As part of NOAA’s collaboration with the Southern Hemisphere Additional OZonsonde (SHADOZ) network, balloons are launched between 2-4 times a month from sites at Suva, Fiji; Hilo, Hawai’i; and American Samoa. The University of the South Pacific site in Suva, Fiji had been experiencing reception issues during balloon flights and finally stopped launches in late 2013 due to the persistent equipment failures. A site visit during February 2-5, 2015 successfully restarted the site with new receiving station equipment. In addition, a series of six ozonesondes on four balloons over a three day period were launched. Two of the balloons carried dual-sonde instruments comparing current and historical sensor solution as a critical component to homogenization of worldwide ozone data, while the remaining flights tested out the new receiving equipment and launch procedures while compiling an interesting record of day-to-day ozone variability in the tropics. Tropospheric and stratospheric ozone measured over a 48 hour time period is compared with satellite observations and placed in context of the long term record. Of particular interest is the variability seen in the stratospheric ozone peak throughout the three day period and even over the course of a single afternoon.

Figure 1. Ozone partial pressure of six ozonesondes launched over a 48 hour period from Suva, Fiji including two dual ozonesonde packages.