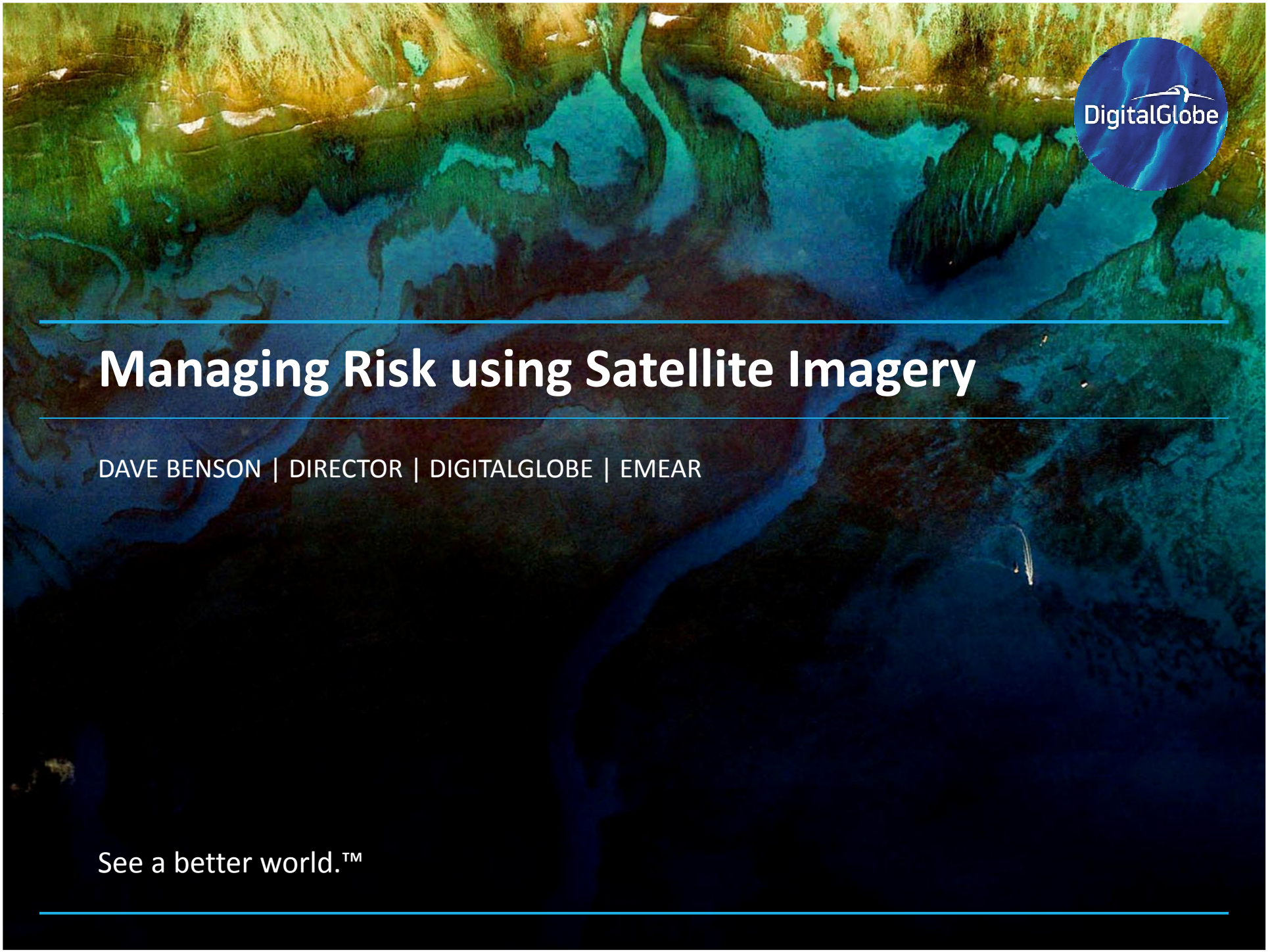

Managing Risk using Satellite Imagery

DAVE BENSON | DIRECTOR | DIGITALGLOBE | EMEAR

See a better world.™

Our World is Full of Threats

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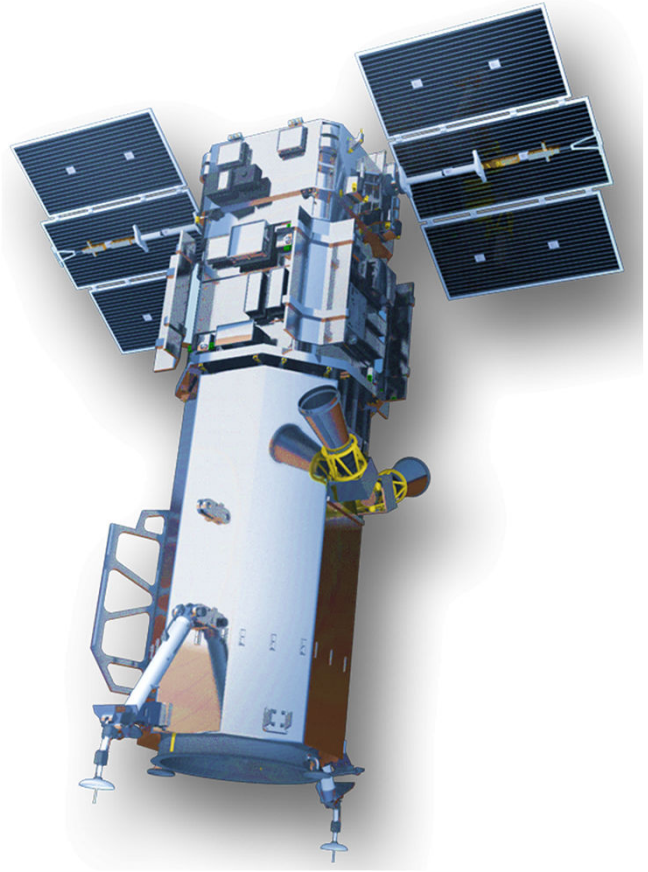
How Imagery Can Help



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Kobani, Syria| October 25, 2014| WorldView-3 Natural Color Image

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Imagery > Information

Resolution		Features
Accuracy		Classification
Multispectral		Monitor
Coverage		Change Detection
Elevation		+ Geo Data

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Human Landscape Data Themes and Structure

Communication: TV, radio, telephony, cellular coverage

Demographics: National / regional / local level statistics

Transportation: Roads, railways, airports, bus networks and schedules

Economy: GDP/GNP, labor market

Significant events: HADR

Education: Rates/levels of education and literacy, schools, enrollment

Religion: Faith-based places of worship (churches, mosques, temples)

Ethnicity: Racial composition, tribal and clan groups, alliances and rivals

Medical /Health: Facilities, conditions, basic needs index, nutrition levels

Groups: Civil, political, ideological

Language: Coincides with ethnicity and groups, language

Land: Use, cover, ownership

Water: Hydrology layers, watershed, seasonal fluctuations

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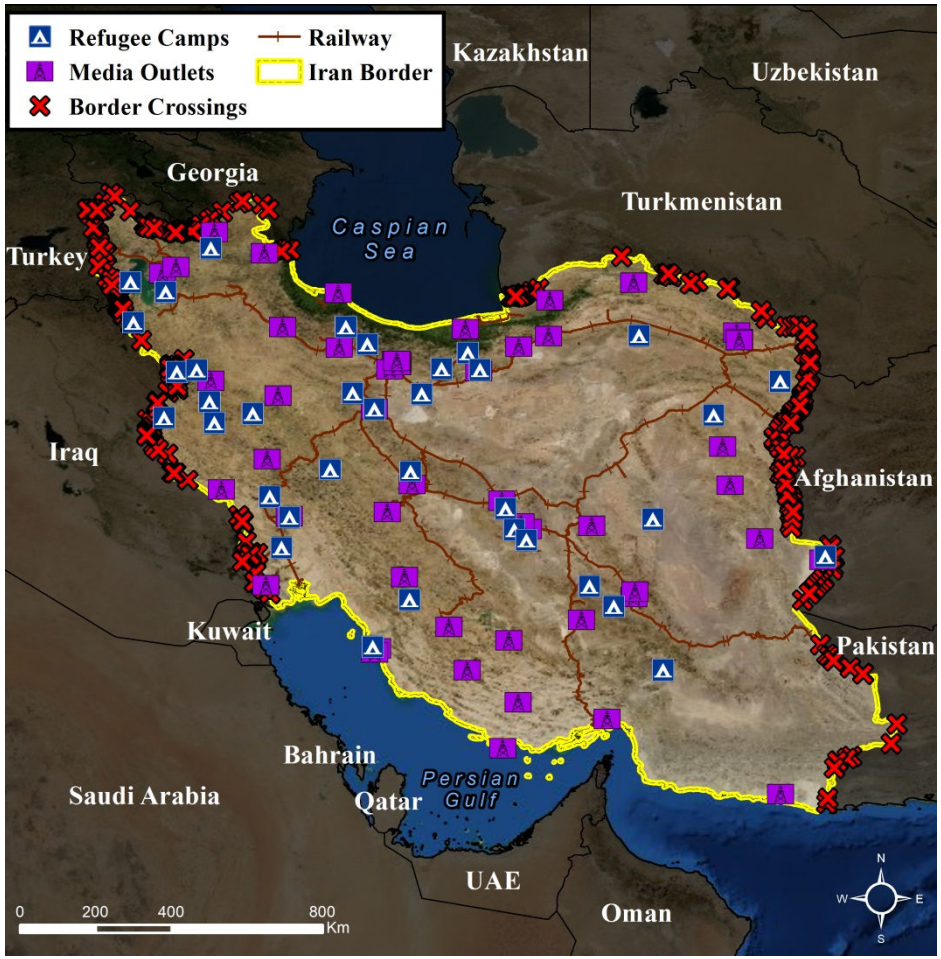
Human Landscape - Iran

- **Over 80,375 Points of Interests (POIs)**
  - 940,100 total records
- **73 Vector and Raster layers**
- **63 Sources consulted**
  - DigitalGlobe imagery was utilized in conjunction with the 63 sources to verify POIs
- **Example data layers include:**
  - 5,761 Bridges and Tunnels
  - 5,424 Lodging Locations
  - 9,812 Kilometers of Railways
  - 9,995 Conflict Locations
  - 92 Media Outlet Locations



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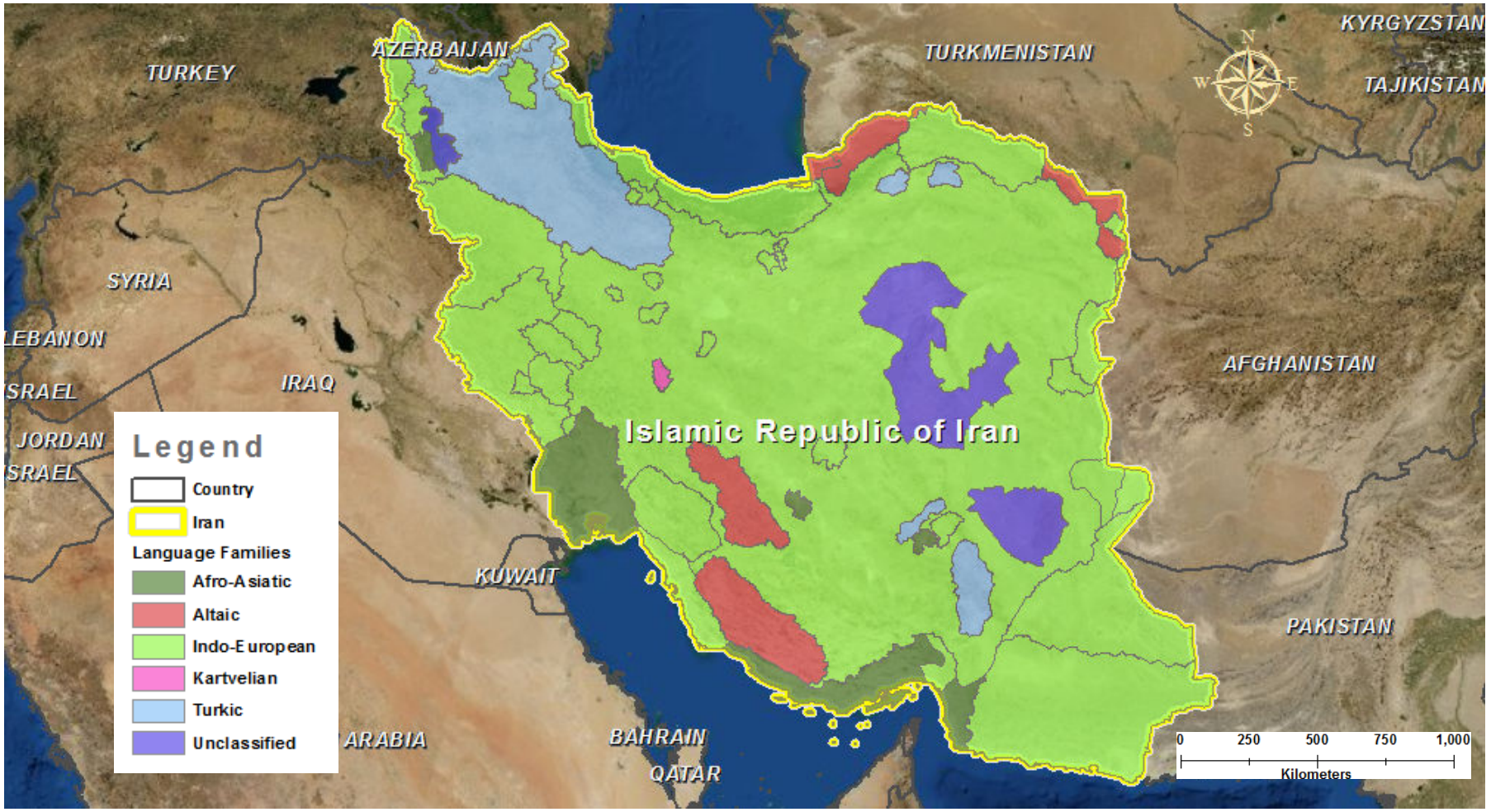
Iran - Languages



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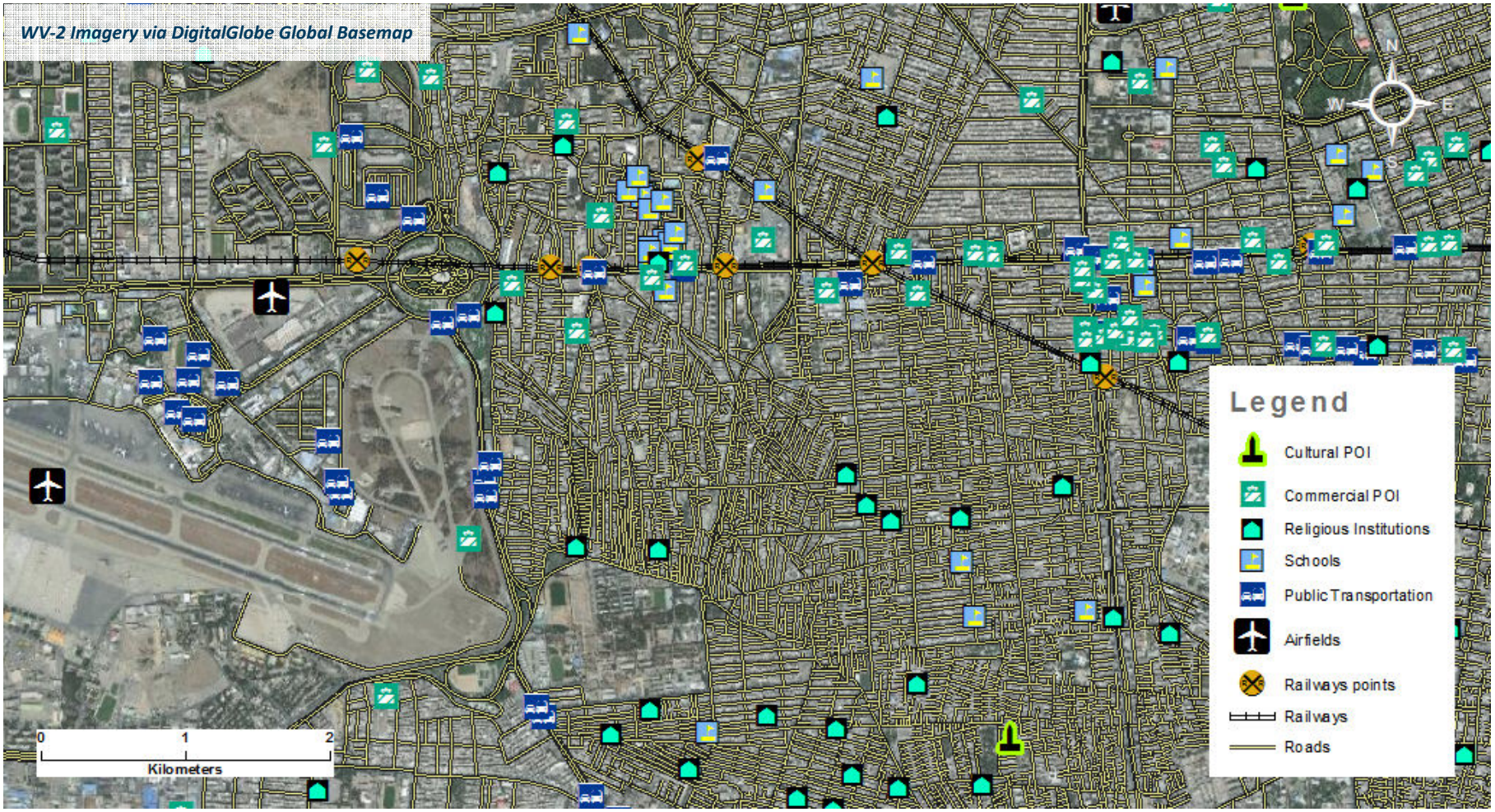
Tehrán, Iran– Point of Interests (POIs)



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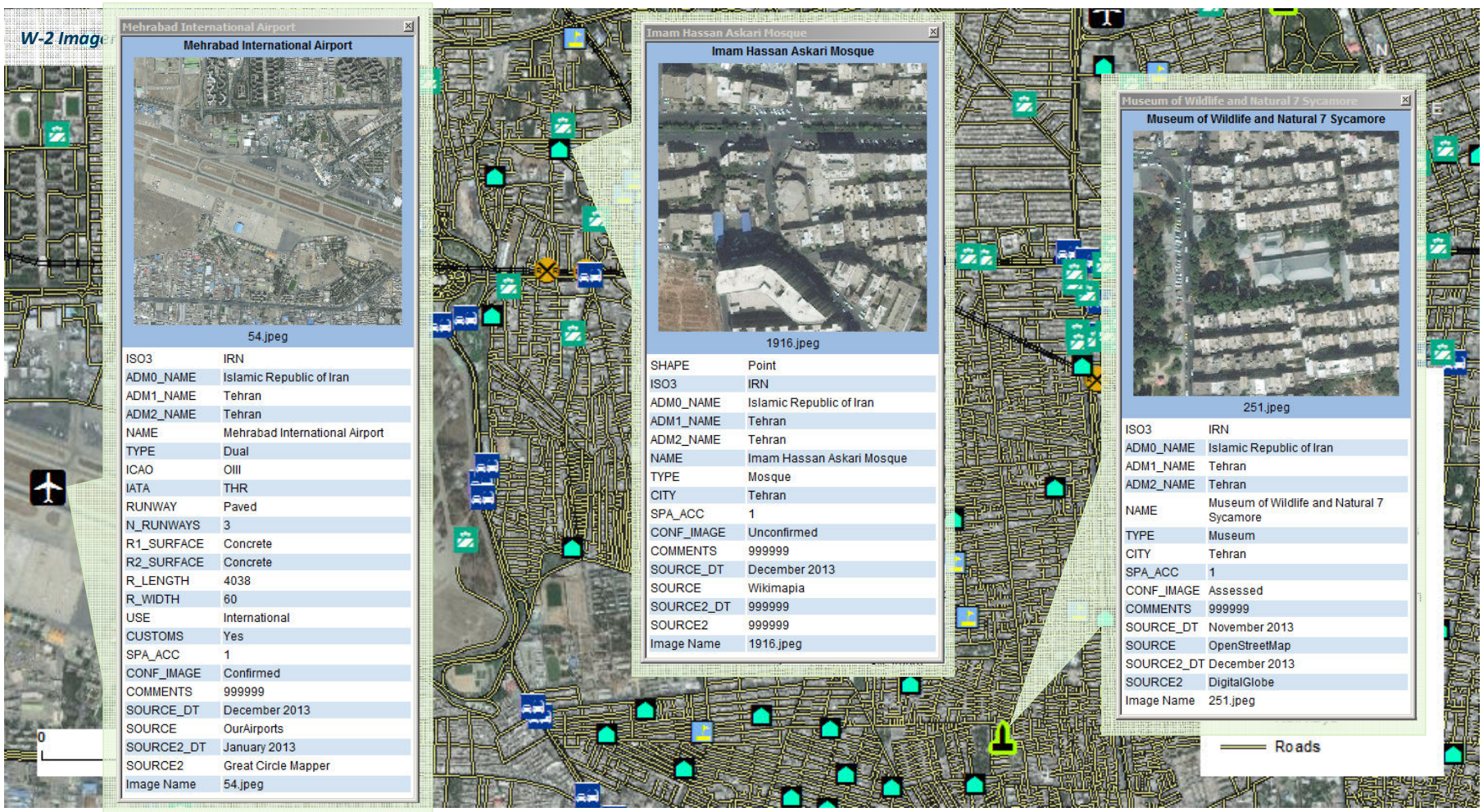
Tehrán, Iran- POI Imagery Chips



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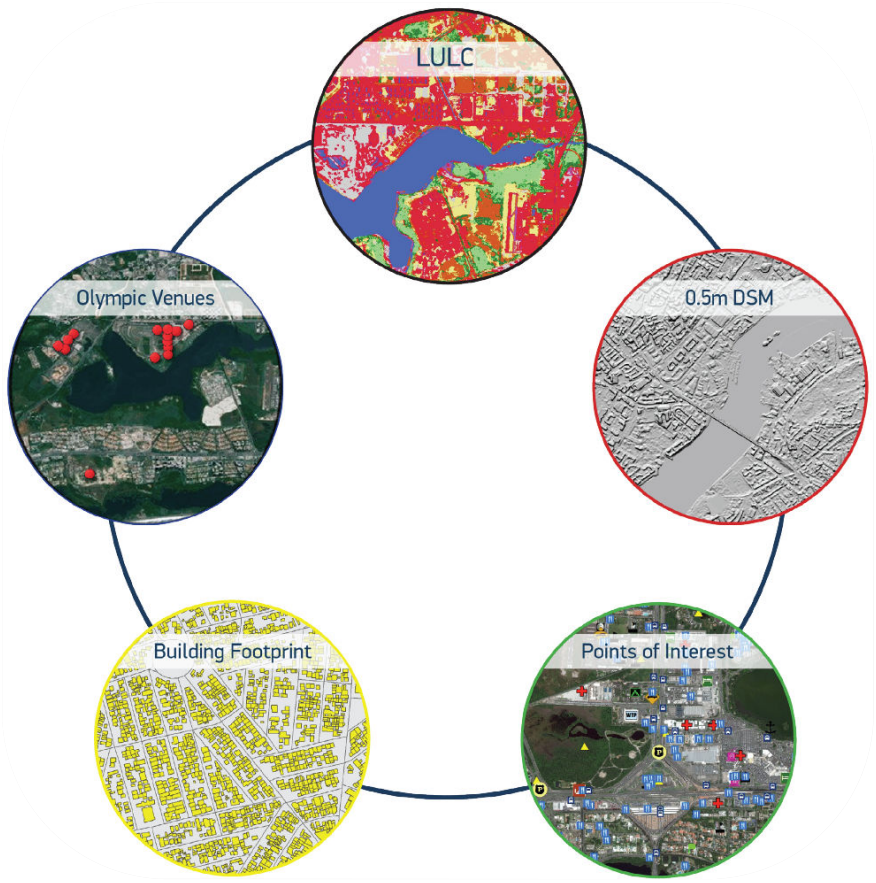
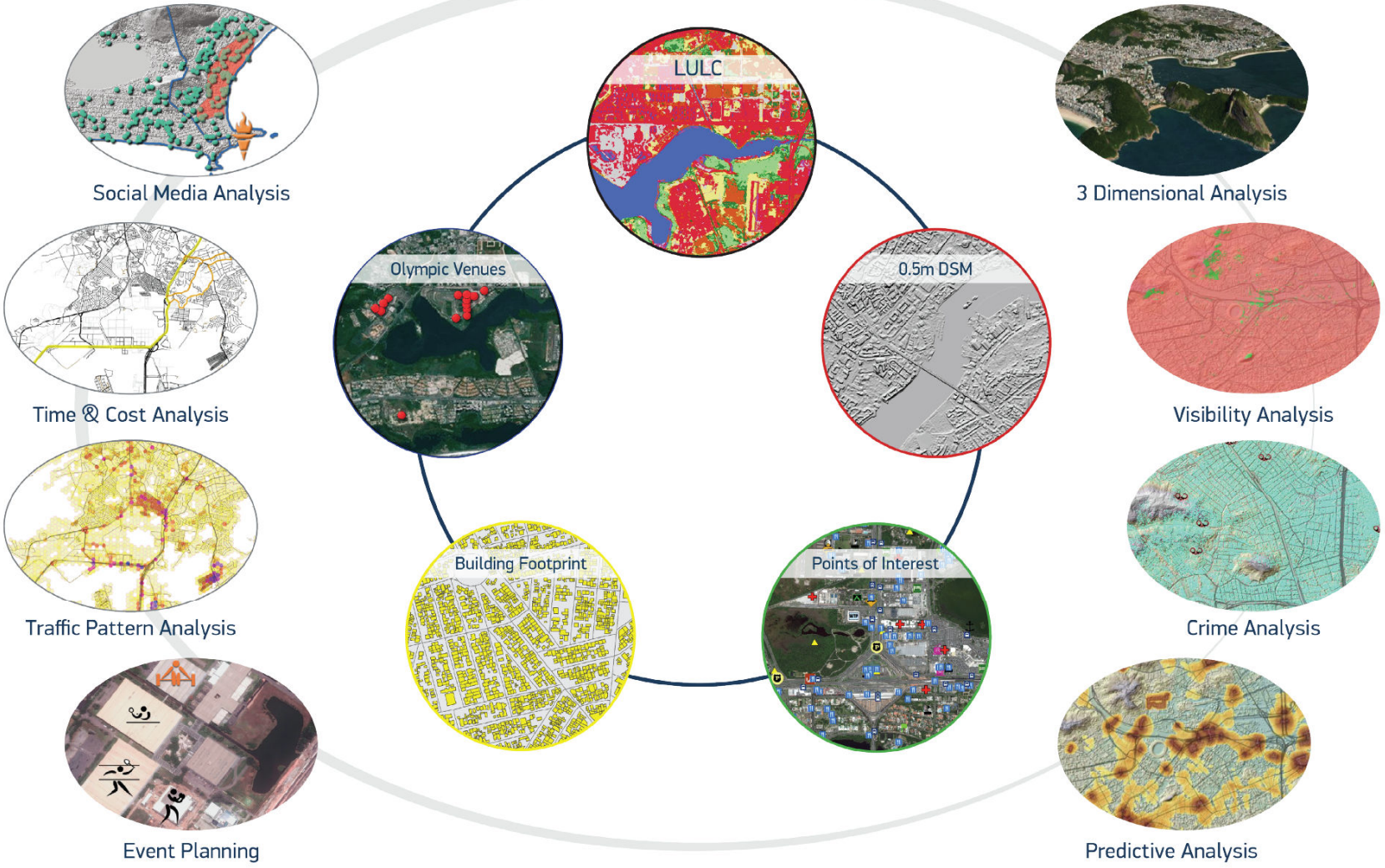
Imagery > Information > Insight



Imagery > Information > Insight > Analysis



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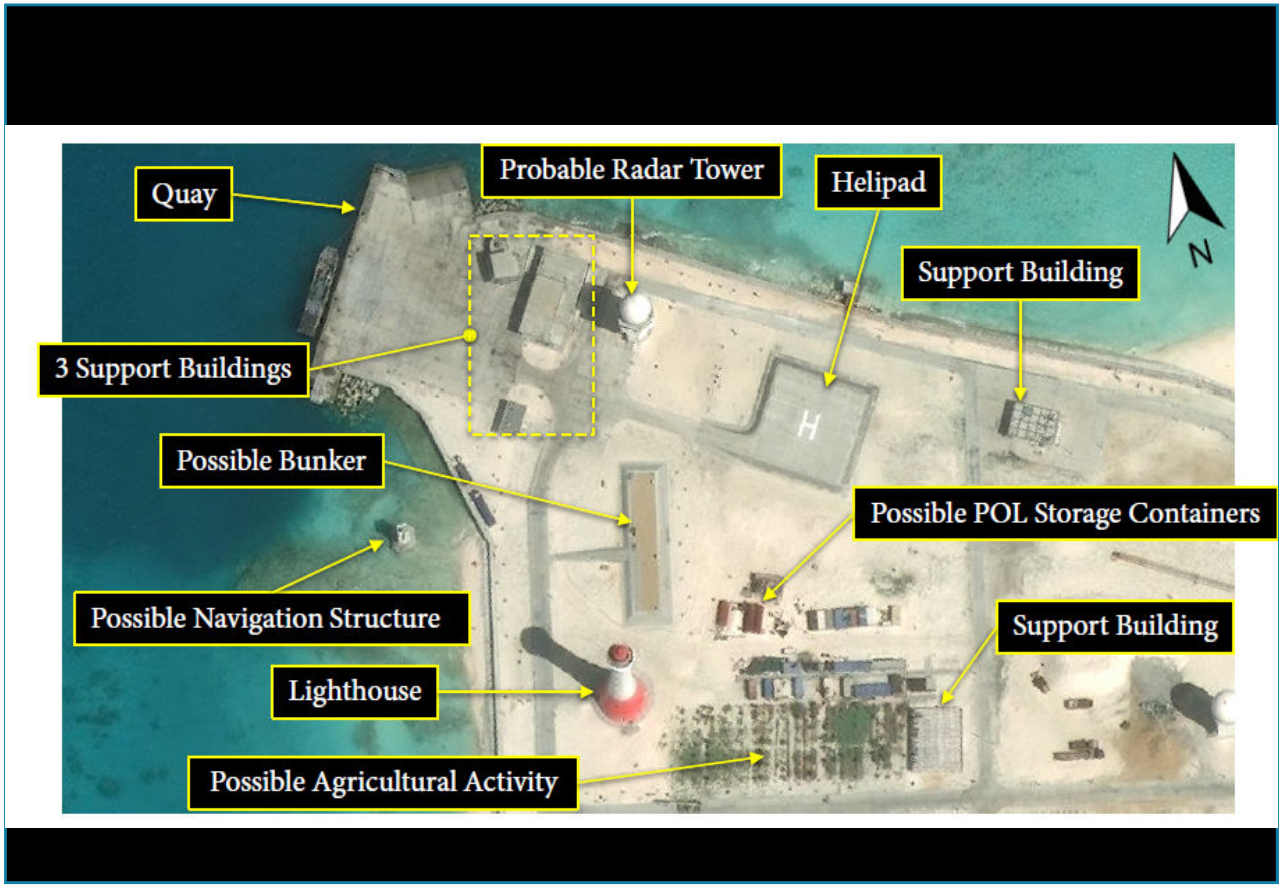
Geospatial Status Report (GSR)

GSRs give a “quick look” into a spot target designed to give rapid analysis geared toward answering “Is something going on here?” questions.

Small AOI
20 km2

Some Analysis



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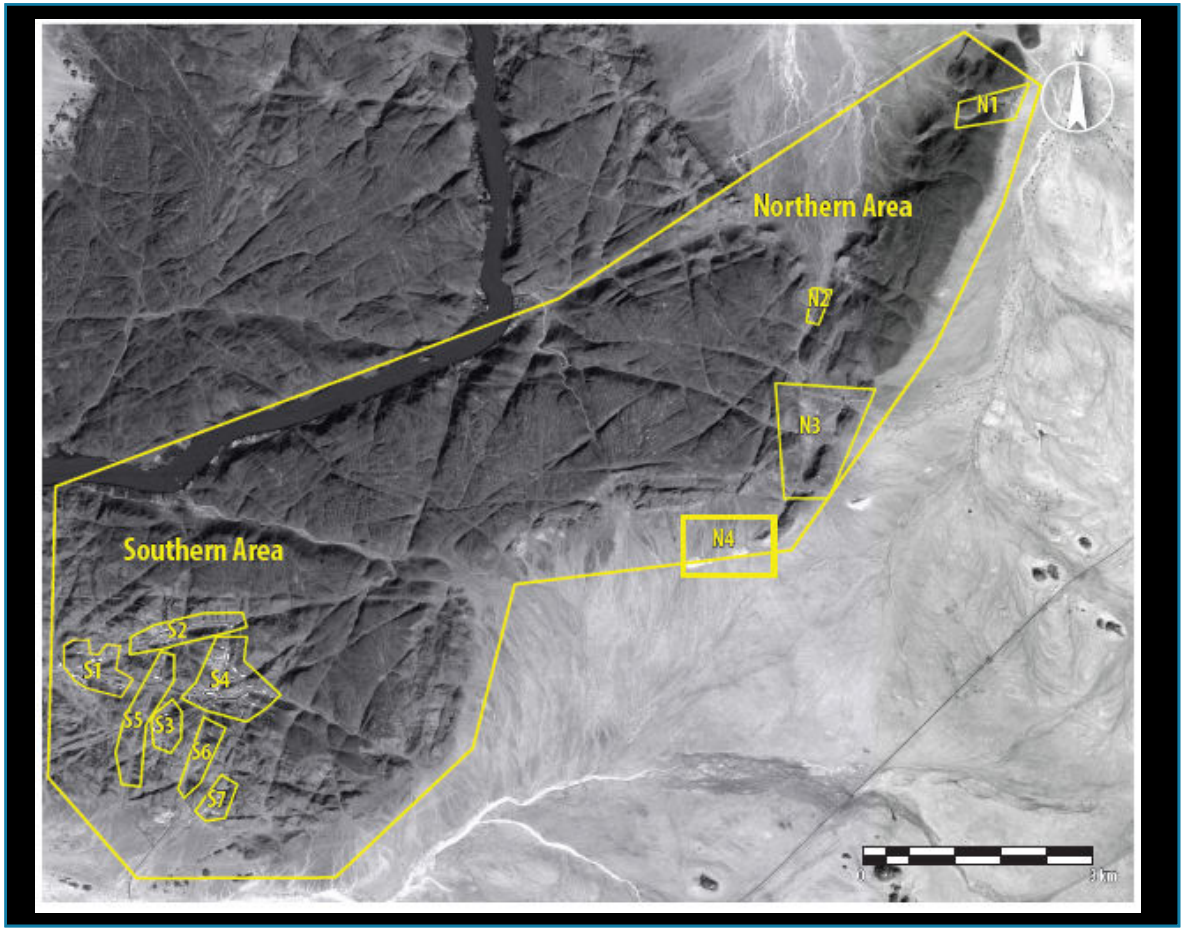
Situation Report (SITREP)

SITREPS are a hybrid between a GSR and an Analysis Report designed to give a more in depth look into a neighborhood or small city.

Mid Size AOI
100 km2

More Analysis



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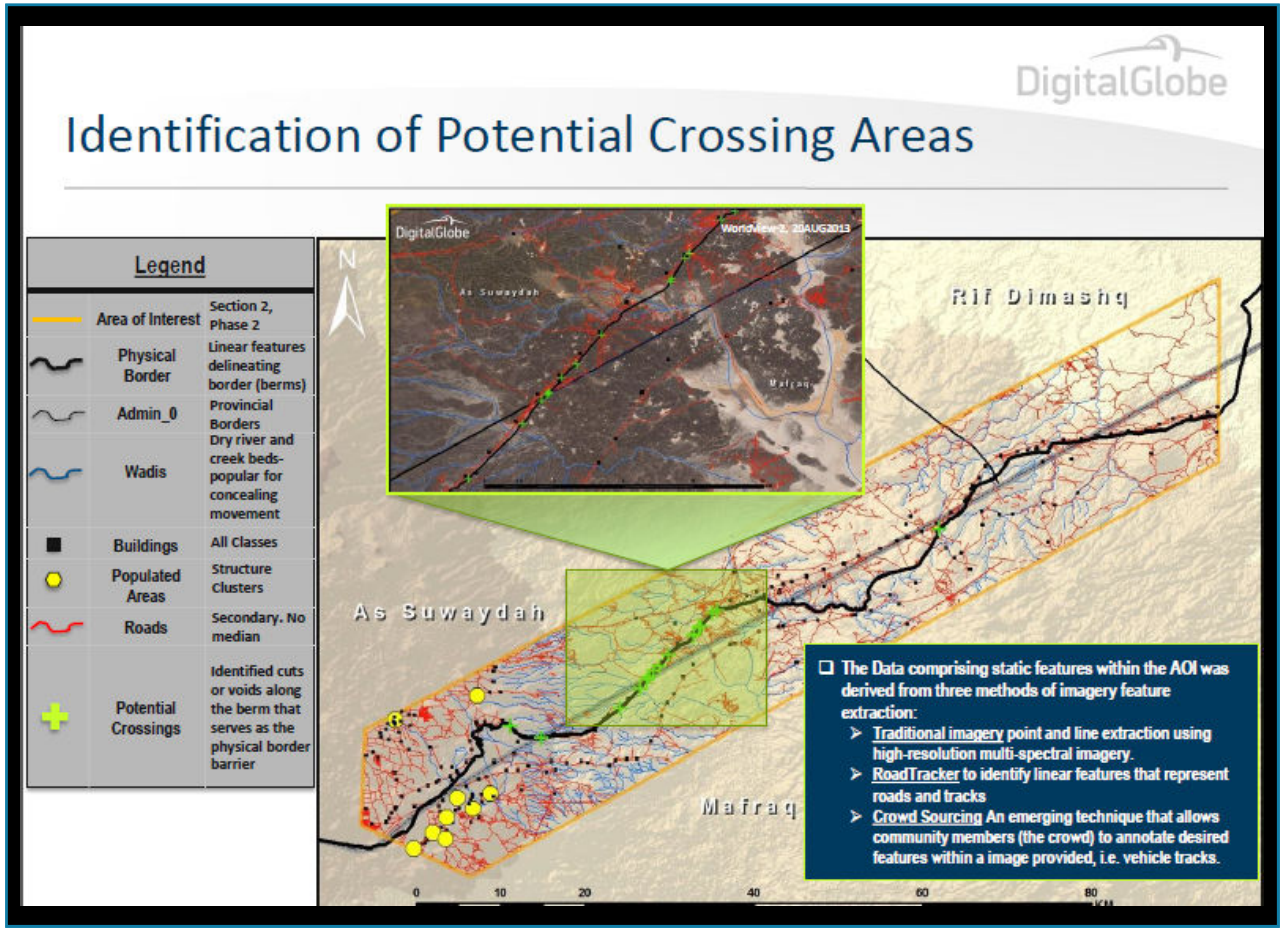
Analysis Report

A comprehensive report depicting full scale awareness of ongoing activity in an area of conflict.

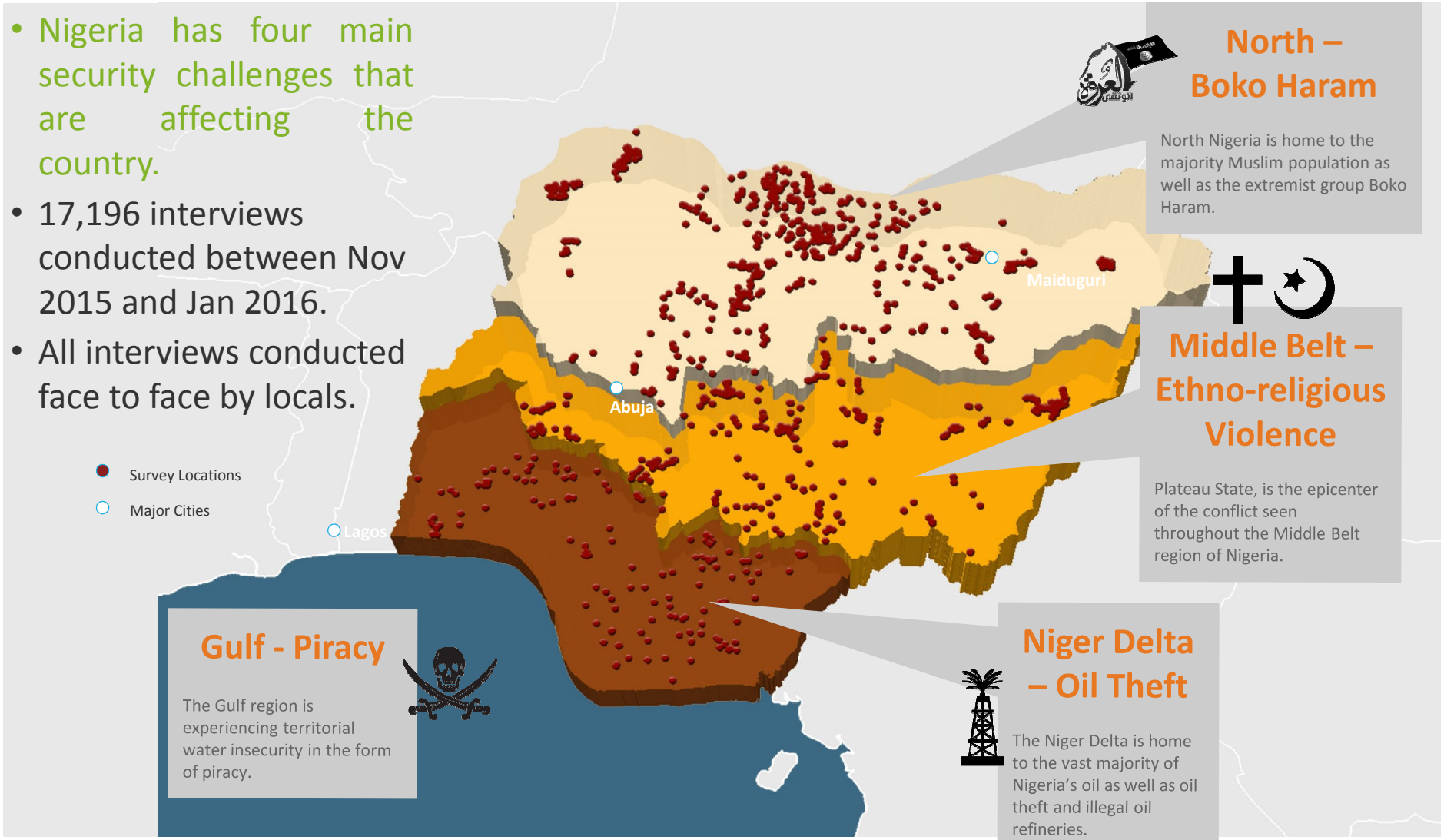
Larger AOI
300 km2

Deeper Analysis



Predictive Analysis Report Example

- Nigeria has four main security challenges that are affecting the country.
- 17,196 interviews conducted between Nov 2015 and Jan 2016.
- All interviews conducted face to face by locals.



North – Boko Haram

North Nigeria is home to the majority Muslim population as well as the extremist group Boko Haram.

Middle Belt – Ethno-religious Violence

Plateau State, is the epicenter of the conflict seen throughout the Middle Belt region of Nigeria.

Niger Delta – Oil Theft

The Niger Delta is home to the vast majority of Nigeria's oil as well as oil theft and illegal oil refineries.

Gulf - Piracy

The Gulf region is experiencing territorial water insecurity in the form of piracy.

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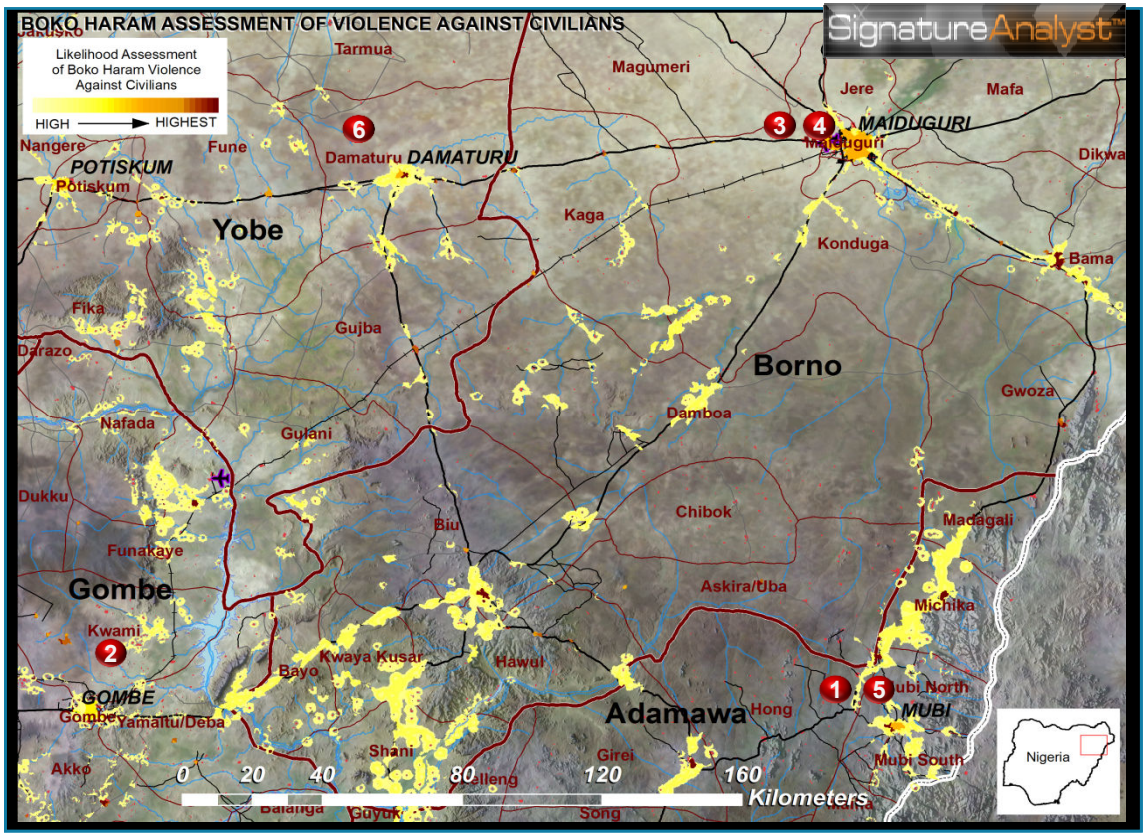
Predictive Analysis Report

A fully customizable report designed to help customers focus resources for maximum impact. Signature Analyst™ is used to deliver actionable information for decision-makers and can be paired with information gained from on the ground polling.

Larger AOI

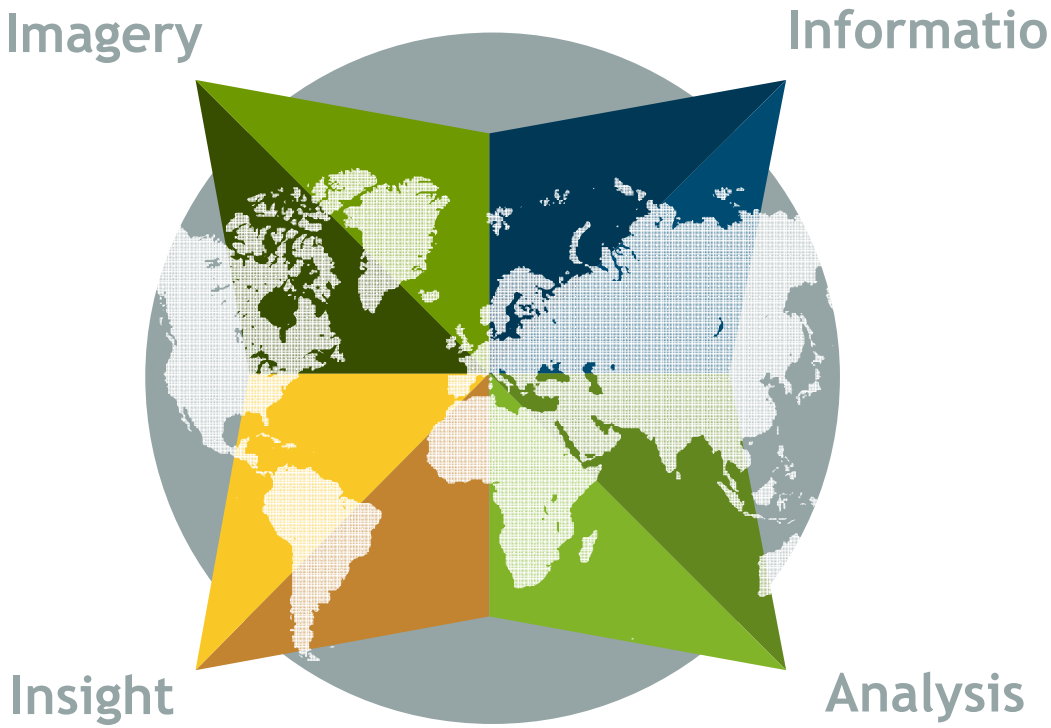
Polling Option

More Analysis



Spatial Output – Assessment Conducted in 2012 proved to be 95% Accurate for Attacks in 2013

How can I Access This Information?



Cloud

Crowd

Algorithm

Report

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Dave Benson

dbenson@digitalglobe.com

Mob: +447795082313

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