

MERRA

1.

FILENAME: MERRA300.prod.assim.inst3_3d_chm_Ne.20021201.hdf (ftp link: [here](#)) (Filesize=49.1MB)

It is a grid file with 1 grid, namely: EOSGRID and four datasets, namely: XDim:EOSGRID (dimension size=540), YDim:EOSGRID (361), Height:EOSGRID (73), TIME:EOSGRID (8).

StructMetadata has parameter 'GridOrigin=HDFE_GD_LL' rather than default value 'GridOrigin=HE5_HDFE_GD_UL' The end users should correctly retrieve the GridOrigin instead of assuming the default value of "HE5_HDFE_GD_UL".

- The four datasets are also present in the Data Fields attached to the grid. (However, the data fields in the grid are named as XDim (dimension size=540), YDim (361), Height (73) and Time (8).)
- The attributes of the datasets follow CF convention.
- The data fields in the grid (which are similar to the datasets) do not have any attributes.

GridName	DimensionList	Projection
EOSGRID	Time, Height	GEO

'Variables 'XDim' and 'Ydim' are duplications of latitude and longitude variables.

A value of 9.99E14 is used for '_FillValue' and 'missing_value.'

Datasets

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
XDim:EOSGRID	long_name	longitude	8-bit character	9
	units	degrees_east	8-bit character	12
YDim:EOSGRID	long_name	latitude	8-bit character	8
	units	degrees_north	8-bit character	13
Height:EOSGRID	long_name	vertical level	8-bit character	14
	units	layer	8-bit character	5
TIME:EOSGRID	long_name	time	8-bit character	4
	units	minutes since 2002-12-01 00:00:00	8-bit character	33

GROUP1: EOSGRID

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
XDim		either of 'units,' 'unit' or long_name not there		
YDim		either of 'units,' 'unit' or long_name not there		
Height		either of 'units,' 'unit' or long_name not there		
Time		either of 'units,' 'unit' or long_name not there		
PLE	long_name	Edge pressures	8-bit character	14
	units	Pa	8-bit character	2

DataFieldName	#Dimension (DimList)
XDim	1-D (XDim)
YDim	1-D (YDim)
Height	1-D (Height)
Time	1-D (Time)
PLE	4-D (Time, Height, YDim, XDim)

All MERRA files have similar structure