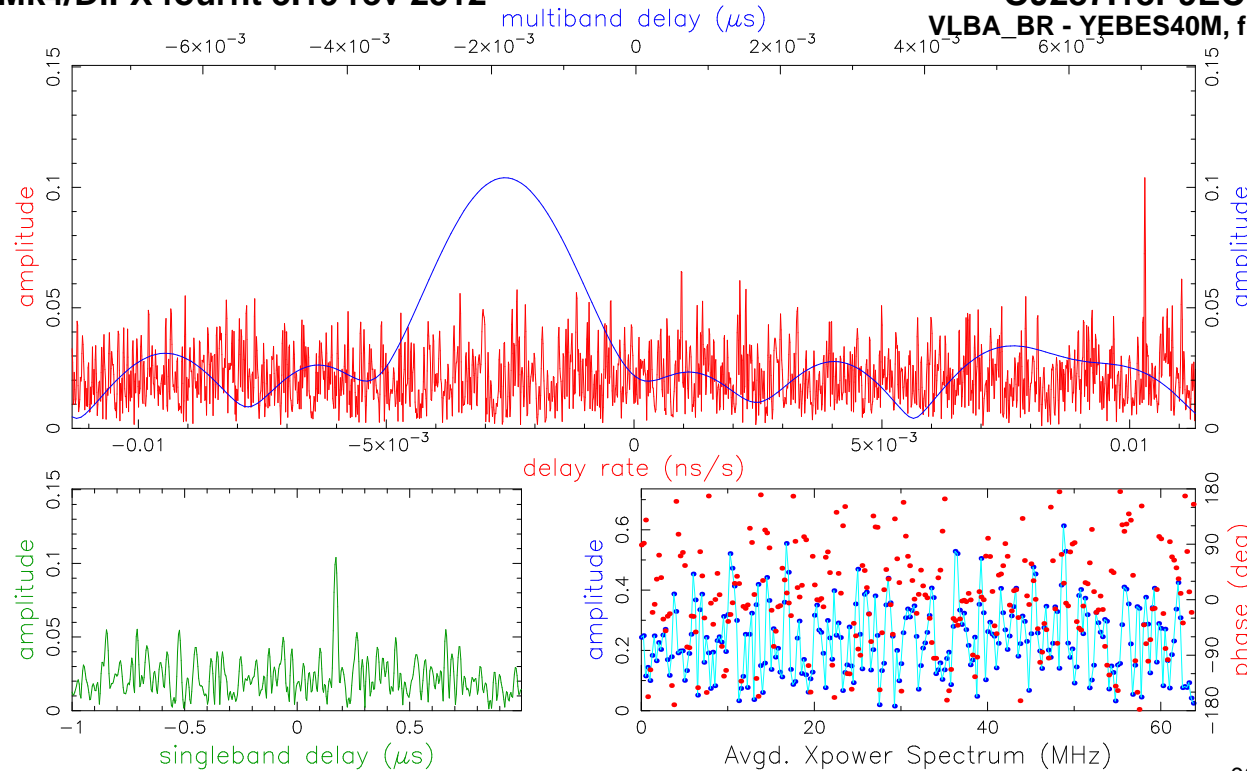


Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, bY  
VLBA\_BR - YEBES40M, fgroup W, pol LL

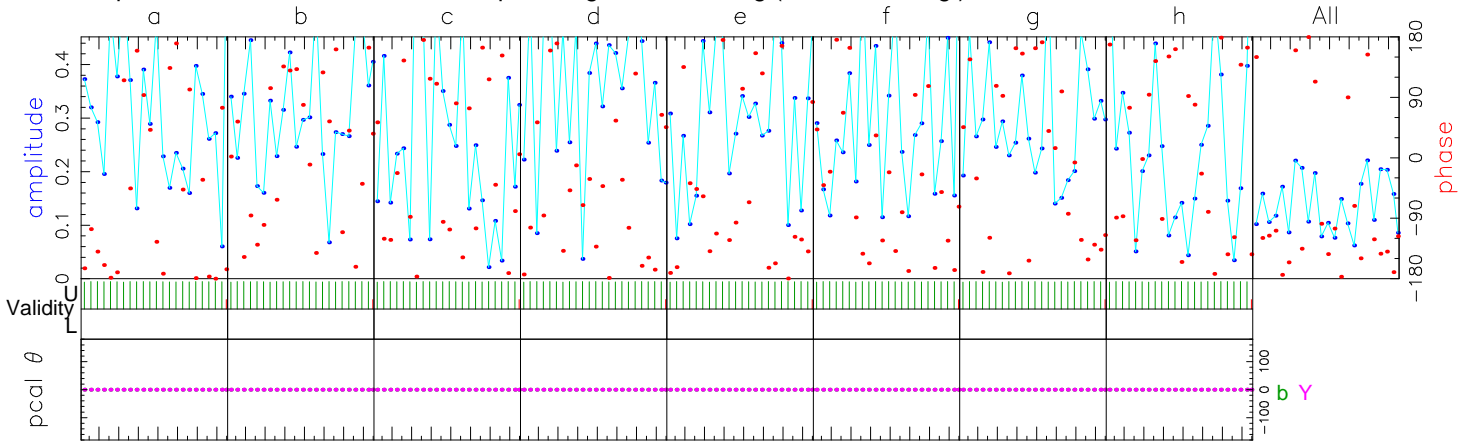


Fringe quality 0

SNR 5.9  
Int time 431.140  
Amp 0.151  
Phase -159.6  
PFD 5.6e-01  
Delays (us)  
SBD 0.171160  
MBD -0.001843  
Fringe rate (Hz)  
0.889563  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120753  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec

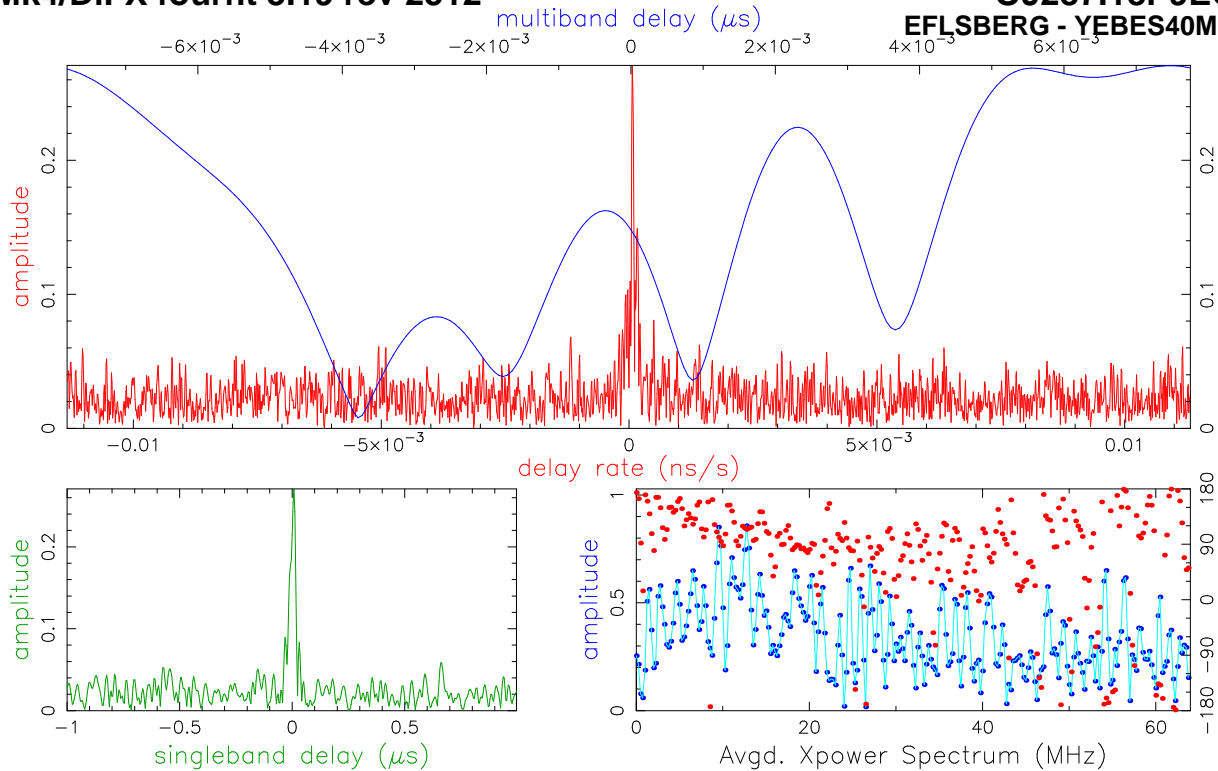


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-173.7	-180.0	-162.3	-129.3	-152.6	-128.4	-173.7	-173.0	Phase	-159.6
	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
	258.6	113.8	84.9	103.4	300.3	242.1	407.9	355.9	Sbd box	300.8
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.07537570756E+02		Apriori delay (usec)		-2.07707602608E+02		Resid mbdelay (usec)		-1.84315E-03	+/- 1.8E-04
Sband delay (usec)	-2.07536443108E+02		Apriori clock (usec)		-1.3358538E+01		Resid sbdelay (usec)		1.71160E-01	+/- 1.5E-03
Phase delay (usec)	-2.07707607754E+02		Apriori clockrate (us/s)		-2.6200000E-07		Resid phdelay (usec)		-5.14597E-06	+/- 6.2E-07
Delay rate (us/s)	1.77359394890E+00		Apriori rate (us/s)		1.77358362196E+00		Resid rate (us/s)		1.03269E-05	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		4.70178248386E-06		Resid phase (deg)		-159.6	+/- 19.4

	RMS	Theor.	Amplitude	0.151 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	48.0	46.4	Search (2048X32)	0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	60.2	81.0	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	22.2	27.4	Inc. seg. avg.	0.154	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	34.2	47.8	Inc. frq. avg.	0.141	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

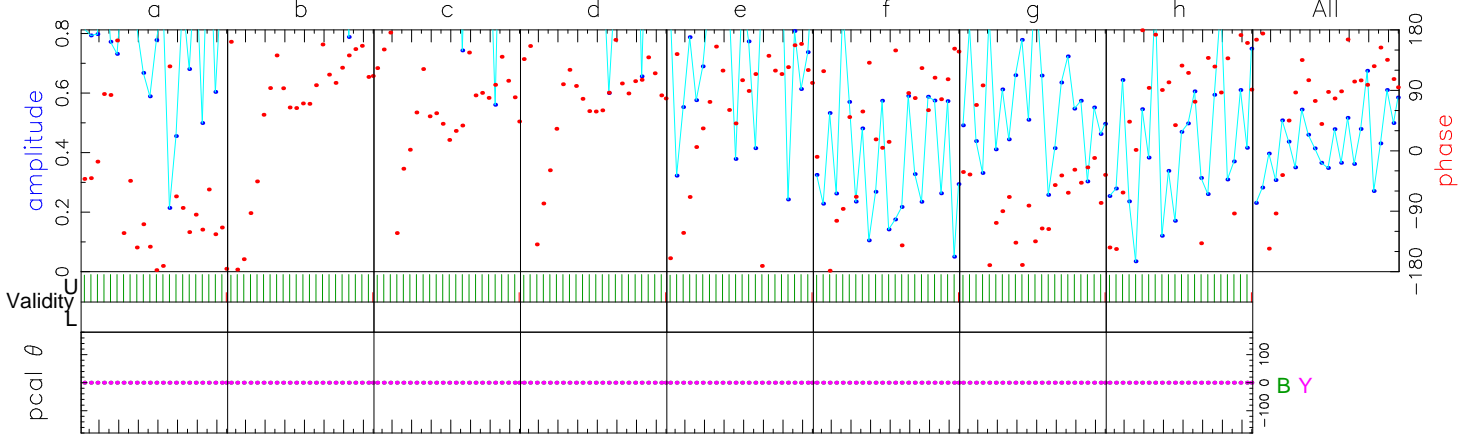
b: az 99.1 el 35.1 pa -44.6 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -10803.621 984.330 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/by..18P9EC Output file: /Exps/c201a/v1/1234/No0027/by.W.18.18P9EC



Fringe quality 7  
 SNR 15.4  
 Int time 434.153  
 Amp 0.271  
 Phase 109.6  
 PFD 7.0e-45  
 Delays (us)  
 SBD 0.007430  
 MBD 0.007421  
 Fringe rate (Hz) 0.005907  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120756  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

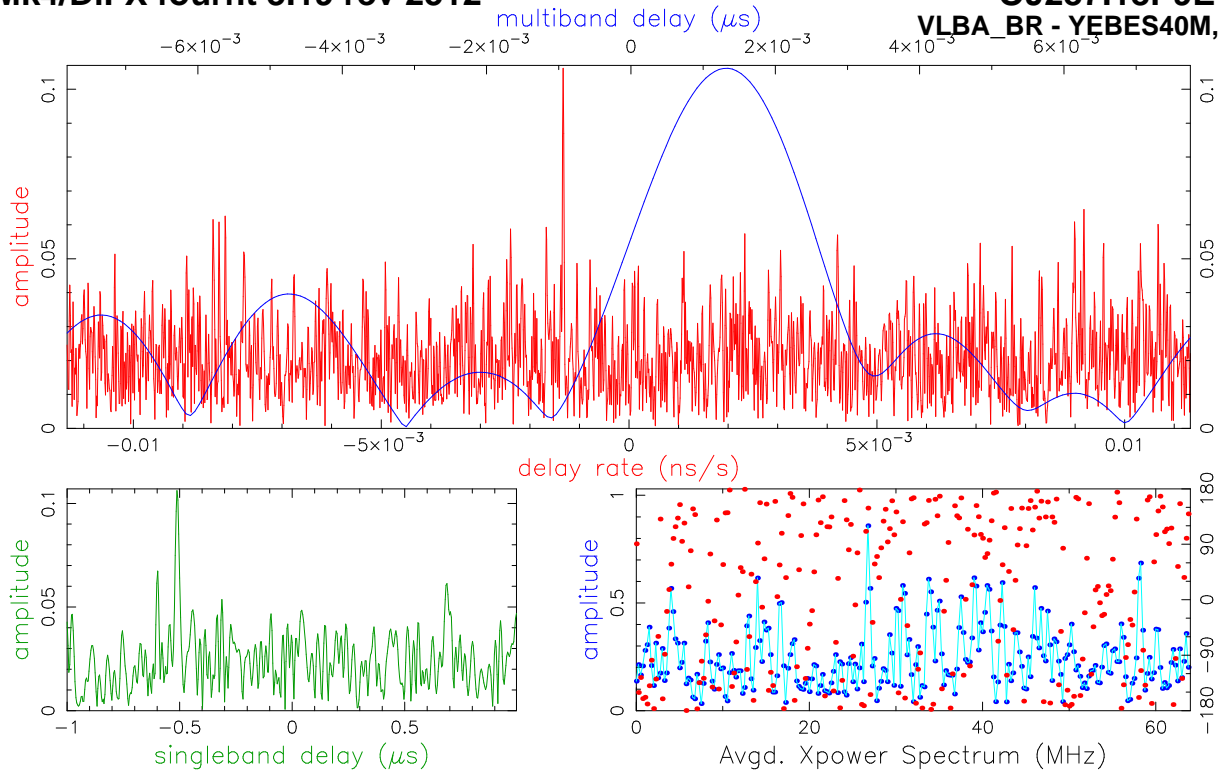
Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-105.4	114.4	83.4	97.6	121.3	74.4	-80.6	136.8	Phase	109.6
	0.4	0.8	0.7	0.7	0.4	0.1	0.3	0.2	Ampl.	0.4
	255.3	257.7	259.0	259.2	258.5	256.8	257.4	251.9	Sbd box	258.9
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.38865562645E+03		Apriori delay (usec)		-2.38866304792E+03		Resid mbdelay (usec)		7.42148E-03	+/- 7.0E-05
Sband delay (usec)	-2.38865561767E+03		Apriori clock (usec)		1.1017265E+00		Resid sbdelay (usec)		7.43025E-03	+/- 5.6E-04
Phase delay (usec)	-2.38866304439E+03		Apriori clockrate (us/s)		-4.2000000E-07		Resid phdelay (usec)		3.53508E-06	+/- 2.4E-07
Delay rate (us/s)	8.24162541113E-02		Apriori rate (us/s)		8.24161855378E-02		Resid rate (us/s)		6.85735E-08	+/- 9.5E-10
Total phase (deg)			Apriori accel (us/s/s)		1.74304221780E-05		Resid phase (deg)		109.6	+/- 7.4

	RMS	Theor.	Amplitude	0.271 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	61.3	17.8	Search (2048X32)	0.268	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	70.4	31.1	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	93.8	10.5	Inc. seg. avg.	0.407	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	106.6	18.3	Inc. frq. avg.	0.447	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 265.9 el 29.7 pa 42.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -474.933 1519.361 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/BY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/BY.W.30.18P9EC

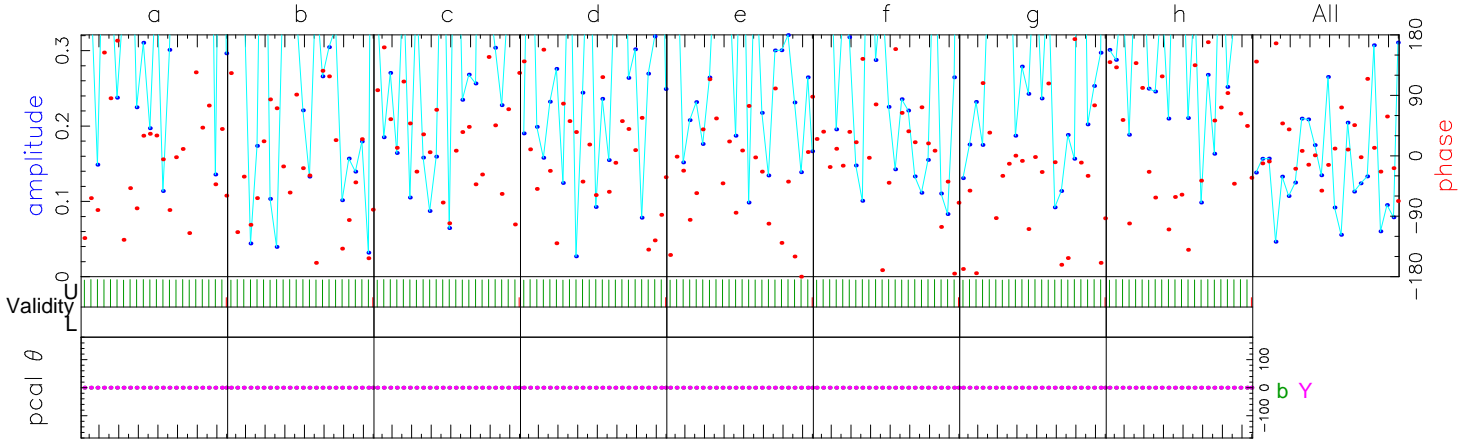


Fringe quality 0

SNR 6.0  
Int time 431.139  
Amp 0.107  
Phase 6.8  
PFD 3.3e-01  
Delays (us)  
SBD -0.511014  
MBD 0.001320  
Fringe rate (Hz)  
-0.114736  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120757  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



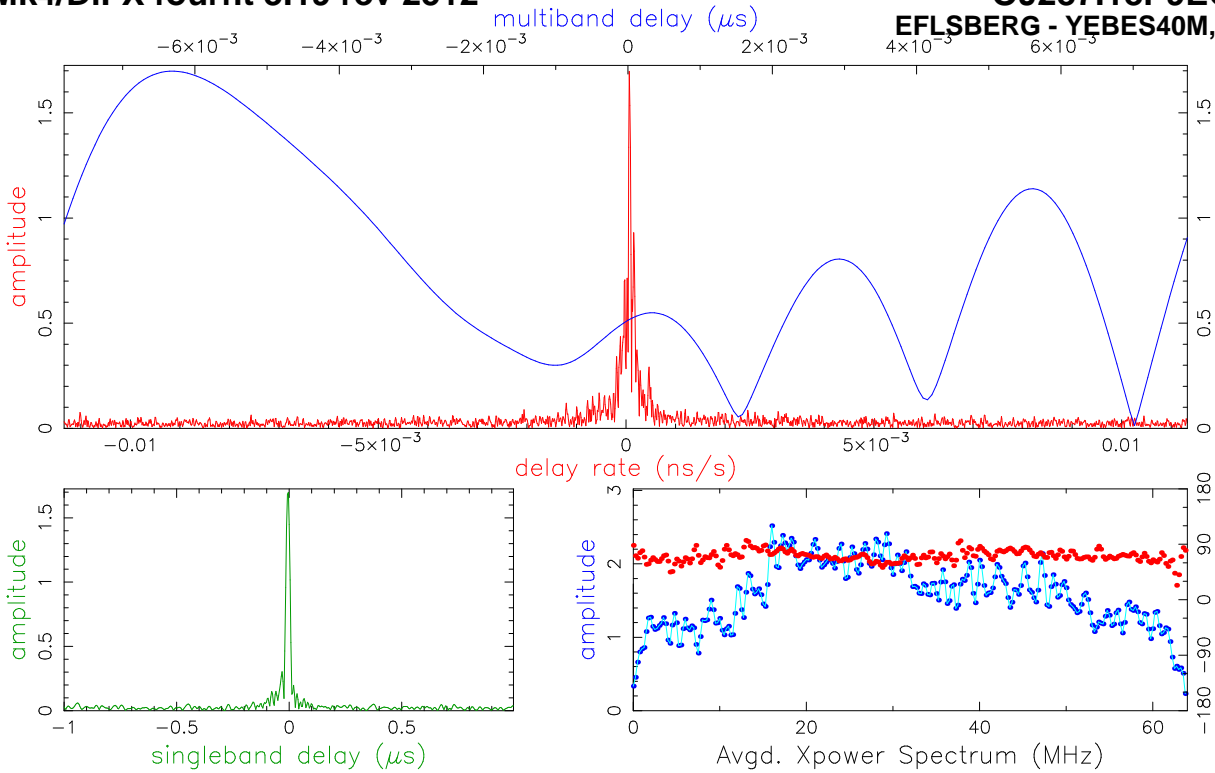
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-2.08221907933E+02	Apriori delay (usec)	-2.07707602608E+02	Resid mbdelay (usec)	1.31967E-03	+/-	1.8E-04
Sband delay (usec)	-2.08218616858E+02	Apriori clock (usec)	-1.3358538E+01	Resid sbdelay (usec)	-5.11014E-01	+/-	1.4E-03
Phase delay (usec)	-2.07707602388E+02	Apriori clockrate (us/s)	-2.6200000E-07	Resid phdelay (usec)	2.19914E-07	+/-	6.1E-07
Delay rate (us/s)	1.77358228999E+00	Apriori rate (us/s)	1.77358362196E+00	Resid rate (us/s)	-1.33197E-06	+/-	2.4E-09
Total phase (deg)	-313.1	Apriori accel (us/s/s)	4.70178248386E-06	Resid phase (deg)	6.8	+/-	19.0

ph/seg (deg)	58.0	Theor.	45.5	Amplitude	0.107 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	72.8		79.4	Search (2048X32)	0.101	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	31.0		26.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	27.4		46.8	Inc. seg. avg.	0.111	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.105	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

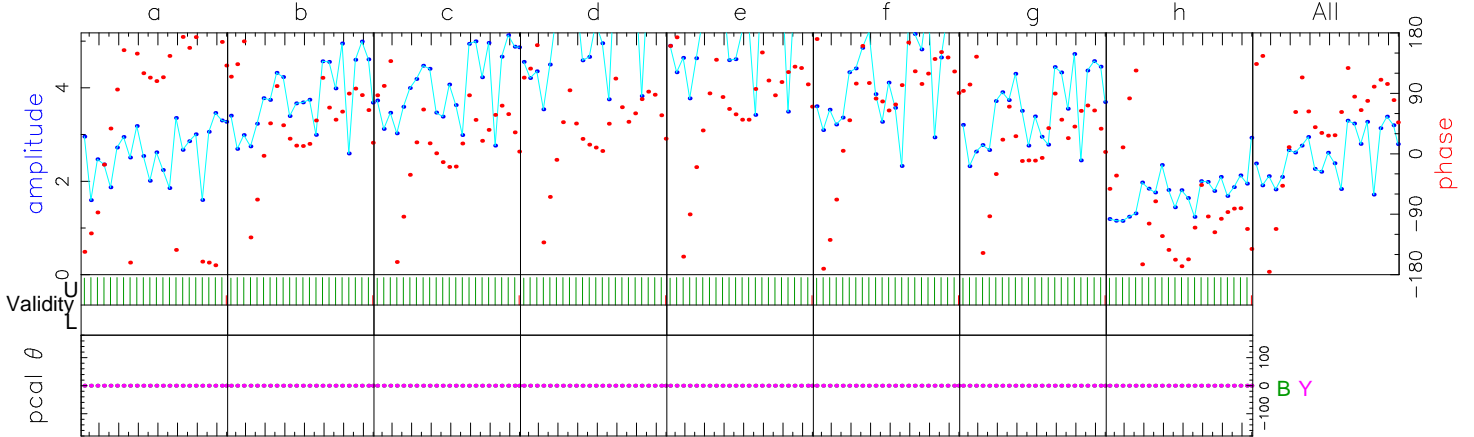
b: az 99.1 el 35.1 pa -44.6 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -10803.621 984.330 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/bY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/bY.W.37.18P9EC



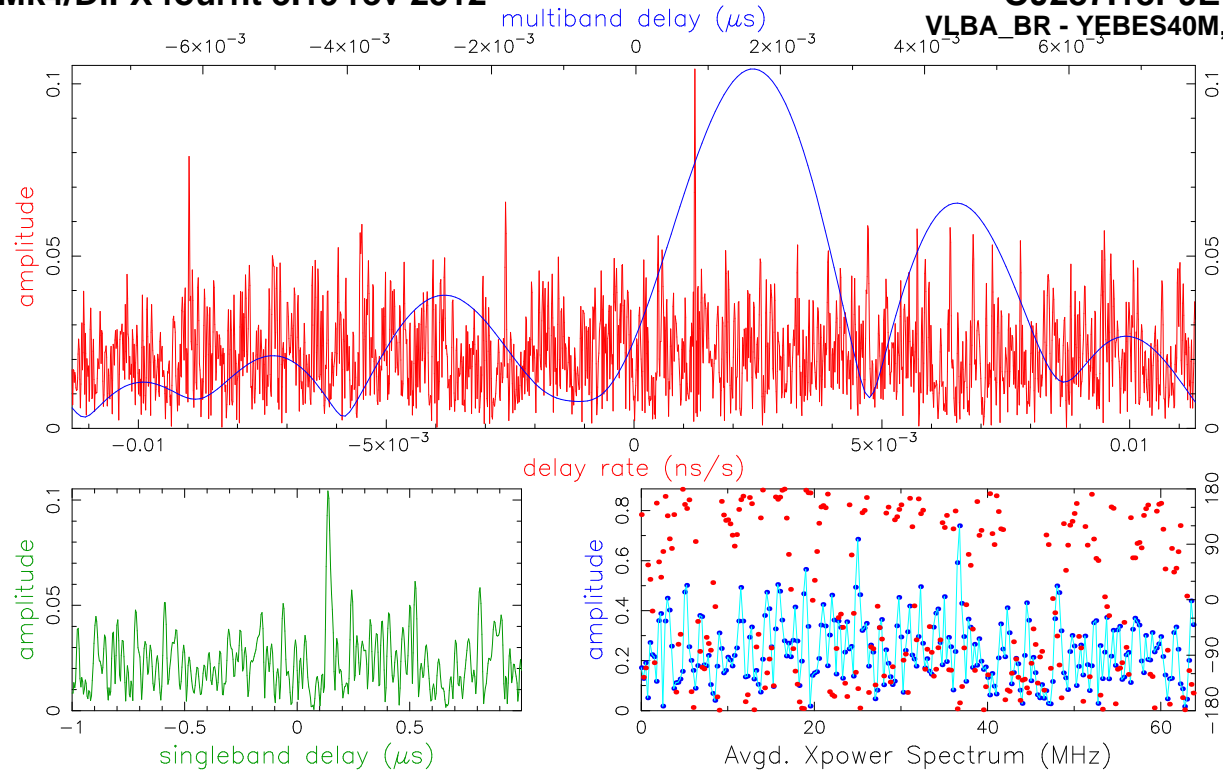
Fringe quality 1  
 SNR 98.3  
 Int time 434.153  
 Amp 1.726  
 Phase 78.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.005655  
 MBD -0.006259  
 Fringe rate (Hz) 0.006105  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120801  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



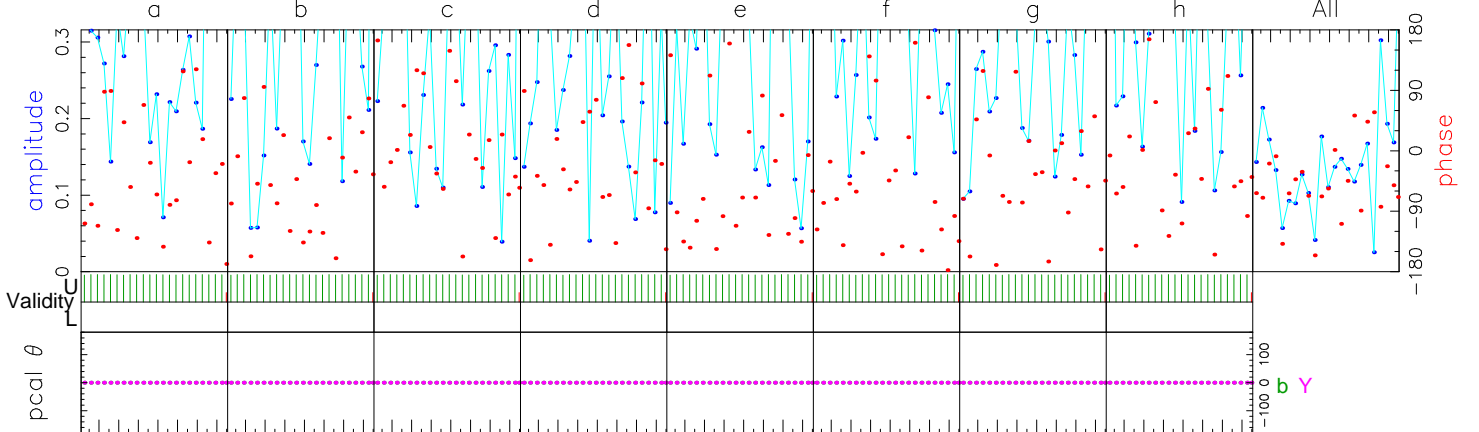
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	166.6	62.2	35.2	60.0	102.8	119.3	39.4	-108.0	Phase	78.5
B	1.6	2.5	2.6	3.5	3.5	2.8	2.3	1.1	Ampl.	2.5
Y	252.0	254.3	255.9	255.7	255.9	255.3	254.1	249.1	Sbd box	255.6
B:Y	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.38866930717E+03		Apriori delay (usec)		-2.38866304792E+03		Resid mbdelay (usec)		-6.25924E-03	+/- 1.1E-05
Sband delay (usec)	-2.38866870292E+03		Apriori clock (usec)		1.1017265E+00		Resid sbdelay (usec)		-5.65500E-03	+/- 8.8E-05
Phase delay (usec)	-2.38866304539E+03		Apriori clockrate (us/s)		-4.2000000E-07		Resid phdelay (usec)		2.53036E-06	+/- 3.8E-08
Delay rate (us/s)	8.24162564063E-02		Apriori rate (us/s)		8.24161855378E-02		Resid rate (us/s)		7.08685E-08	+/- 1.5E-10
Total phase (deg)			Apriori accel (us/s/s)		1.74304221780E-05		Resid phase (deg)		78.5	+/- 1.2

ph/seg (deg) 61.4 2.8 Search (2048X32) 1.640 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 58.0 4.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 85.8 1.6 Inc. seg. avg. 2.576 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 62.7 2.9 Inc. frq. avg. 2.488 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 265.9 el 29.7 pa 42.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -474.933 1519.361 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/BY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/BY.W.52.18P9EC



Fringe quality 0  
SNR 6.0  
Int time 431.140  
Amp 0.105  
Phase -49.9  
PFD 4.9e-01  
Delays (us)  
SBD 0.137739  
MBD 0.001646  
Fringe rate (Hz)  
0.105757  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120802  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

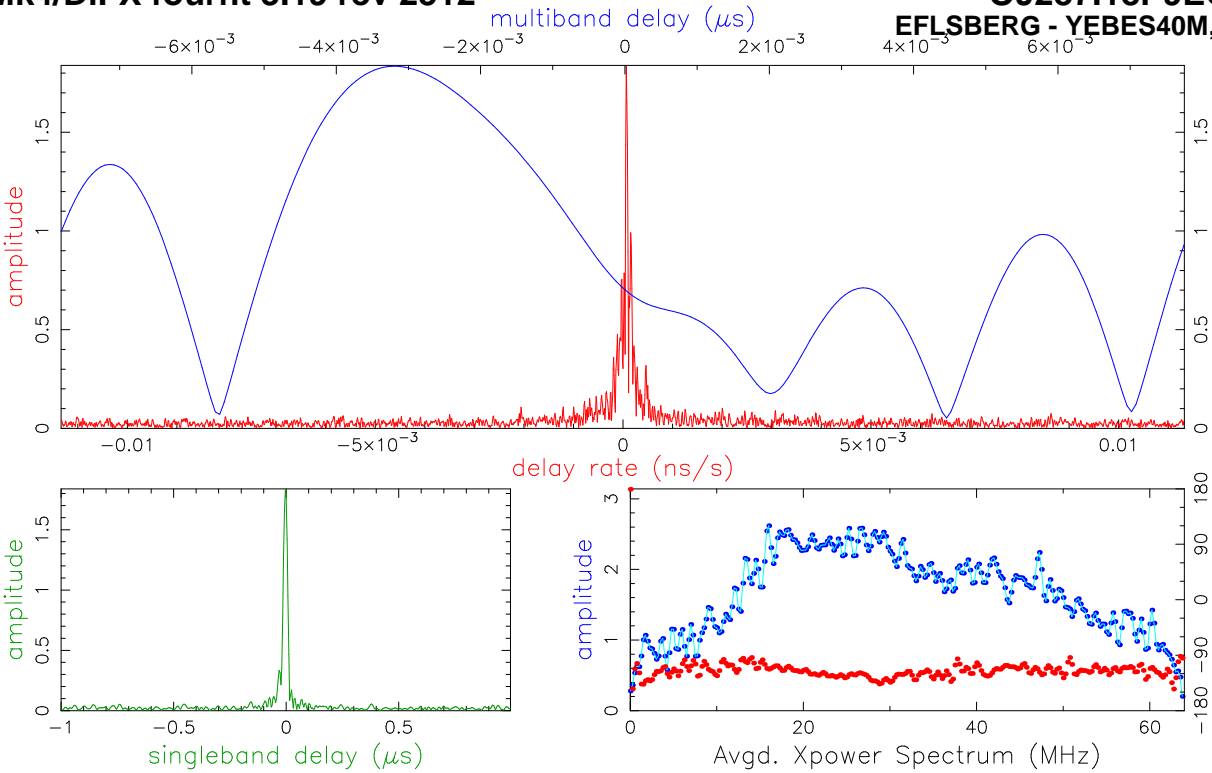
Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-68.0	-36.1	7.2	-44.2	-80.8	-89.2	-43.5	-31.3	Phase	-49.9
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	72.9	54.2	204.4	300.4	39.4	27.8	298.5	107.1	Sbd box	292.3
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.07565332043E+02		Apriori delay (usec)		-2.07707602608E+02		Resid mbdelay (usec)		1.64556E-03	+/- 1.8E-04
Sband delay (usec)	-2.07569863858E+02		Apriori clock (usec)		-1.3358538E+01		Resid sbdelay (usec)		1.37739E-01	+/- 1.4E-03
Phase delay (usec)	-2.07707604218E+02		Apriori clockrate (us/s)		-2.6200000E-07		Resid phdelay (usec)		-1.60973E-06	+/- 6.2E-07
Delay rate (us/s)	1.77358484970E+00		Apriori rate (us/s)		1.77358362196E+00		Resid rate (us/s)		1.22774E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		4.70178248386E-06		Resid phase (deg)		-49.9	+/- 19.3

ph/seg (deg) 53.5 46.2 Search (2048X32) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 71.0 80.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 33.4 27.2 Inc. seg. avg. 0.106 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 19.9 47.5 Inc. frq. avg. 0.107 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
b: az 99.1 el 35.1 pa -44.6 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -10803.621 984.330 ion window (TEC) 0.00 0.00  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/bY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/bY.W.59.18P9EC simultaneous interpolator



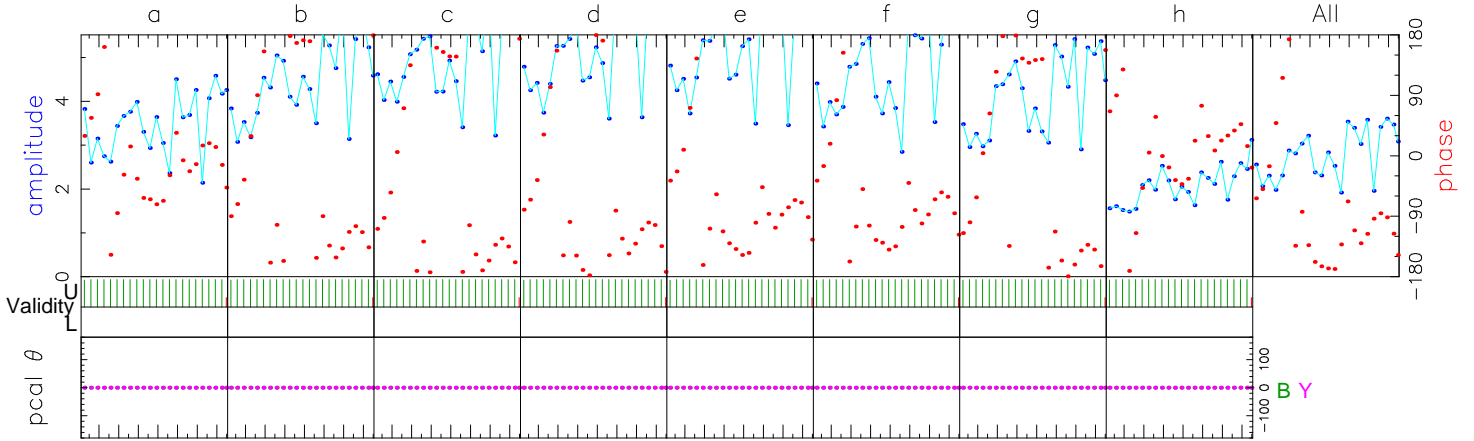


Fringe quality 1

SNR 104.8  
Int time 434.153  
Amp 1.839  
Phase -116.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.003226  
MBD -0.003208  
Fringe rate (Hz)  
0.006086  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

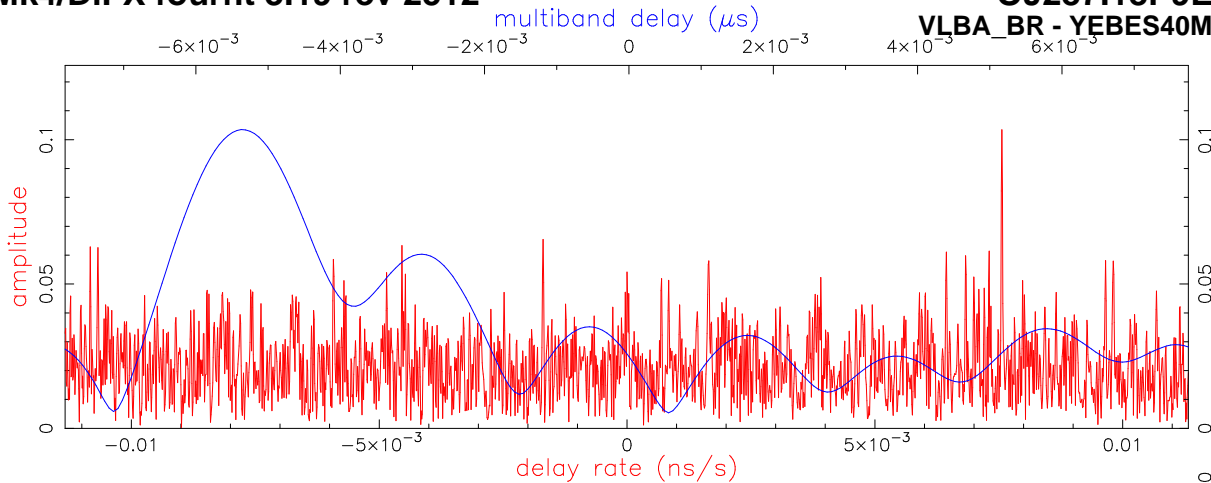
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120805  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec

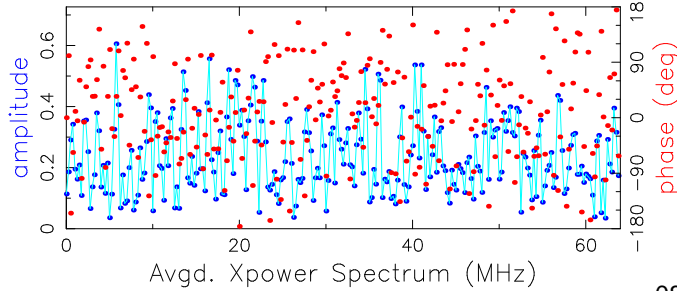
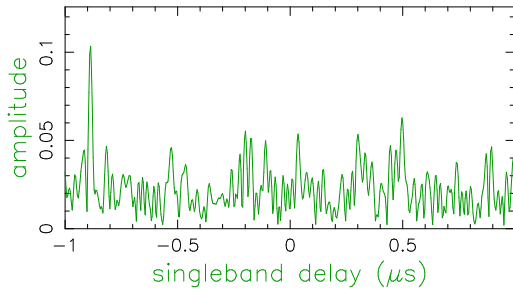


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-14.4	-139.6	-156.7	-131.4	-93.6	-86.6	-164.9	16.6	Phase	-116.7
	2.2	2.9	3.2	3.4	3.5	3.1	2.7	1.3	Ampl.	2.8
	253.4	255.0	256.7	256.6	256.5	256.0	254.7	250.3	Sbd box	256.2
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.38866625610E+03		Apriori delay (usec)		-2.38866304792E+03		Resid mbdelay (usec)		-3.20818E-03	+/- 1.0E-05
Sband delay (usec)	-2.38866627367E+03		Apriori clock (usec)		1.1017265E+00		Resid sbdelay (usec)		-3.22575E-03	+/- 8.2E-05
Phase delay (usec)	-2.38866305169E+03		Apriori clockrate (us/s)		-4.2000000E-07		Resid phdelay (usec)		-3.76314E-06	+/- 3.5E-08
Delay rate (us/s)	8.24162561845E-02		Apriori rate (us/s)		8.24161855378E-02		Resid rate (us/s)		7.06467E-08	+/- 1.4E-10
Total phase (deg)			Apriori accel (us/s/s)		1.74304221780E-05		Resid phase (deg)		-116.7	+/- 1.1

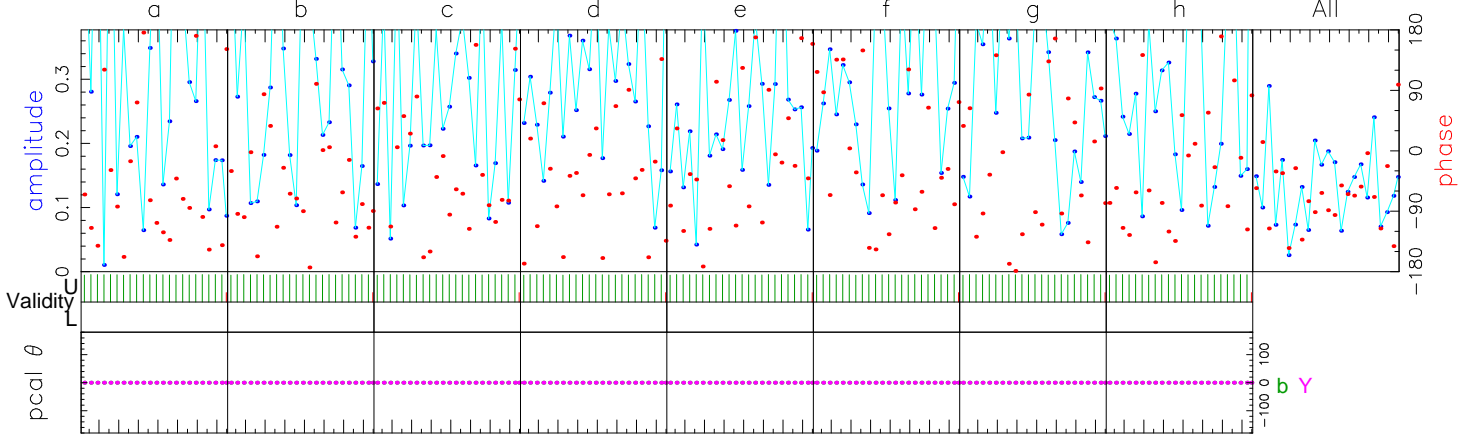
ph/seg (deg) 60.7 2.6 Search (2048X32) 1.766 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 59.7 4.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 75.6 1.5 Inc. seg. avg. 2.781 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 62.9 2.7 Inc. frq. avg. 2.783 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 265.9 el 29.7 pa 42.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -474.933 1519.361 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/BY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/BY.W.73.18P9EC



Fringe quality 0  
SNR 5.9  
Int time 431.139  
Amp 0.126  
Phase -72.2  
PFD 6.0e-01  
Delays (us)  
SBD -0.887627  
MBD -0.005389  
Fringe rate (Hz) 0.652206  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120806  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"



Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec

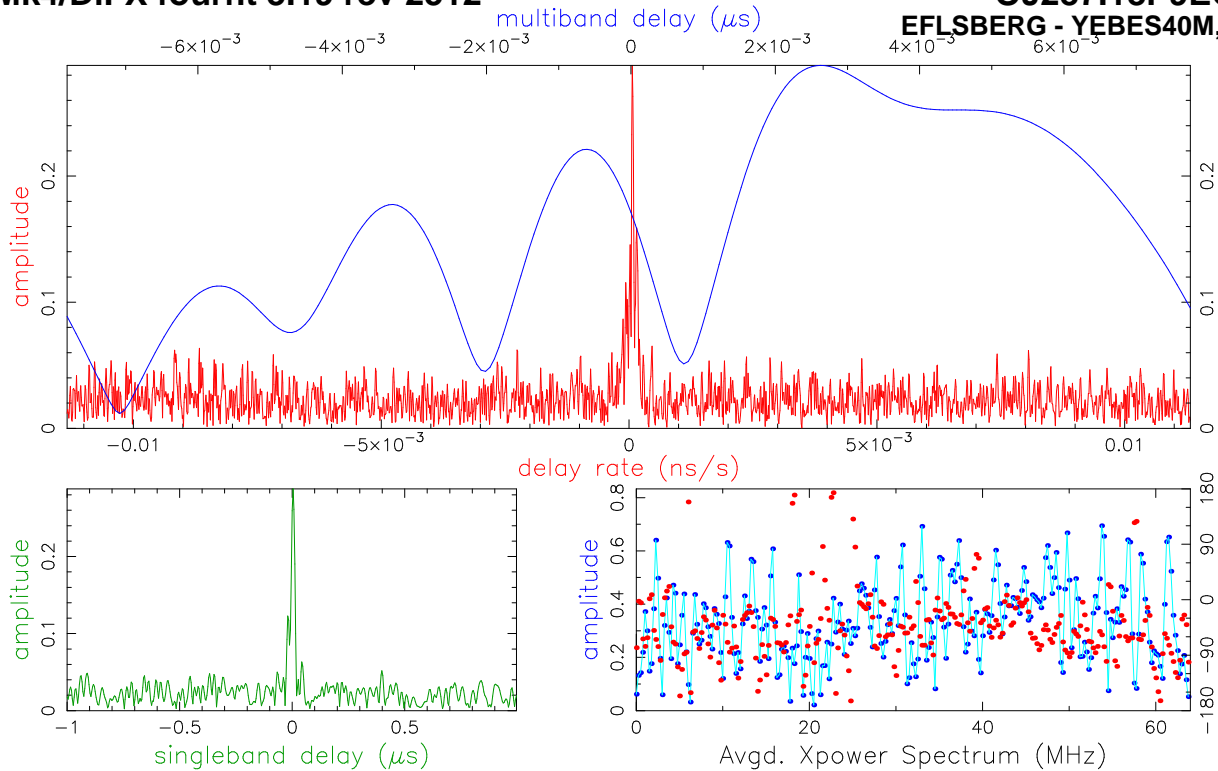


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-89.4	-78.0	-38.1	-41.7	-62.2	-71.3	-119.9	-69.7	Phase	-72.2
	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	29.6	30.5	95.1	461.7	180.9	417.1	139.0	265.2	Sbd box	29.8
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.08587991229E+02	Apriori delay (usec)	-2.07707602608E+02	Resid mbdelay (usec)	-5.38862E-03	+/-	1.8E-04
Sband delay (usec)	-2.08595229608E+02	Apriori clock (usec)	-1.3358538E+01	Resid sbdelay (usec)	-8.87627E-01	+/-	1.5E-03
Phase delay (usec)	-2.07707604936E+02	Apriori clockrate (us/s)	-2.6200000E-07	Resid phdelay (usec)	-2.32776E-06	+/-	6.3E-07
Delay rate (us/s)	1.77359119342E+00	Apriori rate (us/s)	1.77358362196E+00	Resid rate (us/s)	7.57146E-06	+/-	2.5E-09
Total phase (deg)	-32.1	Apriori accel (us/s/s)	4.70178248386E-06	Resid phase (deg)	-72.2	+/-	19.4

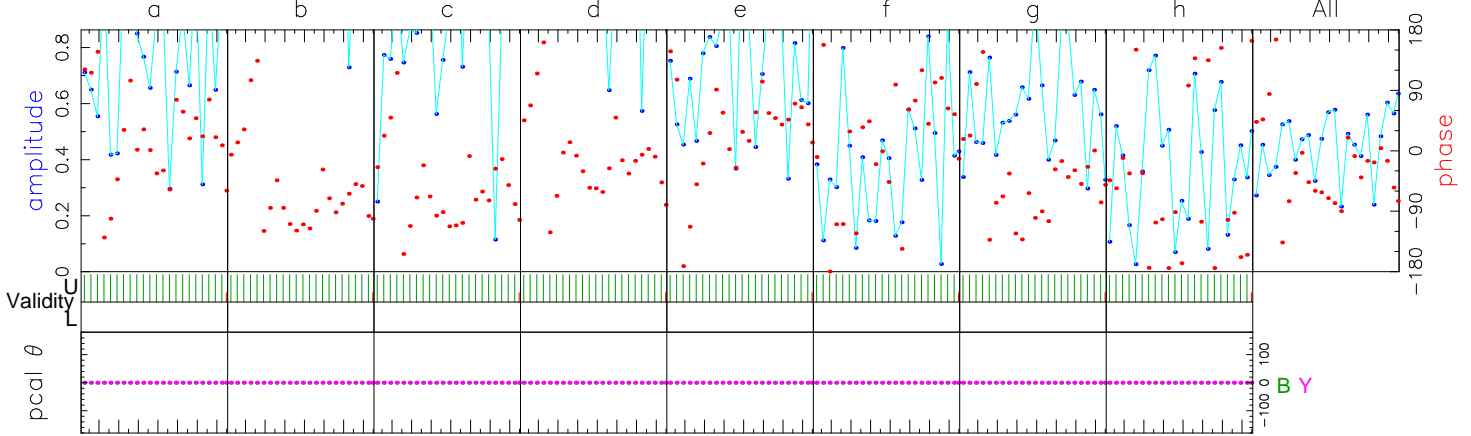
ph/seg (deg)	47.3	Theor.	46.6	Amplitude	0.126 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	66.5		81.3	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	28.3		27.5	Inc. seg. avg.	0.122	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	49.7		47.9	Inc. frq. avg.	0.121	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 99.1 el 35.1 pa -44.6 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -10803.621 984.330 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/bY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/bY.W.77.18P9EC



Fringe quality 7  
 SNR 16.4  
 Int time 434.153  
 Amp 0.288  
 Phase -35.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.003976  
 MBD 0.002628  
 Fringe rate (Hz) 0.006183  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120810  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

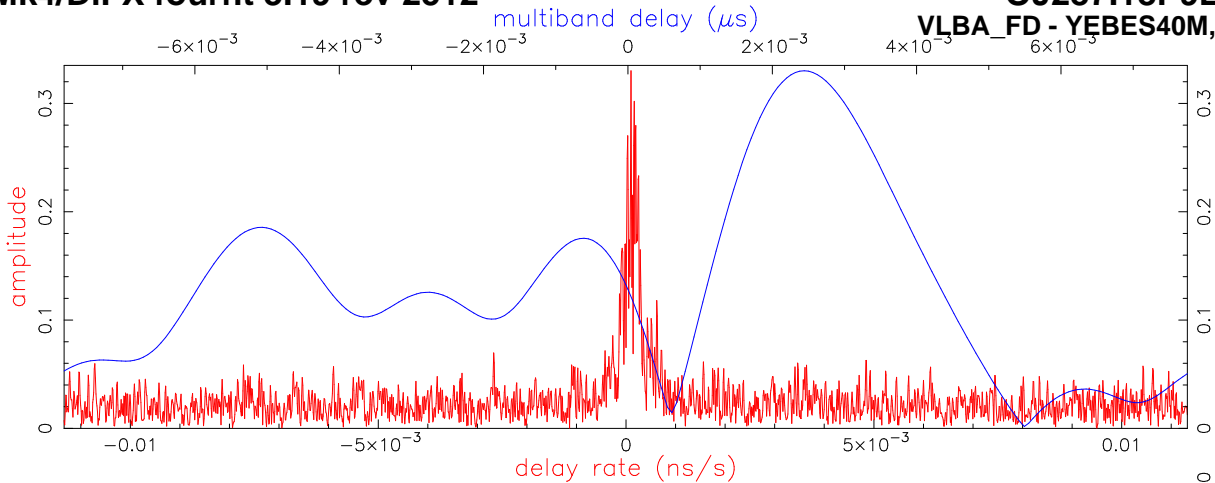
Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.38866042023E+03				-2.38866304792E+03				2.62770E-03	+/- 6.6E-05
Sband delay (usec)	-2.38865907192E+03				1.1017265E+00				3.97600E-03	+/- 5.3E-04
Phase delay (usec)	-2.38866304907E+03				-4.2000000E-07				-1.14685E-06	+/- 2.3E-07
Delay rate (us/s)	8.24162573147E-02				8.24161855378E-02				7.17769E-08	+/- 9.0E-10
Total phase (deg)			-16.9		1.74304221780E-05				-35.6	+/- 7.0
	RMS	Theor.	Amplitude	0.288 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	59.9	16.8	Search (2048X32)	0.280	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)		-1.000	1.000	
amp/seg (%)	68.4	29.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	73.5	9.9	Inc. seg. avg.	0.433	Sample rate(MISamp/s): 128	dr window (ns/s)		-0.011	0.011	
amp/frq (%)	95.4	17.2	Inc. frq. avg.	0.451	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00

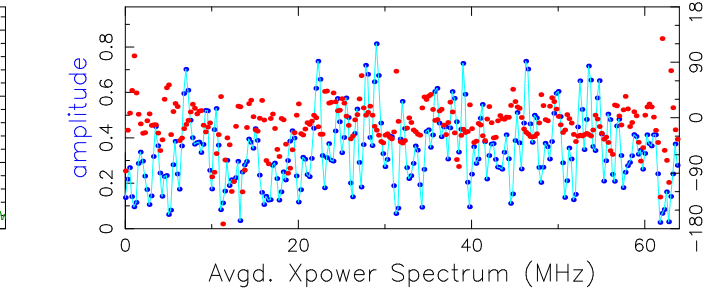
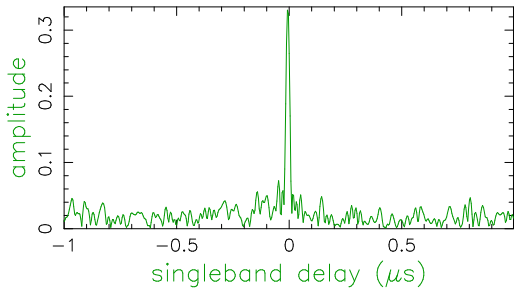
B: az 265.9 el 29.7 pa 42.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -474.933 1519.361 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/BY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/BY.W.87.18P9EC





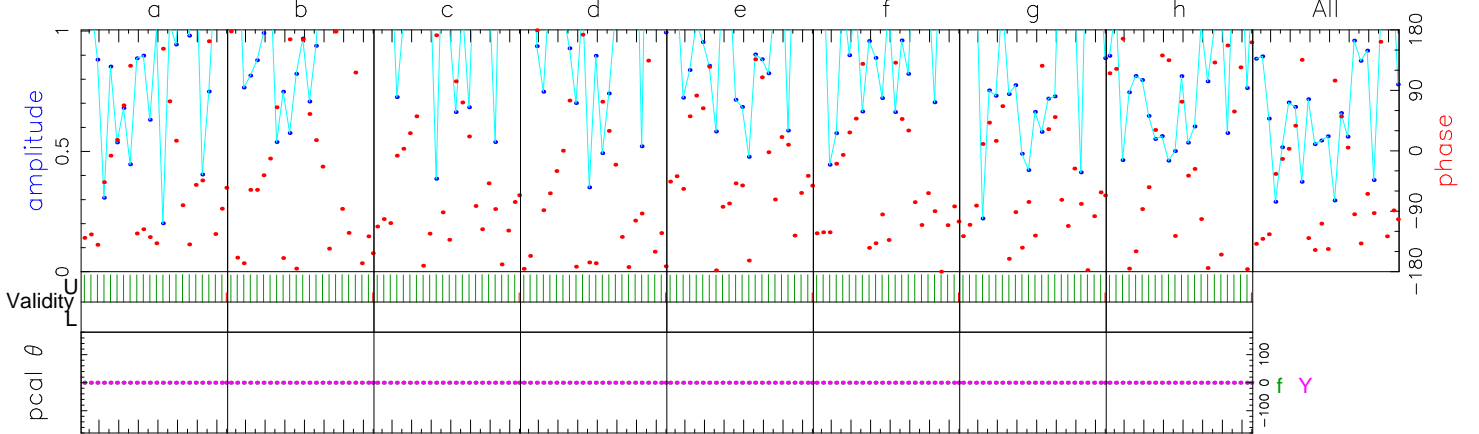
Fringe quality 8

SNR 19.0  
 Int time 429.903  
 Amp 0.335  
 Phase -109.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.006218  
 MBD 0.002464  
 Fringe rate (Hz) 0.008267  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120815  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



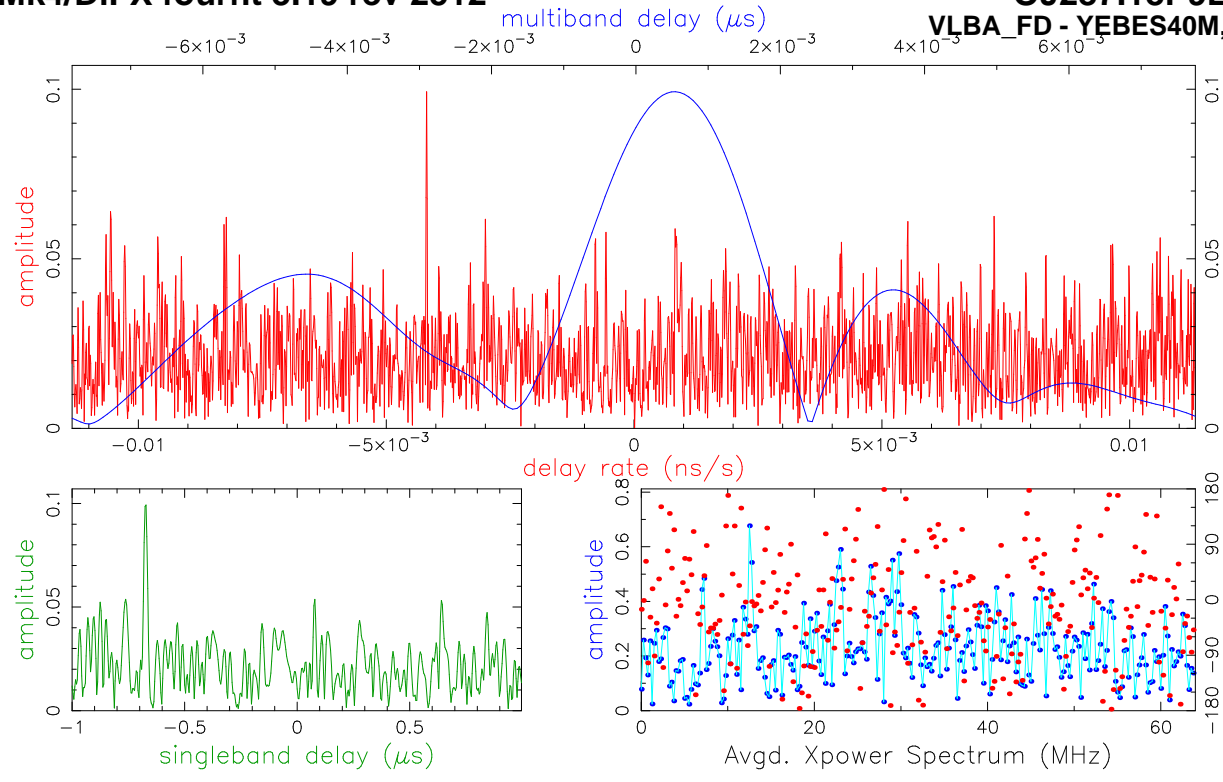
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	3.74882525038E+03	Apriori delay (usec)	3.74883841162E+03	Resid mbdelay (usec)	2.46376E-03	+/-	5.7E-05
Sband delay (usec)	3.74883219337E+03	Apriori clock (usec)	-8.0689220E+00	Resid sbdelay (usec)	-6.21825E-03	+/-	4.5E-04
Phase delay (usec)	3.74883840808E+03	Apriori clockrate (us/s)	-1.1100000E-07	Resid phdelay (usec)	-3.54166E-06	+/-	1.9E-07
Delay rate (us/s)	1.79203240469E+00	Apriori rate (us/s)	1.79203230872E+00	Resid rate (us/s)	9.59670E-08	+/-	7.7E-10
Total phase (deg)	169.8	Apriori accel (us/s/s)	-2.53910983476E-05	Resid phase (deg)	-109.8	+/-	6.0

ph/seg (deg)	RMS 78.9	Theor. 14.5	Amplitude Search (2048X32)	0.335 +/- 0.018	0.312	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	78.9	14.5	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	130.5	25.2	Inc. seg. avg.	0.674	0.674	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	52.5	8.5	Inc. frq. avg.	0.423	0.423	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00
	34.5	14.9					t_cohere infinite			

f: az 94.6 el 49.5 pa -66.0 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -10963.096 -1833.375 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/fY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/fY.W.108.18P9EC

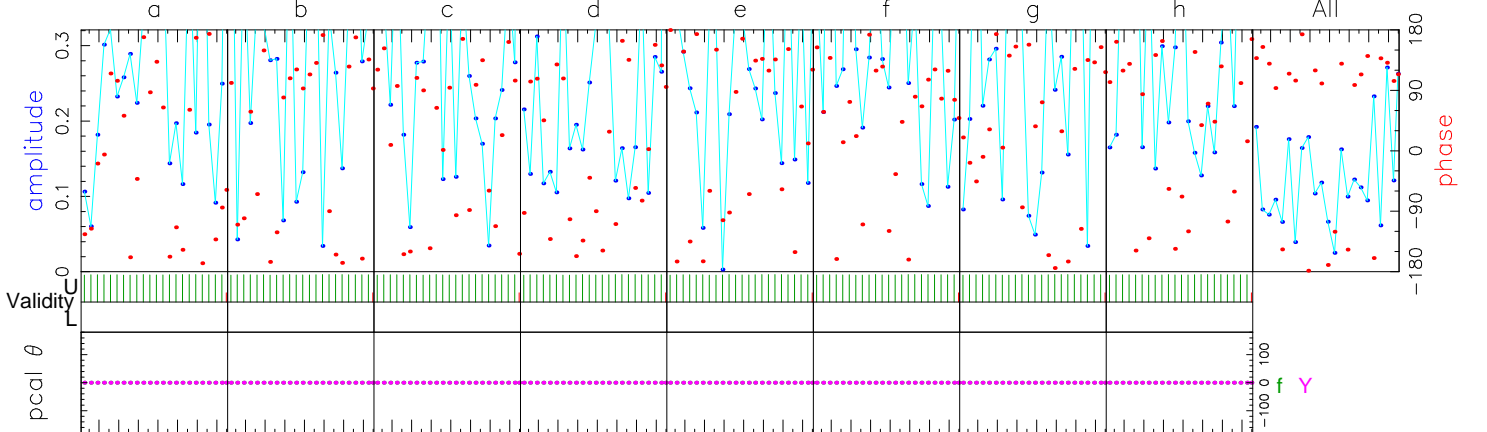


Fringe quality 0

SNR 5.7  
 Int time 429.904  
 Amp 0.107  
 Phase 141.2  
 PFD 9.1e-01  
 Delays (us)  
 SBD -0.673678  
 MBD 0.000527  
 Fringe rate (Hz)  
 -0.361329  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

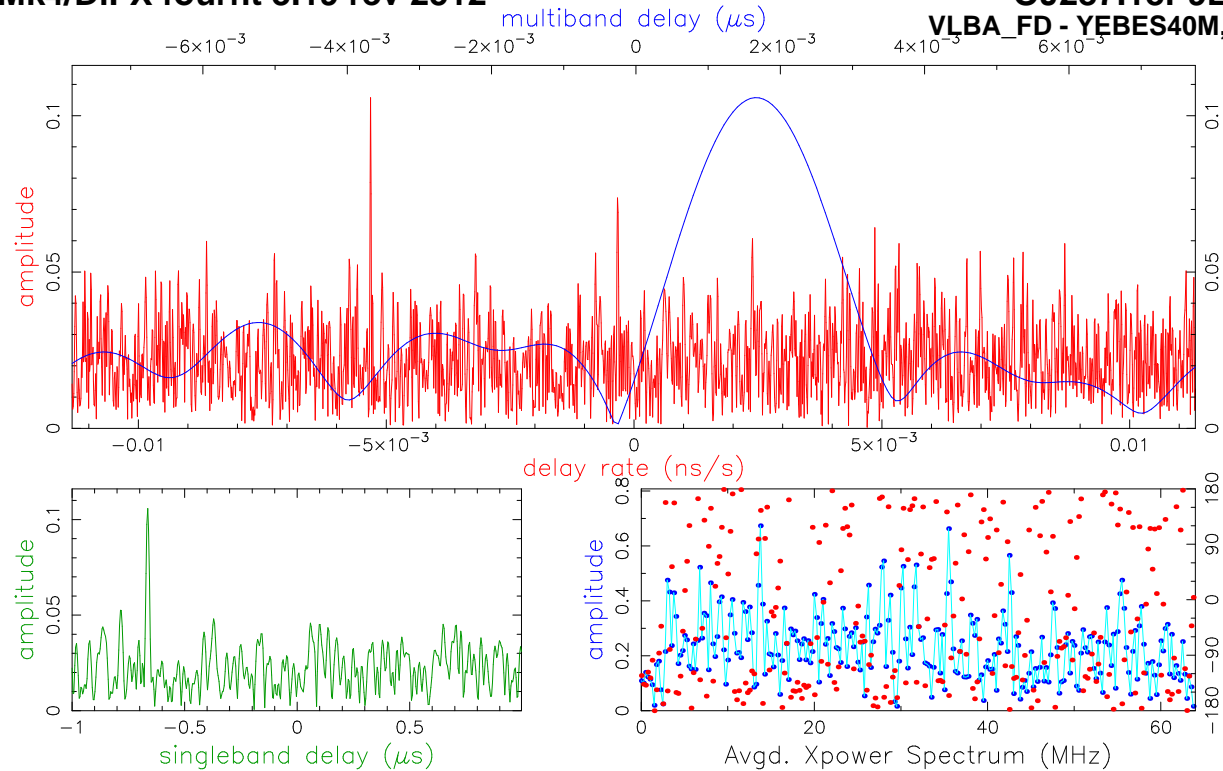
Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120820  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	3.74816706334E+03		Apriori delay (usec)		3.74883841162E+03		Resid mbdelay (usec)		5.26721E-04	+/- 1.9E-04
Sband delay (usec)	3.74816473387E+03		Apriori clock (usec)		-8.0689220E+00		Resid sbdelay (usec)		-6.73678E-01	+/- 1.5E-03
Phase delay (usec)	3.74883841617E+03		Apriori clockrate (us/s)		-1.1100000E-07		Resid phdelay (usec)		4.55475E-06	+/- 6.4E-07
Delay rate (us/s)	1.79202811405E+00		Apriori rate (us/s)		1.79203230872E+00		Resid rate (us/s)		-4.19467E-06	+/- 2.6E-09
Total phase (deg)	60.9		Apriori accel (us/s/s)		-2.53910983476E-05		Resid phase (deg)		141.2	+/- 20.0

ph/seg (deg) 42.3 47.9 Search (2048X32) 0.097 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 65.7 83.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 28.9 28.3 Inc. seg. avg. 0.097 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 39.1 49.3 Inc. frq. avg. 0.103 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 f: az 94.6 el 49.5 pa -66.0 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -10963.096 -1833.375 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/fY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/fY.W.128.18P9EC

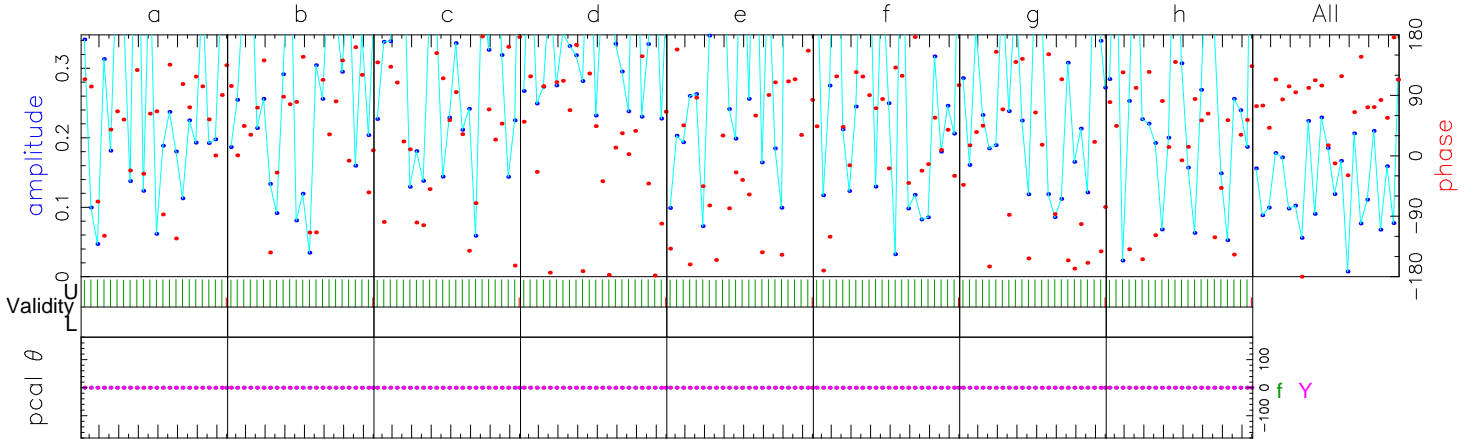


Fringe quality 0

SNR 6.0  
 Int time 429.903  
 Amp 0.116  
 Phase 85.4  
 PFD 4.0e-01  
 Delays (us)  
 SBD -0.664394  
 MBD 0.001654  
 Fringe rate (Hz)  
 -0.458500  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

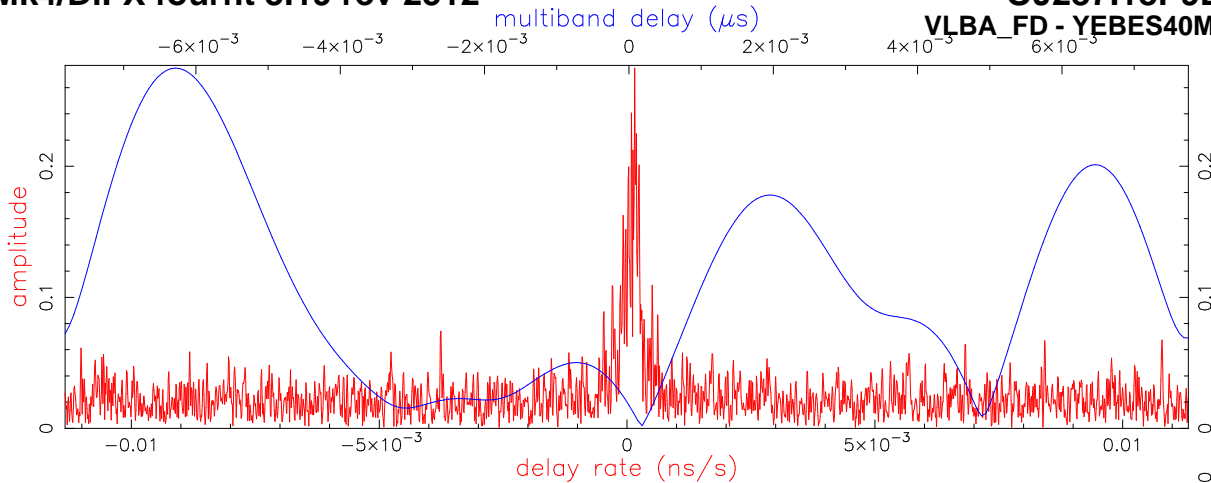
Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120825  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



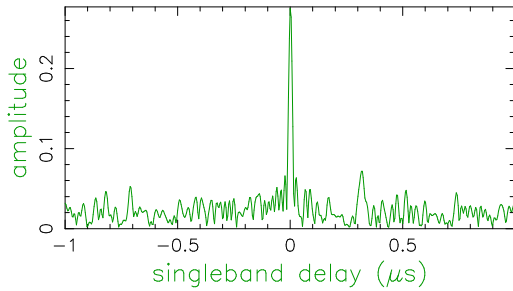
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	88.8	67.5	99.6	97.4	84.8	83.3	89.2	83.1	Phase	85.4
	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	152.8	511.5	60.8	295.9	332.9	434.0	485.6	192.2	Sbd box	86.9
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.74816819019E+03		Apriori delay (usec)		3.74883841162E+03		Resid mbdelay (usec)		1.65357E-03	+/- 1.8E-04
Sband delay (usec)	3.74817401737E+03		Apriori clock (usec)		-8.0689220E+00		Resid sbdelay (usec)		-6.64394E-01	+/- 1.4E-03
Phase delay (usec)	3.74883841437E+03		Apriori clockrate (us/s)		-1.1100000E-07		Resid phdelay (usec)		2.75417E-06	+/- 6.2E-07
Delay rate (us/s)	1.79202698599E+00		Apriori rate (us/s)		1.79203230872E+00		Resid rate (us/s)		-5.32273E-06	+/- 2.5E-09
Total phase (deg)	5.1		Apriori accel (us/s/s)		-2.53910983476E-05		Resid phase (deg)		85.4	+/- 19.1

ph/seg (deg) 50.1 45.8 Amplitude 0.116 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 63.8 79.9 Search (2048X32) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 10.8 27.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 36.0 47.1 Inc. seg. avg. 0.111 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 f: az 94.6 el 49.5 pa -66.0 Y: az 265.0 el 37.4 pa 53.7 u, v (fr/asec) -10963.096 -1833.375 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/fY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/fY.W.150.18P9EC simultaneous interpolator

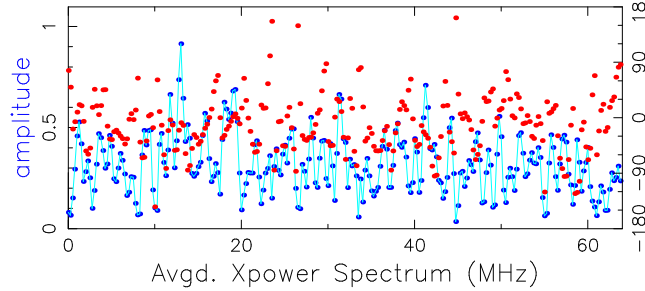


Fringe quality 7

SNR 15.7  
Int time 429.904  
Amp 0.277  
Phase 68.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.001105  
MBD -0.006255  
Fringe rate (Hz)  
0.013560  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

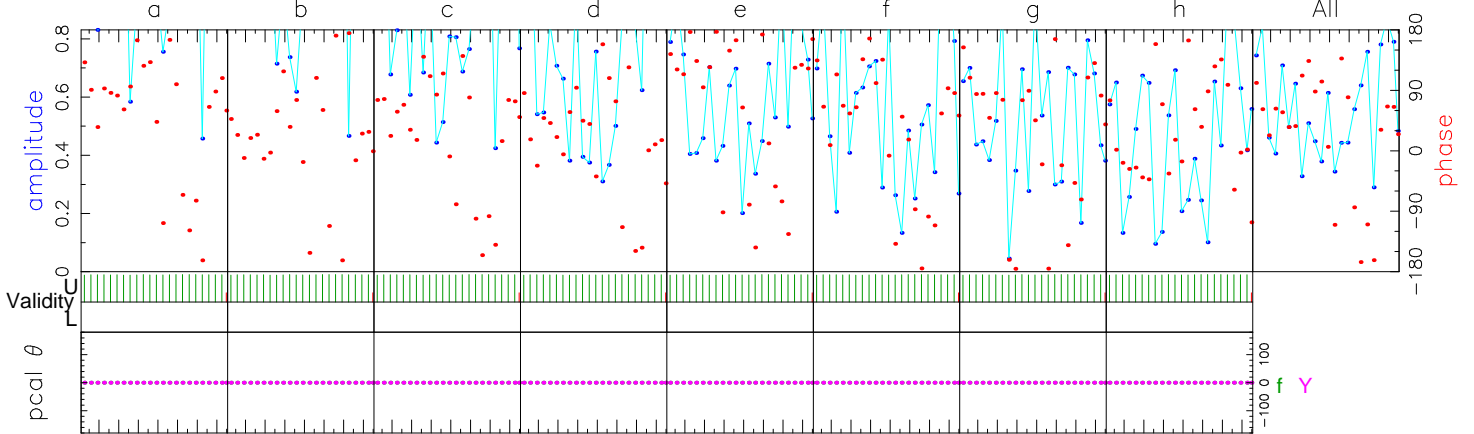


delay rate (ns/s)



Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120811  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

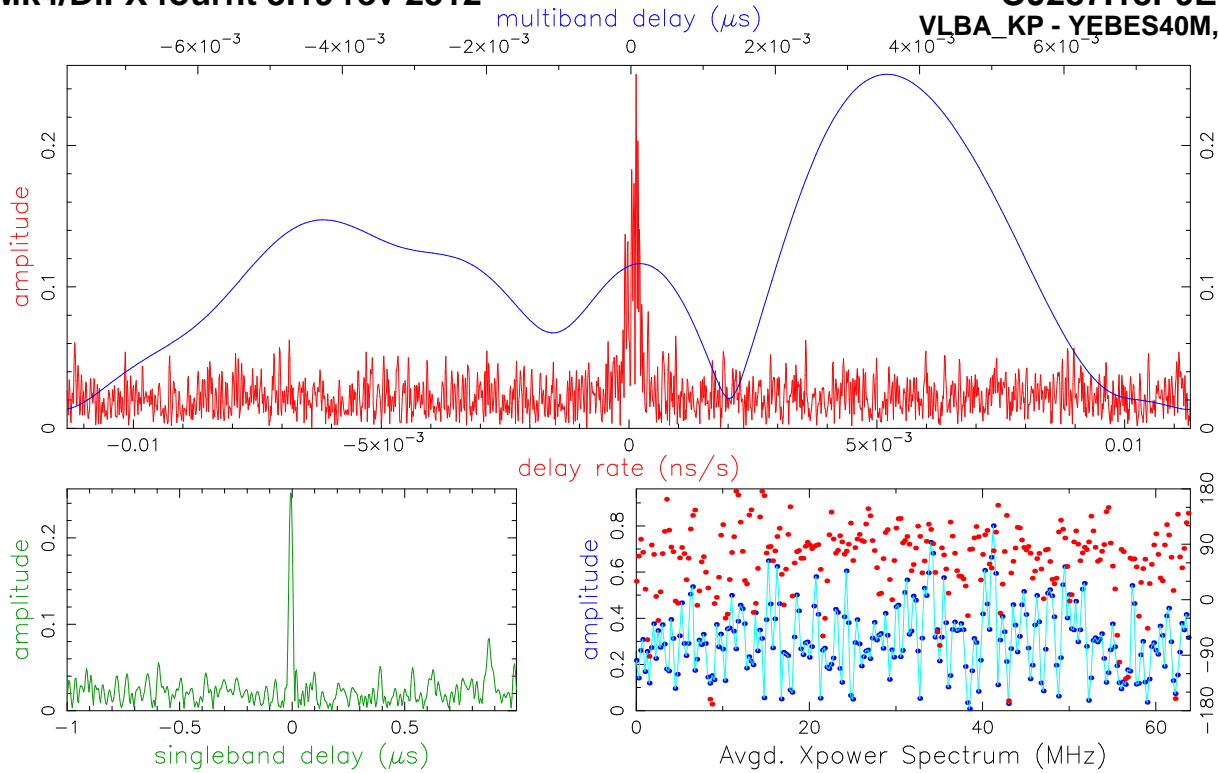
Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	3.74883215710E+03	Apriori delay (usec)	3.74883841162E+03	Resid mbdelay (usec)	-6.25452E-03	+/-	6.9E-05
Sband delay (usec)	3.74883951637E+03	Apriori clock (usec)	-8.0689220E+00	Resid sbdelay (usec)	1.10475E-03	+/-	5.5E-04
Phase delay (usec)	3.74883841382E+03	Apriori clockrate (us/s)	-1.1100000E-07	Resid phdelay (usec)	2.20007E-06	+/-	2.4E-07
Delay rate (us/s)	1.79203246614E+00	Apriori rate (us/s)	1.79203230872E+00	Resid rate (us/s)	1.57415E-07	+/-	9.4E-10
Total phase (deg)	347.9	Apriori accel (us/s/s)	-2.53910983476E-05	Resid phase (deg)	68.2	+/-	7.3

ph/seg (deg)	80.2	Theor.	17.5	Amplitude	0.277 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	122.0	Search (2048X32)	0.269	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	49.2	Inc. seg. avg.	0.542	Inc. frq. avg.	0.349	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	48.8	Inc. frq. avg.	0.349	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
f: az 94.6 el 49.5 pa -66.0	Y: az 265.0 el 37.4 pa 53.7	u, v (fr/asec)	-10963.096 -1833.375	ion window (TEC)	0.00	0.00	0.00	simultaneous interpolator			

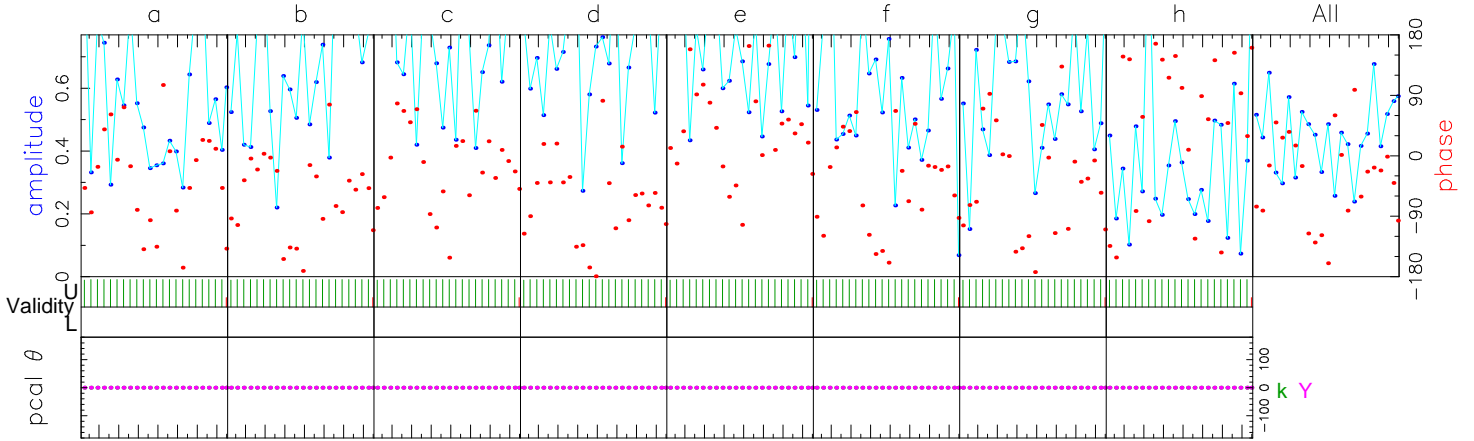


Fringe quality 7

SNR 14.6  
Int time 434.207  
Amp 0.257  
Phase -33.6  
PFD 1.3e-39  
Delays (us)  
SBD -0.005983  
MBD 0.003590  
Fringe rate (Hz) 0.012126  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120821  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

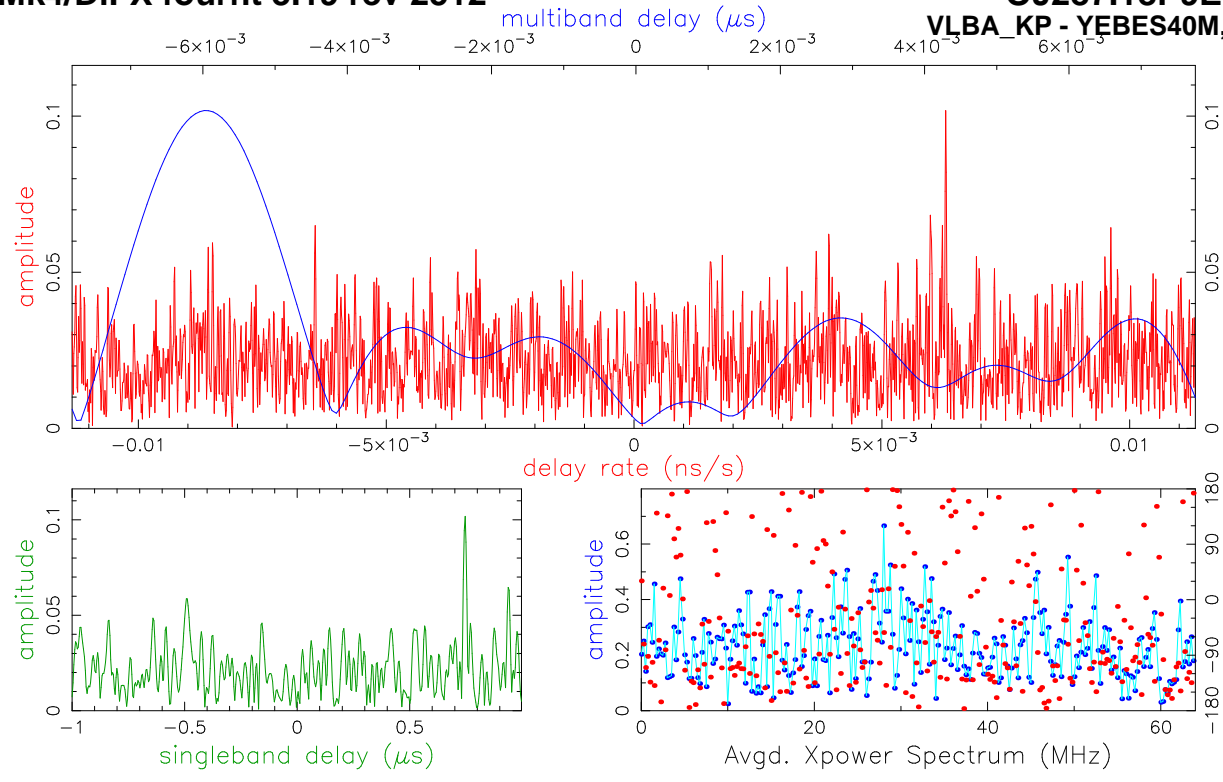
Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-18.1	-61.4	-14.3	-70.8	35.5	-45.7	-47.2	167.1		Phase
	0.3	0.4	0.5	0.5	0.4	0.3	0.2	0.1		Ampl.
	254.8	254.9	255.3	255.2	254.9	255.3	254.1	253.4		Sbd box
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		APs used
k	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
Y	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
k	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)	2.07369782011E+03		Apriori delay (usec)		2.07370985485E+03		Resid mbdelay (usec)		3.59026E-03	+/- 7.4E-05
Sband delay (usec)	2.07370387160E+03		Apriori clock (usec)		-1.2300716E+01		Resid sbdelay (usec)		-5.98325E-03	+/- 5.9E-04
Phase delay (usec)	2.07370985377E+03		Apriori clockrate (us/s)		-2.1460000E-07		Resid phdelay (usec)		-1.08327E-06	+/- 2.5E-07
Delay rate (us/s)	1.89498888291E+00		Apriori rate (us/s)		1.89498874214E+00		Resid rate (us/s)		1.40768E-07	+/- 1.0E-09
Total phase (deg)	289.2		Apriori accel (us/s/s)		-1.57444711211E-05		Resid phase (deg)		-33.6	+/- 7.8

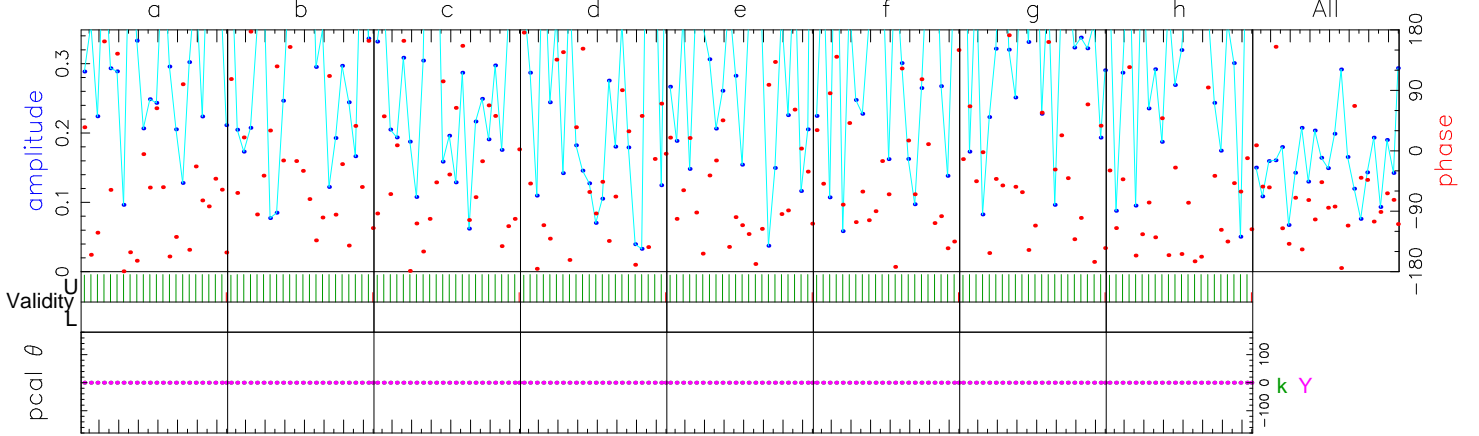
ph/seg (deg) 65.2 18.8 Theor. Amplitude 0.257 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 87.1 32.8 Search (2048X32) 0.241 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 74.5 11.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 55.4 19.3 Inc. seg. avg. 0.425 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 91.6 el 42.9 pa -64.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -11574.865 -1389.581 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/KY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/kY.W.130.18P9EC





Fringe quality 0  
 SNR 5.8  
 Int time 434.207  
 Amp 0.116  
 Phase -91.2  
 PFD 7.8e-01  
 Delays (us)  
 SBD 0.745526  
 MBD -0.005966  
 Fringe rate (Hz)  
 0.542792  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201a  
 Yr:day 16383  
 Start 2020:195:224837  
 Stop 2020:197:120825  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120825  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



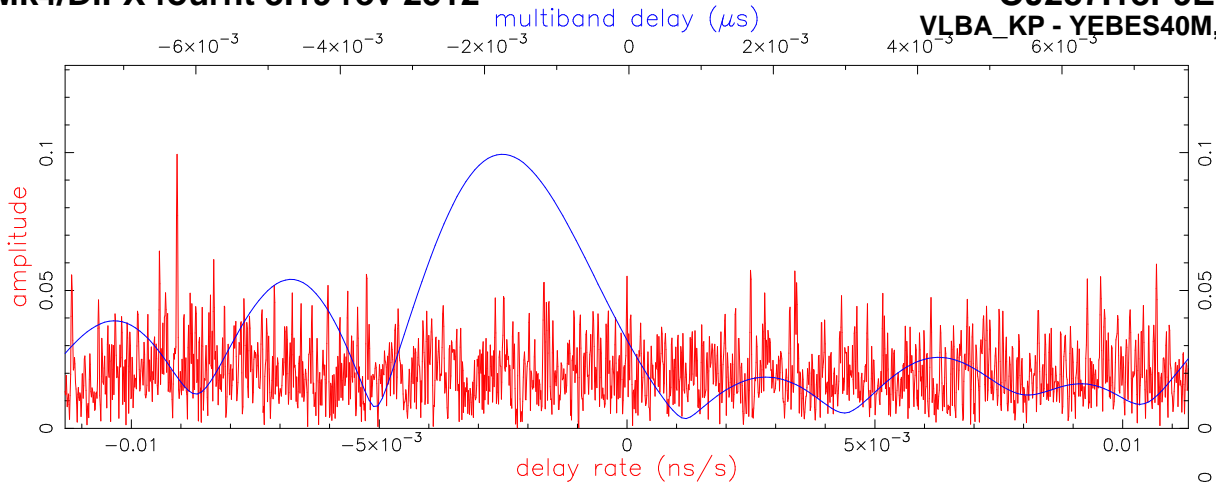
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-102.8	-71.2	-82.0	-135.9	-92.2	-90.2	-66.4	-105.3	Phase	-91.2
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	50.6	41.5	137.5	349.6	37.5	307.1	494.1	497.7	Sbd box	447.9
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.07445388891E+03		Apriori delay (usec)		2.07370985485E+03		Resid mbdelay (usec)		-5.96594E-03	+/- 1.9E-04
Sband delay (usec)	2.07445538060E+03		Apriori clock (usec)		-1.2300716E+01		Resid sbdelay (usec)		7.45526E-01	+/- 1.5E-03
Phase delay (usec)	2.07370985191E+03		Apriori clockrate (us/s)		-2.1460000E-07		Resid phdelay (usec)		-2.94101E-06	+/- 6.4E-07
Delay rate (us/s)	1.89499504342E+00		Apriori rate (us/s)		1.89498874214E+00		Resid rate (us/s)		6.30128E-06	+/- 2.5E-09
Total phase (deg)	231.6		Apriori accel (us/s/s)		-1.57444711211E-05		Resid phase (deg)		-91.2	+/- 19.7

	RMS	Theor.	Amplitude	0.116 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	57.1	47.3	Search (2048X32)	0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	74.4	82.5	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	23.9	27.9	Inc. seg. avg.	0.135	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00
amp/frq (%)	21.6	48.6	Inc. frq. avg.	0.110					

k: az 91.6 el 42.9 pa -64.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -11574.865 -1389.581 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/KY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/kY.W.148.18P9EC

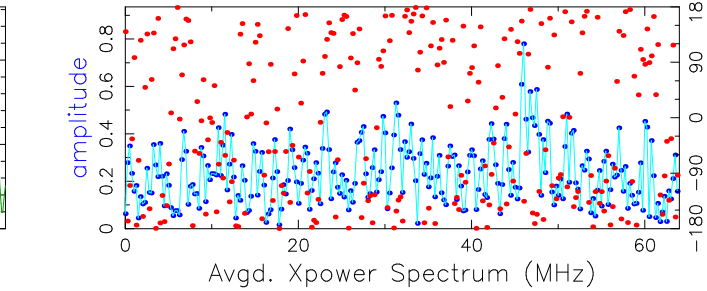
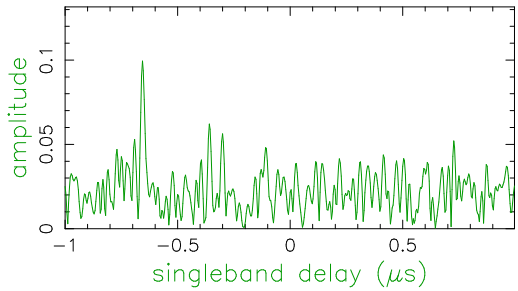
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, kY  
VLBA\_KP - YEBES40M, fgroup W, pol RL



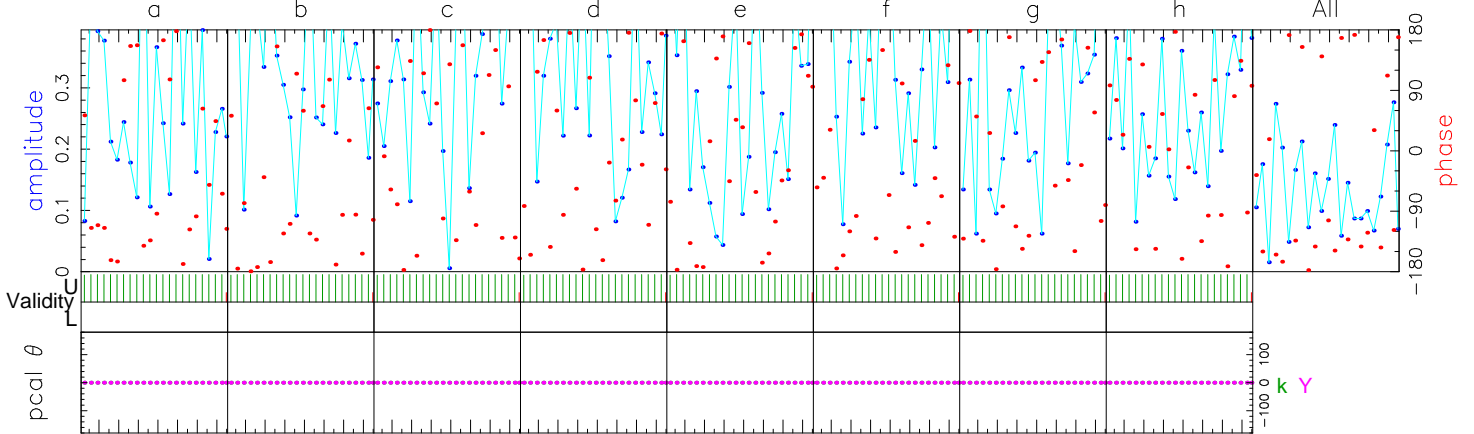
Fringe quality 0

SNR 5.7  
Int time 434.207  
Amp 0.132  
Phase -154.5  
PFD 9.7e-01  
Delays (us)  
SBD -0.655864  
MBD -0.001753  
Fringe rate (Hz)  
-0.783114  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120828  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec

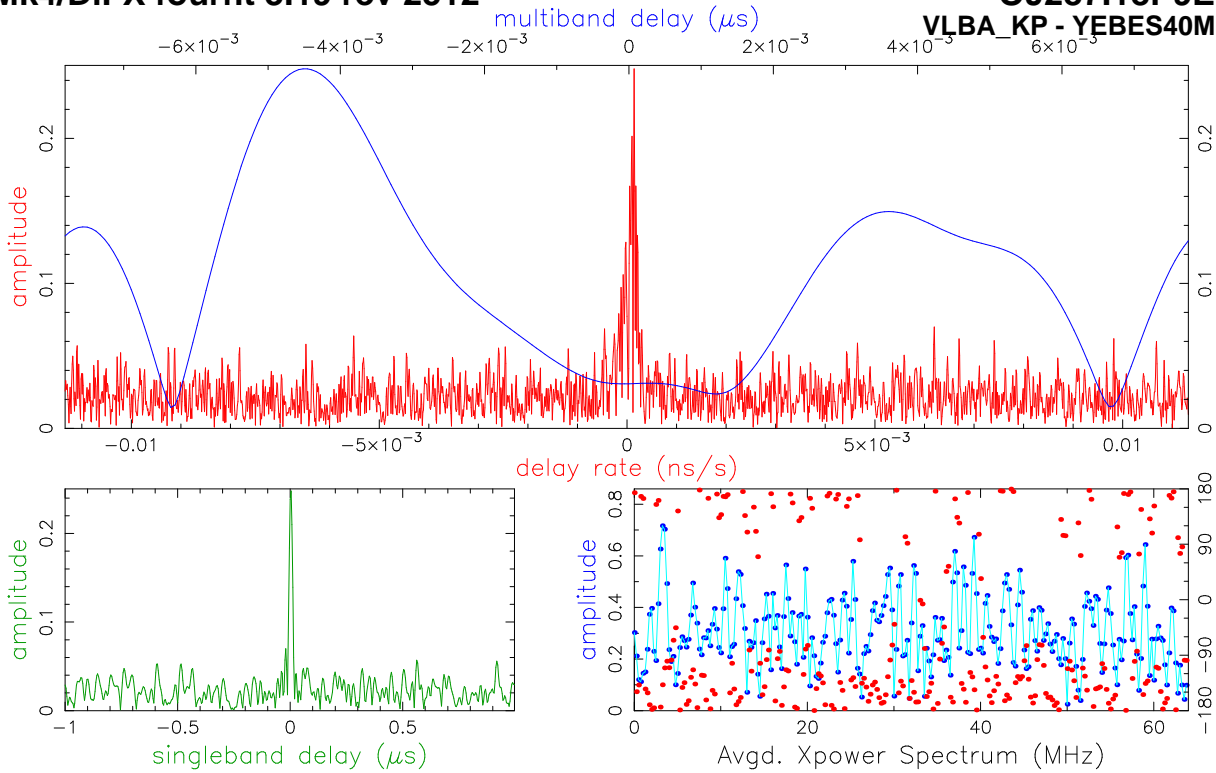


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-145.1	-160.3	177.7	-153.8	-162.6	-110.7	-139.9	130.5	Phase	-154.5
	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	Ampl.	0.1
	226.2	106.1	80.1	166.3	486.7	130.9	462.4	324.3	Sbd box	89.1
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.07305185181E+03	Apriori delay (usec)	2.07370985485E+03	Resid mbdelay (usec)	-1.75304E-03	+/-	1.9E-04
Sband delay (usec)	2.07305399135E+03	Apriori clock (usec)	-1.2300716E+01	Resid sbdelay (usec)	-6.55864E-01	+/-	1.5E-03
Phase delay (usec)	2.07370984987E+03	Apriori clockrate (us/s)	-2.1460000E-07	Resid phdelay (usec)	-4.98286E-06	+/-	6.5E-07
Delay rate (us/s)	1.89497965096E+00	Apriori rate (us/s)	1.89498874214E+00	Resid rate (us/s)	-9.09118E-06	+/-	2.6E-09
Total phase (deg)	168.3	Apriori accel (us/s/s)	-1.57444711211E-05	Resid phase (deg)	-154.5	+/-	20.2

ph/seg (deg)	RMS 67.1	Theor. 48.5	Amplitude Search (2048X32)	0.132 +/- 0.023	0.097	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	82.3	84.6	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	38.1	28.6	Inc. seg. avg.	0.135	0.135	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	28.8	49.9	Inc. frq. avg.	0.133	0.133	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 91.6 el 42.9 pa -64.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -11574.865 -1389.581 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/KY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/kY.W.160.18P9EC

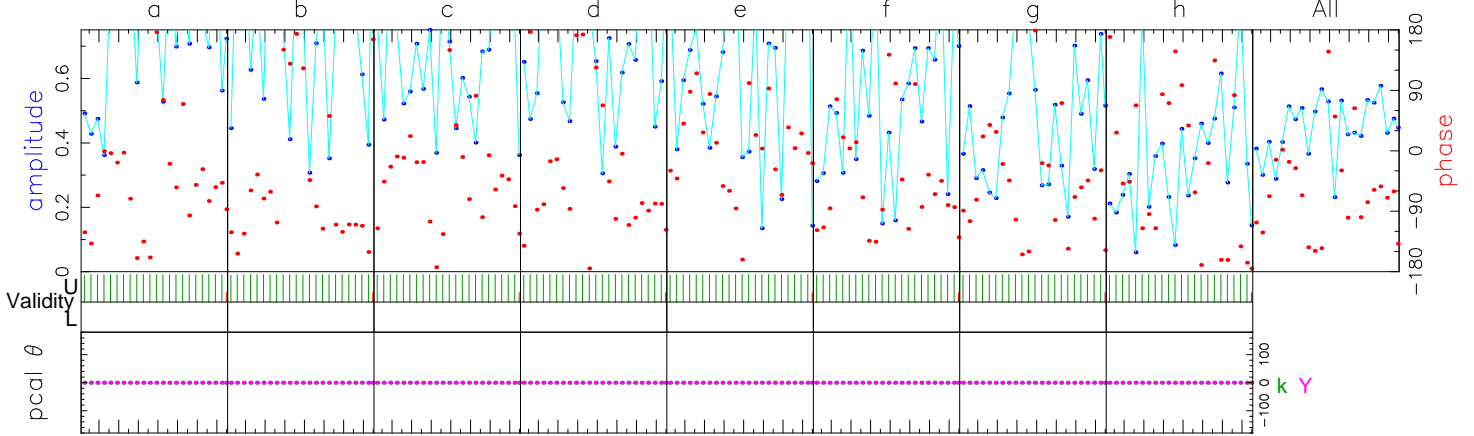


Fringe quality 7

SNR 14.3  
Int time 434.207  
Amp 0.250  
Phase -71.6  
PFD 2.1e-37  
Delays (us)  
SBD 0.002706  
MBD -0.004516  
Fringe rate (Hz) 0.012096  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120814  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



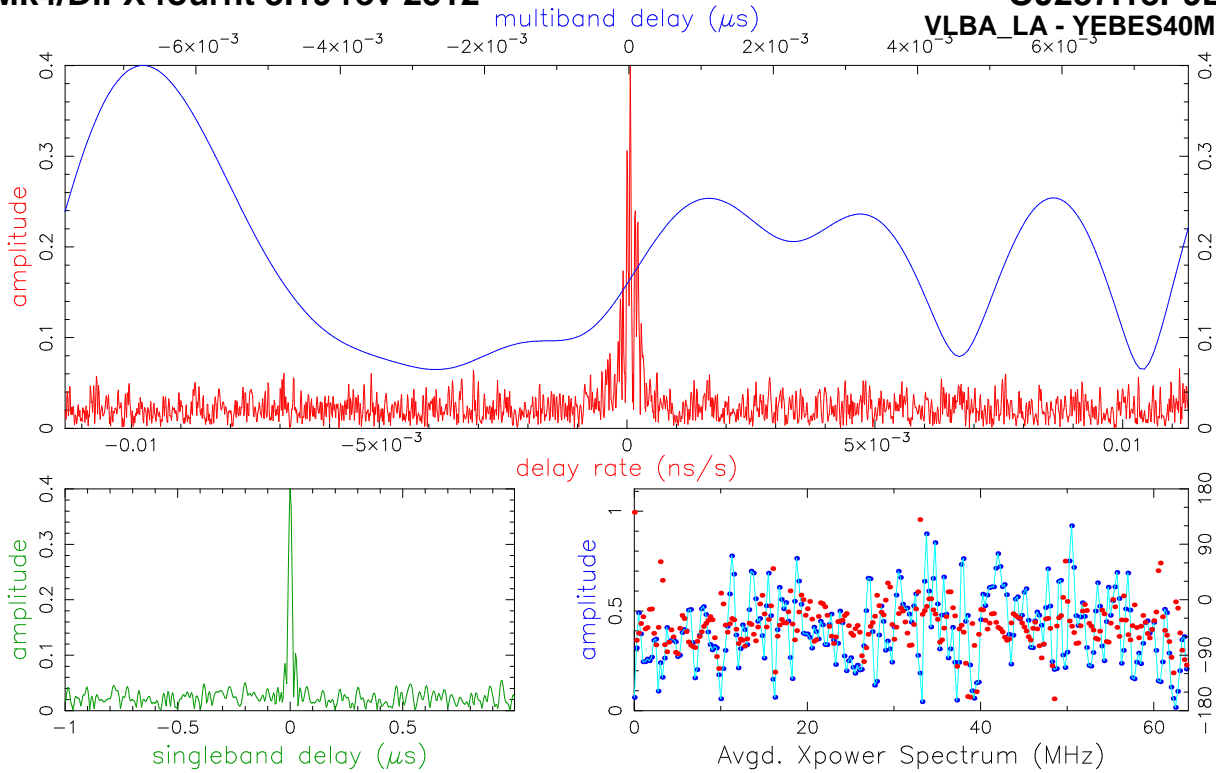
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-56.8	-117.8	-47.7	-94.8	7.9	-70.1	-80.3	-159.2	Phase	-71.6
	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.1	Ampl.	0.3
	257.5	257.4	257.3	256.8	257.4	257.4	257.0	254.0	Sbd box	257.7
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.07370533858E+03	Apriori delay (usec)	2.07370985485E+03	Resid mbdelay (usec)	-4.51627E-03	+/-	7.6E-05
Sband delay (usec)	2.07371256085E+03	Apriori clock (usec)	-1.2300716E+01	Resid sbdelay (usec)	2.70600E-03	+/-	6.0E-04
Phase delay (usec)	2.07370985254E+03	Apriori clockrate (us/s)	-2.1460000E-07	Resid phdelay (usec)	-2.30787E-06	+/-	2.6E-07
Delay rate (us/s)	1.89498888256E+00	Apriori rate (us/s)	1.89498874214E+00	Resid rate (us/s)	1.40417E-07	+/-	1.0E-09
Total phase (deg)	251.2	Apriori accel (us/s/s)	-1.57444711211E-05	Resid phase (deg)	-71.6	+/-	8.0

ph/seg (deg)	64.5	RMS	Theor.	Amplitude	0.250 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	86.1	64.5	19.3	Search (2048X32)	0.237	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	54.1	86.1	33.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	53.3	54.1	11.4	Inc. seg. avg.	0.423	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
		53.3	19.8	Inc. frq. avg.	0.319	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00	

k: az 91.6 el 42.9 pa -64.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -11574.865 -1389.581 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/KY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/kY.W.98.18P9EC

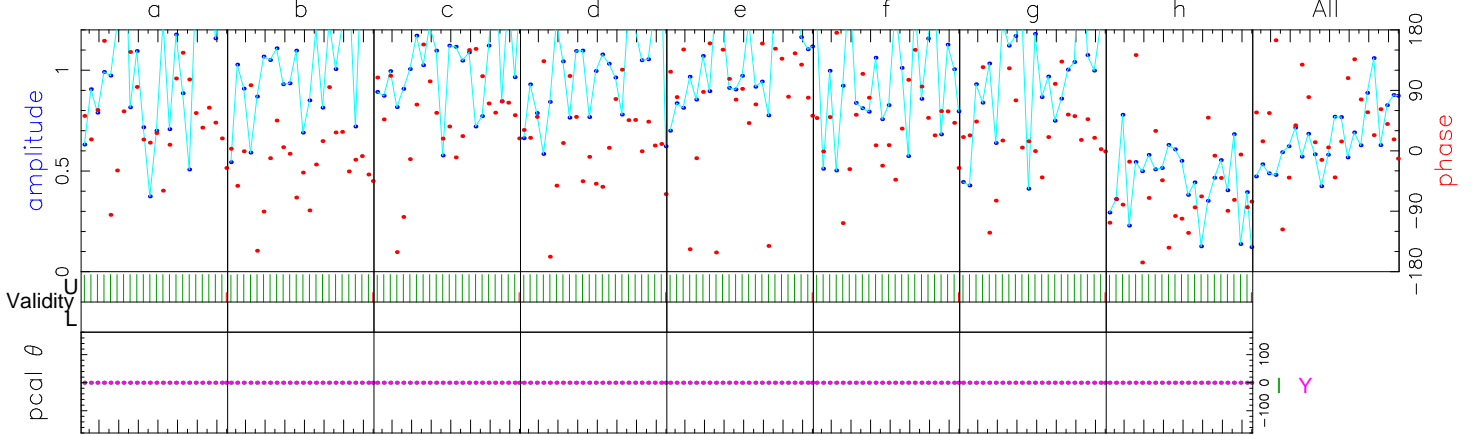


Fringe quality 7

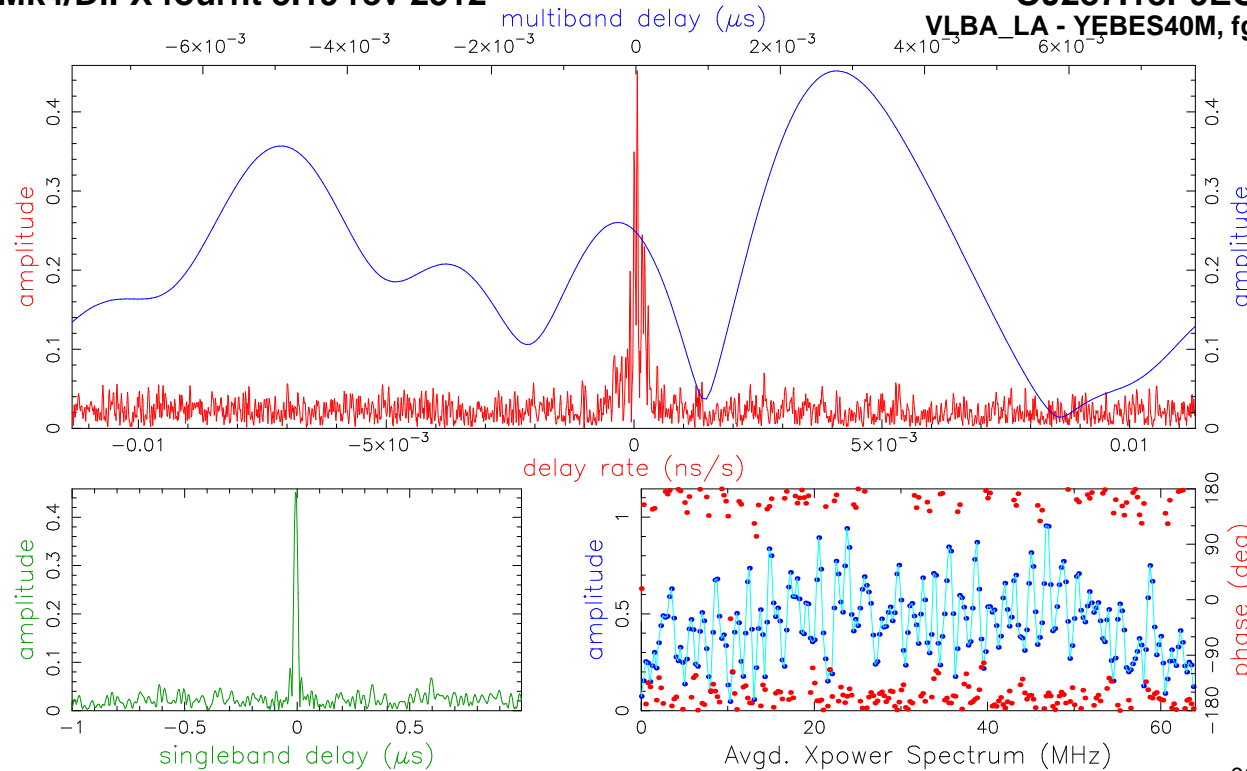
SNR 22.8  
Int time 433.867  
Amp 0.400  
Phase 38.3  
PFD 0.0e+00  
Delays (us)  
SBD 0.000139  
MBD -0.006734  
Fringe rate (Hz)  
0.005679  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120830  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0			
I	1000	1000	1000	1000	1000	1000	1000	1000			
Y	1000	1000	1000	1000	1000	1000	1000	1000			
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
I	1000	1000	1000	1000	1000	1000	1000	1000			
Y	1000	1000	1000	1000	1000	1000	1000	1000			
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)		3.11523281348E+03				3.11523954732E+03			Resid mbdelay (usec)	-6.73384E-03 +/- 4.8E-05	
Sband delay (usec)		3.11523968682E+03				-1.5643425E+01			Resid sbdelay (usec)	1.39500E-04 +/- 3.8E-04	
Phase delay (usec)		3.11523954855E+03				-3.7100000E-07			Resid phdelay (usec)	1.23450E-06 +/- 1.6E-07	
Delay rate (us/s)		1.77851014281E+00				1.77851007689E+00			Resid rate (us/s)	6.59270E-08 +/- 6.5E-10	
Total phase (deg)			256.4			-1.91631406819E-05			Resid phase (deg)	38.3 +/- 5.0	
	RMS	Theor.	Amplitude	0.400 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	62.3	12.1	Search (2048X32)	0.398					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	75.7	21.0	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	64.4	7.1	Inc. seg. avg.	0.646					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	52.9	12.4	Inc. frq. avg.	0.570					Data rate(Mb/s): 2048		ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite	

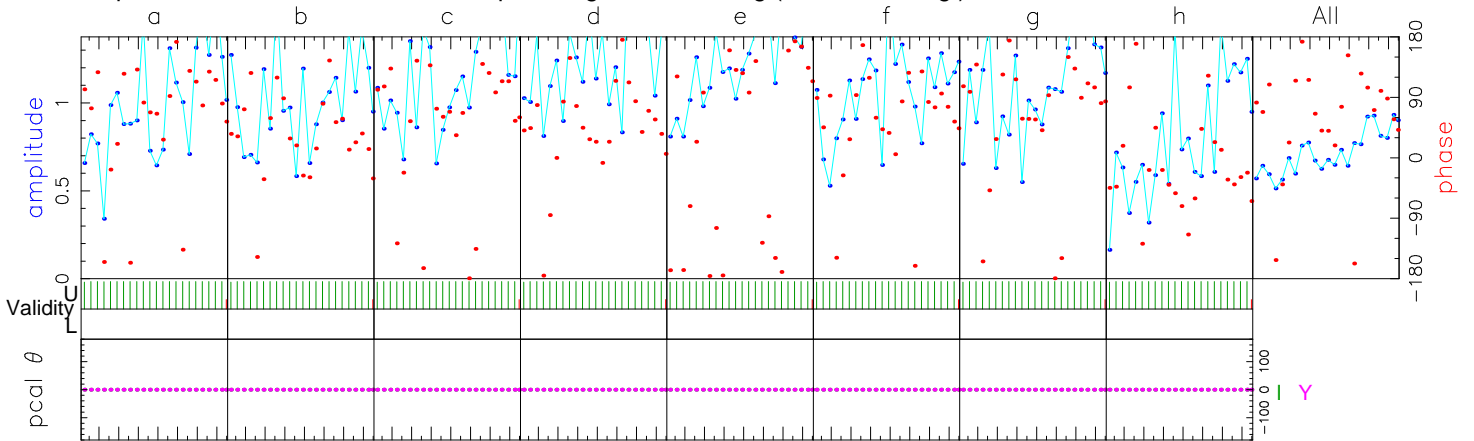


Fringe quality 5

SNR 26.1  
 Int time 433.867  
 Amp 0.459  
 Phase 87.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.006146  
 MBD 0.002815  
 Fringe rate (Hz)  
 0.005726  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120833  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec

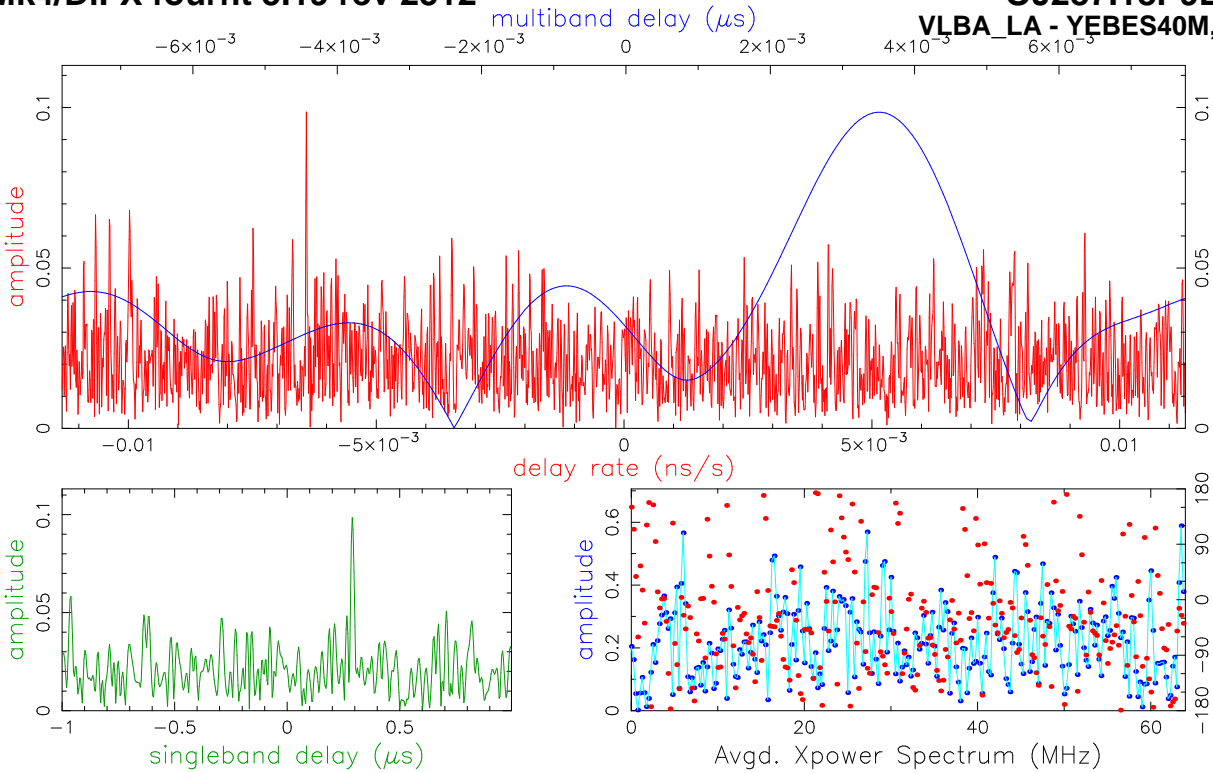


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		3.11522673779E+03				3.11523954732E+03			Resid mbdelay (usec)	2.81548E-03 +/- 4.2E-05
Sband delay (usec)		3.11523340132E+03				-1.5643425E+01			Resid sbdelay (usec)	-6.14600E-03 +/- 3.3E-04
Phase delay (usec)		3.11523955014E+03				-3.7100000E-07			Resid phdelay (usec)	2.82305E-06 +/- 1.4E-07
Delay rate (us/s)		1.77851014336E+00				1.77851007689E+00			Resid rate (us/s)	6.64719E-08 +/- 5.6E-10
Total phase (deg)			305.7			-1.91631406819E-05			Resid phase (deg)	87.5 +/- 4.4

	RMS	Theor.	Amplitude	0.459 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	58.2	10.5	Search (2048X32)	0.447	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	61.3	18.4	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	63.5	6.2	Inc. seg. avg.	0.702	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	49.6	10.8	Inc. frq. avg.	0.665	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

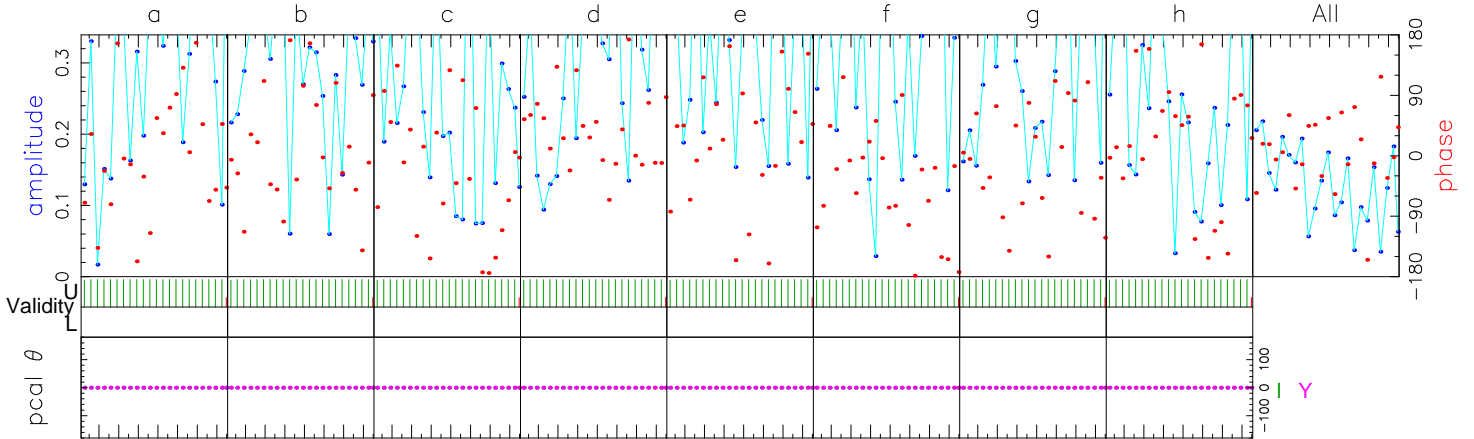
I: az 98.8 el 47.0 pa -58.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -10871.273 -1030.942 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/IY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/IY.W.178.18P9EC



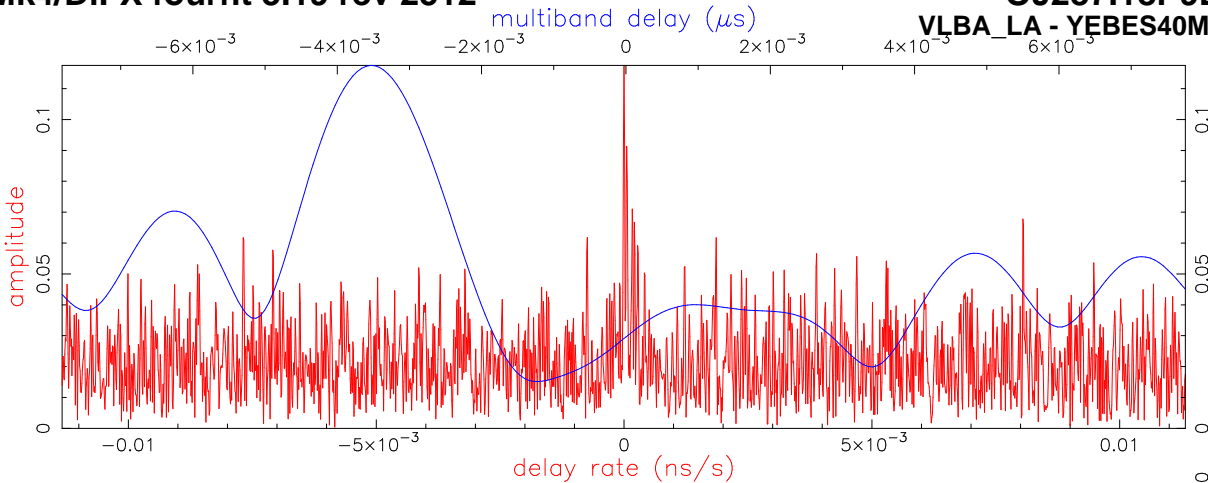


Fringe quality 0  
 SNR 5.6  
 Int time 433.867  
 Amp 0.113  
 Phase 2.4  
 PFD 9.9e-01  
 Delays (us)  
 SBD 0.289664  
 MBD 0.003507  
 Fringe rate (Hz)  
 -0.553170  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120837  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec

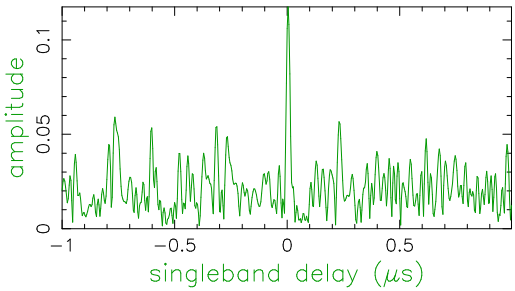


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0				
I	1000	1000	1000	1000	1000	1000	1000	1000				
Y	1000	1000	1000	1000	1000	1000	1000	1000				
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
I	1000	1000	1000	1000	1000	1000	1000	1000				
Y	1000	1000	1000	1000	1000	1000	1000	1000				
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
Group delay (usec)(sbd)		3.11552430396E+03				3.11523954732E+03			Resid mbdelay (usec)	3.50665E-03 +/- 1.9E-04		
Sband delay (usec)		3.11552921157E+03				-1.5643425E+01			Resid sbdelay (usec)	2.89664E-01 +/- 1.5E-03		
Phase delay (usec)		3.11523954739E+03				-3.7100000E-07			Resid phdelay (usec)	7.67298E-08 +/- 6.6E-07		
Delay rate (us/s)		1.77850365513E+00				1.77851007689E+00			Resid rate (us/s)	-6.42176E-06 +/- 2.6E-09		
Total phase (deg)			220.5			-1.91631406819E-05			Resid phase (deg)	2.4 +/- 20.4		
	RMS	Theor.	Amplitude	0.113 +/- 0.020					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	56.2	48.8	Search (2048X32)	0.097					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	63.7	85.2	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	32.8	28.8	Inc. seg. avg.	0.111					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	54.5	50.3	Inc. frq. avg.	0.115					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

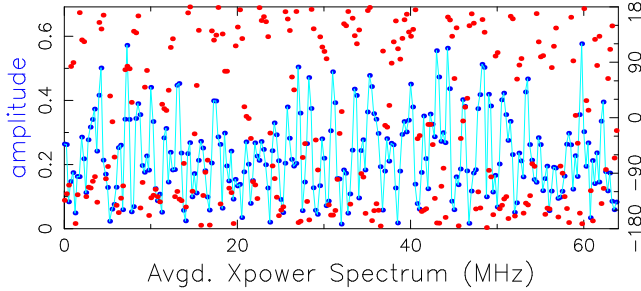


Fringe quality 0

SNR 6.7  
 Int time 433.867  
 Amp 0.118  
 Phase -84.3  
 PFD 6.2e-03  
 Delays (us)  
 SBD 0.004098  
 MBD -0.003520  
 Fringe rate (Hz)  
 0.000248  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

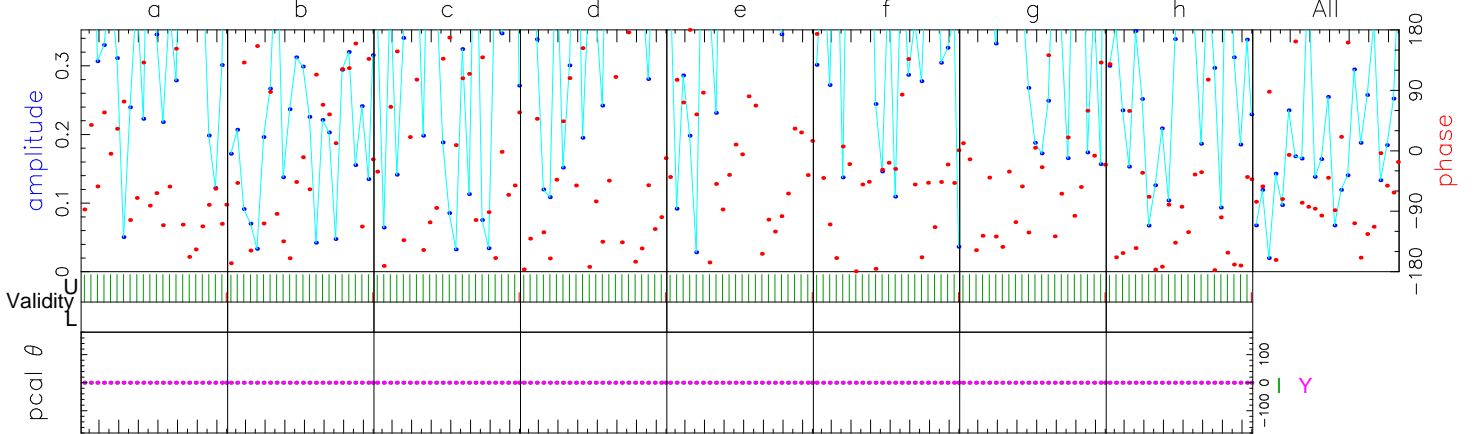


delay rate (ns/s)



Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120841  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



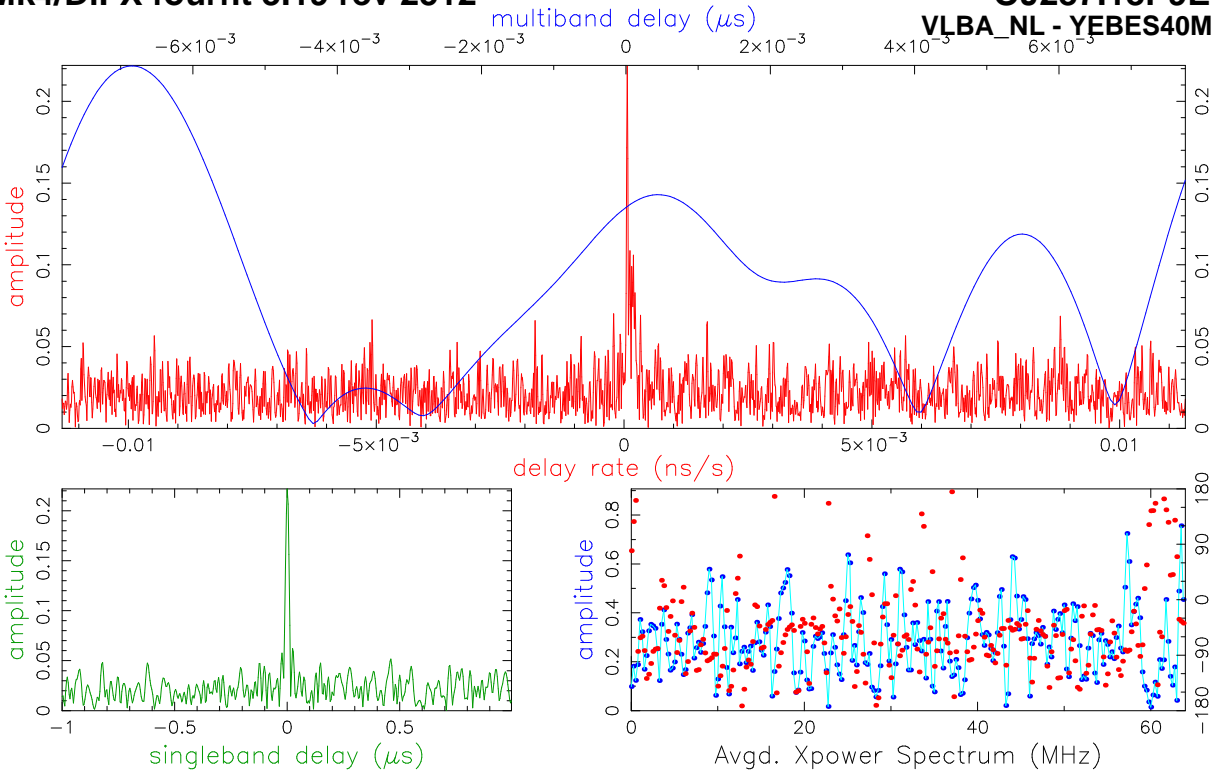
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	3.11523602685E+03	Apriori delay (usec)	3.11523954732E+03	Resid mbdelay (usec)	-3.52047E-03	+/-	1.6E-04
Sband delay (usec)	3.11524364557E+03	Apriori clock (usec)	-1.5643425E+01	Resid sbdelay (usec)	4.09825E-03	+/-	1.3E-03
Phase delay (usec)	3.11523954460E+03	Apriori clockrate (us/s)	-3.7100000E-07	Resid phdelay (usec)	-2.71916E-06	+/-	5.5E-07
Delay rate (us/s)	1.77851007976E+00	Apriori rate (us/s)	1.77851007689E+00	Resid rate (us/s)	2.87958E-09	+/-	2.2E-09
Total phase (deg)	133.8	Apriori accel (us/s/s)	-1.91631406819E-05	Resid phase (deg)	-84.3	+/-	17.1

ph/seg (deg)	67.0	Theor.	41.0	Amplitude	0.118 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	103.5		71.6	Search (2048X32)	0.115	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	41.3		24.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	57.0		42.3	Inc. seg. avg.	0.148	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.130	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

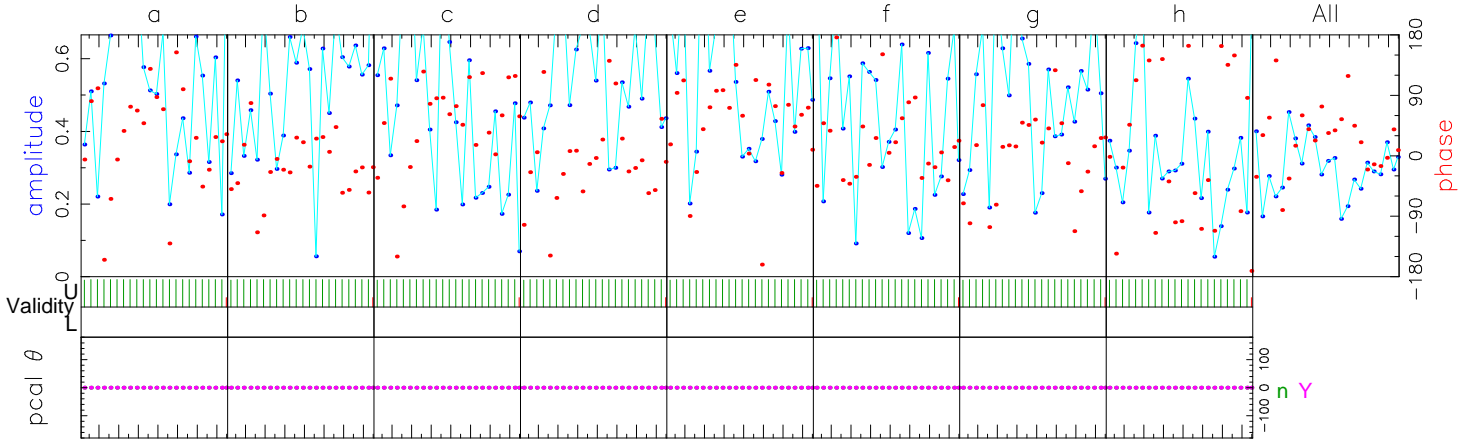
I: az 98.8 el 47.0 pa -58.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -10871.273 -1030.942 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/IY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/IY.W.208.18P9EC



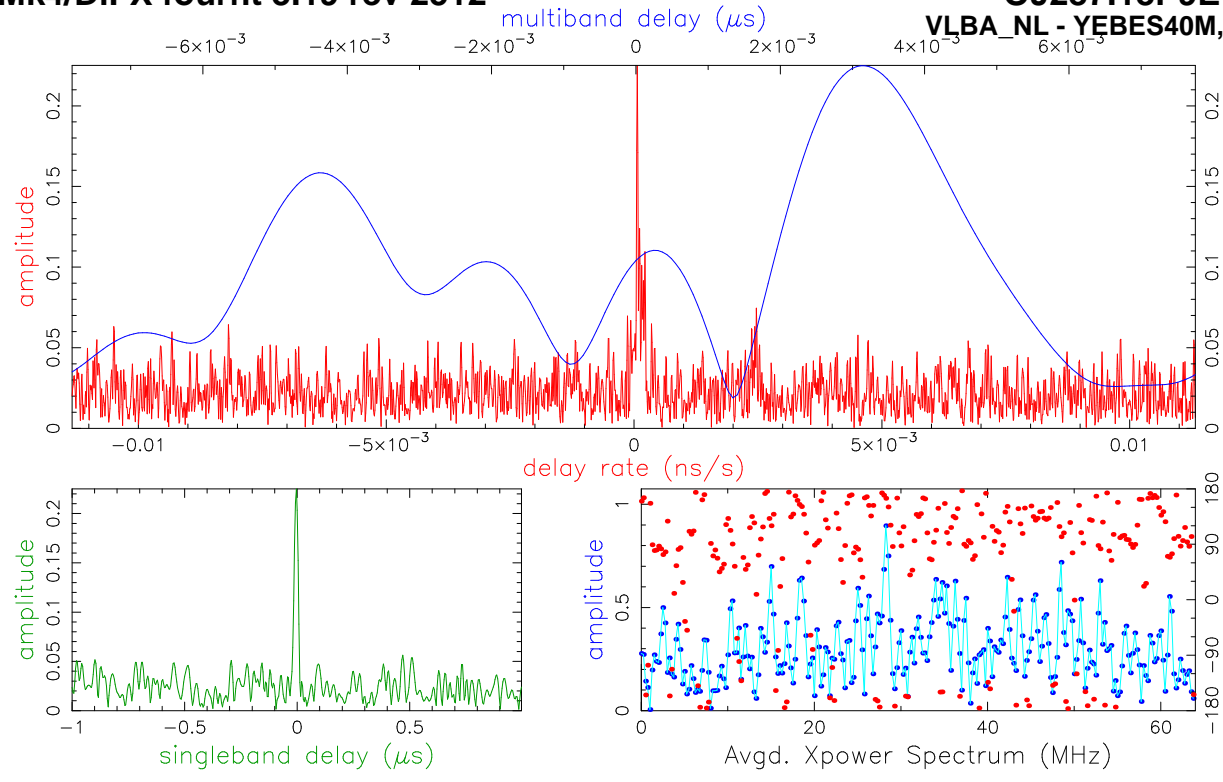
Fringe quality 9  
SNR 12.6  
Int time 433.686  
Amp 0.222  
Phase 20.0  
PFD 6.8e-28  
Delays (us)  
SBD 0.000496  
MBD -0.006844  
Fringe rate (Hz)  
0.005889  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120832  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



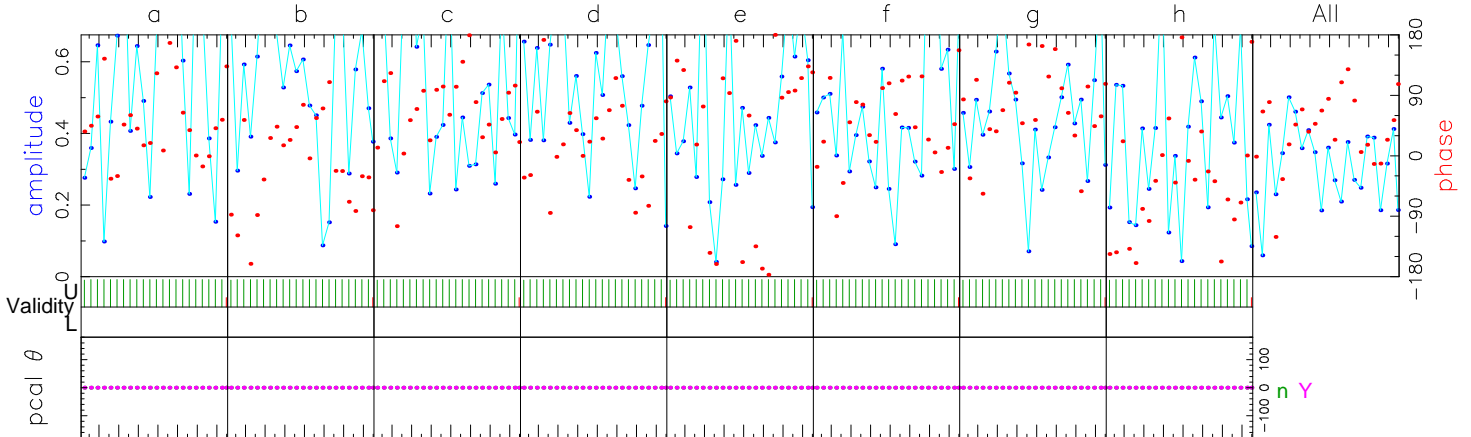
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		5.12182931945E+03				5.12183616335E+03			Resid mbdelay (usec)	-6.84390E-03 +/- 8.6E-05
Sband delay (usec)		5.12183665960E+03				2.0293976E+01			Resid sbdelay (usec)	4.96250E-04 +/- 6.8E-04
Phase delay (usec)		5.12183616399E+03				1.1399998E-07			Resid phdelay (usec)	6.44800E-07 +/- 2.9E-07
Delay rate (us/s)		1.49024992482E+00				1.49024985646E+00			Resid rate (us/s)	6.83673E-08 +/- 1.2E-09
Total phase (deg)			59.9			-2.64965587409E-05			Resid phase (deg)	20.0 +/- 9.1

ph/seg (deg) 49.1 21.7 Search (2048X32) 0.219 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 49.4 37.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 81.7 12.8 Inc. seg. avg. 0.280 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 53.9 22.4 Inc. frq. avg. 0.283 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 120.0 el 55.9 pa -43.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -9127.465 -572.992 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/nY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/nY.W.172.18P9EC



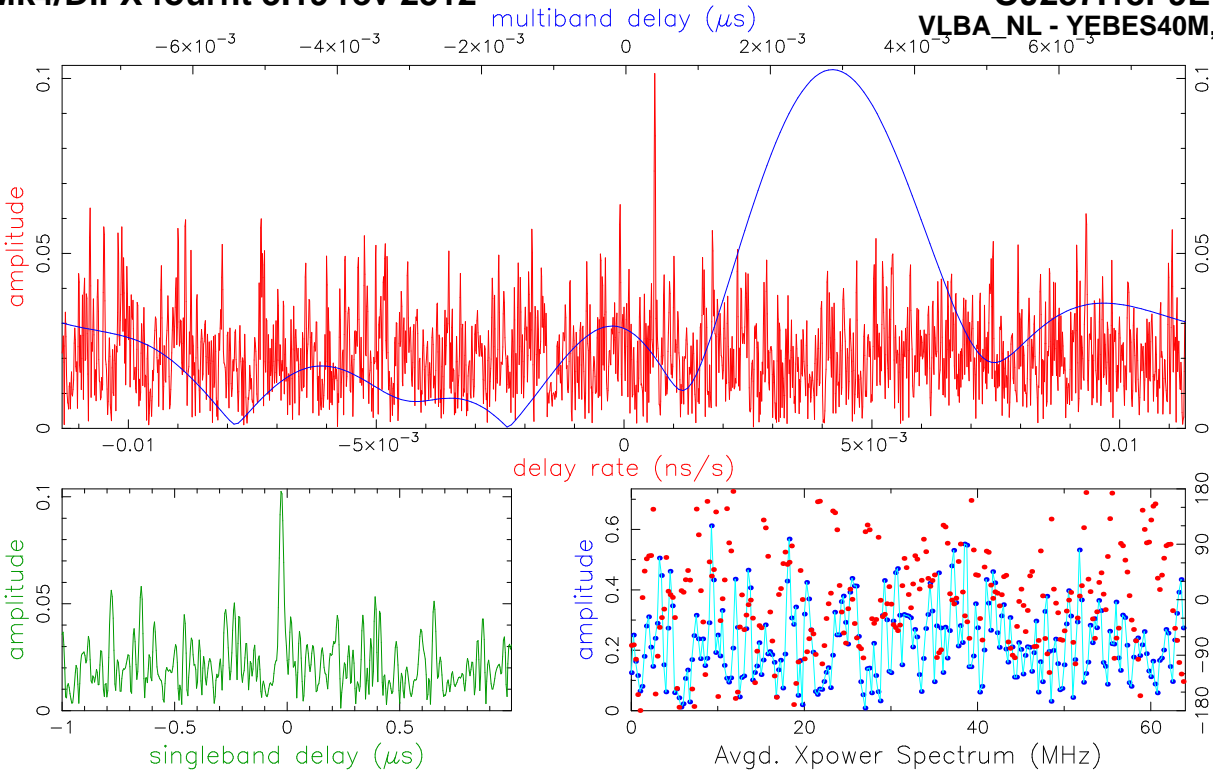
Fringe quality 9  
 SNR 12.8  
 Int time 433.686  
 Amp 0.225  
 Phase 41.3  
 PFD 7.1e-29  
 Delays (us)  
 SBD -0.004301  
 MBD 0.003131  
 Fringe rate (Hz) 0.006117  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120837  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



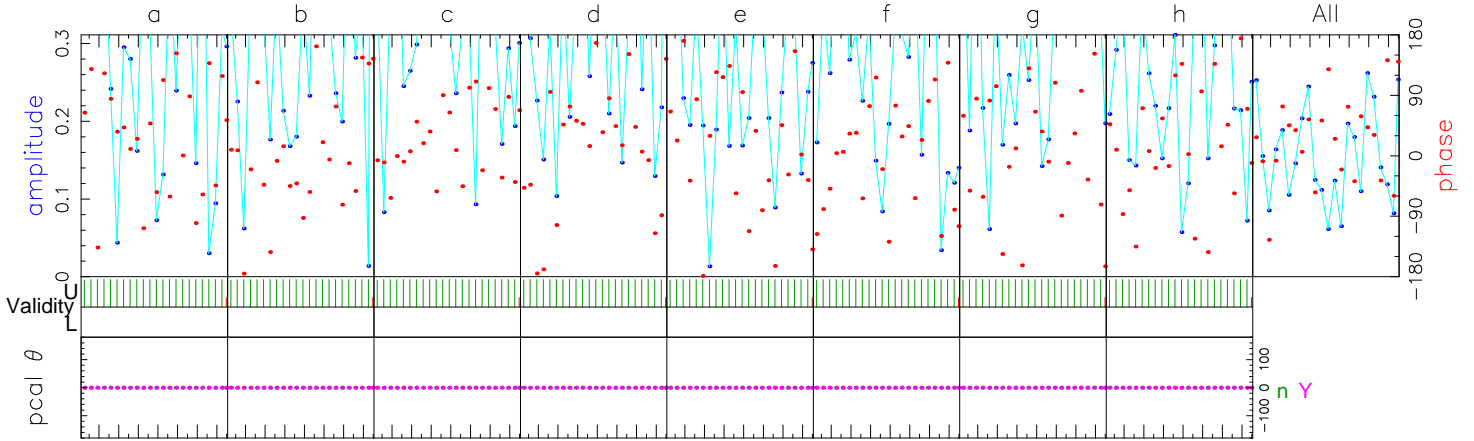
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Y	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)		5.12183929420E+03		Apriori delay (usec)	5.12183616335E+03		Resid mbdelay (usec)	3.13085E-03	+/-	8.5E-05
Sband delay (usec)		5.12183186260E+03		Apriori clock (usec)	2.0293976E+01		Resid sbdelay (usec)	-4.30075E-03	+/-	6.7E-04
Phase delay (usec)		5.12183616468E+03		Apriori clockrate (us/s)	1.1399998E-07		Resid phdelay (usec)	1.33199E-06	+/-	2.9E-07
Delay rate (us/s)		1.49024992747E+00		Apriori rate (us/s)	1.49024985646E+00		Resid rate (us/s)	7.10145E-08	+/-	1.1E-09
Total phase (deg)			81.2	Apriori accel (us/s/s)	-2.64965587409E-05		Resid phase (deg)	41.3	+/-	8.9

ph/seg (deg) 53.4 21.4 Search (2048X32) 0.211 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 61.4 37.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 55.7 12.6 Inc. seg. avg. 0.295 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 41.7 22.1 Inc. frq. avg. 0.300 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 120.0 el 55.9 pa -43.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -9127.465 -572.992 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/nY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/nY.W.189.18P9EC



Fringe quality 0  
 SNR 5.9  
 Int time 433.686  
 Amp 0.104  
 Phase 28.4  
 PFD 6.0e-01  
 Delays (us)  
 SBD -0.025764  
 MBD 0.002683  
 Fringe rate (Hz)  
 0.053206  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120842  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec

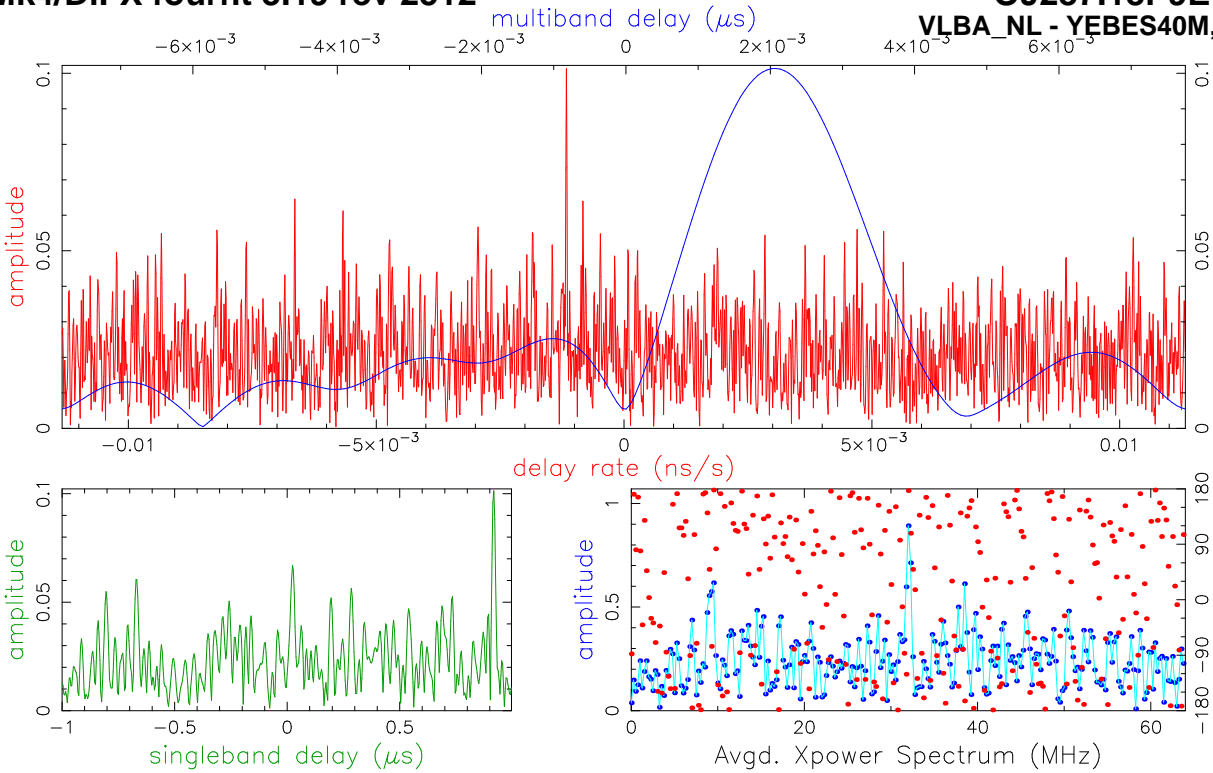


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		5.12180759616E+03				5.12183616335E+03			Resid mbdelay (usec)	2.68281E-03 +/- 1.8E-04
Sband delay (usec)		5.12181039910E+03				2.0293976E+01			Resid sbdelay (usec)	-2.57642E-02 +/- 1.5E-03
Phase delay (usec)		5.12183616426E+03				1.1399998E-07			Resid phdelay (usec)	9.14684E-07 +/- 6.3E-07
Delay rate (us/s)		1.49025047412E+00				1.49024985646E+00			Resid rate (us/s)	6.17666E-07 +/- 2.5E-09
Total phase (deg)			68.3			-2.64965587409E-05			Resid phase (deg)	28.4 +/- 19.4

	RMS	Theor.	Amplitude	0.104 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	62.2	46.6	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	75.7	81.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	22.2	27.5	Inc. seg. avg.	0.116	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	44.5	47.9	Inc. frq. avg.	0.096	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

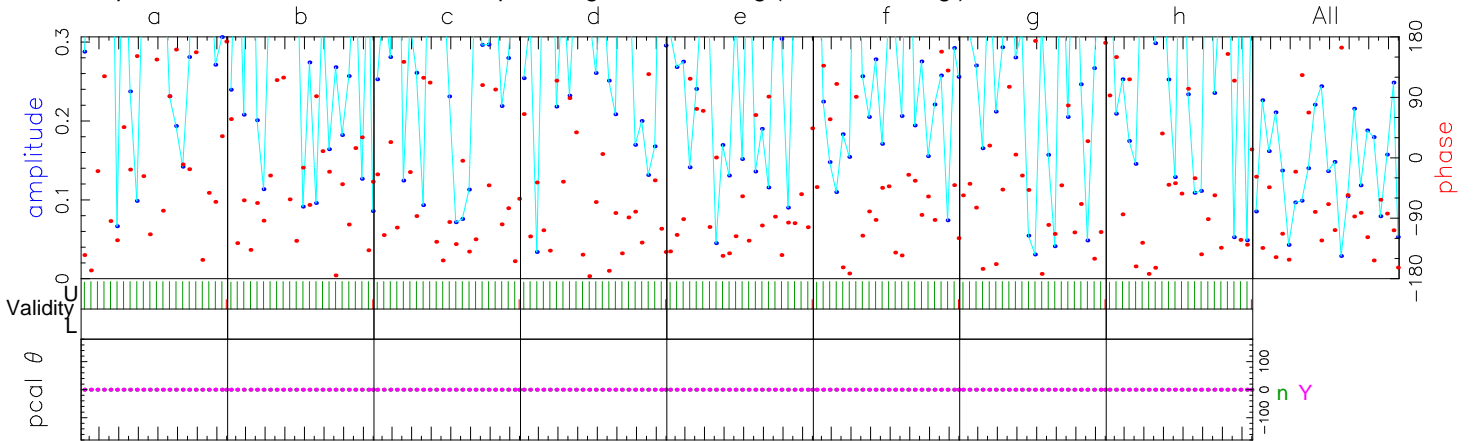
n: az 120.0 el 55.9 pa -43.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -9127.465 -572.992 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/nY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/nY.W.215.18P9EC





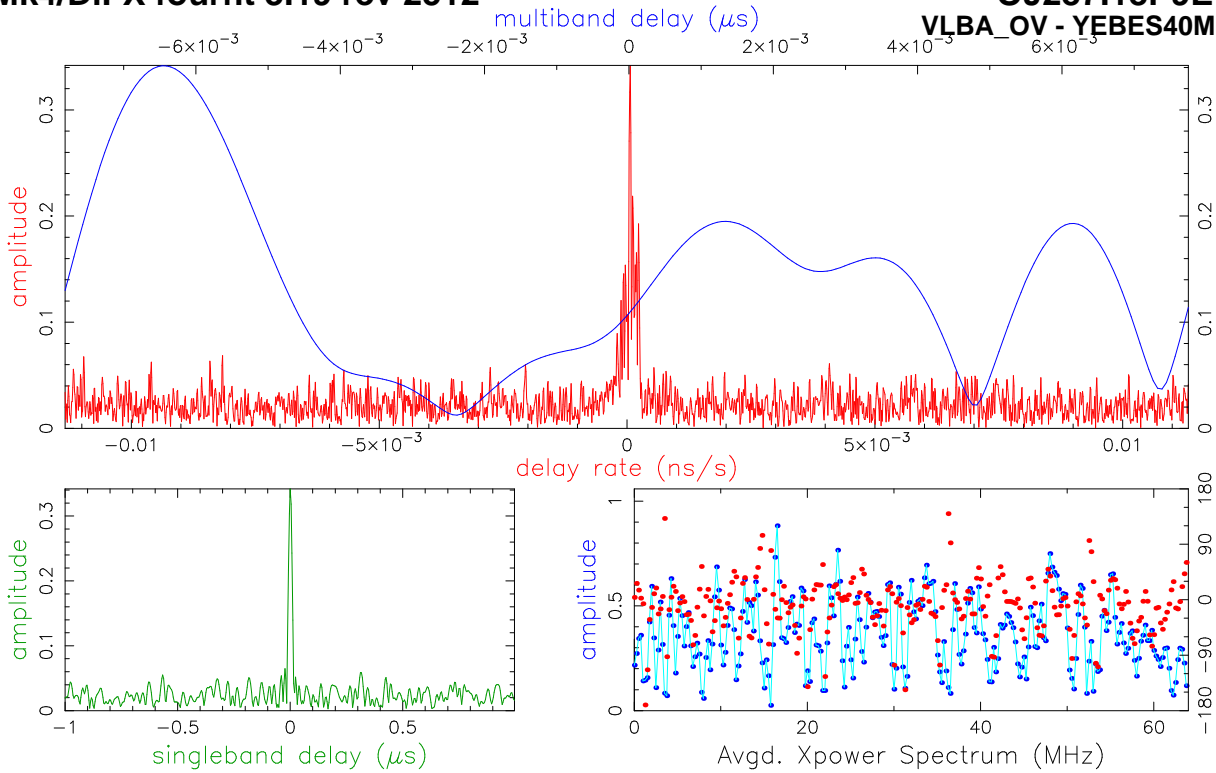
Fringe quality 0  
 SNR 5.8  
 Int time 433.686  
 Amp 0.102  
 Phase -101.9  
 PFD 8.2e-01  
 Delays (us)  
 SBD 0.917103  
 MBD 0.002019  
 Fringe rate (Hz)  
 -0.100291  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120846  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-112.6	-87.3	-111.5	-113.4	-105.3	-76.0	-76.3	-127.4	Phase	-101.9
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	331.8	217.4	345.8	50.3	91.7	85.4	165.0	482.8	Sbd box	491.8
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.12276005742E+03		Apriori delay (usec)		5.12183616335E+03		Resid mbdelay (usec)		2.01907E-03	+/- 1.9E-04
Sband delay (usec)	5.12275326660E+03		Apriori clock (usec)		2.0293976E+01		Resid sbdelay (usec)		9.17103E-01	+/- 1.5E-03
Phase delay (usec)	5.12183616006E+03		Apriori clockrate (us/s)		1.1399998E-07		Resid phdelay (usec)		-3.28651E-06	+/- 6.4E-07
Delay rate (us/s)	1.49024869218E+00		Apriori rate (us/s)		1.49024985646E+00		Resid rate (us/s)		-1.16428E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.64965587409E-05		Resid phase (deg)		-101.9	+/- 19.8

ph/seg (deg) 62.7 47.4 Search (2048X32) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 75.9 82.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 20.6 28.0 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 21.4 48.8 Inc. frq. avg. 0.095 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 120.0 el 55.9 pa -43.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -9127.465 -572.992 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

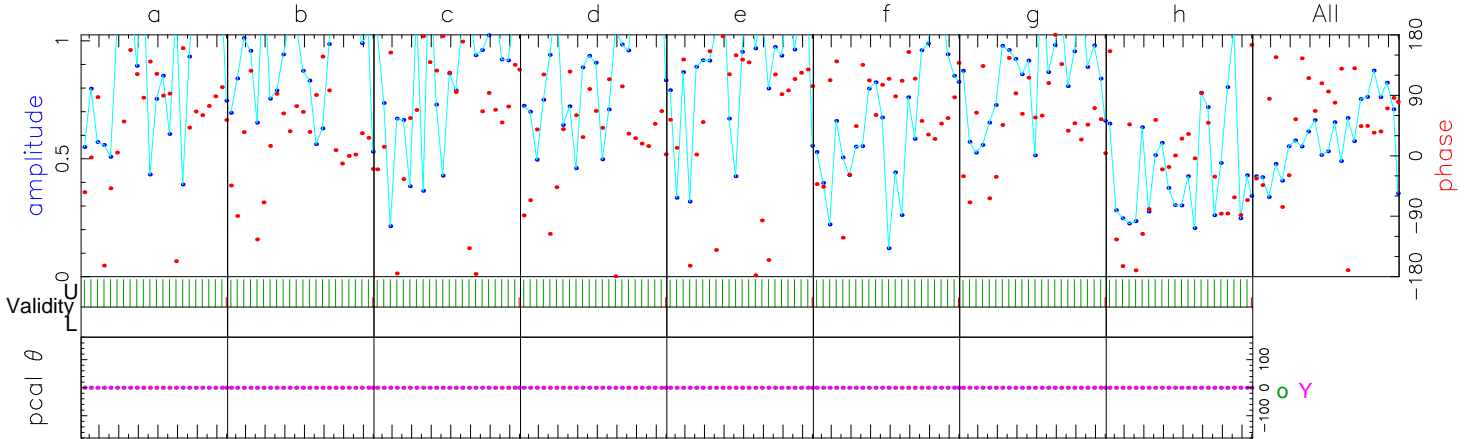


Fringe quality 7

SNR 19.5  
Int time 434.187  
Amp 0.342  
Phase 74.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.000489  
MBD -0.006435  
Fringe rate (Hz)  
0.005858  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

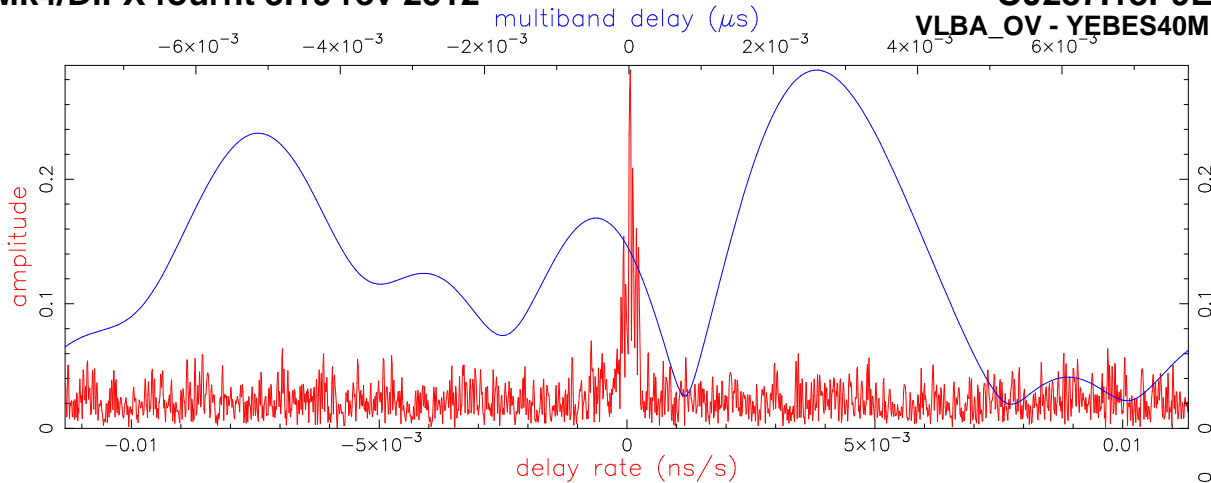
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120833  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



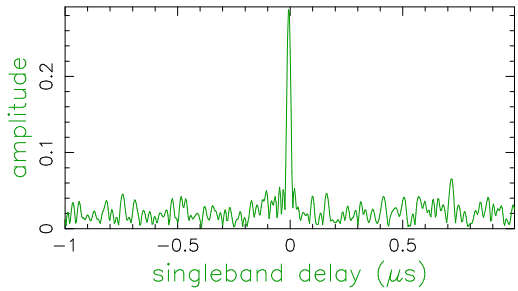
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	84.5	28.9	109.6	46.3	136.2	71.8	65.7	-39.1	Ampl.	74.2
o	0.5	0.5	0.4	0.5	0.5	0.4	0.5	0.1	Ampl.	0.4
Y	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.1
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
Y	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	4.87417824332E+02		Apriori delay (usec)		4.87424259544E+02		Resid mbdelay (usec)		-6.43521E-03	+/- 5.6E-05
Sband delay (usec)	4.87424748794E+02		Apriori clock (usec)		8.1096716E+00		Resid sbdelay (usec)		4.89250E-04	+/- 4.4E-04
Phase delay (usec)	4.87424261936E+02		Apriori clockrate (us/s)		-1.8999993E-08		Resid phdelay (usec)		2.39196E-06	+/- 1.9E-07
Delay rate (us/s)	1.91735857915E+00		Apriori rate (us/s)		1.91735851114E+00		Resid rate (us/s)		6.80088E-08	+/- 7.6E-10
Total phase (deg)	332.3		Apriori accel (us/s/s)		-4.27679134335E-06		Resid phase (deg)		74.2	+/- 5.9

ph/seg (deg) 66.0 14.1 Search (2048X32) 0.338 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 85.0 24.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 59.1 8.3 Inc. seg. avg. 0.577 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 46.2 14.5 Inc. frq. avg. 0.435 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
o: az 92.1 el 37.2 pa -57.9 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -11693.116 -430.488 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/oY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/oY.W.176.18P9EC

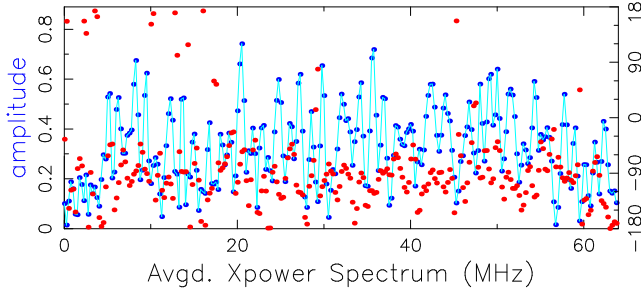


Fringe quality 7

SNR 16.6  
Int time 434.187  
Amp 0.291  
Phase 160.0  
PFD 0.0e+00  
Delays (us)  
SBD -0.006282  
MBD 0.002605  
Fringe rate (Hz)  
0.005744  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

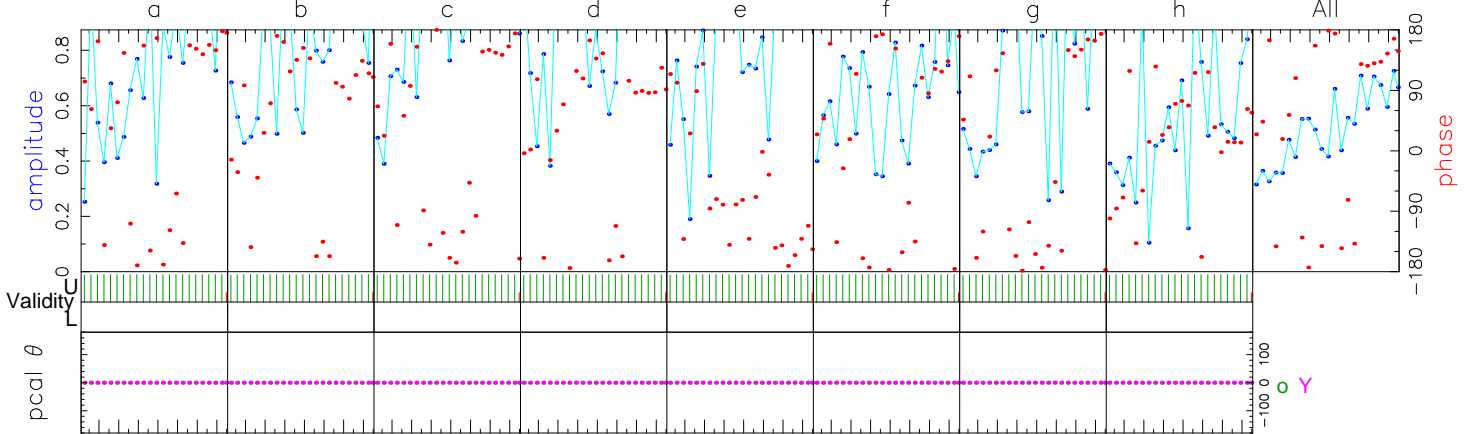


delay rate (ns/s)



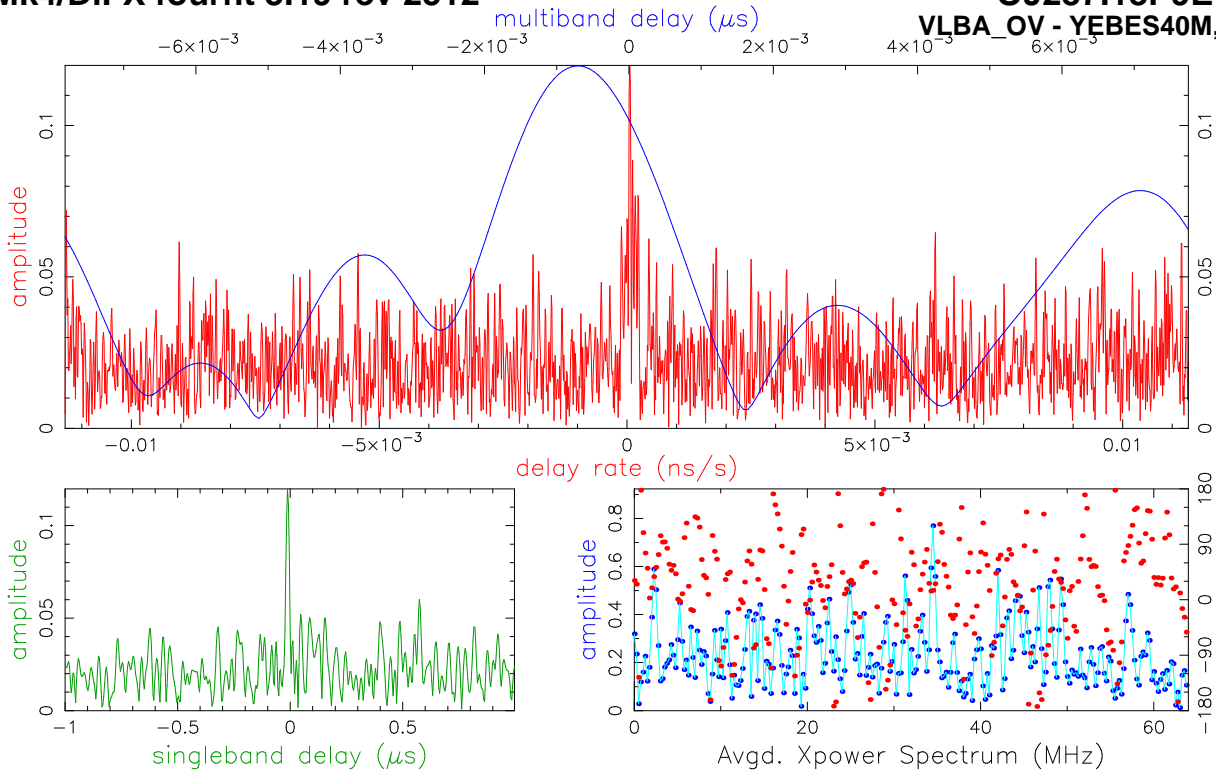
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120837  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



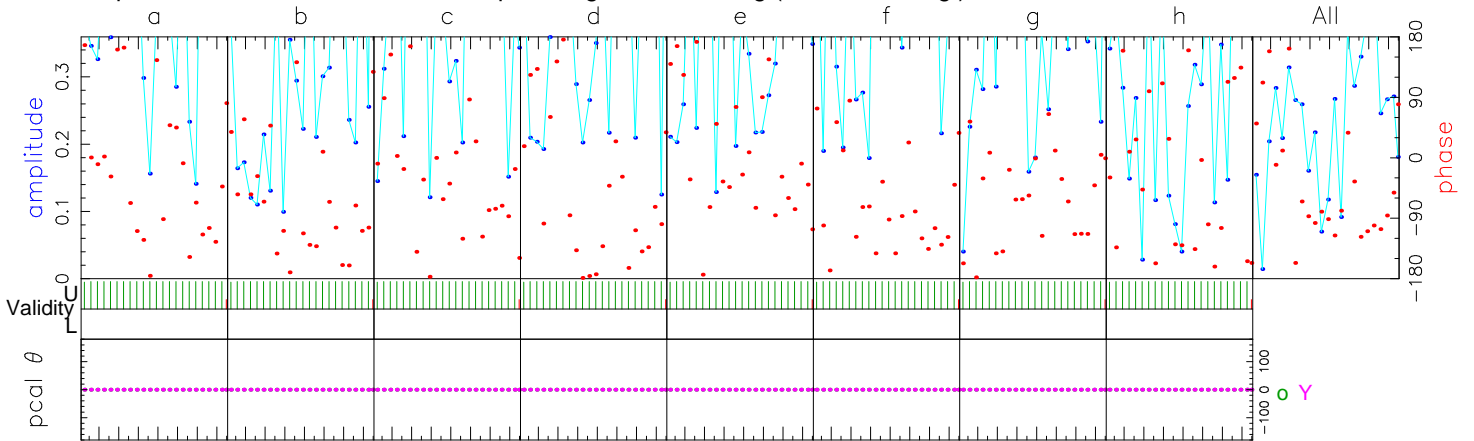
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	173.5	121.6	-176.1	109.7	-123.2	149.9	-179.1	44.9	Phase	160.0
o	0.5	0.4	0.5	0.5	0.4	0.3	0.5	0.2	Ampl.	0.4
Y	255.8	254.9	255.2	255.4	255.1	254.4	254.1	252.0	Sbd box	255.4
o	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.87411239426E+02		Apriori delay (usec)		4.87424259544E+02		Resid mbdelay (usec)		2.60488E-03	+/- 6.5E-05
Sband delay (usec)	4.87417977794E+02		Apriori clock (usec)		8.1096716E+08		Resid sbdelay (usec)		-6.28175E-03	+/- 5.2E-04
Phase delay (usec)	4.87424264703E+02		Apriori clockrate (us/s)		-1.8999993E-08		Resid phdelay (usec)		5.15897E-06	+/- 2.2E-07
Delay rate (us/s)	1.91735857782E+00		Apriori rate (us/s)		1.91735851114E+00		Resid rate (us/s)		6.66859E-08	+/- 8.9E-10
Total phase (deg)	58.2		Apriori accel (us/s/s)		-4.27679134335E-06		Resid phase (deg)		160.0	+/- 6.9

ph/seg (deg) 68.9 16.5 Search (2048X32) 0.285 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 88.6 28.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 63.8 9.8 Inc. seg. avg. 0.495 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 52.4 17.0 Inc. frq. avg. 0.409 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
o: az 92.1 el 37.2 pa -57.9 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -11693.116 -430.488 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/oY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/oY.W.191.18P9EC



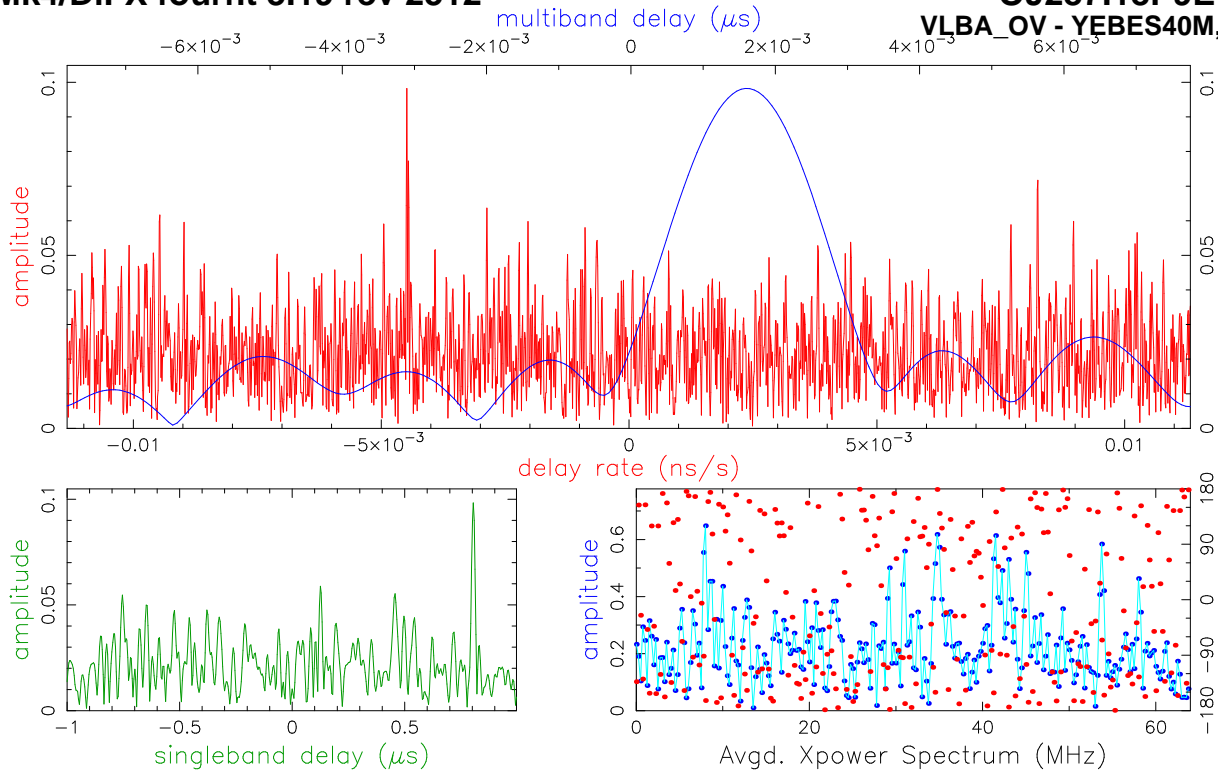
Fringe quality 0  
SNR 6.8  
Int time 434.187  
Amp 0.120  
Phase -87.2  
PFD 2.5e-03  
Delays (us)  
SBD -0.011196  
MBD -0.000706  
Fringe rate (Hz) 0.005081  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120842  
2020:014:135814  
RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



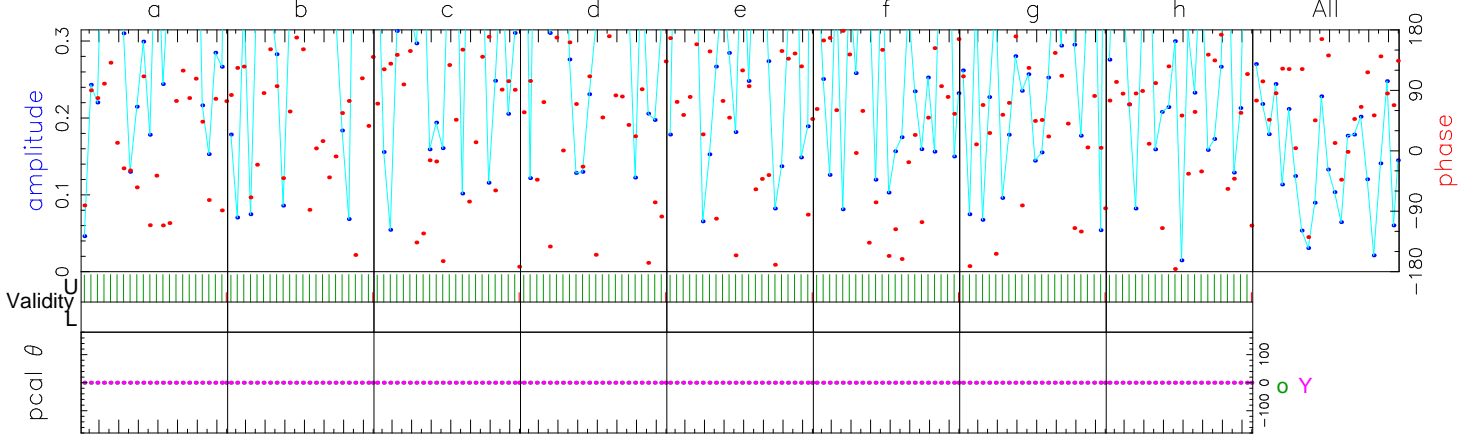
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-88.2	-119.2	-46.8	-126.0	-48.6	-105.4	-63.0	165.3	Phase	-87.2
	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	Ampl.	0.1
	394.3	252.9	339.2	61.1	254.0	253.2	253.7	415.7	Sbd box	254.1
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.87407928770E+02		Apriori delay (usec)		4.87424259544E+02		Resid mbdelay (usec)		-7.05774E-04	+/- 1.6E-04
Sband delay (usec)	4.87413064044E+02		Apriori clock (usec)		8.1096716E+00		Resid sbdelay (usec)		-1.11955E-02	+/- 1.3E-03
Phase delay (usec)	4.87424256731E+02		Apriori clockrate (us/s)		-1.8999993E-08		Resid phdelay (usec)		-2.81284E-06	+/- 5.4E-07
Delay rate (us/s)	1.91735857012E+00		Apriori rate (us/s)		1.91735851114E+00		Resid rate (us/s)		5.89874E-08	+/- 2.2E-09
Total phase (deg)	170.9		Apriori accel (us/s/s)		-4.27679134335E-06		Resid phase (deg)		-87.2	+/- 16.8

ph/seg (deg) RMS Theor. Amplitude 0.120 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 74.1 40.2 Search (2048X32) 0.117 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 131.9 70.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 55.0 23.7 Inc. seg. avg. 0.191 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
amp/frq (%) 45.7 41.4 Inc. frq. avg. 0.141 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
o: az 92.1 el 37.2 pa -57.9 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -11693.116 -430.488 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/oY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/oY.W.211.18P9EC



Fringe quality 0  
SNR 5.6  
Int time 434.187  
Amp 0.105  
Phase 84.9  
PFD 9.9e-01  
Delays (us)  
SBD 0.804756  
MBD 0.001606  
Fringe rate (Hz)  
-0.387127  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120846  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

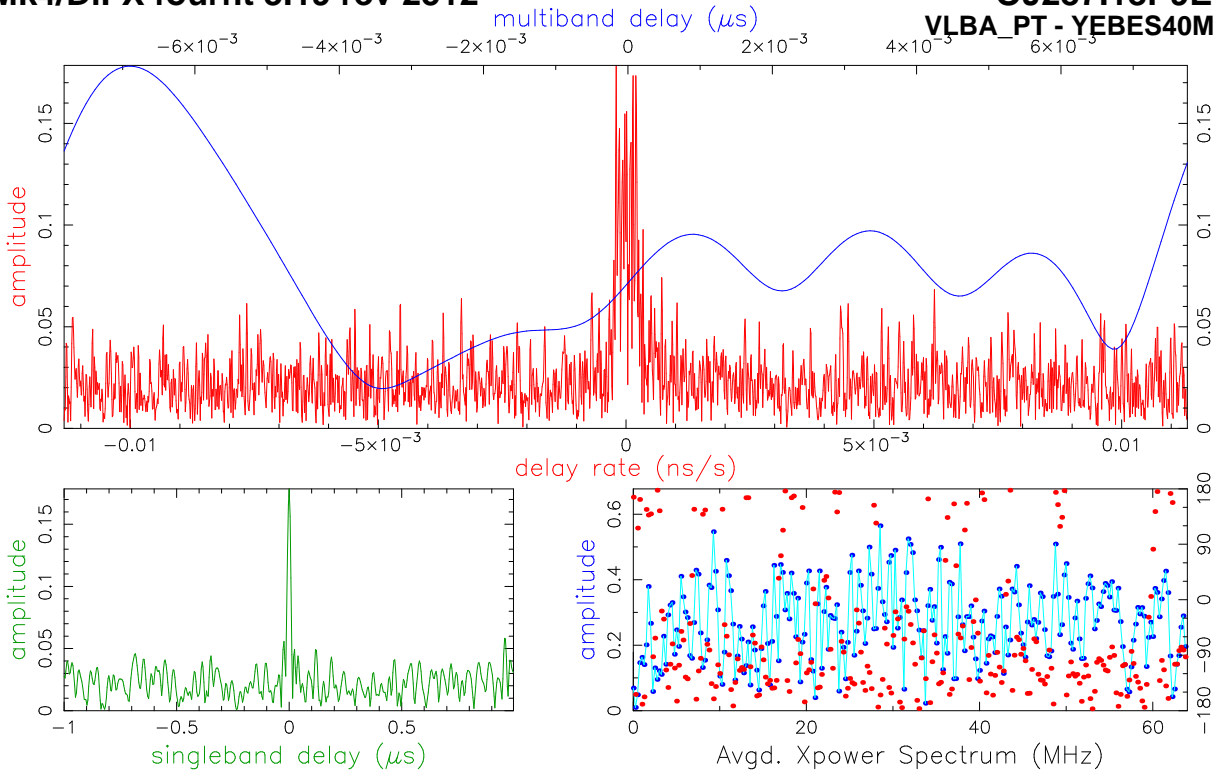
Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	72.3	78.4	110.3	80.2	94.2	95.6	69.0	77.8	Phase	84.9
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	372.4	125.2	125.6	65.6	173.2	63.4	164.4	391.6	Sbd box	463.0
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.88222740922E+02		Apriori delay (usec)		4.87424259544E+02		Resid mbdelay (usec)		1.60638E-03	+/- 1.9E-04
Sband delay (usec)	4.88229015294E+02		Apriori clock (usec)		8.1096716E+00		Resid sbdelay (usec)		8.04756E-01	+/- 1.5E-03
Phase delay (usec)	4.87424262281E+02		Apriori clockrate (us/s)		-1.8999993E-08		Resid phdelay (usec)		2.73722E-06	+/- 6.6E-07
Delay rate (us/s)	1.91735401698E+00		Apriori rate (us/s)		1.91735851114E+00		Resid rate (us/s)		-4.49416E-06	+/- 2.6E-09
Total phase (deg)	343.1		Apriori accel (us/s/s)		-4.27679134335E-06		Resid phase (deg)		84.9	+/- 20.5

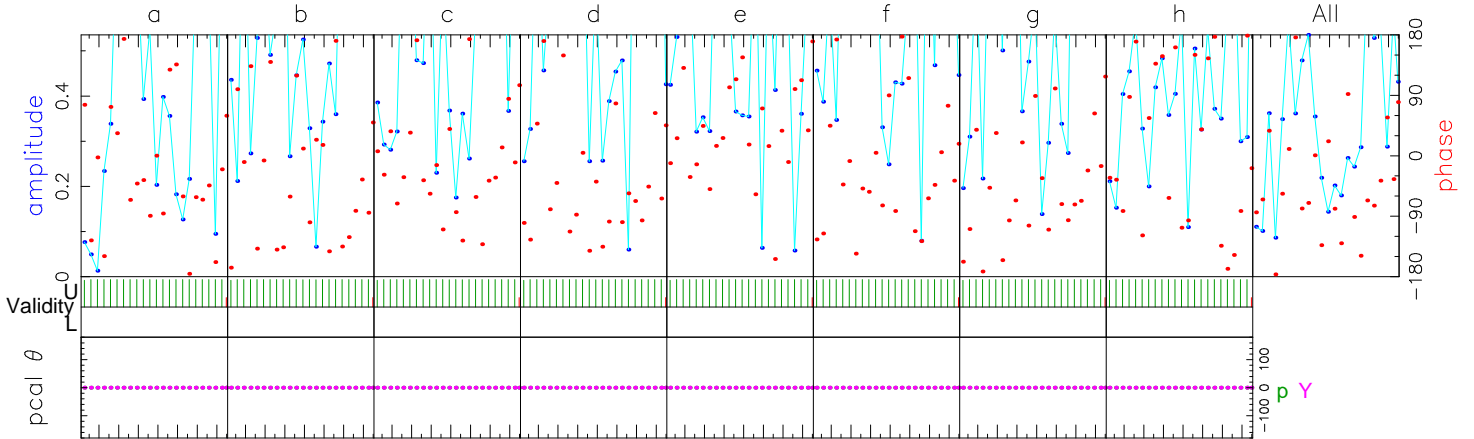
ph/seg (deg) 60.9 49.1 Search (2048X32) 0.096 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 88.0 85.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 15.1 28.9 Inc. seg. avg. 0.114 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 10.5 50.5 Inc. frq. avg. 0.095 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
o: az 92.1 el 37.2 pa -57.9 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -11693.116 -430.488 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/oY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/oY.W.229.18P9EC





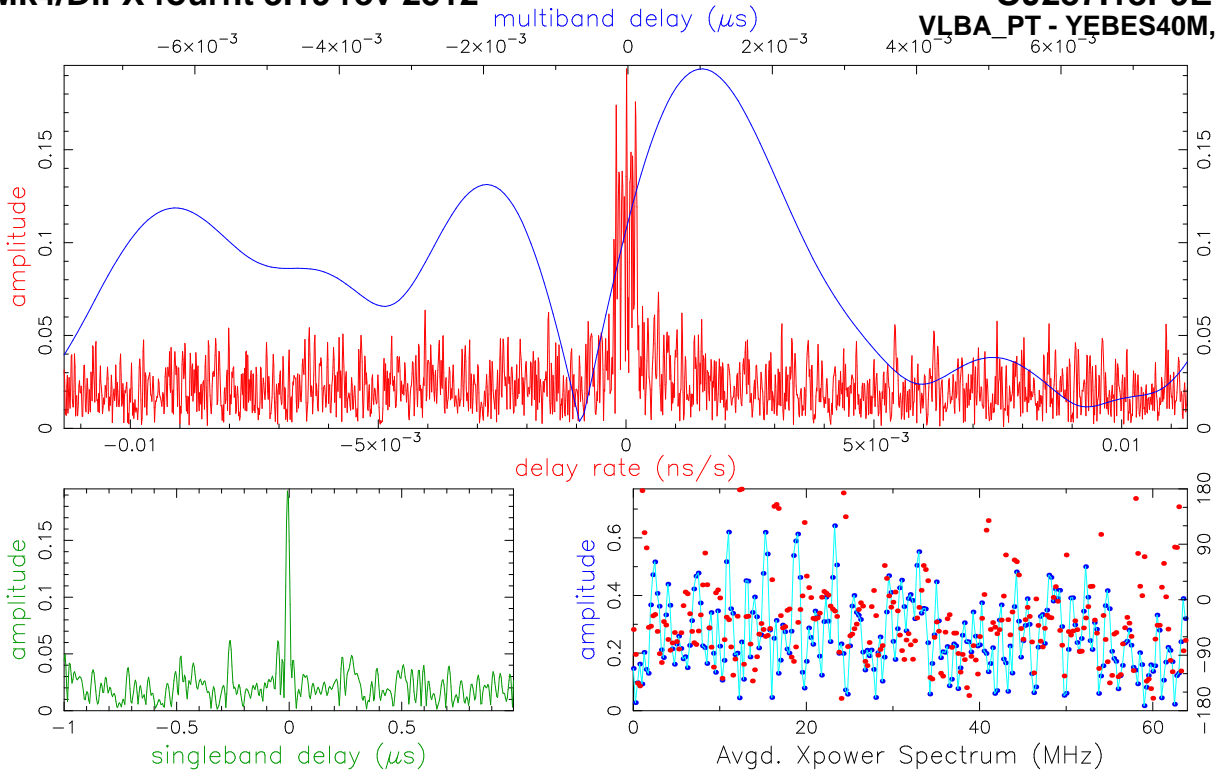
Fringe quality 9  
SNR 10.2  
Int time 433.177  
Amp 0.179  
Phase -51.6  
PFD 1.3e-15  
Delays (us)  
SBD -0.000552  
MBD -0.006917  
Fringe rate (Hz)  
-0.017285  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120834  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



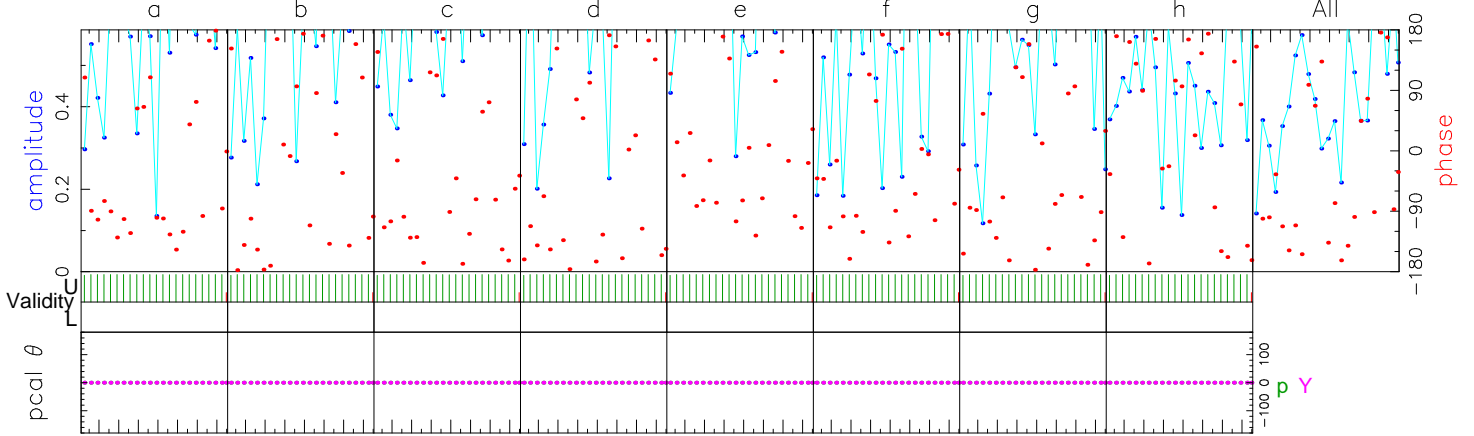
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-49.9	-101.6	-32.9	-67.8	28.5	-42.4	-45.4	-167.3	Phase	-51.6
	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	Ampl.	0.2
	333.7	256.7	256.7	257.1	256.1	256.4	255.8	254.4	Sbd box	256.9
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.80728678479E+03		Apriori delay (usec)	2.80729370199E+03	Resid mbdelay (usec)	-6.91721E-03	+/-	1.1E-04		
Sband delay (usec)	2.80729315049E+03		Apriori clock (usec)	5.3017206E+00	Resid sbdelay (usec)	-5.51500E-04	+/-	8.5E-04		
Phase delay (usec)	2.80729370033E+03		Apriori clockrate (us/s)	-1.6113413E-08	Resid phdelay (usec)	-1.66518E-06	+/-	3.6E-07		
Delay rate (us/s)	1.82123948642E+00		Apriori rate (us/s)	1.82123968709E+00	Resid rate (us/s)	-2.00666E-07	+/-	1.4E-09		
Total phase (deg)		124.7	Apriori accel (us/s/s)	-1.82266588636E-05	Resid phase (deg)	-51.6	+/-	11.3		

RMS Theor. Amplitude 0.179 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 73.1 27.0 Search (2048X32) 0.176 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 133.7 47.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 62.0 15.9 Inc. seg. avg. 0.308 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 amp/frq (%) 51.6 27.8 Inc. frq. avg. 0.241 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 p: az 96.0 el 45.7 pa -60.9 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -11129.899 -1177.699 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/pY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/pY.W.179.18P9EC



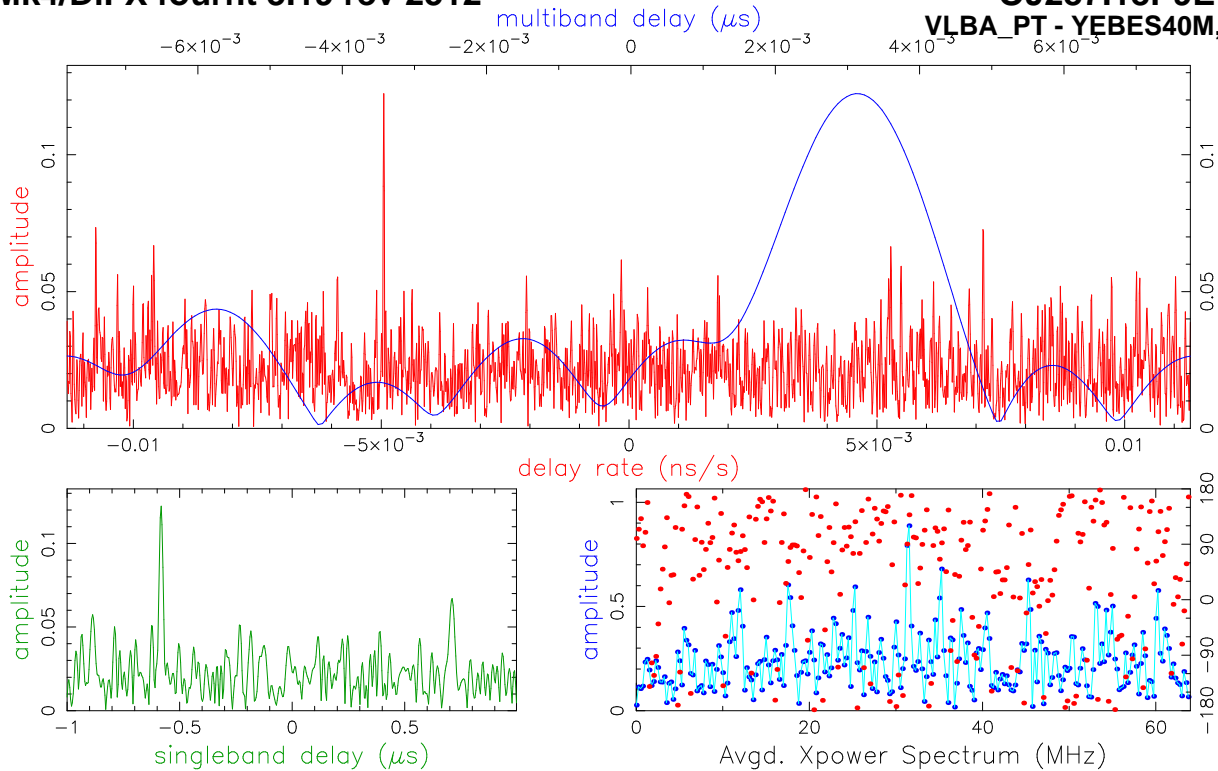
Fringe quality 9  
SNR 11.1  
Int time 433.178  
Amp 0.195  
Phase -133.4  
PFD 4.5e-20  
Delays (us)  
SBD -0.006553  
MBD 0.001037  
Fringe rate (Hz) 0.001018  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120838  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



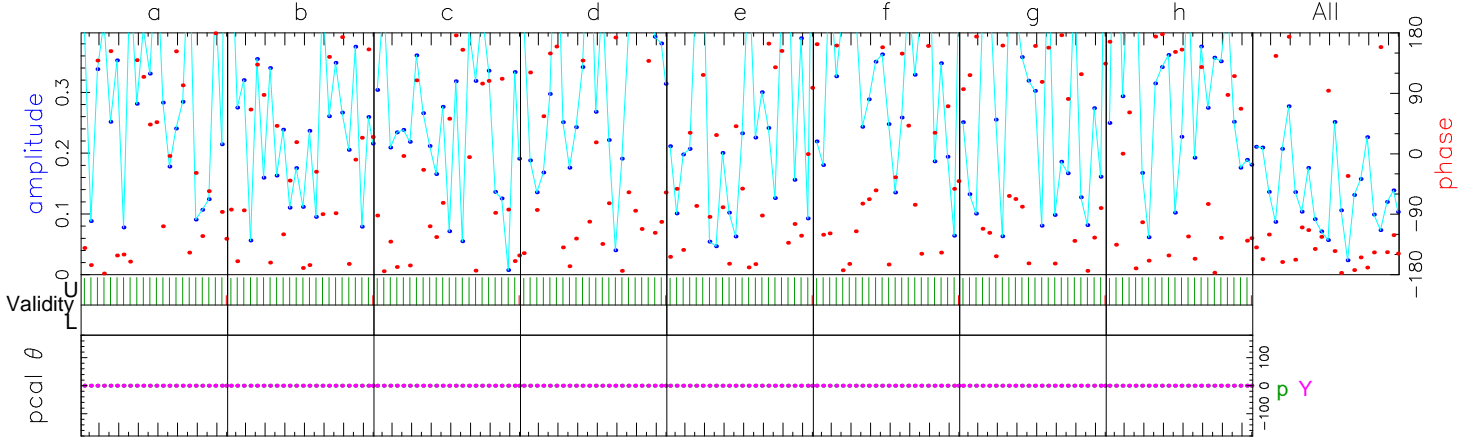
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-118.5	-169.0	-119.9	-178.3	-50.6	-104.2	-123.2	161.7	Phase	-133.4
	0.3	0.2	0.3	0.4	0.3	0.3	0.2	0.2	Ampl.	0.3
	255.1	254.4	254.8	255.4	255.5	254.9	253.8	255.4	Sbd box	255.3
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.80729473937E+03		Apriori delay (usec)		2.80729370199E+03		Resid mbdelay (usec)		1.03738E-03	+/- 9.8E-05
Sband delay (usec)	2.80728714949E+03		Apriori clock (usec)		5.3017206E+00		Resid sbdelay (usec)		-6.55250E-03	+/- 7.7E-04
Phase delay (usec)	2.80729369769E+03		Apriori clockrate (us/s)		-1.6113413E-08		Resid phdelay (usec)		-4.30048E-06	+/- 3.3E-07
Delay rate (us/s)	1.82123969891E+00		Apriori rate (us/s)		1.82123968709E+00		Resid rate (us/s)		1.18209E-08	+/- 1.3E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.8226588636E-05		Resid phase (deg)		-133.4	+/- 10.3

p: az 96.0 el 45.7 pa -60.9 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -11129.899 -1177.699 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/pY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/pY.W.195.18P9EC



Fringe quality 0  
SNR 7.0  
Int time 433.177  
Amp 0.133  
Phase -153.5  
PFD 9.5e-04  
Delays (us)  
SBD -0.582489  
MBD 0.003126  
Fringe rate (Hz)  
-0.427328  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120842  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec

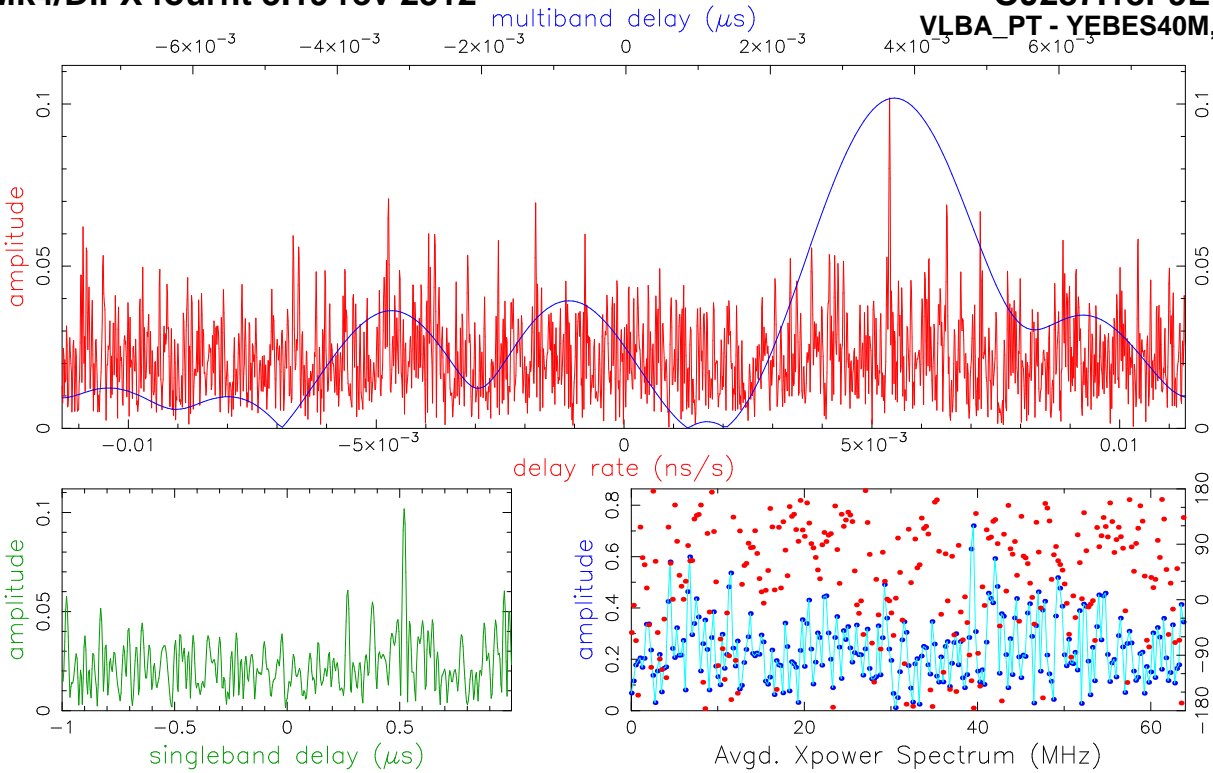


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-178.6	-127.2	-166.6	-138.1	-147.9	-147.7	-144.9	-172.8	Phase	-153.5
	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2	Ampl.	0.1
	74.0	251.3	357.2	10.6	147.2	310.7	327.5	107.2	Sbd box	107.9
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.80671870345E+03	Apriori delay (usec)	2.80729370199E+03	Resid mbdelay (usec)	3.12645E-03	+/-	1.6E-04
Sband delay (usec)	2.80671121274E+03	Apriori clock (usec)	5.3017206E+00	Resid sbdelay (usec)	-5.82489E-01	+/-	1.2E-03
Phase delay (usec)	2.80729369704E+03	Apriori clockrate (us/s)	-1.6113413E-08	Resid phdelay (usec)	-4.95146E-06	+/-	5.3E-07
Delay rate (us/s)	1.82123472623E+00	Apriori rate (us/s)	1.82123968709E+00	Resid rate (us/s)	-4.96086E-06	+/-	2.1E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.82266588636E-05	Resid phase (deg)	-153.5	+/-	16.4

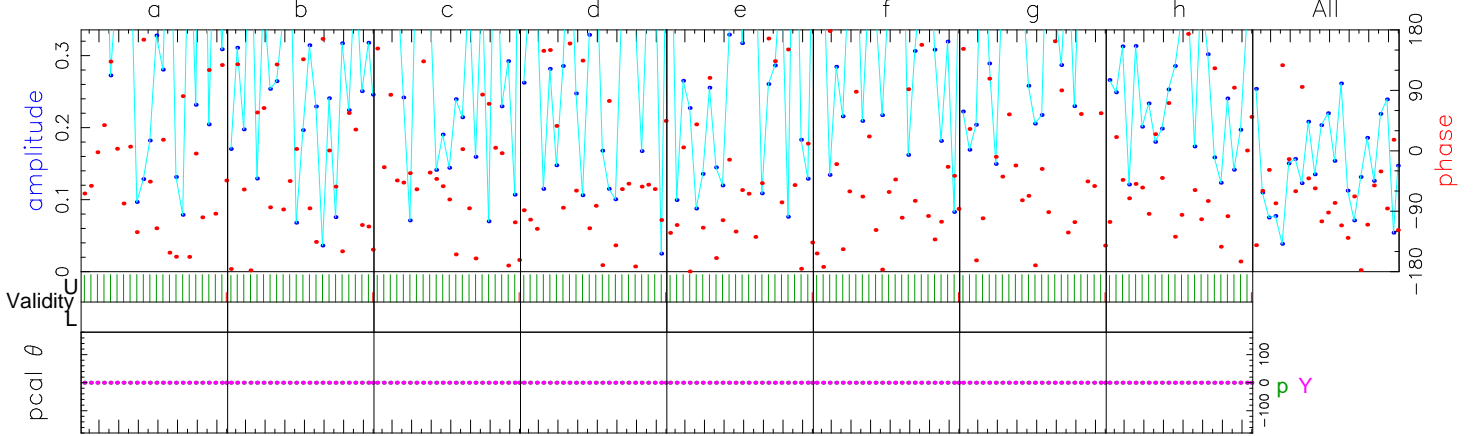
ph/seg (deg)	43.7	Theor.	39.4	Amplitude	0.133 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	54.9		68.8	Search (2048X32)	0.119	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	19.3		23.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	27.6		40.6	Inc. seg. avg.	0.122	Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
				Inc. frq. avg.	0.128	Data rate (Mb/s):	2048			ion window (TEC)	0.00 0.00

p: az 96.0 el 45.7 pa -60.9 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -11129.899 -1177.699 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/pY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/pY.W.214.18P9EC



Fringe quality 0  
SNR 5.8  
Int time 433.178  
Amp 0.112  
Phase -81.8  
PFD 8.1e-01  
Delays (us)  
SBD 0.519925  
MBD 0.003735  
Fringe rate (Hz) 0.461804  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120846  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

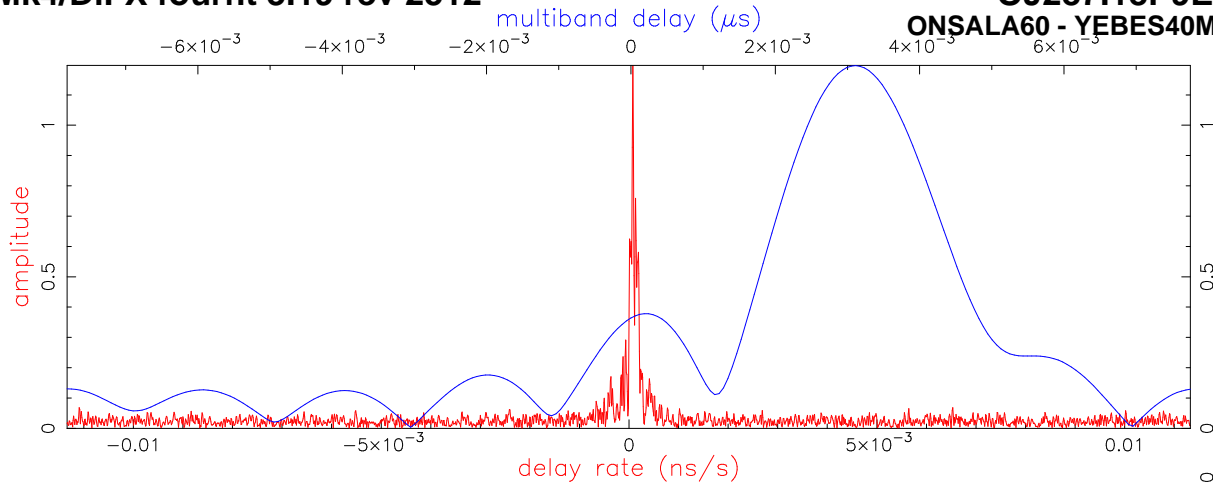
Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-68.1	-109.7	-34.2	-95.9	-98.3	-99.4	-55.6	-73.6	Phase	-81.8
	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	Ampl.	0.1
	42.6	417.1	151.0	147.9	396.3	439.5	504.1	104.6	Sbd box	390.1
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

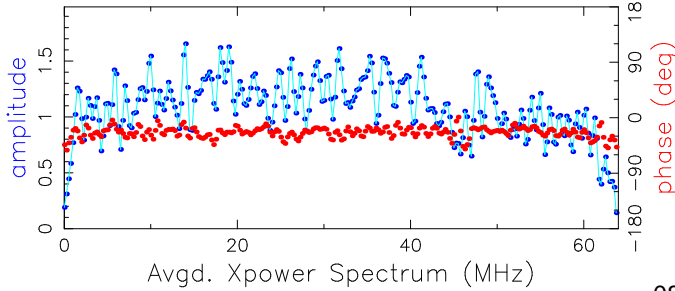
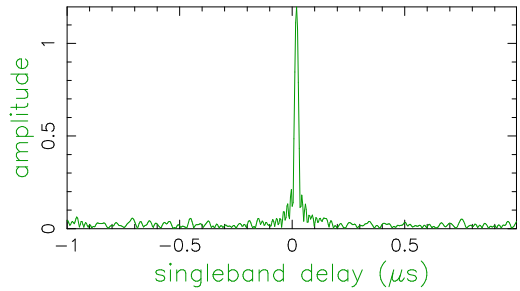
Group delay (usec)(sbd)	2.80781306189E+03	Apriori delay (usec)	2.80729370199E+03	Resid mbdelay (usec)	3.73490E-03	+/-	1.9E-04
Sband delay (usec)	2.80781362674E+03	Apriori clock (usec)	5.3017206E+00	Resid sbdelay (usec)	5.19925E-01	+/-	1.5E-03
Phase delay (usec)	2.80729369936E+03	Apriori clockrate (us/s)	-1.6113413E-08	Resid phdelay (usec)	-2.63739E-06	+/-	6.4E-07
Delay rate (us/s)	1.82124504818E+00	Apriori rate (us/s)	1.82123968709E+00	Resid rate (us/s)	5.36109E-06	+/-	2.5E-09
Total phase (deg)	94.6	Apriori accel (us/s/s)	-1.82266588636E-05	Resid phase (deg)	-81.8	+/-	19.8

ph/seg (deg)	65.6	Theor.	47.4	Amplitude	0.112 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	78.7		82.7	Search (2048X32)	0.098	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	28.2		27.9	Inc. seg. avg.	0.123	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.2		48.8	Inc. frq. avg.	0.107	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
p: az 96.0 el 45.7 pa -60.9	Y: az 265.0 el 37.4 pa 53.7		u,v (fr/asec) -11129.899 -1177.699				simultaneous interpolator			



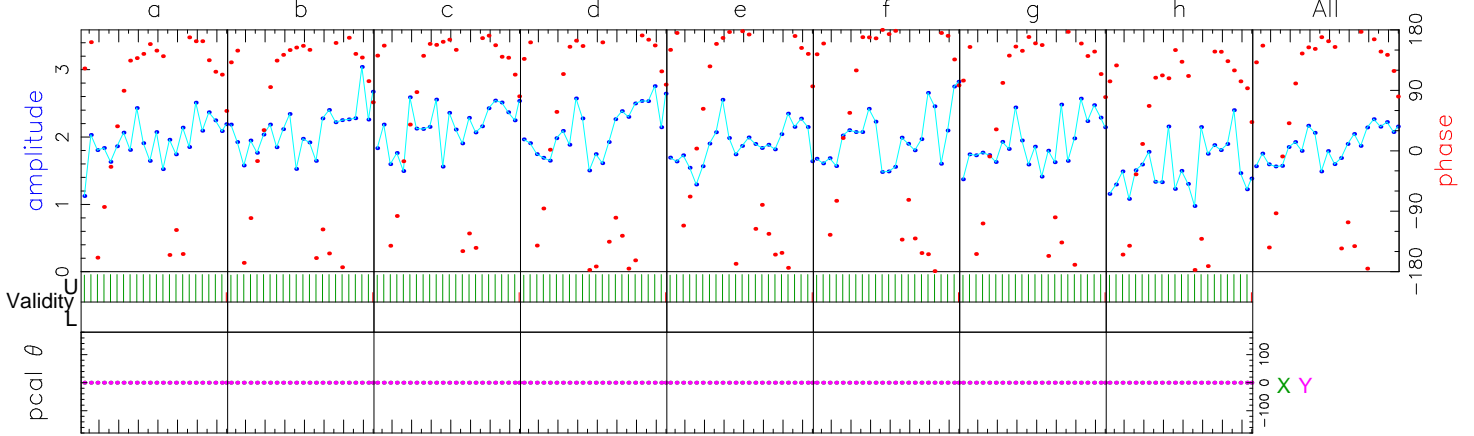
Fringe quality 4

SNR 68.2  
Int time 434.089  
Amp 1.197  
Phase 162.1  
PFD 0.0e+00  
Delays (us)  
SBD 0.019181  
MBD 0.003097  
Fringe rate (Hz)  
0.006908  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120837  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



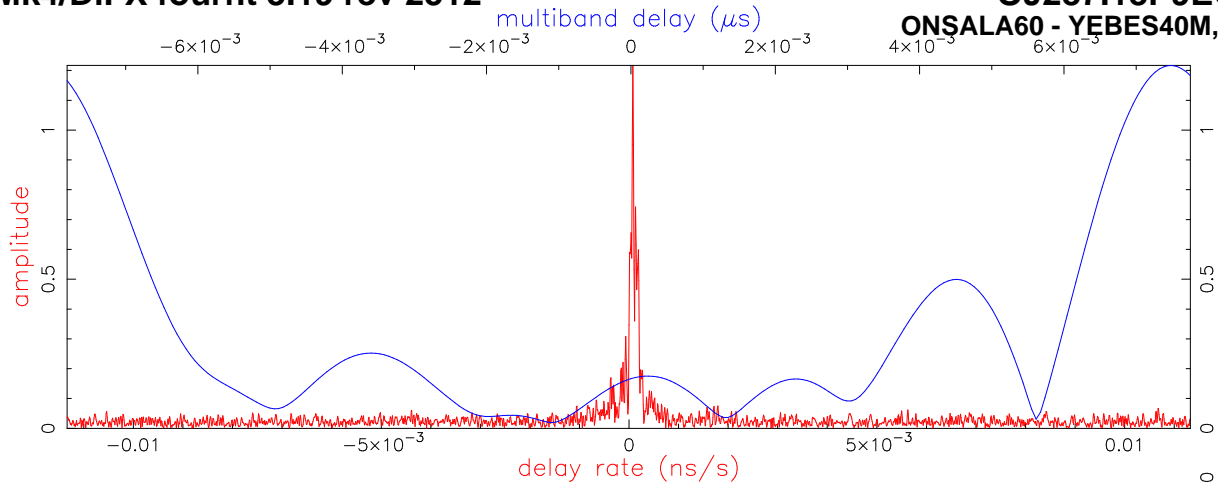
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.45646127509E+03	Apriori delay (usec)	-3.45647999660E+03	Resid mbdelay (usec)	3.09651E-03	+/-	1.6E-05
Sband delay (usec)	-3.45646081585E+03	Apriori clock (usec)	2.8750336E+01	Resid sbdelay (usec)	1.91808E-02	+/-	1.3E-04
Phase delay (usec)	-3.45647999137E+03	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	5.22887E-06	+/-	5.4E-08
Delay rate (us/s)	1.91302594008E-01	Apriori rate (us/s)	1.91302513818E-01	Resid rate (us/s)	8.01896E-08	+/-	2.2E-10
Total phase (deg)	-164.3	Apriori accel (us/s/s)	2.59859706280E-05	Resid phase (deg)	162.1	+/-	1.7

ph/seg (deg)	60.9	RMS	4.0	Theor.	1.162	1.197 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	59.9		7.0	Search (2048X32)	1.162		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	18.2		2.4	Interp.	0.000		Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	11.7		4.1	Inc. seg. avg.	1.868		Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
				Inc. frq. avg.	1.236		Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

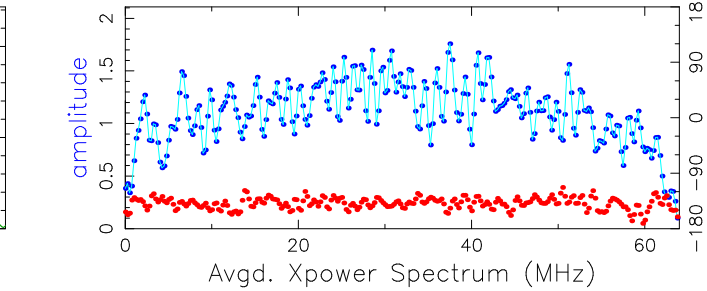
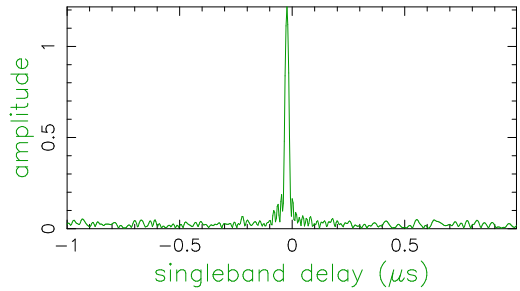
X: az 266.5 el 26.2 pa 35.0 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -1125.286 2356.221 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/XY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/XY.W.188.18P9EC





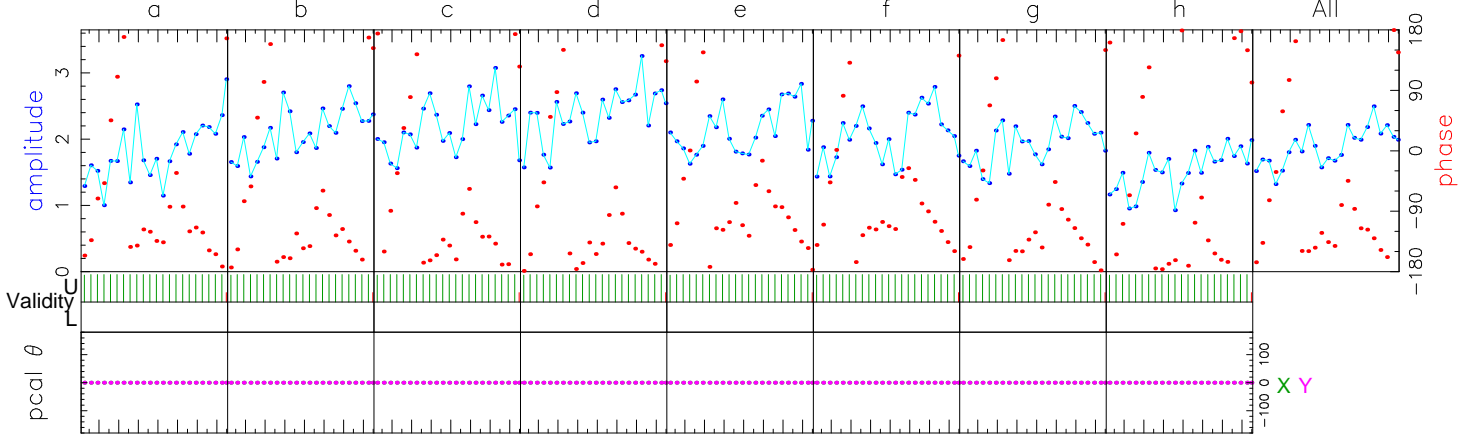
Fringe quality 3

SNR 69.3  
Int time 434.089  
Amp 1.217  
Phase -134.3  
PFD 0.0e+00  
Delays (us)  
SBD -0.023368  
MBD 0.007481  
Fringe rate (Hz)  
0.006923  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



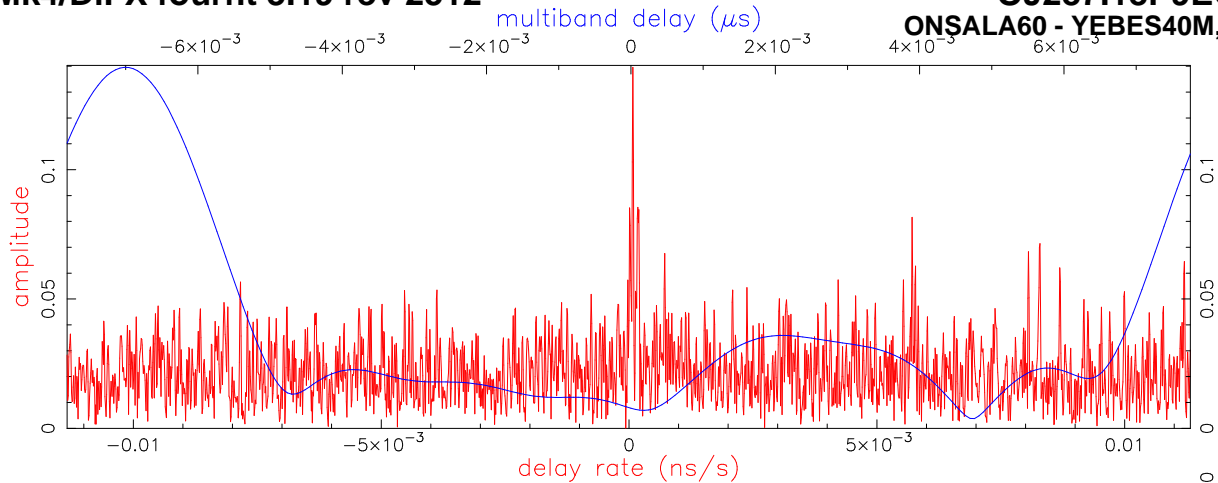
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120841  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



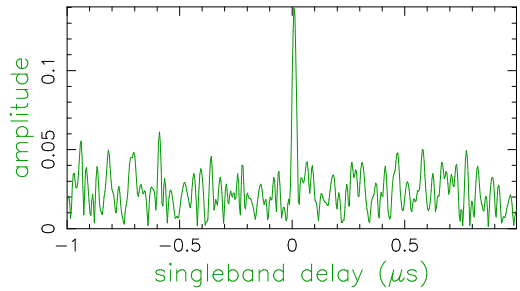
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Group delay (usec)(sbd)	-130.1	-140.5	-145.6	-149.1	-105.1	-105.2	-134.1	-168.1		-134.3
Sband delay (usec)	1.2	1.4	1.4	1.5	1.4	1.2	1.2	1.0		1.3
Phase delay (usec)	251.1	250.6	250.9	251.2	251.4	250.4	250.5	250.3		251.0
Delay rate (us/s)	U/L 849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
	X 1000	1000	1000	1000	1000	1000	1000	1000		APs used
	Y 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
	X:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC freqs
	X:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
	X 1000	1000	1000	1000	1000	1000	1000	1000		Mani PC
	Y 1000	1000	1000	1000	1000	1000	1000	1000		PC amp
	X W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
	Y W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Chan ids
										Tracks
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										

RMS Theor. Amplitude 1.217 +/- 0.018  
 ph/seg (deg) 60.3 4.0 Search (2048X32) 1.184  
 amp/seg (%) 59.5 6.9 Interp. 0.000  
 ph/frq (deg) 23.3 2.3 Inc. seg. avg. 1.881  
 amp/frq (%) 13.4 4.1 Inc. frq. avg. 1.290  
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 X: az 266.5 el 26.2 pa 35.0 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -1125.286 2356.221 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/XY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/XY.W.209.18P9EC

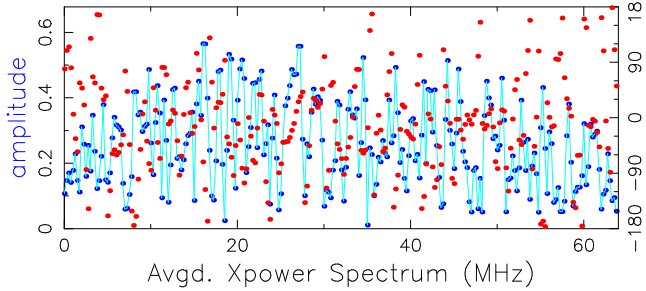


Fringe quality 9

SNR 8.0  
 Int time 434.089  
 Amp 0.140  
 Phase 164.9  
 PFD 4.4e-07  
 Delays (us)  
 SBD 0.008917  
 MBD -0.006983  
 Fringe rate (Hz)  
 0.006938  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

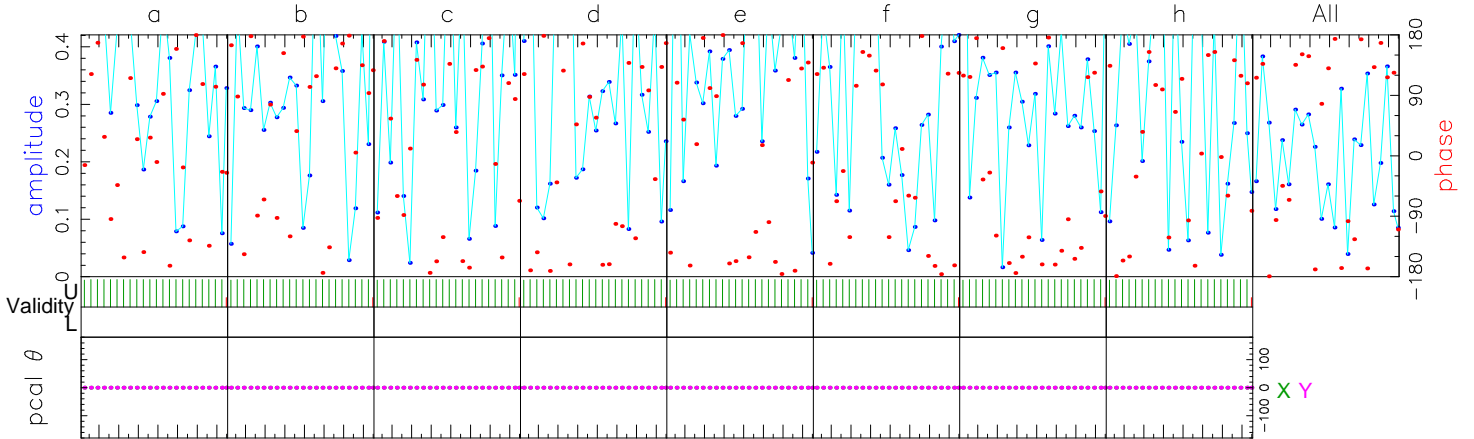


delay rate (ns/s)



Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120846  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec

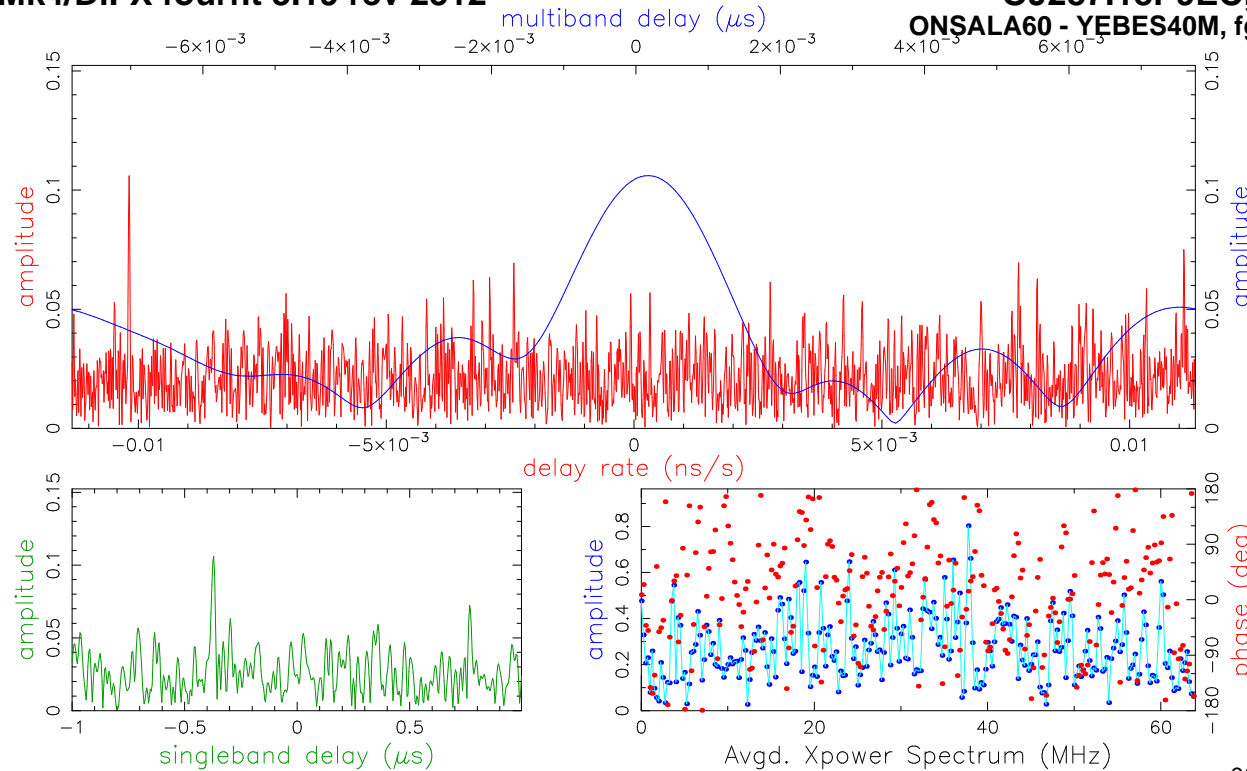


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	144.9	157.6	167.4	-171.7	170.0	156.1	-170.5	131.6	Phase	164.9
	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.1	Ampl.	0.1
	5.1	18.1	258.5	490.0	259.3	468.4	258.5	72.8	Sbd box	259.3
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-3.45647135415E+03	Apriori delay (usec)	-3.45647999660E+03	Resid mbdelay (usec)	-6.98255E-03	+/-	1.4E-04
Sband delay (usec)	-3.45647107985E+03	Apriori clock (usec)	2.8750336E+01	Resid sbdelay (usec)	8.91675E-03	+/-	1.1E-03
Phase delay (usec)	-3.45647999128E+03	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	5.31709E-06	+/-	4.6E-07
Delay rate (us/s)	1.91302594359E-01	Apriori rate (us/s)	1.91302513818E-01	Resid rate (us/s)	8.05403E-08	+/-	1.8E-09
Total phase (deg)	-161.6	Apriori accel (us/s/s)	2.59859706280E-05	Resid phase (deg)	164.9	+/-	14.3

ph/seg (deg)	62.6	Theor.	34.4	Search (2048X32)	0.134	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	85.5		60.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	21.7		20.3	Inc. seg. avg.	0.181	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	26.3		35.4	Inc. frq. avg.	0.138	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 266.5 el 26.2 pa 35.0 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -1125.286 2356.221 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/XY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/XY.W.228.18P9EC

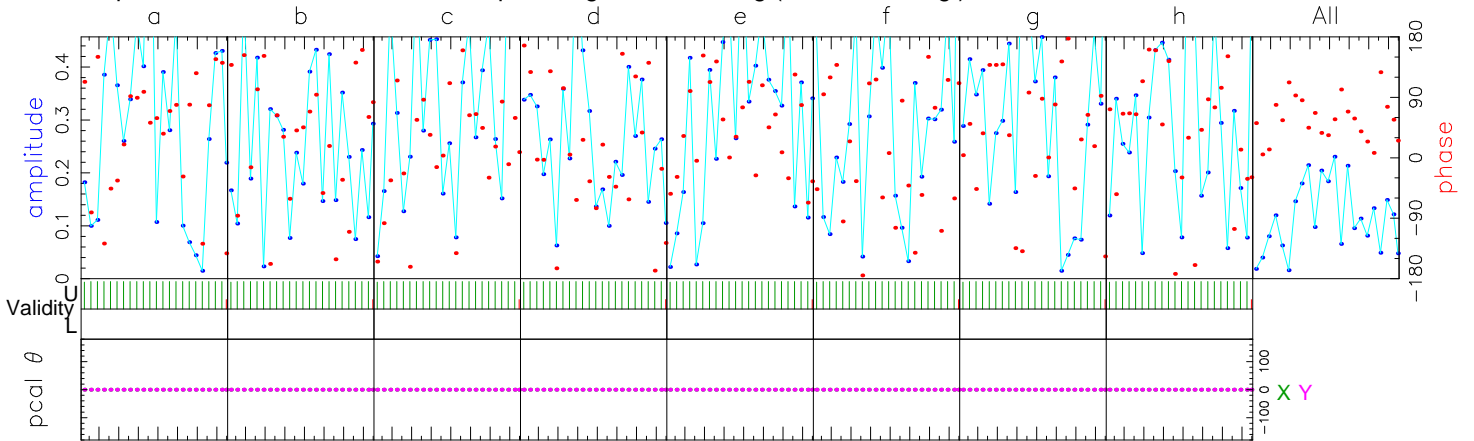


Fringe quality 0

SNR 6.1  
Int time 434.089  
Amp 0.152  
Phase 56.1  
PFD 2.9e-01  
Delays (us)  
SBD -0.372021  
MBD 0.000126  
Fringe rate (Hz)  
-0.878521  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120849  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	73.1	77.6	34.3	7.9	54.8	35.7	59.9	83.6		56.1
	0.2	0.1	0.3	0.1	0.3	0.0	0.2	0.1		0.1
	400.7	453.1	160.3	315.0	266.9	308.1	339.2	95.6		161.8
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
Y	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
X	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec)(sbd)	-3.45685487012E+03	Apriori delay (usec)	-3.45647999660E+03	Resid mbdelay (usec)	1.26474E-04	+/-	1.8E-04
Sband delay (usec)	-3.45685201735E+03	Apriori clock (usec)	2.8750336E+01	Resid sbdelay (usec)	-3.72021E-01	+/-	1.4E-03
Phase delay (usec)	-3.45647999479E+03	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	1.80979E-06	+/-	6.1E-07
Delay rate (us/s)	1.91292315066E-01	Apriori rate (us/s)	1.91302513818E-01	Resid rate (us/s)	-1.01988E-05	+/-	2.4E-09
Total phase (deg)	-270.3	Apriori accel (us/s/s)	2.59859706280E-05	Resid phase (deg)	56.1	+/-	18.9

ph/seg (deg)	32.2	Theor.	45.3	Amplitude	0.152 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	60.9		79.0	Search (2048X32)	0.104	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	28.1		26.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	51.3		46.6	Inc. seg. avg.	0.129	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.146	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

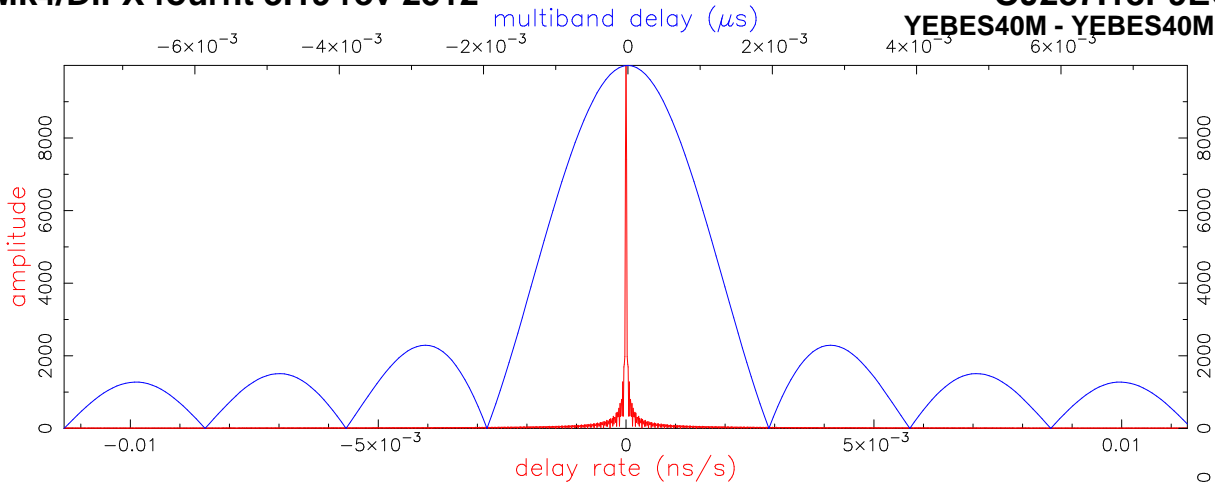
X: az 266.5 el 26.2 pa 35.0 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -1125.286 2356.221 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/XY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/XY.W.242.18P9EC

Mk4/DiFX fourfit 3.19 rev 2512

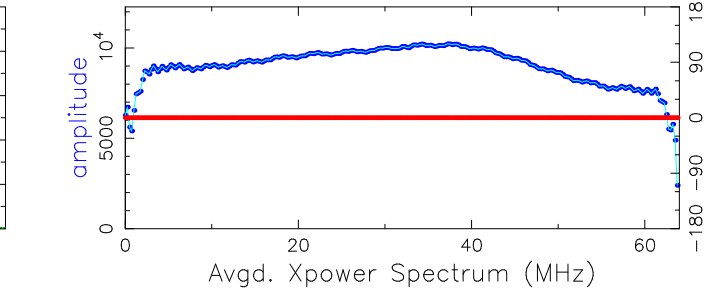
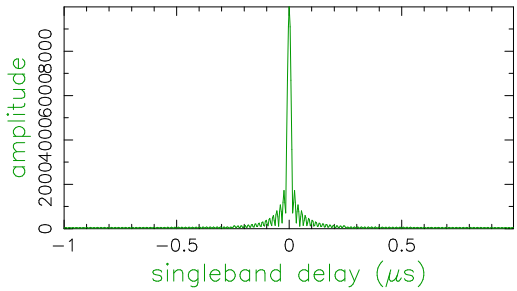
OJ287.18P9EC, No0027, YY

YEBES40M - YEBES40M, fgroup W, pol LL



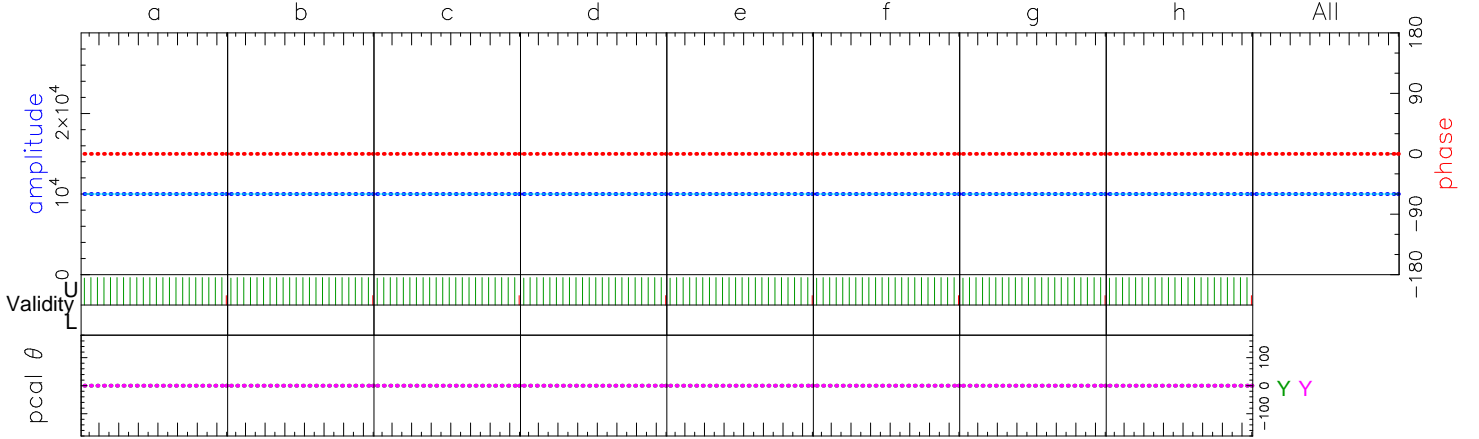
Fringe quality 9

SNR 569831.1  
 Int time 434.207  
 Amp 9999.999  
 Phase -0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz)  
 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120839  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



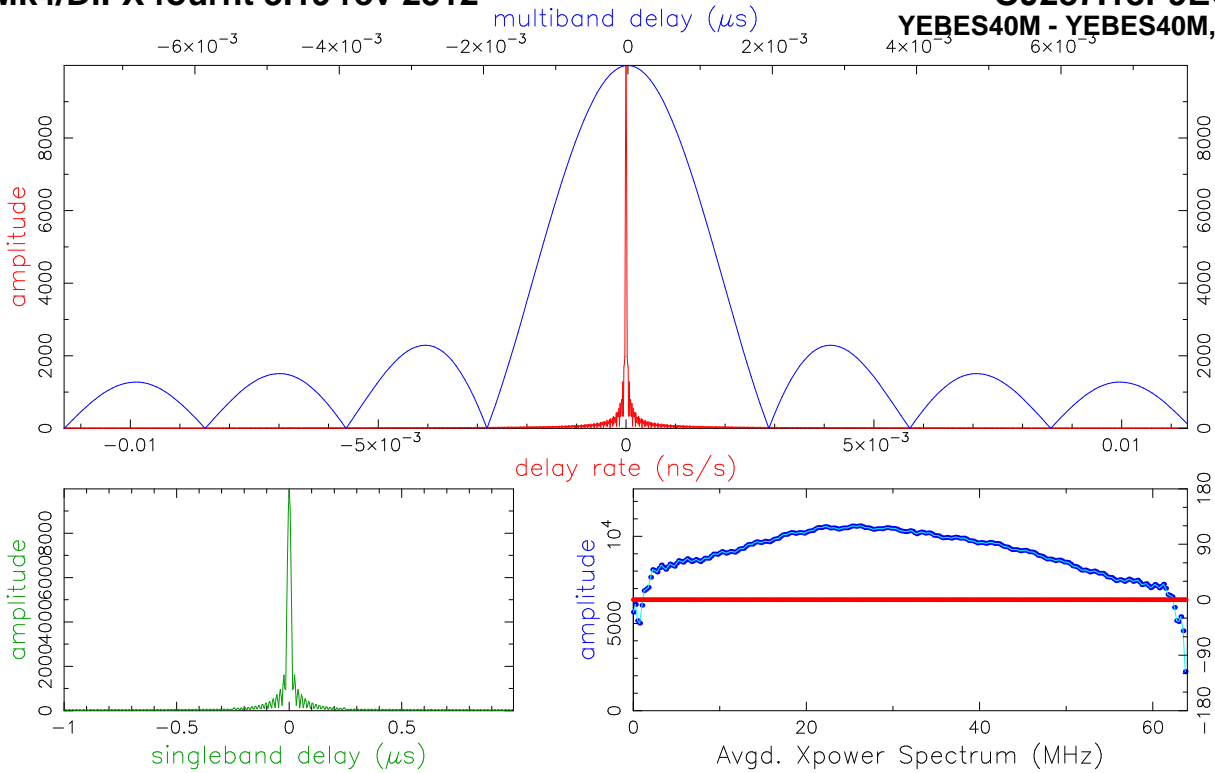
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.9E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.5E-08
Phase delay (usec)	-9.47104056177E-21	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-9.47104E-21	+/-	6.5E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.6E-14
Total phase (deg)	-0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.999 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	9999.999	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	9999.999	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Y: az 265.0 el 37.4 pa 53.7      Y: az 265.0 el 37.4 pa 53.7      u,v (fr/asec) 0.000 0.000      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c201a/v1/1234/No0027/YY..18P9EC      Output file: /Exps/c201a/v1/1234/No0027/YY.W.199.18P9EC

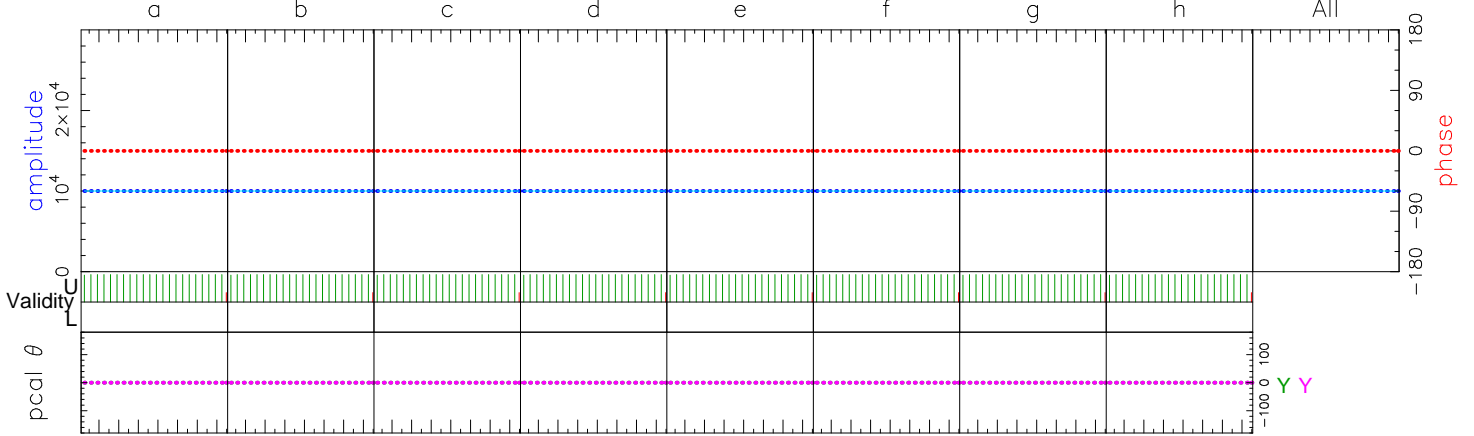


Fringe quality 9

SNR 569831.1  
Int time 434.207  
Amp 9999.999  
Phase -0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz) 0.000000  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120844  
2020:014:135814  
RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

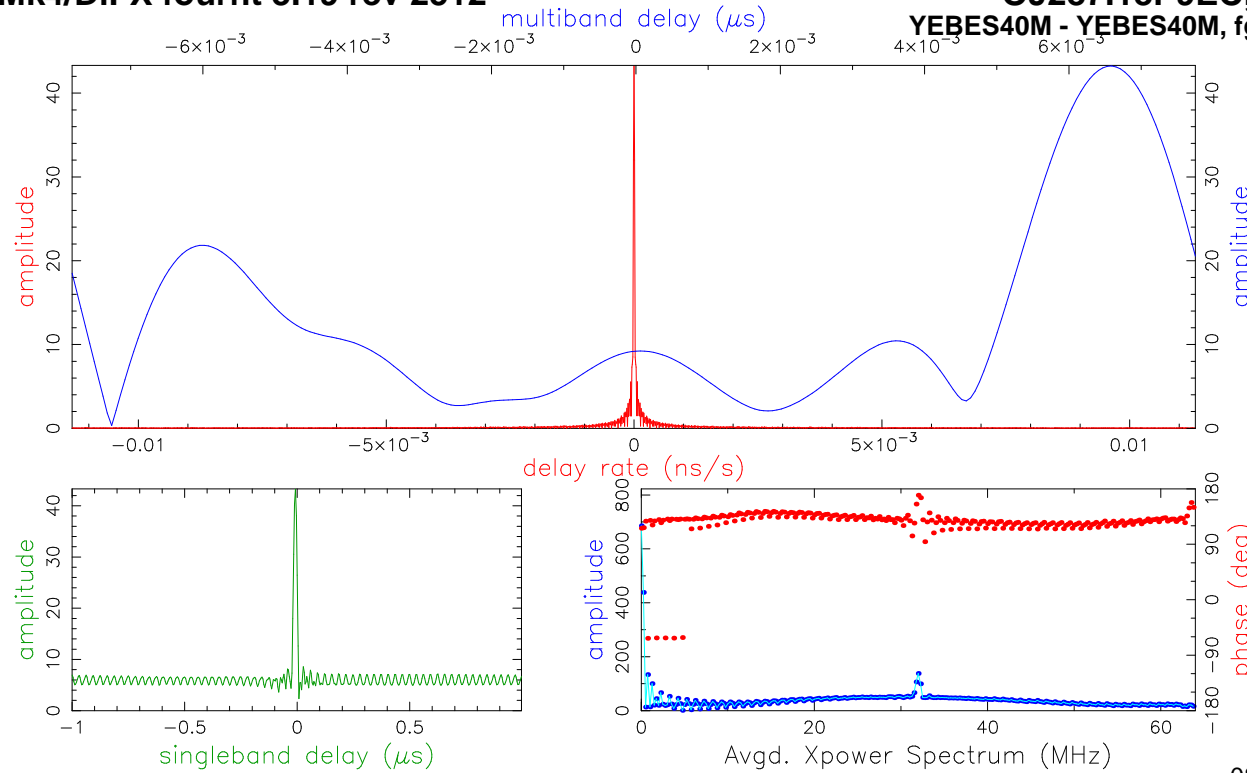
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.9E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.5E-08
Phase delay (usec)	-7.63113970422E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-7.63114E-20	+/-	6.5E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.6E-14
Total phase (deg)	-0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.999 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	9999.999	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	9999.999	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

Y: az 265.0 el 37.4 pa 53.7      Y: az 265.0 el 37.4 pa 53.7      u,v (fr/asec) 0.000 0.000      simultaneous interpolator

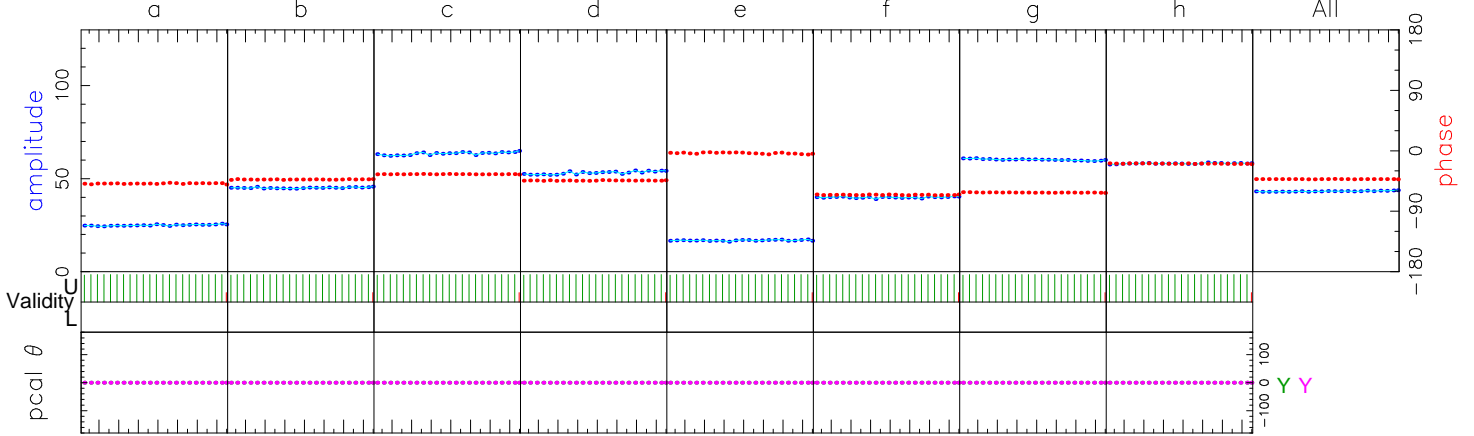
Control file: cf\_1234\_gmva    Input file: /Exps/c201a/v1/1234/No0027/YY..18P9EC    Output file: /Exps/c201a/v1/1234/No0027/YY.W.221.18P9EC





Fringe quality 7  
 SNR 2467.7  
 Int time 434.207  
 Amp 43.307  
 Phase -42.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.008346  
 MBD 0.006565  
 Fringe rate (Hz)  
 -0.000002  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120847  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec

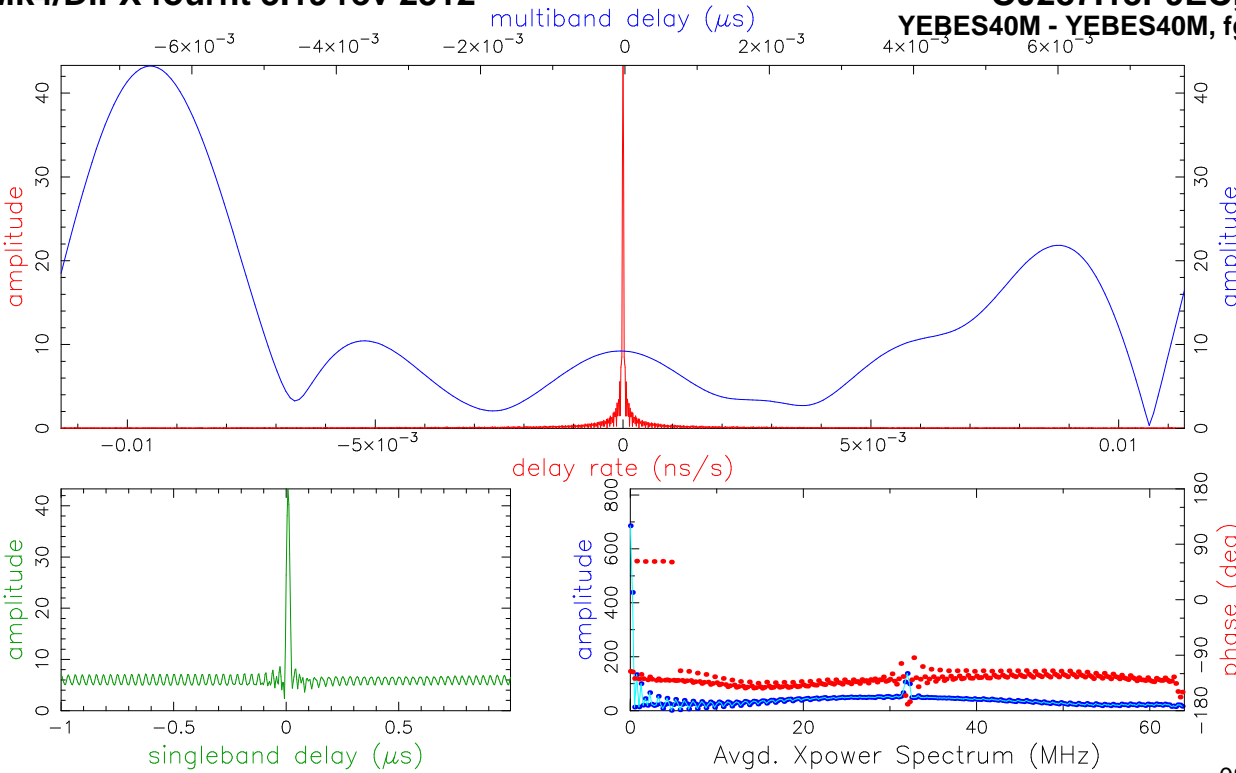


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-48.7	-42.7	-34.8	-44.3	-3.5	-65.6	-62.1	-19.2	Phase	-42.2
	25.0	45.1	63.4	53.1	16.9	39.9	60.2	58.1	Ampl.	45.2
	255.3	254.3	255.0	254.8	255.1	252.2	248.7	253.1	Sbd box	254.9
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-9.05993750000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		6.56506E-03	+/- 4.4E-07
Sband delay (usec)	-8.34575000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-8.34575E-03	+/- 3.5E-06
Phase delay (usec)	-1.36103467691E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-1.36103E-06	+/- 1.5E-09
Delay rate (us/s)	-2.26738438267E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-2.26738E-11	+/- 6.0E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-42.2	+/- 0.0

ph/seg (deg) 0.1 0.1 Theor. Amplitude 43.307 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.5 0.2 Search (2048X32) 42.267 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 22.6 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 37.0 0.1 Inc. seg. avg. 43.228 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Y: az 265.0 el 37.4 pa 53.7 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t\_coherence infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/YY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/YY.W.235.18P9EC simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, YY  
 YEBES40M - YEBES40M, fgroup W, pol RL

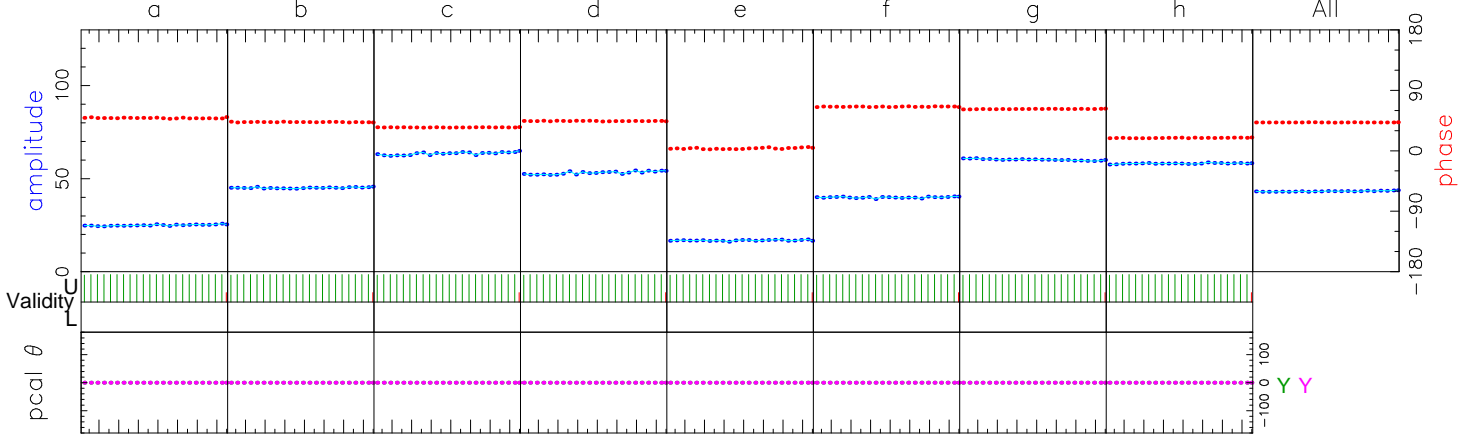


Fringe quality 7

SNR 2467.7  
 Int time 434.207  
 Amp 43.307  
 Phase 42.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.008346  
 MBD -0.006565  
 Fringe rate (Hz)  
 0.000002  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120851  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	9.05993750000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-6.56506E-03	+/-	4.4E-07
Sband delay (usec)	8.34575000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	8.34575E-03	+/-	3.5E-06
Phase delay (usec)	1.36103467701E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	1.36103E-06	+/-	1.5E-09
Delay rate (us/s)	2.26738438267E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	2.26738E-11	+/-	6.0E-12
Total phase (deg)	42.2	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	42.2	+/-	0.0

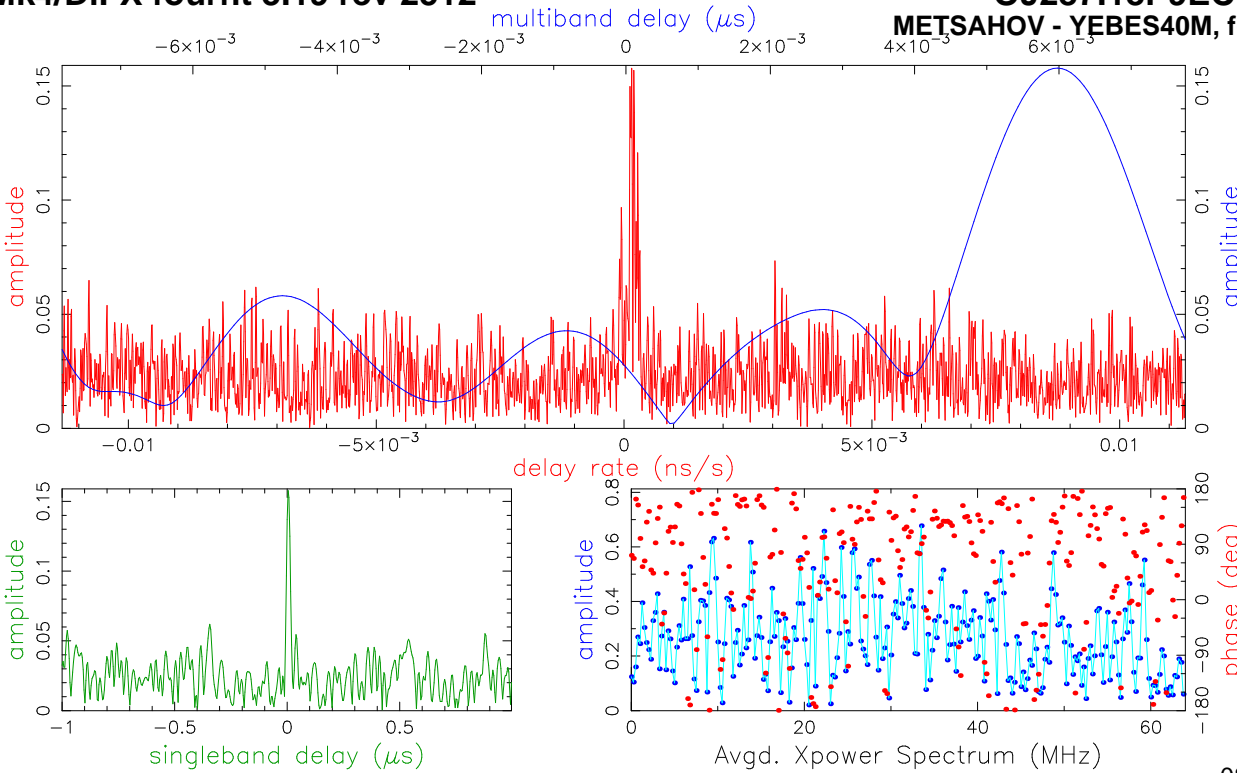
	RMS	Theor.	Amplitude	43.307 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	0.1	0.1	Search (2048X32)	42.267	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	0.5	0.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	22.6	0.1	Inc. seg. avg.	43.228	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	37.0	0.1	Inc. frq. avg.	45.220	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

Y: az 265.0 el 37.4 pa 53.7      Y: az 265.0 el 37.4 pa 53.7      u,v (fr/asec) 0.000 0.000      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/c201a/v1/1234/No0027/YY..18P9EC    Output file: /Exps/c201a/v1/1234/No0027/YY.W.246.18P9EC

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, ZY  
 METSAHOV - YEBES40M, fgroup W, pol LL

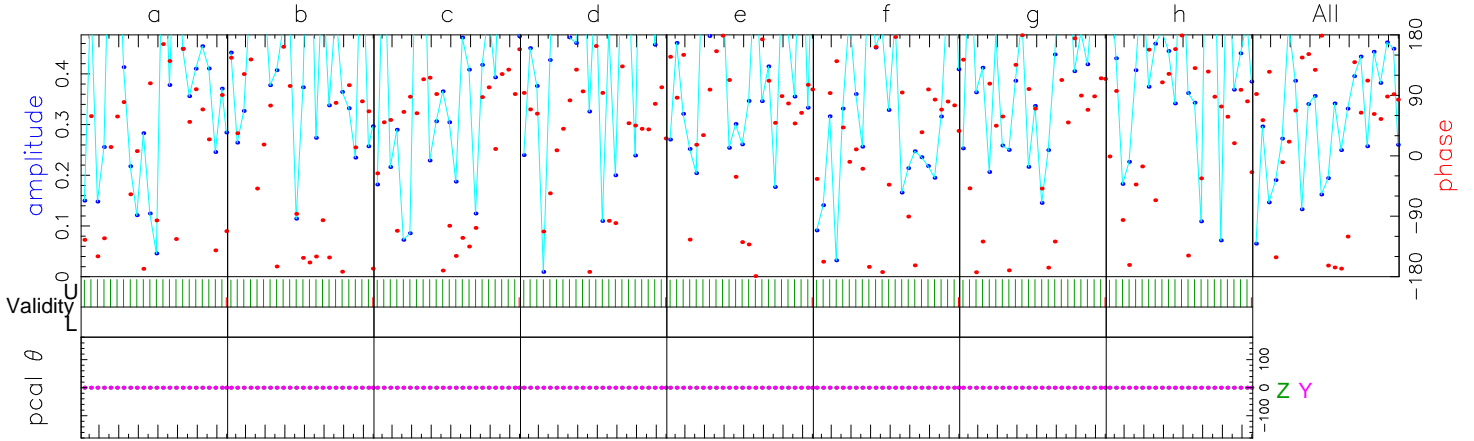


Fringe quality 9

SNR 9.1  
 Int time 433.800  
 Amp 0.159  
 Phase 101.0  
 PFD 5.2e-11  
 Delays (us)  
 SBD 0.005089  
 MBD 0.006002  
 Fringe rate (Hz)  
 0.013398  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120850  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	95.9	141.6	106.9	66.7	111.5	93.8	115.2	97.4	Phase	101.0
	0.1	0.1	0.2	0.3	0.2	0.1	0.2	0.2	Ampl.	0.2
	385.8	119.6	260.9	258.2	258.2	239.9	259.0	459.9	Sbd box	258.3
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.67728802606E+03		Apriori delay (usec)		-5.67729402823E+03		Resid mbdelay (usec)		6.00217E-03	+/- 1.2E-04
Sband delay (usec)	-5.67728893948E+03		Apriori clock (usec)		-1.2075533E+01		Resid sbdelay (usec)		5.08875E-03	+/- 9.5E-04
Phase delay (usec)	-5.67729402497E+03		Apriori clockrate (us/s)		-2.0400000E-07		Resid phdelay (usec)		3.25716E-06	+/- 4.1E-07
Delay rate (us/s)	2.22182831660E-01		Apriori rate (us/s)		2.22182676125E-01		Resid rate (us/s)		1.55535E-07	+/- 1.6E-09
Total phase (deg)			Apriori accel (us/s/s)		3.85670018884E-05		Resid phase (deg)		101.0	+/- 12.7

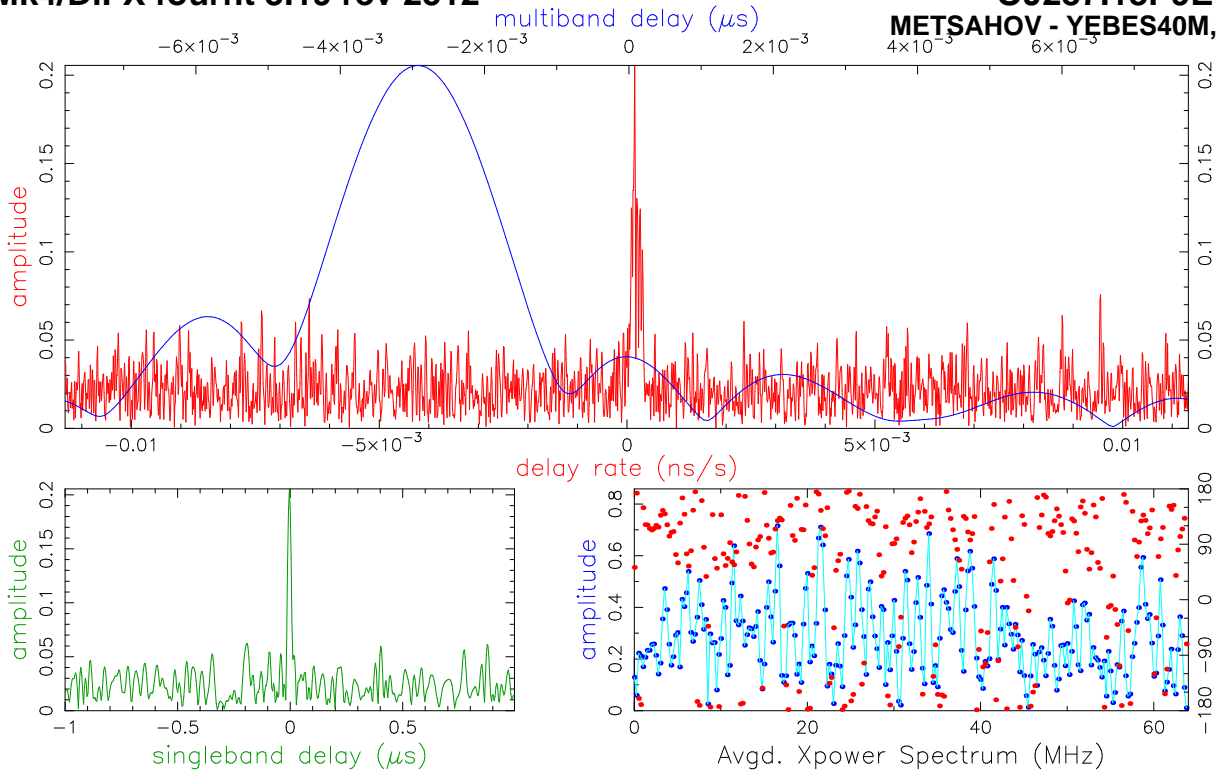
	RMS	Theor.	Amplitude	0.159 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	66.3	30.3	Search (2048X32)	0.156	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	119.7	53.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	23.3	17.9	Inc. seg. avg.	0.270	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	35.6	31.2	Inc. frq. avg.	0.162	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 275.9 el 19.8 pa 31.7 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -1292.950 2930.643 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/ZY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/ZY.W.244.18P9EC

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, ZY  
 METSAHOV - YEBES40M, fgroup W, pol RR

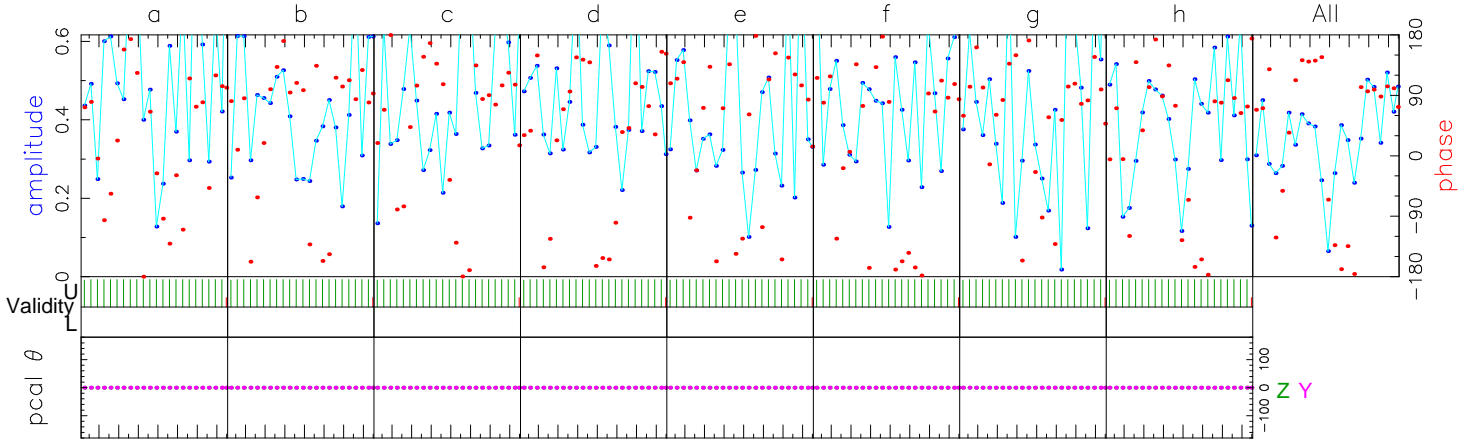


Fringe quality 9

SNR 11.7  
 Int time 433.800  
 Amp 0.206  
 Phase 117.9  
 PFD 5.7e-23  
 Delays (us)  
 SBD -0.003705  
 MBD -0.002923  
 Fringe rate (Hz) 0.013135  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120853  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



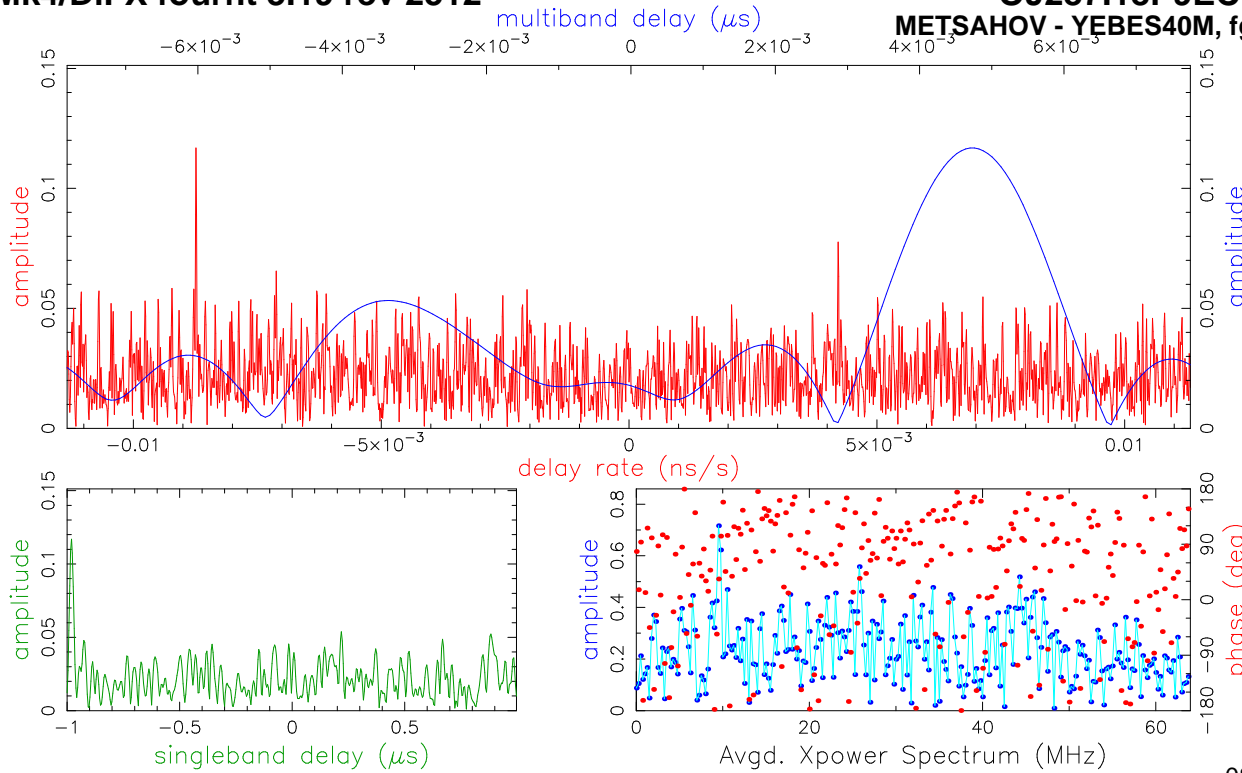
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	108.5	107.4	121.5	119.4	139.4	129.5	109.9	101.9	Phase	117.9
	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	317.7	255.3	256.6	257.1	256.2	256.1	255.5	256.3	Sbd box	256.1
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-5.67729695106E+03	Apriori delay (usec)	-5.67729402823E+03	Resid mbdelay (usec)	-2.92283E-03	+/-	9.3E-05
Sband delay (usec)	-5.67729773348E+03	Apriori clock (usec)	-1.2075533E+01	Resid sbdelay (usec)	-3.70525E-03	+/-	7.4E-04
Phase delay (usec)	-5.67729402443E+03	Apriori clockrate (us/s)	-2.040000E-07	Resid phdelay (usec)	3.80261E-06	+/-	3.2E-07
Delay rate (us/s)	2.22182828610E-01	Apriori rate (us/s)	2.22182676125E-01	Resid rate (us/s)	1.52485E-07	+/-	1.3E-09
Total phase (deg)	-95.1	Apriori accel (us/s/s)	3.85670018884E-05	Resid phase (deg)	117.9	+/-	9.8

ph/seg (deg)	RMS 75.0	Theor. 23.5	Amplitude Search (2048X32)	0.201	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	87.1	41.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	13.8	13.8	Inc. seg. avg.	0.325	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	16.7	24.2	Inc. frq. avg.	0.204	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 275.9 el 19.8 pa 31.7 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -1292.950 2930.643 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/ZY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/ZY.W.252.18P9EC

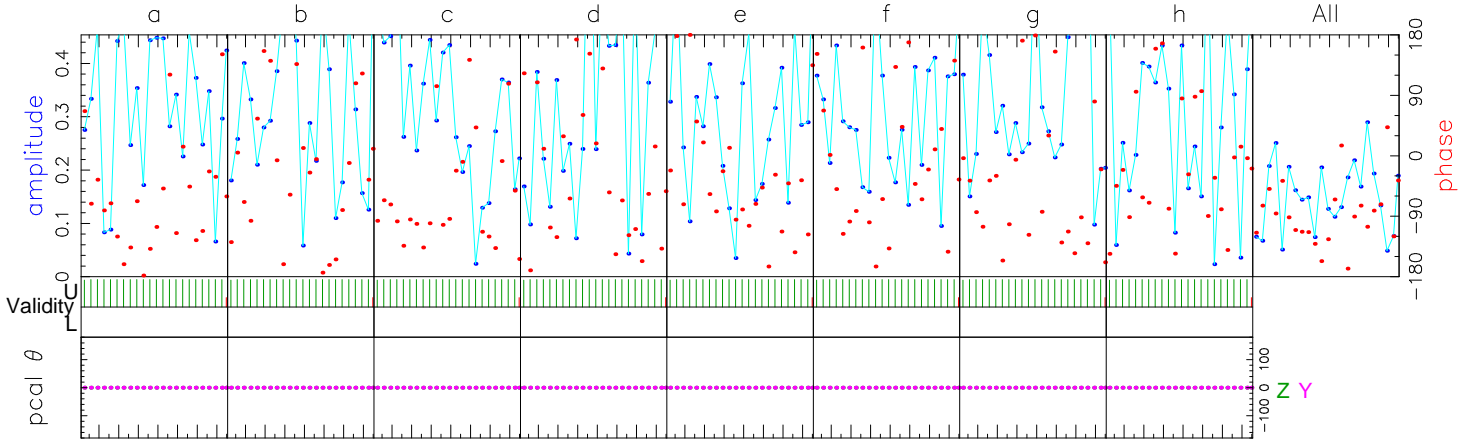


Fringe quality 0

SNR 6.7  
 Int time 433.800  
 Amp 0.151  
 Phase -95.0  
 PFD 8.0e-03  
 Delays (us)  
 SBD -0.980601  
 MBD 0.004728  
 Fringe rate (Hz)  
 -0.753326  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224505.12  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120857  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-94.4	-93.5	-95.2	-117.3	-82.2	-84.4	-106.1	-84.1	Phase	-95.0
	0.2	0.1	0.3	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	6.7	330.1	6.7	145.3	40.1	353.4	4.4	131.6	Sbd box	6.0
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.67827367507E+03		Apriori delay (usec)		-5.67729402823E+03		Resid mbdelay (usec)		4.72816E-03	+/- 1.6E-04
Sband delay (usec)	-5.67827462923E+03		Apriori clock (usec)		-1.2075533E+01		Resid sbdelay (usec)		-9.80601E-01	+/- 1.3E-03
Phase delay (usec)	-5.67729403129E+03		Apriori clockrate (us/s)		-2.0400000E-07		Resid phdelay (usec)		-3.06416E-06	+/- 5.6E-07
Delay rate (us/s)	2.22173930754E-01		Apriori rate (us/s)		2.22182676125E-01		Resid rate (us/s)		-8.74537E-06	+/- 2.2E-09
Total phase (deg)			Apriori accel (us/s/s)		3.85670018884E-05		Resid phase (deg)		-95.0	+/- 17.2

	RMS	Theor.	Amplitude	0.151 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	48.9	41.3	Search (2048X32)	0.113	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	62.3	72.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	13.0	24.3	Inc. seg. avg.	0.154	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	47.2	42.5	Inc. frq. avg.	0.141	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

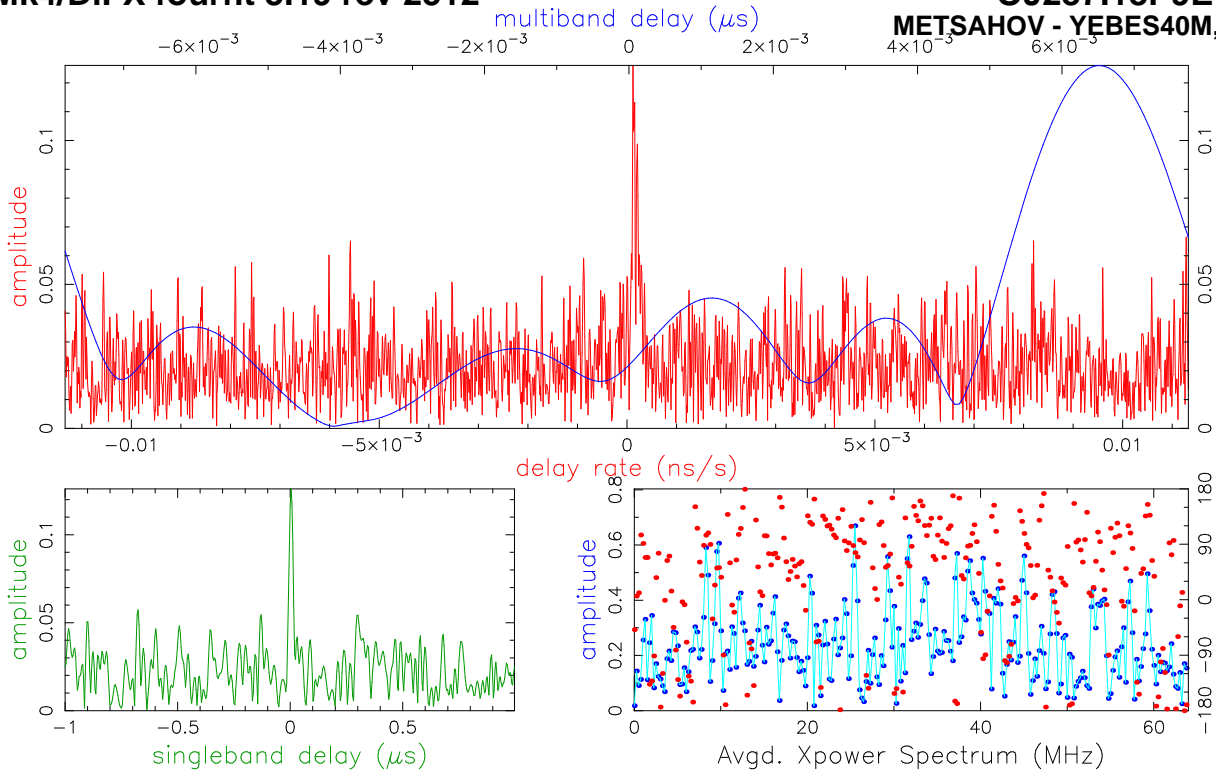
Z: az 275.9 el 19.8 pa 31.7 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -1292.950 2930.643 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/ZY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/ZY.W.258.18P9EC



Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, ZY  
METSALHOV - YEBES40M, fgroup W, pol RL

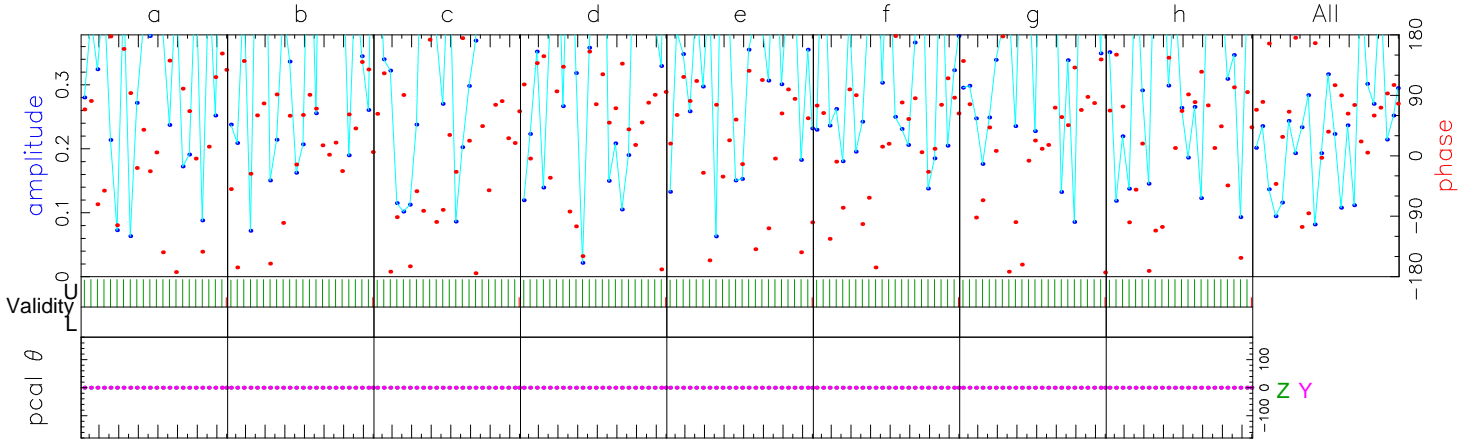


Fringe quality 0

SNR 7.2  
Int time 433.800  
Amp 0.126  
Phase 59.4  
PFD 2.1e-04  
Delays (us)  
SBD 0.004160  
MBD 0.006519  
Fringe rate (Hz) 0.010541  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224505.12  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120900  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	75.4	47.8	38.7	86.6	66.2	53.3	68.0	41.9	Phase	59.4
	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	368.9	257.9	5.2	228.2	92.2	264.3	32.2	354.9	Sbd box	258.1
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.67728750906E+03		Apriori delay (usec)		-5.67729402823E+03		Resid mbdelay (usec)		6.51917E-03	+/- 1.5E-04
Sband delay (usec)	-5.67728986798E+03		Apriori clock (usec)		-1.2075533E+01		Resid sbdelay (usec)		4.16025E-03	+/- 1.2E-03
Phase delay (usec)	-5.67729402631E+03		Apriori clockrate (us/s)		-2.0400000E-07		Resid phdelay (usec)		1.91681E-06	+/- 5.1E-07
Delay rate (us/s)	2.22182798492E-01		Apriori rate (us/s)		2.22182676125E-01		Resid rate (us/s)		1.22367E-07	+/- 2.1E-09
Total phase (deg)			Apriori accel (us/s/s)		3.85670018884E-05		Resid phase (deg)		59.4	+/- 16.0

ph/seg (deg) 71.0 38.3 Search (2048X32) 0.124 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 112.7 66.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 18.3 22.6 Inc. seg. avg. 0.186 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 37.6 39.4 Inc. frq. avg. 0.122 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 Z: az 275.9 el 19.8 pa 31.7 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -1292.950 2930.643 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/ZY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/ZY.W.264.18P9EC