Monthly Cloud Averages (ISCCP-D2like-GEO)

The Monthly Gridded Cloud Averages (ISCCP-D2like-GEO) archival data product contains monthly and monthly 3-hourly (GMT-based) 1°×1° gridded regional mean geostationary satellite (GEO) cloud properties as a function of 18 cloud types, similar to the ISCCP D2 product, where the cloud properties are stratified by pressure, optical depth, and phase. The ISCCP-D2like-GEO product is a 5-satellite, daytime 3-hourly GMT, 8-km nominal resolution, geostationary-only cloud product limited to 60°N to 60°S. The ISCCP-D2like-GEO is a daytime-only product, where the cloud retrievals incorporate only the visible and IR channels common to all geostationary satellites for spatial consistency. The GEO cloud properties are from the same source as for those in the SYN1deg product; however, they are not temporally interpolated. The Gridded GEO Narrowband Radiances (GGEO) data product is the input to this product. Each ISCCP-D2like-GEO file covers a single month. The science data are Scientific Data Sets (SDSs) with multiple records. Each record contains spatially averaged data for an individual region.

The major category of data output on the ISCCP-D2like-GEO HDF file is:

- 18 D2like Cloud Types for Monthly 3-Hourly/Monthly

A complete listing of metadata and gridded science parameters for this data product can be found in Table 1 through Table 19.

Level: 3
Frequency: 1/Month
Portion of Atmosphere Covered: Clouds

Time Interval Covered:
File: 1 Month
Record: 1 Month or Monthly 3-Hour

Portion of Globe Covered:
File: Entire Globe
Record: 1-Deg Regions

Product Version:
GEO: Edition2A
GEO DAY: Edition3A

ISCCP-D2like-GEO Metadata

The ISCCP-D2like-GEO metadata are summarized in Table 1. These metadata contain information that need only be recorded once per product. The CERES metadata are listed in Appendix B. Table B-1 lists the CERES Baseline Header Metadata and Table B-2 lists the CERES_metadata Vdata.

Table 1. ISCCP-D2like Metadata Summary

HDF Name	Description Table	Records	Number of Fields
CERES Baseline Header Metadata	Table B-1	1	36
CERES_metadata Science Data	Table B-2	1	14

ISCCP-D2like-GEO Scientific Data Sets

The ISCCP-D2like GEO product contains Scientific Data Sets (SDS) of gridded cloud parameters. The SDSs are divided into tables that map to Vgroups in the HDF file. Table 2 through Table 4 list the Vgroups following the HDF file structure. The SDSs are 3-dimensional arrays where the first dimension corresponds to the temporal averaging (8 for monthly 3-hourly mean, 1 for monthly mean, listed in Table 5). The last two dimensions refer to the latitude and longitude of the regions; the latitude/longitude grid is defined in Table 6.

Table 7 and Table 8 contain the SDS index numbers as a function of cloud property for the 18 D2like cloud types. Each table contains a list of the parameters, including SDS index, SDS name, data type, units, and range.

Table 9 through Table 19 list the cloud parameters by Vgroup and in order of SDS index number. Each table contains a list of the parameters for one Vgroup, including SDS index, SDS name, data type, units, range, and dimensions within each SDS.

Table 2. Temporal Averaging Vgroups

Number	Vgroup Name	Monthly 3-Hourly Averages/ Monthly Averages
1	Monthly 3-Hourly Averages	See Table 3
2	Monthly Averages	See Table 3

Table 3. Vgroups within each temporal averaging Vgroup

Number	Vgroup Name	Monthly 3-Hourly Averages/ Monthly Averages
1	Regional Identification Parameters	See Table 9
2	Total Cloud for all Cloud Types	See Table 10
3	D2-like 9 Cloud Types	See Table 4

Table 4. Vgroups within D2-like 9 Cloud Types
(9 cloud types x 2 phases = 18 total cloud types)

Number	Vgroup Name	Monthly 3-Hourly Averages/ Monthly Averages
1	Cumulus (Low, Thin)	See Table 11
2	Strato-cumulus (Low, Mid-thick)	See Table 12
3	Stratus (Low, Thick)	See Table 13
4	Alto-cumulus (Mid, Thin)	See Table 14
5	Alto-stratus (Mid, Mid-thick)	See Table 15
6	Nimbo-stratus (Mid, Thick)[a]	See Table 16
7	Cirrus (High, Thin)	See Table 17
8	Cirrus-stratus (High, Mid-thick)	See Table 18
9	Deep Convective (High, Thick)	See Table 19

a. The HDF file contains the incorrect spelling “Nimbo-strutus” for this Vgroup.

Table 5. The 8 GMT-based monthly 3-hourly mean indices and the monthly mean index used in this document.

Time Index	Time Increment
1	00-03 GMT
2	03-06 GMT
3	06-09 GMT
4	09-12 GMT
5	12-15 GMT
6	15-18 GMT
7	18-21 GMT
8	21-24 GMT
1	00-24 GMT Monthly

Black = (MH) Monthly 3-Hourly
Red = (M) Monthly Mean

Table 6. Definition of the CERES equal-angle 1° latitude by 1° longitude grid.

Dimension	Number of Indices	Definition
	Regional	
Latitude	180	Index #1 is defined at 89.5°N and #180 is at 89.5°S
Longitude	360	Index #1 is defined at 179.5°W and #360 is at 179.5°E

Table 7. SDSs for D2-like 9 Cloud Types of Monthly 3-Hourly Averages

SDS Index Within Vgroup Number									Monthly 3-Hourly			
1	2	3	4	5	6	7	8	9	SDS Name	Data Type	Units	Range
03	15	27	39	51	63	75	87	99	Number Of Observations	32-Bit Float	N/A	N/A
04	16	28	40	52	64	76	88	100	Total Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
05	17	29	41	53	65	77	89	101	Liquid Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
06	18	30	42	54	66	78	90	102	Liquid Effective Pressure	32-Bit Float	hPa	0 .. 1100
07	19	31	43	55	67	79	91	103	Liquid Effective Temperature	32-Bit Float	K	100 .. 350
08	20	32	44	56	68	80	92	104	Liquid Log Optical Depth	32-Bit Float	N/A	-6 .. 6
09	21	33	45	57	69	81	93	105	Liquid Water Path	32-Bit Float	g m^{-2}	0 .. 10000
10	22	34	46	58	70	82	94	106	Ice Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
11	23	35	47	59	71	83	95	107	Ice Effective Pressure	32-Bit Float	hPa	0 .. 1100
12	24	36	48	60	72	84	96	108	Ice Effective Temperature	32-Bit Float	K	100 .. 350
13	25	37	49	61	73	85	97	109	Ice Log Optical Depth	32-Bit Float	N/A	-6 .. 6
14	26	38	50	62	74	86	98	110	Ice Water Path	32-Bit Float	g m^{-2}	0 .. 10000

Each monthly 3-hourly mean SDS has 8*180*360 elements. See Table 4 for the list of the nine D2 Vgroup numbers. The 18 cloud types are the combination of the 9 Vgroups x cloud phase. See Table 5 for a complete list of the 8 GMT-based monthly 3-hourly mean time indices. See Table 6 for the definition of the 180*360 regions.

Red = Liquid Cloud Phase
Blue = Ice Cloud Phase

Table 8. SDSs for D2-like 9 Cloud Types of Monthly Averages

SDS Index Within Vgroup Number									Monthly			
1	2	3	4	5	6	7	8	9	SDS Name	Data Type	Units	Range
114	126	138	150	162	174	186	198	210	Monthly Total Number Of Observations	32-Bit Float	N/A	N/A
115	127	139	151	163	175	187	199	211	Total Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
116	128	140	152	164	176	188	200	212	Liquid Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
117	129	141	153	165	177	189	201	213	Liquid Effective Pressure	32-Bit Float	hPa	0 .. 1100
118	130	142	154	166	178	190	202	214	Liquid Effective Temperature	32-Bit Float	K	100 .. 350
119	131	143	155	167	179	191	203	215	Liquid Log Optical Depth	32-Bit Float	N/A	-6 .. 6
120	132	144	156	168	180	192	204	216	Liquid Water Path	32-Bit Float	g m^{-2}	0 .. 10000
121	133	145	157	169	181	193	205	217	Ice Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
122	134	146	158	170	182	194	206	218	Ice Effective Pressure	32-Bit Float	hPa	0 .. 1100
123	135	147	159	171	183	195	207	219	Ice Effective Temperature	32-Bit Float	K	100 .. 350
124	136	148	160	172	184	196	208	220	Ice Log Optical Depth	32-Bit Float	N/A	-6 .. 6
125	137	149	161	173	185	197	209	221	Ice Water Path	32-Bit Float	g m^{-2}	0 .. 10000

Each monthly mean SDS has 1*180*360 elements. See Table 4 for the list of the nine D2 Vgroup numbers. The 18 cloud types are the combination of the 9 Vgroups x cloud phase. See Table 5 for the monthly mean time index. See Table 6 for the definition of the 180*360 regions.

Red = Liquid Cloud Phase
Blue = Ice Cloud Phase

Table 9. Regional Identification Parameters

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
0	111	Colatitude - MH	Colatitude - M	32-Bit Float	Degree	0.0 .. 180.0	8*180 *360	1*180 *360
1	112	Longitude - MH	Longitude - M	32-Bit Float	Degree	0.0 .. 360.0	8*180 *360	1*180 *360

Table 10. Total Cloud for all Cloud Types

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
2	113	Total Cloud for all Cloud Types – MH	Total Cloud for all Cloud Types - M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360

Table 11. D2-like 9 Cloud Types - Cumulus (Low, Thin) Category

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
3	114	Number Of Observations - Cumulus - MH	Monthly Total Number Of Observations - Cumulus – M	32-Bit Float	N/A	N/A	8*180 *360	1*180 *360
4	115	Total Cloud Fraction - Cumulus - MH	Total Cloud Fraction - Cumulus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
5	116	Liquid Cloud Fraction - Cumulus - MH	Liquid Cloud Fraction - Cumulus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
6	117	Liquid Effective Pressure - Cumulus - MH	Liquid Effective Pressure - Cumulus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
7	118	Liquid Effective Temperature - Cumulus - MH	Liquid Effective Temperature - Cumulus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
8	119	Liquid Log Optical Depth - Cumulus - MH	Liquid Log Optical Depth - Cumulus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
9	120	Liquid Water Path - Cumulus - MH	Liquid Water Path - Cumulus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360
10	121	Ice Cloud Fraction - Cumulus - MH	Ice Cloud Fraction - Cumulus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
11	122	Ice Effective Pressure - Cumulus - MH	Ice Effective Pressure - Cumulus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
12	123	Ice Effective Temperature - Cumulus - MH	Ice Effective Temperature - Cumulus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
13	124	Ice Log Optical Depth - Cumulus - MH	Ice Log Optical Depth - Cumulus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
14	125	Ice Water Path - Cumulus - MH	Ice Water Path - Cumulus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360

Table 12. D2-like 9 Cloud Types – Strato-cumulus (Low, Mid-thick) Category

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
15	126	Number Of Observations - Strato-cumulus - MH	Monthly Total Number Of Observations - Strato-cumulus – M	32-Bit Float	N/A	N/A	8*180 *360	1*180 *360
16	127	Total Cloud Fraction - Strato-cumulus - MH	Total Cloud Fraction - Strato-cumulus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
17	128	Liquid Cloud Fraction - Strato-cumulus - MH	Liquid Cloud Fraction - Strato-cumulus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
18	129	Liquid Effective Pressure - Strato-cumulus - MH	Liquid Effective Pressure - Strato-cumulus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
19	130	Liquid Effective Temperature - Strato-cumulus - MH	Liquid Effective Temperature - Strato-cumulus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
20	131	Liquid Log Optical Depth - Strato-cumulus - MH	Liquid Log Optical Depth - Strato-cumulus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
21	132	Liquid Water Path - Strato-cumulus - MH	Liquid Water Path - Strato-cumulus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360
22	133	Ice Cloud Fraction - Strato-cumulus - MH	Ice Cloud Fraction - Strato-cumulus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
23	134	Ice Effective Pressure - Strato-cumulus - MH	Ice Effective Pressure - Strato-cumulus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
24	135	Ice Effective Temperature - Strato-cumulus - MH	Ice Effective Temperature - Strato-cumulus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
25	136	Ice Log Optical Depth - Strato-cumulus - MH	Ice Log Optical Depth - Strato-cumulus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
26	137	Ice Water Path - Strato-cumulus - MH	Ice Water Path - Strato-cumulus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360

Table 13. D2-like 9 Cloud Types – Stratus (Low, Thick) Category

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
27	138	Number Of Observations - Stratus - MH	Monthly Total Number Of Observations - Stratus – M	32-Bit Float	N/A	N/A	8*180 *360	1*180 *360
28	139	Total Cloud Fraction - Stratus - MH	Total Cloud Fraction - Stratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
29	140	Liquid Cloud Fraction - Stratus - MH	Liquid Cloud Fraction - Stratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
30	141	Liquid Effective Pressure - Stratus - MH	Liquid Effective Pressure - Stratus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
31	142	Liquid Effective Temperature - Stratus - MH	Liquid Effective Temperature - Stratus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
32	143	Liquid Log Optical Depth - Stratus - MH	Liquid Log Optical Depth - Stratus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
33	144	Liquid Water Path - Stratus - MH	Liquid Water Path - Stratus – M	32-Bit Float	g m^{-2}	0 .. 10000	8*180 *360	1*180 *360
34	145	Ice Cloud Fraction - Stratus - MH	Ice Cloud Fraction - Stratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
35	146	Ice Effective Pressure - Stratus - MH	Ice Effective Pressure - Stratus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
36	147	Ice Effective Temperature - Stratus - MH	Ice Effective Temperature - Stratus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
37	148	Ice Log Optical Depth - Stratus - MH	Ice Log Optical Depth - Stratus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
38	149	Ice Water Path - Stratus - MH	Ice Water Path - Stratus – M	32-Bit Float	g m^{-2}	0 .. 10000	8*180 *360	1*180 *360

Table 14. D2-like 9 Cloud Types – Alto-cumulus (Mid, Thin) Category

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
39	150	Number Of Observations - Alto-cumulus - MH	Monthly Total Number Of Observations - Alto-cumulus – M	32-Bit Float	N/A	N/A	8*180 *360	1*180 *360
40	151	Total Cloud Fraction - Alto-cumulus - MH	Total Cloud Fraction - Alto-cumulus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
41	152	Liquid Cloud Fraction - Alto-cumulus - MH	Liquid Cloud Fraction - Alto-cumulus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
42	153	Liquid Effective Pressure - Alto-cumulus - MH	Liquid Effective Pressure - Alto-cumulus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
43	154	Liquid Effective Temperature - Alto-cumulus - MH	Liquid Effective Temperature - Alto-cumulus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
44	155	Liquid Log Optical Depth - Alto-cumulus - MH	Liquid Log Optical Depth - Alto-cumulus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
45	156	Liquid Water Path - Alto-cumulus - MH	Liquid Water Path - Alto-cumulus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360
46	157	Ice Cloud Fraction - Alto-cumulus - MH	Ice Cloud Fraction - Alto-cumulus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
47	158	Ice Effective Pressure - Alto-cumulus - MH	Ice Effective Pressure - Alto-cumulus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
48	159	Ice Effective Temperature - Alto-cumulus - MH	Ice Effective Temperature - Alto-cumulus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
49	160	Ice Log Optical Depth - Alto-cumulus - MH	Ice Log Optical Depth - Alto-cumulus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
50	161	Ice Water Path - Alto-cumulus - MH	Ice Water Path - Alto-cumulus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360

Table 15. D2-like 9 Cloud Types – Alto-stratus (Mid, Mid-thick) Category

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
51	162	Number Of Observations - Alto-stratus - MH	Monthly Total Number Of Observations - Alto-stratus – M	32-Bit Float	N/A	N/A	8*180 *360	1*180 *360
52	163	Total Cloud Fraction - Alto-stratus - MH	Total Cloud Fraction - Alto-stratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
53	164	Liquid Cloud Fraction - Alto-stratus - MH	Liquid Cloud Fraction - Alto-stratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
54	165	Liquid Effective Pressure - Alto-stratus - MH	Liquid Effective Pressure - Alto-stratus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
55	166	Liquid Effective Temperature - Alto-stratus - MH	Liquid Effective Temperature - Alto-stratus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
56	167	Liquid Log Optical Depth - Alto-stratus - MH	Liquid Log Optical Depth - Alto-stratus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
57	168	Liquid Water Path - Alto-stratus - MH	Liquid Water Path - Alto-stratus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360
58	169	Ice Cloud Fraction - Alto-stratus - MH	Ice Cloud Fraction - Alto-stratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
59	170	Ice Effective Pressure - Alto-stratus - MH	Ice Effective Pressure - Alto-stratus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
60	171	Ice Effective Temperature - Alto-stratus - MH	Ice Effective Temperature - Alto-stratus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
61	172	Ice Log Optical Depth - Alto-stratus - MH	Ice Log Optical Depth - Alto-stratus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
62	173	Ice Water Path - Alto-stratus - MH	Ice Water Path - Alto-stratus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360

Table 16. D2-like 9 Cloud Types – Nimbo-stratus[a] (Mid, Thick) Category

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
63	174	Number Of Observations - Nimbo-stratus - MH	Monthly Total Number Of Observations - Nimbo-stratus – M	32-Bit Float	N/A	N/A	8*180 *360	1*180 *360
64	175	Total Cloud Fraction - Nimbo-stratus - MH	Total Cloud Fraction - Nimbo-stratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
65	176	Liquid Cloud Fraction - Nimbo-stratus - MH	Liquid Cloud Fraction - Nimbo-stratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
66	177	Liquid Effective Pressure - Nimbo-stratus - MH	Liquid Effective Pressure - Nimbo-stratus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
67	178	Liquid Effective Temperature - Nimbo-stratus - MH	Liquid Effective Temperature - Nimbo-stratus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
68	179	Liquid Log Optical Depth - Nimbo-stratus - MH	Liquid Log Optical Depth - Nimbo-stratus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
69	180	Liquid Water Path - Nimbo-stratus - MH	Liquid Water Path - Nimbo-stratus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360
70	181	Ice Cloud Fraction - Nimbo-stratus - MH	Ice Cloud Fraction - Nimbo-stratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
71	182	Ice Effective Pressure - Nimbo-stratus - MH	Ice Effective Pressure - Nimbo-stratus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
72	183	Ice Effective Temperature - Nimbo-stratus - MH	Ice Effective Temperature - Nimbo-stratus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
73	184	Ice Log Optical Depth - Nimbo-stratus - MH	Ice Log Optical Depth - Nimbo-stratus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
74	185	Ice Water Path - Nimbo-stratus - MH	Ice Water Path - Nimbo-stratus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360

a. The HDF file contains the incorrect spelling “Nimbo-strutus” in all of the SDS names in this table.

Table 17. D2-like 9 Cloud Types – Cirrus (High, Thin) Category

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
75	186	Number Of Observations - Cirrus - MH	Monthly Total Number Of Observations - Cirrus – M	32-Bit Float	N/A	N/A	8*180 *360	1*180 *360
76	187	Total Cloud Fraction - Cirrus - MH	Total Cloud Fraction - Cirrus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
77	188	Liquid Cloud Fraction - Cirrus - MH	Liquid Cloud Fraction - Cirrus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
78	189	Liquid Effective Pressure - Cirrus - MH	Liquid Effective Pressure - Cirrus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
79	190	Liquid Effective Temperature - Cirrus - MH	Liquid Effective Temperature - Cirrus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
80	191	Liquid Log Optical Depth - Cirrus - MH	Liquid Log Optical Depth - Cirrus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
81	192	Liquid Water Path - Cirrus - MH	Liquid Water Path - Cirrus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360
82	193	Ice Cloud Fraction - Cirrus - MH	Ice Cloud Fraction - Cirrus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
83	194	Ice Effective Pressure - Cirrus - MH	Ice Effective Pressure - Cirrus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
84	195	Ice Effective Temperature - Cirrus - MH	Ice Effective Temperature - Cirrus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
85	196	Ice Log Optical Depth - Cirrus - MH	Ice Log Optical Depth - Cirrus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
86	197	Ice Water Path - Cirrus - MH	Ice Water Path - Cirrus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360

Table 18. D2-like 9 Cloud Types – Cirrus-stratus (High, Mid-thick) Category

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
87	198	Number Of Observations - Cirrus-stratus - MH	Monthly Total Number Of Observations - Cirrus-stratus – M	32-Bit Float	N/A	N/A	8*180 *360	1*180 *360
88	199	Total Cloud Fraction - Cirrus-stratus - MH	Total Cloud Fraction - Cirrus-stratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
89	200	Liquid Cloud Fraction - Cirrus-stratus - MH	Liquid Cloud Fraction - Cirrus-stratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
90	201	Liquid Effective Pressure - Cirrus-stratus - MH	Liquid Effective Pressure - Cirrus-stratus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
91	202	Liquid Effective Temperature - Cirrus-stratus - MH	Liquid Effective Temperature - Cirrus-stratus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
92	203	Liquid Log Optical Depth - Cirrus-stratus - MH	Liquid Log Optical Depth - Cirrus-stratus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
93	204	Liquid Water Path - Cirrus-stratus - MH	Liquid Water Path - Cirrus-stratus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360
94	205	Ice Cloud Fraction - Cirrus-stratus - MH	Ice Cloud Fraction - Cirrus-stratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
95	206	Ice Effective Pressure - Cirrus-stratus - MH	Ice Effective Pressure - Cirrus-stratus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
96	207	Ice Effective Temperature - Cirrus-stratus - MH	Ice Effective Temperature - Cirrus-stratus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
97	208	Ice Log Optical Depth - Cirrus-stratus - MH	Ice Log Optical Depth - Cirrus-stratus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
98	209	Ice Water Path - Cirrus-stratus - MH	Ice Water Path - Cirrus-stratus – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360

Table 19. D2-like 9 Cloud Types – Deep Convective (High, Thick) Category

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
99	210	Number Of Observations - Deep Convective - MH	Monthly Total Number Of Observations - Deep Convective – M	32-Bit Float	N/A	N/A	8*180 *360	1*180 *360
100	211	Total Cloud Fraction - Deep Convective - MH	Total Cloud Fraction - Deep Convective – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
101	212	Liquid Cloud Fraction - Deep Convective - MH	Liquid Cloud Fraction - Deep Convective – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
102	213	Liquid Effective Pressure - Deep Convective - MH	Liquid Effective Pressure - Deep Convective – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
103	214	Liquid Effective Temperature - Deep Convective - MH	Liquid Effective Temperature - Deep Convective – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
104	215	Liquid Log Optical Depth - Deep Convective - MH	Liquid Log Optical Depth - Deep Convective – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
105	216	Liquid Water Path - Deep Convective - MH	Liquid Water Path - Deep Convective – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360
106	217	Ice Cloud Fraction - Deep Convective - MH	Ice Cloud Fraction - Deep Convective – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
107	218	Ice Effective Pressure - Deep Convective - MH	Ice Effective Pressure - Deep Convective – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
108	219	Ice Effective Temperature - Deep Convective - MH	Ice Effective Temperature - Deep Convective – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
109	220	Ice Log Optical Depth - Deep Convective - MH	Ice Log Optical Depth - Deep Convective – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
110	221	Ice Water Path - Deep Convective - MH	Ice Water Path - Deep Convective – M	32-Bit Float	$g\ m^{-2}$	0 .. 10000	8*180 *360	1*180 *360

Estimated File Size (1 month file): 247 MB

ISCCP-D2like-GEO Revision Record

The product Revision Record contains information pertaining to approved document changes. The table lists the date the Software Configuration Change Request (SCCR) was approved, the Release and Version Number, the SCCR number, a short description of the revision, and the revised sections. The document authors are listed on the cover.

ISCCP-D2like-GEO Revision Record

SCCR Approval Date	Release/ Version Number	SCCR Number	Description of Revision	Section(s) Affected
05/28/2008	R5V1	675	• Initial version.	All
			• Some links were not working. They have now been modified. (12/09/2010)	All
			• Updated the numbering system of the document where other DPCs were added ahead of this one on the Website. (07/25/2011)	All
07/23/2010	R5V2	799	• Updated Product version.	Sec. 2.18
			• The ASDC footer was added to the bottom of the document. (06/05/2013)	All
7/25/2012	R5V3	916	• Updated Product version.	Page 1
			• Corrected HDF file contents. Added tables.	All
			• Eliminated section numbers from the Data Products Catalog. Specifically, in this document, section number 2.18 was removed.	All
			• Updated some links to refer to the .pdf file instead of the .doc file. (06/20/2014)	All