

Dear reviewer,

Thanks for your comments, as for your comments, I have some replies following:

I .The red line in the figure 4 denotes the heat content change (HCC), not the heat content (HC), the HC fall down to the valley when the HCC varies from negative to zero. So the figure 4 matches the Fig.2. Besides, the time series have been filtered by running mean, the beginning and end of the time series may have little mismatch with the matter of fact.

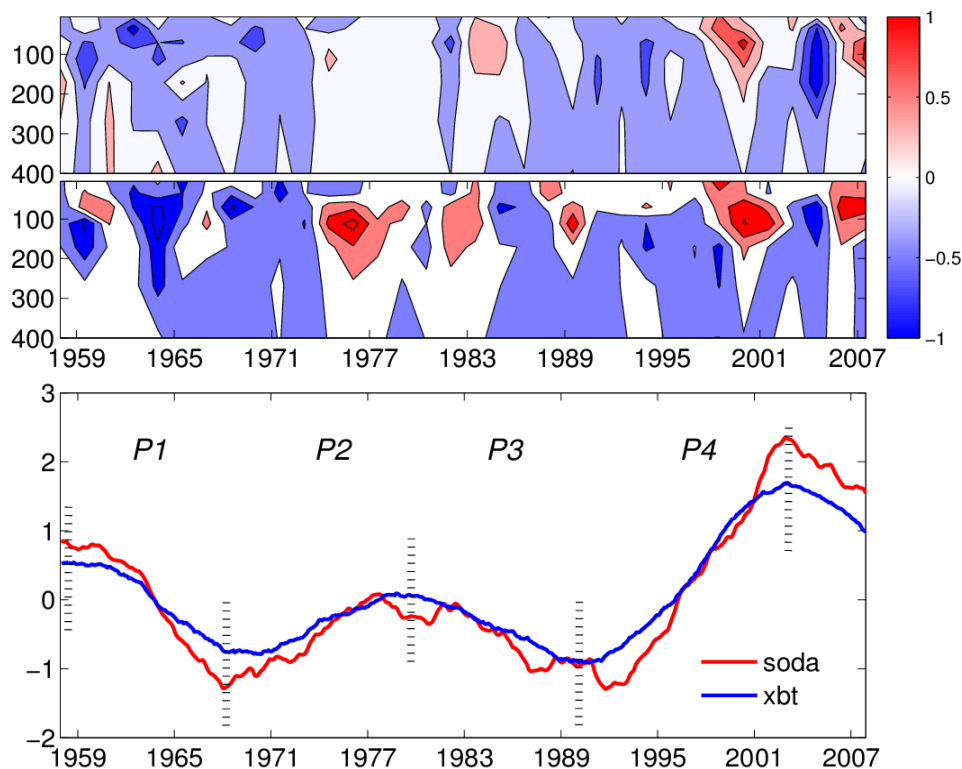


Figure 2. Temperature anomalies of the whole South China Sea (contour interval: 0.2, units: °C; seasonal cycle removed) of the XBT (top) and SODA (middle), and the heat-content time series of XBT and SODA (bottom). Also indicated are P1: 1958-1968; P2: 1969-1981; P3: 1982-1992; and P4: 1993-2003.

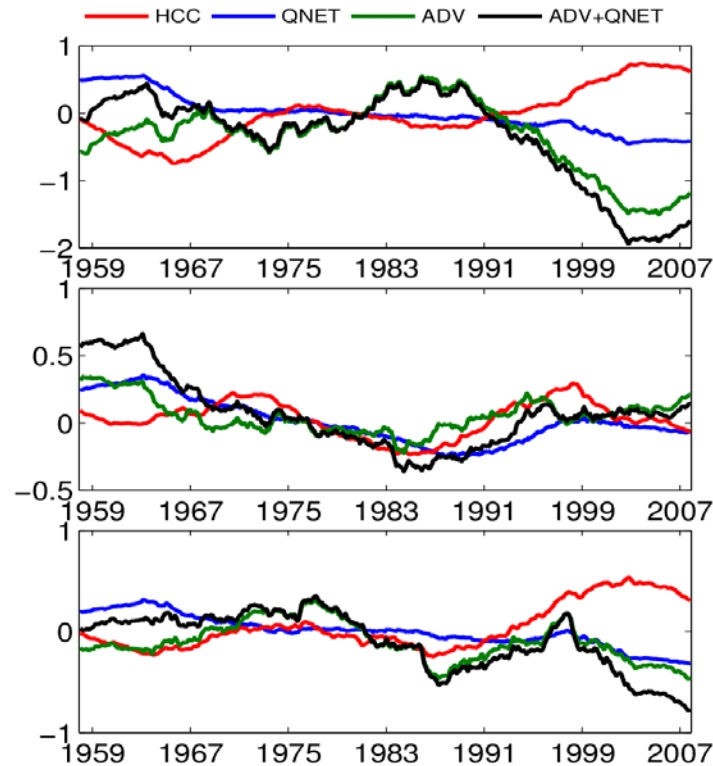
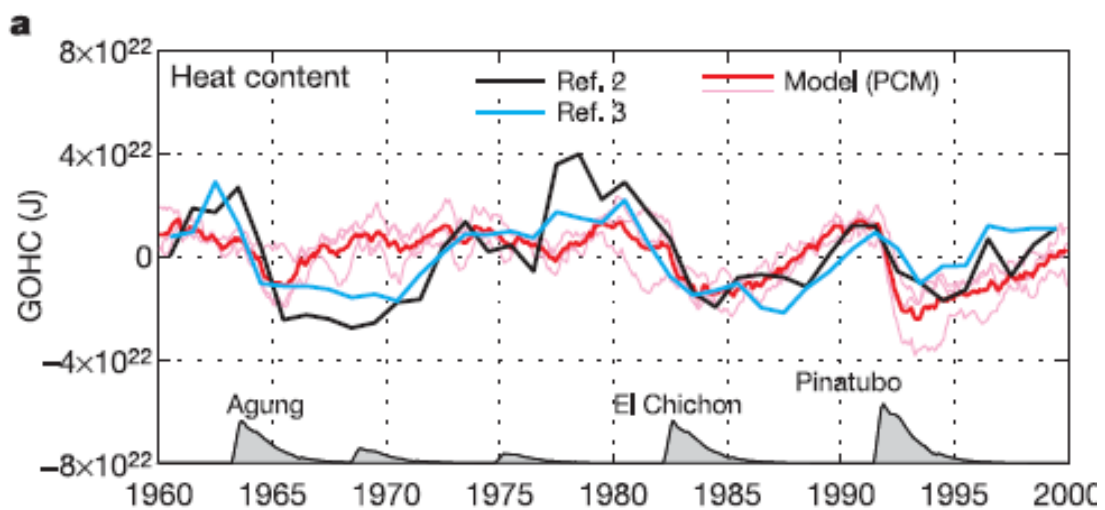


Figure 4 Time series of 10-yr running mean HCC (red), QNET (blue) and ADV (green) in Box 1 (top), Box 2 (middle) and Box 3 (bottom).

II . The figure below I site from a nature paper shows great match between the global ocean heat content (GOHC) and the volcanic eruption. But for the local marginal sea, the heat content may be affected by some local Oceanic process.



Church, J. A. et al, Nature, 2005

III. As for the minor comments, I accept all of them. The modification will be done in the revised manuscript.