

Applying Big Data Analysis Method to Improvement Sea Surface Temperature of Geostationary Satellite.

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Big Data is the amount of data involved enormous and cannot be the information within a reasonable period of time to query, retrieve, manage, and analyze. The Big Data are three qualities: Volume, Velocity, and Variety, which information in many fields have brought progress and a breakthrough opportunity. Recent studies sea surface temperature mostly as a reference material Moderate Resolution Imaging Spectroradiometer (MODIS). Sun-synchronous satellites significantly better than geostationary satellites at a time resolution. The equatorial region of the tropical Pacific SST bias main factors are wind speed and air temperature in past studies. In this study, used big data commonly algorithms to provide sea surface temperature (SST) image hourly data. We apply and compare data mining techniques to improve the quality of GOES SST product. By a logistic regression approach, the GOES SST can be determined with an accuracy of 0.4°K and an improvement of the correction to 95%.

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