



Calibration of the 4002 Weems and Plath Electronic Barometer

The instrument with Serial number 2623-0154

has been compared to the Starpath NIST certified standard barometer and found to require the following offset so that it can read pressures to within the manufacturer's specifications.

Offset Pressure correction (dP) = -8.2 mb

This offset was measured on Sept 5, 2009

with an ambient pressure of 1013.2 mb

in an ambient temperature of 74° F.

Instructions:

This process involves changing some of the standard units and display options, but these can all be returned to preferred values once the pressure offset has been entered. To insert this offset,

- (1) Go to the set up screen (Mode button for 3s, then step to Set) and
set Units = mb
set Altitude = 0
set Actual/Sea Level = Actual
- (2) Return to the main screen and record the existing pressure P in mb
- (3) Return to set up screen, select Pressure, then select Adjust. Then use the + or - keys to insert your correction. For example, if dP = +4.7 mb, and P = 1017.2 mb, then after entering the correction the new P should read 1022.9 mb.
- (3) Return to main screen and you are done. The pressure will then read correctly at other values. It will also adjust correctly if you change the Altitude and then choose to view Sea Level pressure. You can also change to inches of mercury if you prefer and the offset correction will be adjusted accordingly, automatically.
- (4) If power to the instrument is lost, the setup configuration including the offset will be lost, but it can be reinserted as outlined above. The offset dP should be a constant property of the instrument.