

## Electronic Precipitation Methodology

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STRI measures rainfall using tipping buckets. Tipping buckets have a resolution changed to 0.254mm (0.01") with recording intervals of 15 minutes. Totals are given at the end of each 15-minute period.

In the case of tower installations, tipping buckets are located mid-way up the tower on a leveled support arm (see Fig. 1). On crane sites, the tipping bucket is located on the top of the crane in an exposed area (see Fig. 2).

Currently, most sites use Hydrological Services Model TB3 tipping bucket is being used (see Figure 3). Tipping buckets are calibrated at least yearly according to the manufacturer's specifications (see Figure 4).

### Hydrological Services vs Manual gauges

A comparison of monthly totals from BCI over a period of 50 years shows that the Hydrological Services gauge reports approximately 13.5% less rainfall than the Manual rain gauge (see Fig 5).

Figure 1



Bocas Platform tower showing tipping bucket approximately at the middle of the tower

Figure 2



Tipping bucket on top of the Sherman crane.

Figure 3



Hydrological Services Model TB3 tipping bucket

Figure 4



Tipping Bucket Calibration

Figure 6

