P A U L   S C H E R R E R   I N S T I T U T

THE RADIATION ENVIRONMENT

MONITOR

Determination of the STRV–REM observations times

P. Bühler

Paul Scherrer Institute

CH–5232 Villigen PSI, Switzerland

Contents

1 Introduction

Accurate time information is crucial for the analysis of the STRV–REM data. Not primarily for properly locating events on the time axis but because the time tells us the position of the spacecraft. Position again is used for calculating magnetic field and L–value. Thus the accurate time is needed to link the measured particle fluxes to the magnetic coordinates.

STRV–REM observation times are measured with the STRV–1B spacecraft clock. After launch is has been recognized that the clock had not survived the launch totally unscathed and that it was running to slow. The REM observation times thus have to be corrected for this fact.

2 STRV–1B spacecraft time – Universal time UT

During launch the frequency of the STRV–1B spacecraft clock oscillator has obviously been shifted. Although no direct measurements of this shift have been made it is clear that the clock is retarded. We assume that the rate shift has been constant throughout the mission. This assumption seems reasonable and there exist no indications that this may not be valid.

The time delay t_{delay} of the spacecraft–clock with respect to real time per period of time Δt is given by

$$t_{delay} = a \cdot \Delta t \tag{1}$$

Note: the shifted clock rate is $f_0/(1 + a)$ where f_0 is the nominal clock rate in units of Hz.

Regularly, generally during each ground contact, the spacecraft clock is synchronized with the clock of the ground commanding computer. This is done by sending a clock set command which sets the spacecraft clock to a defined time $T0$. The set command is issued at ground at a time such that the clock–set should be executed at time $T0$ (transmission time is taken into account). However, varying transmission times, delays between command issue and transmission, and inaccuracies of the ground computer clock cause that the spacecraft–clock set command is not executed at time $T0$ but at time $T0+\Delta T0$. The situation is illustrated in figure 1. The horizontal axis shows Universal time (UT) and the vertical axis the spacecraft time. The thick bold line represents the spacecraft time. The diagonal line represents a perfectly synchronized clock.

The following relation holds between spacecraft clock time t' and UT t:

$$t = t' + (t - (T0 + \Delta T0)) \cdot a + \Delta T0 \tag{2}$$

which can be solved for t

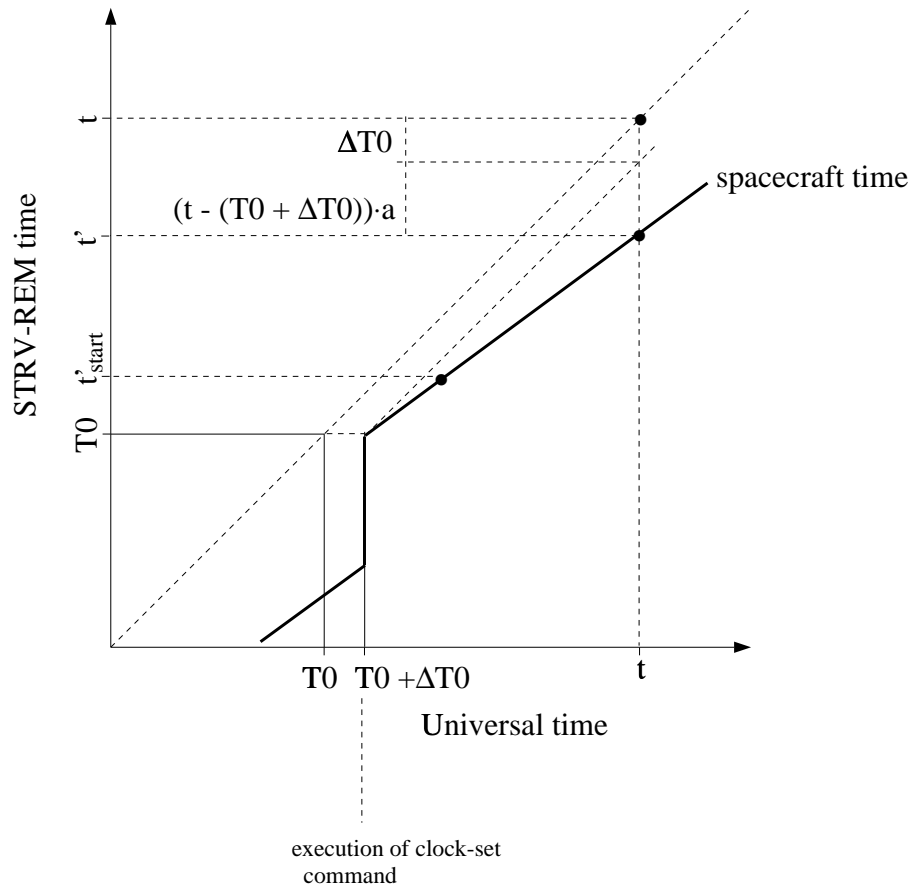$$t = t' + \frac{a}{(1 - a)} \cdot (t' - T0) + \Delta T0 \tag{3}$$

Figure 1: Illustration of the relation between STRV–REM time, t' and real time, t. At UT $T0 + \Delta T0$ REM time is set to $T0$. From then on the REM time is delayed with a rate of a seconds per second.

3 Observation time correction

In order to calculate real time from STRV–REM time (equation (3)), the clock–rate shift a, and for each observation the relevant clock–set information ($T0$ and $\Delta T0$) have to be known.

3.1 $T0$, a, and $\Delta T0$

Information on $T0$ has been provided by DRA. Fortunately the spacecraft commandings have been recorded and saved, so important information could be extracted. DRA has provided a list containing for each REM run, besides others, the relevant reset time $T0$.

a and $\Delta T0$ are not known a priori and must be determined by other means. However, various checks have shown that a can be assumed to be constant throughout the whole mission and $\Delta T0$ can normally not be neglected.

3.2 t'_{start}, a, and $\Delta t'$

Instead of using $T0$ as reference point for the correction, also the start time of a run (t'_{start}) can be used. This has the advantage, that $T0$ is not needed and does not have to be gathered and saved as additional information. Since the spacecraft control has been handed over to the Americans $T0$ is no longer provided (after 1 August 1996).

Rearrangement of equation (3) gives

$$
\begin{aligned}
t &= t' + \frac{a}{(1-a)} \cdot (t' - t'_{start} + t'_{start} - T0) + \Delta T0 \qquad (4)\\
&= t' + \frac{a}{(1-a)} \cdot (t' - t'_{start}) + \left[\Delta T0 - \frac{a}{(1-a)} \cdot (T0 - t'_{start}) \right]\\
&= t' + \frac{a}{(1-a)} \cdot (t' - t'_{start}) + \Delta t'
\end{aligned}
$$

Thus the unknown $\Delta T0$ in equation (3) is replaced now by $\Delta t'$.

3.3 Correction procedure

3.3.1 The idea

The most time–sensitive part of the REM data is data accumulated around apogee (i.e. in the inner belt) because spacecraft velocity is maximal and accumulation times are short. Thus small timing errors already cause significant errors in the calculated spacecraft position and the magnetic parameters.

Trapped particle fluxes, especially in the inner radiation belt are well ordered by the magnetic field and the L–shell parameter. At a given L the omnidirectional particle flux, as measured with STRV–REM, is a monotonically decreasing function of B. This has the following consequence which can be used to check the correctness of the timing:

Assuming the trapped fluxes to be constant in time, or at least only to change slowly, the measured flux at a given L–value is only a function of B. Thus the fluxes measured at the same point in B–L–space must be equal.

The inner radiation belt is suited for checking this behaviour because B–field and particle fluxes are rather stable in this region. Thus measurements from different epochs can be directly compared.

In the upper panel of figure 2, STRV–REM integral proton flux is plotted versus L for four passages through the inner belt on 23 August 1995. L–values have been calculated using the uncorrected observation times. In the lower panel of figure 2 the position of the spacecraft in B–L plane is shown for the same measurements.

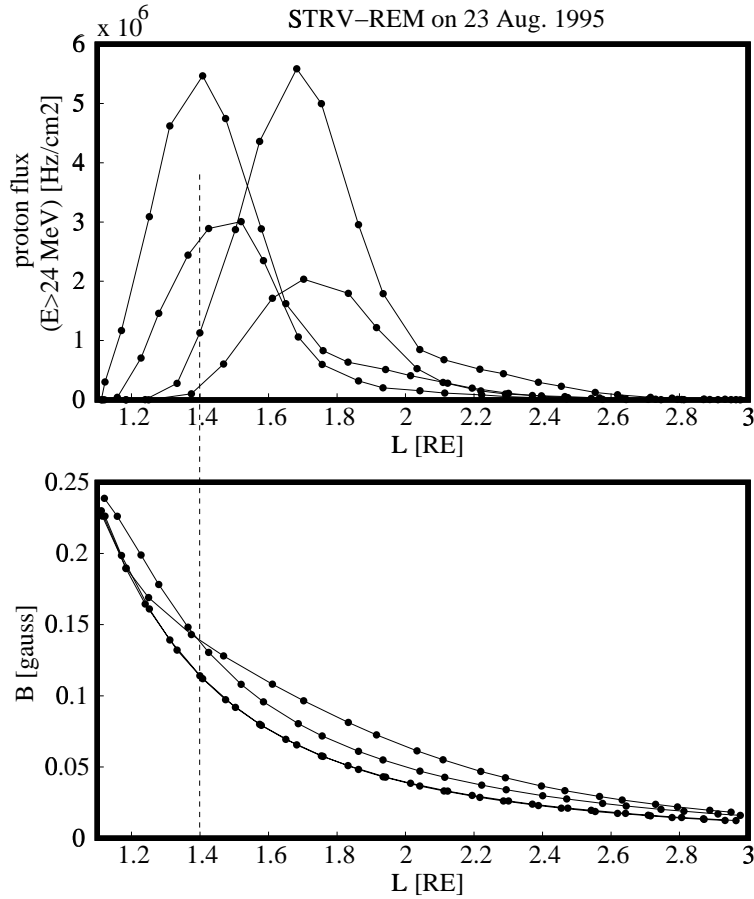Figure 2: Demonstration of the STRV–REM time shift. Proton flux peaks (upper panel) of contiguous passages through the inner belt region are shifted with respect to each other.

The measurements are obviously not in agreement with the expected behaviour described above. The flux peaks are shifted against each other and the crossing point at L=1.4 in the B–L–plane has no corresponding crossing point in the upper panel.

The situation can be perfectly fixed by calculating the observation times with equation (5) and appropriate values for a and $\Delta t'$. The result is shown in figure 3. Now the inner belt passages with identical trajectory in B–L–plane also cover in the flux–L–plot and at $L=1.4$, where the trajectories of the other two passages cross, the fluxes are identical!
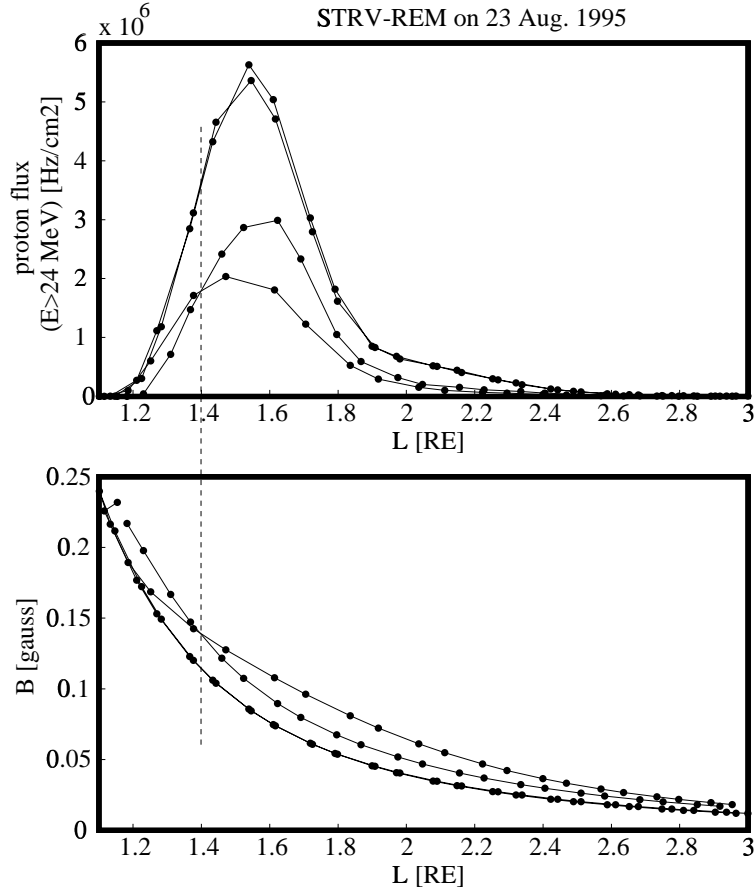
Figure 3: Same as figure 2 but now with correct observation times. The corrected data is in agreement with the expectations.

Note: using this method it is assumed that the orbit parameters and programs used for calculating the position of the satellite and the magnetic field model used for calculating B and L are correct. The fact that a simple time shift is sufficient to bring the data into agreement with the expected behaviour proves that the used models do very well approximate the real situation.

3.3.2 The procedure

For each observation an a and ΔT_0 (or $\Delta t'$) is determined, such that the corrected data behaves as is expected.

This is done by a trial and error procedure for which a special software tool was developed. The procedure is illustrated in figure 4.

Four plots are used to analyze the data: (upper left) proton flux versus L at $L < 3$, (upper right) p–detector count rates versus L at $L > 3$, (lower left) B versus L at $L < 3$, and (lower
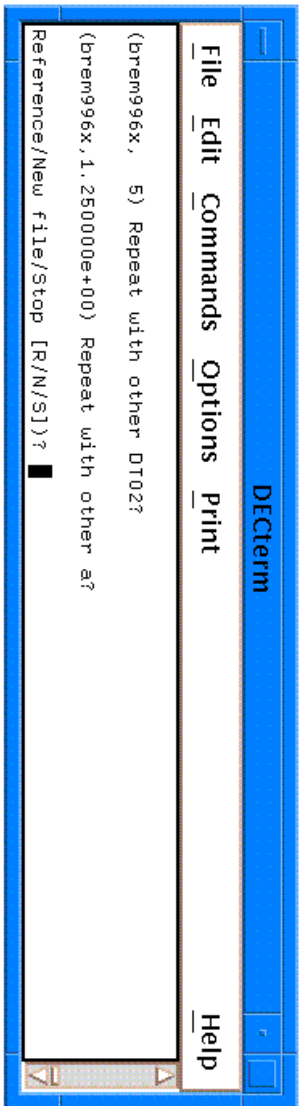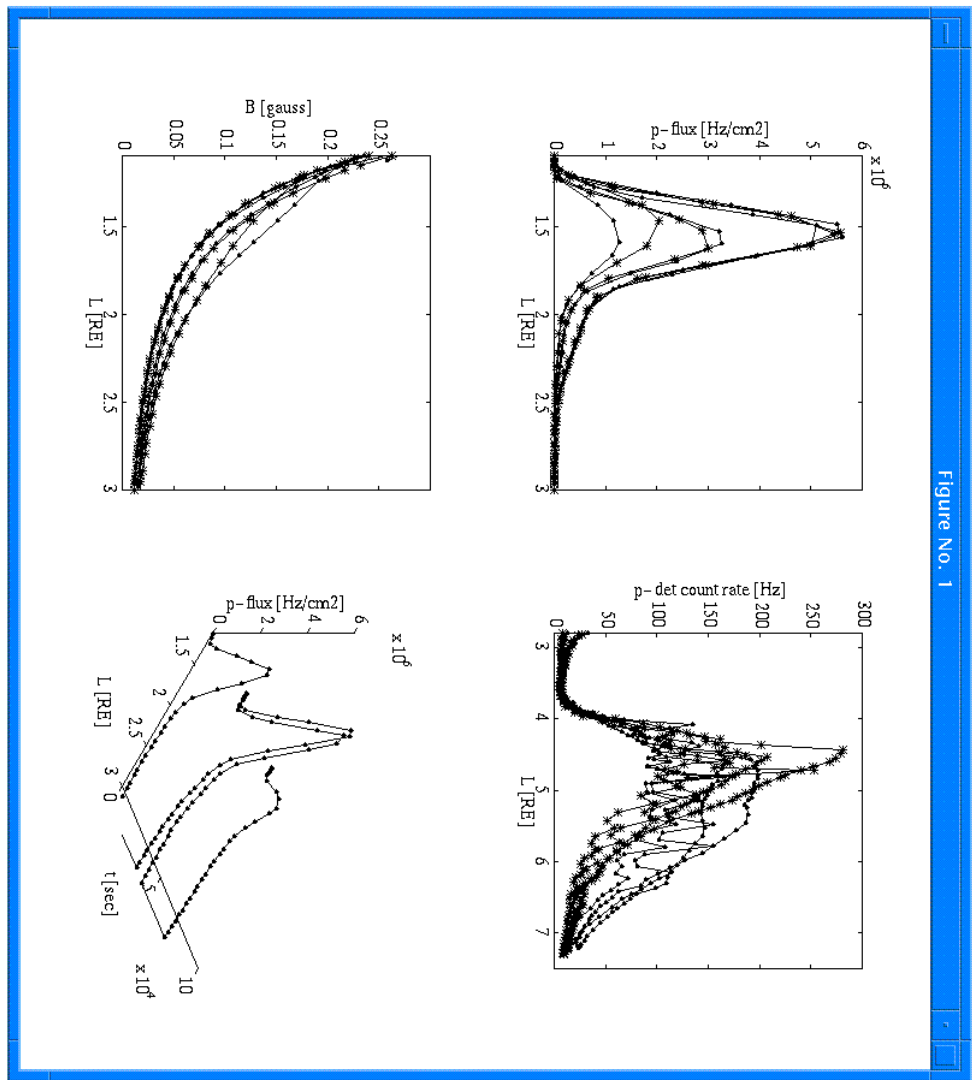
Figure 4: A software tool allows to find the time correction parameters a and $\Delta t'$. See text for details.

right) p–detector count rate versus time and L at $L < 3$.

The program works as follows:

- data for a reference observation file, which's observation times were corrected is calculated (normally data file brem154 is used, which needs no correction)

- data of file for which the parameters a and $\Delta T0$ ($\Delta t'$) shall be determined is calculated using default a and $\Delta t'$ values

- reference data and data to be checked are plotted as shown in figure 4, the reference data is represented by asterisks

- the values of a and $\Delta T0$ ($\Delta t'$) are modified, observation times are corrected, and the plots updated until the times are judged to be correct

- the corrected data can be selected as new reference data and the procedure is repeated with the next observation file or the procedure is stopped

In such a way all data files have been corrected!

4   Results

Parameter a, describing the spacecraft–clock rate shift was found to be $1.25 \cdot 10^{-3}$ which corresponds to 110 sec delay per day. A list of all STRV–REM observations with the $T0$ and $\Delta T0$ ofthe entire mission is given in Appendix A.

5   Appendix A

Table 1: List of STRV–REM observations with the $T0$ and $\Delta T0$ from July 1994 to August 1996

Filename	$T0$	$\Delta T0$
brem0142	23-Jun-94, 02:23:26	6
brem0320	30-Jun-94, 14:16:30	2
brem0570	11-Jul-94, 16:30:24	1
brem065x	14-Jul-94, 16:48:57	-15
brem0652	15-Jul-94, 13:40:17	2
brem0746	19-Jul-94, 17:17:01	10
brem077x	20-Jul-94, 16:32:41	3
brem084x	23-Jul-94, 13:27:41	1
brem096c	28-Jul-94, 13:15:24	1
brem112x	03-Aug-94, 12:02:03	5
brem121x	08-Aug-94, 13:45:11	2
brem125x	10-Aug-94, 16:05:25	1
brem129x	12-Aug-94, 12:42:29	1
brem136x	15-Aug-94, 15:18:49	1
brem139x	16-Aug-94, 12:23:48	2
brem146x	19-Aug-94, 14:13:48	2
brem154x	22-Aug-94, 14:12:39	1
brem157x	24-Aug-94, 18:24:57	4
brem159x	25-Aug-94, 15:00:02	-10
brem161x	26-Aug-94, 10:41:55	4
brem164x	27-Aug-94, 11:51:22	1
brem170x	30-Aug-94, 15:47:13	3
brem173x	01-Sep-94, 10:33:23	2
brem177x	02-Sep-94, 13:51:05	2
brem189x	07-Sep-94, 11:50:01	1
brem191x	08-Sep-94, 17:00:35	1
brem193x	09-Sep-94, 14:46:10	2
brem195x	10-Sep-94, 14:45:15	20
brem202x	13-Sep-94, 17:52:48	20
brem207x	15-Sep-94, 12:23:15	2
brem209x1	16-Sep-94, 14:54:04	2
brem211x	17-Sep-94, 13:04:41	9
brem211x1	19-Sep-94, 10:11:26	25
brem218x	20-Sep-94, 18:29:43	20
brem220x	21-Sep-94, 14:47:50	17
brem222x	22-Sep-94, 12:42:45	2
brem225x	23-Sep-94, 20:24:29	-10

Filename	$T0$	$\Delta T0$ [sec]
brem227x	24-Sep-94, 15:05:31	-15
brem234x	27-Sep-94, 16:46:47	1
brem243x	01-Oct-94, 13:04:36	-20
brem250x	04-Oct-94, 17:49:05	-20
brem255x	06-Oct-94, 13:00:13	-25
brem259x	08-Oct-94, 15:41:15	0
brem264m	10-Oct-94, 16:12:45	1
brem267x	11-Oct-94, 20:03:56	55
brem270m	13-Oct-94, 15:05:54	55
brem272m	14-Oct-94, 12:48:43	80
brem275m	15-Oct-94, 15:52:50	90
brem275m1	15-Oct-94, 15:52:50	120
brem279m	17-Oct-94, 12:17:29	160
brem280m	18-Oct-94, 08:12:07	190
brem280m1	18-Oct-94, 08:12:07	190
brem284m	19-Oct-94, 15:39:52	250
brem286x	20-Oct-94, 12:37:04	-660
brem287m	21-Oct-94, 10:19:23	-650
brem287m1	21-Oct-94, 10:19:23	-620
brem290m	22-Oct-94, 10:14:55	-590
brem290x1	22-Oct-94, 10:14:55	-570
brem294m	24-Oct-94, 13:53:13	-490
brem294m1	24-Oct-94, 13:53:13	-450
brem298m1	25-Oct-94, 21:52:15	-400
brem309x	30-Oct-94, 15:37:22	-10
brem310x	31-Oct-94, 14:07:57	25
brem310x1	31-Oct-94, 14:07:57	70
brem310x1	31-Oct-94, 14:07:57	70
brem313x	01-Nov-94, 14:42:24	130
brem313x1	01-Nov-94, 14:42:24	-40
brem316x	02-Nov-94, 20:39:40	-30
brem317x	03-Nov-94, 15:31:20	-30
brem317x1	04-Nov-94, 13:50:16	2
brem320x	04-Nov-94, 13:50:57	-170
brem322x	05-Nov-94, 11:01:13	-315
brem322x1	05-Nov-94, 11:01:13	1
brem326x	07-Nov-94, 13:18:51	1
brem329x	08-Nov-94, 16:38:28	-30
brem331x	09-Nov-94, 10:39:11	2
brem333x	10-Nov-94, 16:05:26	3
brem335x	11-Nov-94, 13:22:35	90
brem338x	12-Nov-94, 10:52:15	190

Filename	$T0$	$\Delta T0$ [sec]
brem338x1	12-Nov-94, 10:52:15	300
brem342x	14-Nov-94, 13:38:41	20
brem352x	18-Nov-94, 16:17:08	-30
brem354x	19-Nov-94, 15:44:23	-40
brem354x1	19-Nov-94, 15:44:23	0
brem359x	21-Nov-94, 08:13:21	1
brem361x	22-Nov-94, 17:07:32	3
brem363x	23-Nov-94, 12:50:35	2
brem365x	24-Nov-94, 10:37:55	-15
brem368x	25-Nov-94, 16:35:26	-20
brem370x	26-Nov-94, 11:30:15	-45
brem370x1	26-Nov-94, 11:30:15	-70
brem375x	28-Nov-94, 16:40:10	1
brem379x	30-Nov-94, 19:35:40	-15
brem381x	01-Dec-94, 10:18:14	-40
brem383x	02-Dec-94, 13:44:35	2
brem386x	03-Dec-94, 16:08:33	4
brem386x1	03-Dec-94, 16:08:33	-20
brem391x	05-Dec-94, 09:55:34	10
brem391x1	05-Dec-94, 09:55:34	50
brem395x	07-Dec-94, 11:35:40	70
brem397x	08-Dec-94, 09:53:21	150
brem399x	09-Dec-94, 12:44:53	2
brem402x	10-Dec-94, 13:19:07	10
brem402x1	10-Dec-94, 13:19:07	3
brem407x	12-Dec-94, 14:41:02	-20
brem407x1	12-Dec-94, 14:41:02	-30
brem412x	14-Dec-94, 23:22:22	1
brem414x	15-Dec-94, 21:04:45	2
brem414x1	15-Dec-94, 21:04:45	-15
brem418x	17-Dec-94, 21:19:24	2
brem418x1	17-Dec-94, 21:19:24	-20
brem422x	19-Dec-94, 09:03:39	3
brem422x1	19-Dec-94, 09:03:39	3
brem427x	21-Dec-94, 13:51:13	2
brem429x	22-Dec-94, 10:30:06	-10
brem436x	22-Dec-94, 10:30:06	-140
brem441x	27-Dec-94, 16:37:37	2
brem441x1	27-Dec-94, 16:37:37	-10
brem457x	03-Jan-95, 15:43:20	15
brem459x	04-Jan-95, 20:52:31	7
brem461x	05-Jan-95, 10:26:40	-20

Filename	$T0$	$\Delta T0$ [sec]
brem461x1	05-Jan-95, 10:26:40	-30
brem464x	06-Jan-95, 23:14:08	-30
brem467x	07-Jan-95, 19:52:34	-30
brem470x	09-Jan-95, 09:43:17	-30
brem478x	12-Jan-95, 19:48:48	3
brem480x	13-Jan-95, 22:04:24	1
brem482x	14-Jan-95, 13:49:09	2
brem482x1	14-Jan-95, 13:49:09	2
brem487x	16-Jan-95, 12:46:22	2
brem487x1	16-Jan-95, 12:46:22	2
brem492x	18-Jan-95, 20:58:17	2
brem494x	19-Jan-95, 18:29:13	2
brem496x	20-Jan-95, 16:19:00	2
brem498x	21-Jan-95, 13:55:43	3
brem500x	21-Jan-95, 13:56:24	-30
brem503x	23-Jan-95, 12:16:11	2
brem505x	24-Jan-95, 20:08:25	-20
brem507x	25-Jan-95, 11:36:03	3
brem509x	26-Jan-95, 15:00:36	3
brem512x	27-Jan-95, 13:39:43	2
brem514x	28-Jan-95, 13:15:23	1
brem516x	28-Jan-95, 13:14:42	2
brem518x	30-Jan-95, 11:43:12	2
brem521x	30-Jan-95, 11:42:32	1
brem523x	01-Feb-95, 16:08:51	-20
brem526x	02-Feb-95, 13:12:21	2
brem528x	03-Feb-95, 21:10:47	2
brem530x	04-Feb-95, 12:15:02	3
brem532x	04-Feb-95, 12:15:43	-10
brem535x	06-Feb-95, 22:22:24	2
brem536x	06-Feb-95, 22:23:05	1
brem537x	07-Feb-95, 19:33:31	1
brem536x1	07-Feb-95, 19:34:12	2
brem539x	08-Feb-95, 16:38:15	-10
brem541x	09-Feb-95, 09:09:42	-10
brem542x	09-Feb-95, 09:10:22	2
brem544x	10-Feb-95, 15:09:43	1
brem546x	11-Feb-95, 12:10:29	1
brem548x	11-Feb-95, 12:09:48	-10
brem550x	11-Feb-95, 12:09:48	-240
brem553x	14-Feb-95, 18:52:51	3
brem555x	15-Feb-95, 15:55:34	2

Filename	$T0$	$\Delta T0$ [sec]
brem557x	16-Feb-95, 13:02:12	-20
brem559x	17-Feb-95, 10:43:27	-20
brem562x	18-Feb-95, 12:27:05	2
brem565x	18-Feb-95, 12:27:45	-40
brem567x	20-Feb-95, 21:13:50	2
brem568x	20-Feb-95, 21:14:31	1
brem569x	21-Feb-95, 17:52:02	1
brem573x	23-Feb-95, 14:18:35	-20
brem576x	24-Feb-95, 21:48:41	2
brem579x	25-Feb-95, 20:02:16	1
brem582x	27-Feb-95, 12:39:04	5
brem582x1	27-Feb-95, 12:39:04	5
brem591x	02-Mar-95, 17:42:11	-10
brem595x	04-Mar-95, 06:04:31	-20
brem599x	06-Mar-95, 12:14:22	20
brem599x1	06-Mar-95, 12:14:22	2
brem603x	08-Mar-95, 10:03:15	1
brem604x	08-Mar-95, 10:02:34	1
brem606x	09-Mar-95, 14:12:32	3
brem609x	11-Mar-95, 05:43:10	3
brem611x	11-Mar-95, 05:43:51	2
brem615x	13-Mar-95, 12:34:25	-20
brem618x	13-Mar-95, 12:35:06	-60
brem622x1	17-Mar-95, 16:08:01	100
brem629x	19-Mar-95, 20:26:01	30
brem633x	21-Mar-95, 06:41:43	2
brem635x	21-Mar-95, 06:42:23	-40
brem638x	23-Mar-95, 14:20:55	-30
brem640x	23-Mar-95, 14:21:35	-50
brem643x	25-Mar-95, 17:48:34	-10
brem645x	25-Mar-95, 17:49:14	-40
brem648x	27-Mar-95, 20:49:28	-20
brem651x	27-Mar-95, 20:50:09	-20
brem653x	30-Mar-95, 10:49:15	70
brem656x	30-Mar-95, 10:48:34	10
brem662x	03-Apr-95, 05:37:01	70
brem664x	04-Apr-95, 02:32:01	30
brem664x1	04-Apr-95, 23:27:01	-20
brem668x	05-Apr-95, 20:23:01	50
brem671x	07-Apr-95, 03:45:01	35
brem671x1	08-Apr-95, 00:40:01	110
brem675m	08-Apr-95, 21:36:01	20

Filename	$T0$	$\Delta T0$ [sec]
brem677x	09-Apr-95, 18:38:01	100
brem679x	10-Apr-95, 15:26:01	25
brem679x1	11-Apr-95, 12:21:01	110
brem683x	12-Apr-95, 09:16:01	200
brem686x	13-Apr-95, 21:53:01	0
brem687x	14-Apr-95, 08:30:01	40
brem690x	15-Apr-95, 10:29:01	10
brem692x	16-Apr-95, 12:38:01	110
brem696x	18-Apr-95, 01:14:01	10
brem696x1	18-Apr-95, 22:09:01	80
brem700x	19-Apr-95, 19:04:01	180
brem702x	20-Apr-95, 21:13:01	0
brem704x	21-Apr-95, 18:18:01	90
brem707x	22-Apr-95, 16:46:20	-20
brem709x	22-Apr-95, 16:45:39	-20
brem714x	24-Apr-95, 17:15:47	-120
brem716x	25-Apr-95, 17:49:31	-30
brem718x	27-Apr-95, 16:41:39	-30
brem720x	27-Apr-95, 16:40:59	-30
brem722x	29-Apr-95, 11:16:40	1
brem722x1	29-Apr-95, 11:16:40	-30
brem726x	29-Apr-95, 11:15:59	-30
brem726x1	29-Apr-95, 11:15:59	-30
brem730m	02-May-95, 17:36:02	-20
brem733x	02-May-95, 17:36:43	-40
brem734x	04-May-95, 16:19:48	-30
brem737x	04-May-95, 16:20:29	-40
brem740m	06-May-95, 11:55:59	-30
brem742x	06-May-95, 11:56:40	-30
brem745x	08-May-95, 13:54:18	1
brem747m	08-May-95, 13:53:38	-20
brem747x1	08-May-95, 13:53:38	-40
brem750x	11-May-95, 10:33:44	3
brem753x	11-May-95, 10:34:25	-30
brem755x	13-May-95, 12:14:57	-20
brem758x	13-May-95, 12:14:17	-30
brem758x1	13-May-95, 12:14:17	-40
brem761x	16-May-95, 10:12:35	-20
brem764x	16-May-95, 10:11:54	-30
brem767x	18-May-95, 18:38:58	-30
brem769x	18-May-95, 18:38:18	-20
brem771x	20-May-95, 12:31:59	2

Filename	$T0$	$\Delta T0$ [sec]
brem774x	20-May-95, 12:31:18	-30
brem774x1	20-May-95, 12:31:18	3
brem778x	25-May-95, 09:37:14	110
brem780x	25-May-95, 09:36:34	2
brem787x	27-May-95, 09:59:07	-30
brem790x	27-May-95, 09:58:26	3
brem790x1	27-May-95, 09:58:26	3
brem794x	30-May-95, 12:44:38	1
brem798x	30-May-95, 12:43:57	2
brem800x	01-Jun-95, 17:05:16	-70
brem803x	01-Jun-95, 17:04:35	-80
brem806x	04-Jun-95, 16:21:54	4
brem808x	04-Jun-95, 16:21:14	-30
brem809x	06-Jun-95, 07:59:09	-20
brem812x	06-Jun-95, 07:58:29	1
brem815x	08-Jun-95, 16:24:18	-30
brem817x	08-Jun-95, 16:23:38	-30
brem820x	10-Jun-95, 10:16:14	-20
brem820x1	10-Jun-95, 10:16:14	-50
brem824x	10-Jun-95, 10:15:34	3
brem824x1	10-Jun-95, 10:15:34	3
brem826x	13-Jun-95, 17:50:07	1
brem828x	13-Jun-95, 17:49:26	4
brem831x	15-Jun-95, 14:57:33	-30
brem833x	15-Jun-95, 14:56:52	-40
brem835x	17-Jun-95, 08:44:31	-30
brem835x1	17-Jun-95, 08:44:31	-40
brem839x	17-Jun-95, 08:43:50	-30
brem842x	20-Jun-95, 09:40:06	-20
brem844x	20-Jun-95, 09:39:26	-30
brem847x	22-Jun-95, 13:49:21	-90
brem849x	22-Jun-95, 13:48:41	-85
brem852x	24-Jun-95, 15:40:28	-20
brem852x1	24-Jun-95, 15:40:28	-30
brem856x	24-Jun-95, 15:39:47	-40
brem858x	27-Jun-95, 16:49:44	1
brem860x	27-Jun-95, 16:49:04	-40
brem860m	27-Jun-95, 16:49:04	-40
brem863x	29-Jun-95, 12:53:18	-30
brem865x	29-Jun-95, 12:52:38	2
brem868x	01-Jul-95, 14:37:35	1
brem868x1	01-Jul-95, 14:37:35	-50

Filename	$T0$	$\Delta T0$ [sec]
brem872x	01-Jul-95, 14:36:54	-25
brem875x	04-Jul-95, 15:54:29	-30
brem875x1	04-Jul-95, 15:54:29	-40
brem879x	06-Jul-95, 09:47:14	-40
brem881x	06-Jul-95, 09:46:33	5
brem884x	08-Jul-95, 14:01:58	-20
brem884x1	08-Jul-95, 14:01:58	-30
brem888x	08-Jul-95, 14:01:17	-30
brem891x	11-Jul-95, 16:48:16	-20
brem894x	11-Jul-95, 15:36:05	-70
brem900x	15-Jul-95, 16:08:18	1
brem903x	15-Jul-95, 16:07:38	-10
brem906x	18-Jul-95, 06:54:56	1
brem909x	18-Jul-95, 06:54:15	-30
brem911x	20-Jul-95, 08:28:02	1
brem913x	20-Jul-95, 08:27:21	2
brem916x	22-Jul-95, 16:09:50	1
brem916x1	22-Jul-95, 16:09:50	-30
brem920x	22-Jul-95, 16:09:09	-10
brem923x	25-Jul-95, 16:03:06	-10
brem923x1	25-Jul-95, 16:03:06	-20
brem927x	27-Jul-95, 09:31:00	-30
brem930x	27-Jul-95, 09:36:06	-30
brem933x	29-Jul-95, 15:30:43	-10
brem933x1	29-Jul-95, 15:30:43	-20
brem936x	29-Jul-95, 15:30:02	4
brem939x	01-Aug-95, 13:44:27	-20
brem941x	01-Aug-95, 13:43:46	-20
brem943x	03-Aug-95, 08:41:20	-10
brem943x1	03-Aug-95, 08:41:20	-20
brem948x	05-Aug-95, 12:09:43	-10
brem951x	05-Aug-95, 12:09:03	2
brem951x1	05-Aug-95, 12:09:03	2
brem955x	08-Aug-95, 16:25:38	2
brem955x1	08-Aug-95, 16:25:38	2
brem958x	10-Aug-95, 10:02:48	-30
brem962x	10-Aug-95, 10:02:07	-30
brem964x	12-Aug-95, 14:15:56	1
brem967x	12-Aug-95, 14:15:15	-20
brem967x1	12-Aug-95, 14:15:15	-10
brem970x	15-Aug-95, 12:20:57	-10
brem973x	15-Aug-95, 12:20:17	-10

Filename	$T0$	$\Delta T0$ [sec]
brem975x	17-Aug-95, 10:21:58	-20
brem977x	17-Aug-95, 10:21:17	-20
brem980x	19-Aug-95, 10:44:25	-20
brem980x1	19-Aug-95, 10:44:25	-20
brem984x	19-Aug-95, 10:43:44	-30
brem987x	22-Aug-95, 14:30:14	-30
brem989x	22-Aug-95, 14:29:33	-10
brem992x	24-Aug-95, 16:34:19	1
brem994x	24-Aug-95, 16:33:38	-5
brem996x	26-Aug-95, 12:26:44	30
brem999x	26-Aug-95, 12:26:03	30
brem999x1	26-Aug-95, 12:26:03	30
xrem003x	29-Aug-95, 11:57:54	50
xrem003x1	29-Aug-95, 11:57:54	70
xrem007x	31-Aug-95, 07:16:03	70
xrem010x	31-Aug-95, 07:15:22	90
xrem012x1	02-Sep-95, 14:43:12	-20
xrem015x	02-Sep-95, 14:42:31	-30
xrem015x1	02-Sep-95, 14:42:31	-30
xrem019x	05-Sep-95, 11:43:57	-10
xrem021x	05-Sep-95, 11:43:16	-10
xrem024x2	07-Sep-95, 18:14:36	4
xrem024x3	07-Sep-95, 18:14:36	-10
xrem028x	09-Sep-95, 10:47:30	-10
xrem031x	09-Sep-95, 10:46:50	1
xrem031x1	09-Sep-95, 10:46:50	-50
xrem035x	12-Sep-95, 07:03:14	-30
xrem038x	12-Sep-95, 07:02:34	-30
xrem038x1	12-Sep-95, 07:02:34	-50
xrem042x	15-Sep-95, 13:38:42	-20
xrem042x1	15-Sep-95, 13:38:42	-30
xrem046x	17-Sep-95, 07:15:15	-10
xrem049x	17-Sep-95, 07:15:56	-40
xrem051x	19-Sep-95, 05:22:20	-20
xrem054x	19-Sep-95, 05:22:60	-60
xrem056x	21-Sep-95, 14:39:03	-5
xrem056x1	21-Sep-95, 14:39:03	-20
xrem060x	23-Sep-95, 08:48:38	-20
xrem063x	23-Sep-95, 08:47:57	-30
xrem067c	26-Sep-95, 05:27:28	-10
xrem069x	26-Sep-95, 05:26:48	-10
xrem076x	30-Sep-95, 08:06:39	2

Filename	$T0$	$\Delta T0$ [sec]
xrem079x	30-Sep-95, 08:05:58	-10
xrem079x1	30-Sep-95, 08:05:58	-35
xrem083x	03-Oct-95, 03:48:27	3
xrem083x1	03-Oct-95, 03:48:27	3
xrem088x	05-Oct-95, 09:06:15	3
xrem088x1	05-Oct-95, 09:06:15	-20
xrem093x1	07-Oct-95, 08:39:40	60
xrem096x	07-Oct-95, 08:39:00	2
xrem100x	10-Oct-95, 13:49:07	-80
xrem104x	12-Oct-95, 07:23:55	-40
xrem109x	14-Oct-95, 07:18:59	30
xrem114x	14-Oct-95, 07:18:18	2
xrem117x	17-Oct-95, 08:27:24	60
xrem120x	19-Oct-95, 11:08:51	10
xrem122x	19-Oct-95, 11:08:10	-50
xrem125x	21-Oct-95, 14:57:33	2
xrem128x	21-Oct-95, 14:56:53	3
xrem132x	24-Oct-95, 11:19:45	1
xrem133x	24-Oct-95, 11:19:05	2
xrem136x	26-Oct-95, 08:05:60	-10
xrem138x	26-Oct-95, 08:05:20	-20
xrem142x	28-Oct-95, 13:37:21	2
xrem144x	28-Oct-95, 13:36:41	10
xrem147x	31-Oct-95, 05:38:19	2
xrem149x	31-Oct-95, 05:37:39	45
xrem152x	02-Nov-95, 07:15:11	-10
xrem154x	02-Nov-95, 07:14:31	-30
xrem157x	04-Nov-95, 08:52:28	16
xrem160x	04-Nov-95, 08:51:47	-25
xrem165x	07-Nov-95, 11:17:58	-10
xrem167x	07-Nov-95, 11:18:39	-10
xrem169x	09-Nov-95, 14:10:42	-10
xrem171x	09-Nov-95, 14:11:22	-20
xrem173x	11-Nov-95, 09:55:52	-30
xrem176x	11-Nov-95, 09:56:33	-60
xrem180x	14-Nov-95, 06:42:30	-40
xrem180x1	14-Nov-95, 06:42:30	-70
xrem184x	14-Nov-95, 06:41:49	-70
xrem184x1	14-Nov-95, 06:41:49	-90
xrem188x	17-Nov-95, 18:04:00	-100
xrem190x	17-Nov-95, 18:03:19	-140
xrem193x	19-Nov-95, 10:50:30	-10

Filename	$T0$	$\Delta T0$ [sec]
xrem195x	20-Nov-95, 20:37:35	60
xrem198x	20-Nov-95, 20:36:55	2
xrem201x	23-Nov-95, 13:04:01	3
xrem204x	23-Nov-95, 13:04:42	-20
xrem206x	25-Nov-95, 10:19:36	-20
xrem209x	25-Nov-95, 10:20:16	-40
xrem209x1	25-Nov-95, 10:20:16	-30
xrem213x	28-Nov-95, 11:39:24	-30
xrem215x	28-Nov-95, 11:38:44	-30
xrem218x	30-Nov-95, 09:59:22	30
xrem221x	30-Nov-95, 10:00:03	2
xrem223x	02-Dec-95, 10:28:47	-30
xrem223x1	02-Dec-95, 10:28:47	2
xrem227x	02-Dec-95, 10:28:07	3
xrem230x	05-Dec-95, 18:23:18	2
xrem231x	05-Dec-95, 18:22:38	-30
xrem234x	07-Dec-95, 07:44:08	-10
xrem237x	07-Dec-95, 07:44:48	-30
xrem239x	09-Dec-95, 09:59:39	-80
xrem239x1	09-Dec-95, 09:59:39	-90
xrem243x	09-Dec-95, 09:58:58	3
xrem246x	09-Dec-95, 09:58:58	-320
xrem248x	12-Dec-95, 10:01:14	-20
xrem246x1	12-Dec-95, 10:00:34	-10
xrem251x	14-Dec-95, 20:24:14	-10
xrem254x	14-Dec-95, 20:24:55	2
xrem256x	16-Dec-95, 17:18:02	2
xrem259x	16-Dec-95, 17:17:21	8
xrem262x	19-Dec-95, 07:02:05	5
xrem265x	19-Dec-95, 07:02:46	2
xrem267x	21-Dec-95, 15:17:10	20
xrem267x1	21-Dec-95, 15:17:10	30
xrem271x	21-Dec-95, 15:16:30	-35
xrem271x1	21-Dec-95, 15:16:30	-40
xrem275x	24-Dec-95, 18:36:06	-10
xrem277x	24-Dec-95, 18:35:26	1
xrem277x1	24-Dec-95, 18:35:26	-20
xrem281x	27-Dec-95, 14:23:11	4
xrem284x	27-Dec-95, 14:23:51	-40
xrem286x	29-Dec-95, 18:17:53	-30
xrem289x	29-Dec-95, 18:18:34	-30
xrem294x	02-Jan-96, 10:36:30	-20

Filename	$T0$	$\Delta T0$ [sec]
xrem297x	02-Jan-96, 10:37:11	-40
xrem300x	04-Jan-96, 08:06:55	20
xrem300x1	04-Jan-96, 08:06:55	30
xrem305x	06-Jan-96, 10:14:17	-10
xrem305x1	06-Jan-96, 10:14:17	-30
xrem310x	09-Jan-96, 08:33:04	-20
xrem313x	10-Jan-96, 11:36:55	-30
xrem316x	11-Jan-96, 08:39:57	-35
xrem316x1	11-Jan-96, 08:39:57	-30
xrem321x	13-Jan-96, 18:35:44	-15
xrem321x1	13-Jan-96, 18:35:44	-30
xrem328x	16-Jan-96, 10:55:56	-15
xrem328x1	16-Jan-96, 10:55:56	-30
xrem332x	18-Jan-96, 10:24:45	-30
xrem332x1	18-Jan-96, 10:24:45	-40
xrem344x	22-Jan-96, 16:50:53	-40
xrem344x1	22-Jan-96, 16:50:53	-60
xrem349x	25-Jan-96, 09:24:10	-40
xrem353x	27-Jan-96, 07:18:41	-50
xrem353x1	27-Jan-96, 07:18:41	-45
xrem359x	30-Jan-96, 07:09:45	-20
xrem365x	01-Feb-96, 09:49:09	-5
xrem365x1	01-Feb-96, 09:49:09	-30
xrem370x	03-Feb-96, 11:38:05	-30
xrem370x1	03-Feb-96, 11:38:05	-40
xrem374x	05-Feb-96, 18:57:23	2
xrem377x	06-Feb-96, 20:24:18	-30
xrem381x	08-Feb-96, 09:25:40	-10
xrem381x1	08-Feb-96, 09:25:40	-40
xrem388x	10-Feb-96, 20:50:04	-20
xrem388x1	10-Feb-96, 20:50:04	-65
xrem393x	13-Feb-96, 13:10:20	-25
xrem393x1	13-Feb-96, 13:10:20	-25
xrem397x	15-Feb-96, 15:23:20	-20
xrem397x1	15-Feb-96, 15:23:20	-35
xrem402x	17-Feb-96, 10:42:33	-25
xrem402x1	17-Feb-96, 10:42:33	-50
xrem409x	20-Feb-96, 21:14:24	-15
xrem409x1	20-Feb-96, 21:14:24	-90
xrem414x	22-Feb-96, 19:42:47	2
xrem417x	24-Feb-96, 09:20:13	1
xrem417x1	24-Feb-96, 09:20:13	-35

Filename	$T0$	$\Delta T0$ [sec]
xrem425x	27-Feb-96, 08:57:18	-40
xrem425x1	27-Feb-96, 08:57:18	-60
xrem429x	29-Feb-96, 12:37:53	2
xrem429x1	29-Feb-96, 12:37:53	-80
xrem434x	02-Mar-96, 07:10:03	-10
xrem434x1	02-Mar-96, 07:10:03	-30
xrem441x	05-Mar-96, 07:29:09	-40
xrem446x	07-Mar-96, 10:29:59	-40
xrem446x1	07-Mar-96, 10:29:59	-165
xrem450x	09-Mar-96, 10:38:38	-20
xrem450x1	09-Mar-96, 10:38:38	-60
xrem459x	12-Mar-96, 09:48:07	-55
xrem459x1	12-Mar-96, 09:48:07	-130
xrem462x	14-Mar-96, 15:13:40	-15
xrem462x1	14-Mar-96, 15:13:40	-100
xrem468x	16-Mar-96, 15:41:17	2
xrem468x1	16-Mar-96, 15:41:17	-200
xrem476x	20-Mar-96, 09:36:54	-10
xrem479x	22-Mar-96, 00:17:57	-25
xrem482x	23-Mar-96, 09:46:14	3
xrem482x1	23-Mar-96, 09:46:14	-30
xrem490x	26-Mar-96, 10:39:04	-30
xrem490x1	26-Mar-96, 10:39:04	-50
xrem495x	28-Mar-96, 19:04:59	-30
xrem495x1	28-Mar-96, 19:04:59	-30
xrem499x	30-Mar-96, 12:18:22	1
xrem499x1	30-Mar-96, 12:18:22	-30
xrem506x	02-Apr-96, 05:10:14	-20
xrem509x	03-Apr-96, 22:01:04	-20
xrem509x1	03-Apr-96, 22:01:04	-80
xrem514x	05-Apr-96, 22:21:05	2
xrem514x1	05-Apr-96, 22:21:05	-30
xrem520x	08-Apr-96, 18:52:28	-20
xrem520x1	08-Apr-96, 18:52:28	-35
xrem525x	11-Apr-96, 01:50:01	10
xrem525x1	11-Apr-96, 22:33:01	70
xrem530x	13-Apr-96, 05:39:01	0
xrem530x1	14-Apr-96, 02:21:01	90
xrem534x	14-Apr-96, 23:04:01	10
xrem534x1	16-Apr-96, 06:08:01	30
xrem539x	16-Apr-96, 22:05:54	0
xrem539x1	16-Apr-96, 22:05:54	-70

Filename	$T0$	$\Delta T0$ [sec]
xrem543x	18-Apr-96, 17:07:32	0
xrem543x1	18-Apr-96, 17:07:32	-90
xrem548x	20-Apr-96, 13:07:43	5
xrem548x1	20-Apr-96, 13:07:43	-10
xrem555x	20-Apr-96, 13:07:43	-320
xrem555x1	20-Apr-96, 13:07:43	-460
xrem560x	25-Apr-96, 18:41:26	-20
xrem560x1	25-Apr-96, 18:41:26	-105
xrem564x	27-Apr-96, 12:22:17	-20
xrem564x1	27-Apr-96, 12:22:17	-70
xrem571x	30-Apr-96, 23:08:26	-20
xrem573x	01-May-96, 19:43:55	-30
xrem576x	02-May-96, 22:07:08	-10
xrem576x1	02-May-96, 22:07:08	-15
xrem580x	04-May-96, 10:22:14	10
xrem580x1	04-May-96, 10:22:14	-40
xrem587x	04-May-96, 10:22:14	-330
xrem588x	07-May-96, 21:10:30	20
xrem590x	07-May-96, 21:10:30	-80
xrem593x	07-May-96, 21:10:30	-40
xrem596x	07-May-96, 21:10:30	-220
xrem598x	11-May-96, 11:07:25	0
xrem601x	11-May-96, 11:07:25	50
xrem604x	13-May-96, 12:10:52	305
xrem608x	16-May-96, 16:52:16	505
xrem610x	16-May-96, 16:52:16	570
xrem612x	16-May-96, 16:52:16	470
xrem617x	18-May-96, 08:26:03	800
xrem621x	18-May-96, 08:26:03	870
xrem623x	18-May-96, 08:26:03	490
xrem626x	23-May-96, 12:26:34	1100
xrem629x	25-May-96, 04:46:15	1200
xrem632x	25-May-96, 04:46:15	1300
xrem632x1	25-May-96, 04:46:15	1370
xrem640x	30-May-96, 18:15:40	1630
xrem643x	30-May-96, 18:15:40	1725
xrem645x	30-May-96, 18:15:40	-200
xrem647x	30-May-96, 18:15:40	-220
xrem645x1	30-May-96, 18:15:40	-230
xrem657x	06-Jun-96, 18:47:06	-20
xrem659x	06-Jun-96, 18:47:06	-10
xrem662x	06-Jun-96, 18:47:06	-190

Filename	$T0$	$\Delta T0$ [sec]
xrem665x	08-Jun-96, 19:47:31	0
xrem673x	08-Jun-96, 19:47:31	-520
xrem675x	08-Jun-96, 19:47:31	-530
xrem677x	08-Jun-96, 19:47:31	-540
xrem679x	15-Jun-96, 16:08:36	205
xrem683x	17-Jun-96, 09:37:02	0
xrem685x	17-Jun-96, 09:37:02	-30
xrem688x	20-Jun-96, 06:47:26	-10
xrem690x	20-Jun-96, 06:47:26	-15
xrem690x1	20-Jun-96, 06:47:26	-5
xrem694x	22-Jun-96, 17:22:50	30
xrem696x	22-Jun-96, 17:22:50	40
xrem696x1	22-Jun-96, 17:22:50	-30
xrem700x	25-Jun-96, 06:45:07	-30
xrem702x	25-Jun-96, 06:45:07	-25
xrem709x	25-Jun-96, 06:45:07	-440
xrem709x1	25-Jun-96, 06:45:07	-450
xrem713x	25-Jun-96, 06:45:07	-450
xrem713x1	25-Jun-96, 06:45:07	-475
xrem717x	02-Jul-96, 15:02:02	1
xrem719x	02-Jul-96, 15:02:02	0
xrem723x	04-Jul-96, 15:11:46	0
xrem725x	06-Jul-96, 05:56:10	-20
xrem728x	06-Jul-96, 05:56:10	-20
xrem728x1	06-Jul-96, 05:56:10	-50
xrem732x	09-Jul-96, 04:11:12	-30
xrem734x	09-Jul-96, 04:11:12	0
xrem734x1	09-Jul-96, 04:11:12	-10
xrem744x	09-Jul-96, 04:11:12	-460
xrem744x1	09-Jul-96, 04:11:12	-460
xrem750x	16-Jul-96, 17:48:04	-30
xrem750x1	16-Jul-96, 17:48:04	-10
xrem754x	18-Jul-96, 12:56:59	1
xrem754x1	18-Jul-96, 12:56:59	0
xrem760x	20-Jul-96, 05:32:29	-50
xrem760x1	20-Jul-96, 05:32:29	1
xrem766x	20-Jul-96, 05:32:29	-470
xrem766x1	20-Jul-96, 05:32:29	-500
xrem770x	25-Jul-96, 14:48:46	-150
xrem770x1	25-Jul-96, 14:48:46	-30
xrem776x	27-Jul-96, 18:31:34	-20
xrem776x1	27-Jul-96, 18:31:34	-20

Filename	$T0$	$\Delta T0$ [sec]
xrem781x	30-Jul-96, 08:40:52	-20
xrem781x1	30-Jul-96, 08:40:52	-10
xrem781x1	31-Jul-96, 17:29:01	100
xrem786x	01-Aug-96, 19:15:01	10
xrem788x	02-Aug-96, 15:54:11	90
xrem790x	03-Aug-96, 07:24:01	0
xrem790x1	04-Aug-96, 04:03:01	80
xrem794x	05-Aug-96, 00:43:01	140
xrem794x1	05-Aug-96, 21:22:01	210
xrem798x	06-Aug-96, 23:10:01	30
xrem800x	07-Aug-96, 14:39:01	50
xrem802x	08-Aug-96, 16:28:01	-60
xrem805x	09-Aug-96, 18:17:01	20
xrem807x	11-Aug-96, 01:16:01	-80
xrem807x1	11-Aug-96, 21:55:01	-50
xrem812x	12-Aug-96, 18:34:01	-25
xrem814x	13-Aug-96, 20:23:01	-280
xrem816x	14-Aug-96, 17:02:01	-220
xrem819x	15-Aug-96, 08:31:01	-420
xrem821x	16-Aug-96, 15:30:01	-300
xrem821x1	17-Aug-96, 12:09:01	-340
xrem825x	18-Aug-96, 08:48:01	-620
xrem828x	19-Aug-96, 15:46:01	-630
xrem831x	20-Aug-96, 22:40:01	-750
xrem833x	21-Aug-96, 19:19:01	-890
xrem835x	22-Aug-96, 21:06:01	-1120
xrem837x	23-Aug-96, 17:44:01	-470
xrem839x	24-Aug-96, 09:11:01	-550
xrem841x	25-Aug-96, 05:49:01	-530
xrem839x1	26-Aug-96, 02:27:01	-420
xrem841x1	26-Aug-96, 23:05:01	-380
xrem847x	28-Aug-96, 00:52:01	-600
xrem852x	29-Aug-96, 23:19:01	-570
xrem854x	30-Aug-96, 19:57:01	-500
xrem856x	01-Sep-96, 02:54:01	-520
xrem860x	02-Sep-96, 20:09:01	-380
xrem868x	06-Sep-96, 01:31:01	-490
xrem869x	07-Sep-96, 03:19:01	-350
xrem871x	07-Sep-96, 23:57:01	-350
xrem874x	09-Sep-96, 06:54:01	-250
xrem878x	11-Sep-96, 00:10:01	-300
xrem880x	11-Sep-96, 15:38:01	-250

Filename	$T0$	$\Delta T0$ [sec]
xrem880x1	11-Sep-96, 15:38:01	-250
xrem882x	12-Sep-96, 17:26:01	40
xrem884x	13-Sep-96, 14:08:01	130
xrem891x	15-Sep-96, 07:29:01	40
xrem888x	16-Sep-96, 14:26:01	140
xrem896x	17-Sep-96, 21:05:01	20
xrem894x	18-Sep-96, 17:52:01	90
xrem901x	20-Sep-96, 00:37:01	1
xrem899x	20-Sep-96, 21:25:01	90
xrem907x	22-Sep-96, 04:10:01	30
xrem905x	23-Sep-96, 00:57:01	230
xrem910x	24-Sep-96, 07:42:01	70
xrem913x	25-Sep-96, 14:37:01	150
xrem916x	27-Sep-96, 07:51:01	0
xrem919x	28-Sep-96, 09:37:01	100
xrem921x	29-Sep-96, 01:05:01	0
xrem924x	30-Sep-96, 08:00:01	150
xrem924x1	01-Oct-96, 04:37:01	220
xrem927x	02-Oct-96, 01:14:01	20
xrem930x	03-Oct-96, 03:00:01	130
xrem931x	03-Oct-96, 18:28:01	20
xrem934x	05-Oct-96, 01:23:01	120
xrem937x	06-Oct-96, 08:19:01	0
xrem940x	07-Oct-96, 15:14:01	150
xrem943x	08-Oct-96, 16:57:01	20
xrem946x	09-Oct-96, 23:51:01	150
xrem948x	11-Oct-96, 01:37:01	20
xrem950x	11-Oct-96, 22:23:01	100
xrem953x	13-Oct-96, 05:09:41	50
xrem957x	14-Oct-96, 22:20:01	200
xrem960x	16-Oct-96, 00:05:01	30
xrem962x	16-Oct-96, 20:51:01	90
xrem964x	17-Oct-96, 22:28:01	10
xrem966x	18-Oct-96, 19:15:01	80
xrem976x	20-Oct-96, 02:00:01	10
xrem978x	21-Oct-96, 08:54:01	130
xrem978x1	22-Oct-96, 05:31:01	220
xrem982x	24-Oct-96, 19:21:01	10
xrem980x	25-Oct-96, 16:07:01	50
xrem987x	26-Oct-96, 22:52:01	-70
xrem985x	27-Oct-96, 19:29:01	-20
xrem987x1	28-Oct-96, 16:05:01	40

Filename	$T0$	$\Delta T0$ [sec]
xrem985x1	29-Oct-96, 12:42:01	130
xrem993x	30-Oct-96, 04:09:01	-100
xrem995x	31-Oct-96, 00:56:01	-10
xrem997x	01-Nov-96, 02:23:01	-130
xrem999x	01-Nov-96, 23:09:01	-40
yrem002x	03-Nov-96, 05:53:01	-100
yrem005x	04-Nov-96, 12:47:01	50
yrem008x	05-Nov-96, 19:40:01	-160
yrem011x	07-Nov-96, 02:34:01	-90
yrem021x	11-Nov-96, 09:33:01	150
yrem021x1	12-Nov-96, 06:09:01	250
yrem025x	12-Nov-96, 21:30:01	-60
yrem027x	13-Nov-96, 18:26:01	95
yrem029x	14-Nov-96, 19:55:01	40
yrem031x	15-Nov-96, 16:41:01	100
yrem034x	16-Nov-96, 23:24:01	1
yrem036x	17-Nov-96, 20:00:01	40
yrem034x1	18-Nov-96, 16:35:01	140
yrem036x1	19-Nov-96, 13:11:01	250
yrem042x	20-Nov-96, 09:51:01	40
yrem043x	20-Nov-96, 20:19:01	60
yrem049x	23-Nov-96, 09:56:01	50
yrem051x	24-Nov-96, 06:32:01	140
yrem049x1	25-Nov-96, 03:08:01	220
yrem051x1	25-Nov-96, 23:43:01	250
yrem057x	28-Nov-96, 23:48:01	40
yrem060x	29-Nov-96, 20:33:01	70
yrem067x	01-Dec-96, 03:16:01	40
yrem070x	02-Dec-96, 10:10:01	90
yrem075x	04-Dec-96, 08:30:01	0
yrem079x	04-Dec-96, 23:56:01	-210
yrem076x	06-Dec-96, 06:49:01	-60
yrem090x	11-Dec-96, 00:08:01	-450
yrem091x	11-Dec-96, 10:35:01	-470
yrem090x1	11-Dec-96, 20:53:01	-480
yrem091x1	12-Dec-96, 07:11:01	-430
yrem099x2	14-Dec-96, 20:47:01	-820
yrem100x	15-Dec-96, 07:15:01	-840
yrem099x3	15-Dec-96, 17:33:01	-900
yrem100x1	16-Dec-96, 03:51:01	-840
yrem104x	17-Dec-96, 00:16:01	-1050
yrem106x	17-Dec-96, 20:51:01	-1050

Filename	$T0$	$\Delta T0$ [sec]
yrem104x1	18-Dec-96, 07:19:01	-1100
yrem106x1	19-Dec-96, 03:45:01	-1110
yrem111x	20-Dec-96, 10:48:01	-1450
yrem111x1	21-Dec-96, 07:23:01	-1450
yrem128x	27-Dec-96, 07:31:01	-2550
yrem128x1	28-Dec-96, 04:06:01	-2600
yrem132x	28-Dec-96, 19:23:01	-2750
yrem134x	29-Dec-96, 15:58:01	-2900
yrem139x	01-Jan-97, 00:35:01	50
yrem140x	01-Jan-97, 11:03:01	40
yrem139x1	02-Jan-97, 07:28:01	170
yrem140x1	03-Jan-97, 04:03:01	240
yrem149x	05-Jan-97, 02:23:01	40
yrem150x	05-Jan-97, 17:49:01	80
yrem149x1	06-Jan-97, 19:33:01	0
yrem150x1	07-Jan-97, 11:00:01	200
yrem156x	08-Jan-97, 07:35:01	30
yrem157x	08-Jan-97, 18:03:01	60
yrem156x1	09-Jan-97, 04:20:01	110
yrem160x	10-Jan-97, 00:45:01	50
yrem161x	10-Jan-97, 11:13:01	60
yrem160x1	10-Jan-97, 21:30:01	140
yrem161x1	11-Jan-97, 07:48:01	150
yrem166x	12-Jan-97, 09:22:01	0
yrem167x	12-Jan-97, 19:49:01	80
yrem166x1	13-Jan-97, 06:07:01	110
yrem167x1	13-Jan-97, 16:25:01	0
yrem171x	14-Jan-97, 23:07:01	0
yrem171x1	15-Jan-97, 19:43:01	120
yrem170x1	16-Jan-97, 11:09:01	190
yrem180x	18-Jan-97, 09:35:01	160
yrem183x	19-Jan-97, 06:10:01	1
yrem185x	19-Jan-97, 21:37:01	100
yrem183x1	20-Jan-97, 13:03:01	90
yrem185x1	21-Jan-97, 04:30:01	210
yrem190x	22-Jan-97, 01:05:01	30
yrem191x	22-Jan-97, 16:32:01	80
yrem190x1	23-Jan-97, 07:58:01	120
yrem195x	23-Jan-97, 23:25:01	10
yrem196x	24-Jan-97, 09:52:01	40
yrem195x1	24-Jan-97, 20:10:01	100
yrem196x1	25-Jan-97, 06:28:01	130

Filename	$T0$	$\Delta T0$ [sec]
yrem201x	25-Jan-97, 21:44:01	30
yrem199x	26-Jan-97, 13:10:01	10
yrem201x1	27-Jan-97, 04:37:01	150
yrem199x1	27-Jan-97, 20:02:01	0
yrem204x	28-Jan-97, 21:48:41	10
yrem204x1	30-Jan-97, 04:40:01	110
yrem206x	30-Jan-97, 15:08:01	150
yrem210x	31-Jan-97, 06:24:01	0
yrem211x	31-Jan-97, 16:52:01	0
yrem210x1	01-Feb-97, 03:10:01	120
yrem211x1	01-Feb-97, 18:26:01	30
yrem211x2	03-Feb-97, 21:54:01	240
yrem220x	04-Feb-97, 18:29:01	30
yrem221x	05-Feb-97, 04:57:01	70
yrem221x1	06-Feb-97, 01:32:01	160
yrem225x	06-Feb-97, 21:57:01	50
yrem227x	07-Feb-97, 08:25:01	60
yrem225x1	07-Feb-97, 18:42:01	130
yrem230x	08-Feb-97, 20:16:01	0
yrem231x	09-Feb-97, 11:43:01	60
yrem230x1	10-Feb-97, 03:09:01	130
yrem231x1	10-Feb-97, 18:36:01	200
yrem237x	11-Feb-97, 20:20:01	20
yrem238x	12-Feb-97, 11:46:01	60
yrem240x	13-Feb-97, 08:21:01	20
yrem243x	14-Feb-97, 15:14:01	120
yrem247x	16-Feb-97, 03:15:01	0
yrem250x	17-Feb-97, 10:08:01	140
yrem255x	18-Feb-97, 22:08:01	20
yrem253x	19-Feb-97, 18:53:01	50
yrem260x	20-Feb-97, 20:27:01	50
yrem258x	21-Feb-97, 17:12:01	80
yrem262x	22-Feb-97, 23:55:01	40
yrem265x	24-Feb-97, 06:47:01	160
yrem269x	25-Feb-97, 18:48:01	20
yrem271x	27-Feb-97, 01:41:01	120
yrem274x	28-Feb-97, 03:25:01	10
yrem276x	01-Mar-97, 00:00:01	30
yrem278x	02-Mar-97, 01:44:01	30
yrem281x	03-Mar-97, 18:53:14	200
yrem286x	05-Mar-97, 01:46:01	60
yrem289x1	06-Mar-97, 03:30:01	130

Filename	$T0$	$\Delta T0$ [sec]
yrem290x1	06-Mar-97, 18:56:01	-20
yrem292x1	07-Mar-97, 20:39:01	120
yrem296x	09-Mar-97, 08:40:01	35
yrem298x	10-Mar-97, 00:07:01	100
yrem296x1	10-Mar-97, 15:33:01	190
yrem298x1	11-Mar-97, 06:59:01	250
yrem300x	11-Mar-97, 22:25:01	50
yrem302x	12-Mar-97, 13:51:01	60
yrem300x1	13-Mar-97, 05:18:01	120
yrem307x	14-Mar-97, 01:52:01	50
yrem309x	14-Mar-97, 22:37:22	0
yrem322x	20-Mar-97, 22:20:01	0
yrem324x	21-Mar-97, 13:46:01	60
yrem322x1	22-Mar-97, 05:11:01	110
yrem328x	23-Mar-97, 01:46:01	60
yrem331x	24-Mar-97, 08:37:01	130
yrem334x	26-Mar-97, 01:45:01	30
yrem337x	26-Mar-97, 22:30:01	110
yrem344x	29-Mar-97, 22:19:01	20
yrem347c	31-Mar-97, 05:15:02	120
yrem351x	01-Apr-97, 22:18:01	30
yrem353x	02-Apr-97, 13:44:01	80
yrem351x1	03-Apr-97, 05:09:01	130
yrem355x	03-Apr-97, 20:35:01	0
yrem354x	04-Apr-97, 12:00:01	60
yrem355x1	05-Apr-97, 03:26:01	130
yrem359x	05-Apr-97, 18:51:01	20
yrem362x	07-Apr-97, 01:42:01	150
yrem368x	09-Apr-97, 05:07:01	20
yrem370x	10-Apr-97, 01:51:01	100
yrem371x	10-Apr-97, 22:14:01	40
yrem373x	11-Apr-97, 13:40:01	80
yrem371x1	12-Apr-97, 05:05:01	130
yrem377x	12-Apr-97, 20:30:01	0
yrem380x	14-Apr-97, 03:21:01	140
yrem384x	16-Apr-97, 01:25:01	20
yrem386x	16-Apr-97, 16:50:01	80
yrem384x1	17-Apr-97, 08:15:01	130
yrem388x	18-Apr-97, 04:48:01	20
yrem391x	19-Apr-97, 01:30:01	120
yrem392x	19-Apr-97, 21:53:01	0
yrem395x	21-Apr-97, 04:42:01	150

Filename	$T0$	$\Delta T0$ [sec]
yrem400x	22-Apr-97, 21:48:01	0
yrem403x	23-Apr-97, 23:28:01	0
yrem408x	25-Apr-97, 06:17:01	0
yrem405x	26-Apr-97, 03:00:01	0
yrem409x	26-Apr-97, 18:14:01	0
yrem412x	28-Apr-97, 01:02:01	0
yrem418x	30-Apr-97, 09:31:01	0
yrem423x	02-May-97, 12:51:01	0
yrem744x	24-May-97, 18:02:01	40
yrem747x	26-May-97, 00:46:01	160
yrem482x	27-May-97, 22:52:01	70
yrem485x	29-May-97, 05:36:01	130
yrem488x	30-May-97, 22:34:01	-90
yrem491x	31-May-97, 19:03:01	20
yrem494x	02-Jun-97, 01:47:01	130
yrem499x	04-Jun-97, 04:58:01	40
yrem501x	05-Jun-97, 01:37:01	150
yrem503x	05-Jun-97, 21:56:01	0
yrem505x	06-Jun-97, 23:31:01	0
yrem532x	18-Jun-97, 11:29:01	70
yrem531x	19-Jun-97, 02:49:01	220
yrem538x	19-Jun-97, 18:06:01	30
yrem536x	20-Jun-97, 09:25:01	70
yrem538x1	21-Jun-97, 00:45:01	100
yrem540x	22-Jun-97, 02:17:01	40
yrem543x	23-Jun-97, 08:56:01	150
yrem744x	24-May-97, 18:02:01	30
yrem747x	26-May-97, 00:46:01	170
yremnnnx	01-Jul-97, 20:59:01	0
yrem581x	09-Jul-97, 02:27:01	100
yrem584x	09-Jul-97, 23:01:01	0
yrem588x	10-Jul-97, 19:14:01	50
yrem591x	11-Jul-97, 10:32:01	60
yrem588x1	12-Jul-97, 01:50:01	120
yrem594x	15-Jul-97, 21:35:01	30
yrem597x	16-Jul-97, 23:03:01	130
yrem600x	18-Jul-97, 05:38:01	20
yrem602x	19-Jul-97, 02:11:01	110
yrem604x	21-Jul-97, 04:51:01	160
yrem607x	21-Jul-97, 04:51:01	150
yrem612x	23-Jul-97, 12:52:01	150
yrem612x1	22-Jul-97, 21:36:01	70

Filename	$T0$	$\Delta T0$ [sec]
yrem616x	25-Jul-97, 00:30:01	40
yrem622x	27-Jul-97, 08:32:01	30
yrem624x	28-Jul-97, 09:59:01	120
yrem621x	29-Jul-97, 16:32:01	50
yrem631x	02-Aug-97, 17:13:01	30
yrem639x	03-Aug-97, 23:46:01	120
yrem643x	05-Aug-97, 21:35:01	20
yrem645x	06-Aug-97, 18:07:01	100
yrem648x	07-Aug-97, 19:24:01	20
yrem651x	09-Aug-97, 01:57:01	110
yrem655c	10-Aug-97, 23:32:01	10
yrem656c	11-Aug-97, 14:48:01	70
yrem657x	12-Aug-97, 06:03:01	10
yrem660x	13-Aug-97, 02:33:01	100
yrem662x	13-Aug-97, 22:43:01	20
yrem664x	15-Aug-97, 05:13:01	140
yrem669x	16-Aug-97, 21:54:01	30
yrem672x	18-Aug-97, 04:24:01	130
yrem677x	19-Aug-97, 21:04:01	20
yrem678x	20-Aug-97, 12:19:01	70
yrem677x1	21-Aug-97, 03:34:01	130
yrem682x	22-Aug-97, 04:58:01	30
yrem684x	23-Aug-97, 11:28:01	150
yrem687x	24-Aug-97, 23:02:01	10
yrem690x	26-Aug-97, 00:27:01	120
yrem694x	27-Aug-97, 22:10:01	20
yrem696x	28-Aug-97, 13:25:01	70
yrem694x1	29-Aug-97, 04:39:01	130
yrem699x	30-Aug-97, 00:59:01	20
yrem702x	31-Aug-97, 07:28:01	140
yrem712x	03-Sep-97, 01:30:01	30
yrem710x	03-Sep-97, 16:44:01	90
yrem712x1	04-Sep-97, 07:58:01	150
yrem713x	04-Sep-97, 23:12:01	20
yrem715x	05-Sep-97, 19:41:01	90
yrem716x	06-Sep-97, 15:49:01	1
yrem720x	07-Sep-97, 22:17:01	140
yrem722x	09-Sep-97, 04:50:01	10
yrem724x	10-Sep-97, 01:18:01	90
yrem727x	11-Sep-97, 02:32:01	70
yrem728x	11-Sep-97, 17:46:01	80
yrem727x1	12-Sep-97, 09:00:01	160

Filename	$T0$	$\Delta T0$ [sec]
yrem732x	13-Sep-97, 05:19:01	30
yrem735x	14-Sep-97, 11:46:01	150
yrem740x	16-Sep-97, 19:37:01	20
yrem742x	17-Sep-97, 10:51:01	70
yrem740x1	18-Sep-97, 02:05:01	120
yrem746x	19-Sep-97, 03:28:01	40
yrem749x	20-Sep-97, 09:55:01	200
yrem752x	22-Sep-97, 02:32:01	80
yrem752x1	22-Sep-97, 02:32:01	70
yrem756x	23-Sep-97, 08:59:01	30
yrem758x	24-Sep-97, 05:27:01	120
yrem759x	24-Sep-97, 20:31:01	20
yrem761x	25-Sep-97, 11:44:01	70
yrem764x	26-Sep-97, 18:11:01	10
yrem767x	28-Sep-97, 00:38:01	130
yrem774x	30-Sep-97, 23:40:01	0
yrem775x	01-Oct-97, 14:54:01	70
yrem774x1	02-Oct-97, 06:07:01	120
yrem778x	02-Oct-97, 21:20:01	30
yrem781x	04-Oct-97, 03:46:01	145
yrem786x	06-Oct-97, 01:30:01	30
yrem787x	06-Oct-97, 16:43:01	80
yrem786x1	07-Oct-97, 07:56:01	150
yrem791x	08-Oct-97, 04:14:01	60
yrem792x	08-Oct-97, 19:27:01	95
yrem800x	12-Oct-97, 04:43:01	30
yrem803x	13-Oct-97, 11:10:01	140
yrem807x	14-Oct-97, 22:41:01	30
yrem809x	16-Oct-97, 00:03:01	0
yrem812x	17-Oct-97, 06:29:01	15
yrem814x	18-Oct-97, 02:57:01	110
yrem816x	19-Oct-97, 02:32:36	40
yrem816x1	18-Oct-97, 23:05:01	10
yrem819x	20-Oct-97, 00:27:01	130
yrem822x	21-Oct-97, 06:56:01	30
yrem828x	24-Oct-97, 05:58:01	15
yrem831x	25-Oct-97, 12:25:01	135
yrem837x	28-Oct-97, 06:22:01	25
yrem840x	29-Oct-97, 12:48:01	140
yrem844x	31-Oct-97, 05:23:01	35
yrem847x	01-Nov-97, 11:50:01	0
yrem855x	04-Nov-97, 21:00:01	0

Filename	$T0$	$\Delta T0$ [sec]
yrem857x	05-Nov-97, 12:13:01	130
yrem855x1	06-Nov-97, 03:26:01	190
yrem861x	07-Nov-97, 04:47:01	0
yrem863x	08-Nov-97, 01:15:01	100
yrem865x	08-Nov-97, 21:22:01	20
yrem866x	09-Nov-97, 12:35:01	0
yrem865x1	10-Nov-97, 03:48:01	120
yrem873x	12-Nov-97, 06:33:01	30
yrem875x	13-Nov-97, 03:01:01	110
yrem882x	16-Nov-97, 01:53:01	20
yrem885x	17-Nov-97, 08:19:01	20
yrem899x	23-Nov-97, 06:21:01	90
yrem908x	27-Nov-97, 01:39:01	20
yrem909x	27-Nov-97, 16:52:01	90
yrem908x1	28-Nov-97, 08:06:01	140
yrem913x	29-Nov-97, 04:23:01	0
yrem916x	30-Nov-97, 10:49:01	160
yrem922x	03-Dec-97, 04:45:01	10
yrem925x	04-Dec-97, 11:11:01	130
yrem929x	06-Dec-97, 03:46:01	10
yrem932x	07-Dec-97, 10:12:01	130
yrem937x	09-Dec-97, 07:50:01	20
yrem940x	10-Dec-97, 14:16:01	130
yrem946x	13-Dec-97, 03:08:01	20
yrem953x	16-Dec-97, 02:08:01	0
yrem954x	16-Dec-97, 17:21:01	60
yrem953x1	17-Dec-97, 08:33:01	150
yrem959x	18-Dec-97, 20:03:01	0
yrem961x	19-Dec-97, 11:16:01	60
yrem963x	20-Dec-97, 07:34:01	50
yrem966x	21-Dec-97, 13:59:01	150
yrem973x	24-Dec-97, 02:51:01	0
yrem975x	25-Dec-97, 14:21:01	0
yrem978x	26-Dec-97, 20:48:01	0
yrem981x	28-Dec-97, 03:13:01	0
yrem984x	29-Dec-97, 04:35:01	0
yrem985x	30-Dec-97, 00:52:01	20
yrem988x	31-Dec-97, 07:18:01	130
yrem993x	01-Jan-98, 23:52:01	0
yrem995x	03-Jan-98, 01:13:01	110
yrem998x	04-Jan-98, 07:39:01	20
yrem999x	04-Jan-98, 22:52:01	0

Filename	$T0$	$\Delta T0$ [sec]
zrem002x	05-Jan-98, 19:09:01	60
zrem003x	06-Jan-98, 10:22:01	0
zrem002x1	07-Jan-98, 01:34:01	110
zrem007x	07-Jan-98, 21:52:01	35
zrem010x	09-Jan-98, 04:17:01	130
zrem017x	10-Jan-98, 20:51:01	0
zrem015x	11-Jan-98, 12:04:01	80
zrem017x1	12-Jan-98, 03:17:01	130
zrem021x	13-Jan-98, 19:51:01	30
zrem024x	15-Jan-98, 02:17:01	15
zrem026x	15-Jan-98, 22:44:01	100
zrem028x	16-Jan-98, 18:51:01	40
zrem031x	18-Jan-98, 01:16:01	135
zrem035x	19-Jan-98, 17:50:01	25
zrem038x	21-Jan-98, 00:16:01	130
zrem043x	23-Jan-98, 02:58:01	0
zrem044x	23-Jan-98, 18:11:01	100
zrem043x1	24-Jan-98, 09:24:01	150
zrem048x	25-Jan-98, 00:35:01	0
zrem049x	25-Jan-98, 15:48:01	80
zrem052x	26-Jan-98, 22:13:01	0
zrem055x	28-Jan-98, 04:38:01	110
zrem088x	11-Feb-98, 23:32:01	25
zrem091x	13-Feb-98, 05:57:01	140
zrem094x	14-Feb-98, 17:26:01	10
zrem097x	15-Feb-98, 23:52:01	115
zrem102x	17-Feb-98, 21:29:01	0
zrem103x	18-Feb-98, 12:42:01	80
zrem106x	19-Feb-98, 19:07:01	5
zrem109x	21-Feb-98, 01:32:01	125
zrem114x	22-Feb-98, 23:10:01	0
zrem115x	23-Feb-98, 14:22:01	95
zrem114x1	24-Feb-98, 05:35:01	130
zrem129x	25-Feb-98, 01:51:01	0
zrem130x	25-Feb-98, 17:04:01	60
zrem129x1	26-Feb-98, 08:16:01	140
zrem144x	08-Mar-98, 06:27:01	30
zrem146x	09-Mar-98, 02:54:01	100
zrem148x	09-Mar-98, 22:58:01	20
zrem150x	10-Mar-98, 14:10:01	90
zrem165x	12-Mar-98, 01:39:01	10
zrem170x	12-Mar-98, 01:39:01	10

Filename	$T0$	$\Delta T0$ [sec]
zrem177x	20-Mar-98, 12:11:01	135
zrem185x	25-Mar-98, 08:39:01	0
zrem187x	26-Mar-98, 05:05:01	100
zrem189x	27-Mar-98, 01:11:41	10
zrem190x	27-Mar-98, 16:21:01	40
zrem197x	30-Mar-98, 10:11:01	40
zrem206x	03-Apr-98, 10:22:01	190
zrem211x	05-Apr-98, 02:50:01	10
zrem229x	12-Apr-98, 22:05:01	0
zrem238x	19-Apr-98, 05:51:01	20
zrem247x	20-Apr-98, 12:12:01	120
zrem276x	03-May-98, 03:11:01	20
zrem279x	04-May-98, 09:29:01	130
zrem287x	07-May-98, 08:11:01	50
zrem290x	08-May-98, 14:29:01	170
zrem293x	10-May-98, 01:49:01	0
zrem295x	10-May-98, 16:52:01	80
zrem297x	11-May-98, 18:05:01	150
zrem306x	15-May-98, 12:58:32	70
zrem332x	20-May-98, 23:58:01	1
zrem321x	21-May-98, 20:18:01	80
zrem335x	27-May-98, 07:12:01	70
zrem343x	30-May-98, 10:45:01	410
zrem351x	03-Jun-98, 00:21:01	1060
zrem360x	07-Jun-98, 00:00:01	1920
zrem366x	08-Jun-98, 01:09:01	2290
zrem367x	09-Jun-98, 12:28:01	40
zrem370x	10-Jun-98, 18:39:01	165
zrem379x	14-Jun-98, 18:08:01	0
zrem386x	17-Jun-98, 16:32:01	60
zrem403x	24-Jun-98, 20:01:01	90
zrem406x	26-Jun-98, 02:11:01	80
zrem415x	29-Jun-98, 15:39:01	70
zrem420x	01-Jul-98, 22:47:01	1
zrem420x1	01-Jul-98, 22:47:01	0
zrem424x	03-Jul-98, 10:06:01	30
zrem436x	08-Jul-98, 10:36:01	10
zrem440x	10-Jul-98, 02:48:01	60
zrem445x	12-Jul-98, 10:08:01	60
zrem452x	15-Jul-98, 08:24:01	70
zrem459x	18-Jul-98, 06:45:01	60
zrem460x	18-Jul-98, 21:49:01	110

Filename	$T0$	$\Delta T0$ [sec]
zrem472x	23-Jul-98, 12:15:01	90
zrem474x	24-Jul-98, 08:16:01	170
zrem476x	25-Jul-98, 09:25:01	50
zrem478x	26-Jul-98, 00:29:01	110
zrem483x	28-Jul-98, 02:39:01	1
zrem483x1	28-Jul-98, 05:34:11	30
zrem484x	28-Jul-98, 17:42:01	90
zrem487x	29-Jul-98, 23:48:01	30
zrem488x	30-Jul-98, 14:51:01	80
zrem492x	01-Aug-98, 01:59:01	30
zrem495x	02-Aug-98, 08:05:01	130
zrem499x	03-Aug-98, 19:12:01	20
zrem500x	04-Aug-98, 10:15:01	70
zrem504x	05-Aug-98, 21:22:01	10
zrem513x	09-Aug-98, 20:39:01	60
zrem514x	10-Aug-98, 11:42:01	140
zrem516x	11-Aug-98, 02:57:01	30
zrem520x	12-Aug-98, 19:04:01	175
zrem523x	14-Aug-98, 01:10:01	0
zrem527x	15-Aug-98, 17:17:01	170
zrem538x	20-Aug-98, 02:35:01	10
zrem539x	20-Aug-98, 17:38:01	80
zrem539x1	20-Aug-98, 23:14:55	0
zrem547x	21-Aug-98, 23:43:01	20
zrem542x	23-Aug-98, 05:48:01	150
zrem556x	25-Aug-98, 22:54:01	15
zrem558x	28-Aug-98, 16:01:01	70
zrem561x	29-Aug-98, 22:06:01	20
zrem561x1	30-Aug-98, 07:03:04	0
zrem563x	30-Aug-98, 13:08:01	95
zrem578x	03-Sep-98, 22:21:01	20
zrem581x	04-Sep-98, 13:23:01	90
zrem587x	10-Sep-98, 04:47:01	0
zrem591x	11-Sep-98, 00:39:01	0
zrem594x	12-Sep-98, 06:42:01	-100
zrem594x1	12-Sep-98, 11:53:54	-100
zrem594x2	12-Sep-98, 12:20:38	-130
zrem598x	13-Sep-98, 22:46:01	0