



Air-sea fluxes in the Atlantic from satellite measurements.

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We estimate the net heat flux in the tropical and subtropical Atlantic Ocean using satellite data. These fluxes are related to changes in sea surface temperature (SST), which is therefore an important input parameter. This variable influences atmospheric circulations and is indicative of surface and subsurface oceanic circulations. We employ data from the geostationary satellites, METEOSAT-7 and 8, and from the Special Sensor Microwave/Imager (SSM/I) for the shortwave and long-wave radiative fluxes, and for estimates of SST. For turbulent flux calculations, we use the bulk aerodynamic method with satellite estimates for wind speed (several scatterometer instruments, and atmospheric humidity and temperature estimated from the SSM/I and the Bowen ration. The turbulent flux estimates have been processed at the Institut Francais de Recherche pour l'Exploitation de la Mer (IFREMER), since the launch of the European Remote Sensing Satellite 1 in 1991. Fifteen years of data are now processed and are being evaluated for their accuracy and for the information they provide on climate signals in this region. Data from several field campaigns, especially recent observations in the

tropical Atlantic from ships and buoys, are invoked. Anomalies observed in the record will be discussed.