

ICON Data Product 0P: IVM Ancillary Products

ERROR: Missing variables attribute epoch : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_ALTITUDE : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_FRAC_DENS_H : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_FRAC_DENS_O : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_LATITUDE : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_LST : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_LONGITUDE : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_ION_DENS : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_ION_TEMP : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_FA : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_MER : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_X : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_Y : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_Z : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_ZON : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_RAW_IV_X : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_RAW_IV_Y : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_RAW_IV_Z : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_UNIT_MER_X : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_UNIT_MER_Y : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_UNIT_MER_Z : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_AP_POT : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_MTB_STATUS : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_SLEW_STATUS : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_SUN_STATUS : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_ORBIT_NUMBER : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_MAGNETIC_LATITUDE : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_MAGNETIC_LONGITUDE : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_DM_FLAG : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_RPA_FLAG : Var_Type
ERROR: Missing variables attribute ICON_L2_IVM_A_TIME_UTC_END : Var_Type
ERROR: Missing global attribute "Text_Supplement"
ERROR: Missing variables attribute epoch : Var_Notes
ERROR: Missing variables attribute epoch : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_FRAC_DENS_H : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_FRAC_DENS_H : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_FRAC_DENS_O : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_FRAC_DENS_O : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_ION_DENS : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_ION_DENS : CatDesc

ERROR: Missing variables attribute ICON_L2_IVM_A_ION_TEMP : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_ION_TEMP : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_FA : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_FA : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_MER : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_MER : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_X : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_X : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_Y : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_Y : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_Z : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_Z : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_ZON : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_IV_ZON : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_RAW_IV_X : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_RAW_IV_X : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_RAW_IV_Y : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_RAW_IV_Y : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_RAW_IV_Z : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_RAW_IV_Z : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_UNIT_MER_X : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_UNIT_MER_X : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_UNIT_MER_Y : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_UNIT_MER_Y : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_UNIT_MER_Z : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_UNIT_MER_Z : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_AP_POT : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_AP_POT : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_SLEW_STATUS : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_SLEW_STATUS : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_DM_FLAG : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_DM_FLAG : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_RPA_FLAG : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_RPA_FLAG : CatDesc
ERROR: Missing variables attribute ICON_L2_IVM_A_TIME_UTC_END : Var_Notes
ERROR: Missing variables attribute ICON_L2_IVM_A_TIME_UTC_END : CatDesc

This document describes the data product for Ancillary Products for IVM Data Processing, which is in NetCDF4 format.

MISSING Text_Supplement

NetCDF files contain **variables** and the **dimensions** over which those variables are defined. First, the dimensions are defined, then all variables in the file are described.

Dimensions

The dimensions used by the variables in this file are given below, along with nominal sizes. Note that the size may vary from file to file. For example, the "Epoch" dimension, which describes the number of time samples contained in this file, will likely have a varying size.

Dimension Name	Nominal Size
epoch	86396

Variables

Variables in this file are listed below. First, the most important variables (the "data" variables) are described, followed by the "support_data" variables, and finally the "metadata" variables. The variables classified as "ignore_data" are not shown.

Support_Data

Variable Name	Description	Units	Dimensions
ICON_L2_IVM_A_TIME_UTC	ISO 9601 formatted UTC timestamp (at middle of reading). ISO 9601 formatted UTC timestamp (at middle of reading).Time is generated from the time-code at byte 1015 of the IVM packet minus the time sync at byte 1019 of the IVM packet. This is the GPS time at the start of the integration period. The integration period is assumed to be 4 seconds so the center time is 2 seconds after that. The formula is (time-code * 1000ms) + 2000ms - (16 * time sync / 1000) in GPS milliseconds then converted to UTC time. See the UTD 206-024 Rev A document.Time may be delayed by up to 10 ms due to FSW polling delay.Maximum time is ~2150 UTC and minimum time is ~1970 UTC.		epoch
ICON_L2_IVM_A_TIME_UTC_START	Milliseconds since 1970-01-01 00:00:00 UTC at start of reading. Milliseconds since 1970-01-01 00:00:00 UTC at start of reading.Time is generated from the time-code at byte 1015 of the IVM packet minus the time sync at byte 1019 of the IVM packet. This is the GPS time at the start of the integration period. The integration period is assumed to be 4 seconds so the center time is 2 seconds after that. The formula is (time-code * 1000ms) + 2000ms - (16 * time sync / 1000) in GPS milliseconds then converted to UTC time. See the UTD 206-024 Rev A document.Time may be delayed by up to 10 ms due to FSW polling delay.Maximum time is ~2150 UTC and minimum time is ~1970 UTC.	milliseconds	epoch

MISSING Var_Type

Variable Name	Description	Units	Dimensions
epoch	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_ALTITUDE	WGS84 Altitude of s/c position (geodetic) Geodetic Altitude of Spacecraft using WGS84	km	epoch
ICON_L2_IVM_A_FRAC_DENS_H	MISSING CatDesc MISSING Var_Notes		epoch

Variable Name	Description	Units	Dimensions
ICON_L2_IVM_A_FRAC_DE NS_0	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_LATITUD E	WGS84 Latitude of s/c position (geodetic) Geodetic Latitude of Spacecraft using WGS84	degree s North	epoch
ICON_L2_IVM_A_LST	Local Solar Time	hour	epoch
ICON_L2_IVM_A_LONGITU DE	WGS84 Longitude of s/c position (geodetic) Geodetic Longitude of Spacecraft using WGS84	degree s East	epoch
ICON_L2_IVM_A_ION_DEN S	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_ION_TEM P	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_IV_FA	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_IV_MER	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_IV_X	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_IV_Y	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_IV_Z	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_IV_ZON	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_RAW_IV_ X	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_RAW_IV_ Y	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_RAW_IV_ Z	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_UNIT_ME R_X	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_UNIT_ME R_Y	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_UNIT_ME R_Z	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_AP_POT	MISSING CatDesc MISSING Var_Notes		epoch

Variable Name	Description	Units	Dimensions
ICON_L2_IVM_A_MTB_STATUS	MTB Firing Status If the MTB are active during any part of the measurement, it is recorded as active for whole measurement. Decoded from s/c housekeeping file: /disks/icondata/Temporary/IVM/Ancillary/Input/ICON_L0_SPACECRAFT_HOUSEKEEPING_2017-05-27_v01r000.CSV If the MTB are active during any part of the measurement, it is recorded as active for whole measurement. Decoded from s/c housekeeping file: /disks/icondata/Temporary/IVM/Ancillary/Input/ICON_L0_SPACECRAFT_HOUSEKEEPING_2017-05-28_v01r000.CSV If the MTB are active during any part of the measurement, it is recorded as active for whole measurement. Decoded from s/c housekeeping file:		epoch
ICON_L2_IVM_A_SLEW_STATUS	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_SUN_STATUS	s/c Sun/Shadow Status Code Data is from predictive ephemeris. 0=Sun, 1=Earth Shadow		epoch
ICON_L2_IVM_A_ORBIT_NUMBER	Orbit Number Integer Orbit Number		epoch
ICON_L2_IVM_A_MAGNETIC_LATITUDE	Magnetic Latitude of s/c position Currently not an accurate value, later versions will be interpolated from R. Stoneback code and table	degrees North from Magnetic Equator	epoch
ICON_L2_IVM_A_MAGNETIC_LONGITUDE	Magnetic Longitude of s/c position Currently not an accurate value, later versions will be interpolated from R. Stoneback code and table	degrees East	epoch
ICON_L2_IVM_A_DM_FLAG	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_RPA_FLAG	MISSING CatDesc MISSING Var_Notes		epoch
ICON_L2_IVM_A_TIME_UTC_END	MISSING CatDesc MISSING Var_Notes		epoch

This document was automatically generated on 2018-03-02 13:03 using the file:
 ICON_L2_IVM-A_2017-05-27_v01r000.NC
 Software version: ICON SDC > IVM Prime Generator vv1.0