GOME Operations for November 2004

Draft report based on analysis of EGOI data using the Daily Reports and ERGO software system of the PCS

GOME Operations during November 2004

Date	operations	remark
01/11/04	data available within visibility of groundstations	start of sun calibration: 13:11:23.96
02/11/04	data available within visibility of groundstations	start of sun calibration: 12:39:50.41
03/11/04	data available within visibility of groundstations	start of sun calibration: 12:08:22.87
04/11/04	data available within visibility of groundstation	start of sun calibration: 11:36:48.17
05/11/04	data available within visibility of groundstations	start of sun calibration: 11:05:20.62
06/11/04	data available within visibility of groundstations GOME switch-off start: 03:50:30 stop: 10:30:00	start of sun calibration: 10:33:46.53 (TST44 with warm detectors T=~266.5K)
07/11/04	data available within visibility of groundstations	start of sun calibration: 13:23:26.56
08/11/04	data available within visibility of groundstations	start of sun calibration: 12:51:59.00
09/11/04	data available within visibility of groundstations	start of sun calibration: 12:20:25.46
10/11/04	data available within visibility of groundstations	start of sun calibration: 11:48:51.93
11/11/04	data available within visibility of groundstation	start of sun calibration: 11:17:18.40
12/11/04	data available within visibility of groundstations	start of sun calibration: 10:45:50.87
13/11/04	data available within visibility of groundstations	start of sun calibration: 10:14:17.34
14/11/04	SEU data available within visibility of groundstations	no solar calibration measurements available due to instrument anomaly
15/11/04	data available within visibility of groundstations	start of sun calibration: 12:32:22.16
16/11/04	data available within visibility of groundstations	start of sun calibration: 12:00:48.83
17/11/04	data available within visibility of groundstations	start of sun calibration: 11:29:15.34
18/11/04	data available within visibility of groundstation	start of sun calibration: 10:57:41.82
19/11/04	data available within visibility of groundstations	no solar calibration measurements available due to missing data
20/11/04	data available within visibility of groundstations	start of sun calibration: 13:15:47.99
21/11/04	data available within visibility of groundstations	start of sun calibration: 12:44:14.47
22/11/04	data available within visibility of groundstations	start of sun calibration: 12:12:46.96
23/11/04	data available within visibility of groundstations	start of sun calibration: 11:41:13.45
24/11/04	Lamp Failure data available within visibility of groundstations GOME switch-off start: 03:49:30 stop: 09:30:00	start of sun calibration: 11:09:40.46, 09:29:00.81 (TST44 with warm detectors T=~268 K)
25/11/04	data available within visibility of groundstation	start of sun calibration: 10:38:07.16
26/11/04	data available within visibility of groundstations	start of sun calibration: 13:27:46.82
27/11/04	data available within visibility of groundstations	start of sun calibration: 12:56:13.29
28/11/04	data available within visibility of groundstations	start of sun calibration: 12:24:39.78
29/11/04	data available within visibility of groundstations	start of sun calibration: 11:53:06.27
30/11/04	data available within visibility of groundstations	start of sun calibration: 11:21:26.76

Anomalies:

single event upsets (SEU):

Date	reason
14/11/2004	on-board software problem caused anomaly (orbits 50035 - 50039); ~12:30 - ~21:00 Level 0: - 3*Nack flag set - scan mirror position at 261.8 deg - charge Amp temperatures. Scan Mirror temperatures, Scan Motor temperatures, scan Unit Electronics temp, Optical Bench temp., calibration unit Lamp temp., pre disperser prism temp. increase - scan mirror motor current high at 64300 BU (nominally at ~30000 BU)

list of datagaps:

Date	Orbit No.	duration	reason
01/11/04	49846	08:17:23 - 08:28:16	gap at MA
01/11/04	49848	11:37:06 - 11:44:17	gap at MA
01/11/04	49853	19:33:20 - 19:45:07	gap at MA
01/11/04	49848	11:47:08 - 11:53:27	gap at MS
02/11/04	49867	19:05:58 - 19:12:57	gap at MA
02/11/04	49868	20:40:04 - 20:53:45	gap at MA
02/11/04	49869	22:23:31 - 22:31:48	gap at MA
02/11/04	49856	00:31:01 - 00:33:01	gap at MS
02/11/04	49870	23:58:14 - 23:59:16	gap at MS
03/11/04	49875	08:54:11 - 09:06:36	gap at MA
03/11/04	49883	21:49:57 - 22:01:35	gap at MA
03/11/04	49870	23:58:14 - 23:59:16	gap at MS
04/11/04	49889	08:22:51 - 08:34:14	gap at MA
04/11/04	49890	10:08:38 - 10:16:14	gap at MS
04/11/04	49891	11:42:55 - 11:49:28	gap at MA
04/11/04	49891	11:45:49 - 11:59:07	gap at MS
04/11/04	49896	19:38:48 - 19:50:55	gap at MA
04/11/04	49897	21:17:25 - 21:30:39	gap at MA
04/11/04	49898	22:55:06 - 23:08:27	gap at MS
04/11/04	49892	13:27:40 - 13:28:42	gap at MS
05/11/04	49903	07:52:55 - 07:59:48	gap at MA
05/11/04	49908	15:57:35 - 16:09:33	gap at KS
05/11/04	49909	17:35:30 - 17:48:23	gap at KS
05/11/04	49911	20:45:44 - 20:59:26	gap at MA
05/11/04	49908	16:11:14 - 16:24:09	gap at GS
06/11/04	49926	21:55:51 - 22:07:08	gap at MA
06/11/04	49915 - 49919	03:50:30 - 10:26:01	data gap due to instrument switch-off (see unavailability report ER2-UNA2004/027)
07/11/04	49934	11:48:56 - 11:54:34	gap at MA
07/11/04	49939	19:44:18 - 19:56:44	gap at MA
08/11/04	49946	07:59:07 - 08:07:05	gap at MA

08/11/04	49948	11:16:39 - 11:25:26	gap at MA
08/11/04	49950	14:25:25 - 14:37:03	gap at KS
08/11/04	49953	19:16:24 - 19:24:43	gap at MA
08/11/04	49953	19:34:27 - 19:46:52	gap at PS
08/11/04	49954	20:51:24 - 21:05:07	gap at MA
08/11/04	49955	22:35:59 - 22:42:28	gap at MA
09/11/04	49967	18:47:33 - 18:51:43	gap at MA
09/11/04	49969	22:01:51 - 22:12:40	gap at MA
10/11/04	49977	11:55:05 - 11:59:33	gap at MA
11/11/04	49991	11:22:31 - 11:30:54	gap at MA
11/11/04	49998	22:42:26 - 22:47:40	gap at MA
12/11/04	50011	20:25:59 - 20:39:45	gap at MA
13/11/04	50025	19:55:19 - 20:08:28	gap at MA
14/11/04	50033	09:39:09 - 09:53:02	gap at KS
14/11/04	50034	11:28:24 - 11:36:24	gap at MA
14/11/04	50038	17:52:14 - 18:05:23	gap at KS
14/11/04	50039	19:27:03 - 19:36:24	gap at MA
15/11/04	50044	03:47:22 - 04:00:21	gap at GS
15/11/04	50053	18:58:20 - 19:03:08	gap at MA
15/11/04	50055	22:14:23 - 22:23:39	gap at MA
16/11/04	50068	20:00:52 - 20:14:14	gap at MA
16/11/04	50069	21:40:35 - 21:49:05	gap at MA
17/11/04	50077	11:34:12 - 11:41:40	gap at MA
18/11/04	50097	20:37:14 - 20:50:54	gap at MA
19/11/04	50105	10:21:50 - 10:35:50	gap at KS
20/11/04	50120	11:40:00 - 11:46:53	gap at MA
20/11/04	50125	19:36:04 - 19:48:01	gap at MA
21/11/04	50139	19:08:33 - 19:15:54	gap at MA
21/11/04	50140	20:42:54 - 20:56:36	gap at MA
21/11/04	50140	21:06:16 - 21:13:47	gap at PS
21/11/04	50141	22:26:36 - 22:34:29	gap at MA
21/11/04	50134	11:19:13 - 11:24:50	gap at MS
21/11/04	50135	12:59:14 - 13:02:46	gap at MS
22/11/04	50147	08:56:50 - 09:09:15	gap at MA
22/11/04	50154	20:11:59 - 20:25:42	gap at MA
22/11/04	50155	21:52:54 - 22:04:22	gap at MA
22/11/04	50142	00:01:10 - 00:09:53	gap at MS
22/11/04	50148	10:47:34 - 10:52:40	gap at MS
23/11/04	50163	11:45:54 - 11:52:02	gap at MA
23/11/04	50168	19:41:33 - 19:53:48	gap at MA
23/11/04	50163	11:55:54 - 12:01:57	gap at MS
24/11/04	50173 - 50175	03:49:30 - 09:30:00	data gap due to instrument switch-off (see unavailability report ER2-UNA2004/027)
24/11/04	50183	20:48:34 - 21:02:17	gap at MA
24/11/04	50184	22:32:49 - 22:39:50	gap at MA
24/11/04	50177	11:24:09 - 11:30:36	gap at MS

24/11/04	50178	13:04:14 - 13:08:08	gap at MS
25/11/04	50191	10:41:16 - 10:52:54	gap at MA
25/11/04	50196	18:44:45 - 18:48:51	gap at MA
25/11/04	50197	20:17:34 - 20:31:22	gap at MA
25/11/04	50198	21:58:48 - 22:09:54	gap at MA
26/11/04	50206	11:51:59 - 11:57:05	gap at MA
26/11/04	50211	19:47:03 - 19:59:41	gap at MA
26/11/04	50212	21:26:04 - 21:39:12	gap at MA
26/11/04	50206	12:00:53 - 12:07:35	gap at MS
27/11/04	50218	08:01:42 - 08:10:09	gap at MA
27/11/04	50220	11:19:35 - 11:28:08	gap at MA
27/11/04	50225	19:19:03 - 19:27:39	gap at MA
27/11/04	50227	22:39:11 - 22:45:05	gap at MA
27/11/04	50214	00:46:29 - 00:51:32	gap at MS
28/11/04	50234	10:47:02 - 10:58:23	gap at MA
28/11/04	50239	18:50:20 - 18:54:34	gap at MA
28/11/04	50241	22:05:21 - 22:15:25	gap at MA
29/11/04	50254	19:52:34 - 20:05:33	gap at MA
29/11/04	50255	21:31:52 - 21:44:50	gap at MA
29/11/04	50247	08:46:03 - 08:49:02	gap at MA
30/11/04	50261	08:06:33 - 08:16:14	gap at MA
30/11/04	50263	11:25:28 - 11:33:40	gap at MA
30/11/04	50268	19:24:22 - 19:33:29	gap at MA
30/11/04	50269	21:00:04 - 21:13:37	gap at MA
30/11/04	50270	22:45:40 - 22:50:12	gap at MA

Lamp Failures:

Date	reason	remark
24/11/04	Lamp Failure (no. 138 - 139) Orbits 50176	Lamp Failures set during monthly calibration sequences, voltage reached only a value of 178 V

cooler switchings:

Date	coolers off/on	maximum detector warm up temperature [Kelvin]
06/11/04	03:50:30 off 10:39:42 on	FPA 1: 268.8 FPA 2: 269.7 FPA 3: 269.6 FPA 4: 269.8
24/11/04	03:49:30 off 09:34:57 on	FPA 1: 269.2 FPA 2: 270.0 FPA 3: 269.9 FPA 4: 270.1

timeline interruptions: (operations in nadir static view):

Date	Orbit No.	Duration	remark

07/11/04 49932 08:43:30 GOME Timline stopped due to Payload synchronisation, instrument in Nadir Static View
07/11/04 49933 10:16:00 GOME Timline stopped due to Payload synchronisation, instrument in Nadir Static View

Narrow Swath Timeline:

Date	Orbit No.	Duration	remark
04-05/11/04	49892 - 49905	~13:00 (04/11/04) - ~10:30 (05/11/04)	Narrow Swath Timeline GMNNOT41 executed
15/11/04	50042 - 50049	~00:00 - ~12:00 (15/10/04)	Narrow Swath Timeline GMNNOT41 executed, note: due to SEU Narrow Swath data are available only on day 15/11/04
24-25/11/04	50178 - 50191	~12:30 (24/11/04) - ~10:00 (25/11/04)	Narrow Swath Timeline GMNNOT41 executed

others:

Date	Orbit No.	Duration	remark
28/11/04	50236	~14:00 - ~15:45	calibration lamp mode 14:07:28 - 14:17:28 after ignition with nominal lamp voltage value, sudden decrease of voltage to a value of ~182 V at 14:07:47 (nominal value ~198V) however no lamp failure occurred