Interactive comment on “Sea level trend and variability around the Peninsular Malaysia” by Q. H. Luu et al.

K. Balaguru
karthik.balaguru@pnnl.gov

Received and published: 7 July 2014

General comments

This is a really interesting paper in which the authors have documented the Sea-Level Rise (SLR) rates around peninsular Malaysia using longterm sea-level data from tide gauges and also satellite altimetry data. While the monsoon circulation plays an important role in SLR at seasonal timescales, ENSO and IOD modulate the SLR rates at interannual timescales.

However, even though longterm trends in SLR are given for various regions around peninsular Malaysia, I wonder to what physical mechanisms might these trends be attributed to. Are these trends purely resulting from thermal expansion of water due to global warming? Also, the Walker circulation is projected to weaken in a warming planet. What is the role of these circulation changes? Is there a way to separate these different influences?

Interactive comment on Ocean Sci. Discuss., 11, 1519, 2014.