

Electronic Air Pressure Methodology

(Last rev. 14/11/2024)

Air pressure is measured electronically on the Celestino meteorological tower (see Figure 1 & 2) using a Setra 278 Barometric Pressure sensor (Figure 3)

Air pressure is sampled every 10 seconds. The average, minimum and maximum values are recorded at the end of every 60 minute interval.

Sensor elements are replaced according to the manufacture's recommendations.

Records are provided with two Quality Control flags. Flag one indicates the fitness for use of each record. Possible values are: good, bad, doubtful, missing. Records are marked as bad if they fail one or more QC tests. Likewise, records are marked as doubtful if they are potentially bad, but without sufficiently strong evidence to be marked as bad. The second QC variable provides that reason for marking a variable as bad or doubtful. Potential values are: range, step, persistence, drift. At this time only range tests have been applied.

Figure 1



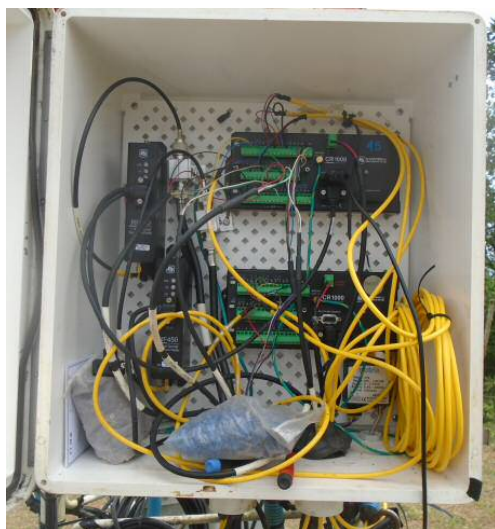
Location of the Agua Salud research plots (red polygons) and the Celestino Meteorology Station

Figure 2



Celestino tower

Figure 3



Setra 278 Barometric Pressure sensor