

Reconciliation of profile sonic boom angles

Following are the profile sonic boom angles measured for the four configurations.

Sonic	Cnfg 1	cal		Cnfg 2	cal		Cnfg 3a	Cnfg 3b	cal		Cnfg4	cal
	twh			srs			spo	jm			spo	
	july 6-14			july 28			aug 1	aug 6			aug 12	
1.5 m	132.3	0.6		131.6	-0.1		135.1	132.4	0.7		132.3	0.6
3 m	136.0	4.3		132.5*	0.8		137.0	134.2	2.5		133.1	1.4
4 m	133.6	1.9		129.8*	-1.9		136.1*	132.5*	0.8		131.8	0.1
5.5 m	134.6	2.9		133.7*	2.0		138.2*	134.8*	3.1		133.4	1.7
7 m	134.0	2.3		132.2	0.5		136.2*	134.4*#	2.7		133.8	2.1
8m	132.6	0.9		133.7	2.0		137.0	133.0#	1.3		134.3#	2.6

*: sonic height changed from previous configuration

#: changed sonic since previous azimuth measurement

cal: azimuth entry in calibration file = measured magnetic azimuth - 131.7

For configuration 3, the 3b azimuths are more consistent with previous and

following azimuths than are 3a. I (twh) used 3b for the profile cal_files.

Both Semmer and Oncley measured azimuths for the horizontal arrays in configuration

2, and Militzer and Oncley measured azimuths for the horizontal arrays in

configuration 3. In both cases, Oncley's azimuth measurements were ~4 degrees

larger than the others. Thus we will use Semmer's azimuths for [configuration2](#)

and militzer's for [configuration 3](#) . Also oncley recommends using the 'surveyed'

horizontal array azimuths for [configuration 4](#), which in this case are mostly very close to Oncley's measurements.