

Abstract View

Volume 17, Issue 1 (January 1987)

Journal of Physical Oceanography Article: pp. 26–36 | Abstract | PDF (719K)

Bispectra of Sea-Surface Temperature Anomalies

Detlev Müller

Climate Dynamics Laboratory, Institute of Geophysics and Planetary Physics, UCLA, Los Angeles, CA 90024

(Manuscript received May 1, 1986, in final form July 15, 1986) DOI: 10.1175/1520-0485(1987)017<0026:BOSSTA>2.0.CO;2

ABSTRACT

Observed anomalies of sea-surface temperatures (SST) exhibit significant triplecorrelations and bispectra. Features of this type are not covered by the standard Ornstein Uhlenbeck (OU) concept of SST fluctuations. The present paper derives the spectrum and the bispectrum for a simple non-Gaussian Markov process. It can be shown by means of the inverse modeling technique that this process yields a satisfactory approximation to the spectra and the real part of the bispectra of SST-anomaly data. Moreover, the analysis indicates that the imaginary part of the bispectrum cannot be represented in terms of a singlevariable model.

Options:

- <u>Create Reference</u>
- Email this Article
- Add to MyArchive
- Search AMS Glossary

Search CrossRef for: • <u>Articles Citing This Article</u>

Search Google Scholar for: • <u>Detlev Müller</u>



© 2008 American Meteorological Society <u>Privacy Policy and Disclaimer</u> Headquarters: 45 Beacon Street Boston, MA 02108-3693 DC Office: 1120 G Street, NW, Suite 800 Washington DC, 20005-3826 <u>amsinfo@ametsoc.org</u> Phone: 617-227-2425 Fax: 617-742-8718 <u>Allen Press, Inc.</u> assists in the online publication of *AMS* journals. top 📥