

Playing with PLOTMS

Data and initialization

- Folder
project2013_278/2013.1.00278.S/science_goal.uid__A001_X120_X100/
group.uid__A001_X120_X101/member.uid__A001_X120_X102/calibrat
ed'
- >casapy-setup
- >casapy
- CASA>: plotms()
- Browse file uid__A002_Xa0b40d_X3cb8.ms

Summary

File Edit View

Search Message:

Time Priority Origin Message

Time	Priority	Origin	Message
... INFO	plotms::::	plotms	##### End Task: plotms #####
... INFO	plotms:::+	plotms	##### End Task: plotms #####
... INFO	PlotMS:::summary+		MeasurementSet Name: /arcfs0/homesarc/almauser29/scuola/2013.1.00278.s/science_goal.uid_A001_X120_X100/group.uid_A001_X120_X101/member.uid_A001_X120_X102/calibrated/working/uid_A002_Xa0b40d_X3cb8.ms MS Version 2
... INFO	...otMS:::summary+		
... INFO	...otMS:::summary+	Observer: jeskj Project: uid://A001/X10e/X13a	
... INFO	...otMS:::summary+	Observation: ALMA	
... INFO	...otMS:::summary+	Data records: 3078324 Total elapsed time = 2262.34 seconds	
... INFO	...otMS:::summary+	Observed from 17-May-2015/06:09:08.4 to 17-May-2015/06:46:50.7 (UTC)	
... INFO	PlotMS:::summary		
... INFO	...otMS:::summary+	ObservationID = 0 ArrayID = 0	
... INFO	...otMS:::summary+	Date Timerange (UTC) scan FlId FieldName	
... INFO	...otMS:::summary+	17-May-2015/06:09:08.4 - 06:11:03.5 1 0 J1517-2422	nRows SpwIds Average Interval(s) ScanIntent
... INFO	...otMS:::summary+	06:12:23.0 - 06:13:25.2 2 0 J1517-2422	402732 [0, 1, 2, 3, 4, 5, 6, 7, 8] [1..15, 2, 02, 1, 01, 2, 02, 1, 01, 2, 02, 1, 01] [CALIBRATE_POINTING#ON_SOURCE, CALIBRATE_NVR#ON_SOURCE]
... INFO	...otMS:::summary+	06:13:27.6 - 06:13:43.7 3 0 J1517-2422	673164 [0, 9, 10, 11, 12, 13, 14, 15, 16] [1..15, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48]
... INFO	...otMS:::summary+	06:14:05.6 - 06:24:40.1 4 0 J1517-2422	[CALIBRATE_SIDE_BAND_RATIO#OFF_SOURCE, CALIBRATE_SIDE_BAND_RATIO#ON_SOURCE, CALIBRATE_NVR#OFF_SOURCE, CALIBRATE_NVR#ON_SOURCE]
... INFO	...otMS:::summary+	06:25:13.7 - 06:25:30.3 5 1 Titan	128232 [0, 9, 10, 11, 12, 13, 14, 15, 16] [1..15, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48]
... INFO	...otMS:::summary+	06:25:49.4 - 06:28:27.7 6 1 Titan	551700 [0, 17, 18, 19, 20, 21, 22, 23, 24] [1..15, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05]
... INFO	...otMS:::summary+	06:28:48.0 - 06:29:18.5 7 2 J1625-2527	137952 [0, 17, 18, 19, 20, 21, 22, 23, 24] [1..15, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05]
... INFO	...otMS:::summary+	06:29:50.2 - 06:30:05.9 8 3 IRAS16293-2422	[CALIBRATE_ATMOSPHERE#OFF_SOURCE, CALIBRATE_ATMOSPHERE#ON_SOURCE, CALIBRATE_NVR#OFF_SOURCE, CALIBRATE_NVR#ON_SOURCE]
... INFO	...otMS:::summary+	06:30:25.9 - 06:37:17.5 9 3 IRAS16293-2422	128196 [0, 9, 10, 11, 12, 13, 14, 15, 16] [1..15, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48]
... INFO	...otMS:::summary+	06:37:33.3 - 06:38:03.7 10 2 J1625-2527	128232 [0, 9, 10, 11, 12, 13, 14, 15, 16] [1..15, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48]
... INFO	...otMS:::summary+	06:38:37.8 - 06:38:53.5 11 3 IRAS16293-2422	551700 [0, 17, 18, 19, 20, 21, 22, 23, 24] [1..15, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05]
... INFO	...otMS:::summary+	06:39:13.5 - 06:46:05.1 12 3 IRAS16293-2422	[CALIBRATE_ATMOSPHERE#OFF_SOURCE, CALIBRATE_ATMOSPHERE#ON_SOURCE, CALIBRATE_NVR#OFF_SOURCE, CALIBRATE_NVR#ON_SOURCE]
... INFO	...otMS:::summary+	06:46:19.8 - 06:46:50.7 13 2 J1625-2527	358596 [0, 17, 18, 19, 20, 21, 22, 23, 24] [1..15, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05]
... INFO	PlotMS:::summary	(nRows - Total number of rows per scan)	[CALIBRATE_PHASE#ON_SOURCE, CALIBRATE_NVR#ON_SOURCE]
... INFO	PlotMS:::summary	Fields: 4	
... INFO	...otMS:::summary+	ID Code Name RA Decl Epoch SrcId nRows	
... INFO	...otMS:::summary+	0 none J1517-2422 15:17:41.813000 -24.22.19.47600 J2000 0 1755828	
... INFO	...otMS:::summary+	1 none Titan 16:00:38.603294 -18.22.18.23335 J2000 1 266184	
... INFO	...otMS:::summary+	2 none J1625-2527 16:25:46.891640 -25.27.38.32690 J2000 2 82728	
... INFO	...otMS:::summary+	3 none IRAS16293-2422 16:32:22.720000 -24.28.34.30000 J2000 3 973584	
... INFO	PlotMS:::summary	Spectral Windows: (25 unique spectral windows and 2 unique polarization setups)	
... INFO	...otMS:::summary+	#Spwid Name #Chans Frame Cn0(MHz) ChanWid(kHz) TotBW(kHz) CtrFreq(MHz) BBC Num Corrs	
... INFO	...otMS:::summary+	0 WVR#NOMINAL 4 TOPO 1845500.000 1500000.000 750000.0 187500.0000 0 XX	
... INFO	...otMS:::summary+	1 ALMA_RB_07#BB_1SW-01#FULL_RES 128 TOPO 238986.763 -15625.000 2000000.0 282994.5750 1 XX YY	
... INFO	...otMS:::summary+	2 ALMA_RB_07#BB_1SW-01#CH_AVG 1 TOPO 282971.138 1781250.000 282971.1375 1 XX YY	
... INFO	...otMS:::summary+	3 ALMA_RB_07#BB_2SW-01#FULL_RES 128 TOPO 285924.263 -15625.000 2000000.0 284932.0750 2 XX YY	
... INFO	...otMS:::summary+	4 ALMA_RB_07#BB_2SW-01#CH_AVG 1 TOPO 284908.638 1781250.000 284908.6375 2 XX YY	
... INFO	...otMS:::summary+	5 ALMA_RB_07#BB_3SW-01#FULL_RES 128 TOPO 294002.388 15625.000 2000000.0 294994.5750 3 XX YY	
... INFO	...otMS:::summary+	6 ALMA_RB_07#BB_3SW-01#CH_AVG 1 TOPO 294971.138 1781250.000 294971.1375 3 XX YY	
... INFO	...otMS:::summary+	7 ALMA_RB_07#BB_4SW-01#FULL_RES 128 TOPO 296002.388 15625.000 2000000.0 296994.5750 4 XX YY	
... INFO	...otMS:::summary+	8 ALMA_RB_07#BB_4SW-01#CH_AVG 1 TOPO 296971.138 1781250.000 296971.1375 4 XX YY	
... INFO	...otMS:::summary+	9 ALMA_RB_07#BB_1SW-01#FULL_RES 128 TOPO 334028.519 15625.000 2000000.0 335020.7067 1 XX YY	
... INFO	...otMS:::summary+	10 ALMA_RB_07#BB_1SW-01#CH_AVG 1 TOPO 334997.269 1781250.000 1781250.000 334997.2692 1 XX YY	
... INFO	...otMS:::summary+	11 ALMA_RB_07#BB_2SW-01#FULL_RES 128 TOPO 334508.019 15625.000 2000000.0 335500.2067 2 XX YY	
... INFO	...otMS:::summary+	12 ALMA_RB_07#BB_2SW-01#CH_AVG 1 TOPO 335476.769 1781250.000 1781250.000 335476.7692 2 XX YY	
... INFO	...otMS:::summary+	13 ALMA_RB_07#BB_3SW-01#FULL_RES 128 TOPO 334966.019 15625.000 2000000.0 335958.2067 3 XX YY	
... INFO	...otMS:::summary+	14 ALMA_RB_07#BB_3SW-01#CH_AVG 1 TOPO 335934.769 1781250.000 1781250.000 335934.7692 3 XX YY	
... INFO	...otMS:::summary+	15 ALMA_RB_07#BB_4SW-01#FULL_RES 128 TOPO 335445.519 15625.000 2000000.0 336437.7067 4 XX YY	
... INFO	...otMS:::summary+	16 ALMA_RB_07#BB_4SW-01#CH_AVG 1 TOPO 336414.269 1781250.000 1781250.000 336414.2692 4 XX YY	
... INFO	...otMS:::summary+	17 ALMA_RB_07#BB_1SW-01#FULL_RES 1920 TOPO 334791.794 244.141 468750.0 335026.0473 1 XX YY	
... INFO	...otMS:::summary+	18 ALMA_RB_07#BB_1SW-01#CH_AVG 1 TOPO 335025.986 468750.000 335025.9862 1 XX YY	
... INFO	...otMS:::summary+	19 ALMA_RB_07#BB_2SW-01#FULL_RES 1920 TOPO 335260.552 244.141 468750.0 335494.8051 2 XX YY	
... INFO	...otMS:::summary+	20 ALMA_RB_07#BB_2SW-01#CH_AVG 1 TOPO 335494.744 468750.000 335494.7440 2 XX YY	
... INFO	...otMS:::summary+	21 ALMA_RB_07#BB_3SW-01#FULL_RES 1920 TOPO 335729.355 244.141 468750.0 335963.6083 3 XX YY	
... INFO	...otMS:::summary+	22 ALMA_RB_07#BB_3SW-01#CH_AVG 1 TOPO 335963.547 468750.000 468750.0 335963.5473 3 XX YY	
... INFO	...otMS:::summary+	23 ALMA_RB_07#BB_4SW-01#FULL_RES 1920 TOPO 336198.113 244.141 468750.0 336432.3661 4 XX YY	
... INFO	...otMS:::summary+	24 ALMA_RB_07#BB_4SW-01#CH_AVG 1 TOPO 336432.305 468750.000 468750.0 336432.3051 4 XX YY	
... INFO	PlotMS:::summary	Sources: 212	
... INFO	...otMS:::summary+	ID Name SpwId RestFreq(MHz) SysVel(km/s)	
... INFO	...otMS:::summary+	0 J1517-2422 0 - -	
... INFO	...otMS:::summary+	0 J1517-2422 25 - -	
... INFO	...otMS:::summary+	0 J1517-2422 26 - -	
... INFO	...otMS:::summary+	0 J1517-2422 27 - -	
... INFO	...otMS:::summary+	0 J1517-2422 28 - -	
... INFO	...otMS:::summary+	0 J1517-2422 29 - -	
... INFO	...otMS:::summary+	0 J1517-2422 30 - -	
... INFO	...otMS:::summary+	0 J1517-2422 31 - -	

Intents

Fields

To Antennas scroll down

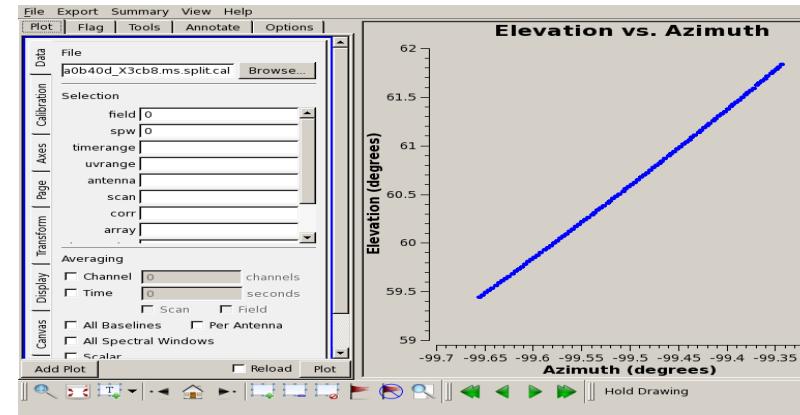
Spectral windows

0=wvr, 1-8=pointing (a freq diverse da oss)

9-16=atmospheric corrections

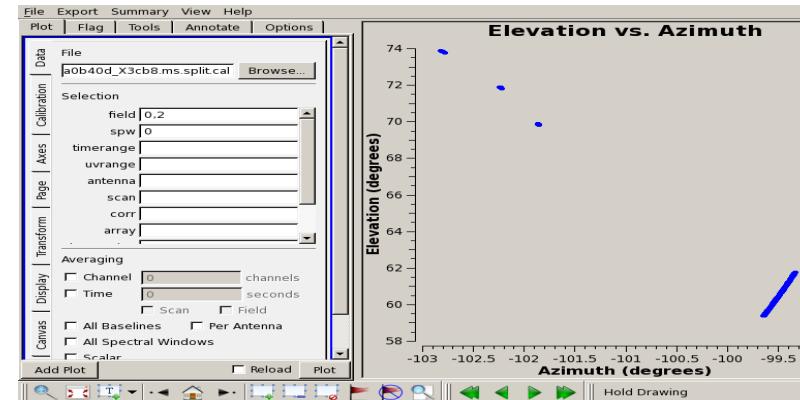
17,19,21,23=full resolution science

18,20,22,24= averaged science

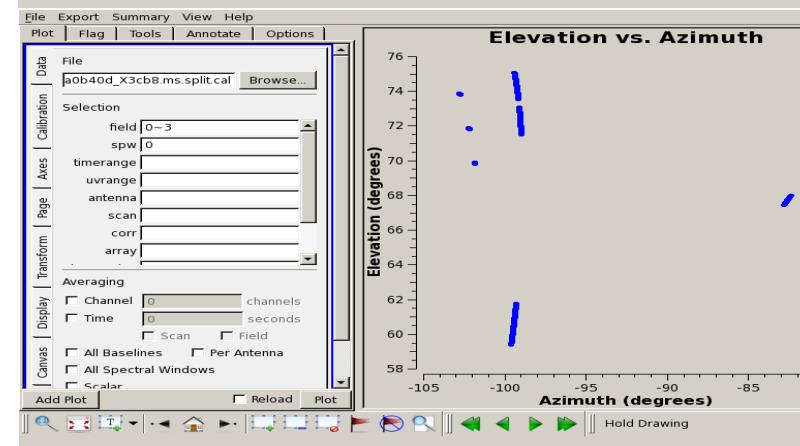


(Az, el)

Axes= azimuth, elevation
Field=0
Spw=17



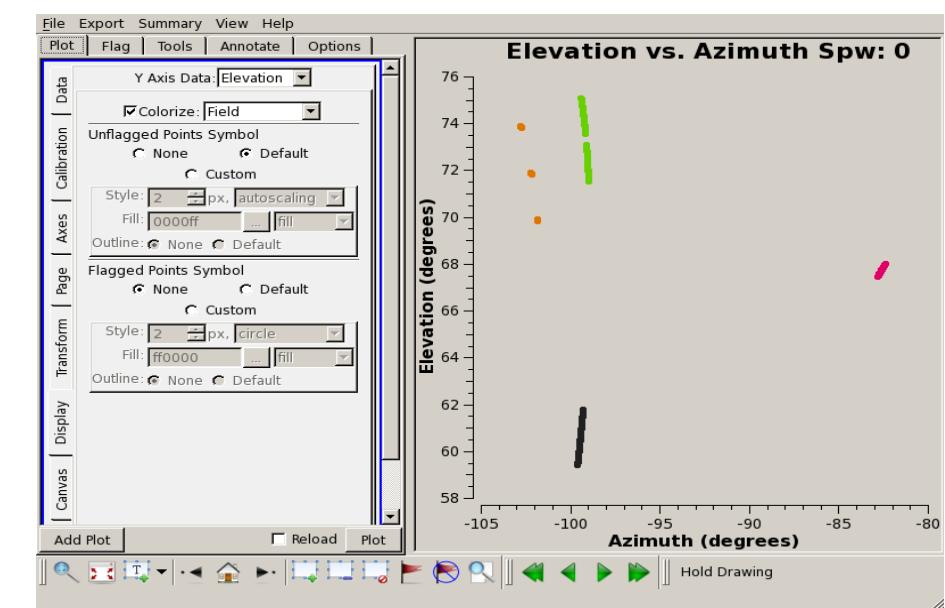
Field=(0,2)



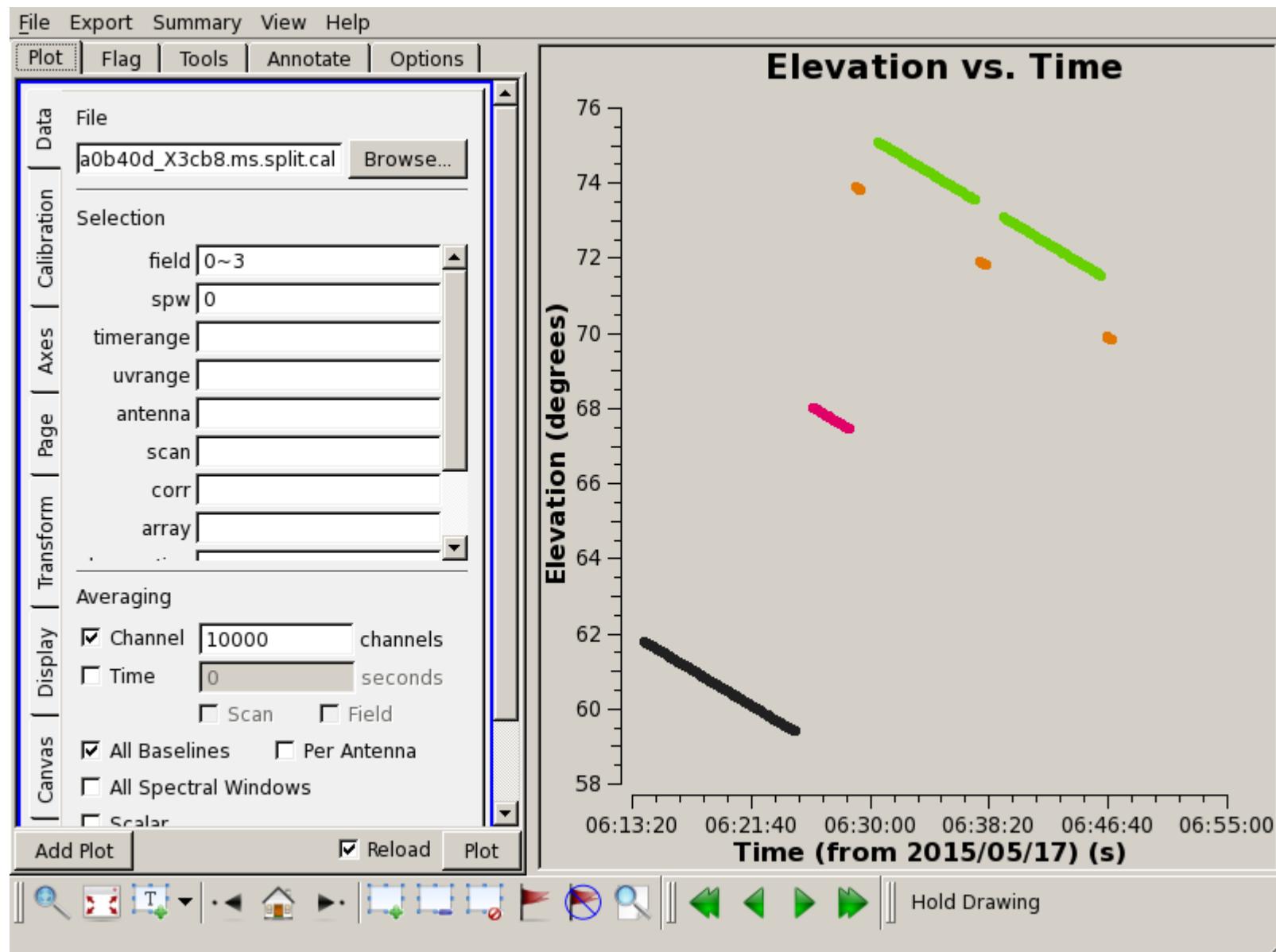
Field=(0~3)

Display-> Colorize = Field

NB phase cal vicino al target
Bp e flux calibrators dove capitano



(el, time)



NB Bp e flux cal una volta sola, Phase cal sempre prima e dopo di uno scan sul target
Usare tool locate per individuare nomi delle sorgenti e annotations per generare labels

File Export Summary View Help

Plot Flag Tools Annotate Options

Data Calibration

File

[A002_Xa0b40d_X3cb8.ms] Browse...

Selection

field

spw 17

timerange

uvrange

antenna

scan

corr

array

observation

intent

msselect

Averaging

Channel 10000 channels

Time 10000 seconds

Scan

Field

All Baselines

Per Antenna

All Spectral Windows

Scalar

Add Plot

Reload

Plot



Hold Drawing

Amp:corrected vs. Time Spw: 17

10
8
6
4
2
0

Amp:corrected

Time (from 2015/05/17) (s)

06:13:20 06:21:40 06:30:00 06:38:20 06:46:40 06:55:00

(time, amp)

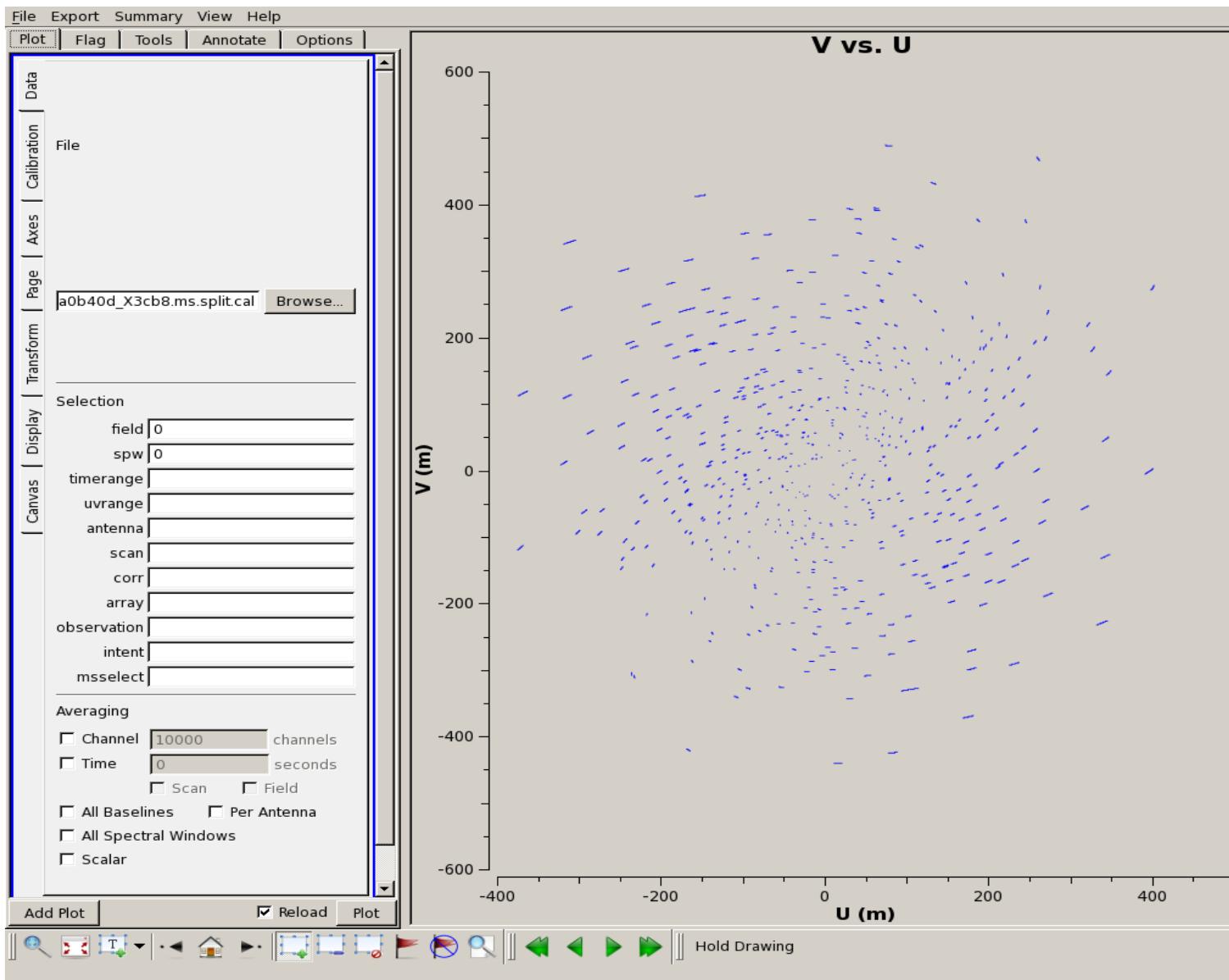
*.ms

Corrected

Averaging channel=10000

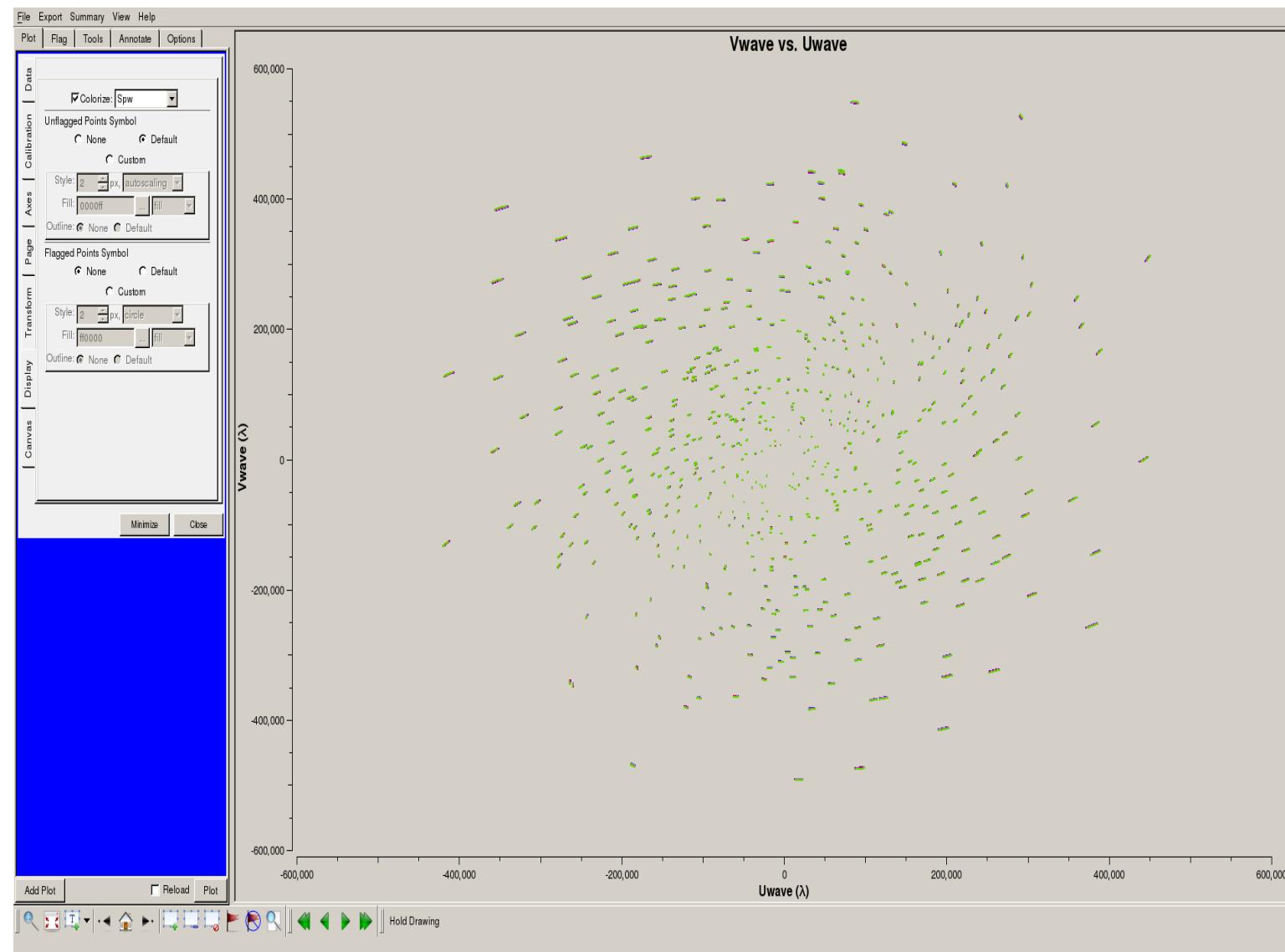
Colorize per field

(u,v)



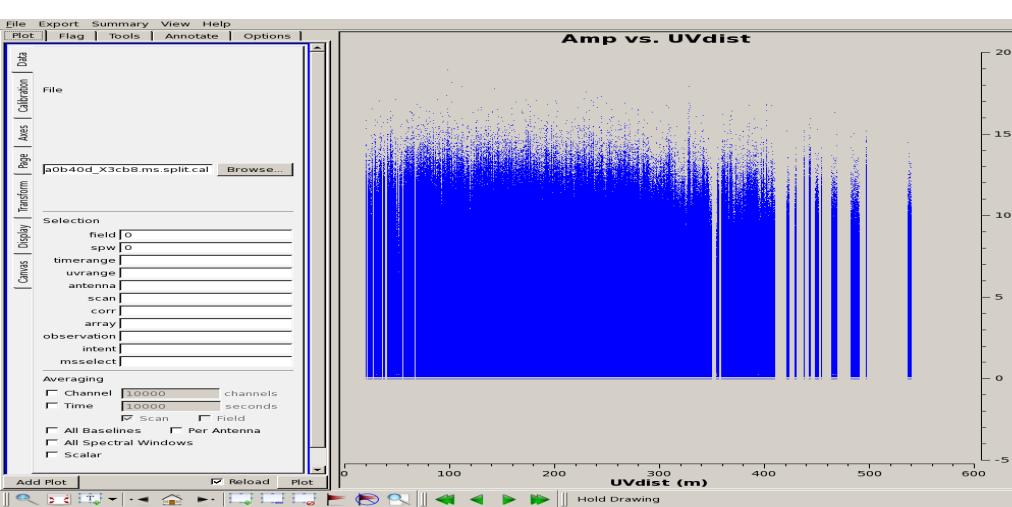
Axes=(u, v)
Iterate per Field
(diversi field hanno
diversa distribuzione
in cielo)

(uwave,vwave)



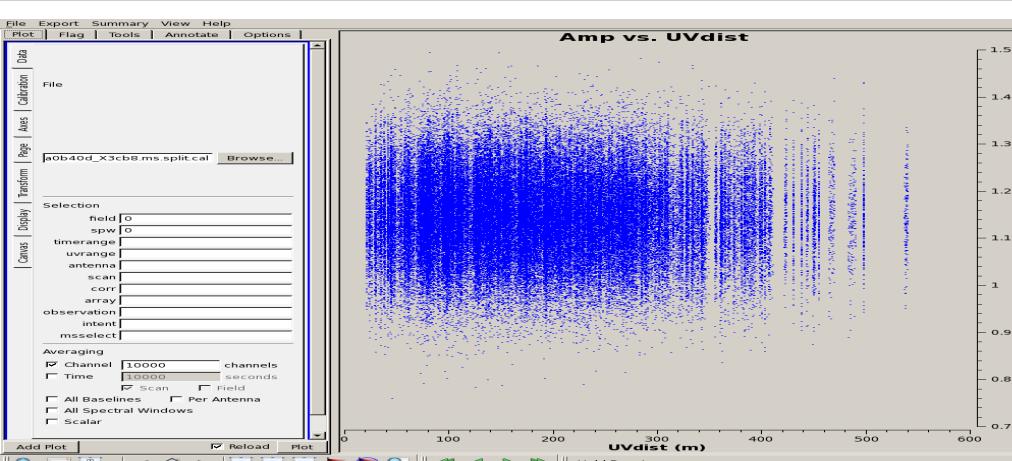
Axes=(uwave, vwave)
Field=0
Spw=17,19,21,23
Averaging
Channel=1000
Time=60
Colorize per spw

(le spectral windows allargano la copertura del piano uv)



(uvdist, amp)

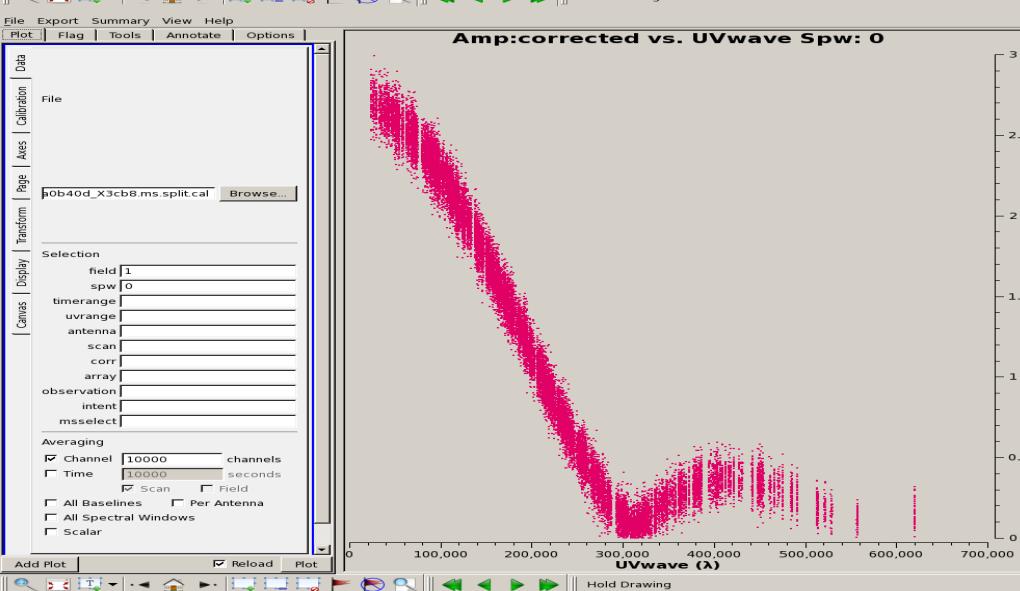
Axes= (uvdist, amp)
Field=0
Spw=17



+Average->channel=10000

+Axes=(uvwave, amp)
Con hover o locate individuare il valore della xmin e xmax

$1/X_{\min} \ 180/\pi * 3600 = \text{maximum rec scale}$
 $1/X_{\max} \ 180/\pi * 3600 = \text{resolution}$



+field=1 (diversa estensione)
+field=3 (diversa struttura)

Confronti di calibrazione

ObservationID = 0 ArrayID = 0									
Date	Timerange (UTC)	Scan	FldId	FieldName	nRows	SpwIds	Average Interval(s)	ScanIntent	
17-May-2015/06:09:08.4 - 06:11:03.5	06:12:23.0 - 06:13:25.2	1	0	J1517-2422	402732	[0, 1, 2, 3, 4, 5, 6, 7, 8]	[1.15, 2.02, 1.01, 2.02, 1.01, 2.02, 1.01]	[CALIBRATE_POINTING#ON_SOURCE, C	
	06:13:27.6 - 06:13:43.7	2	0	J1517-2422	673164	[0, 9, 10, 11, 12, 13, 14, 15, 16]	[1.15, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48]	[CALIBRATE_SIDEBAND_RATI	
	06:14:05.6 - 06:24:40.1	3	0	J1517-2422	128232	[0, 9, 10, 11, 12, 13, 14, 15, 16]	[1.15, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48]	[CALIBRATE_ATMOSPHERE#OF	
	06:25:13.7 - 06:25:30.3	4	0	J1517-2422	551700	[0, 17, 18, 19, 20, 21, 22, 23, 24]	[1.15, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05]	[CALIBRATE_BANDPASS#ON_	
	06:25:49.4 - 06:28:27.7	5	1	Titan	128232	[0, 9, 10, 11, 12, 13, 14, 15, 16]	[1.15, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48]	[CALIBRATE_ATMOSPHERE#OF	
	06:28:48.0 - 06:29:18.5	6	1	Titan	137952	[0, 17, 18, 19, 20, 21, 22, 23, 24]	[1.15, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05]	[CALIBRATE_AMPLI#ON_SOL	
	06:29:50.2 - 06:30:05.9	7	2	J1625-2527	27576	[0, 17, 18, 19, 20, 21, 22, 23, 24]	[1.15, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05]	[CALIBRATE_PHASE#ON_SOL	
	06:30:25.9 - 06:37:17.5	8	3	IRAS16293-2422	128196	[0, 9, 10, 11, 12, 13, 14, 15, 16]	[1.15, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48]	[CALIBRATE_ATMOSPHERE#OF	
	06:37:33.3 - 06:38:03.7	9	3	IRAS16293-2422	358596	[0, 17, 18, 19, 20, 21, 22, 23, 24]	[1.15, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05]	[OBSERVE_TARGET#ON_SOUL	
	06:38:37.8 - 06:38:53.5	10	2	J1625-2527	27576	[0, 17, 18, 19, 20, 21, 22, 23, 24]	[1.15, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05]	[CALIBRATE_PHASE#ON_SOL	
	06:39:13.5 - 06:46:05.1	11	3	IRAS16293-2422	128196	[0, 9, 10, 11, 12, 13, 14, 15, 16]	[1.15, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48, 0.48]	[CALIBRATE_ATMOSPHERE#OF	
	06:46:19.8 - 06:46:50.7	12	3	IRAS16293-2422	358596	[0, 17, 18, 19, 20, 21, 22, 23, 24]	[1.15, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05]	[OBSERVE_TARGET#ON_SOUL	
	06:46:46.0 - 06:46:50.7	13	2	J1625-2527	27576	[0, 17, 18, 19, 20, 21, 22, 23, 24]	[1.15, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05, 6.05]	[CALIBRATE_PHASE#ON_SOUL	
(nRows = Total number of rows per scan)									
Fields: 4									
ID	Code	Name	RA	Decl	Epoch	SrcId	nRows		
0	none	J1517-2422	15:17:41.813000	-24.22.19.47600	J2000	0	1755828		
1	none	Titan	16:00:38.603294	-18.22.18.23335	J2000	1	266184		
2	none	J1625-2527	16:25:46.891640	-25.27.38.32690	J2000	2	82728		
3	none	IRAS16293-2422	16:32:22.720000	-24.28.34.30000	J2000	3	973584		
Spectral Windows: (25 unique spectral windows and 2 unique polarization setups)									
SpwID	Name	#Chans	Frame	Ch0(MHz)	ChanWid(kHz)	TotBW(kHz)	CtrFreq(MHz)	BBC	Num
0	WVR#NOMINAL	4	TOPO	184550.000	1500000.000	7500000.0	187550.0000	0	XX
1	ALMA_RB_07#BB_1#SW-01#FULL_RES	128	TOPO	283986.763	-15625.000	2000000.0	282994.5750	1	XX YY
2	ALMA_RB_07#BB_1#SW-01#CH_AVG	1	TOPO	282971.138	1781250.000	1781250.0	282971.1375	1	XX YY
3	ALMA_RB_07#BB_2#SW-01#FULL_RES	128	TOPO	285924.263	-15625.000	2000000.0	284932.0750	2	XX YY
4	ALMA_RB_07#BB_2#SW-01#CH_AVG	1	TOPO	284908.638	1781250.000	1781250.0	284908.6375	2	XX YY
5	ALMA_RB_07#BB_3#SW-01#FULL_RES	128	TOPO	294002.388	15625.000	2000000.0	294994.5750	3	XX YY
6	ALMA_RB_07#BB_3#SW-01#CH_AVG	1	TOPO	294971.138	1781250.000	1781250.0	294971.1375	3	XX YY
7	ALMA_RB_07#BB_4#SW-01#FULL_RES	128	TOPO	296002.388	15625.000	2000000.0	296994.5750	4	XX YY
8	ALMA_RB_07#BB_4#SW-01#CH_AVG	1	TOPO	296971.138	1781250.000	1781250.0	296971.1375	4	XX YY
9	ALMA_RB_07#BB_1#SW-01#FULL_RES	128	TOPO	334028.519	15625.000	2000000.0	335020.7067	1	XX YY
10	ALMA_RB_07#BB_1#SW-01#CH_AVG	1	TOPO	334997.269	1781250.000	1781250.0	334997.2692	1	XX YY
11	ALMA_RB_07#BB_2#SW-01#FULL_RES	128	TOPO	334508.019	15625.000	2000000.0	335500.2067	2	XX YY
12	ALMA_RB_07#BB_2#SW-01#CH_AVG	1	TOPO	335476.769	1781250.000	1781250.0	335476.7692	2	XX YY
13	ALMA_RB_07#BB_3#SW-01#FULL_RES	128	TOPO	334966.019	15625.000	2000000.0	335598.2067	3	XX YY
14	ALMA_RB_07#BB_3#SW-01#CH_AVG	1	TOPO	335934.769	1781250.000	1781250.0	335934.7692	3	XX YY
15	ALMA_RB_07#BB_4#SW-01#FULL_RES	128	TOPO	335445.519	15625.000	2000000.0	336437.7067	4	XX YY
16	ALMA_RB_07#BB_4#SW-01#CH_AVG	1	TOPO	336414.269	1781250.000	1781250.0	336414.2692	4	XX YY
17	ALMA_RB_07#BB_1#SW-01#FULL_RES	1920	TOPO	334791.794	244.141	468750.0	335026.0473	1	XX YY
18	ALMA_RB_07#BB_1#SW-01#CH_AVG	1	TOPO	335025.986	468750.000	468750.0	335025.9862	1	XX YY
19	ALMA_RB_07#BB_2#SW-01#FULL_RES	1920	TOPO	335260.552	244.141	468750.0	335494.8051	2	XX YY
20	ALMA_RB_07#BB_2#SW-01#CH_AVG	1	TOPO	335494.744	468750.000	468750.0	335494.7440	2	XX YY
21	ALMA_RB_07#BB_3#SW-01#FULL_RES	1920	TOPO	335729.355	244.141	468750.0	335963.6083	3	XX YY
22	ALMA_RB_07#BB_3#SW-01#CH_AVG	1	TOPO	335963.547	468750.000	468750.0	335963.5473	3	YY VV

Insert Message:

Lock scroll

Bandpass correction

(freq, amp)

Field=0

Iterate baseline

Spw=17

colorize=corr

Averaging

Time=10000

Channels=10

+ select Antenna= 0&6

(check nel summary)

oppure 'DA41'&'DA49'

+ Column X=Data

le corr sono separate, c'e' slope e
flussi errati

+ Column X=Corrected

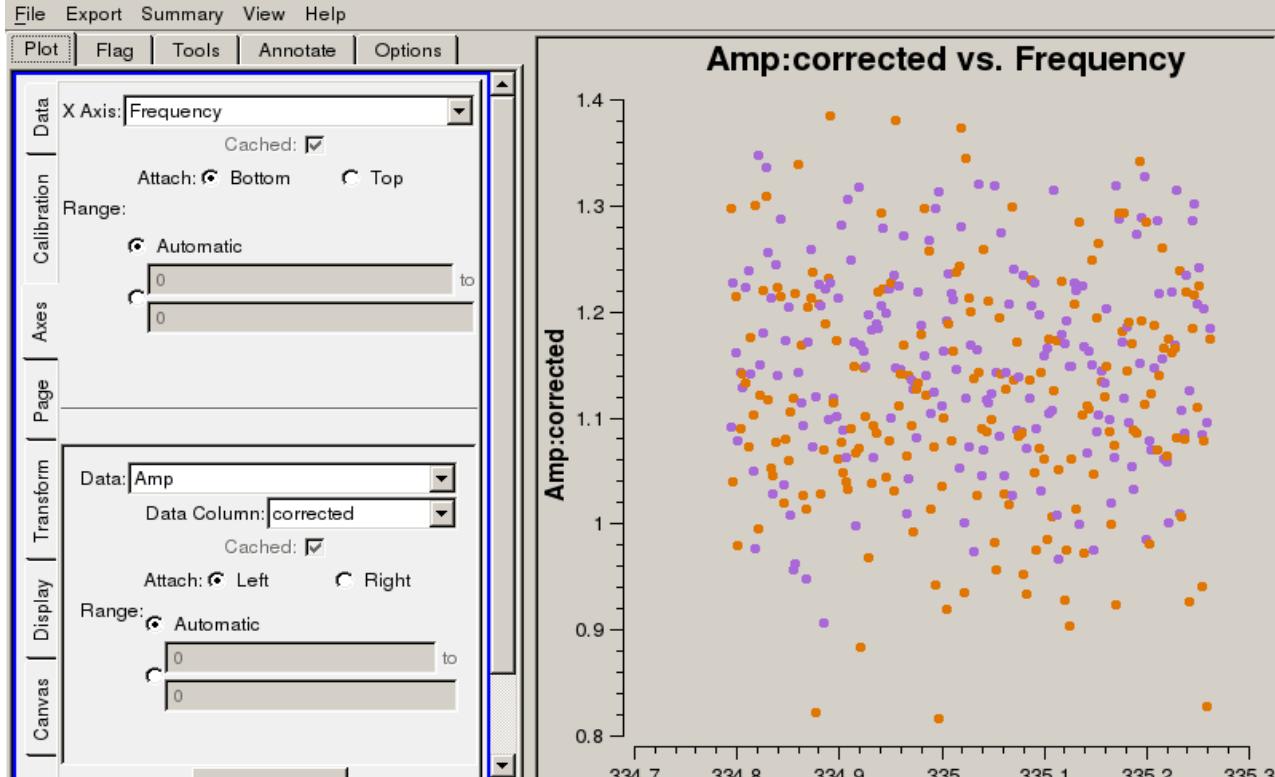
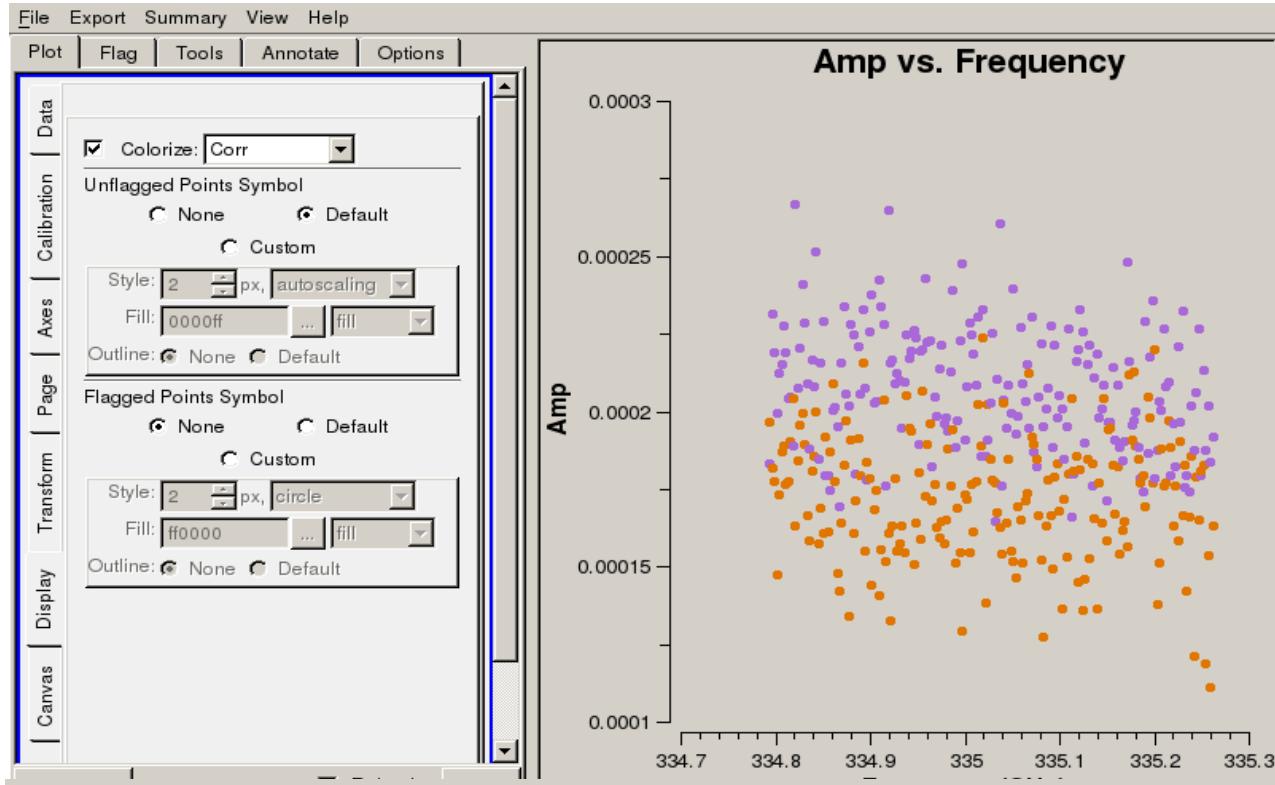
Spettro del target

+field=3

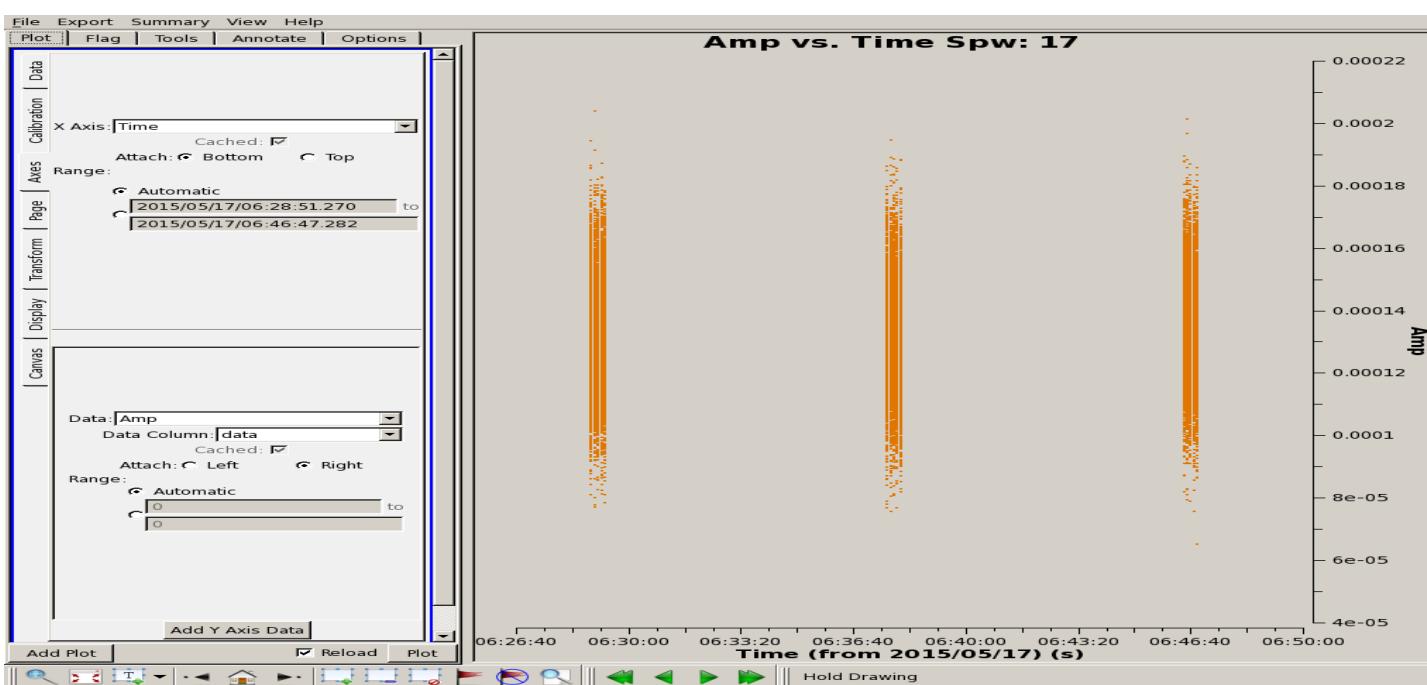
spw=17,19,21,23

Colorize per spw

Averaging Time=10000



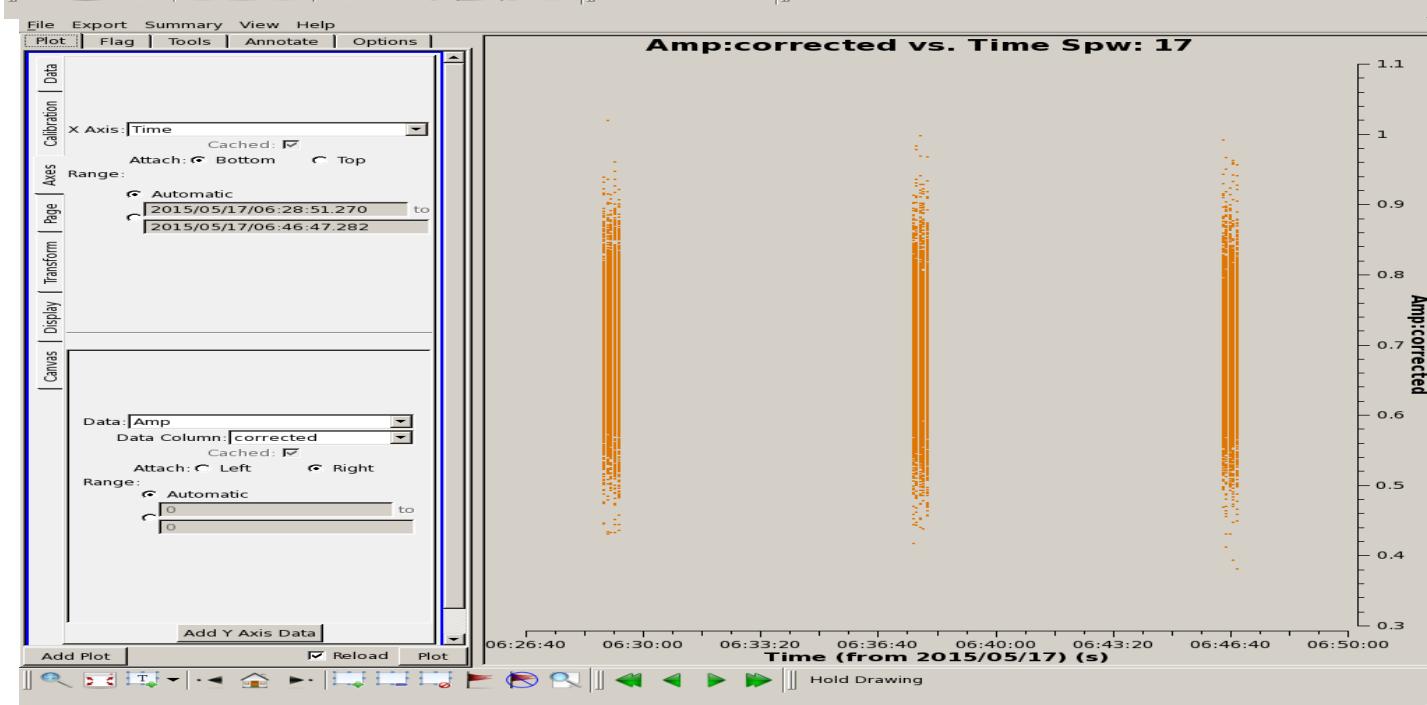
(time, amp)



Field=2 (phase cal)
Spw=17
Averaging
Channel=10000

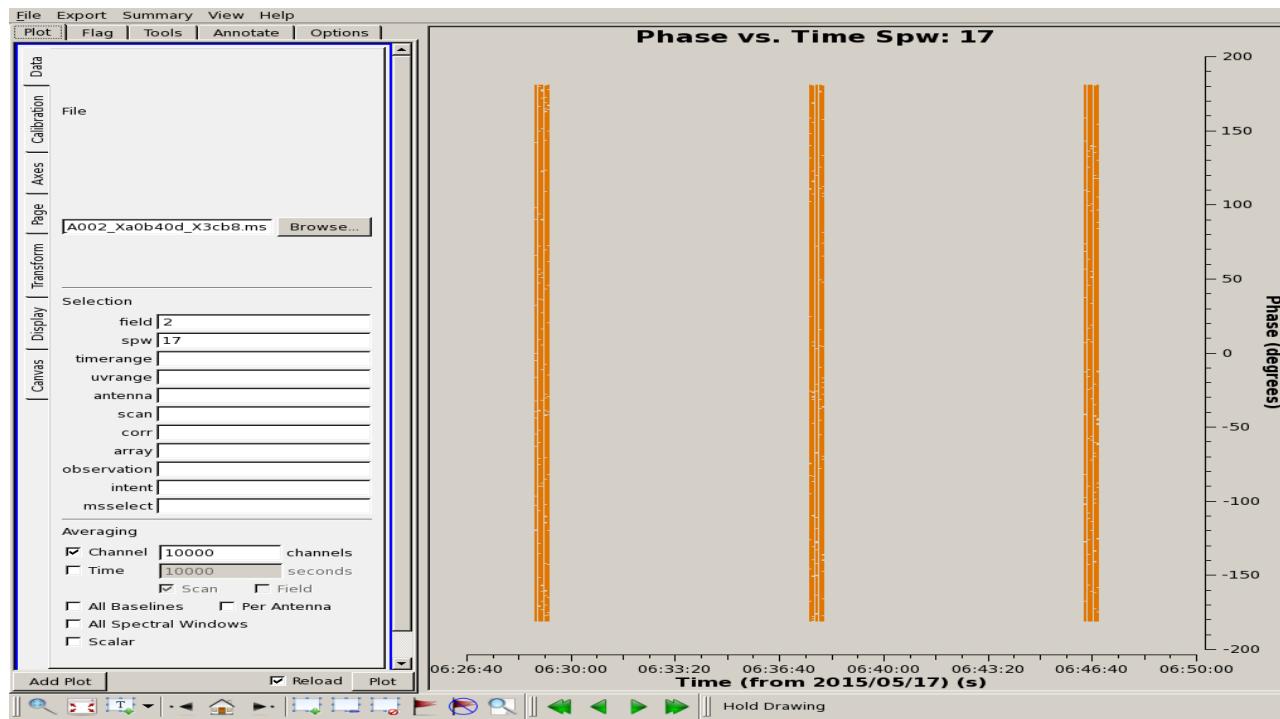
Data

+ add plot
(set 2 rows o columns
in Options)



Corrected
(compare the scale)

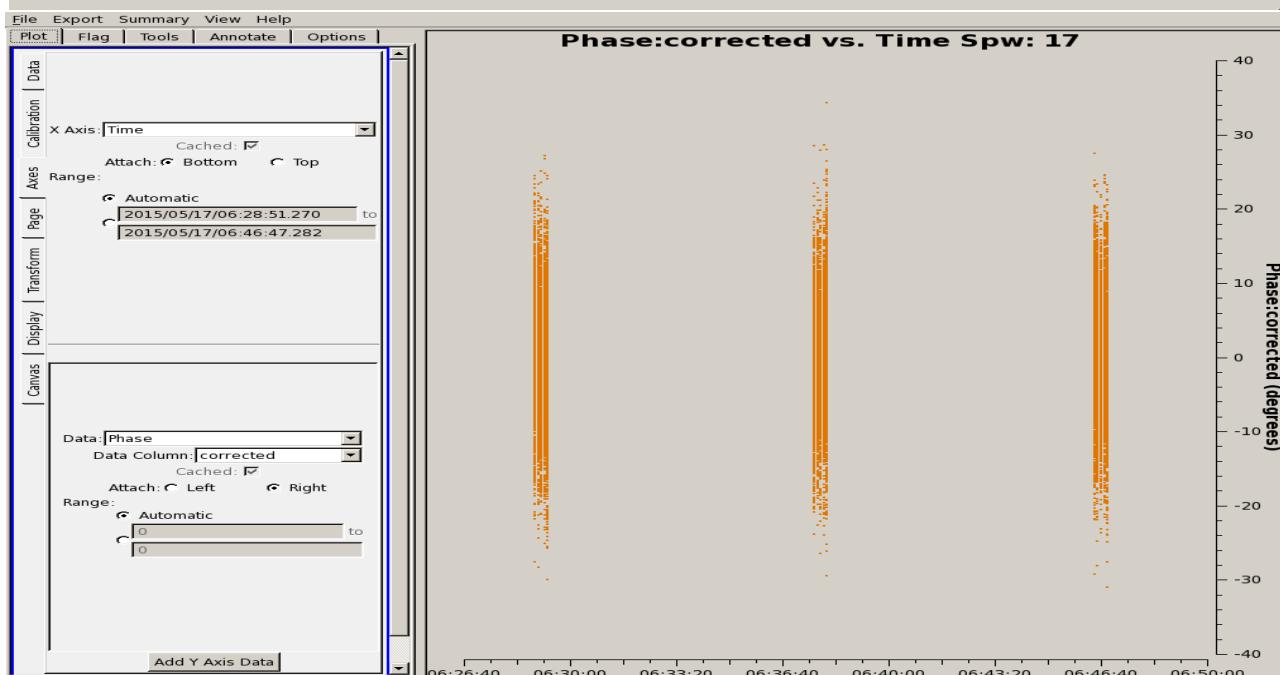
(time, phase)



Field=2 (phase cal)
Spw=17
Averaging
Channel=10000

Data

+ add plot
(set 2 plot in options)



Corrected