

Baroclinic IG Wave "Noise"

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Abstract

Baroclinic inertia-gravity wave turbulence (BIG WT) has been pointed out as a source of considerable (of order 5 cm in terms of SSH oscillations) "noise" in altimeter measurements [1,2,3]. Apart from that "negative" role, BIG WT represents an important component of ocean dynamics, tracer fluctuations and transport, and global ocean energy balance. Discussion of both "negative" and "positive" issues of BIG WT will be given in this presentation, and recommendations about the identification and "removal" of BIG WT noise from altimeter measurements will be suggested.

References: [1] JPO, 26(7), 1256-1265, (1996); [2] Int. J. Rem. Sens., 17, 2647-2666, (1996); [2] Proc. Roy.Soc, A, 455, 91-123, (1999).