**D3R ICEPOP dataset**

D3R operational period for the ICE-POP campaign was from 2017/11/01 to 2018/03/17

D3R was located at 37.6774, 128.719

The filename string for all the NETCDF files follow “Freq\_bandD3R\_YYYYMMDD\_HRMNSC\_SN.nc”

* Freq\_band: Ku or Ka
* Year, YYYY: Year of the data recorded.
* Month, MM: Month of the data recorded.
* Day, DD: Day of the data recorded
* HR: Hour of the day
* MN: Minutes
* SC: Seconds
* SN: Scan number

Below are the days during the campaign in which D3R was down for maintenance:

* 2018/01/19 to 2018/02/02
* 2018/02/16 to 2018/02/17

Below are the days during the campaign in which D3R was not scanning due to clear weather:

* 2017/11/05
* 2017/11/18
* 2017/11/26
* 2017/12/11
* 2017/12/16
* 2017/12/26
* 2017/12/31
* 2018/01/01
* 2018/01/06
* 2018/01/13
* 2018/03/03

Notes for the data user:

* All range gates are 150 meters. The first range gate is at 0 km and is the short transmit pulse.
* There are total off 266 range gates in each ray
* D3R uses two frequency diverse pulses: a “short” and “medium” pulse. The short pulse is use for the first 27 range gates (up to 3.3 km). The medium pulse is used for the remaining data.
* Ground clutter is NOT enabled and will be present in the results.
* Use 0 dB SNR threshold used for censoring data.
* RawPower\_\* is the received power without any noise subtraction or manipulation.
* SignalPower\_\* is the power used to estimate reflectivity (without compensation for range or the radar constant).
* The ZDR bias has been corrected and the corrected values can be found under the global attribute “Modified” in the NETCDF files.
* The initial PhiDP offset has been corrected and the corrected values can be found under the global attribute “Modified” in the NETCDF files.