



MAXAR

Next generation EO satellites and Direct Access: challenges and opportunities

Pascal Schichor European Space Imaging
Iain MacInnes, Maxar

About European Space Imaging



- Munich based Company, established in 2002
- SME- around 40 employees
- WorldView Global Alliance since 2009
- Local Tasking of MAXARS optical satellite fleet



MAXARS

Current VHR Optical Satellite Missions



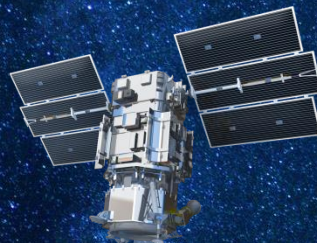
WORLDVIEW-3

31 cm GSD
680,000km²
per day



WORLDVIEW-2

46 cm GSD
1,000,000km²
per day



WORLDVIEW-1

50 cm GSD
+1,000,000km²
per day



GEOEYE-1

41 cm GSD
350,000km²
per day

DIRECT ACCESS with the
European Space Imaging

GROUND STATION

Local Tasking of:

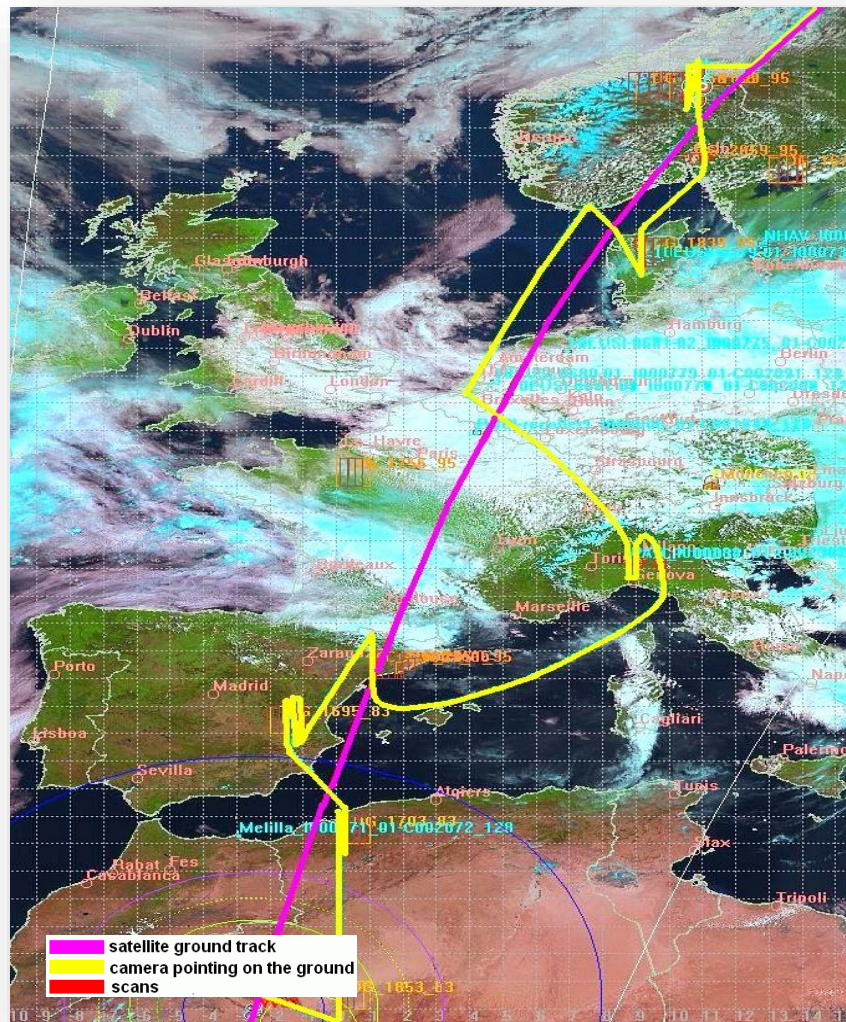
- WorldView-1
- WorldView-2
- WorldView-3
- VGTasking for GeoEye





Local Tasking

Shooting in between the clouds



GROUND STATION

LOCAL TASKING BENEFITS

The ground station allows greater flexibility for our customers and includes the following benefits:



Last minute
order entry



Maximizing
collection yield
(# of targets)



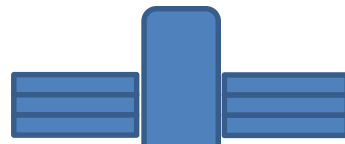
Minimizing cloud
cover and maximizing
area of collection



Faster production
and near real-time
delivery

DATA FLOW

From the Satellite to Archiving the Data



- Secured Data Downlink (X-Band)
- Authenticated “Handshake” uplink (S-Band)
- upload of the Pass Scenario (S-Band)



EUSI Ground Station

Level 0 Data

EUSI ARCHIVE

MAXAR Archive

Backhauling to Maxar

Level 2 Data

Customers

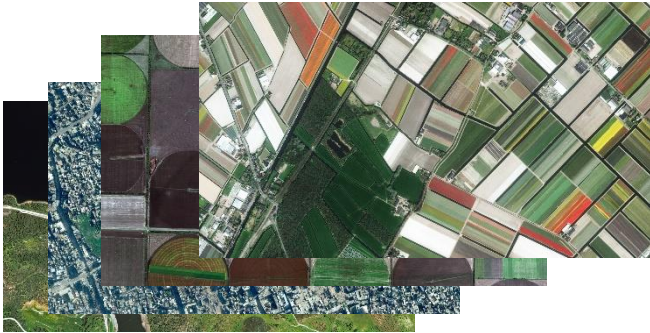


ARCHIVING SYSTEM

- Data stored from 2002 up to date:
- 160 TB available
- 71% in use

-> All data stored in Level 0 Data format

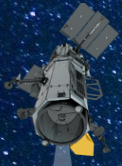
RATIO Level 0 VS Level 2: 1:3-1:5
(depending on the Band combination)



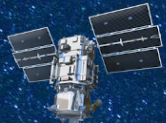
Current and Future VHR Optical Satellite Missions



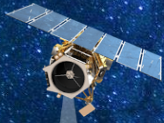
WORLDVIEW-3
31 cm GSD
680,000km²
per day



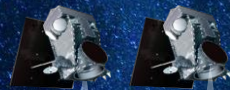
WORLDVIEW-2
46 cm GSD
1,000,000km²
per day



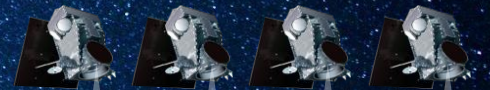
WORLDVIEW-1
50 cm GSD
+1,000,000km²
per day



GEOEYE-1
41 cm GSD
350,000km²
per day



2
Legion Polar Orbit 50cm



4
Legion Mid inclined Orbit 34cm

An aerial photograph of the Colosseum in Rome, Italy. The iconic elliptical amphitheater is the central focus, showing its multiple tiers of arches and the central arena. The surrounding area includes modern roads with traffic, green spaces, and other buildings. The text "Thank you!" is overlaid in the center of the image in a blue, pixelated font.

Thank you!