

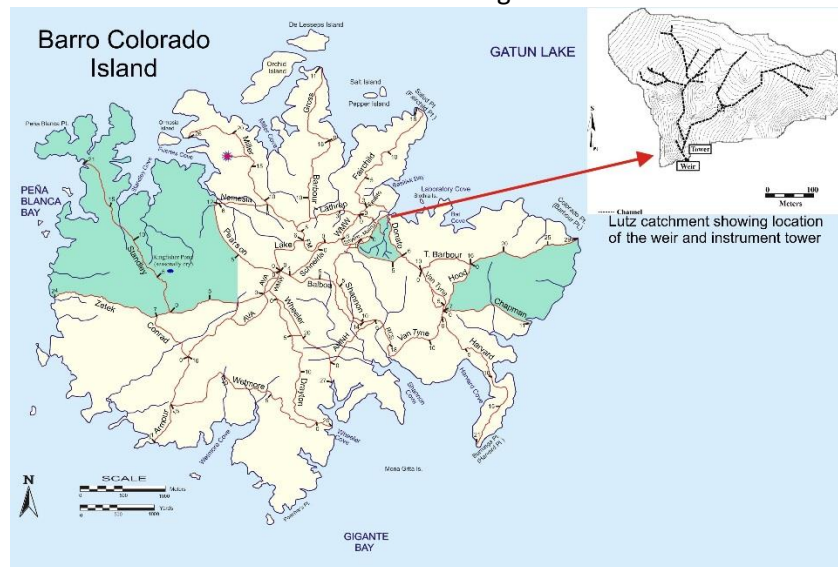
Lutz Tower Electronic Wind Speed and Direction

(Last rev. 23/11/2015)

Readme - bci_elect_48m_wd.txt & bci_elect_48m_ws.txt

When build in 1972, the Lutz tower was 42m tall and, based on estimates from photos taken at the time, stood at least 5m above the surrounding canopy. The tower itself is located at the base of the Lutz catchment in a valley that rises well above the top of the tower to the south and west. Furthermore, the central part of the island located to the southwest of the tower rises at least 50m above the top of the tower. Undoubtedly, this topography significantly reduces the amount of wind detected from that quadrant.

Figure 1



Barro Colorado Island showing location of Lutz Catchment and tower.

In 2001 it was observed that the surrounding forest canopy had increased in height significantly and was approaching the level of the top of the tower. Two new sections were added to the tower increasing the height to 48m. At that point the anemometer was moved to the 48m. No overlapping electronic wind speed or direction was obtained. However, analog cup anemometers were maintained at both levels for several years. These data are available on request.