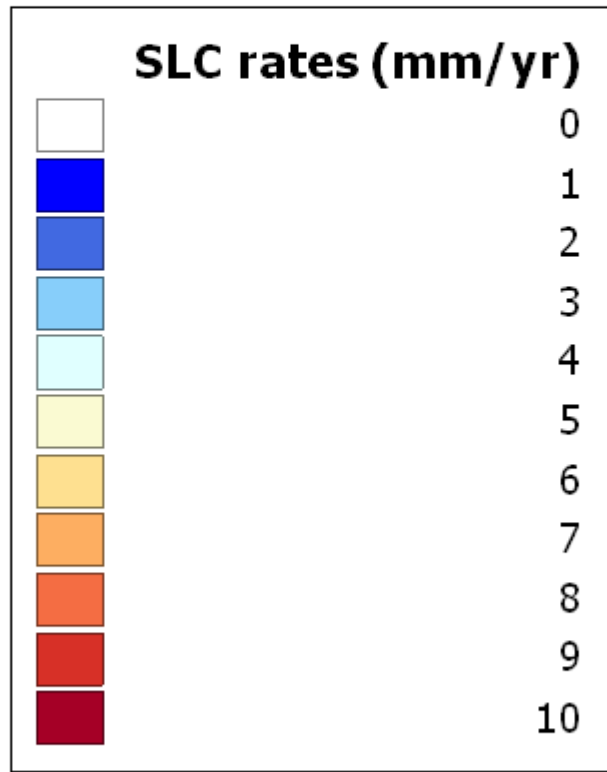
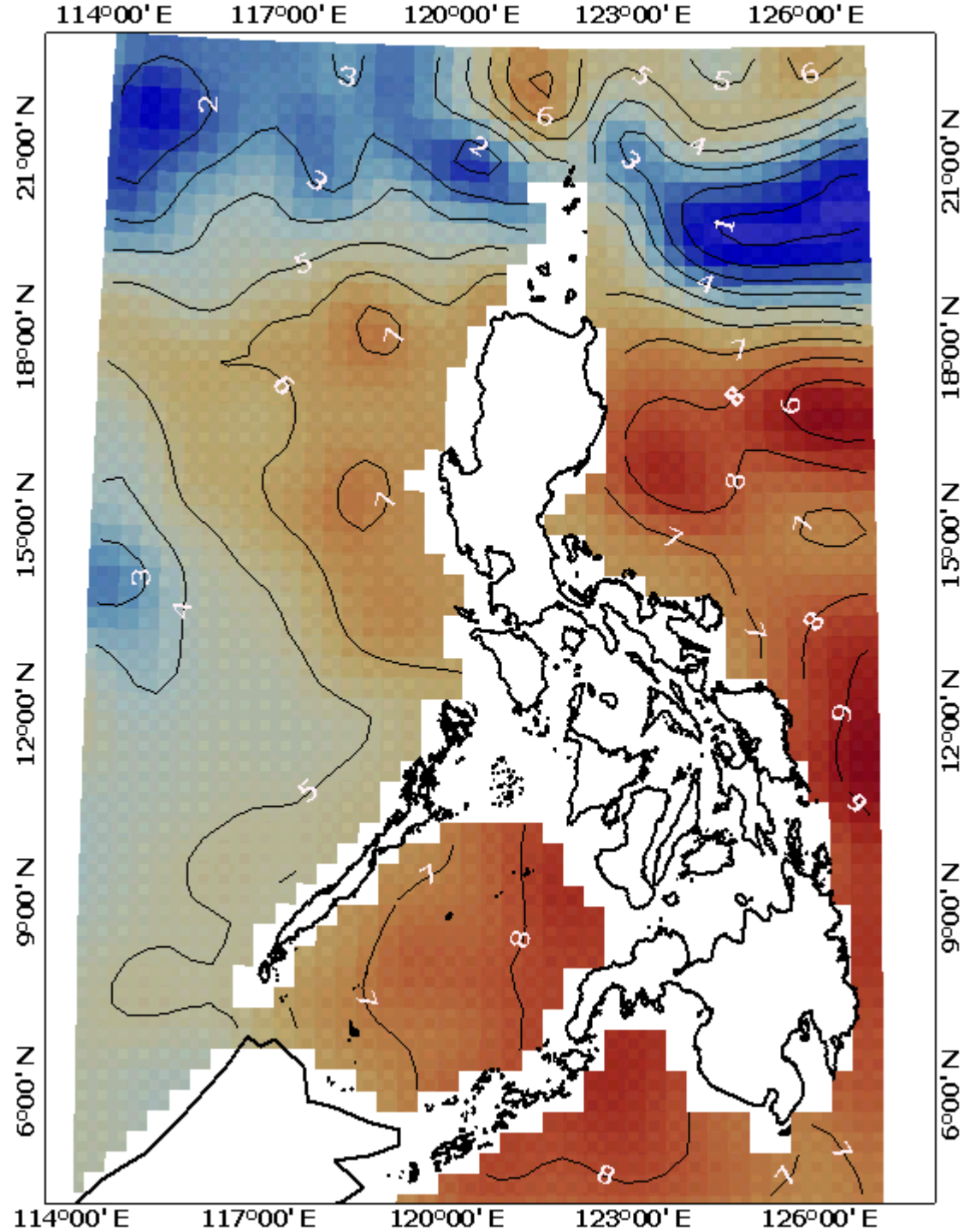


Resilient Seas Project 2 (2012)

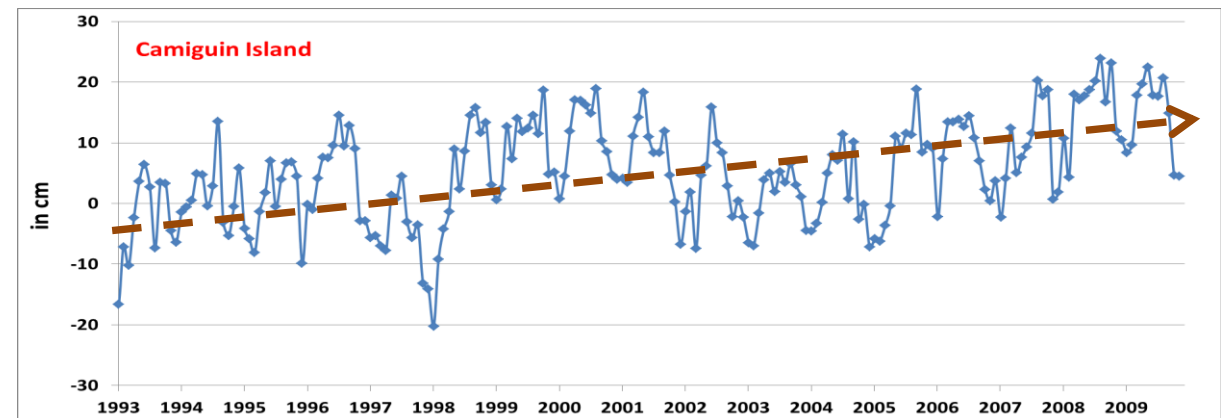
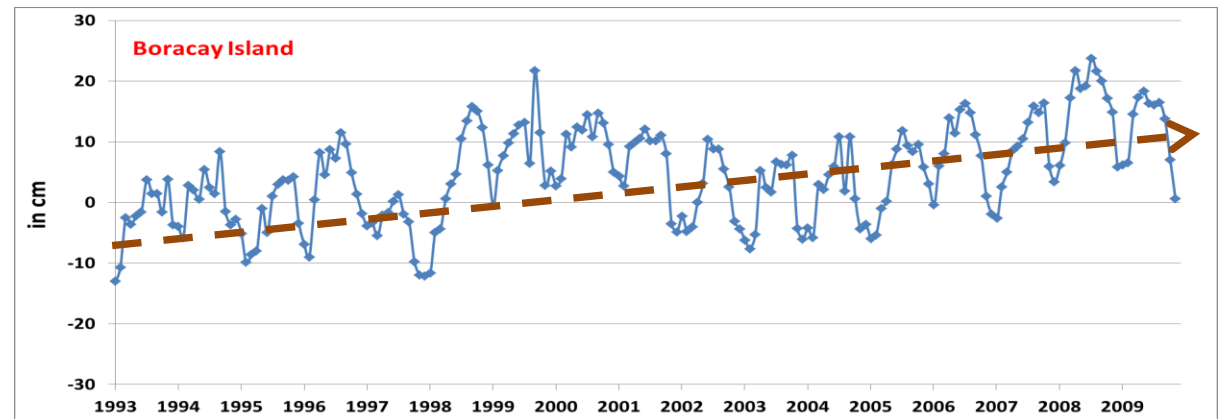
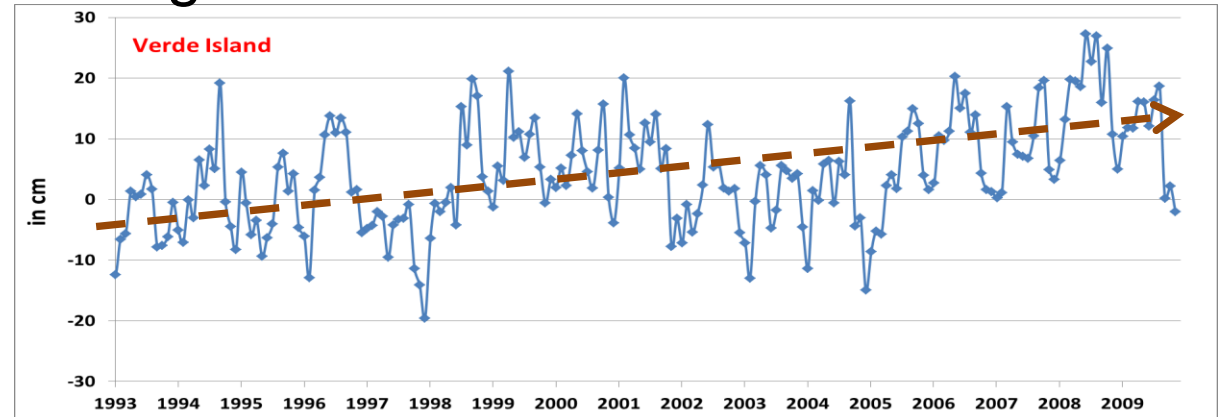
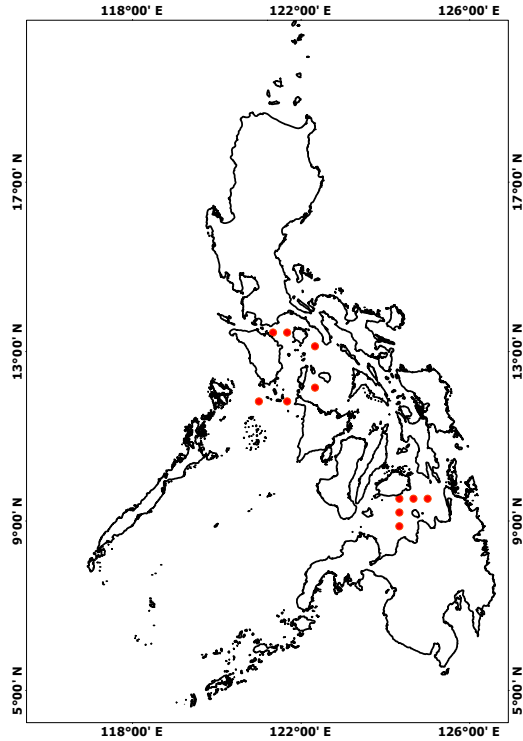
Sea level is rising close to 1 cm/y all around the country.



Sea level change (mm/yr): 1993-2009



ENSO and PDO cycles are embedded in the signal of an overall rise of sea level



AVISO monthly
sea surface
heights for Verde,
Boracay, and
Camiguin islands
(1993 -2009)

Expected consequences of sea level rise

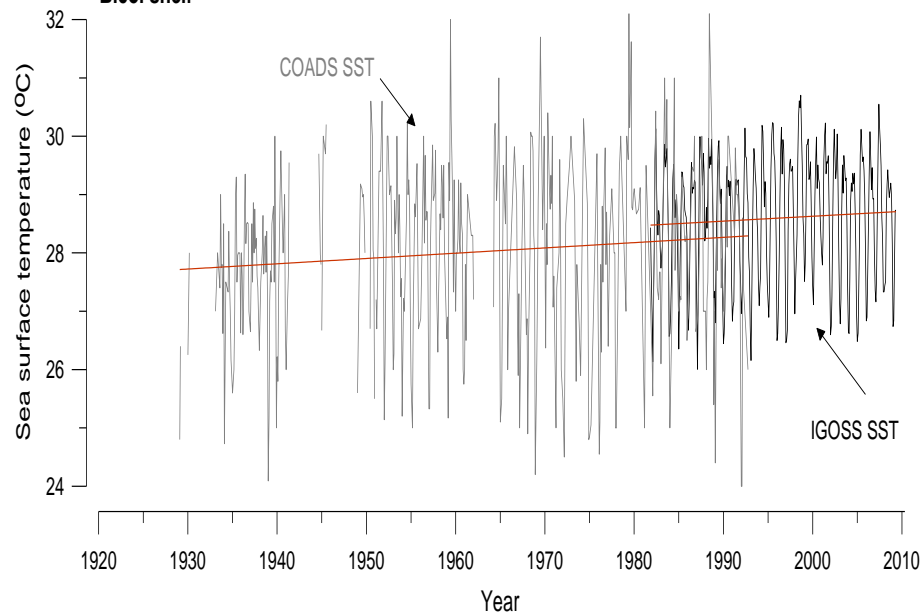
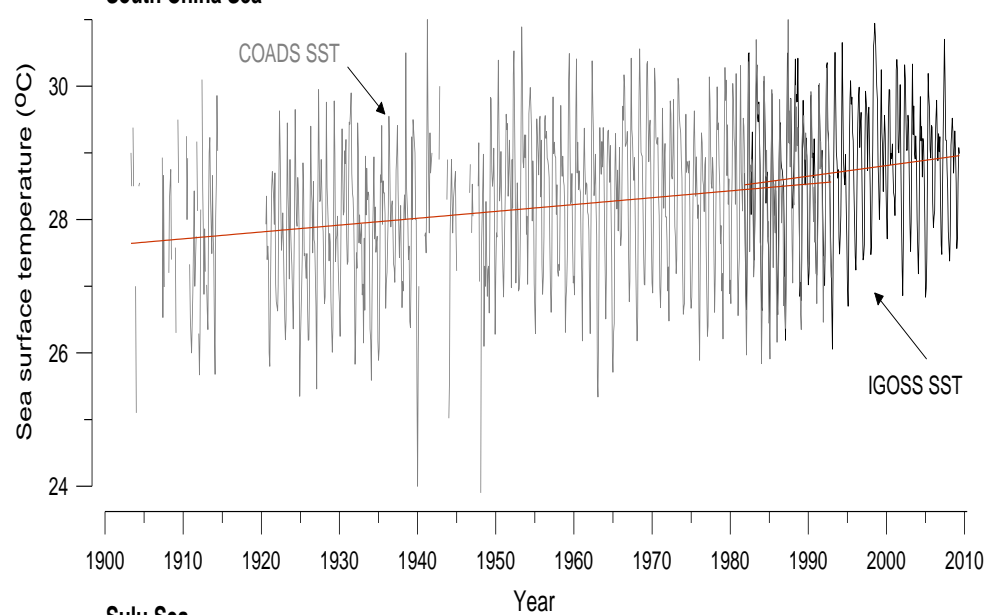
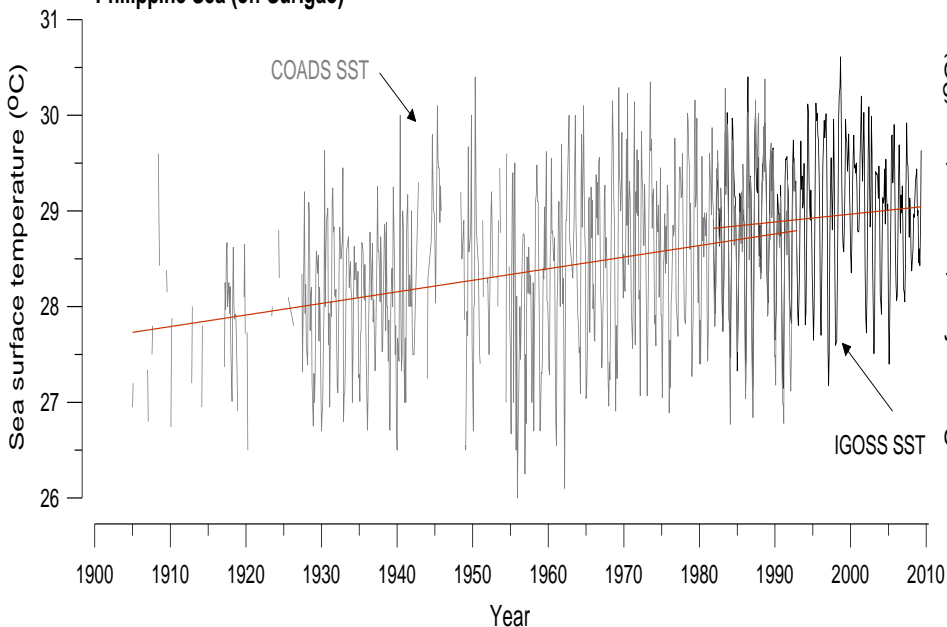
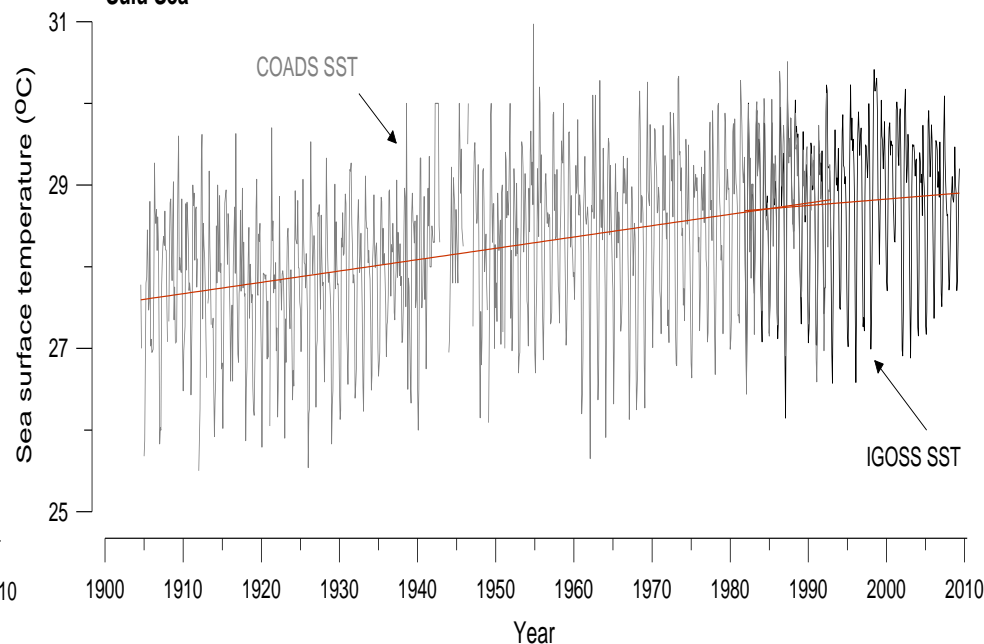
- Permanent marine inundation
- Increase in frequency, magnitude, duration and coverage of coastal flooding
- Contamination of coastal aquifers
- Greater wave inundation
- Coastal erosion

WHO | Flooding and communicable diseases fact sheet

Floods can potentially increase the transmission of :

- Water-borne **diseases**, such as typhoid fever, cholera, leptospirosis and hepatitis
- Vector-borne **diseases**, such as malaria, dengue and dengue haemorrhagic fever

Can also lead to increase in occurrence of diarrhea due to contaminated water

Bicol shelf**South China Sea****Philippine Sea (off Surigao)****Sulu Sea**

Comprehensive Ocean-Atmosphere Data Set (COADS), Jan 1854 to Dec 1992: <http://ingrid.ldeo.columbia.edu/SOURCES/.COADS/.mean/.sst/>

Integrated Global Ocean Services System (IGOSS), Nov 1981 to present: http://ingrid.ldeo.columbia.edu/SOURCES/.IGOSS/.nmc/.Reyn_SmithOlv2/.monthly/.sst/



HABs and Pyrodinium blooms in the Philippines

Global increase in frequency and distribution of HABs are attributed to eutrophication and warming of seas.

Possible consequences of further warming of the ocean

- Increase in frequency of jellyfish blooms
- Increase in frequency and sites of harmful algal blooms
- Emergence of cholera bacteria from their dormant stage in coastal waters