

Cf/Radial - A Radar and Lidar Data Format for Data Providers, End Users, and Tool Providers Joe VanAndel, Mike Dixon, Wen-Chau Lee, Bob Rilling, Chris Burghart

National Center for Atmospheric Research / Earth Observing Laboratory

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Cf/Radial is a modern standard data format for radar/lidar data along with tools to read, write, convert, analyze and display radial data. Cf/Radial supports scanning or staring, airborne, mobile and stationary instruments.





Aerosol backscatter cross section 30-Dec-2012 2012123010000 UTC



**TOOLS & DISPLAYS** 



What is Cf/Radial?

- \* CF Climate & Forecasting conventions
  - compatible with numeric models &
  - analysis tools.
- \* netCDF format
- \* supports compression
- \* supports multiple operating systems & computer architectures
- \* extends CF for radial radar/lidar data

NIMA wind profiler moments & winds estimation AP detection and removal Vertically Integrated Liquid (VIL) Particle Identification Precipitation rate Velocity De-aliasing Multiple-radar doppler synthesis ALGORITHMS

Available Tools and Language support:

Radx Library (C++ library)

RadxPrint

RadxConvert : CfRadial, DORADE, UF, Foray1,

\* new standard units: dB,dBm, dBZ \* new standard names

Current Users of Cf/Radial: \* NCAR \* NOAA/NSSL \* UNIDATA \* EEC & Pro Sensing (radar vendors) \* DOE/ARM \* Various universities NEXRAD level 2 archive, SIGMET raw

RadxMergeFields

Solo3 radar display/editing tool (under development)

Python display tool (under development)

Matlab display tool (under development)

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