

Spot satellite programming a custom service

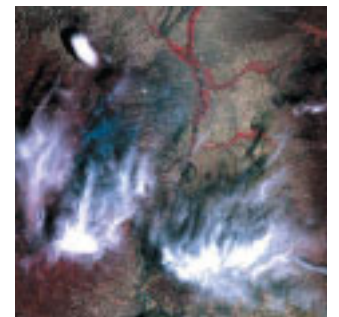
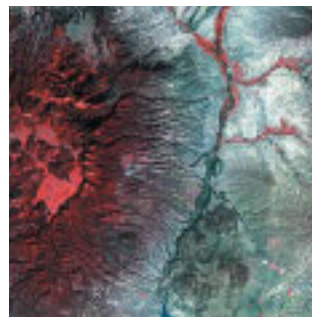


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➤ From urgent requests to multidate surveys

Whether you are keeping track of natural phenomena or in urgent need of imagery for a given area, the Spot satellites' unique revisit capability caters for your immediate or multidate coverage needs. A single Spot satellite can revisit the same site every two or three days on average, depending on latitude. The three Spot satellites can fly over any point on the Earth's surface on a given day.

Spot programming services make optimum use of this acquisition capacity to provide a flexible and effective response to users' diverse requirements.



20-metre colour (full scenes) - Fires in New Mexico
30/09/1999 and 14/05/2000

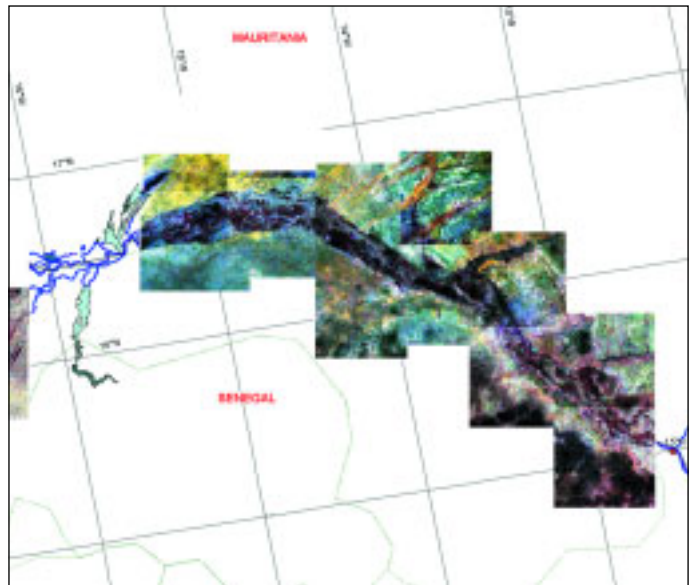
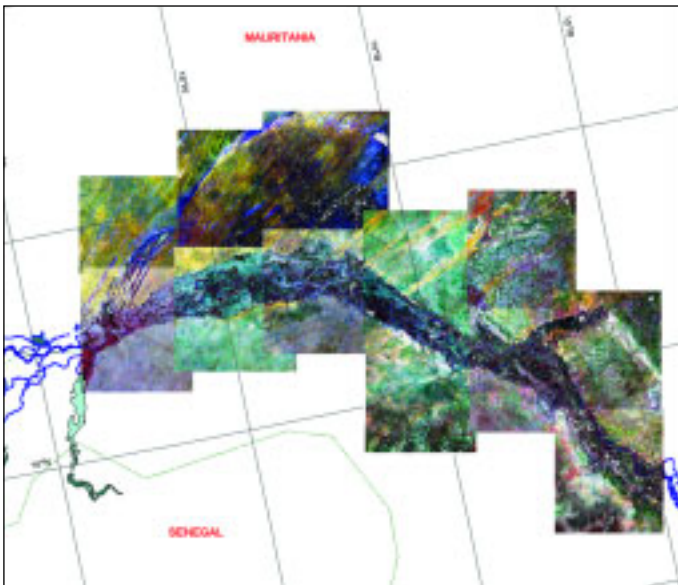


Spot satellite programming a custom service

➤ From specific sites to vast territories

You may need imagery of specific sites, entire regions or even countries. The Spot satellites acquire images covering an area of 60 x 60 km within an observable corridor of 950 km, over almost the entire surface of the globe, and offer ground resolutions of 2.5 metres, 5 metres, 10 metres and 20 metres in black and white or colour.

For larger areas, images composed of different data strips acquired during the same pass or the same season constitute a powerful mapping tool. Easy access to Spot satellite programming services backed by high revisit rates means you get the images you need, when you need them.



20-metre colour - Monitoring the Senegal River in flood
(extracts from full coverages) - Left: January to March 1999 - Right: February to March 2000

➤ Unrivalled acquisition flexibility

The Spot satellites offer unique advantages for acquiring high-quality images on demand.

➤ Multi-scale coverage

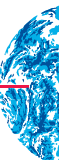
The two high-resolution imaging instruments on all the Spot satellites can be tasked to operate independently or together in twin-viewing mode. Operating together in the vertical-viewing configuration, the two instruments can cover a ground swath of 117 km (2 x 60 km with a 3 km overlap). At the other end of the scale, Spot 5 can acquire subscenes for users requiring images of much smaller areas at resolutions down to 2.5 metres.

➤ Anywhere

The strip-selection mirror on each imaging instrument can be steered to view an area of interest anywhere within an observable corridor of 950 km.

➤ Anytime

The Spot satellites' oblique viewing capability makes it possible to acquire repeat imagery of an area more frequently during a given orbital cycle. Revisit intervals vary according to latitude. For example, at a latitude of 45° and a viewing angle of over 27°, a single satellite can observe an area 11 times during an orbital cycle of 26 days—that's 154 times a year. In this way, the three Spot satellites (Spot 2, Spot 4 and Spot 5) can cover an area of interest every day.



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➤ A service tailored to demand

➤ Working closely with users



To provide the most flexible response to users' requests, Spot Image offers two programming services based on level of urgency and specific acquisition requirements.

➤ Standard programming service

This option allows you to request specific image acquisitions if you cannot find what you need in the catalogue. It is particularly suited to applications that do not require images to be acquired within specific time windows or at extreme viewing angles. Spot Image determines the likely number of acquisition attempts needed to satisfy your request according to local weather conditions and conflicts with other programming requests. The price of programmed products includes programming service fees and applies to images acquired with less than 10% cloud cover.

➤ Priority programming service

This option guarantees high-priority image acquisition after analysis of available satellite capacity and previous commitments. Spot Image then commits the necessary satellite programming resources. This option is particularly suited to applications that are subject to urgent time constraints or require full coverage of an area under specific conditions. Priority programming fees are charged on top of the price of programmed products acquired with less than 10% cloud cover.

➤ "Cloud-free" warranty

Optimizing Spot satellite programming in accordance with weather forecasts ensures that all resources are used as efficiently as possible. Depending on the area of interest, Spot Image can guarantee cloud-free images. This warranty applies chiefly to applications requiring Spot imagery that is free of cloud, fog, mist and sandstorms. Such requests are subject to a preliminary feasibility study and apply only to images acquired with the priority programming service.

When we receive a programming request, a specialist assesses its technical feasibility, then discusses options with you. Whether the programming request concerns a single image or coverage of an extensive area, we process it in the same personalized manner to guarantee you the highest standards of service.

1 Request assessment

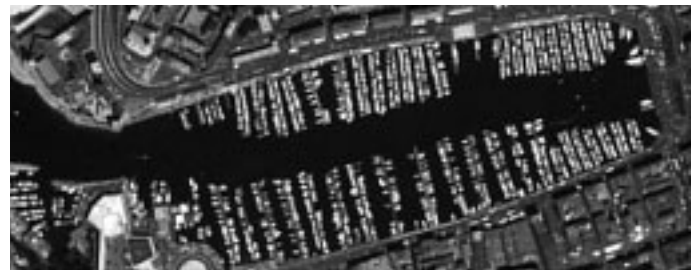
Spot Image works closely with users to assess acquisition constraints, programming parameters and compatibility of requests with the chosen programming service. We then check our archive of several million SPOT scenes to see if we already have imagery that fits your application requirements.

2 Feasibility study

Spot Image works closely with users to assess acquisition constraints, programming parameters and compatibility of requests with the chosen programming service. We then check our archive of several million SPOT scenes to see if we already have imagery that fits your application requirements.

- weather conditions,
- viewing angle,
- acquisition period,
- experience of the area of interest (since 1986),
- satellite(s) required,
- the work plan of the three Spot satellites.

We then estimate the likelihood of successful acquisition of the images requested. If necessary, we may suggest that you adjust your request parameters to increase the chances of success, while still meeting your initial application requirements.



2.5-metre B&W (subscene) - Marseille, France - 14/08/2002

3 Proposal

Spot Image sends you a proposal that specifies the number of scenes required, programming parameters, image validation parameters and satellite programming fees. We then task the satellites as soon as we have received a written commitment from you to purchase the imagery acquired in accordance with the agreed specifications.



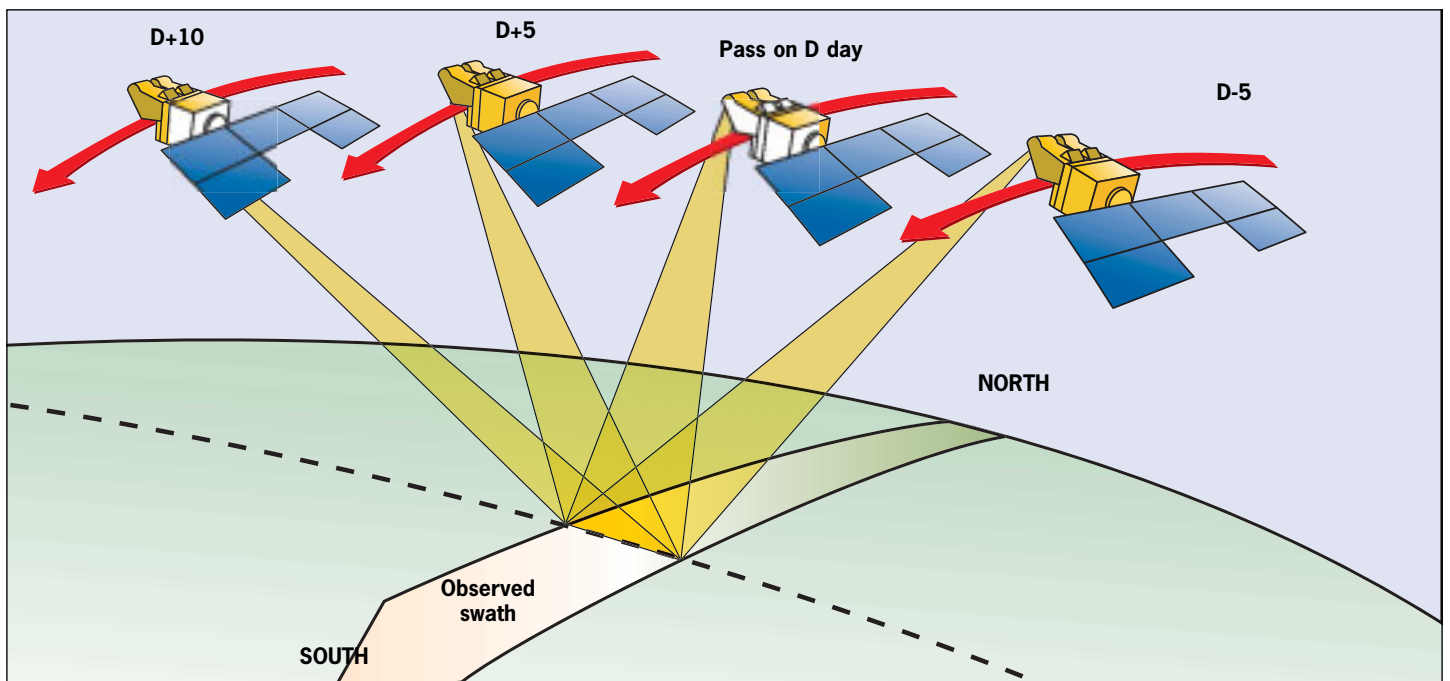
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4 Spot satellite programming

Spot Image's programming teams in Toulouse, France, prepare satellite work plans for the next 24 hours to acquire the images requested. The work plans are optimized daily on the basis of global weather data provided by French national weather service Météo France.

5 Image validation

Using quicklook images, Spot Image validates acquisitions with respect to the geographic position of the area of interest, radiometric quality, cloud and snow cover. We inform you as soon as an image is validated.



Spot's HRV and HRG instruments employ an oblique viewing geometry

The Spot satellite programming service is particularly suited to applications requiring information that is up to date or meets specific criteria. Applications include:

- map updating
- seasonal crop monitoring
- natural disaster management
- environmental monitoring and impact studies
- geopolitical monitoring
- urban planning and tracking of urban growth
- land-use and cadastral mapping

Success rate

$$= \frac{\text{number of images validated}}{\text{number of acquisition attempts}}$$

Over the last three years, the average success rate for the two programming services is around **83 %**.

www.spotimage.com

France, Australia, Brazil, China, Japan, Mexico, Singapore, United Arab Emirates, United States

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