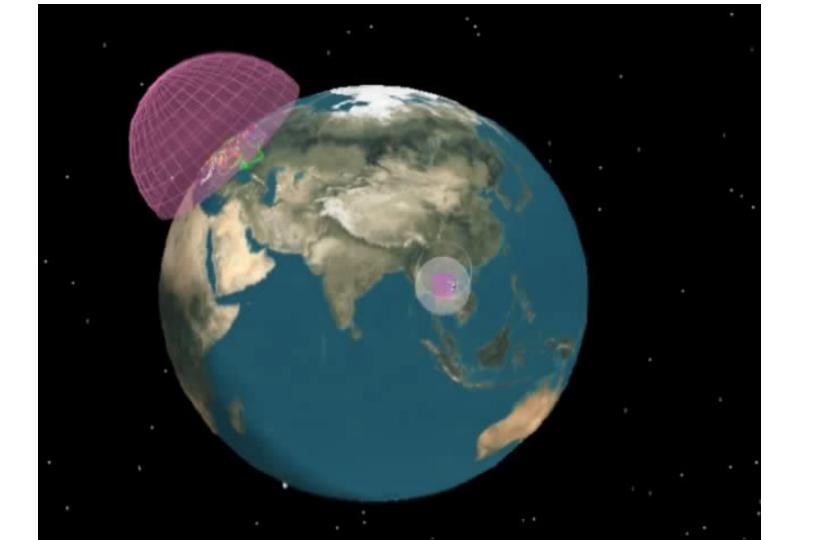
# EUROPEAN SPACE IMAGING

European Preferred Gateway For VHR Imagery

**ZEUSI** 

Pschichor@euspaceimaging.com



### **ZEUSI**

# EUROPE'S LEADER IN IMAGERY SOLUTIONS

- Infrastructure Operator since 2002: Operating the DAF Ground Station to downlink and disseminate VHR Data.
- Leading supplier of VHR Satellite Imagery to all EU Agencies
- Extensive network of innovative partners and regional distributors
- Customer base covers more than 1700 customers in 59 countries in Europe and North Africa. Each year we process 3500-4500 orders.

### **ZEUSI**

#### INVESTING IN EUROPEAN

# GROUND Infrastructure

- Significant investment to upgrade the ground station over the years for local tasking and direct downlink
- Personalised approach to planning, offering the customer the most flexibility from a satellite provider
- Near real-time delivery of data in as little as 30 minutes and with an average delivery of a few hours. Non standard delivery options for security accounts



#### REDUCING

# THE LATENCY

#### **Near Real Time Orders: Continuing our success story:**

- Further reducing the latency to less than **30 minutes**
- Scaling up the quantity of time critical orders

New DAF 3.0: Scalable System to allow performance scale up if needed -> AIM: decreasing the latency to less than 20 minutes

# FLEXIBLE TASKING SOLUTIONS

Reducing the Cut off Time: Last minute order entry ensures that our customer can quickly react on emerging situations and have intra day result with our Satellite Imagery

**Collection Parameters:** Flexibility on non standard tasking requests: Multiple Stereo acquisitions, special look angles and more.

# **OUR EXPERTISE**



#### TECHNICAL EXPERIENCE

All staff have a master degree in geography, geodesy or related science



#### OPERATIONS PRODUCT MANAGERS

Four certified product order specialists (working with the order handling system) and 3 long-time operations managers to assist in high season

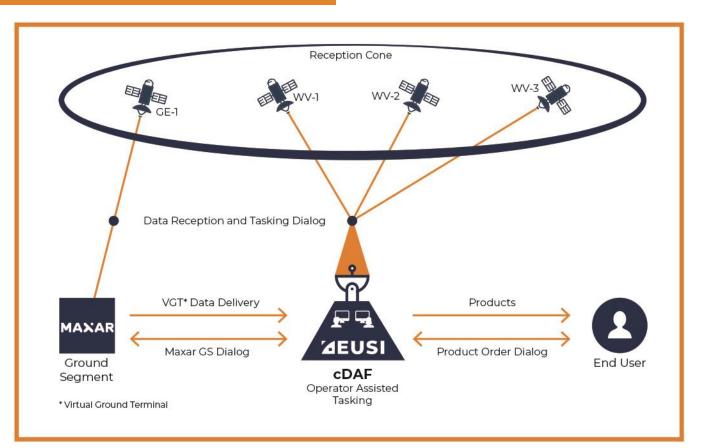


#### PERSONALISED CARE

From first enquiry through to project completion we have built multiple longstanding relationships with our customers offer 24/7 care



# GROUND STATION **PROCESS**



# COUNTRY COVERAGES TASKING VHR CAPABILITIES

#### Worldview Global Alliance Sensor Overview:

Legacy : WorldView-1, WorldView-2, WorldView-3, Geoeye-1 Future : Legion-1, Legion-2, Legion-3, Legion-4, Legion-5, Legion-6



WorldView-1 PAN, 50cm



WorldView-2 RGBN (8Bands), 46cm

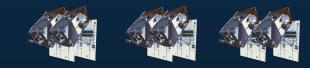


GeoEye, s), RGBN, 41cm

**CURRENT SATELLITES** 



WorldView-3, RGBN (16 Bands), 30cm



| Legion 1&2,     | Legion 3&4,     | Legion 5&6,     |
|-----------------|-----------------|-----------------|
| RGBN (8 Bands), | RGBN (8 Bands), | RGBN (8 Bands), |
| 30cm            | 30cm            | 30cm            |
| Launch Q2 2023  | Launch Q3 2023  |                 |





# SPATIAL RESOLUTION

### **RESOLUTION DEVELOPMENT**



| Satellite  | IKONOS | Worldview-1 | Worldview-2 | GeoEye | WorldView-3 | Legion 1-2 (3-6) |
|------------|--------|-------------|-------------|--------|-------------|------------------|
| Resolution | 82 cm  | 50cm        | 46cm        | 41cm   | 30cm        | 30cm             |
| Launch     | 1999   | 2007        | 2009        | 2008   | 2014        | 2023             |
|            |        |             |             |        |             |                  |

|      | N I - 4 | EA     |    |
|------|---------|--------|----|
| NOAA | kegulai | 10n 50 | cm |
|      | - Balai |        |    |

# **SPATIAL RESOLUTION**





80 cm

60 cm



50 cm

2007



**40 cm** 

2008/09



30 cm

15 cm HD

2020



1999

- A technique that improves the visual clarity of an image.
- The image is aesthetically refined with precise edges and well reconstructed details.
- It enables faster and more accurate data extraction from images collected by our satellite constellation.



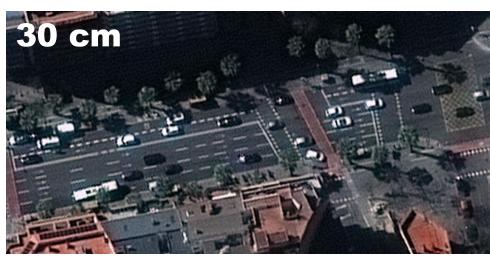
Always check native sensor resolution vs product GSD



#### **VISUAL CLARITY** easier to interpret images, allowing you to find critical features faster

# ACCURATE FEATURE

have the level of detail available to accurately identify features







#### RAPID DECISION MAKING

faster interpretation driving rapid confident mission decisions



## TASKING CAPACITY 30CM WITH LEGION & WORLDVIEW-3

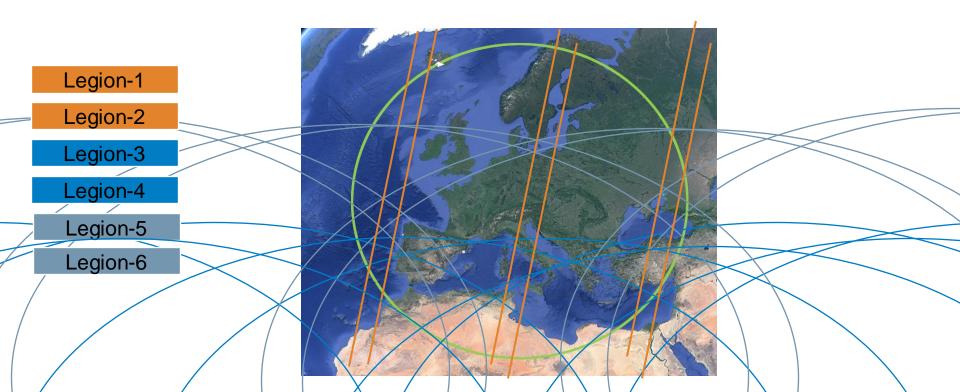
**Revisit with 30 cm:** 12-15 times a day at southern European latitude

Mid Inclined Orbits: revisits from sunset to sundown:

- Emergency response, maritime surveillance, infrastructure development, and more
- Reducing risks of clouds
- Intraday monitoring
- 15 HD coverage to be massively increased

The combined coverage of the world's most advanced satellite imaging constellation allows EUSI to offer up to 15 daily collections at 30 - 50 cm resolution of Earth's most frequently changing regions.





Geospatial data is used for a wide variety of defence, security and intelligence business applications to see the world as it is, and how it is changing.

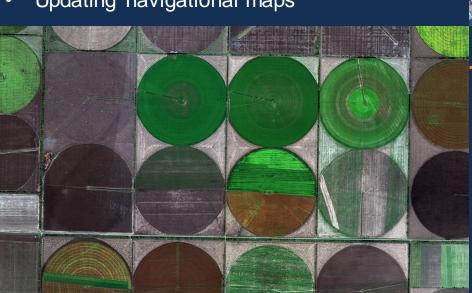


### **CIVIL GOVERNMENT**

- Urban planning
- Migration
- Asset management
- Disaster response
- Utilities management
- Sustainable development
- Maintaining cadastral maps
- Monitoring compliance

#### MARITIME

- Identification of vessels •
- Detection of illegal fishing •
- Detection of pollution •
- Validation of AIS Data •
- Detection of coastal erosion •
- Identification of algal blooms
- Bathymetric data analysis •
- Updating navigational maps



### **AGRICULTURE & FORESTRY**

- Early warning of plant heath
- Yield calculations
- Optimising harvest timing
- Irrigation system planning ۲
- Soil quality management
- Water resource management ٠
- Calculating carbon stocks
- Natural resource protection

#### **DEFENCE & INTELLIGENCE**

- Movement of equipment
- Damage from attacks
- Offensive / defensive systems
- Test camouflaged bunkers
- Mission planning
- Search & rescue operations
- Precise mapping
- Movement of people



### **ENERGY & MINING**

- Asset management
- Competitor auditing
- Resource exploration
- Compliance analysis
- Material detection
- Leak detection
- Pipeline mapping
- Inventory analysis

#### **EMERGENCY MANGEMENT**

- Predict likelihood of fires
- Estimate path of flooding
- Detect geological movement
- Aid in development planning
- Analyse effects of disaster
- Crowd management
- Insurance analysis
- Response implementation





### **EDUCATION & RESEARCH**

- Environment monitoring
- Impact assessment
- Monitor urban development
- Monitor soil losses
- Disaster impact
- 16 band spectral analysis
- Crime predication software
- Monitoring historical data

# Thank you very much Questions?

