



May 17, 2010



## **DAILY BRIEFING ON THE DEEPWATER HORIZON OIL SPILL IN THE GULF OF MEXICO FOR THE FLORIDA CONGRESSIONAL DELEGATION**

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# BACKGROUND INFORMATION

- ✕ CSTARS is collecting on a daily basis satellite imagery for the National Geospatial-Intelligence agency (NGA).
- ✕ NGA disseminates this data to other USG agencies such as DHS, USCG, NOAA, USGS as well as State and Local agencies in LA, MS, AL and FL involved in the oil spill response.
- ✕ The following satellite sensors are downlinked and processed at CSTARS:
  - + Cosmo-SkyMed [3 Radars] (Italian)
  - + TerraSAR-X [Radar] (German)
  - + RadarSat-1 & RadarSat-2 [Radars] (Canadian)
  - + Spot-4 & Spot-5 [Optical Sensors] (France)
  - + NASA's MODIS on Aqua & Terra [Optical Sensors] (USA)
  - + ALOS/PALSAR [Radar] (Japan)
  - + ENVISAT ASAR & MERIS [Optical & Radar Sensors] (European Union)
  - + ERS-2 [Radar] (European Union)
  - + FormoSat-2 [Optical Sensor] (Taiwan)
  - + EROS-B [Optical Sensor] (Israel)

# OVERVIEW

- ✗ As of 17 May 2010:
  - + The latest images suggest further growth of the main slick to 19,579 km<sup>2</sup> or ~7,559 sq mi. This areal coverage approaches the size of the State of New Jersey!!
  - + Main oil slick has now nearly surrounded the Mississippi Delta.
  - + Main oil slick has slowed down spreading westward due to light and variable winds.
  - + The northern portion of slick is spreading northward which is driven by local currents. Also it appears that the oil is much more diluted and appears more like a sheen.
  - + Southern extending streak is further stretching southeast and being entrapped by the Loop Current.
  - + Very light winds changing direction from East to North-West.



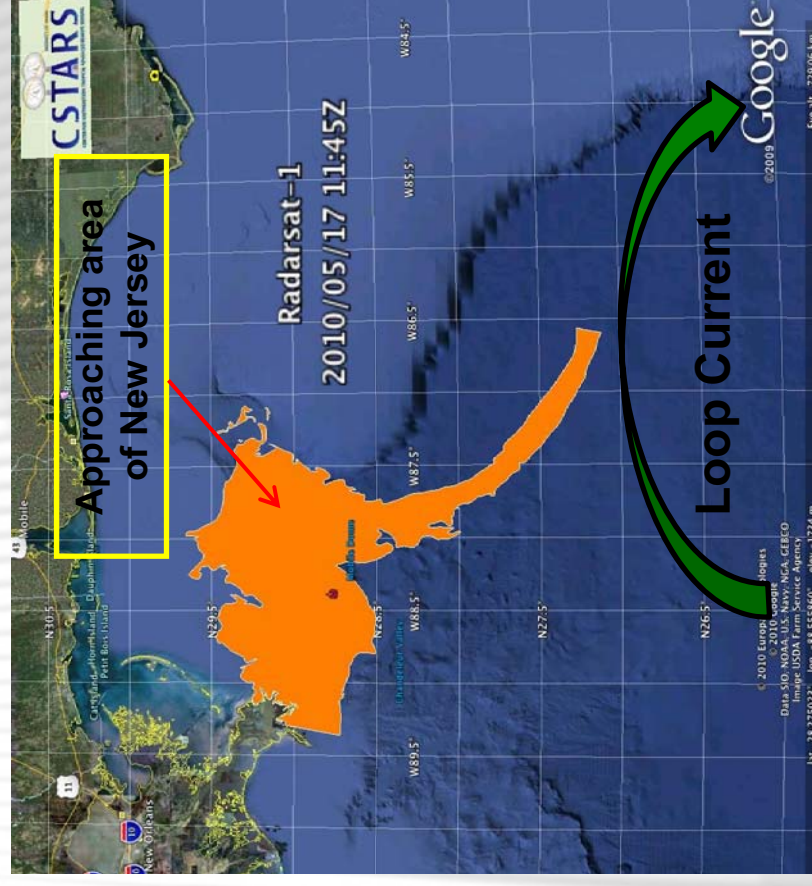
# OIL SPILL SIZE

Indication is strong that slick made contact with Loop Current

Partial area of main slick (green) over 3,410 sq mi



Area of main slick (orange) over 7,559 sq mi

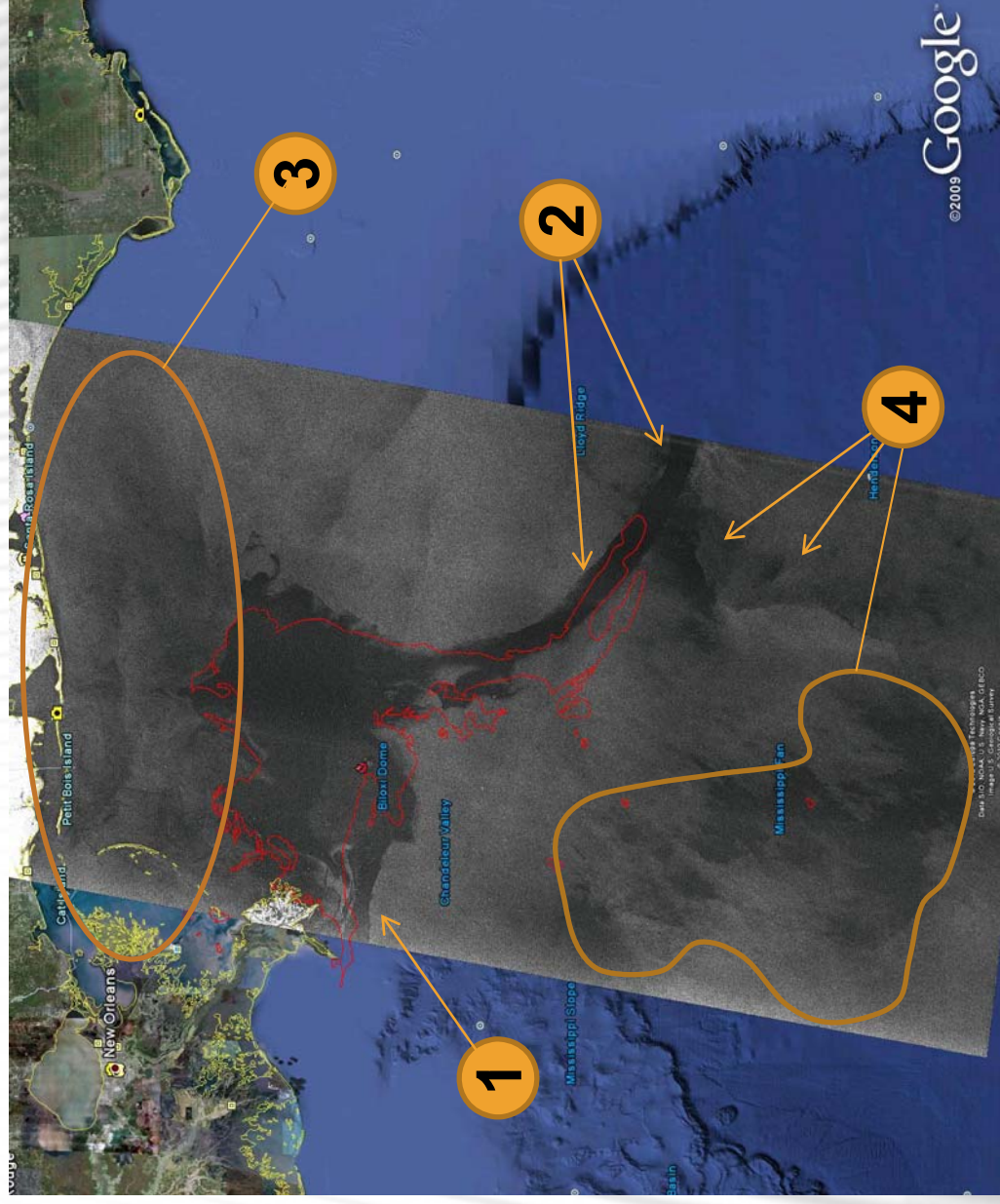


# RADARSAT-1

## 17 MAY 2010 11:45 UTC (07:45 EDT)

1. Main oil slick continues westward propagation but at slower phase. Large portion of Mississippi Delta is surrounded by the oil.
2. Southern streak stretching SE likely already entrained in Loop Current.
3. Northern portion of main oil slick but diluted from weather and waves spreading North following local currents.
4. Extent of diluted slicks (possibly only oil sheen) from previous drifting patches observed to the South moving into central Gulf of Mexico.

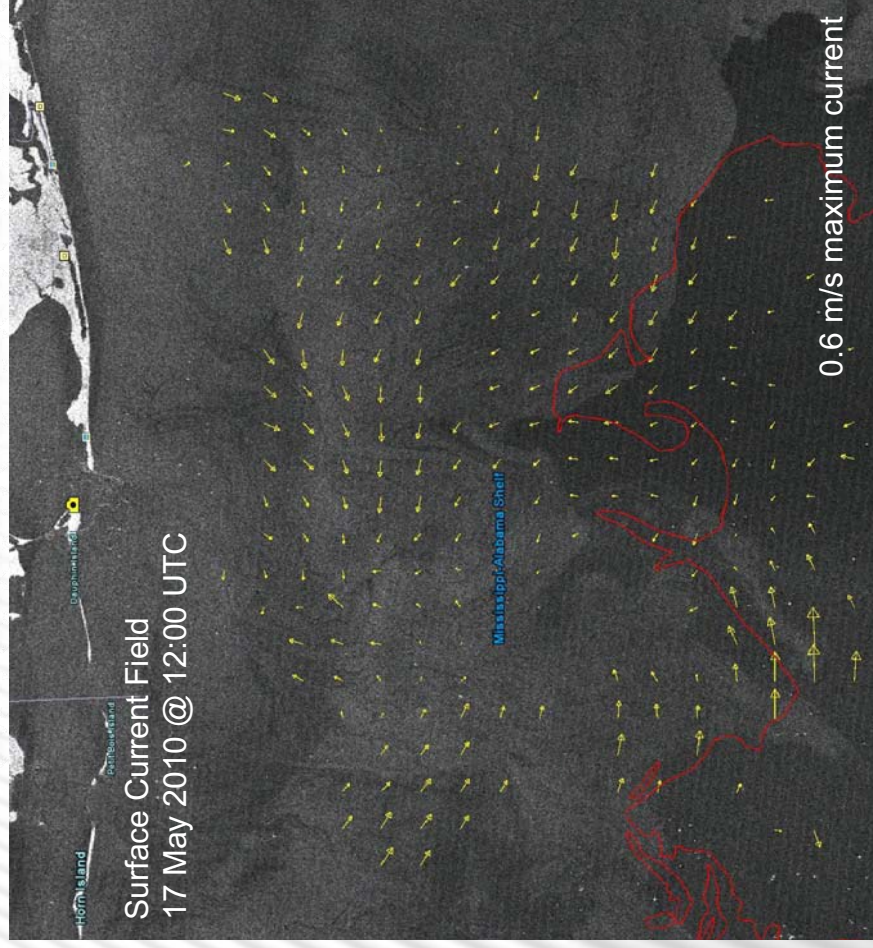
**Red** contour as of 15 May 23:53 UTC (19:53 EDT).



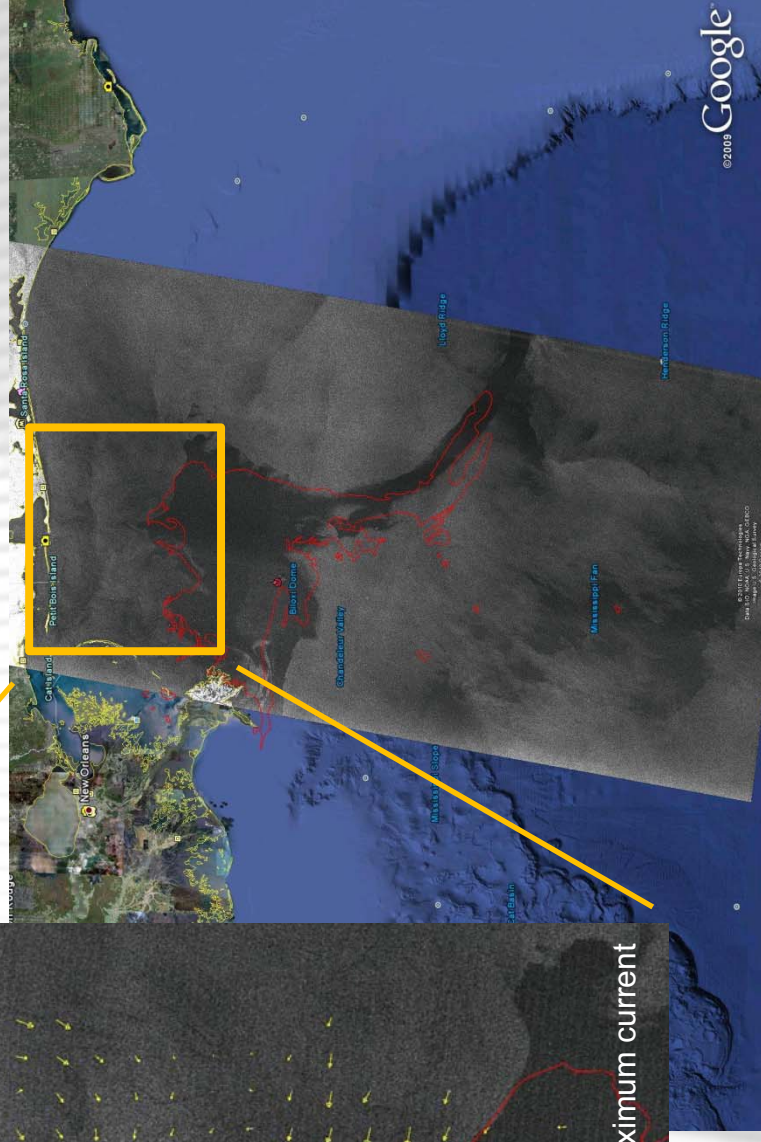


# RADARSAT-1

## 17 MAY 2010 11:45 UTC (07:45 EDT)



Current data provided by CORDC,  
Scripps Institution of Oceanography





# MODIS ON TERRA

## 17 MAY 2010 16:36 UTC (12:36 EDT)

1. Optical image consistent with Radarsat-1 of 17 May @ 11:45 UTC (07:45 EDT) showing the extended streak of oil bending to the flow of the Loop Current.

**Red** contour as of May 15 23:53 UTC (19:53 EDT).

