With the increased demand for minerals to support decarbonization pathways, everyone benefits from safe and sustainable operations. Mining use cases range from monitoring the impact on local ecosystems to assessing haul road conditions and post-blast sites; and identifying water bodies that could pose a risk to workers and equipment.

**Application areas**

- Water bodies detection
- Weeds mapping & classification
- Cracks & erosion localization
- Blast site analysis
- Haul roads / in-pit roads mapping
- Bodies detection
- Well pad boundaries mapping for disturbance footprints
- Mines rehabilitation incl. re-vegetation monitoring
- Create digital records for ESG reporting

**Adding value from geospatial intelligence across the mine life cycle**

**Before mining**
- Land mapping, vegetation & biodiversity assessment of the local ecosystem
- Identifying environmentally sensitive or protected habitats
- Monitoring the progress of a new mine construction

**Mining**
- Automation of site inspections for safety monitoring (cracks, erosion, water bodies) or illegal activities detection
- Creation of digital records for ESG reporting
- Intelligence gathering on competitors activities

**After Mining**
- Monitoring and reporting on mine rehabilitation progress
- Tracking re-vegetation, invasive species detection, change detection in local biodiversity ecosystem

Find out more on our website  
Request a personalized demo
We understand your challenges

<table>
<thead>
<tr>
<th>Use cases</th>
<th>Water bodies detection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reach zero fatalities</td>
<td>Create safer working environment by identifying and mitigating potential risks before they occur.</td>
</tr>
<tr>
<td>Embrace digitalization</td>
<td>Embrace step-change technologies that enhance performance across the entire mining value chain &amp; improve your bottom line.</td>
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<tr>
<td>Tighten control over environmental footprint</td>
<td>Take proactive measures that reduce your environmental impact throughout the mine’s lifecycle.</td>
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<tr>
<td>Efficiently manage assets</td>
<td>Reduce downtime and increase productivity through efficient asset management and proactive maintenance.</td>
</tr>
<tr>
<td>Mitigate climate change risks</td>
<td>Allign strategy with UN SDGs, support responsible business practices that mitigate climate change risks.</td>
</tr>
</tbody>
</table>

### Water bodies detection
- **2x** classes of water bodies monitored
- **↓** reduction in equipment failures
- **↓** reduction in worker injuries
- **↑** improvement in accuracy

### Haul roads & in-pit roads mapping
- **1.5x** improvement in tire life span
- **↓** reduction in operating costs
- **↓** less accidents
- **↑** improvement in analysis quality

### Cracks & erosion localization
- **3x** classes of cracks identified & monitored
- **↑** increase in efficiency
- **↓** reduction in risk assessment costs
- **↑** improvement in accuracy