Tropical Ocean Circulation in SODA and CMIP5
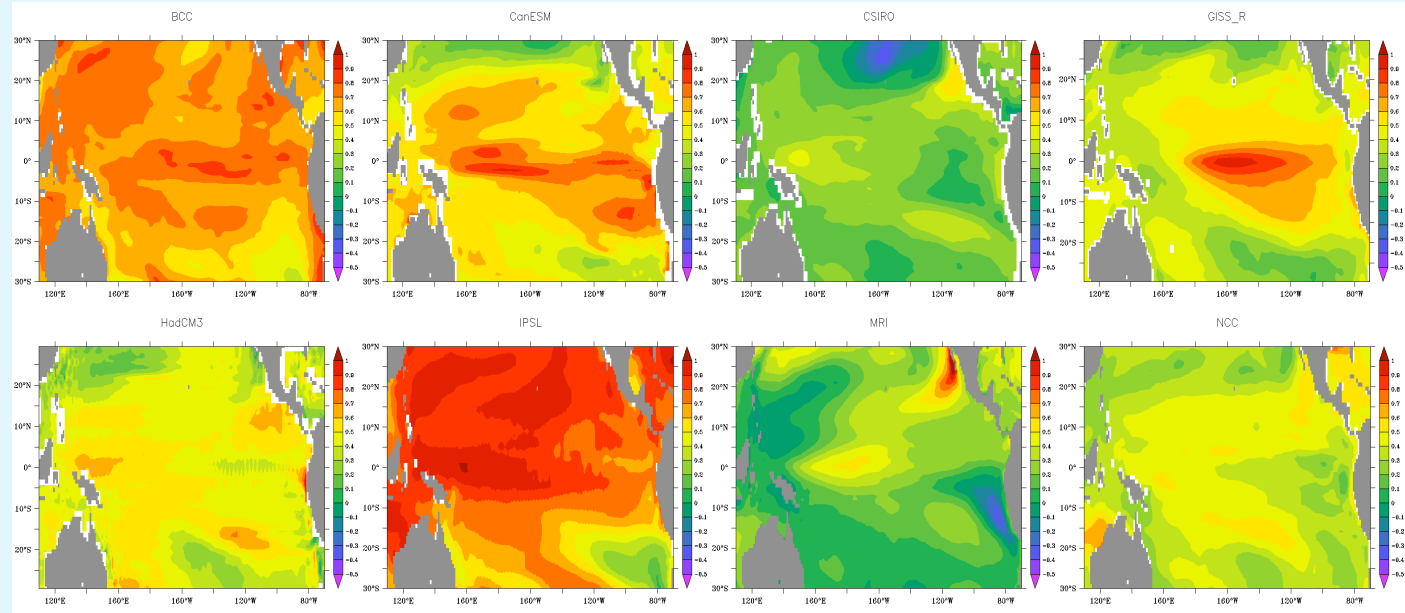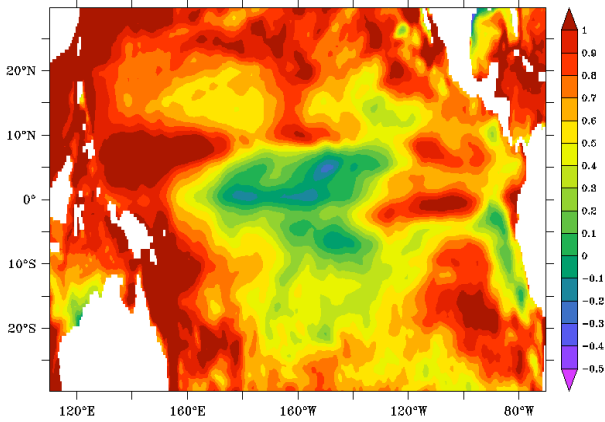
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Data

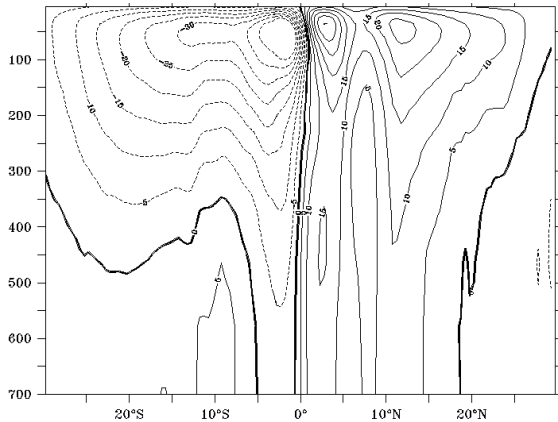- ◆ SODA (Simple Ocean Data Assimilation)
- ◆ CMIP5-historical run

SST Linear Trend in SODA (1900-1999)

SST Linear Trend in CMIP5 Models (1900-2005)

BCC   CanESM   CSIRO   GISS_R

HadCM3   IPSL   MRI   NCC

Convergence of Interior Transport of STC in SODA and CMIP5

Stream Function of Subtropical Cell (STC) in SODA

- ◆ Sections at 9°N and 9°S are calculated as by McPhaden and Zhang (2002), and similar isopycnals are used to mark the top and bottom of the STC (Fig. 3)
- ◆ Interior transports: Transport from 145°E-80°W at 9°N and 160°E-80°W at 9°S
- ◆ Convergence transport between 9°N/9°S is calculated as the difference between Southern Hemisphere and Northern Hemisphere

Reference: McPhaden and Zhang, 2002, *Nature, 415*, 603-608

SODA226   GISS   BCC

MRI   HadCM3   CanESM

NCC   IPSL   CSIRO