CVI File Variable Information for PREDICT

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TIME (sec):   Time in sec after midnight
CVINLET (no units):   CVI Inlet Flag: 0=CVI, 1=ambient
CVFXFLOWS (no units):   CVI Flow Flag (relates to instruments drawing flow from CVI)
CVCWC (g m-3):   CVI condensed water content
CVRAD (microns):   CVI cut radius
CVCFACT (no units):   CVI concentration factor

General Comments

1) PLEASE NOTE: CVCWC is set to missing value for any of these three conditions:
      a) Ambient sample was taken (CVINLET=1)
      b) Airspeed < 150 m/s (takeoff and landing, landing gear interference issues).
      c) Occasional periods of saturation and subsequent hysteresis due to inadequate flows, usually for
      CVCWC >~ 1 g/m3 at the high altitudes flown in this project. See "Flight Specific Comments."
2) CVCWC calibration most valid for 200-400 mb; may show slight positive bias out of cloud during climb and descent.
3) Cut size CVRAD was increased whenever an impactor sample was changed—CVCWC may miss small ice during that time.
4) CVCWC data lagged approximately 3.5 sec behind wing probes due to sample line and data system lags; this has been corrected in the merged netcdf files.

Flight Specific Comments:
RF01: Missing data ~45558 to 45638 due to data system problem.

RF02: Missing data ~38545 to 39002 due to inadequate flow settings during high water content event

RF03: Missing data ~43425 to 43680 due to inadequate flow settings during high water content event

RF07: Missing data ~57863 to 57993s due to inadequate flow settings during high water content event

RF12: Missing data ~64452 to 64516s and ~64618 to 64788s due to inadequate flow settings during high water content event.

RF13: Missing data ~62380 to 64365s due to improper flow settings.

RF16: Missing data ~56017 to 56943s and ~67376 to 72561s due to flow control problem at very lower pressures.

RF17: Missing data ~42050 to 42700s and ~43115 to 43275s due to inadequate flow settings during high water content event.

RF18: Missing data ~44300 to 45000s due to inadequate flow settings during high water content event.

RF19: Missing data ~54958 to 55860s and ~63437 to 64180s due to inadequate flow settings during high water content event.

RF22: Missing data ~59195 to 59275s due to inadequate flow settings during high water content event.

RF24: Missing data ~45371 to 45574s due to inadequate flow settings during high water content event.

RF25: Missing data ~50030 to 50197s, ~50732 to 51510s, and ~57560 to 57895s due to inadequate flow settings during high water content event.