



SHADOZ Notes

Southern Hemisphere Additional Ozonesondes

A NASA/Goddard Space Flight Center public archive of tropical and remote ozonesonde profile data

SHADOZ is a NASA project to augment and archive balloon-borne ozonesonde launches and to archive data from tropical and remote operational sites. The project was initiated in 1998 by NASA/Goddard Space Flight Center with other US and international co-investigators. There are currently thirteen stations launching ozonesondes in the SHADOZ network. The collective data set provides the first climatology of tropical ozone in the equatorial region, enhances validation studies aimed at improving satellite remote sensing techniques for tropical ozone estimations, and serves as an educational tool to students, especially in participating countries.

SHADOZ Sites, URL=<http://croc.gsfc.nasa.gov/shadoz>



SHADOZ Site	Principal Investigator (PI), Station Chiefs and Operators
Ascension, U.K.	Anne Thompson (PI; anne.m.thompson@nasa.gov ; NASA/GSFC), Andrew Avery, Peter Crane & Patrick Benjamin (US Air Force AFSPC E-ROS/Wolf Creek)
Costa Rica (multiple sites)	Henry Selkirk (PI; henry.b.selkirk@nasa.gov ; NASA/USRA), Holger Vömel (NCAR), Jorge Andres Diaz & Ernesto Corrales (UCR)
Hanoi, Vietnam	Shin-Ya Ogino (PI; ogino-sy@jamstec.go.jp ; JAMSTEC), Masato Shiotani (Kyoto U.), T. H. Anh Nguyen (AMO)
Hilo, HI, USA	Bryan Johnson (PI; bryan.johnson@nasa.gov ; NOAA/GMD), David Nardini & Darryl Kuniyuki (NOAA/MLO)
Irene, South Africa	Gert J. R. Coetsee (PI; gerrie.coetsee@weathersa.co.za ; SAWS), Tshidi Machinini (SAWS)
Kuala Lumpur, Malaysia	Maznorizan Mohamad (PI; maz@met.gov.my), Zamuna Zainal, Nur Aleesha Abdullah, & Ab Rahman Buang (MMD)
La Reunion, France	Françoise Posny (PI; francoise.posny@univ-reunion.fr), Jean-Marc Metzger (U. Reunion)
Nairobi, Kenya	Christian Félix (PI; christian.felix@meteoswiss.ch), René Stübi & Gonzague Romanens (Meteoswiss), Kennedy Thiongo (KMD)
Natal, Brazil	Francisco R. da Silva & Tercio L. B. Penha (INPE)
Paramaribo, Surinam	Ankie Piters (PI; ankie.piters@knmi.nl) & Marc Allart (KNMI), S. Mitro & G. Paiman (MDS)
Pago Pago, Am. Samoa	Bryan Johnson (PI; NOAA/GMD), LTJG Diane M. Perry (NOAA/ASO)
San Cristobal, Ecuador	Bryan Johnson (PI; NOAA/GMD), Manuel Carvajal & Jimmy Paredes (INAMHI)
Suva, Fiji	Bryan Johnson (PI; NOAA/GMD), Matakite Maata, Francis Mani, and Miriama Vuiyasawa (USP)

The **Quadrennial Ozone Symposium (QOS)** was held 4-9 September 2016 <www.ozone-symposium-2016>. Nine SHADOZ related



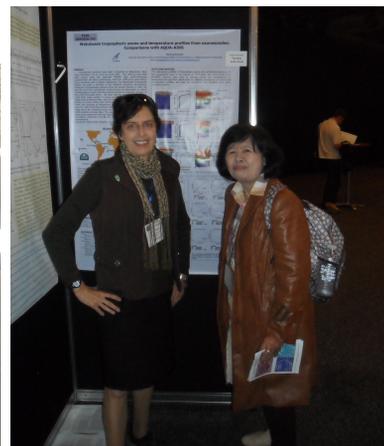
abstracts have been submitted to sessions related to tropospheric ozone observations and measurement techniques. Prior to the QOS, a three day WMO-GAW-SHADOZ-NDACC Ozone Sonde Expert Workshop was held to discuss outstanding issues concerning operating procedures, reprocessing methods, and the status of homogeneous data records. The meeting comprised of ozonesonde experts and station operators, a number of whom are members of the SHADOZ network, as well as ENSCI, Vaisala, and Modem industry representatives. Dr. Herman Smit h.smit@juelich.de led the discussions with a whole day dedicated to planning the upcoming JOSIE-SHADOZ campaign in fall 2017. The campaign will focus profiling limitations and capabilities that are encountered in the SHADOZ network. We anticipate that every ozonesonde-radiosonde instrument combination will be tested in JOSIE-SHADOZ. As a truly international intercomparison activity, JOSIE-SHADOZ, under the auspices of WMO/GAW, will bring together eight SHADOZ ozonesonde stations to compare the performance of different ozone-radiosonde systems under controlled conditions in an environmental simulation chamber that uses an accurate UV-photometer as the Standard Reference.



Group photo at the Ozonesonde experts workshop. There were 20-30 participants.



SHADOZ members at the QOS banquet (L-R): Gerrie Coetzee (Irene), Françoise Posny (La Reunion), Richard Querel (Lauder), Jacquie Witte, Ryan Stauffer (Ascension), and Herman Smit (JOSIE)



Anne Thompson with Ninong Komala (Watakosek-Java PI) during the QOS poster session.

Meeting Announcements

NDACC (Network for the Detection of Atmospheric Composition, Change; www.ndsc.ncep.noaa.gov) 17-21, 2016, Bremen, Germany. SHADOZ is a cooperating network of NDACC.

AGU (American Geophysical Union) 12-16 Decembr, 2016. Sessions of interest to ozonesonde users and presenters: A11M: Understanding Processes that Influence the Vertical Distribution of Ozone in the Troposphere, A41J: Atmospheric Trace Species: Observations and Analyses of the Effects of Changing Atmospheric Composition on Stratospheric Ozone and Climate I

We pay our respects to Dr. Mike Proffitt. His UV-photometer was the ozone standard during the 2004 BESOS (Balloon Experiment on Standards for Ozone Sondes) campaign. A payload of 12 ozonesondes surrounding Mike's UV photometer was launched in Laramie Wyoming in the Tuesday, 13 April, 2004. Results of the campaign are in *Deshler, T. et al., 2008. Atmospheric comparison of electrochemical cell ozonesondes from different manufacturers, and with different cathode solution strengths: The Balloon Experiment on Standards for Ozonesondes. Journal of Geophysical Research: Atmospheres, 113(D4).*



Gondola of sondes with the UV photometer in the center. Mike Proffitt is in the center of both photos.



The gondola launch on a perfect day!