

VOCALS/Southeast Pacific science: The WCR-WCL-GVR integrated dataset. Expanding our observational capabilities through a combination of airborne radar, lidar, microwave radiometer, and in situ observations

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A suite of three remote sensing instruments was deployed on the NSF/NCAR C130 for VOCALS-REx. Combining products from these sensors with each other and with in situ measurements made onboard the C130 allows us to compute key quantities (e.g. adiabatic liquid water path) that could not be obtained from a single instrument while freeing users, who are often interested in a single derived product or small set of products, from the hassles involved in obtaining basic data files for individual instruments, writing routines to ingest these data, and compute the desired quantities all while avoiding a variety of pitfalls that may be well known to experienced users of the individual instruments, but are often not obvious to inexperienced users (prior to experiencing them firsthand).