MULTI SATELLITE SPECTRAL BANDS CONVERSION TABLE - Follow Wave-Lenghts						nts		SIMPLE RGBN SATELLITES O								OTHER N	MULTISPECT	RAL S	By: @sergioajv1 (Twitter)							
SATELLITES > SENTINE					LANDSAT-8-0							SKYMAP50-SV1			Jilin JL1GP - 01 & 02			Sentinel-3-OLCI Sentinel-3-SLSTR					Version:04 - 2022/10/15			
Swath:10		00km; Revisit:5d			Swath:185km;Revisit:16d.			Orbit H: 628,6 km				Swa	Swath:12km; Revisit:2d.			CGSat			Swath:127	0km;Revisit:4d	Swath:1400km;Revisit:2d			*This whole table		
WaveLenght		Sentinel-2A (~2B)			Res:15-60m			4A V			Wave	3 e 4		Resolution: 0.5m / 2m			HyperScan sensor			Resolutio	n:300m	Resolution:500/1000m			is under	
Aproximate #order		(2015-06-23+)			(2013-05-30+)			(2019-12-20+)			Lenght	(201	14+) (20	(2013-05-30+)						(2016-01-16+)				tests / verification*		
BAND		Wave-L. RES:		BAND RES:			WPM MUX WFI				IDEM		RES:			Wave L. RES:				Central MULTIP			PURPOSES - PROPERTIES			
(nm)	TYPE	#order:	(nm) Min.	Max.	m	#order:	Min. Max		2 - 8m	MUX 17m	55m	Min. N	lax. 5-8		BAND	Min Max		BAND	nm	m	BAND	Min. Max.	BAND	W.L.	LIER	(According to S2/L8/S3):
400	Violet								31d	31d	5d		26-	-5d				B0-Pan	450-800	5	B01	392,5 407,5				//Coastal aerosol, correction
420	Violet								92Km	95Km	684K		60-86	66km	-	:CBERS		B1	403-423	5	B02	407,5 417,5				//YELLOW subs.,detrital pig. (TURBIDITY)
440	Violet	#12-B01	432,2	453,2	60	#3-B01	433 45	30	B0-PAN			450	900	В0	0-PAN	450 890	0,5	B2	433-453	5	B03	437,5 447,5	5			Aerosol//Chlorophyll abs., vegetation
460	*BLUE*	#1-B02	459,4	525,4	10	#2-B02	450 5°	15 30	B1-B	B05	B13	450	520		B1	450 520	2	B3	450-515	5	B04	485 495	reflect			SoilxVeg.,water/Bathym./Chlorophyll MAX.
530						#1-B08-PAN	500 68	30 15										B7	485-495	10	B05	505 515	500m			//Chlorophyll, sedim., turbid., red tide
560	*GREEN*	#3-B03	541,8	577,8	10	#6-B03	525 60	30	B2-G	B06	B14	520	590		B2	520 590	2	B4	525-600	5	B06	555 565	S 1	554,27	1	Turbidity,oil//Chlorophyll MIN.
590																		B8	615-625	10						L-8 Panchromatic //
600																		B5	630-680	5	B07	615 625				//Sediment loading
630	*RED*	#5-B04	649,1	680,1	10	#5-B04	630 68	30	B3-G	B07	B15	630	690		B3	630 690	2	B9	650-680	10	B08	660 670	S2	659,47	1	Soil,veg//2nd Chl.MAX,sedim.,yellow subs.
670																		B14	660-670	20	B09	670 677,5				//Improved fluorescence,Surface Mix.Layer
690																		B15	678-685	20	B10	677,5 685	i e			//Chlorophyll fluorescence peak
700	RedEdge		696,6	711,6	20													B10	699-719	10	B11	703,75 713,75	i			Vegetation//Chl.fl.basel.
740	RedEdge	_	733	748	20													B11	733-748	10	B12	750 757,5				Vegetation//O2 abs.,clouds,veg.
760	RedEdge												_					B16	750-758	20	B13	760 762,5				//O2 abs.,clouds,veg.;aerosol corr.
765	RedEdge	_											_					B17	759-763	20	B14	762,5 766,25				//Atmospheric correction
767 780	RedEdge	_	770.0	702.0	20				B4-N	DOO	D46	770	900	D.	4 NID	770 000		B12	773-793	10	B15	766,25 768,75				//Cloud top press.,fluore.over land
	NIR	#9-B07 #2-B08	772,8 779,8	792,8 885,8	20 10				B4-N	B08	B16	770	890	B4	4-NIR	770 890	2	B6-NIR	785-900	5	B16	771,25 786,25				Vegetation//Atmos.corr.
830	NIR NarrNIR	#2-B06	854,2	875,2	20	#4-B05	845 88	35 30					_					B13	055 075	20	B17	055 075	S 3	000	1	Vegetation
880	NIR	#10-D0A	004,2	0/0,2	20	#4-600	845 86	30					_					B18	855-875 935-955	20	B18	855 875	33	868	1	Vegetation//Atmos.aeros.corr.,clouds Vegetation//Water vapour reference; SLSTR
900	SWIR																	B19	1000-1040	20	B19	880 890 895 905				//Water vapour abs.,Veg.(max.reflect.)
940	SWIR	#13-B09	935,1	955,1	60													SW1	1195-1225	100	B20	930 950				//Water vapour abs., Atmos.aeros.corr.
1300	SWIR	#4-B10	1358	1389	60	#9-B09	1360 139	30										SW2	1360-1390	100	B21	1000 1040	S4	1374,8	3	Cirrus cloud detection//Atmos.aeros.corr.
1600	SWIR	#7-B10	1568,2	1659,2	20	#8-B06	1560 166	30 30				1550 1	750 SW	IIR1				SW3	1550-1590	100	DET	1000 1040	S5	1613,4	3	Snow/ice/cloud disc>0.025;moist.soil-veq.//
2200	SWIR	#11-B12	2114,9	2289,9	20	#7-B07	2100 230	_				2080 2						SW4	1610-1690	100			S6	2250,7	3	Fire/Ground/Snow/cloud>0.015;soil-veg.
+	IR		2111,0	2200,0			2100 200	00				2000 2	011	II CZ					1010 1000				S7/F1	3742	.001	THERMAL INFRA-RED
+	THERMAL					#10-B10	TIRS1	100				10400 12	2500 Their	rmal				MW	3700-4950	100			S8/F2	10850	.001	/Thermal map, soil moist/
+	THERMAL					B11	TIRS2	100										LW	7500-13500	150			S9	12020.5	.001	/Improved thermal map/
BAND C	FFSET TIME	:	B02-B12: 2.09s 12 tracks			0.96s / 14 tracks																				
INDIC	ES FORM	/IULAS - C	- CONVERSION:				BASIC R,G,B,NIR SATELLITES:												NOTES - Purposes:							
NDVI (NDNR) (B08-B04			304)/(B08+B04)			(B05-B04)/(B05		NDVI = (N-R)/(N+R) ; DVI = N/R															rence Vegetation Index			
			B12)/(B08+B12)			(B05-B07)/(B05													(B08-S6)/	(B8+S6)	Vegetation					
		11)/(B08+B11)			(B03-B05)/(B03													(B06-B17)	/(B06+B17)	Water on Leaves						
		8)/(B03+B08)			(B03-B05)/(B03		NDWI = (G-N)/(G+N) ; Simple = G/N											(B06-B17)	/(B06+B17)	Water Bodies: Normalized Difference Water Index						
			1)/(B03+B11)			(B03-B06)/(B03															Cut mask near (S2NDSI>0.2 & B03>0.15)			& B03>0.15)		
GEOAlteration B11/B12						B06/B07													B20/B21		Geology					
FeOx B11/B08					B06/B05												B20/B17		Geology							
		2 - Alternative: B05/B01			B04/B02		IOx = R/B											B08/B04 Geology: Iron Oxide Index				Index R	/B			
			0.3 B09>0.1 B10>0.01					G > .3 (? - test)											Clouds(any)							
Brovey(Sharp)			O. OENTINEL O OTHERO			LANDONE		Brovey Pansharpening = (< R; G; B; N > / (R+G+B+N)) * PAN											Simple Color Sharpening of							
BAND COMPOSITIONS:			S: SENTINEL & OTHERS			LANDSAT-8	CBERS-INPE: 3 / 4 / 4A SKYMAP50-SV1 JL1GP - CGSat												Sentinel-3-OLCI				Sources			
NATURAL FALSE NIR (RED VEG)			B04*3, B03*3, B02*3			B04*3, B03*3, I		R, G, B											(B08+B09+B10)*1, B06*3, (B04+B05)*1.5					https://www.usgs.gov/faqs/what-are-best-landsat-spa https://en.wikipedia.org/wiki/Sentinel-2		
NATURAL ENHANCED			B08*2,B04*3,B03*3			B05*2,B04*3,B		N, R, G (~R, N, G)											B17*2, (B08+B09+B10)*1, (B04+B05)*1.5 B08+B09+B10)*1+B11*.3, B06*2+(B16+B18)*.5, (B04+B05)*1.5					nttps://en.wikipedia.org/wiki/Sentinei-2 https://www.sentinel-hub.com/develop/documentatio		
FALSE COL.URBAN-SW						B04*3,B03*2+E		IOX(R/B), N, G SIMPLE ENH. = R, G * 0.7 + N * 0.3 , B												B10)"1+B11^.3, B06*	Z+(B16+B1	https://sentinel.esa.int/web/sentinel/technical-guides				
FALSE COL.URBAN-SW FALSE COL.SWIR-NIR						B07*2,B06*3,B	N, NDRG((R-G)/(R+G)), B															nttps://sentinel.esa.int/web/sentinel/technical-guides/ https://sentinel.esa.int/web/sentinel/user-guides/senti				
FALSE COL.GEOLOGY			B12*3,B08*3,B04*3			B07*3,B05*3,B B07*3,B04*3,B		DVI(N/R), G, B																		
GEOLOGY ENHANCED			, ,																D20* 4E - F	DON* 45 , D00*4 7 D00*4 6 , D47* 0 D04*0 D04* 4				*L8:The along-track spectral band separation leads to an approximately 0.05 accord time delay This time delay creates a small but significant		
AGRICULTURE			B04*1+B12*1.5,B05*1.5+B08*0.5,B02*2.8			B07*2,B04*1.5- B06*3,B05*3,B		N/C											B20*.15+B08*1.7,B06*1.6+B17*.2,B04*2-B21*.1					https://earth.esa.int/web/eoportal/satellite-missions/		
			B11*3,B08*3,B02*3 B04*3,B03*3,B01*3					N/G										/R08+R00+R10*1 R06*3 /P02+P03*1 5					http://www2.dgi.inpe.br/catalogo/explore			
BATHYMETRIC			DU4 3,BU3"3,BU	ıs	B04*3,B03*3,B		(R-B)/(R+B)											(B08+B09+B10)*1, B06*3, (B02+B03)*1.5					ntp://wwwz.ugi.inpe.bi/catalogo/explore			