

**Satsense Solutions Ltd**  
Remote Sensing | Geospatial Analyses

# OIL SPILL AND OIL SEEP DETECTION SERVICES

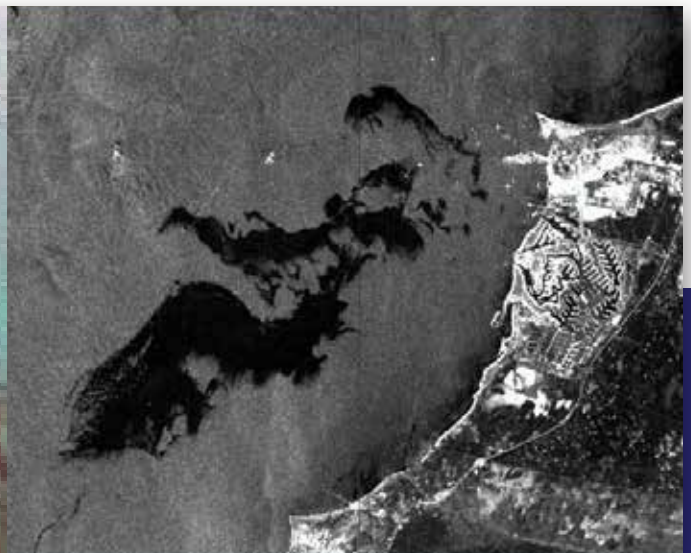
Global estimates of oil slicks in the ocean suggest that around half are due to man-made causes (oil spills) while the other half are due to natural causes (oil seeps). The ability to differentiate between oil spills & oil seeps brings with it immense environmental benefits & economic opportunity. The detection of oil spills can help restrict marine pollution while that of oil seeps can provide Oil & Gas Exploration companies with valuable information about active petroleum systems under the seabed.

Satsense® Oil Spill and Oil Seep Detection Services provides a highly effective and reliable tool for detecting oil spills & oil seeps.

## What is the Satsense® Oil Spill and Oil Seep Detection Services?

Satsense Solutions Ltd. uses earth observation data from space-borne satellites to identify oil slicks in the ocean. Data from Synthetic Aperture Radar (SAR) systems, independent of cloud, weather and day-light conditions are used in detecting oil spills and oil seeps. This is achieved by studying the locations of interest and undertaking the following analysis:

- ▶ Identifying dark formations and distinguishing oil slicks from look-alikes
- ▶ Assessing oceanic and meteorological information (wind, temperature, wave)
- ▶ Computing statistical features of the oil slick
- ▶ Determining oil slick extent, such as area, perimeter, latitude and longitude
- ▶ Evaluating contextual data for ships, such as AIS and bright-spot indicators
- ▶ Evaluating contextual data of slick location, such as frequency, distance from shore and water column depth





## How are the services provided?

The classification of oil spills and oil seeps is based on quantitative and qualitative data analysis. The results are provided in a report with tabulated data. Geo-referenced data can also be provided in the form of GeoTIFFs or KMZ files or as per requirement.

Oil spill off the coast of Finland, bright spots indicating Ships conducting clean-up activities - (L) Oil Seep off the coast of Somalia - (R)

## Why use these Services?

Satsense® Oil Spill and Oil Seep Detection Services provide a highly effective solution for preventing marine pollution and also providing valuable information for Oil & Gas exploration :

- ▶ Limit further marine destruction
- ▶ Forecast spread of the spill and determine extent of damage
- ▶ Assist in cleanup activities
- ▶ Find potential causes and prevent future oil spills
- ▶ Indicate location of active petroleum systems under the seabed
- ▶ Select offshore blocks for Oil & Gas exploration

## Who can use these Services?

Satsense® Oil Spill and Oil Seep Detection Services can be used by a variety of businesses and governmental agencies such as:

- ▶ Coast guards to aid in clean-up activities and predict the direction of the oil slick spread
- ▶ Port authorities to monitor illegal spillage from ships and platforms
- ▶ Environmental protection agencies to determine the cause of oil spill
- ▶ Insurance companies to determine the extent of damaged cause by oil spill
- ▶ Oil & Gas exploration companies to monitor oil seeps and locate offshore oil reserves

Satsense Solutions Ltd. applies Remote Sensing technology to provide unique & innovative business and governance solutions.

Please visit our website for more details: [www.satsense.co](http://www.satsense.co)

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**Disclaimer:** Remotely sensed data are generally recorded under changing environmental conditions, which might impact the accuracy of output data. Although results are based on well established methods and tools are thoroughly validated for accuracy, remotely sensed data are subject to natural variations of the atmosphere, local conditions etc. therefore Satsense Solutions Limited cannot take any responsibility caused by the usage and interpretation of remote sensing products. As with all measuring tools / systems, calibration based on in-situ data is recommended.

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