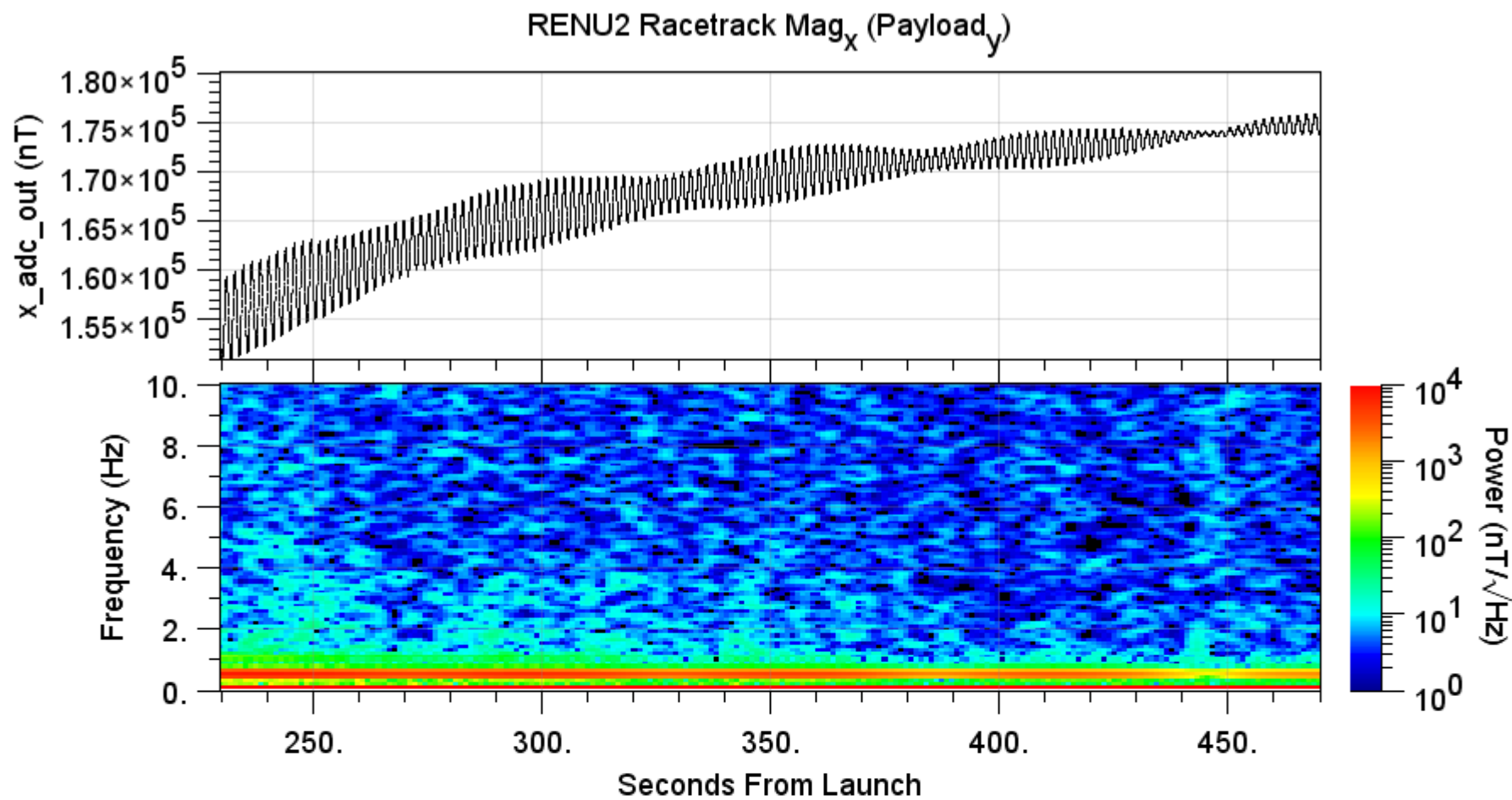




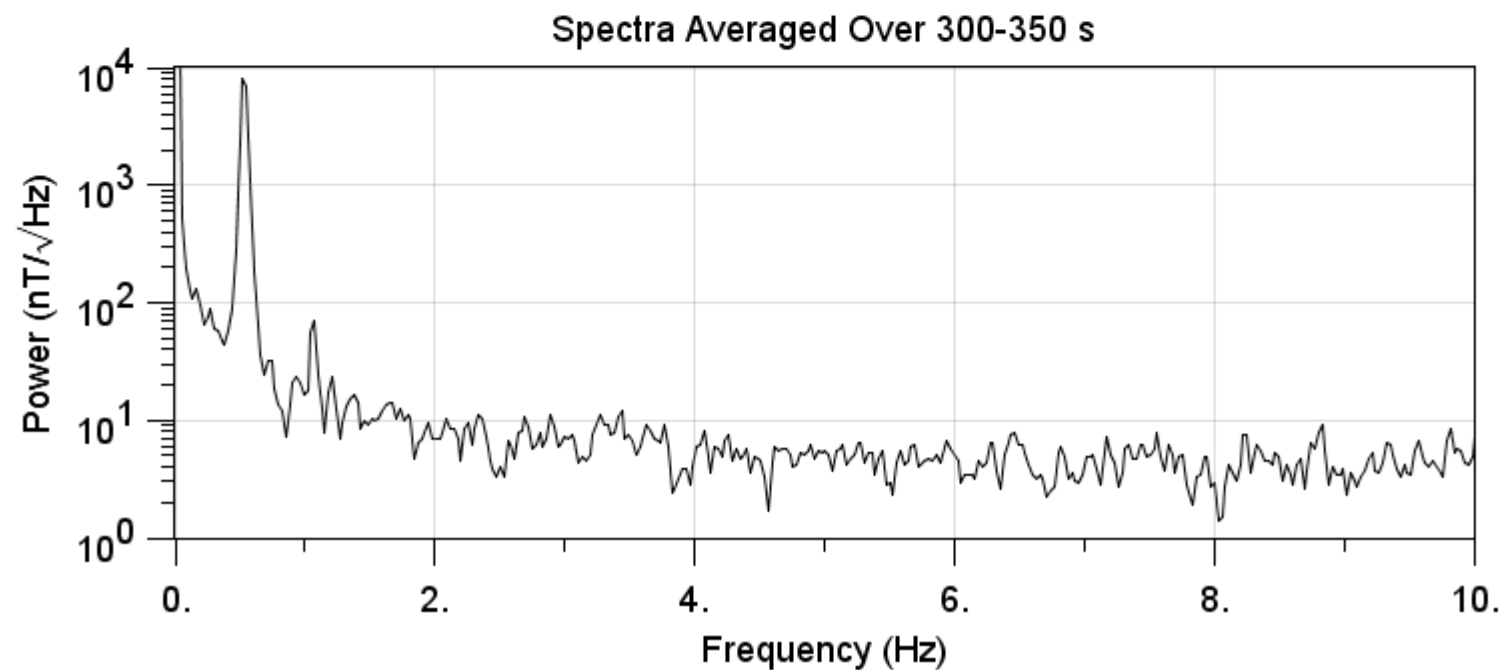
University of
New Hampshire

RENU2 Racetrack Magnetometer

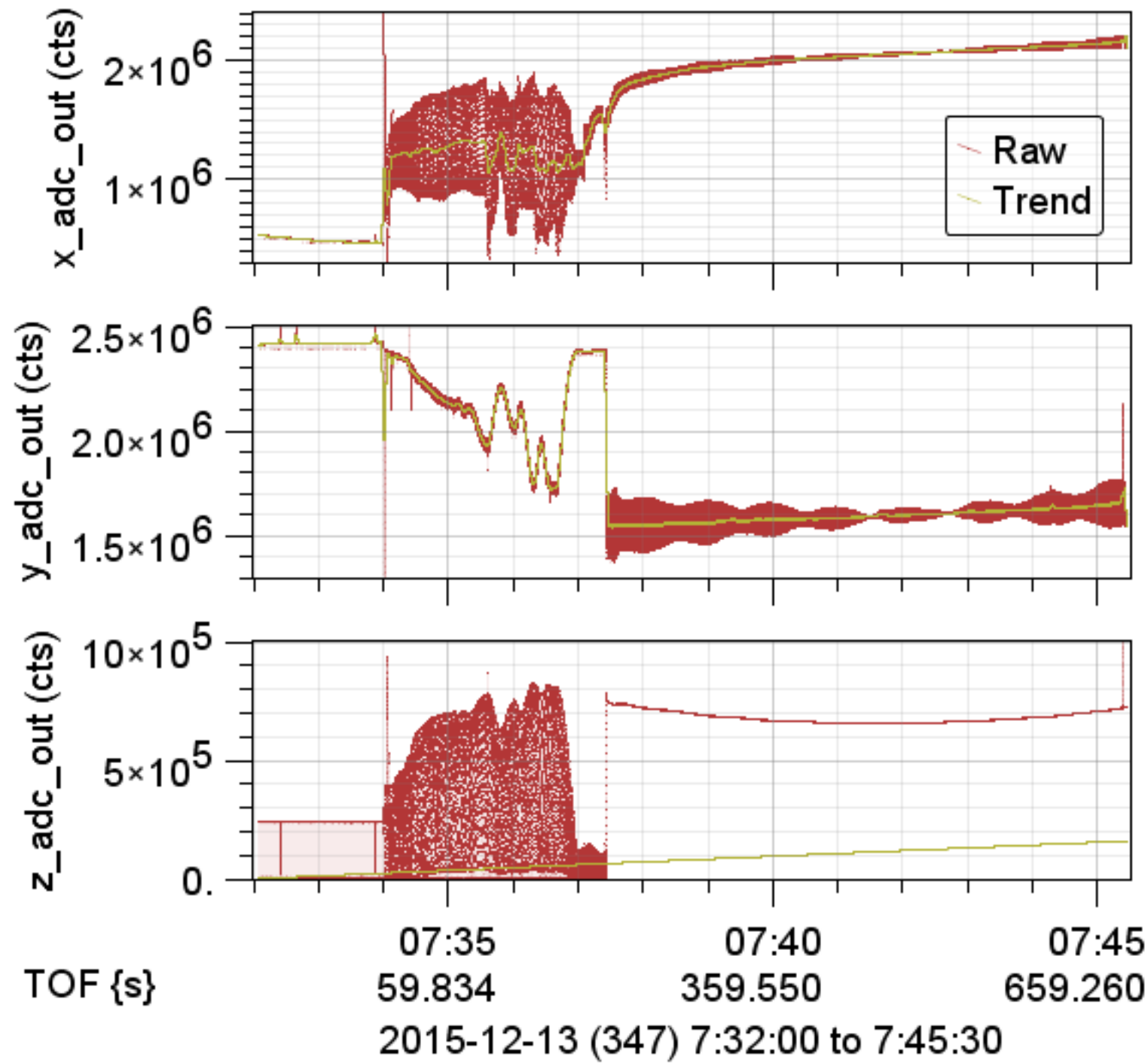


- Three orders of magnitude drop between spin tone and flat noise curve

- Drift in offset



- Applied running detrend to spin-plane components



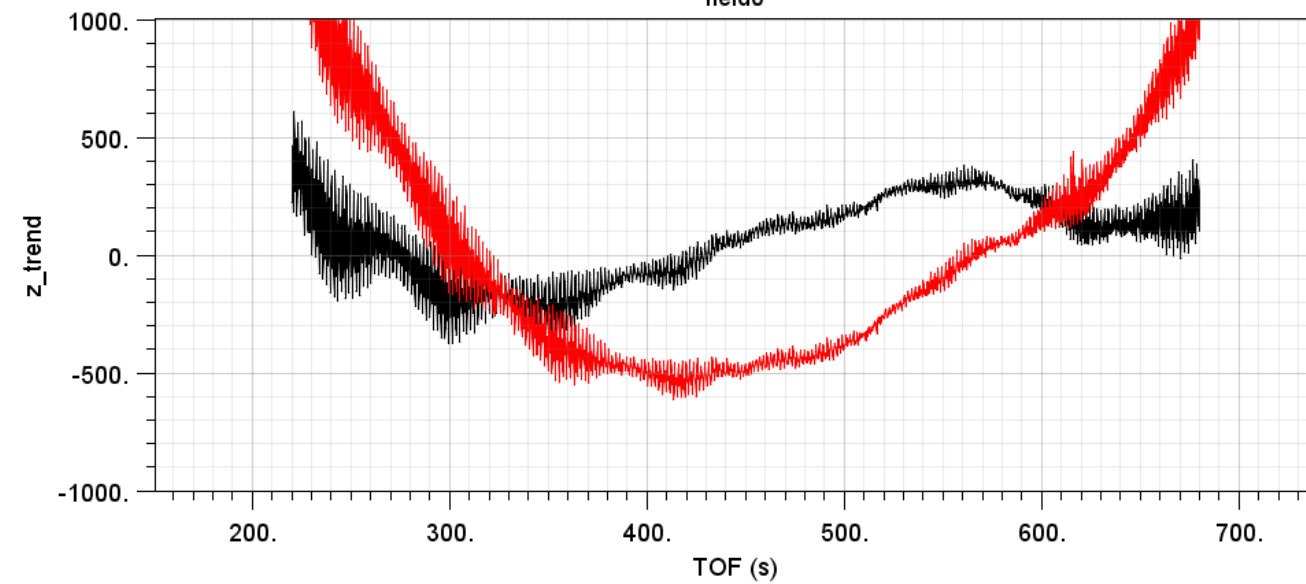
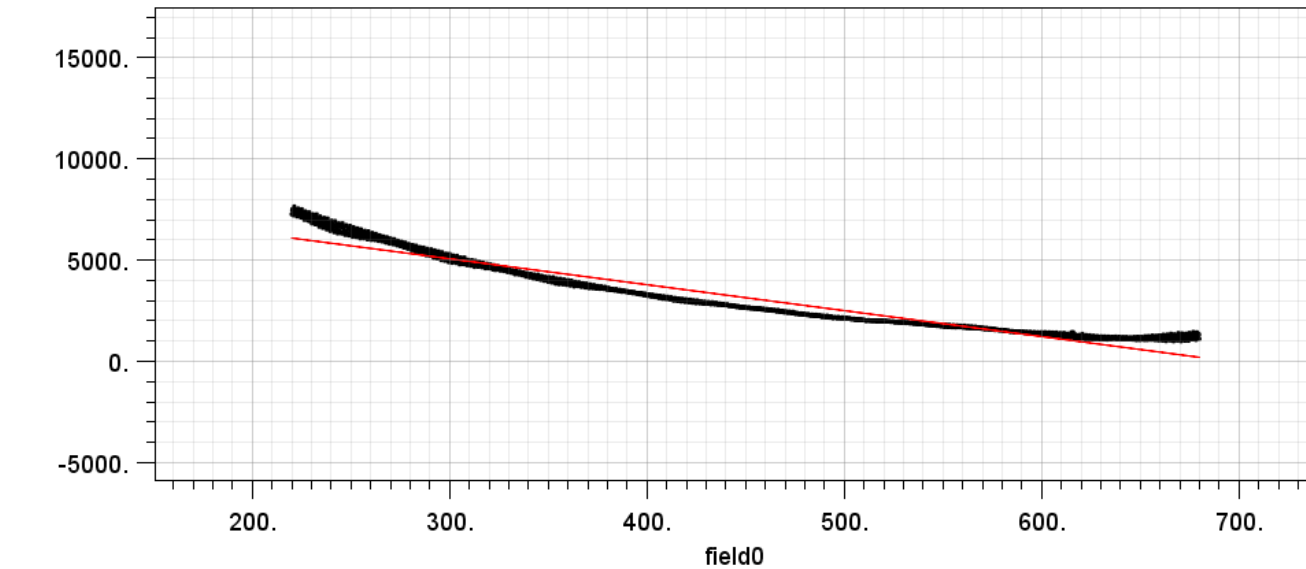
Significant nonlinear drift in RTKx

Linear drift in RTKy

Drift in RTKz undetermined until comparison with IGRF

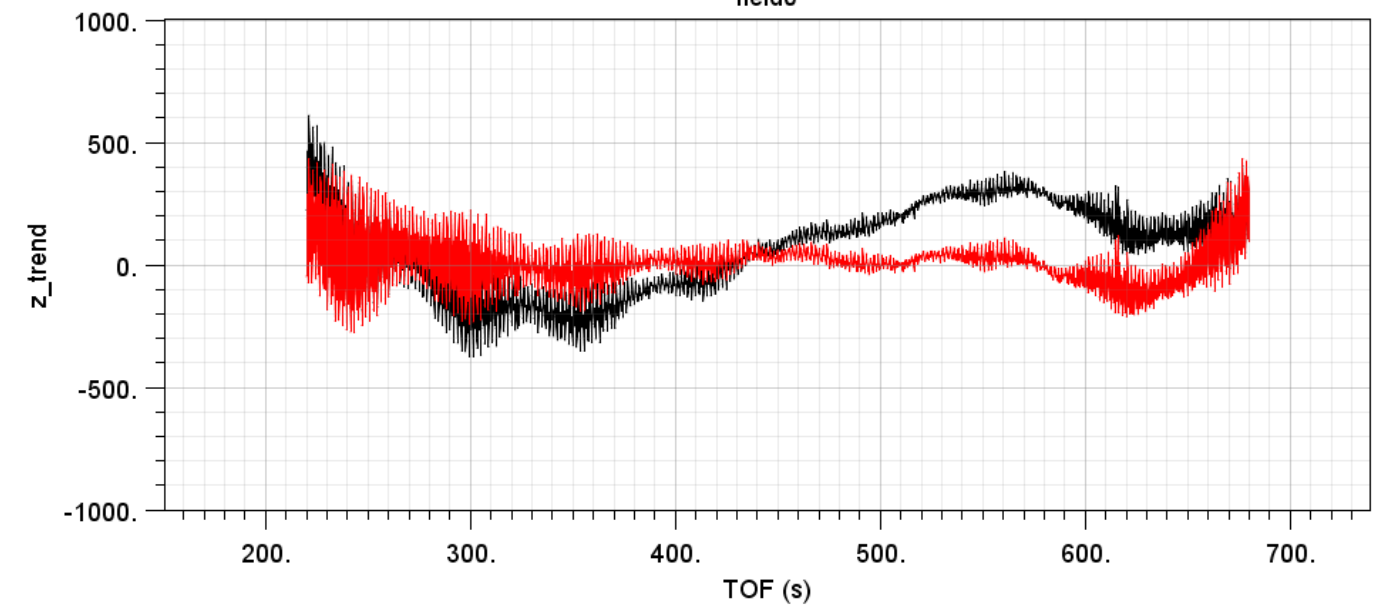
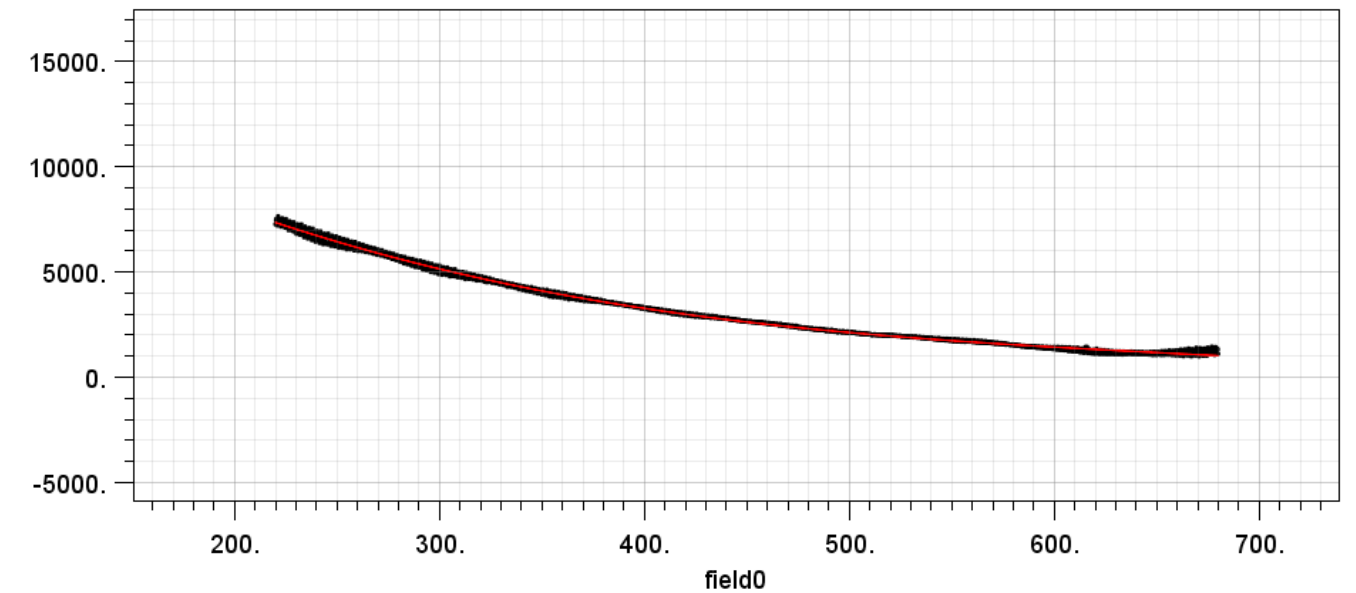
Linear

RMS: 482.24 Evaluations: 3
xslope: -12.81, yshift: 2043.95, xshift: -535.96



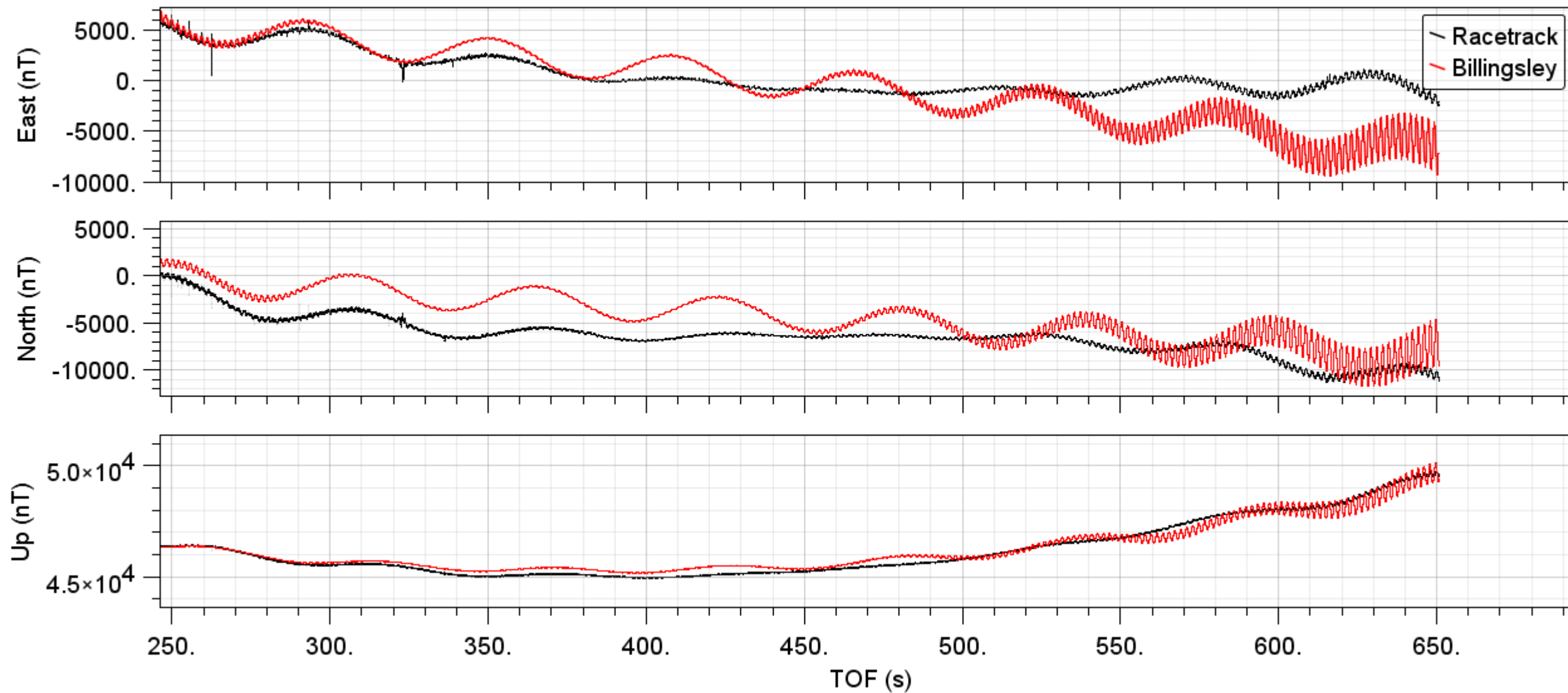
Cubic

RMS: 89.23 Evaluations: 25
xslope: -14.46, yshift: 3229.56, x²slope: 0.04, xshift: -402.92, x³slope: 0.0

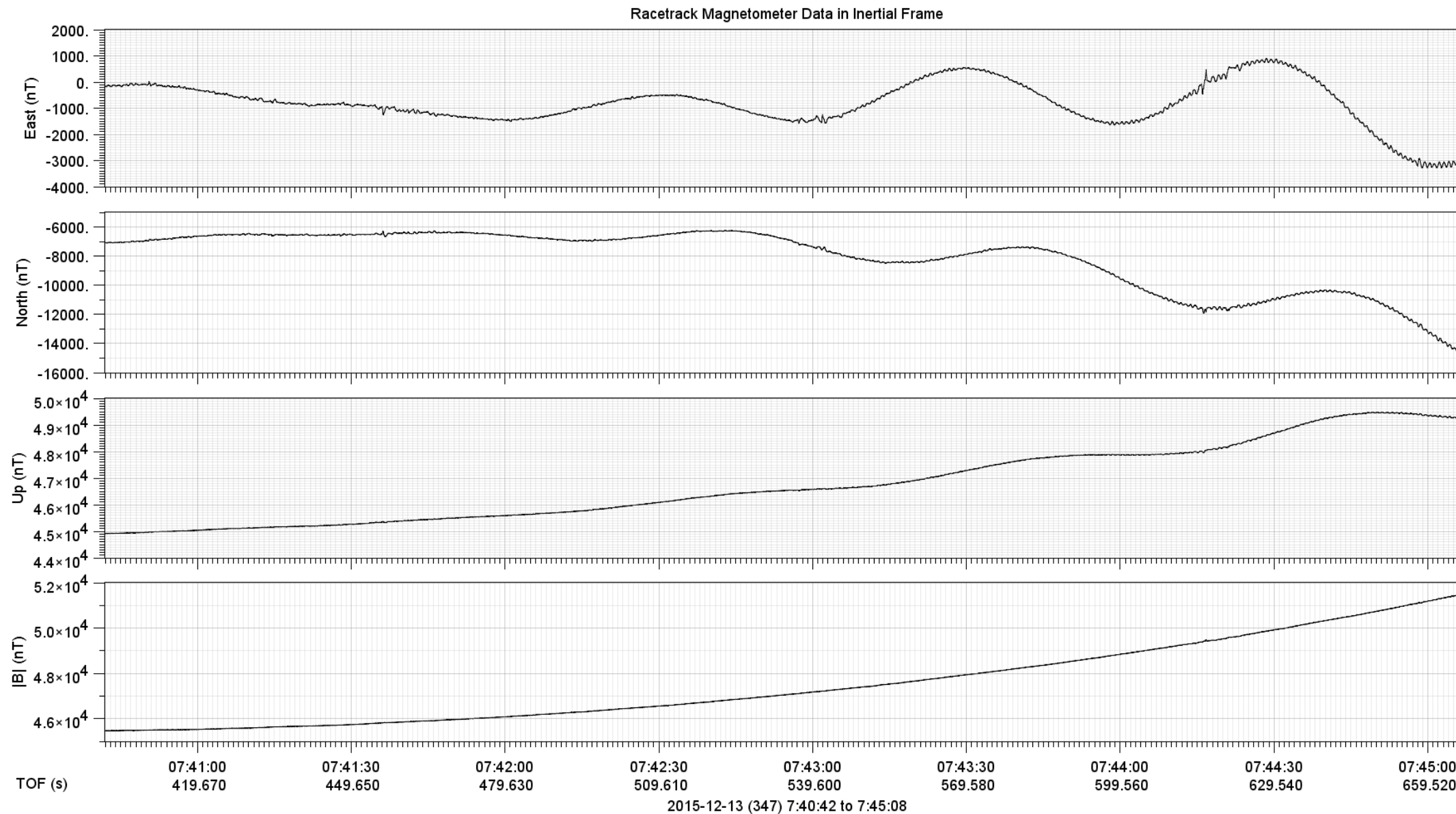


- Linear fit to drift still results in significant difference from IGRF field
- Cubic fit applied to spin-axis component

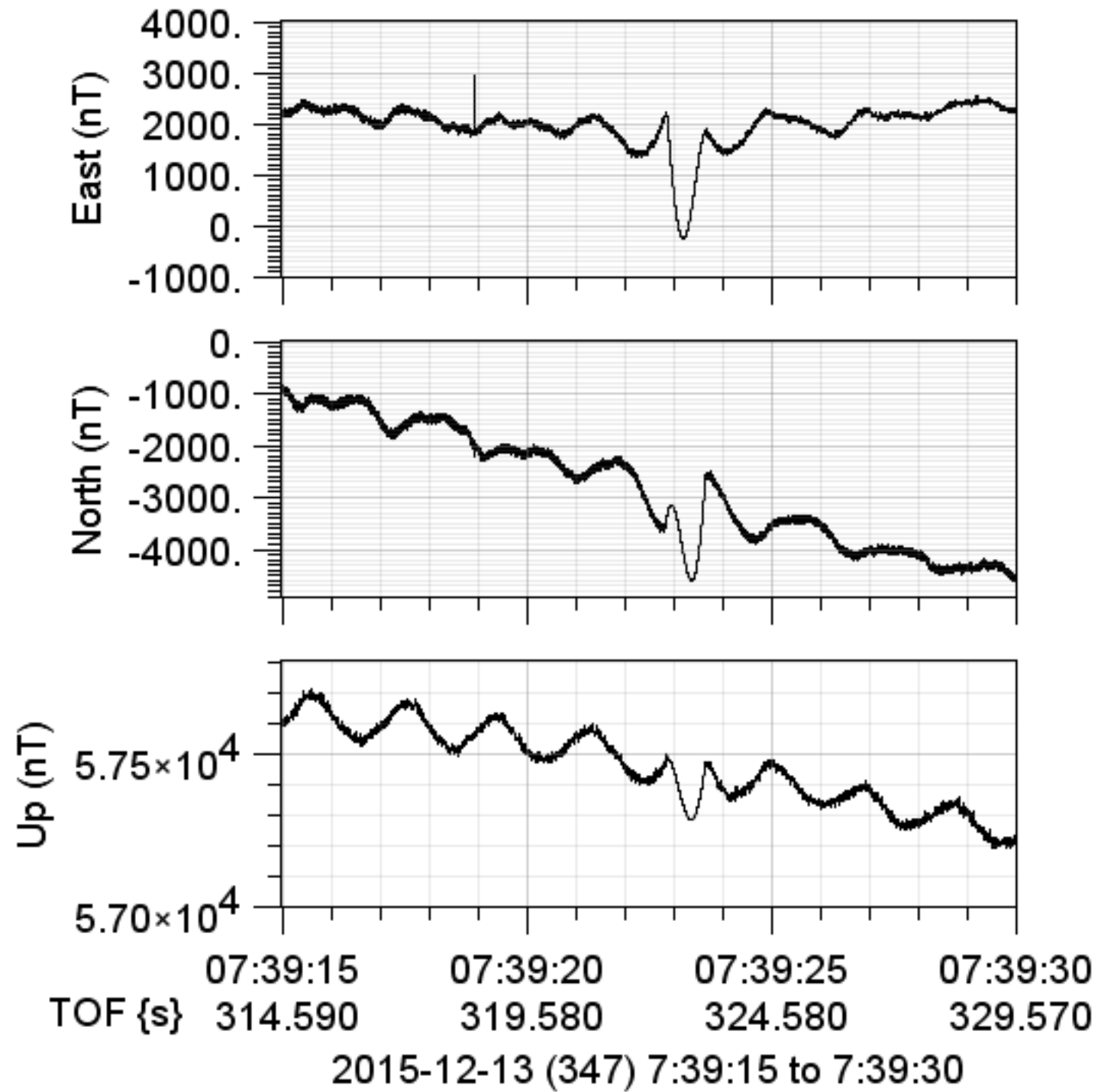
Despun with NSROC Attitude Solution



- Flight Calibration routine using IGRF applied (thanks Max!)
- Agreement was great at the beginning of flight, but seems to wander off later (possible timing issues in Racetrack being worked on)



- Some isolated peaks/sinusoids that could indicate small scale current structures (T+539s, T+615s)
- Want to clear up timing issue before making any confident claims



Large sinusoid at $\sim T+322s$?

