00:01
1660 AD	19 Mar 21:45	20 Jun 21:52	22 Sep 09:56	21 Dec 00:24	00:01
1661 AD	20 Mar 03:33	21 Jun 03:46	22 Sep 15:51	21 Dec 06:14	00:01
1662 AD	20 Mar 09:24	21 Jun 09:34	22 Sep 21:37	21 Dec 12:01	00:01
1663 AD	20 Mar 15:15	21 Jun 15:28	23 Sep 03:34	21 Dec 18:02	00:01
1664 AD	19 Mar 21:04	20 Jun 21:10	22 Sep 09:21	20 Dec 23:55	00:01
1665 AD	20 Mar 02:51	21 Jun 02:58	22 Sep 15:11	21 Dec 05:45	00:00
1666 AD	20 Mar 08:45	21 Jun 08:55	22 Sep 21:05	21 Dec 11:39	00:00
1667 AD	20 Mar 14:43	21 Jun 14:35	23 Sep 02:42	21 Dec 17:23	00:00
1668 AD	19 Mar 20:30	20 Jun 20:22	22 Sep 08:36	20 Dec 23:12	00:00
1669 AD	20 Mar 02:14	21 Jun 02:15	22 Sep 14:26	21 Dec 05:02	00:00
1670 AD	20 Mar 08:02	21 Jun 08:01	22 Sep 20:03	21 Dec 10:43	00:00
1671 AD	20 Mar 13:48	21 Jun 13:49	23 Sep 01:54	21 Dec 16:35	00:00
1672 AD	19 Mar 19:34	20 Jun 19:28	22 Sep 07:40	20 Dec 22:21	00:00
1673 AD	20 Mar 01:19	21 Jun 01:12	22 Sep 13:28	21 Dec 04:02	00:00
1674 AD	20 Mar 07:04	21 Jun 07:06	22 Sep 19:22	21 Dec 09:56	00:00
1675 AD	20 Mar 12:57	21 Jun 12:46	23 Sep 00:59	21 Dec 15:44	00:00
1676 AD	19 Mar 18:40	20 Jun 18:30	22 Sep 06:51	20 Dec 21:37	00:00
1677 AD	20 Mar 00:26	21 Jun 00:24	22 Sep 12:45	21 Dec 03:33	00:00
1678 AD	20 Mar 06:24	21 Jun 06:13	22 Sep 18:25	21 Dec 09:16	00:00
1679 AD	20 Mar 12:18	21 Jun 12:04	23 Sep 00:22	21 Dec 15:13	00:00
1680 AD	19 Mar 18:11	20 Jun 17:52	22 Sep 06:13	20 Dec 21:05	00:00
1681 AD	20 Mar 00:01	20 Jun 23:45	22 Sep 12:02	21 Dec 02:51	00:00
1682 AD	20 Mar 05:49	21 Jun 05:44	22 Sep 17:59	21 Dec 08:49	00:00
1683 AD	20 Mar 11:47	21 Jun 11:30	22 Sep 23:40	21 Dec 14:35	00:00
1684 AD	19 Mar 17:32	20 Jun 17:14	22 Sep 05:34	20 Dec 20:22	00:00
1685 AD	19 Mar 23:15	20 Jun 23:07	22 Sep 11:32	21 Dec 02:16	00:00
1686 AD	20 Mar 05:08	21 Jun 04:53	22 Sep 17:11	21 Dec 07:57	00:00
1687 AD	20 Mar 10:52	21 Jun 10:37	22 Sep 23:01	21 Dec 13:55	00:00
1688 AD	19 Mar 16:37	20 Jun 16:18	22 Sep 04:48	20 Dec 19:47	00:00
1689 AD	19 Mar 22:25	20 Jun 22:02	22 Sep 10:29	21 Dec 01:28	00:00
1690 AD	20 Mar 04:13	21 Jun 03:54	22 Sep 16:22	21 Dec 07:21	00:00
1691 AD	20 Mar 10:11	21 Jun 09:36	22 Sep 21:59	21 Dec 13:05	00:00
1692 AD	19 Mar 15:57	20 Jun 15:20	22 Sep 03:47	20 Dec 18:50	00:00
1693 AD	19 Mar 21:37	20 Jun 21:15	22 Sep 09:42	21 Dec 00:44	00:00
1694 AD	20 Mar 03:31	21 Jun 03:06	22 Sep 15:20	21 Dec 06:25	00:00
1695 AD	20 Mar 09:18	21 Jun 08:52	22 Sep 21:13	21 Dec 12:18	00:00
1696 AD	19 Mar 15:04	20 Jun 14:38	22 Sep 03:08	20 Dec 18:11	00:00
1697 AD	19 Mar 20:56	20 Jun 20:28	22 Sep 08:57	20 Dec 23:53	00:00
1698 AD	20 Mar 02:42	21 Jun 02:21	22 Sep 14:55	21 Dec 05:53	00:00
1699 AD	20 Mar 08:38	21 Jun 08:08	22 Sep 20:39	21 Dec 11:48	00:00

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1700 AD	20 Mar 14:27	21 Jun 13:52	23 Sep 02:28	21 Dec 17:38	00:00
1701 AD	20 Mar 20:11	21 Jun 19:46	23 Sep 08:26	21 Dec 23:36	00:00
1702 AD	21 Mar 02:13	22 Jun 01:38	23 Sep 14:07	22 Dec 05:19	00:00
1703 AD	21 Mar 08:05	22 Jun 07:22	23 Sep 19:56	22 Dec 11:10	00:00
1704 AD	20 Mar 13:50	21 Jun 13:08	23 Sep 01:48	21 Dec 17:05	00:00
1705 AD	20 Mar 19:42	21 Jun 19:00	23 Sep 07:31	21 Dec 22:44	00:00
1706 AD	21 Mar 01:25	22 Jun 00:51	23 Sep 13:22	22 Dec 04:36	00:00
1707 AD	21 Mar 07:18	22 Jun 06:36	23 Sep 19:03	22 Dec 10:24	00:00
1708 AD	20 Mar 13:05	21 Jun 12:17	23 Sep 00:50	21 Dec 16:03	00:00
1709 AD	20 Mar 18:41	21 Jun 18:06	23 Sep 06:47	21 Dec 21:56	00:00
1710 AD	21 Mar 00:35	21 Jun 23:56	23 Sep 12:27	22 Dec 03:39	00:00
1711 AD	21 Mar 06:19	22 Jun 05:36	23 Sep 18:13	22 Dec 09:32	00:00
1712 AD	20 Mar 12:00	21 Jun 11:20	23 Sep 00:07	21 Dec 15:30	00:00
1713 AD	20 Mar 17:55	21 Jun 17:11	23 Sep 05:51	21 Dec 21:11	00:00
1714 AD	20 Mar 23:44	21 Jun 23:00	23 Sep 11:43	22 Dec 03:06	00:00
1715 AD	21 Mar 05:43	22 Jun 04:48	23 Sep 17:30	22 Dec 08:59	00:00
1716 AD	20 Mar 11:36	21 Jun 10:36	22 Sep 23:18	21 Dec 14:43	00:00
1717 AD	20 Mar 17:16	21 Jun 16:31	23 Sep 05:16	21 Dec 20:42	00:00
1718 AD	20 Mar 23:14	21 Jun 22:27	23 Sep 10:59	22 Dec 02:27	00:00
1719 AD	21 Mar 05:04	22 Jun 04:12	23 Sep 16:48	22 Dec 08:17	00:00
1720 AD	20 Mar 10:47	21 Jun 09:57	22 Sep 22:47	21 Dec 14:13	00:00
1721 AD	20 Mar 16:42	21 Jun 15:50	23 Sep 04:35	21 Dec 19:54	00:00
1722 AD	20 Mar 22:27	21 Jun 21:38	23 Sep 10:26	22 Dec 01:50	00:00
1723 AD	21 Mar 04:18	22 Jun 03:22	23 Sep 16:11	22 Dec 07:46	00:00
1724 AD	20 Mar 10:09	21 Jun 09:07	22 Sep 21:55	21 Dec 13:29	00:00
1725 AD	20 Mar 15:48	21 Jun 14:54	23 Sep 03:47	21 Dec 19:22	00:00
1726 AD	20 Mar 21:47	21 Jun 20:45	23 Sep 09:29	22 Dec 01:05	00:00
1727 AD	21 Mar 03:38	22 Jun 02:28	23 Sep 15:12	22 Dec 06:50	00:00
1728 AD	20 Mar 09:16	21 Jun 08:12	22 Sep 21:06	21 Dec 12:45	00:00
1729 AD	20 Mar 15:08	21 Jun 14:07	23 Sep 02:51	21 Dec 18:25	00:00
1730 AD	20 Mar 20:52	21 Jun 19:54	23 Sep 08:38	22 Dec 00:15	00:00
1731 AD	21 Mar 02:41	22 Jun 01:37	23 Sep 14:26	22 Dec 06:09	00:00
1732 AD	20 Mar 08:34	21 Jun 07:24	22 Sep 20:16	21 Dec 11:49	00:00
1733 AD	20 Mar 14:11	21 Jun 13:11	23 Sep 02:11	21 Dec 17:43	00:00
1734 AD	20 Mar 20:06	21 Jun 19:04	23 Sep 07:57	21 Dec 23:36	00:00
1735 AD	21 Mar 01:59	22 Jun 00:50	23 Sep 13:43	22 Dec 05:28	00:00
1736 AD	20 Mar 07:39	21 Jun 06:32	22 Sep 19:38	21 Dec 11:28	00:00
1737 AD	20 Mar 13:40	21 Jun 12:31	23 Sep 01:28	21 Dec 17:14	00:00
1738 AD	20 Mar 19:34	21 Jun 18:20	23 Sep 07:17	21 Dec 23:04	00:00
1739 AD	21 Mar 01:28	22 Jun 00:07	23 Sep 13:07	22 Dec 05:01	00:00
1740 AD	20 Mar 07:23	21 Jun 06:00	22 Sep 18:55	21 Dec 10:44	00:00
1741 AD	20 Mar 13:02	21 Jun 11:49	23 Sep 00:46	21 Dec 16:35	00:00
1742 AD	20 Mar 18:55	21 Jun 17:43	23 Sep 06:31	21 Dec 22:23	00:00
1743 AD	21 Mar 00:47	21 Jun 23:29	23 Sep 12:16	22 Dec 04:05	00:00
1744 AD	20 Mar 06:22	21 Jun 05:06	22 Sep 18:11	21 Dec 09:58	00:00
1745 AD	20 Mar 12:13	21 Jun 11:00	23 Sep 00:00	21 Dec 15:41	00:00
1746 AD	20 Mar 17:58	21 Jun 16:45	23 Sep 05:44	21 Dec 21:30	00:00
1747 AD	20 Mar 23:42	21 Jun 22:23	23 Sep 11:30	22 Dec 03:29	00:00
1748 AD	20 Mar 05:34	21 Jun 04:10	22 Sep 17:16	21 Dec 09:12	00:00
1749 AD	20 Mar 11:16	21 Jun 09:54	22 Sep 23:04	21 Dec 15:02	00:00

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1750 AD	20 Mar 17:12	21 Jun 15:45	23 Sep 04:50	21 Dec 20:50	00:00
1751 AD	20 Mar 23:08	21 Jun 21:33	23 Sep 10:34	22 Dec 02:37	00:00
1752 AD	20 Mar 04:47	21 Jun 03:16	22 Sep 16:28	21 Dec 08:33	00:00
1753 AD	20 Mar 10:41	21 Jun 09:17	22 Sep 22:19	21 Dec 14:20	00:00
1754 AD	20 Mar 16:34	21 Jun 15:10	23 Sep 04:07	21 Dec 20:09	00:00
1755 AD	20 Mar 22:22	21 Jun 20:52	23 Sep 09:59	22 Dec 02:06	00:00
1756 AD	20 Mar 04:18	21 Jun 02:46	22 Sep 15:54	21 Dec 07:51	00:00
1757 AD	20 Mar 10:01	21 Jun 08:34	22 Sep 21:45	21 Dec 13:42	00:00
1758 AD	20 Mar 15:51	21 Jun 14:25	23 Sep 03:34	21 Dec 19:38	00:00
1759 AD	20 Mar 21:47	21 Jun 20:14	23 Sep 09:19	22 Dec 01:28	00:00
1760 AD	20 Mar 03:25	21 Jun 01:52	22 Sep 15:10	21 Dec 07:22	00:00
1761 AD	20 Mar 09:19	21 Jun 07:47	22 Sep 21:00	21 Dec 13:08	00:00
1762 AD	20 Mar 15:15	21 Jun 13:37	23 Sep 02:45	21 Dec 18:53	00:00
1763 AD	20 Mar 21:01	21 Jun 19:14	23 Sep 08:30	22 Dec 00:46	00:00
1764 AD	20 Mar 02:51	21 Jun 01:07	22 Sep 14:19	21 Dec 06:30	00:00
1765 AD	20 Mar 08:31	21 Jun 06:53	22 Sep 20:03	21 Dec 12:15	00:00
1766 AD	20 Mar 14:17	21 Jun 12:39	23 Sep 01:48	21 Dec 18:04	00:00
1767 AD	20 Mar 20:12	21 Jun 18:28	23 Sep 07:34	21 Dec 23:48	00:00
1768 AD	20 Mar 01:48	21 Jun 00:03	22 Sep 13:24	21 Dec 05:37	00:00
1769 AD	20 Mar 07:37	21 Jun 05:59	22 Sep 19:18	21 Dec 11:27	00:00
1770 AD	20 Mar 13:30	21 Jun 11:51	23 Sep 01:05	21 Dec 17:19	00:00
1771 AD	20 Mar 19:16	21 Jun 17:28	23 Sep 06:51	21 Dec 23:18	00:00
1772 AD	20 Mar 01:10	20 Jun 23:23	22 Sep 12:45	21 Dec 05:09	00:00
1773 AD	20 Mar 07:01	21 Jun 05:14	22 Sep 18:35	21 Dec 10:56	00:00
1774 AD	20 Mar 12:57	21 Jun 11:04	23 Sep 00:24	21 Dec 16:49	00:00
1775 AD	20 Mar 18:56	21 Jun 17:00	23 Sep 06:14	21 Dec 22:40	00:00
1776 AD	20 Mar 00:37	20 Jun 22:43	22 Sep 12:05	21 Dec 04:31	00:00
1777 AD	20 Mar 06:26	21 Jun 04:41	22 Sep 17:59	21 Dec 10:21	00:00
1778 AD	20 Mar 12:21	21 Jun 10:35	22 Sep 23:46	21 Dec 16:08	00:00
1779 AD	20 Mar 18:06	21 Jun 16:09	23 Sep 05:31	21 Dec 21:59	00:00
1780 AD	19 Mar 23:54	20 Jun 22:00	22 Sep 11:27	21 Dec 03:45	00:00
1781 AD	20 Mar 05:37	21 Jun 03:46	22 Sep 17:13	21 Dec 09:31	00:00
1782 AD	20 Mar 11:22	21 Jun 09:27	22 Sep 22:54	21 Dec 15:22	00:00
1783 AD	20 Mar 17:12	21 Jun 15:15	23 Sep 04:39	21 Dec 21:14	00:00
1784 AD	19 Mar 22:54	20 Jun 20:52	22 Sep 10:24	21 Dec 03:01	00:00
1785 AD	20 Mar 04:43	21 Jun 02:42	22 Sep 16:13	21 Dec 08:47	00:00
1786 AD	20 Mar 10:42	21 Jun 08:37	22 Sep 22:00	21 Dec 14:35	00:00
1787 AD	20 Mar 16:29	21 Jun 14:13	23 Sep 03:42	21 Dec 20:26	00:00
1788 AD	19 Mar 22:16	20 Jun 20:09	22 Sep 09:38	21 Dec 02:16	00:00
1789 AD	20 Mar 04:05	21 Jun 02:04	22 Sep 15:26	21 Dec 08:02	00:00
1790 AD	20 Mar 09:54	21 Jun 07:50	22 Sep 21:12	21 Dec 13:53	00:00
1791 AD	20 Mar 15:49	21 Jun 13:44	23 Sep 03:08	21 Dec 19:45	00:00
1792 AD	19 Mar 21:33	20 Jun 19:26	22 Sep 09:01	21 Dec 01:34	00:00
1793 AD	20 Mar 03:20	21 Jun 01:20	22 Sep 14:55	21 Dec 07:27	00:00
1794 AD	20 Mar 09:16	21 Jun 07:16	22 Sep 20:47	21 Dec 13:24	00:00
1795 AD	20 Mar 15:04	21 Jun 12:51	23 Sep 02:28	21 Dec 19:18	00:00
1796 AD	19 Mar 20:54	20 Jun 18:42	22 Sep 08:24	21 Dec 01:10	00:00
1797 AD	20 Mar 02:48	21 Jun 00:35	22 Sep 14:11	21 Dec 06:54	00:00
1798 AD	20 Mar 08:39	21 Jun 06:16	22 Sep 19:50	21 Dec 12:41	00:00
1799 AD	20 Mar 14:31	21 Jun 12:09	23 Sep 01:41	21 Dec 18:32	00:00

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1800 AD	20 Mar 20:12	21 Jun 17:52	23 Sep 07:26	22 Dec 00:16	00:00
1801 AD	21 Mar 01:56	21 Jun 23:42	23 Sep 13:13	22 Dec 06:02	00:00
1802 AD	21 Mar 07:48	22 Jun 05:36	23 Sep 19:02	22 Dec 11:51	00:00
1803 AD	21 Mar 13:34	22 Jun 11:08	24 Sep 00:44	22 Dec 17:36	00:00
1804 AD	20 Mar 19:17	21 Jun 16:56	23 Sep 06:40	21 Dec 23:24	00:00
1805 AD	21 Mar 01:05	21 Jun 22:50	23 Sep 12:29	22 Dec 05:13	00:00
1806 AD	21 Mar 06:52	22 Jun 04:30	23 Sep 18:08	22 Dec 11:04	00:00
1807 AD	21 Mar 12:42	22 Jun 10:21	24 Sep 00:02	22 Dec 17:01	00:00
1808 AD	20 Mar 18:30	21 Jun 16:06	23 Sep 05:51	21 Dec 22:50	00:00
1809 AD	21 Mar 00:22	21 Jun 21:57	23 Sep 11:42	22 Dec 04:38	00:00
1810 AD	21 Mar 06:21	22 Jun 03:56	23 Sep 17:37	22 Dec 10:34	00:00
1811 AD	21 Mar 12:13	22 Jun 09:37	23 Sep 23:20	22 Dec 16:25	00:00
1812 AD	20 Mar 17:59	21 Jun 15:29	23 Sep 05:16	21 Dec 22:16	00:00
1813 AD	20 Mar 23:50	21 Jun 21:28	23 Sep 11:08	22 Dec 04:07	00:00
1814 AD	21 Mar 05:43	22 Jun 03:10	23 Sep 16:47	22 Dec 09:51	00:00
1815 AD	21 Mar 11:30	22 Jun 08:58	23 Sep 22:42	22 Dec 15:43	00:00
1816 AD	20 Mar 17:16	21 Jun 14:44	23 Sep 04:33	21 Dec 21:30	00:00
1817 AD	20 Mar 23:01	21 Jun 20:30	23 Sep 10:18	22 Dec 03:17	00:00
1818 AD	21 Mar 04:50	22 Jun 02:23	23 Sep 16:09	22 Dec 09:14	00:00
1819 AD	21 Mar 10:39	22 Jun 07:58	23 Sep 21:47	22 Dec 15:02	00:00
1820 AD	20 Mar 16:24	21 Jun 13:43	23 Sep 03:38	21 Dec 20:48	00:00
1821 AD	20 Mar 22:15	21 Jun 19:37	23 Sep 09:28	22 Dec 02:36	00:00
1822 AD	21 Mar 04:09	22 Jun 01:19	23 Sep 15:04	22 Dec 08:18	00:00
1823 AD	21 Mar 09:55	22 Jun 07:09	23 Sep 20:56	22 Dec 14:11	00:00
1824 AD	20 Mar 15:39	21 Jun 12:59	23 Sep 02:47	21 Dec 19:59	00:00
1825 AD	20 Mar 21:25	21 Jun 18:47	23 Sep 08:31	22 Dec 01:43	00:00
1826 AD	21 Mar 03:16	22 Jun 00:42	23 Sep 14:28	22 Dec 07:40	00:00
1827 AD	21 Mar 09:08	22 Jun 06:21	23 Sep 20:14	22 Dec 13:28	00:00
1828 AD	20 Mar 14:53	21 Jun 12:08	23 Sep 02:10	21 Dec 19:18	00:00
1829 AD	20 Mar 20:42	21 Jun 18:05	23 Sep 08:05	22 Dec 01:15	00:00
1830 AD	21 Mar 02:37	21 Jun 23:48	23 Sep 13:42	22 Dec 07:05	00:00
1831 AD	21 Mar 08:26	22 Jun 05:37	23 Sep 19:35	22 Dec 13:02	00:00
1832 AD	20 Mar 14:16	21 Jun 11:27	23 Sep 01:28	21 Dec 18:52	00:00
1833 AD	20 Mar 20:12	21 Jun 17:17	23 Sep 07:12	22 Dec 00:34	00:00
1834 AD	21 Mar 02:04	21 Jun 23:12	23 Sep 13:07	22 Dec 06:30	00:00
1835 AD	21 Mar 07:56	22 Jun 04:55	23 Sep 18:49	22 Dec 12:18	00:00
1836 AD	20 Mar 13:39	21 Jun 10:41	23 Sep 00:38	21 Dec 18:02	00:00
1837 AD	20 Mar 19:23	21 Jun 16:37	23 Sep 06:31	21 Dec 23:53	00:00
1838 AD	21 Mar 01:17	21 Jun 22:19	23 Sep 12:07	22 Dec 05:33	00:00
1839 AD	21 Mar 06:59	22 Jun 04:01	23 Sep 17:59	22 Dec 11:22	00:00
1840 AD	20 Mar 12:41	21 Jun 09:48	22 Sep 23:53	21 Dec 17:13	00:00
1841 AD	20 Mar 18:28	21 Jun 15:33	23 Sep 05:34	21 Dec 22:56	00:00
1842 AD	21 Mar 00:13	21 Jun 21:22	23 Sep 11:26	22 Dec 04:55	00:00
1843 AD	21 Mar 06:04	22 Jun 03:03	23 Sep 17:09	22 Dec 10:48	00:00
1844 AD	20 Mar 11:54	21 Jun 08:46	22 Sep 22:57	21 Dec 16:31	00:00
1845 AD	20 Mar 17:44	21 Jun 14:42	23 Sep 04:54	21 Dec 22:27	00:00
1846 AD	20 Mar 23:45	21 Jun 20:31	23 Sep 10:31	22 Dec 04:12	00:00
1847 AD	21 Mar 05:32	22 Jun 02:18	23 Sep 16:22	22 Dec 10:05	00:00
1848 AD	20 Mar 11:18	21 Jun 08:14	22 Sep 22:20	21 Dec 16:00	00:00
1849 AD	20 Mar 17:13	21 Jun 14:07	23 Sep 04:04	21 Dec 21:41	00:00

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1850 AD	20 Mar 23:02	21 Jun 19:59	23 Sep 10:00	22 Dec 03:37	00:00
1851 AD	21 Mar 04:54	22 Jun 01:43	23 Sep 15:51	22 Dec 09:29	00:00
1852 AD	20 Mar 10:41	21 Jun 07:28	22 Sep 21:40	21 Dec 15:12	00:00
1853 AD	20 Mar 16:24	21 Jun 13:22	23 Sep 03:36	21 Dec 21:11	00:00
1854 AD	20 Mar 22:20	21 Jun 19:07	23 Sep 09:12	22 Dec 02:58	00:00
1855 AD	21 Mar 04:05	22 Jun 00:48	23 Sep 14:58	22 Dec 08:47	00:00
1856 AD	20 Mar 09:49	21 Jun 06:36	22 Sep 20:53	21 Dec 14:39	00:00
1857 AD	20 Mar 15:45	21 Jun 12:25	23 Sep 02:32	21 Dec 20:16	00:00
1858 AD	20 Mar 21:32	21 Jun 18:13	23 Sep 08:22	22 Dec 02:10	00:00
1859 AD	21 Mar 03:18	21 Jun 23:56	23 Sep 14:08	22 Dec 08:01	00:00
1860 AD	20 Mar 09:05	21 Jun 05:42	22 Sep 19:53	21 Dec 13:41	00:00
1861 AD	20 Mar 14:46	21 Jun 11:34	23 Sep 01:47	21 Dec 19:34	00:00
1862 AD	20 Mar 20:43	21 Jun 17:20	23 Sep 07:26	22 Dec 01:19	00:00
1863 AD	21 Mar 02:30	21 Jun 23:02	23 Sep 13:16	22 Dec 07:06	00:00
1864 AD	20 Mar 08:10	21 Jun 04:52	22 Sep 19:16	21 Dec 13:03	00:00
1865 AD	20 Mar 14:06	21 Jun 10:46	23 Sep 01:00	21 Dec 18:50	00:00
1866 AD	20 Mar 19:55	21 Jun 16:34	23 Sep 06:51	22 Dec 00:49	00:00
1867 AD	21 Mar 01:46	21 Jun 22:20	23 Sep 12:43	22 Dec 06:47	00:00
1868 AD	20 Mar 07:44	21 Jun 04:10	22 Sep 18:31	21 Dec 12:28	00:00
1869 AD	20 Mar 13:32	21 Jun 10:04	23 Sep 00:28	21 Dec 18:24	00:00
1870 AD	20 Mar 19:32	21 Jun 15:56	23 Sep 06:10	22 Dec 00:13	00:00
1871 AD	21 Mar 01:20	21 Jun 21:42	23 Sep 11:56	22 Dec 05:59	00:00
1872 AD	20 Mar 06:57	21 Jun 03:32	22 Sep 17:53	21 Dec 11:54	00:00
1873 AD	20 Mar 12:52	21 Jun 09:25	22 Sep 23:35	21 Dec 17:33	00:00
1874 AD	20 Mar 18:38	21 Jun 15:07	23 Sep 05:23	21 Dec 23:22	00:00
1875 AD	21 Mar 00:21	21 Jun 20:47	23 Sep 11:15	22 Dec 05:16	00:00
1876 AD	20 Mar 06:10	21 Jun 02:32	22 Sep 16:59	21 Dec 10:54	00:00
1877 AD	20 Mar 11:48	21 Jun 08:18	22 Sep 22:48	21 Dec 16:50	00:00
1878 AD	20 Mar 17:43	21 Jun 14:04	23 Sep 04:27	21 Dec 22:41	00:00
1879 AD	20 Mar 23:32	21 Jun 19:45	23 Sep 10:09	22 Dec 04:25	00:00
1880 AD	20 Mar 05:14	21 Jun 01:32	22 Sep 16:07	21 Dec 10:18	00:00
1881 AD	20 Mar 11:14	21 Jun 07:28	22 Sep 21:50	21 Dec 16:01	00:00
1882 AD	20 Mar 17:05	21 Jun 13:17	23 Sep 03:38	21 Dec 21:54	00:00
1883 AD	20 Mar 22:50	21 Jun 19:04	23 Sep 09:32	22 Dec 03:52	00:00
1884 AD	20 Mar 04:45	21 Jun 00:59	22 Sep 15:21	21 Dec 09:34	00:00
1885 AD	20 Mar 10:30	21 Jun 06:51	22 Sep 21:16	21 Dec 15:28	00:00
1886 AD	20 Mar 16:27	21 Jun 12:41	23 Sep 03:05	21 Dec 21:20	00:00
1887 AD	20 Mar 22:19	21 Jun 18:28	23 Sep 08:54	22 Dec 03:05	00:00
1888 AD	20 Mar 03:56	21 Jun 00:15	22 Sep 14:54	21 Dec 09:03	00:00
1889 AD	20 Mar 09:51	21 Jun 06:10	22 Sep 20:38	21 Dec 14:52	00:00
1890 AD	20 Mar 15:41	21 Jun 11:54	23 Sep 02:23	21 Dec 20:45	00:00
1891 AD	20 Mar 21:25	21 Jun 17:33	23 Sep 08:14	22 Dec 02:41	00:00
1892 AD	20 Mar 03:22	20 Jun 23:24	22 Sep 14:00	21 Dec 08:19	00:00
1893 AD	20 Mar 09:09	21 Jun 05:10	22 Sep 19:47	21 Dec 14:08	00:00
1894 AD	20 Mar 14:59	21 Jun 10:57	23 Sep 01:28	21 Dec 19:58	00:00
1895 AD	20 Mar 20:49	21 Jun 16:44	23 Sep 07:11	22 Dec 01:39	00:00
1896 AD	20 Mar 02:24	20 Jun 22:28	22 Sep 13:04	21 Dec 07:30	00:00
1897 AD	20 Mar 08:16	21 Jun 04:24	22 Sep 18:49	21 Dec 13:13	00:00
1898 AD	20 Mar 14:07	21 Jun 10:07	23 Sep 00:35	21 Dec 18:59	00:00
1899 AD	20 Mar 19:46	21 Jun 15:46	23 Sep 06:30	22 Dec 00:56	00:00

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1900 AD	21 Mar 01:39	21 Jun 21:40	23 Sep 12:20	22 Dec 06:42	00:00
1901 AD	21 Mar 07:24	22 Jun 03:28	23 Sep 18:09	22 Dec 12:37	00:00
1902 AD	21 Mar 13:17	22 Jun 09:15	23 Sep 23:55	22 Dec 18:36	00:00
1903 AD	21 Mar 19:15	22 Jun 15:05	24 Sep 05:44	23 Dec 00:21	00:00
1904 AD	21 Mar 00:59	21 Jun 20:51	23 Sep 11:40	22 Dec 06:14	00:00
1905 AD	21 Mar 06:58	22 Jun 02:52	23 Sep 17:30	22 Dec 12:04	00:00
1906 AD	21 Mar 12:53	22 Jun 08:42	23 Sep 23:15	22 Dec 17:53	00:00
1907 AD	21 Mar 18:33	22 Jun 14:23	24 Sep 05:09	22 Dec 23:52	00:00
1908 AD	21 Mar 00:28	21 Jun 20:19	23 Sep 10:58	22 Dec 05:34	00:00
1909 AD	21 Mar 06:13	22 Jun 02:06	23 Sep 16:45	22 Dec 11:20	00:00
1910 AD	21 Mar 12:03	22 Jun 07:49	23 Sep 22:31	22 Dec 17:12	00:00
1911 AD	21 Mar 17:54	22 Jun 13:36	24 Sep 04:18	22 Dec 22:53	00:00
1912 AD	20 Mar 23:29	21 Jun 19:17	23 Sep 10:08	22 Dec 04:45	00:00
1913 AD	21 Mar 05:18	22 Jun 01:10	23 Sep 15:53	22 Dec 10:35	00:00
1914 AD	21 Mar 11:11	22 Jun 06:55	23 Sep 21:34	22 Dec 16:22	00:00
1915 AD	21 Mar 16:51	22 Jun 12:29	24 Sep 03:24	22 Dec 22:16	00:00
1916 AD	20 Mar 22:47	21 Jun 18:25	23 Sep 09:15	22 Dec 03:59	00:00
1917 AD	21 Mar 04:37	22 Jun 00:14	23 Sep 15:00	22 Dec 09:46	00:00
1918 AD	21 Mar 10:26	22 Jun 06:00	23 Sep 20:46	22 Dec 15:42	00:00
1919 AD	21 Mar 16:19	22 Jun 11:54	24 Sep 02:35	22 Dec 21:27	00:00
1920 AD	20 Mar 21:59	21 Jun 17:40	23 Sep 08:28	22 Dec 03:17	00:00
1921 AD	21 Mar 03:51	21 Jun 23:36	23 Sep 14:20	22 Dec 09:07	00:00
1922 AD	21 Mar 09:49	22 Jun 05:27	23 Sep 20:10	22 Dec 14:57	00:00
1923 AD	21 Mar 15:29	22 Jun 11:03	24 Sep 02:04	22 Dec 20:53	00:00
1924 AD	20 Mar 21:20	21 Jun 16:59	23 Sep 07:58	22 Dec 02:45	00:00
1925 AD	21 Mar 03:12	21 Jun 22:50	23 Sep 13:44	22 Dec 08:37	00:00
1926 AD	21 Mar 09:01	22 Jun 04:30	23 Sep 19:27	22 Dec 14:33	00:00
1927 AD	21 Mar 14:59	22 Jun 10:22	24 Sep 01:17	22 Dec 20:19	00:00
1928 AD	20 Mar 20:44	21 Jun 16:07	23 Sep 07:06	22 Dec 02:04	00:00
1929 AD	21 Mar 02:35	21 Jun 22:01	23 Sep 12:53	22 Dec 07:53	00:00
1930 AD	21 Mar 08:30	22 Jun 03:53	23 Sep 18:36	22 Dec 13:40	00:00
1931 AD	21 Mar 14:06	22 Jun 09:28	24 Sep 00:23	22 Dec 19:30	00:00
1932 AD	20 Mar 19:54	21 Jun 15:23	23 Sep 06:16	22 Dec 01:14	00:00
1933 AD	21 Mar 01:43	21 Jun 21:12	23 Sep 12:01	22 Dec 06:58	00:00
1934 AD	21 Mar 07:28	22 Jun 02:48	23 Sep 17:45	22 Dec 12:50	00:00
1935 AD	21 Mar 13:18	22 Jun 08:38	23 Sep 23:38	22 Dec 18:37	00:00
1936 AD	20 Mar 18:58	21 Jun 14:22	23 Sep 05:26	22 Dec 00:27	00:00
1937 AD	21 Mar 00:45	21 Jun 20:12	23 Sep 11:13	22 Dec 06:22	00:00
1938 AD	21 Mar 06:43	22 Jun 02:04	23 Sep 17:00	22 Dec 12:13	00:00
1939 AD	21 Mar 12:28	22 Jun 07:39	23 Sep 22:49	22 Dec 18:06	00:00
1940 AD	20 Mar 18:24	21 Jun 13:36	23 Sep 04:46	21 Dec 23:55	00:00
1941 AD	21 Mar 00:21	21 Jun 19:33	23 Sep 10:33	22 Dec 05:44	00:00
1942 AD	21 Mar 06:11	22 Jun 01:16	23 Sep 16:16	22 Dec 11:40	00:00
1943 AD	21 Mar 12:03	22 Jun 07:12	23 Sep 22:12	22 Dec 17:29	00:00
1944 AD	20 Mar 17:49	21 Jun 13:02	23 Sep 04:02	21 Dec 23:15	00:00
1945 AD	20 Mar 23:37	21 Jun 18:52	23 Sep 09:50	22 Dec 05:04	00:00
1946 AD	21 Mar 05:33	22 Jun 00:44	23 Sep 15:41	22 Dec 10:53	00:00
1947 AD	21 Mar 11:13	22 Jun 06:19	23 Sep 21:29	22 Dec 16:43	00:00
1948 AD	20 Mar 16:57	21 Jun 12:11	23 Sep 03:22	21 Dec 22:33	00:00
1949 AD	20 Mar 22:48	21 Jun 18:03	23 Sep 09:06	22 Dec 04:23	00:00

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
1950 AD	21 Mar 04:35	21 Jun 23:36	23 Sep 14:44	22 Dec 10:13	00:00
1951 AD	21 Mar 10:26	22 Jun 05:25	23 Sep 20:37	22 Dec 16:00	00:00
1952 AD	20 Mar 16:14	21 Jun 11:13	23 Sep 02:24	21 Dec 21:43	00:00
1953 AD	20 Mar 22:01	21 Jun 17:00	23 Sep 08:06	22 Dec 03:31	00:01
1954 AD	21 Mar 03:54	21 Jun 22:54	23 Sep 13:55	22 Dec 09:24	00:01
1955 AD	21 Mar 09:35	22 Jun 04:31	23 Sep 19:41	22 Dec 15:11	00:01
1956 AD	20 Mar 15:21	21 Jun 10:24	23 Sep 01:35	21 Dec 21:00	00:01
1957 AD	20 Mar 21:17	21 Jun 16:21	23 Sep 07:26	22 Dec 02:49	00:01
1958 AD	21 Mar 03:06	21 Jun 21:57	23 Sep 13:09	22 Dec 08:40	00:01
1959 AD	21 Mar 08:55	22 Jun 03:50	23 Sep 19:08	22 Dec 14:34	00:01
1960 AD	20 Mar 14:43	21 Jun 09:42	23 Sep 00:59	21 Dec 20:26	00:01
1961 AD	20 Mar 20:32	21 Jun 15:30	23 Sep 06:42	22 Dec 02:20	00:01
1962 AD	21 Mar 02:30	21 Jun 21:24	23 Sep 12:35	22 Dec 08:15	00:01
1963 AD	21 Mar 08:20	22 Jun 03:04	23 Sep 18:23	22 Dec 14:02	00:01
1964 AD	20 Mar 14:10	21 Jun 08:57	23 Sep 00:17	21 Dec 19:50	00:01
1965 AD	20 Mar 20:05	21 Jun 14:56	23 Sep 06:06	22 Dec 01:40	00:01
1966 AD	21 Mar 01:53	21 Jun 20:33	23 Sep 11:43	22 Dec 07:28	00:01
1967 AD	21 Mar 07:37	22 Jun 02:23	23 Sep 17:38	22 Dec 13:16	00:01
1968 AD	20 Mar 13:22	21 Jun 08:13	22 Sep 23:26	21 Dec 19:00	00:01
1969 AD	20 Mar 19:08	21 Jun 13:55	23 Sep 05:07	22 Dec 00:44	00:01
1970 AD	21 Mar 00:56	21 Jun 19:43	23 Sep 10:59	22 Dec 06:36	00:01
1971 AD	21 Mar 06:38	22 Jun 01:19	23 Sep 16:45	22 Dec 12:24	00:01
1972 AD	20 Mar 12:21	21 Jun 07:06	22 Sep 22:33	21 Dec 18:13	00:01
1973 AD	20 Mar 18:13	21 Jun 13:01	23 Sep 04:21	22 Dec 00:08	00:01
1974 AD	21 Mar 00:07	21 Jun 18:38	23 Sep 09:58	22 Dec 05:56	00:01
1975 AD	21 Mar 05:57	22 Jun 00:26	23 Sep 15:55	22 Dec 11:46	00:01
1976 AD	20 Mar 11:50	21 Jun 06:24	22 Sep 21:48	21 Dec 17:35	00:01
1977 AD	20 Mar 17:42	21 Jun 12:14	23 Sep 03:29	21 Dec 23:23	00:01
1978 AD	20 Mar 23:34	21 Jun 18:10	23 Sep 09:25	22 Dec 05:21	00:01
1979 AD	21 Mar 05:22	21 Jun 23:56	23 Sep 15:16	22 Dec 11:10	00:01
1980 AD	20 Mar 11:10	21 Jun 05:47	22 Sep 21:09	21 Dec 16:56	00:01
1981 AD	20 Mar 17:03	21 Jun 11:45	23 Sep 03:05	21 Dec 22:51	00:01
1982 AD	20 Mar 22:56	21 Jun 17:23	23 Sep 08:46	22 Dec 04:38	00:01
1983 AD	21 Mar 04:39	21 Jun 23:09	23 Sep 14:42	22 Dec 10:30	00:01
1984 AD	20 Mar 10:24	21 Jun 05:02	22 Sep 20:33	21 Dec 16:23	00:01
1985 AD	20 Mar 16:14	21 Jun 10:44	23 Sep 02:07	21 Dec 22:08	00:01
1986 AD	20 Mar 22:03	21 Jun 16:30	23 Sep 07:59	22 Dec 04:02	00:01
1987 AD	21 Mar 03:52	21 Jun 22:11	23 Sep 13:45	22 Dec 09:46	00:01
1988 AD	20 Mar 09:39	21 Jun 03:57	22 Sep 19:29	21 Dec 15:28	00:01
1989 AD	20 Mar 15:28	21 Jun 09:53	23 Sep 01:20	21 Dec 21:22	00:01
1990 AD	20 Mar 21:19	21 Jun 15:33	23 Sep 06:55	22 Dec 03:07	00:01
1991 AD	21 Mar 03:02	21 Jun 21:19	23 Sep 12:48	22 Dec 08:54	00:01
1992 AD	20 Mar 08:48	21 Jun 03:14	22 Sep 18:43	21 Dec 14:43	00:01
1993 AD	20 Mar 14:41	21 Jun 09:00	23 Sep 00:22	21 Dec 20:26	00:01
1994 AD	20 Mar 20:28	21 Jun 14:48	23 Sep 06:19	22 Dec 02:23	00:01
1995 AD	21 Mar 02:14	21 Jun 20:34	23 Sep 12:13	22 Dec 08:17	00:01
1996 AD	20 Mar 08:03	21 Jun 02:24	22 Sep 18:00	21 Dec 14:06	00:01
1997 AD	20 Mar 13:55	21 Jun 08:20	22 Sep 23:56	21 Dec 20:07	00:01
1998 AD	20 Mar 19:55	21 Jun 14:03	23 Sep 05:37	22 Dec 01:57	00:01
1999 AD	21 Mar 01:46	21 Jun 19:49	23 Sep 11:31	22 Dec 07:44	00:01

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2000 AD	20 Mar 07:35	21 Jun 01:48	22 Sep 17:28	21 Dec 13:38	00:01
2001 AD	20 Mar 13:31	21 Jun 07:38	22 Sep 23:05	21 Dec 19:22	00:01
2002 AD	20 Mar 19:16	21 Jun 13:24	23 Sep 04:55	22 Dec 01:15	00:01
2003 AD	21 Mar 01:00	21 Jun 19:10	23 Sep 10:47	22 Dec 07:04	00:01
2004 AD	20 Mar 06:49	21 Jun 00:57	22 Sep 16:30	21 Dec 12:42	00:01
2005 AD	20 Mar 12:33	21 Jun 06:46	22 Sep 22:23	21 Dec 18:35	00:01
2006 AD	20 Mar 18:26	21 Jun 12:26	23 Sep 04:03	22 Dec 00:22	00:01
2007 AD	21 Mar 00:07	21 Jun 18:06	23 Sep 09:51	22 Dec 06:08	00:01
2008 AD	20 Mar 05:48	20 Jun 23:59	22 Sep 15:45	21 Dec 12:04	00:01
2009 AD	20 Mar 11:44	21 Jun 05:46	22 Sep 21:19	21 Dec 17:47	00:01
2010 AD	20 Mar 17:32	21 Jun 11:28	23 Sep 03:09	21 Dec 23:39	00:01
2011 AD	20 Mar 23:21	21 Jun 17:16	23 Sep 09:05	22 Dec 05:30	00:01
2012 AD	20 Mar 05:14	20 Jun 23:09	22 Sep 14:49	21 Dec 11:12	00:01
2013 AD	20 Mar 11:02	21 Jun 05:04	22 Sep 20:44	21 Dec 17:11	00:01
2014 AD	20 Mar 16:57	21 Jun 10:51	23 Sep 02:29	21 Dec 23:03	00:01
2015 AD	20 Mar 22:45	21 Jun 16:38	23 Sep 08:21	22 Dec 04:48	00:01
2016 AD	20 Mar 04:30	20 Jun 22:34	22 Sep 14:21	21 Dec 10:44	00:01
2017 AD	20 Mar 10:29	21 Jun 04:24	22 Sep 20:02	21 Dec 16:28	00:01
2018 AD	20 Mar 16:15	21 Jun 10:07	23 Sep 01:54	21 Dec 22:23	00:01
2019 AD	20 Mar 21:58	21 Jun 15:54	23 Sep 07:50	22 Dec 04:19	00:01
2020 AD	20 Mar 03:50	20 Jun 21:44	22 Sep 13:30	21 Dec 10:02	00:01
2021 AD	20 Mar 09:37	21 Jun 03:32	22 Sep 19:21	21 Dec 15:59	00:01
2022 AD	20 Mar 15:33	21 Jun 09:14	23 Sep 01:04	21 Dec 21:48	00:01
2023 AD	20 Mar 21:24	21 Jun 14:58	23 Sep 06:50	22 Dec 03:27	00:01
2024 AD	20 Mar 03:06	20 Jun 20:51	22 Sep 12:44	21 Dec 09:20	00:01
2025 AD	20 Mar 09:01	21 Jun 02:42	22 Sep 18:19	21 Dec 15:03	00:01
2026 AD	20 Mar 14:46	21 Jun 08:24	23 Sep 00:05	21 Dec 20:50	00:01
2027 AD	20 Mar 20:25	21 Jun 14:11	23 Sep 06:02	22 Dec 02:42	00:01
2028 AD	20 Mar 02:17	20 Jun 20:02	22 Sep 11:45	21 Dec 08:20	00:01
2029 AD	20 Mar 08:02	21 Jun 01:48	22 Sep 17:38	21 Dec 14:14	00:01
2030 AD	20 Mar 13:52	21 Jun 07:31	22 Sep 23:27	21 Dec 20:09	00:01
2031 AD	20 Mar 19:41	21 Jun 13:17	23 Sep 05:15	22 Dec 01:55	00:01
2032 AD	20 Mar 01:22	20 Jun 19:09	22 Sep 11:11	21 Dec 07:56	00:01
2033 AD	20 Mar 07:23	21 Jun 01:01	22 Sep 16:51	21 Dec 13:46	00:01
2034 AD	20 Mar 13:17	21 Jun 06:44	22 Sep 22:39	21 Dec 19:34	00:01
2035 AD	20 Mar 19:03	21 Jun 12:33	23 Sep 04:39	22 Dec 01:31	00:01
2036 AD	20 Mar 01:03	20 Jun 18:32	22 Sep 10:23	21 Dec 07:13	00:01
2037 AD	20 Mar 06:50	21 Jun 00:22	22 Sep 16:13	21 Dec 13:08	00:01
2038 AD	20 Mar 12:40	21 Jun 06:09	22 Sep 22:02	21 Dec 19:02	00:01
2039 AD	20 Mar 18:32	21 Jun 11:57	23 Sep 03:49	22 Dec 00:40	00:01
2040 AD	20 Mar 00:11	20 Jun 17:46	22 Sep 09:45	21 Dec 06:33	00:01
2041 AD	20 Mar 06:07	20 Jun 23:36	22 Sep 15:26	21 Dec 12:18	00:01
2042 AD	20 Mar 11:53	21 Jun 05:16	22 Sep 21:11	21 Dec 18:04	00:01
2043 AD	20 Mar 17:27	21 Jun 10:58	23 Sep 03:07	22 Dec 00:01	00:01
2044 AD	19 Mar 23:20	20 Jun 16:51	22 Sep 08:48	21 Dec 05:43	00:01
2045 AD	20 Mar 05:07	20 Jun 22:34	22 Sep 14:33	21 Dec 11:35	00:01
2046 AD	20 Mar 10:58	21 Jun 04:14	22 Sep 20:22	21 Dec 17:28	00:01
2047 AD	20 Mar 16:52	21 Jun 10:03	23 Sep 02:08	21 Dec 23:07	00:02
2048 AD	19 Mar 22:34	20 Jun 15:54	22 Sep 08:00	21 Dec 05:02	00:02
2049 AD	20 Mar 04:28	20 Jun 21:47	22 Sep 13:42	21 Dec 10:52	00:02

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2050 AD	20 Mar 10:19	21 Jun 03:33	22 Sep 19:28	21 Dec 16:38	00:02
2051 AD	20 Mar 15:59	21 Jun 09:18	23 Sep 01:27	21 Dec 22:34	00:02
2052 AD	19 Mar 21:56	20 Jun 15:16	22 Sep 07:15	21 Dec 04:17	00:02
2053 AD	20 Mar 03:47	20 Jun 21:04	22 Sep 13:06	21 Dec 10:10	00:02
2054 AD	20 Mar 09:34	21 Jun 02:47	22 Sep 18:59	21 Dec 16:10	00:02
2055 AD	20 Mar 15:28	21 Jun 08:40	23 Sep 00:49	21 Dec 21:55	00:02
2056 AD	19 Mar 21:11	20 Jun 14:28	22 Sep 06:39	21 Dec 03:51	00:02
2057 AD	20 Mar 03:08	20 Jun 20:19	22 Sep 12:23	21 Dec 09:43	00:02
2058 AD	20 Mar 09:05	21 Jun 02:04	22 Sep 18:08	21 Dec 15:25	00:02
2059 AD	20 Mar 14:44	21 Jun 07:47	23 Sep 00:03	21 Dec 21:18	00:02
2060 AD	19 Mar 20:38	20 Jun 13:45	22 Sep 05:48	21 Dec 03:01	00:02
2061 AD	20 Mar 02:26	20 Jun 19:32	22 Sep 11:31	21 Dec 08:49	00:02
2062 AD	20 Mar 08:07	21 Jun 01:11	22 Sep 17:20	21 Dec 14:42	00:02
2063 AD	20 Mar 13:59	21 Jun 07:02	22 Sep 23:08	21 Dec 20:21	00:02
2064 AD	19 Mar 19:38	20 Jun 12:45	22 Sep 04:57	21 Dec 02:08	00:02
2065 AD	20 Mar 01:28	20 Jun 18:32	22 Sep 10:42	21 Dec 08:00	00:02
2066 AD	20 Mar 07:20	21 Jun 00:16	22 Sep 16:27	21 Dec 13:45	00:02
2067 AD	20 Mar 12:53	21 Jun 05:56	22 Sep 22:19	21 Dec 19:43	00:02
2068 AD	19 Mar 18:49	20 Jun 11:53	22 Sep 04:06	21 Dec 01:32	00:02
2069 AD	20 Mar 00:45	20 Jun 17:41	22 Sep 09:52	21 Dec 07:22	00:02
2070 AD	20 Mar 06:34	20 Jun 23:22	22 Sep 15:44	21 Dec 13:19	00:02
2071 AD	20 Mar 12:34	21 Jun 05:20	22 Sep 21:37	21 Dec 19:03	00:02
2072 AD	19 Mar 18:21	20 Jun 11:13	22 Sep 03:27	21 Dec 00:56	00:02
2073 AD	20 Mar 00:13	20 Jun 17:07	22 Sep 09:15	21 Dec 06:50	00:02
2074 AD	20 Mar 06:08	20 Jun 22:58	22 Sep 15:03	21 Dec 12:35	00:02
2075 AD	20 Mar 11:46	21 Jun 04:40	22 Sep 20:58	21 Dec 18:27	00:02
2076 AD	19 Mar 17:38	20 Jun 10:36	22 Sep 02:50	21 Dec 00:13	00:02
2077 AD	19 Mar 23:31	20 Jun 16:23	22 Sep 08:35	21 Dec 06:00	00:03
2078 AD	20 Mar 05:10	20 Jun 21:58	22 Sep 14:24	21 Dec 11:58	00:03
2079 AD	20 Mar 11:00	21 Jun 03:49	22 Sep 20:13	21 Dec 17:44	00:03
2080 AD	19 Mar 16:44	20 Jun 09:34	22 Sep 01:56	20 Dec 23:32	00:03
2081 AD	19 Mar 22:34	20 Jun 15:16	22 Sep 07:37	21 Dec 05:22	00:03
2082 AD	20 Mar 04:30	20 Jun 21:03	22 Sep 13:23	21 Dec 11:04	00:03
2083 AD	20 Mar 10:10	21 Jun 02:43	22 Sep 19:11	21 Dec 16:53	00:03
2084 AD	19 Mar 15:59	20 Jun 08:40	22 Sep 00:59	20 Dec 22:41	00:03
2085 AD	19 Mar 21:53	20 Jun 14:32	22 Sep 06:43	21 Dec 04:28	00:03
2086 AD	20 Mar 03:35	20 Jun 20:09	22 Sep 12:32	21 Dec 10:22	00:03
2087 AD	20 Mar 09:28	21 Jun 02:06	22 Sep 18:28	21 Dec 16:08	00:03
2088 AD	19 Mar 15:17	20 Jun 07:56	22 Sep 00:18	20 Dec 21:56	00:03
2089 AD	19 Mar 21:06	20 Jun 13:43	22 Sep 06:07	21 Dec 03:52	00:03
2090 AD	20 Mar 03:01	20 Jun 19:36	22 Sep 11:59	21 Dec 09:43	00:03
2091 AD	20 Mar 08:42	21 Jun 01:19	22 Sep 17:51	21 Dec 15:38	00:03
2092 AD	19 Mar 14:33	20 Jun 07:15	21 Sep 23:41	20 Dec 21:32	00:03
2093 AD	19 Mar 20:34	20 Jun 13:07	22 Sep 05:29	21 Dec 03:20	00:03
2094 AD	20 Mar 02:21	20 Jun 18:42	22 Sep 11:16	21 Dec 09:13	00:03
2095 AD	20 Mar 08:15	21 Jun 00:39	22 Sep 17:11	21 Dec 15:00	00:03
2096 AD	19 Mar 14:03	20 Jun 06:30	21 Sep 22:54	20 Dec 20:46	00:03
2097 AD	19 Mar 19:48	20 Jun 12:13	22 Sep 04:35	21 Dec 02:37	00:03
2098 AD	20 Mar 01:40	20 Jun 18:03	22 Sep 10:24	21 Dec 08:20	00:03
2099 AD	20 Mar 07:17	20 Jun 23:41	22 Sep 16:11	21 Dec 14:04	00:03

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2100 AD	20 Mar 13:03	21 Jun 05:32	22 Sep 22:00	21 Dec 19:51	00:03
2101 AD	20 Mar 18:56	21 Jun 11:21	23 Sep 03:46	22 Dec 01:39	00:03
2102 AD	21 Mar 00:36	21 Jun 16:53	23 Sep 09:31	22 Dec 07:32	00:03
2103 AD	21 Mar 06:23	21 Jun 22:45	23 Sep 15:24	22 Dec 13:24	00:03
2104 AD	20 Mar 12:14	21 Jun 04:37	22 Sep 21:09	21 Dec 19:12	00:04
2105 AD	20 Mar 18:06	21 Jun 10:18	23 Sep 02:52	22 Dec 01:03	00:04
2106 AD	21 Mar 00:04	21 Jun 16:12	23 Sep 08:47	22 Dec 06:53	00:04
2107 AD	21 Mar 05:50	21 Jun 22:01	23 Sep 14:37	22 Dec 12:42	00:04
2108 AD	20 Mar 11:39	21 Jun 03:57	22 Sep 20:28	21 Dec 18:34	00:04
2109 AD	20 Mar 17:36	21 Jun 09:55	23 Sep 02:19	22 Dec 00:27	00:04
2110 AD	20 Mar 23:21	21 Jun 15:32	23 Sep 08:07	22 Dec 06:18	00:04
2111 AD	21 Mar 05:10	21 Jun 21:25	23 Sep 14:05	22 Dec 12:07	00:04
2112 AD	20 Mar 11:02	21 Jun 03:19	22 Sep 19:55	21 Dec 17:56	00:04
2113 AD	20 Mar 16:50	21 Jun 08:57	23 Sep 01:35	21 Dec 23:46	00:04
2114 AD	20 Mar 22:39	21 Jun 14:46	23 Sep 07:27	22 Dec 05:39	00:04
2115 AD	21 Mar 04:22	21 Jun 20:30	23 Sep 13:12	22 Dec 11:26	00:04
2116 AD	20 Mar 10:08	21 Jun 02:17	22 Sep 18:56	21 Dec 17:14	00:04
2117 AD	20 Mar 16:06	21 Jun 08:09	23 Sep 00:44	21 Dec 23:03	00:04
2118 AD	20 Mar 21:52	21 Jun 13:43	23 Sep 06:26	22 Dec 04:48	00:04
2119 AD	21 Mar 03:38	21 Jun 19:35	23 Sep 12:19	22 Dec 10:36	00:04
2120 AD	20 Mar 09:28	21 Jun 01:31	22 Sep 18:05	21 Dec 16:23	00:04
2121 AD	20 Mar 15:15	21 Jun 07:11	22 Sep 23:43	21 Dec 22:10	00:04
2122 AD	20 Mar 21:03	21 Jun 13:01	23 Sep 05:38	22 Dec 04:00	00:04
2123 AD	21 Mar 02:48	21 Jun 18:49	23 Sep 11:29	22 Dec 09:45	00:04
2124 AD	20 Mar 08:35	21 Jun 00:37	22 Sep 17:18	21 Dec 15:34	00:04
2125 AD	20 Mar 14:29	21 Jun 06:32	22 Sep 23:13	21 Dec 21:31	00:04
2126 AD	20 Mar 20:15	21 Jun 12:09	23 Sep 04:59	22 Dec 03:25	00:04
2127 AD	21 Mar 02:02	21 Jun 18:01	23 Sep 10:55	22 Dec 09:20	00:04
2128 AD	20 Mar 07:58	20 Jun 23:58	22 Sep 16:45	21 Dec 15:12	00:05
2129 AD	20 Mar 13:54	21 Jun 05:37	22 Sep 22:24	21 Dec 21:01	00:05
2130 AD	20 Mar 19:48	21 Jun 11:29	23 Sep 04:20	22 Dec 02:52	00:05
2131 AD	21 Mar 01:36	21 Jun 17:21	23 Sep 10:08	22 Dec 08:39	00:05
2132 AD	20 Mar 07:23	20 Jun 23:11	22 Sep 15:51	21 Dec 14:25	00:05
2133 AD	20 Mar 13:15	21 Jun 05:06	22 Sep 21:43	21 Dec 20:18	00:05
2134 AD	20 Mar 19:01	21 Jun 10:43	23 Sep 03:27	22 Dec 02:02	00:05
2135 AD	21 Mar 00:44	21 Jun 16:30	23 Sep 09:20	22 Dec 07:47	00:05
2136 AD	20 Mar 06:32	20 Jun 22:24	22 Sep 15:11	21 Dec 13:36	00:05
2137 AD	20 Mar 12:20	21 Jun 04:00	22 Sep 20:46	21 Dec 19:22	00:05
2138 AD	20 Mar 18:03	21 Jun 09:45	23 Sep 02:39	22 Dec 01:16	00:05
2139 AD	20 Mar 23:47	21 Jun 15:33	23 Sep 08:27	22 Dec 07:06	00:05
2140 AD	20 Mar 05:36	20 Jun 21:18	22 Sep 14:07	21 Dec 12:50	00:05
2141 AD	20 Mar 11:31	21 Jun 03:09	22 Sep 20:01	21 Dec 18:45	00:05
2142 AD	20 Mar 17:23	21 Jun 08:51	23 Sep 01:47	22 Dec 00:32	00:05
2143 AD	20 Mar 23:10	21 Jun 14:41	23 Sep 07:39	22 Dec 06:21	00:05
2144 AD	20 Mar 05:00	20 Jun 20:42	22 Sep 13:33	21 Dec 12:17	00:05
2145 AD	20 Mar 10:56	21 Jun 02:25	22 Sep 19:11	21 Dec 18:03	00:05
2146 AD	20 Mar 16:42	21 Jun 08:13	23 Sep 01:07	21 Dec 23:55	00:05
2147 AD	20 Mar 22:32	21 Jun 14:07	23 Sep 07:03	22 Dec 05:45	00:05
2148 AD	20 Mar 04:22	20 Jun 19:55	22 Sep 12:46	21 Dec 11:29	00:05
2149 AD	20 Mar 10:12	21 Jun 01:47	22 Sep 18:42	21 Dec 17:29	00:05

Equinox and Solstice are in UT, $TT = UT + \Delta T$

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2150 AD	20 Mar 16:01	21 Jun 07:29	23 Sep 00:28	21 Dec 23:21	00:05
2151 AD	20 Mar 21:46	21 Jun 13:15	23 Sep 06:16	22 Dec 05:08	00:06
2152 AD	20 Mar 03:37	20 Jun 19:10	22 Sep 12:09	21 Dec 11:01	00:06
2153 AD	20 Mar 09:35	21 Jun 00:50	22 Sep 17:44	21 Dec 16:43	00:06
2154 AD	20 Mar 15:21	21 Jun 06:35	22 Sep 23:35	21 Dec 22:31	00:06
2155 AD	20 Mar 21:05	21 Jun 12:28	23 Sep 05:26	22 Dec 04:21	00:06
2156 AD	20 Mar 02:52	20 Jun 18:15	22 Sep 11:03	21 Dec 10:01	00:06
2157 AD	20 Mar 08:38	21 Jun 00:03	22 Sep 16:56	21 Dec 15:55	00:06
2158 AD	20 Mar 14:25	21 Jun 05:45	22 Sep 22:43	21 Dec 21:41	00:06
2159 AD	20 Mar 20:11	21 Jun 11:29	23 Sep 04:33	22 Dec 03:25	00:06
2160 AD	20 Mar 01:56	20 Jun 17:23	22 Sep 10:28	21 Dec 09:20	00:06
2161 AD	20 Mar 07:50	20 Jun 23:05	22 Sep 16:06	21 Dec 15:09	00:06
2162 AD	20 Mar 13:36	21 Jun 04:49	22 Sep 21:58	21 Dec 21:03	00:06
2163 AD	20 Mar 19:22	21 Jun 10:42	23 Sep 03:52	22 Dec 02:59	00:06
2164 AD	20 Mar 01:21	20 Jun 16:33	22 Sep 09:33	21 Dec 08:43	00:06
2165 AD	20 Mar 07:15	20 Jun 22:23	22 Sep 15:28	21 Dec 14:39	00:06
2166 AD	20 Mar 13:08	21 Jun 04:12	22 Sep 21:20	21 Dec 20:32	00:06
2167 AD	20 Mar 18:59	21 Jun 10:04	23 Sep 03:08	22 Dec 02:16	00:06
2168 AD	20 Mar 00:45	20 Jun 16:02	22 Sep 09:03	21 Dec 08:13	00:06
2169 AD	20 Mar 06:42	20 Jun 21:47	22 Sep 14:42	21 Dec 13:58	00:06
2170 AD	20 Mar 12:27	21 Jun 03:30	22 Sep 20:33	21 Dec 19:43	00:06
2171 AD	20 Mar 18:08	21 Jun 09:21	23 Sep 02:30	22 Dec 01:34	00:06
2172 AD	20 Mar 00:00	20 Jun 15:07	22 Sep 08:09	21 Dec 07:14	00:06
2173 AD	20 Mar 05:43	20 Jun 20:50	22 Sep 13:58	21 Dec 13:10	00:06
2174 AD	20 Mar 11:26	21 Jun 02:31	22 Sep 19:46	21 Dec 19:04	00:06
2175 AD	20 Mar 17:15	21 Jun 08:15	23 Sep 01:28	22 Dec 00:45	00:06
2176 AD	19 Mar 23:01	20 Jun 14:05	22 Sep 07:20	21 Dec 06:40	00:06
2177 AD	20 Mar 05:01	20 Jun 19:49	22 Sep 12:58	21 Dec 12:24	00:06
2178 AD	20 Mar 10:48	21 Jun 01:32	22 Sep 18:45	21 Dec 18:09	00:07
2179 AD	20 Mar 16:30	21 Jun 07:28	23 Sep 00:41	22 Dec 00:05	00:07
2180 AD	19 Mar 22:26	20 Jun 13:22	22 Sep 06:21	21 Dec 05:47	00:07
2181 AD	20 Mar 04:14	20 Jun 19:10	22 Sep 12:14	21 Dec 11:41	00:07
2182 AD	20 Mar 10:02	21 Jun 00:57	22 Sep 18:11	21 Dec 17:36	00:07
2183 AD	20 Mar 15:55	21 Jun 06:48	23 Sep 00:00	21 Dec 23:17	00:07
2184 AD	19 Mar 21:41	20 Jun 12:41	22 Sep 05:58	21 Dec 05:17	00:07
2185 AD	20 Mar 03:38	20 Jun 18:28	22 Sep 11:41	21 Dec 11:10	00:07
2186 AD	20 Mar 09:26	21 Jun 00:12	22 Sep 17:29	21 Dec 16:59	00:07
2187 AD	20 Mar 15:08	21 Jun 06:04	22 Sep 23:26	21 Dec 22:56	00:07
2188 AD	19 Mar 21:08	20 Jun 11:55	22 Sep 05:05	21 Dec 04:37	00:07
2189 AD	20 Mar 02:59	20 Jun 17:38	22 Sep 10:53	21 Dec 10:27	00:07
2190 AD	20 Mar 08:43	20 Jun 23:23	22 Sep 16:46	21 Dec 16:21	00:07
2191 AD	20 Mar 14:34	21 Jun 05:14	22 Sep 22:28	21 Dec 22:00	00:07
2192 AD	19 Mar 20:15	20 Jun 11:02	22 Sep 04:17	21 Dec 03:52	00:07
2193 AD	20 Mar 02:07	20 Jun 16:45	22 Sep 09:57	21 Dec 09:39	00:07
2194 AD	20 Mar 07:54	20 Jun 22:27	22 Sep 15:43	21 Dec 15:18	00:07
2195 AD	20 Mar 13:31	21 Jun 04:14	22 Sep 21:39	21 Dec 21:11	00:07
2196 AD	19 Mar 19:25	20 Jun 10:06	22 Sep 03:20	21 Dec 02:54	00:07
2197 AD	20 Mar 01:12	20 Jun 15:49	22 Sep 09:07	21 Dec 08:48	00:07
2198 AD	20 Mar 06:53	20 Jun 21:33	22 Sep 15:02	21 Dec 14:49	00:07
2199 AD	20 Mar 12:50	21 Jun 03:26	22 Sep 20:48	21 Dec 20:31	00:07

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2200 AD	20 Mar 18:40	21 Jun 09:16	23 Sep 02:41	22 Dec 02:26	00:07
2201 AD	21 Mar 00:40	21 Jun 15:05	23 Sep 08:28	22 Dec 08:20	00:07
2202 AD	21 Mar 06:35	21 Jun 20:55	23 Sep 14:17	22 Dec 14:04	00:07
2203 AD	21 Mar 12:15	22 Jun 02:49	23 Sep 20:14	22 Dec 20:02	00:07
2204 AD	20 Mar 18:13	21 Jun 08:47	23 Sep 01:59	22 Dec 01:48	00:08
2205 AD	21 Mar 00:03	21 Jun 14:32	23 Sep 07:46	22 Dec 07:36	00:08
2206 AD	21 Mar 05:44	21 Jun 20:15	23 Sep 13:45	22 Dec 13:32	00:08
2207 AD	21 Mar 11:38	22 Jun 02:07	23 Sep 19:31	22 Dec 19:11	00:08
2208 AD	20 Mar 17:20	21 Jun 07:51	23 Sep 01:19	22 Dec 01:05	00:08
2209 AD	20 Mar 23:10	21 Jun 13:33	23 Sep 07:02	22 Dec 06:59	00:08
2210 AD	21 Mar 04:59	21 Jun 19:16	23 Sep 12:44	22 Dec 12:41	00:08
2211 AD	21 Mar 10:37	22 Jun 01:01	23 Sep 18:34	22 Dec 18:34	00:08
2212 AD	20 Mar 16:35	21 Jun 06:53	23 Sep 00:16	22 Dec 00:16	00:08
2213 AD	20 Mar 22:29	21 Jun 12:37	23 Sep 06:00	22 Dec 06:01	00:08
2214 AD	21 Mar 04:07	21 Jun 18:21	23 Sep 11:54	22 Dec 11:57	00:08
2215 AD	21 Mar 10:01	22 Jun 00:18	23 Sep 17:41	22 Dec 17:39	00:08
2216 AD	20 Mar 15:46	21 Jun 06:07	22 Sep 23:29	21 Dec 23:30	00:08
2217 AD	20 Mar 21:37	21 Jun 11:52	23 Sep 05:18	22 Dec 05:25	00:08
2218 AD	21 Mar 03:31	21 Jun 17:42	23 Sep 11:09	22 Dec 11:07	00:08
2219 AD	21 Mar 09:11	21 Jun 23:29	23 Sep 17:06	22 Dec 17:02	00:08
2220 AD	20 Mar 15:06	21 Jun 05:24	22 Sep 22:54	21 Dec 22:54	00:08
2221 AD	20 Mar 20:59	21 Jun 11:12	23 Sep 04:41	22 Dec 04:46	00:08
2222 AD	21 Mar 02:39	21 Jun 16:52	23 Sep 10:36	22 Dec 10:47	00:08
2223 AD	21 Mar 08:37	21 Jun 22:49	23 Sep 16:25	22 Dec 16:33	00:08
2224 AD	20 Mar 14:31	21 Jun 04:36	22 Sep 22:11	21 Dec 22:21	00:08
2225 AD	20 Mar 20:22	21 Jun 10:19	23 Sep 03:57	22 Dec 04:15	00:08
2226 AD	21 Mar 02:17	21 Jun 16:11	23 Sep 09:44	22 Dec 09:57	00:08
2227 AD	21 Mar 07:54	21 Jun 21:58	23 Sep 15:32	22 Dec 15:46	00:09
2228 AD	20 Mar 13:45	21 Jun 03:51	22 Sep 21:16	21 Dec 21:33	00:09
2229 AD	20 Mar 19:37	21 Jun 09:36	23 Sep 02:59	22 Dec 03:15	00:09
2230 AD	21 Mar 01:12	21 Jun 15:13	23 Sep 08:53	22 Dec 09:06	00:09
2231 AD	21 Mar 07:04	21 Jun 21:07	23 Sep 14:43	22 Dec 14:50	00:09
2232 AD	20 Mar 12:50	21 Jun 02:53	22 Sep 20:28	21 Dec 20:39	00:09
2233 AD	20 Mar 18:34	21 Jun 08:31	23 Sep 02:14	22 Dec 02:37	00:09
2234 AD	21 Mar 00:27	21 Jun 14:22	23 Sep 08:02	22 Dec 08:23	00:09
2235 AD	21 Mar 06:10	21 Jun 20:07	23 Sep 13:51	22 Dec 14:14	00:09
2236 AD	20 Mar 12:07	21 Jun 02:00	22 Sep 19:39	21 Dec 20:05	00:09
2237 AD	20 Mar 18:07	21 Jun 07:51	23 Sep 01:26	22 Dec 01:52	00:09
2238 AD	20 Mar 23:47	21 Jun 13:35	23 Sep 07:21	22 Dec 07:50	00:09
2239 AD	21 Mar 05:41	21 Jun 19:35	23 Sep 13:13	22 Dec 13:38	00:09
2240 AD	20 Mar 11:33	21 Jun 01:27	22 Sep 19:00	21 Dec 19:27	00:09
2241 AD	20 Mar 17:22	21 Jun 07:08	23 Sep 00:49	22 Dec 01:22	00:09
2242 AD	20 Mar 23:16	21 Jun 13:01	23 Sep 06:42	22 Dec 07:06	00:09
2243 AD	21 Mar 04:58	21 Jun 18:47	23 Sep 12:32	22 Dec 12:55	00:09
2244 AD	20 Mar 10:47	21 Jun 00:37	22 Sep 18:19	21 Dec 18:47	00:09
2245 AD	20 Mar 16:41	21 Jun 06:25	23 Sep 00:03	22 Dec 00:37	00:09
2246 AD	20 Mar 22:18	21 Jun 12:01	23 Sep 05:51	22 Dec 06:29	00:09
2247 AD	21 Mar 04:10	21 Jun 17:55	23 Sep 11:41	22 Dec 12:14	00:09
2248 AD	20 Mar 10:06	20 Jun 23:44	22 Sep 17:25	21 Dec 17:58	00:09
2249 AD	20 Mar 15:51	21 Jun 05:21	22 Sep 23:08	21 Dec 23:50	00:09

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2250 AD	20 Mar 21:42	21 Jun 11:15	23 Sep 04:59	22 Dec 05:36	00:10
2251 AD	21 Mar 03:23	21 Jun 17:03	23 Sep 10:45	22 Dec 11:22	00:10
2252 AD	20 Mar 09:10	20 Jun 22:51	22 Sep 16:30	21 Dec 17:12	00:10
2253 AD	20 Mar 15:05	21 Jun 04:41	22 Sep 22:20	21 Dec 22:59	00:10
2254 AD	20 Mar 20:44	21 Jun 10:18	23 Sep 04:11	22 Dec 04:49	00:10
2255 AD	21 Mar 02:33	21 Jun 16:13	23 Sep 10:06	22 Dec 10:41	00:10
2256 AD	20 Mar 08:28	20 Jun 22:06	22 Sep 15:53	21 Dec 16:32	00:10
2257 AD	20 Mar 14:14	21 Jun 03:42	22 Sep 21:37	21 Dec 22:31	00:10
2258 AD	20 Mar 20:09	21 Jun 09:37	23 Sep 03:33	22 Dec 04:23	00:10
2259 AD	21 Mar 02:00	21 Jun 15:28	23 Sep 09:21	22 Dec 10:10	00:10
2260 AD	20 Mar 07:55	20 Jun 21:17	22 Sep 15:08	21 Dec 16:01	00:10
2261 AD	20 Mar 13:54	21 Jun 03:12	22 Sep 20:58	21 Dec 21:51	00:10
2262 AD	20 Mar 19:34	21 Jun 08:54	23 Sep 02:46	22 Dec 03:40	00:10
2263 AD	21 Mar 01:22	21 Jun 14:50	23 Sep 08:38	22 Dec 09:28	00:10
2264 AD	20 Mar 07:15	20 Jun 20:44	22 Sep 14:24	21 Dec 15:14	00:10
2265 AD	20 Mar 12:59	21 Jun 02:17	22 Sep 20:07	21 Dec 21:03	00:10
2266 AD	20 Mar 18:46	21 Jun 08:06	23 Sep 02:02	22 Dec 02:49	00:10
2267 AD	21 Mar 00:30	21 Jun 13:54	23 Sep 07:48	22 Dec 08:33	00:10
2268 AD	20 Mar 06:14	20 Jun 19:35	22 Sep 13:30	21 Dec 14:25	00:10
2269 AD	20 Mar 12:04	21 Jun 01:24	22 Sep 19:18	21 Dec 20:17	00:10
2270 AD	20 Mar 17:45	21 Jun 07:01	23 Sep 01:03	22 Dec 02:07	00:10
2271 AD	20 Mar 23:35	21 Jun 12:51	23 Sep 06:53	22 Dec 07:54	00:11
2272 AD	20 Mar 05:34	20 Jun 18:46	22 Sep 12:40	21 Dec 13:43	00:11
2273 AD	20 Mar 11:25	21 Jun 00:24	22 Sep 18:22	21 Dec 19:34	00:11
2274 AD	20 Mar 17:14	21 Jun 06:20	23 Sep 00:19	22 Dec 01:26	00:11
2275 AD	20 Mar 23:03	21 Jun 12:18	23 Sep 06:09	22 Dec 07:14	00:11
2276 AD	20 Mar 04:54	20 Jun 18:04	22 Sep 11:54	21 Dec 13:03	00:11
2277 AD	20 Mar 10:48	20 Jun 23:59	22 Sep 17:51	21 Dec 18:56	00:11
2278 AD	20 Mar 16:33	21 Jun 05:42	22 Sep 23:42	22 Dec 00:44	00:11
2279 AD	20 Mar 22:20	21 Jun 11:33	23 Sep 05:36	22 Dec 06:35	00:11
2280 AD	20 Mar 04:14	20 Jun 17:29	22 Sep 11:26	21 Dec 12:30	00:11
2281 AD	20 Mar 10:01	20 Jun 23:02	22 Sep 17:05	21 Dec 18:22	00:11
2282 AD	20 Mar 15:48	21 Jun 04:51	22 Sep 22:59	22 Dec 00:13	00:11
2283 AD	20 Mar 21:40	21 Jun 10:44	23 Sep 04:46	22 Dec 05:57	00:11
2284 AD	20 Mar 03:31	20 Jun 16:24	22 Sep 10:24	21 Dec 11:41	00:11
2285 AD	20 Mar 09:21	20 Jun 22:16	22 Sep 16:16	21 Dec 17:33	00:11
2286 AD	20 Mar 15:03	21 Jun 03:58	22 Sep 22:00	21 Dec 23:18	00:11
2287 AD	20 Mar 20:45	21 Jun 09:46	23 Sep 03:46	22 Dec 05:04	00:11
2288 AD	20 Mar 02:38	20 Jun 15:40	22 Sep 09:36	21 Dec 10:53	00:11
2289 AD	20 Mar 08:25	20 Jun 21:13	22 Sep 15:16	21 Dec 16:38	00:11
2290 AD	20 Mar 14:10	21 Jun 03:02	22 Sep 21:13	21 Dec 22:28	00:11
2291 AD	20 Mar 19:59	21 Jun 08:57	23 Sep 03:04	22 Dec 04:18	00:11
2292 AD	20 Mar 01:49	20 Jun 14:40	22 Sep 08:44	21 Dec 10:09	00:12
2293 AD	20 Mar 07:39	20 Jun 20:32	22 Sep 14:39	21 Dec 16:08	00:12
2294 AD	20 Mar 13:29	21 Jun 02:19	22 Sep 20:29	21 Dec 21:58	00:12
2295 AD	20 Mar 19:22	21 Jun 08:10	23 Sep 02:19	22 Dec 03:45	00:12
2296 AD	20 Mar 01:20	20 Jun 14:08	22 Sep 08:14	21 Dec 09:41	00:12
2297 AD	20 Mar 07:14	20 Jun 19:50	22 Sep 13:56	21 Dec 15:31	00:12
2298 AD	20 Mar 12:59	21 Jun 01:42	22 Sep 19:52	21 Dec 21:21	00:12
2299 AD	20 Mar 18:48	21 Jun 07:40	23 Sep 01:43	22 Dec 03:11	00:12

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2300 AD	21 Mar 00:40	21 Jun 13:22	23 Sep 07:21	22 Dec 08:54	00:12
2301 AD	21 Mar 06:26	21 Jun 19:08	23 Sep 13:15	22 Dec 14:45	00:12
2302 AD	21 Mar 12:09	22 Jun 00:52	23 Sep 19:05	22 Dec 20:31	00:12
2303 AD	21 Mar 17:54	22 Jun 06:36	24 Sep 00:48	23 Dec 02:15	00:12
2304 AD	20 Mar 23:40	21 Jun 12:26	23 Sep 06:38	22 Dec 08:11	00:12
2305 AD	21 Mar 05:29	21 Jun 18:02	23 Sep 12:15	22 Dec 13:59	00:12
2306 AD	21 Mar 11:14	21 Jun 23:45	23 Sep 18:04	22 Dec 19:46	00:12
2307 AD	21 Mar 17:05	22 Jun 05:41	23 Sep 23:56	23 Dec 01:35	00:12
2308 AD	20 Mar 23:02	21 Jun 11:24	23 Sep 05:32	22 Dec 07:17	00:12
2309 AD	21 Mar 04:48	21 Jun 17:15	23 Sep 11:26	22 Dec 13:12	00:12
2310 AD	21 Mar 10:34	21 Jun 23:07	23 Sep 17:18	22 Dec 19:02	00:12
2311 AD	21 Mar 16:23	22 Jun 04:57	23 Sep 23:04	23 Dec 00:46	00:13
2312 AD	20 Mar 22:14	21 Jun 10:53	23 Sep 05:02	22 Dec 06:43	00:13
2313 AD	21 Mar 04:08	21 Jun 16:35	23 Sep 10:48	22 Dec 12:32	00:13
2314 AD	21 Mar 09:54	21 Jun 22:21	23 Sep 16:44	22 Dec 18:22	00:13
2315 AD	21 Mar 15:42	22 Jun 04:19	23 Sep 22:41	23 Dec 00:19	00:13
2316 AD	20 Mar 21:37	21 Jun 10:03	23 Sep 04:17	22 Dec 06:07	00:13
2317 AD	21 Mar 03:24	21 Jun 15:48	23 Sep 10:09	22 Dec 12:04	00:13
2318 AD	21 Mar 09:12	21 Jun 21:36	23 Sep 16:00	22 Dec 17:54	00:13
2319 AD	21 Mar 15:05	22 Jun 03:22	23 Sep 21:41	22 Dec 23:33	00:13
2320 AD	20 Mar 20:57	21 Jun 09:15	23 Sep 03:33	22 Dec 05:27	00:13
2321 AD	21 Mar 02:47	21 Jun 14:57	23 Sep 09:13	22 Dec 11:14	00:13
2322 AD	21 Mar 08:30	21 Jun 20:42	23 Sep 15:00	22 Dec 16:57	00:13
2323 AD	21 Mar 14:13	22 Jun 02:37	23 Sep 20:53	22 Dec 22:48	00:13
2324 AD	20 Mar 20:07	21 Jun 08:21	23 Sep 02:29	22 Dec 04:28	00:13
2325 AD	21 Mar 01:51	21 Jun 14:03	23 Sep 08:20	22 Dec 10:17	00:13
2326 AD	21 Mar 07:33	21 Jun 19:51	23 Sep 14:16	22 Dec 16:09	00:13
2327 AD	21 Mar 13:23	22 Jun 01:39	23 Sep 19:58	22 Dec 21:52	00:13
2328 AD	20 Mar 19:08	21 Jun 07:28	23 Sep 01:51	22 Dec 03:52	00:13
2329 AD	21 Mar 01:01	21 Jun 13:11	23 Sep 07:36	22 Dec 09:46	00:13
2330 AD	21 Mar 06:52	21 Jun 18:58	23 Sep 13:27	22 Dec 15:32	00:14
2331 AD	21 Mar 12:43	22 Jun 00:54	23 Sep 19:25	22 Dec 21:28	00:14
2332 AD	20 Mar 18:46	21 Jun 06:45	23 Sep 01:05	22 Dec 03:15	00:14
2333 AD	21 Mar 00:33	21 Jun 12:32	23 Sep 06:55	22 Dec 09:07	00:14
2334 AD	21 Mar 06:17	21 Jun 18:26	23 Sep 12:52	22 Dec 15:03	00:14
2335 AD	21 Mar 12:12	22 Jun 00:18	23 Sep 18:34	22 Dec 20:42	00:14
2336 AD	20 Mar 17:59	21 Jun 06:06	23 Sep 00:27	22 Dec 02:36	00:14
2337 AD	20 Mar 23:50	21 Jun 11:49	23 Sep 06:15	22 Dec 08:26	00:14
2338 AD	21 Mar 05:36	21 Jun 17:33	23 Sep 12:03	22 Dec 14:07	00:14
2339 AD	21 Mar 11:17	21 Jun 23:25	23 Sep 17:57	22 Dec 20:03	00:14
2340 AD	20 Mar 17:11	21 Jun 05:10	22 Sep 23:32	22 Dec 01:50	00:14
2341 AD	20 Mar 22:56	21 Jun 10:49	23 Sep 05:17	22 Dec 07:39	00:14
2342 AD	21 Mar 04:39	21 Jun 16:36	23 Sep 11:11	22 Dec 13:30	00:14
2343 AD	21 Mar 10:35	21 Jun 22:26	23 Sep 16:51	22 Dec 19:07	00:14
2344 AD	20 Mar 16:23	21 Jun 04:13	22 Sep 22:40	22 Dec 01:01	00:14
2345 AD	20 Mar 22:11	21 Jun 09:59	23 Sep 04:28	22 Dec 06:54	00:14
2346 AD	21 Mar 03:59	21 Jun 15:48	23 Sep 10:14	22 Dec 12:35	00:14
2347 AD	21 Mar 09:42	21 Jun 21:41	23 Sep 16:11	22 Dec 18:31	00:14
2348 AD	20 Mar 15:40	21 Jun 03:30	22 Sep 21:53	22 Dec 00:17	00:15
2349 AD	20 Mar 21:28	21 Jun 09:13	23 Sep 03:44	22 Dec 06:06	00:15

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2350 AD	21 Mar 03:10	21 Jun 15:02	23 Sep 09:44	22 Dec 12:04	00:15
2351 AD	21 Mar 09:05	21 Jun 20:56	23 Sep 15:27	22 Dec 17:49	00:15
2352 AD	20 Mar 14:54	21 Jun 02:43	22 Sep 21:16	21 Dec 23:48	00:15
2353 AD	20 Mar 20:45	21 Jun 08:27	23 Sep 03:06	22 Dec 05:45	00:15
2354 AD	21 Mar 02:42	21 Jun 14:17	23 Sep 08:53	22 Dec 11:25	00:15
2355 AD	21 Mar 08:29	21 Jun 20:09	23 Sep 14:48	22 Dec 17:18	00:15
2356 AD	20 Mar 14:28	21 Jun 02:00	22 Sep 20:28	21 Dec 23:05	00:15
2357 AD	20 Mar 20:15	21 Jun 07:45	23 Sep 02:13	22 Dec 04:50	00:15
2358 AD	21 Mar 01:51	21 Jun 13:33	23 Sep 08:09	22 Dec 10:43	00:15
2359 AD	21 Mar 07:45	21 Jun 19:27	23 Sep 13:50	22 Dec 16:21	00:15
2360 AD	20 Mar 13:30	21 Jun 01:09	22 Sep 19:37	21 Dec 22:10	00:15
2361 AD	20 Mar 19:13	21 Jun 06:48	23 Sep 01:28	22 Dec 04:03	00:15
2362 AD	21 Mar 01:03	21 Jun 12:36	23 Sep 07:15	22 Dec 09:43	00:15
2363 AD	21 Mar 06:41	21 Jun 18:22	23 Sep 13:05	22 Dec 15:39	00:15
2364 AD	20 Mar 12:35	21 Jun 00:09	22 Sep 18:47	21 Dec 21:33	00:15
2365 AD	20 Mar 18:27	21 Jun 05:52	23 Sep 00:30	22 Dec 03:18	00:16
2366 AD	21 Mar 00:08	21 Jun 11:37	23 Sep 06:28	22 Dec 09:14	00:16
2367 AD	21 Mar 06:11	21 Jun 17:35	23 Sep 12:12	22 Dec 14:56	00:16
2368 AD	20 Mar 12:03	20 Jun 23:24	22 Sep 17:59	21 Dec 20:49	00:16
2369 AD	20 Mar 17:49	21 Jun 05:11	22 Sep 23:54	22 Dec 02:49	00:16
2370 AD	20 Mar 23:45	21 Jun 11:08	23 Sep 05:43	22 Dec 08:30	00:16
2371 AD	21 Mar 05:29	21 Jun 16:59	23 Sep 11:37	22 Dec 14:23	00:16
2372 AD	20 Mar 11:25	20 Jun 22:49	22 Sep 17:24	21 Dec 20:14	00:16
2373 AD	20 Mar 17:17	21 Jun 04:34	22 Sep 23:12	22 Dec 01:58	00:16
2374 AD	20 Mar 22:53	21 Jun 10:19	23 Sep 05:09	22 Dec 07:54	00:16
2375 AD	21 Mar 04:46	21 Jun 16:13	23 Sep 10:53	22 Dec 13:40	00:16
2376 AD	20 Mar 10:34	20 Jun 21:56	22 Sep 16:35	21 Dec 19:31	00:16
2377 AD	20 Mar 16:17	21 Jun 03:33	22 Sep 22:25	22 Dec 01:27	00:16
2378 AD	20 Mar 22:13	21 Jun 09:24	23 Sep 04:11	22 Dec 07:05	00:16
2379 AD	21 Mar 03:59	21 Jun 15:10	23 Sep 09:58	22 Dec 12:53	00:16
2380 AD	20 Mar 09:50	20 Jun 20:57	22 Sep 15:40	21 Dec 18:44	00:16
2381 AD	20 Mar 15:41	21 Jun 02:45	22 Sep 21:24	22 Dec 00:27	00:16
2382 AD	20 Mar 21:16	21 Jun 08:28	23 Sep 03:16	22 Dec 06:18	00:17
2383 AD	21 Mar 03:09	21 Jun 14:24	23 Sep 09:02	22 Dec 12:02	00:17
2384 AD	20 Mar 09:01	20 Jun 20:10	22 Sep 14:48	21 Dec 17:49	00:17
2385 AD	20 Mar 14:43	21 Jun 01:49	22 Sep 20:44	21 Dec 23:47	00:17
2386 AD	20 Mar 20:37	21 Jun 07:46	23 Sep 02:36	22 Dec 05:34	00:17
2387 AD	21 Mar 02:24	21 Jun 13:35	23 Sep 08:25	22 Dec 11:29	00:17
2388 AD	20 Mar 08:16	20 Jun 19:23	22 Sep 14:12	21 Dec 17:28	00:17
2389 AD	20 Mar 14:15	21 Jun 01:14	22 Sep 20:00	21 Dec 23:14	00:17
2390 AD	20 Mar 19:59	21 Jun 06:59	23 Sep 01:55	22 Dec 05:06	00:17
2391 AD	21 Mar 01:57	21 Jun 12:58	23 Sep 07:44	22 Dec 10:53	00:17
2392 AD	20 Mar 07:52	20 Jun 18:48	22 Sep 13:29	21 Dec 16:41	00:17
2393 AD	20 Mar 13:31	21 Jun 00:28	22 Sep 19:20	21 Dec 22:38	00:17
2394 AD	20 Mar 19:23	21 Jun 06:24	23 Sep 01:11	22 Dec 04:20	00:17
2395 AD	21 Mar 01:08	21 Jun 12:10	23 Sep 06:56	22 Dec 10:05	00:17
2396 AD	20 Mar 06:55	20 Jun 17:50	22 Sep 12:41	21 Dec 15:57	00:17
2397 AD	20 Mar 12:46	20 Jun 23:36	22 Sep 18:27	21 Dec 21:38	00:17
2398 AD	20 Mar 18:20	21 Jun 05:15	23 Sep 00:15	22 Dec 03:28	00:17
2399 AD	21 Mar 00:09	21 Jun 11:07	23 Sep 06:00	22 Dec 09:18	00:18

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2400 AD	20 Mar 06:01	20 Jun 16:53	22 Sep 11:41	21 Dec 15:06	00:18
2401 AD	20 Mar 11:43	20 Jun 22:28	22 Sep 17:31	21 Dec 21:01	00:18
2402 AD	20 Mar 17:40	21 Jun 04:24	22 Sep 23:24	22 Dec 02:45	00:18
2403 AD	20 Mar 23:32	21 Jun 10:17	23 Sep 05:11	22 Dec 08:33	00:18
2404 AD	20 Mar 05:23	20 Jun 16:03	22 Sep 10:56	21 Dec 14:30	00:18
2405 AD	20 Mar 11:18	20 Jun 21:59	22 Sep 16:48	21 Dec 20:18	00:18
2406 AD	20 Mar 17:00	21 Jun 03:46	22 Sep 22:41	22 Dec 02:08	00:18
2407 AD	20 Mar 22:52	21 Jun 09:43	23 Sep 04:33	22 Dec 07:58	00:18
2408 AD	20 Mar 04:49	20 Jun 15:34	22 Sep 10:22	21 Dec 13:46	00:18
2409 AD	20 Mar 10:30	20 Jun 21:10	22 Sep 16:15	21 Dec 19:42	00:18
2410 AD	20 Mar 16:20	21 Jun 03:06	22 Sep 22:10	22 Dec 01:32	00:18
2411 AD	20 Mar 22:10	21 Jun 08:56	23 Sep 03:55	22 Dec 07:23	00:18
2412 AD	20 Mar 03:57	20 Jun 14:34	22 Sep 09:36	21 Dec 13:18	00:18
2413 AD	20 Mar 09:52	20 Jun 20:23	22 Sep 15:24	21 Dec 19:03	00:18
2414 AD	20 Mar 15:37	21 Jun 02:05	22 Sep 21:10	22 Dec 00:46	00:18
2415 AD	20 Mar 21:26	21 Jun 07:56	23 Sep 02:54	22 Dec 06:33	00:19
2416 AD	20 Mar 03:21	20 Jun 13:49	22 Sep 08:38	21 Dec 12:20	00:19
2417 AD	20 Mar 08:58	20 Jun 19:24	22 Sep 14:24	21 Dec 18:10	00:19
2418 AD	20 Mar 14:45	21 Jun 01:19	22 Sep 20:18	21 Dec 23:55	00:19
2419 AD	20 Mar 20:36	21 Jun 07:11	23 Sep 02:04	22 Dec 05:39	00:19
2420 AD	20 Mar 02:22	20 Jun 12:48	22 Sep 07:48	21 Dec 11:31	00:19
2421 AD	20 Mar 08:13	20 Jun 18:40	22 Sep 13:43	21 Dec 17:21	00:19
2422 AD	20 Mar 13:56	21 Jun 00:26	22 Sep 19:33	21 Dec 23:11	00:19
2423 AD	20 Mar 19:44	21 Jun 06:17	23 Sep 01:20	22 Dec 05:06	00:19
2424 AD	20 Mar 01:42	20 Jun 12:11	22 Sep 07:09	21 Dec 11:00	00:19
2425 AD	20 Mar 07:29	20 Jun 17:47	22 Sep 12:59	21 Dec 16:53	00:19
2426 AD	20 Mar 13:24	20 Jun 23:44	22 Sep 18:57	21 Dec 22:43	00:19
2427 AD	20 Mar 19:21	21 Jun 05:42	23 Sep 00:45	22 Dec 04:31	00:19
2428 AD	20 Mar 01:10	20 Jun 11:23	22 Sep 06:26	21 Dec 10:26	00:19
2429 AD	20 Mar 07:01	20 Jun 17:16	22 Sep 12:20	21 Dec 16:15	00:19
2430 AD	20 Mar 12:44	20 Jun 23:03	22 Sep 18:07	21 Dec 21:58	00:20
2431 AD	20 Mar 18:32	21 Jun 04:51	22 Sep 23:52	22 Dec 03:44	00:20
2432 AD	20 Mar 00:25	20 Jun 10:41	22 Sep 05:41	21 Dec 09:32	00:20
2433 AD	20 Mar 06:05	20 Jun 16:15	22 Sep 11:27	21 Dec 15:20	00:20
2434 AD	20 Mar 11:48	20 Jun 22:05	22 Sep 17:19	21 Dec 21:10	00:20
2435 AD	20 Mar 17:39	21 Jun 03:58	22 Sep 23:03	22 Dec 02:59	00:20
2436 AD	19 Mar 23:26	20 Jun 09:31	22 Sep 04:40	21 Dec 08:50	00:20
2437 AD	20 Mar 05:17	20 Jun 15:20	22 Sep 10:34	21 Dec 14:38	00:20
2438 AD	20 Mar 11:06	20 Jun 21:09	22 Sep 16:22	21 Dec 20:22	00:20
2439 AD	20 Mar 16:55	21 Jun 02:58	22 Sep 22:05	22 Dec 02:10	00:20
2440 AD	19 Mar 22:49	20 Jun 08:55	22 Sep 03:56	21 Dec 08:05	00:20
2441 AD	20 Mar 04:34	20 Jun 14:36	22 Sep 09:45	21 Dec 13:54	00:20
2442 AD	20 Mar 10:21	20 Jun 20:29	22 Sep 15:41	21 Dec 19:44	00:20
2443 AD	20 Mar 16:16	21 Jun 02:27	22 Sep 21:34	22 Dec 01:35	00:20
2444 AD	19 Mar 22:07	20 Jun 08:04	22 Sep 03:16	21 Dec 07:25	00:20
2445 AD	20 Mar 03:55	20 Jun 13:55	22 Sep 09:14	21 Dec 13:20	00:21
2446 AD	20 Mar 09:43	20 Jun 19:47	22 Sep 15:04	21 Dec 19:10	00:21
2447 AD	20 Mar 15:31	21 Jun 01:32	22 Sep 20:44	22 Dec 01:00	00:21
2448 AD	19 Mar 21:26	20 Jun 07:25	22 Sep 02:36	21 Dec 06:55	00:21
2449 AD	20 Mar 03:15	20 Jun 13:03	22 Sep 08:21	21 Dec 12:40	00:21

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2450 AD	20 Mar 09:04	20 Jun 18:54	22 Sep 14:13	21 Dec 18:26	00:21
2451 AD	20 Mar 14:58	21 Jun 00:52	22 Sep 20:01	22 Dec 00:16	00:21
2452 AD	19 Mar 20:46	20 Jun 06:30	22 Sep 01:37	21 Dec 06:02	00:21
2453 AD	20 Mar 02:29	20 Jun 12:18	22 Sep 07:31	21 Dec 11:50	00:21
2454 AD	20 Mar 08:14	20 Jun 18:09	22 Sep 13:20	21 Dec 17:34	00:21
2455 AD	20 Mar 14:00	20 Jun 23:51	22 Sep 19:00	21 Dec 23:17	00:21
2456 AD	19 Mar 19:49	20 Jun 05:40	22 Sep 00:54	21 Dec 05:11	00:21
2457 AD	20 Mar 01:33	20 Jun 11:19	22 Sep 06:42	21 Dec 10:59	00:21
2458 AD	20 Mar 07:17	20 Jun 17:07	22 Sep 12:32	21 Dec 16:50	00:21
2459 AD	20 Mar 13:08	20 Jun 23:03	22 Sep 18:23	21 Dec 22:47	00:21
2460 AD	19 Mar 19:03	20 Jun 04:41	22 Sep 00:01	21 Dec 04:38	00:22
2461 AD	20 Mar 00:55	20 Jun 10:29	22 Sep 05:57	21 Dec 10:28	00:22
2462 AD	20 Mar 06:48	20 Jun 16:26	22 Sep 11:49	21 Dec 16:17	00:22
2463 AD	20 Mar 12:42	20 Jun 22:17	22 Sep 17:30	21 Dec 22:04	00:22
2464 AD	19 Mar 18:33	20 Jun 04:11	21 Sep 23:25	21 Dec 04:01	00:22
2465 AD	20 Mar 00:21	20 Jun 09:58	22 Sep 05:15	21 Dec 09:50	00:22
2466 AD	20 Mar 06:09	20 Jun 15:47	22 Sep 11:05	21 Dec 15:34	00:22
2467 AD	20 Mar 11:59	20 Jun 21:43	22 Sep 17:00	21 Dec 21:27	00:22
2468 AD	19 Mar 17:52	20 Jun 03:21	21 Sep 22:39	21 Dec 03:12	00:22
2469 AD	19 Mar 23:34	20 Jun 09:05	22 Sep 04:32	21 Dec 09:02	00:22
2470 AD	20 Mar 05:17	20 Jun 14:57	22 Sep 10:23	21 Dec 14:54	00:22
2471 AD	20 Mar 11:06	20 Jun 20:39	22 Sep 15:57	21 Dec 20:37	00:22
2472 AD	19 Mar 16:54	20 Jun 02:24	21 Sep 21:47	21 Dec 02:32	00:22
2473 AD	19 Mar 22:43	20 Jun 08:07	22 Sep 03:35	21 Dec 08:17	00:22
2474 AD	20 Mar 04:32	20 Jun 13:53	22 Sep 09:20	21 Dec 13:59	00:22
2475 AD	20 Mar 10:20	20 Jun 19:49	22 Sep 15:13	21 Dec 19:56	00:23
2476 AD	19 Mar 16:14	20 Jun 01:31	21 Sep 20:49	21 Dec 01:42	00:23
2477 AD	19 Mar 21:57	20 Jun 07:16	22 Sep 02:41	21 Dec 07:30	00:23
2478 AD	20 Mar 03:45	20 Jun 13:13	22 Sep 08:38	21 Dec 13:21	00:23
2479 AD	20 Mar 09:39	20 Jun 19:01	22 Sep 14:17	21 Dec 19:03	00:23
2480 AD	19 Mar 15:27	20 Jun 00:49	21 Sep 20:14	21 Dec 01:01	00:23
2481 AD	19 Mar 21:15	20 Jun 06:37	22 Sep 02:09	21 Dec 06:55	00:23
2482 AD	20 Mar 03:04	20 Jun 12:27	22 Sep 07:56	21 Dec 12:43	00:23
2483 AD	20 Mar 08:54	20 Jun 18:22	22 Sep 13:51	21 Dec 18:43	00:23
2484 AD	19 Mar 14:53	20 Jun 00:05	21 Sep 19:31	21 Dec 00:32	00:23
2485 AD	19 Mar 20:43	20 Jun 05:49	22 Sep 01:23	21 Dec 06:18	00:23
2486 AD	20 Mar 02:32	20 Jun 11:45	22 Sep 07:18	21 Dec 12:10	00:23
2487 AD	20 Mar 08:26	20 Jun 17:35	22 Sep 12:53	21 Dec 17:51	00:23
2488 AD	19 Mar 14:10	19 Jun 23:21	21 Sep 18:43	20 Dec 23:44	00:23
2489 AD	19 Mar 19:53	20 Jun 05:06	22 Sep 00:35	21 Dec 05:32	00:24
2490 AD	20 Mar 01:40	20 Jun 10:53	22 Sep 06:18	21 Dec 11:11	00:24
2491 AD	20 Mar 07:24	20 Jun 16:40	22 Sep 12:11	21 Dec 17:03	00:24
2492 AD	19 Mar 13:16	19 Jun 22:19	21 Sep 17:51	20 Dec 22:51	00:24
2493 AD	19 Mar 18:59	20 Jun 04:00	21 Sep 23:38	21 Dec 04:37	00:24
2494 AD	20 Mar 00:40	20 Jun 09:51	22 Sep 05:31	21 Dec 10:33	00:24
2495 AD	20 Mar 06:36	20 Jun 15:40	22 Sep 11:06	21 Dec 16:18	00:24
2496 AD	19 Mar 12:26	19 Jun 21:24	21 Sep 16:56	20 Dec 22:11	00:24
2497 AD	19 Mar 18:16	20 Jun 03:13	21 Sep 22:54	21 Dec 04:04	00:24
2498 AD	20 Mar 00:13	20 Jun 09:08	22 Sep 04:39	21 Dec 09:46	00:24
2499 AD	20 Mar 06:01	20 Jun 15:04	22 Sep 10:35	21 Dec 15:45	00:24

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2500 AD	20 Mar 11:57	20 Jun 20:52	22 Sep 16:20	21 Dec 21:38	00:24
2501 AD	20 Mar 17:46	21 Jun 02:40	22 Sep 22:11	22 Dec 03:22	00:24
2502 AD	20 Mar 23:30	21 Jun 08:34	23 Sep 04:10	22 Dec 09:17	00:24
2503 AD	21 Mar 05:28	21 Jun 14:25	23 Sep 09:51	22 Dec 15:00	00:25
2504 AD	20 Mar 11:14	20 Jun 20:07	22 Sep 15:41	21 Dec 20:52	00:25
2505 AD	20 Mar 16:55	21 Jun 01:52	22 Sep 21:37	22 Dec 02:48	00:25
2506 AD	20 Mar 22:45	21 Jun 07:42	23 Sep 03:17	22 Dec 08:29	00:25
2507 AD	21 Mar 04:29	21 Jun 13:27	23 Sep 09:06	22 Dec 14:26	00:25
2508 AD	20 Mar 10:24	20 Jun 19:07	22 Sep 14:47	21 Dec 20:14	00:25
2509 AD	20 Mar 16:14	21 Jun 00:49	22 Sep 20:30	22 Dec 01:52	00:25
2510 AD	20 Mar 21:57	21 Jun 06:40	23 Sep 02:24	22 Dec 07:45	00:25
2511 AD	21 Mar 03:52	21 Jun 12:33	23 Sep 08:00	22 Dec 13:27	00:25
2512 AD	20 Mar 09:37	20 Jun 18:17	22 Sep 13:46	21 Dec 19:16	00:25
2513 AD	20 Mar 15:17	21 Jun 00:03	22 Sep 19:43	22 Dec 01:09	00:25
2514 AD	20 Mar 21:12	21 Jun 05:57	23 Sep 01:29	22 Dec 06:48	00:25
2515 AD	21 Mar 02:58	21 Jun 11:45	23 Sep 07:22	22 Dec 12:43	00:25
2516 AD	20 Mar 08:49	20 Jun 17:29	22 Sep 13:12	21 Dec 18:39	00:26
2517 AD	20 Mar 14:40	20 Jun 23:17	22 Sep 19:02	22 Dec 00:26	00:26
2518 AD	20 Mar 20:21	21 Jun 05:09	23 Sep 00:58	22 Dec 06:26	00:26
2519 AD	21 Mar 02:21	21 Jun 11:02	23 Sep 06:39	22 Dec 12:16	00:26
2520 AD	20 Mar 08:16	20 Jun 16:46	22 Sep 12:27	21 Dec 18:05	00:26
2521 AD	20 Mar 14:02	20 Jun 22:33	22 Sep 18:26	22 Dec 00:01	00:26
2522 AD	20 Mar 20:00	21 Jun 04:31	23 Sep 00:11	22 Dec 05:42	00:26
2523 AD	21 Mar 01:46	21 Jun 10:19	23 Sep 05:57	22 Dec 11:34	00:26
2524 AD	20 Mar 07:34	20 Jun 16:02	22 Sep 11:44	21 Dec 17:28	00:26
2525 AD	20 Mar 13:25	20 Jun 21:49	22 Sep 17:29	21 Dec 23:05	00:26
2526 AD	20 Mar 19:03	21 Jun 03:35	22 Sep 23:21	22 Dec 04:55	00:26
2527 AD	21 Mar 00:57	21 Jun 09:25	23 Sep 05:02	22 Dec 10:39	00:26
2528 AD	20 Mar 06:44	20 Jun 15:05	22 Sep 10:46	21 Dec 16:24	00:26
2529 AD	20 Mar 12:18	20 Jun 20:46	22 Sep 16:41	21 Dec 22:22	00:26
2530 AD	20 Mar 18:11	21 Jun 02:41	22 Sep 22:23	22 Dec 04:05	00:27
2531 AD	20 Mar 23:59	21 Jun 08:25	23 Sep 04:09	22 Dec 09:57	00:27
2532 AD	20 Mar 05:50	20 Jun 14:06	22 Sep 09:58	21 Dec 15:52	00:27
2533 AD	20 Mar 11:48	20 Jun 19:58	22 Sep 15:47	21 Dec 21:32	00:27
2534 AD	20 Mar 17:31	21 Jun 01:49	22 Sep 21:40	22 Dec 03:27	00:27
2535 AD	20 Mar 23:27	21 Jun 07:46	23 Sep 03:25	22 Dec 09:19	00:27
2536 AD	20 Mar 05:20	20 Jun 13:34	22 Sep 09:12	21 Dec 15:06	00:27
2537 AD	20 Mar 10:59	20 Jun 19:20	22 Sep 15:12	21 Dec 21:03	00:27
2538 AD	20 Mar 16:56	21 Jun 01:18	22 Sep 21:02	22 Dec 02:46	00:27
2539 AD	20 Mar 22:46	21 Jun 07:04	23 Sep 02:51	22 Dec 08:38	00:27
2540 AD	20 Mar 04:33	20 Jun 12:45	22 Sep 08:41	21 Dec 14:36	00:27
2541 AD	20 Mar 10:25	20 Jun 18:35	22 Sep 14:28	21 Dec 20:20	00:27
2542 AD	20 Mar 16:06	21 Jun 00:21	22 Sep 20:16	22 Dec 02:13	00:27
2543 AD	20 Mar 22:00	21 Jun 06:10	23 Sep 01:58	22 Dec 08:03	00:28
2544 AD	20 Mar 03:56	20 Jun 11:55	22 Sep 07:42	21 Dec 13:45	00:28
2545 AD	20 Mar 09:35	20 Jun 17:35	22 Sep 13:35	21 Dec 19:36	00:28
2546 AD	20 Mar 15:29	20 Jun 23:34	22 Sep 19:20	22 Dec 01:19	00:28
2547 AD	20 Mar 21:16	21 Jun 05:21	23 Sep 01:02	22 Dec 07:06	00:28
2548 AD	20 Mar 02:58	20 Jun 11:00	22 Sep 06:50	21 Dec 13:00	00:28
2549 AD	20 Mar 08:50	20 Jun 16:52	22 Sep 12:40	21 Dec 18:40	00:28

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2550 AD	20 Mar 14:31	20 Jun 22:37	22 Sep 18:30	22 Dec 00:28	00:28
2551 AD	20 Mar 20:22	21 Jun 04:25	23 Sep 00:17	22 Dec 06:21	00:28
2552 AD	20 Mar 02:15	20 Jun 10:13	22 Sep 06:05	21 Dec 12:08	00:28
2553 AD	20 Mar 07:52	20 Jun 15:54	22 Sep 11:59	21 Dec 18:07	00:28
2554 AD	20 Mar 13:46	20 Jun 21:52	22 Sep 17:49	21 Dec 23:59	00:28
2555 AD	20 Mar 19:43	21 Jun 03:40	22 Sep 23:33	22 Dec 05:48	00:28
2556 AD	20 Mar 01:32	20 Jun 09:18	22 Sep 05:23	21 Dec 11:45	00:29
2557 AD	20 Mar 07:33	20 Jun 15:17	22 Sep 11:16	21 Dec 17:30	00:29
2558 AD	20 Mar 13:20	20 Jun 21:08	22 Sep 17:04	21 Dec 23:19	00:29
2559 AD	20 Mar 19:10	21 Jun 03:01	22 Sep 22:49	22 Dec 05:12	00:29
2560 AD	20 Mar 01:05	20 Jun 08:52	22 Sep 04:37	21 Dec 10:56	00:29
2561 AD	20 Mar 06:42	20 Jun 14:32	22 Sep 10:29	21 Dec 16:46	00:29
2562 AD	20 Mar 12:32	20 Jun 20:27	22 Sep 16:20	21 Dec 22:30	00:29
2563 AD	20 Mar 18:24	21 Jun 02:13	22 Sep 22:04	22 Dec 04:16	00:29
2564 AD	20 Mar 00:03	20 Jun 07:46	22 Sep 03:50	21 Dec 10:12	00:29
2565 AD	20 Mar 05:52	20 Jun 13:38	22 Sep 09:40	21 Dec 15:58	00:29
2566 AD	20 Mar 11:35	20 Jun 19:23	22 Sep 15:23	21 Dec 21:46	00:29
2567 AD	20 Mar 17:25	21 Jun 01:07	22 Sep 21:06	22 Dec 03:38	00:29
2568 AD	19 Mar 23:23	20 Jun 06:56	22 Sep 02:53	21 Dec 09:21	00:30
2569 AD	20 Mar 05:04	20 Jun 12:37	22 Sep 08:44	21 Dec 15:12	00:30
2570 AD	20 Mar 10:54	20 Jun 18:35	22 Sep 14:34	21 Dec 21:01	00:30
2571 AD	20 Mar 16:49	21 Jun 00:28	22 Sep 20:19	22 Dec 02:50	00:30
2572 AD	19 Mar 22:33	20 Jun 06:05	22 Sep 02:07	21 Dec 08:45	00:30
2573 AD	20 Mar 04:26	20 Jun 12:01	22 Sep 08:04	21 Dec 14:32	00:30
2574 AD	20 Mar 10:16	20 Jun 17:54	22 Sep 13:54	21 Dec 20:19	00:30
2575 AD	20 Mar 16:06	20 Jun 23:39	22 Sep 19:41	22 Dec 02:14	00:30
2576 AD	19 Mar 22:01	20 Jun 05:32	22 Sep 01:33	21 Dec 08:05	00:30
2577 AD	20 Mar 03:41	20 Jun 11:15	22 Sep 07:23	21 Dec 13:58	00:30
2578 AD	20 Mar 09:31	20 Jun 17:08	22 Sep 13:13	21 Dec 19:50	00:30
2579 AD	20 Mar 15:29	20 Jun 23:00	22 Sep 18:58	22 Dec 01:37	00:30
2580 AD	19 Mar 21:16	20 Jun 04:33	22 Sep 00:43	21 Dec 07:28	00:30
2581 AD	20 Mar 03:07	20 Jun 10:27	22 Sep 06:36	21 Dec 13:14	00:31
2582 AD	20 Mar 08:55	20 Jun 16:20	22 Sep 12:20	21 Dec 18:59	00:31
2583 AD	20 Mar 14:40	20 Jun 22:02	22 Sep 17:59	22 Dec 00:48	00:31
2584 AD	19 Mar 20:31	20 Jun 03:52	21 Sep 23:50	21 Dec 06:34	00:31
2585 AD	20 Mar 02:10	20 Jun 09:32	22 Sep 05:37	21 Dec 12:18	00:31
2586 AD	20 Mar 07:55	20 Jun 15:21	22 Sep 11:27	21 Dec 18:05	00:31
2587 AD	20 Mar 13:49	20 Jun 21:11	22 Sep 17:14	21 Dec 23:54	00:31
2588 AD	19 Mar 19:29	20 Jun 02:43	21 Sep 22:57	21 Dec 05:48	00:31
2589 AD	20 Mar 01:18	20 Jun 08:36	22 Sep 04:52	21 Dec 11:41	00:31
2590 AD	20 Mar 07:10	20 Jun 14:30	22 Sep 10:38	21 Dec 17:30	00:31
2591 AD	20 Mar 13:03	20 Jun 20:13	22 Sep 16:21	21 Dec 23:23	00:31
2592 AD	19 Mar 19:03	20 Jun 02:07	21 Sep 22:16	21 Dec 05:13	00:31
2593 AD	20 Mar 00:51	20 Jun 07:57	22 Sep 04:07	21 Dec 11:02	00:32
2594 AD	20 Mar 06:40	20 Jun 13:53	22 Sep 09:57	21 Dec 16:53	00:32
2595 AD	20 Mar 12:36	20 Jun 19:51	22 Sep 15:48	21 Dec 22:45	00:32
2596 AD	19 Mar 18:21	20 Jun 01:28	21 Sep 21:34	21 Dec 04:35	00:32
2597 AD	20 Mar 00:09	20 Jun 07:20	22 Sep 03:32	21 Dec 10:23	00:32
2598 AD	20 Mar 05:59	20 Jun 13:13	22 Sep 09:20	21 Dec 16:09	00:32
2599 AD	20 Mar 11:46	20 Jun 18:50	22 Sep 15:00	21 Dec 21:58	00:32

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2600 AD	20 Mar 17:33	21 Jun 00:38	22 Sep 20:52	22 Dec 03:50	00:32
2601 AD	20 Mar 23:14	21 Jun 06:21	23 Sep 02:37	22 Dec 09:38	00:32
2602 AD	21 Mar 05:00	21 Jun 12:06	23 Sep 08:19	22 Dec 15:24	00:32
2603 AD	21 Mar 10:55	21 Jun 17:56	23 Sep 14:06	22 Dec 21:14	00:32
2604 AD	20 Mar 16:44	20 Jun 23:30	22 Sep 19:47	22 Dec 02:59	00:32
2605 AD	20 Mar 22:30	21 Jun 05:21	23 Sep 01:40	22 Dec 08:47	00:33
2606 AD	21 Mar 04:21	21 Jun 11:20	23 Sep 07:28	22 Dec 14:36	00:33
2607 AD	21 Mar 10:10	21 Jun 17:01	23 Sep 13:06	22 Dec 20:24	00:33
2608 AD	20 Mar 15:59	20 Jun 22:53	22 Sep 19:03	22 Dec 02:16	00:33
2609 AD	20 Mar 21:46	21 Jun 04:43	23 Sep 00:55	22 Dec 08:02	00:33
2610 AD	21 Mar 03:34	21 Jun 10:32	23 Sep 06:44	22 Dec 13:51	00:33
2611 AD	21 Mar 09:29	21 Jun 16:27	23 Sep 12:40	22 Dec 19:48	00:33
2612 AD	20 Mar 15:16	20 Jun 22:06	22 Sep 18:25	22 Dec 01:41	00:33
2613 AD	20 Mar 21:03	21 Jun 03:56	23 Sep 00:20	22 Dec 07:35	00:33
2614 AD	21 Mar 02:57	21 Jun 09:54	23 Sep 06:12	22 Dec 13:28	00:33
2615 AD	21 Mar 08:53	21 Jun 15:33	23 Sep 11:48	22 Dec 19:14	00:33
2616 AD	20 Mar 14:45	20 Jun 21:23	22 Sep 17:44	22 Dec 01:05	00:33
2617 AD	20 Mar 20:33	21 Jun 03:13	22 Sep 23:32	22 Dec 06:51	00:34
2618 AD	21 Mar 02:18	21 Jun 09:01	23 Sep 05:12	22 Dec 12:36	00:34
2619 AD	21 Mar 08:07	21 Jun 14:53	23 Sep 11:02	22 Dec 18:27	00:34
2620 AD	20 Mar 13:53	20 Jun 20:29	22 Sep 16:43	22 Dec 00:10	00:34
2621 AD	20 Mar 19:36	21 Jun 02:15	22 Sep 22:35	22 Dec 05:55	00:34
2622 AD	21 Mar 01:24	21 Jun 08:09	23 Sep 04:27	22 Dec 11:44	00:34
2623 AD	21 Mar 07:13	21 Jun 13:47	23 Sep 10:02	22 Dec 17:29	00:34
2624 AD	20 Mar 12:57	20 Jun 19:32	22 Sep 15:56	21 Dec 23:24	00:34
2625 AD	20 Mar 18:42	21 Jun 01:23	22 Sep 21:46	22 Dec 05:15	00:34
2626 AD	21 Mar 00:33	21 Jun 07:09	23 Sep 03:26	22 Dec 11:01	00:34
2627 AD	21 Mar 06:28	21 Jun 13:02	23 Sep 09:22	22 Dec 16:57	00:34
2628 AD	20 Mar 12:23	20 Jun 18:46	22 Sep 15:09	21 Dec 22:46	00:34
2629 AD	20 Mar 18:12	21 Jun 00:38	22 Sep 21:02	22 Dec 04:35	00:35
2630 AD	21 Mar 00:02	21 Jun 06:40	23 Sep 02:58	22 Dec 10:31	00:35
2631 AD	21 Mar 05:58	21 Jun 12:25	23 Sep 08:37	22 Dec 16:18	00:35
2632 AD	20 Mar 11:44	20 Jun 18:12	22 Sep 14:33	21 Dec 22:09	00:35
2633 AD	20 Mar 17:31	21 Jun 00:04	22 Sep 20:28	22 Dec 04:00	00:35
2634 AD	20 Mar 23:22	21 Jun 05:49	23 Sep 02:09	22 Dec 09:41	00:35
2635 AD	21 Mar 05:08	21 Jun 11:37	23 Sep 08:01	22 Dec 15:38	00:35
2636 AD	20 Mar 10:56	20 Jun 17:18	22 Sep 13:45	21 Dec 21:28	00:35
2637 AD	20 Mar 16:40	20 Jun 23:01	22 Sep 19:30	22 Dec 03:14	00:35
2638 AD	20 Mar 22:28	21 Jun 04:55	23 Sep 01:22	22 Dec 09:07	00:35
2639 AD	21 Mar 04:26	21 Jun 10:35	23 Sep 06:55	22 Dec 14:47	00:35
2640 AD	20 Mar 10:12	20 Jun 16:19	22 Sep 12:46	21 Dec 20:35	00:36
2641 AD	20 Mar 15:57	20 Jun 22:13	22 Sep 18:38	22 Dec 02:26	00:36
2642 AD	20 Mar 21:46	21 Jun 04:02	23 Sep 00:16	22 Dec 08:06	00:36
2643 AD	21 Mar 03:32	21 Jun 09:51	23 Sep 06:09	22 Dec 14:01	00:36
2644 AD	20 Mar 09:21	20 Jun 15:34	22 Sep 11:58	21 Dec 19:49	00:36
2645 AD	20 Mar 15:08	20 Jun 21:21	22 Sep 17:48	22 Dec 01:33	00:36
2646 AD	20 Mar 20:55	21 Jun 03:17	22 Sep 23:47	22 Dec 07:31	00:36
2647 AD	21 Mar 02:52	21 Jun 09:02	23 Sep 05:27	22 Dec 13:20	00:36
2648 AD	20 Mar 08:38	20 Jun 14:46	22 Sep 11:20	21 Dec 19:16	00:36
2649 AD	20 Mar 14:24	20 Jun 20:39	22 Sep 17:15	22 Dec 01:13	00:36

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2650 AD	20 Mar 20:21	21 Jun 02:29	22 Sep 22:54	22 Dec 06:55	00:36
2651 AD	21 Mar 02:15	21 Jun 08:17	23 Sep 04:47	22 Dec 12:50	00:36
2652 AD	20 Mar 08:08	20 Jun 14:03	22 Sep 10:36	21 Dec 18:41	00:37
2653 AD	20 Mar 13:58	20 Jun 19:55	22 Sep 16:22	22 Dec 00:23	00:37
2654 AD	20 Mar 19:42	21 Jun 01:50	22 Sep 22:16	22 Dec 06:18	00:37
2655 AD	21 Mar 01:37	21 Jun 07:36	23 Sep 03:53	22 Dec 12:02	00:37
2656 AD	20 Mar 07:22	20 Jun 13:17	22 Sep 09:42	21 Dec 17:46	00:37
2657 AD	20 Mar 13:02	20 Jun 19:07	22 Sep 15:39	21 Dec 23:36	00:37
2658 AD	20 Mar 18:53	21 Jun 00:54	22 Sep 21:17	22 Dec 05:15	00:37
2659 AD	21 Mar 00:36	21 Jun 06:36	23 Sep 03:06	22 Dec 11:10	00:37
2660 AD	20 Mar 06:19	20 Jun 12:18	22 Sep 08:55	21 Dec 17:05	00:37
2661 AD	20 Mar 12:09	20 Jun 18:04	22 Sep 14:39	21 Dec 22:47	00:37
2662 AD	20 Mar 17:55	20 Jun 23:54	22 Sep 20:32	22 Dec 04:43	00:37
2663 AD	20 Mar 23:56	21 Jun 05:41	23 Sep 02:13	22 Dec 10:30	00:38
2664 AD	20 Mar 05:47	20 Jun 11:26	22 Sep 08:01	21 Dec 16:17	00:38
2665 AD	20 Mar 11:29	20 Jun 17:21	22 Sep 13:59	21 Dec 22:15	00:38
2666 AD	20 Mar 17:27	20 Jun 23:17	22 Sep 19:39	22 Dec 03:57	00:38
2667 AD	20 Mar 23:14	21 Jun 05:03	23 Sep 01:30	22 Dec 09:51	00:38
2668 AD	20 Mar 05:03	20 Jun 10:50	22 Sep 07:27	21 Dec 15:46	00:38
2669 AD	20 Mar 10:57	20 Jun 16:41	22 Sep 13:15	21 Dec 21:26	00:38
2670 AD	20 Mar 16:41	20 Jun 22:33	22 Sep 19:11	22 Dec 03:23	00:38
2671 AD	20 Mar 22:37	21 Jun 04:19	23 Sep 00:53	22 Dec 09:15	00:38
2672 AD	20 Mar 04:24	20 Jun 10:02	22 Sep 06:39	21 Dec 15:02	00:38
2673 AD	20 Mar 10:04	20 Jun 15:51	22 Sep 12:33	21 Dec 20:58	00:38
2674 AD	20 Mar 16:02	20 Jun 21:42	22 Sep 18:12	22 Dec 02:37	00:39
2675 AD	20 Mar 21:52	21 Jun 03:24	22 Sep 23:57	22 Dec 08:25	00:39
2676 AD	20 Mar 03:36	20 Jun 09:08	22 Sep 05:50	21 Dec 14:19	00:39
2677 AD	20 Mar 09:27	20 Jun 15:00	22 Sep 11:33	21 Dec 19:57	00:39
2678 AD	20 Mar 15:08	20 Jun 20:49	22 Sep 17:22	22 Dec 01:50	00:39
2679 AD	20 Mar 21:00	21 Jun 02:34	22 Sep 23:05	22 Dec 07:39	00:39
2680 AD	20 Mar 02:49	20 Jun 08:17	22 Sep 04:52	21 Dec 13:20	00:39
2681 AD	20 Mar 08:27	20 Jun 14:03	22 Sep 10:48	21 Dec 19:14	00:39
2682 AD	20 Mar 14:22	20 Jun 19:56	22 Sep 16:31	22 Dec 00:59	00:39
2683 AD	20 Mar 20:11	21 Jun 01:40	22 Sep 22:17	22 Dec 06:52	00:39
2684 AD	20 Mar 01:53	20 Jun 07:24	22 Sep 04:13	21 Dec 12:53	00:39
2685 AD	20 Mar 07:51	20 Jun 13:20	22 Sep 10:00	21 Dec 18:38	00:40
2686 AD	20 Mar 13:42	20 Jun 19:09	22 Sep 15:52	22 Dec 00:32	00:40
2687 AD	20 Mar 19:42	21 Jun 00:58	22 Sep 21:40	22 Dec 06:26	00:40
2688 AD	20 Mar 01:38	20 Jun 06:49	22 Sep 03:28	21 Dec 12:09	00:40
2689 AD	20 Mar 07:17	20 Jun 12:41	22 Sep 09:23	21 Dec 18:05	00:40
2690 AD	20 Mar 13:12	20 Jun 18:38	22 Sep 15:07	21 Dec 23:49	00:40
2691 AD	20 Mar 19:02	21 Jun 00:22	22 Sep 20:52	22 Dec 05:35	00:40
2692 AD	20 Mar 00:41	20 Jun 06:03	22 Sep 02:48	21 Dec 11:30	00:40
2693 AD	20 Mar 06:34	20 Jun 11:55	22 Sep 08:36	21 Dec 17:08	00:40
2694 AD	20 Mar 12:15	20 Jun 17:39	22 Sep 14:22	21 Dec 23:00	00:40
2695 AD	20 Mar 18:03	20 Jun 23:20	22 Sep 20:06	22 Dec 04:55	00:41
2696 AD	19 Mar 23:52	20 Jun 05:03	22 Sep 01:49	21 Dec 10:38	00:41
2697 AD	20 Mar 05:29	20 Jun 10:46	22 Sep 07:38	21 Dec 16:32	00:41
2698 AD	20 Mar 11:28	20 Jun 16:38	22 Sep 13:19	21 Dec 22:14	00:41
2699 AD	20 Mar 17:22	20 Jun 22:22	22 Sep 19:02	22 Dec 03:59	00:41

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2700 AD	20 Mar 23:03	21 Jun 04:06	23 Sep 00:57	22 Dec 09:56	00:41
2701 AD	21 Mar 04:59	21 Jun 10:06	23 Sep 06:46	22 Dec 15:40	00:41
2702 AD	21 Mar 10:45	21 Jun 15:57	23 Sep 12:35	22 Dec 21:32	00:41
2703 AD	21 Mar 16:37	21 Jun 21:43	23 Sep 18:25	23 Dec 03:27	00:41
2704 AD	20 Mar 22:33	21 Jun 03:35	23 Sep 00:17	22 Dec 09:10	00:41
2705 AD	21 Mar 04:14	21 Jun 09:22	23 Sep 06:12	22 Dec 15:05	00:41
2706 AD	21 Mar 10:08	21 Jun 15:17	23 Sep 12:01	22 Dec 20:56	00:42
2707 AD	21 Mar 16:01	21 Jun 21:05	23 Sep 17:46	23 Dec 02:46	00:42
2708 AD	20 Mar 21:40	21 Jun 02:44	22 Sep 23:40	22 Dec 08:46	00:42
2709 AD	21 Mar 03:36	21 Jun 08:40	23 Sep 05:29	22 Dec 14:30	00:42
2710 AD	21 Mar 09:28	21 Jun 14:27	23 Sep 11:14	22 Dec 20:17	00:42
2711 AD	21 Mar 15:18	21 Jun 20:07	23 Sep 16:59	23 Dec 02:10	00:42
2712 AD	20 Mar 21:12	21 Jun 01:59	22 Sep 22:45	22 Dec 07:52	00:42
2713 AD	21 Mar 02:49	21 Jun 07:43	23 Sep 04:31	22 Dec 13:41	00:42
2714 AD	21 Mar 08:37	21 Jun 13:34	23 Sep 10:14	22 Dec 19:26	00:42
2715 AD	21 Mar 14:30	21 Jun 19:20	23 Sep 15:57	23 Dec 01:08	00:42
2716 AD	20 Mar 20:06	21 Jun 00:56	22 Sep 21:49	22 Dec 07:00	00:42
2717 AD	21 Mar 01:58	21 Jun 06:52	23 Sep 03:41	22 Dec 12:44	00:43
2718 AD	21 Mar 07:46	21 Jun 12:40	23 Sep 09:27	22 Dec 18:33	00:43
2719 AD	21 Mar 13:31	21 Jun 18:19	23 Sep 15:14	23 Dec 00:33	00:43
2720 AD	20 Mar 19:26	21 Jun 00:12	22 Sep 21:04	22 Dec 06:21	00:43
2721 AD	21 Mar 01:10	21 Jun 05:58	23 Sep 02:54	22 Dec 12:13	00:43
2722 AD	21 Mar 07:07	21 Jun 11:52	23 Sep 08:43	22 Dec 18:04	00:43
2723 AD	21 Mar 13:09	21 Jun 17:45	23 Sep 14:31	22 Dec 23:52	00:43
2724 AD	20 Mar 18:50	20 Jun 23:28	22 Sep 20:24	22 Dec 05:49	00:43
2725 AD	21 Mar 00:43	21 Jun 05:29	23 Sep 02:18	22 Dec 11:37	00:43
2726 AD	21 Mar 06:35	21 Jun 11:22	23 Sep 08:05	22 Dec 17:25	00:43
2727 AD	21 Mar 12:22	21 Jun 17:00	23 Sep 13:52	22 Dec 23:19	00:44
2728 AD	20 Mar 18:15	20 Jun 22:51	22 Sep 19:44	22 Dec 05:02	00:44
2729 AD	20 Mar 23:55	21 Jun 04:34	23 Sep 01:31	22 Dec 10:49	00:44
2730 AD	21 Mar 05:42	21 Jun 10:21	23 Sep 07:15	22 Dec 16:39	00:44
2731 AD	21 Mar 11:34	21 Jun 16:08	23 Sep 12:57	22 Dec 22:27	00:44
2732 AD	20 Mar 17:11	20 Jun 21:43	22 Sep 18:43	22 Dec 04:19	00:44
2733 AD	20 Mar 23:02	21 Jun 03:35	23 Sep 00:33	22 Dec 10:04	00:44
2734 AD	21 Mar 04:57	21 Jun 09:26	23 Sep 06:17	22 Dec 15:48	00:44
2735 AD	21 Mar 10:45	21 Jun 15:03	23 Sep 12:00	22 Dec 21:40	00:44
2736 AD	20 Mar 16:37	20 Jun 20:58	22 Sep 17:53	22 Dec 03:28	00:44
2737 AD	20 Mar 22:20	21 Jun 02:49	22 Sep 23:40	22 Dec 09:15	00:45
2738 AD	21 Mar 04:08	21 Jun 08:39	23 Sep 05:27	22 Dec 15:05	00:45
2739 AD	21 Mar 10:05	21 Jun 14:32	23 Sep 11:18	22 Dec 20:54	00:45
2740 AD	20 Mar 15:46	20 Jun 20:10	22 Sep 17:11	22 Dec 02:46	00:45
2741 AD	20 Mar 21:36	21 Jun 02:06	22 Sep 23:08	22 Dec 08:37	00:45
2742 AD	21 Mar 03:31	21 Jun 08:01	23 Sep 04:57	22 Dec 14:30	00:45
2743 AD	21 Mar 09:18	21 Jun 13:37	23 Sep 10:40	22 Dec 20:28	00:45
2744 AD	20 Mar 15:10	20 Jun 19:30	22 Sep 16:35	22 Dec 02:20	00:45
2745 AD	20 Mar 21:01	21 Jun 01:19	22 Sep 22:20	22 Dec 08:05	00:45
2746 AD	21 Mar 02:53	21 Jun 07:04	23 Sep 04:03	22 Dec 13:53	00:45
2747 AD	21 Mar 08:51	21 Jun 12:59	23 Sep 09:52	22 Dec 19:42	00:45
2748 AD	20 Mar 14:31	20 Jun 18:39	22 Sep 15:38	22 Dec 01:29	00:46
2749 AD	20 Mar 20:16	21 Jun 00:33	22 Sep 21:29	22 Dec 07:16	00:46

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2750 AD	21 Mar 02:09	21 Jun 06:27	23 Sep 03:14	22 Dec 13:01	00:46
2751 AD	21 Mar 07:53	21 Jun 11:59	23 Sep 08:55	22 Dec 18:49	00:46
2752 AD	20 Mar 13:39	20 Jun 17:48	22 Sep 14:51	22 Dec 00:35	00:46
2753 AD	20 Mar 19:24	20 Jun 23:37	22 Sep 20:37	22 Dec 06:20	00:46
2754 AD	21 Mar 01:08	21 Jun 05:19	23 Sep 02:19	22 Dec 12:11	00:46
2755 AD	21 Mar 06:59	21 Jun 11:10	23 Sep 08:09	22 Dec 18:05	00:46
2756 AD	20 Mar 12:42	20 Jun 16:49	22 Sep 13:55	21 Dec 23:56	00:46
2757 AD	20 Mar 18:33	20 Jun 22:40	22 Sep 19:48	22 Dec 05:46	00:46
2758 AD	21 Mar 00:33	21 Jun 04:37	23 Sep 01:39	22 Dec 11:36	00:47
2759 AD	21 Mar 06:26	21 Jun 10:16	23 Sep 07:21	22 Dec 17:29	00:47
2760 AD	20 Mar 12:16	20 Jun 16:11	22 Sep 13:18	21 Dec 23:21	00:47
2761 AD	20 Mar 18:05	20 Jun 22:08	22 Sep 19:07	22 Dec 05:09	00:47
2762 AD	20 Mar 23:56	21 Jun 03:54	23 Sep 00:49	22 Dec 10:57	00:47
2763 AD	21 Mar 05:49	21 Jun 09:47	23 Sep 06:44	22 Dec 16:48	00:47
2764 AD	20 Mar 11:34	20 Jun 15:30	22 Sep 12:34	21 Dec 22:35	00:47
2765 AD	20 Mar 17:19	20 Jun 21:19	22 Sep 18:25	22 Dec 04:23	00:47
2766 AD	20 Mar 23:11	21 Jun 03:13	23 Sep 00:15	22 Dec 10:16	00:47
2767 AD	21 Mar 04:57	21 Jun 08:47	23 Sep 05:52	22 Dec 16:07	00:47
2768 AD	20 Mar 10:43	20 Jun 14:33	22 Sep 11:45	21 Dec 21:57	00:48
2769 AD	20 Mar 16:33	20 Jun 20:25	22 Sep 17:31	22 Dec 03:41	00:48
2770 AD	20 Mar 22:25	21 Jun 02:06	22 Sep 23:08	22 Dec 09:24	00:48
2771 AD	21 Mar 04:15	21 Jun 07:57	23 Sep 05:00	22 Dec 15:16	00:48
2772 AD	20 Mar 09:58	20 Jun 13:43	22 Sep 10:46	21 Dec 21:02	00:48
2773 AD	20 Mar 15:42	20 Jun 19:32	22 Sep 16:34	22 Dec 02:48	00:48
2774 AD	20 Mar 21:34	21 Jun 01:28	22 Sep 22:27	22 Dec 08:41	00:48
2775 AD	21 Mar 03:24	21 Jun 07:03	23 Sep 04:08	22 Dec 14:27	00:48
2776 AD	20 Mar 09:09	20 Jun 12:51	22 Sep 10:06	21 Dec 20:19	00:48
2777 AD	20 Mar 15:00	20 Jun 18:47	22 Sep 15:58	22 Dec 02:10	00:49
2778 AD	20 Mar 20:50	21 Jun 00:30	22 Sep 21:36	22 Dec 07:59	00:49
2779 AD	21 Mar 02:41	21 Jun 06:22	23 Sep 03:31	22 Dec 13:59	00:49
2780 AD	20 Mar 08:31	20 Jun 12:09	22 Sep 09:21	21 Dec 19:49	00:49
2781 AD	20 Mar 14:23	20 Jun 17:59	22 Sep 15:10	22 Dec 01:35	00:49
2782 AD	20 Mar 20:20	20 Jun 23:56	22 Sep 21:04	22 Dec 07:29	00:49
2783 AD	21 Mar 02:13	21 Jun 05:38	23 Sep 02:44	22 Dec 13:17	00:49
2784 AD	20 Mar 07:58	20 Jun 11:27	22 Sep 08:37	21 Dec 19:06	00:49
2785 AD	20 Mar 13:44	20 Jun 17:24	22 Sep 14:28	22 Dec 00:54	00:49
2786 AD	20 Mar 19:35	20 Jun 23:05	22 Sep 20:04	22 Dec 06:35	00:49
2787 AD	21 Mar 01:20	21 Jun 04:50	23 Sep 01:57	22 Dec 12:26	00:50
2788 AD	20 Mar 07:03	20 Jun 10:34	22 Sep 07:47	21 Dec 18:11	00:50
2789 AD	20 Mar 12:48	20 Jun 16:19	22 Sep 13:31	21 Dec 23:55	00:50
2790 AD	20 Mar 18:33	20 Jun 22:09	22 Sep 19:22	22 Dec 05:52	00:50
2791 AD	21 Mar 00:23	21 Jun 03:46	23 Sep 00:59	22 Dec 11:42	00:50
2792 AD	20 Mar 06:09	20 Jun 09:28	22 Sep 06:49	21 Dec 17:30	00:50
2793 AD	20 Mar 12:00	20 Jun 15:23	22 Sep 12:41	21 Dec 23:20	00:50
2794 AD	20 Mar 17:59	20 Jun 21:09	22 Sep 18:17	22 Dec 05:03	00:50
2795 AD	20 Mar 23:48	21 Jun 03:00	23 Sep 00:11	22 Dec 10:58	00:50
2796 AD	20 Mar 05:36	20 Jun 08:55	22 Sep 06:05	21 Dec 16:50	00:50
2797 AD	20 Mar 11:26	20 Jun 14:47	22 Sep 11:51	21 Dec 22:34	00:51
2798 AD	20 Mar 17:16	20 Jun 20:42	22 Sep 17:49	22 Dec 04:31	00:51
2799 AD	20 Mar 23:11	21 Jun 02:25	22 Sep 23:35	22 Dec 10:20	00:51

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2800 AD	20 Mar 04:57	20 Jun 08:11	22 Sep 05:29	21 Dec 16:08	00:51
2801 AD	20 Mar 10:43	20 Jun 14:07	22 Sep 11:25	21 Dec 22:03	00:51
2802 AD	20 Mar 16:37	20 Jun 19:51	22 Sep 17:01	22 Dec 03:49	00:51
2803 AD	20 Mar 22:22	21 Jun 01:34	22 Sep 22:50	22 Dec 09:44	00:51
2804 AD	20 Mar 04:09	20 Jun 07:21	22 Sep 04:42	21 Dec 15:34	00:51
2805 AD	20 Mar 10:01	20 Jun 13:07	22 Sep 10:22	21 Dec 21:11	00:51
2806 AD	20 Mar 15:50	20 Jun 18:57	22 Sep 16:13	22 Dec 03:06	00:52
2807 AD	20 Mar 21:41	21 Jun 00:39	22 Sep 21:53	22 Dec 08:52	00:52
2808 AD	20 Mar 03:24	20 Jun 06:23	22 Sep 03:39	21 Dec 14:36	00:52
2809 AD	20 Mar 09:07	20 Jun 12:18	22 Sep 09:33	21 Dec 20:28	00:52
2810 AD	20 Mar 15:01	20 Jun 18:02	22 Sep 15:08	22 Dec 02:07	00:52
2811 AD	20 Mar 20:46	20 Jun 23:45	22 Sep 20:59	22 Dec 07:58	00:52
2812 AD	20 Mar 02:30	20 Jun 05:34	22 Sep 02:56	21 Dec 13:51	00:52
2813 AD	20 Mar 08:22	20 Jun 11:25	22 Sep 08:40	21 Dec 19:34	00:52
2814 AD	20 Mar 14:08	20 Jun 17:15	22 Sep 14:34	22 Dec 01:35	00:52
2815 AD	20 Mar 20:02	20 Jun 23:00	22 Sep 20:20	22 Dec 07:31	00:52
2816 AD	20 Mar 01:54	20 Jun 04:47	22 Sep 02:10	21 Dec 13:17	00:53
2817 AD	20 Mar 07:45	20 Jun 10:43	22 Sep 08:09	21 Dec 19:12	00:53
2818 AD	20 Mar 13:47	20 Jun 16:34	22 Sep 13:48	22 Dec 00:57	00:53
2819 AD	20 Mar 19:36	20 Jun 22:21	22 Sep 19:37	22 Dec 06:50	00:53
2820 AD	20 Mar 01:18	20 Jun 04:14	22 Sep 01:34	21 Dec 12:44	00:53
2821 AD	20 Mar 07:11	20 Jun 10:06	22 Sep 07:16	21 Dec 18:22	00:53
2822 AD	20 Mar 12:56	20 Jun 15:51	22 Sep 13:06	22 Dec 00:14	00:53
2823 AD	20 Mar 18:45	20 Jun 21:32	22 Sep 18:53	22 Dec 06:04	00:53
2824 AD	20 Mar 00:32	20 Jun 03:15	22 Sep 00:38	21 Dec 11:44	00:53
2825 AD	20 Mar 06:10	20 Jun 09:03	22 Sep 06:30	21 Dec 17:38	00:54
2826 AD	20 Mar 12:05	20 Jun 14:49	22 Sep 12:05	21 Dec 23:24	00:54
2827 AD	20 Mar 17:49	20 Jun 20:28	22 Sep 17:48	22 Dec 05:13	00:54
2828 AD	19 Mar 23:32	20 Jun 02:15	21 Sep 23:44	21 Dec 11:06	00:54
2829 AD	20 Mar 05:30	20 Jun 08:07	22 Sep 05:25	21 Dec 16:43	00:54
2830 AD	20 Mar 11:19	20 Jun 13:56	22 Sep 11:15	21 Dec 22:37	00:54
2831 AD	20 Mar 17:09	20 Jun 19:43	22 Sep 17:05	22 Dec 04:33	00:54
2832 AD	19 Mar 23:00	20 Jun 01:35	21 Sep 22:53	21 Dec 10:15	00:54
2833 AD	20 Mar 04:43	20 Jun 07:29	22 Sep 04:50	21 Dec 16:11	00:54
2834 AD	20 Mar 10:43	20 Jun 13:21	22 Sep 10:34	21 Dec 21:58	00:55
2835 AD	20 Mar 16:32	20 Jun 19:05	22 Sep 16:25	22 Dec 03:47	00:55
2836 AD	19 Mar 22:13	20 Jun 00:53	21 Sep 22:26	21 Dec 09:46	00:55
2837 AD	20 Mar 04:09	20 Jun 06:48	22 Sep 04:10	21 Dec 15:29	00:55
2838 AD	20 Mar 09:55	20 Jun 12:33	22 Sep 09:58	21 Dec 21:27	00:55
2839 AD	20 Mar 15:44	20 Jun 18:14	22 Sep 15:46	22 Dec 03:23	00:55
2840 AD	19 Mar 21:39	20 Jun 00:01	21 Sep 21:30	21 Dec 09:02	00:55
2841 AD	20 Mar 03:25	20 Jun 05:50	22 Sep 03:21	21 Dec 14:53	00:55
2842 AD	20 Mar 09:22	20 Jun 11:39	22 Sep 08:59	21 Dec 20:38	00:55
2843 AD	20 Mar 15:09	20 Jun 17:25	22 Sep 14:42	22 Dec 02:22	00:55
2844 AD	19 Mar 20:45	19 Jun 23:11	21 Sep 20:37	21 Dec 08:15	00:56
2845 AD	20 Mar 02:38	20 Jun 05:05	22 Sep 02:20	21 Dec 13:53	00:56
2846 AD	20 Mar 08:24	20 Jun 10:48	22 Sep 08:05	21 Dec 19:42	00:56
2847 AD	20 Mar 14:08	20 Jun 16:28	22 Sep 13:58	22 Dec 01:36	00:56
2848 AD	19 Mar 19:59	19 Jun 22:18	21 Sep 19:46	21 Dec 07:17	00:56
2849 AD	20 Mar 01:39	20 Jun 04:05	22 Sep 01:37	21 Dec 13:13	00:56

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2850 AD	20 Mar 07:34	20 Jun 09:54	22 Sep 07:21	21 Dec 19:08	00:56
2851 AD	20 Mar 13:27	20 Jun 15:40	22 Sep 13:06	22 Dec 00:56	00:56
2852 AD	19 Mar 19:10	19 Jun 21:26	21 Sep 19:05	21 Dec 06:52	00:56
2853 AD	20 Mar 01:13	20 Jun 03:25	22 Sep 00:53	21 Dec 12:37	00:57
2854 AD	20 Mar 07:06	20 Jun 09:14	22 Sep 06:39	21 Dec 18:28	00:57
2855 AD	20 Mar 12:51	20 Jun 14:59	22 Sep 12:32	22 Dec 00:28	00:57
2856 AD	19 Mar 18:47	19 Jun 20:56	21 Sep 18:20	21 Dec 06:09	00:57
2857 AD	20 Mar 00:30	20 Jun 02:44	22 Sep 00:10	21 Dec 11:59	00:57
2858 AD	20 Mar 06:24	20 Jun 08:32	22 Sep 05:55	21 Dec 17:49	00:57
2859 AD	20 Mar 12:16	20 Jun 14:17	22 Sep 11:41	21 Dec 23:30	00:57
2860 AD	19 Mar 17:51	19 Jun 19:59	21 Sep 17:36	21 Dec 05:24	00:57
2861 AD	19 Mar 23:42	20 Jun 01:54	21 Sep 23:20	21 Dec 11:09	00:57
2862 AD	20 Mar 05:29	20 Jun 07:36	22 Sep 05:01	21 Dec 16:58	00:58
2863 AD	20 Mar 11:11	20 Jun 13:12	22 Sep 10:50	21 Dec 22:55	00:58
2864 AD	19 Mar 17:07	19 Jun 19:04	21 Sep 16:37	21 Dec 04:34	00:58
2865 AD	19 Mar 22:53	20 Jun 00:50	21 Sep 22:24	21 Dec 10:21	00:58
2866 AD	20 Mar 04:46	20 Jun 06:39	22 Sep 04:08	21 Dec 16:14	00:58
2867 AD	20 Mar 10:38	20 Jun 12:30	22 Sep 09:53	21 Dec 21:58	00:58
2868 AD	19 Mar 16:15	19 Jun 18:15	21 Sep 15:48	21 Dec 03:52	00:58
2869 AD	19 Mar 22:09	20 Jun 00:12	21 Sep 21:37	21 Dec 09:37	00:58
2870 AD	20 Mar 04:02	20 Jun 05:59	22 Sep 03:24	21 Dec 15:27	00:58
2871 AD	20 Mar 09:45	20 Jun 11:37	22 Sep 09:19	21 Dec 21:25	00:59
2872 AD	19 Mar 15:40	19 Jun 17:33	21 Sep 15:11	21 Dec 03:11	00:59
2873 AD	19 Mar 21:26	19 Jun 23:23	21 Sep 20:59	21 Dec 09:05	00:59
2874 AD	20 Mar 03:18	20 Jun 05:09	22 Sep 02:44	21 Dec 15:02	00:59
2875 AD	20 Mar 09:16	20 Jun 11:00	22 Sep 08:31	21 Dec 20:48	00:59
2876 AD	19 Mar 14:59	19 Jun 16:42	21 Sep 14:23	21 Dec 02:38	00:59
2877 AD	19 Mar 20:55	19 Jun 22:39	21 Sep 20:11	21 Dec 08:23	00:59
2878 AD	20 Mar 02:49	20 Jun 04:30	22 Sep 01:54	21 Dec 14:09	00:59
2879 AD	20 Mar 08:27	20 Jun 10:07	22 Sep 07:43	21 Dec 20:04	00:59
2880 AD	19 Mar 14:18	19 Jun 16:02	21 Sep 13:33	21 Dec 01:46	01:00
2881 AD	19 Mar 20:02	19 Jun 21:49	21 Sep 19:18	21 Dec 07:30	01:00
2882 AD	20 Mar 01:49	20 Jun 03:29	22 Sep 01:02	21 Dec 13:21	01:00
2883 AD	20 Mar 07:41	20 Jun 09:17	22 Sep 06:51	21 Dec 19:05	01:00
2884 AD	19 Mar 13:17	19 Jun 14:57	21 Sep 12:40	21 Dec 00:55	01:00
2885 AD	19 Mar 19:05	19 Jun 20:50	21 Sep 18:27	21 Dec 06:47	01:00
2886 AD	20 Mar 00:59	20 Jun 02:38	22 Sep 00:09	21 Dec 12:36	01:00
2887 AD	20 Mar 06:41	20 Jun 08:12	22 Sep 05:58	21 Dec 18:33	01:00
2888 AD	19 Mar 12:40	19 Jun 14:09	21 Sep 11:53	21 Dec 00:19	01:00
2889 AD	19 Mar 18:34	19 Jun 20:02	21 Sep 17:39	21 Dec 06:06	01:01
2890 AD	20 Mar 00:26	20 Jun 01:50	21 Sep 23:25	21 Dec 12:03	01:01
2891 AD	20 Mar 06:22	20 Jun 07:47	22 Sep 05:17	21 Dec 17:51	01:01
2892 AD	19 Mar 12:04	19 Jun 13:34	21 Sep 11:09	20 Dec 23:41	01:01
2893 AD	19 Mar 17:55	19 Jun 19:30	21 Sep 17:01	21 Dec 05:29	01:01
2894 AD	19 Mar 23:52	20 Jun 01:21	21 Sep 22:49	21 Dec 11:16	01:01
2895 AD	20 Mar 05:32	20 Jun 06:55	22 Sep 04:39	21 Dec 17:10	01:01
2896 AD	19 Mar 11:20	19 Jun 12:49	21 Sep 10:34	20 Dec 22:58	01:01
2897 AD	19 Mar 17:08	19 Jun 18:39	21 Sep 16:17	21 Dec 04:46	01:02
2898 AD	19 Mar 22:53	20 Jun 00:16	21 Sep 21:57	21 Dec 10:41	01:02
2899 AD	20 Mar 04:46	20 Jun 06:04	22 Sep 03:45	21 Dec 16:27	01:02

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2900 AD	20 Mar 10:31	20 Jun 11:46	22 Sep 09:32	21 Dec 22:10	01:02
2901 AD	20 Mar 16:20	20 Jun 17:36	22 Sep 15:16	22 Dec 03:57	01:02
2902 AD	20 Mar 22:15	20 Jun 23:29	22 Sep 21:00	22 Dec 09:45	01:02
2903 AD	21 Mar 03:54	21 Jun 05:04	23 Sep 02:45	22 Dec 15:35	01:02
2904 AD	20 Mar 09:41	20 Jun 10:58	22 Sep 08:39	21 Dec 21:22	01:02
2905 AD	20 Mar 15:34	20 Jun 16:52	22 Sep 14:26	22 Dec 03:07	01:02
2906 AD	20 Mar 21:22	20 Jun 22:31	22 Sep 20:10	22 Dec 08:59	01:03
2907 AD	21 Mar 03:14	21 Jun 04:24	23 Sep 02:07	22 Dec 14:51	01:03
2908 AD	20 Mar 08:59	20 Jun 10:12	22 Sep 07:58	21 Dec 20:41	01:03
2909 AD	20 Mar 14:47	20 Jun 16:03	22 Sep 13:46	22 Dec 02:36	01:03
2910 AD	20 Mar 20:45	20 Jun 21:58	22 Sep 19:35	22 Dec 08:30	01:03
2911 AD	21 Mar 02:33	21 Jun 03:35	23 Sep 01:23	22 Dec 14:22	01:03
2912 AD	20 Mar 08:26	20 Jun 09:30	22 Sep 07:19	21 Dec 20:10	01:03
2913 AD	20 Mar 14:23	20 Jun 15:27	22 Sep 13:07	22 Dec 01:57	01:03
2914 AD	20 Mar 20:11	20 Jun 21:07	22 Sep 18:46	22 Dec 07:49	01:03
2915 AD	21 Mar 02:00	21 Jun 03:00	23 Sep 00:40	22 Dec 13:39	01:04
2916 AD	20 Mar 07:43	20 Jun 08:47	22 Sep 06:27	21 Dec 19:21	01:04
2917 AD	20 Mar 13:28	20 Jun 14:32	22 Sep 12:11	22 Dec 01:07	01:04
2918 AD	20 Mar 19:20	20 Jun 20:21	22 Sep 17:58	22 Dec 06:54	01:04
2919 AD	21 Mar 01:00	21 Jun 01:53	22 Sep 23:42	22 Dec 12:41	01:04
2920 AD	20 Mar 06:44	20 Jun 07:43	22 Sep 05:34	21 Dec 18:30	01:04
2921 AD	20 Mar 12:34	20 Jun 13:36	22 Sep 11:19	22 Dec 00:19	01:04
2922 AD	20 Mar 18:22	20 Jun 19:12	22 Sep 16:56	22 Dec 06:11	01:04
2923 AD	21 Mar 00:13	21 Jun 01:01	22 Sep 22:51	22 Dec 12:01	01:05
2924 AD	20 Mar 06:05	20 Jun 06:53	22 Sep 04:41	21 Dec 17:47	01:05
2925 AD	20 Mar 11:56	20 Jun 12:43	22 Sep 10:25	21 Dec 23:35	01:05
2926 AD	20 Mar 17:51	20 Jun 18:41	22 Sep 16:18	22 Dec 05:31	01:05
2927 AD	20 Mar 23:37	21 Jun 00:24	22 Sep 22:07	22 Dec 11:21	01:05
2928 AD	20 Mar 05:25	20 Jun 06:17	22 Sep 04:03	21 Dec 17:11	01:05
2929 AD	20 Mar 11:20	20 Jun 12:16	22 Sep 09:57	21 Dec 23:01	01:05
2930 AD	20 Mar 17:12	20 Jun 17:54	22 Sep 15:38	22 Dec 04:51	01:05
2931 AD	20 Mar 22:58	20 Jun 23:43	22 Sep 21:36	22 Dec 10:44	01:05
2932 AD	20 Mar 04:45	20 Jun 05:34	22 Sep 03:26	21 Dec 16:34	01:06
2933 AD	20 Mar 10:31	20 Jun 11:17	22 Sep 09:04	21 Dec 22:22	01:06
2934 AD	20 Mar 16:22	20 Jun 17:05	22 Sep 14:53	22 Dec 04:17	01:06
2935 AD	20 Mar 22:12	20 Jun 22:43	22 Sep 20:36	22 Dec 10:01	01:06
2936 AD	20 Mar 03:59	20 Jun 04:29	22 Sep 02:24	21 Dec 15:44	01:06
2937 AD	20 Mar 09:52	20 Jun 10:27	22 Sep 08:13	21 Dec 21:33	01:06
2938 AD	20 Mar 15:41	20 Jun 16:06	22 Sep 13:47	22 Dec 03:18	01:06
2939 AD	20 Mar 21:24	20 Jun 21:55	22 Sep 19:41	22 Dec 09:08	01:06
2940 AD	20 Mar 03:10	20 Jun 03:47	22 Sep 01:31	21 Dec 14:53	01:07
2941 AD	20 Mar 08:58	20 Jun 09:32	22 Sep 07:12	21 Dec 20:36	01:07
2942 AD	20 Mar 14:47	20 Jun 15:21	22 Sep 13:07	22 Dec 02:31	01:07
2943 AD	20 Mar 20:34	20 Jun 21:04	22 Sep 18:57	22 Dec 08:21	01:07
2944 AD	20 Mar 02:19	20 Jun 02:52	22 Sep 00:48	21 Dec 14:12	01:07
2945 AD	20 Mar 08:11	20 Jun 08:50	22 Sep 06:42	21 Dec 20:11	01:07
2946 AD	20 Mar 14:07	20 Jun 14:31	22 Sep 12:20	22 Dec 02:01	01:07
2947 AD	20 Mar 19:59	20 Jun 20:19	22 Sep 18:17	22 Dec 07:54	01:07
2948 AD	20 Mar 01:53	20 Jun 02:15	22 Sep 00:11	21 Dec 13:43	01:08
2949 AD	20 Mar 07:46	20 Jun 08:05	22 Sep 05:50	21 Dec 19:28	01:08

Equinox and Solstice are in UT, TT = UT + ΔT

Year	Spring Equinox	Summer Solstice	Autumn Equinox	Winter Solstice	ΔT
2950 AD	20 Mar 13:36	20 Jun 13:57	22 Sep 11:42	22 Dec 01:24	01:08
2951 AD	20 Mar 19:22	20 Jun 19:41	22 Sep 17:30	22 Dec 07:11	01:08
2952 AD	20 Mar 01:08	20 Jun 01:29	21 Sep 23:17	21 Dec 12:53	01:08
2953 AD	20 Mar 06:57	20 Jun 07:22	22 Sep 05:11	21 Dec 18:44	01:08
2954 AD	20 Mar 12:48	20 Jun 13:00	22 Sep 10:48	22 Dec 00:28	01:08
2955 AD	20 Mar 18:30	20 Jun 18:42	22 Sep 16:39	22 Dec 06:16	01:08
2956 AD	20 Mar 00:13	20 Jun 00:34	21 Sep 22:31	21 Dec 12:08	01:08
2957 AD	20 Mar 06:02	20 Jun 06:18	22 Sep 04:04	21 Dec 17:51	01:09
2958 AD	20 Mar 11:48	20 Jun 12:02	22 Sep 09:55	21 Dec 23:46	01:09
2959 AD	20 Mar 17:39	20 Jun 17:46	22 Sep 15:44	22 Dec 05:33	01:09
2960 AD	19 Mar 23:30	19 Jun 23:34	21 Sep 21:31	21 Dec 11:16	01:09
2961 AD	20 Mar 05:19	20 Jun 05:31	22 Sep 03:25	21 Dec 17:13	01:09
2962 AD	20 Mar 11:15	20 Jun 11:17	22 Sep 09:05	21 Dec 23:02	01:09
2963 AD	20 Mar 17:00	20 Jun 17:04	22 Sep 14:58	22 Dec 04:52	01:09
2964 AD	19 Mar 22:48	19 Jun 23:01	21 Sep 20:57	21 Dec 10:45	01:09
2965 AD	20 Mar 04:44	20 Jun 04:49	22 Sep 02:36	21 Dec 16:26	01:10
2966 AD	20 Mar 10:31	20 Jun 10:35	22 Sep 08:30	21 Dec 22:24	01:10
2967 AD	20 Mar 16:20	20 Jun 16:23	22 Sep 14:24	22 Dec 04:17	01:10
2968 AD	19 Mar 22:08	19 Jun 22:11	21 Sep 20:09	21 Dec 10:02	01:10
2969 AD	20 Mar 03:55	20 Jun 04:04	22 Sep 02:02	21 Dec 16:01	01:10
2970 AD	20 Mar 09:53	20 Jun 09:46	22 Sep 07:40	21 Dec 21:48	01:10
2971 AD	20 Mar 15:42	20 Jun 15:29	22 Sep 13:29	22 Dec 03:32	01:10
2972 AD	19 Mar 21:29	19 Jun 21:23	21 Sep 19:23	21 Dec 09:23	01:10
2973 AD	20 Mar 03:23	20 Jun 03:13	22 Sep 00:58	21 Dec 15:02	01:11
2974 AD	20 Mar 09:06	20 Jun 08:58	22 Sep 06:46	21 Dec 20:54	01:11
2975 AD	20 Mar 14:49	20 Jun 14:44	22 Sep 12:38	22 Dec 02:44	01:11
2976 AD	19 Mar 20:37	19 Jun 20:31	21 Sep 18:22	21 Dec 08:21	01:11
2977 AD	20 Mar 02:21	20 Jun 02:20	22 Sep 00:16	21 Dec 14:15	01:11
2978 AD	20 Mar 08:14	20 Jun 08:02	22 Sep 05:58	21 Dec 20:04	01:11
2979 AD	20 Mar 13:59	20 Jun 13:44	22 Sep 11:47	22 Dec 01:52	01:11
2980 AD	19 Mar 19:41	19 Jun 19:36	21 Sep 17:43	21 Dec 07:50	01:11
2981 AD	20 Mar 01:38	20 Jun 01:27	21 Sep 23:20	21 Dec 13:36	01:12
2982 AD	20 Mar 07:29	20 Jun 07:10	22 Sep 05:09	21 Dec 19:30	01:12
2983 AD	20 Mar 13:19	20 Jun 12:58	22 Sep 11:05	22 Dec 01:24	01:12
2984 AD	19 Mar 19:18	19 Jun 18:54	21 Sep 16:52	21 Dec 07:05	01:12
2985 AD	20 Mar 01:06	20 Jun 00:49	21 Sep 22:45	21 Dec 13:03	01:12
2986 AD	20 Mar 07:01	20 Jun 06:38	22 Sep 04:31	21 Dec 18:55	01:12
2987 AD	20 Mar 12:50	20 Jun 12:25	22 Sep 10:20	22 Dec 00:39	01:12
2988 AD	19 Mar 18:31	19 Jun 18:17	21 Sep 16:17	21 Dec 06:32	01:12
2989 AD	20 Mar 00:28	20 Jun 00:07	21 Sep 21:56	21 Dec 12:12	01:13
2990 AD	20 Mar 06:13	20 Jun 05:47	22 Sep 03:44	21 Dec 18:02	01:13
2991 AD	20 Mar 11:52	20 Jun 11:31	22 Sep 09:39	21 Dec 23:57	01:13
2992 AD	19 Mar 17:42	19 Jun 17:21	21 Sep 15:19	21 Dec 05:37	01:13
2993 AD	19 Mar 23:25	19 Jun 23:05	21 Sep 21:06	21 Dec 11:32	01:13
2994 AD	20 Mar 05:18	20 Jun 04:46	22 Sep 02:49	21 Dec 17:23	01:13
2995 AD	20 Mar 11:10	20 Jun 10:29	22 Sep 08:34	21 Dec 23:02	01:13
2996 AD	19 Mar 16:52	19 Jun 16:19	21 Sep 14:28	21 Dec 04:56	01:13
2997 AD	19 Mar 22:50	19 Jun 22:13	21 Sep 20:05	21 Dec 10:40	01:14
2998 AD	20 Mar 04:36	20 Jun 03:57	22 Sep 01:50	21 Dec 16:29	01:14
2999 AD	20 Mar 10:18	20 Jun 09:45	22 Sep 07:49	21 Dec 22:24	01:14

Equinox and Solstice are in UT, TT = UT + ΔT