1. Dataset Title - The dataset title that will publicly appear in the data archive. EOL may modify for project consistency.

SOCRATES Liquid Precipitation Properties Retrieval Product

2. Dataset Author(s) List dataset authors. Indicate lead and corresponding authors. Include contact information.

Litai Kang
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3. Time of Interest - Include begin and end dates *(i.e., YYYY/MM/DD hh:mm:ss to YYYY/MM/DD hh:mm:ss)*.

Begin datetime 2018-01-15 21:00:00

End datetime   2018-02-24 09:00:00

4. Area of Interest - Include GeoLocation information (latitude/longitude box) *(e.g., 40.00 to 45.50; -95.37 to -110.00)*.

Maximum (North) Latitude: -42.00, Minimum (South) Latitude: -63.00

Minimum (West) Longitude: 133.00, Maximum (East) Longitude: 164.00

5. Data Frequency - Frequency of data collection (5 minute, hourly, continuous, etc.).

continuous

6. Data Spatial Type  ISO metadata SpatialRepresentation (vector, grid, textTable, tin, stereoModel, video, etc.) which describes how the geographic nature of the data is represented.

point

7.General Dataset Description - Short description of this dataset.

This dataset contains retrievals of liquid precipitation properties for the Southern Ocean Cloud Radiation and Aerosol Transport Experimental Study (SOCRATES) during January and February 2018. Liquid-phase precipitation properties are retrieved where radar and lidar are zenith-pointing using radar reflectivity-velocity retrieval and radar-lidar retrievals.

8.File Names - List names of files transferred.

rl.tar.gz

zv.tar.gz

SOCRATES_Liquid_Precip_Data_Readme.pdf

SOCRATES_Liquid_Precip_Data_header.pdf

9.Data restrictions - All submitted SOCRATES data sets will be password protected for one year as per the SOCRATES Data Policy unless otherwise requested. The password protection is via a SOCRATES specific "*user ID*" and "*password*." If you require additional security, please contact [loehrer@ucar.edu](mailto:loehrer@ucar.edu?subject=SOCRATES%20Data%20Submission) to request a unique "*user ID*" and "*password*" for your data.

Standard data restriction as other SOCRATES dataset.

10.Digital Object Identifier (DOI) - Indicate if you would like for NCAR/EOL to generate a DOI for your dataset. If your dataset already has a DOI, please include that link in your email.

Please generate a DOI for our dataset, thank you!

11.GCMD Keywords - See [http://gcmdservices.gsfc.nasa.gov/static/kms/sciencekeywords/sciencekeywords.csv?ed_wiki_keywords_page](http://gcmdservices.gsfc.nasa.gov/static/kms/sciencekeywords/sciencekeywords.csv?ed_wiki_keywords_page)

precipitation rate

drizzle

liquid precipitation

hydrometeors

stratocumulus

radar reflectivity

doppler velocity

spectrum width

lidar backscatter

lidar depolarization ratio

Gulfstream V

12.Publications *(Optional)* - Please include a list of links to publications using this dataset, including "in press" and "submitted" publications, conference proceedings, theses, and reports. Submitted publications will be added to this project's publications list.

Kang, L., Marchand, R. T., & Wood, R. Stratocumulus Precipitation Properties over the Southern Ocean Observed from Aircraft during the SOCRATES campaign. *under review*. *Journal of Geophysical Research: Atmospheres*