

Bay of Bengal

Overview

The Bay of Bengal is located in the northeastern Indian Ocean (approximately 6° to 22°N and 80° to 94°E) (Figure 1). It is bounded by India (to the west), Bangladesh (to the north) and Myanmar, and the Andaman Sea (in the east). The region is influenced by monsoons and the outflow from several major river systems.

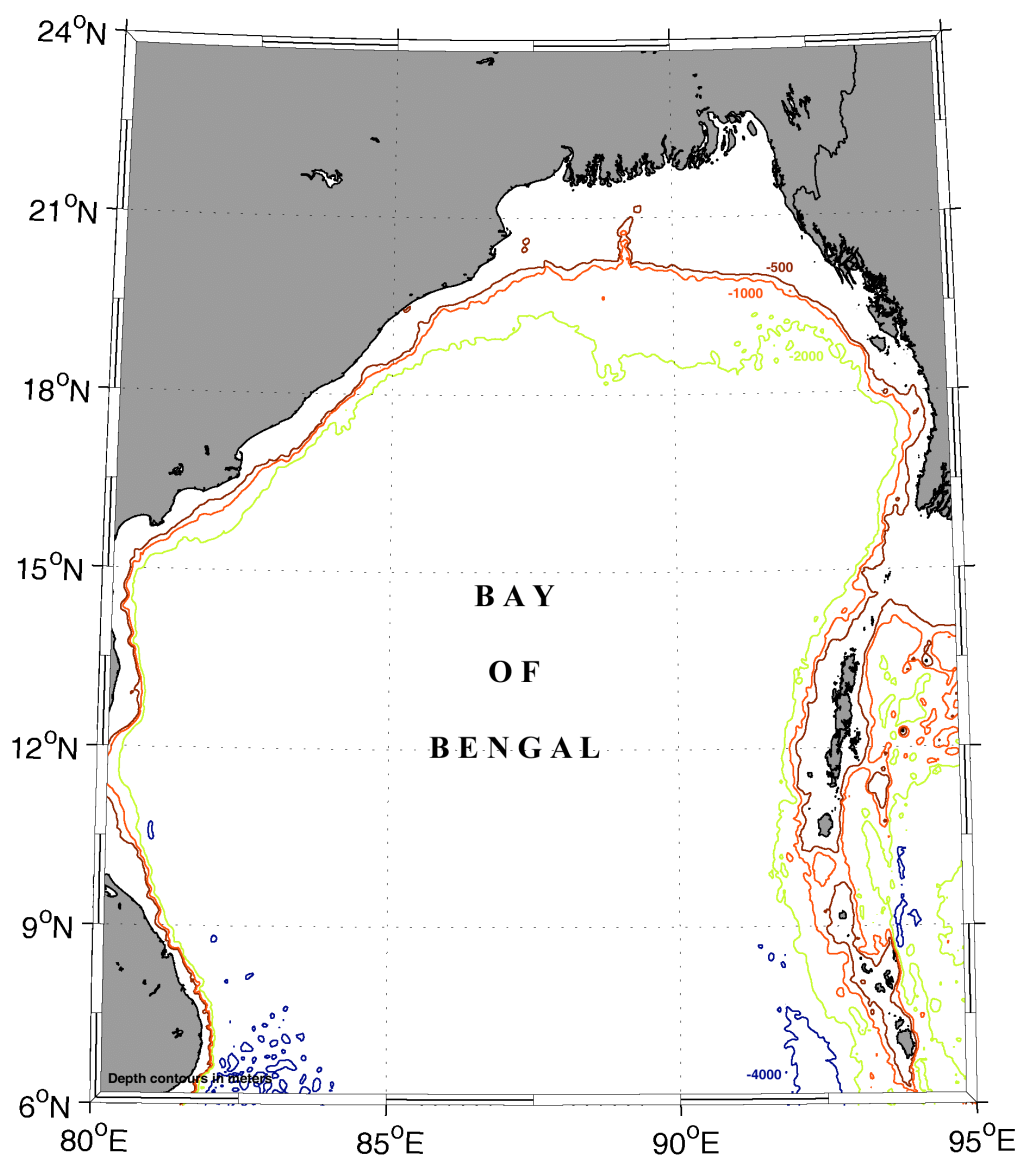


Figure 1. Bathymetry of the Bay of Bengal. [Smith and Sandwell, 1997]

Observations

There has been no scientific research on the internal waves in the Bay of Bengal Equatorial Indian Ocean. Satellite imagery shows internal wave activity along the continental shelf areas along the adjacent landmasses. The waves appear to be typical fine scale continental shelf waves propagating shoreward from the shelf break. Since the Bay of Bengal is located in the tropics, it is expected that internal waves occur all year round as they do in the adjacent Andaman Sea. Table 1 shows the months of the year during when internal waves have been observed

Table 1 - Months when internal waves have been observed in the Bay of Bengal
(Numbers indicate unique dates in that month when waves have been noted)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
			3							1	1

References

Smith, W. H. F., and D. T. Sandwell, 1997; Global seafloor topography from satellite altimetry and ship depth soundings, *Science*, v. **277**, 1957-1962
http://topex.ucsd.edu/marine_topo/mar_topo.html

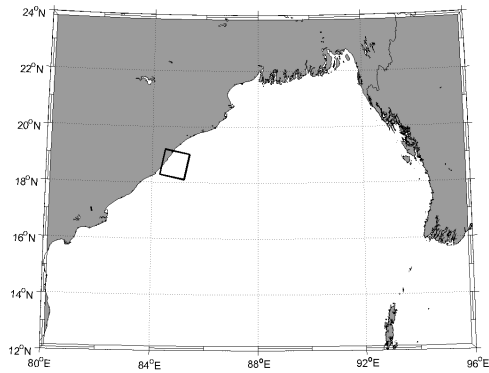
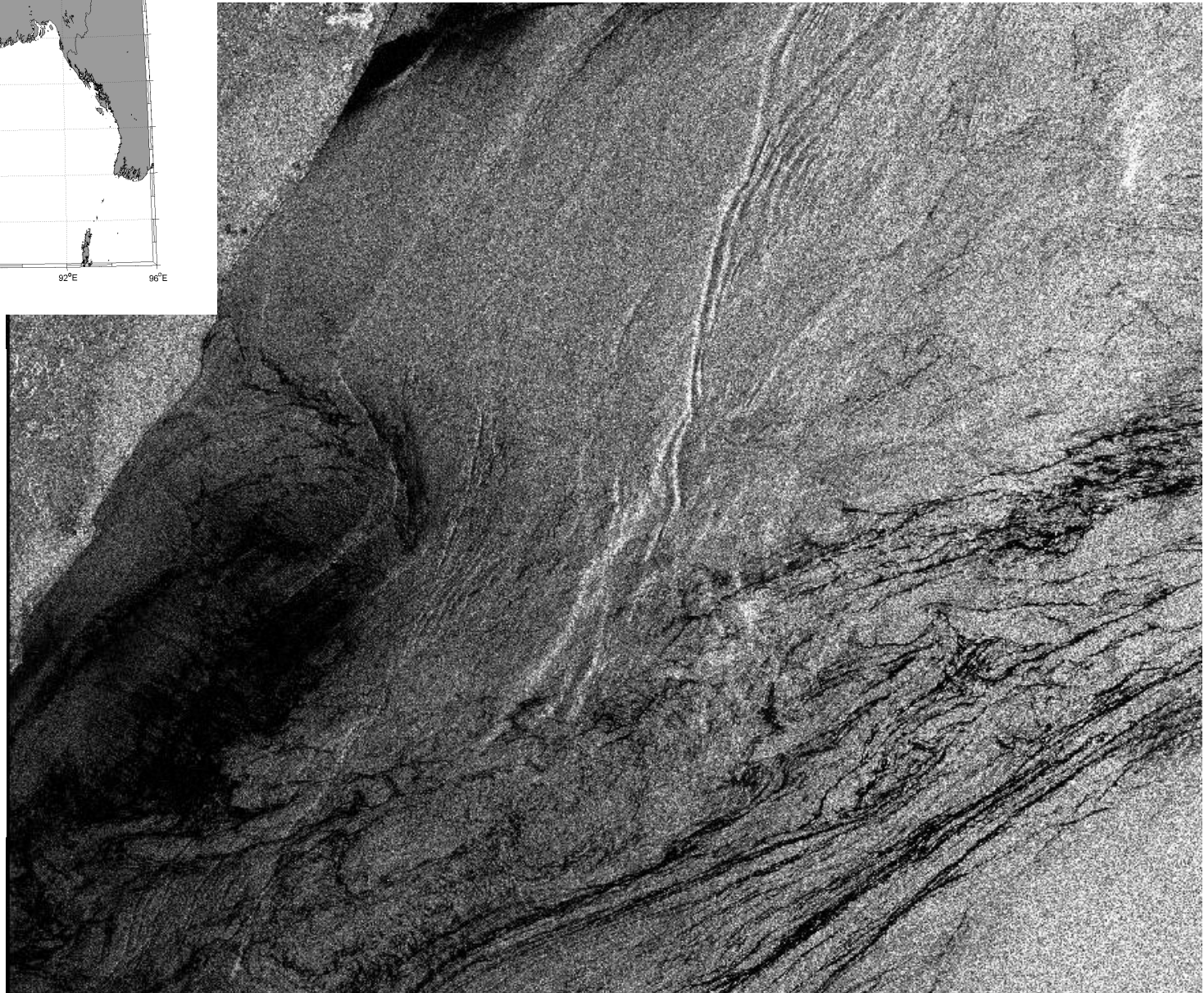


Figure 2. ERS-1 (C-band VV) SAR image acquired on 12 April 1996 at 0450 UTC (orbit 24799, frame 3231). The image shows signatures of continental shelf internal waves and surface slicks along the east coast of India. Image is 100 km x 100 km. © 1996 ESA [Image courtesy of *The Tropical and Subtropical Ocean Viewed by ERS SAR* <http://www.ifm.uni-hamburg.de/ers-sar/>]



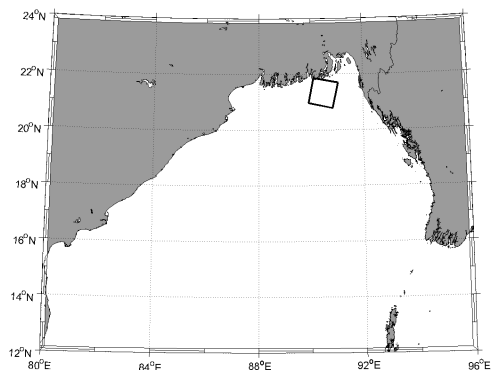
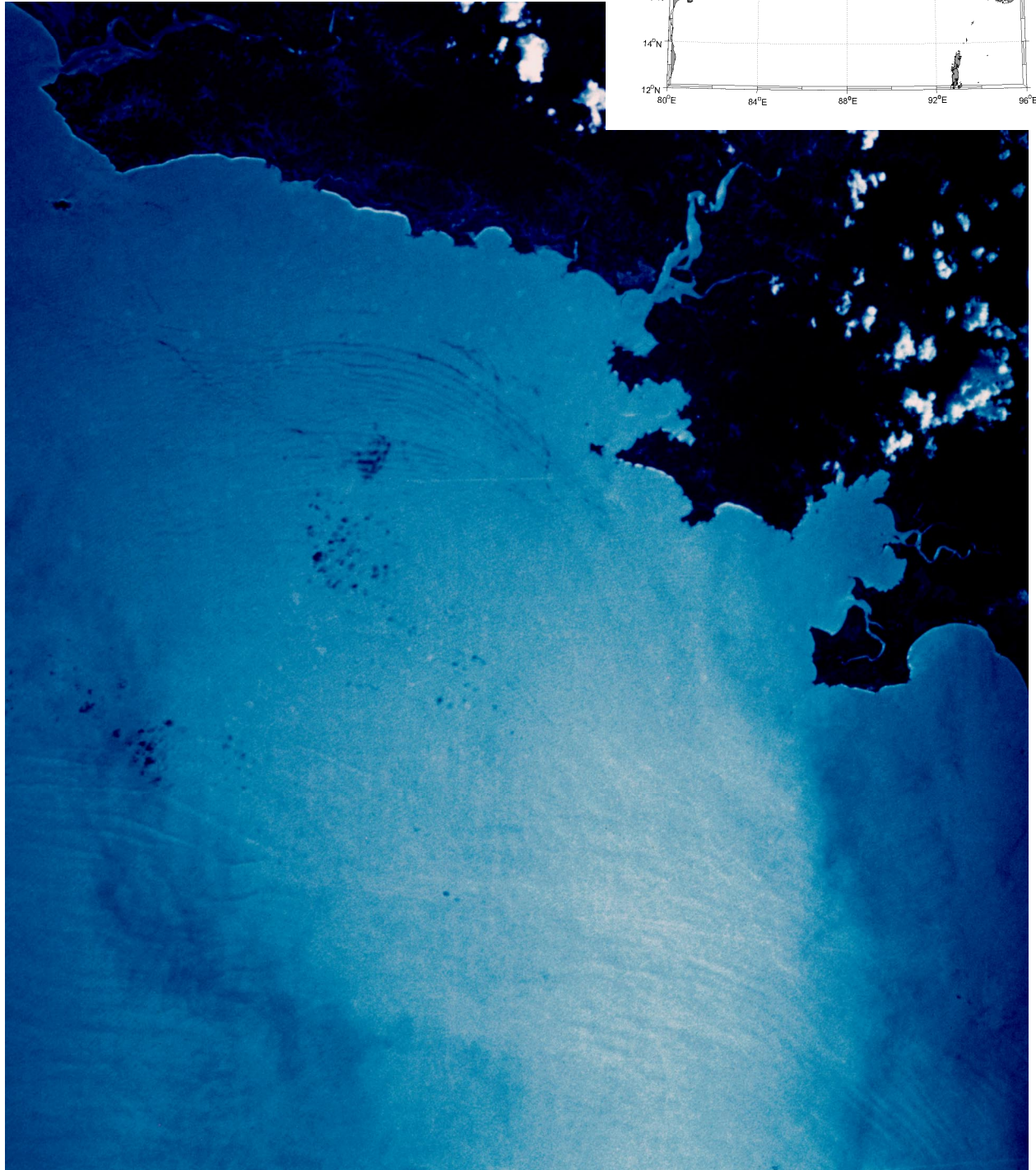


Figure 3. ERS-2 (C-band VV) SAR image acquired on 1 November 1997 at 0429 UTC (orbit 13242, frame 3177). The image shows signatures of continental shelf internal waves south of the Ganges River. Imaged area is 100 km x 100 km. ©1997 ESA. [Image courtesy of *The Tropical and Subtropical Ocean Viewed by ERS SAR* <http://www.ifm.uni-hamburg.de/ers-sar/>]



Figure 4. Astronaut photograph (STS61B-51-62) acquired on 3 December 1985 at 0601 UTC. The image shows signatures of continental shelf internal waves along the coast of Myanmar. Imaged area is approximately 40 km x 55 km. [Image courtesy of Earth Sciences and Image Analysis, NASA-Johnson Space Center. (<http://eol.jsc.nasa.gov>)]



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