



**Identifying the benefits of Earth observation and application of the data in preparing for and responding to oil spills**

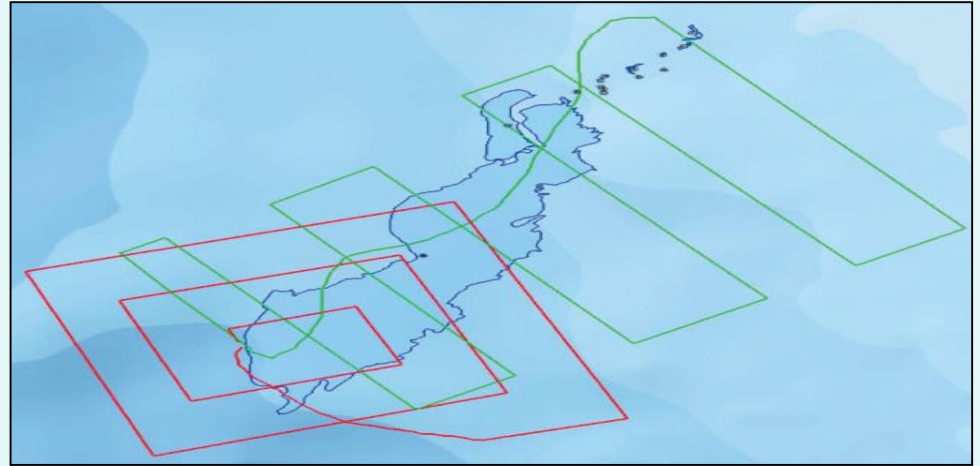
# Surveillance Tools

Figure 1 Examples of surveillance tools that may be used in a response operation

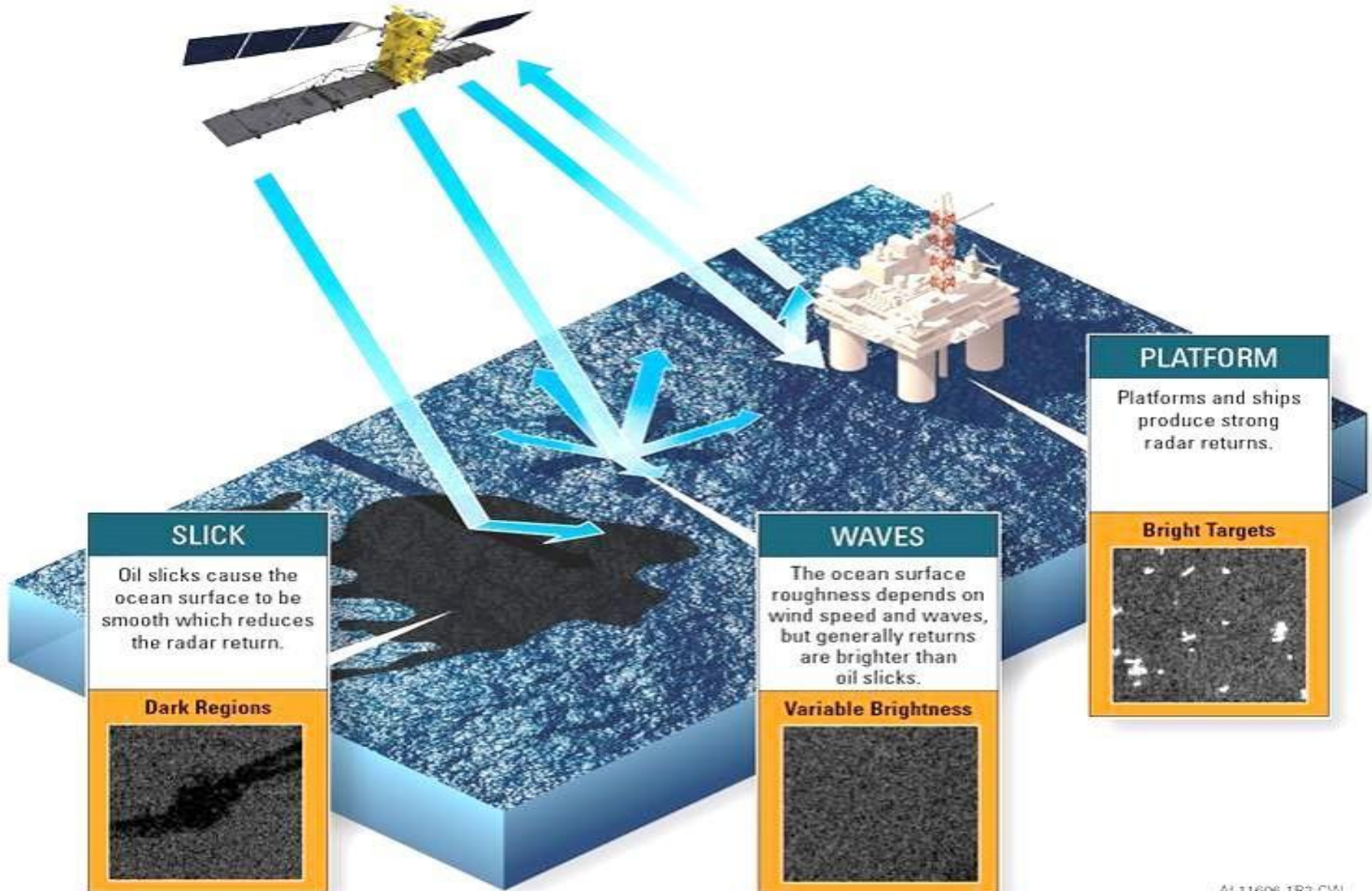


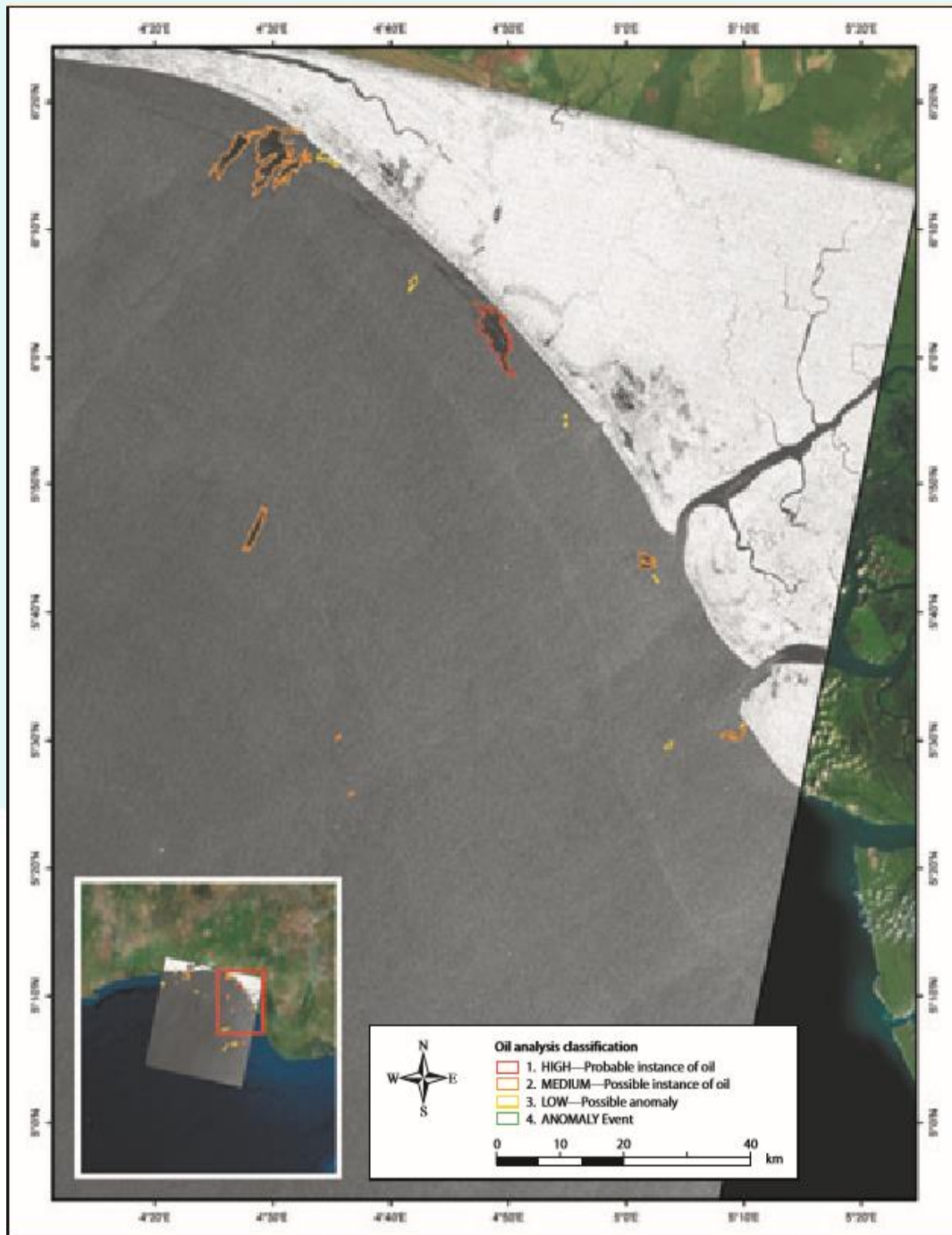
# Why use satellite imagery in a response?

- ▶ Accepted and integral component of effective oil spill response (JIP)
- ▶ Provides strategic information
- ▶ ‘Another tool in the tool box’
  - Different scales
  - Complementary role
- ▶ Wide Coverage
- ▶ Guides aerial surveillance
- ▶ Validates trajectory oil spill modelling
- ▶ Keeps field team out of harm
- ▶ Capabilities developed significantly = technology now meeting industry needs i.e. timely response
- ▶ Weather Independent



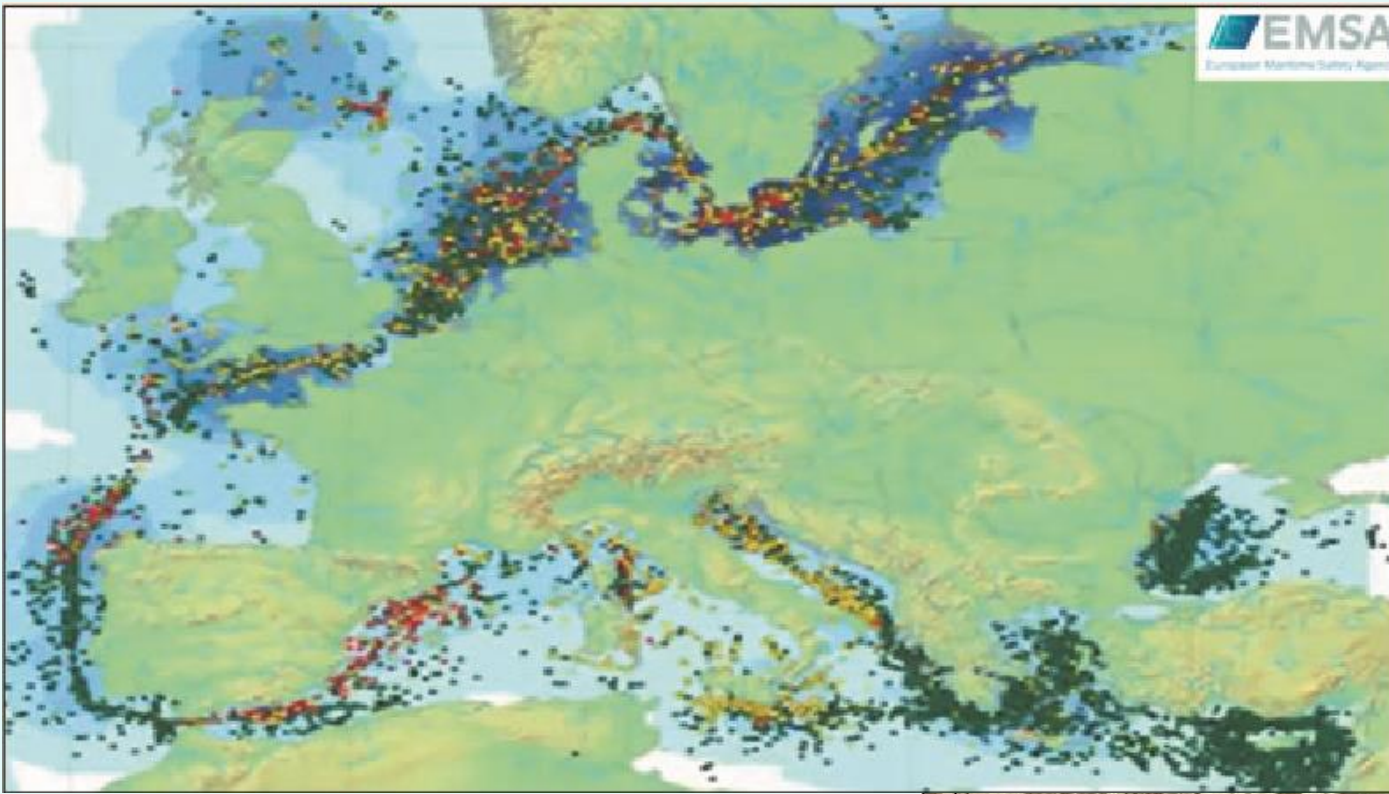
# How radar satellite imagery detects oil on the sea surface





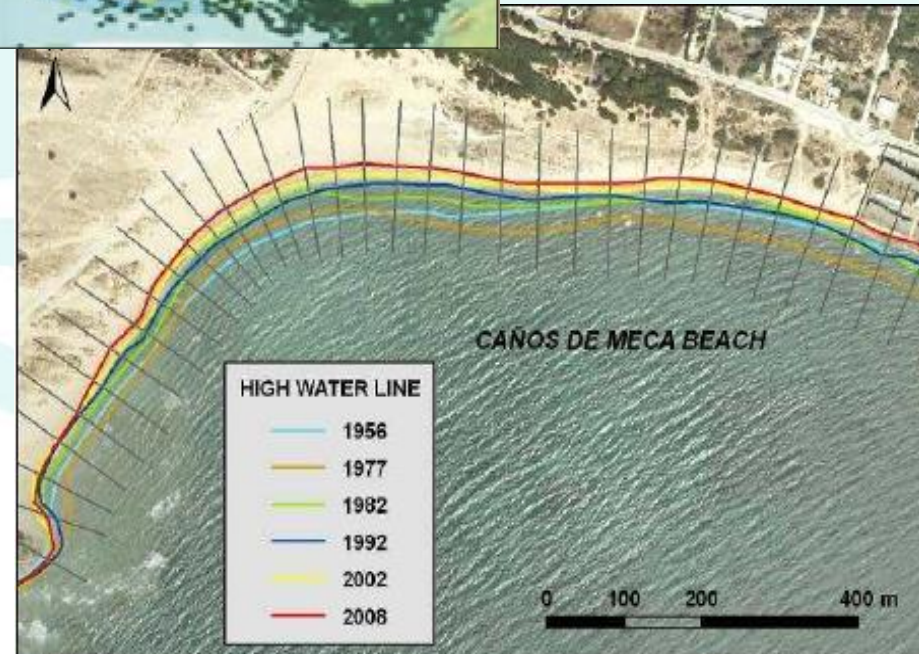
## ► Key features:

- Outlined/digitized oil slick features
- Estimations of oil slick areas
- Identification of assets and/or response operations
- Identification of false alarms.



## ► Oil Spill Detection / Monitoring Programme

- Monitor area at risk
- Monitor during specific time periods
- Provide initial alert of possible oil spill



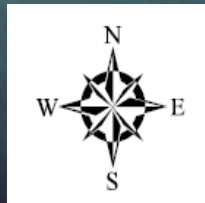
# STRATEGIES & TACTICS

## OVERALL STRATEGY



Markham River

 Fish Farm



Google earth

Google earth

© 2015 Google  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image © 2016 TerraMetrics  
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2 km



# Find out more

► IPIECA-IOGP Good Practice Guides  
(oilspillresponseproject.org and on the IPIECA website)

[http://www.oilspillresponseproject.org/wp-content/uploads/2017/01/Satellite\\_remote\\_sensing\\_2016.pdf](http://www.oilspillresponseproject.org/wp-content/uploads/2017/01/Satellite_remote_sensing_2016.pdf)





*Oil Spill Response*



**THANK YOU**