

Electronic Precipitation Methodology

(Last rev. 13/11/2024)

Rainfall has been electronically measured at the Celestino station (Figures 1 & 2) since 2015 when the station was first established.

Two Campbell Sci. TB3 tipping buckets are installed approximately 70cm above the ground (Figures 3 & 4).

The tipping buckets are calibrated at least yearly according to the manufacturer's specifications (see Figure 4).

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



Clearing Site showing location of tipping bucket in right corner of fenced in area.

Figure 3



Hydrological Services Model TB3 tipping bucket

Figure 4



Tipping Bucket Calibration