GOME Operations for December 2004 Draft report based on analysis of EGOI data using the Daily Reports and ERGO software system of the PCS



GOME Operations during December 2004

Date	operations	remark
01/12/04	data available within visibility of groundstations	start of sun calibration: 10:49:53.25
02/12/04	data available within visibility of groundstation	start of sun calibration: 10:18:19.75
03/12/04	data available within visibility of groundstations	start of sun calibration: 13:07:59.45
04/12/04	data available within visibility of groundstations	start of sun calibration: 12:36:22.63
05/12/04	data available within visibility of groundstations	start of sun calibration: 12:04:49.13
06/12/04	data available within visibility of groundstations	start of sun calibration: 11:33:15.64
07/12/04	data available within visibility of groundstations	start of sun calibration: 11:01:42.14
08/12/04	data available within visibility of groundstations	start of sun calibration: 10:30:02.64
09/12/04	data available within visibility of groundstation	start of sun calibration: 13:19:42.36
10/12/04	data available within visibility of groundstations	start of sun calibration: 12:48:02.85
11/12/04	data available within visibility of groundstations	start of sun calibration: 12:16:29.36
12/12/04	data available within visibility of groundstations	start of sun calibration: 11:44:55.87
13/12/04	data available within visibility of groundstations	start of sun calibration: 11:13:16.37
14/12/04	data available within visibility of groundstations	start of sun calibration: 10:41:39.96
15/12/04	data available within visibility of groundstations	start of sun calibration: 13:31:19.68
16/12/04	data available within visibility of groundstation	start of sun calibration: 12:59:40.18
17/12/04	data available within visibility of groundstations	start of sun calibration: 12:28:06.67
18/12/04	data available within visibility of groundstations	start of sun calibration: 11:56:27.14
19/12/04	data available within visibility of groundstations	start of sun calibration: 11:24:53.63
20/12/04	data available within visibility of groundstations	start of sun calibration: 10:53:14.13
21/12/04	data available within visibility of groundstations	start of sun calibration: 10:21:40.63
22/12/04	data available within visibility of groundstations	start of sun calibration: 13:11:14.34
23/12/04	data available within visibility of groundstation	no solar calibration performed due to the execution of an ERS2 orbit manouvre
24/12/04	data available within visibility of groundstations	no solar calibration performed due to the execution of an ERS2 orbit manouvre
25/12/04	data available within visibility of groundstations	start of sun calibration: 11:36:18.62
no	o data available due IDHT in standby and Payload switch	-off
26/12/04	GOME switch-off	no solar calibration data available
	start: 12:45:36	
27/12/04	no data available due IDHT in standby GOME switch-off	no solar calibration data available
28/12/04	no data available due IDHT in standby GOME switch-off	no solar calibration data available
		start of sun calibration:
29/12/04	data available within visibility of groundstations GOME switch-off	11:10:23.68 (TST44 with warm detectors T=~261K);
	stop: 09:31:00	12:51:00.27 (with nominal detector temperatures of $T = \sim 235 \text{ K}$);
	3.0p. 00.01.00	21:14:02.80 (TST44 with warm detectors T=~258K)
30/12/04	data available within visibility of groundstation	start of sun calibration: 12:19:24.24
31/12/04	data available within visibility of groundstations	start of sun calibration: 11:47:44.75

Anomalies:

single event upsets (SEU):

Date reason

on-board software problem caused anomaly (orbits 50683-50684);

~19:21:39 - 22:19:42

29/12/2004

Level 0:

- parameter V315 out of limit;

cured with GOME power cycle

on-board software problem caused anomaly (orbits 50685-50692); 22:26:35 (29/12/04) - 11:44:29 (30/12/04)

Level 0:

- parameter V316 out of limit;

- 3xNack flag set

29-30/12/04

- instrument not in rotating mode

- scan mirror position set 16 at 261.8 deg, instead of alternating between +/- 30 deg

- scan mirror motor current at 65535 BU

(nominal would be ~37000 BU)

- pixel channel summation values 0 (no science data available)

duration

list of datagaps:

Orbit No.

Date

Date	CIBIC I TO.	daration	1000011
01/12/04	50282	18:55:53 - 19:00:17	gap at MA
01/12/04	50283	20:28:47 - 20:42:32	gap at MA
02/12/04	50294	15:22:04 - 15:26:05	gap at GS
03/12/04	50304	08:11:57 - 08:22:16	gap at MA
03/12/04	50306	11:31:18 - 11:39:02	gap at MA
03/12/04	50311	19:27:53 - 19:39:19	gap at MA
04/12/04	50314	00:35:33 - 00:42:46	gap at GS
04/12/04	50319	09:19:00 - 09:32:20	gap at MA
04/12/04	50325	19:00:51 - 19:05:59	gap at MA
04/12/04	50326	20:34:25 - 20:48:06	gap at MA
04/12/04	50327	22:17:25 - 22:26:22	gap at MA
05/12/04	50330	03:18:25 - 03:32:09	gap at GS
05/12/04	50341	21:43:49 - 21:56:01	gap at MA
06/12/04	50347	08:17:23 - 08:28:16	gap at MA
06/12/04	50349	11:37:06 - 11:44:17	gap at MA
06/12/04	50354	19:33:20 - 19:45:07	gap at MA
07/12/04	50368	19:05:58 - 19:12:57	gap at MA
07/12/04	50369	20:40:04 - 20:53:45	gap at MA
08/12/04	50376	08:54:11 - 09:06:36	gap at MA
09/12/04	50392	11:42:55 - 11:49:28	gap at MA

reason





09/12/04	50397	19:38:48 - 19:50:55	gap at MA
10/12/04	50404	07:52:55 - 07:59:48	gap at MA
10/12/04	50411	19:11:09 - 19:18:51	gap at MA
10/12/04	50412	20:45:44 - 20:59:26	gap at MA
10/12/04	50413	22:29:42 - 22:37:10	gap at MA
11/12/04	50427	21:55:51 - 22:07:08	gap at MA
12/12/04	50435	11:48:56 - 11:54:34	gap at MA
12/12/04	50440	19:44:18 - 19:56:44	gap at MA
13/12/04	50447	07:59:07 - 08:07:05	gap at MA
13/12/04	50449	11:16:39 - 11:25:26	gap at MA
13/12/04	50454	19:16:24 - 19:24:43	gap at MA
14/12/04	50463	10:44:09 -10:55:39	gap at MA
14/12/04	50468	18:47:33 - 18:51:43	gap at MA
14/12/04	50469	20:20:22 - 20:34:10	gap at MA
15/12/04	50478	11:55:05 - 11:59:33	gap at MA
15/12/04	50483	19:49:48 - 20:02:37	gap at MA
16/12/04	50490	08:03:53 - 08:13:12	gap at MA
16/12/04	50492	11:22:31 - 11:30:54	gap at MA
16/12/04	50496 - 50499	17:46:40 - 22:58:15	no data due to payload switch-off due to incorrect execution of AMI ICU memory test procedure (see ER2-UNA 2004/031)
17/12/04	50506	10:49:55 - 11:01:07	gap at MA
17/12/04	50511	18:53:07 - 18:57:26	gap at MA
17/12/04	50513	22:08:21 - 22:18:10	gap at MA
18/12/04	50526	19:55:19 - 20:08:28	gap at MA
18/12/04	50527	21:34:46 - 21:47:38	gap at MA
19/12/04	50535	11:28:24 - 11:36:24	gap at MA
19/12/04	50537	14:36:40 - 14:48:14	gap at KS
19/12/04	50541	21:03:00 - 21:16:26	gap at MA
20/12/04	50555	20:31:36 - 20:45:19	gap at MA
21/12/04	50569	20:00:52 - 20:14:14	gap at MA
22/12/04	50578	11:34:12 - 11:41:40	gap at MA
22/12/04	50583	19:30:36 - 19:42:13	gap at MA
23/12/04	50597	19:03:23 - 19:08:50	gap at MA
23/12/04	50598	20:37:14 - 20:50:54	gap at MA
23/12/04	50599	22:20:27 - 22:29:05	gap at MA
24/12/04	50613	21:47:01 - 21:58:48	gap at MA
24/12/04	50607	12:01:17 - 12:03:43	gap at KS
25/12/04	50621	11:40:00 - 11:46:53	gap at MA
25/12/04	50627	21:14:32 - 21:27:47	gap at MA
		00:27:29 (26/12/04) -09:31:00 (29/12/04)	no data due to IDHT in standby and Payload switch-off (ER2-UNA- 2004/034)
29/12/04	50682	17:40:07 - 17:51:13	gap at KS
29/12/04	50682	17:53:35 - 18:03:24	gap at GS
29/12/04	50683	19:13:16 - 19:21:17	gap at MA
29/12/04	50683	19:16:39 - 19:21:39	gap at KS
29/12/04	50684	20:53:19 - 21:02:17	gap at MA



29/12/04 30/12/04	50685 50697	22:32:49 - 22:39:50 18:44:45 - 18:48:51	gap at MA gap at MA
30/12/04	50699	21:58:48 - 22:09:54	gap at MA
31/12/04	50707	11:51:59 - 11:57:05	gap at MA
31/12/04	50713	21:26:04 - 21:39:12	gap at MA

Lamp Failures: none

cooler switchings:

Date	coolers off/on	maximum detector warm up temperature [Kelvin]
		FPA 1: 264.2
		FPA 2: 264.2
20/12/04	00:27:29 (26/12/04) off 11:16:20 (29/12/04) on	
23/12/07	11:16:20 (29/12/04) on	FPA 3: 264.1
		FPA 4: 264.1
		FPA 1: 259.2
		FPA 2: 259.0
29/12/04	19:21:39 off	
29/12/04	21:19:10 on	FPA 3: 259.9
		FPA 4: 259.1

timeline interruptions: (operations in nadir static view): none

Narrow Swath Timeline:

Date	Orbit No.	Duration	remark
04-05/12/04	50322 - 50335	~14:00 (04/12/04) - ~12:00 (05/12/04)	Narrow Swath Timeline GMNNOT41 executed
14-15/12/04	50464 - 50479	~12:00 (14/12/04) - ~13:00 (15/12/04)	Narrow Swath Timeline GMNNOT41 executed
24-25/12/04	50608 - 50620	~13:30 (24/12/04) - ~10:00 (25/12/04)	Narrow Swath Timeline GMNNOT41 executed
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others:

Date Orbit No.	Duration	remark
29 /12 50678 /04	11:04:47 - 11:06:41 11:14:23 - 11:16:20	calibration lamp mode without Lamp Failure (TST44 with warm detectors)
29 /12 50684 /04	21:08:20 - 21:10:16 21:18:02 - ~21:20:22	calibration lamp mode without Lamp Failure (TST44 with warm detectors); first sequence however with calibration lamp instability: after ignition with nominal lamp voltage value, sudden decrease of voltage to a value of ~180 V at ~21:08:52 (nominal value ~198V) however no lamp failure occurred