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La Reunion Island (21°S, 55.5°E) SHADOZ/NDACC station: First re-processed ozonesonde data and comparisons with lidar measurements at the Maïdo Observatory.

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La Reunion Island has been launching ozonesondes since Septembre 1992 and is one of the few stations with long term ozone profile measurements in the tropics. Over time changes in instrumentation, sensing solution, and operating procedures have affected the homogeneity of the data set prompting a re-processing of the data record. We highlight our reprocessing efforts and quantify changes in the data regard with respect to the original data. From May to July 2015, the MORGANE (Maïdo ObservatoRy Gas and Aerosol Ndacc Experiment) campaign has been carried out at the Maïdo Observatory (2200 masl). 12 ECC ozonesondes have been launched and their ozone profiles compared with the tropospheric and stratospheric lidar measurements. These comparisons show an agreement better than 20% in the troposphere and 10% in the stratosphere and are within the limits of the instruments' accuracy. Total ozone column values are in good agreement, less than 10%, with those of the co-located SAOZ and Aura's OMI satellite instruments. Additional comparisons have been performed during MORGANE between P-T-U profiles measured by the French meteorological radiosonde, Modem M10, and participating lidars operating at the Maïdo Observatory. Preliminary analysis of temperature, water vapor and wind profiles data are presented.