

Daily status, July 6

AHATS daily status 7/06/08

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Summary: Gordon has demonstrated that the passive filter circuit produces solid period measurements of both the temperature and pressure signals from the Paroscientific barometers. We are in the process of replicating the new circuit for all 14 barometers. We have deployed adam pressure-1 serving locations 3b-6b and 5t-7t and plan to deploy adam pressure-2, serving locations 7b-9b and 8t-9t before we leave for the day. This will give us two sets of five pressure sensors (5-9) at two heights. We will complete pressure-2 with locations 10b and 11b tomorrow after we purchase additional resistors.

For more details, see the ahats logbook at <https://wiki.ucar.edu/display/ahatslogbook>

Good wind direction: For the period 7/1 13:00 through 7/6 13:00, we have 71.67 hours of data periods of length 20 minutes or longer with wind directions from 295-355 degrees. This includes 59.17 hours of periods longer than one hour and equates to good wind direction periods 60% of the time. Sorted by stability, there are 33.75 hours of stable stratification ($\langle w'tc \rangle < 0$) and 37.58 hours of unstable stratification.

Note that the normal to the array is 325 degrees. If the array orientation were 315 degrees (NW: 285-345 degrees) as for HATS/SGS, then the division is 36.58 hours stable and only 24.67 hours unstable.

Since 6/25, we have had 46% good wind directions, with a symmetric stability distribution in the range $-1 < z/L < 1$ and some periods with $-2 < z/L < -1$ or $1 < z/L < 5$.