

SPOT 5 watching over Earth's poles

> The French space agency CNES and Spot Image are building up a significant archive of imagery of the polar regions from SPOT 5's HRS instrument (High Resolution Stereoscopic) for International Polar Year (IPY). With global warming today a chief concern, these data are giving scientists around the globe an opportunity to gain a closer insight into the world's changing ice cover.

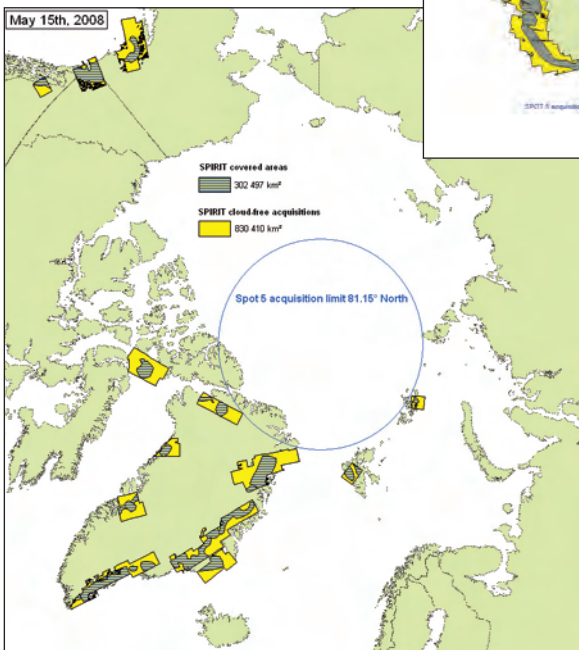
SPOT 5's HRS instrument has the key ability to acquire stereopair imagery at a spatial resolution of 5 metres, over an area of 120 km x 600 km. This makes it a vital tool for tracking temperate and polar ice cover.

CNES and Spot Image have launched the SPIRIT project (SPOT 5 stereoscopic survey of Polar Ice: Reference Images and Topographies) in partnership with French survey and mapping agency IGN, responsible for generating digital elevation model (DEM) products, and the LEGOS space geophysics and oceanography research laboratory, project scientist.

The chief aims of this project are to:

- Acquire HRS imagery of 2.5 million sq.km. of the Arctic and Antarctic regions, covering glaciers, small ice caps and the coasts of Antarctica and Greenland.
- Allow scientists around the world working on themes in line with IPY to access the SPOT 5 HRS archive through a dedicated Web interface.
- Distribute DEM products free of charge to research laboratories approved by CNES, giving them a baseline topography that until now has been lacking for studies of polar ice, so they can map change in these regions.

At the start of May, acquisitions over the Northern Hemisphere had already covered 830,000 sq.km of Arctic regions and 3,400,000 sq.km of the Antarctic ice sheet.



North Pole coverage

South Pole coverage



THEY MADE IT TO THE TOP!

> David Mussotte and Pascal Toustou from Spot Image's Programming department (centre) courageously hoisted Spot Image's colours on the summit of Mount Kilimanjaro. Their feat was made possible by the friends, guides and support team who accompanied them and helped to put together the project, which took many months to plan. What will be the next challenge to fly the flag for Spot Image?



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SPOT 5 AND TERRASAR-X ASSISTING CHINA

> Emergency response operations following the recent earthquake in the province of Sichuan, China, received support through the provision of SPOT 5 and TerraSAR-X imagery as well as detailed evaluations of these data. A set of satellite images, maps and initial estimations of the earthquake's impact on urban and rural areas and on infrastructures was rapidly delivered to Chinese government agencies and rescue organizations such as the State Bureau of Surveying and Mapping (CASM), the Ministry of Land and Resource, the State Earthquake Administration and the State Council of China. All this information was used to rapidly identify the worst-hit areas, assess damage, plan access routes and support teams setting up refugee camps and coordination centres.

KOMPSAT-2 PRODUCTION CENTRE IN TOULOUSE

► To support reception of data from the KOMPSAT-2 satellite in Europe, a receiving system supplied by the Korean Aerospace Research Institute (KARI) has been operating on KSAT premises in Svalbard since April, in addition to KARI's main data centre in South Korea. Located in northern Norway, the KSAT station is able to receive imagery directly from the satellite on 10 orbital revolutions, as well as downloading imagery stored on board on each pass. Two production centres will operate alongside the receiving stations, one at KSAT in Tromsø and the other at Spot Image in Toulouse. The latter will be operational in July, once the broadband link between Svalbard and Spot Image is up and running. With this production centre, Spot Image will be able to generate KOMPSAT-2 level 1A, 2A, 1-metre colour merge and orthoimagery products. Spot Image's customers will thus now benefit from even more reception and production capacity and more services, as well as direct access to KOMPSAT-2 archive imagery via the Sirius Online catalogue. The new production centres will provide greater responsiveness to our customers' needs at a time when market demand for imagery from this very-high-resolution satellite is growing.

A NOVEL USE FOR SPOTMAPS



► Belgian advertising agency Duval et Guillaume hit on a novel idea for one of its client's communication campaigns, using a tram decked out in SPOTMaps livery operating along Belgium's coast. The campaign has succeeded beyond the advertiser's expectations.

Pleiades ground segment operational from word go



► As the civil and commercial operator of the Pleiades satellites, Spot Image is preparing a sophisticated ground segment that will be technically qualified several months ahead of the launch of PHR 1A, the first satellite in the constellation. Organization of satellite tasking, image production and distribution will therefore be ready right from the start of commercial operations shortly after launch. PHR1A is scheduled to lift off early in 2010 and the second satellite 15 months later.

Integration of the Pleiades centre at Spot Image began in May with the installation of an antenna and receiving equipment racks. Full system tests including reception of data from the SPOT

satellites will be performed in readiness for site acceptance testing and initial commissioning of the antenna in July.

The Pleiades imagery ground segment will chiefly be composed of:

- a main mission centre at Spot Image in Toulouse (for tasking, reception, production and distribution of PHR imagery)
- a main receiving station in Kiruna, Sweden
- a network of regional receiving stations

■ On signing a delegated public service agreement with CNES in January 2008 for operation of the Pleiades satellites, Spot Image became the official, exclusive worldwide distributor of Pleiades data.

Under the agreement, Spot Image will operate the civil channel on the Pleiades satellites and will be allocated 90% of satellite capacity to serve a full range of users.