## Sea of Okhotsk



Figure 1. Internal Waves east of Sakhalin Island in the Sea of Okhotsk. Space Shuttle Photographs (STS047-151-229) acquired September 14, 1992 02:54 GMT. Image dimensions are approximately 200 x 200 km. Image Courtesy of Earth Sciences and Image Analysis Laboratory, NASA Johnson Space Center (http://eol.jsc.nasa.gov).



Figure 2. ERS-2 C-Band VV SAR image collected on October 1, 1998. The image shows an area north of Sakhalin Island with a number of internal wave signatures having a variety of propagation directions. This indicates there are several source locations. Image dimensions are 100 km x 140 km centered near  $56^{\circ}$  N. latitude,  $143^{\circ}$  E. longitude. [Image from ADI'DAS Radar Image Preview Database. http://adidas.iki.rssi.ru]



Figure 3. SIR-C L-Band SAR imagery of Internal Waves north of Sakhalin Island in the Sea of Okhotsk. Image was acquired October 10, 1994 (DT169.2) 19:58 GMT. Internal wave signatures show several propagation directions indicating multiple sources. Image dimensions are 34.4 x 106.9 km.



Figure 4. ERS-2 and SIR-C data shown with map of the local bathymetry (derived from Smith and Sandwell version 8.2)



Figure 6. ERS-2 C-Band VV SAR image collected on August 2, 1999, 19:24 GMT (Orbit: 22387, Frames: 2691). The image shows internal wave signatures off the northeast coast of Hokkaido Island, Japan, in the southern Sea of Okhotsk. Image dimensions are 100 km x 100 km centered near 45.4<sup>o</sup> N. latitude, 142.5<sup>o</sup> E. longitude. [Image from ADI'DAS Radar Image Preview Database. http://adidas.iki.rssi.ru]

## **Related Publications**

- L.Mitnik, V.Dubina, Y. Sugimori, Dynamic features of the Soya Warm Current as seen by ERS synthetic aperture radar // Proc. The 17th International Symposium on Okhotsk Sea &Sea Ice, Mombetsu, Hokkaido, Japan, 2002. pp.74-81.
- Nagovitsyn, A.P., and E.N. Pelinovsky, 1988: Solitary internal wave observation in coastal zone of Okhotsk Sea. *Meteorology i Hydrology*, 4, 124-126.
- Nagovitsyn, A.P., E.N. Pelinovsky, and Yu. A. Stepanyants, 1991: Observation and analysis of solitary internal waves in the coastal zone of the Sea of Okhotsk, Sov. J. Phys. Oceanogr., 2 (1), 65-70.
- Ostrovsky, L.A., and Y.A. Stepanyants, 1989, "Do internal solitons exist in the ocean?" Rev. of Geophys., 27(3), 293-310.