

AMERICAN METEOROLOGICAL SOCIETY

AMS Journals Online

AMS Home Jou

Journals Home

Journal Archive

Subscribe

For Authors

Help

Advanced Search

Search



Abstract View

Volume 18, Issue 9 (September 1988)

Journal of Physical Oceanography

Article: pp. 1241–1259 | Abstract | PDF (1.05M)

Spinup toward Communication between Large Oceanic Subpolar and Subtropical Gyres

Richard Schopp

IFREMER Centre de Brest, Brest, France

(Manuscript received August 31, 1987, in final form March 21, 1988) DOI: 10.1175/1520-0485(1988)018<1241:STCBLO>2.0.CO;2

ABSTRACT

An interpretation in terms of planetary waves is proposed, which sheds light on the dynamics underlying the large-scale cross-gyre geostrophic flow recently developed in a two-layer ventilated thermocline model.

The cross-gyre communication flow is the result of an arrested nondispersive baroclinic Rossby wave in the presence of zonal Sverdrup transport along the line of vanishing Ekman pumping. A baroclinic adjustment is described in which a resting ocean settles to a steady communicating solution.

Options:

- Create Reference
- Email this Article
- Add to MyArchive
- Search AMS Glossary

Search CrossRef for:

• Articles Citing This Article

Search Google Scholar for:

• Richard Schopp



top 📤

