

Table 34 Sea Surface Temperature

| | Data type #1 NOAA AVHRR | Data type #2 MODIS SST |
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| <i>Spatial Dimensions</i> | | |
| Area to cover | 2400 x 6400 kilometers | 2000 km wide segments |
| Mapping unit | 1 km | 1 km for level 2 daily product |
| Positional accuracy | Depends on level of Geo-referencing | Depends on level of Geo-referencing |
| <i>Temporal Dimensions</i> | | |
| When | Approx. 1030hrs and 2230hrs | Approx. 1030hrs and 2230hrs |
| How often | Twice daily | Twice daily (AQUQ and TERRA) |
| Variable to map | Sea surface temperature | Sea surface temperature |
| Environmental / Sensor Restrictions | Clouds, strong winds and breaking waves. | Clouds, strong winds and breaking waves. |
| Processing technique (Output) | Image cover slicing and colour coding Map of SST variation | Image cover slicing and colour coding Map of SST variation |
| Resources – Hardware and Software | PC Image processing software | PC Image processing software |
| Resource – Personnel | Trained in image analysis and experience with AVHRR thermal data Knowledge of area to be mapped | Trained in image analysis and experience with MODIS thermal data Knowledge of area to be mapped |
| References: Note these are some example references | McClain et al (1985) Walton et al (1998) | Brown et al (1999) |

Brown, O., Minnett, P., Evans, R., Kearns, E., Kilpatrick, K., Kumar, A., Sikorski, R., and Závody, A., (1999). "MODIS Infrared Sea Surface Temperature Algorithm Theoretical Basis Document Version 2.0." University of Miami, NAS5-31361.

McClain, E., Pichel, W., and Walton, C., (1985). "Comparative performance of AVHRR-based multichannel sea surface temperatures." Journal of Geophysical Research, 90: 11.

Walton, C., Pichel, W., Sapper, J., and May, D., (1998). "The development and operational application of nonlinear algorithms for the measurement of sea surface temperatures with the NOAA polar-orbiting environmental satellites." Journal of Geophysical Research, 103: 27,999-928,012.