History :

* WSR-57 :
* WSR-74
* WRS-88D : deployed between 1991-1997
* Upgrade 2007 : doppler
* Upgrade 2010 : super resolution
* Upgrade 2013-2015 : dual-pol

three processing levels of data:

* Level I: Raw data (not archieved)
* Level II: signal processing of Level I into reflectivity, velocity and spectrum width (+ dual pol). Archived since 1994
* Level III

2 operating modes :

* clear-air mode : 0.1 :1 :4.5°
* precipidation mode : 0.5 – 19.5° with 9-14 sweeps

Beam shape :

* 1° wide conical shape
* Resolution along beam 1km for reflectivity and 250m for velocity.

(Diehl & Larkin, 2005)

(Ansari et al., 2018)

Reference

Ansari, S., Del Greco, S., Kearns, E., Brown, O., Wilkins, S., Ramamurthy, M., Weber, J., May, R., Sundwall, J., Layton, J., Gold, A., Pasch, A., & Lakshmanan, V. (2018). Unlocking the Potential of NEXRAD Data through NOAA’s Big Data Partnership. *Bulletin of the American Meteorological Society*, *99*(1), 189–204. https://doi.org/10.1175/BAMS-D-16-0021.1

Diehl, R. H., & Larkin, R. P. (2005). Introduction to the WSR-88D (NEXRAD) for Ornithological Research. *USDA Forest Service Gen. Tech. Rep.*, 876–888. http://www.fs.fed.us/psw/publications/documents/psw\_gtr191/psw\_gtr191\_0876-0888\_diehl.pdf