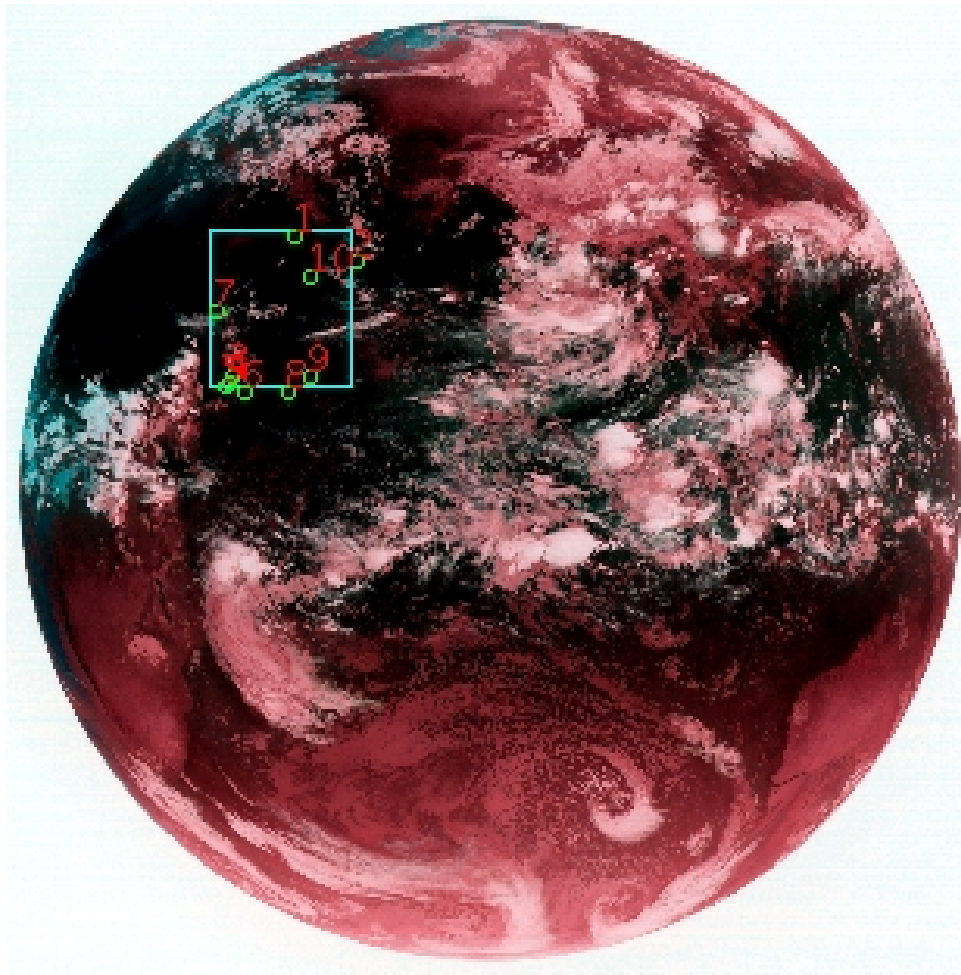


DQE Report: Location Accuracy of INSAT-3DR-IMG STANDARD (FULL DISK) Product 3RIMG_20JUN2020_1545

Satellite INSAT-3DR No Of Bands 6 Product Type STANDARD
 Sensor IMG LvlOfProcess L1B Selected Band 2-TIR1
 DOP/Time 20-06-20/15:45 Station ID BES Field View(deg) 18.006
 Res(Y,X) [Km] (4.0,4.0) Res(Y,X) [uRad] (112.0,112.0)

(81.128N,-7.22W)

(81.128N,155.142E)



(-80.986S,-7.22W)

(-80.986S,155.142E)

GCP Distribution overview for 3RIMG20JUN20201545L1BDQE

Image Width: 2805 Image Height: 2816 No Of GCPs: 10

GCP Coverage(%) 16.22 (N-S) 14.47 (E-W)

Location Error(E)

Legend —0Km < E <= 50Km —50Km < E <= 100Km —E >100Km

Location Error (In IR Pixels)

	Mean	Direction	Stddev	RMS
Along	2.023	N	0.820	2.183
Across	-3.822	W	0.838	3.913

Scale (Km)

	Pixel Size	Stddev	%variation
Average	4.561	0.380	14.034
Along	4.586	0.464	14.639
Across	4.920	0.281	22.999

Internal Distortion (in IR Pixels)

	PeakToPeak	Mean	Stddev	RMS
Along	2.096	0.167	0.70	0.720
Across	1.600	0.964	0.47	1.073

Attitude Residuals (Deg)

Pitch	Roll	Yaw
-0.01735	-0.04115	0.34041

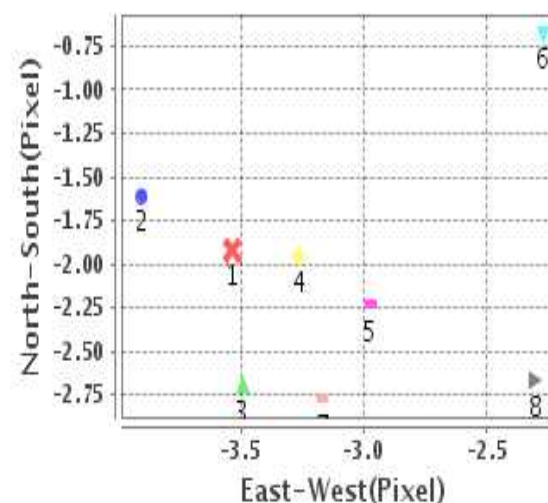
Reference Used

Sensor	Resolution	Projection
ETM	500.00	GGP

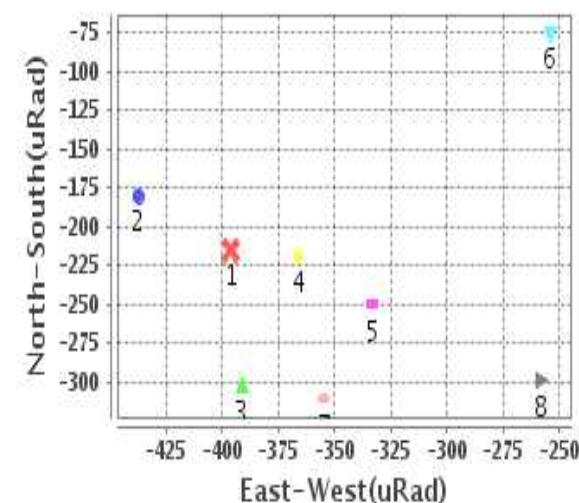
Radial Error (in IR Pixels)

Mean	4.403
Min	2.866
Max	5.815
CE90	4.891

Location Error For GCPs(Pixel)



Location Error For GCPs(uRad)



Detailed Product Information

Ancillary Info

Satellite	INSAT-3DR	Generation Date	20-06-20
Sensor	IMG	DQE Date	23-06-2020
PassType	NONE	Aquisition Date	20-06-20
Imaging Mode	FULL_FRAME	Aquisition Time(GMT)	15:45
Sat Altitude(m)	3.6E7	Nominal Altitude(Km)	3.6E7
Station	BES	Predicted Altitude(Km)	-999.99
Sat Location(deg)	-999.99 E	Nominal Center Lat(deg)	0.0
Format	hdf5-1.8.8	Nominal Center Lon(deg)	74.0
LvlOfProcessing	STANDARD	Predicted Center Lat(deg)	-999.99
DP JobId	3RIMG_20JUN20	Predicted Center Lon(deg)	-999.99
ProductCode	NONE		
Field View(deg)	18.006		

Projection Parameters

Projection	None
Ellipsoid	WGS_84
Datum	WGS_84
Zone	NotAvail
Semi_Major_Axis(Km)	6378.14
Semi_Minor_Axis(Km)	6356.75
Standard_Parallel1(deg)	-999.99
Standard_Parallel2(deg)	-999.99
Projection-Origin_Lon(deg)	-999.99
Projection-Origin_Lat(deg)	-999.99
Projection_False_Easting(Km)	-999.99
Projection_False_Northing(Km)	-999.99

Scene Center Desc

Centre Lat(deg)	0.071
Center Lon(deg)	73.961
Centre Roll(deg)	-999.0
Centre Pitch(deg)	-999.0
Center Yaw(deg)	-999.0
SunElevation(deg)	-999.99
SunAzimuth(deg)	-999.99
SatElevation(deg)	-999.99
SatAzimuth(deg)	-999.99

Scene Corner Desc

NW_Lat(deg)	81.128
NW_Lon(deg)	-7.22
SW_Lat(deg)	-80.986
SW_Lon(deg)	-7.22
NE_Lat(deg)	81.128
NE_Lon(deg)	155.142
SE_Lat(deg)	-80.986
SE_Lon(deg)	155.142

Band Wise Details

	Res_AL(Km)	Res_AX(Km)	Image Height	Image Width
MIR	4.0	4.0	2816	2805
SWIR	1.0	1.0	11264	11220
TIR1	4.0	4.0	2816	2805
TIR2	4.0	4.0	2816	2805
VIS	1.0	1.0	11264	11220
WV	8.0	8.0	1408	1402

GDQE Computation Base

Projection	MER	Wildpoint Rejection Threshold	2.60	SemiMajorAxis(m)	6378137.00	Mode Of Computation	grid
Ellipsoid	WGS_84		-sigma	SemiMinorAxis(m)	6356752.31	Used Reference Type	REFINSREF
Datum	WGS_84	Unit	pixels	Standardparallel1(deg)	17.0		
Zone	Not Applicable			Standardparallel2(deg)	17.0		

* -999.99 : Not Applicable/Not Available

References

JobId : 3RIMG20JUN20201545L1BDQE

(-999.99 - Not Available/Not Computed)

Ref.No	Source	File Name	Resolution (m)	Projection
1	ETM	world_Band1.img	500.0	GCP

Location Accuracy

GCP Distribution Statistics

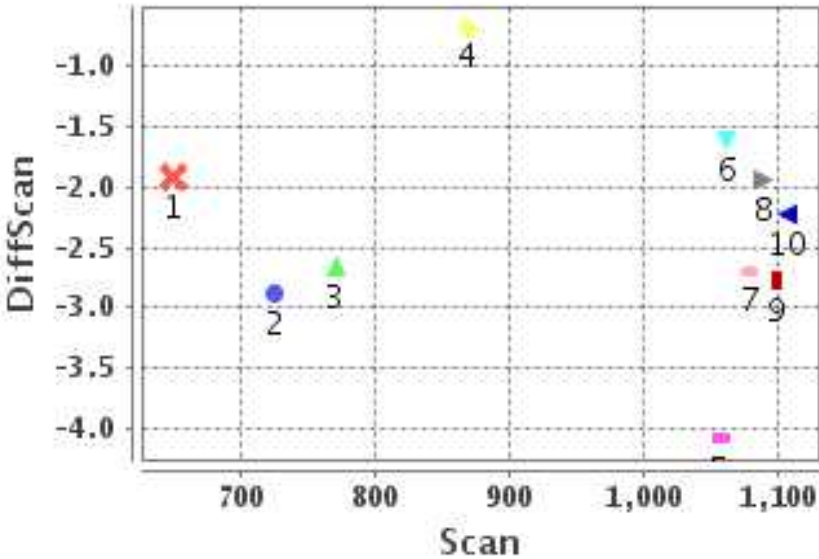
Image Width (pixels) : 2805 Image Height (pixels) : 2816 No of GCPs : 10

	Mean	StdDev	Min	Max	Coverage(in %)
GCP Scan	950.1	168.9	649.2	1106.00	16.22 (N-S)
GCP Pix	756.0	129.7	598.2	1004.25	14.47 (E-W)

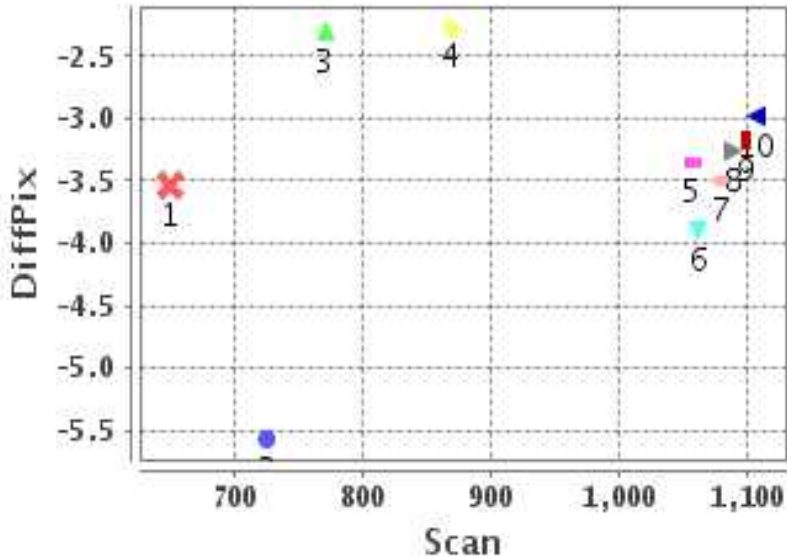
Identified Control Point details : (Differences are Reference - Product)

No	Scan	Pix	DiffScan (line)	DiffPix (pixel)	DifLat (Km)	Dir	DifLon (Km)	Dir	Status
1	649.2	820.0	-1.9	-3.54	10.086	N	20.959	W	Accepted
2	725.2	1004.2	-2.9	-5.57	13.904	N	26.890	W	Rejected
3	1061.0	647.5	-1.6	-3.90	6.974	N	17.696	W	Accepted
4	1078.5	633.2	-2.7	-3.49	9.252	N	17.238	W	Accepted
5	1088.2	627.0	-1.9	-3.27	7.752	N	17.764	W	Accepted
6	1106.0	682.5	-2.2	-2.97	9.614	N	13.577	W	Accepted
7	867.8	598.2	-0.7	-2.27	0.247	N	11.463	W	Accepted
8	1098.0	807.8	-2.8	-3.17	11.958	N	11.682	W	Accepted
9	1056.5	871.8	-4.1	-3.35	15.244	N	13.524	W	Rejected
10	770.8	868.2	-2.7	-2.30	8.867	N	11.921	W	Accepted

Error(Pixels) Vs. GCPScan



Error(Pixels) Vs. GCPScan



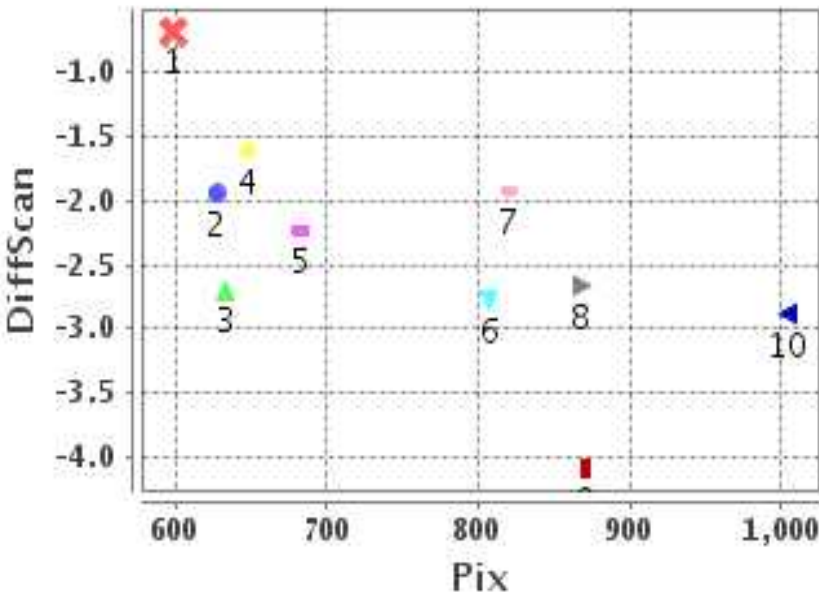
Number Of Points

North	8
South	0
East	0
West	8

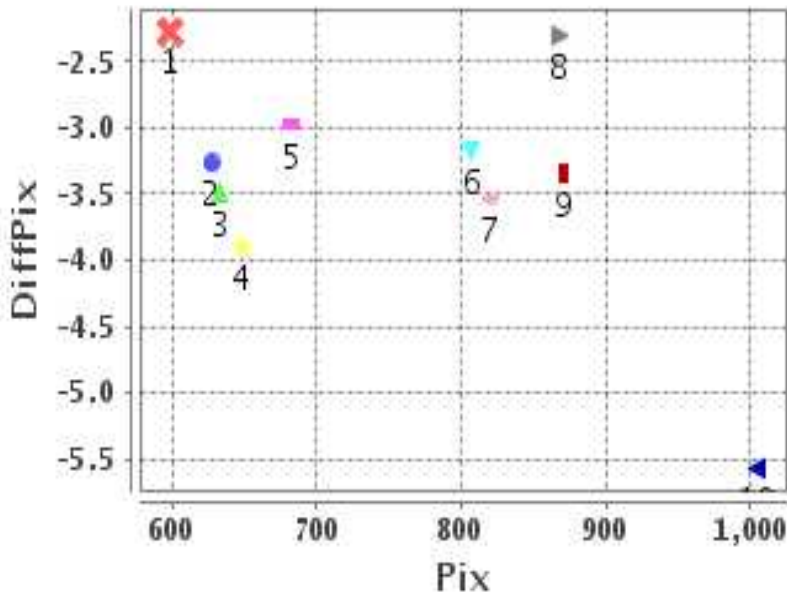
Radial Error (Km)

Mean	4.403
Min	2.866
Max	5.815
CE90	4.891

Error(Pixels) Vs. GCPPix



Error(Pixels) Vs. GCPPix



Location Accuracy

	Mean	StdDev	RMS	Dir	* MinRMS	* MaxRMS
Along(Km)	2.023	0.820	2.183	N	2.042	2.334
Across (Km)	-3.822	0.838	3.913	W	3.684	4.040

Block-Wise Geo location Error Statistics

Location Accuracy,Scale,ID

Scan Range-0-937; Pix Range-0-934		
Number of GCPs	3	
Location Error(Km)		
Along(Mean,Dir)	6.403329999	N
Across(Mean,Dir)	-14.78	W
Scale(Km)		
Average Scale (Mean,%Variation)	4.94	23.58
Internal Distortion(Pixel)		
Along(Mean,Stddev)	-0.25	0.99
Across(Mean,Stddev)	0.65	0.62

Scan Range-0-937; Pix Range-934-1869		
Number of GCPs	-999	
Location Error(Km)		
Along(Mean,Dir)	-999.99	NotAvail
Across(Mean,Dir)	-999.99	NotAvail
Scale(Km)		
Average Scale (Mean,%Variation)	-999.99	-999.9
Internal Distortion(Pixel)		
Along(Mean,Stddev)	-999.99	-999.99
Across(Mean,Stddev)	-999.99	-999.99

Scan Range-0-937; Pix Range-1869-2805		
Number of GCPs	-999	
Location Error(Km)		
Along(Mean,Dir)	-999.99	NotAvail
Across(Mean,Dir)	-999.99	NotAvail
Scale(Km)		
Average Scale (Mean,%Variation)	-999.99	-999.9
Internal Distortion(Pixel)		
Along(Mean,Stddev)	-999.99	-999.99
Across(Mean,Stddev)	-999.99	-999.99

Scan Range-937-1876; Pix Range-0-934		
Number of GCPs	5	
Location Error(Km)		
Along(Mean,Dir)	9.108	N
Across(Mean,Dir)	-15.59	W
Scale(Km)		
Average Scale (Mean,%Variation)	4.59	14.69
Internal Distortion(Pixel)		
Along(Mean,Stddev)	0.80	0.34
Across(Mean,Stddev)	0.12	0.35

Scan Range-937-1876; Pix Range-934-1869		
Number of GCPs	-999	
Location Error(Km)		
Along(Mean,Dir)	-999.99	NotAvail
Across(Mean,Dir)	-999.99	NotAvail
Scale(Km)		
Average Scale (Mean,%Variation)	-999.99	-999.9
Internal Distortion(Pixel)		
Along(Mean,Stddev)	-999.99	-999.99
Across(Mean,Stddev)	-999.99	-999.99

Scan Range-937-1876; Pix Range-1869-2805		
Number of GCPs	-999	
Location Error(Km)		
Along(Mean,Dir)	-999.99	NotAvail
Across(Mean,Dir)	-999.99	NotAvail
Scale(Km)		
Average Scale (Mean,%Variation)	-999.99	-999.9
Internal Distortion(Pixel)		
Along(Mean,Stddev)	-999.99	-999.99
Across(Mean,Stddev)	-999.99	-999.99

Scan Range-1876-2816; Pix Range-0-934		
Number of GCPs	-999	
Location Error(Km)		
Along(Mean,Dir)	-999.99	NotAvail
Across(Mean,Dir)	-999.99	NotAvail
Scale(Km)		
Average Scale (Mean,%Variation)	-999.99	-999.9
Internal Distortion(Pixel)		
Along(Mean,Stddev)	-999.99	-999.99
Across(Mean,Stddev)	-999.99	-999.99

Scan Range-1876-2816; Pix Range-937-1869		
Number of GCPs	-999	
Location Error(Km)		
Along(Mean,Dir)	-999.99	NotAvail
Across(Mean,Dir)	-999.99	NotAvail
Scale(Km)		
Average Scale (Mean,%Variation)	-999.99	-999.9
Internal Distortion(Pixel)		
Along(Mean,Stddev)	-999.99	-999.99
Across(Mean,Stddev)	-999.99	-999.99

Scan Range-1876-2816; Pix Range-1869-2805		
Number of GCPs	-999	
Location Error(Km)		
Along(Mean,Dir)	-999.99	NotAvail
Across(Mean,Dir)	-999.99	NotAvail
Scale(Km)		
Average Scale (Mean,%Variation)	-999.99	-999.9
Internal Distortion(Pixel)		
Along(Mean,Stddev)	-999.99	-999.99
Across(Mean,Stddev)	-999.99	-999.99

*-999 : no gcp available
* -999.99 : values are not computed