MSDP INSTRUMENT AND DATA at THEMIS and PIC DU MIDI

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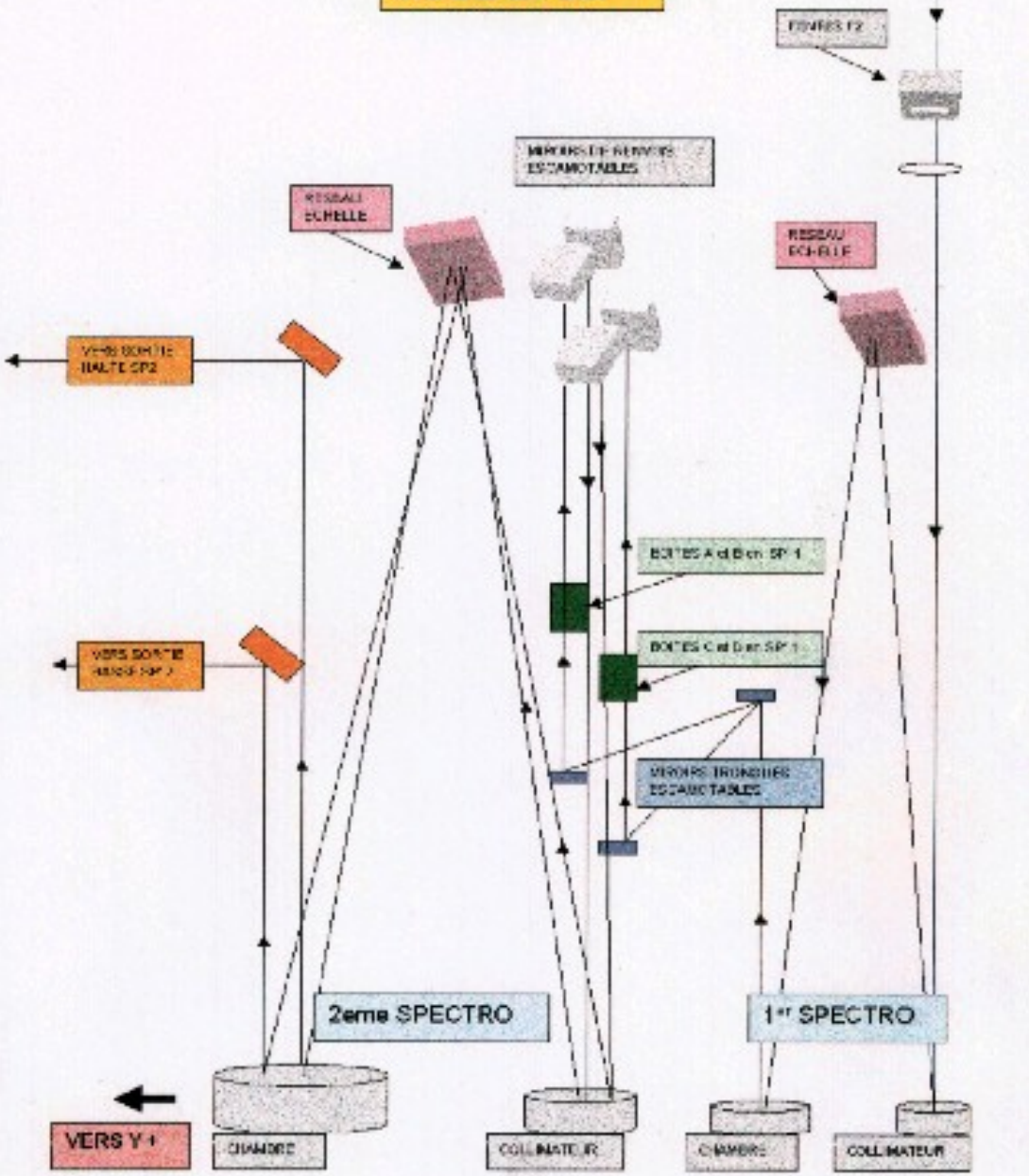
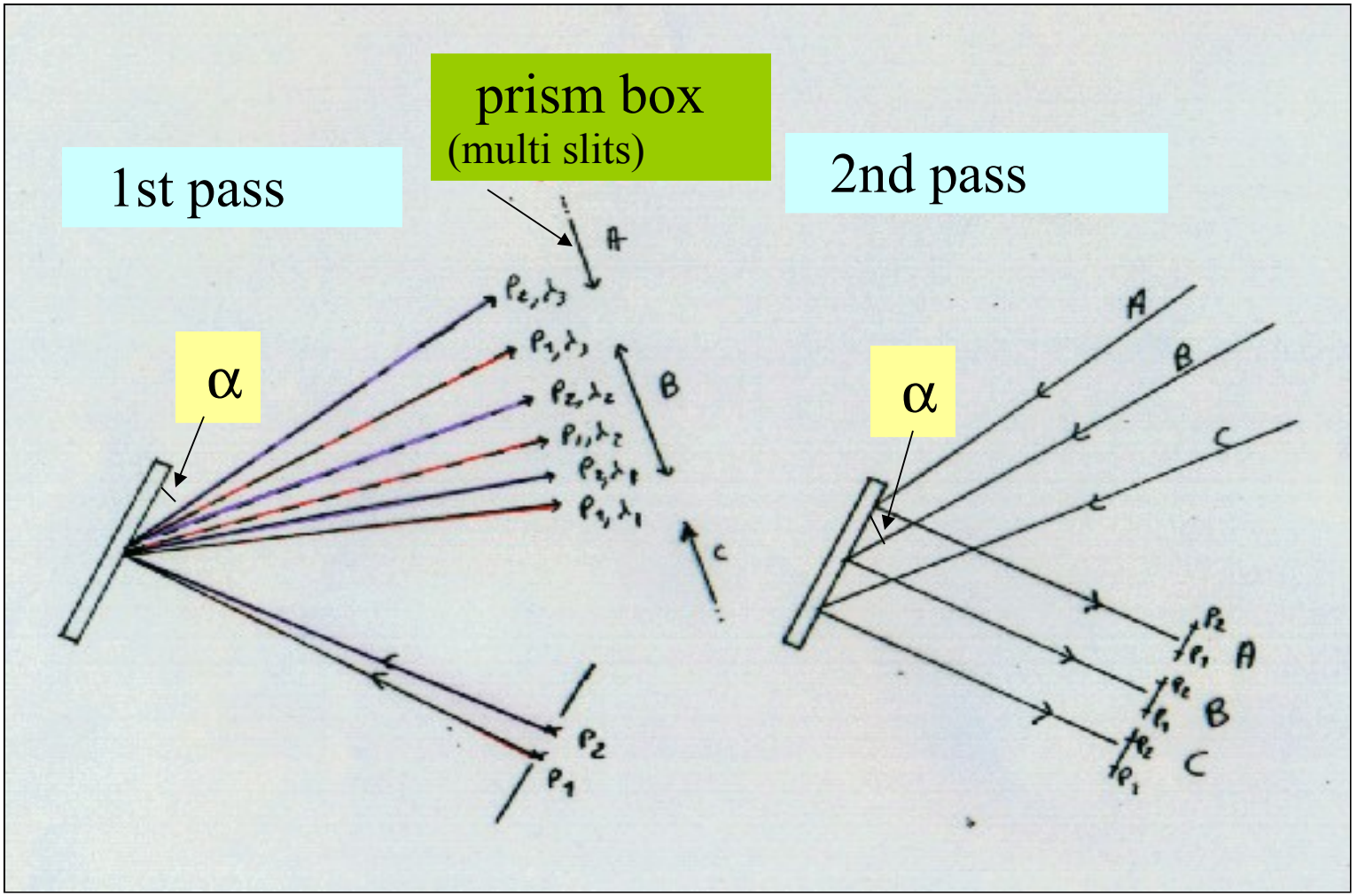
SPECTROGTRAPHES THEMIS VUE DE COTE

OC DEC 05

MODE DPSM

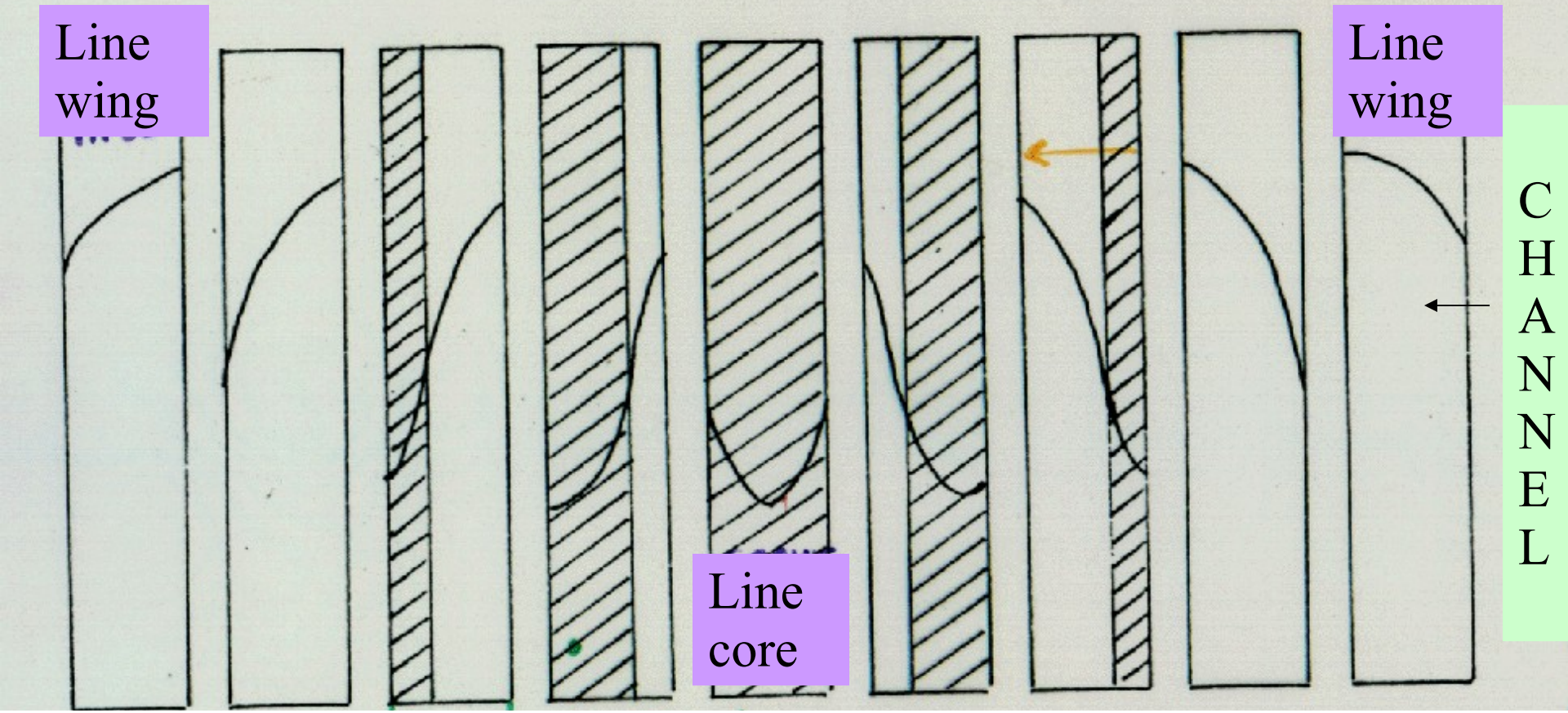


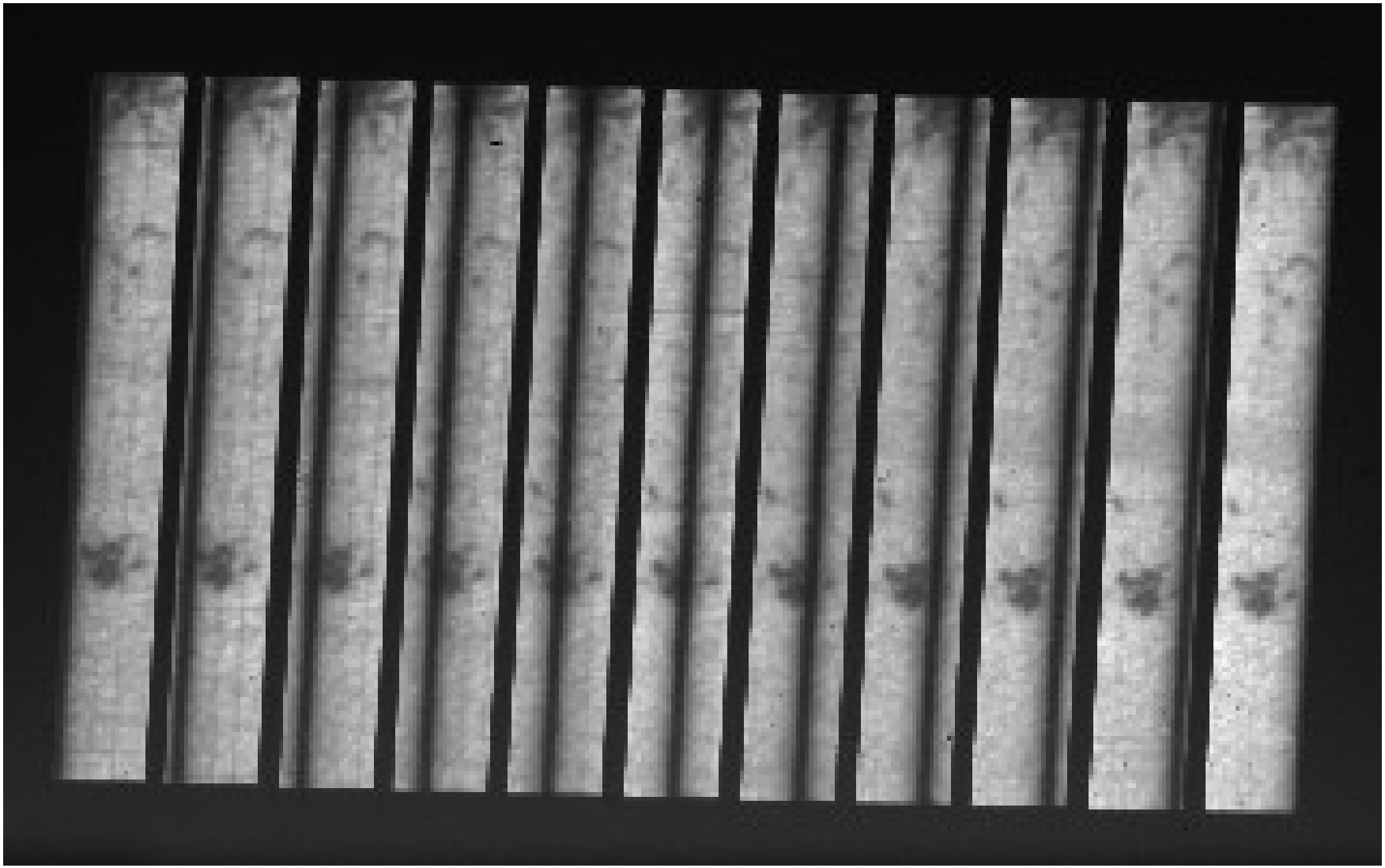
DOUBLE PASS ON THE GRATING



MSDP SPECTRA

Each channel corresponds to a narrow band filter, with a variation of the wavelenth inside the channel in the direction opposite to the dispersion (Pic, box 9 and 11 channel, invern=0) or in the same direction (THEMIS, 2 boxes 8 channel, invern aile



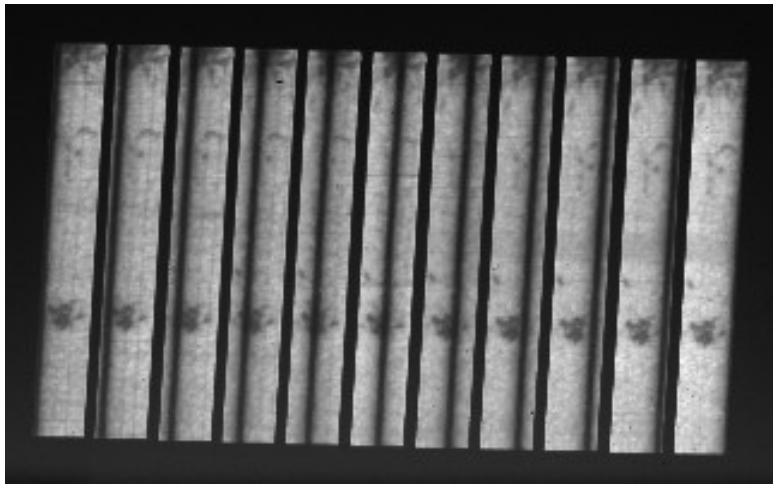


MSDP OBSERVATIONS

STEP_Y

i

x

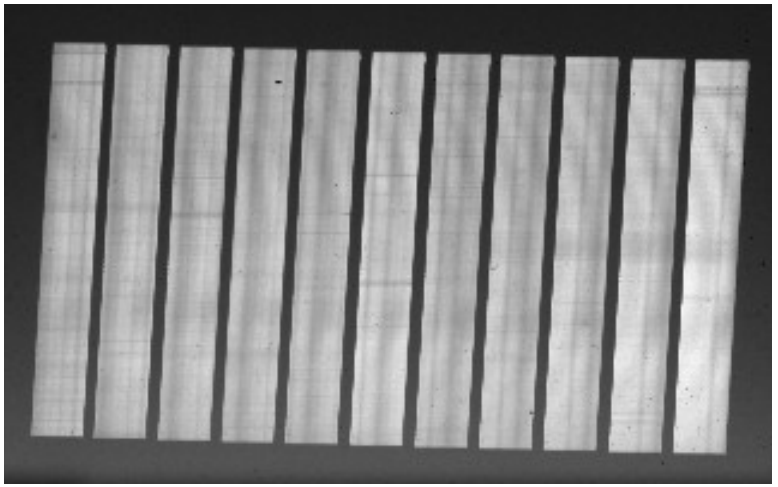


OBSERVED SPECTRA

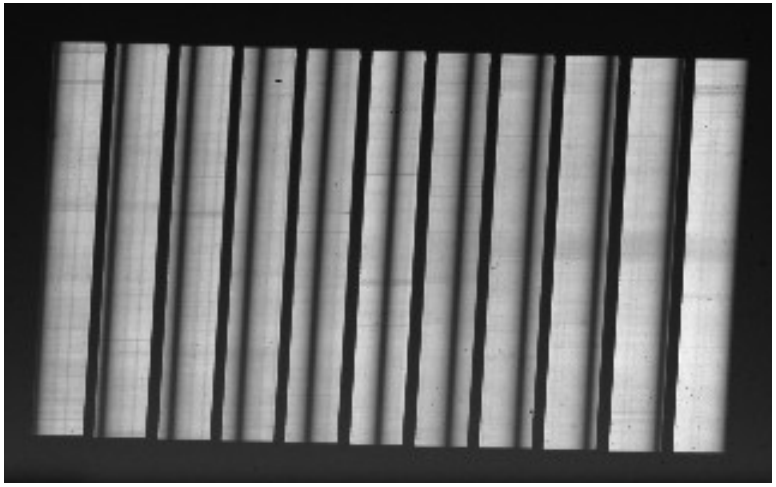
y

j

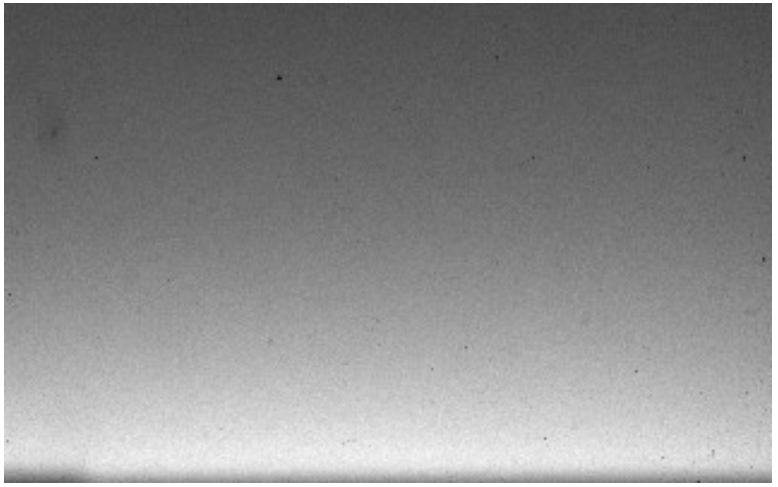
STEP_X



FIELD STOP (F.S.)



FLAT FIELD (F.F.)

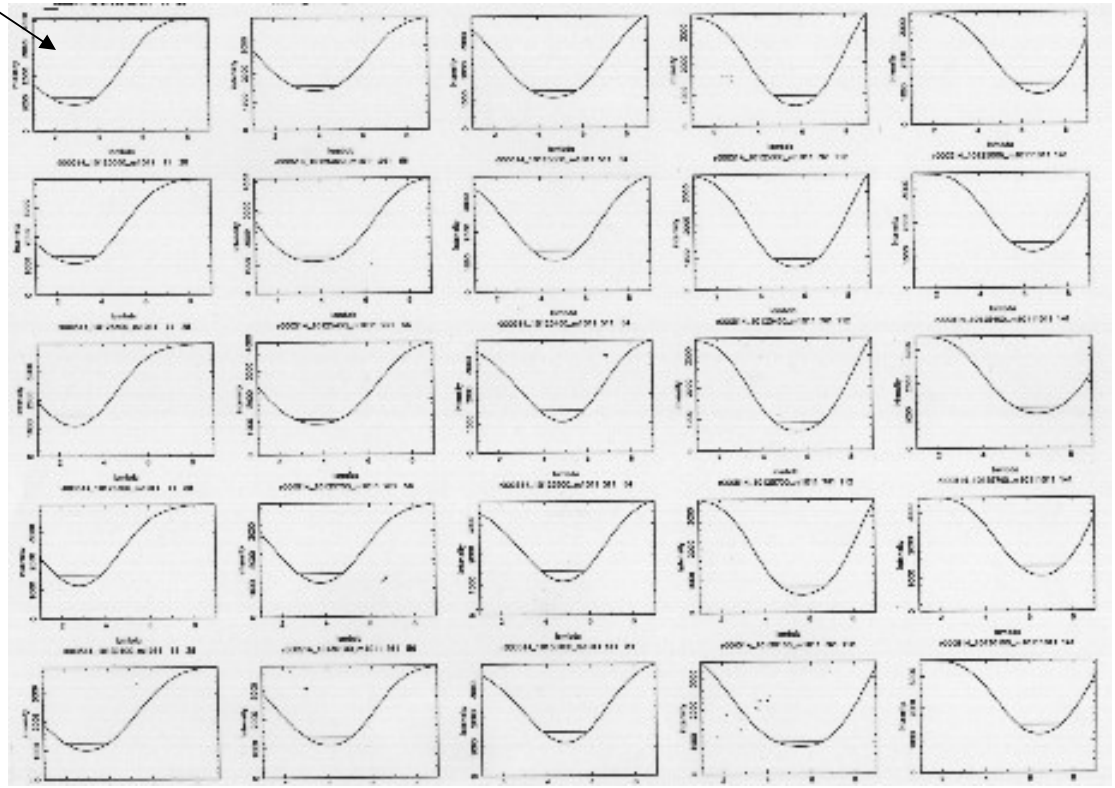


DARK CURRENT (D.C.)

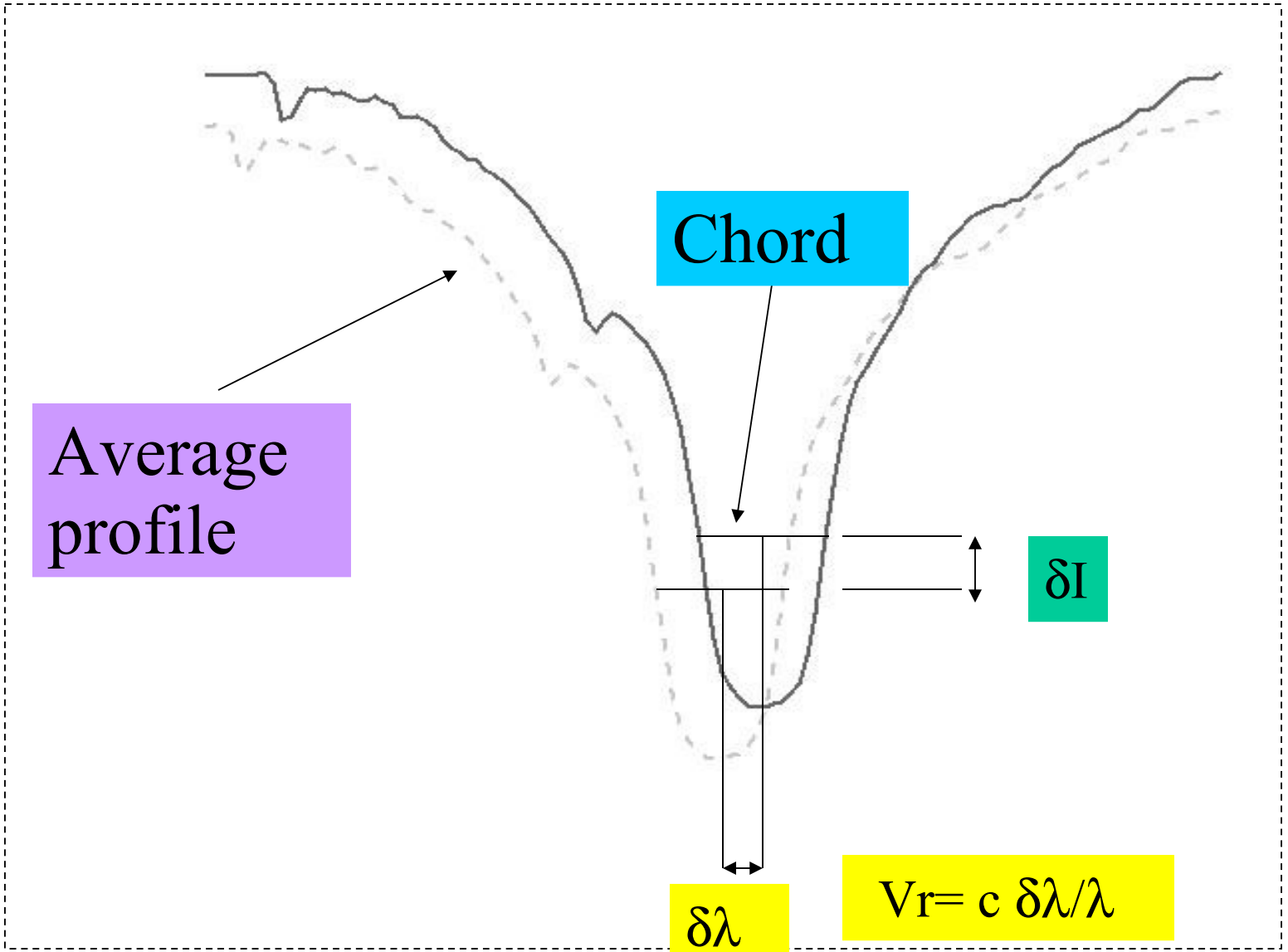
RESULT : LINE PROFILE IN EACH PIXEL OF THE FIELD OF VIEW

profile for one pixel of the field

Example on a very small fraction of the field of view



DETERMINATION OF INTENSITY AND VELOCITY FLUCTATIONS



RESULT: VELOCITY FIELD FOR DIFFERENT CHORDS

INTENSITY CONTINUUM

INTENSITY 288 mA

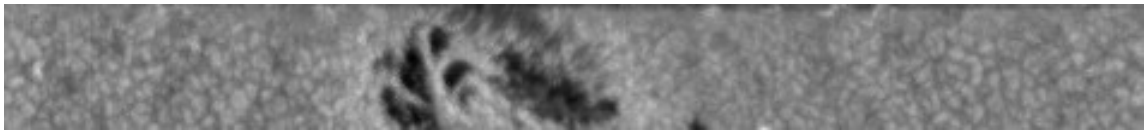
DOPPLER VELOCITY 288 mA

INTENSITY 144 mA

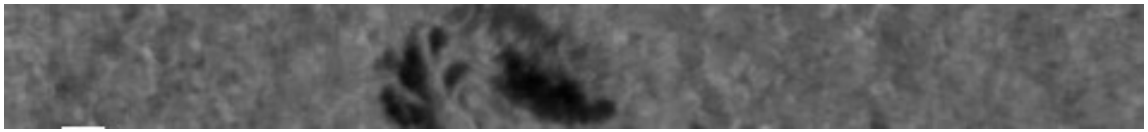
DOPPLER VELOCITY 144 mA

RESULT: INTENSITY, VELOCITY FIELD AND MAGNETIC FIELD

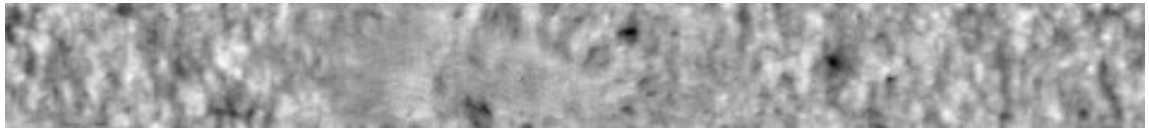
INTENSITY CONTINUUM



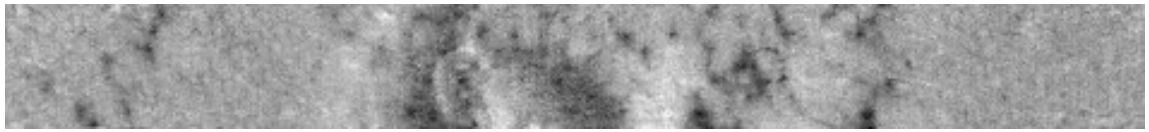
INTENSITY 144 mA

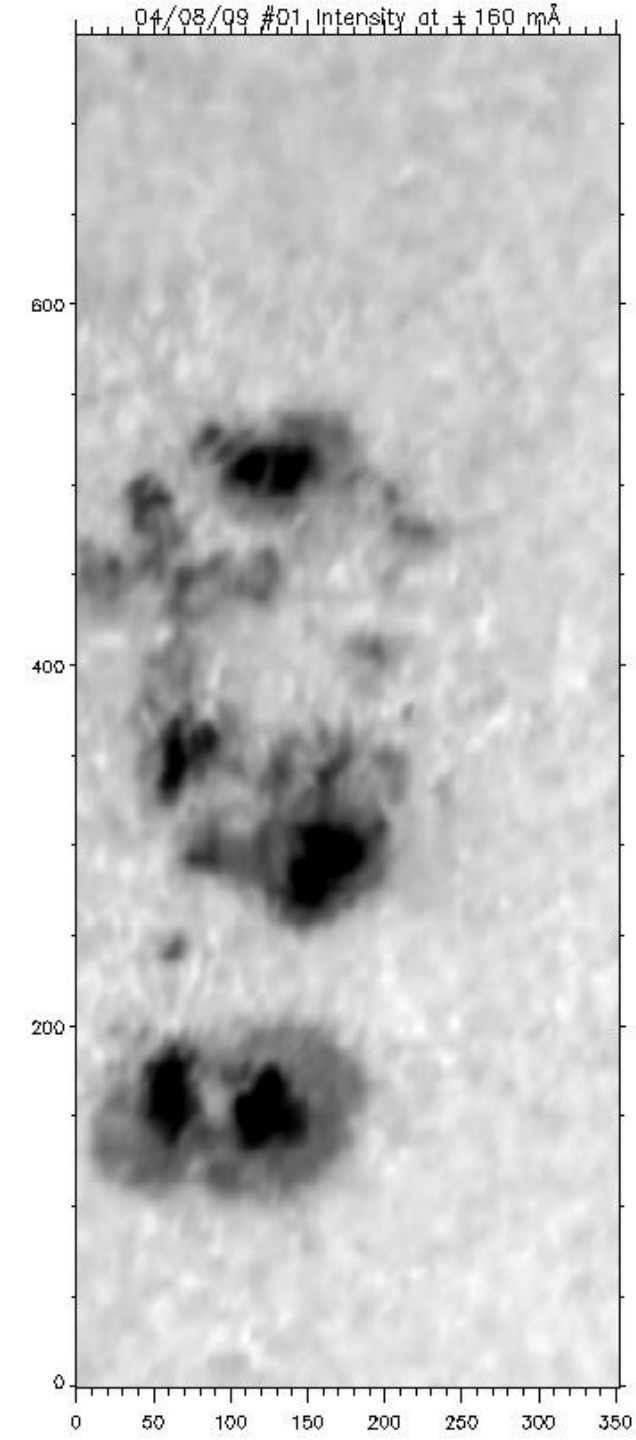


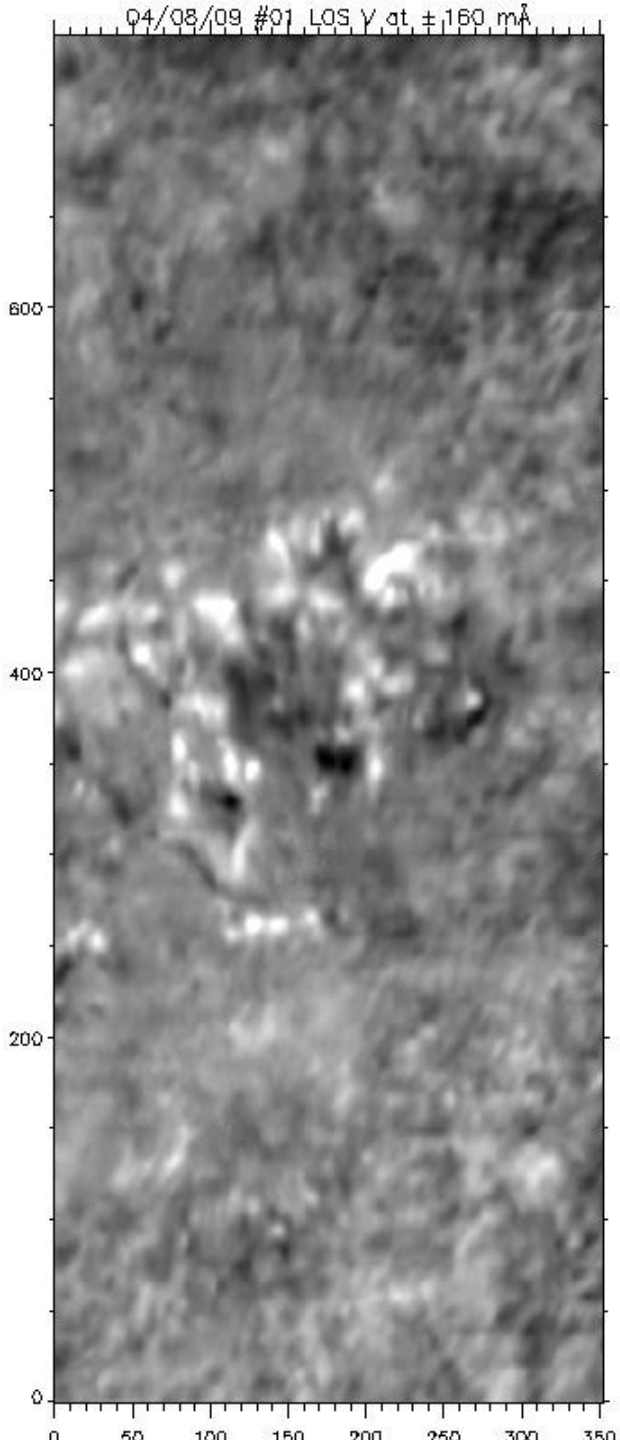
DOPPLER VELOCITY 144 mA

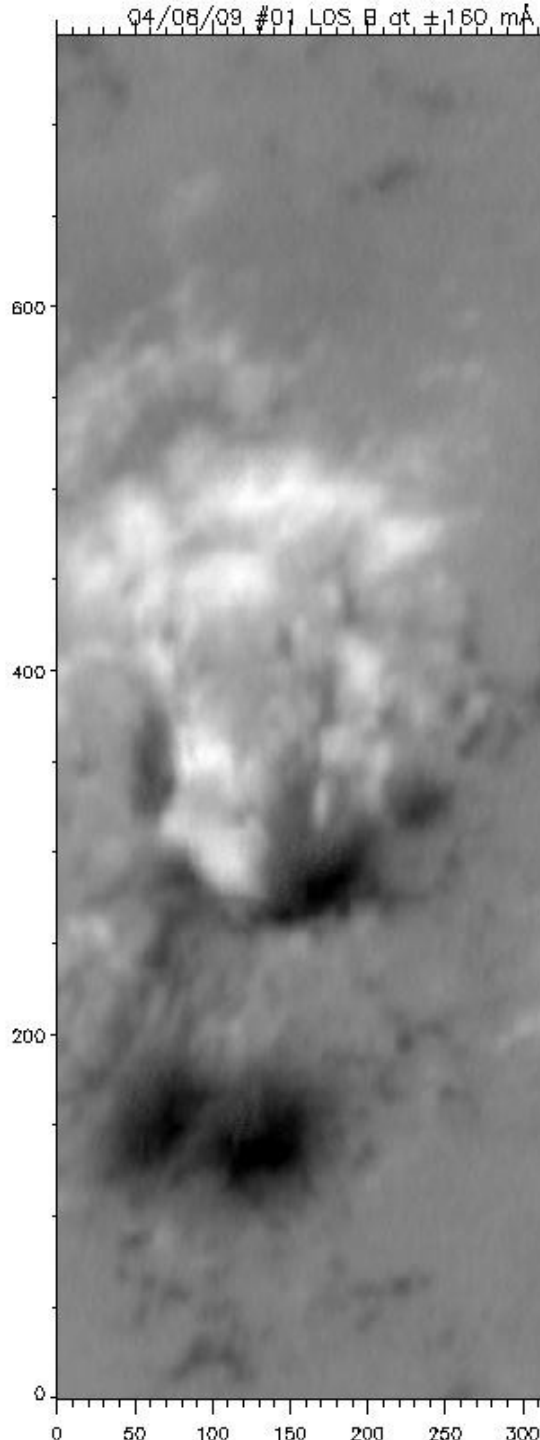


B //




04/08/09 #01 Intensity at ±160 mÅ
600
400
200
0
0
50
100
150
200
250
300
350


04/08/09 #01 LOS V at ±160 mÅ
600
400
200
0
0
50
100
150
200
250
300
350


04/08/09 #01 LOS B at ±160 mÅ
600
400
200
0
0
50
100
150
200
250
300