

**Isopycnic Potential Vorticity in the Confluence Zone of the Norwegian and Barents Seas**

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**Summary.** This paper presents the results of applying isopycnic potential vorticity (IPV) as an index of hydrological parameter variability in a research area in the confluence zone of the Norwegian and Barents Seas. IPV variability within this area is discussed and the relationship between IPV, and geostrophic flow and environmental parameters is analysed. Isopycnic temperature and salinity distributions display a significant correlation with IPV, and slopes of the linear regression lines  $q = a_1\theta + a_0$  and  $q = b_1S + b_0$  change in value and sign with increasing isopycnal value (depths), IPV was estimated on the basis of the results of deep-water soundings CTD carrying out *in situ* during the oceanological expeditions of r/v "OCEANIA" to the Norwegian and Greenland Seas in summers of 1988 and 1989.