SPOT 6-7 products

Caracteristics

DATATERRA DINAMIS

Products generated by GEOSUD/DINAMIS terminal

Instrument	Resolution	Spectral mode	Processing level	Description
S6 or S7	1.5 m	PAN	Primary	1.5-m panchromatic with radiometric and geometric corrections (*)
S6 or S7	1.5 m	PAN	Ortho	1.5-m panchromatic, orthorectified to projection
S6 or S7	6 m	XS	Primary	6-m colour, with radiometric and geometric corrections
S6 or S7	6 m	XS	Ortho	6-m colour, orthorectified to projection
S6 or S7	1.5 m	PAN+XS	Ortho	1.5-m merged product, orthorectified to projection (merged 3-band natural colour, merged 3-band false colour, merged 4-band)
S6 or S7	Bundle	PAN+XS	Primary	Simultaneous acquisition of 4 colour bands at 6 m and 1 panchromatic band at 1.5 m
S6 or S7	Bundle	PAN+XS	Ortho	Orthorectification, simultaneous acquisition of 4 colour bands at 6 m and 1 panchromatic band at 1.5 m
S6 or S7	1.5 m	PAN+MS	Primary	1.5-m merged product (merged 3-band natural colour, merged 3-band false colour, merged 4-band)

(*) at nadir

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1. GEOMETRIC PROCESSING

SPOT-6 and SPOT-7 imagery products are available at two processing levels: Primary and Ortho.

All products are corrected for radiometric effects and sensor distortion, using internal calibration parameters, ephemerides and altitude measurements..

Primary (perfect sensor)

This is the processing level closest to the raw image as acquired by the sensor, to guarantee that acquisition conditions are accurately restored. The sensor geometry is rectilinear and the image corrected for radiometric distortion.

The Primary product is designed for users proficient in satellite imagery processing techniques who want to apply their own methods (e.g. orthorectification or 3D modelling). The RPCs (rational polynomial coefficients) and sensor model are provided to give them the freedom to do this on their own.

Level 1 products are georeferenced, meaning that their metadata provide the image's exact location.

Ortho

Level 3 (Ortho) processing applies the same radiometric corrections as Level 1.

Georeferenced image corrected for off-nadir and relief effects, readily useable and suitable for integration in a geographic information system (GIS).

2. PRODUCT FORMAT

SPOT-6/7 products are in DIMAP V2 format, like Pleiades products (DIMAP V2 is an enhanced version of SPOT's DIMAP V1 format)

Different image formats are available:

- DIMAP JPEG 2000 with optimized compression (3.5 bits/pixel), ideal for downloading and sharing
- DIMAP JPEG 2000 with normal compression (8 bits/pixel), recommended for high-precision post-processing
- Uncompressed GeoTIFF

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