Use of Special Sensor Microwave/Imager data to improve satellite-derived sea surface temperature

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The development of satellite algorithms for sea surface temperature retrieval requires high quality in situ measurements simultaneous in time and space with satellite data. In order to choose the best set of available observations for NOAA14/AVHRR sensor from Pathfinder Matchups Database, we have used auxiliary information from an independent sensor, the DMSP F-13 SSM/I wind speed. The period studied encompasses the years 1995 to 1999. The total number of new matchups is 123843. We analyze the errors produced in the estimation of satellite sea surface temperature as a function of wind speed, for day and night, different season and geographical regions.