

## Monthly Gridded Cloud Averages (ISCCP-D2like-Day/Nit)

The Monthly Gridded Cloud Averages (ISCCP-D2like-Day/Nit) archival data product contains monthly and monthly 3-hourly (GMT-based)  $1^{\circ} \times 1^{\circ}$  gridded regional mean CERES MODIS-derived 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. There are separate daytime and nighttime datasets for both Terra-MODIS and Aqua-MODIS. The retrievals, and therefore the quality, are different for each dataset. The CERES MODIS-derived cloud properties are not the official NASA MODIS cloud retrievals, but are based on the CERES cloud working group retrievals that are also available in other CERES products. The CERES MODIS-derived cloud properties have coverage from pole to pole. For these MODIS-based ISCCP-D2like products, the cloud fractions for 42 cloud types, similar to the [ISCCP D1](#) product, are also available. The Single Scanner Footprint TOA/Surface Fluxes and Clouds (SSF) archival data product is the input to this product. Each ISCCP-D2like-Day/Nit file covers a single month using the SSFs from the CERES instrument that is in cross-track scan mode. The science data are Science Data Sets (SDSs) with multiple records. Each record contains spatially averaged data for an individual region.

The major categories of data output on the ISCCP-D2like-Day and ISCCP-D2like-Nit HDF files are:

- 18 D2like Cloud Types for Monthly 3-Hourly/Monthly
- 42 D1like Cloud Type Fractions 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 30](#).

**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:**

**TRMM:** N/A

**Terra:** Edition2A, Edition3A

**Aqua:** Edition2A, Edition3A



## ISCCP-D2like-Day/Nit Metadata

The ISCCP-D2like-Day/Nit 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-Day/Nit Metadata Summary

HDF Name	Description Table	Records	Number of Fields
CERES Baseline Header Metadata	<a href="#">Table B-1</a>	1	36
CERES_metadata Science Data	<a href="#">Table B-2</a>	1	14

## ISCCP-D2like-Day/Nit Scientific Data Sets

The ISCCP-D2like Day/Nit 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 5](#) list the Vgroups following the HDF file structure. The SDSs are 3- or 4-dimensional arrays where the first dimension corresponds to the temporal averaging (8 for monthly 3-hourly mean, 1 for monthly mean, listed in [Table 6](#)). The last two dimensions refer to the latitude and longitude of the regions; the latitude/longitude grid is defined in [Table 7](#). In 4-dimensional arrays, the second dimension refers to the optical depth index, listed in [Table 8](#).

[Table 9](#) and [Table 10](#) contain the SDS index numbers as a function of cloud property for the 18 D2like cloud types. [Table 11](#) and [Table 12](#) contain the SDS index numbers as a function of cloud property and for the 42 D1like cloud types. Each table contains a list of the parameters, including SDS index, SDS name, data type, units, and range.

[Table 13](#) through [Table 30](#) 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. In SDS names, the suffix MH expands to “Monthly 3-Hourly Mean,” and the suffix M expands to “Monthly Mean” at the end of each name.

Table 2. Temporal Averaging Vgroups

Number	Vgroup Name	Monthly 3-Hourly Averages/ Monthly Averages
1	Monthly 3-Hourly Averages	See <a href="#">Table 3</a>
2	Monthly Averages	See <a href="#">Table 3</a>



Table 3. Vgroups within each temporal averaging Vgroup

Number	Vgroup Name	Monthly 3-Hourly Averages/ Monthly Averages
1	Regional Identification Parameters	See <a href="#">Table 13</a>
2	Total Cloud for all Cloud Types	See <a href="#">Table 14</a>
3	D2-like 9 Cloud Types	See <a href="#">Table 4</a>
4	D1-like 42 Cloud Type Fractions	See <a href="#">Table 5</a>

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 <a href="#">Table 15</a>
2	Strato-Cumulus (Low, Mid-thick)	See <a href="#">Table 16</a>
3	Stratus (Low, Thick)	See <a href="#">Table 17</a>
4	Alto-Cumulus (Mid, Thin)	See <a href="#">Table 18</a>
5	Alto-Stratus (Mid, Mid-thick)	See <a href="#">Table 19</a>
6	Nimbo-Stratus (Mid, Thick)	See <a href="#">Table 20</a>
7	Cirrus (High, Thin)	See <a href="#">Table 21</a>
8	Cirrus-Stratus (High, Mid-thick)	See <a href="#">Table 22</a>
9	Deep Convective (High, Thick)	See <a href="#">Table 23</a>

Table 5. Vgroups within D1-like 42 Cloud Type Fractions  
 (7 cloud layers x 6 optical depth bins = 42 total cloud types)

Number	Vgroup Name	Monthly 3-Hourly Averages/ Monthly Averages
1	(10-180mb)	See <a href="#">Table 24</a>
2	(180-310mb)	See <a href="#">Table 25</a>
3	(310-440mb)	See <a href="#">Table 26</a>
4	(440-560mb)	See <a href="#">Table 27</a>
5	(560-680mb)	See <a href="#">Table 28</a>
6	(680-800mb)	See <a href="#">Table 29</a>
7	(800-1000mb)	See <a href="#">Table 30</a>



Table 6. 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 7. 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 8. The 6 optical depth indices used in Table 11 and Table 12.

Optical Depth Index	Optical Depth Increment
1	0.02 – 1.27
2	1.27 - 3.55
3	3.55 – 9.38
4	9.38 – 22.63
5	22.63 – 60.36
6	60.36 – 378.65



Table 9. 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	21	39	57	75	93	111	129	147	Number Of Observations	32-Bit Float	N/A	N/A
04	22	40	58	76	94	112	130	148	Total Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
05	23	41	59	77	95	113	131	149	Liquid Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
06	24	42	60	78	96	114	132	150	Liquid Effective Pressure	32-Bit Float	hPa	0 .. 1100
07	25	43	61	79	97	115	133	151	Liquid Effective Temperature	32-Bit Float	K	100 .. 350
08	26	44	62	80	98	116	134	152	Liquid Linear Optical Depth -	32-Bit Float	N/A	0 .. 400
09	27	45	63	81	99	117	135	153	Liquid Log Optical Depth	32-Bit Float	N/A	-6 .. 6
10	28	46	64	82	100	118	136	154	Liquid Water Path	32-Bit Float	g m <sup>-2</sup>	0 .. 10000
11	29	47	65	83	101	119	137	155	Liquid Water Particle Radius	32-Bit Float	μm	0 .. 40
12	30	48	66	84	102	120	138	156	Liquid Infrared Emissivity	32-Bit Float	N/A	0 .. 1
13	31	49	67	85	103	121	139	157	Ice Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
14	32	50	68	86	104	122	140	158	Ice Effective Pressure	32-Bit Float	hPa	0 .. 1100
15	33	51	69	87	105	123	141	159	Ice Effective Temperature	32-Bit Float	K	100 .. 350
16	34	52	70	88	106	124	142	160	Ice Linear Optical Depth	32-Bit Float	N/A	0 .. 400
17	35	53	71	89	107	125	143	161	Ice Log Optical Depth	32-Bit Float	N/A	-6 .. 6
18	36	54	72	90	108	126	144	162	Ice Water Path	32-Bit Float	g m <sup>-2</sup>	0 .. 10000
19	37	55	73	91	109	127	145	163	Ice Water Particle Diameter	32-Bit Float	μm	0 .. 300
20	38	56	74	92	110	128	146	164	Ice Infrared Emissivity	32-Bit Float	N/A	0 .. 1

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 6](#) for a complete list of the 8 GMT-based monthly 3-hourly mean time indices. See [Table 7](#) for the definition of the 180\*360 regions.

Red = Liquid Cloud Phase  
 Blue = Ice Cloud Phase



Table 10. 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
189	207	225	243	261	279	297	315	333	Monthly Total Number Of Observations	32-Bit Float	N/A	N/A
190	208	226	244	262	280	298	316	334	Total Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
191	209	227	245	263	281	299	317	335	Liquid Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
192	210	228	246	264	282	300	318	336	Liquid Effective Pressure	32-Bit Float	hPa	0 .. 1100
193	211	229	247	265	283	301	319	337	Liquid Effective Temperature	32-Bit Float	K	100 .. 350
194	212	230	248	266	284	302	320	338	Liquid Linear Optical Depth -	32-Bit Float	N/A	0 .. 400
195	213	231	249	267	285	303	321	339	Liquid Log Optical Depth	32-Bit Float	N/A	-6 .. 6
196	214	232	250	268	286	304	322	340	Liquid Water Path	32-Bit Float	g m <sup>-2</sup>	0 .. 10000
197	215	233	251	269	287	305	323	341	Liquid Water Particle Radius	32-Bit Float	μm	0 .. 40
198	216	234	252	270	288	306	324	342	Liquid Infrared Emissivity	32-Bit Float	N/A	0 .. 1
199	217	235	253	271	289	307	325	343	Ice Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
200	218	236	254	272	290	308	326	344	Ice Effective Pressure	32-Bit Float	hPa	0 .. 1100
201	219	237	255	273	291	309	327	345	Ice Effective Temperature	32-Bit Float	K	100 .. 350
202	220	238	256	274	292	310	328	346	Ice Linear Optical Depth	32-Bit Float	N/A	0 .. 400
203	221	239	257	275	293	311	329	347	Ice Log Optical Depth	32-Bit Float	N/A	-6 .. 6
204	222	240	258	276	294	312	330	348	Ice Water Path	32-Bit Float	g m <sup>-2</sup>	0 .. 10000
205	223	241	259	277	295	313	331	349	Ice Water Particle Diameter	32-Bit Float	μm	0 .. 300
206	224	242	260	278	296	314	332	350	Ice Infrared Emissivity	32-Bit Float	N/A	0 .. 1

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 6](#) for the monthly mean time index. See [Table 7](#) for the definition of the 180\*360 regions.

Red = Liquid Cloud Phase  
 Blue = Ice Cloud Phase



Table 11. SDSs for D1-like 42 Cloud Type Fractions of Monthly 3-Hourly Averages

SDS Index of Each VGroup Number							Monthly 3-Hourly Averages			
1	2	3	4	5	6	7	SDS Name	Data Type	Units	Range
165	168	171	174	177	180	183	Total Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
166	169	172	175	178	181	184	Liquid Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
167	170	173	176	179	182	185	Ice Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0

Each monthly 3-hourly mean SDS has 8\*6\*180\*360 elements. See [Table 5](#) for the list of the seven D1 Vgroup numbers. The 42 cloud types are the combination of the 7 Vgroups x 6 optical depth indices. See [Table 8](#) for a complete list of optical depth indices. See [Table 6](#) for a complete list of the 8 GMT-based monthly 3-hourly mean time indices. See [Table 7](#) for a definition of the 180\*360 regions.

Table 12. SDSs for D1-like 42 Cloud Type Fractions of Monthly Averages

SDS Index of Each VGroup Number							Monthly Averages			
1	2	3	4	5	6	7	SDS Name	Data Type	Units	Range
351	354	357	360	363	366	369	Total Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
352	355	358	361	364	367	370	Liquid Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0
353	356	359	362	365	368	371	Ice Cloud Fraction	32-Bit Float	Percent	0.0 .. 100.0

Each monthly mean SDS has 1\*6\*180\*360 elements. See [Table 5](#) for the list of the seven D1 Vgroup numbers. The 42 cloud types are the combination of the 7 Vgroups x 6 optical depth indices. See [Table 8](#) for a complete list of optical depth indices. See [Table 6](#) for the monthly mean time index. See [Table 7](#) for a definition of the 180\*360 regions.

Table 13. 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	186	Colatitude - MH		Colatitude - M		32-Bit Float	Degree	0.0 .. 180.0	8*180*360	1*180*360
1	187	Longitude - MH		Longitude - M		32-Bit Float	Degree	0.0 .. 360.0	8*180*360	1*180*360



Table 14. 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	188	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 15. 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	189	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	190	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	191	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	192	Liquid Effective Pressure - Cumulus - MH	Liquid Effective Pressure - Cumulus - M	32-Bit Float	hPa	0 .. 1100	8*180*360	1*180*360
7	193	Liquid Effective Temperature - Cumulus - MH	Liquid Effective Temperature - Cumulus - M	32-Bit Float	K	100 .. 350	8*180*360	1*180*360
8	194	Liquid Linear Optical Depth - Cumulus - MH	Liquid Linear Optical Depth - Cumulus - M	32-Bit Float	N/A	0 .. 400	8*180*360	1*180*360
9	195	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
10	196	Liquid Water Path - Cumulus - MH	Liquid Water Path - Cumulus - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180*360	1*180*360
11	197	Liquid Water Particle Radius - Cumulus - MH	Liquid Water Particle Radius - Cumulus - M	32-Bit Float	μm	0 .. 40	8*180*360	1*180*360
12	198	Liquid Infrared Emissivity - Cumulus - MH	Liquid Infrared Emissivity - Cumulus - M	32-Bit Float	N/A	0 .. 1	8*180*360	1*180*360
13	199	Ice Cloud Fraction - Cumulus - MH	Ice Cloud Fraction - Cumulus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
14	200	Ice Effective Pressure - Cumulus - MH	Ice Effective Pressure - Cumulus - M	32-Bit Float	hPa	0 .. 1100	8*180*360	1*180*360
15	201	Ice Effective Temperature - Cumulus - MH	Ice Effective Temperature - Cumulus - M	32-Bit Float	K	100 .. 350	8*180*360	1*180*360
16	202	Ice Linear Optical Depth - Cumulus - MH	Ice Linear Optical Depth - Cumulus - M	32-Bit Float	N/A	0 .. 400	8*180*360	1*180*360
17	203	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
18	204	Ice Water Path - Cumulus - MH	Ice Water Path - Cumulus - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180*360	1*180*360
19	205	Ice Water Particle Diameter - Cumulus - MH	Ice Water Particle Diameter - Cumulus - M	32-Bit Float	μm	0 .. 300	8*180*360	1*180*360
20	206	Ice Infrared Emissivity - Cumulus - MH	Ice Infrared Emissivity - Cumulus - M	32-Bit Float	N/A	0 .. 1	8*180*360	1*180*360



Table 16. 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
21	207	Number Of Observations - Stratocumulus - MH	Monthly Total Number Of Observations - Stratocumulus - M	32-Bit Float	N/A	N/A	8*180*360	1*180*360
22	208	Total Cloud Fraction - Stratocumulus - MH	Total Cloud Fraction - Stratocumulus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
23	209	Liquid Cloud Fraction - Stratocumulus - MH	Liquid Cloud Fraction - Stratocumulus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
24	210	Liquid Effective Pressure - Stratocumulus - MH	Liquid Effective Pressure - Stratocumulus - M	32-Bit Float	hPa	0 .. 1100	8*180*360	1*180*360
25	211	Liquid Effective Temperature - Stratocumulus - MH	Liquid Effective Temperature - Stratocumulus - M	32-Bit Float	K	100 .. 350	8*180*360	1*180*360
26	212	Liquid Linear Optical Depth - Stratocumulus - MH	Liquid Linear Optical Depth - Stratocumulus - M	32-Bit Float	N/A	0 .. 400	8*180*360	1*180*360
27	213	Liquid Log Optical Depth - Stratocumulus - MH	Liquid Log Optical Depth - Stratocumulus - M	32-Bit Float	N/A	-6 .. 6	8*180*360	1*180*360
28	214	Liquid Water Path - Stratocumulus - MH	Liquid Water Path - Stratocumulus - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180*360	1*180*360
29	215	Liquid Water Particle Radius - Stratocumulus - MH	Liquid Water Particle Radius - Stratocumulus - M	32-Bit Float	μm	0 .. 40	8*180*360	1*180*360
30	216	Liquid Infrared Emissivity - Stratocumulus - MH	Liquid Infrared Emissivity - Stratocumulus - M	32-Bit Float	N/A	0 .. 1	8*180*360	1*180*360
31	217	Ice Cloud Fraction - Stratocumulus - MH	Ice Cloud Fraction - Stratocumulus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
32	218	Ice Effective Pressure - Stratocumulus - MH	Ice Effective Pressure - Stratocumulus - M	32-Bit Float	hPa	0 .. 1100	8*180*360	1*180*360
33	219	Ice Effective Temperature - Stratocumulus - MH	Ice Effective Temperature - Stratocumulus - M	32-Bit Float	K	100 .. 350	8*180*360	1*180*360
34	220	Ice Linear Optical Depth - Stratocumulus - MH	Ice Linear Optical Depth - Stratocumulus - M	32-Bit Float	N/A	0 .. 400	8*180*360	1*180*360
35	221	Ice Log Optical Depth - Stratocumulus - MH	Ice Log Optical Depth - Stratocumulus - M	32-Bit Float	N/A	-6 .. 6	8*180*360	1*180*360
36	222	Ice Water Path - Stratocumulus - MH	Ice Water Path - Stratocumulus - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180*360	1*180*360
37	223	Ice Water Particle Diameter - Stratocumulus - MH	Ice Water Particle Diameter - Stratocumulus - M	32-Bit Float	μm	0 .. 300	8*180*360	1*180*360
38	224	Ice Infrared Emissivity - Stratocumulus - MH	Ice Infrared Emissivity - Stratocumulus - M	32-Bit Float	N/A	0 .. 1	8*180*360	1*180*360



Table 17. 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
39	225	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
40	226	Total Cloud Fraction - Stratus - MH	Total Cloud Fraction - Stratus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
41	227	Liquid Cloud Fraction - Stratus - MH	Liquid Cloud Fraction - Stratus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
42	228	Liquid Effective Pressure - Stratus - MH	Liquid Effective Pressure - Stratus - M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
43	229	Liquid Effective Temperature - Stratus - MH	Liquid Effective Temperature - Stratus - M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
44	230	Liquid Linear Optical Depth - Stratus - MH	Liquid Linear Optical Depth - Stratus - M	32-Bit Float	N/A	0 .. 400	8*180 *360	1*180 *360
45	231	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
46	232	Liquid Water Path - Stratus - MH	Liquid Water Path - Stratus - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180 *360	1*180 *360
47	233	Liquid Water Particle Radius - Stratus - MH	Liquid Water Particle Radius - Stratus - M	32-Bit Float	μm	0 .. 40	8*180 *360	1*180 *360
48	234	Liquid Infrared Emissivity - Stratus - MH	Liquid Infrared Emissivity - Stratus - M	32-Bit Float	N/A	0 .. 1	8*180 *360	1*180 *360
49	235	Ice Cloud Fraction - Stratus - MH	Ice Cloud Fraction - Stratus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
50	236	Ice Effective Pressure - Stratus - MH	Ice Effective Pressure - Stratus - M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
51	237	Ice Effective Temperature - Stratus - MH	Ice Effective Temperature - Stratus - M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
52	238	Ice Linear Optical Depth - Stratus - MH	Ice Linear Optical Depth - Stratus - M	32-Bit Float	N/A	0 .. 400	8*180 *360	1*180 *360
53	239	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
54	240	Ice Water Path - Stratus - MH	Ice Water Path - Stratus - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180 *360	1*180 *360
55	241	Ice Water Particle Diameter - Stratus - MH	Ice Water Particle Diameter - Stratus - M	32-Bit Float	μm	0 .. 300	8*180 *360	1*180 *360
56	242	Ice Infrared Emissivity - Stratus - MH	Ice Infrared Emissivity - Stratus - M	32-Bit Float	N/A	0 .. 1	8*180 *360	1*180 *360



Table 18. 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
57	243	Number Of Observations - AltoCumulus - MH	Monthly Total Number Of Observations - AltoCumulus – M	32-Bit Float	N/A	N/A	8*180*360	1*180*360
58	244	Total Cloud Fraction - AltoCumulus - MH	Total Cloud Fraction - AltoCumulus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
59	245	Liquid Cloud Fraction - AltoCumulus - MH	Liquid Cloud Fraction - AltoCumulus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
60	246	Liquid Effective Pressure - AltoCumulus - MH	Liquid Effective Pressure - AltoCumulus – M	32-Bit Float	hPa	0 .. 1100	8*180*360	1*180*360
61	247	Liquid Effective Temperature - AltoCumulus - MH	Liquid Effective Temperature - AltoCumulus – M	32-Bit Float	K	100 .. 350	8*180*360	1*180*360
62	248	Liquid Linear Optical Depth - AltoCumulus - MH	Liquid Linear Optical Depth - AltoCumulus – M	32-Bit Float	N/A	0 .. 400	8*180*360	1*180*360
63	249	Liquid Log Optical Depth - AltoCumulus - MH	Liquid Log Optical Depth - AltoCumulus – M	32-Bit Float	N/A	-6 .. 6	8*180*360	1*180*360
64	250	Liquid Water Path - AltoCumulus - MH	Liquid Water Path - AltoCumulus – M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180*360	1*180*360
65	251	Liquid Water Particle Radius - AltoCumulus - MH	Liquid Water Particle Radius - AltoCumulus – M	32-Bit Float	µm	0 .. 40	8*180*360	1*180*360
66	252	Liquid Infrared Emissivity - AltoCumulus - MH	Liquid Infrared Emissivity - AltoCumulus – M	32-Bit Float	N/A	0 .. 1	8*180*360	1*180*360
67	253	Ice Cloud Fraction - AltoCumulus - MH	Ice Cloud Fraction - AltoCumulus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
68	254	Ice Effective Pressure - AltoCumulus - MH	Ice Effective Pressure - AltoCumulus – M	32-Bit Float	hPa	0 .. 1100	8*180*360	1*180*360
69	255	Ice Effective Temperature - AltoCumulus - MH	Ice Effective Temperature - AltoCumulus – M	32-Bit Float	K	100 .. 350	8*180*360	1*180*360
70	256	Ice Linear Optical Depth - AltoCumulus - MH	Ice Linear Optical Depth - AltoCumulus – M	32-Bit Float	N/A	0 .. 400	8*180*360	1*180*360
71	257	Ice Log Optical Depth - AltoCumulus - MH	Ice Log Optical Depth - AltoCumulus – M	32-Bit Float	N/A	-6 .. 6	8*180*360	1*180*360
72	258	Ice Water Path - AltoCumulus - MH	Ice Water Path - AltoCumulus – M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180*360	1*180*360
73	259	Ice Water Particle Diameter - AltoCumulus - MH	Ice Water Particle Diameter - AltoCumulus – M	32-Bit Float	µm	0 .. 300	8*180*360	1*180*360
74	260	Ice Infrared Emissivity - AltoCumulus - MH	Ice Infrared Emissivity - AltoCumulus – M	32-Bit Float	N/A	0 .. 1	8*180*360	1*180*360



Table 19. 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
75	261	Number Of Observations - Altostratus - MH	Monthly Total Number Of Observations - Altostratus - M	32-Bit Float	N/A	N/A	8*180*360	1*180*360
76	262	Total Cloud Fraction - Altostratus – MH	Total Cloud Fraction - Altostratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
77	263	Liquid Cloud Fraction - Altostratus - MH	Liquid Cloud Fraction - Altostratus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
78	264	Liquid Effective Pressure - Altostratus - MH	Liquid Effective Pressure - Altostratus - M	32-Bit Float	hPa	0 .. 1100	8*180*360	1*180*360
79	265	Liquid Effective Temperature - Altostratus - MH	Liquid Effective Temperature - Altostratus - M	32-Bit Float	K	100 .. 350	8*180*360	1*180*360
80	266	Liquid Linear Optical Depth - Altostratus - MH	Liquid Linear Optical Depth - Altostratus - M	32-Bit Float	N/A	0 .. 400	8*180*360	1*180*360
81	267	Liquid Log Optical Depth - Altostratus - MH	Liquid Log Optical Depth - Altostratus - M	32-Bit Float	N/A	-6 .. 6	8*180*360	1*180*360
82	268	Liquid Water Path - Altostratus - MH	Liquid Water Path - Altostratus - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180*360	1*180*360
83	269	Liquid Water Particle Radius - Altostratus - MH	Liquid Water Particle Radius - Altostratus - M	32-Bit Float	µm	0 .. 40	8*180*360	1*180*360
84	270	Liquid Infrared Emissivity - Altostratus - MH	Liquid Infrared Emissivity - Altostratus - M	32-Bit Float	N/A	0 .. 1	8*180*360	1*180*360
85	271	Ice Cloud Fraction - Altostratus - MH	Ice CloudFraction - Altostratus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
86	272	Ice Effective Pressure - Altostratus - MH	Ice Effective Pressure - Altostratus - M	32-Bit Float	hPa	0 .. 1100	8*180*360	1*180*360
87	273	Ice Effective Temperature - Altostratus - MH	Ice Effective Temperature - Altostratus - M	32-Bit Float	K	100 .. 350	8*180*360	1*180*360
88	274	Ice Linear Optical Depth - Altostratus - MH	Ice Linear Optical Depth - Altostratus - M	32-Bit Float	N/A	0 .. 400	8*180*360	1*180*360
89	275	Ice Log Optical Depth - Altostratus - MH	Ice Log Optical Depth - Altostratus - M	32-Bit Float	N/A	-6 .. 6	8*180*360	1*180*360
90	276	Ice Water Path - Altostratus - MH	Ice Water Path - Altostratus - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180*360	1*180*360
91	277	Ice Water Particle Diameter - Altostratus - MH	Ice Water Particle Diameter - Altostratus - M	32-Bit Float	µm	0 .. 300	8*180*360	1*180*360
92	278	Ice Infrared Emissivity - Altostratus - MH	Ice Infrared Emissivity - Altostratus - M	32-Bit Float	N/A	0 .. 1	8*180*360	1*180*360



Table 20. D2-like 9 Cloud Types – Nimbo-Stratus (Mid, Thick) Category

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
93	279	Number Of Observations - Nimbostratus – MH <sup>a</sup>	Monthly Total Number Of Observations - Nimbostratus – M	32-Bit Float	N/A	N/A	8*180 *360	1*180 *360
94	280	Total Cloud Fraction - Nimbostratus - MH	Total Cloud Fraction - Nimbostratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
95	281	Liquid Cloud Fraction - Nimbostratus - MH	Liquid Cloud Fraction - Nimbostratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
96	282	Liquid Effective Pressure - Nimbostratus - MH	Liquid Effective Pressure - Nimbostratus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
97	283	Liquid Effective Temperature - Nimbostratus - MH	Liquid Effective Temperature - Nimbostratus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
98	284	Liquid Linear Optical Depth - Nimbostratus - MH	Liquid Linear Optical Depth - Nimbostratus – M	32-Bit Float	N/A	0 .. 400	8*180 *360	1*180 *360
99	285	Liquid Log Optical Depth - Nimbostratus - MH	Liquid Log Optical Depth - Nimbostratus -	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
100	286	Liquid Water Path - Nimbostratus - MH	Liquid Water Path - Nimbostratus – M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180 *360	1*180 *360
101	287	Liquid Water Particle Radius - Nimbostratus - MH	Liquid Water Particle Radius - Nimbostratus – MH	32-Bit Float	μm	0 .. 40	8*180 *360	1*180 *360
102	288	Liquid Infrared Emissivity - Nimbostratus - MH	Liquid Infrared Emissivity - Nimbostratus – M	32-Bit Float	N/A	0 .. 1	8*180 *360	1*180 *360
103	289	Ice Cloud Fraction - Nimbostratus - MH	Ice Cloud Fraction - Nimbostratus – M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
104	290	Ice Effective Pressure - Nimbostratus - MH	Ice Effective Pressure - Nimbostratus – M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
105	291	Ice Effective Temperature - Nimbostratus - MH	Ice Effective Temperature - Nimbostratus – M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
106	292	Ice Linear Optical Depth - Nimbostratus - MH	Ice Linear Optical Depth - Nimbostratus – M	32-Bit Float	N/A	0 .. 400	8*180 *360	1*180 *360
107	293	Ice Log Optical Depth - Nimbostratus - MH	Ice Log Optical Depth - Nimbostratus – M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
108	294	Ice Water Path - Nimbostratus - MH	Ice Water Path - Nimbostratus – M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180 *360	1*180 *360
109	295	Ice Water Particle Diameter - Nimbostratus - MH	Ice Water Particle Diameter - Nimbostratus – M	32-Bit Float	μm	0 .. 300	8*180 *360	1*180 *360
110	296	Ice Infrared Emissivity - Nimbostratus - MH	Ice Infrared Emissivity - Nimbostratus – M	32-Bit Float	N/A	0 .. 1	8*180 *360	1*180 *360

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





Table 21. 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
111	297	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
112	298	Total Cloud Fraction - Cirrus - MH	Total Cloud Fraction - Cirrus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
113	299	Liquid Cloud Fraction - Cirrus - MH	Liquid Cloud Fraction - Cirrus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
114	300	Liquid Effective Pressure - Cirrus - MH	Liquid Effective Pressure - Cirrus - M	32-Bit Float	hPa	0 .. 1100	8*180*360	1*180*360
115	301	Liquid Effective Temperature - Cirrus - MH	Liquid Effective Temperature - Cirrus - M	32-Bit Float	K	100 .. 350	8*180*360	1*180*360
116	302	Liquid Linear Optical Depth - Cirrus - MH	Liquid Linear Optical Depth - Cirrus - M	32-Bit Float	N/A	0 .. 400	8*180*360	1*180*360
117	303	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
118	304	Liquid Water Path - Cirrus - MH	Liquid Water Path - Cirrus - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180*360	1*180*360
119	305	Liquid Water Particle Radius - Cirrus - MH	Liquid Water Particle Radius - Cirrus - M	32-Bit Float	μm	0 .. 40	8*180*360	1*180*360
120	306	Liquid Infrared Emissivity - Cirrus - MH	Liquid Infrared Emissivity - Cirrus - M	32-Bit Float	N/A	0 .. 1	8*180*360	1*180*360
121	307	Ice Cloud Fraction - Cirrus - MH	Ice Cloud Fraction - Cirrus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180*360	1*180*360
122	308	Ice Effective Pressure - Cirrus - MH	Ice Effective Pressure - Cirrus - M	32-Bit Float	hPa	0 .. 1100	8*180*360	1*180*360
123	309	Ice Effective Temperature - Cirrus - MH	Ice Effective Temperature - Cirrus - M	32-Bit Float	K	100 .. 350	8*180*360	1*180*360
124	310	Ice Linear Optical Depth - Cirrus - MH	Ice Linear Optical Depth - Cirrus - M	32-Bit Float	N/A	0 .. 400	8*180*360	1*180*360
125	311	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
126	312	Ice Water Path - Cirrus - MH	Ice Water Path - Cirrus - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180*360	1*180*360
127	313	Ice Water Particle Diameter - Cirrus - MH	Ice Water Particle Diameter - Cirrus - M	32-Bit Float	μm	0 .. 300	8*180*360	1*180*360
128	314	Ice Infrared Emissivity - Cirrus - MH	Ice Infrared Emissivity - Cirrus - M	32-Bit Float	N/A	0 .. 1	8*180*360	1*180*360



Table 22. 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
129	315	Number Of Observations - Cirrostratus - MH	Monthly Total Number Of Observations - Cirrostratus - M	32-Bit Float	N/A	N/A	8*180 *360	1*180 *360
130	316	Total Cloud Fraction - Cirrostratus - MH	Total Cloud Fraction - Cirrostratus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
131	317	Liquid Cloud Fraction - Cirrostratus - MH	Liquid Cloud Fraction - Cirrostratus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
132	318	Liquid Effective Pressure - Cirrostratus - MH	Liquid Effective Pressure - Cirrostratus - M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
133	319	Liquid Effective Temperature - Cirrostratus - MH	Liquid Effective Temperature - Cirrostratus - M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
134	320	Liquid Linear Optical Depth - Cirrostratus - MH	Liquid Linear Optical Depth - Cirrostratus - M	32-Bit Float	N/A	0 .. 400	8*180 *360	1*180 *360
135	321	Liquid Log Optical Depth - Cirrostratus - MH	Liquid Log Optical Depth - Cirrostratus - M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
136	322	Liquid Water Path - Cirrostratus - MH	Liquid Water Path - Cirrostratus - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180 *360	1*180 *360
137	323	Liquid Water Particle Radius - Cirrostratus - MH	Liquid Water Particle Radius - Cirrostratus - M	32-Bit Float	μm	0 .. 40	8*180 *360	1*180 *360
138	324	Liquid Infrared Emissivity - Cirrostratus - MH	Liquid Infrared Emissivity - Cirrostratus - M	32-Bit Float	N/A	0 .. 1	8*180 *360	1*180 *360
139	325	Ice Cloud Fraction - Cirrostratus - MH	Ice Cloud Fraction - Cirrostratus - M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
140	326	Ice Effective Pressure - Cirrostratus - MH	Ice Effective Pressure - Cirrostratus - M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
141	327	Ice Effective Temperature - Cirrostratus - MH	Ice Effective Temperature - Cirrostratus - M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
142	328	Ice Linear Optical Depth - Cirrostratus - MH	Ice Linear Optical Depth - Cirrostratus - MH	32-Bit Float	N/A	0 .. 400	8*180 *360	1*180 *360
143	329	Ice Log Optical Depth - Cirrostratus - MH	Ice Log Optical Depth - Cirrostratus - M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
144	330	Ice Water Path - Cirrostratus - MH	Ice Water Path - Cirrostratus - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180 *360	1*180 *360
145	331	Ice Water Particle Diameter - Cirrostratus - MH	Ice Water Particle Diameter - Cirrostratus - M	32-Bit Float	μm	0 .. 300	8*180 *360	1*180 *360
146	332	Ice Infrared Emissivity - Cirrostratus - MH	Ice Infrared Emissivity - Cirrostratus - M	32-Bit Float	N/A	0 .. 1	8*180 *360	1*180 *360





Table 23. 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
147	333	Number Of Observations - Deep Convection - MH	Monthly Total Number Of Observations - Deep Convection - M	32-Bit Float	N/A	N/A	8*180 *360	1*180 *360
148	334	Total Cloud Fraction - Deep Convection - MH	Total Cloud Fraction - Deep Convection - M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
149	335	Liquid Cloud Fraction - Deep Convection - MH	Liquid Cloud Fraction - Deep Convection - M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
150	336	Liquid Effective Pressure - Deep Convection - MH	Liquid Effective Pressure - Deep Convection - M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
151	337	Liquid Effective Temperature - Deep Convection - MH	Liquid Effective Temperature - Deep Convection - M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
152	338	Liquid Linear Optical Depth - Deep Convection - MH	Liquid Linear Optical Depth - Deep Convection - M	32-Bit Float	N/A	0 .. 400	8*180 *360	1*180 *360
153	339	Liquid Log Optical Depth - Deep Convection - MH	Liquid Log Optical Depth - Deep Convection - M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
154	340	Liquid Water Path - Deep Convection - MH	Liquid Water Path - Deep Convection - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180 *360	1*180 *360
155	341	Liquid Water Particle Radius - Deep Convection - MH	Liquid Water Particle Radius - Deep Convection - M	32-Bit Float	μm	0 .. 40	8*180 *360	1*180 *360
156	342	Liquid Infrared Emissivity - Deep Convection - MH	Liquid Infrared Emissivity - Deep Convection - M	32-Bit Float	N/A	0 .. 1	8*180 *360	1*180 *360
157	343	Ice Cloud Fraction - Deep Convection - MH	Ice Cloud Fraction - Deep Convection - M	32-Bit Float	Percent	0.0 .. 100.0	8*180 *360	1*180 *360
158	344	Ice Effective Pressure - Deep Convection - MH	Ice Effective Pressure - Deep Convection - M	32-Bit Float	hPa	0 .. 1100	8*180 *360	1*180 *360
159	345	Ice Effective Temperature - Deep Convection - MH	Ice Effective Temperature - Deep Convection - M	32-Bit Float	K	100 .. 350	8*180 *360	1*180 *360
160	346	Ice Linear Optical Depth - Deep Convection - MH	Ice Linear Optical Depth - Deep Convection - M	32-Bit Float	N/A	0 .. 400	8*180 *360	1*180 *360
161	347	Ice Log Optical Depth - Deep Convection - MH	Ice Log Optical Depth - Deep Convection - M	32-Bit Float	N/A	-6 .. 6	8*180 *360	1*180 *360
162	348	Ice Water Path - Deep Convection - MH	Ice Water Path - Deep Convection - M	32-Bit Float	g m <sup>-2</sup>	0 .. 10000	8*180 *360	1*180 *360
163	349	Ice Water Particle Diameter - Deep Convection - MH	Ice Water Particle Diameter - Deep Convection - M	32-Bit Float	μm	0 .. 300	8*180 *360	1*180 *360
164	350	Ice Infrared Emissivity - Deep Convection - MH	Ice Infrared Emissivity - Deep Convection - M	32-Bit Float	N/A	0 .. 1	8*180 *360	1*180 *360



Table 24. D1-like 42 Cloud Type Fractions (10-180mb)

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
165	351	Total Cloud Area Fraction - (10-180mb) - MH	Total Cloud Area Fraction - (10-180mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
166	352	Liquid Cloud Area Fraction - (10-180mb) - MH	Liquid Cloud Area Fraction - (10-180mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
167	353	Ice Cloud Area Fraction - (10-180mb) - MH	Ice Cloud Area Fraction - (10-180mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360

Table 25. D1-like 42 Cloud Type Fractions (180-310mb)

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
168	354	Total Cloud Area Fraction - (180-310mb) - MH	Total Cloud Area Fraction - (180-310mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
169	355	Liquid Cloud Area Fraction - (180-310mb) - MH	Liquid Cloud Area Fraction - (180-310mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
170	356	Ice Cloud Area Fraction - (180-310mb) - MH	Ice Cloud Area Fraction - (180-310mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360

Table 26. D1-like 42 Cloud Type Fractions (310-440mb)

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
171	357	Total Cloud Area Fraction - (310-440mb) - MH	Total Cloud Area Fraction - (310-440mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
172	358	Liquid Cloud Area Fraction - (310-440mb) - MH	Liquid Cloud Area Fraction - (310-440mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
173	359	Ice Cloud Area Fraction - (310-440mb) - MH	Ice Cloud Area Fraction - (310-440mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360



Table 27. D1-like 42 Cloud Type Fractions (440-560mb)

SDS index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
174	360	Total Cloud Area Fraction - (440-560mb) - MH	Total Cloud Area Fraction - (440-560mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
175	361	Liquid Cloud Area Fraction - (440-560mb) - MH	Liquid Cloud Area Fraction - (440-560mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
176	362	Ice Cloud Area Fraction - (440-560mb) - MH	Ice Cloud Area Fraction - (440-560mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360

Table 28. D1-like 42 Cloud Type Fractions (560-680mb)

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
177	363	Total Cloud Area Fraction - (560-680mb) - MH	Total Cloud Area Fraction - (560-680mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
178	364	Liquid Cloud Area Fraction - (560-680mb) - MH	Liquid Cloud Area Fraction - (560-680mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
179	365	Ice Cloud Area Fraction - (560-680mb) - MH	Ice Cloud Area Fraction - (560-680mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360

Table 29. D1-like 42 Cloud Type Fractions (680-800mb)

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
180	366	Total Cloud Area Fraction - (680-800mb) - MH	Total Cloud Area Fraction - (680-800mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
181	367	Liquid Cloud Area Fraction - (680-800mb) - MH	Liquid Cloud Area Fraction - (680-800mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
182	368	Ice Cloud Area Fraction - (680-800mb) - MH	Ice Cloud Area Fraction - (680-800mb) - M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360



Table 30. D1-like 42 Cloud Type Fractions (800-1000mb)

SDS Index		SDS Name					Dimensions	
MH	M	Monthly 3-Hourly Mean (MH)	Monthly Mean (M)	Data Type	Units	Range	MH	M
183	369	Total Cloud Area Fraction – (800-1000mb) – MH	Total Cloud Area Fraction – (800-1000mb) – M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
184	370	Liquid Cloud Area Fraction – (800-1000mb) – MH	Liquid Cloud Area Fraction – (800-1000mb) – M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360
185	371	Ice Cloud Area Fraction – (800-1000mb) – MH	Ice Cloud Area Fraction – (800-1000mb) – M	32-Bit Float	Percent	0.0 .. 100.0	8*6*180 *360	1*6*180 *360

**Estimated File Size (1 month file):**

**135 MB**



## ISCCP-D2like-Day/Nit 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-Day/Nit Revision Record

SCCR Approval Date	Release/Version Number	SCCR Number	Description of Revision	Section(s) Affected
04/03/2008	R5V1	672	<ul style="list-style-type: none"> <li>Initial version.</li> <li>Some links were not working. They have now been modified. (12/09/2010)</li> </ul>	All All
03/01/2011	R5V2	837	<ul style="list-style-type: none"> <li>Added two tables to indicate two new categories.</li> <li>The ASDC footer was added to the bottom of the document. (06/05/2013)</li> </ul>	Tables 2.9-11 & 2.9-12 All
7/25/2012	R5V3	915	<ul style="list-style-type: none"> <li>Updated Product version.</li> <li>Added two tables to define dimension indices.</li> <li>Corrected dimension information in tables.</li> <li>Eliminated section numbers from the Data Products Catalog. Specifically, in this document, section number 2.9 was removed.</li> <li>Updated some links to refer to the .pdf file instead of the .doc file. (06/20/2014)</li> </ul>	Page 1 Tables 6 & 7 Tables 12, 13, & 14 All All

