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

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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”

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)
SST trends to 1982 to 2016:

- NE Caribbean SST (°C, 17.63N, 067.0W): 0.022 +/- 0.001 °C.yr⁻¹
- WT Atlantic SST (°C, 15N, 038.0W): 0.023 +/- 0.001 °C.yr⁻¹
October 8, 2015: NOAA declares third ever global coral bleaching event. Bleaching intensifies in Hawaii, high ocean temperatures threaten Caribbean corals.
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