

ITESRE

AGILE

DOCUMENT TYPE: TEST REPORT

TITLE: THE RAW AND FITS DATA ARCHIVE OF THE AGILE POST-CERN 2000
TESTS AT ITESRE (December 2000 - February 2001)

DOCUMENT No. AGILE-ITE-RP-001 **PAGE:** I of ii,10
Te.S.R.E. Report 312/01

PROJECT Ref.: AGILE EGSE

ISSUE No.: 2.0 **DATE:** February 2001

PREPARED BY: MASSIMO TRIFOGLIO
FULVIO GIANOTTI
JOHN B. STEPHEN
NATALIA AURICCHIO

Ref: AGILE-ITE-RP-001
Page: ii
Issue: 2.0
Date: February 2001

1	INTRODUCTION.....	1
1.1	PURPOSE AND SCOPE	1
1.2	REFERENCE DOCUMENTS	2
1.3	DOCUMENT HISTORY	2
2.	MEASUREMENT LOG.....	3
2.1	SCIENCE CONSOLE LOGBOOK	3
3.	PERMANENT ARCHIVE DIRECTORY.....	5
3.1	THE CDROM ARCHIVE	5
3.3	THE OFF-LINE ARCHIVE BACKUP.....	10

1 Introduction

1.1 Purpose and scope

In the period 06 December 2000 - 10 February 2001 a number of tests have been carried out at Itesre on the AGILE Minicalorimeter CsI Bars tested at CERN in November 2000.

From the Science Console point of view, the test set up was the same used for the CsI Bars standalone tests carried out with the TESRE Test Equipment during the CERN Campaign.

Also at ITE, the TESRE Test Equipment (TE) was exploited in order to gather and AD convert the CsI Bars signals, and the Science Console was in charge of acquiring all the digital data contained in the pseudo TM packets created and sent in near real time by the TE.

The purpose of the present note is to provide information relevant for user of the *Post-CERN 2000 Tests at ITE (Dec 00 - Jan 01)* consisting of 15 CDROMs (in 1 copy) where all the log, raw and FITS data files of the relevant measurements archived by the Science Console have been saved.

A summary of the set up of each measurement is presented in chapter 2.

As no modification occurred, for all the information devoted to the format and content of the data, the reader should refer to:

- the SRD document of the Tesre TE Host Computer [1], which:
 - in Annex A gives details on the data formats of the data produced by the Host Computer and sent to the Science Console;
- the ICD document of the CERN November 2000 Test Campaign [2], which:
 - in Section 4 summaries the archiving operations giving details on the various directory structures forming the temporary and the permanent archives related to the test campaign;
 - in Annex B provides an overview of the configuration related to the processing of the raw data;
 - in Annex C, details the format for the FITS files produced by the raw data processing.

Hence, the present document is limited to the information specific to this CDROM archive, namely:

- chapter 3 contains the whole directory of the permanent archive on CDROMs;
- chapter 4 provide information on the backup performed on the off-line archive before re-initialisation.

A general description of the Science Console software architecture can be found in [3].

1.2 Reference Documents

- [1] "M.Trifoglio, F.Gianotti, M.Malaspina, J.B. Stephen, "User software requirements for the Host Computer of the AGILE Minicalorimeter *CSI Bars* TESRE Test Equipment", AGILE-ITE-SR-002, Issue 01/A, Octrober 2000.
- [2] M.Trifoglio, F.Gianotti, J.B.Stephen, "Interface Control Document of the AGILE Minicalorimeter Science Console for the Test Beam Campaign (November 2000) at CERN", AGILE-ITE-ICD-002, Issue 01, December 2000.
- [3] M.Trifoglio, F.Gianotti, J.B.Stephen, The Ground Support Equipment for the Scientific tests and calibration of the AGILE instrument", Proceedings of SPIE's Annual Meeting, 30 July-4 August 2000, S.Diego, Colorado USA, SPIE Vol. 4140, p. 478.

1.3 Document History

Issue 1.0	first issue.
Issue 2.0	Added the detailed Logbook.

2. Measurement log

Summary information on each measurement are provided by the logbook of the Science Console as presented in the following section.

2.1 Science Console Logbook

The table hereafter contains the information noted on the logbook of the Science Console in order to provide for each measurement:

- Runid: the Run Identification number assigned to the measurement;
- Source: the target: X-Ray source or Precision Pulse Generator (PPG);
- Exp. Time: the time duration of exposure;
- Measure Description: description of the measurement;
- Aim: purpose of the measurement

Additional notes provide information on the environment and the instrument set up.

Runid #	Source	Exp. Time (s)	Measure Description	Aim
4336-4358	PPG		Test	Functional test
4372-4373-4374	¹³⁷ Cs	2000	1 - 2 - 3 cm from side A	Functional test
4375-4376-4377	¹³⁷ Cs	2000	1 - 2 - 3 cm from side B	Functional test
4383	⁸⁸ Y	18000	1 cm from side B	Light Output @ 1 cm from PD
4385	⁸⁸ Y	9000	1 cm from side B	Light Output @ 1 cm from PD
4386-4387-4388	⁸⁸ Y	12000	5 - 8 - 12 cm from side B	Functional test
4389-4390-4391	⁸⁸ Y	12000	1 - 5 - 8 cm from side B	Functional test
4400	²² Na	600	2 cm from side B	Functional test
4401	²² Na	300	1 cm from side B	Functional test
4403	²² Na	300	1 cm from side B	Functional test
4417	²² Na	3600	1 cm from PD 6B and 2B	Functional test
4418	²² Na	7200	1 cm from PD 6B and 2B	Light Output @ 1 cm from PD
4419-4420	²² Na	7200	5 - 8 cm from PD 6B and 2B	Attenuation Coefficient
4421-4422-4423	²² Na	7200	12 - 16 - 24 cm from PD 6B and 2B	Attenuation Coefficient
4426	²² Na	7200	1 cm from PD 6A and 2A	Light Output @ 1 cm from PD
4427-4428	²² Na	7200	5 - 8 cm from PD 6A and 2A	Attenuation Coefficient
4429-4430	²² Na	7200	12 - 16 cm from PD 6A and 2A	Attenuation Coefficient
4433	²² Na	7200	1 cm from PD 8A and 4A	Light Output @ 1 cm from PD
4434-4435	²² Na	7200	5 - 8 cm from PD 8A and 4A	Attenuation Coefficient
4436-4437	²² Na	7200	12 - 16 cm from PD 8A and 4A	Attenuation Coefficient
4439	²² Na	7200	1 cm from PD 8B and 4B	Light Output @ 1 cm from PD
4440-4442	²² Na	7200	5 - 8 cm from PD 8B and 4B	Attenuation Coefficient
4443-4444	²² Na	7200	12 - 16 cm from PD 8B and 4B	Attenuation Coefficient
4449-4450	PPG	300	Bar 5a: attenuation x100 - x200	Gain and offset
4455	²² Na	7200	1 cm from PD 5B and 1B	Functional test
4461	²⁴¹ Am	1800	Bar 2B and 6B	Calibration (e ⁻ /channel)

Runid #	Source	Exp. Time (s)	Measure Description	Aim
4463	^{241}Am	1800	Bar 2A and 6A	Calibration ($e^-/\text{channel}$)
4464	^{241}Am	1800	Bar 4B and 8B	Calibration ($e^-/\text{channel}$)
4465	^{241}Am	1800	Bar 4B and 8B	Calibration ($e^-/\text{channel}$)
4467	^{241}Am	1800	Bar 4A and 8A	Calibration ($e^-/\text{channel}$)
4471	PPG	500	Bar 2A: attenuation x500 - x200 - x100	Gain and offset
4473-4474-4475	PPG	500	Bar 2B: attenuation x500 - x200 - x100	Gain and offset
4477-4478-4479	PPG	500	Bar 6A: attenuation x500 - x200 - x100	Gain and offset
4480-4481-4482	PPG	500	Bar 6B: attenuation x500 - x200 - x100	Gain and offset
4483-4485-4486	PPG	500	Bar 8A: attenuation x500 - x200 - x100	Gain and offset
4487-4488-4489	PPG	500	Bar 8B: attenuation x500 - x200 - x100	Gain and offset
4491-4492-4493	PPG	500	Bar 4A: attenuation x500 - x200 - x100	Gain and offset
4495-4496-4497	PPG	500	Bar 4B: attenuation x500 - x200 - x100	Gain and offset
4504	^{241}Am	900	Bar 6B	Calibration ($e^-/\text{channel}$)
4505-4506			Test	Functional test
4513	^{241}Am	2000	Bar 5B and 1B	Calibration ($e^-/\text{channel}$)
4521	^{241}Am	2000	Bar 5A and 1A	Calibration ($e^-/\text{channel}$)
4523	PPG	500	Bar 5A: attenuation x500 - x200 - x100	Gain and offset
4524	PPG	500	Bar 5B: attenuation x500 - x200 - x100	Gain and offset
4525	PPG	500	Bar 1A: attenuation x500 - x200 - x100	Gain and offset
4526	PPG	500	Bar 1B: attenuation x500 - x200 - x100	Gain and offset
4528	^{22}Na	300	1 cm from PD 5A	Functional test
4530	^{22}Na	3000	1 cm from PD 5A	Functional test
4533	^{22}Na	3000	5 cm from PD 5A	Functional test
4539	^{22}Na	7000	1 cm from PD 6A (counter+decoupling capacitor)	Functional test
4541	^{22}Na	3000	1 cm from PD 8A (counter + decoupling capacitor)	Functional test
4542	^{22}Na	1000	1 cm from PD 6A (counter+ decoupling capacitor)	Functional test
4547	^{22}Na	7200	1 cm from PD 6B	Light Output @ 1 cm from PD
4548-4549-4550	^{22}Na	7200	5 - 8 - 12 cm from PD 6B	Attenuation Coefficient
4563-76			Test	Functional test
4577-80			Test	Functional test
4598-4599-4600	^{22}Na	7200	20-16-12 cm from PD 6A	Attenuation Coefficient
4601-4602	^{22}Na	7200	8 - 5 cm from PD 6A	Attenuation Coefficient
4603	^{22}Na	7200	1 cm from PD 6A	Light Output @ 1 cm from PD
4606	PPG	150	Bar 6A: attenuation x500 - x200 - x100	Gain and offset
4607	^{241}Am	600	Bar 6A	Calibration ($e^-/\text{channel}$)

3. Permanent Archive Directory

3.1 The CDROM Archive

CDROM#	Run ID	Measurement Start Date	Measurement Start Time	Measurement Stop Time	Total number of events	RUN ID Total Size (bytes)	Test Equipment
0007	4336	2000-12-06	09:32:18	09:32:19	10	2086164	TESRE T.E.
0007	4336	2000-12-06	09:32:20	09:34:00	63200	2086164	TESRE T.E.
0007	4338	2000-12-06	09:37:57	09:37:59	16	2078208	TESRE T.E.
0007	4338	2000-12-06	09:38:00	09:39:39	57840	2078208	TESRE T.E.
0007	4345	2000-12-06	09:54:20	09:54:22	3	2082432	TESRE T.E.
0007	4345	2000-12-06	09:54:23	09:56:02	58000	2082432	TESRE T.E.
0007	4346	2000-12-06	09:57:12	09:57:14	13	2072928	TESRE T.E.
0007	4346	2000-12-06	09:57:15	09:58:54	57776	2072928	TESRE T.E.
0007	4348	2000-12-06	10:36:12	10:36:14	12	2095632	TESRE T.E.
0007	4348	2000-12-06	10:36:15	10:37:54	58432	2095632	TESRE T.E.
0007	4349	2000-12-06	10:38:47	10:38:49	9	2088240	TESRE T.E.
0007	4349	2000-12-06	10:38:50	10:40:29	58128	2088240	TESRE T.E.
0007	4350	2000-12-06	10:41:04	10:41:06	15	2079792	TESRE T.E.
0007	4350	2000-12-06	10:41:07	10:42:46	57952	2079792	TESRE T.E.
0007	4351	2000-12-06	10:43:49	10:43:51	7	2092464	TESRE T.E.
0007	4351	2000-12-06	10:43:52	10:45:31	58304	2092464	TESRE T.E.
0007	4352	2000-12-06	10:46:27	10:46:29	12	2089824	TESRE T.E.
0007	4352	2000-12-06	10:46:30	10:48:09	58192	2089824	TESRE T.E.
0007	4353	2000-12-06	10:48:28	10:48:30	5	1864368	TESRE T.E.
0007	4353	2000-12-06	10:48:31	10:51:26	51360	1864368	TESRE T.E.
0007	4354	2000-12-06	10:52:27	10:53:56	51904	1875456	TESRE T.E.
0007	4355	2000-12-06	10:54:54	10:54:56	3	2096688	TESRE T.E.
0007	4355	2000-12-06	10:54:57	10:56:36	58256	2096688	TESRE T.E.
0007	4356	2000-12-06	10:57:06	10:57:08	3	2088240	TESRE T.E.
0007	4356	2000-12-06	10:57:09	10:58:48	58128	2088240	TESRE T.E.
0007	4357	2000-12-06	11:01:49	11:03:28	57728	2074512	TESRE T.E.
0007	4358	2000-12-06	11:04:04	11:04:06	7	2081904	TESRE T.E.
0007	4358	2000-12-06	11:04:07	11:05:46	57952	2081904	TESRE T.E.
0007	4372	2000-12-11	19:19:53	19:19:55	8	25833984	TESRE T.E.
0007	4372	2000-12-11	19:19:56	19:53:17	782832	25833984	TESRE T.E.
0007	4373	2000-12-11	19:54:00	19:54:02	14	24613248	TESRE T.E.
0007	4373	2000-12-11	19:54:03	20:27:22	745840	24613248	TESRE T.E.
0007	4374	2000-12-11	20:28:03	20:28:05	11	23642784	TESRE T.E.
0007	4374	2000-12-11	20:28:06	21:01:25	716432	23642784	TESRE T.E.
0007	4375	2000-12-11	21:10:07	21:10:09	15	24215664	TESRE T.E.
0007	4375	2000-12-11	21:10:10	21:43:28	733792	24215664	TESRE T.E.
0007	4376	2000-12-11	21:44:10	21:44:11	11	24404160	TESRE T.E.
0007	4376	2000-12-11	21:44:12	22:17:34	739504	24404160	TESRE T.E.
0007	4377	2000-12-11	22:18:17	22:18:19	9	23324400	TESRE T.E.
0007	4377	2000-12-11	22:18:20	22:51:36	706784	23324400	TESRE T.E.
0008	4383	2000-12-14	11:50:50	11:50:52	3	211199508	TESRE T.E.
0008	4383	2000-12-14	11:50:53	15:20:04	6399968	211199508	TESRE T.E.
0008	4385	2000-12-14	17:32:03	17:32:05	6	22698720	TESRE T.E.
0008	4385	2000-12-14	17:32:06	19:51:21	687824	22698720	TESRE T.E.
0009	4386	2000-12-15	20:11:23	20:11:25	6	193477680	TESRE T.E.
0009	4386	2000-12-15	20:11:26	23:31:24	5862944	193477680	TESRE T.E.

0010	4387	2000-12-15	23:32:37	23:32:38	11	189479664	TESRE T.E.
0010	4387	2000-12-15	23:32:39	02:52:37	5741792	189479664	TESRE T.E.
0010	4388	2000-12-16	02:54:04	02:54:06	12	35759856	TESRE T.E.
0010	4388	2000-12-16	02:54:07	17:56:55	1083616	35759856	TESRE T.E.
0011	4389	2000-12-18	18:18:12	18:18:14	4	193631856	TESRE T.E.
0011	4389	2000-12-18	18:18:15	21:38:13	5867616	193631856	TESRE T.E.
0012	4390	2000-12-18	21:39:40	21:39:42	5	191164512	TESRE T.E.
0012	4390	2000-12-18	21:39:43	00:59:40	5792848	191164512	TESRE T.E.
0012	4391	2000-12-19	01:00:53	01:00:55	16	34677984	TESRE T.E.
0012	4391	2000-12-19	01:00:56	19:55:08	1050832	34677984	TESRE T.E.
0012	4400	2001-01-10	18:05:24	18:05:26	3	9555252	TESRE T.E.
0012	4400	2001-01-10	18:05:27	18:15:58	283120	9555252	TESRE T.E.
0012	4401	2001-01-10	18:37:26	18:37:28	9	5815392	TESRE T.E.
0012	4401	2001-01-10	18:37:29	18:42:28	171344	5815392	TESRE T.E.
0012	4403	2001-01-10	18:56:52	18:56:54	15	5818032	TESRE T.E.
0012	4403	2001-01-10	18:56:55	19:01:54	176288	5818032	TESRE T.E.
0013	4417	2001-01-12	17:53:11	17:53:13	9	35144772	TESRE T.E.
0013	4417	2001-01-12	17:53:14	18:53:12	1064976	35144772	TESRE T.E.
0013	4418	2001-01-12	19:33:32	19:33:34	7	70177008	TESRE T.E.
0013	4418	2001-01-12	19:33:35	21:33:33	2126560	70177008	TESRE T.E.
0013	4419	2001-01-12	21:35:00	21:35:02	10	67643664	TESRE T.E.
0013	4419	2001-01-12	21:35:03	23:35:00	2049792	67643664	TESRE T.E.
0013	4420	2001-01-12	23:36:13	23:36:15	9	62667792	TESRE T.E.
0013	4420	2001-01-12	23:36:16	01:36:14	1899008	62667792	TESRE T.E.
0014	4421	2001-01-13	01:37:43	03:37:41	1715760	56620080	TESRE T.E.
0014	4422	2001-01-13	03:39:08	03:39:10	6	51988464	TESRE T.E.
0014	4422	2001-01-13	03:39:11	05:39:09	1575392	51988464	TESRE T.E.
0014	4423	2001-01-13	05:41:33	05:41:36	13	37129488	TESRE T.E.
0014	4423	2001-01-13	05:41:37	14:11:57	1125120	37129488	TESRE T.E.
0014	4425	2001-01-17	19:26:27	19:28:34	21840	720756	TESRE T.E.
0014	4426	2001-01-17	19:38:45	19:38:47	2	57362448	TESRE T.E.
0014	4426	2001-01-17	19:38:48	21:38:45	1738240	57362448	TESRE T.E.
0014	4427	2001-01-17	21:40:12	21:40:14	14	56628528	TESRE T.E.
0014	4427	2001-01-17	21:40:15	23:40:12	1716000	56628528	TESRE T.E.
0015	4428	2001-01-17	23:41:25	23:41:26	13	52981104	TESRE T.E.
0015	4428	2001-01-17	23:41:27	01:41:26	1605472	52981104	TESRE T.E.
0015	4429	2001-01-18	01:42:53	01:42:54	13	51041760	TESRE T.E.
0015	4429	2001-01-18	01:42:55	03:42:53	1546704	51041760	TESRE T.E.
0015	4430	2001-01-18	03:44:23	05:44:21	1526912	50388096	TESRE T.E.
0015	4433	2001-01-18	20:17:48	20:17:50	16	59003508	TESRE T.E.
0015	4433	2001-01-18	20:17:51	22:17:48	1787968	59003508	TESRE T.E.
0016	4434	2001-01-18	22:19:15	22:19:17	16	59214672	TESRE T.E.
0016	4434	2001-01-18	22:19:18	00:19:16	1794368	59214672	TESRE T.E.
0016	4435	2001-01-19	00:20:28	00:20:29	5	57890448	TESRE T.E.
0016	4435	2001-01-19	00:20:30	02:20:29	1754240	57890448	TESRE T.E.
0016	4436	2001-01-19	02:21:56	02:21:58	2	57453264	TESRE T.E.
0016	4436	2001-01-19	02:21:59	04:21:57	1740992	57453264	TESRE T.E.
0016	4437	2001-01-19	04:23:24	04:23:26	2	57694560	TESRE T.E.
0016	4437	2001-01-19	04:23:27	06:23:24	1748304	57694560	TESRE T.E.
0017	4439	2001-01-19	19:50:37	19:50:39	6	76950720	TESRE T.E.
0017	4439	2001-01-19	19:50:40	21:50:38	2331824	76950720	TESRE T.E.
0017	4440	2001-01-19	21:52:05	21:52:07	15	75535680	TESRE T.E.
0017	4440	2001-01-19	21:52:08	23:52:05	2288944	75535680	TESRE T.E.

0017	4441	2001-01-19	23:53:17	23:53:19	8	528	TESRE T.E.
0017	4442	2000-05-07	09:53:31	15:07:34	2198272	72545616	TESRE T.E.
0018	4443	2000-05-07	09:53:31	15:07:34	2061664	68035440	TESRE T.E.
0018	4444	2000-05-07	09:53:31	15:07:34	1925248	63533712	TESRE T.E.
0018	4449	2001-01-24	15:24:11	15:24:13	4	5243568	TESRE T.E.
0018	4449	2001-01-24	15:24:14	15:29:14	158880	5243568	TESRE T.E.
0018	4450	2001-01-24	15:38:32	15:43:32	158272	5222976	TESRE T.E.
0018	4451	2001-01-24	15:44:26	15:44:28	15	528	TESRE T.E.
0018	4453	2001-01-24	15:53:33	15:53:32	1520	4621584	TESRE T.E.
0018	4455	2001-01-24	20:58:15	09:14:28	2764720	91235796	TESRE T.E.
0018	4457	2001-01-25	10:50:38	10:50:40	16	11385828	TESRE T.E.
0018	4457	2001-01-25	10:50:41	11:25:03	345008	11385828	TESRE T.E.
0019	4458	2001-01-25	11:25:49	14:22:44	516032	17029056	TESRE T.E.
0019	4459	2001-01-25	14:23:25	16:10:29	517744	17085552	TESRE T.E.
0019	4461	2001-01-25	16:28:49	16:28:51	4	9222612	TESRE T.E.
0019	4461	2001-01-25	16:28:52	16:58:51	279456	9222612	TESRE T.E.
0019	4463	2001-01-25	17:24:48	17:24:50	6	10779120	TESRE T.E.
0019	4463	2001-01-25	17:24:52	17:54:51	326624	10779120	TESRE T.E.
0019	4464	2001-01-25	17:56:44	17:56:46	7	4747248	TESRE T.E.
0019	4464	2001-01-25	17:56:47	18:06:00	143840	4747248	TESRE T.E.
0019	4465	2001-01-25	18:06:19	18:26:47	343744	11343552	TESRE T.E.
0019	4466	2001-01-25	18:27:32	18:27:34	9	5634288	TESRE T.E.
0019	4466	2001-01-25	18:27:35	18:53:04	170720	5634288	TESRE T.E.
0019	4467	2001-01-25	18:58:56	18:58:58	15	13966128	TESRE T.E.
0019	4467	2001-01-25	18:58:59	19:28:58	423200	13966128	TESRE T.E.
0019	4470	2001-01-25	20:39:02	20:39:04	10	13877460	TESRE T.E.
0019	4470	2001-01-25	20:39:05	08:46:35	420512	13877460	TESRE T.E.
0019	4471	2001-01-26	09:07:30	09:07:32	11	7572576	TESRE T.E.
0019	4471	2001-01-26	09:07:33	09:15:53	229456	7572576	TESRE T.E.
0019	4472	2001-01-26	09:16:35	09:16:37	15	4201824	TESRE T.E.
0019	4472	2001-01-26	09:16:38	09:21:26	127312	4201824	TESRE T.E.
0019	4473	2001-01-26	09:25:44	09:25:46	7	2277264	TESRE T.E.
0019	4473	2001-01-26	09:25:47	09:28:17	68992	2277264	TESRE T.E.
0019	4474	2001-01-26	09:31:48	09:31:50	13	2267232	TESRE T.E.
0019	4474	2001-01-26	09:31:51	09:34:20	68688	2267232	TESRE T.E.
0019	4475	2001-01-26	09:35:02	09:35:04	11	2266704	TESRE T.E.
0019	4475	2001-01-26	09:35:05	09:37:34	68672	2266704	TESRE T.E.
0019	4477	2001-01-26	09:39:17	09:41:42	55120	1818960	TESRE T.E.
0019	4478	2001-01-26	09:42:47	09:45:05	60432	1994256	TESRE T.E.
0019	4479	2001-01-26	09:45:47	09:45:49	4	2141568	TESRE T.E.
0019	4479	2001-01-26	09:45:50	09:48:19	64880	2141568	TESRE T.E.
0019	4480	2001-01-26	09:49:09	09:49:11	7	2142096	TESRE T.E.
0019	4480	2001-01-26	09:49:12	09:51:41	64896	2142096	TESRE T.E.
0019	4481	2001-01-26	09:52:25	09:52:27	12	2138400	TESRE T.E.
0019	4481	2001-01-26	09:52:28	09:54:57	64784	2138400	TESRE T.E.
0019	4482	2001-01-26	09:55:38	09:55:40	10	2138400	TESRE T.E.
0019	4482	2001-01-26	09:55:41	09:58:10	64784	2138400	TESRE T.E.
0019	4483	2001-01-26	10:00:06	10:00:08	15	2216016	TESRE T.E.
0019	4483	2001-01-26	10:00:09	10:02:38	67136	2216016	TESRE T.E.
0019	4485	2001-01-26	10:04:15	10:04:17	2	2229744	TESRE T.E.
0019	4485	2001-01-26	10:04:18	10:06:48	67552	2229744	TESRE T.E.
0019	4486	2001-01-26	10:07:28	10:07:30	7	2219712	TESRE T.E.
0019	4486	2001-01-26	10:07:31	10:10:00	67248	2219712	TESRE T.E.

0019	4487	2001-01-26	10:10:43	10:10:45	9	2209680	TESRE T.E.
0019	4487	2001-01-26	10:10:46	10:13:15	66944	2209680	TESRE T.E.
0019	4488	2001-01-26	10:15:09	10:15:11	4	2217072	TESRE T.E.
0019	4488	2001-01-26	10:15:12	10:17:41	67168	2217072	TESRE T.E.
0019	4489	2001-01-26	10:18:30	10:18:32	12	2224992	TESRE T.E.
0019	4489	2001-01-26	10:18:33	10:21:03	67408	2224992	TESRE T.E.
0019	4491	2001-01-26	10:42:41	10:42:43	8	2178528	TESRE T.E.
0019	4491	2001-01-26	10:42:44	10:45:13	66000	2178528	TESRE T.E.
0019	4492	2001-01-26	10:45:51	10:45:53	5	2193312	TESRE T.E.
0019	4492	2001-01-26	10:45:54	10:48:24	66448	2193312	TESRE T.E.
0019	4493	2001-01-26	10:49:10	10:49:12	11	2186448	TESRE T.E.
0019	4493	2001-01-26	10:49:14	10:51:43	66240	2186448	TESRE T.E.
0019	4495	2001-01-26	10:53:49	10:53:51	9	2189616	TESRE T.E.
0019	4495	2001-01-26	10:53:52	10:56:22	66336	2189616	TESRE T.E.
0019	4496	2001-01-26	10:57:05	10:57:07	4	1901856	TESRE T.E.
0019	4496	2001-01-26	10:57:08	11:00:12	57616	1901856	TESRE T.E.
0019	4497	2001-01-26	11:00:53	11:00:55	2	2184864	TESRE T.E.
0019	4497	2001-01-26	11:00:56	11:03:26	66192	2184864	TESRE T.E.
0019	4504	2001-01-27	12:03:10	12:03:12	10	3039732	TESRE T.E.
0019	4504	2001-01-27	12:03:13	12:17:04	92096	3039732	TESRE T.E.
0019	4505	2001-01-27	12:19:10	12:19:11	13	3195456	TESRE T.E.
0019	4505	2001-01-27	12:19:12	12:34:13	96816	3195456	TESRE T.E.
0019	4506	2001-01-27	12:35:05	12:35:07	5	3237168	TESRE T.E.
0019	4506	2001-01-27	12:35:08	12:50:08	98080	3237168	TESRE T.E.
0019	4513	2001-01-27	17:02:42	17:02:58	5	18075060	TESRE T.E.
0019	4513	2001-01-27	17:02:59	17:36:18	547712	18075060	TESRE T.E.
0019	4514	2001-01-27	17:36:56	17:38:52	39344	1298352	TESRE T.E.
0019	4521	2001-01-27	17:42:20	17:42:22	3	22793232	TESRE T.E.
0019	4521	2001-01-27	17:42:23	18:15:42	690688	22793232	TESRE T.E.
0019	4523	2001-01-27	18:22:08	18:22:10	11	8595840	TESRE T.E.
0019	4523	2001-01-27	18:22:11	18:30:30	260464	8595840	TESRE T.E.
0019	4524	2001-01-27	18:31:17	18:31:19	5	8582112	TESRE T.E.
0019	4524	2001-01-27	18:31:20	18:39:39	260048	8582112	TESRE T.E.
0019	4525	2001-01-27	18:40:04	18:40:06	15	8611680	TESRE T.E.
0019	4525	2001-01-27	18:40:07	18:48:26	260944	8611680	TESRE T.E.
0019	4526	2001-01-27	18:48:51	18:48:53	4	8624352	TESRE T.E.
0019	4526	2001-01-27	18:48:54	18:57:13	261328	8624352	TESRE T.E.
0019	4528	2001-01-27	19:03:01	19:03:03	14	3227136	TESRE T.E.
0019	4528	2001-01-27	19:03:04	19:08:03	97776	3227136	TESRE T.E.
0020	4530	2001-01-27	19:08:23	19:58:23	979248	32315184	TESRE T.E.
0020	4533	2001-01-27	20:23:03	20:23:10	4	97407060	TESRE T.E.
0020	4533	2001-01-27	20:23:11	22:53:08	2951712	97407060	TESRE T.E.
0020	4537	2001-01-29	15:54:46	15:54:55	13	794148	TESRE T.E.
0020	4537	2001-01-29	15:54:56	15:58:35	24032	794148	TESRE T.E.
0020	4539	2001-01-29	16:04:59	16:05:01	15	53000112	TESRE T.E.
0020	4539	2001-01-29	16:05:02	18:01:40	1606048	53000112	TESRE T.E.
0020	4540	2001-01-29	18:54:08	18:54:10	16	250272	TESRE T.E.
0020	4540	2001-01-29	18:54:11	18:54:59	7568	250272	TESRE T.E.
0020	4541	2001-01-29	19:00:16	19:00:18	15	12624480	TESRE T.E.
0020	4541	2001-01-29	19:00:19	19:27:13	382544	12624480	TESRE T.E.
0020	4542	2001-01-29	19:28:47	19:28:49	11	7586304	TESRE T.E.
0020	4542	2001-01-29	19:28:50	19:45:29	229872	7586304	TESRE T.E.
0020	4547	2001-01-29	20:06:21	20:06:50	496	50392356	TESRE T.E.

0020	4547	2001-01-29	20:06:51	22:06:49	1526544	50392356	TESRE T.E.
0021	4548	2001-01-29	22:08:16	22:08:18	11	53342784	TESRE T.E.
0021	4548	2001-01-29	22:08:19	00:08:16	1616432	53342784	TESRE T.E.
0021	4549	2001-01-30	00:09:43	00:09:45	8	57045648	TESRE T.E.
0021	4549	2001-01-30	00:09:46	02:09:43	1728640	57045648	TESRE T.E.
0021	4550	2001-01-30	02:11:11	02:11:12	16	29323792	TESRE T.E.
0021	4550	2001-01-30	02:11:13	03:06:52	888576	29323792	TESRE T.E.
0021	4563	2001-02-05	12:00:02	12:00:04	5	74976	TESRE T.E.
0021	4565	2001-02-05	12:06:06	12:06:08	4	12672	TESRE T.E.
0021	4568	2001-02-05	12:16:28	12:16:55	16	431940	TESRE T.E.
0021	4568	2001-02-05	12:16:56	12:18:35	13056	431940	TESRE T.E.
0021	4569	2001-02-05	12:20:49	12:20:51	2	868032	TESRE T.E.
0021	4569	2001-02-05	12:20:52	12:22:31	26288	868032	TESRE T.E.
0021	4571	2001-02-05	12:25:09	12:26:44	14336	473088	TESRE T.E.
0021	4573	2001-02-05	12:30:32	12:32:09	9328	307824	TESRE T.E.
0021	4575	2001-02-05	12:35:06	12:35:08	13	429792	TESRE T.E.
0021	4575	2001-02-05	12:35:09	12:36:49	13008	429792	TESRE T.E.
0021	4576	2001-02-05	12:38:00	12:38:02	9	492624	TESRE T.E.
0021	4576	2001-02-05	12:38:03	12:39:42	14912	492624	TESRE T.E.
0021	4577	2001-02-05	12:43:04	12:43:06	6	4387152	TESRE T.E.
0021	4577	2001-02-05	12:43:08	12:58:07	132928	4387152	TESRE T.E.
0021	4578	2001-02-05	12:58:50	12:58:52	8	4385040	TESRE T.E.
0021	4578	2001-02-05	12:58:53	13:13:52	132864	4385040	TESRE T.E.
0021	4579	2001-02-05	13:15:04	13:15:06	3	4432560	TESRE T.E.
0021	4579	2001-02-05	13:15:07	13:30:06	134304	4432560	TESRE T.E.
0021	4580	2001-02-05	13:30:52	13:45:51	132048	4357584	TESRE T.E.
0021	4598	2001-02-08	20:21:17	20:21:19	11	9871488	TESRE T.E.
0021	4598	2001-02-08	20:21:20	22:21:18	299120	9871488	TESRE T.E.
0021	4599	2001-02-08	22:22:44	22:22:46	16	9755856	TESRE T.E.
0021	4599	2001-02-08	22:22:47	00:22:46	295616	9755856	TESRE T.E.
0021	4600	2001-02-09	00:24:12	00:24:14	3	9844032	TESRE T.E.
0021	4600	2001-02-09	00:24:15	02:24:13	298288	9844032	TESRE T.E.
0021	4601	2001-02-09	02:25:39	02:25:41	15	10100112	TESRE T.E.
0021	4601	2001-02-09	02:25:42	04:25:41	306048	10100112	TESRE T.E.
0021	4602	2001-02-09	04:26:52	04:26:54	11	12638736	TESRE T.E.
0021	4602	2001-02-09	04:26:55	06:26:54	382976	12638736	TESRE T.E.
0021	4603	2001-02-09	06:28:20	06:28:22	4	18453072	TESRE T.E.
0021	4603	2001-02-09	06:28:23	08:28:21	559168	18453072	TESRE T.E.
0021	4606	2001-02-10	10:45:07	10:45:09	9	2332212	TESRE T.E.
0021	4606	2001-02-10	10:45:10	10:47:40	70656	2332212	TESRE T.E.
0021	4607	2001-02-10	10:49:31	10:49:33	8	1747680	TESRE T.E.
0021	4607	2001-02-10	10:49:34	10:59:33	52944	1747680	TESRE T.E.

3.3 The Off-line Archive Backup

Before re-initialisation, the whole Science Console Off-line archive directory tree on magnetic disk has been backed up on 2 DAT tapes using the tar command with the multivolume option (*tar cvfM*).