Comparing Different Alternatives to the Tide, Gauge Altimeter Drift Estimation Problem

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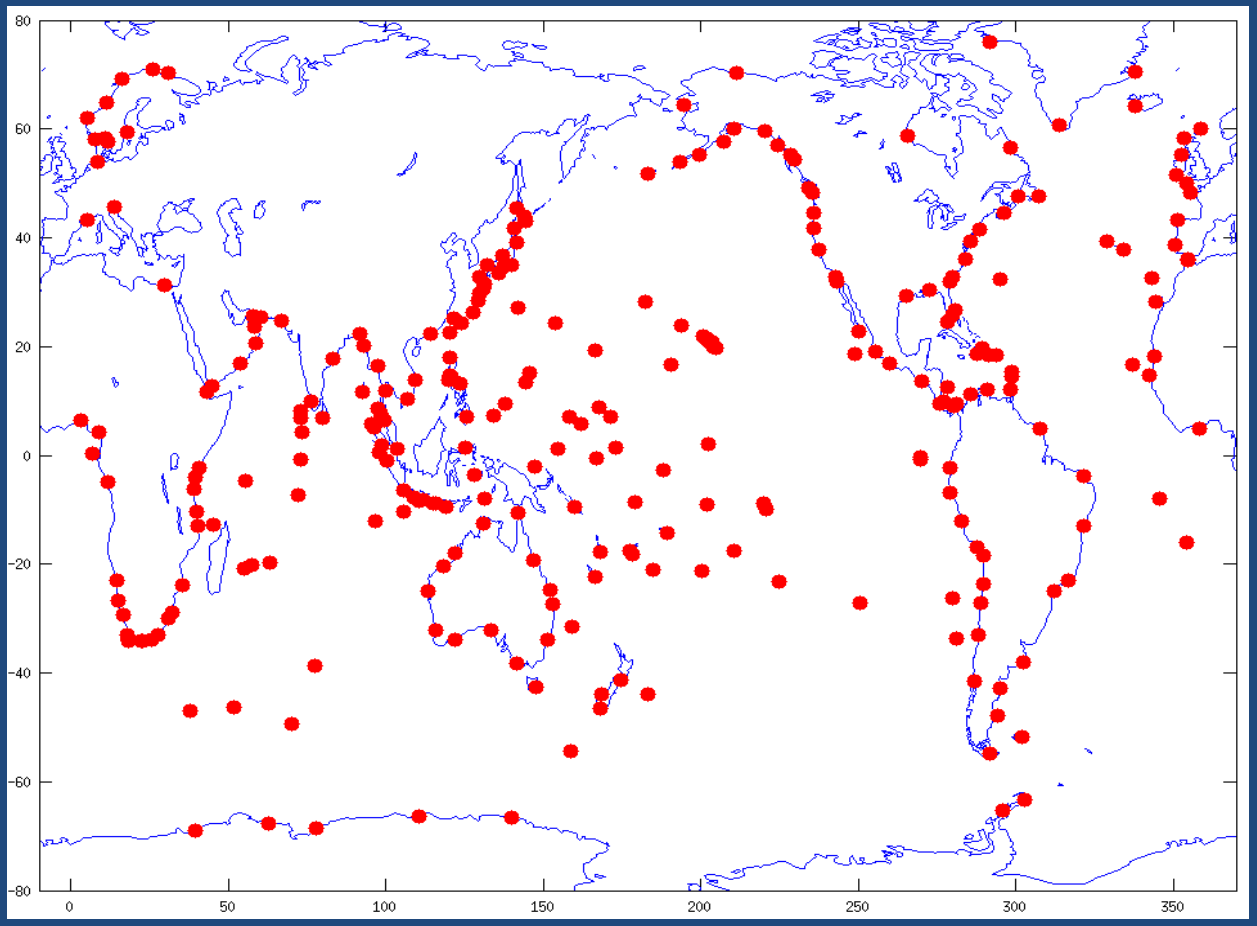
Co-authors names do not appear in order to protect the innocent …

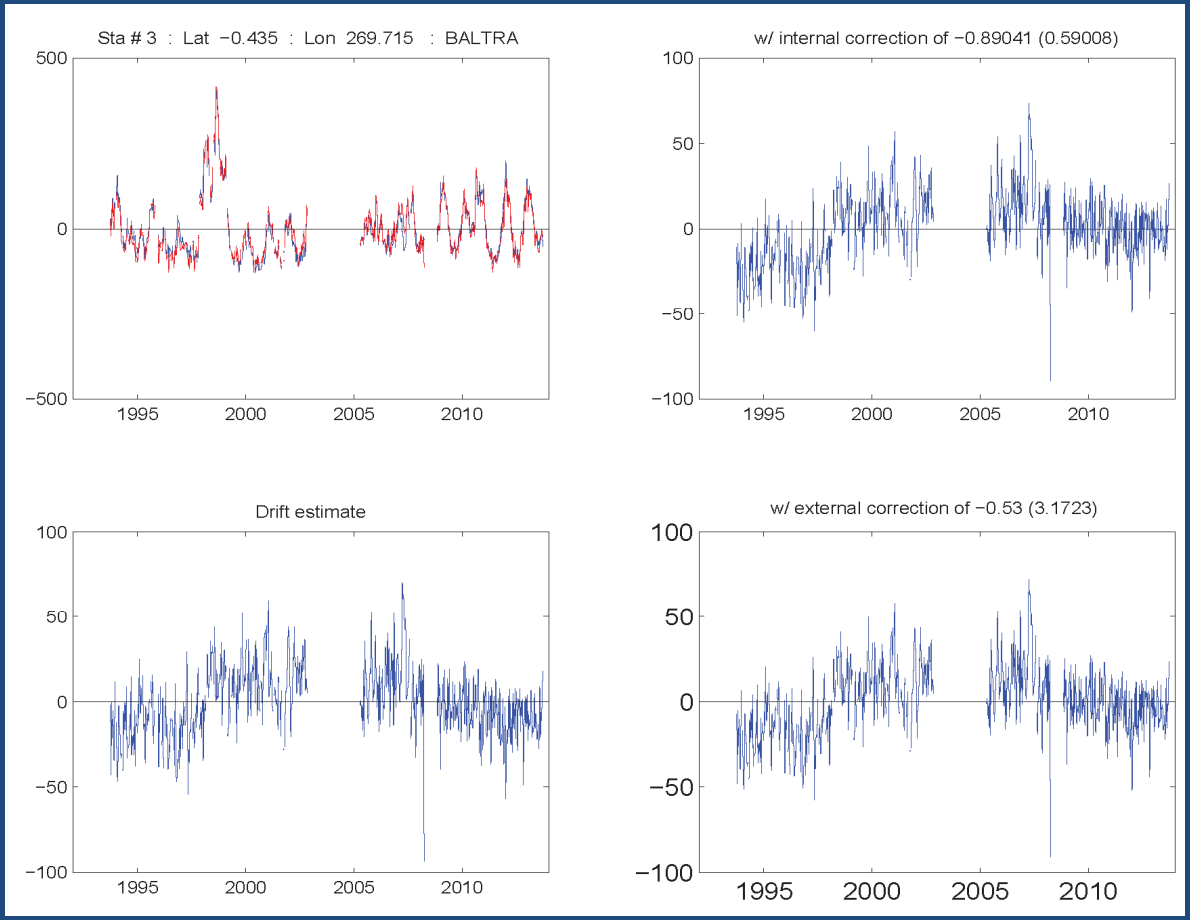
Station selection issues

1 – Statistical Independence



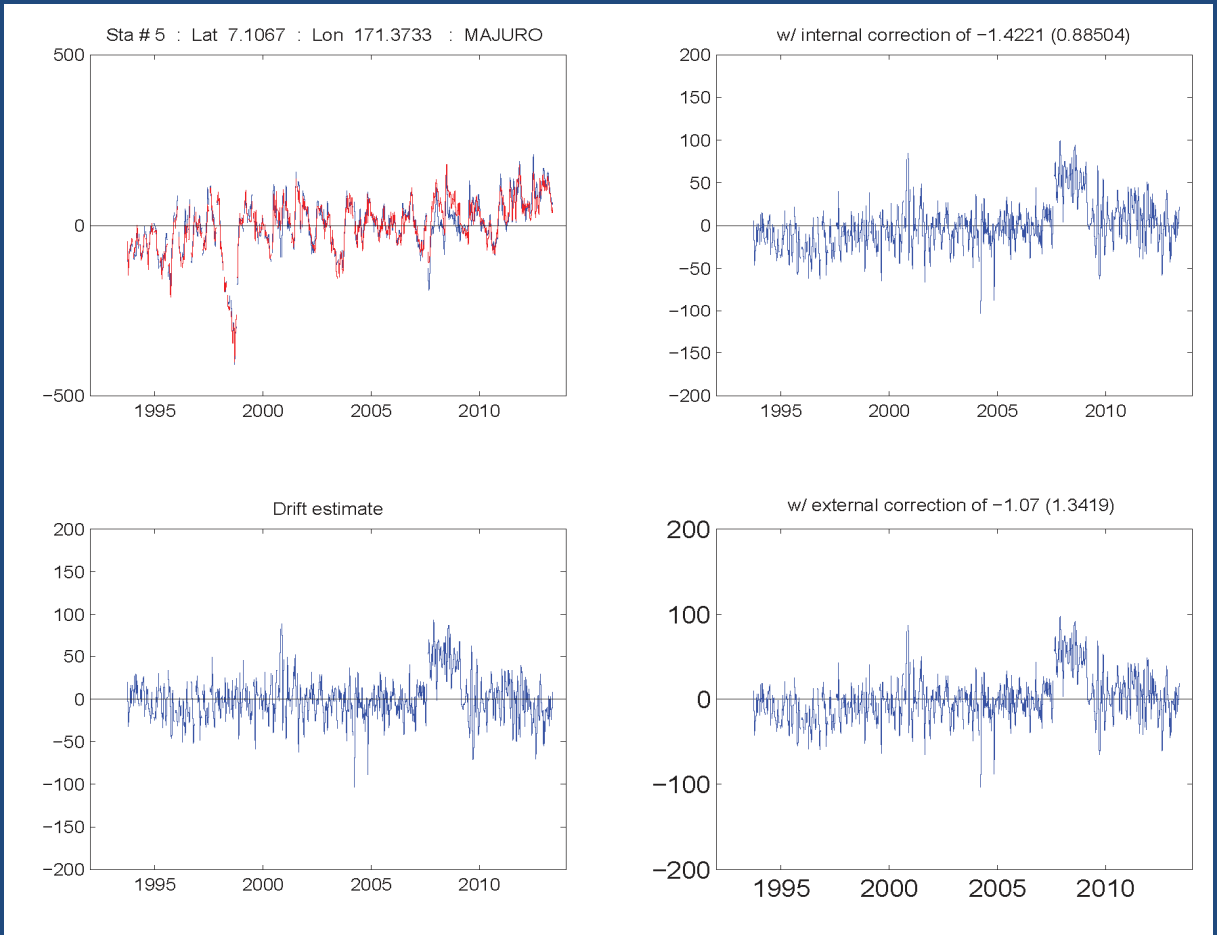
Station selection issues

2 – Independent of Altimeter



Station selection issues

2 – Independent of Altimeter



Land motion issues

1 – Careful documentation

GNSS, GIA, my “internal” estimate,
or nothing?

This is the largest source of error!

Land motion issues

2 – Bias errors

I have always included a bias error in my internal estimate.

GNSS estimates introduce the ITRF scale rate error, also a bias error.
More on this in a moment.

Error budget issues

1 – Thorough, complete derivation

The error bar on the cycle by cycle points is key to comparing different calculation methods.

Error budget issues

2 – ITRF errors are tricky

Applies to GMSL series, too?

Should we apply to both?

This point needs work.

Application issues

Drift Estimation vs. Calibration

TOPEX Side A/B step