

MODIS

MOD10A1

- FILENAME:** MOD10A1.A2000065.h00v08.005.2008237034422.hdf (ftp link: [here](#)) (Filesize=123.0KB)

It is a grid file with 1 grid, namely: MOD_Grid_Snow_500m

The data for all data fields only contain discrete value rather than continuous value. Useful data field attribute: Key

It uses the regular XDim (2400) and YDim (2400)

GridName	DimensionList	Projection
MOD_Grid_Snow_500m	No dimension names listed	SNSOID

Some software tools requires extra steps to retrieve latitude and longitude for SNSOID projection

A value of 255 is used for ‘_FillValue.’ Values of 0 and -6 are used for ‘missing_value.’

GRID1: MOD_Grid_Snow_500m

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
Snow_Cover_Daily_Tile	long_name	Snow cover extent by best observation of the day	8-bit character	48
	units	none	8-bit character	4

DataFieldName	#Dimension (DimList)
Snow_Cover_Daily_Tile	2-D (YDim, XDim)

Other MOD10A1, MOD10A2, MYD10A1 and MYD10A2 files have similar structure

MOD10C1

- FILENAME:** MOD10C1.A2005018.005.2007349093349.hdf (ftp link: [here](#)) (Filesize=4.73MB)

It is a grid file with 1 grid, namely: MOD_CMG_Snow_5km

The data for all data fields only contain discrete value rather than continuous value. Useful data field attribute: Key

It uses the regular XDim (7200) and YDim (3600)

GridName	DimensionList	Projection
MOD_CMG_Snow_5km	No dimension names listed	GEO

A value of 255 is used for ‘_FillValue.’ The file is missing the ‘missing_value’ attribute.

GRID1: MOD_CMG_Snow_5km

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
Day_CMG_Snow_Cover	long_name	Daily snow extent, global at 5km	8-bit character	33
	units	none	8-bit character	4

DataFieldName	#Dimension (DimList)
Day_CMG_Snow_Cover	2-D (YDim, XDim)

Other MOD10C1, MOD10C2, MOD10CM, MYD10C1, MYD10C2 and MYD10CM files have similar structure

MOD10_L2

3.

FILENAME: MOD10_L2.A2000065.0040.005.2008235221207.hdf (ftp link: [here](#)) (Filesize=997.0 KB)

It is a swath file with 1 swath, namely: MOD_Swath_Snow. It has two dimension maps

The data for all data fields only contain discrete value rather than continuous value. Useful data field attribute: Key

The Geolocation Fields provide 'Latitude' and 'Longitude'.

SwathName	DimensionList
MOD_Swath_Snow	Along_swath_lines_500m (4060), Cross_swath_pixels_500m (2708), Coarse_swath_lines_5km (406), Coarse_swath_pixels_5km (271)

Values of -999 and 255 are used for '_FillValue.' The file is missing the 'missing_value' attribute.

GROUP1: MOD_Swath_Snow

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
Latitude	long_name	Coarse 5 km resolution latitude	8-bit character	31
	units	degrees	8-bit character	7
Longitude	long_name	Coarse 5 km resolution longitude	8-bit character	32
	units	degrees	8-bit character	7
Snow_Cover	long_name	Snow covered land	8-bit character	17
	units	none	8-bit character	4

GeoFieldName	#Dimension (DimList)
Latitude	2-D (Coarse_swath_lines_5km, Coarse_swath_pixels_5km)
Longitude	2-D (Coarse_swath_lines_5km, Coarse_swath_pixels_5km)

DataFieldName	#Dimension (DimList)
Snow_Cover	2-D (Along_swath_lines_500m, Cross_swath_pixels_500m)

Other MOD10_L2 and MYD10_L2 files have similar structure

4.

FILENAME: MOD29.A2005018.0000.005.2007345021445.hdf (ftp link: [here](#)) (Filesize=2.13 MB)

It is a swath file with 1 swath, namely: MOD_Swath_Sea_Ice. It has two dimension maps

The data for all data fields only contain discrete value rather than continuous value. Useful data field attribute: Key

The Geolocation Fields provide 'Latitude' and 'Longitude'.

SwathName	DimensionList
MOD_Swath_Sea_Ice	Along_swath_lines_1km (2030), Cross_swath_pixels_1km (1354), Coarse_swath_lines_5km (406), Coarse_swath_pixels_5km (271)

Values of -999 and 255 are used for '_FillValue.' The file is missing the 'missing_value' attribute.

GROUP1: MOD_Swath_Sea_Ice

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
Latitude	long_name	Coarse 5 km resolution latitude	8-bit character	31
	units	degrees	8-bit character	7
Longitude	long_name	Coarse 5 km resolution longitude	8-bit character	32
	units	degrees	8-bit character	7
Ice_Surface_Temperature	long_name	Ice Surface Temperature by split-window method	8-bit character	46
	units	Degree_Kelvin	8-bit character	13

GeoFieldName	#Dimension (DimList)
Latitude	2-D (Coarse_swath_lines_5km, Coarse_swath_pixels_5km)
Longitude	2-D (Coarse_swath_lines_5km, Coarse_swath_pixels_5km)

DataFieldName	#Dimension (DimList)
Ice_Surface_Temperature	2-D (Along_swath_lines_1km, Cross_swath_pixels_1km)

Other MOD29 and MYD29 files have similar structure

MOD29E1D

5.

FILENAME: MOD29E1D.A2000055.005.2006268025009.hdf (ftp link: [here](#)) (Filesize=1.38 MB)

It is a grid file with 2 grids, namely: MOD_Grid_Sealice_4km_North and MOD_Grid_Sealice_4km_South

The data for all data fields only contain discrete value rather than continuous value. Useful data field attribute: Key

It uses the regular XDim (4501) and YDim (4501)

GridName	DimensionList	Projection
MOD_Grid_Sealice_4km_North	No dimension names listed	LAMAZ
MOD_Grid_Sealice_4km_South	No dimension names listed	LAMAZ

HDF-EOS2 library is not able to retrieve latitude and longitude correctly

Values of 255 and 7 are used for ‘_FillValue’ and a value of 0 is used for ‘missing_value.’

GRID1: MOD_Grid_Sealice_4km_North

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
Ice_Surface_Temperature_NP	long_name	Estimated sea ice surface temperature 4 km North Pole grid	8-bit character	58
	units	Degree_Kelvin	8-bit character	13

DataFieldName	#Dimension (DimList)
Ice_Surface_Temperature_NP	2-D (YDim, XDim)

GRID2: MOD_Grid_Sealice_4km_South

DataFieldName	AttributeName	AttributeValue	AttributeType	AttributeArraySize
Ice_Surface_Temperature_SP	long_name	Estimated sea ice surface temperature 4 km South Pole grid	8-bit character	58
	units	Degree_Kelvin	8-bit character	13

DataFieldName	#Dimension (DimList)
Ice_Surface_Temperature_SP	2-D (YDim, XDim)

Other MOD29E1D, MOD29P1D, MOD29P1N, MYD29E1D, MYD29P1D and MYD29P1N files have similar structure