



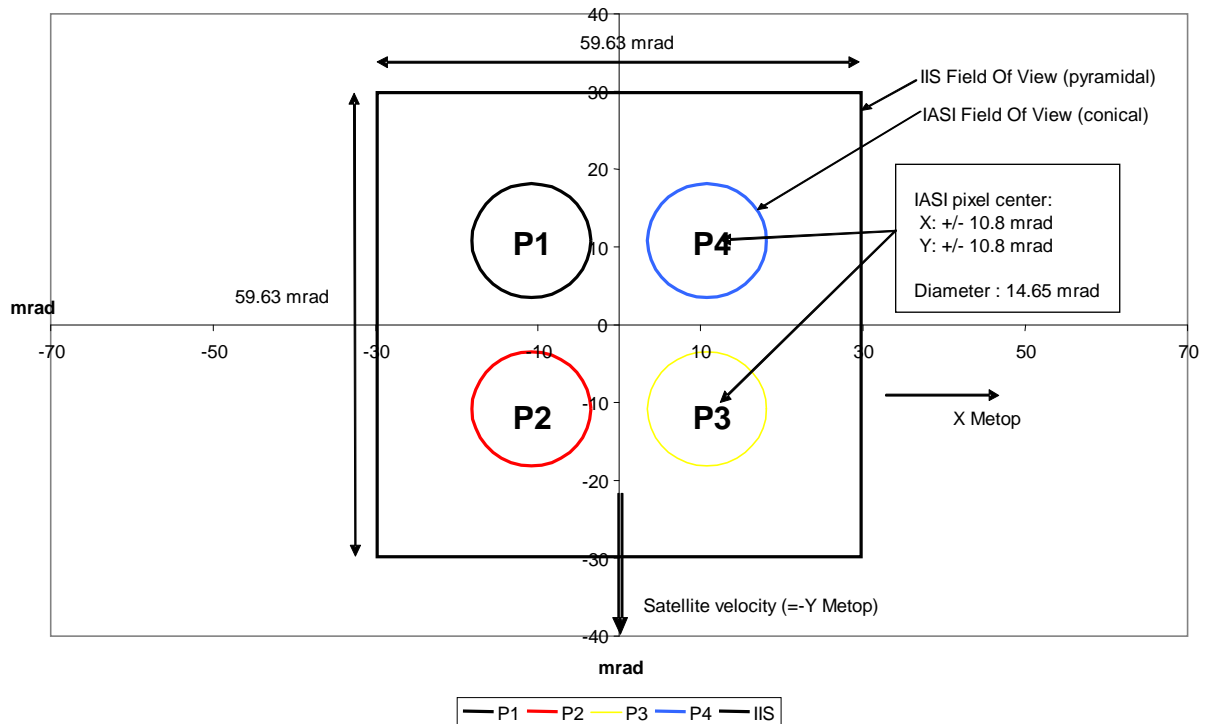
MEMO

Date : 3 June 2009

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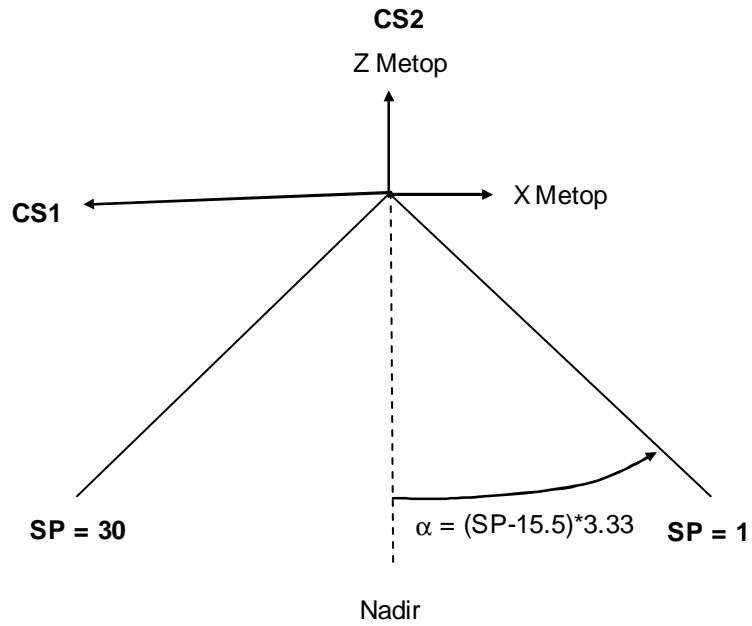
IASI/METOP PSF

1. Definition of IASI and IIS FOV



IASI and IIS FOVs seen by METOP (projection on ground)

2. Swath Characteristics

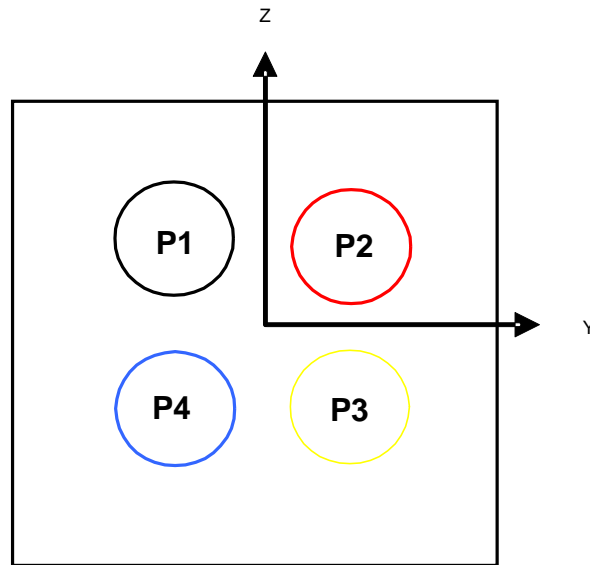


SP	α (deg)
1	-48.33
2	-45.00
3	-41.67
4	-38.33
5	-35.00
6	-31.67
7	-28.33
8	-25.00
9	-21.67
10	-18.33
11	-15.00
12	-11.67
13	-8.33
14	-5.00
15	-1.67
16	1.67
17	5.00
18	8.33
19	11.67
20	15.00
21	18.33
22	21.67
23	25.00
24	28.33
25	31.67
26	35.00
27	38.33
28	41.67
29	45.00
30	48.33

View	α (deg)
CS1	85
CS2	180

3. PSF file format

The file "PSF_spatiale_conf_ope.txt" provides IASI PSFs in ascii format for the 4 pixels. The coordinate system is defined by (Z,Y) in IASI focal plan frame of reference.



IASI FOVs in the focal plan frame of reference

Constants are the following :

PN = number of pixels (4)
NMAX = maximum number of lines or columns (100)

The file format is the following :

INTEGER IDefPsfSondNbLin = Number of lines used to describe the PSF

INTEGER IDefPsfSondNbCol = Number of columns used to describe the PSF

REAL64 IDefPsfSondY(PN,NMAX) = Y coordinate for field angles in radian

REAL64 IDefPsfSondZ(PN,NMAX) = Z coordinate for field angles in radian

REAL64 IDefPsfSondWgt(PN,NMAX,NMAX) = Normalised weights associated to each (Y,Z) points

REAL64 IDefPsfPdsPix(PN) = pixel weight for spectral calibration (NOT USEFULL FOR USERS)

REAL64 IDefPsfSondBaryCentreY(PN) = Y coordinate of sounder pixels barycenter in radian
(Note that it can be recomputed directly by using IDefPsfSondY and IDefPsfSondWgt)

REAL64 IDefPsfSondBaryCentreZ(PN) = Z coordinate of sounder pixels barycenter in radian
(Note that it can be recomputed directly by using IDefPsfSondZ and IDefPsfSondWgt)

Remark : for application that does not required an important accuracy or for very homogeneous scenes, a uniform circular model for PSF can be used. In this case, PSF weights have a constant value. Calculations are then easier.