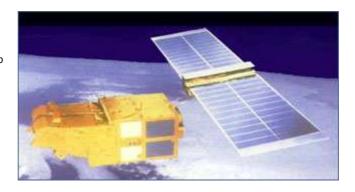
Space technology

CSIR bids farewell to SPOT-2 satellite

For the last time: "HBK ----- OVER AND OUT"

It was the end of an era at the CSIR Satellite Applications Centre when the tracking, telemetry and command group bid farewell to SPOT-2 on 29 July 2009. At 20:50 Greenwich Mean Time on this date, the CSIR performed some of the final manoeuvres to end the life of this satellite.



It was an emotional moment for the

team, some of whom had been around on 22 January 1990 on behalf of the French space agency CNES, to support the rocket that took SPOT-2 into space, Ariane 35, as well as some of the first moments in the life of the satellite after separation from Ariane 35.

SPOT-2 started its operational service on 21 March, 1990. It was originally designed to last three years, but - remarkably - worked for more than 19 uninterrupted years. In the almost two decades of its life, the satellite acquired a total of 6,5 million pictures covering almost 23,4 billion km² (that is, about 46 times the complete surface of the Earth).

The de-orbit manoeuvres of SPOT-2 started on 16 July 2009 and ended on July 30. Between 16-20 July, the first manoeuvres took place, releasing the satellite from its operational orbit, lowering the perigee of the orbit by 15 km and reducing the on-board fuel from 60 kg to between 15-20 kg.

The second stage of daily manoeuvres was performed from 20-29 July. SPOT-2 lost 25 km in altitude every day to attain a perigee of 600 km. Since 30 July, SPOT-2 has been passive, after its electrical system was cut and all tanks emptied.

From this date, SPOT-2 has been relegated to space junk, on an elliptical low orbit of perigee at 600 km and peak of 800 km. The satellite is now subjected to more severe rubbings (friction). It will lose altitude progressively and will disintegrate in the atmosphere in about 25 years, without risk to human life.

Speaking on behalf of the staff at Hartebeesthoek, Tiaan Strydom stated, "We as HBK were proud to support you, SPOT-2, and you will always be remembered by us as the satellite originally designed to last three years, but which worked remarkably for more than 19 years."

Read more about space junk

- Biffy van Rooyen

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