New England Shelf



Figure 1. Radarsat C-Band HH SAR image collected Aug 27, 1996, 10:58 GMT. A large number of continental shelf solitons can be seen south of Nantucket Island, Martha's Vineyard and the coast of Rhode Island. Bathymetric signatures are also visible in the upper right, east of Nantucket. [Figure Courtesy of Don Thompson JHU/APL]

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Figure 2. ERS-2 C-Band VV SAR image collected Aug 8, 1996, 03:00 GMT. (Orbit 6800). A large of number continental shelf solitons can be seen south of the coast of Rhode Island. A more uniform wind condition helps to highlight the internal wave signatures. [Figure Courtesy of Don Thompson JHU/APL]

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Figure 3. a) Temperature time series from a thermistor mooring near 40.17^{0} N. 71.15^{0} , deployed as part of the Shelfbreak PRIMER study in 1996. b) An expanded view of the strongest bore event [Image from Colosi et. al 2001]

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Figure 4. a) Density Profile derived from SD2 data collected on July 13, 1985 at 42.20° N. latitude, 68.7° W. longitude, depth = 178 m (Source NODC Global Ocean Temperature and Salinity Profiles (Jun 1991) b) derived Brunt-Väisälä frequency N(z) c) zero flow current profile d) Normalized vertical eigenfunctions (mode 1 & 2) for $2\pi/k_0 = 400$ m, H = 178 m for density and velocity profiles shown e) Phase Velocity f) Dispersion relations.



Figure 5. SIR-C L-Band SAR imagery of Internal Waves north of the Gulf Stream. Image was acquired 14 April 1994 (DT81.2) 9:40 GMT. Image is centered at 39⁰53.9' N, 71⁰23.6' W with dimensions 30 x 100 km.

References

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