

Southern Hemisphere Additional Ozonesondes (SHADOZ) 2023 Project and Data Archive Updates

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The Southern Hemisphere Additional Ozonesondes (SHADOZ) network, jointly operated by NASA-Goddard Space Flight Center (GSFC), NOAA's Global Monitoring Lab (GML) and international partners, collects and archives ozonesonde-radiosonde data records for 14 operating stations in the tropics and subtropics. There are now >9700 ozone and pressure-temperature-humidity (P-T-U) profiles with 100m vertical resolution at the SHADOZ archive (<https://tropo.gsfc.nasa.gov/shadoz/Archive.html>) with data from 1998-2023 including NOAA-affiliated stations: Hilo, American Samoa, and Fiji. The focus of this presentation is a 2023 update on the SHADOZ Project and Data Archive activities including: (1) the introduction of Digital Object Identifiers (DOIs) for individual SHADOZ stations' datasets for data users, (2) recent efforts in data quality assurance [eg. testing the application of new *Nakano and Morofuji* (2023) pump correction factors to SHADOZ data], and (3) new SHADOZ-derived tropical ozone trends analysis expanding upon *Thompson et al.* (2021) results. We also report on the success of hosting virtual regional SHADOZ station meet-ups in 2023, organized by the NASA-GSFC team, to foster improved communication with station Principal Investigators and staff. This presentation summarizes our overarching goal of maintaining the continuity of long-term global ozonesonde records and ensuring that the best quality data reach end users.

References

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