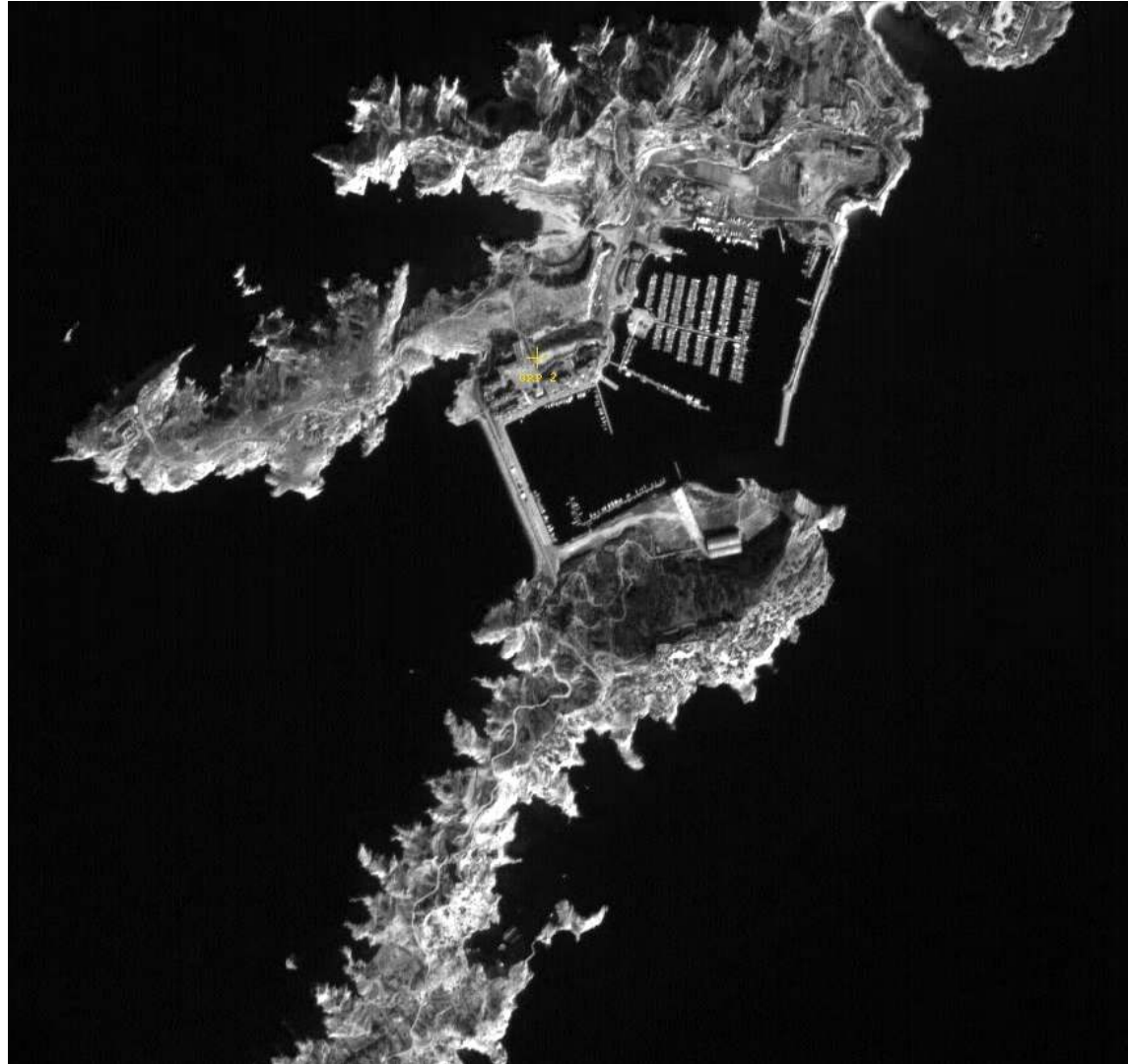


ALOS PSM/AVN Data Quality Control

Visual inspection

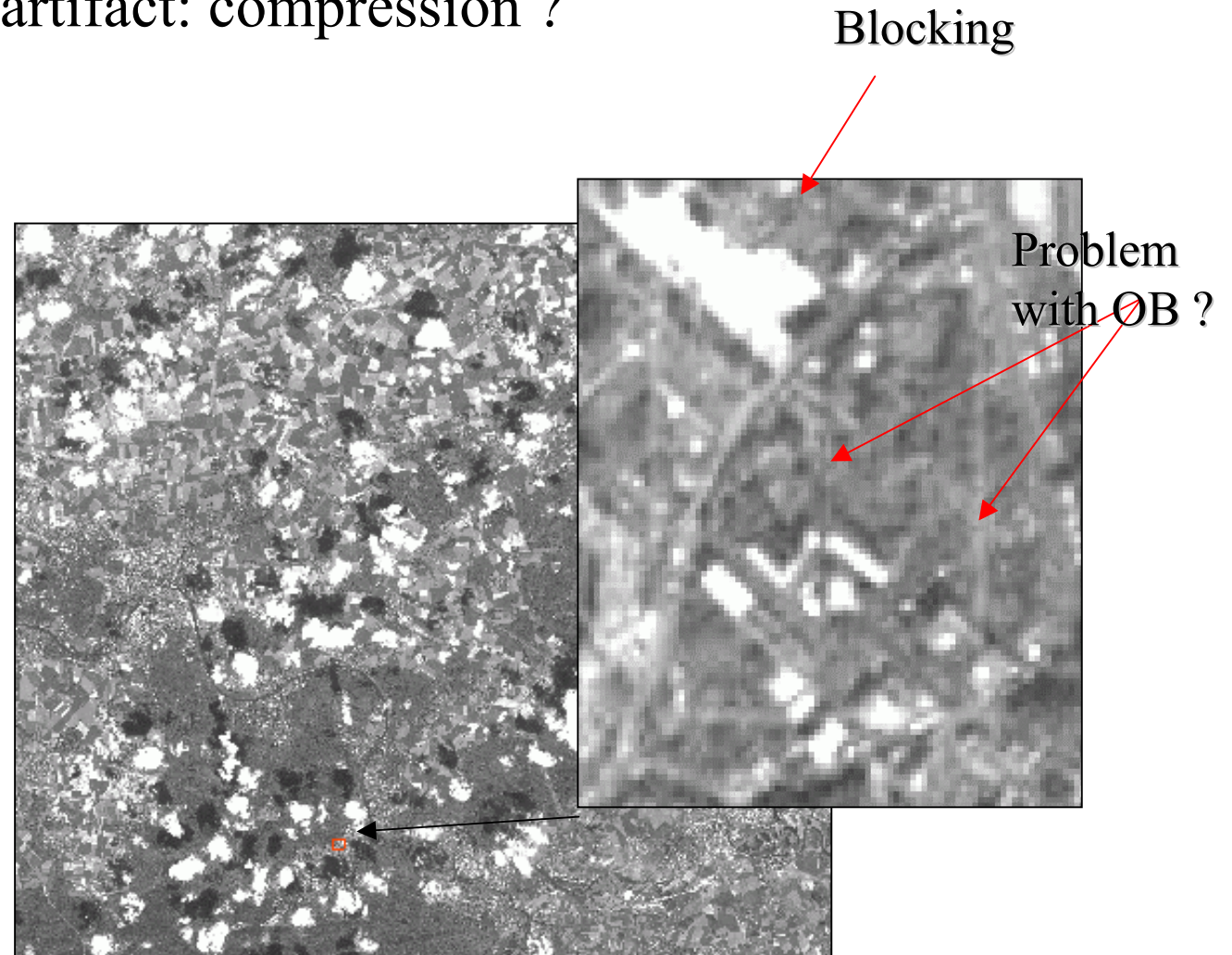


TO ALOS QC team

S.Saunier, July, 27, 2007

PRISM Image, vertical artifact

>Strange vertical artifact: compression ?



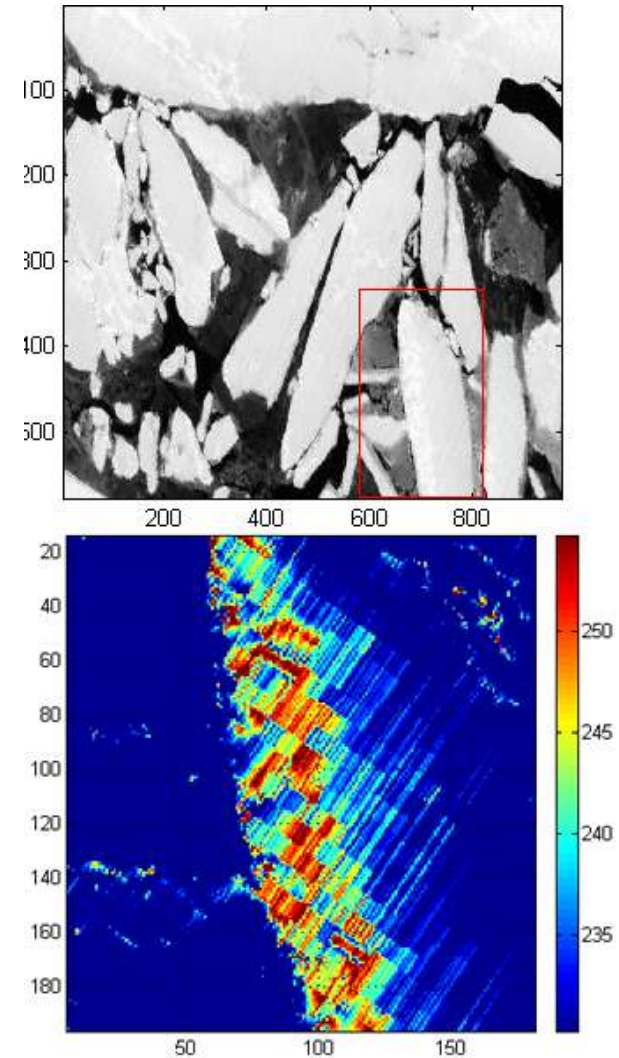
PRISM Image, jpeg compression

PRISM & JPEG Compression

- Saturation and blocking artefacts are observed
- The second image is obtained with a threshold of 230 applied.

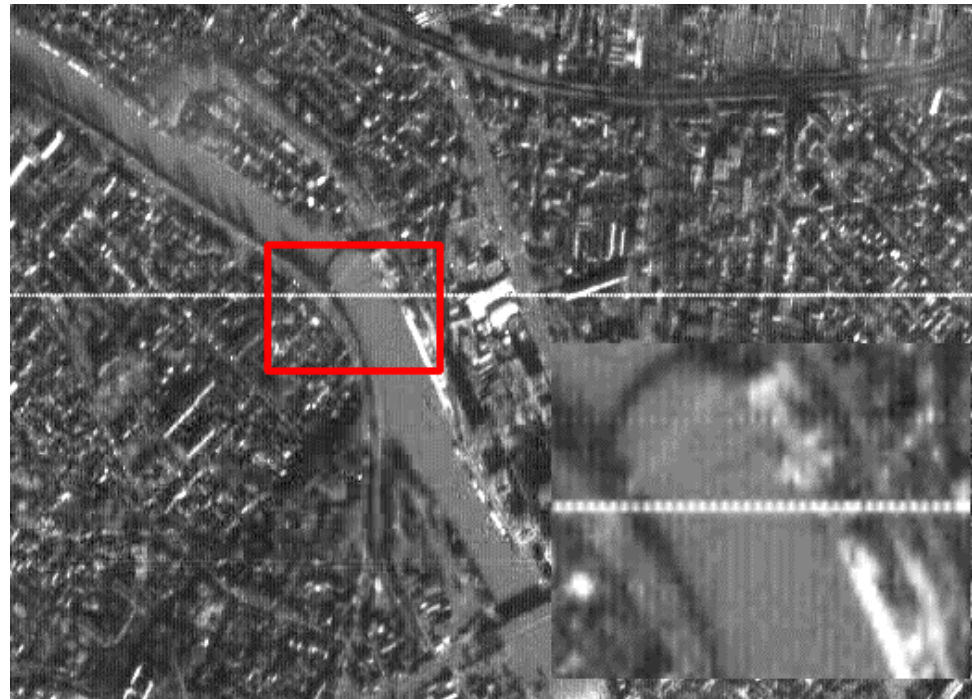
>>To evaluate actual cosmetic patch

Compression kernel is highlighted (block)
and pixel from odd and even detectors
are compressed separately.



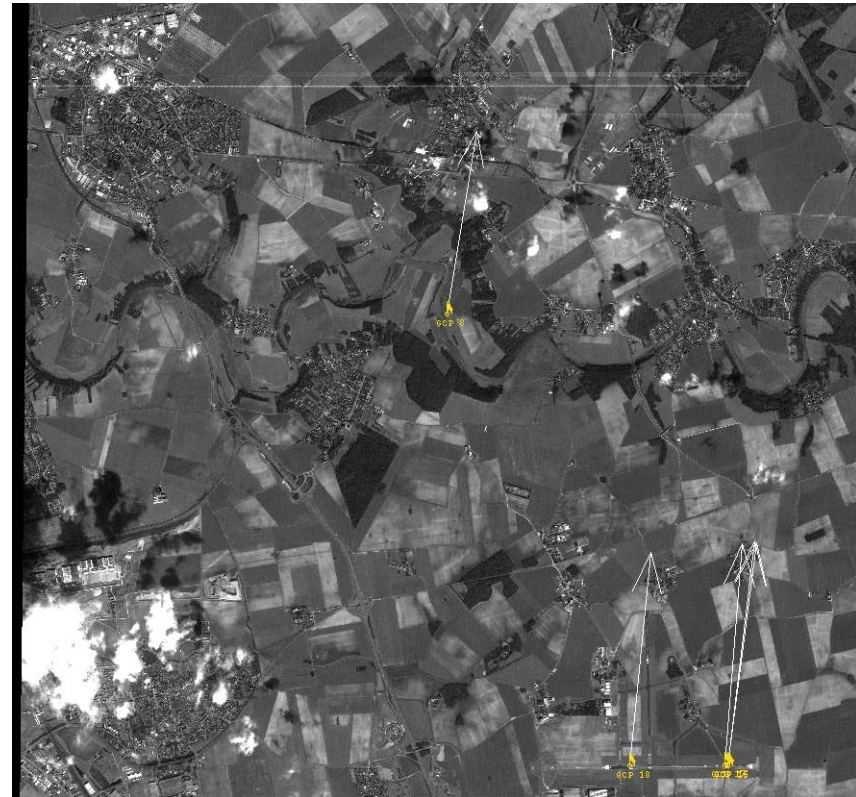
PRISM Image, detector over saturation

- >Only odd or even detectors are contaminated
- >Problem may be due to processing chain



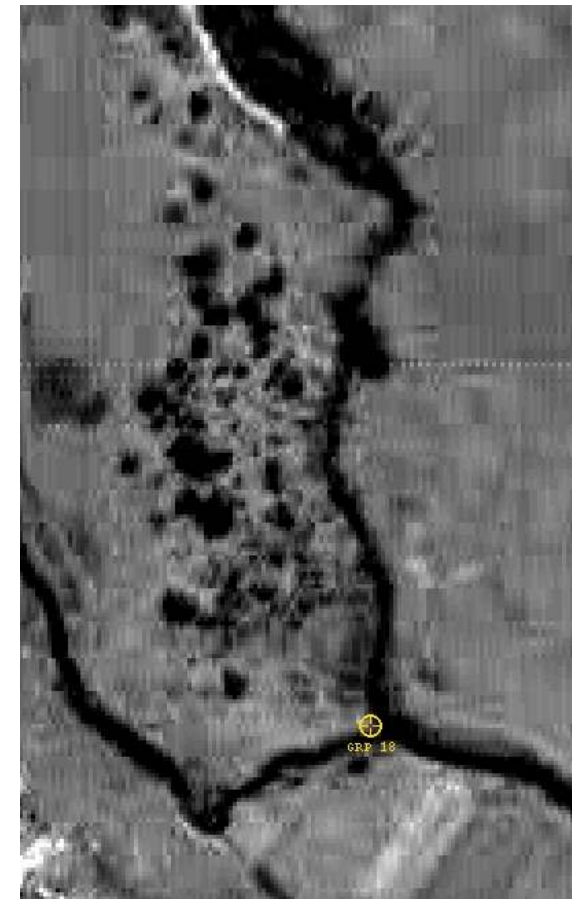
PRISM Image, detector over saturation

- >A gray and a bright tray is observed,
- >The tray is “across ccds”,
- >No recovery period observed



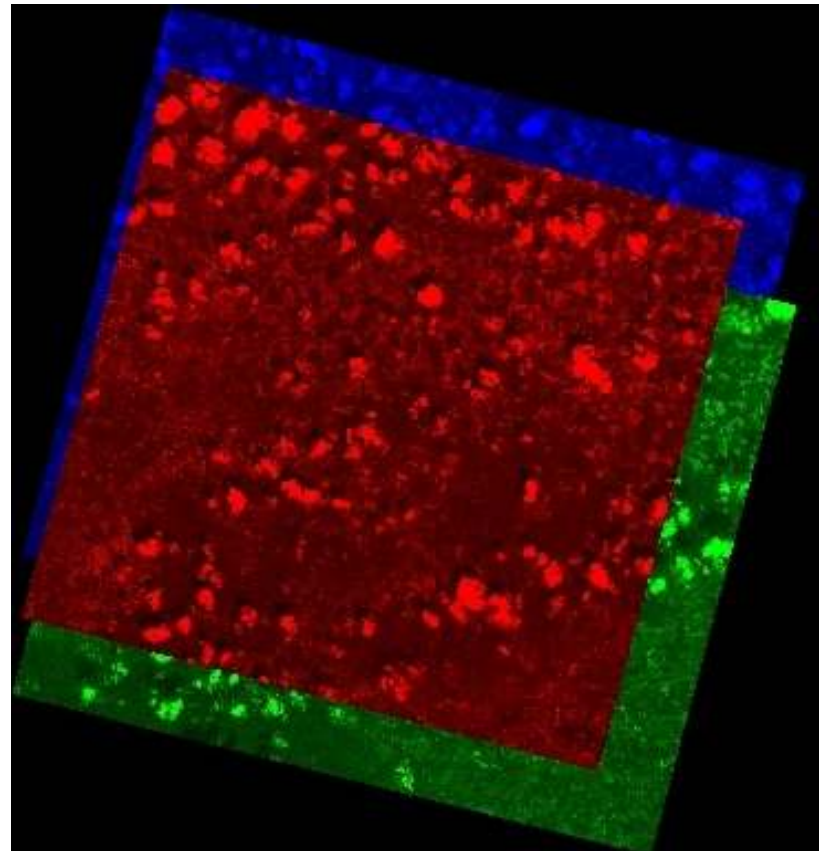
PRISM Image, artifacts

- >JPEG Compression
- >Relative calibration
- >Detector 'ringing'



ALOS Optical Sensors Data Verification

- > B/N/F View superposition
- > **To control the overlap between triplet scenes**
- > **To control frame shift applied (tbc)**



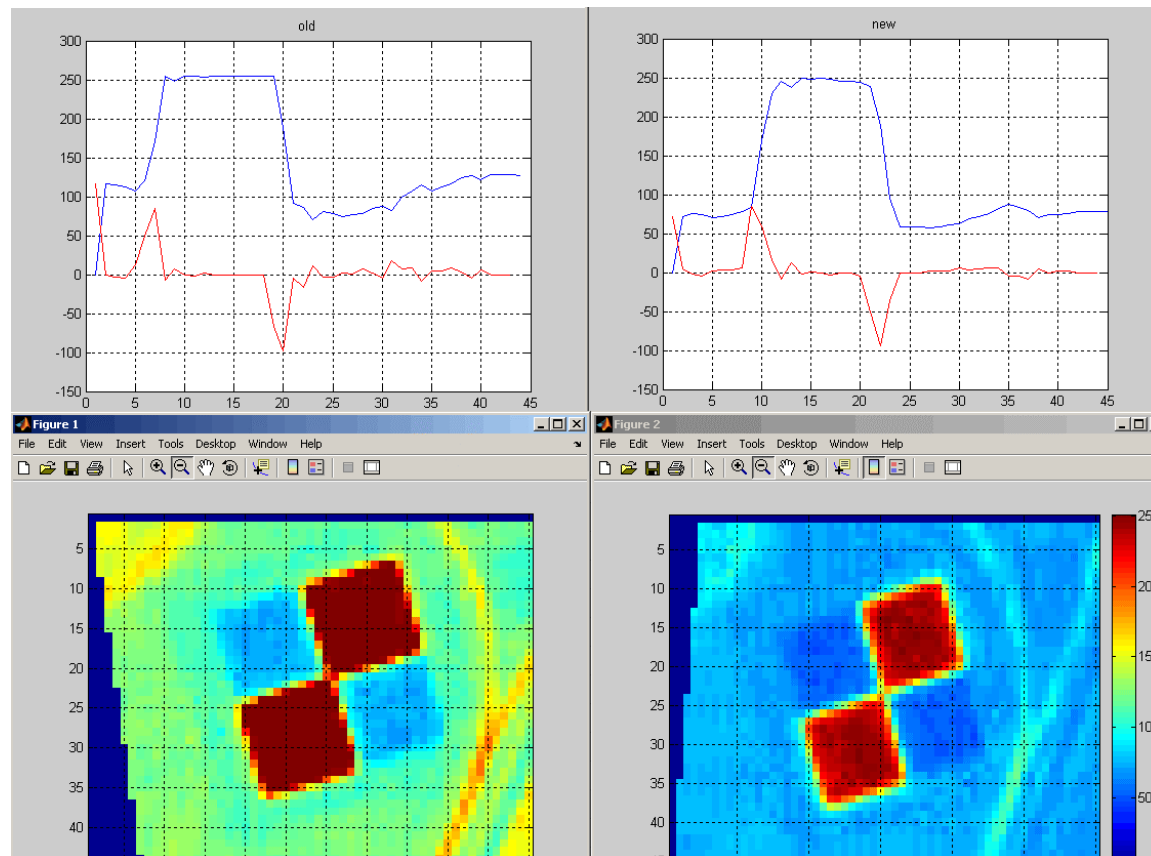
PRISM Image, relative calibration

- >Only odd or even detector are contaminated
- >Problem may be due to processing chain
- >It is interesting to follow this artifact along with frame
- >**Visual inspection for a set of consecutive images may be done**



PRISM Image, saturation

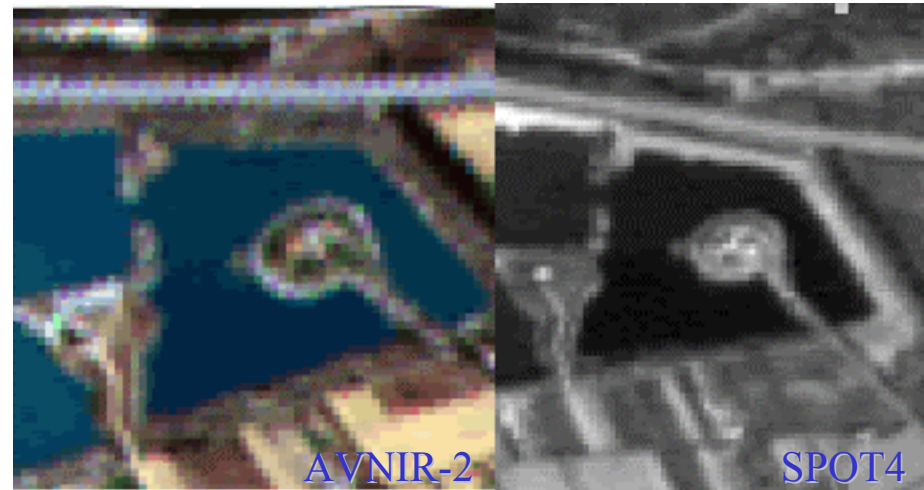
- >To check gain setting applied,
- >If not well suited, to report to ESA



AVNIR-2 - Interband

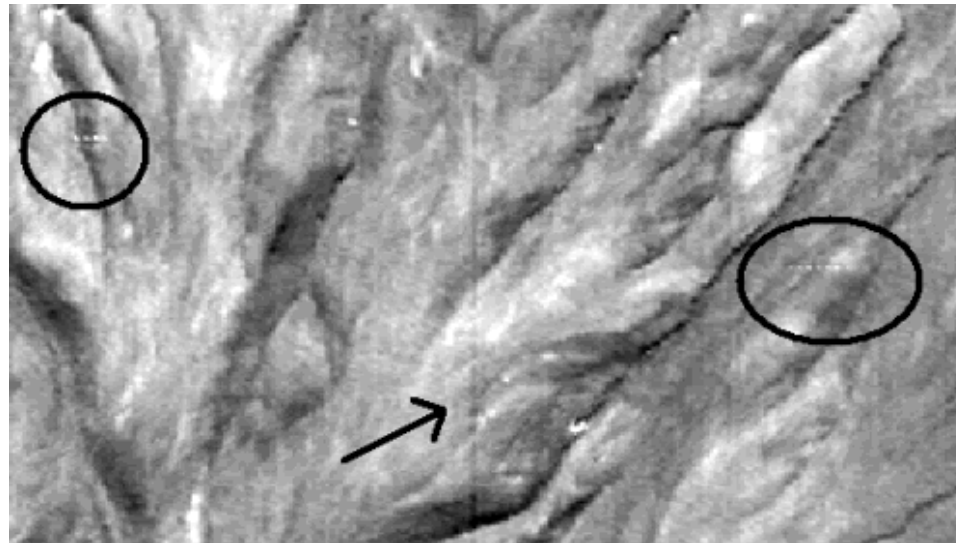
>1B2R product

>Mis-registration due a wrong pixel size applied during processing wrt pointing angle.

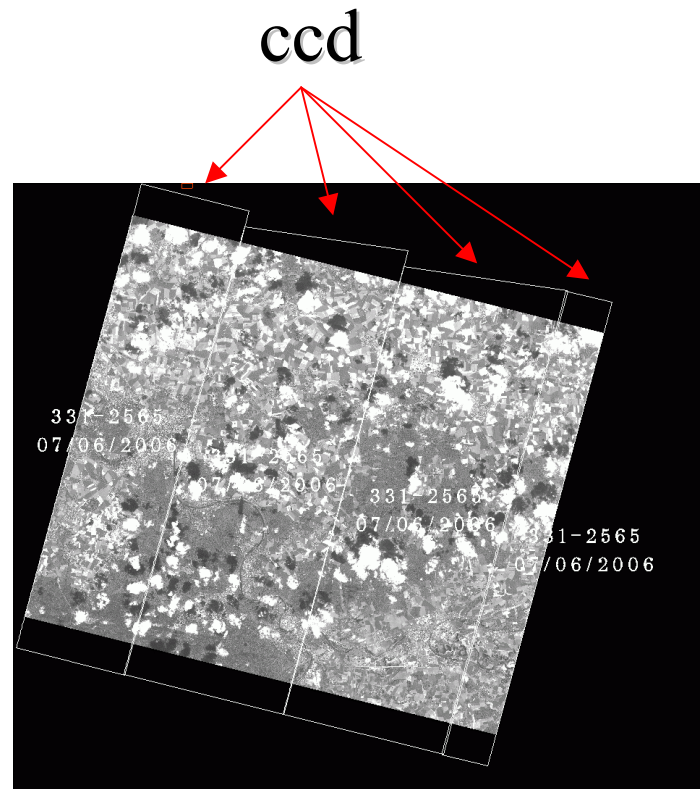


AVNIR-2 – Missing data

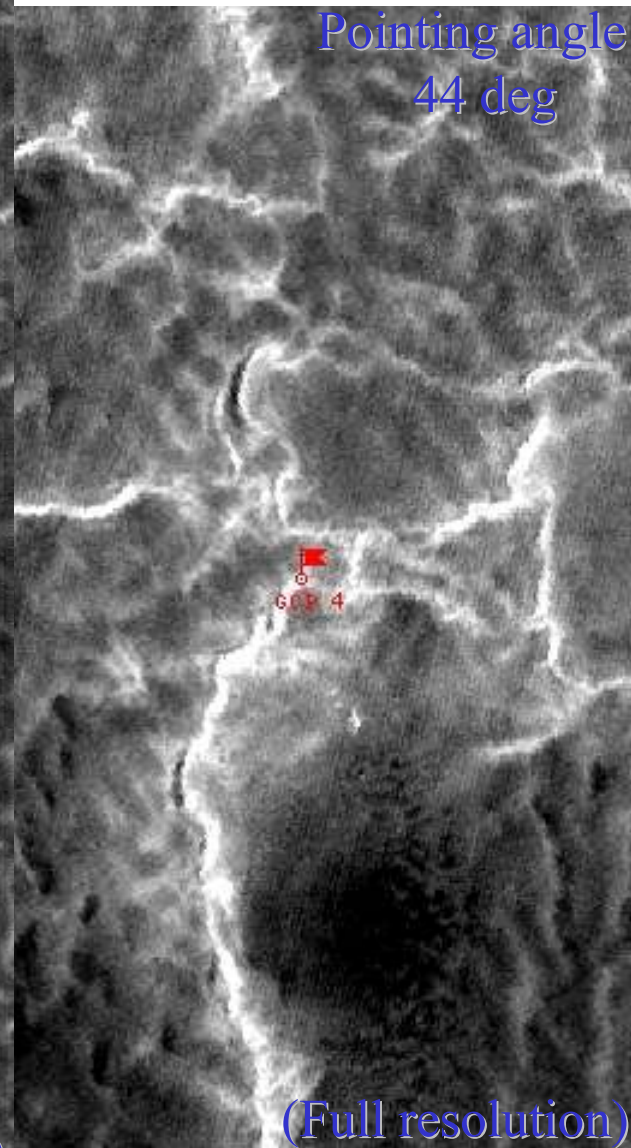
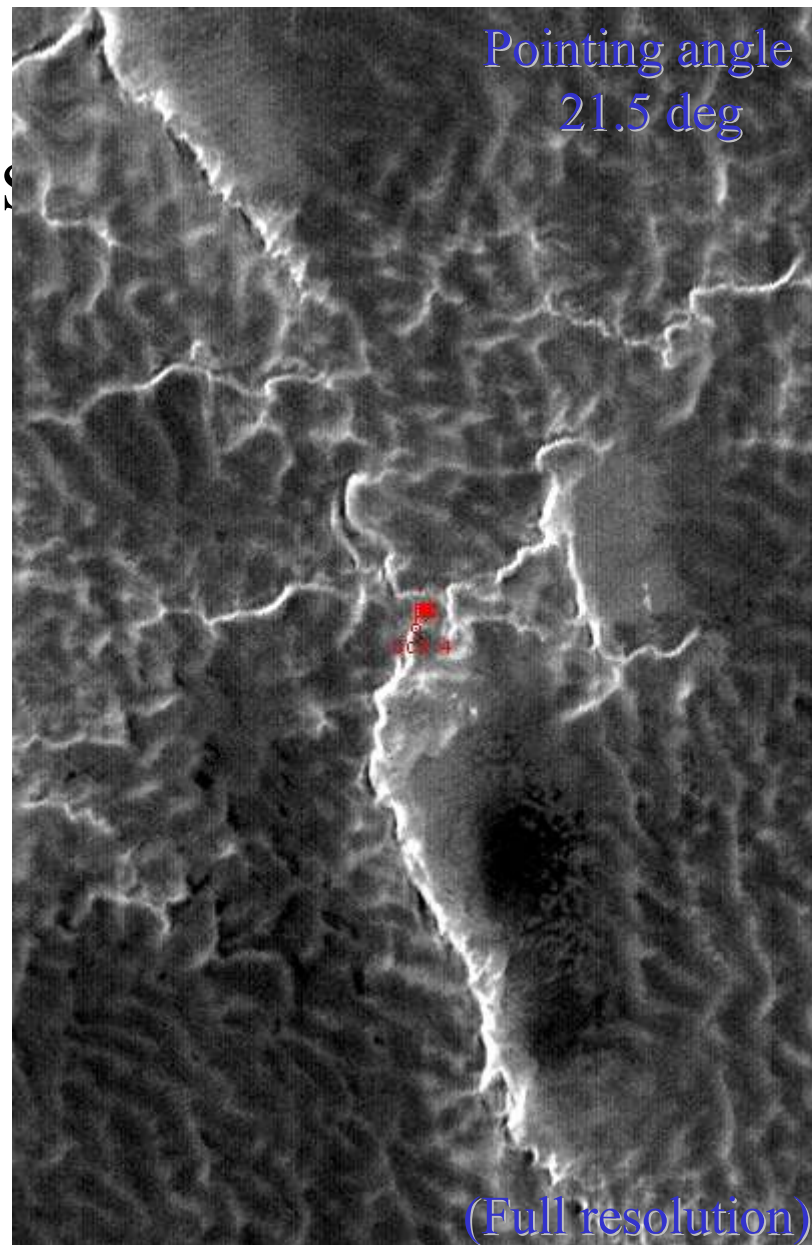
- >Missing data problem (circle)
- >due to the lost of data during downlink
- >a dark column at the center of the quick look highlights mis-calibrated or in operant detecor.



PRISM Image - 1B2 product level



AVNIR-2 Image Quality, pixel size and pointing angle



PRISM Image Interpretability

Line - Plane – roof – line intersection ...

>Detectability Recognizability

>Perfect, good, medium, poor



PRISM Image Interpretability

- >To check a same area views with B/N/F radiometers
- >To detect if occlusions occurred,
- >The QI of a same target can be degraded along with the three PRISM views,
- >It becomes problematic for DSM processing ...

(To add QL)