

## **Fair Use of NOAA's CDR Data Sets, Algorithms and Documentation:**

The development of a Climate Data Record (CDR) - including computer algorithms, data sets and documentation - is typically a painstaking process involving multiple scientists working over many years. These scientists rely on the fair use and proper acknowledgment of the CDR to sustain their professional reputations and careers.

The National Academy of Sciences has issued guidance for credit allocation in scientific work [1]. The CDR Program urges anyone using a NOAA CDR to honor this guidance by properly recognizing the CDR scientists and the CDR Program following the acknowledgement and citation examples below. In cases where a NOAA CDR becomes a fundamental part of a study, publication, presentation or proposal, the CDR Program encourages users to offer co-authorship status to the original CDR developers. If the data are used we encourage the use of the data citation to ensure data provenance and attribution [2].

Acknowledgement: The AVHRR Cloud Properties - NASA CDR used in this study was acquired from the NOAA National Centers for Environmental Information (NCEI; formerly NCDC) (<https://www.ncei.noaa.gov>). This CDR was developed by Patrick Minnis, Kristopher Bedka, and David Doelling of NASA Langley Research Center and Sarah Bedka, Gang Hong, Konstantin Khlopenkov, Michele Nordeen, Rabindra Palikonda, Benjamin Scarino, Szedung Sun-Mack, Mandana Thieman, Qinq Trepte, and Christopher Yost from Science Systems and Applications, Inc., and Patrick Heck of the University of Wisconsin-Madison through support from NOAA's CDR Program.

Literature Citation: Minnis, P, and co-authors, 2016: A Consistent Long-Term Cloud and Clear-Sky Radiation Property Dataset from the Advanced Very High Resolution Radiometer (AVHRR). Algorithm Theoretical Basis Document. AVHRR Cloud Properties – NASA [CDRP-ATBD-0826].

Data Citation: Patrick Minnis, Kristopher Bedka, and the NOAA CDR Program (2016): NOAA Climate Data Record (CDR) of AVHRR Cloud Properties - NASA, Version 1. NOAA National Centers for Environmental Information (NCEI). [doi:10.7289/V5HT2M8T](https://doi.org/10.7289/V5HT2M8T) [access date].

## **CDR Program Open Data Policy:**

The NOAA CDR Program's official distribution point for CDRs is NOAA's National Centers for Environmental Information (NCEI; formerly NCDC) which provides sustained, open access and active data management of the CDR packages and related information in keeping with the United States' open data policies and practices as described in the President's Memorandum on "Open Data Policy" [3] and pursuant to the Executive Order of May 9, 2013, "Making Open and Machine Readable the New Default for Government Information" [4]. In line with these policies, the CDR data sets are non-proprietary, publicly available, and no restrictions are placed upon their use.

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[1] On Being a Scientist: A Guide to Responsible Conduct in Research: 3rd Edition (2009), Committee on Science, Engineering, and Public Policy, National Academy of Sciences, National Academy of Engineering, and Institute of Medicine, 82 pages, ISBN-10: 0-309-11970-7. Available for download at: [http://www.nap.edu/catalog.php?record\\_id=12192](http://www.nap.edu/catalog.php?record_id=12192).

[2] Ruth E. Duerr, Robert R. Downs, Curt Tilmes, Bruce Barkstrom, W. Christopher Lenhardt, Joseph Glassy, Luis E. Bermudez and Peter Slaughter. On the utility of identification schemes for digital earth science data: an assessment and recommendations, Earth Science Informatics, Vol. 4, Num. 3, 139-160, 2011, doi:10.1007/s12145-011-0083-6.

[3] <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-13.pdf>

[4] <http://www.whitehouse.gov/the-press-office/2013/05/09/executive-order-making-open-and-machine-readable-new-default-government>

[5] <https://www.ncdc.noaa.gov/cdr>