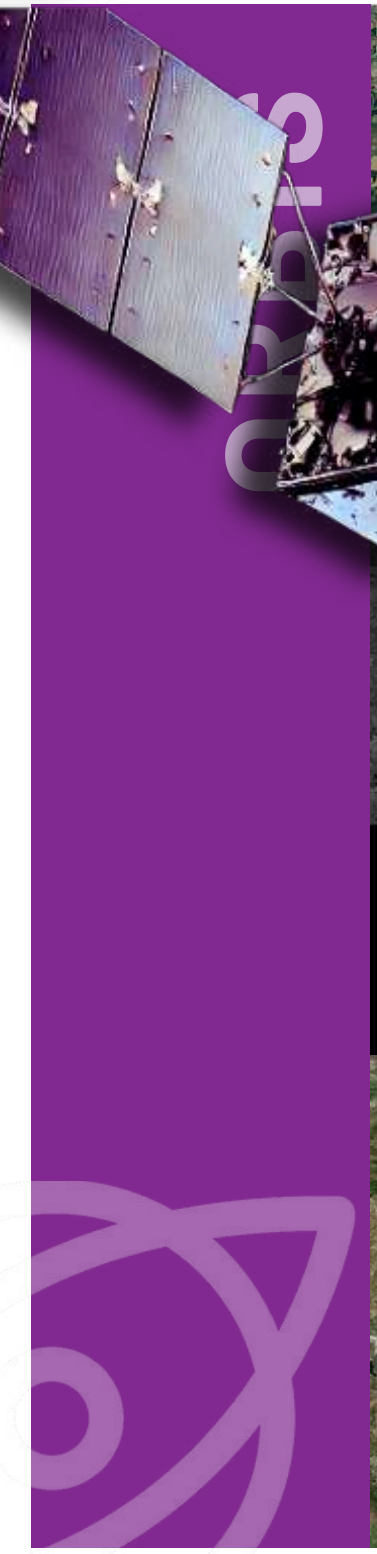
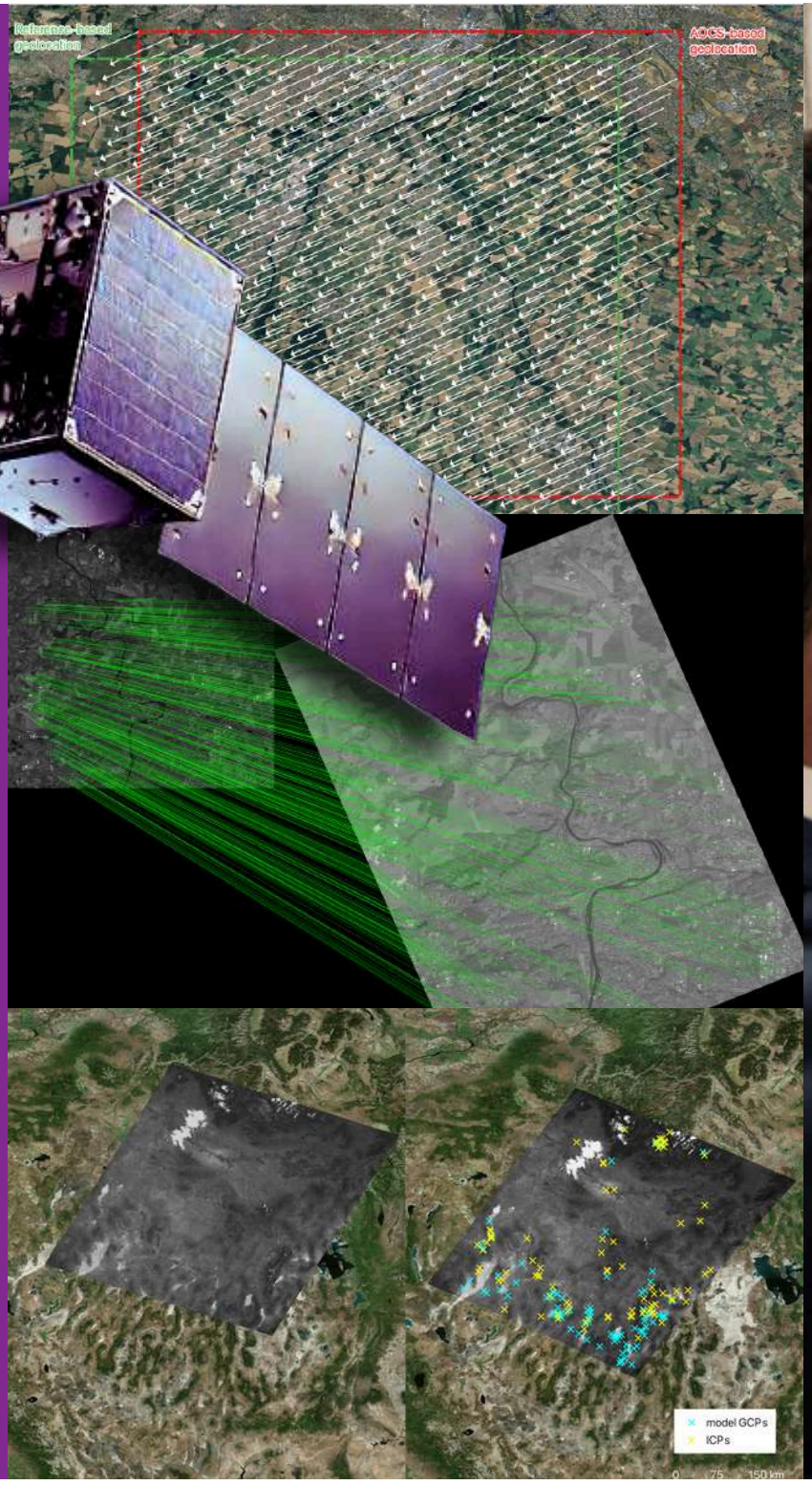
BY WORLD FROM SPACE
ORBIS

payload data service
for Earth Observation missions

TECHNICAL INTRODUCTION

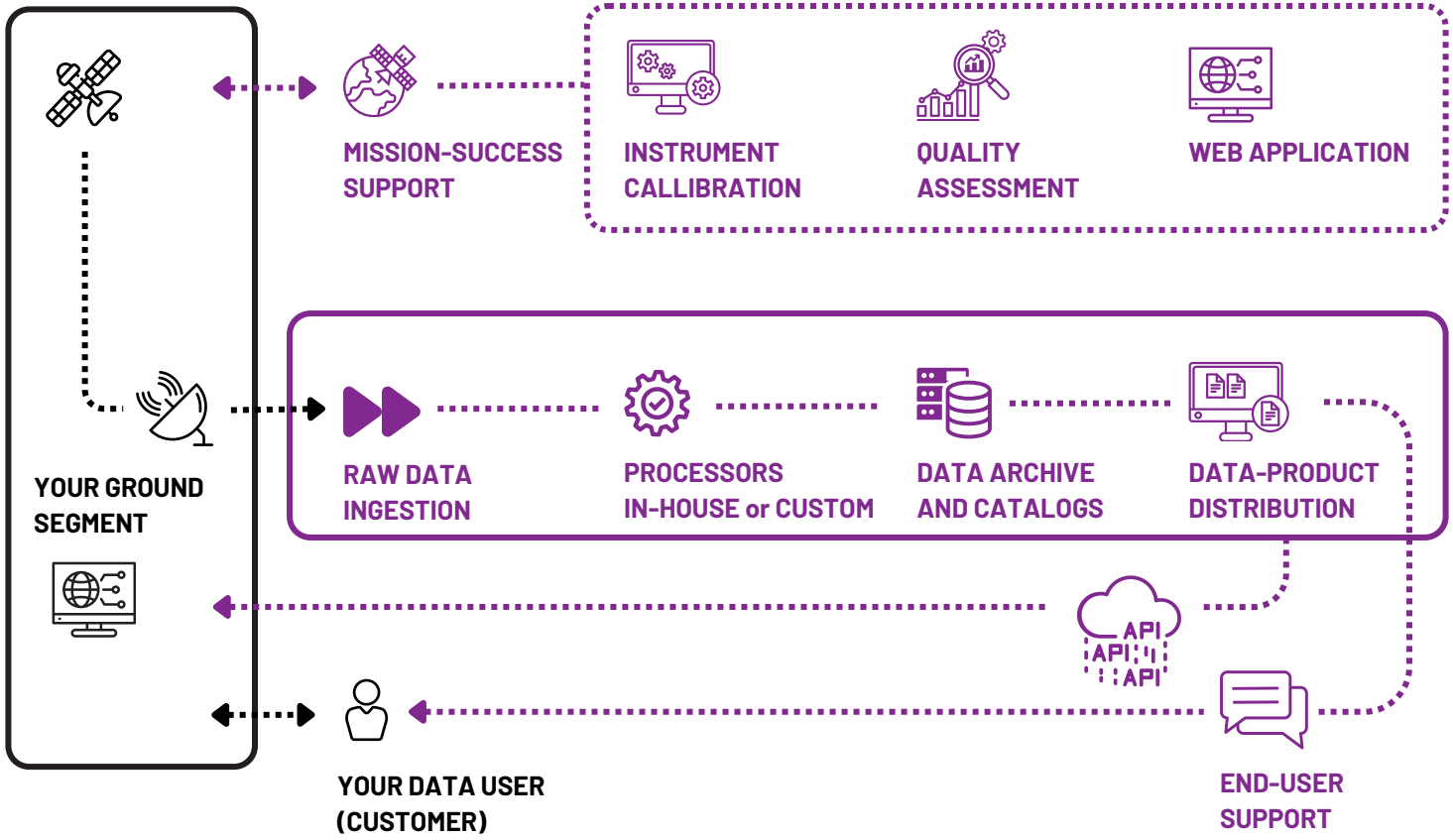



Reference-based geolocation
AOCS-based geolocation
model GCPs
ICPs
0
75
150 km


Collections
Level-1
Show EO products from:
February 4th, 2025
00:00
to:
March 21st, 2025
ID
Bounding box
DataProduct_L1_20250321101616
[14.167065, 49.917344, 14.636915, 50.159974]
DataProduct_L1_20250321101614
[14.194067, 50.006580, 14.565789, 50.248691]

OVERVIEW

Raw data limits the value of **your mission**,
and threatens its commercial success.
Provide reliable, analysis-ready data with **ORBIS**.



ORBIS: *A complex data service for satellite Earth Observation missions.*

- processing, managing, and delivering your imaging results
- calibration of your instrument throughout the mission lifetime
- helps you better understand your data users.

MAIN ORBIS **FEATURES**

Modern integration to Ground Segment

Cloud-based platform

Scaling for your mission size and budget

Data authenticity verification

Automated data preprocessing

Industry-standard data formats (STAC, COG)

Mission lifetime support

Platform for your data users

Instrument calibration and quality control

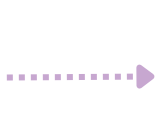
Spatiotemporal product enhancement (mosaicking, pansharpening)

HOW IT WORKS

1 Pre-flight

2 Commissioning

3 Operations

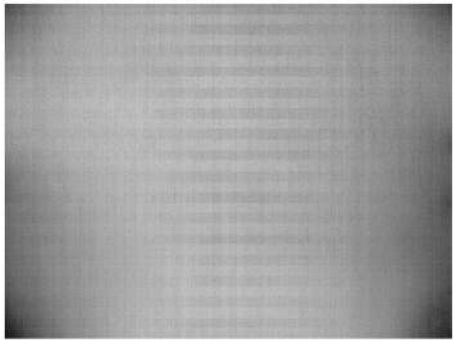

1 Pre-flight

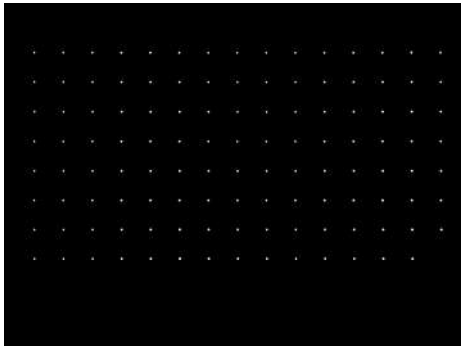
- Early mission enables us to design use cases, consult the mission equipment, and plan cal/val activities.
- We configure the system according to your requirements.
- We develop instrument models based on your payload and ground calibration data.

2 Commissioning

3 Operations

1) Dark frame development
2) Instrument geometric distortion





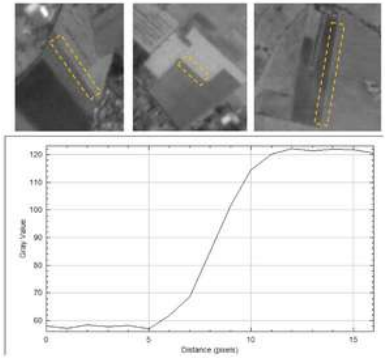
1 Pre-flight

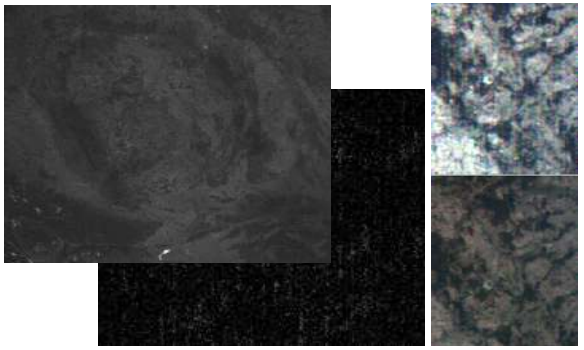
- We guide you through executing the calibration plan
- We validate the pre-operational data, issue the quality report, and adjust the instrument models

2 Commissioning

3 Operations

1) Resolution determination
2) Sensor error handling
3) Pointing accuracy assessment



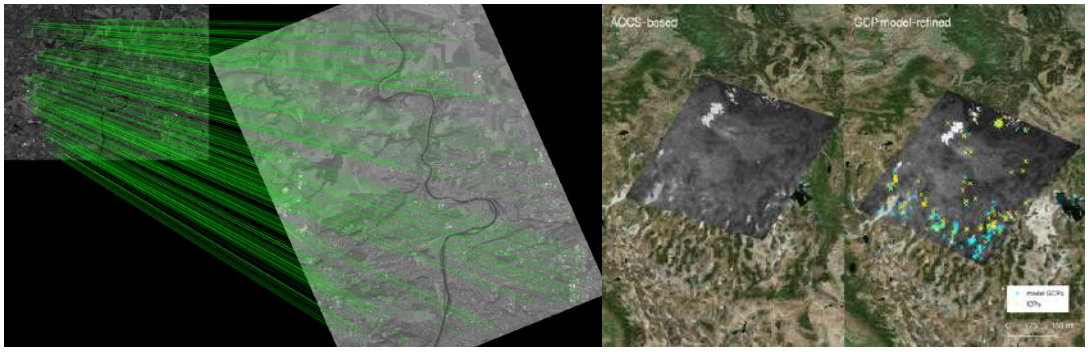


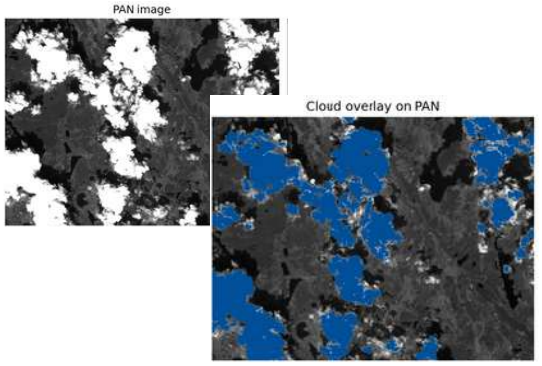
1 Pre-flight

2 Commissioning

3 Operations

- The system starts delivering results on a nominal basis
- We provide support: task re-calibration campaigns, keep the processing updated, and react to anomalies
- We can:
  - host your archive further for your data users
  - perform archive re-processing
  - help secure mission continuity





EO EXPERTISE

1 **In-flight calibration**

2 **Radiometric corrections**

3 **Geometric corrections**

4 **Design and enhancement**

1 In-flight calibration

- creating adapter to your instrument
- improving sensor models during commissioning
- calibration data tasking
- cross-calibration with other satellites
- reference data determination
- processing simulation
- payload performance validation
- regular re-calibration
- nominal pre-processing adjustment

2 Radiometric corrections

- color filter removal
- defective pixel treatment
- non-linearity/non-uniformity correction
- vignetting correction
- dark signal correction
- destriping and noise removal
- radiometric modelling (radiance/reflectance)
- atmospheric correction
- cloud masking

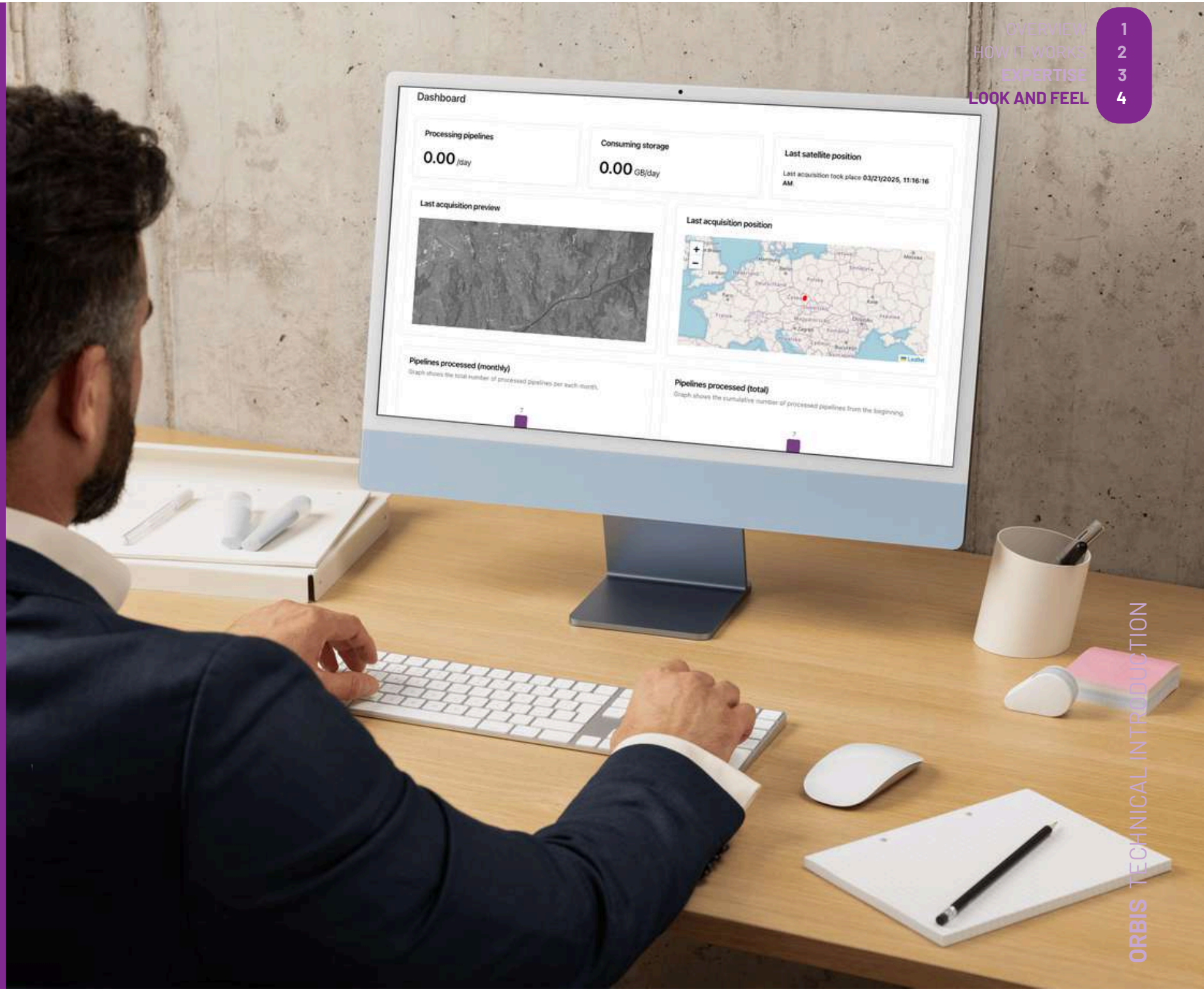
Geometric corrections

- band alignment
- AOCS data processing
- geometric model application
- image registration
- georeferencing
- orthorectification
- reprojection
- image coregistration
- image resampling
- product tiling

4 Design and enhancement

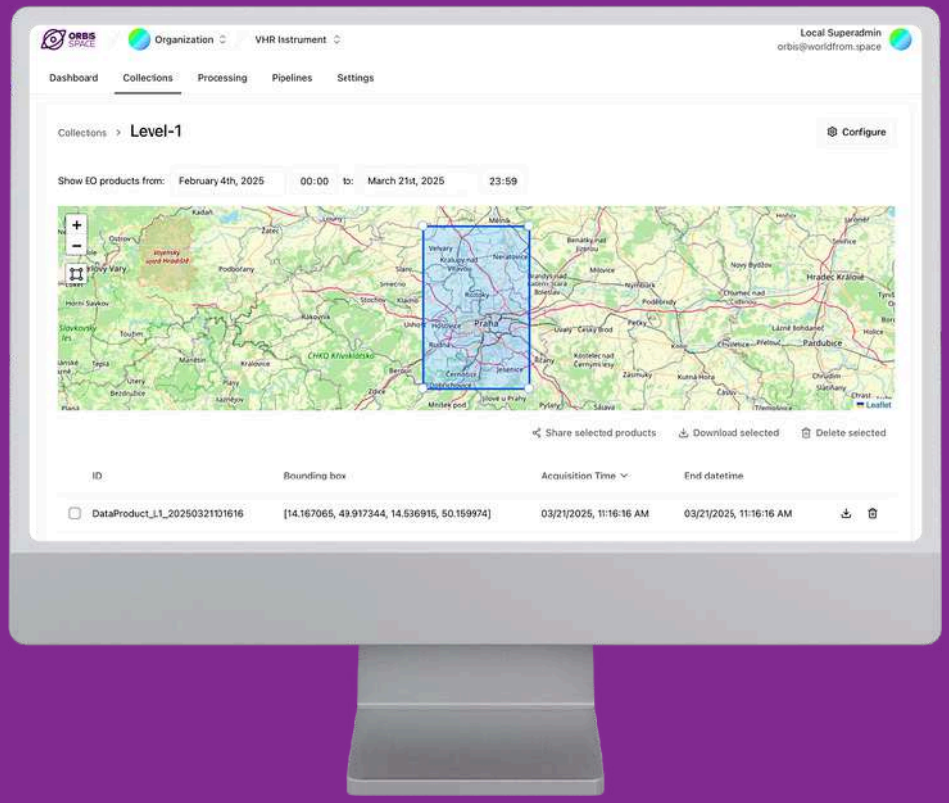
- metadata gathering and standardisation
- quality reporting
- standard raster formats (TIFF, COG, JPEG2000 and more)
- STAC product format (other formats possible)
- mosaicking
- pan-sharpening
- data fusion

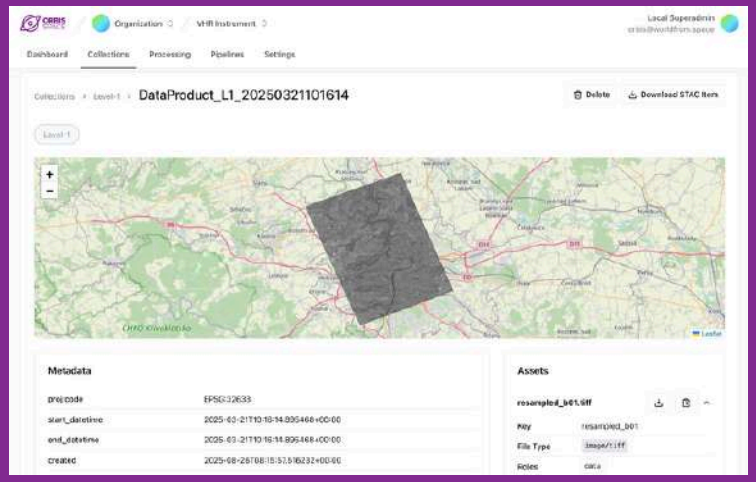
LOOK & FEEL

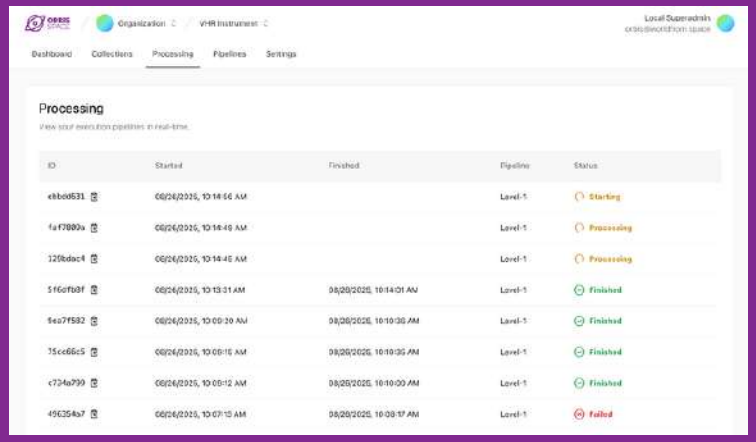

Dashboard
Processing pipelines
0.00 /day
Consuming storage
0.00 GB/day
Last satellite position
Last acquisition took place 03/21/2025, 11:16:16 AM.
Last acquisition preview
Last acquisition position
Pipelines processed (monthly)
Pipelines processed (total)

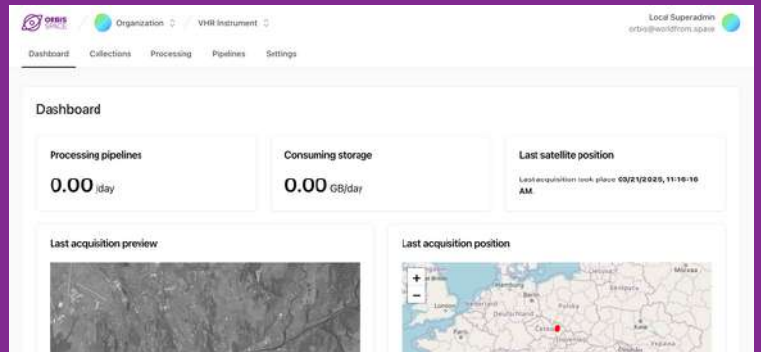
LOOK & FEEL

ORBIS Platform









REQUEST DEMO

CONTACT DETAILS

- FOR BUSINESS OR COLLABORATION:

  seidl@worldfrom.space

  +420 774 936 336

- FOR TECHNICAL AND DEMO:

orbis@worldfrom.space