



Australian Government

Geoscience Australia

**South Pacific Sea Level and Climate Monitoring GPS
Coordinate Time Series**

National Geospatial Reference Systems Project

Geospatial & Earth Monitoring Division, Geoscience Australia

February 29, 2008

Department of Resources, Energy and Tourism

Minister for Resources, Energy and Tourism: The Hon. Martin Ferguson, MP

Secretary: Dr. Peter Boxall

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Note of Caution:

It is important to note that the length of the time series of some sites may be too short for reliable vertical station velocity estimation. As the data collection and the height time series becomes longer, and the strategy of simultaneous estimation of velocities and periodical or seasonal signals is used, the estimates of the vertical crustal motion will become more accurate and reliable.

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1 General Notes

- I. This combined SPSLCMP GPS solution has been aligned to the GPS realization IGS05 of International Terrestrial Reference Frame 2005 (ITRF2005).
- II. Error bars are 1 sigma. All variance-covariance has been re-scaled to better reflect actual precision.
- III. Each solution 'circle' represents a weekly combined solution. Outliers are not shown on plots.
- IV. The combined flicker and white noise models for 3D velocity estimation for each CGPS site.

2..Time Series

2.1 Cook Islands

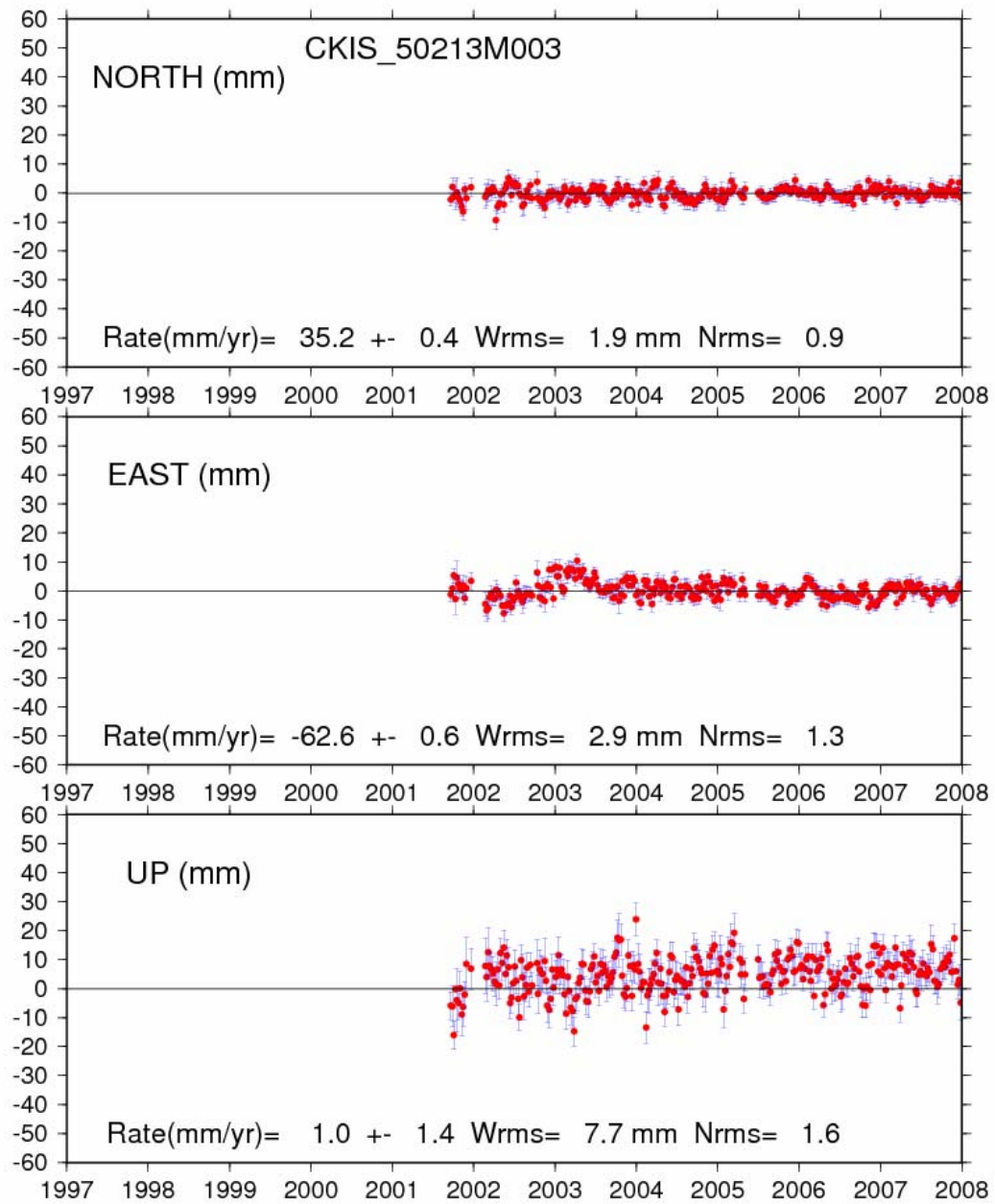


Figure 1 – De-trended in North and East and Trended in Up Time Series Plot – Cook Islands

2.2 Fiji (LAUT)

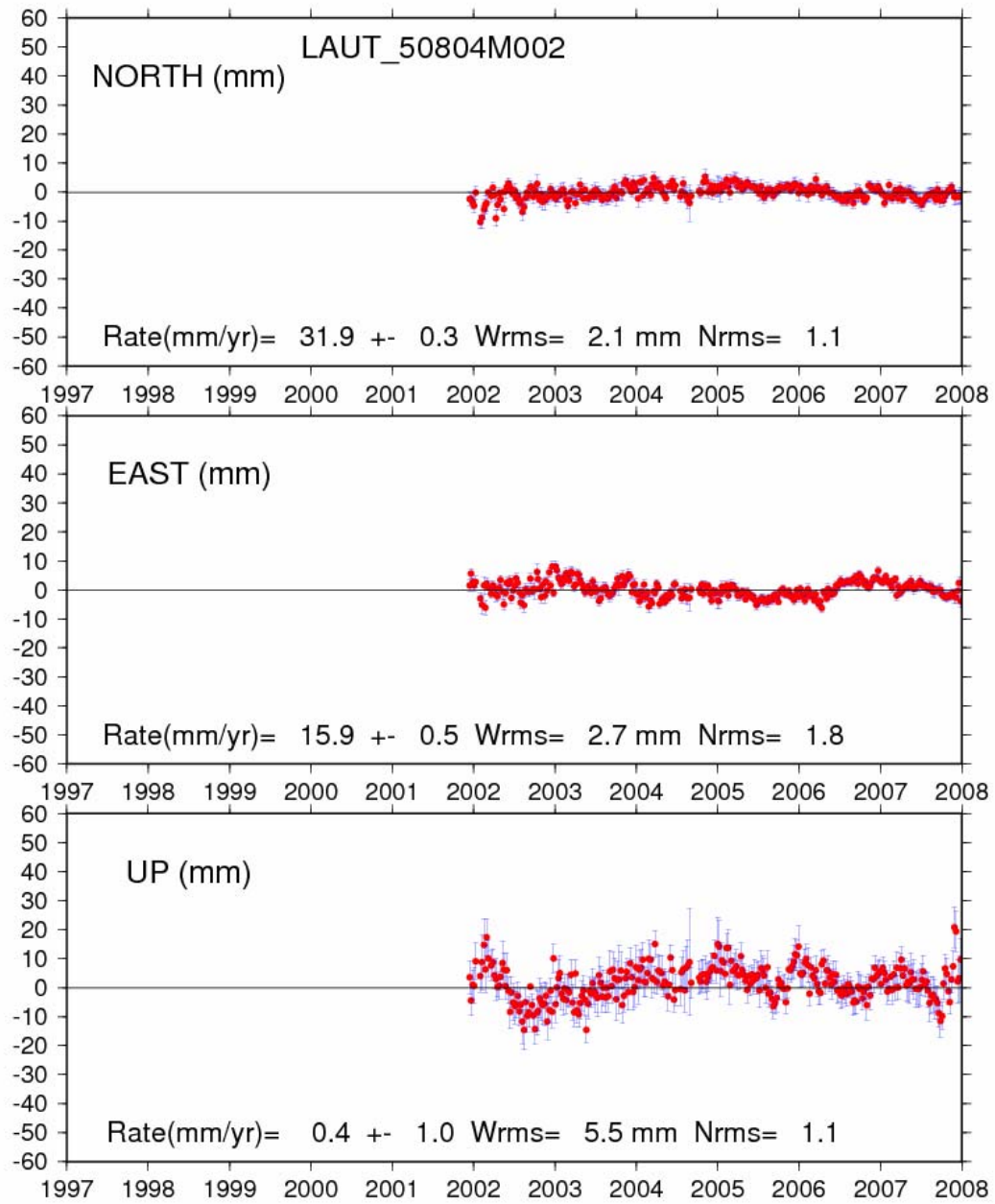


Figure 2 – De-trended in North and East and Trended in Up Time Series Plot – Fiji

2.3 Kiribati

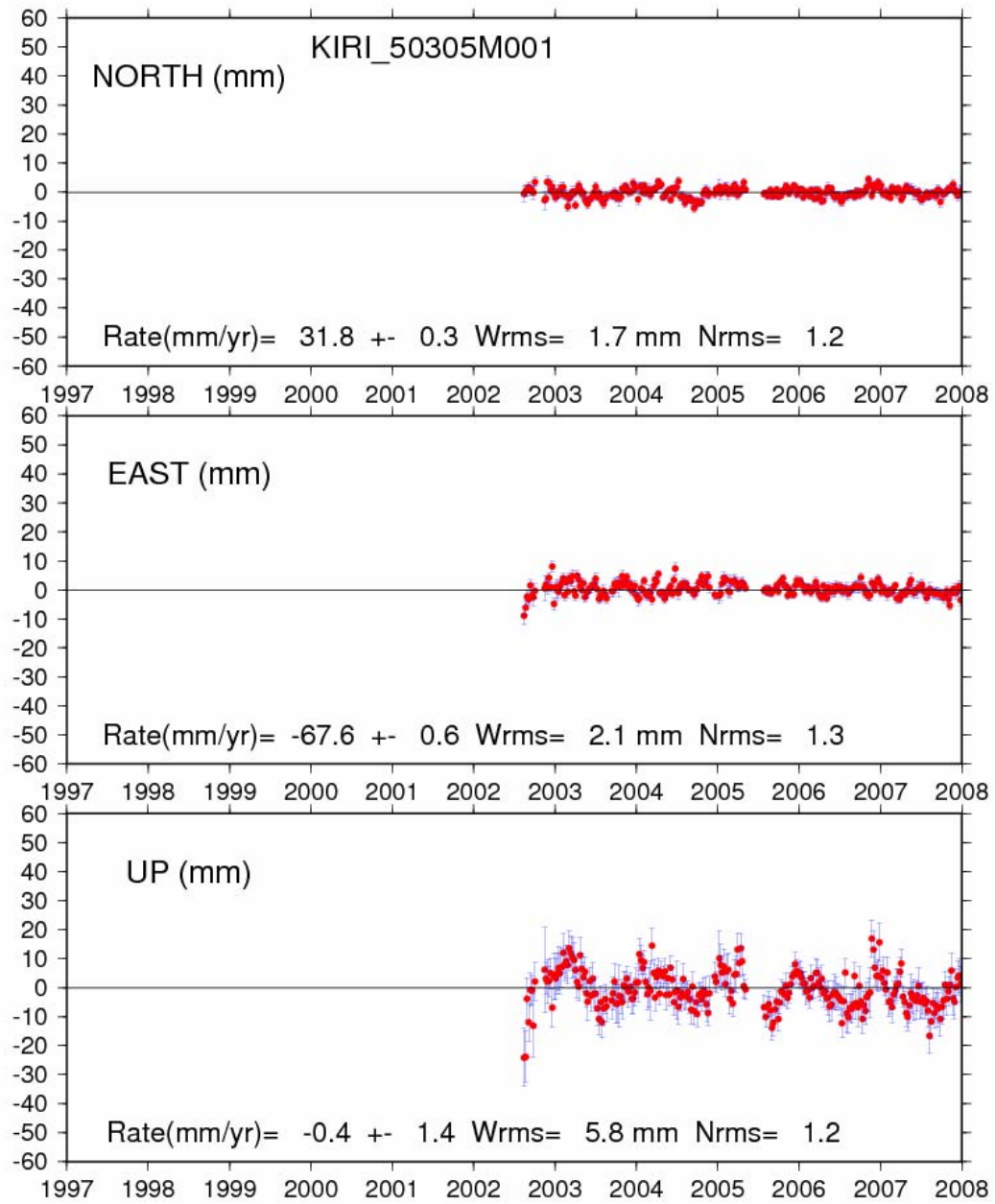


Figure 3 – De-trended in North and East and Trended in Up Time Series Plot – Kiribati

2.4 Manus Island (PNG)

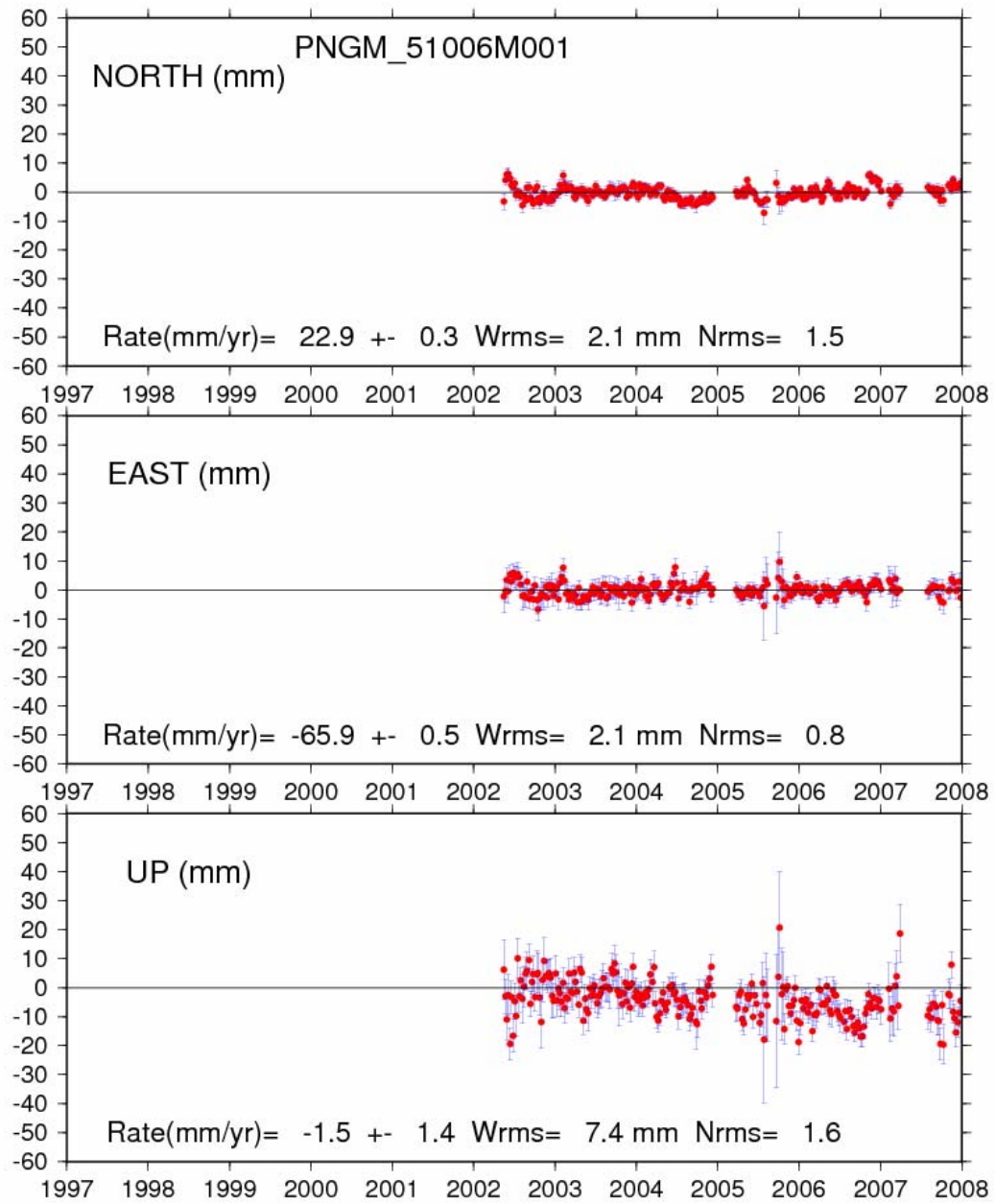


Figure 4 – De-trended in North and East and Trended in Up Time Series Plot – Manus Island

2.5 Micronesia (PHON)

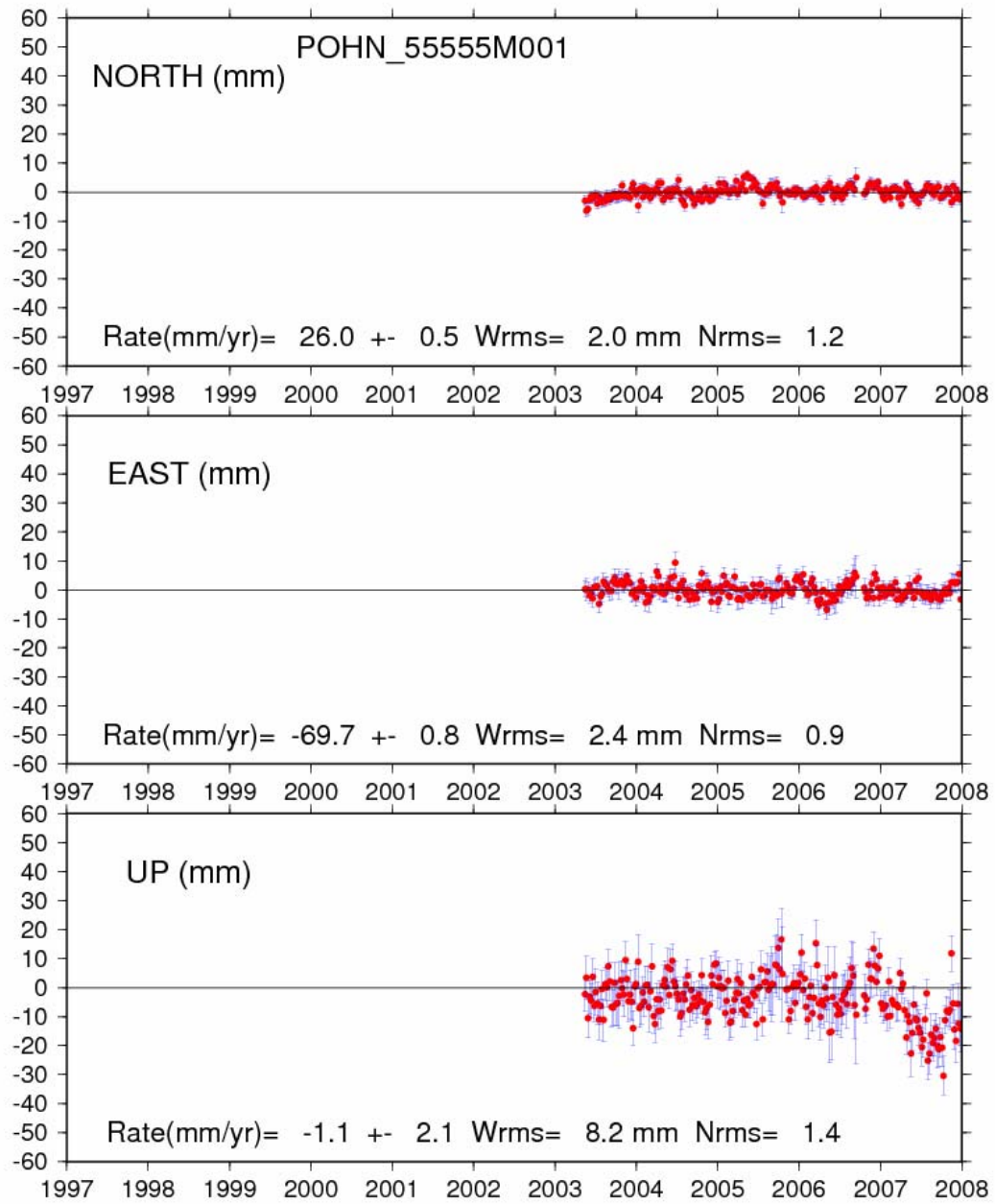


Figure 5 – De-trended in North and East and Trended in Up Time Series Plot – Micronesia

2.6 Nauru

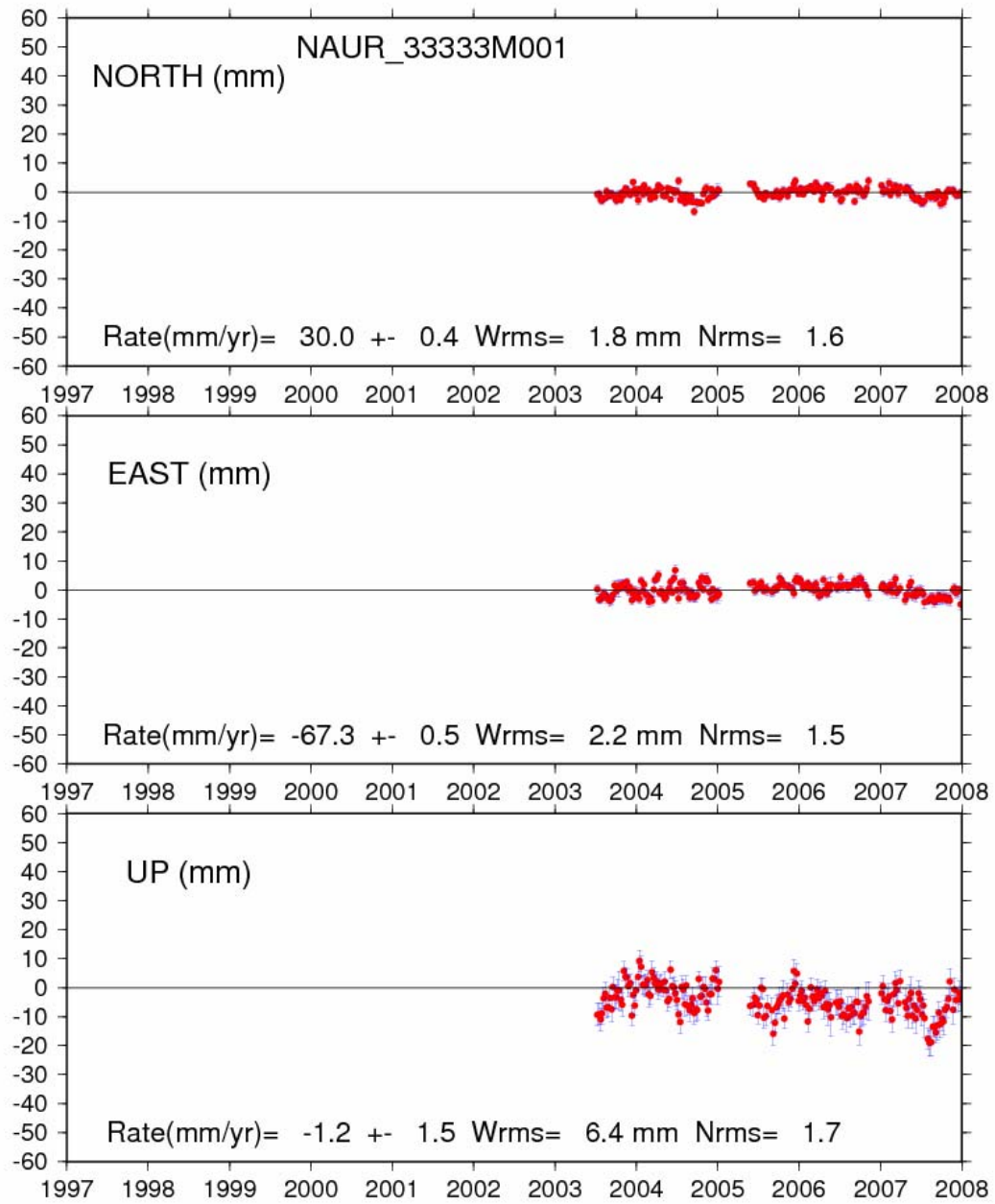


Figure 6 – De-trended in North and East and Trended in Up Time Series Plot – Nauru

2.7 Samoa

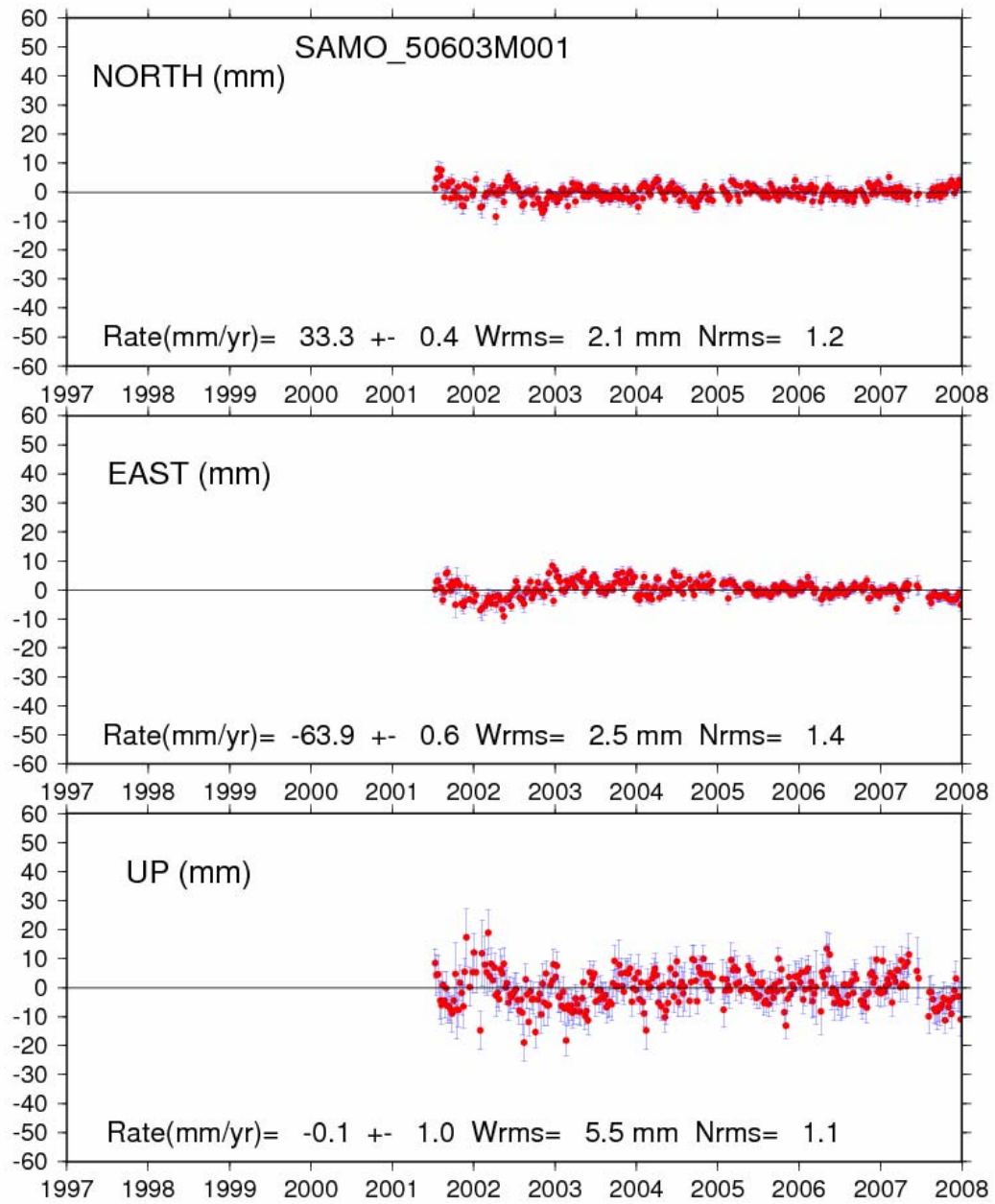


Figure 7 – De-trended in North and East and Trended in Up Time Series Plot – Samoa

2.8 Tonga

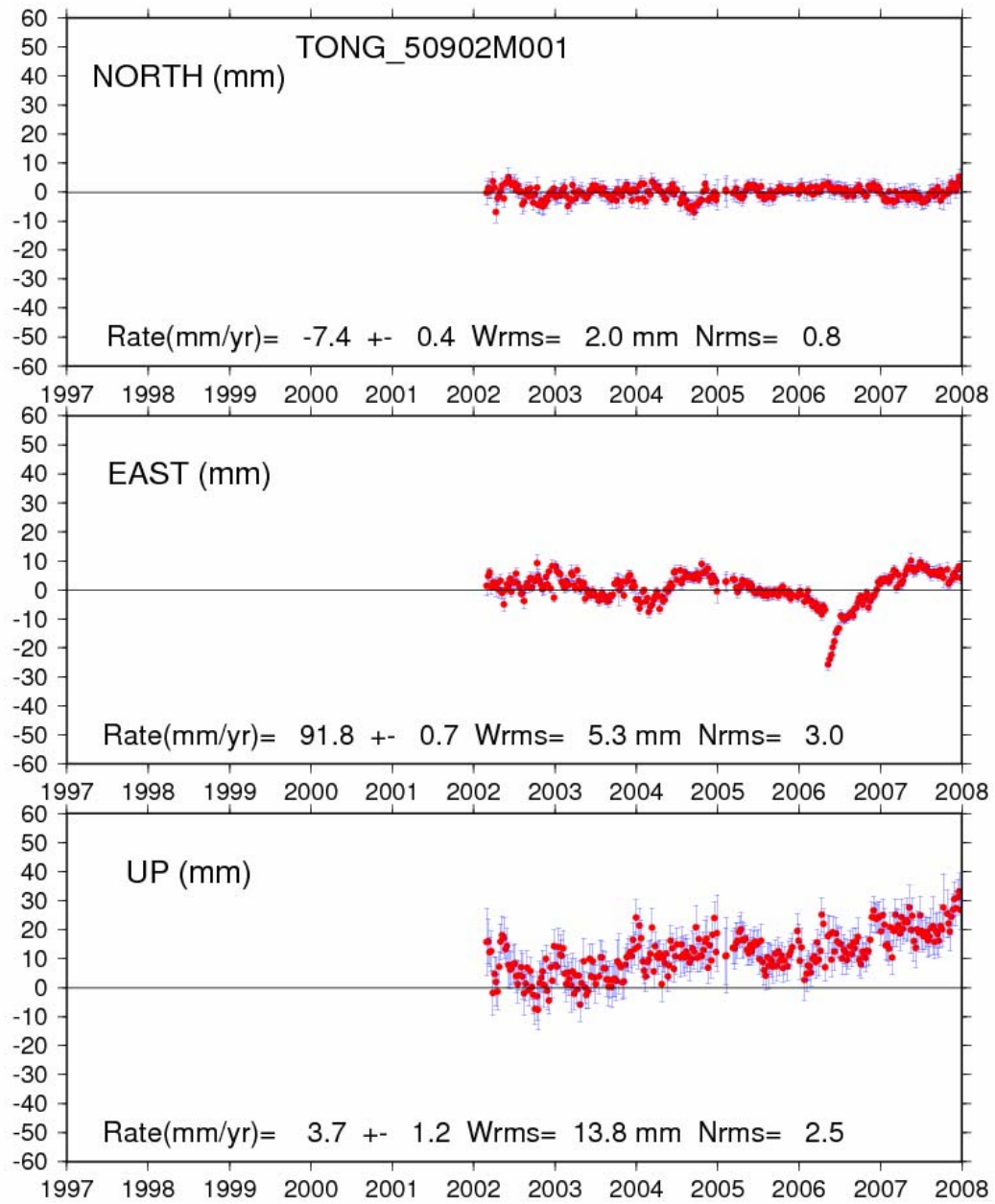


Figure 8 – De-trended in North and East and Trended in Up Time Series Plot – Tonga

2.9 Tuvalu

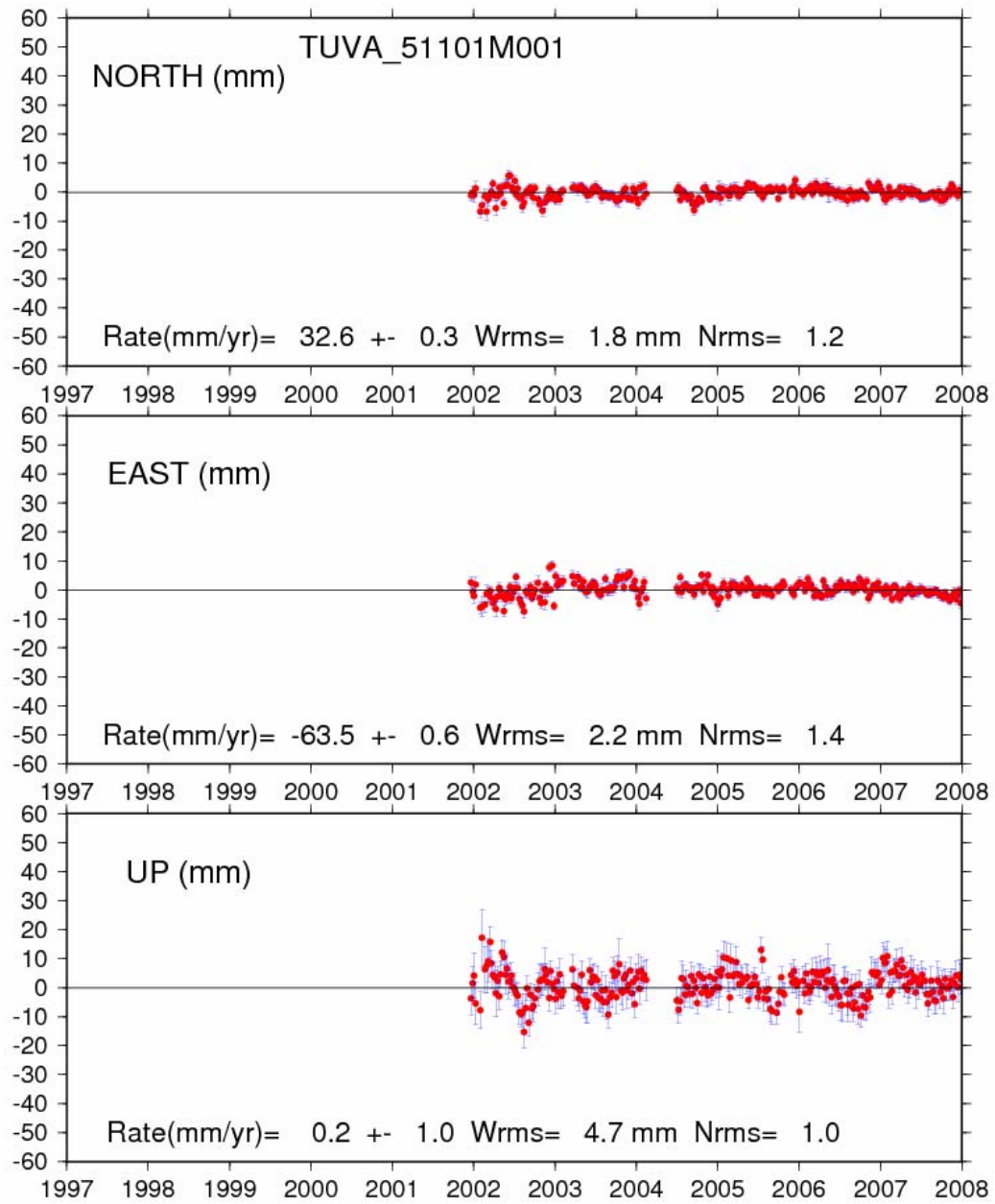


Figure 9 – De-trended in North and East and Trended in Up Time Series Plot – Tuvalu

2.10 Vanuatu

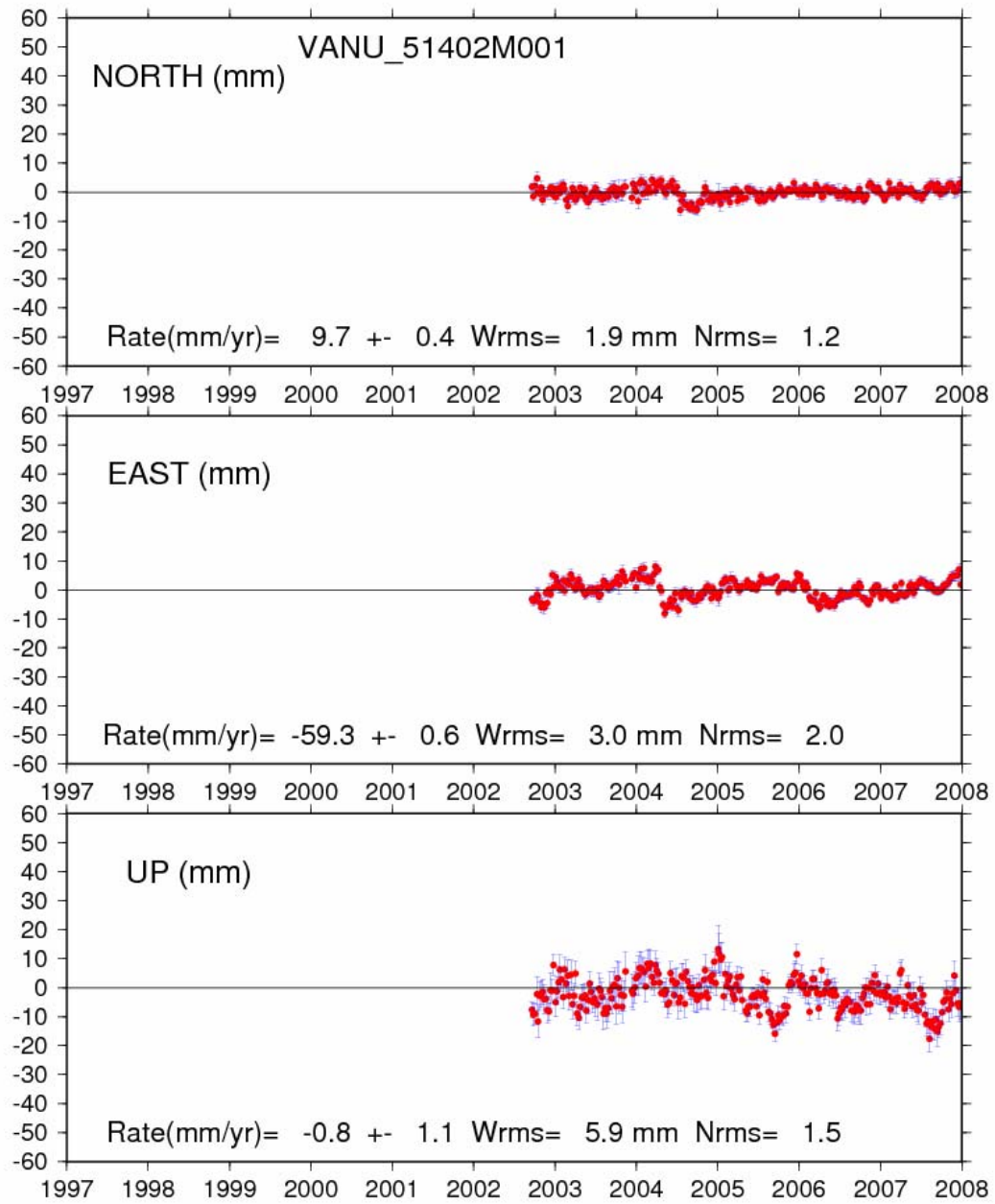


Figure 10 – De-trended in North and East and Trended in Up Time Series Plot – Vanuatu

2.11 Marshall Islands

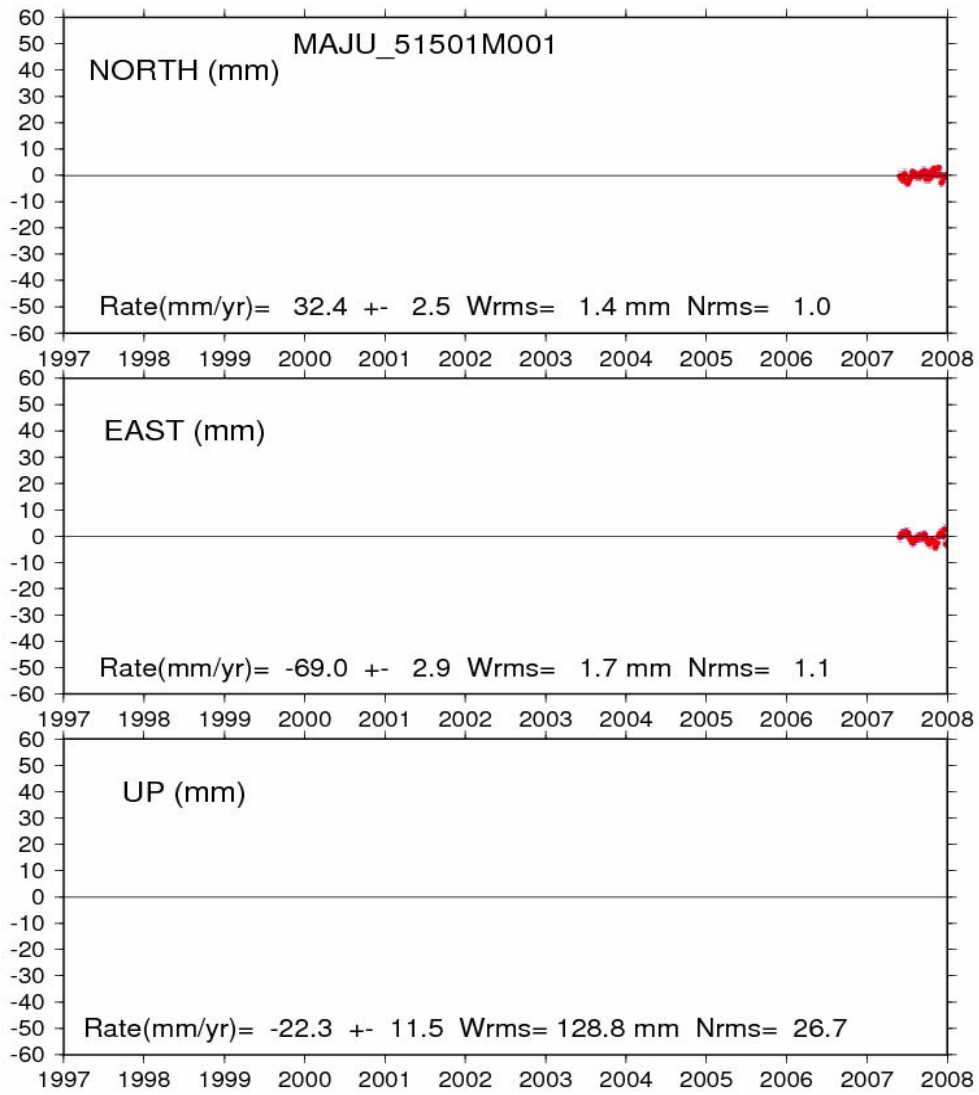


Figure 11 – De-trended in North and East and Trended in Up Time Series Plot – Marshall Islands