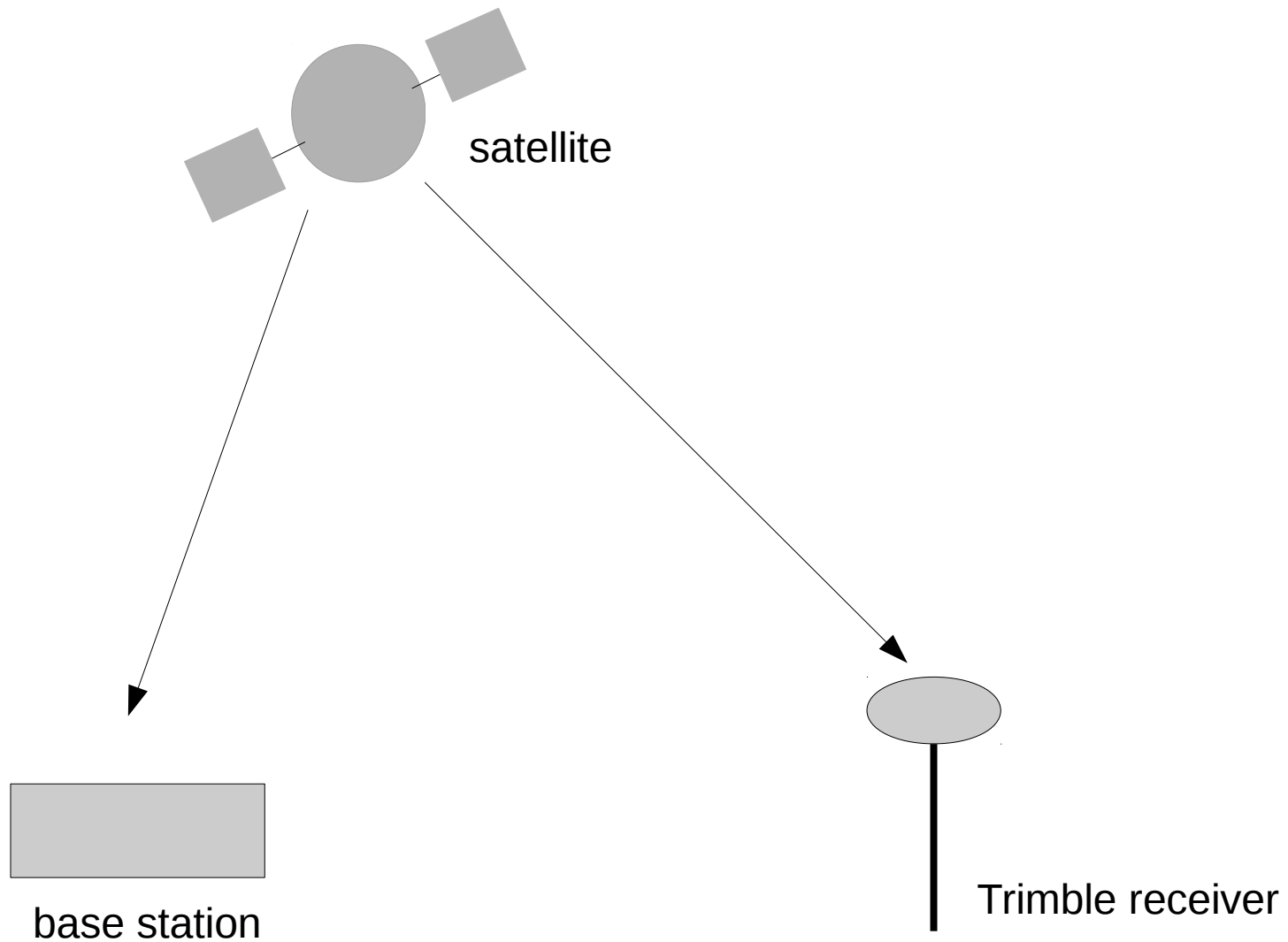


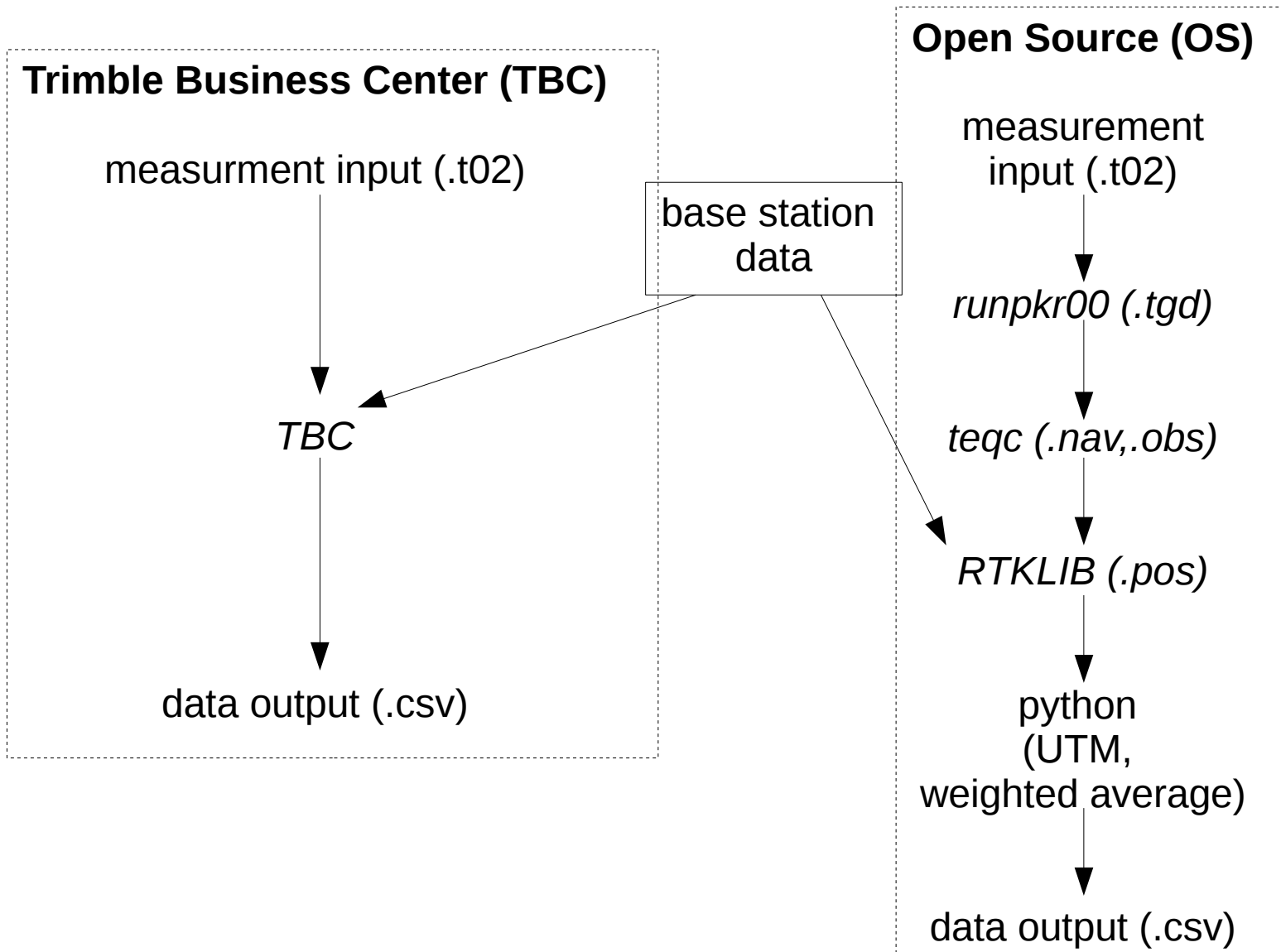


Methods & Processing

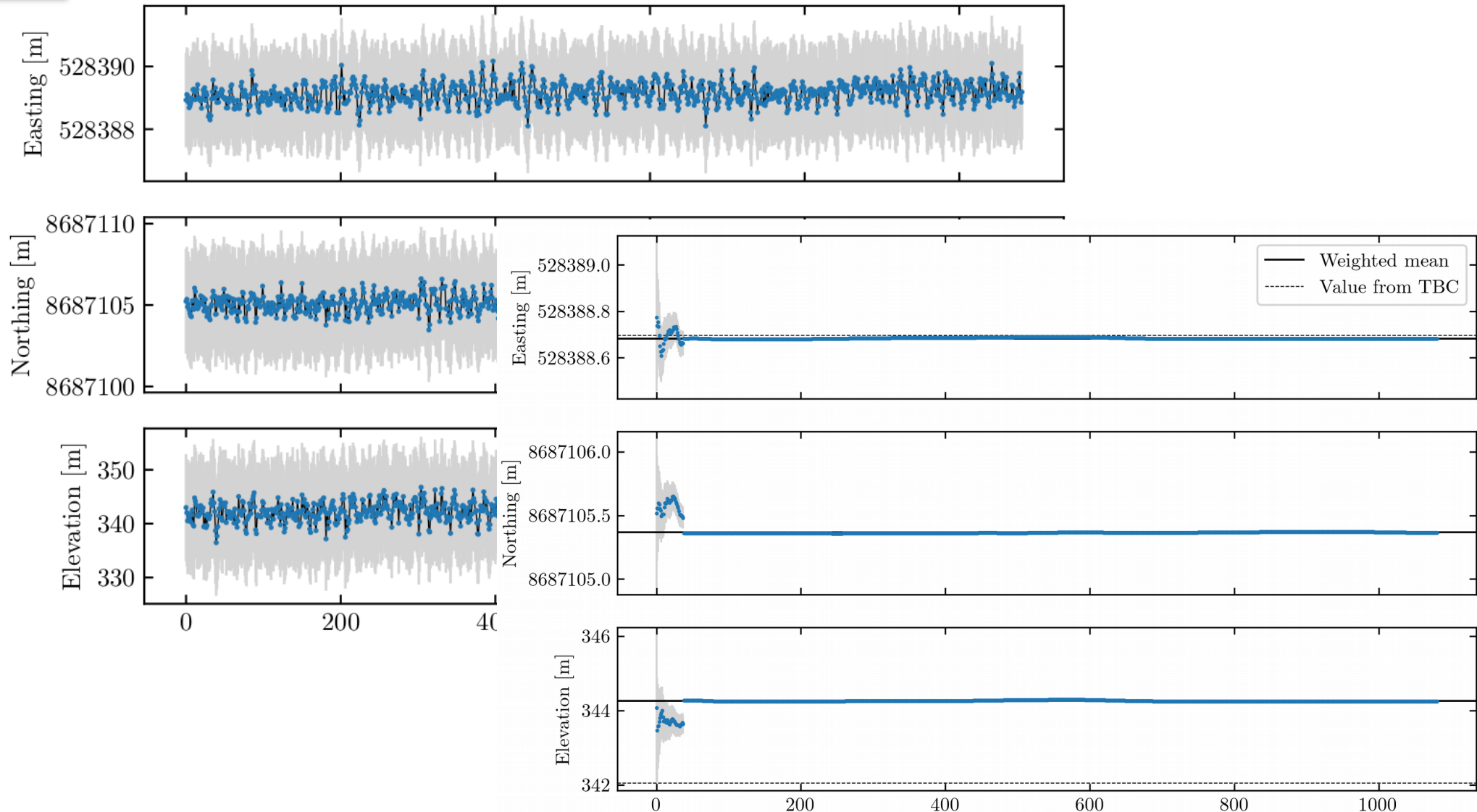
differential GPS



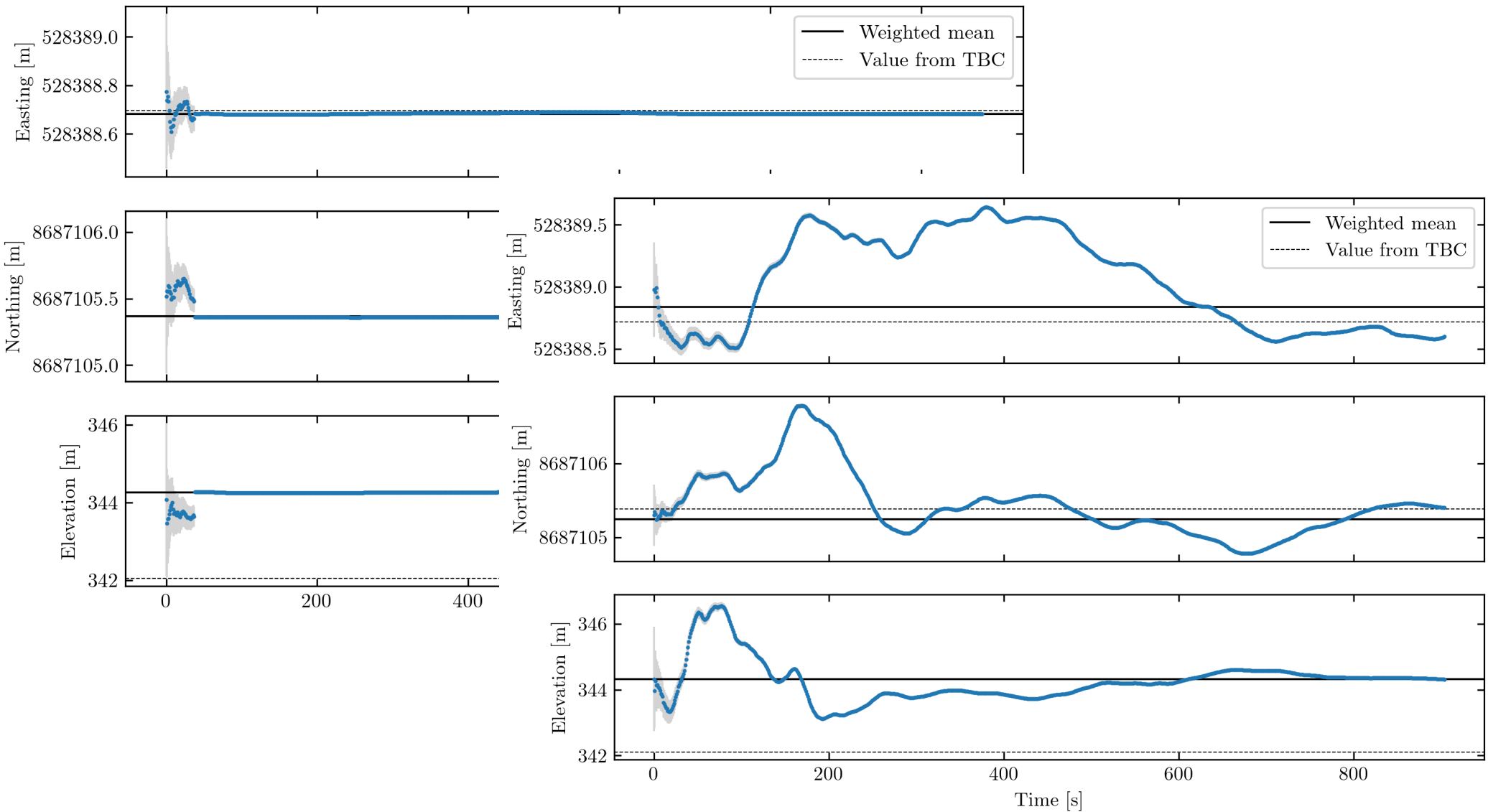
Post processing - 2 methods



time series: processing



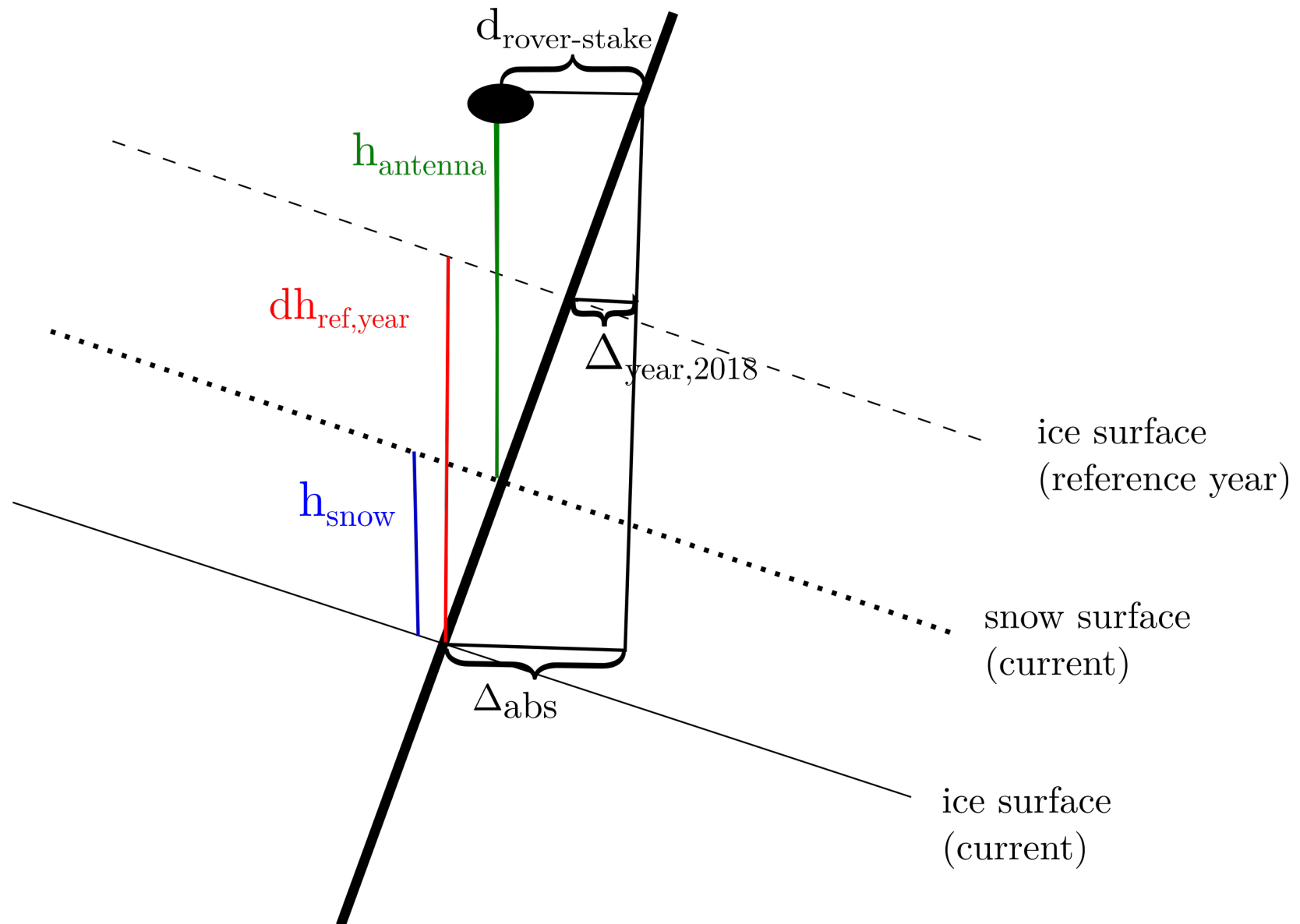
time series: OS



OS as replacement for TBC?

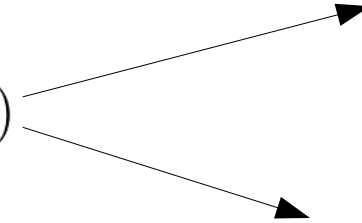
	Northing [m]	Easting [m]	Elevation [m]
Mean Difference	0.09	0.05	0.24
Median Difference	0.01	0.01	0.07

Stake correction



stake correction

horizontal

$$\Delta_{\text{abs}} = (h_{\text{snow}} + h_{\text{antenna}}) * \sin(\alpha)$$

$$\Delta_{\text{north}} = -(\Delta_{\text{abs}} * \cos(\phi)) - d_{\text{rover-stake}}$$
$$\Delta_{\text{east}} = -\Delta_{\text{abs}} * \sin(\phi)$$

vertical

$$\Delta_{\text{elev,TBC}} = -h_{\text{snow}}$$

$$\Delta_{\text{elev,os}} = -(h_{\text{snow}} + h_{\text{antenna}})$$

Final stake positions

Name	Northing [m]	Easting [m]	Elevation [m]
BL2-2016	8686150.74 \pm 0.16	523049.41 \pm 0.11	436.89 \pm 0.48
BL2-2018	8686149.82 \pm 0.02	523051.47 \pm 0.03	437.74 \pm 0.06
BL3-2016	8686091.51 \pm 0.27	523544.75 \pm 0.13	490.82 \pm 0.25
BL3-2018	8686091.17 \pm 0.42	523545.34 \pm 0.10	491.39 \pm 1.03
BL4-2018	8686098.89 \pm 0.21	524181.02 \pm 0.20	570.94 \pm 0.20
BL4-i-2016	8686098.47 \pm 0.27	524179.80 \pm 0.19	571.65 \pm 0.20
BL4-ii-2016	8686098.39 \pm 1.30	524179.92 \pm 0.31	571.36 \pm 4.82
BL5-i-2017	8686130.74 \pm 0.09	524644.27 \pm 0.01	628.63 \pm 0.09
BL5-ii-2017	8686130.74 \pm 0.28	524644.28 \pm 0.15	628.56 \pm 0.75
T1-2018	8687106.55 \pm 0.32	528388.42 \pm 0.07	341.59 \pm 0.24
T1-i-2017	8687105.69 \pm 0.13	528388.68 \pm 0.18	341.26 \pm 0.12
T1-ii-2017	8687105.58 \pm 0.45	528388.84 \pm 0.44	341.38 \pm 0.65
T2-2016	8687321.31 \pm 0.42	527951.88 \pm 0.14	394.88 \pm 2.34
T2-2018	8687319.62 \pm 0.28	527951.35 \pm 0.27	395.86 \pm 1.61