# GOME Operations for January 2005 Draft report based on analysis of EGOI data using the Daily Reports and ERGO software system of the PCS

### **GOME Operations during January 2005**

Date operations 01/01/05 data available within visibility of groundstations 02/01/05 data available within visibility of groundstation 03/01/05 data available within visibility of groundstation 04/01/05 data available within visibility of groundstation 05/01/05 data available within visibility of groundstation 06/01/05 data available within visibility of groundstation 07/01/05 data available within visibility of groundstations 08/01/05 data available within visibility of groundstations 09/01/05 data available within visibility of groundstation 10/01/05 data available within visibility of groundstation 11/01/05 data available within visibility of groundstation 12/01/05 data available within visibility of groundstation 13/01/05 data available within visibility of groundstation 14/01/05 data available within visibility of groundstations 15/01/05 data available within visibility of groundstations 16/01/05 data available within visibility of groundstation 17/01/05 data available within visibility of groundstation 18/01/05 data available within visibility of groundstation 19/01/05 data available within visibility of groundstation

SEU Lamp Failure

data available within visibility of groundstation

20/01/05

GOME unavailable

start: 11:18:37

#### stop: 16:12:04

start of sun calibration: 11:16:05.25 start of sun calibration: 10:44:31.76 start of sun calibration: 10:12:52.28 start of sun calibration: 13:02:23.36 start of sun calibration: 12:30:43.86 start of sun calibration: 11:59:04.35 start of sun calibration: 11:27:24.84 start of sun calibration: 10:55:45.33 start of sun calibration: 10:24:05.83 start of sun calibration: 13:13:39.54 start of sun calibration: 12:42:00.03 start of sun calibration: 12:10:14.51 start of sun calibration: 11:38:34.99 start of sun calibration: 11:06:56.60 start of sun calibration: 10:35:17.09 start of sun calibration: 13:24:44.79 no solar calibration data available due to data gap start of sun calibration: 12:21:25.75

remark

start of sun calibration: 11:49:46.23

no solar calibration data available due to GOME anomaly

21/01/05 data available within visibility of groundstations no solar calibration measurements performed due to the execution of an ERS2 orbit manouevre 22/01/05 data available within visibility of groundstations no solar calibration measurements performed due to the execution of an ERS2 orbit manouevre start of sun calibration: 13:04:11.62 23/01/05 data available within visibility of groundstation 24/01/05 data available within visibility of groundstation no solar calibration data available 25/01/05 data available within visibility of groundstation start of sun calibration: 12:00:47.23 26/01/05 data available within visibility of groundstation start of sun calibration: 11:29:07.68 27/01/05 data available within visibility of groundstation start of sun calibration: 10:57:22.14 28/01/05 data available within visibility of groundstations start of sun calibration: 10:25:42.59 29/01/05 data available within visibility of groundstations no solar calibration data available due to data gap 30/01/05 data available within visibility of groundstation start of sun calibration: 12:43:30.72 start of sun calibration: 12:11:45.17 31/01/05 data available within visibility of groundstation

### **Anomalies:**

single event upsets (SEU):



Date

reason

on-board software problem caused anomaly (orbits 50995-50997);

14:00 - 19:00

Level 0:

- parameter V316 out of limit;

- 3xNack flag set

20/01/05

- 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)

# list of datagaps:

Date	Orbit No.	duration	reason
01/01/05	50721	11:19:35 - 11:28:08	gap at MA
01/01/05	50728	22:39:11 - 22:45:05	gap at MA
01/01/05	50719	08:09:08 - 08:10:09	gap at MA
02/01/05	50741	20:23:10 - 20:36:57	gap at MA
03/01/05	50755	19:52:34 - 20:05:33	gap at MA
04/01/05	50764	11:25:28 - 11:33:40	gap at MA
04/01/05	50769	19:24:22 - 19:33:29	gap at MA
04/01/05	50771	22:45:40 - 22:50:12	gap at MA
05/01/05	50783	18:55:53 - 19:00:17	gap at MA
05/01/05	50785	22:11:22 - 22:20:55	gap at MA
06/01/05	50792	10:21:21 - 10:33:34	gap at MA
06/01/05	50799	21:37:41 - 21:50:26	gap at MA
07/01/05	50805	08:11:57 - 08:22:16	gap at MA
07/01/05	50807	11:31:18 - 11:39:02	gap at MA
07/01/05	50813	21:05:56 - 21:19:16	gap at MA
07/01/05	50812	19:33:41 - 19:38:00	gap at KS
08/01/05	50815	00:35:33 - 00:42:46	gap at GS
08/01/05	50827	20:34:25 - 20:48:06	gap at MA
09/01/05	50835	10:27:01 - 10:39:07	gap at MA
10/01/05	50850	11:37:06 - 11:44:17	gap at MA
10/01/05	50855	19:33:20 - 19:45:07	gap at MA
11/01/05	50869	19:05:58 - 19:12:57	gap at MA
11/01/05	50871	22:23:31 - 22:31:48	gap at MA
12/01/05	50877	08:54:11 - 09:06:36	gap at MA
12/01/05	50885	21:49:57 - 22:01:35	gap at MA
13/01/05	50893	11:42:55 - 11:49:28	gap at MA
13/01/05	50899	21:17:25 - 21:30:39	gap at MA
14/01/05	50913	20:45:44 - 20:59:26	gap at MA



14/01/05	50905	07:56:43 - 07:59:48	gap at MA
15/01/05	50927	20:14:47 - 20:28:33	gap at MA
15/01/05	50927	20:22:13 - 20:36:03	gap at KS
16/01/05	50936	11:48:56 - 11:54:34	gap at MA
16/01/05	50941	19:44:18 - 19:56:44	gap at MA
16/01/05	50942	21:23:11 - 21:36:21	gap at MA
17/01/05	50948	07:59:07 - 08:07:05	gap at MA
17/01/05	50950	11:16:39 - 11:25:26	gap at MA
17/01/05	50951	12:46:37 - 12:59:21	gap at KS
17/01/05	50951	13:00:48 - 13:10:49	gap at MS
17/01/05	50956	20:51:24 - 21:05:07	gap at MA
17/01/05	50957	22:35:59 - 22:42:28	gap at MA
18/01/05	50969	18:47:33 - 18:51:43	gap at MA
18/01/05	50971	22:01:51 - 22:12:40	gap at MA
19/01/05	50979	11:55:05 - 11:59:33	gap at MA
19/01/05	50984	19:49:48 - 20:02:37	gap at MA
19/01/05	50985	21:28:58 - 21:42:02	gap at MA
20/01/05 5	50993-998	8 11:18:37 - 16:12:04	GOME was unavailable due to an unboard anomaly (see unavailability ER-UNA-002)
20/01/05	50991	08:03:53 - 08:13:12	gap at MA
20/01/05	50998	19:21:42 - 19:30:34	gap at MA
20/01/05	50999	20:57:07 - 21:10:47	gap at MA
20/01/05	51000	22:42:26 - 22:47:40	gap at MA
21/01/05	51001	00:15:58 - 00:27:06	gap at MS
21/01/05	51013	20:25:59 - 20:39:45	gap at MA
23/01/05	51036	11:28:24 - 11:36:24	gap at MA
23/01/05	51041	19:27:03 - 19:36:24	gap at MA
24/01/05	51055	18:58:20 - 19:03:08	gap at MA
24/01/05	51057	22:14:23 - 22:23:39	gap at MA
25/01/05	51069	18:43:05 - 18:56:46	gap at PS
25/01/05	51071	21:40:35 - 21:53:13	gap at MA
26/01/05	51073	01:07:25 - 01:17:47	gap at GS
26/01/05	51079	11:34:12 - 11:41:40	gap at MA
27/01/05	51098	19:03:23 - 19:08:50	gap at MA
27/01/05	51099	20:37:14 - 20:50:54	gap at MA
29/01/05	51122	11:40:00 - 11:46:53	gap at MA
29/01/05	51123	13:09:14 - 13:21:42	gap at KS
29/01/05	51127	19:36:04 - 19:48:01	gap at MA
30/01/05	51141	19:08:33 - 19:15:54	gap at MA
30/01/05	51142	20:42:54 - 20:56:36	gap at MA
30/01/05	51143	22:26:36 - 22:34:29	gap at MA
30/01/05	51139	15:54:48 - 15:59:43	gap at KS
31/01/05	51149	08:56:50 - 09:09:15	gap at MA
31/01/05	51155	18:54:29 - 19:07:58	gap at PS
31/01/05	51156	20:34:36 - 20:44:14	gap at PS



31/01/05 51157 21:52:54 - 22:04:22

gap at MA

### Lamp Failures:

Date reason remark 20/01/05 Lamp Failure (no. 140 - 141) Lamp Failures set during diffuser lamp mode, voltage reached only a value of 180 V Orbit 50995 28/01/05 Lamp Failure (no. 142 - 147) Orbit 51108-112 Lamp Failures set during quarterly calibration, voltage reached only (or dropped down after a few seconds to) a value of 180 V cooler switchings: Date coolers off/on maximum detector warm up temperature [Kelvin] FPA 1: 273.9 FPA 2: 274.7 11:18:37 off 20/01/05 14:45:08 on FPA 3: 274.3 FPA 4: 274.6 timeline interruptions: (operations in nadir static view):

DateOrbit No.Durationremark06/01/055079921:53:05 - 21:54:53 GOME Timline stopped, instrument in Nadir Static ViewNarrow Swath Timeline:

Date	Orbit No.	Duration	remark	K
04-05/01/05	50765 - 50779	~14:00 (04/01/05) - ~12:00 (05/01/05)	Narrow Swath Timeline GI	MNNOT41 executed
14-15/01/05	50908 - 50921	~12:30 (14/01/05) - ~10:00 (15/01/05)	Narrow Swath Timeline GI	MNNOT41 executed
24-25/01/05	51502 - 51065	~14:00 (24/01/05) - ~11:00 (25/01/05)	Narrow Swath Timeline GI	MNNOT41 executed
others:				

DateOrbit No.Durationremark20/01/055099514:33:29 - 14:33:46<br/>14:43:11 - 14:43:26calibration lamp switched on (diffuser mode), but voltage reached only ~180 V and measurement went into Lamp Failure

