

Costa Concordia Cruise Ship Capsizes

Satellite Image Location: Island off the West Coast of Italy

Date: January 16, 2012

Source: WorldView-1: Panchromatic

Inset Images: Capsized ship: Washington Post; Location map: BBC News



The Event

On Friday evening, January 13, 2012, the Costa Concordia cruise ship, which was carrying 4,234 passengers and crew, hit rocks near Giglio, a small island off the coast of Tuscany, Italy.

The ship ran aground tearing a 165 foot gash in the port side of the ship. The ship capsized killing a confirmed 16 people with 16 still missing not including possible unregistered passengers.

The Location

The inset map shows the location of Isola del Giglio, which is off the coast of Italy.

Isola del Giglio, where the capsized cruise ship rests on a rocky reef named Le Scole, is part of the Tuscan Archipelago National Park, the largest marine protected area in Italy. The sea surrounding Giglio Island is considered the cleanest and most transparent in Italy. Among the Island's inhabitants are important plants and birds and some rare frogs, while the seas support coral, cetaceans, and the occasional Mediterranean monk seal - a critically endangered species.

Tuscan archipelago Tyrrhenian Sea Monte Argentario Orbetello Lagoon ISOLA DEL GIGLIO Stricken ship Costa Concordia Feniglia Dune Nature Reserve

Other Cruise Ship Incidents *

1972-2012	Total	1000+ passengers	<1000 passengers
Grounded Ships	90	53	37

Not an exhaustive list; information is a compilation from multiple sources.

Costa Concordia Ship Statistics

Flag: Italy [IT]	Speed recorded: Max: 16.9 knots; Ave: 15.6 knots	
Launched: 2006	Length x Breadth: 291 m x 38 m	
Crew: 1,068	Decks: 13	
Passengers: 3,000	Tonnage: 114,500	
	Dead weight: 10000 t	

Image Sensor:

WorldView-1 was successfully launched on September 18, 2007, by DigitalGlobe of Longmont, Colorado. The high-capacity, panchromatic imaging system features half-meter resolution imagery. Operating at an altitude of 496 kilometers, WorldView-1 has an average revisit time of 1.7 days and is capable of collecting up to 750,000 square kilometers (290,000 square miles) per day of half-meter imagery. (From: http://www.satimagingcorp.com/satellite-sensors/worldview-1.html). Imagery acquired from the WorldView-1 satellite is used for disaster relief, civil government mapping, and land use planning.

Interpretive Learning...

- 1) Explore other passenger and cruise ship accidents/sinkings and the causes of the accidents (http://en.wikipedia.org/wiki/List_of_accidents_and_disasters_by_death_toll)
- 2) What environmental impacts might result from this ship sinking in shallow water near the shoreline.

Explore More...

- View the video: *The Telegraph:* Concordia: How the Disaster Unfolded. http://www.telegraph.co.uk/news
- View the imagery: http://www.digitalglobe.com/
- View the video: 'Worst Cruise ship disasters' at: http://www.ibtimes.com/articles/282482/20120116/costa-concordia-crusie-ship-sinkingworst-titanic.htm

Sources:

The Telegraph: Concordia: How the Disaster unfolded. http://www.telegraph.co.uk/news List of Accidents and disasters by death toll:

http://en.wikipedia.org/wiki/List_of_accidents_and_disasters_by_death_toll

Ships that have grounded 1972-2012: http://www.cruisejunkie.com/

Location Map: http://www.bbc.co.uk/news/science-environment-16597720

Capsized Cruise Ship Image: http://www.washingtonpost.com/lifestyle/travel/costa-concordiasinking-leaves-cruise-ship-passengers-alarmed--and-out-ofluck/2012/01/17/gIOAcvbe8P story.html

Acknowledgements:

Satellite image of cruise ship courtesy of DigitalGlobe, Inc. Permission to use image granted by DigitalGlobe, Longmont, Colorado.

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