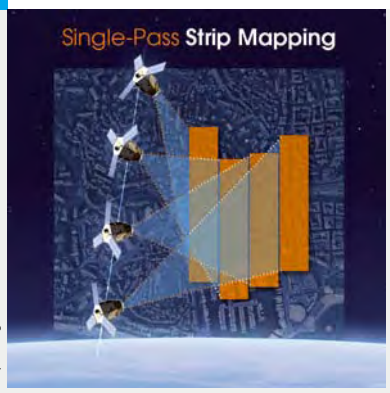

EXCEPTIONAL responsiveness

IN ADDITION TO SUPPLYING 50-CENTIMETRE COLOUR PRODUCTS AND OFFERING EXTENSIVE CAPACITY FOR COMMERCIAL CUSTOMERS, PLÉIADES IS DESIGNED TO DELIVER DATA IN RECORD TIME. THIS SPEED IS A KEY ELEMENT OF THE SPACE AND GROUND COMPONENTS, BUILT TO FULFIL USERS' REQUIREMENTS.

Space component

The twin Pléiades satellites will be placed in the same orbit and phased 180 degrees to operate as a true constellation. Added to their oblique viewing capability and exceptional agility, this orbit phasing allows the satellites to revisit any point on the globe daily—ideal for anticipating risks and managing crises effectively.

The Pléiades satellites' gyros will enable them to tilt very quickly along and across track to image different areas of interest. Each satellite will be able to collect imagery anywhere within an 800-km-wide ground strip, covering 200 kilometres in 11 seconds or 800 kilometres in 25 seconds, including stabilization time. That kind of performance will make it possible to image multiple targets, collect mosaics in a single pass (up to one square degree), conduct stereo and tri-stereo viewing, and support coastal, border or corridor surveillance to closely match users' needs.

Lastly, Pléiades' extensive acquisition capacity—more than 1 million square kilometres a day—and 20-kilometre swath will mean that different requests can be fulfilled simultaneously, thus providing an extra guarantee for users.

Ground component

The ground operations component is also organized with maximum responsiveness in mind. Work plans are uploaded to the satellites three times a day by three stations around the globe, making it possible to task requests up to two hours before each satellite pass. This reduces the lead time between tasking requests and image acquisition to a minimum. Customers with receiving stations configured for direct tasking will be able to refine tasking plans at the last moment according to the latest weather forecasts.

A lot of work has gone into designing image production systems. The fully automatic orthorectification process is capable of generating a 20 km x 20 km colour image in less than 30 minutes and a single-pass mosaic of 60 km x 60 km in less than two hours.

On the customer side, everything from ordering through to data delivery has been made as flexible and easy as possible. New acquisitions, catalogue data, subscription offers, online monitoring services and more mean that imagery is just a click away, ready to use. ■

LAUNCH IN SIGHT!

Integration of the telescope and radiometric, mechanical, thermal, environmental and acoustic tests have been completed, and Pléiades 1 is all set to go. The bird was delivered to prime contractor CNES on 12 November and is scheduled to launch next autumn. Pléiades 2 is undergoing the same construction process, with integration of the telescope slated for early 2010.

Pléiades 1 undergoes radiometric testing