

CSIR contributes to 'good health' of THEMIS constellation

The [THEMIS](#) (Time History of Events and Macroscale Interactions during Substorms) constellation of five probes is "in a very good state of health", thanks to the continued support by, amongst others, the CSIR's ground station at Hartebeesthoek.

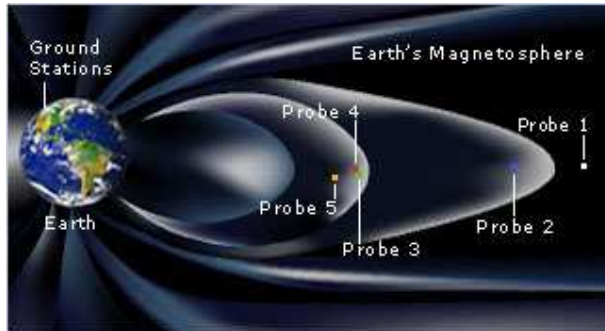


Image courtesy THEMIS

The orbital manoeuvre placement began in early September 2007 and took nine weeks to complete for the four primary probes. This means that each probe is in an orbit that will allow it to line up once every four days over a dedicated array of ground observatories located in Canada and the northern United States.

On 18 November 2007, the THEMIS team celebrated the completion of EFI deployment of Probe 1 and a fully configured and 'checked-out' operation constellation. The four primary probes (P1-P4) are ready to start science operations at the start of December 2007 - two weeks ahead of schedule. The deployment of the fifth probe (P5) will take place in January 2008.

These favourable outcomes earned the CSIR's tracking, telemetry and command team (and their counterparts who participated worldwide) "special thanks ... for continued THEMIS support". Vassilis Angelopoulos of THEMIS Operations in Berkeley, California, notes, "Congratulations on a job well done ... the constellation in position with all instruments deployed is a dream come true for science!"

The CSIR has been involved in the project since February 2007, when the organisation received the first signals from the five science satellites lifted by a Delta 2 rocket, after the satellites were untraceable for 24 hours following the launch.