

Sonic tilt corrections

(This is an email from Katherine McCaffrey at NOAA.)

Hi all,

Here are the [b0 b1 b2] values:

50m

nw = [0.0103 0.0225 0.0041]

se = [-0.0088 0.0107 -0.0133]

100m

nw = [-0.0042 0.0261 0.0041]

se = [-0.0258 0.0012 0.0060]

150m

nw = [-0.0043 0.0197 0.0140]

se = [-0.0169 0.0011 -0.0038]

200m

nw = [-0.0046 0.0134 -0.0074]

se = [-0.0059 0.0045 -0.0059]

250m

nw = [0.0156 0.0133 0.0064]

se = [-0.0126 0.0027 0.0162]

300m

nw = [0.0866 0.0112 0.0183]

se = [0.0692 -0.0097 0.0019]

Thanks for running the corrections and statistics, Steve! I'll write up a little blurb to put on the blog about how the tilt correction method works.

Cheers,

Katie

On July 9 Katherine sent an email with revised tilts for the NW sonics and the tilts for the flux stations:

Hi Gordon, I have the planar fit coefficients for the flux stations below, as well as a corrected version of the northwest booms' tilts (I found an error in it).

The southeast sonics are unchanged.

Sorry for the delay - confusion with Tom Horst, so I ended up taking out 45 degrees on either side of the boom as you'd suggested!

50m_nw: -0.0092 0.0216 0.0044

100m_nw: -0.0014 0.0268 0.0040

150m_nw: -0.0052 0.0182 -0.0139

200m_nw: -0.0054 0.0117 -0.0072

250m_nw: 0.0106 0.0107 0.0065

300m_nw: 0.0622 0.0061 0.0130

50m_se: -0.0088 -0.0107 -0.0133 (note the sign change on b1, this one is correct)

100m_se: -0.0258 0.0012 0.0060

150m_se: -0.0169 0.0011 -0.0038

200m_se: -0.0059 0.0045 -0.0059

250m_se: -0.0126 0.0027 0.0162

300m_se: 0.0692 -0.0097 0.0019

5m_ehs: -0.0027 0.0288 -0.0035

5m_bao: -0.0064 -0.0087 0.0010