

# Spot-6 and Spot-7 imagery

## Characteristics



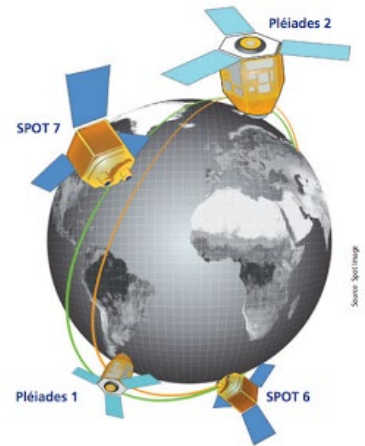
DATA TERRA  
DINAMIS

SPOT-6 and SPOT-7 form with the two Pleiades satellites a constellation of optical Earth-imaging satellites providing continuity and availability of high- and very-high-resolution data..

SPOT-6 and SPOT-7 draw on the successful heritage of previous generations of SPOT satellites to offer products at a resolution of 1.5 m.



The two identical Korsch imaging instruments on SPOT-6 and SPOT-7 afford a ground swath of 60 km and a daily revisit capability (viewing angle  $>45^\circ$ , operated simultaneously on the two satellites).



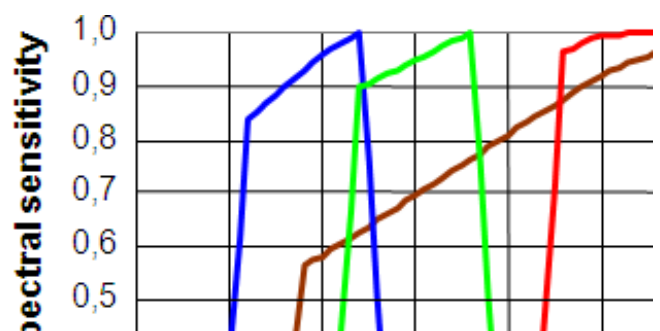
### Resolution

The SPOT-6 and SPOT-7 satellites acquire imagery at a resolution of 2 m at nadir in panchromatic (black and white) mode and 8 m at nadir in multispectral (colour) mode, with a dynamic range of 12 bits per pixel. Images are then resampled on the ground. Airbus Defence & Space and GEOSUD/DINAMIS distribute SPOT-6 and SPOT-7 products at a resolution of 1.5 m in panchromatic mode and 6 m multispectral mode.

### Spectral bands

The five spectral bands are always acquired simultaneously..

- Panchromatic (PAN): 0.450-0.745  $\mu\text{m}$
- Blue (B0): 0.450-0.520  $\mu\text{m}$
- Green (B1): 0.530-0.590  $\mu\text{m}$
- Red (B2): 0.625-0.695  $\mu\text{m}$
- Near-infrared (B3): 0.760-0.890  $\mu\text{m}$

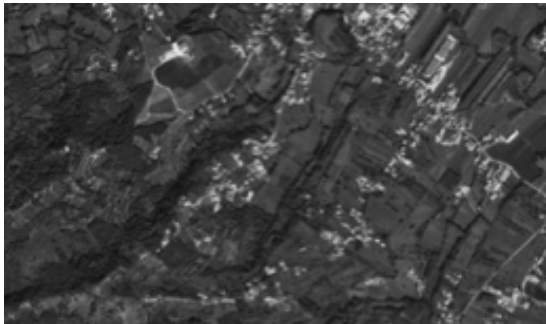


## Combinaisons spectrales

Panchromatic (PAN)	Multispectral (XS)	Bundle (PAN+XS)	Pansharpened (PAN +XS ou PAN+MS)
1,5 m 1 band (black and white)	6 m 4 bands (B, G, R, NIR)	1.5 m and 6 m Acquired simultaneously Co-registered  1 file PAN 1.5 m 1 band  1 file Multispectral 6 m 4 bands	Merged product 1.5 m  Pan-sharpened 3 natural or false colour bands  or  Pan-sharpened 4 bands

### Panchromatic (PAN)

- Single-spectral-band product
- Black and white
- 1.5-m resolution.



### Multispectral (XS)

- Four-spectral-band product (blue, red, green, near-infrared)
- Colour
- 6-m resolution.





## Bundle

- 1.5 m panchromatic (left) and 6-m multispectral (right) acquired simultaneously
- Delivered separately (not merged)



Panchromatic image



Multispectral image  
(zoomed x4)



Pan-Sharpended

## Pan-Sharpened

Pan-sharpening combines the visual detail of multispectral data with the spatial information of panchromatic data to provide a colour product at higher resolution (1.5 m).