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Data Processing and Analysis with MODIS Level -1B & Level 2




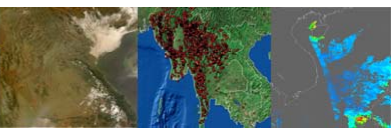
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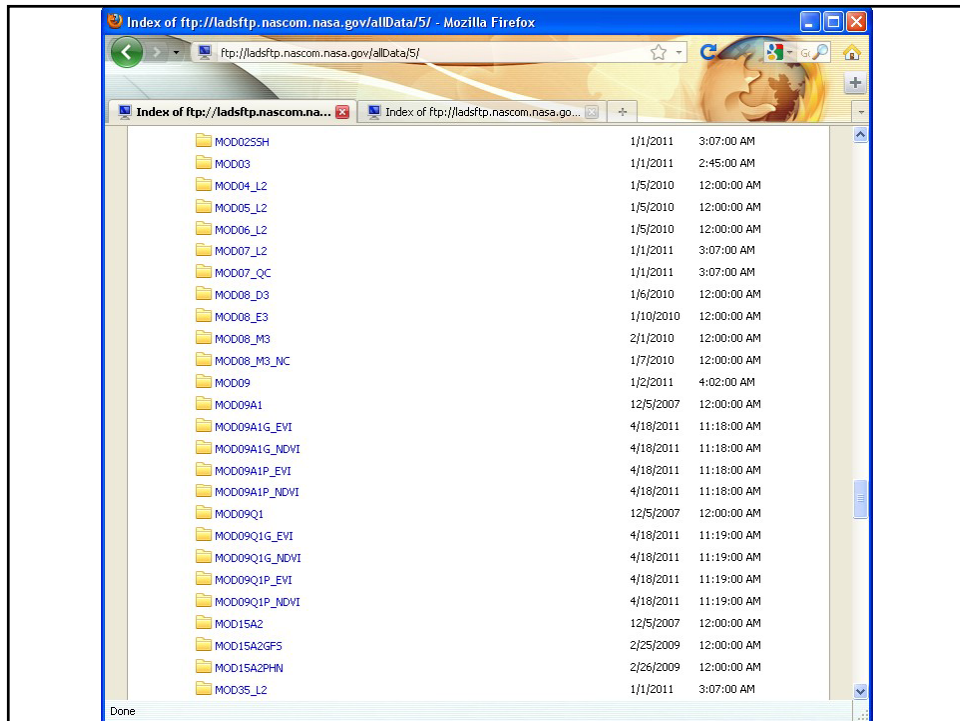
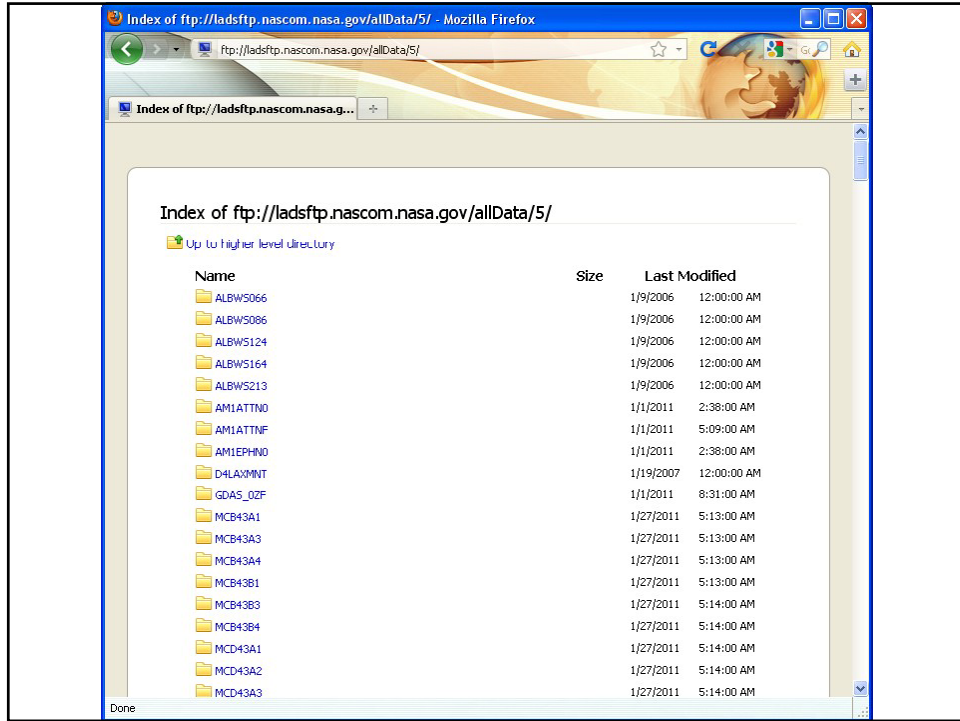
<http://www.geoinfo.ait.ac.th/>

TERRA/MODIS Sensor Characteristics							
Primary Use	Band Groups	Band Color	Band	Bandwidth ¹	Spectral Radiance ²	Required SNR ³	Purpose (Example)
Land/Cloud/Aerosols Boundaries	①	Red	1	620 - 670	21.8	128	Yag. Chlorophyll Absorption
		Red	2	641 - 676	24.7	201	Cloud and Veg. Land Cover Transformation
		Blue	3	459 - 479	35.3	243	Soil, Vegetation Differences
		Green	4	545 - 555	29.0	228	Green Vegetation
		Blue	5	2120 - 2130	6.4	74	Land/Cloud Differences
Land/Cloud/Aerosols Properties	①	Blue	6	1620 - 1652	7.3	275	Snow/Cloud Differences
		SWIR	7	2105 - 2155	1.0	110	Land and Cloud Properties
		VI	8	405 - 420	44.9	800	Chlorophyll
		Blue	9	430 - 440	41.9	838	Chlorophyll
		Blue	10	483 - 493	30.1	802	Chlorophyll
Ocean Color / Phytoplankton / Biogeochemistry	①	Green	11	520 - 530	27.9	714	Chlorophyll
		Green	12	545 - 556	31.0	750	Sediments
		Yellow	13	662 - 672	9.5	910	Sediments, Atmosphere
		Red	14	673 - 683	8.7	1087	Chlorophyll Fluorescence
		Red	15	743 - 753	10.2	106	Aerosol Properties
		Red	16	862 - 877	6.2	516	Aerosol / Atmospheric Properties
		Red	17	890 - 920	10.0	167	Cloud / Atmospheric Properties
Atmospheric Water Vapor	①	Red	18	931 - 941	3.6	87	Cloud / Atmospheric Properties
		Red	19	915 - 965	15.0	260	Cloud / Atmospheric Properties
		IR	20				

Notes:							
①	Land and Cloud Boundaries/Properties Bands						
②	Ocean Color Bands						
③	Atmosphere / Ocean Bands						

Primary Use	Band	Bandwidth ¹	Spectral Radiance ²	Required NE(Delta)T(%) ³	Index	Band	SDS name	Index	Band	IKM	SDS name	Index	Band	IKM	SDS name
Surface/Cloud Temperature	3B	29	3.600 - 3.840	0.44(200)	0.05	1	EV_250_ReFSB	1	1	EV_250_Aggr500_ReFSB	1	1	EV_250_Aggr_1KM_ReFSB		
	3B	21	3.929 - 3.989	0.38(256)	0.00	2	EV_250_ReFSB	2	2	EV_250_Aggr_1KM_ReFSB					
Atmospheric Temperature	3B	22	3.929 - 3.989	0.67(300)	0.07	1	EV_500_ReFSB	1	3	EV_500_Aggr_1KM_ReFSB					
	3B	23	4.020 - 4.080	0.79(300)	0.07	2	EV_500_ReFSB	2	4	EV_500_Aggr_1KM_ReFSB					
	3B	24	4.433 - 4.498	0.17(200)	0.25	3	EV_500_ReFSB	3	5	EV_500_Aggr_1KM_ReFSB					
	3B	25	4.402 - 4.549	0.59(276)	0.25	4	EV_500_ReFSB	4	6	EV_500_Aggr_1KM_ReFSB					
	3B	26	5.000 - 5.160	0.50(200)	0.05	5	EV_500_ReFSB	5	7	EV_500_Aggr_1KM_ReFSB					
Cirrus Clouds Water Vapor	3B	27	6.535 - 6.895	1.16(240)	0.25	1		1	8	EV_1KM_ReFSB					
	3B	28	7.175 - 7.475	0.18(200)	0.25	2		2	9	EV_1KM_ReFSB					
Cloud Properties	3B	29	8.400 - 8.700	0.69(300)	0.05	3		3	10	EV_1KM_ReFSB					
	3B	30	9.500 - 9.800	0.69(300)	0.25	4		4	11	EV_1KM_ReFSB					
Surface/Cloud Temperature	3B	31	10.700 - 11.200	0.55(300)	0.05	5		5	12	EV_1KM_ReFSB					
	3B	32	11.770 - 12.270	0.94(300)	0.05	6		6	13	EV_1KM_ReFSB					
Cloud Top Altitude	3B	33	13.185 - 13.485	4.52(200)	0.25	7		7	14	EV_1KM_ReFSB					
	3B	34	13.485 - 13.785	3.76(200)	0.25	8		8	15	EV_1KM_ReFSB					
	3B	35	13.785 - 14.085	3.11(200)	0.25	9		9	16	EV_1KM_ReFSB					
	3B	36	14.085 - 14.385	2.08(200)	0.25	10		10	17	EV_1KM_ReFSB					
	3B	37				11		11	18	EV_1KM_ReFSB					
	3B	38				12		12	19	EV_1KM_ReFSB					
	3B	39				13		20	20	EV_1KM_Emissive					
	3B	40				14		21	21	EV_1KM_Emissive					
	3B	41				15		22	22	EV_1KM_Emissive					
	3B	42				16		23	23	EV_1KM_Emissive					
	3B	43				17		24	24	EV_1KM_Emissive					
	3B	44				18		25	25	EV_1KM_Emissive					
	3B	45				19		26	26	EV_1KM_Emissive					
	3B	46				20		27	27	EV_1KM_Emissive					
	3B	47				21		28	28	EV_1KM_Emissive					
	3B	48				22		29	29	EV_1KM_Emissive					
	3B	49				23		30	30	EV_1KM_Emissive					
	3B	50				24		31	31	EV_1KM_Emissive					
3B	51				25		32	32	EV_1KM_Emissive						
3B	52				26		33	33	EV_1KM_Emissive						
3B	53				27		34	34	EV_1KM_Emissive						
3B	54				28		35	35	EV_1KM_Emissive						
3B	55				29		36	36	EV_1KM_Emissive						

Footnotes:	
¹ Bands 1 to 19 are in nm; Bands 20 to 36 are in μm	² Spectral Radiance values are $\text{W/m}^2/\mu\text{m}^2/\text{sr}$
³ NE(Delta)T = Noise-equivalent temperature difference	⁴ NE(Delta)T = Noise-equivalent temperature difference
Note: Performance goal is 30-40% better than required	



Index of ftp://ladsftp.nascom.nasa.gov/allData/5/MOD09/2011/112/ - Mozilla Firefox

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Index of ftp://ladsftp.nascom.nasa.gov/allData/5/MOD09/2011/112/

Up to higher level directory

Name	Size	Last Modified
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Index of ftp://e4ftl01u.ecs.nasa.gov/MOLT/

Up to higher level directory

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MOD09GQ.005		12/1/2010 11:57:00 AM
MOD09GST.004		12/1/2010 11:57:00 AM
MOD09Q1.005		12/1/2010 11:57:00 AM
MOD11A1.004		12/1/2010 11:57:00 AM
MOD11A1.005		12/1/2010 11:57:00 AM
MOD11A1.041		12/1/2010 11:57:00 AM
MOD11A2.004		12/1/2010 11:57:00 AM
MOD11A2.005		12/1/2010 11:57:00 AM
MOD11A2.041		12/1/2010 11:57:00 AM
MOD11B1.004		12/1/2010 11:57:00 AM
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