

S10 Synchronous and asynchronous responses of North Pacific boundary current systems to climate variability

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09:00-09:05 Introduction by Convenors

[Kosei]

09:05-09:35 Masami Nonaka(Invited) **Oyashio**

09:35-09:55 Harold P. Batchelder **eastern boundary (E)**

09:55-10:15 Elena I. Ustinova **western boundary**

10:15-10:35 Steven J. Bograd **west & east**

10:35-10:55 Tea/Coffee Break

[Steve]

10:55-11:25 Andrew Bakun(Invited) **eastern boundary (E)**

11:25-11:45 Hiroshi Ichikawa **western boundary**

11:45-12:05 Shoshiro Minobe **Kuroshio-Oyashio Extension**

12:05-12:25 George Shevchenko **East Sakhalin Current (E)**

12:25-14:00 Lunch

[Slava]

14:00-14:30	Bo Qiu (Invited)	Kuroshio Extension
14:30-14:50	Shin-ichi Ito	Kuroshio & Oyashio
14:50-15:10	David L. Mackas	California Current (E)
15:10-15:30	Jin Woo Kim	Kuroshio

15:30-15:50 Tea/Coffee Break

[Jack]

15:50-16:20	Ryan R. Rykaczewski	California Current (E)
16:20-16:40	William T. Peterson	California Current (E)
16:40-17:00	Peter W. Lawson	Northeast Pacific (E)
17:00-17:20	Kiyotaka Hidaka	Kuroshio (E)

[Jack]

17:20-17:30 Summary by Convenors

Posters

Gennady V. Khen	northern Pacific
Victor I. Kuzin	Kuroshio
Ryan R. Rykaczewski	California Current (E)

climatology of wintertime wind stress curl

wind stress curl

NCEP/NCAR

monthly data

1949-2000

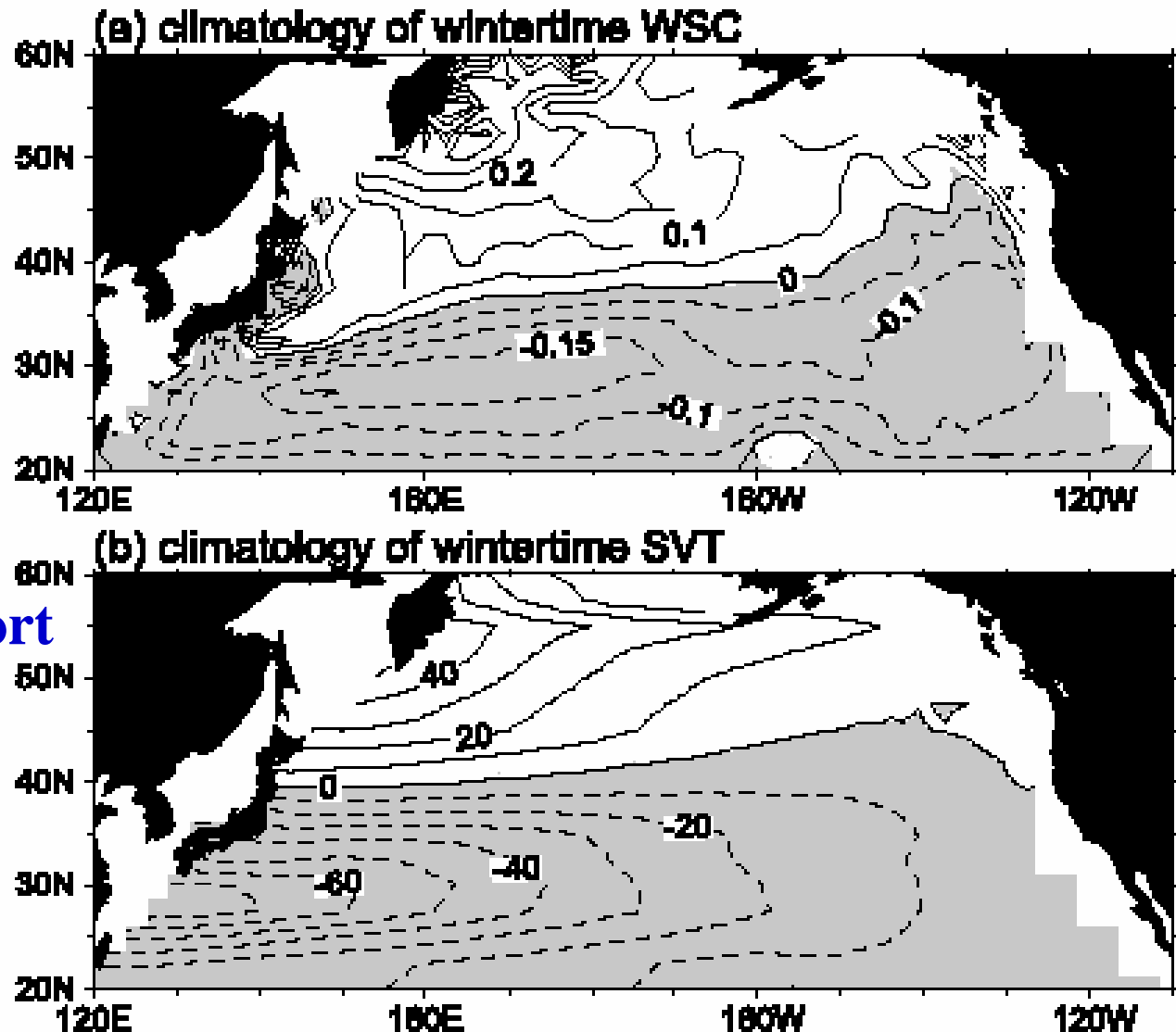
2.5 deg resolution

1-2-1 filter

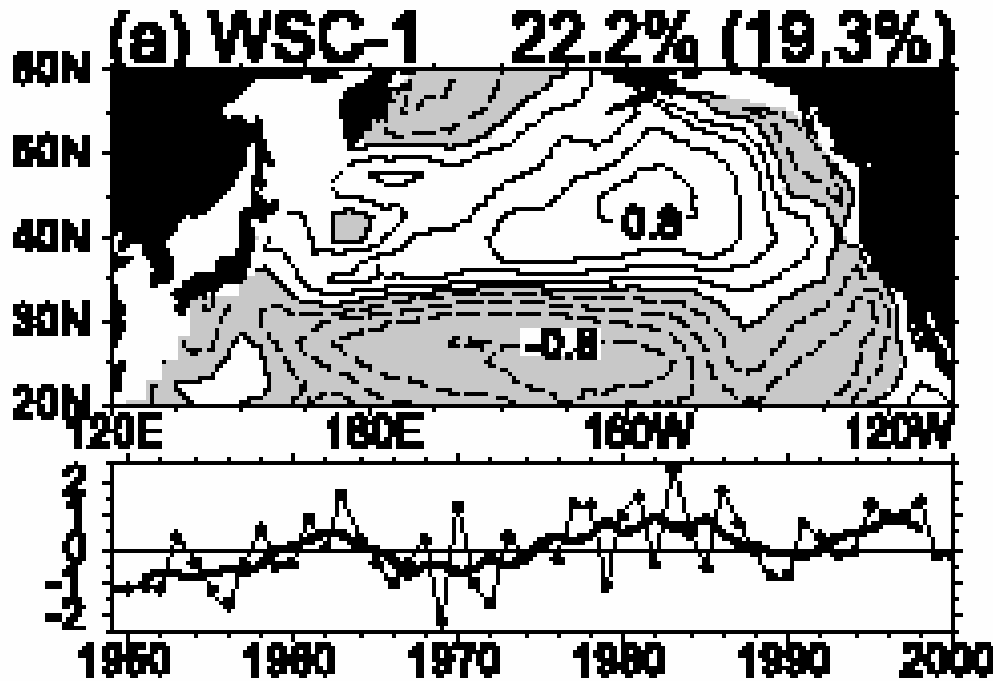
Sverdrup transport

65Sv at 27.5N

-45Sv at 52.5N

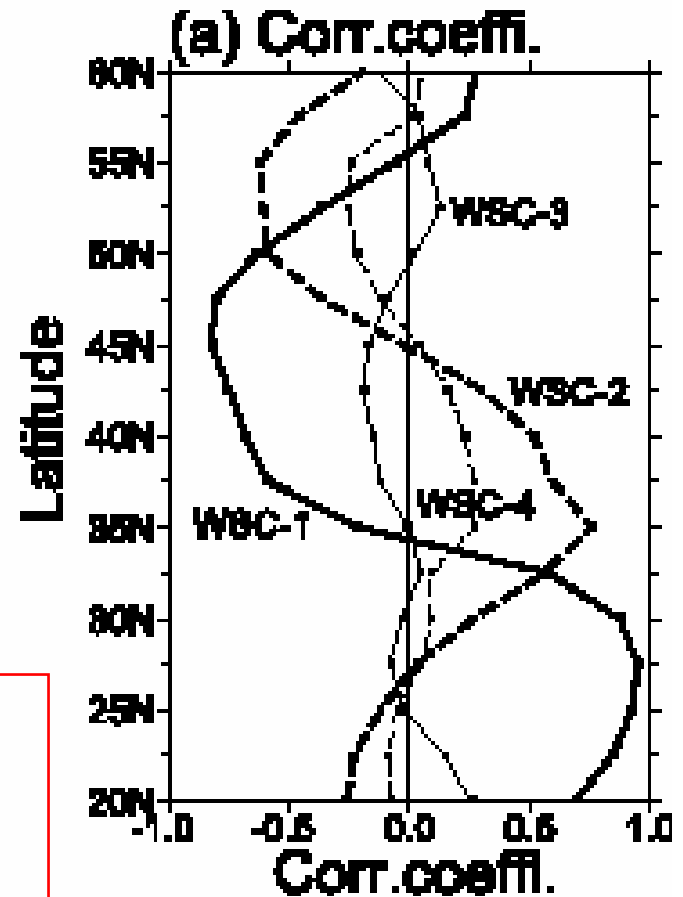


Wintertime wind stress curl



REOF1: wind stress curl
negative correlation with NPI -0.93
synchronized barotropic response

In real ocean, there is also baroclinic response and not only synchronized response exists.



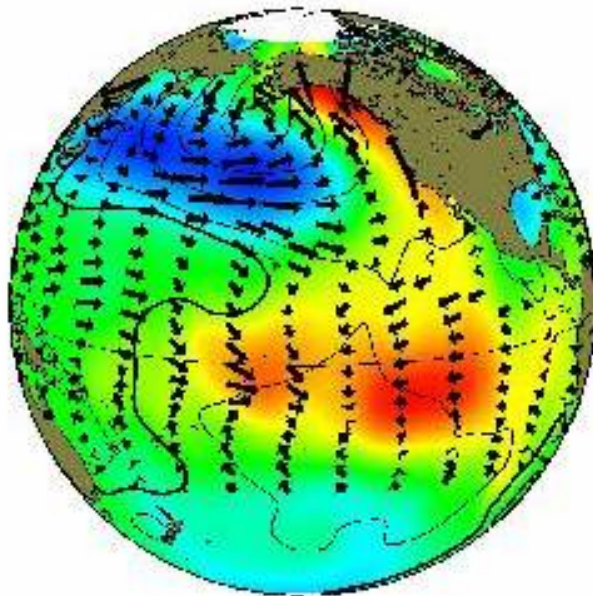
Ishi and Hanawa (2005)

E-W synchronicity of sardine & anchovy alternation

Positive PDO (1976-87)

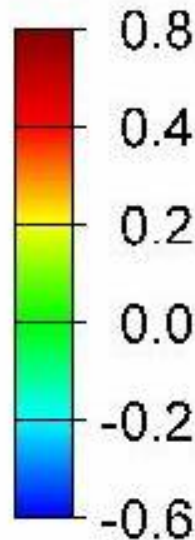
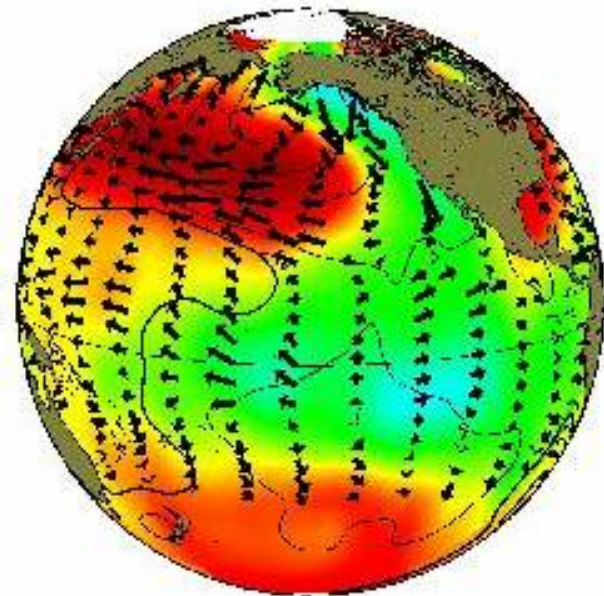
= “Sardine Dominant Regime”

- High PP in West, Low PP in CC
- Faster Kuroshio and Slower CC



Negative PDO (1945-75)

= “Anchovy Dominant Regime”



Chavez (2003)

The Flow Hypothesis

Species Relationships in Boundary Current System

