

## Manual Precipitation Methodology

(Last rev. 30/10/2024)

Fortuna Station (see Figure 1) precipitation has been measured manually using several different rain gauges at least three locations (see Figure 2). Gauge and site changes were not always recorded.

### Monitoring history:

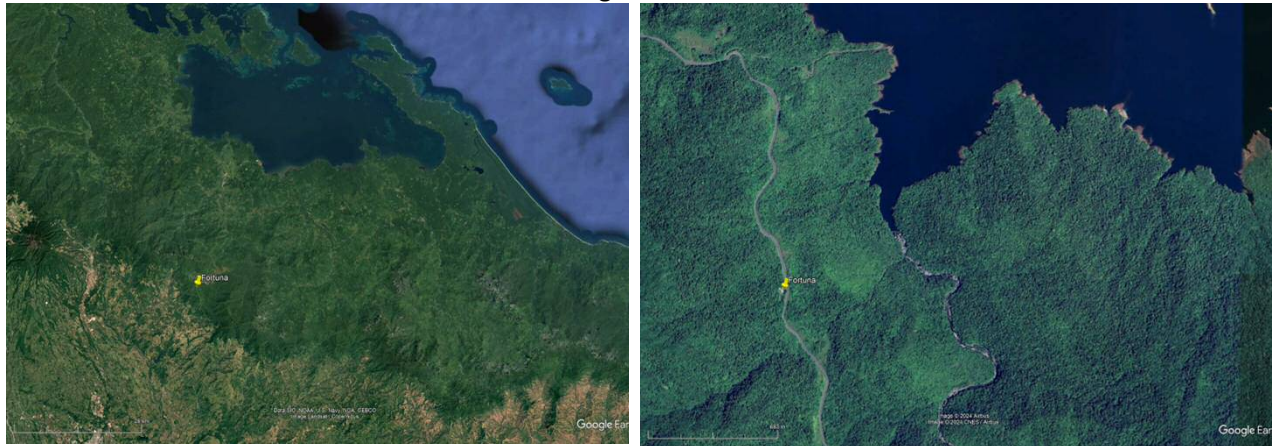
1. It is probable that rainfall was measured with other gauges at other locations prior to when the Physical Monitoring program began assisting the station in 2012
2. In 2012 the gauge was moved from its location near to the bushes (see Figure 3) into a more open area approximately 15m south.
3. A NovaLynx Model 260-2520 Forestry Aluminum Rain Gauge rain gauge with a total capacity of 20" and measures to 0.01" was installed in the clearing to the north of the main building (see Figure 3).
4. On Aug. 10, 2017, the new gauge was moved to its final location in the south clearing (see Figure 4). A wind skirt was added to the original gauge as an experiment to evaluate the possible effects of wind on rain measurement at this location.

### Screened gauge vs Unscreened gauge

A comparison of monthly rainfall recorded at the screened and unscreened gauges shows that the screened gauge reports approximately 7% more rainfall (see Figure 4).

Rainfall is recorded between 8:30 and 10:00am. Rainfall is recorded almost every day.

Figure 1.



Location of Fortuna Station

Figure 2.



Location of gauges

Figure 2.



Rain gauge, 2012

Figure 3.



New rain gauge in north clearing

Figure 4



Original Rain gauge with new wind skirt (right), and new rain gauge (left)

