



Sea Surface Temperature trends in the Caribbean/ W. Tropical Atlantic: an update

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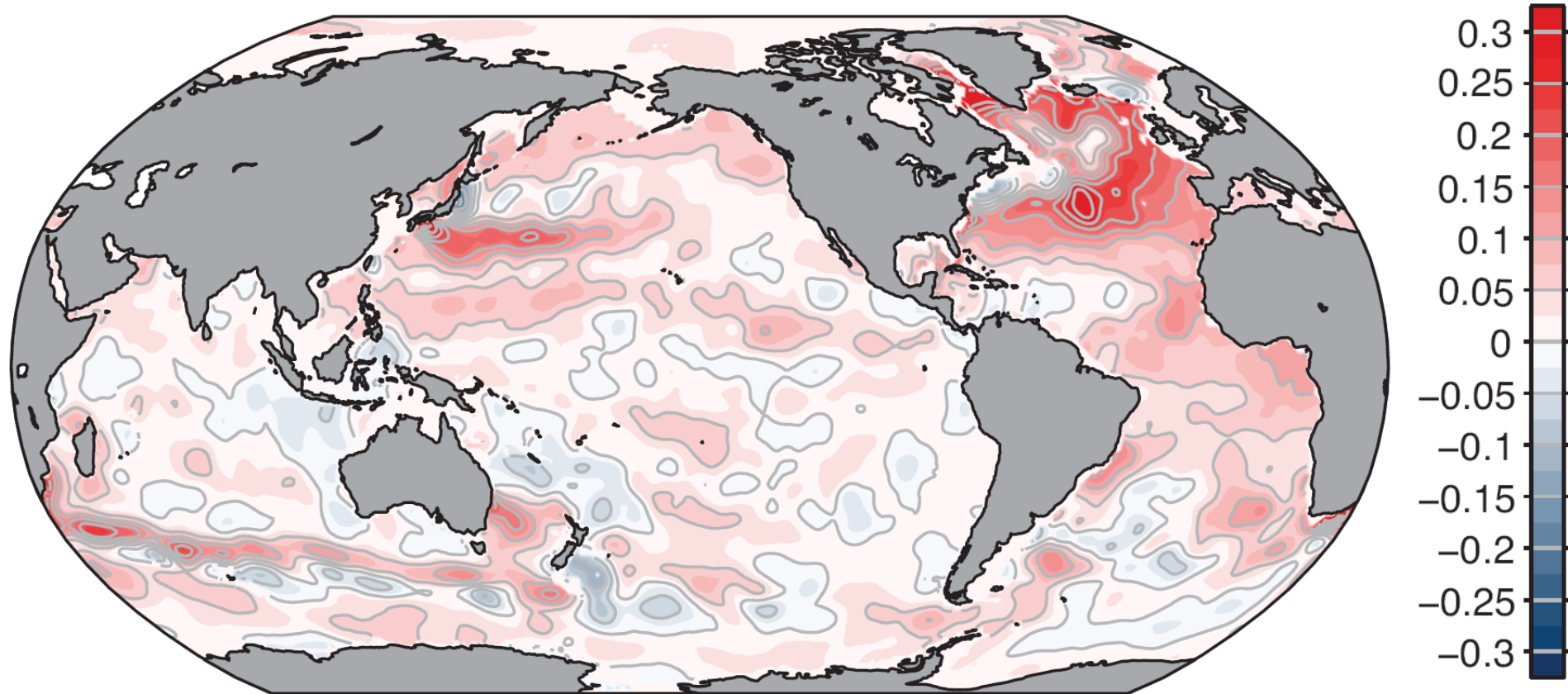
Puerto Rico Climate Change Council (PRCCC) Annual Meeting
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Climate Change 2014 Synthesis Report: “The global average ocean warming over this period is **0.11 [0.09 to 0.13] °C per decade in the upper 75 m**, decreasing to **0.015°C per decade by 700 m**”



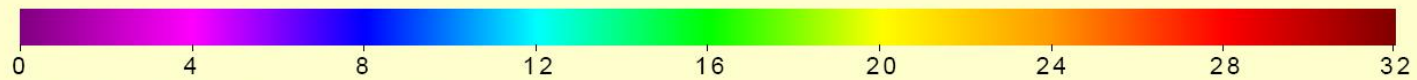
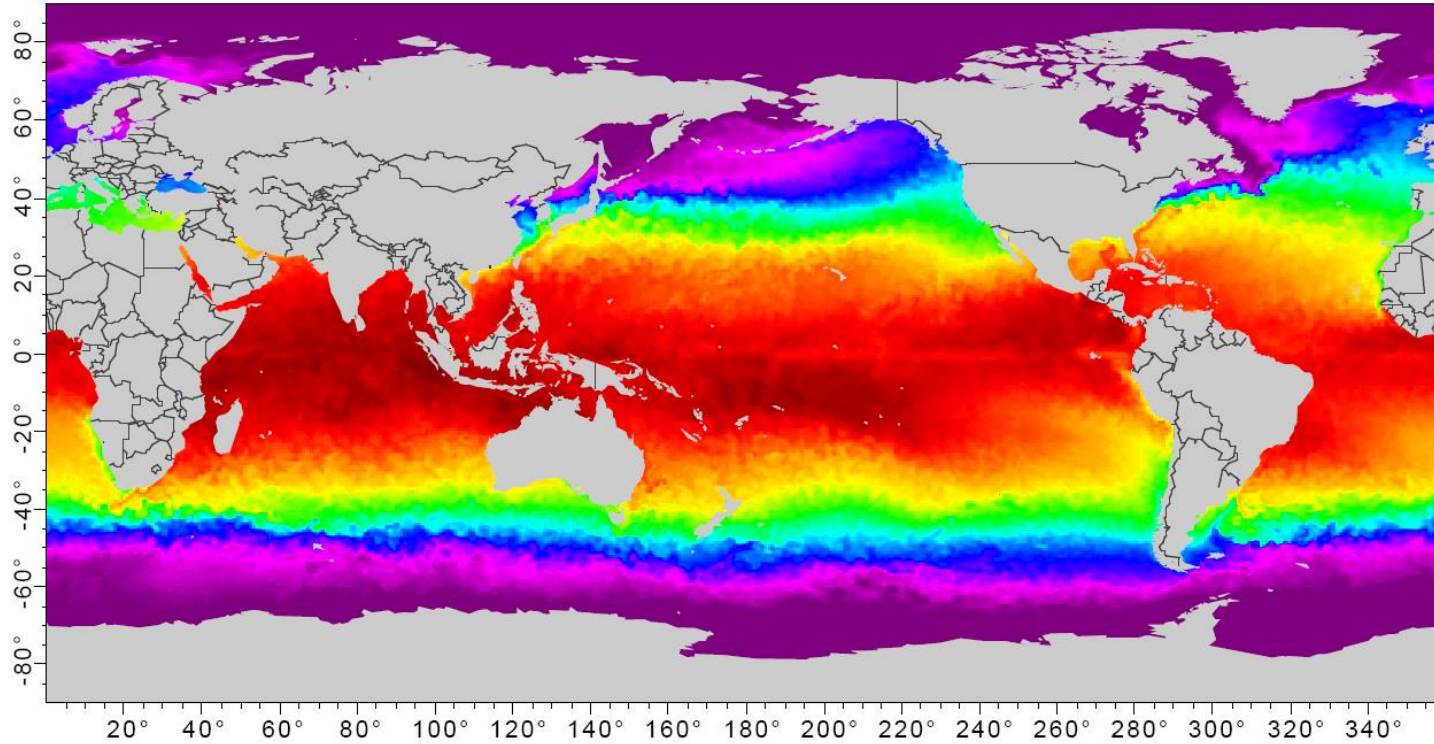
Rhein, M., S.R. Rintoul, S. Aoki, E. Campos, D. Chambers, R.A. Feely, S. Gulev, G.C. Johnson, S.A. Josey, A. Kostianoy, C. Mauritzen, D. Roemmich, L.D. Talley and F. Wang, 2013: Observations: Ocean. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Some impacts of increased ocean temperature:

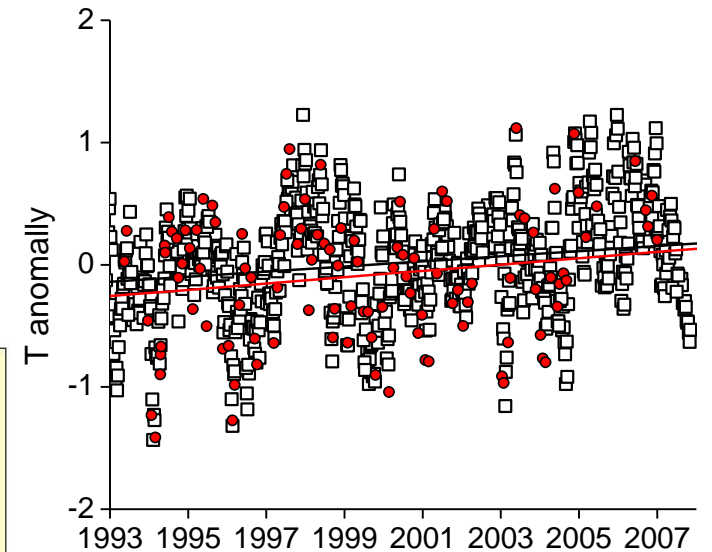
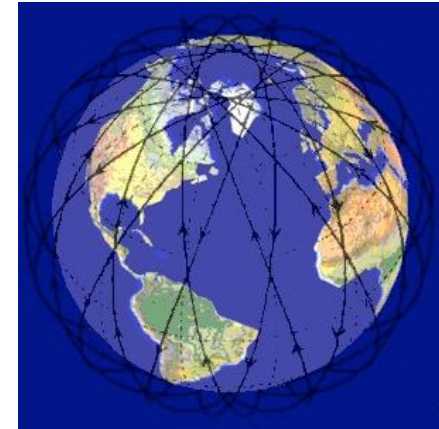
- Coastal ecosystems: coral bleaching, hypoxia
- Fisheries: displacement of species
- Sea level rise (SW expansion, ice melting)
- Climatic events: tropical storms, precipitation
- Global ocean circulation: global climate alterations



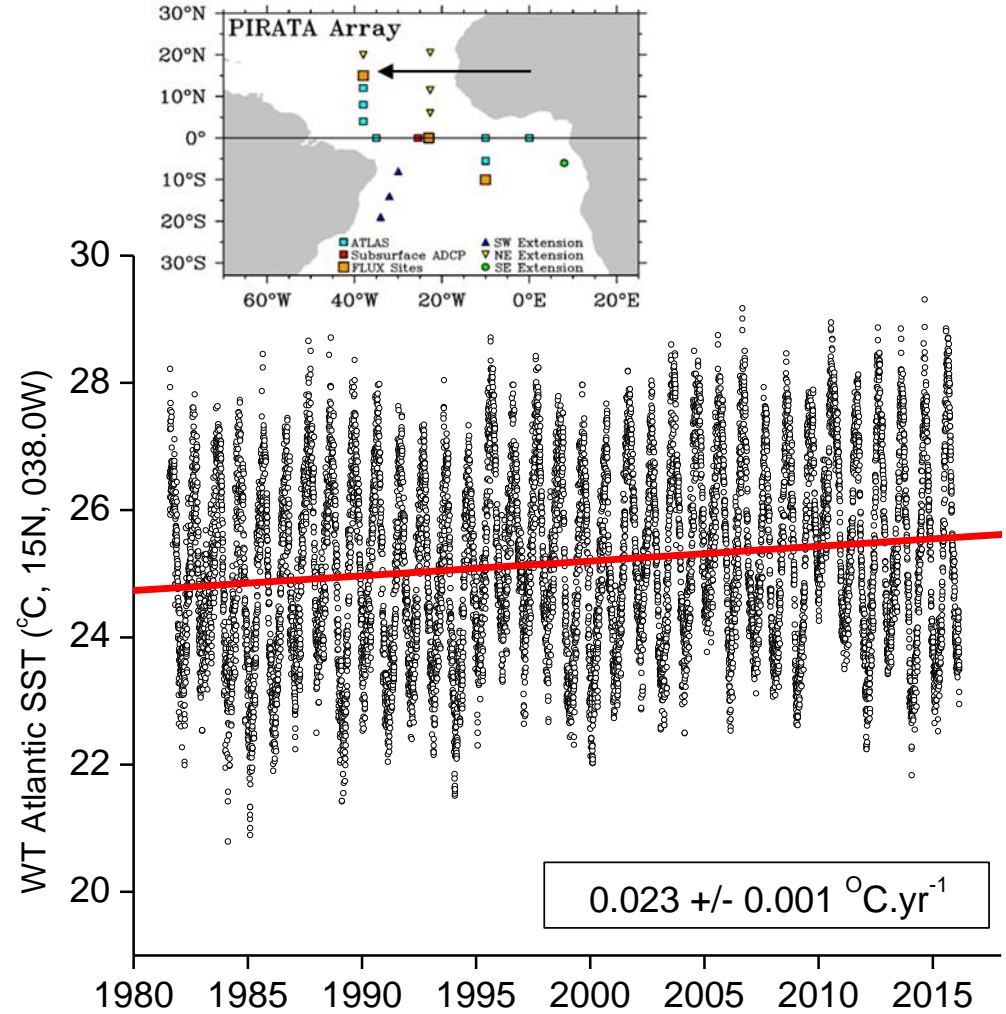
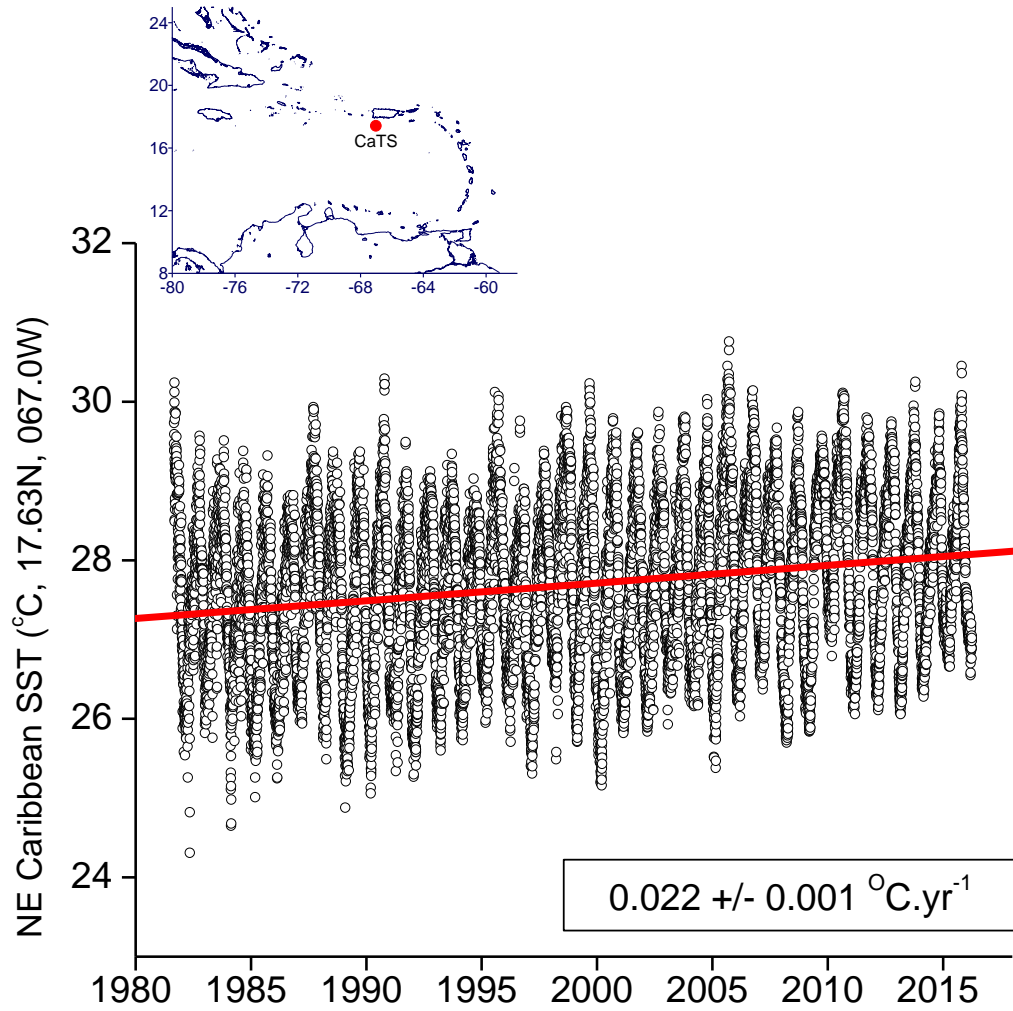
Data : SST, Daily Optimum Interpolation (OI), AVHRR, (NOAA POES)



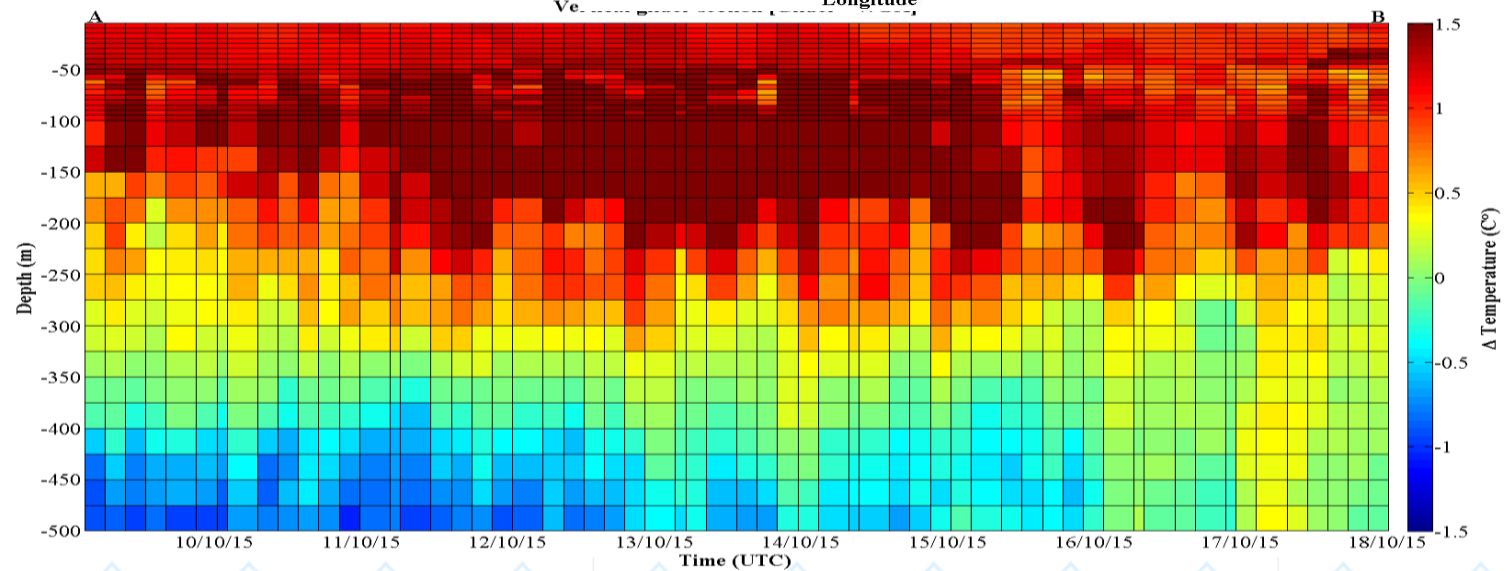
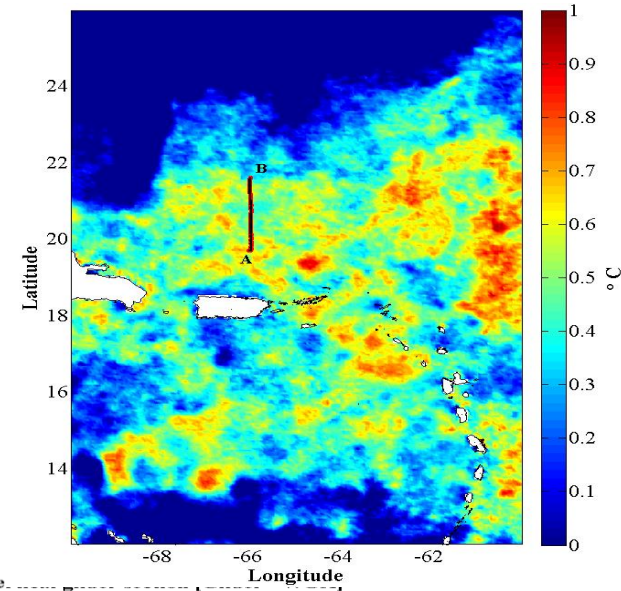
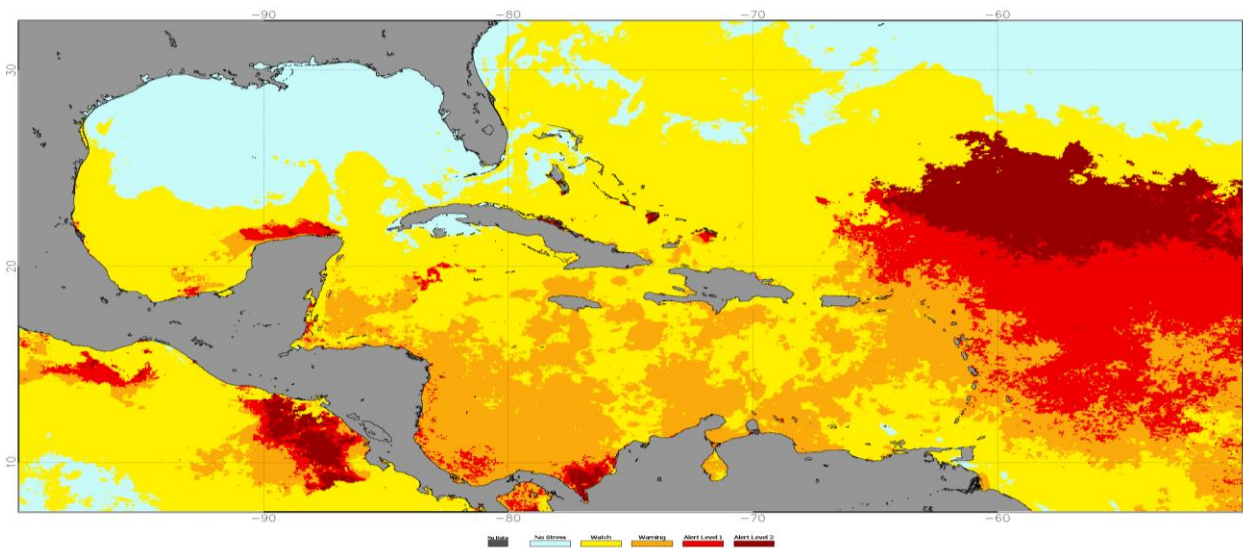
Daily Sea Surface Temperature (degree C)
SST, Daily Optimum Interpolation (OI), AVHRR Only, Version 2, Final+Preliminary
(2016-04-05T00:00:00Z, Altitude=0.0 m)
Data courtesy of NOAA NCDC



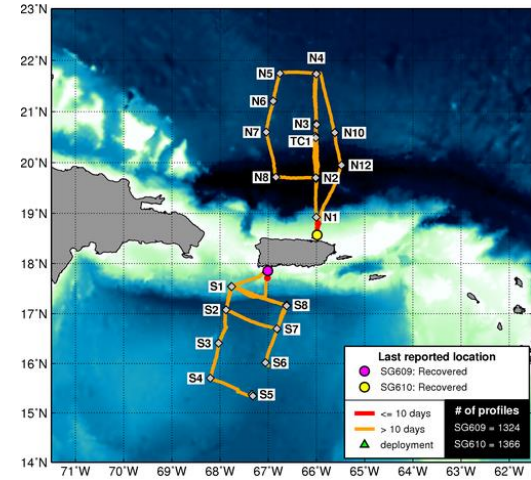
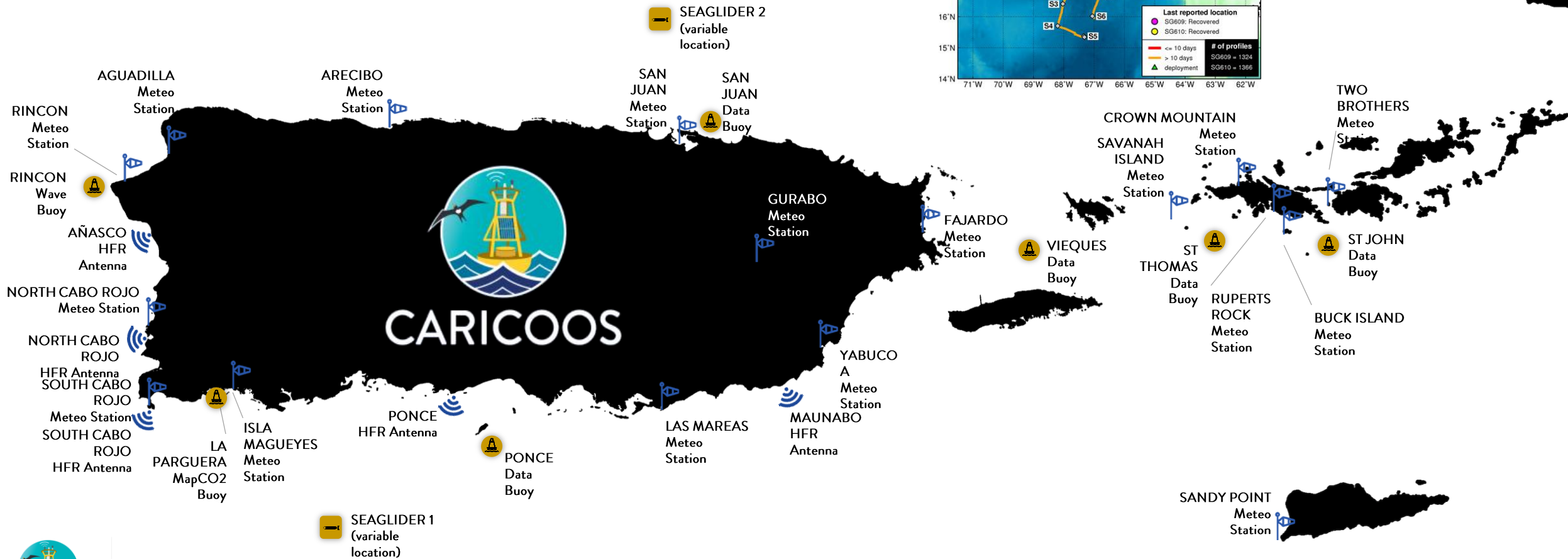
SST trends to 1982 to 2016:



October 8, 2015: NOAA declares third ever global coral bleaching event. Bleaching intensifies in Hawaii, high ocean temperatures threaten Caribbean corals



CariCOOS Observing Assets





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