

# An Automated Processing Workflow for Air/Spaceborne (Hyperspectral) Remote Sensing

- » Motivation: triggered by multitude of airborne campaigns since 2004:
  - » Frame camera's
  - » Wisk- and pushbroom (hyperspectral missions)
  - » Video → near-realtime awareness
- » Own developed middleware for distributed computing → **FAST**
  - » Centred around a database
  - » Pattern for parallelism include:
    - » Master/Worker framework
    - » Task/data decomposition
  - » Parallelism is implemented in the middleware, NOT in the applications
- » Own developed geo-correction module for better interfacing with Modtran, L2 processing on raw geometry and the ability to handle multitude of sensors .
- » Atmospheric correction: no Modtran LUT tables but computed on the fly
- » Controlled through www/xml interface
- » Multitude of airborne sensors processed, in particular APEX PAF is hosted on the system
- » Used for the Proba-V mission and Tuned for the processing of the VNREDSat1B hyperspectral space mission