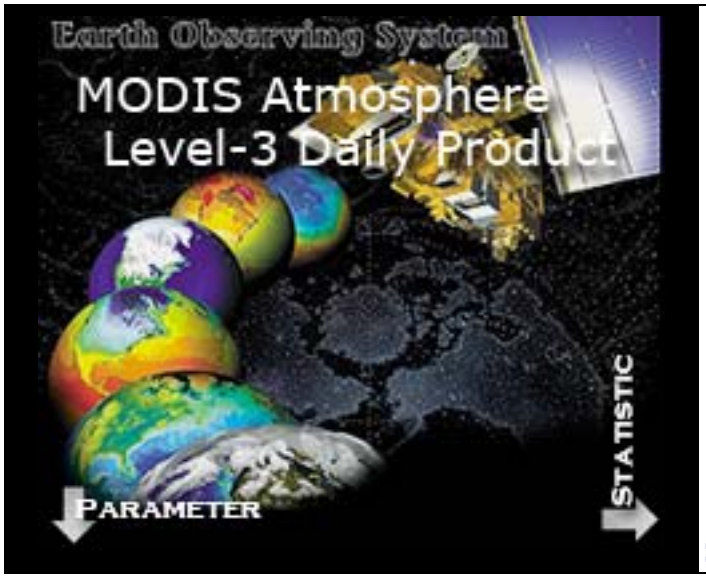
L3 Daily Global (08_D3) Statistics

Collection 006 Updates

16 April 2013, Version 34

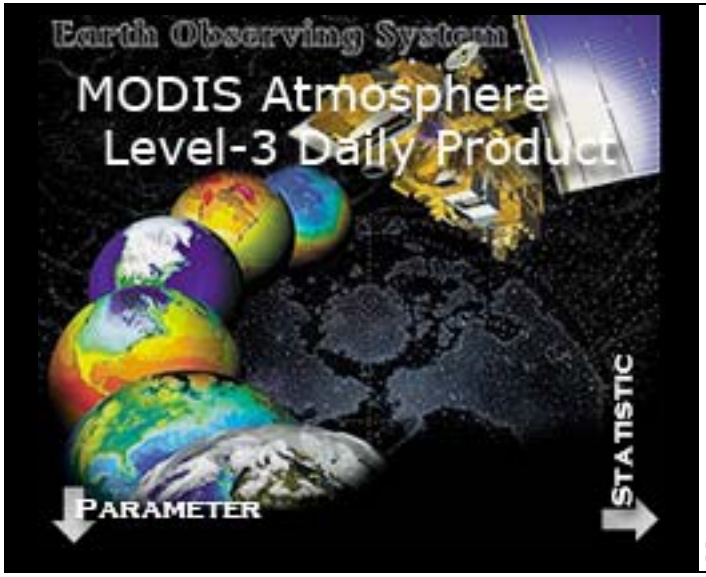
= Added = Renamed = Deleted = Modified



Solar and Sensor Angles

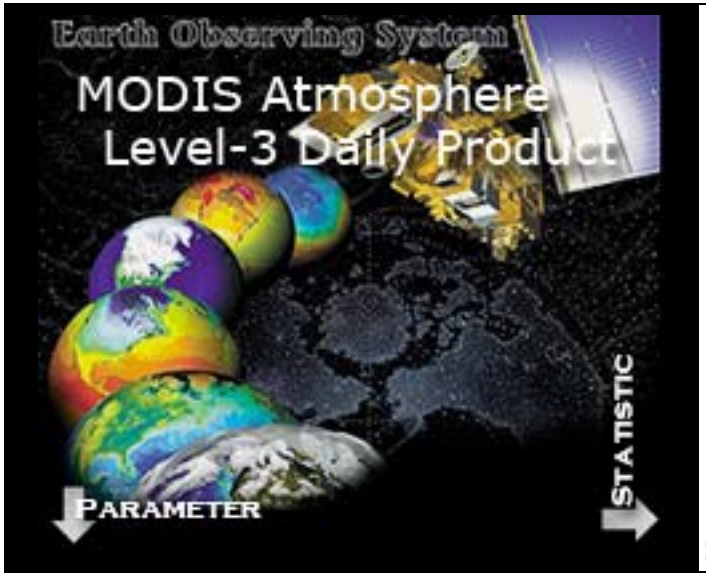
Angles

	Mean	Standard_Deviation	Minimum	Maximum	QA_Mean	QA_Standard_Deviation	Histogram_Counts (n)	Confidence_Histogram (4)	Fraction	Pixel_Counts	Mean_Uncertainty	QA_Mean_Uncertainty	Log_Mean_Uncertainty	QA_Log_Mean_Uncertainty	Log_Mean	Log_Standard_Deviation	QA_Log_Mean	QA_Log_Standard_Deviation	Regression_Slope	Regression_Intercept	Regression_R-Squared	Regression_Mean_Square_Error	Joint_Histo_vs_Opt_Depth (nxn)	Joint_Histo_vs_Effect_Radius (nxn)	Joint_Histo_vs_Temperature (nxn)	Joint_Histo_vs_Emissivity (nxn)	Joint_Histo_vs_Pressure (nxn)
01. Solar_Zenith [changed to D+N in C6]	•	•	•	•						•																	
02. Solar_Zenith_Day	•	•	•	•						•																	
03. Solar_Zenith_Night	•	•	•	•						•																	
04. Solar_Azimuth [changed to D+N in C6]	•	•	•	•						•																	
05. Solar_Azimuth_Day	•	•	•	•						•																	
06. Solar_Azimuth_Night	•	•	•	•						•																	
07. Sensor_Zenith [changed to D+N in C6]	•	•	•	•						•																	
08. Sensor_Zenith_Day	•	•	•	•						•																	
09. Sensor_Zenith_Night	•	•	•	•						•																	
10. Sensor_Azimuth [changed to D+N in C6]	•	•	•	•						•																	
11. Sensor_Azimuth_Day	•	•	•	•						•																	
12. Sensor_Azimuth_Night	•	•	•	•						•																	

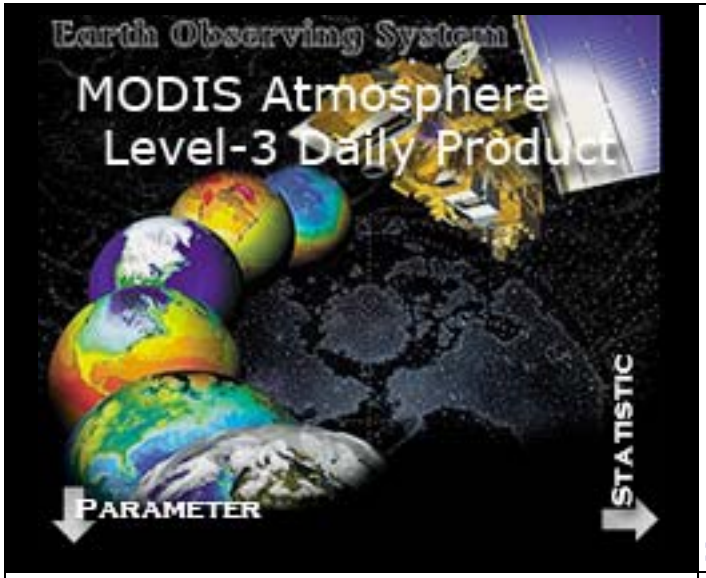


Derived from L2 Aerosol (04_L2)

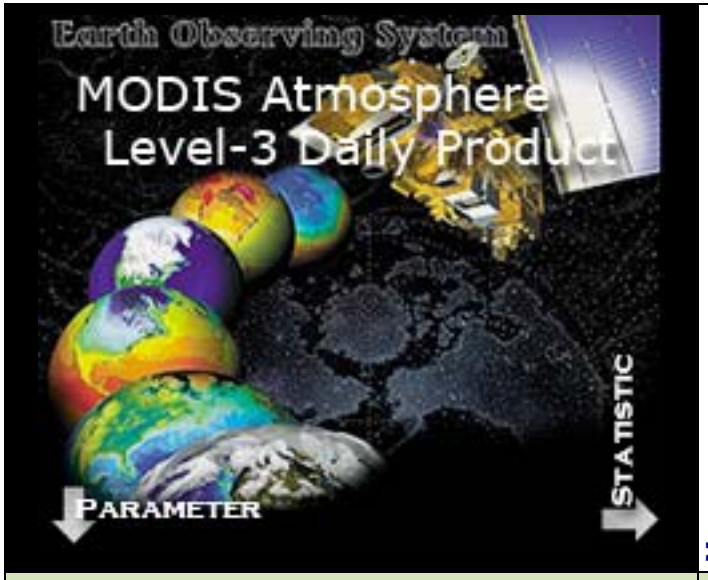
	Mean	Standard_Deviation	Minimum	Maximum	QA_Mean	QA_Standard_Deviation	Histogram_Counts (n)	Confidence_Histogram (4)	Fraction	Pixel_Counts	Mean_Uncertainty	QA_Mean_Uncertainty	Log_Mean_Uncertainty	QA_Log_Mean_Uncertainty	Log_Mean	Log_Standard_Deviation	QA_Log_Mean	QA_Log_Standard_Deviation	Regression_Slope	Regression_Intercept	Regression_R-Squared	Regression_Mean_Square_Error	Joint_Histo_vs_Opt_Depth (nxn)	Joint_Histo_vs_Effect_Radius (nxn)	Joint_Histo_vs_Temperature (nxn)	Joint_Histo_vs_Emissivity (nxn)	Joint_Histo_vs_Pressure (nxn)
Combined Land & Ocean																											
01. Aerosol_Scattering_Angle [prev. Scatt...]	•	•	•	•			•			•																	
02. Aerosol_Optical_Depth_Land_Ocean [prev. Opt...]	•	•	•	•						•																	
Optical_Depth_Ratio_Small_Land_And_Ocean	•	•	•	•						•																	
Reflected_Flux_Land_And_Ocean	•	•	•	•						•																	
03. Aerosol_Avg_Cloud_Distance_Land_Ocean	•	•	•	•						•																	
Land Only																											
01. Aerosol_Optical_Depth_Land (3) [prev. Corrected...]	•	•	•	•	•	•	•	•																			
Optical_Depth_Ratio_Small_Land	•	•	•	•	•	•	•	•																			
Aerosol_Mass_Concentration_Land	•	•	•	•	•	•	•	•																			
Transmitted_Flux_Land (2)	•	•	•	•	•	•	•	•																			
Reflected_Flux_Land (3)	•	•	•	•	•	•	•	•																			
Angstrom_Exponent_Land [1]	•	•	•	•	•	•	•	•											•	•	•	•					
Mean_Reflectance_Land_All_QA47 (3)	•	•	•	•	•	•	•	•																			
Mean_Reflectance_Land_All_QA66 (3)	•	•	•	•	•	•	•	•																			
Path_Radiance_Land_QA47 (2)	•	•	•	•	•	•	•	•																			
Path_Radiance_Land_QA66 (2)	•	•	•	•	•	•	•	•																			
Critical_Reflectance_Land_QA47 (2)	•	•	•	•	•	•	•	•																			
Critical_Reflectance_Land_QA66 (2)	•	•	•	•	•	•	•	•																			
Aerosol_Cloud_Mask_Cloud_Fraction_Land	•	•	•	•						•																	
02. Aerosol_Number_Pixels_Used_Land (2) to (10)	•	•	•	•	•	•	•																				



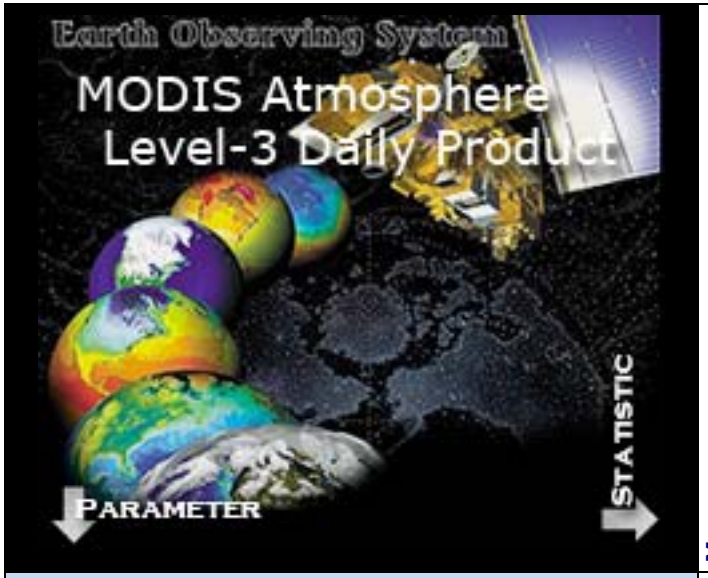
	Mean	Standard_Deviation	Minimum	Maximum	QA_Mean	QA_Standard_Deviation	Histogram_Counts (n)	Confidence_Histogram (4)	Fraction	Pixel_Counts	Mean_Uncertainty	QA_Mean_Uncertainty	Log_Mean_Uncertainty	QA_Log_Mean_Uncertainty	Log_Mean	Log_Standard_Deviation	QA_Log_Mean	QA_Log_Standard_Deviation	Regression_Slope	Regression_Intercept	Regression_R-Squared	Regression_Mean_Square_Error	Joint_Histo_vs_Opt_Depth (nxn)	Joint_Histo_vs_Effect_Radius (nxn)	Joint_Histo_vs_Temperature (nxn)	Joint_Histo_vs_Emissivity (nxn)	Joint_Histo_vs_Pressure (nxn)
Ocean Only																											
01. Aerosol_Optical_Depth_Average_Ocean (7) [prev Eff.]	•	•	•	•	•	•	•	•																			
02. Aerosol_Optical_Depth_Small_Ocean	•	•	•	•	•	•	•	•																			
Optical_Depth_Ratio_Small_Ocean	•	•	•	•	•	•	•	•																			
Aerosol_Effective_Radius_Ocean [prev Eff.]	•	•	•	•	•	•	•	•																			
Aerosol_Mass_Concentration_Ocean	•	•	•	•	•	•	•	•																			
03. Aerosol_PSML003_Ocean [prev. CCN_Ocean]	•	•	•	•	•	•	•	•																			
Aerosol_Angstrom_Exponent_1_Ocean [2]	•	•	•	•	•	•	•	•											•	•	•	•					
Aerosol_Angstrom_Exponent_2_Ocean [3]	•	•	•	•	•	•	•	•											•	•	•	•					
Aerosol_Asymmetry_Factor_Avg_Ocean (7)	•	•	•	•	•	•	•	•																			
Aerosol_Backscattering_Ratio_Avg_Ocean (7)	•	•	•	•	•	•	•	•																			
Transmitted_Flux_Average_Ocean (7)	•	•	•	•	•	•	•	•																			
Reflected_Flux_Average_Ocean (7)	•	•	•	•	•	•	•	•																			
04. Aerosol_Optical_Depth_by_models_Ocean (9) [Opt]	•	•	•	•	•	•		•																			
Aerosol_Cloud_Mask_Cloud_Fraction_Ocean	•	•	•	•						•																	
05. Aerosol_Number_Pixels_Used_Ocean (1) to (10)	•	•	•	•	•	•	•																				
06. Aerosol_AE1_Ocean																							•				
07. Aerosol_AE2_Ocean																							•				
08. Aerosol_OD_Ratio_Small_Ocean																							•				
Deep Blue Aerosol																											
01. Deep_Blue_Aerosol_Optical_Depth_Land	•	•	•	•	•	•	•	•																			
02. Deep_Blue_Aerosol_Optical_Depth_550_Land	•	•	•	•	•	•	•	•																			



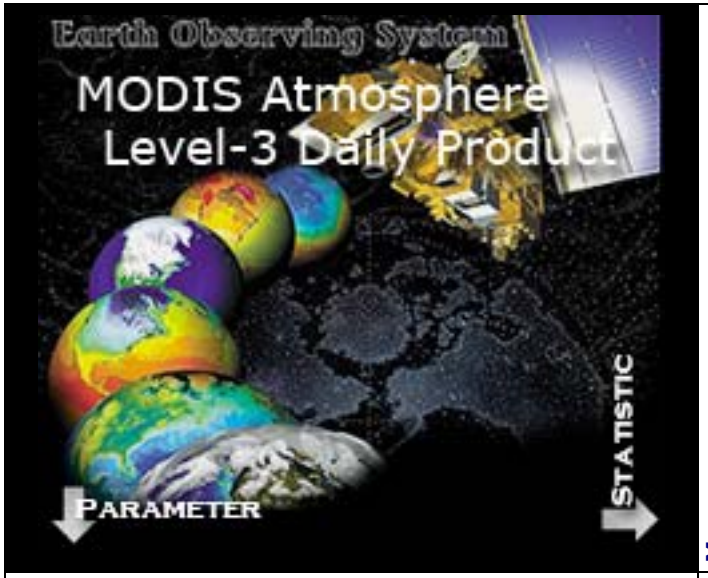
Parameter \ Statistic	Mean	Standard_Deviation	Minimum	Maximum	QA_Mean	QA_Standard_Deviation	Histogram_Counts (n)	Confidence_Histogram (4)	Fraction	Pixel_Counts	Mean_Uncertainty	QA_Mean_Uncertainty	Log_Mean_Uncertainty	QA_Log_Mean_Uncertainty	Log_Mean	Log_Standard_Deviation	QA_Log_Mean	QA_Log_Standard_Deviation	Regression_Slope	Regression_Intercept	Regression_R-Squared	Regression_Mean_Square_Error	Joint_Histo_vs_Opt_Depth (nxn)	Joint_Histo_vs_Effect_Radius (nxn)	Joint_Histo_vs_Temperature (nxn)	Joint_Histo_vs_Emissivity (nxn)	Joint_Histo_vs_Pressure (nxn)
03. Deep_Blue_Angstrom_Exponent_Land	•	•	•	•	•	•	•	•																			
04. Deep_Blue_Single_Scattering_Albedo_Land (3)	•	•	•	•	•	•	•	•																			
05. Deep_Blue_Number_Pixels_Used_550_Land	•	•	•	•	•	•	•																				
06. AOD_550_Dark_Target_Deep_Blue_Combined	•	•	•	•	•	•	•	•																			
Derived from L2 Water Vapor (05_L2)																											
01. Water_Vapor_Near_Infrared_Clear	•	•	•	•	•	•	•	•																			
02. Water_Vapor_Near_Infrared_Cloud	•	•	•	•	•	•	•	•																			
Derived from L2 Cloud (06_L2)																											
Cirrus Detection																											
01. Cirrus_Reflectance	•	•	•	•	•	•	•																				
02. Cirrus_Fraction_SWIR									•	•																	
Cloud Top Properties																											
01. Cloud_Top_Pressure [Finely binned L/M/H Histograms]	•	•	•	•			•			•																•	
02. Cloud_Top_Pressure_Day ["]	•	•	•	•			•			•																•	
03. Cloud_Top_Pressure_Night ["]	•	•	•	•			•			•																•	
04. Cloud_Top_Pressure_Nadir [Finely binned L/M/H Histograms]	•	•	•	•			•			•																	
05. Cloud_Top_Pressure_Nadir_Day ["]	•	•	•	•			•			•																	
06. Cloud_Top_Pressure_Nadir_Night ["]	•	•	•	•			•			•																	
07. Cloud_Top_Temperature [Finely binned L/M/H JHist.]	•	•	•	•			•			•																	•
08. Cloud_Top_Temperature_Day ["]	•	•	•	•			•			•																	•
09. Cloud_Top_Temperature_Night ["]	•	•	•	•			•			•																	•



Parameter \ Statistic	Mean	Standard_Deviation	Minimum	Maximum	QA_Mean	QA_Standard_Deviation	Histogram_Counts (n)	Confidence_Histogram (4)	Fraction	Pixel_Counts	Mean_Uncertainty	QA_Mean_Uncertainty	Log_Mean_Uncertainty	QA_Log_Mean_Uncertainty	Log_Mean	Log_Standard_Deviation	QA_Log_Mean	QA_Log_Standard_Deviation	Regression_Slope	Regression_Intercept	Regression_R-Squared	Regression_Mean_Square_Error	Joint_Histo_vs_Opt_Depth (nxn)	Joint_Histo_vs_Effect_Radius (nxn)	Joint_Histo_vs_Temperature (nxn)	Joint_Histo_vs_Emissivity (nxn)	Joint_Histo_vs_Pressure (nxn)
10. Cloud_Top_Temperature _Nadir [Finely Binned L/M/H JHist.]	•	•	•	•						•																	•
11. Cloud_Top_Temperature _Nadir_Day [“]	•	•	•	•						•																	•
12. Cloud_Top_Temperature _Nadir_Night [“]	•	•	•	•						•																	•
13. Cloud_Effective_Emissivity [Finely Binned L/M/H JHist.]	•	•	•	•			•			•																	•
14. Cloud_Effective_Emissivity_Day [“]	•	•	•	•			•			•																	•
15. Cloud_Effective_Emissivity_Night [“]	•	•	•	•			•			•																	•
16. Cloud_Effective_Emissivity _Nadir [“]	•	•	•	•						•																	•
17. Cloud_Effective_Emissivity _Nadir_Day [“]	•	•	•	•						•																	•
18. Cloud_Effective_Emissivity _Nadir_Night [“]	•	•	•	•						•																	•
19. Cloud_Fraction [Finely Binned L/M/H JHist.]	•	•	•	•			•			•																	•
20. Cloud_Fraction_Day [“]	•	•	•	•			•			•																	•
21. Cloud_Fraction_Night [“]	•	•	•	•			•			•																	•
22. Cloud_Fraction_Nadir [Finely Binned L/M/H JHist.]	•	•	•	•						•																	•
23. Cloud_Fraction_Nadir_Day [“]	•	•	•	•						•																	•
24. Cloud_Fraction_Nadir_Night [“]	•	•	•	•						•																	•
25. Cloud_Top_Height [Finely Binned L/M/H JHist.]	•	•	•	•						•																	•
26. Cloud_Top_Height_Day [“]	•	•	•	•						•																	•
27. Cloud_Top_Height_Night [“]	•	•	•	•						•																	•
28. Cloud_Top_Height _Nadir [Finely Binned L/M/H JHist.]	•	•	•	•						•																	•
29. Cloud_Top_Height _Nadir_Day [“]	•	•	•	•						•																	•
30. Cloud_Top_Height _Nadir_Night [“]	•	•	•	•						•																	•
31. Cirrus_Fraction_Infrared [denom. includes clears in C6]									•	•																	

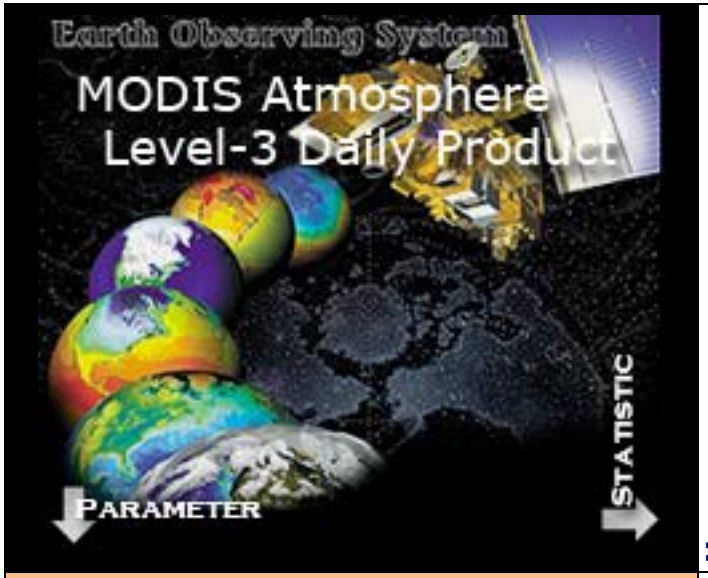


	Mean	Standard_Deviation	Minimum	Maximum	QA_Mean	QA_Standard_Deviation	Histogram_Counts (n)	Confidence_Histogram (4)	Fraction	Pixel_Counts	Mean_Uncertainty	QA_Mean_Uncertainty	Log_Mean_Uncertainty	QA_Log_Mean_Uncertainty	Log_Mean	Log_Standard_Deviation	QA_Log_Mean	QA_Log_Standard_Deviation	Regression_Slope	Regression_Intercept	Regression_R-Squared	Regression_Mean_Square_Error	Joint_Histo_vs_Opt_Depth (nxn)	Joint_Histo_vs_Effect_Radius (nxn)	Joint_Histo_vs_Temperature (nxn)	Joint_Histo_vs_Emissivity (nxn)	Joint_Histo_vs_Pressure (nxn)
32. High_Cloud_Fraction_Infrared [denom. includes clears]									●	●																	
33. Cloud_Phase_Infrared							●																				
34. Cloud_Phase_Infrared_Day							●																		●		●
35. Cloud_Phase_Infrared_Night							●																		●		●
36. Cloud_Top_Pressure_1km_Nadir_Day [sample vs. avg.]																											●
37. Cloud_Top_Pressure_1km_Nadir_Night [sample vs. avg.]																											●
38. Sunglint_Fraction_Day [Sfc. Type in Cloud Top Retrieval Space]									●	●																	
39. Snow_Fraction_Day [Sfc. Type in Cloud Top Retrieval Space]									●	●																	
40. Snow_Fraction_Night ["]									●	●																	
41. Ocean_Fraction_Day ["]									●	●																	
42. Ocean_Fraction_Night ["]									●	●																	
43. Coast_Fraction_Day ["]									●	●																	
44. Coast_Fraction_Night ["]									●	●																	
45. Desert_Fraction_Day ["]									●	●																	
46. Desert_Fraction_Night ["]									●	●																	
47. Land_Fraction_Day ["]									●	●																	
48. Land_Fraction_Night ["]									●	●																	
Cloud Optical Properties																											
(Primary 2.1 Retrieval)																											
01. Cloud_Optical_Thickness_Liquid	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●						●	●	●	●
02. Cloud_Optical_Thickness_Ice	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●						●	●	●	●
03. Cloud_Optical_Thickness_Undetermined	●	●	●	●	●	●									●	●	●	●									

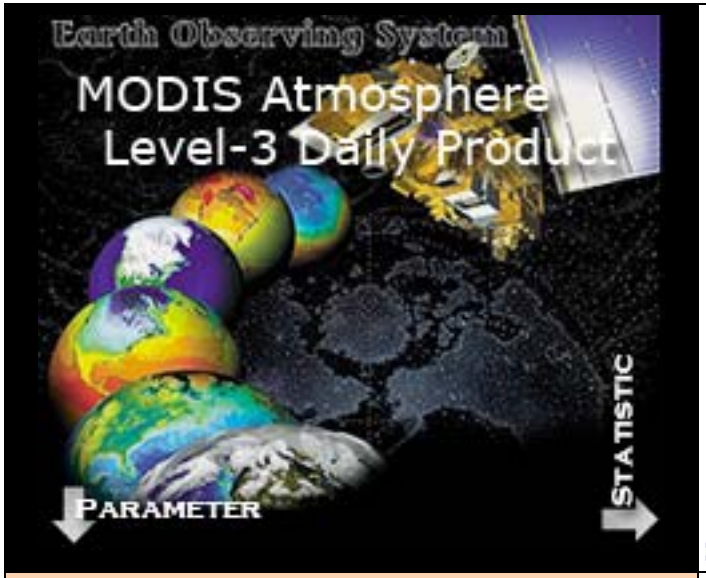


PARAMETER \ STATISTIC	Mean	Standard_Deviation	Minimum	Maximum	QA_Mean	QA_Standard_Deviation	Histogram_Counts (n)	Confidence_Histogram (4)	Fraction	Pixel_Counts	Mean_Uncertainty	QA_Mean_Uncertainty	Log_Mean_Uncertainty	QA_Log_Mean_Uncertainty	Log_Mean	Log_Standard_Deviation	QA_Log_Mean	QA_Log_Standard_Deviation	Regression_Slope	Regression_Intercept	Regression_R-Squared	Regression_Mean_Square_Error	Joint_Histo_vs_Opt_Depth (nxn)	Joint_Histo_vs_Effect_Radius (nxn)	Joint_Histo_vs_Temperature (nxn)	Joint_Histo_vs_Emissivity (nxn)	Joint_Histo_vs_Pressure (nxn)
04. Cloud_Optical_Thickness_Combined	●	●	●	●	●	●									●	●	●	●									●
05. Cloud_Optical_Thickness_PCL_Liquid	●	●	●	●			?				●		?		?	?											?
06. Cloud_Optical_Thickness_PCL_Ice	●	●	●	●			?				●		?		?	?											
07. Cloud_Optical_Thickness_PCL_Undetermined	●	●	●	●			?								?	?											
08. Cloud_Optical_Thickness_PCL_Combined	●	●	●	●			?								?	?											
09. Cloud_Optical_Thickness_ISCCP [8]																											●
10. Cloud_Effective_Radius_Liquid	●	●	●	●	●	●	●	●			●	●													●	●	●
11. Cloud_Effective_Radius_Ice	●	●	●	●	●	●	●	●			●	●													●	●	●
12. Cloud_Effective_Radius_Undetermined	●	●	●	●	●	●																					
13. Cloud_Effective_Radius_Combined	●	●	●	●	●	●																					
14. Cloud_Effective_Radius_PCL_Liquid	●	●	●	●			?				●																
15. Cloud_Effective_Radius_PCL_Ice	●	●	●	●			?				●																
16. Cloud_Effective_Radius_PCL_Undetermined	●	●	●	●																							
17. Cloud_Water_Path_Liquid	●	●	●	●	●	●	●	●			●	●															
18. Cloud_Water_Path_Ice	●	●	●	●	●	●	●	●			●	●															
19. Cloud_Water_Path_Undetermined	●	●	●	●	●	●																					
20. Cloud_Water_Path_Combined	●	●	●	●	●	●																					
21. Cloud_Water_Path_PCL_Liquid	●	●	●	●			?				●																
22. Cloud_Water_Path_PCL_Ice	●	●	●	●			?				●																
23. Cloud_Water_Path_PCL_Undetermined	●	●	●	●																							
25. Cloud_Phase_Optical_Properties																									●		

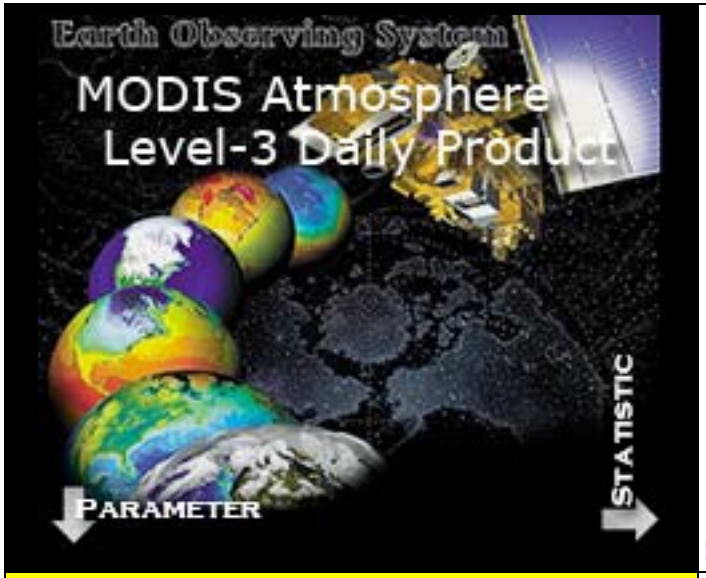
(Primary Cloud Retrieval Fraction)



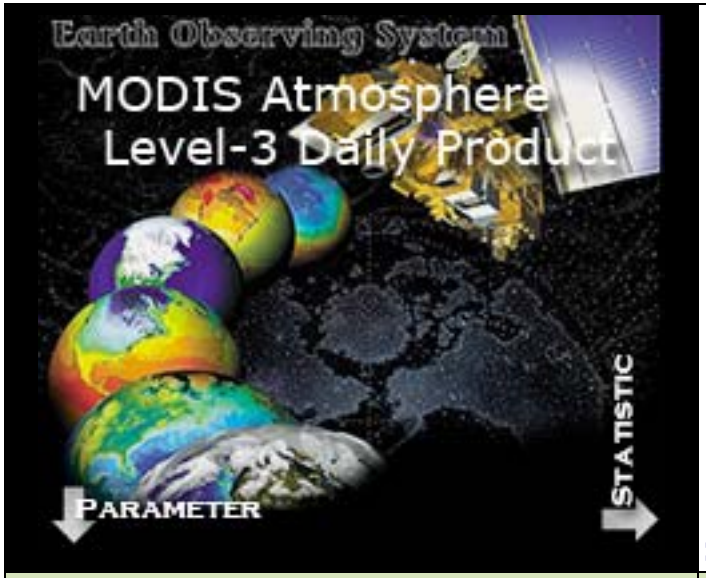
Parameter \ Statistic	Mean	Standard_Deviation	Minimum	Maximum	QA_Mean	QA_Standard_Deviation	Histogram_Counts (n)	Confidence_Histogram (4)	Fraction	Pixel_Counts	Mean_Uncertainty	QA_Mean_Uncertainty	Log_Mean_Uncertainty	QA_Log_Mean_Uncertainty	Log_Mean	Log_Standard_Deviation	QA_Log_Mean	QA_Log_Standard_Deviation	Regression_Slope	Regression_Intercept	Regression_R-Squared	Regression_Mean_Square_Error	Joint_Histo_vs_Opt_Depth (nxn)	Joint_Histo_vs_Effect_Radius (nxn)	Joint_Histo_vs_Temperature (nxn)	Joint_Histo_vs_Emissivity (nxn)	Joint_Histo_vs_Pressure (nxn)
26. Cloud_Retrieval_Fraction_Liquid [denom. incl. fail in C6]									●	●																	
27. Cloud_Retrieval_Fraction_Ice [denom. incl. fail in C6]									●	●																	
28. Cloud_Retrieval_Fraction_Undetermined ["]									●	●																	
29. Cloud_Retrieval_Fraction_Combined ["]									●	●																	
30. Cloud_Retrieval_Fraction_PCL_Liquid ["]									●	●																	
31. Cloud_Retrieval_Fraction_PCL_Ice ["]									●	●																	
32. Cloud_Retrieval_Fraction_PCL_Undetermined ["]									●	●																	
33. Cloud_Retrieval_Fraction_PCL_Combined ["]									●	●																	
(Primary Retrieval Single-Layer Clouds only)																											
34. Cloud_Optical_Thickness_1L_Liquid [4]	●	●	●	●	●	●	●				●	●											●	●			
35. Cloud_Optical_Thickness_1L_Ice [5]	●	●	●	●	●	●	●				●	●											●	●		●	
36. Cloud_Effective_Radius_1L_Liquid	●	●	●	●	●	●	●				●	●															
37. Cloud_Effective_Radius_1L_Ice	●	●	●	●	●	●	●				●	●															
38. Cloud_Water_Path_1L_Liquid	●	●	●	●	●	●	●				●	●															
39. Cloud_Water_Path_1L_Ice	●	●	●	●	●	●	●				●	●															
40. Cloud_Phase_Optical_Properties1L																									●		
(Single-Layer Cloud Fraction)																											
41. Cloud_Retrieval_Fraction_1L_Liquid [denom. incl. fail]									●	●																	
42. Cloud_Retrieval_Fraction_1L_Ice [denom. incl. fail]									●	●																	
(Multi-Layer Cloud Fraction)																											
43. Cloud_Retrieval_Fraction_ML_Liquid [denom. incl. fail]									●	●																	
44. Cloud_Retrieval_Fraction_ML_Ice [denom. incl. fail]									●	●																	



	Mean	Standard_Deviation	Minimum	Maximum	QA_Mean	QA_Standard_Deviation	Histogram_Counts (n)	Confidence_Histogram (4)	Fraction	Pixel_Counts	Mean_Uncertainty	QA_Mean_Uncertainty	Log_Mean_Uncertainty	QA_Log_Mean_Uncertainty	Log_Mean	Log_Standard_Deviation	QA_Log_Mean	QA_Log_Standard_Deviation	Regression_Slope	Regression_Intercept	Regression_R-Squared	Regression_Mean_Square_Error	Joint_Histo_vs_Opt_Depth (nxn)	Joint_Histo_vs_Effect_Radius (nxn)	Joint_Histo_vs_Temperature (nxn)	Joint_Histo_vs_Emissivity (nxn)	Joint_Histo_vs_Pressure (nxn)
45. Cloud_Retrieval_Fraction_ML_Undetermined [“]									●	●																	
46. Cloud_Retrieval_Fraction_ML_Combined [“]									●	●																	
(Ratio of Multi-Layer Clouds to All-Layer Clouds by Phase)																											
47. ML_Ratio_Liquid [prev. Fraction]									●	●																	
48. ML_Ratio_Ice [prev. Fraction]									●	●																	
49. ML_Ratio_Undetermined [prev. Fraction]									●	●																	
50. ML_Ratio_Combind [prev. Fraction]									●	●																	
(Supplementary 1.6/2.1 Retrieval)																											
51. Cloud_Optical_Thickness_1621_Liquid [6]	●	●	●	●	●	●	●																?	●			?
52. Cloud_Optical_Thickness_1621_Ice [7]	●	●	●	●	●	●	●																?	●			?
53. Cloud_Effective_Radius_1621_Liquid	●	●	●	●	●	●	●																				
54. Cloud_Effective_Radius_1621_Ice	●	●	●	●	●	●	●																				
55. Cloud_Water_Path_1621_Liquid	●	●	●	●	●	●	●																				
56. Cloud_Water_Path_1621_Ice	●	●	●	●	●	●	●																				
56. Cloud_Retrieval_Fraction_1621_Liquid [denom incl. fail]									●	●																	
57. Cloud_Retrieval_Fraction_1621_Ice [denom incl. fail]									●	●																	
58. Cloud_Optical_Thickness_1621_PCL_Liquid	●	●	●	●			?																	?			?
59. Cloud_Optical_Thickness_1621_PCL_Ice	●	●	●	●			?																	?			?
60. Cloud_Effective_Radius_1621_PCL_Liquid	●	●	●	●			?																				
61. Cloud_Effective_Radius_1621_PCL_Ice	●	●	●	●			?																				
62. Cloud_Water_Path_1621_PCL_Liquid	●	●	●	●			?																				
63. Cloud_Water_Path_1621_PCL_Ice	●	●	●	●			?																				



	Mean	Standard_Deviation	Minimum	Maximum	QA_Mean	QA_Standard_Deviation	Histogram_Counts (n)	Confidence_Histogram (4)	Fraction	Pixel_Counts	Mean_Uncertainty	QA_Mean_Uncertainty	Log_Mean_Uncertainty	QA_Log_Mean_Uncertainty	Log_Mean	Log_Standard_Deviation	QA_Log_Mean	QA_Log_Standard_Deviation	Regression_Slope	Regression_Intercept	Regression_R-Squared	Regression_Mean_Square_Error	Joint_Histo_vs_Opt_Depth (nxn)	Joint_Histo_vs_Effect_Radius (nxn)	Joint_Histo_vs_Temperature (nxn)	Joint_Histo_vs_Emissivity (nxn)	Joint_Histo_vs_Pressure (nxn)
64. Cloud_Retrieval_Fraction_1621_PCL_Liquid									●	●																	
65. Cloud_Retrieval_Fraction_1621_PCL_Ice									●	●																	
(Supplementary 1.6 Retrieval)																											
66. Cloud_Optical_Thickness_16_Liquid	●	●	●	●			?				●																?
67. Cloud_Optical_Thickness_16_Ice	●	●	●	●			?				●																?
68. Cloud_Effective_Radius_16_Liquid	●	●	●	●	●	●	?	●			●	●											?	●	●		
69. Cloud_Effective_Radius_16_Ice	●	●	●	●	●	●	?	●			●	●											?	●	●		
70. Cloud_Water_Path_16_Liquid	●	●	●	●			?				●																
71. Cloud_Water_Path_16_Ice	●	●	●	●			?				●																
72. Cloud_Retrieval_Fraction_16_Liquid									●	●																	
73. Cloud_Retrieval_Fraction_16_Ice									●	●																	
74. Cloud_Optical_Thickness_16_PCL_Liquid	●	●	●	●			?				●																?
75. Cloud_Optical_Thickness_16_PCL_Ice	●	●	●	●			?				●																?
76. Cloud_Effective_Radius_16_PCL_Liquid	●	●	●	●			?				●													?	?		
77. Cloud_Effective_Radius_16_PCL_Ice	●	●	●	●			?				●													?	?		
78. Cloud_Water_Path_16_PCL_Liquid	●	●	●	●			?				●																
79. Cloud_Water_Path_16_PCL_Ice	●	●	●	●			?				●																
80. Cloud_Retrieval_Fraction_16_PCL_Liquid									●	●																	
81. Cloud_Retrieval_Fraction_16_PCL_Ice									●	●																	
(Supplementary 3.7 Retrieval)																											
82. Cloud_Optical_Thickness_37_Liquid	●	●	●	●			●				●																?
83. Cloud_Optical_Thickness_37_Ice	●	●	●	●			●				●																?



PARAMETER \ STATISTIC	Mean	Standard_Deviation	Minimum	Maximum	QA_Mean	QA_Standard_Deviation	Histogram_Counts (n)	Confidence_Histogram (4)	Fraction	Pixel_Counts	Mean_Uncertainty	QA_Mean_Uncertainty	Log_Mean_Uncertainty	QA_Log_Mean_Uncertainty	Log_Mean	Log_Standard_Deviation	QA_Log_Mean	QA_Log_Standard_Deviation	Regression_Slope	Regression_Intercept	Regression_R-Squared	Regression_Mean_Square_Error	Joint_Histo_vs_Opt_Depth (nxn)	Joint_Histo_vs_Effect_Radius (nxn)	Joint_Histo_vs_Temperature (nxn)	Joint_Histo_vs_Emissivity (nxn)	Joint_Histo_vs_Pressure (nxn)
84. Cloud_Effective_Radius_37_Liquid	•	•	•	•	•	•	•	•			•	•											?	•	•		
85. Cloud_Effective_Radius_37_Ice	•	•	•	•	•	•	•	•			•	•											?	•	•		
86. Cloud_Water_Path_37_Liquid	•	•	•	•			•				•																
87. Cloud_Water_Path_37_Ice	•	•	•	•			•				•																
88. Cloud_Retrieval_Fraction_37_Liquid									•	•																	
89. Cloud_Retrieval_Fraction_37_Ice									•	•																	
90. Cloud_Optical_Thickness_37_PCL_Liquid	•	•	•	•			?				•																?
91. Cloud_Optical_Thickness_37_PCL_Ice	•	•	•	•			?				•																?
92. Cloud_Effective_Radius_37_PCL_Liquid	•	•	•	•			?				•													?	?		
93. Cloud_Effective_Radius_37_PCL_Ice	•	•	•	•			?				•													?	?		
94. Cloud_Water_Path_37_PCL_Liquid	•	•	•	•			?				•																
95. Cloud_Water_Path_37_PCL_Ice	•	•	•	•			?				•																
96. Cloud_Retrieval_Fraction_37_PCL_Liquid									•	•																	
97. Cloud_Retrieval_Fraction_37_PCL_Ice									•	•																	

Derived from L2 Atm Profile (07_L2)

01. Total_Ozone	•	•	•	•	•	•	•	•																			
02. Total_Totals	•	•	•	•	•	•	•	•																			
03. Lifted_Index	•	•	•	•	•	•	•	•																			
04. Atmospheric_Water_Vapor	•	•	•	•	•	•	•	•																			
05. Atmospheric_Water_Vapor_Low	•	•	•	•	•	•	•	•																			
06. Atmospheric_Water_Vapor_High	•	•	•	•	•	•	•	•																			
07. Retrieved_Temperature_Profile	•	•	•	•						•																	

= New PCL Parameters & SDSs to be added first

Note that all "**_Joint_Histogram_**" SDS names were changed to "**_Joint_Histo_"** in C006 in TL, D3, E3, & M3. This was done to stay within the 63 character legal SDS name length limit in HDF4. The longest statistic name in L3 is 28 characters. Therefore, the longest parameter name should be held to 35 characters or less to be "safe"; however some parameters can be up to 39 characters if you "watch" what statistics you attempt to compute and what statistic suffix's you attempt to append.

[4] *Joint Histogram with Cloud_Effective_Radius_1L_Liquid*
[5] *Joint Histogram with Cloud_Effective_Radius_1L_Ice*
[6] *Joint Histogram with Cloud_Effective_Radius_1621_Liquid*
[7] *Joint Histogram with Cloud_Effective_Radius_1621_Ice*
[8] *Joint Histogram uses ISCCP-like bin boundaries*

Some 4/4 Notes on Cloud Optical Property parameters:

1. Yellow highlighted parameters are all the new PCL (Party Cloudy) Cloud Optical Property retrievals. PCL Histograms and Joint Histograms are TBD.

2. The 1L and ML aggregation is only defined (currently) for the 2.1 retrieval.

3. Only Liquid and Ice are aggregated for 1621, 16, and 37. Added those matching additional parameters for the Non-PCL case for symmetry.

4. Added Optical Thickness, Water_Path and Fractions for the **non-PCL** "_16" and "_37" cases for symmetry.

5. Only the Cloud Optical Property parameters and statistics (SDS's) highlighted in yellow are planned for the next C6 Optical Properties Update delivery. SDS "dots" that are NOT highlighted in yellow that are in rows of the _PCL parameters (with yellow highlight) are NOT planned for the first delivery iteration. Some are still TBD.