

## TECHNICAL SPECIFICATIONS OF EARTH OBSERVING SATELLITES

Sensor/Satellite	Operator/ Country	Launch & End Date	Sensor type	Resolution			Swath(km)	Revisit (days)
				Spectral Resolution (µm)	Spatial (m)	Radiometric(bit)		
ALI/ EO-1	NASA/USA	2000	PAN	0.48-0.69	10	16	37	16 (7-9)
			Multi	0.433-0.453,0.45-0.515,0.525-0.605,0.63-0.69 0.775-0.805,0.845-0.89,1.2-1.3,1.55-1.75,2.08-2.35	30	16	37	
ALOS	JAXA / Japan	2006	PALSAR PRISM AVNIR-2	HH, VV /H H+HV, VV+VH L-Band 1270 MHz, 23.6 cm. Pan:0.52-0.77 0.42-0.50,0.52-0.60,0.61-0.69,0.76-0.89	10-100 2.5 10	3/5 8 8	20-350 70(nadir) 35(back) 70(nadir)	46 (2)
ALSAT-1	DMC- Algeria	2002	Multi	0.52-0.62(Green), 0.63-0.69(red),0.76-0.9(NIR)	32	8	600	4
ASTER/TERRA	METI & NASA / Japan -USA	1999	VNIR	0.52-0.60,0.63-0.69,0.76-0.86 (S)	15	8	60	48 (16)
			SWIR	1.60-1.70,2.145-2.185,2.185-2.225,2.235-2.285, 2.295-2.365,2.360-2.430	30	8	60	48 (16)
			TIR	8.125-8.475,8.475-8.825,8.925-9.275,10.25-10.95 10.95-11.65	90	12	60	48 (16)
BEIJING-1	DMC-Çin	2007	PAN	0.5-0.8	4	8	24	-
			Multi	0.52-0.62, 0.63-0.69, 0.76-0.9	32	8	600	5
BİLSAT	TUBITAK SPACE - Tur.	2003-2005	PAN Multi	0.45-0.90 Visible:0.45-0.52,0.52-0.60,0.63-0.69,NIR:0.76-0.90	12.6 27.6	8 8	25 55	5 (116) 4 (52)
CARTOSAT-1 (IRS-P5)	ISRO Hint.	2005	PAN	0.5-0.85 (S)	2.5	10	27.5 (S)/55 (M)	126/5
CARTOSAT-2	ISRO Hint.	2007	MONO Paint-Brush Multi-View	0.45-0.85	0.8	10	(9.6/28/50)x9.6 9.6x38, 28x29, 50x19 (9.6/15/28)x9.6	4-5
CBERS-1/2	INPE -CAST / Brasil- China	1999/2003	PAN	0.51-0.73 (S)	20	-	113	26/3
			Multi	0.45-0.53, 0.52-0.59,0.63-0.69, NIR:0.77-0.89	20	-	113	26/3
			IRMSS	0.50-1.10(P), 1.55-1.75, 2.08-2.35(S), 10.40-12.50(T)	80/160(T)	-	120	26
			WFI-Multi	0.63-0.69, NIR: 0.77-0.89	260	-	890	5
ENVISAT	ESA /EU	2002	ASAR MERIS	C-band HH veya VV 15 spektral band	12.5-75 300	ENL>3 8	54-400 -	3 -
EROS A1	ImageSat - Israel	2000	PAN	0.5-0.9 (S)	1.9/0.9	10	14/7	1.8-4
EROS B1	ImageSat - Israel	2006	PAN	0.5-0.9 (S)	0.7	10	7	1.8-4
ERS-1/2	ESA /EU	91-00/94	SAR Image Mode	C-Band (5.3Ghz) polarization:VV	30	-	100	3-35
			SAR	L-HH (1.275 GHz)	18	3	75	44
FORMOSAT	NSPO / Tayvan	2004	PAN	0.45-0.90	2	8	24	1
			Multi	0.45-0.52, 0.52-0.60, 0.63-0.69, 0.76-0.90	8	8	24	1
GEOEYE-1	GeoEye / USA	2008	PAN	0.45-0.80	0.41	11	15.2	<3
			Multi	0.45-0.51, 0.51-0.58, 0.655-0.69, 0.78-0.92	1.65	11	15.2	<3
HYPERION/ EO-1	NASA / USA	2000	HYPERION	220 spektral band (0.4-2.5um arası - hyperspektral)	30	16	7.7	16 (7-9)
IKONOS-2	GeoEye - USA (Space Imaging)	1999	PAN	0.526-0.929 (S)	0.82	11	11.3	3.5-5
			Multi	0.445-0.516,0.506-0.595,0.632-0.698,0.757-0.853 (S)	3.2	11	11.3	3.5-5
IRS 1C/D	ISRO / India	1995/97	PAN	0.5-0.75 (S)	5.8	6	70.5	24/25
			LISS-III	VNIR:0.52-0.59,0.62-0.68,0.77-0.86,SWIR:1.55-1.70	23	7	141	24/25
			WiFS	0.62-0.68,0.77-0.86	188	7	812	24/25
IRS-P6 (ResourceSat-1)	ISRO / India	2003	LISS-III	0.52-0.59,0.62-0.68,0.77-0.86 SWIR:1.55-1.70	23.5	7-10 SWIR	140	24
			LISS-IV	MX:0.52-0.59,0.62-0.68,0.77-0.86 veya Mono:0.62-068	5.8	7	24/70 (M)	5
			AWiFS	0.52-0.59,0.62-0.68,0.77-0.86 SWIR:1.55-1.70	56-70	10	2 x 370	5
JERS 1	JAXA / Japan	1992- 1999	OPS	VNIR:0.52-0.60,0.63-0.69,0.76-0.86 (S)	18	6	75	44
			OPS	SWIR:1.60-1.71,2.01-2.12,2.13-2.25,2.27-2.40	18	6	75	44
KOMPSAT-1	KARI /G.Korea	1999	EOC	0.51-0.73	6.6	8	24	-
			OSMI(ocean)	0.412-0.443,0.490-0.555,0.765-0.865	-	-	24	-
KOMPSAT-2	KARI /G.Korea	2006	PAN	0.50-0.90	1	10	15	28/3
			Multi	0.45-0.52, 0.52-0.60, 0.63-0.69, 0.76-0.90	4	10	15	28/3
LANDSAT-1/2/3	NASA-EOSAT/USA	1972/75/78 1978/82/83	MSS	VNIR:0.5-0.6,0.6-0.7,0.7-0.8,0.8-0.11	80	8	180	18
LANDSAT-4/5	Space Imaging- NASA/USA	1982/84, 1987/-	TM	VNIR:0.45-0.52,0.52-0.60,0.63-0.69,0.76-0.90	30	8	183	16
			TM	SWIR:1.55-1.75,2.08-2.35	30	8	183	16
			TM	TIR:10.42-12.5	120	8	183	16
LANDSAT-7	NASA /USA	1999-2003 (slc- off)	PAN	0.52-0.9	15	8	185	16
			ETM	VNIR ve SWIR Landsat 5 ile aynı	30	8	185	16
			ETM	TIR:10.42-12.5 (Low-High gain)	60	8	185	16

<b>MODIS/TERRA</b>	METI-NASA /JP-USA	1999	MODIS	2 spektral band 7 spektral band 26 spektral band	250 500 1000	8 8 8	2330 2330 2330	1-2 1-2 1-2
<b>MONITOR-E</b>	GKNPT & RSA /RU	2005-2007	PAN Multi	0.54-0.84 0.54-0.59, 0.63-0.67, 0.78-0.90	8 20	8 8	96 160	- -
<b>NIGERIASAT-1</b>	NIGERIA	2003	Multi	0.52-0.62(Green),0.63-0.69(red),0.76-0.90(NIR)	32	8	600	-
<b>ORBVIEW-3</b>	GeoEye(ORBIMAGE) / USA	2003-2007	PAN Multi	0.45-0.90 0.45-0.52,0.52-0.60,0.62-0.695,0.76-0.9(S)	1 4	11 11	8 8	8 8
<b>ORBVIEW-2 (SeaStar)</b>	GEOEYE(ORBIMAGE) NASA	1997	SeaWifs	0.402-0.422,0.433-0.453,0.480-0.500,0.500-0.520 0.545-0.565,0.660-0.680,0.745-0.785,0.845-0.885	4500 GAC 1130 LAC	10	1500 GAC 2800 LAC	1
<b>PALSAR/ALOS</b>	NASDA	2006	PALSAR	HH, VV /H H+HV, VV+VH L-Band 1270 MHz, 23.6 cm.	10-100	3/5	20-350	46 /2
<b>PROBA</b>	ESA	2001	HRC CHRIS	0.415-1.050 with 5-12nm spectral res. 19 bands	18 18	- -	14	- -
<b>RADARSAT -1</b>	CSA / Kanada	1995	SAR	C-HH band 16 beam mode (S)	8-100	-	50-500	3-35 (24)
<b>RADARSAT - 2</b>	CSA-MDA/ Kanada	2007	SAR	C-HH,VV,HV,VH (S)	3-100	-	20-500	3-35 (24)
<b>RAPIDEYE-1/2/3/4/5</b>	RapidEye / DE.	2008	Multi	0.44-0.51, 0.52-0.59, 0.63-0.685, 069-0.73, 0.76-0.85	6.5	12	77	1-5.5
<b>RASAT</b>	TUBITAK-SPACE /TR	2009	PAN	0.42-0.73	7.5	8	30	4
			MS	0.42-0.55, 0.55-0.58, 0.58-0.73	15	8	30	4
<b>RESOURCE-DK1</b>	Ts-SKB/Rus	2006	PAN	0.58-0.8	1	-	28	-
			Multi	0.5-0.6, 0.6-0.7, 0.7-0.8	2-3	-	28	-
<b>SAC-C</b>	ARJANTIN	2000	MMRS	5 VNIR	175	8	360	9/7
			HRTC	PAN-VNIR	35	8	90	16
			HSTC	PAN-VNIR	250	8	1000	2
<b>SPIN 2 ve Mekikler</b>	RUSSIA	88/95 98/05 Periyodik	MK-4	Visible:0.515-0.565,0.635-0.690,0.810-0.900	15,8,15	Film	150	8
			KVR-1000/DK1	Pan 0.49-0.59	2-1	Film	40	-
			TK-350	Topoğrafik Kamera: 0.49 -0.59 (S)	10	Film	200	-
<b>SPOT -1/2/3</b>	CNES & Astrium /France	1986/90/93 - / - / 96	HRV-PAN	0.51-0.73 (S)	10	8	60	1-4(26)
			HRV	VNIR:050-0.59,061-0.68,0.79-0.89	20	8	60	1-4(26)
<b>SPOT-4</b>	CNES & Astrium /FR	1998	HRV-PAN	0.61-0.68 (s)	10	8	60	1-4(26)
			HRVIR	VNIR:050-0.59,061-0.68,0.79-0.89, SWIR:1.58-1.75	20	8	60	1-4(26)
			Vegetation	0.43-0.47,0.61-0.68,0.78-0.89,1.58-1.75	1000	4/8	2200	1
<b>SPOT-5</b>	CNES & Astrium /FR	2002	HRS-PAN	0.49-0.69 (S)	10	8	120	1-4(26)
			HRG-PAN	0.49-0.69 Super mode (S)	2.5 - 5	8	60	1-4(26)
			HRG	VNIR:0.49-0.61,0.61-0.68,0.78-0.89(S)	10	8	60	1-4(26)
			HRG	SWIR:1.58-1.75	20	8	60	1-4(26)
			Vegetation	0.43-0.47,0.61-0.68,0.78-0.89,1.58-1.75	1000	4/8 bit	2250	1
<b>QUICKBIRD</b>	Digital Globe /USA	2001	PAN	0.445-0.900 (S)	0.61-0.73	11	16.5	3.5
			Multi	VNIR:0.45-0.52,0.52-0.60,0.63-0.69,0.76-0.89 (S)	2.5-2.9	11	16.5	3.5
<b>TERRASAR-X</b>	InfoTerra & DLR/DE	2007	Spotlight	Polarization: Dual (HH/VV) or Single (VV or HH)	1	-	5 x10	-
			StripMap	Polarization: Dual (HH/VV, HH/HV, VV/HV) or Single (VVorHH)	3	-	15-30	-
			ScanSAR	VV or HH	16	-	100	-
<b>TOPSAT</b>	BNSC-UK MoD/ UK	2005	PAN		2.8	-	17	2-2.5
			MS	Blue, Green, Red	5.6	-	17	2-2.5
<b>WORLDVIEW-1</b>	Digital Globe / USA	2007	PAN	0.40-0.90	0.5	11	17.6	5

Chart prepared and provided by: Yucel Erbay, NIK SYSTEM (www.nik.com.tr)