



deeper  
TECHNOLOGY

GEODATA DRIVEN DECISIONS

Rostock, den 26. August 2021



# Geodata driven decisions for environmental protection

- Coastal areas are unique ecosystems that are especially vulnerable
- Monitoring is needed to protect it
- Lots of geospatial data available
- We offer a scalable, automatic translation of the data into a reliable, digital information
- enable geodata driven decision making



An aerial photograph showing a complex landscape. A multi-lane highway runs diagonally across the middle. To the left, there is a dense urban area with many buildings and a large industrial facility with several white storage tanks. The right side features a mix of green agricultural fields and brown, possibly fallow or harvested, land. A large white text box with a red border is overlaid in the upper right quadrant.

aerial image  
not a digital information



every point of the surface  
translated to a digital  
information  
[deeper.landcover](http://deeper.landcover)

# Seashield

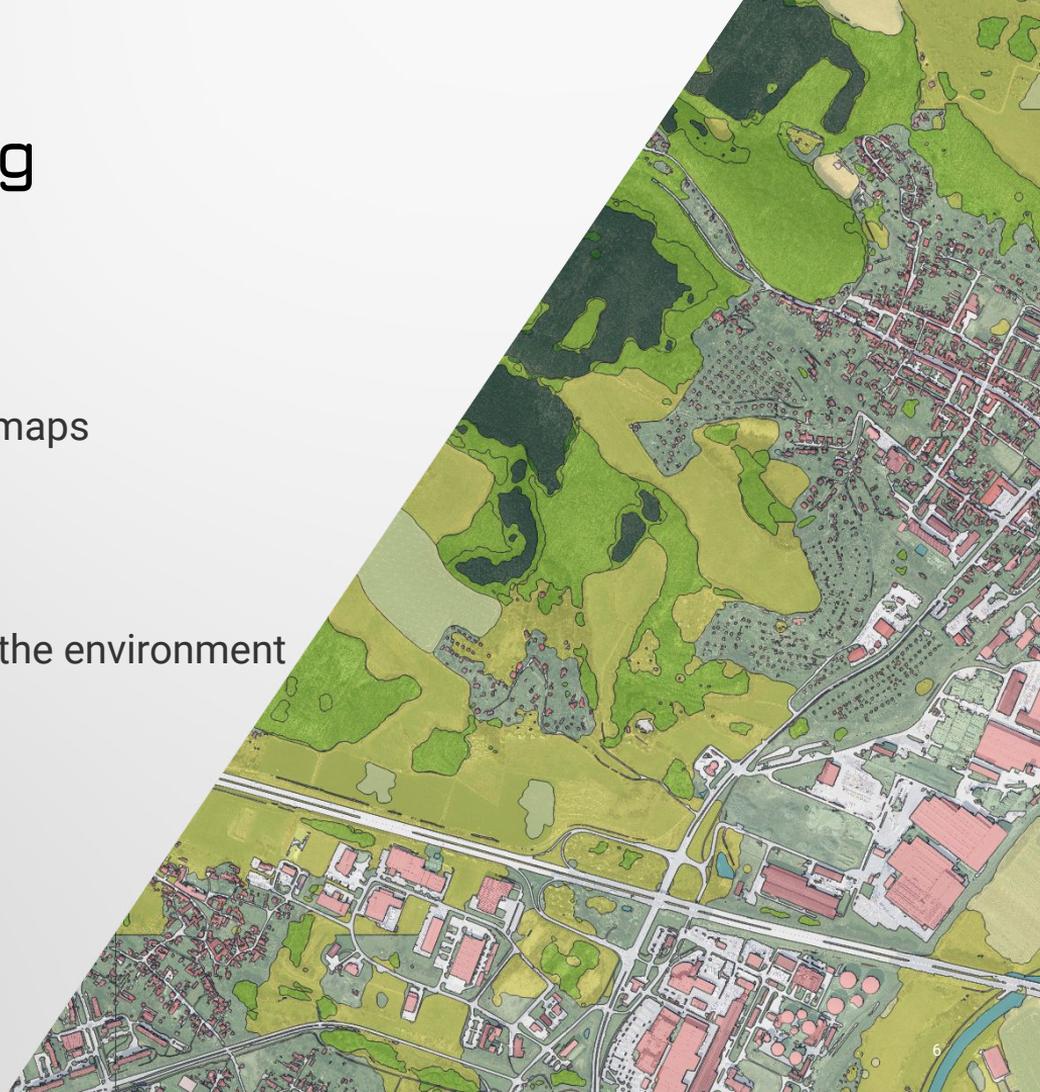
**How can we enable protection of coastal areas through geodata?**

- Mapping and monitoring of the environment
- Geospatial insight
- Live tracking



# Mapping and Monitoring

- Translate optical imagery to landcover maps
- Track change over time
- evaluate the change in landcover
- consequently understanding change in the environment



# Mapping and Monitoring



Landesamt für innere Verwaltung M-V, Amt für Geoinformation, Vermessung und Katasterwesen

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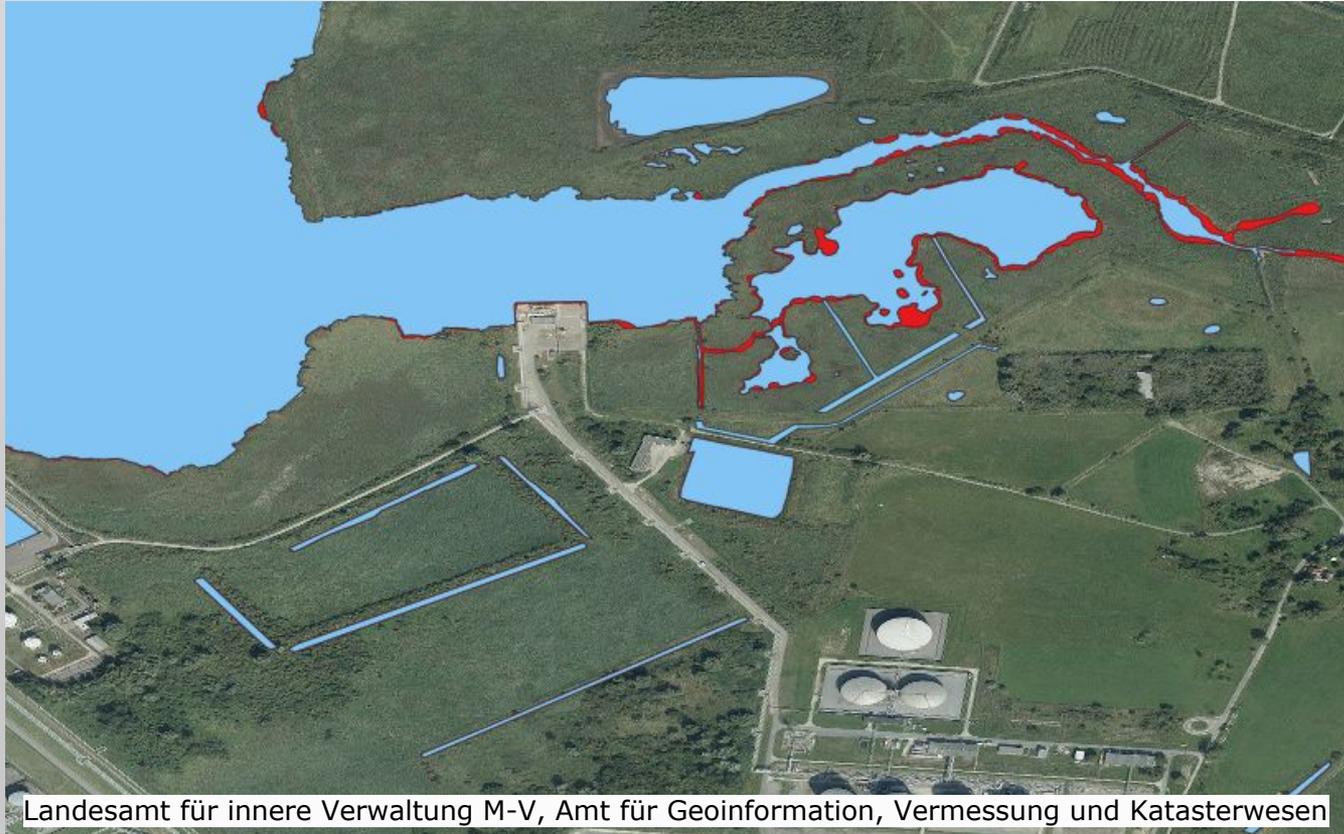
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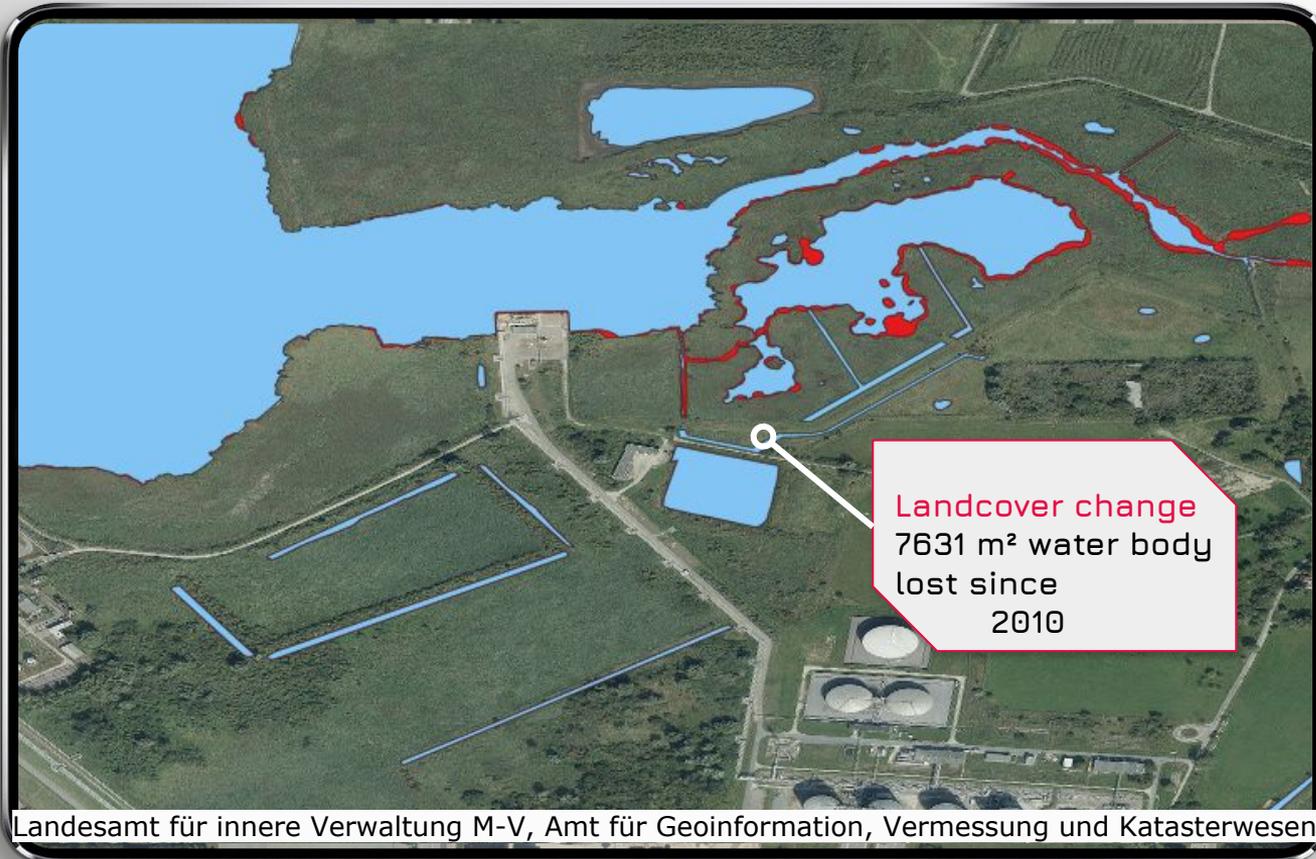
# Mapping and Monitoring



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- monitor change over time

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# Mapping and Monitoring



- Translate optical imagery to landcover maps
- monitor change over time
- make it accessible as a digital information to local authorities

# Mapping and Monitoring



- Translate optical imagery to landcover maps
- monitor change over time
- make it accessible as a digital information to local authorities
- Find stress in the environment

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- Translate optical imagery to landcover maps
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- make it accessible as a digital information to local authorities
- Find stress in the environment
- Monitor environmental measures

# Mapping and Monitoring



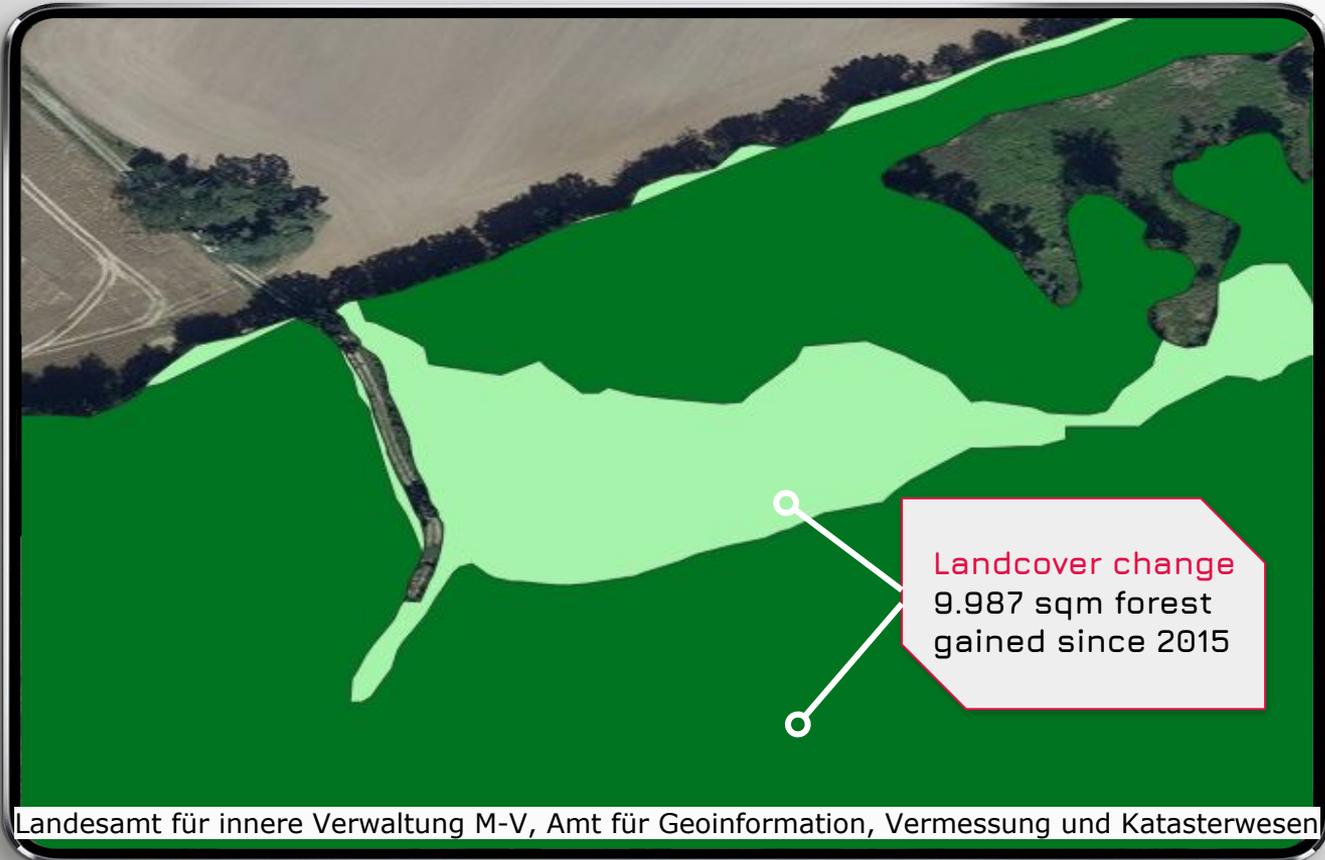
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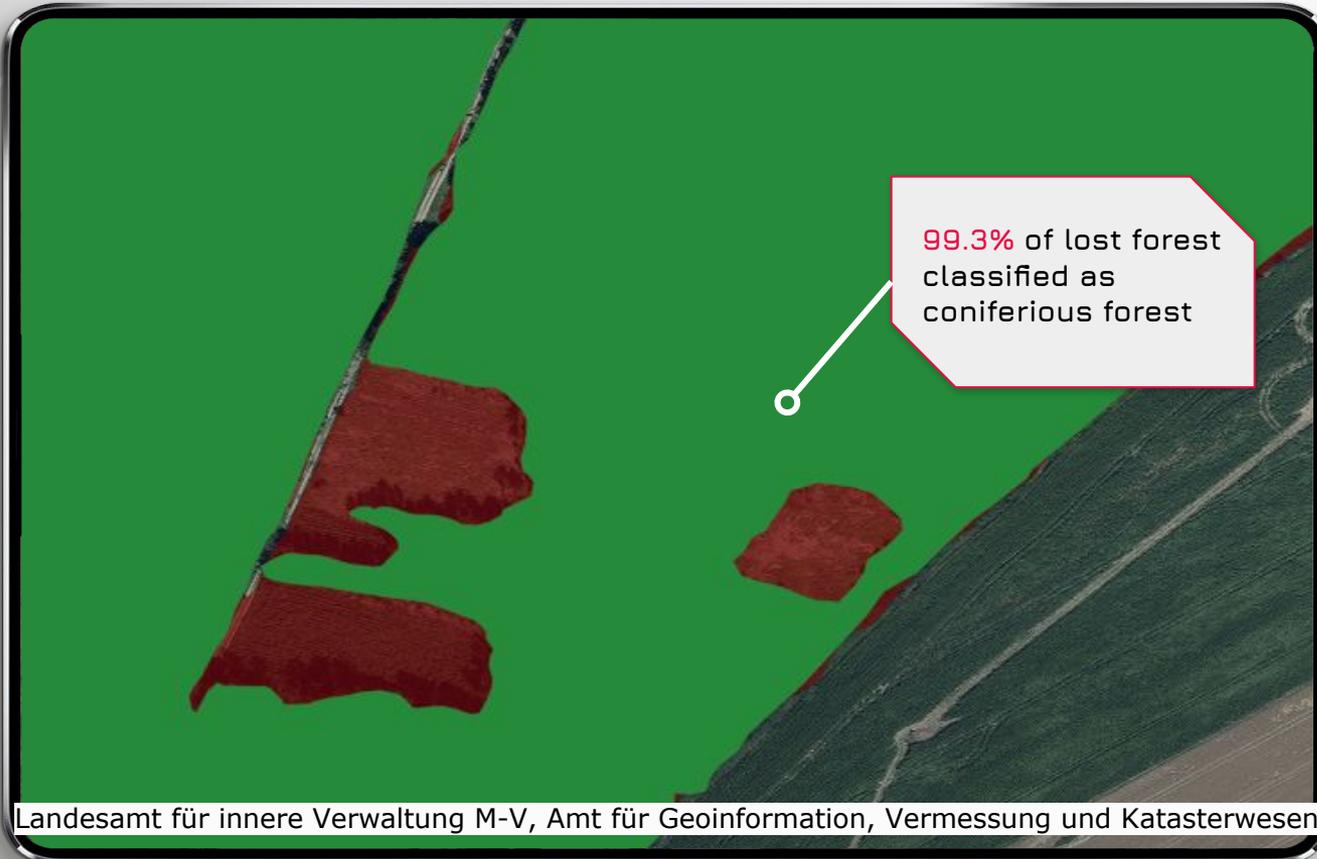
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# Geospatial insight

- Combining change detection of the landcover with extended classification themes
- explore spatial proximity of the different classes
- Translate the change in landcover to macroscopic insight about the environment



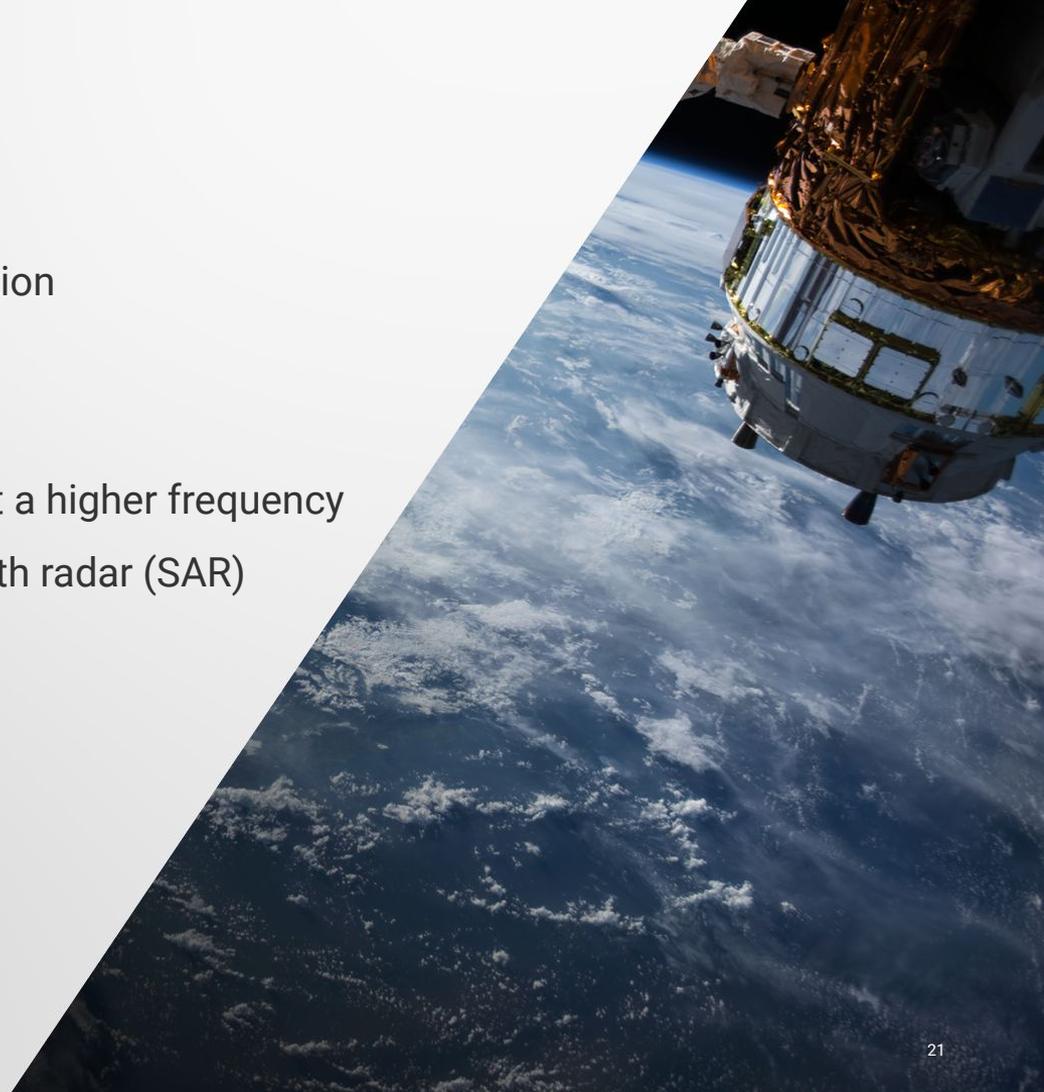
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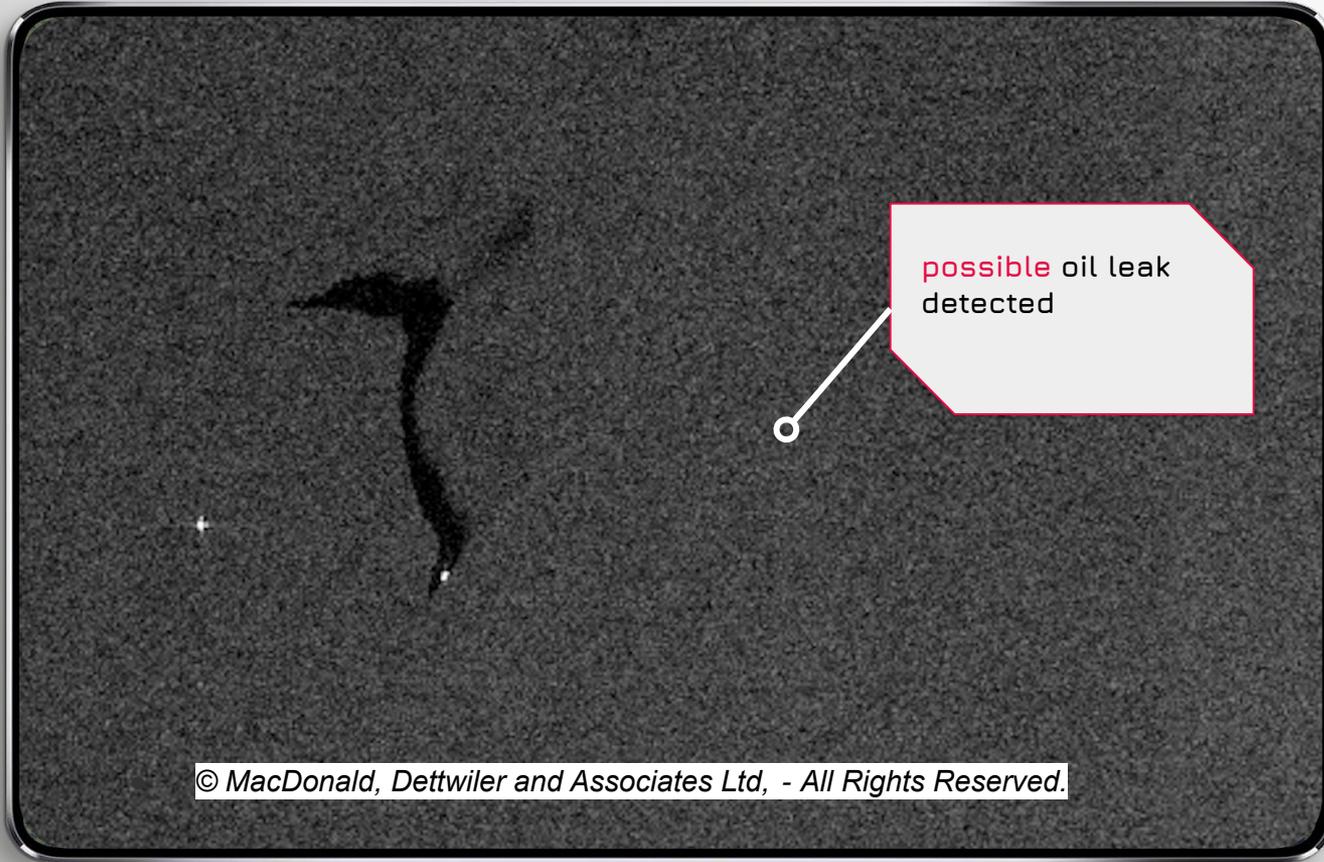
- Answer more complex questions
- scalable quantify the quality of environmental measurements

# Live tracking

- Events that need intermediate intervention
  - Oil spills
  - Waste water dumps
- Monitoring with data that is available at a higher frequency
- Weekly screenings of the waterbody with radar (SAR)



# Live Tracking



- Live detection of environmental catastrophes
- Allert local authorities

# Kontakt

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