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Report for period 16 January to 19 February 2006

Smart-1 suffered another Double EDAC error on 19 of January. SSC requested ESOC to compile all addresses that have been subject of double EDAC errors and sent them to SSC to check for a possible correlation with a specific chip malfunction. This time ESOC tried a new procedure that prevents losing any data, this was done on 20 January and proved to be successful.

For the rest, Smart-1 operation has been nominal during the reporting period.

The RF compatibility tests for the ranging tone tests with the Chinese CLTC and India ISRO have been completed. The tests were complemented with two specific tests using ESA ground stations: Maspalomas with Cortex and Redu with Enertec. Both stations provided an excellent support although only the Cortex tests were successful.

In addition an image of Crater Billy was released during this period and additional images are anticipated during the next reporting period.

Future Activities

Future activities are focused on the following:

- End of mission preparation and impact on the moon analysis
- Tone ranging test on Smart-1 with Chinese CLTC Kashi station and with ISRO
- Continue the work for the ground automation activities

Spacecraft Status

Summary

The spacecraft status is good with all functions working nominally.

AOCS

The AOC subsystem has done well in the period covered by this report. The ST CHUs have both worked within their temperature operational limits (19 °C).

TT&C

The performance of the TTC subsystem has been nominal during this period.

EP, Power and Thermal

The performance of the Power and Thermal Subsystems during the reporting period was very good.

Orbital Information

SMART-1 OD407 Close to Apolune 1958
Epoch (UTC) 2006/02/20 07:48:16.8

Elements WRT Moon and its equator of date

Pericentre Distance (km)	2350.486012
Apocentre Distance (km)	4487.005509
Semi Major Axis (km)	3418.745760
Eccentricity	0.312471
Inclination (°)	90.581276
Ascending Node (°)	238.818405
Argument of Pericentre (°)	252.315878
True Anomaly (°)	179.999996
Osculating Orbital Period (h)	4.982594

The changes since apolune 1925 are as follows:

- semi-major axis -0.2 km
- perilune height -10.3 km
- apolune height +9.9 km

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