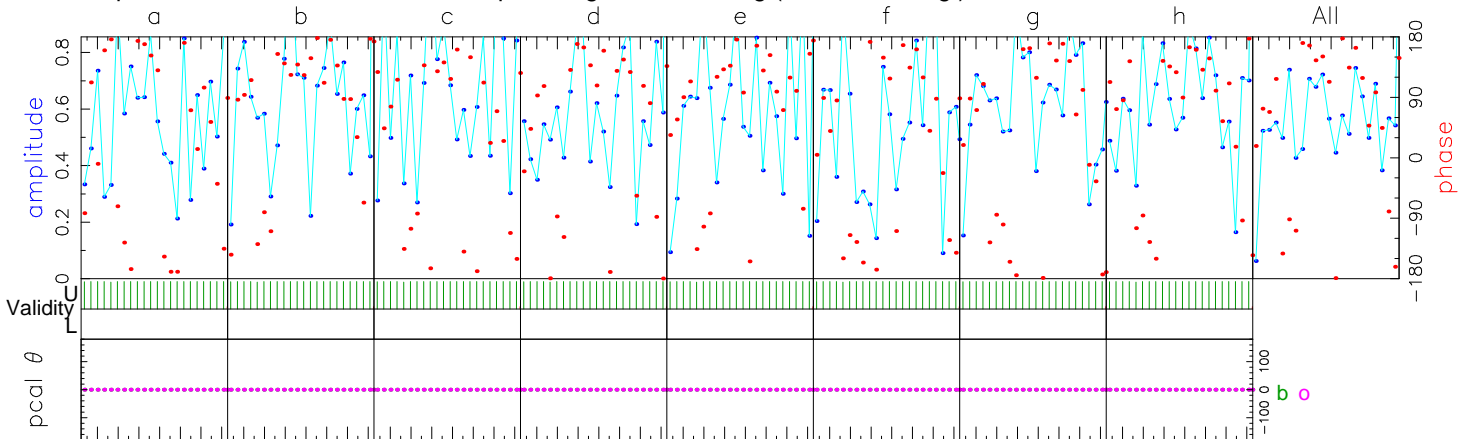


Fringe quality 9

SNR 15.7
Int time 406.536
Amp 0.285
Phase 147.7
PFD 0.0e+00
Delays (us)
SBD 0.000035
MBD -0.000402
Fringe rate (Hz) 0.001361
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

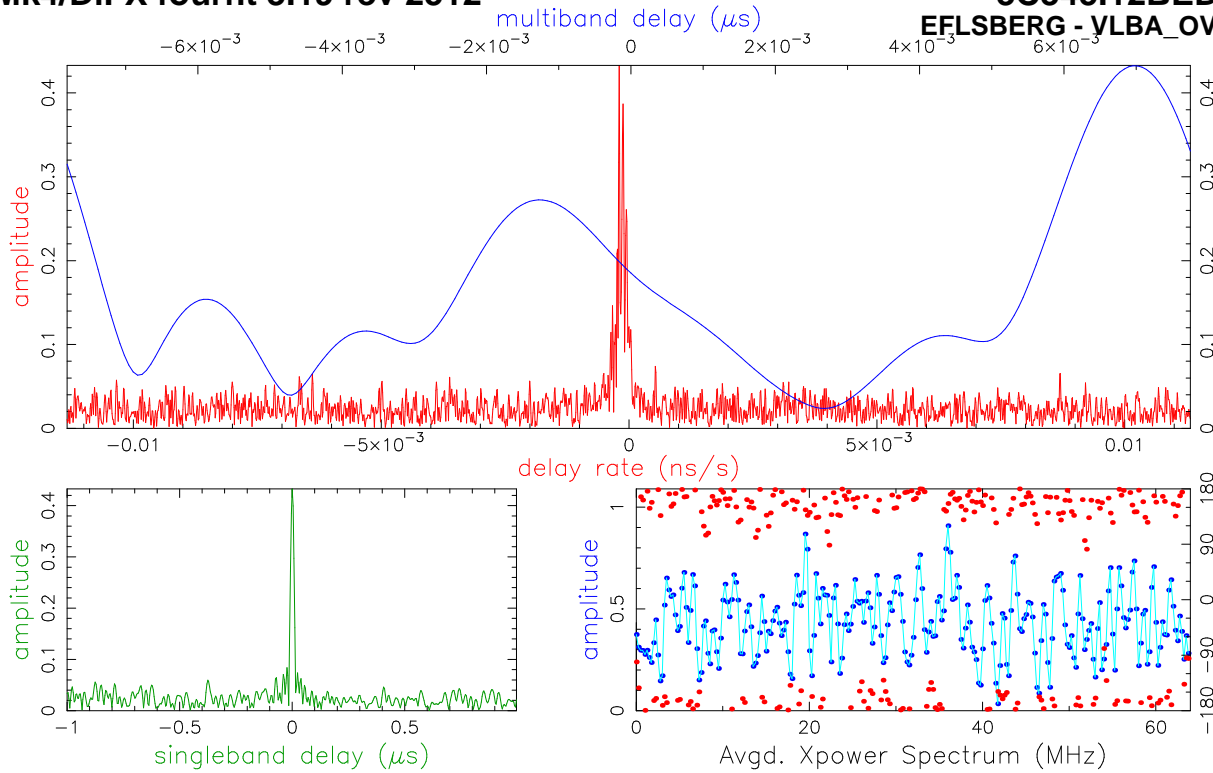
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165548
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	-178.0	134.7	136.8	147.4	150.5	145.9	153.5	147.4	Phase	147.7
	0.2	0.4	0.3	0.3	0.3	0.2	0.3	0.3	Ampl.	0.3
	257.4	257.4	257.0	256.6	257.3	257.3	256.8	256.8	Sbd box	257.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.20032769122E+03		Apriori delay (usec)		1.20032809316E+03		Resid mbdelay (usec)		-4.01945E-04	+/- 6.9E-05
Sband delay (usec)	1.20032812791E+03		Apriori clock (usec)		-1.7242477E+01		Resid sbdelay (usec)		3.47500E-05	+/- 5.5E-04
Phase delay (usec)	1.20032809793E+03		Apriori clockrate (us/s)		-2.4337607E-07		Resid phdelay (usec)		4.76364E-06	+/- 2.4E-07
Delay rate (us/s)	-1.46733239170E-01		Apriori rate (us/s)		-1.46733254968E-01		Resid rate (us/s)		1.57980E-08	+/- 1.0E-09
Total phase (deg)	127.9		Apriori accel (us/s/s)		3.60575885645E-06		Resid phase (deg)		147.7	+/- 7.3

ph/seg (deg) 70.1 17.5 Search (2048X32) 0.279 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 107.6 30.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.8 10.3 Inc. seg. avg. 0.527 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 20.0 18.0 Inc. frq. avg. 0.287 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 66.1 el 33.9 pa -52.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1101.765 1173.303 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/bo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/bo.W.16.12BED8

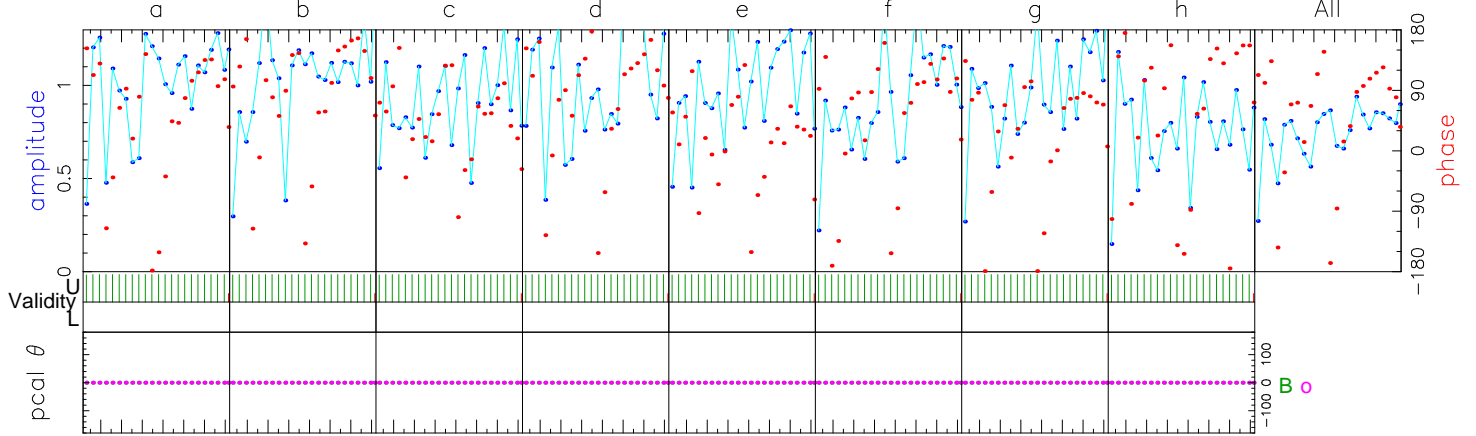


Fringe quality 6

SNR 24.0
Int time 410.829
Amp 0.433
Phase 92.9
PFD 0.0e+00
Delays (us)
SBD 0.000350
MBD 0.006997
Fringe rate (Hz)
-0.016874
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

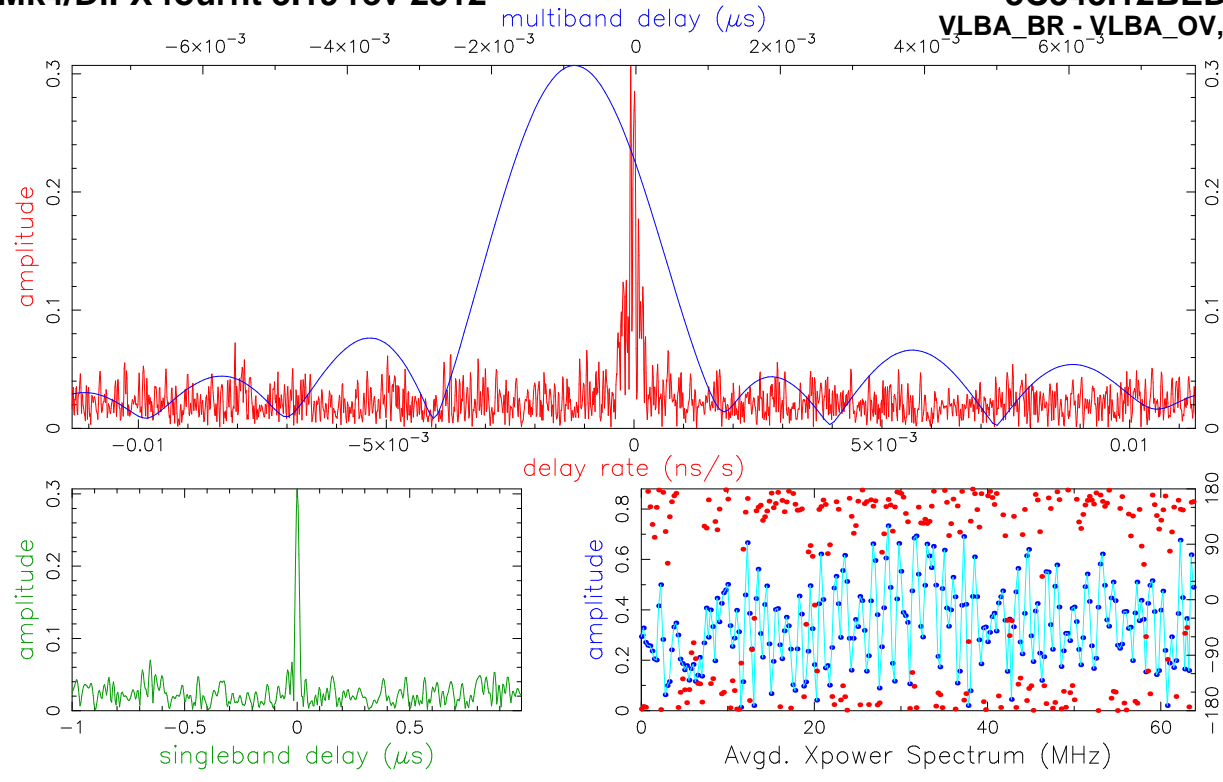
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165548
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	104.7	121.8	50.8	118.2	21.1	111.7	68.5	139.9	Phase	92.9
	0.5	0.5	0.6	0.7	0.6	0.6	0.5	0.4	Ampl.	0.5
	257.1	257.2	257.7	257.5	257.1	257.5	257.5	258.5	Sbd box	257.1
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.86453483103E+03		Apriori delay (usec)		6.86452783394E+03		Resid mbdelay (usec)		6.99709E-03	+/- 4.5E-05
Sband delay (usec)	6.86452818344E+03		Apriori clock (usec)		2.0928383E-01		Resid sbdelay (usec)		3.49500E-04	+/- 3.6E-04
Phase delay (usec)	6.86452783693E+03		Apriori clockrate (us/s)		-2.0098100E-07		Resid phdelay (usec)		2.99433E-06	+/- 1.5E-07
Delay rate (us/s)	-1.48316848256E+00		Apriori rate (us/s)		-1.48316828666E+00		Resid rate (us/s)		-1.95896E-07	+/- 6.5E-10
Total phase (deg)	314.3		Apriori accel (us/s/s)		-2.44504455346E-05		Resid phase (deg)		92.9	+/- 4.8

ph/seg (deg) 66.6 11.5 Search (2048X32) 0.411 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 78.9 20.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.1 6.8 Inc. seg. avg. 0.727 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 29.3 11.8 Inc. frq. avg. 0.538 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 269.2 el 56.7 pa 55.8 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 11012.287 -596.290 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Bo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Bo.W.20.12BED8

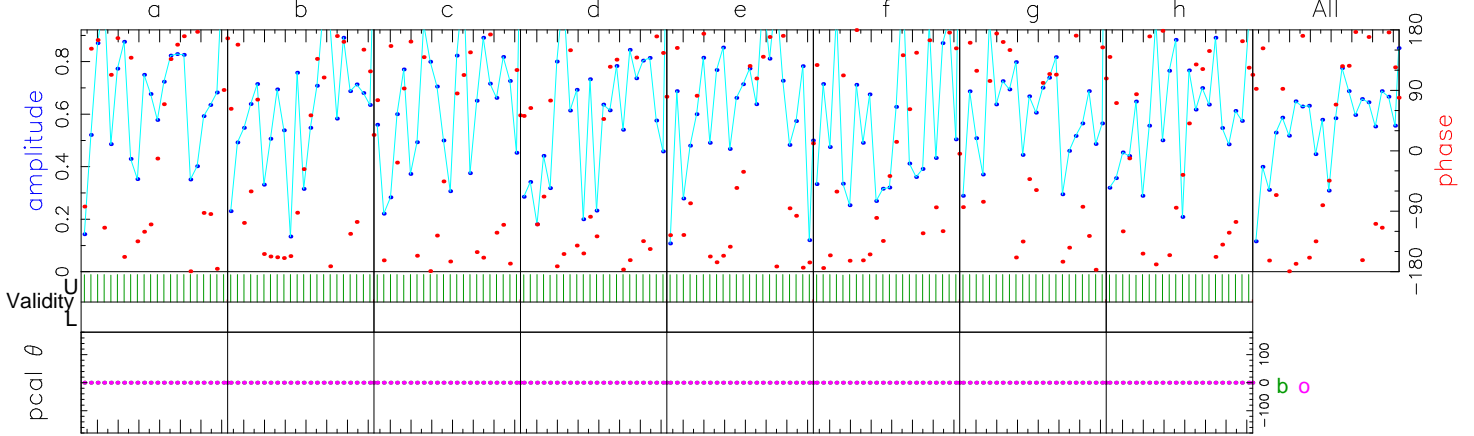


Fringe quality 9

SNR 16.9
Int time 406.536
Amp 0.307
Phase 179.7
PFD 0.0e+00
Delays (us)
SBD 0.000189
MBD -0.000849
Fringe rate (Hz)
-0.005655
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

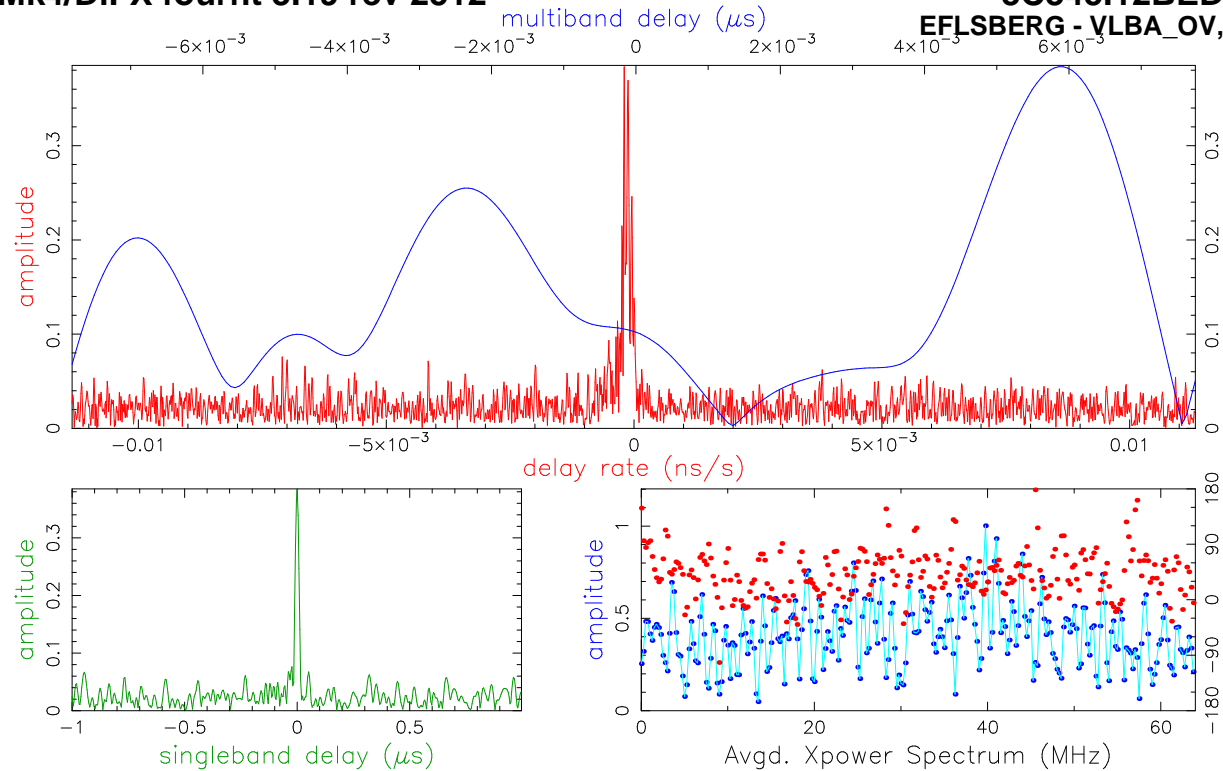
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165551
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



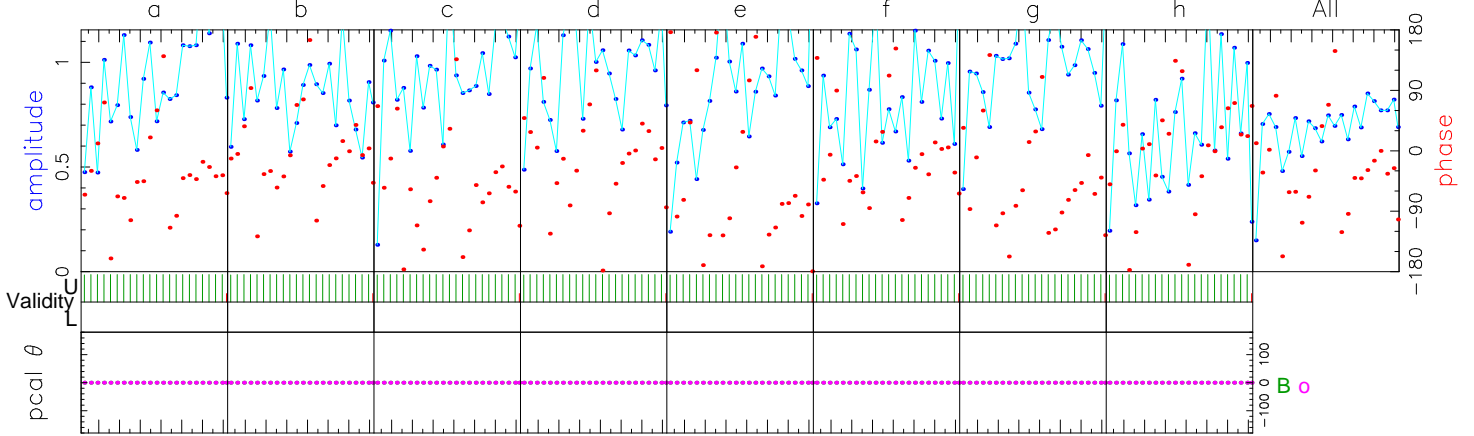
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-179.9	179.6	170.2	-177.6	-173.7	-167.8	170.1	175.6	Phase	179.7
	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	Ampl.	0.3
	257.4	256.9	257.6	257.1	256.7	257.1	257.6	256.7	Sbd box	257.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.20032724386E+03		Apriori delay (usec)		1.20032809316E+03		Resid mbdelay (usec)		-8.49301E-04	+/- 6.4E-05
Sband delay (usec)	1.20032828241E+03		Apriori clock (usec)		-1.7242477E+01		Resid sbdelay (usec)		1.89250E-04	+/- 5.1E-04
Phase delay (usec)	1.20032809896E+03		Apriori clockrate (us/s)		-2.4337607E-07		Resid phdelay (usec)		5.79410E-06	+/- 2.2E-07
Delay rate (us/s)	-1.46733320615E-01		Apriori rate (us/s)		-1.46733254968E-01		Resid rate (us/s)		-6.56464E-08	+/- 9.3E-10
Total phase (deg)	159.9		Apriori accel (us/s/s)		3.60575885645E-06		Resid phase (deg)		179.7	+/- 6.8

ph/seg (deg) 64.6 16.2 Search (2048X32) 0.303 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 93.5 28.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.2 9.6 Inc. seg. avg. 0.531 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.4 16.7 Inc. frq. avg. 0.305 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 66.1 el 33.9 pa -52.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1101.765 1173.303 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/bo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/bo.W.33.12BED8



Fringe quality 8
 SNR 21.3
 Int time 410.829
 Amp 0.385
 Phase -35.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.000782
 MBD 0.005871
 Fringe rate (Hz)
 -0.016987
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165553
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

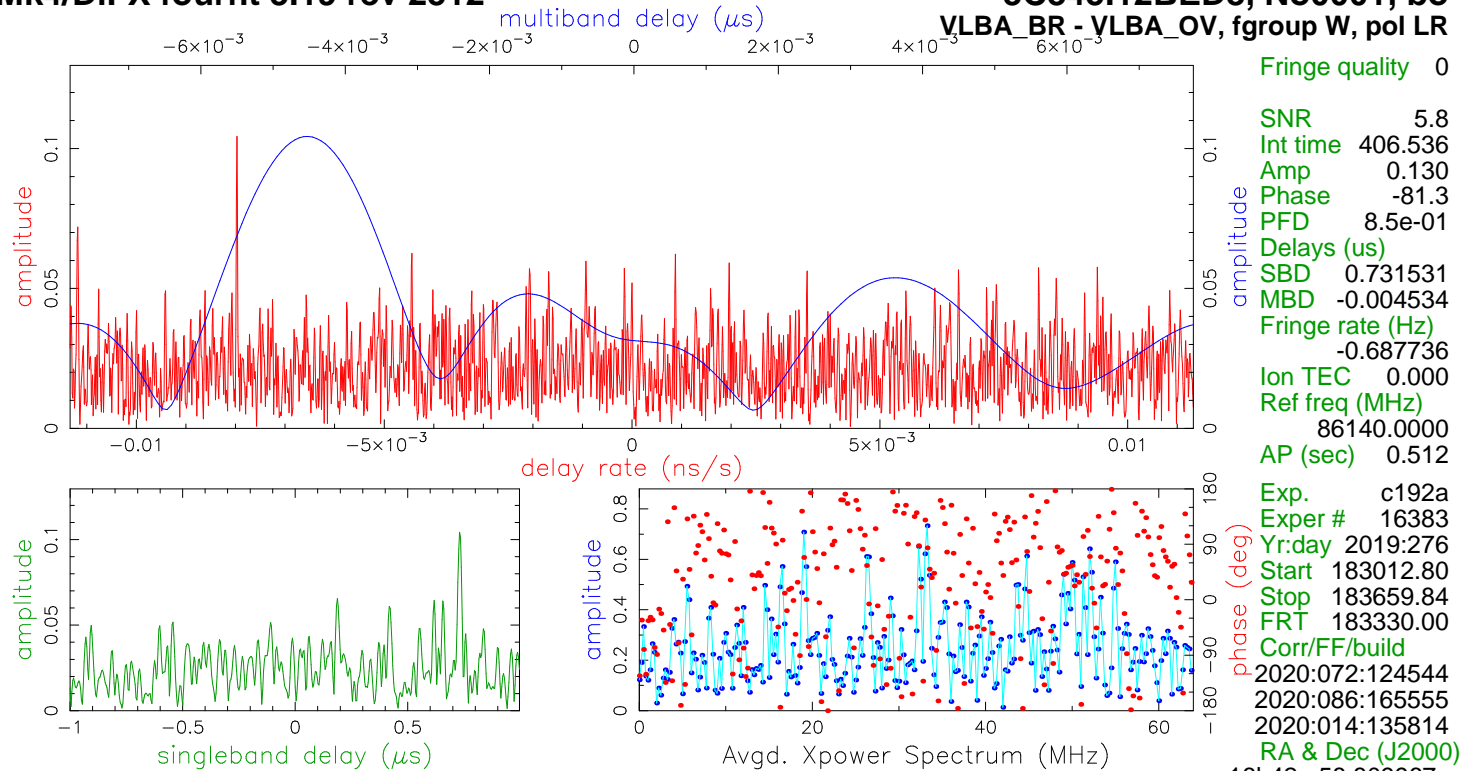
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-40.1	-8.0	-57.4	0.0	-111.3	-22.5	-68.7	25.9	Phase	-35.2
	0.6	0.5	0.5	0.5	0.4	0.5	0.5	0.4	Ampl.	0.5
	257.1	256.4	257.0	257.4	257.8	257.5	258.1	257.1	Sbd box	256.8
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.86453370515E+03		Apriori delay (usec)		6.86452783394E+03		Resid mbdelay (usec)		5.87122E-03	+/- 5.1E-05
Sband delay (usec)	6.86452705219E+03		Apriori clock (usec)		2.0928383E-01		Resid sbdelay (usec)		-7.81750E-04	+/- 4.0E-04
Phase delay (usec)	6.86452783280E+03		Apriori clockrate (us/s)		-2.0098100E-07		Resid phdelay (usec)		-1.13567E-06	+/- 1.7E-07
Delay rate (us/s)	-1.48316848386E+00		Apriori rate (us/s)		-1.48316828666E+00		Resid rate (us/s)		-1.97199E-07	+/- 7.3E-10
Total phase (deg)	186.2		Apriori accel (us/s/s)		-2.44504455346E-05		Resid phase (deg)		-35.2	+/- 5.4

	RMS	Theor.	Amplitude	0.385 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	67.2	12.9	Search (2048X32)	0.377	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	85.8	22.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	47.1	7.6	Inc. seg. avg.	0.666	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	30.0	13.2	Inc. frq. avg.	0.481	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

B: az 269.2 el 56.7 pa 55.8 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 11012.287 -596.290 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Bo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Bo.W.43.12BED8



Fringe quality 0

SNR 5.8

Int time 406.536

Amp 0.130

Phase -81.3

PFD 8.5e-01

Delays (us)

SBD 0.731531

MBD -0.004534

Fringe rate (Hz)

-0.687736

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183012.80

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:072:124544

2020:086:165555

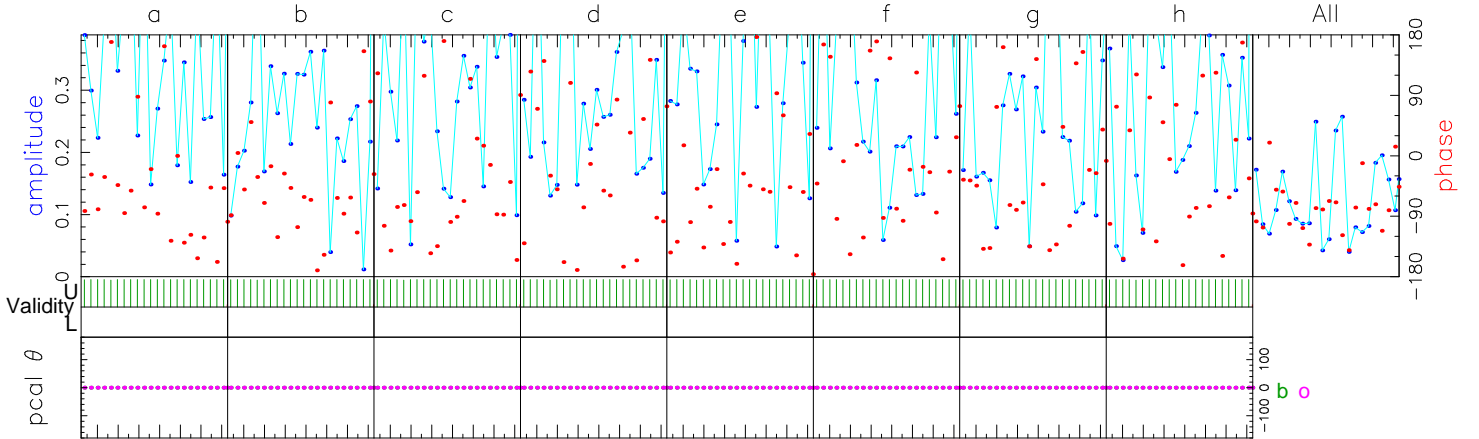
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	-94.6	-61.2	-81.2	112.9	-73.7	-95.2	-86.4	-69.8	Phase	-81.3
	0.2	0.2	0.2	0.0	0.2	0.1	0.1	0.0	Ampl.	0.1
	443.3	86.8	425.8	308.0	299.0	214.7	223.7	262.3	Sbd box	444.3
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.20105793374E+03		Apriori delay (usec)		1.20032809316E+03		Resid mbdelay (usec)		-4.53442E-03	+/- 1.9E-04
Sband delay (usec)	1.20105962416E+03		Apriori clock (usec)		-1.7242477E+01		Resid sbdelay (usec)		7.31531E-01	+/- 1.5E-03
Phase delay (usec)	1.20032809054E+03		Apriori clockrate (us/s)		-2.4337607E-07		Resid phdelay (usec)		-2.62017E-06	+/- 6.4E-07
Delay rate (us/s)	-1.46741238902E-01		Apriori rate (us/s)		-1.46733254968E-01		Resid rate (us/s)		-7.98393E-06	+/- 2.7E-09
Total phase (deg)	258.9		Apriori accel (us/s/s)		3.60575885645E-06		Resid phase (deg)		-81.3	+/- 19.8

RMS Theor. Amplitude 0.130 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

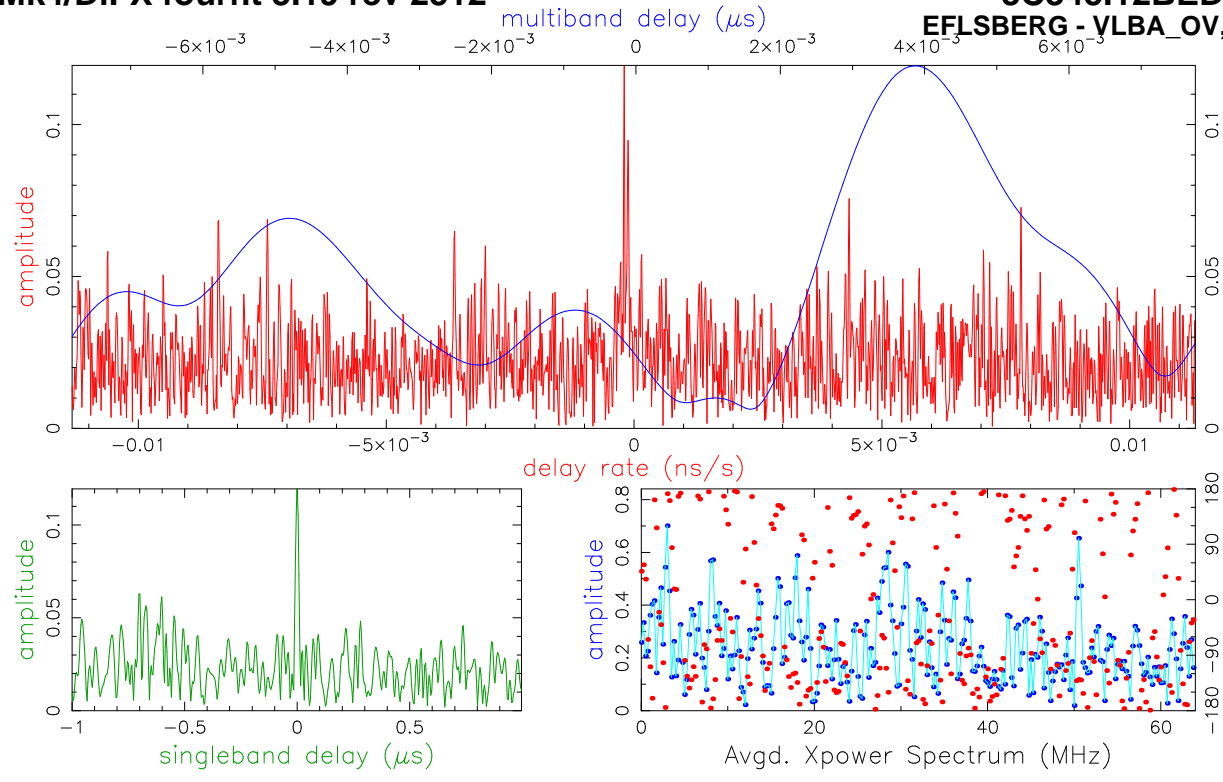
ph/seg (deg) 40.9 47.5 Search (2048X32) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

amp/seg (%) 64.9 83.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

ph/frq (deg) 68.9 28.0 Inc. seg. avg. 0.115 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011

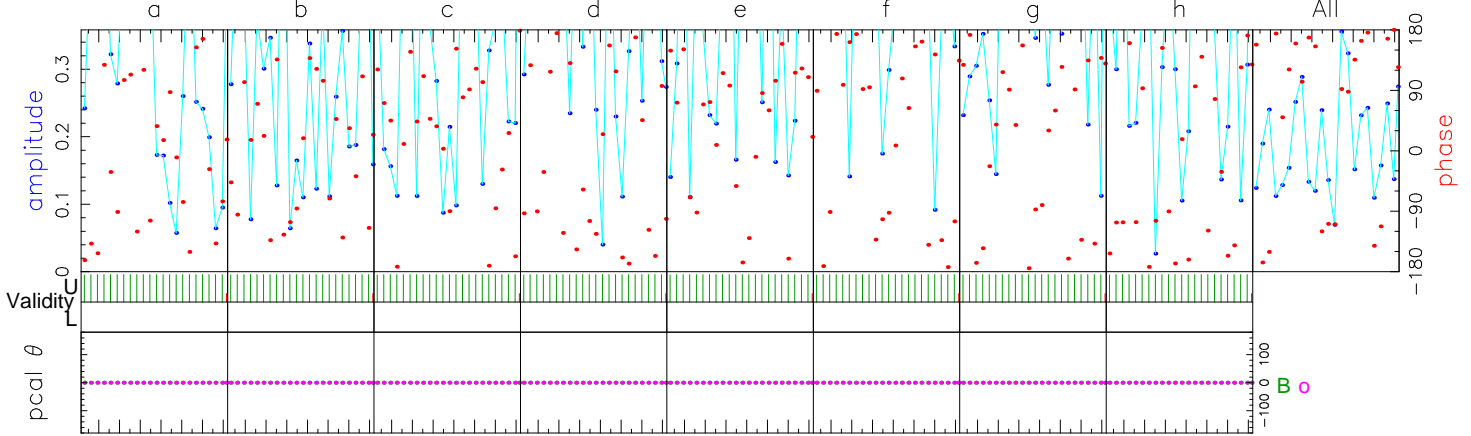
amp/frq (%) 59.8 48.9 Inc. frq. avg. 0.127 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 66.1 el 33.9 pa -52.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1101.765 1173.303 simultaneous interpolator



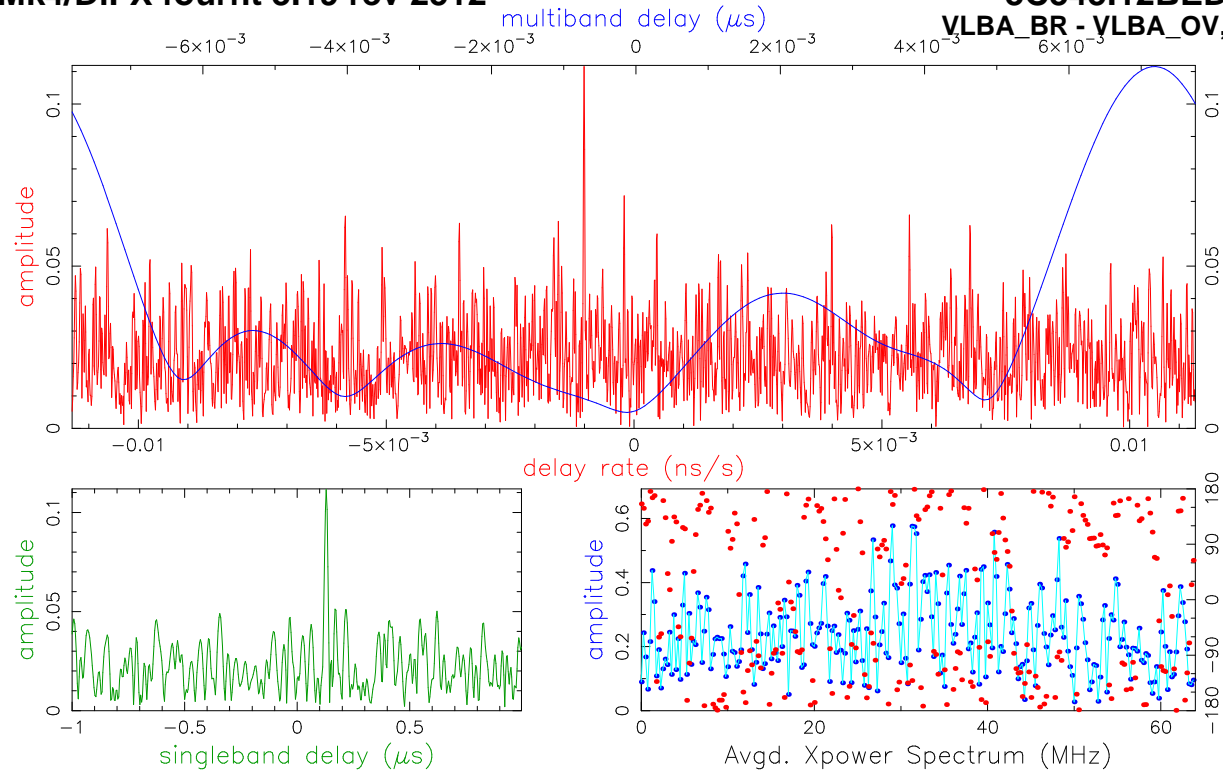
Fringe quality 0
SNR 6.6
Int time 410.829
Amp 0.119
Phase 159.1
PFD 1.0e-02
Delays (us)
SBD -0.000422
MBD 0.003854
Fringe rate (Hz)
-0.017165
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165558
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	-168.7	-151.9	92.1	-163.7	109.9	154.7	155.1	-170.9	Phase	159.1
	0.1	0.0	0.1	0.2	0.2	0.2	0.2	0.2	Ampl.	0.1
	502.2	491.9	446.2	256.4	257.8	257.3	255.5	507.1	Sbd box	256.9
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.86453168765E+03		Apriori delay (usec)		6.86452783394E+03		Resid mbdelay (usec)		3.85372E-03	+/- 1.6E-04
Sband delay (usec)	6.86452741219E+03		Apriori clock (usec)		2.0928383E-01		Resid sbdelay (usec)		-4.21750E-04	+/- 1.3E-03
Phase delay (usec)	6.86452783907E+03		Apriori clockrate (us/s)		-2.0098100E-07		Resid phdelay (usec)		5.13166E-06	+/- 5.6E-07
Delay rate (us/s)	-1.48316848593E+00		Apriori rate (us/s)		-1.48316828666E+00		Resid rate (us/s)		-1.99272E-07	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.44504455346E-05		Resid phase (deg)		159.1	+/- 17.3

ph/seg (deg) 54.7 41.5 Search (2048X32) 0.118 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 86.3 72.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 45.9 24.5 Inc. seg. avg. 0.150 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 51.9 42.7 Inc. frq. avg. 0.136 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 269.2 el 56.7 pa 55.8 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 11012.287 -596.290 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Bo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Bo.W.63.12BED8

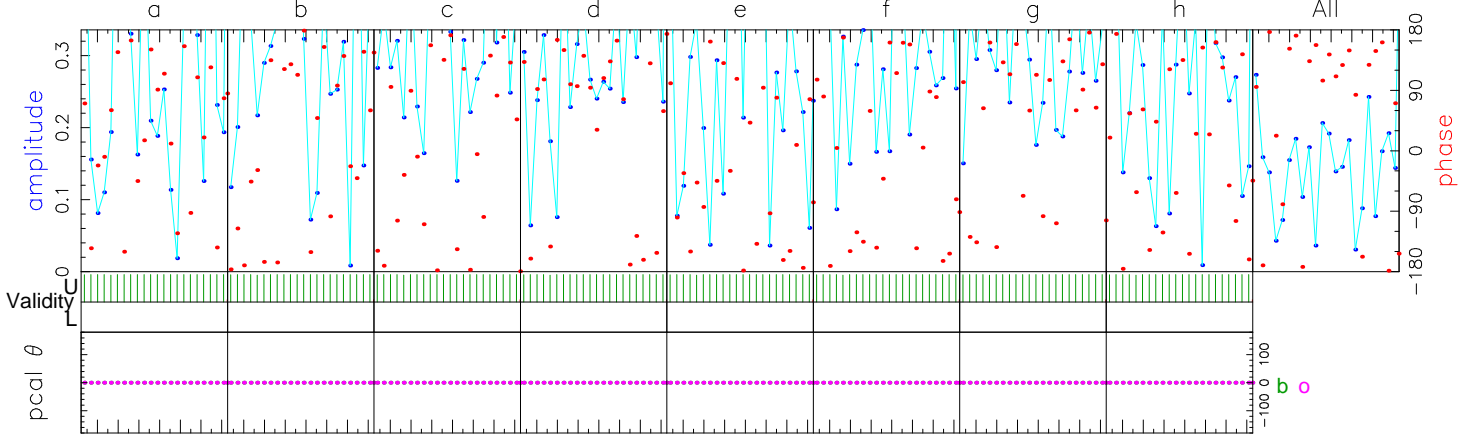


Fringe quality 0

SNR 6.2
Int time 406.536
Amp 0.112
Phase 143.1
PFD 1.9e-01
Delays (us)
SBD 0.129027
MBD 0.007190
Fringe rate (Hz)
-0.086834
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

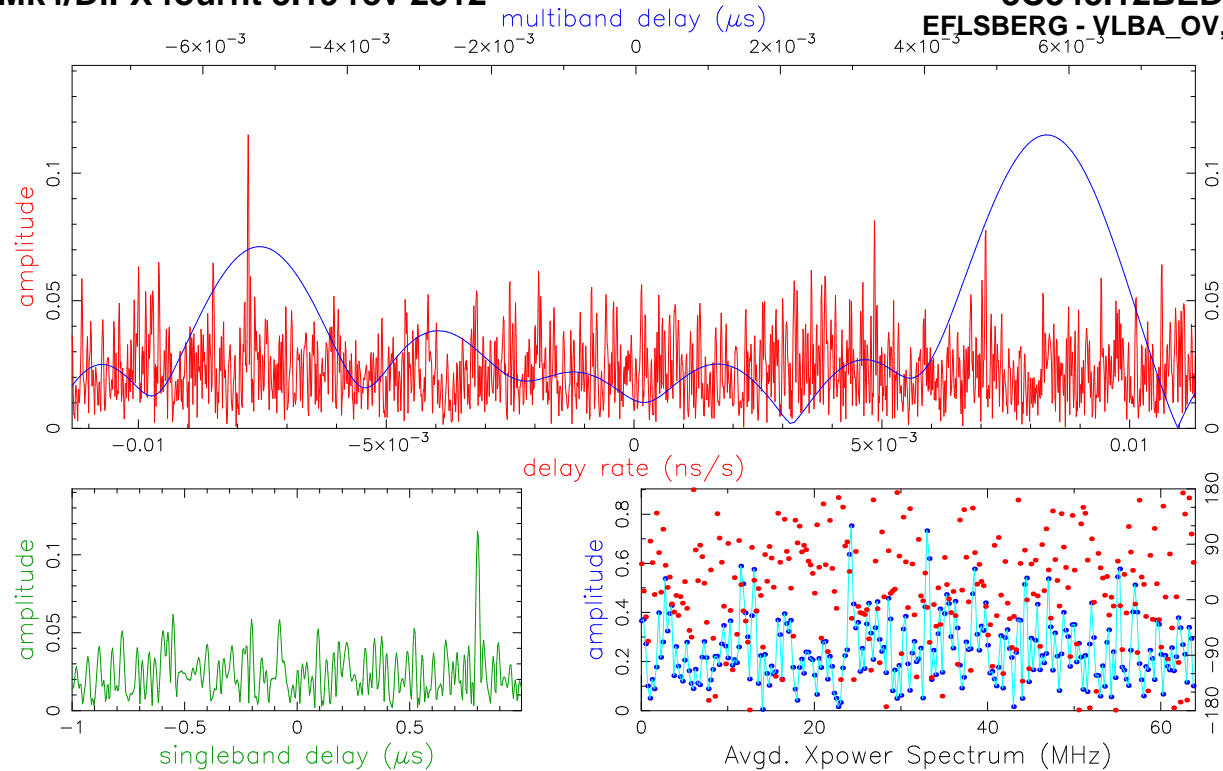
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165559
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



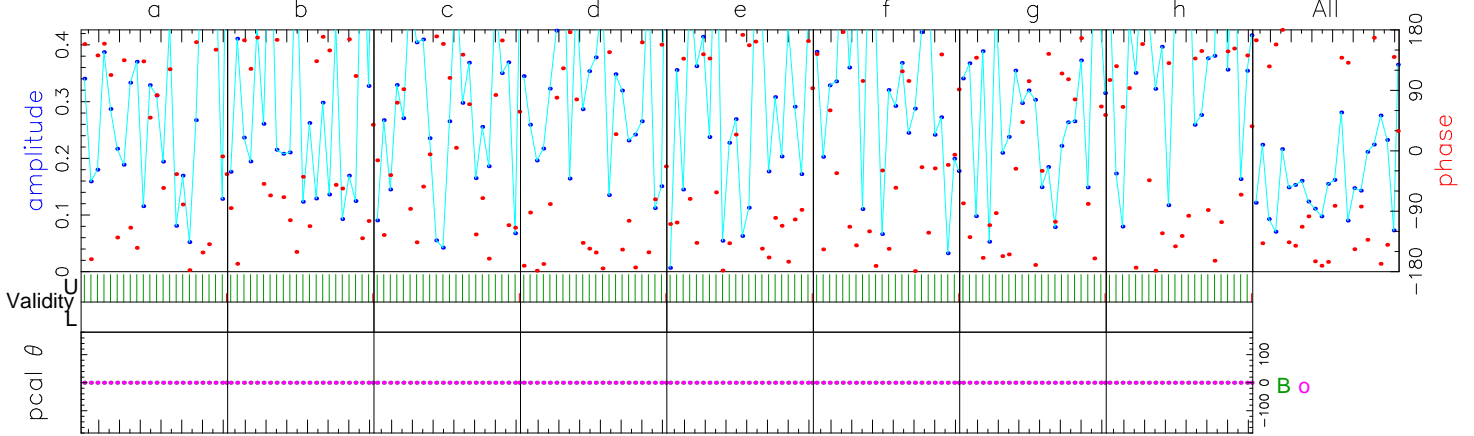
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	126.8	154.3	154.3	141.8	104.8	152.3	138.7	127.5	Phase	143.1
	0.1	0.1	0.2	0.2	0.0	0.1	0.1	0.0	Ampl.	0.1
	161.9	1.4	388.8	288.8	511.4	364.5	229.4	338.4	Sbd box	290.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.20046028353E+03		Apriori delay (usec)		1.20032809316E+03		Resid mbdelay (usec)		7.19036E-03	+/- 1.8E-04
Sband delay (usec)	1.20045712041E+03		Apriori clock (usec)		-1.7242477E+01		Resid sbdelay (usec)		1.29027E-01	+/- 1.4E-03
Phase delay (usec)	1.20032809778E+03		Apriori clockrate (us/s)		-2.4337607E-07		Resid phdelay (usec)		4.61574E-06	+/- 6.0E-07
Delay rate (us/s)	-1.46734263029E-01		Apriori rate (us/s)		-1.46733254968E-01		Resid rate (us/s)		-1.00806E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		3.60575885645E-06		Resid phase (deg)		143.1	+/- 18.6

ph/seg (deg) 51.9 44.7 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 65.9 78.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 19.7 26.3 Inc. seg. avg. 0.111 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 51.6 46.0 Inc. frq. avg. 0.104 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 66.1 el 33.9 pa -52.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1101.765 1173.303 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/bo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/bo.W.68.12BED8



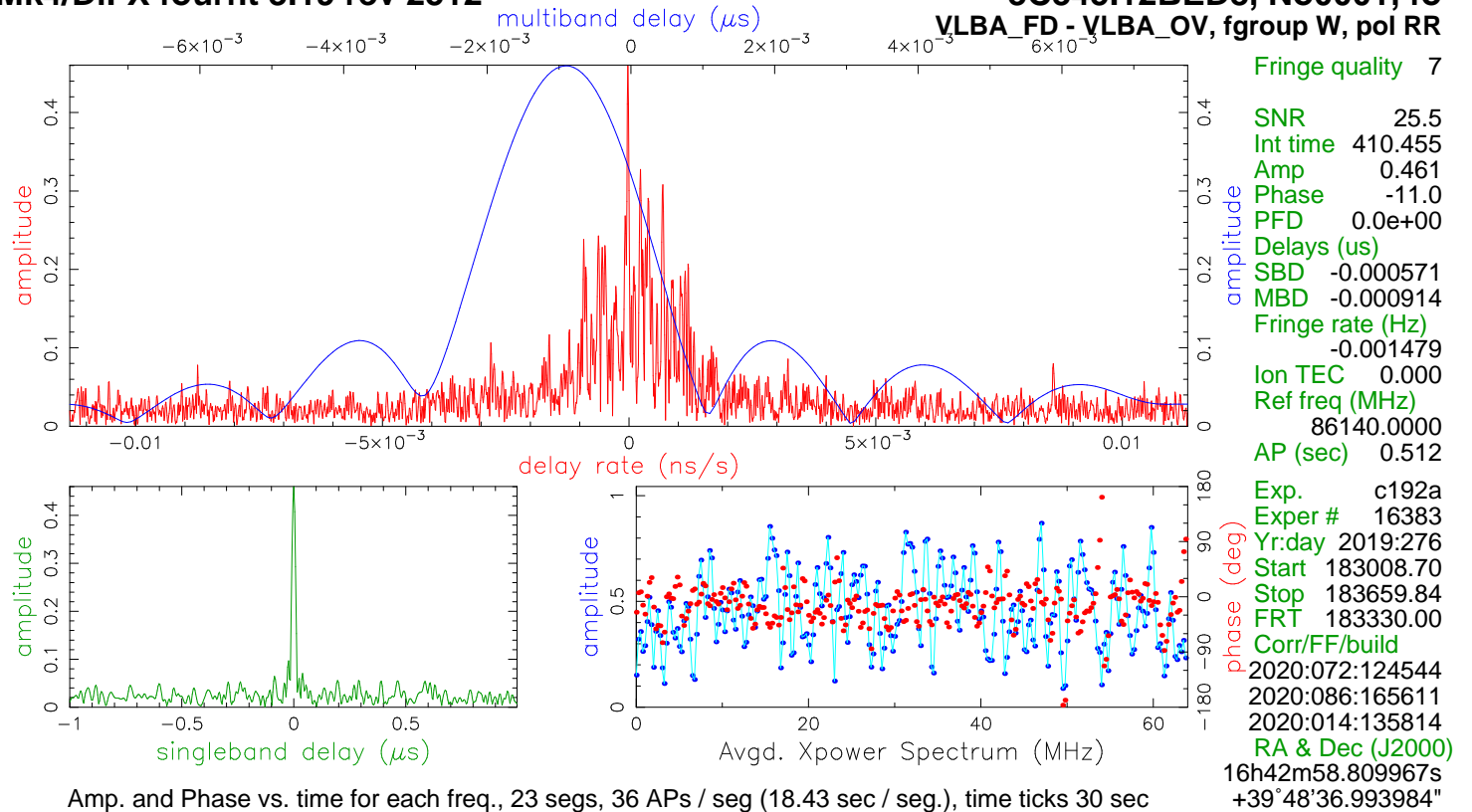
Fringe quality 0
SNR 6.4
Int time 410.829
Amp 0.142
Phase -159.1
PFD 3.3e-02
Delays (us)
SBD 0.802105
MBD 0.005717
Fringe rate (Hz)
-0.671366
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165603
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

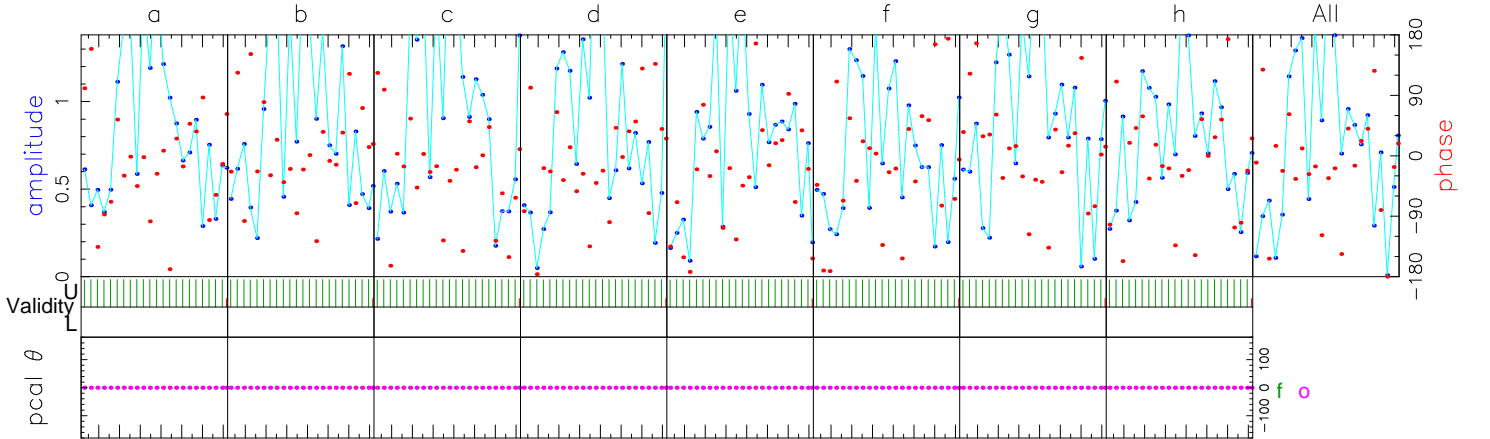


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	177.0	-131.2	-69.6	-173.7	-142.3	-148.4	-172.6	-168.2	Phase	-159.1
	0.2	0.2	0.0	0.2	0.2	0.1	0.1	0.2	Ampl.	0.1
	239.6	219.0	139.6	49.6	463.0	278.6	104.3	115.9	Sbd box	462.3
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.86533042553E+03		Apriori delay (usec)		6.86452783394E+03		Resid mbdelay (usec)		5.71660E-03	+/- 1.7E-04
Sband delay (usec)	6.86532993944E+03		Apriori clock (usec)		2.0928383E-01		Resid sbdelay (usec)		8.02105E-01	+/- 1.3E-03
Phase delay (usec)	6.86452782880E+03		Apriori clockrate (us/s)		-2.0098100E-07		Resid phdelay (usec)		-5.13105E-06	+/- 5.7E-07
Delay rate (us/s)	-1.48317608056E+00		Apriori rate (us/s)		-1.48316828666E+00		Resid rate (us/s)		-7.79390E-06	+/- 2.4E-09
Total phase (deg)	62.3		Apriori accel (us/s/s)		-2.44504455346E-05		Resid phase (deg)		-159.1	+/- 17.8

ph/seg (deg) 48.5 42.7 Search (2048X32) 0.114 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.9 74.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.3 25.2 Inc. seg. avg. 0.156 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.4 43.9 Inc. frq. avg. 0.136 Data rate (Mbit/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 269.2 el 56.7 pa 55.8 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 11012.287 -596.290 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Bo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Bo.W.83.12BED8

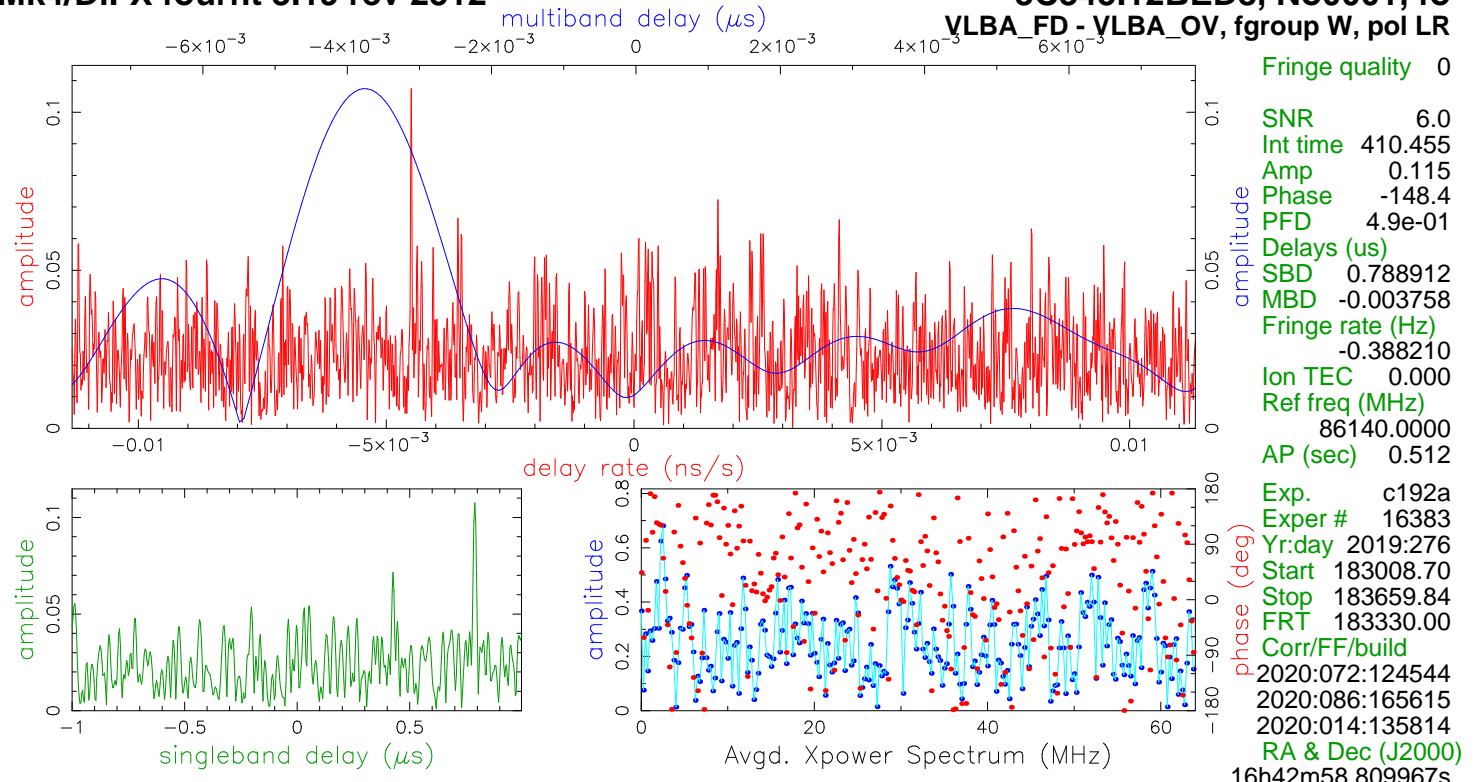


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-12.8	-4.5	-15.0	-13.0	-14.8	-8.5	-12.1	-5.3	Phase	-11.0
	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	Ampl.	0.5
	257.2	256.7	256.9	256.8	256.6	257.2	257.0	256.2	Sbd box	256.9
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fo	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.22717447022E+03		Apriori delay (usec)		2.22717538439E+03		Resid mbdelay (usec)		-9.14170E-04	+/- 4.3E-05
Sband delay (usec)	2.22717481289E+03		Apriori clock (usec)		-1.6174999E+01		Resid sbdelay (usec)		-5.71500E-04	+/- 3.4E-04
Phase delay (usec)	2.22717538403E+03		Apriori clockrate (us/s)		-9.1930498E-08		Resid phdelay (usec)		-3.53738E-07	+/- 1.4E-07
Delay rate (us/s)	-6.53444916950E-03		Apriori rate (us/s)		-6.53443200115E-03		Resid rate (us/s)		-1.71684E-08	+/- 6.1E-10
Total phase (deg)	209.0		Apriori accel (us/s/s)		-1.88137562833E-05		Resid phase (deg)		-11.0	+/- 4.5

RMS Theor. Amplitude 0.461 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 78.2 10.8 Search (2048X32) 0.448 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 121.6 18.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 4.5 6.4 Inc. seg. avg. 0.751 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 13.9 11.1 Inc. frq. avg. 0.458 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 f: az 61.0 el 37.1 pa -78.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 14.933 -1880.128 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/fo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/fo.W.111.12BED8



Fringe quality 0

SNR 6.0

Int time 410.455

Amp 0.115

Phase -148.4

PFD 4.9e-01

Delays (us)

SBD 0.788912

MBD -0.003758

Fringe rate (Hz)

-0.388210

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183008.70

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:072:124544

2020:086:165615

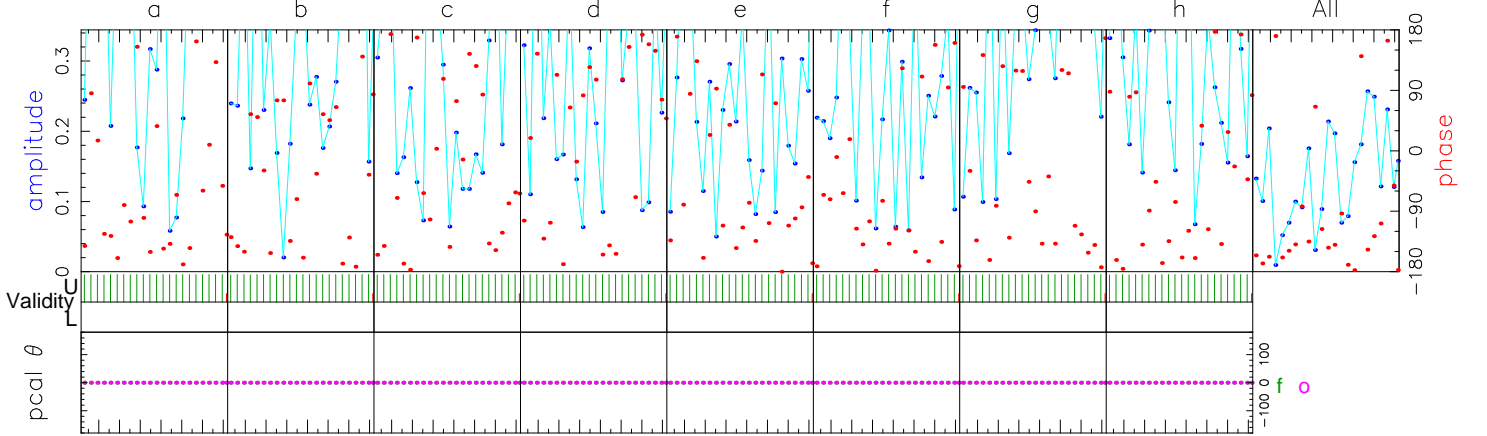
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



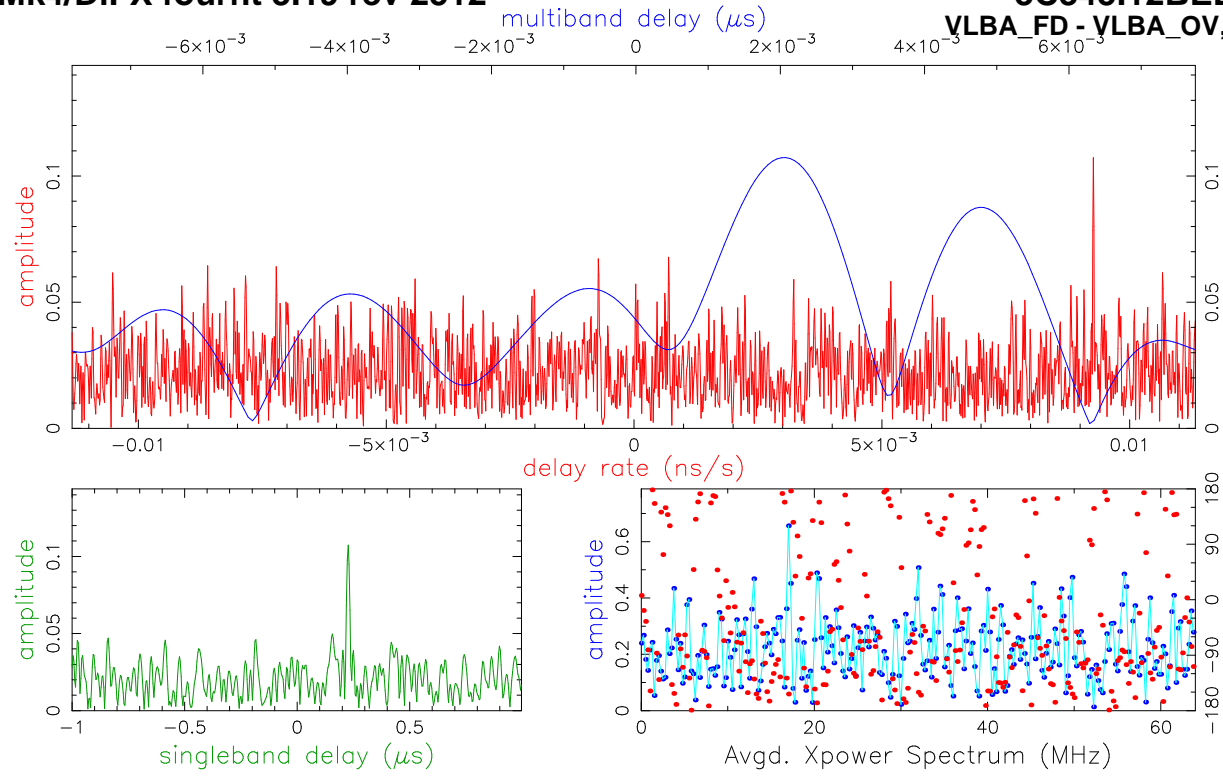
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-131.1	-178.5	-133.5	164.6	-119.4	-130.9	-160.9	-139.0	Phase	-148.4
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	458.2	484.6	460.8	300.3	175.9	406.2	198.9	366.2	Sbd box	459.0
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.22796850144E+03	Apriori delay (usec)	2.22717538439E+03	Resid mbdelay (usec)	-3.75795E-03	+/-	1.8E-04
Sband delay (usec)	2.22796429664E+03	Apriori clock (usec)	-1.6174999E+01	Resid sbdelay (usec)	7.88912E-01	+/-	1.4E-03
Phase delay (usec)	2.22717537960E+03	Apriori clockrate (us/s)	-9.1930498E-08	Resid phdelay (usec)	-4.78690E-06	+/-	6.2E-07
Delay rate (us/s)	-6.53893872875E-03	Apriori rate (us/s)	-6.53443200115E-03	Resid rate (us/s)	-4.50673E-06	+/-	2.6E-09
Total phase (deg)	71.5	Apriori accel (us/s/s)	-1.88137562833E-05	Resid phase (deg)	-148.4	+/-	19.2

ph/seg (deg)	48.6	Theor.	46.1	Amplitude	0.115 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
amp/seg (%)	69.2	Search (2048X32)	0.106	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	29.0	Inc. seg. avg.	0.108	Inc. frq. avg.	0.113	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	25.5	Inc. frq. avg.	0.113			Sample rate(MSamp/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

f: az 61.0 el 37.1 pa -78.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 14.933 -1880.128 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/fo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/fo.W.133.12BED8

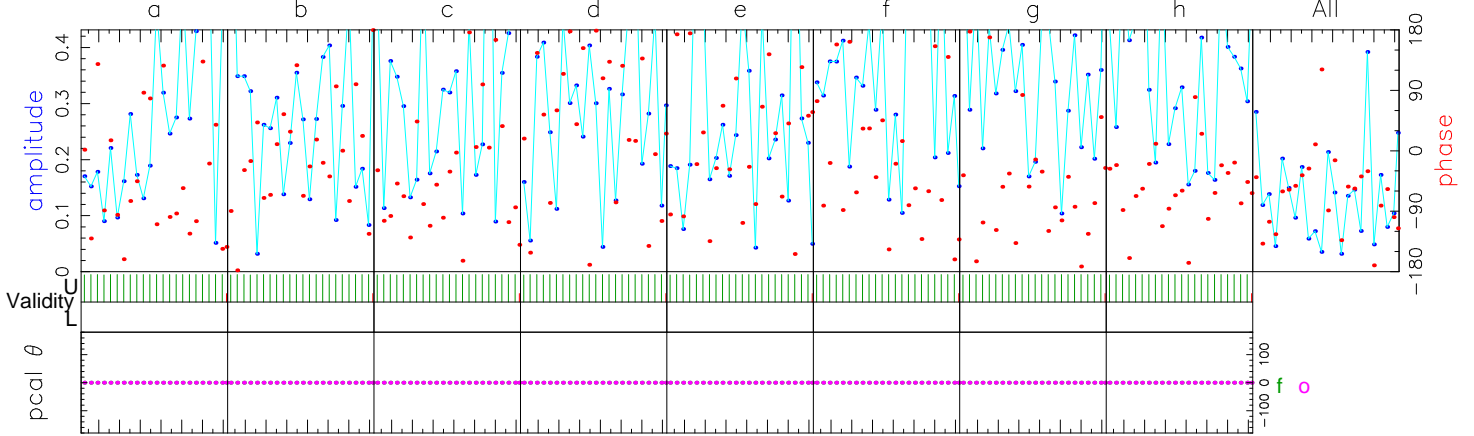


Fringe quality 0

SNR 5.9
Int time 410.455
Amp 0.144
Phase -59.6
PFD 5.0e-01
Delays (us)
SBD 0.226355
MBD 0.002047
Fringe rate (Hz) 0.799241
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

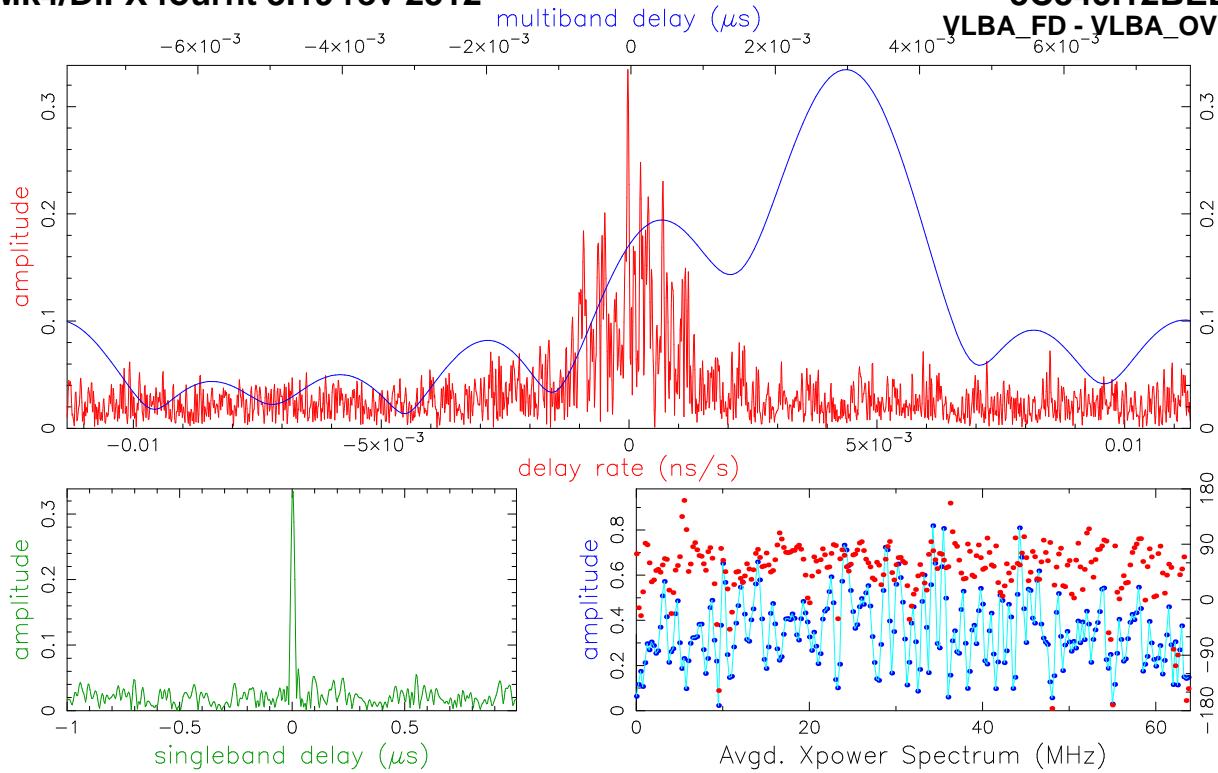
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:072:124544
2020:086:165620
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



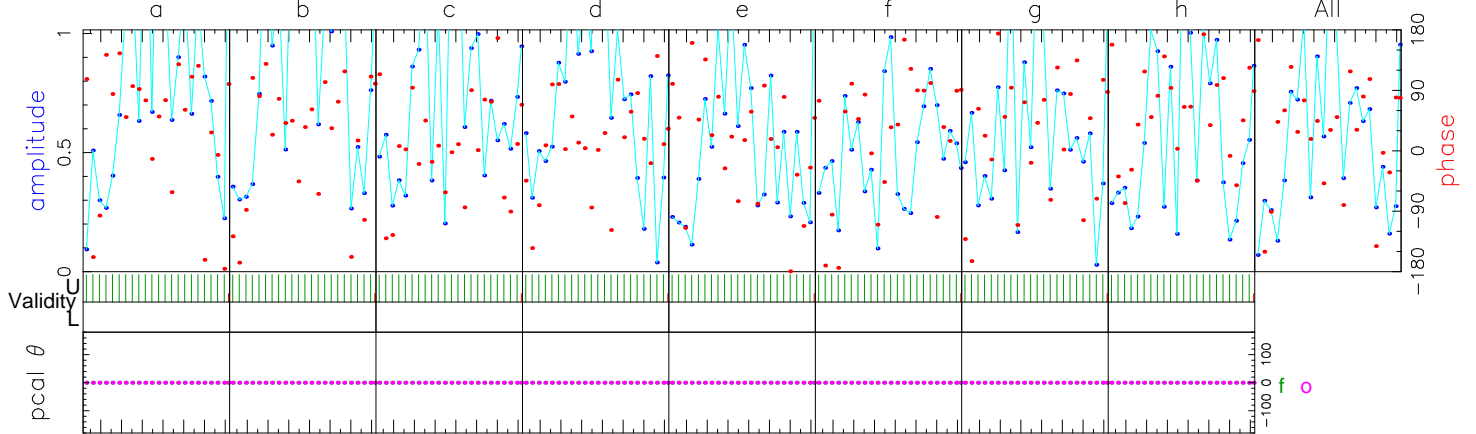
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-101.6	-36.6	-57.4	97.1	-12.3	-60.5	-85.2	-54.5	Phase	-59.6
	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.3	Ampl.	0.2
	145.4	209.6	321.0	426.3	425.8	234.4	478.7	314.6	Sbd box	314.9
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.22739618129E+03		Apriori delay (usec)		2.22717538439E+03		Resid mbdelay (usec)		2.04690E-03	+/- 1.8E-04
Sband delay (usec)	2.22740173939E+03		Apriori clock (usec)		-1.6174999E+01		Resid sbdelay (usec)		2.26355E-01	+/- 1.4E-03
Phase delay (usec)	2.22717538246E+03		Apriori clockrate (us/s)		-9.1930498E-08		Resid phdelay (usec)		-1.92293E-06	+/- 6.2E-07
Delay rate (us/s)	-6.52515360422E-03		Apriori rate (us/s)		-6.53443200115E-03		Resid rate (us/s)		9.27840E-06	+/- 2.6E-09
Total phase (deg)	160.4		Apriori accel (us/s/s)		-1.88137562833E-05		Resid phase (deg)		-59.6	+/- 19.3

ph/seg (deg) 58.6 46.2 Search (2048X32) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 83.5 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) 70.5 27.2 Inc. seg. avg. 0.136 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 62.5 47.5 Inc. frq. avg. 0.161 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 61.0 el 37.1 pa -78.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 14.933 -1880.128 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/fo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/fo.W.152.12BED8



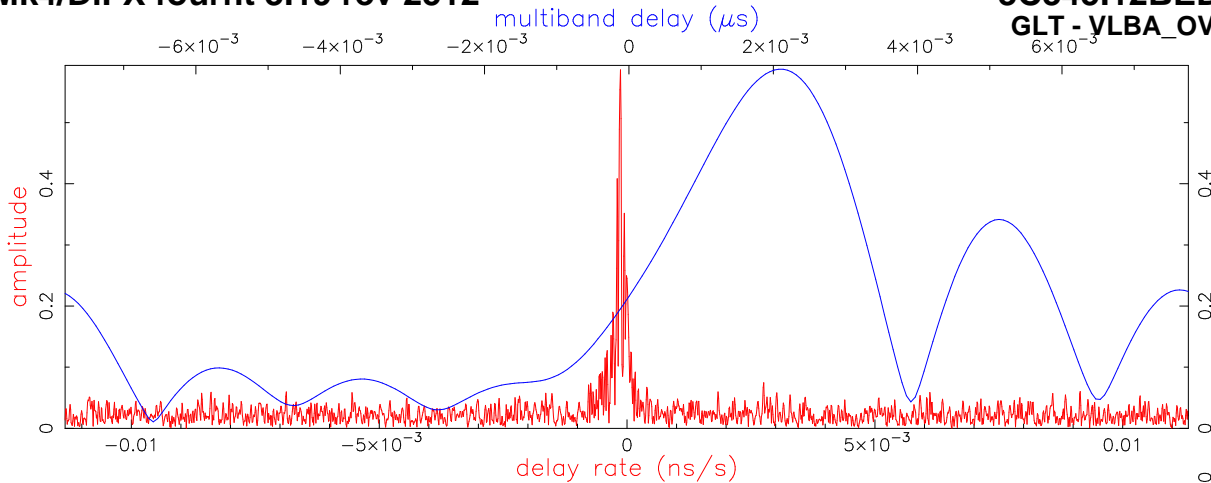
Fringe quality 8
 SNR 18.7
 Int time 410.455
 Amp 0.338
 Phase 53.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.002449
 MBD 0.002960
 Fringe rate (Hz) -0.001440
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165607
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



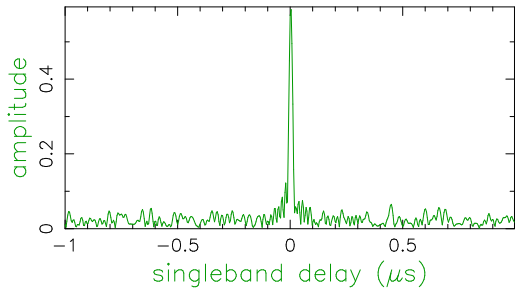
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	53.9
o	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	0.4
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.6
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC phase	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
									PC amp	
									Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	2.22717834482E+03				2.22717538439E+03				Resid mbdelay (usec)	2.96043E-03 +/- 5.8E-05
Sband delay (usec)	2.22717783339E+03				-1.6174999E+01				Resid sbdelay (usec)	2.44900E-03 +/- 4.6E-04
Phase delay (usec)	2.22717538613E+03				-9.1930498E-08				Resid phdelay (usec)	1.73956E-06 +/- 2.0E-07
Delay rate (us/s)	-6.53444871248E-03				-6.53443200115E-03				Resid rate (us/s)	-1.67113E-08 +/- 8.3E-10
Total phase (deg)		273.9			-1.88137562833E-05				Resid phase (deg)	53.9 +/- 6.1

ph/seg (deg) 79.5 14.7 Search (2048X32) 0.326 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 119.6 25.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 29.6 8.6 Inc. seg. avg. 0.544 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.9 15.1 Inc. frq. avg. 0.369 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 61.0 el 37.1 pa -78.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 14.933 -1880.128 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/fo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/fo.W.91.12BED8

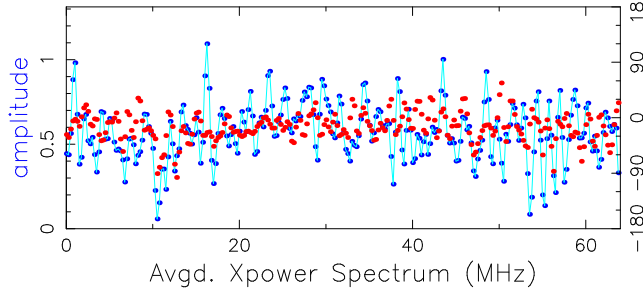


Fringe quality 4

SNR 32.9
Int time 410.688
Amp 0.594
Phase -7.8
PFD 0.0e+00
Delays (us)
SBD 0.002512
MBD 0.002028
Fringe rate (Hz)
-0.011371
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

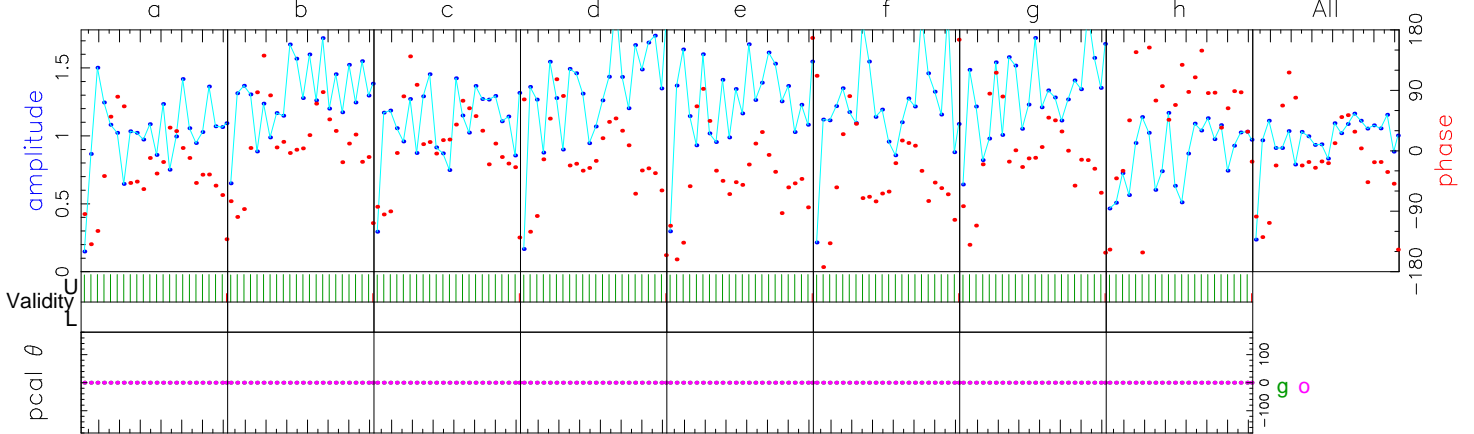


delay rate (ns/s)



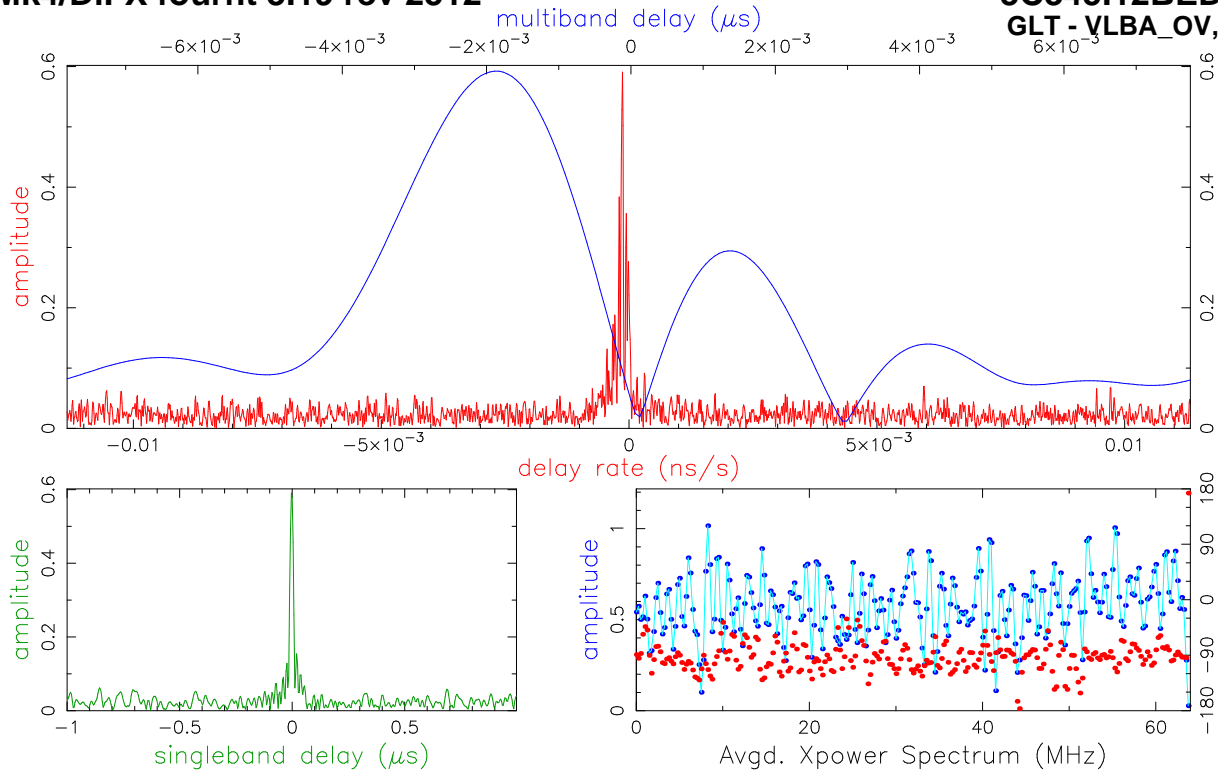
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165618
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	-28.4	13.8	16.0	-9.9	-38.1	-45.4	-8.6	87.2		-7.8
	0.7	0.8	0.7	0.8	0.7	0.7	0.8	0.5	Ampl.	0.7
	259.3	257.6	257.1	257.4	257.2	257.3	257.8	259.6	Sbd box	257.6
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	5.75425936679E+03		Apriori delay (usec)		5.75425733910E+03		Resid mbdelay (usec)		2.02770E-03	+/- 3.3E-05
Sband delay (usec)	5.75425985160E+03		Apriori clock (usec)		-1.5333658E+01		Resid sbdelay (usec)		2.51250E-03	+/- 2.6E-04
Phase delay (usec)	5.75425733884E+03		Apriori clockrate (us/s)		7.4018997E-08		Resid phdelay (usec)		-2.51647E-07	+/- 1.1E-07
Delay rate (us/s)	-7.96777168656E-01		Apriori rate (us/s)		-7.96777036652E-01		Resid rate (us/s)		-1.32004E-07	+/- 4.7E-10
Total phase (deg)	60.5		Apriori accel (us/s/s)		-4.09619280062E-06		Resid phase (deg)		-7.8	+/- 3.5

ph/seg (deg) 60.2 8.4 Search (2048X32) 0.578 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 71.3 14.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 46.2 4.9 Inc. seg. avg. 0.963 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 24.9 8.6 Inc. frq. avg. 0.703 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 142.5 el 51.0 pa -10.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/go..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/go.W.140.12BED8

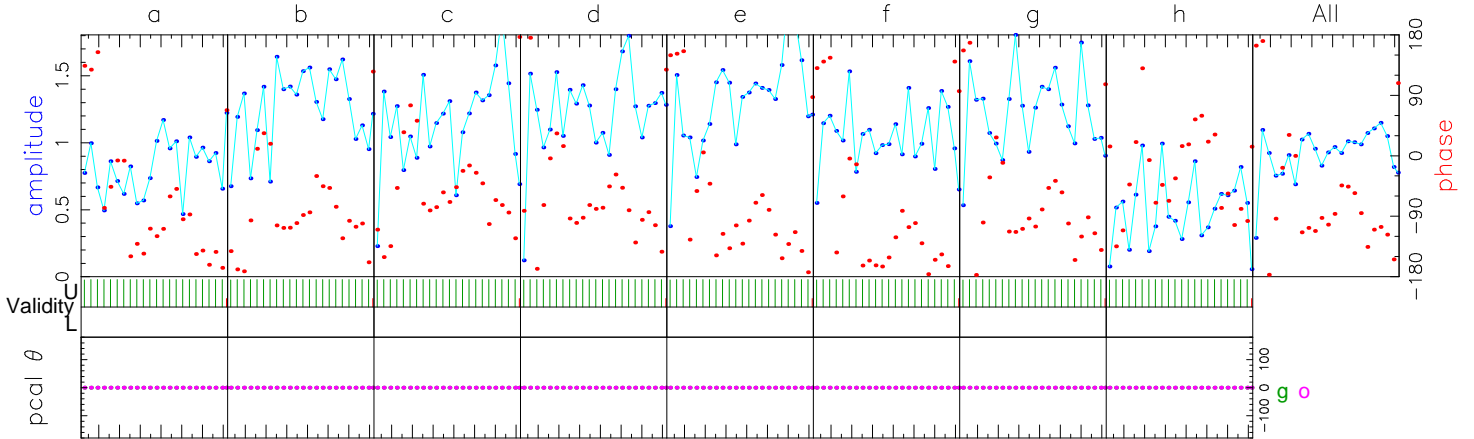


Fringe quality 4

SNR 33.4
Int time 410.730
Amp 0.602
Phase -99.3
PFD 0.0e+00
Delays (us)
SBD -0.002245
MBD -0.001771
Fringe rate (Hz)
-0.011234
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

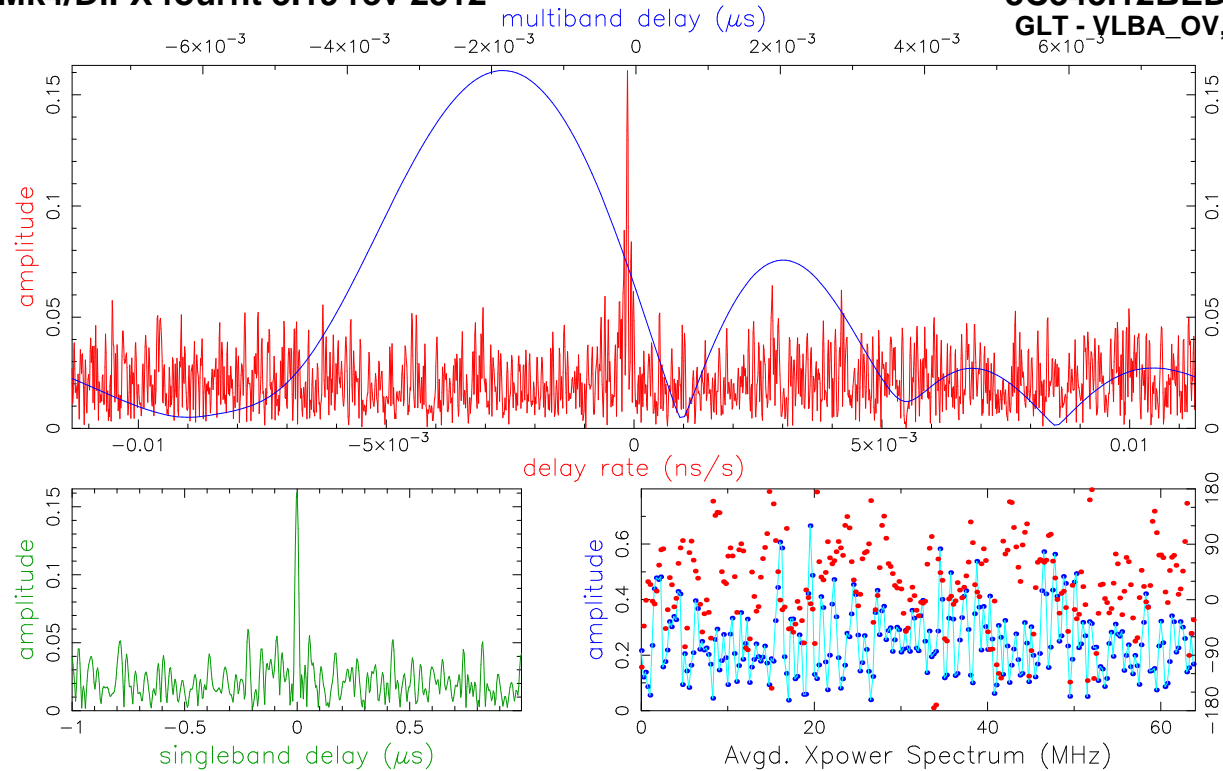
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165622
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	-119.8	-92.3	-64.0	-82.3	-120.8	-148.1	-100.2	-40.0	Phase	-99.3
	0.4	0.8	0.8	0.8	0.9	0.6	0.8	0.2	Ampl.	0.7
	258.4	256.6	256.2	256.2	256.6	256.6	256.9	259.1	Sbd box	256.4
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	5.75425556767E+03		Apriori delay (usec)		5.75425733910E+03		Resid mbdelay (usec)		-1.77143E-03	+/- 3.3E-05
Sband delay (usec)	5.75425509385E+03		Apriori clock (usec)		-1.5333658E+01		Resid sbdelay (usec)		-2.24525E-03	+/- 2.6E-04
Phase delay (usec)	5.75425733590E+03		Apriori clockrate (us/s)		7.4018997E-08		Resid phdelay (usec)		-3.20056E-06	+/- 1.1E-07
Delay rate (us/s)	-7.96777167063E-01		Apriori rate (us/s)		-7.96777036652E-01		Resid rate (us/s)		-1.30411E-07	+/- 4.7E-10
Total phase (deg)			Apriori accel (us/s/s)		-4.09619280062E-06		Resid phase (deg)		-99.3	+/- 3.4

ph/seg (deg) 59.0 8.2 Search (2048X32) 0.582 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 61.2 14.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 37.3 4.9 Inc. seg. avg. 0.913 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 37.0 8.5 Inc. frq. avg. 0.663 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 142.5 el 51.0 pa -10.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/go..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/go.W.159.12BED8

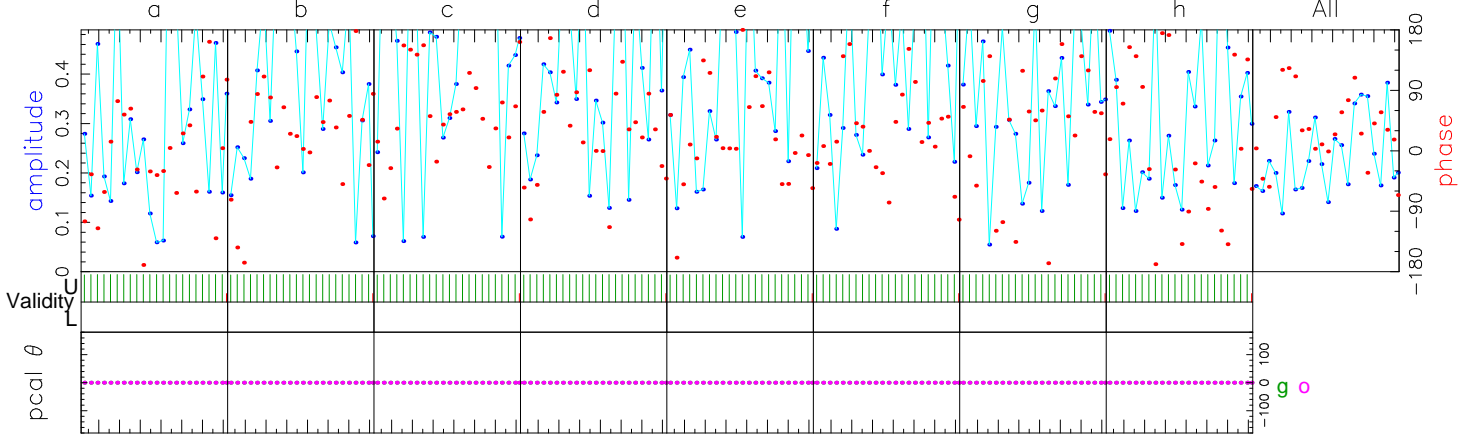


Fringe quality 9

SNR 9.0
Int time 410.688
Amp 0.163
Phase 32.8
PFD 5.8e-11
Delays (us)
SBD -0.001513
MBD -0.001895
Fringe rate (Hz)
-0.011373
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

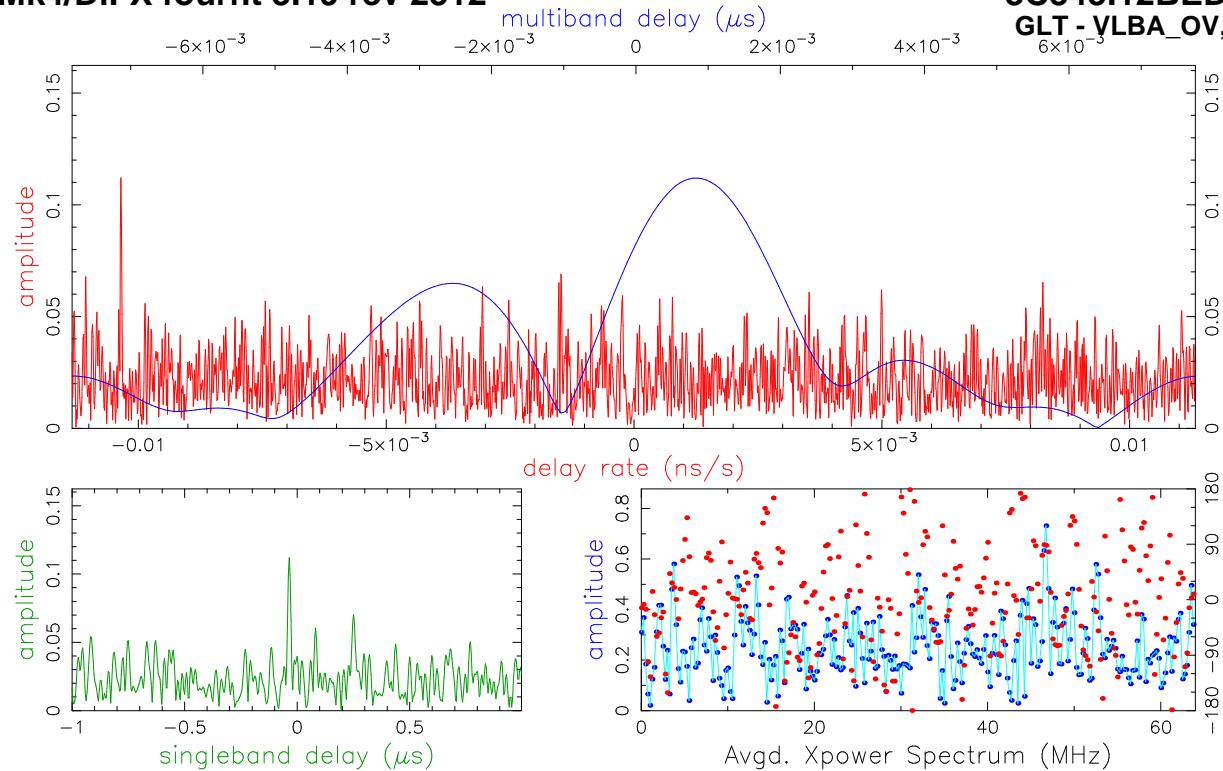
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165627
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	-14.1	37.2	47.4	49.5	16.3	21.1	74.4	-114.6	Phase	32.8
	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.1	Ampl.	0.2
	235.0	256.8	256.8	256.4	256.9	256.8	62.8	172.2	Sbd box	256.6
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.75425544457E+03		Apriori delay (usec)		5.75425733910E+03		Resid mbdelay (usec)		-1.89452E-03	+/- 1.2E-04
Sband delay (usec)	5.75425582560E+03		Apriori clock (usec)		-1.5333658E+01		Resid sbdelay (usec)		-1.51350E-03	+/- 9.5E-04
Phase delay (usec)	5.75425734015E+03		Apriori clockrate (us/s)		7.4018997E-08		Resid phdelay (usec)		1.05886E-06	+/- 4.1E-07
Delay rate (us/s)	-7.96777168682E-01		Apriori rate (us/s)		-7.96777036652E-01		Resid rate (us/s)		-1.32031E-07	+/- 1.7E-09
Total phase (deg)	101.1		Apriori accel (us/s/s)		-4.09619280062E-06		Resid phase (deg)		32.8	+/- 12.7

ph/seg (deg) 49.7 30.4 Search (2048X32) 0.160 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.1 53.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 66.6 17.9 Inc. seg. avg. 0.206 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.8 31.3 Inc. frq. avg. 0.178 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 142.5 el 51.0 pa -10.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/go..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/go.W.173.12BED8

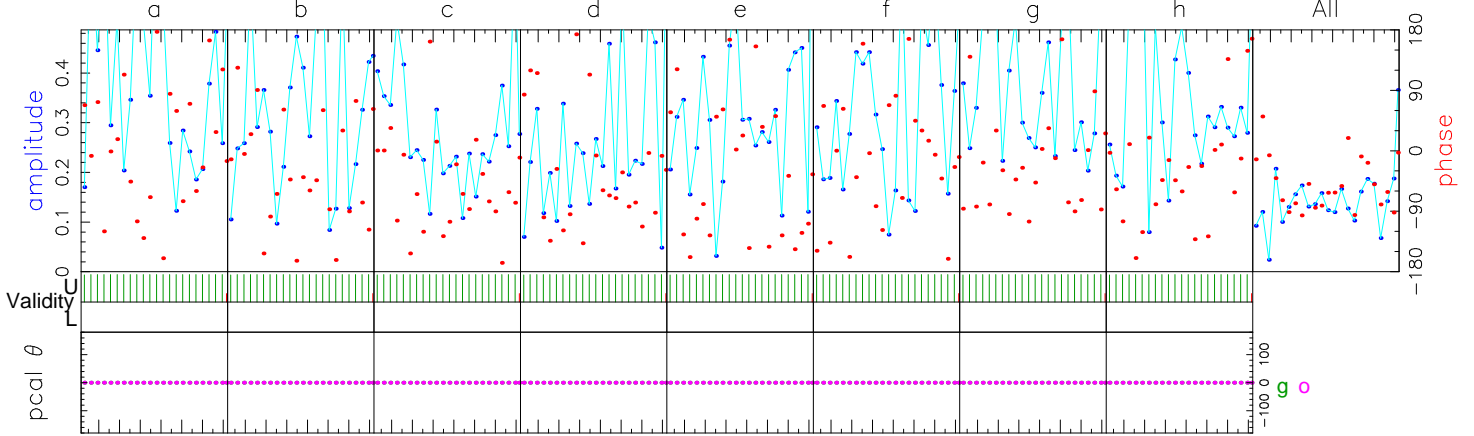


Fringe quality 0

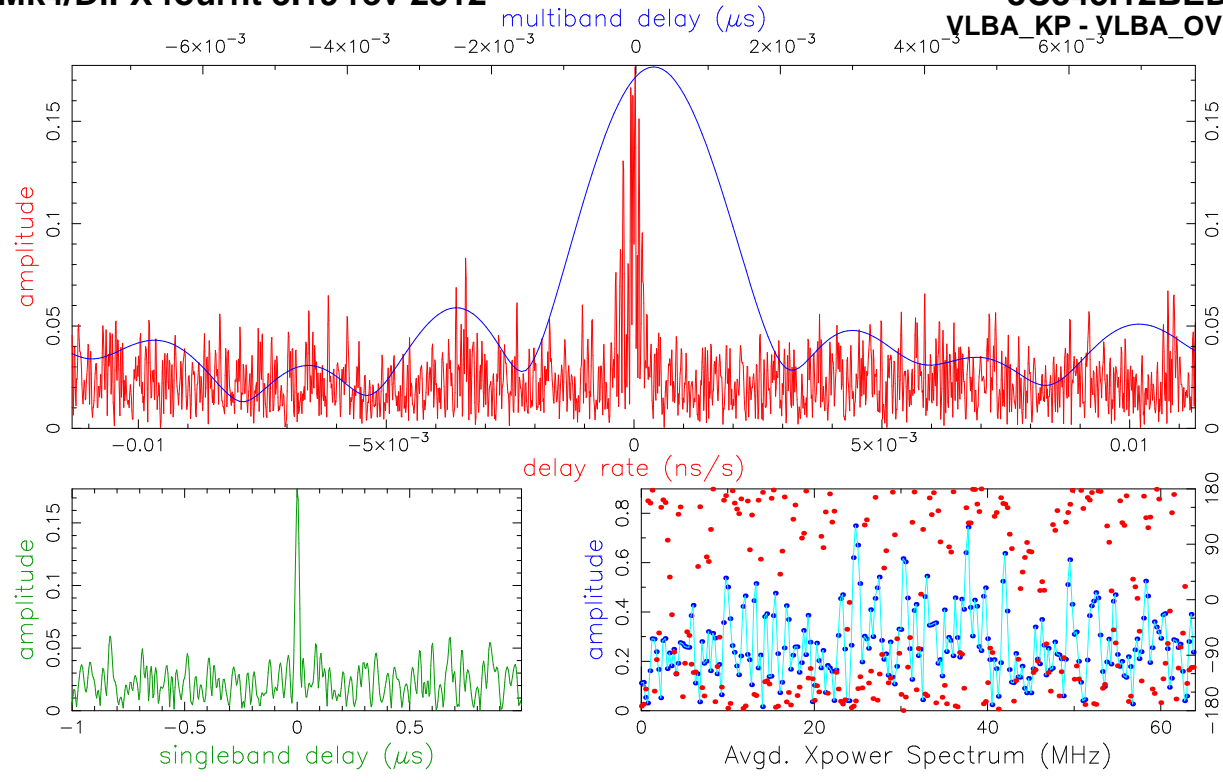
SNR 6.2
Int time 410.730
Amp 0.162
Phase -54.0
PFD 1.4e-01
Delays (us)
SBD -0.035156
MBD 0.000833
Fringe rate (Hz)
-0.893291
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165631
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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		
	-66.5	-18.9	-59.7	-71.3	-108.2	-24.6	-47.9	-60.9	Phase	-54.0		
	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.2	Ampl.	0.2		
	98.5	198.4	422.8	388.1	96.5	55.0	248.1	43.4	Sbd box	248.0		
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used			
g	0	0	0	0	0	0	0	0	PC freqs			
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
o	1000	1000	1000	1000	1000	1000	1000	1000				
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks			
									Tracks			
Group delay (usec)(sbd)	5.75422692259E+03		Apriori delay (usec)		5.75425733910E+03		Resid mbdelay (usec)		8.33497E-04	+/- 1.7E-04		
Sband delay (usec)	5.75422218310E+03		Apriori clock (usec)		-1.5333658E+01		Resid sbdelay (usec)		-3.51560E-02	+/- 1.4E-03		
Phase delay (usec)	5.75425733736E+03		Apriori clockrate (us/s)		7.4018997E-08		Resid phdelay (usec)		-1.74027E-06	+/- 6.0E-07		
Delay rate (us/s)	-7.96787406871E-01		Apriori rate (us/s)		-7.96777036652E-01		Resid rate (us/s)		-1.03702E-05	+/- 2.5E-09		
Total phase (deg)	14.3		Apriori accel (us/s/s)		-4.09619280062E-06		Resid phase (deg)		-54.0	+/- 18.5		
	RMS	Theor.	Amplitude	0.162 +/- 0.026		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	39.4	44.3	Search (2048X32)	0.108		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	50.3	77.3	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	30.6	26.1	Inc. seg. avg.	0.156		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	44.5	45.6	Inc. frq. avg.	0.159		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
g: az 142.5 el 51.0 pa -10.6	o: az 60.7 el 29.9 pa -64.6		u,v (fr/asec) 5935.898 2167.580						simultaneous interpolator			

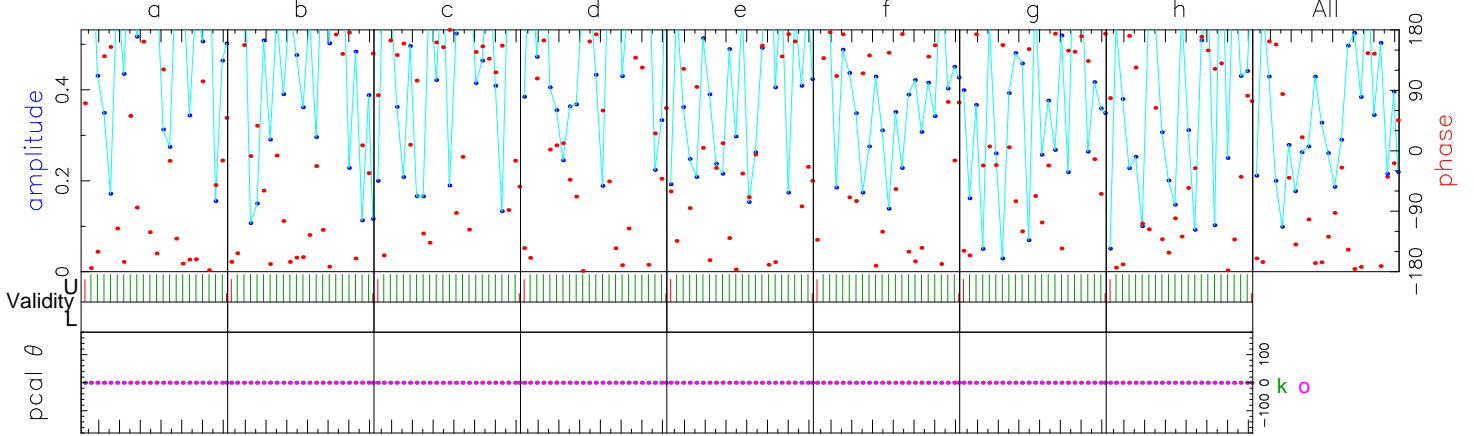


Fringe quality 9

SNR 9.8
Int time 407.733
Amp 0.177
Phase -163.1
PFD 5.3e-14
Delays (us)
SBD 0.000895
MBD 0.000247
Fringe rate (Hz) 0.002003
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

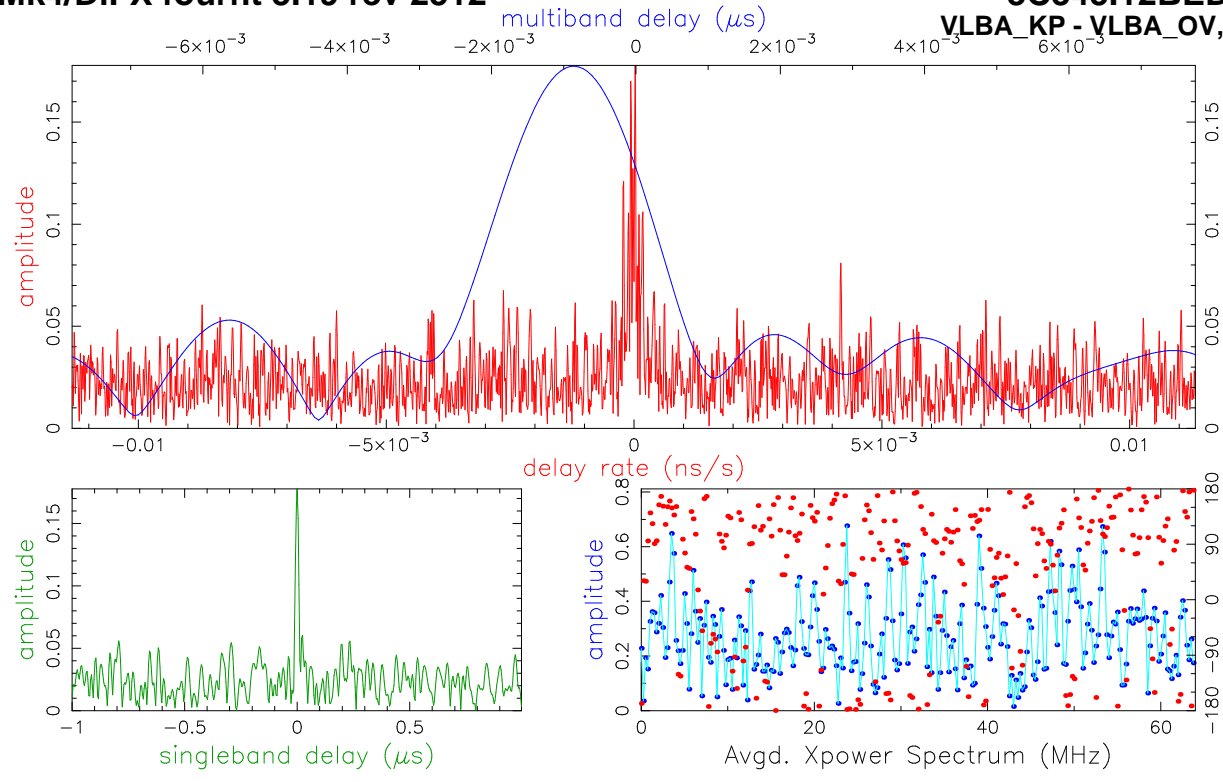
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165627
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	-167.2	-155.6	-170.3	-171.7	-143.2	-172.7	-124.2	-176.4	Phase	-163.1
	0.2	0.3	0.2	0.2	0.1	0.2	0.1	0.2	Ampl.	0.2
	257.1	257.5	336.8	258.3	367.9	257.0	175.4	80.8	Sbd box	257.2
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.85758117185E+02		Apriori delay (usec)		6.85757870171E+02		Resid mbdelay (usec)		2.47014E-04	+/- 1.1E-04
Sband delay (usec)	6.85758765421E+02		Apriori clock (usec)		-1.7031700E+01		Resid sbdelay (usec)		8.95250E-04	+/- 8.8E-04
Phase delay (usec)	6.85757864912E+02		Apriori clockrate (us/s)		-1.9555999E-07		Resid phdelay (usec)		-5.25906E-06	+/- 3.8E-07
Delay rate (us/s)	3.11211152874E-02		Apriori rate (us/s)		3.11210920389E-02		Resid rate (us/s)		2.32485E-08	+/- 1.6E-09
Total phase (deg)	174.1		Apriori accel (us/s/s)		-9.19914500056E-06		Resid phase (deg)		-163.1	+/- 11.7

ph/seg (deg) 79.8 28.1 Amplitude 0.177 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 122.9 49.0 Search (2048X32) 0.172 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.9 16.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.1 28.9 Inc. seg. avg. 0.305 Sample rate(MSamp/s): 128 dr window (ns/s) -0.011 0.011
 k: az 60.1 el 32.1 pa -73.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) -248.865 -1113.881 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ko..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ko.W.177.12BED8 simultaneous interpolator

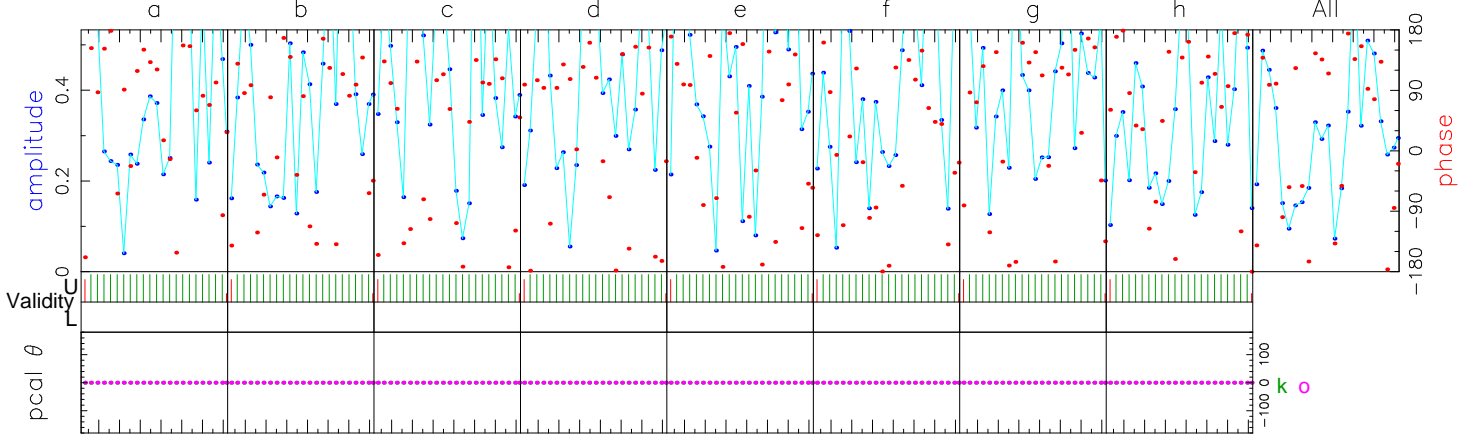


Fringe quality 9

SNR 9.8
Int time 407.733
Amp 0.178
Phase 134.4
PFD 4.0e-14
Delays (us)
SBD -0.000557
MBD -0.000879
Fringe rate (Hz) 0.001898
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165631
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

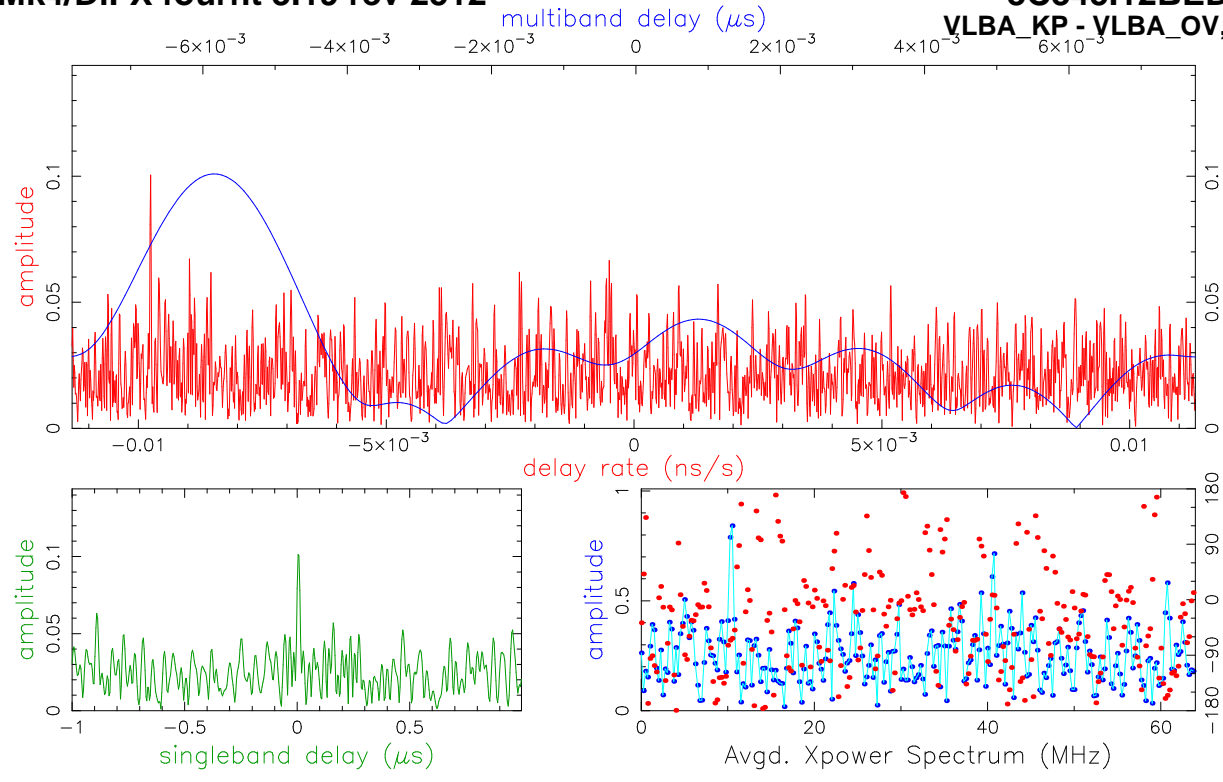


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	6.85756990810E+02		Apriori delay (usec)		6.85757870171E+02		Resid mbdelay (usec)		-8.79361E-04	+/- 1.1E-04
Sband delay (usec)	6.85757313171E+02		Apriori clock (usec)		-1.7031700E+01		Resid sbdelay (usec)		-5.57000E-04	+/- 8.8E-04
Phase delay (usec)	6.85757874506E+02		Apriori clockrate (us/s)		-1.9555999E-07		Resid phdelay (usec)		4.33528E-06	+/- 3.8E-07
Delay rate (us/s)	3.11211140765E-02		Apriori rate (us/s)		3.11210920389E-02		Resid rate (us/s)		2.20376E-08	+/- 1.6E-09
Total phase (deg)	111.6		Apriori accel (us/s/s)		-9.19914500056E-06		Resid phase (deg)		134.4	+/- 11.7

ph/seg (deg) 85.7 28.0 Amplitude 0.178 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 111.2 48.8 Search (2048X32) 0.176 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.9 16.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.3 28.8 Inc. seg. avg. 0.271 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 k: az 60.1 el 32.1 pa -73.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) -248.865 -1113.881 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, ko
VLBA_KP - VLBA_OV, fgroup W, pol LR

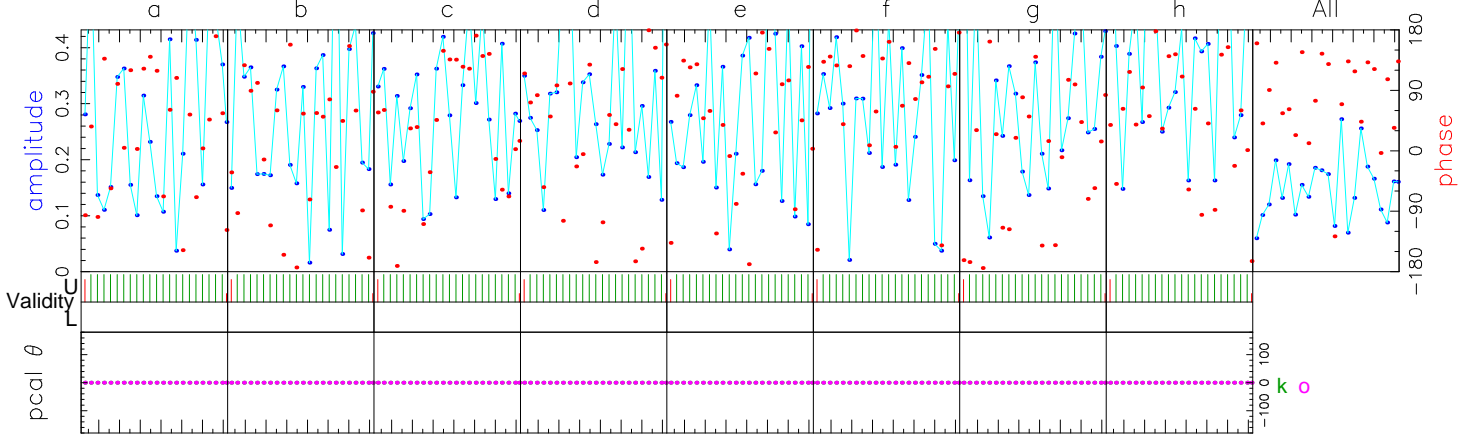


Fringe quality 0

SNR 5.7
Int time 407.733
Amp 0.144
Phase 88.7
PFD 9.1e-01
Delays (us)
SBD 0.005722
MBD -0.005947
Fringe rate (Hz)
-0.841241
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165635
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



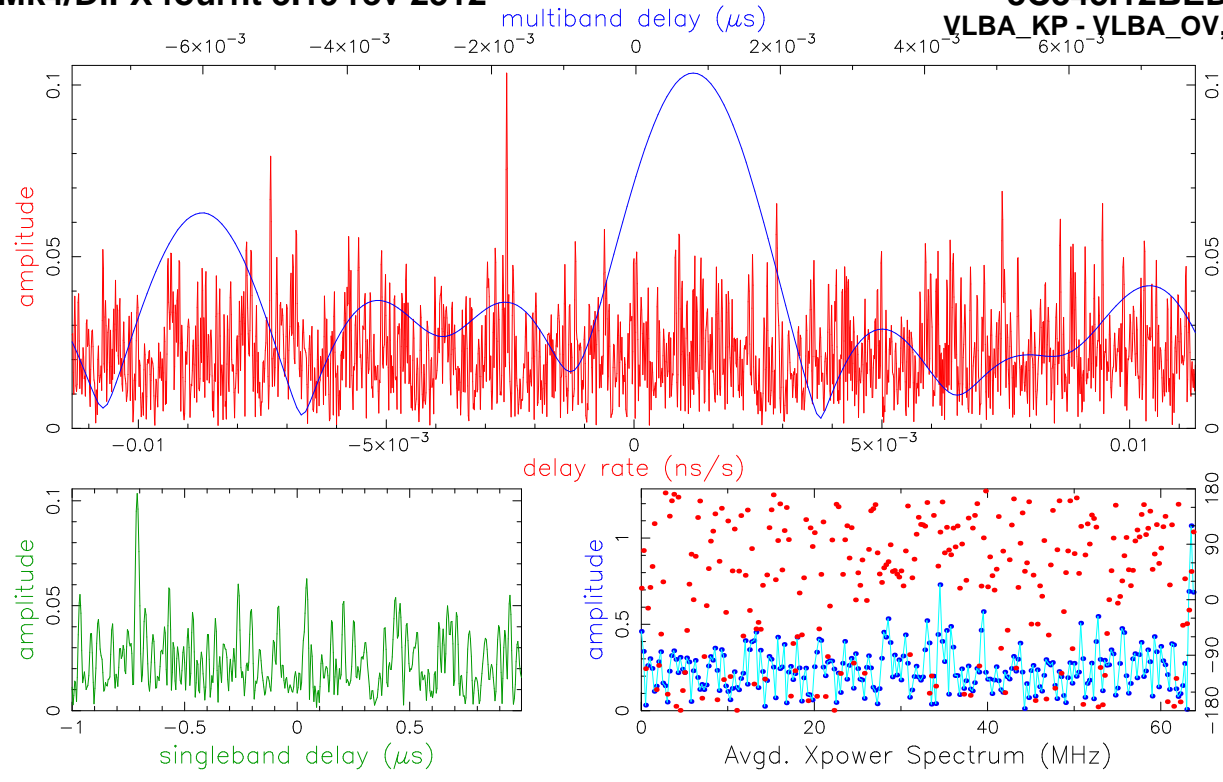
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	6.85767548147E+02	Apriori delay (usec)		6.85757870171E+02	Resid mbdelay (usec)		-5.94702E-03	+/-	1.9E-04	
Sband delay (usec)	6.85763591671E+02	Apriori clock (usec)		-1.7031700E+01	Resid sbdelay (usec)		5.72150E-03	+/-	1.5E-03	
Phase delay (usec)	6.85757873030E+02	Apriori clockrate (us/s)		-1.9555999E-07	Resid phdelay (usec)		2.85878E-06	+/-	6.4E-07	
Delay rate (us/s)	3.1111326022E-02	Apriori rate (us/s)		3.11210920389E-02	Resid rate (us/s)		-9.76598E-06	+/-	2.7E-09	
Total phase (deg)		65.8	Apriori accel (us/s/s)		-9.19914500056E-06	Resid phase (deg)		88.7	+/-	20.0

ph/seg (deg)	56.2	Theor.	47.9	Amplitude	0.144 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	67.9		83.5	Search (2048X32)	0.099	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	21.0		28.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	47.0		49.3	Inc. seg. avg.	0.153	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.130	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

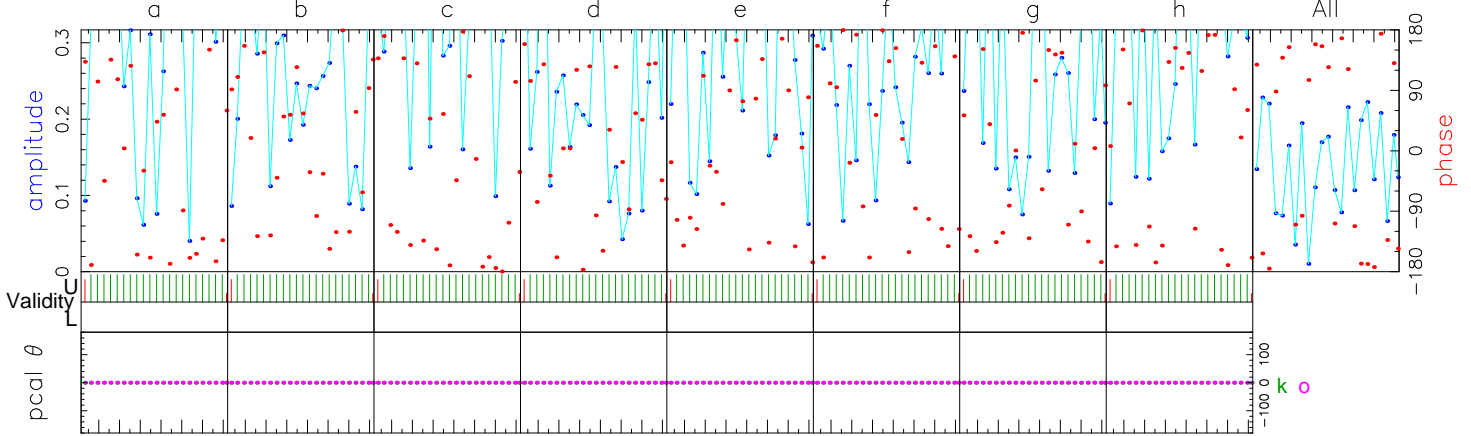
k: az 60.1 el 32.1 pa -73.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) -248.865 -1113.881 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ko..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ko.W.215.12BED8



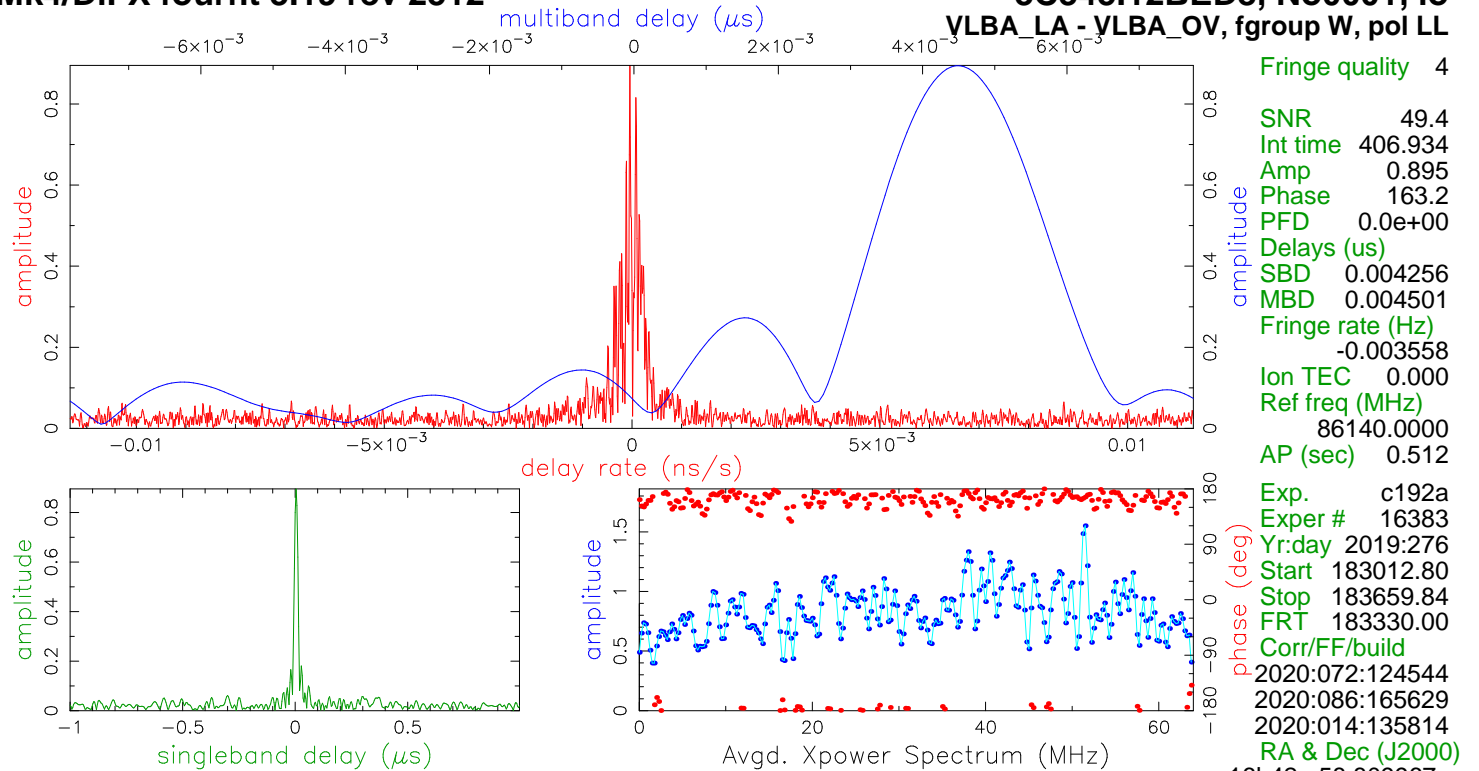
Fringe quality 0
SNR 5.7
Int time 407.733
Amp 0.106
Phase 175.3
PFD 9.4e-01
Delays (us)
SBD -0.710832
MBD 0.000796
Fringe rate (Hz)
-0.221312
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165639
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

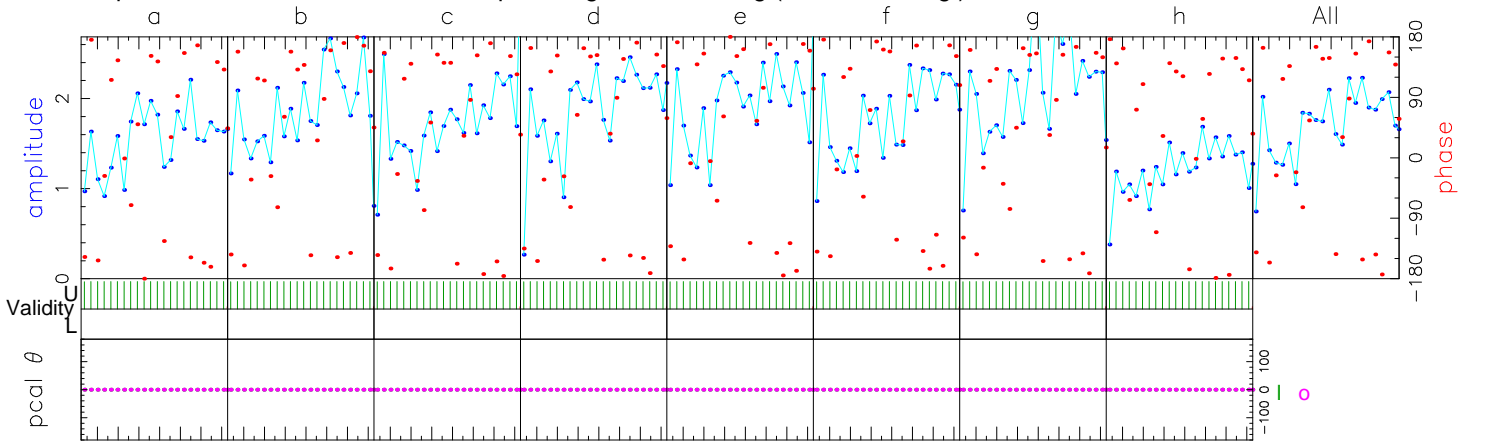


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	6.85039916327E+02		Apriori delay (usec)		6.85757870171E+02		Resid mbdelay (usec)		7.96156E-04	+/- 1.9E-04
Sband delay (usec)	6.85047038421E+02		Apriori clock (usec)		-1.7031700E+01		Resid sbdelay (usec)		-7.10832E-01	+/- 1.5E-03
Phase delay (usec)	6.85757875823E+02		Apriori clockrate (us/s)		-1.9555999E-07		Resid phdelay (usec)		5.65182E-06	+/- 6.5E-07
Delay rate (us/s)	3.11185228260E-02		Apriori rate (us/s)		3.11210920389E-02		Resid rate (us/s)		-2.56921E-06	+/- 2.7E-09
Total phase (deg)	152.4		Apriori accel (us/s/s)		-9.19914500056E-06		Resid phase (deg)		175.3	+/- 20.1

ph/seg (deg) 49.3 48.0 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 71.7 83.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 28.3 28.4 Inc. seg. avg. 0.106 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 52.0 49.5 Inc. frq. avg. 0.101 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 60.1 el 32.1 pa -73.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) -248.865 -1113.881 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ko..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ko.W.231.12BED8



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

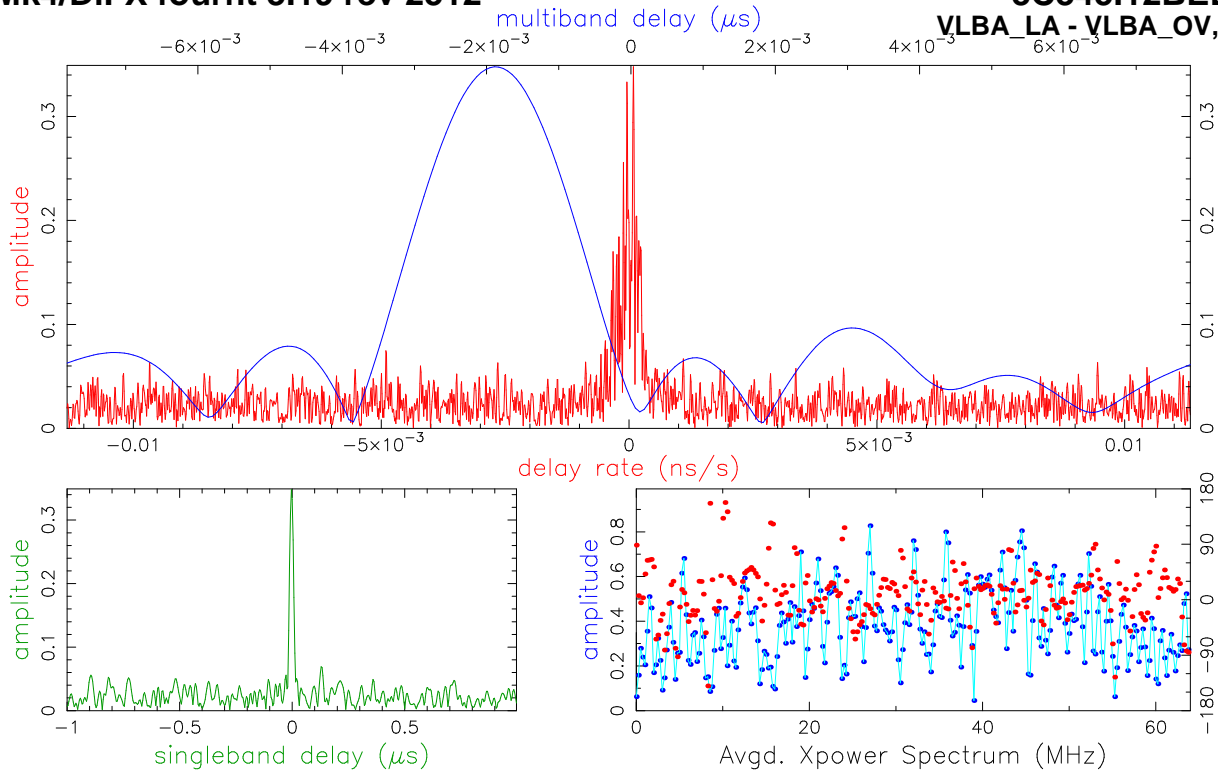


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	162.4	160.6	154.6	163.9	175.5	177.0	165.4	136.1	Phase	163.2
	0.8	1.0	0.9	1.0	1.0	0.9	1.1	0.6	Ampl.	0.9
	257.8	258.3	258.2	258.5	257.8	257.9	257.8	258.4	Sbd box	258.1
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.41250017438E+03		Apriori delay (usec)		2.41249567319E+03		Resid mbdelay (usec)		4.50118E-03	+/- 2.2E-05
Sband delay (usec)	2.41249992869E+03		Apriori clock (usec)		-1.7370033E+01		Resid sbdelay (usec)		4.25550E-03	+/- 1.7E-04
Phase delay (usec)	2.41249567846E+03		Apriori clockrate (us/s)		-3.5245298E-07		Resid phdelay (usec)		5.26375E-06	+/- 7.5E-08
Delay rate (us/s)	-4.29120560591E-02		Apriori rate (us/s)		-4.29120147566E-02		Resid rate (us/s)		-4.13025E-08	+/- 3.2E-10
Total phase (deg)	267.2		Apriori accel (us/s/s)		-1.43902509739E-05		Resid phase (deg)		163.2	+/- 2.3

	RMS	Theor.	Amplitude	0.895 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	76.1	5.6	Search (2048X32)	0.872	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	100.1	9.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	13.9	3.3	Inc. seg. avg.	1.703	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	16.1	5.7	Inc. frq. avg.	0.909	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/lo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/lo.W.189.12BED8

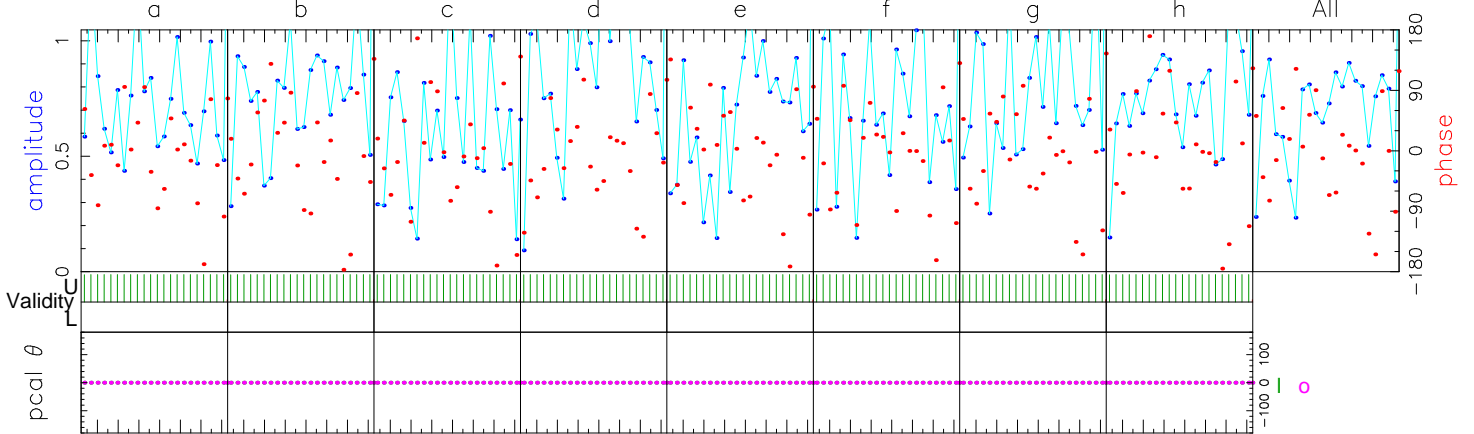


Fringe quality 9

SNR 19.3
Int time 406.934
Amp 0.349
Phase -4.8
PFD 0.0e+00
Delays (us)
SBD -0.003053
MBD -0.001861
Fringe rate (Hz) 0.007471
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165634
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

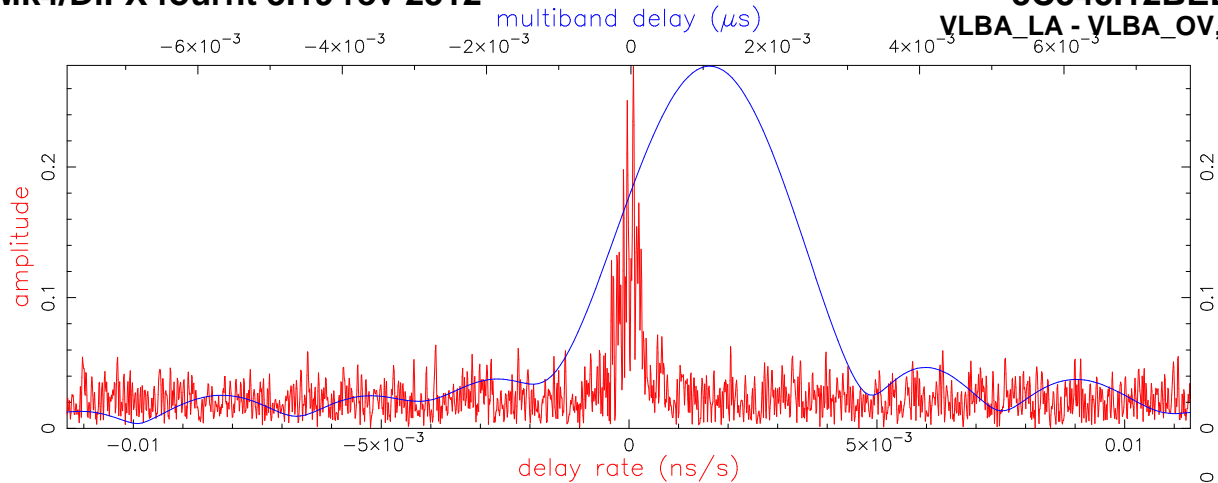
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.41249381207E+03					2.41249567319E+03			Resid mbdelay (usec)	-1.86112E-03 +/- 5.6E-05
Sband delay (usec)	2.41249262069E+03					-1.7370033E+01			Resid sbdelay (usec)	-3.05250E-03 +/- 4.5E-04
Phase delay (usec)	2.41249567304E+03					-3.5245298E-07			Resid phdelay (usec)	-1.55082E-07 +/- 1.9E-07
Delay rate (us/s)	-4.29119280242E-02					-4.29120147566E-02			Resid rate (us/s)	8.67324E-08 +/- 8.2E-10
Total phase (deg)			99.1			-1.43902509739E-05			Resid phase (deg)	-4.8 +/- 5.9
	RMS	Theor.	Amplitude	0.349 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	69.0	14.3	Search (2048X32)	0.345					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	112.2	24.9	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	8.8	8.4	Inc. seg. avg.	0.661					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	24.6	14.7	Inc. frq. avg.	0.347					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 simultaneous interpolator

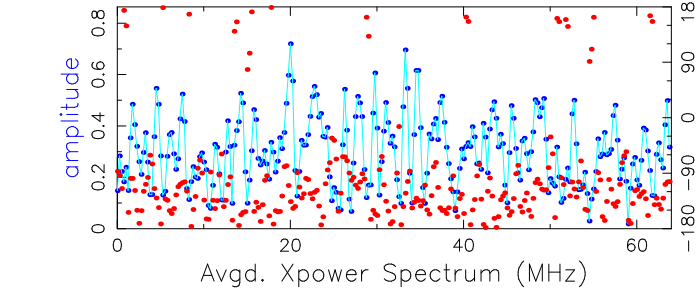
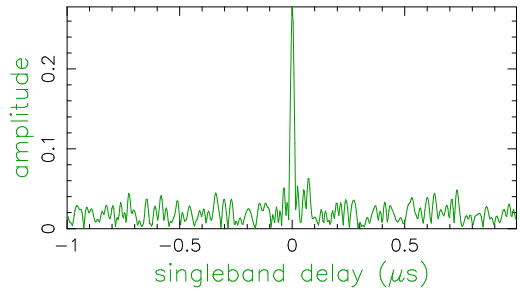
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/lo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/lo.W.211.12BED8



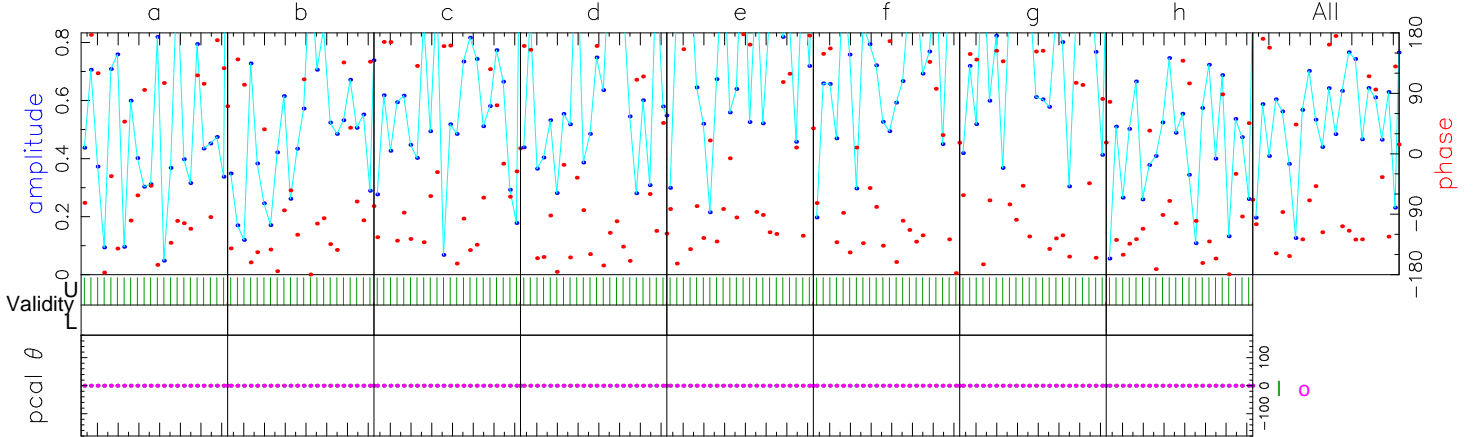
Fringe quality 9

SNR 15.3
Int time 406.934
Amp 0.278
Phase -136.0
PFD 3.5e-44
Delays (us)
SBD 0.000562
MBD 0.001097
Fringe rate (Hz) 0.007249
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:072:124544
2020:086:165639
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



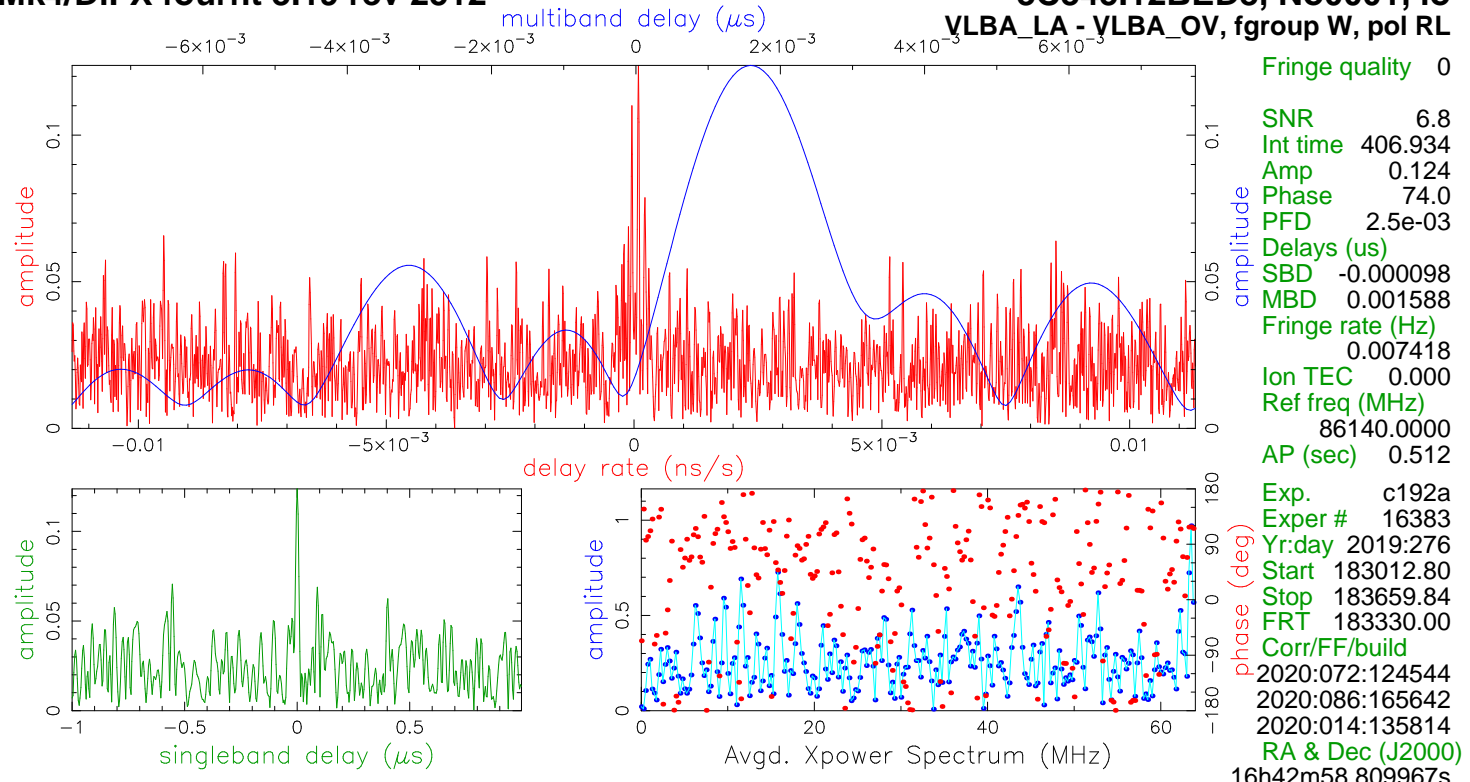
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.41249676992E+03	Apriori delay (usec)		2.41249567319E+03	Resid mbdelay (usec)		1.09672E-03	+/- 7.1E-05		
Sband delay (usec)	2.41249623544E+03	Apriori clock (usec)		-1.7370033E+01	Resid sbdelay (usec)		5.62250E-04	+/- 5.6E-04		
Phase delay (usec)	2.41249566881E+03	Apriori clockrate (us/s)		-3.5245298E-07	Resid phdelay (usec)		-4.38662E-06	+/- 2.4E-07		
Delay rate (us/s)	-4.29119306062E-02	Apriori rate (us/s)		-4.29120147566E-02	Resid rate (us/s)		8.41504E-08	+/- 1.0E-09		
Total phase (deg)		-32.1	Apriori accel (us/s/s)		-1.43902509739E-05	Resid phase (deg)		-136.0	+/- 7.5	

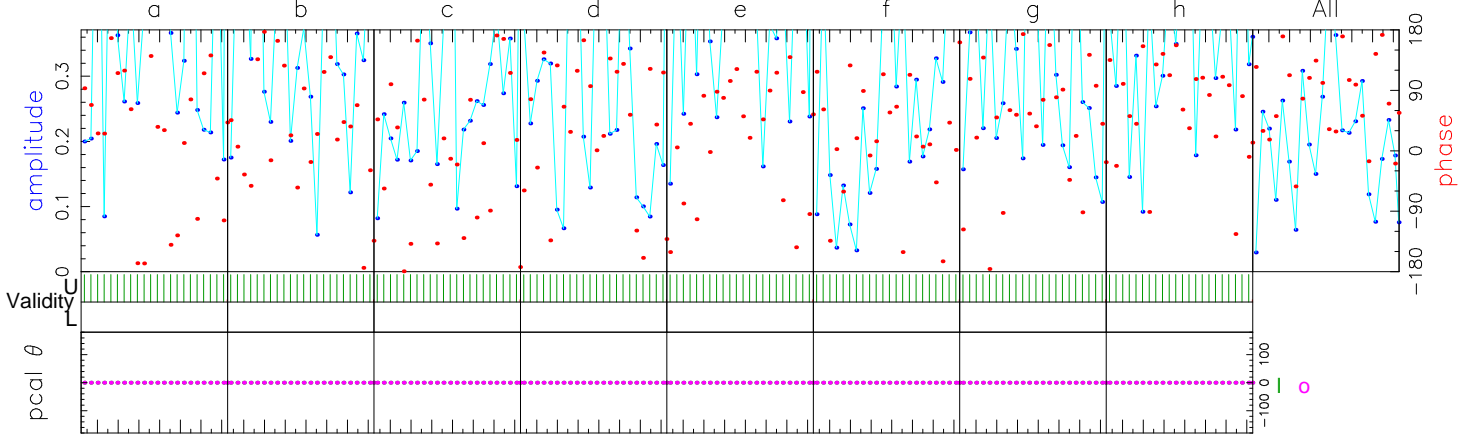
ph/seg (deg)	71.5	17.9	Amplitude	0.278 +/- 0.018	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5							
amp/seg (%)	106.1	31.3	Search (2048X32)	0.268	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000				
ph/frq (deg)	7.3	10.6	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.008	0.008		
amp/frq (%)	27.8	18.5	Inc. seg. avg.	0.496	Sample rate(MISamp/s): 128		dr window (ns/s)		-0.011		0.011			
		Inc. frq. avg.		0.274	Data rate(Mb/s): 2048		nlags: 256		t_cohere infinite		ion window (TEC)		0.00	0.00

l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/lo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/lo.W.229.12BED8



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

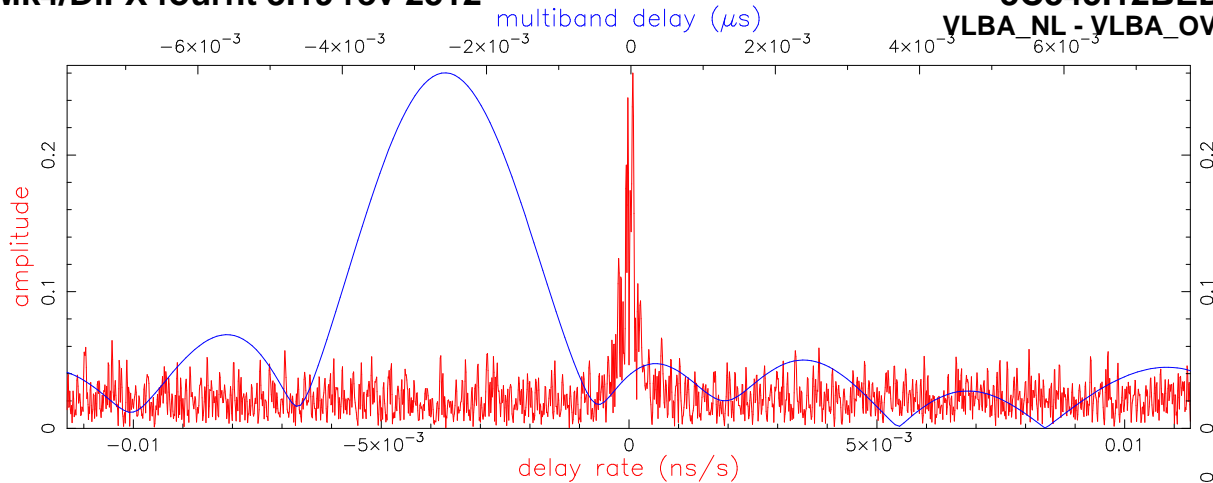


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	89.5	73.6	6.0	77.5	72.7	48.7	72.3	86.4	Phase	74.0
	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	12.0	306.1	363.5	359.6	256.9	116.0	69.3	256.8	Sbd box	257.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.41249726107E+03		Apriori delay (usec)		2.41249567319E+03		Resid mbdelay (usec)		1.58788E-03	+/- 1.6E-04
Sband delay (usec)	2.41249557544E+03		Apriori clock (usec)		-1.7370033E+01		Resid sbdelay (usec)		-9.77500E-05	+/- 1.3E-03
Phase delay (usec)	2.41249567558E+03		Apriori clockrate (us/s)		-3.5245298E-07		Resid phdelay (usec)		2.38483E-06	+/- 5.4E-07
Delay rate (us/s)	-4.29119286392E-02		Apriori rate (us/s)		-4.29120147566E-02		Resid rate (us/s)		8.61174E-08	+/- 2.3E-09
Total phase (deg)	177.9		Apriori accel (us/s/s)		-1.43902509739E-05		Resid phase (deg)		74.0	+/- 16.8

ph/seg (deg) 62.8 40.2 Search (2048X32) 0.122 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 104.1 70.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.8 23.7 Inc. seg. avg. 0.167 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.7 41.4 Inc. frq. avg. 0.119 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 ion window (TEC) 0.00 0.00
 simultaneous interpolator

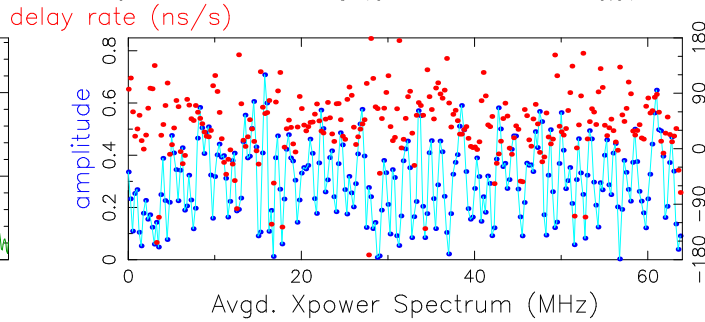
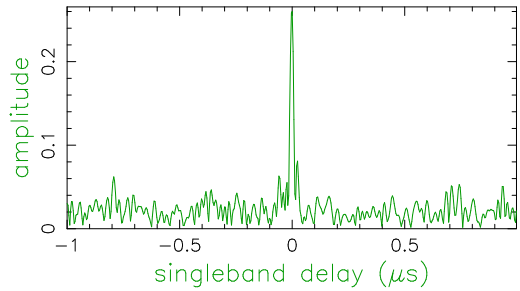
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, no VLBA_NL - VLBA_OV, fgroup W, pol LL



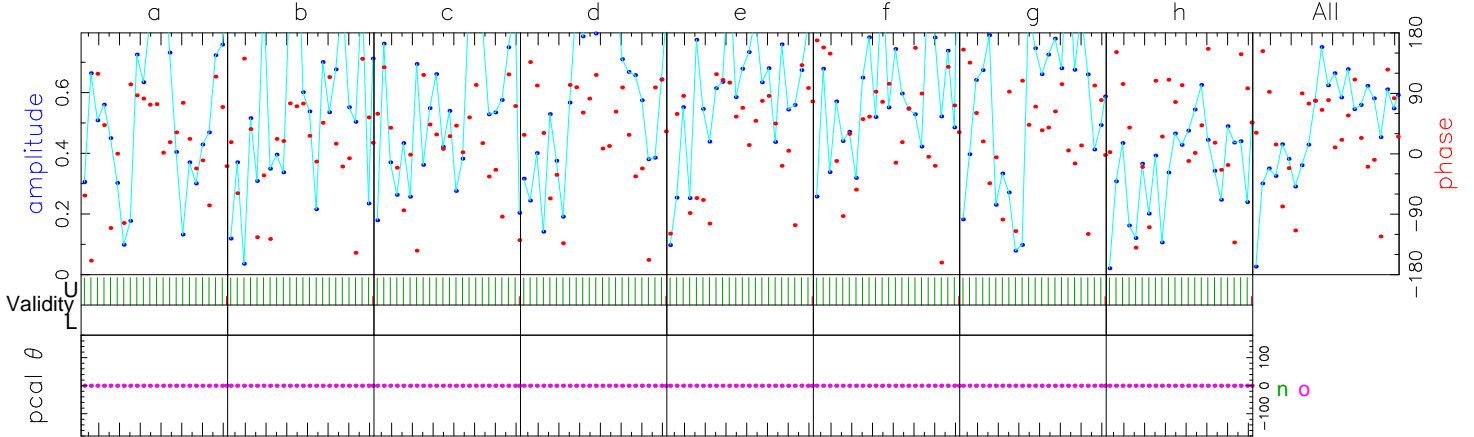
Fringe quality 9

SNR 14.7
Int time 410.824
Amp 0.266
Phase 50.2
PFD 3.0e-40
Delays (us)
SBD -0.001811
MBD -0.002624
Fringe rate (Hz) 0.007128
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



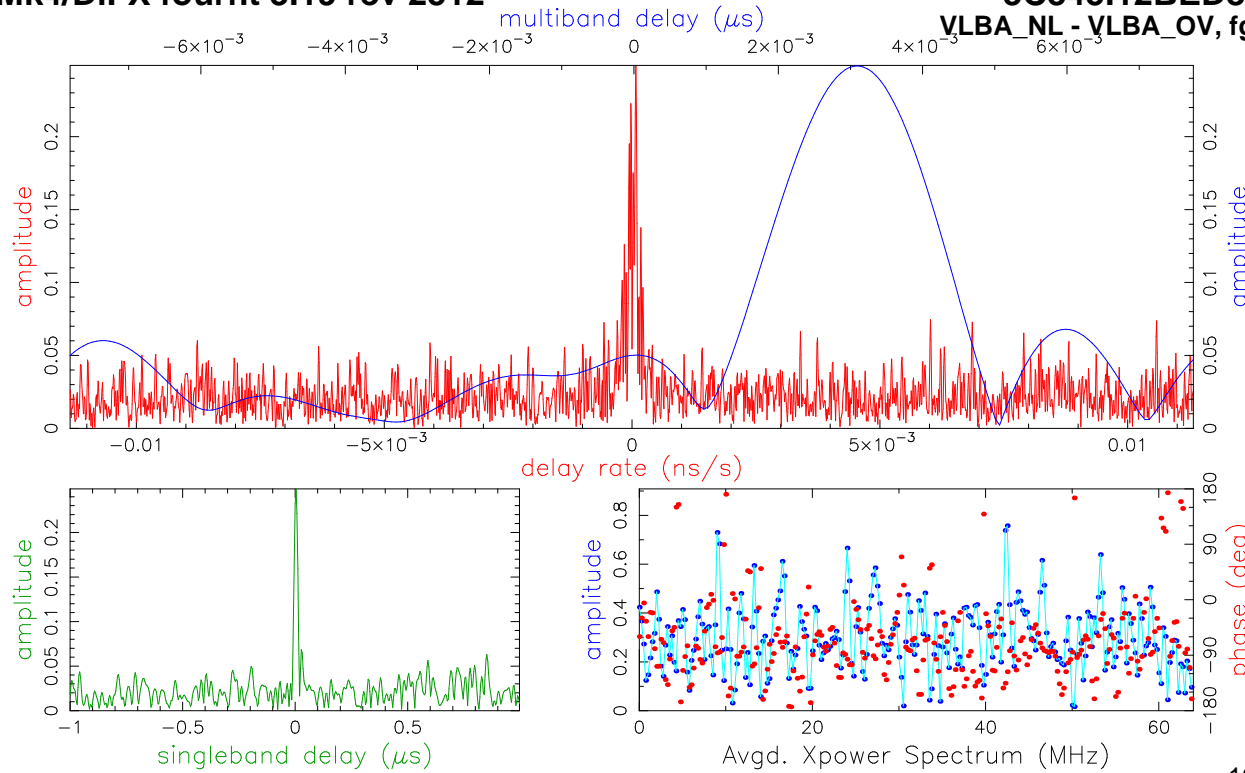
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165641
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	0:0
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	5.79987452740E+03					5.79987715098E+03			Resid mbdelay (usec)	-2.62358E-03 +/- 7.4E-05
Sband delay (usec)	5.79987533973E+03					9.8455582E+00			Resid sbdelay (usec)	-1.81125E-03 +/- 5.9E-04
Phase delay (usec)	5.79987715260E+03					1.3324251E-07			Resid phdelay (usec)	1.61750E-06 +/- 2.5E-07
Delay rate (us/s)	-2.30854664991E-01					-2.30854747736E-01			Resid rate (us/s)	8.27454E-08 +/- 1.1E-09
Total phase (deg)			332.9			-2.63821853623E-05			Resid phase (deg)	50.2 +/- 7.8
RMS	73.0	18.7							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	73.0	18.7	Search (2048X32)	0.251					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	103.6	32.6	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	11.7	11.0	Inc. seg. avg.	0.463					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	21.9	19.2	Inc. frq. avg.	0.259					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 74.7 el 50.6 pa -69.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1675.956 -1330.225 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/no..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/no.W.236.12BED8

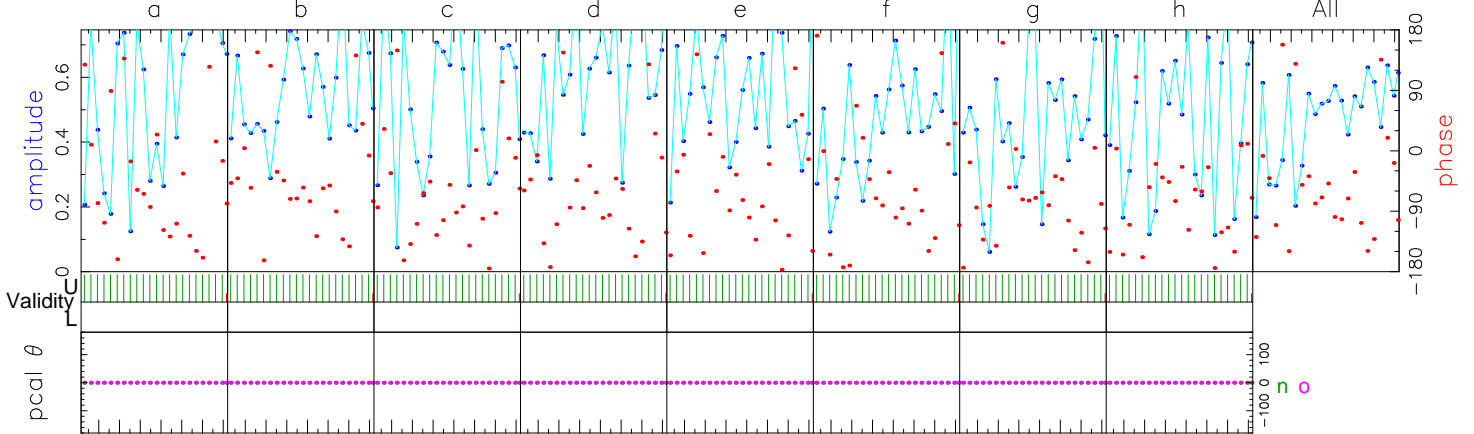


Fringe quality 9

SNR 13.8
 Int time 410.824
 Amp 0.249
 Phase -79.9
 PFD 1.6e-34
 Delays (us)
 SBD 0.003397
 MBD 0.003084
 Fringe rate (Hz) 0.006798
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

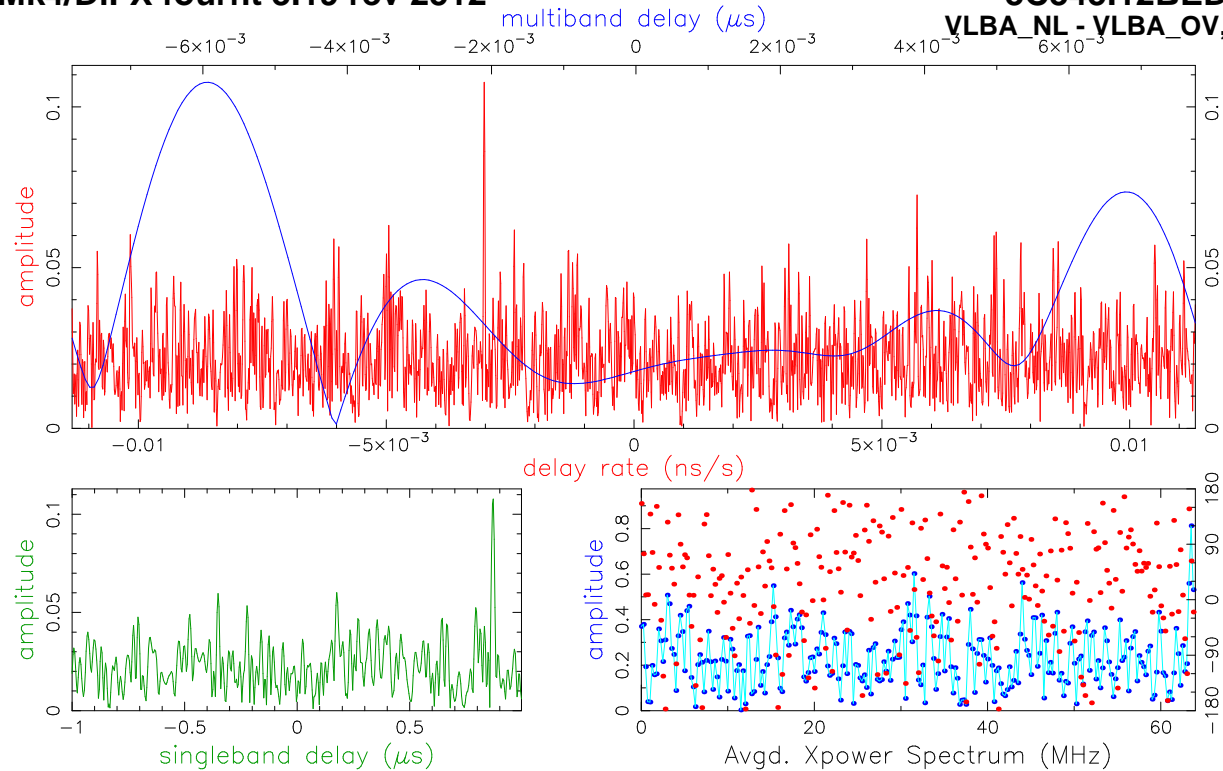
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build 2020:072:124544
 2020:086:165645
 2020:014:135814
 RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	-97.0	-68.2	-69.9	-86.0	-87.3	-80.3	-82.0	-73.1	Phase	-79.9
	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.2	Ampl.	0.2
	258.3	257.2	257.8	257.7	257.6	259.1	258.2	257.3	Sbd box	257.9
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.79988023453E+03		Apriori delay (usec)		5.79987715098E+03		Resid mbdelay (usec)		3.08355E-03	+/- 7.9E-05
Sband delay (usec)	5.79988054773E+03		Apriori clock (usec)		9.8455582E+00		Resid sbdelay (usec)		3.39675E-03	+/- 6.2E-04
Phase delay (usec)	5.79987714840E+03		Apriori clockrate (us/s)		1.3324251E-07		Resid phdelay (usec)		-2.57631E-06	+/- 2.7E-07
Delay rate (us/s)	-2.30854668815E-01		Apriori rate (us/s)		-2.30854747736E-01		Resid rate (us/s)		7.89213E-08	+/- 1.1E-09
Total phase (deg)	202.8		Apriori accel (us/s/s)		-2.63821853623E-05		Resid phase (deg)		-79.9	+/- 8.3

ph/seg (deg) 67.7 19.9 Search (2048X32) 0.245 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 104.4 34.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.6 11.7 Inc. seg. avg. 0.442 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 21.9 20.5 Inc. frq. avg. 0.246 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 74.7 el 50.6 pa -69.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1675.956 -1330.225 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/no..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/no.W.255.12BED8

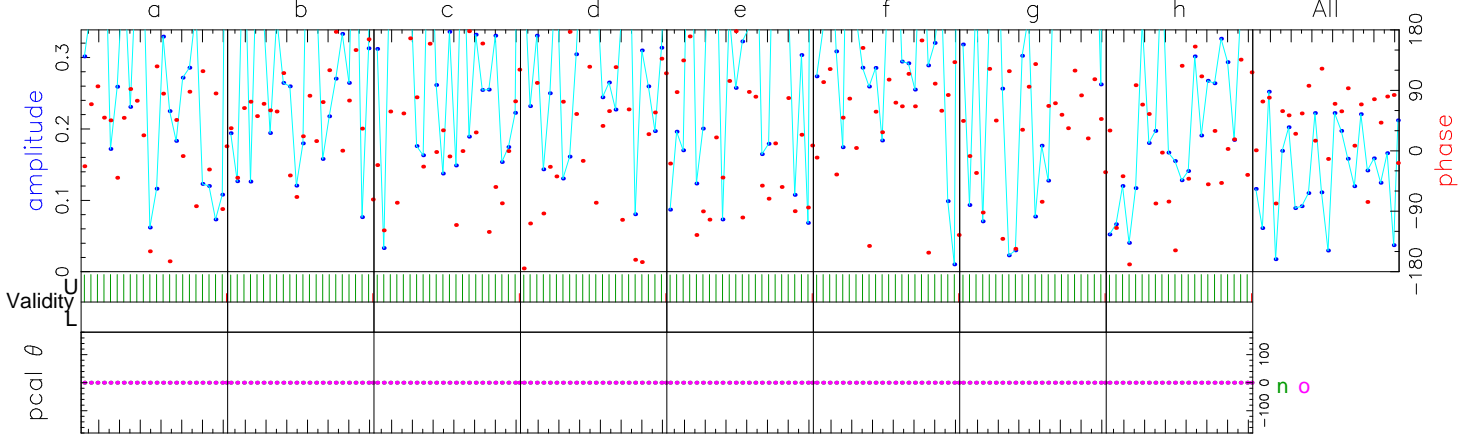


Fringe quality 0

SNR 6.1
 Int time 410.824
 Amp 0.113
 Phase 56.5
 PFD 2.7e-01
 Delays (us)
 SBD 0.869524
 MBD -0.005932
 Fringe rate (Hz)
 -0.260287
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

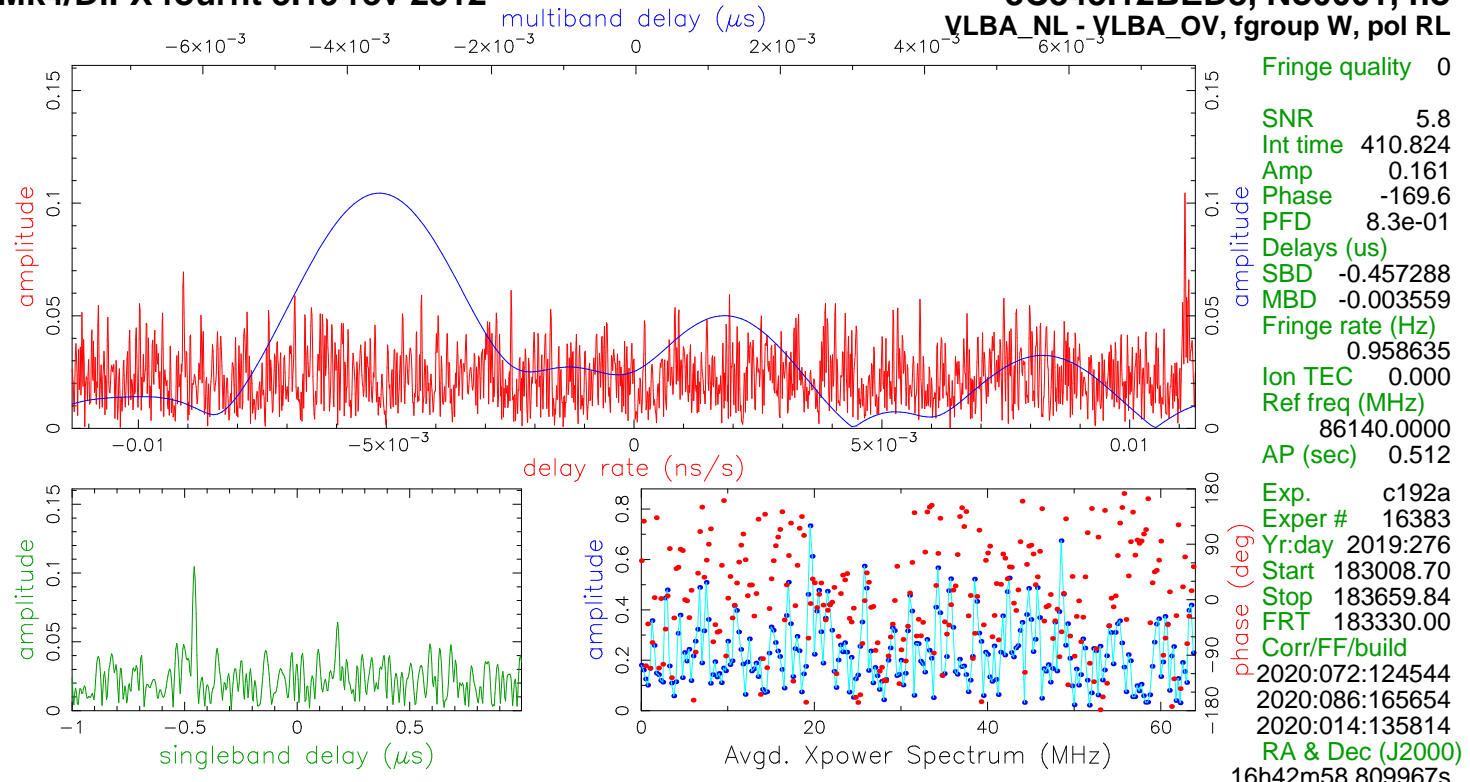
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165649
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

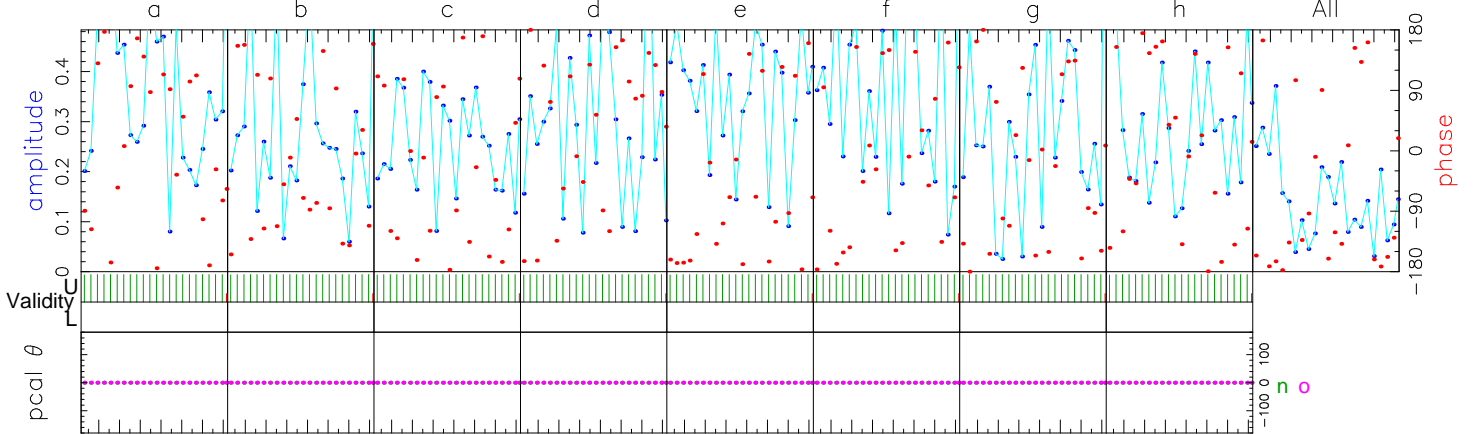


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	5.80074621891E+03		Apriori delay (usec)		5.79987715098E+03		Resid mbdelay (usec)		-5.93207E-03	+/- 1.8E-04
Sband delay (usec)	5.80074667473E+03		Apriori clock (usec)		9.8455582E+00		Resid sbdelay (usec)		8.69524E-01	+/- 1.4E-03
Phase delay (usec)	5.79987715280E+03		Apriori clockrate (us/s)		1.3324251E-07		Resid phdelay (usec)		1.82318E-06	+/- 6.1E-07
Delay rate (us/s)	-2.30857769408E-01		Apriori rate (us/s)		-2.30854747736E-01		Resid rate (us/s)		-3.02167E-06	+/- 2.6E-09
Total phase (deg)	339.2		Apriori accel (us/s/s)		-2.63821853623E-05		Resid phase (deg)		56.5	+/- 18.9

ph/seg (deg) 52.1 45.2 Search (2048X32) 0.113 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.1 78.9 Interp. 0.106 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.3 26.7 Inc. seg. avg. 0.109 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 56.0 46.5 Inc. frq. avg. 0.109 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 74.7 el 50.6 pa -69.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1675.956 -1330.225 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/no..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/no.W.280.12BED8

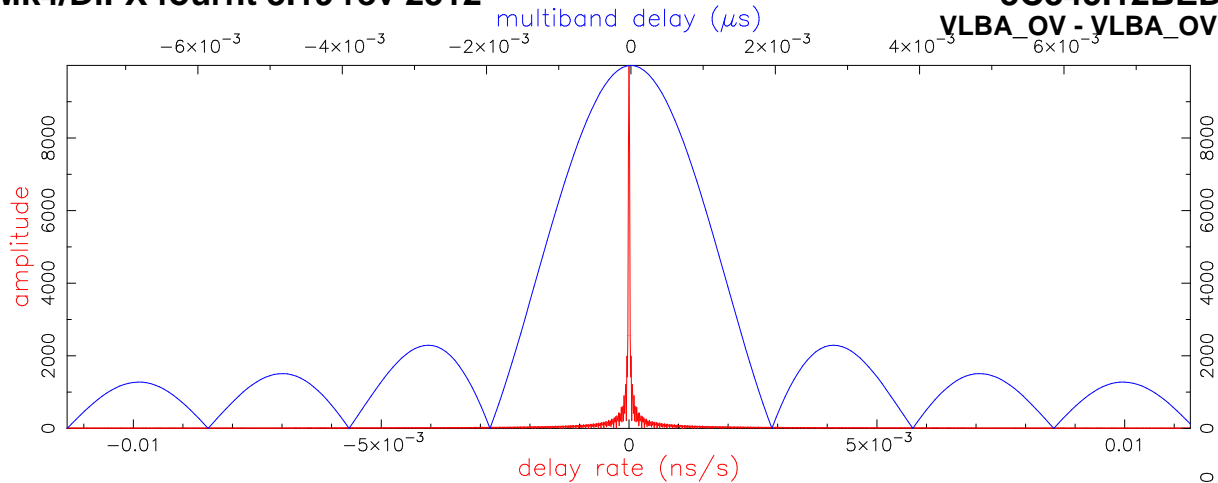


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

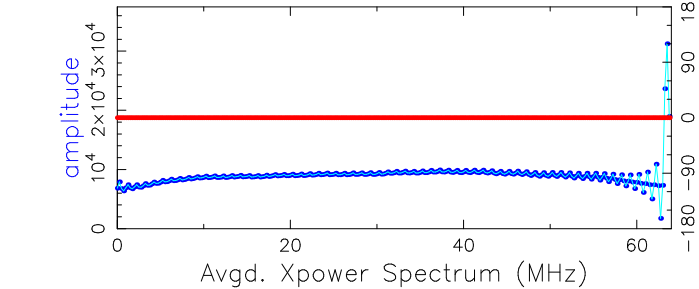
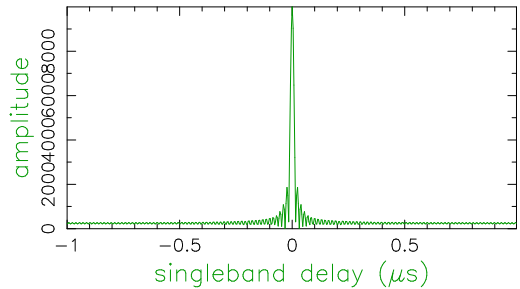


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
166.5	-117.2	-160.1	146.0	-162.3	-166.8	-166.9	-168.0	-168.0	Phase	-169.6
0.1	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.2	Ampl.	0.2
474.2	1.3	479.1	39.7	39.3	31.5	138.0	178.8	178.8	Sbd box	139.9
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.79942046674E+03		Apriori delay (usec)	5.79987715098E+03	Resid mbdelay (usec)	-3.55924E-03	+/-	1.9E-04		
Sband delay (usec)	5.79941986323E+03		Apriori clock (usec)	9.8455582E+00	Resid sbdelay (usec)	-4.57288E-01	+/-	1.5E-03		
Phase delay (usec)	5.79987714551E+03		Apriori clockrate (us/s)	1.3324251E-07	Resid phdelay (usec)	-5.46863E-06	+/-	6.4E-07		
Delay rate (us/s)	-2.30843618930E-01		Apriori rate (us/s)	-2.30854747736E-01	Resid rate (us/s)	1.11288E-05	+/-	2.7E-09		
Total phase (deg)		113.1	Apriori accel (us/s/s)	-2.63821853623E-05	Resid phase (deg)	-169.6	+/-	19.8		

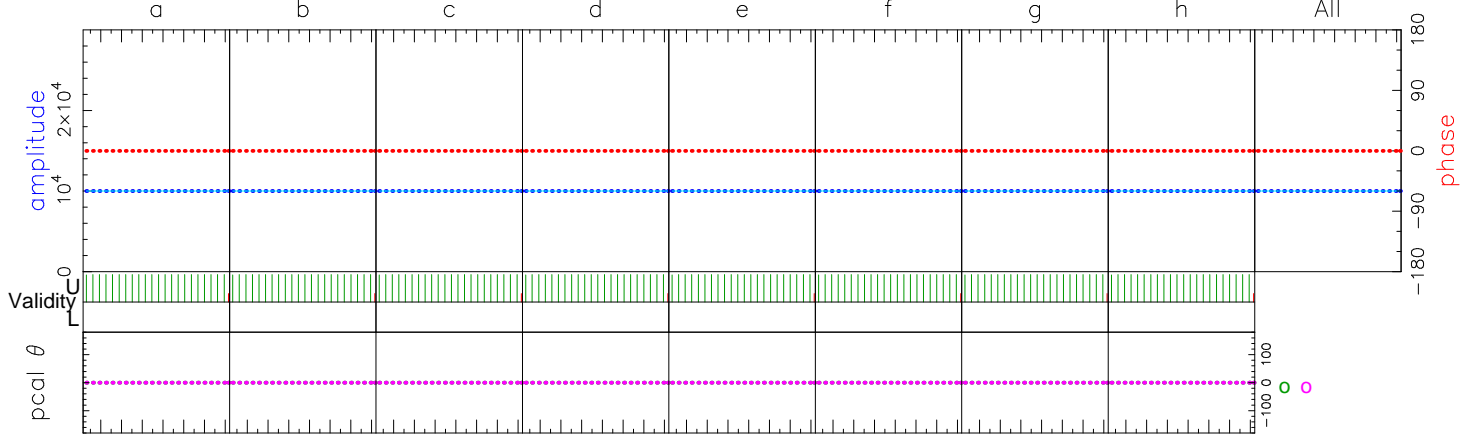
RMS Theor. Amplitude 0.161 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 68.3 47.4 Search (2048X32) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 92.4 82.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 30.1 28.0 Inc. seg. avg. 0.171 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 34.1 48.8 Inc. frq. avg. 0.159 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 n: az 74.7 el 50.6 pa -69.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1675.956 -1330.225 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/no..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/no.W.305.12BED8



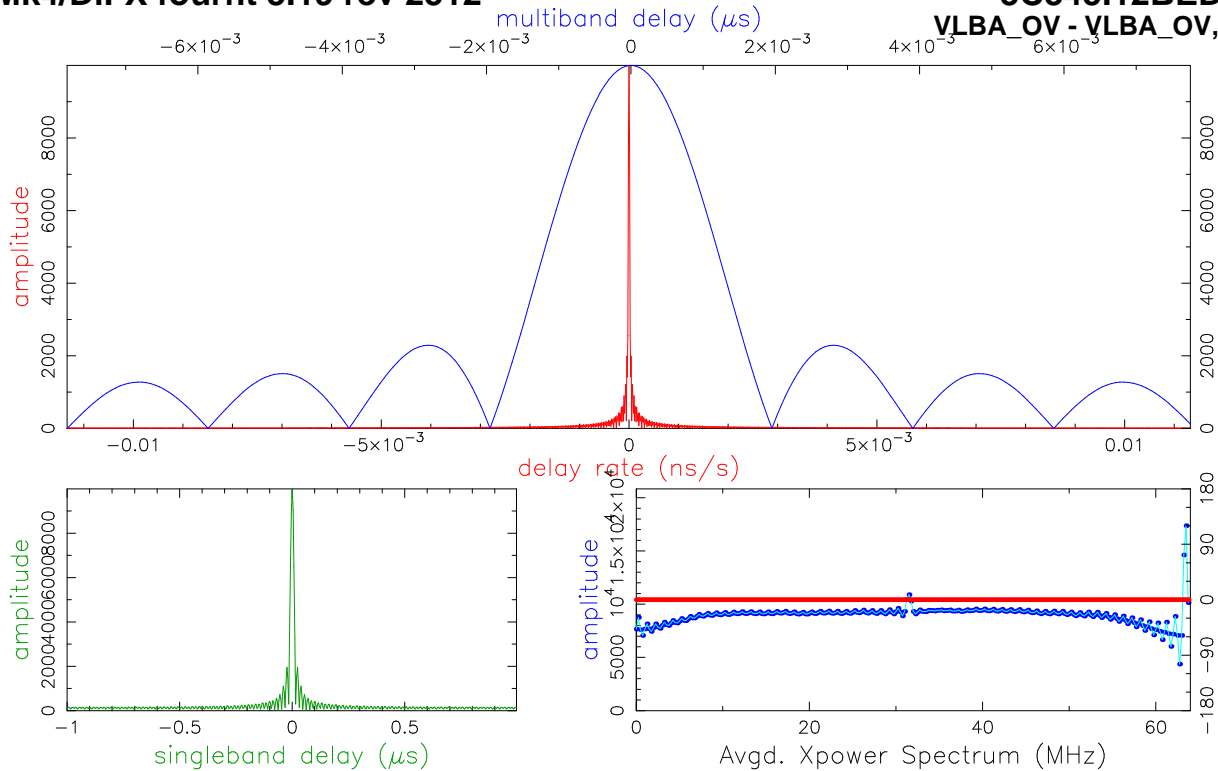
Fringe quality 9
 SNR 554278.9
 Int time 410.829
 Amp 9999.999
 Phase -0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165645
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

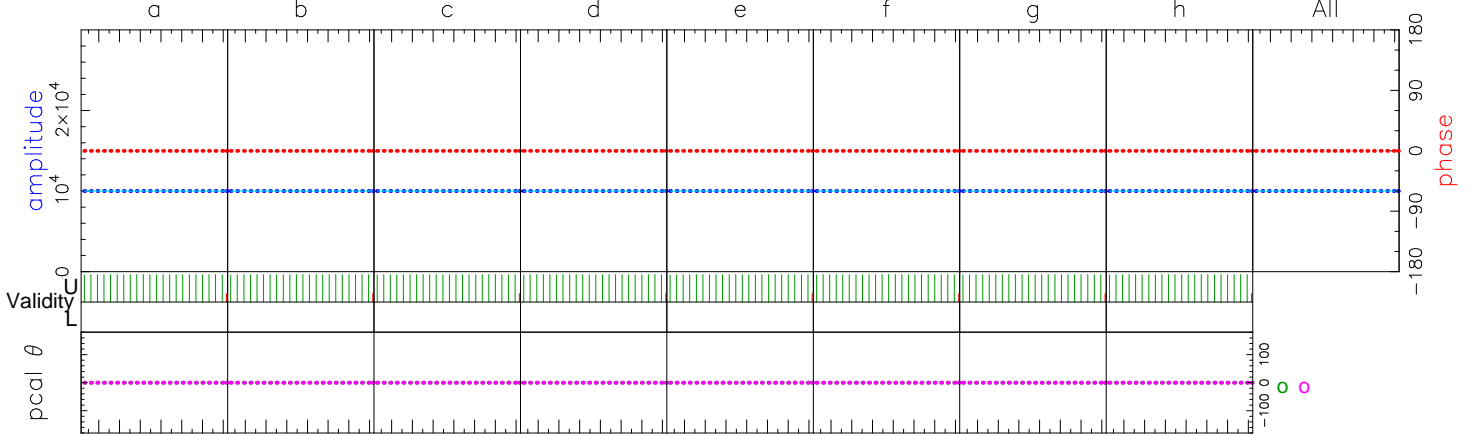


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
o	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		+/- 2.0E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		+/- 1.6E-08
Phase delay (usec)	-2.37826719241E-19	-2.37826719241E-19	-2.37826719241E-19	-2.37826719241E-19	-2.37826719241E-19	-2.37826719241E-19	-2.37826719241E-19	-2.37826719241E-19		+/- 6.7E-12
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		+/- 2.8E-14
Total phase (deg)			-0.0							+/- 0.0
RMS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Theor.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Amplitude	9999.999 +/- 0.018	9999.999	9999.999	9999.999	9999.999	9999.999	9999.999	9999.999		
Search (2048X32)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Interp.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Inc. seg. avg.	10000.000	10000.000	10000.000	10000.000	10000.000	10000.000	10000.000	10000.000		
Inc. frq. avg.	9999.999	9999.999	9999.999	9999.999	9999.999	9999.999	9999.999	9999.999		
PCal mode:	MANUAL, MANUAL	MANUAL, MANUAL	MANUAL, MANUAL	MANUAL, MANUAL	MANUAL, MANUAL	MANUAL, MANUAL	MANUAL, MANUAL	MANUAL, MANUAL		
PCal rate:	0.000E+00, 0.000E+00 (us/s)	0.000E+00, 0.000E+00 (us/s)	0.000E+00, 0.000E+00 (us/s)	0.000E+00, 0.000E+00 (us/s)	0.000E+00, 0.000E+00 (us/s)	0.000E+00, 0.000E+00 (us/s)	0.000E+00, 0.000E+00 (us/s)	0.000E+00, 0.000E+00 (us/s)		
Bits/sample:	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2		
Sample rate (MSamp/s):	128	128	128	128	128	128	128	128		
Data rate (Mb/s):	2048	2048	2048	2048	2048	2048	2048	2048		
PC period (AP's)	5, 5	5, 5	5, 5	5, 5	5, 5	5, 5	5, 5	5, 5		
sb window (us)	-1.000	1.000	-1.000	1.000	-1.000	1.000	-1.000	1.000		
mb window (us)	-0.008	0.008	-0.008	0.008	-0.008	0.008	-0.008	0.008		
dr window (ns/s)	-0.011	0.011	-0.011	0.011	-0.011	0.011	-0.011	0.011		
ion window (TEC)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
o: az 60.7 el 29.9 pa -64.6	o: az 60.7 el 29.9 pa -64.6	o: az 60.7 el 29.9 pa -64.6	o: az 60.7 el 29.9 pa -64.6	o: az 60.7 el 29.9 pa -64.6	o: az 60.7 el 29.9 pa -64.6	o: az 60.7 el 29.9 pa -64.6	o: az 60.7 el 29.9 pa -64.6	o: az 60.7 el 29.9 pa -64.6		
u, v (fr/asec)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
Control file:	cf_1234_gmva	Input file:	/Exps/c192a/v1_PV/1234/No0001/oo..12BED8	Output file:	/Exps/c192a/v1_PV/1234/No0001/oo.W.256.12BED8	simultaneous interpolator				



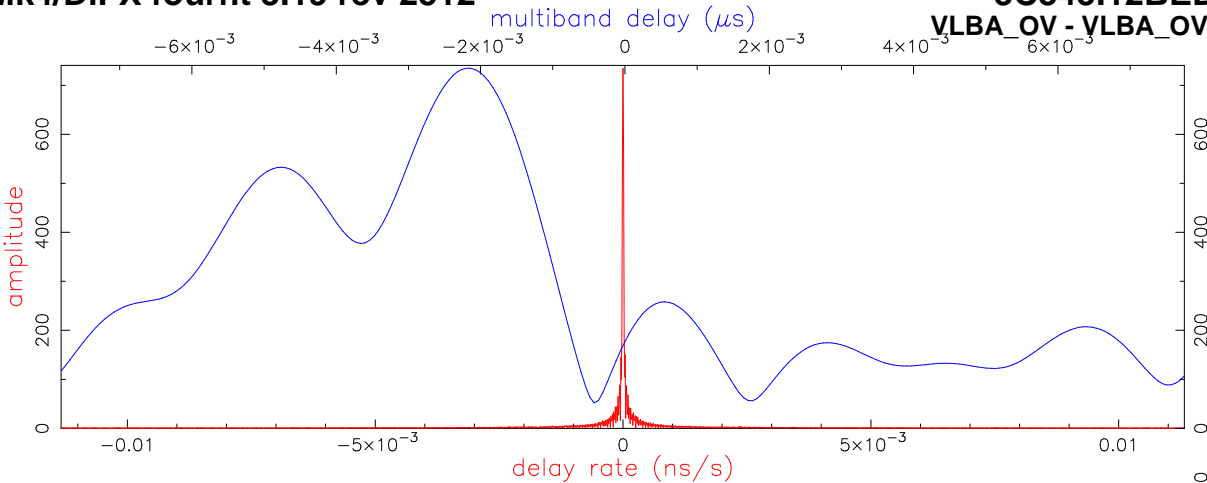
Fringe quality 9
 SNR 554278.9
 Int time 410.829
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165649
 2020:014:135814
 RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



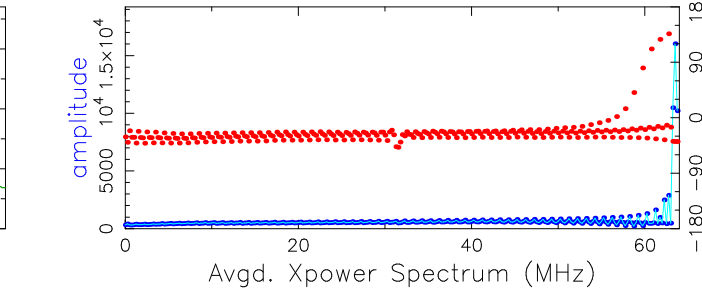
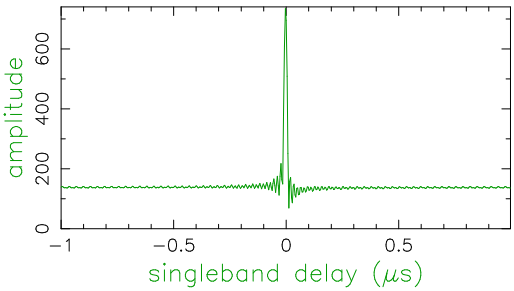
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
o	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	10000.0
o	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
o	0:0	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		+/- 2.0E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		+/- 1.6E-08
Phase delay (usec)	3.01693251038E-20	3.01693251038E-20	3.01693251038E-20	3.01693251038E-20	3.01693251038E-20	3.01693251038E-20	3.01693251038E-20	3.01693251038E-20		+/- 6.7E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		+/- 2.8E-14
Total phase (deg)			0.0							+/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 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
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/oo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/oo.W.274.12BED8



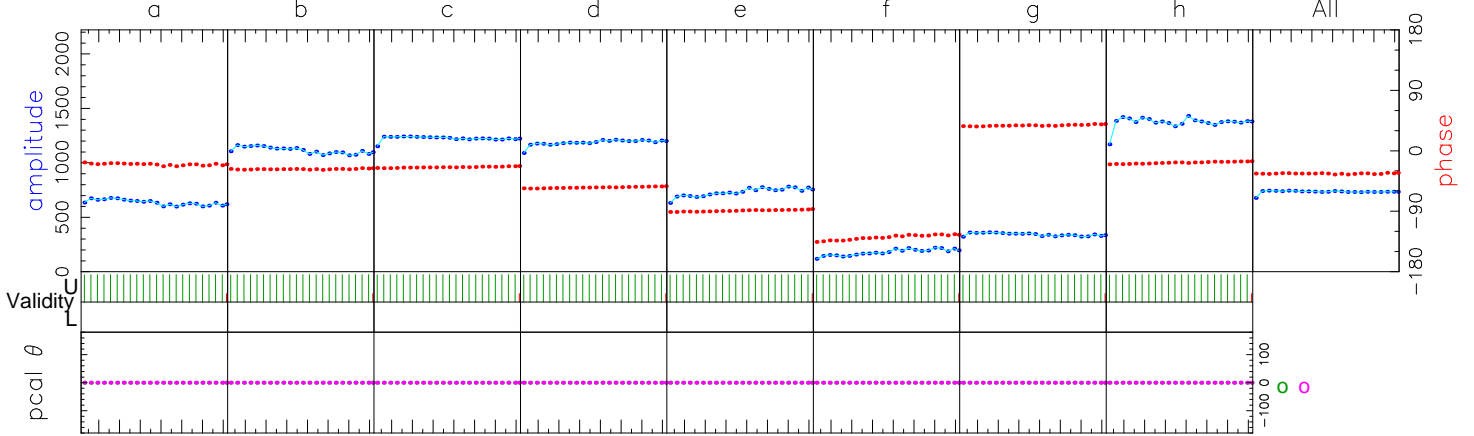
Fringe quality 5

SNR 41054.8
Int time 410.829
Amp 740.689
Phase -34.0
PFD 0.0e+00
Delays (us)
SBD -0.002854
MBD -0.002216
Fringe rate (Hz)
-0.000031
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165653
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

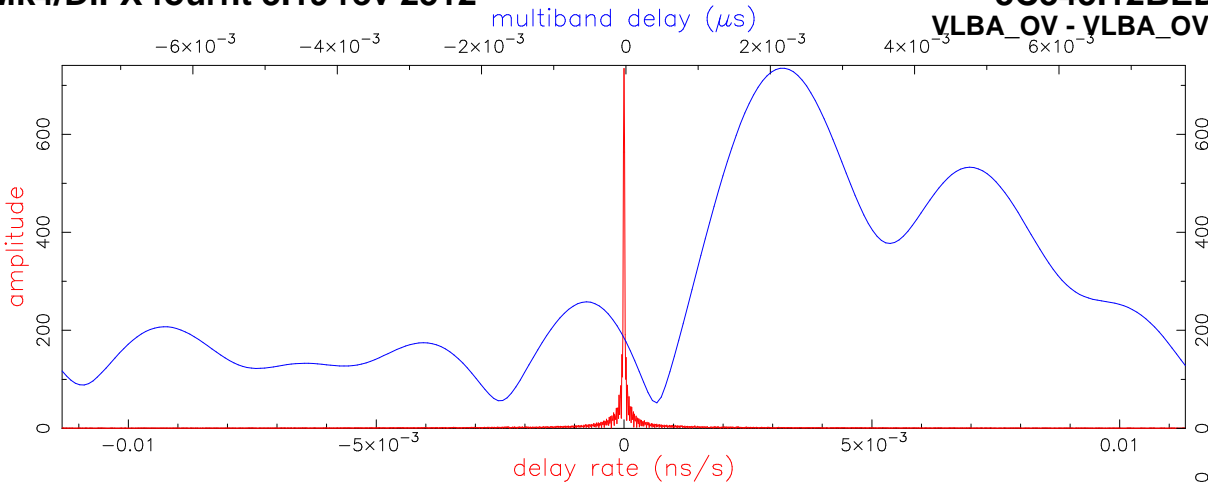
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-20.1	-27.3	-24.5	-54.6	-89.0	-128.3	37.7	-17.8	Phase	-34.0
	636.8	1115.6	1225.6	1186.4	730.5	178.1	342.9	1372.2	Ampl.	848.5
	256.8	256.1	256.3	256.0	256.2	255.1	256.3	255.1	Sbd box	256.3
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

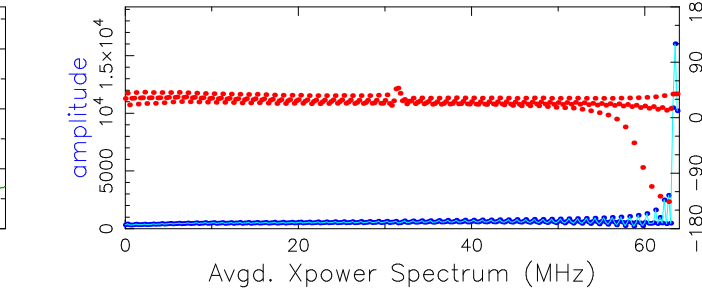
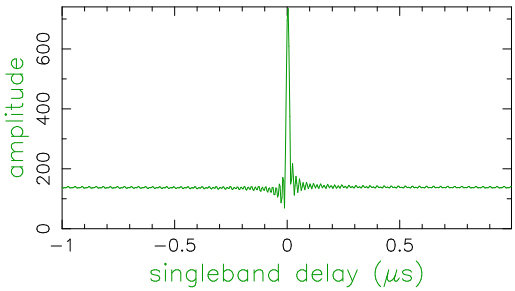
Group delay (usec)(sbd) -2.21615625000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -2.21616E-03 +/- 2.6E-08
 Sband delay (usec) -2.85400000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -2.85400E-03 +/- 2.1E-07
 Phase delay (usec) -1.09612219135E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.09612E-06 +/- 9.0E-11
 Delay rate (us/s) -3.59238713129E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -3.59239E-10 +/- 3.8E-13
 Total phase (deg) -34.0 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -34.0 +/- 0.0

RMS Theor. Amplitude 740.689 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.6 0.0 Search (2048X32) 718.853 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.9 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 54.9 0.0 Inc. seg. avg. 734.519 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 57.7 0.0 Inc. frq. avg. 848.504 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 o: az 60.7 el 29.9 pa -64.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator



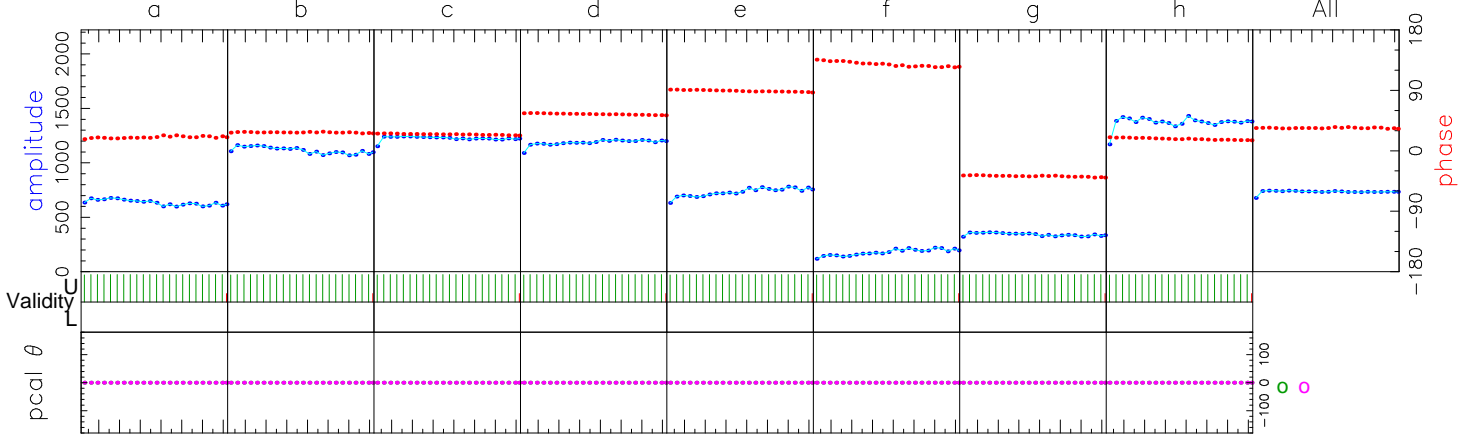
Fringe quality 5

SNR 41054.8
Int time 410.829
Amp 740.689
Phase 34.0
PFD 0.0e+00
Delays (us)
SBD 0.002854
MBD 0.002216
Fringe rate (Hz)
0.000031
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165656
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

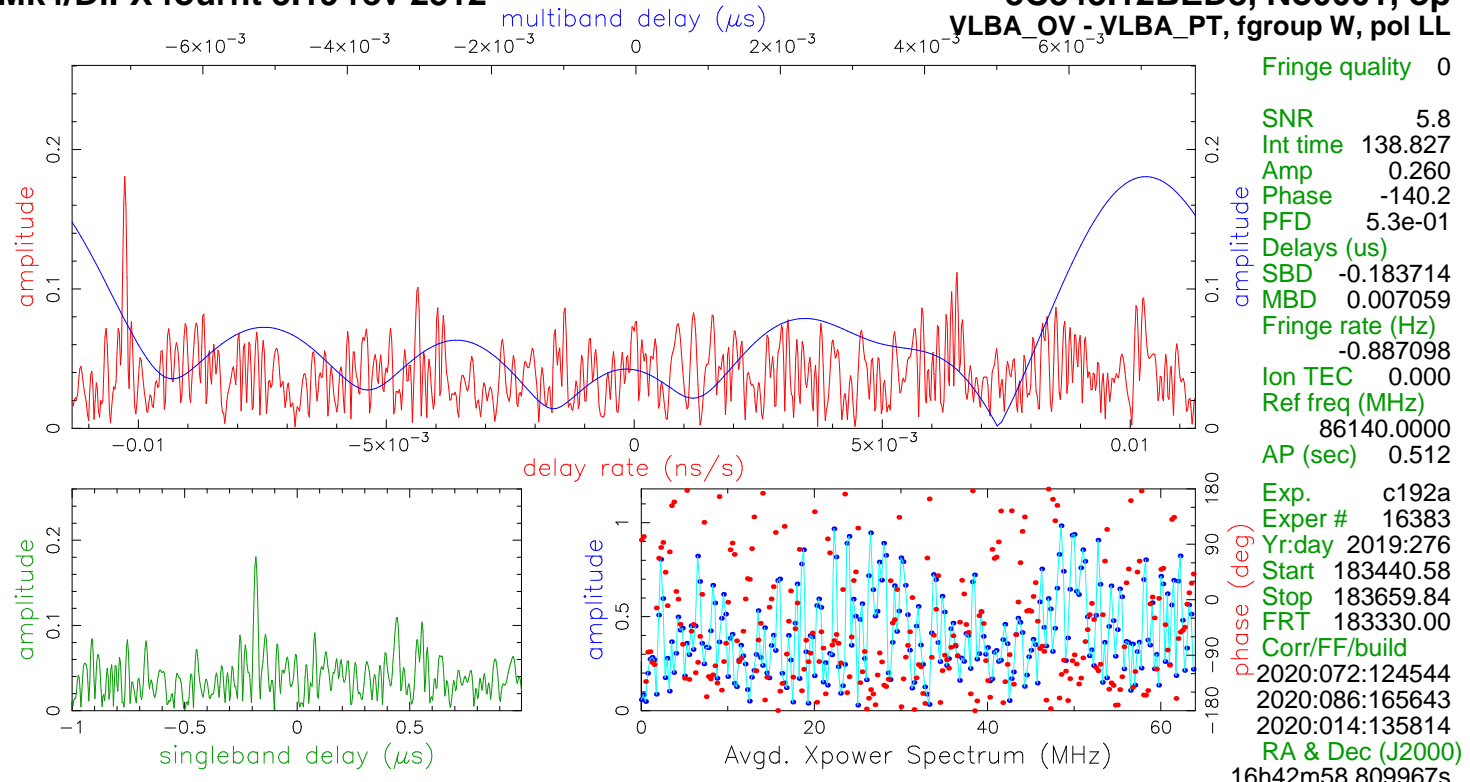


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:0	0:0	0:0	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

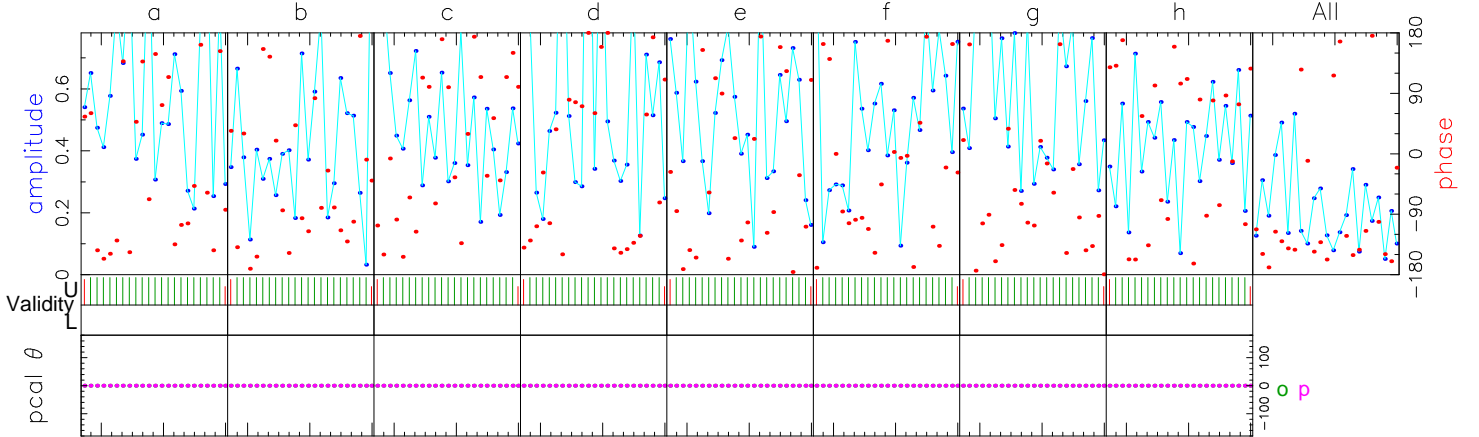
Group delay (usec)(sbd) 2.21615625000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 2.21616E-03 +/- 2.6E-08
 Sband delay (usec) 2.85400000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 2.85400E-03 +/- 2.1E-07
 Phase delay (usec) 1.09612219137E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 1.09612E-06 +/- 9.0E-11
 Delay rate (us/s) 3.59238713129E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 3.59239E-10 +/- 3.8E-13
 Total phase (deg) 34.0 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 34.0 +/- 0.0

RMS Theor. Amplitude 740.689 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.6 0.0 Search (2048X32) 718.853 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.9 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 54.9 0.0 Inc. seg. avg. 734.519 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 57.7 0.0 Inc. frq. avg. 848.504 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/oo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/oo.W.311.12BED8



Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



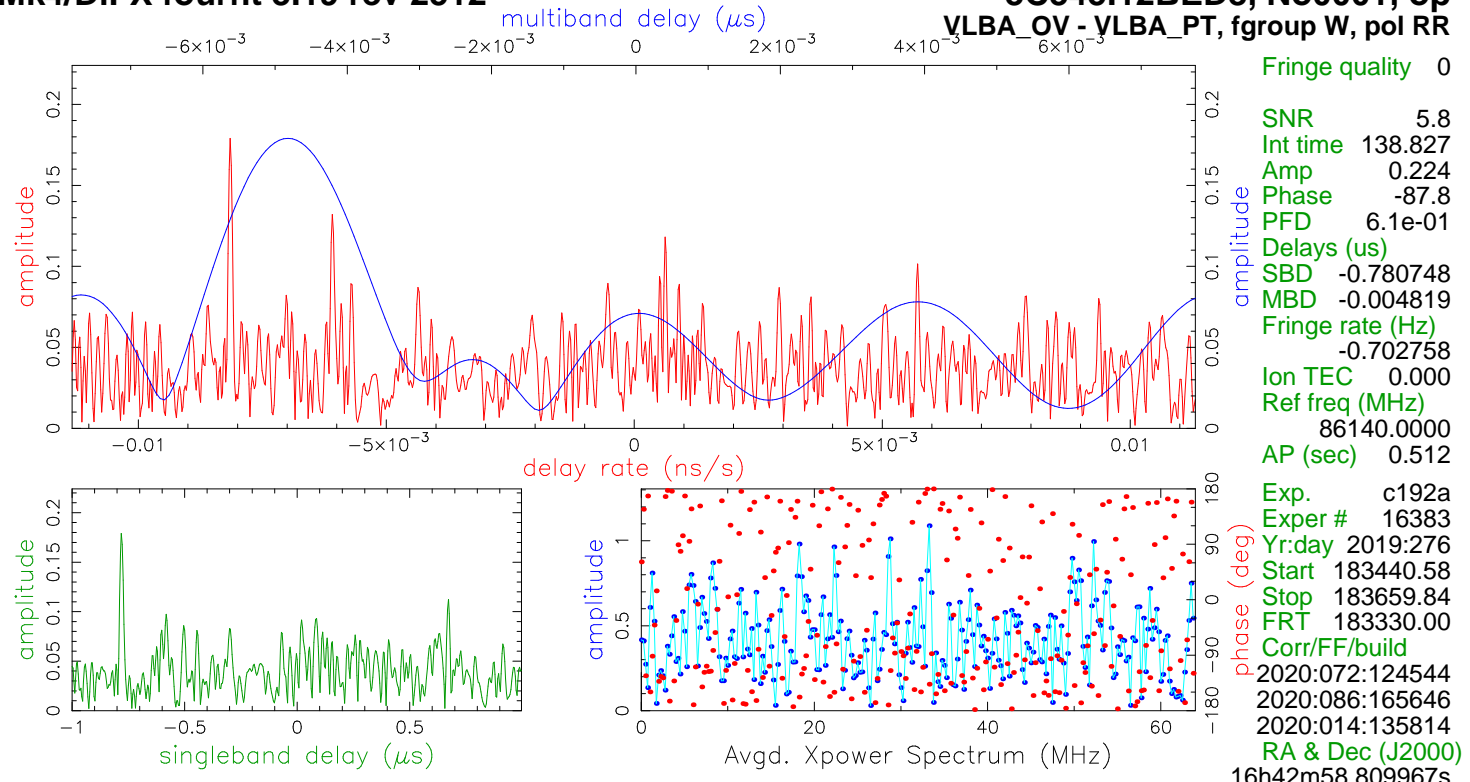
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Phase	-154.3	-103.2	-135.4	-164.6	-157.0	-116.6	-111.2	144.2		-140.2
Ampl.	0.3	0.3	0.2	0.4	0.3	0.3	0.5	0.2		0.3
Sbd box	344.9	365.9	218.9	209.0	189.5	171.5	209.8	373.9		210.0
APs used	U/L 272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0		
PC freqs	o 1000	1000	1000	1000	1000	1000	1000	1000		
PC phase	p 1000	1000	1000	1000	1000	1000	1000	1000		
Mani PC	o:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
PC amp	o:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Chan ids	o 1000	1000	1000	1000	1000	1000	1000	1000		
Tracks	p 1000	1000	1000	1000	1000	1000	1000	1000		
Chan ids	o W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Tracks	p W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.82713480134E+03	Apriori delay (usec)	-1.82695436039E+03	Resid mbdelay (usec)	7.05905E-03	+/-	1.9E-04
Sband delay (usec)	-1.82713807464E+03	Apriori clock (usec)	4.7238750E+07	Resid sbdelay (usec)	-1.83714E-01	+/-	1.5E-03
Phase delay (usec)	-1.82695436491E+03	Apriori clockrate (us/s)	-2.0290559E-07	Resid phdelay (usec)	-4.51991E-06	+/-	6.4E-07
Delay rate (us/s)	1.44106802768E-02	Apriori rate (us/s)	1.44209786063E-02	Resid rate (us/s)	-1.02983E-05	+/-	7.9E-09
Total phase (deg)	-357.6	Apriori accel (us/s/s)	1.27269049504E-05	Resid phase (deg)	-140.2	+/-	19.7

ph/seg (deg)	50.0	Theor.	47.2	Amplitude	0.260 +/- 0.045	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	72.5	Search (1024X32)	0.179	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	39.9	Inc. seg. avg.	0.234	Inc. frq. avg.	0.270	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	40.8	Inc. frq. avg.	0.270			Sample rate (MSamp/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

o: az 60.7 el 29.9 pa -64.6 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) -84.992 1115.195 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/op..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/op.W.250.12BED8



Fringe quality 0

SNR 5.8

Int time 138.827

Amp 0.224

Phase -87.8

PFD 6.1e-01

Delays (us)

SBD -0.780748

MBD -0.004819

Fringe rate (Hz)

-0.702758

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183440.58

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:072:124544

2020:086:165646

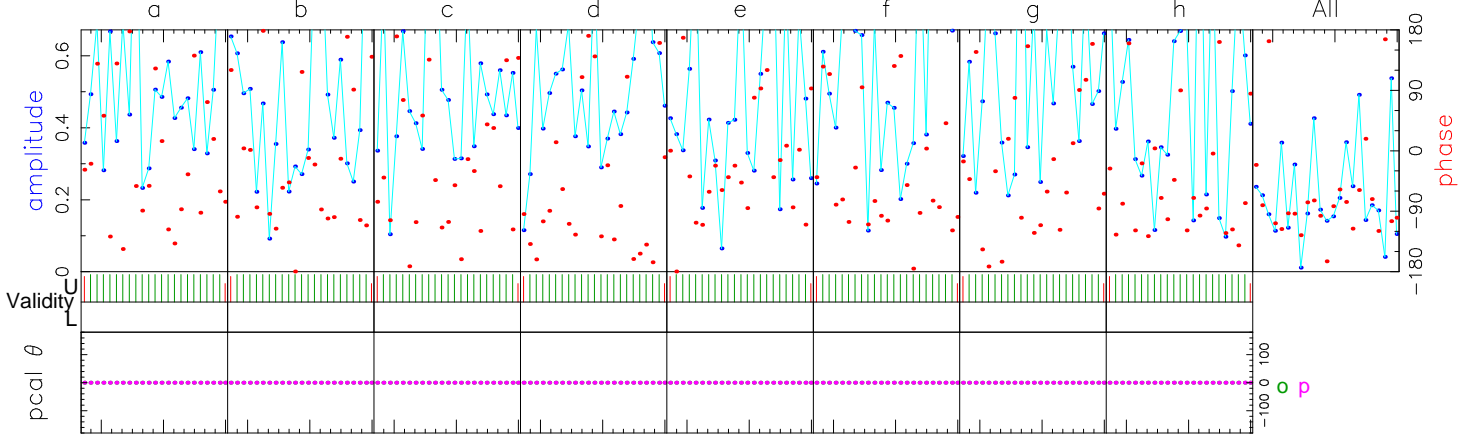
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-80.7	-82.9	-70.7	-144.3	-38.2	-83.8	-92.8	-88.7	Phase	-87.8
	0.2	0.2	0.1	0.3	0.3	0.3	0.3	0.3	Ampl.	0.2
	414.2	339.3	419.9	57.2	344.7	466.7	308.8	105.8	Sbd box	57.1
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.82774042960E+03					-1.82695436039E+03			Resid mbdelay (usec)	-4.81921E-03 +/- 1.9E-04
Sband delay (usec)	-1.82773510839E+03					4.7238750E+00			Resid sbdelay (usec)	-7.80748E-01 +/- 1.5E-03
Phase delay (usec)	-1.82695436322E+03					-2.0290559E-07			Resid phdelay (usec)	-2.83150E-06 +/- 6.4E-07
Delay rate (us/s)	1.44128202867E-02					1.44209786063E-02			Resid rate (us/s)	-8.15832E-06 +/- 8.0E-09
Total phase (deg)			-305.2			1.27269049504E-05			Resid phase (deg)	-87.8 +/- 19.8

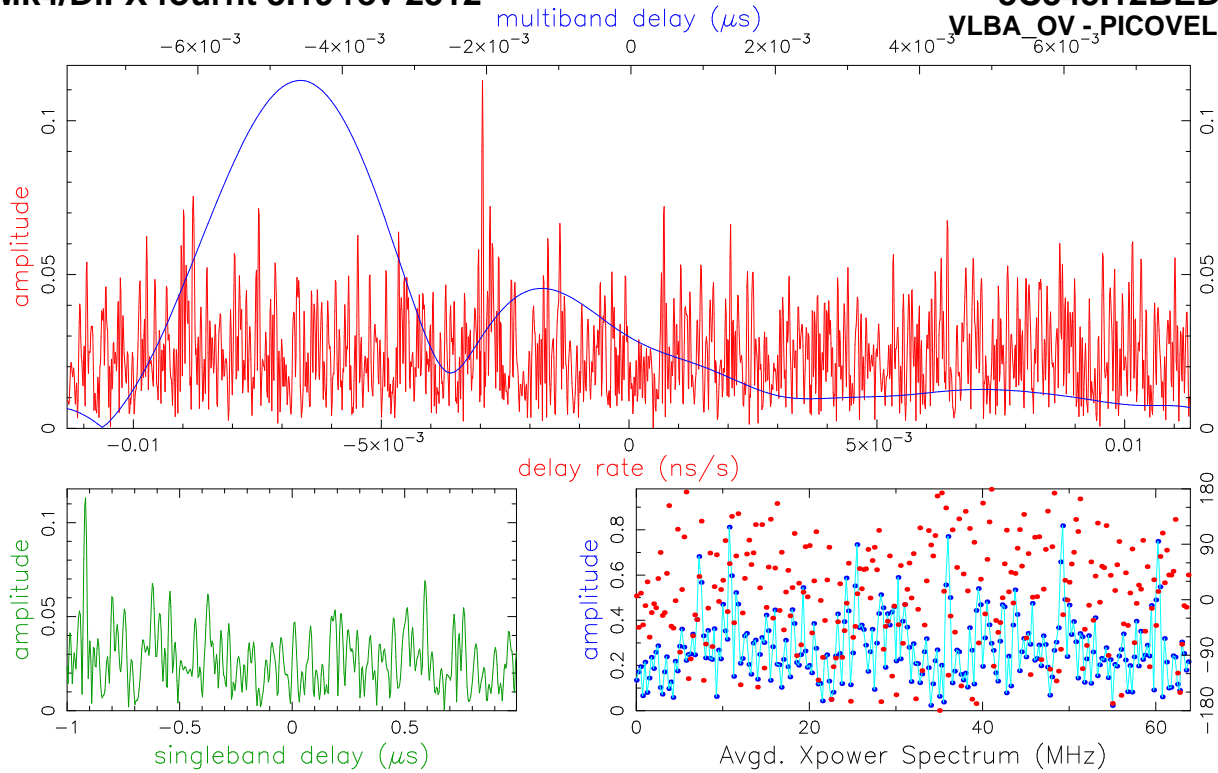
ph/seg (deg) 47.9 47.6 Search (1024X32) 0.175 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 77.5 83.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 31.8 28.0 Inc. seg. avg. 0.205 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 29.0 49.0 Inc. frq. avg. 0.227 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 60.7 el 29.9 pa -64.6 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) -84.992 1115.195 simultaneous interpolator

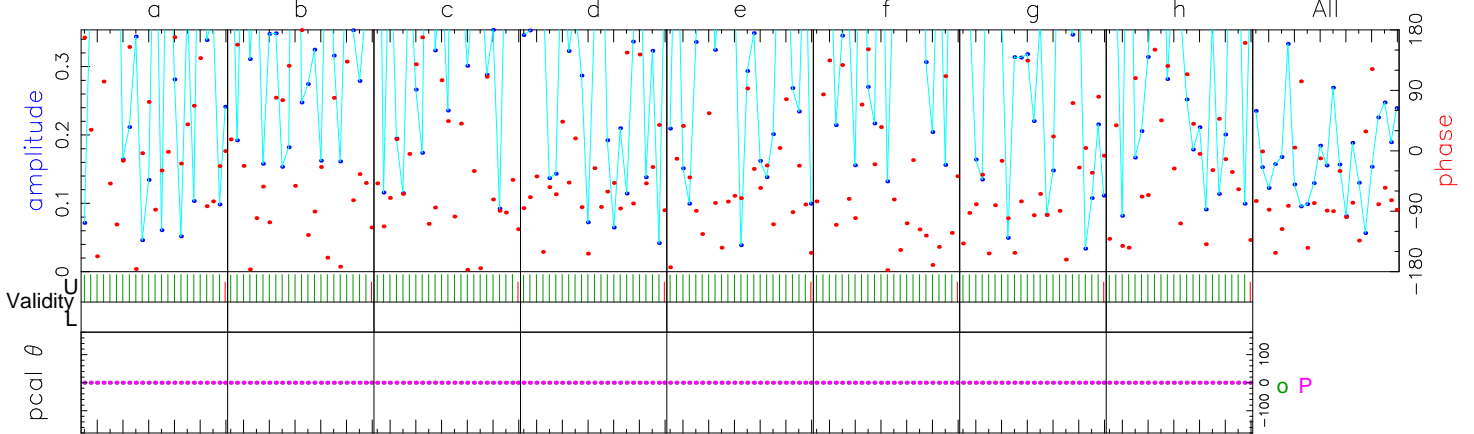


Fringe quality 0

SNR 5.8
Int time 336.738
Amp 0.118
Phase -77.0
PFD 8.8e-01
Delays (us)
SBD -0.919308
MBD -0.004566
Fringe rate (Hz)
-0.254681
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183122.43
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165646
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

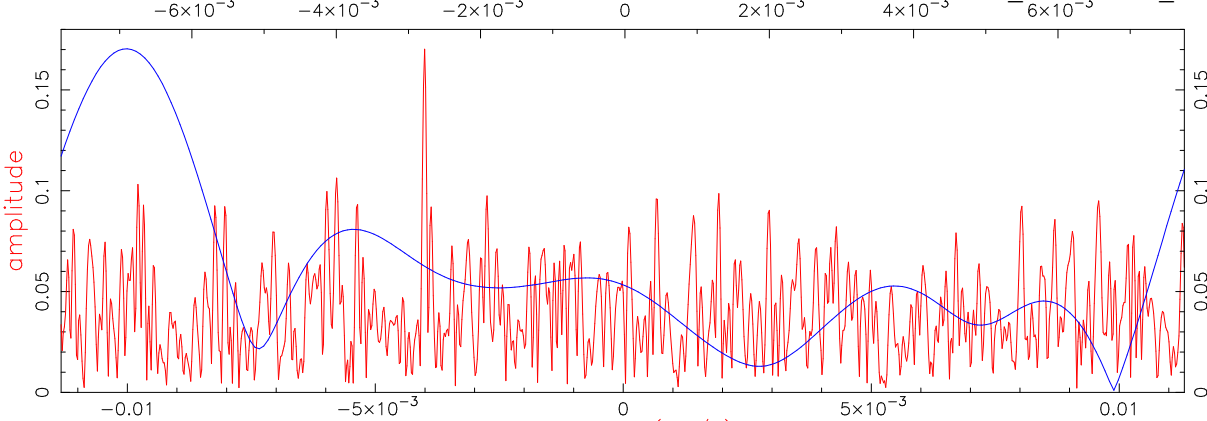
Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-92.8	-80.5	-77.5	-61.7	-52.5	-116.7	-90.5	-53.5	Phase	-77.0
	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	447.3	112.0	57.2	142.8	188.1	198.0	389.4	501.5	Sbd box	21.7
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-7.92575418126E+03		Apriori delay (usec)		-7.92482774029E+03		Resid mbdelay (usec)		-4.56596E-03	+/- 1.9E-04
Sband delay (usec)	-7.92574704804E+03		Apriori clock (usec)		1.6719748E+01		Resid sbdelay (usec)		-9.19308E-01	+/- 1.5E-03
Phase delay (usec)	-7.92482774278E+03		Apriori clockrate (us/s)		3.5398100E-07		Resid phdelay (usec)		-2.48223E-06	+/- 6.4E-07
Delay rate (us/s)	1.49545466922E+00		Apriori rate (us/s)		1.49545762581E+00		Resid rate (us/s)		-2.95660E-06	+/- 3.3E-09
Total phase (deg)			Apriori accel (us/s/s)		4.23835004818E-05		Resid phase (deg)		-77.0	+/- 19.9

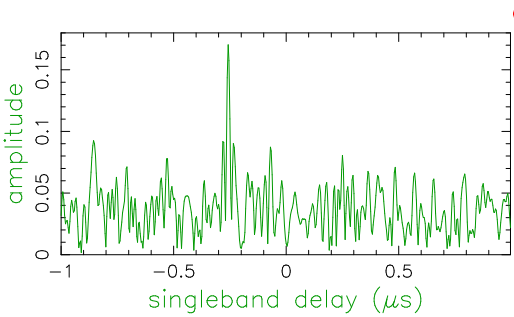
ph/seg (deg) 68.0 47.7 Search (2048X32) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 73.2 83.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 23.8 28.2 Inc. seg. avg. 0.129 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 37.5 49.1 Inc. frq. avg. 0.110 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 60.7 el 29.9 pa -64.6 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -11070.428 2921.183 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/oP..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/oP.W.260.12BED8

multiband delay (μ s)

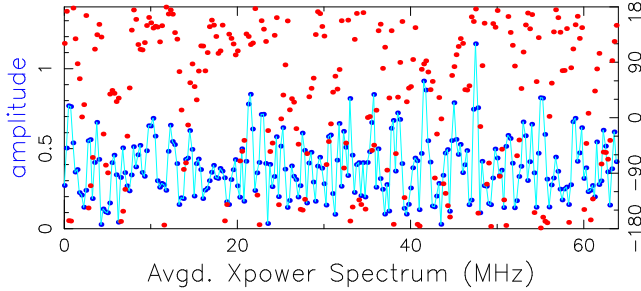


Fringe quality 0

SNR 5.5
Int time 138.827
Amp 0.180
Phase 135.1
PFD 9.9e-01
Delays (us)
SBD -0.257123
MBD -0.006859
Fringe rate (Hz)
-0.345689
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

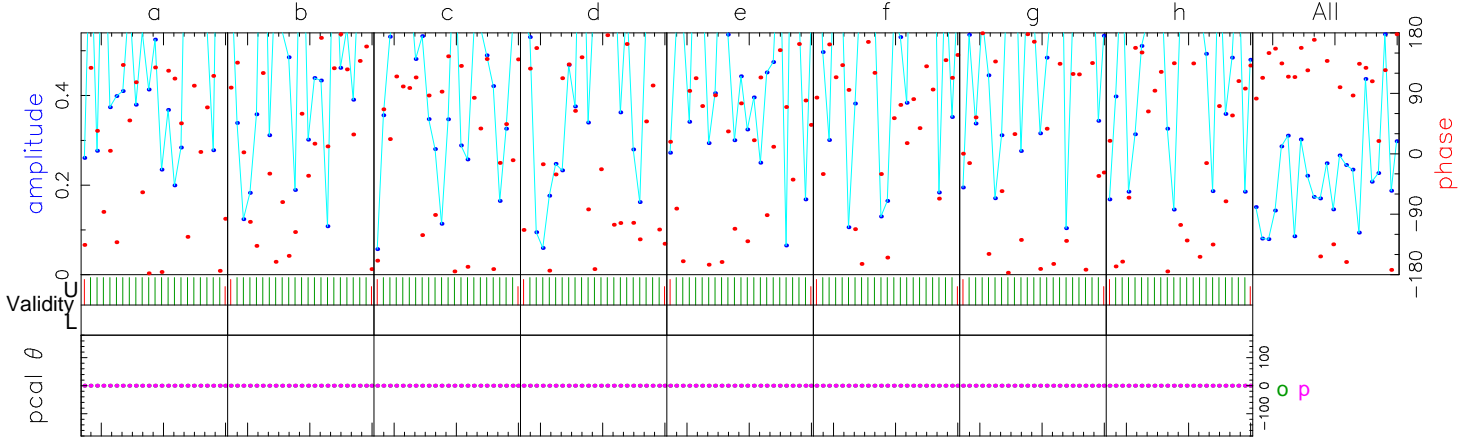


delay rate (ns/s)



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183440.58
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165648
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

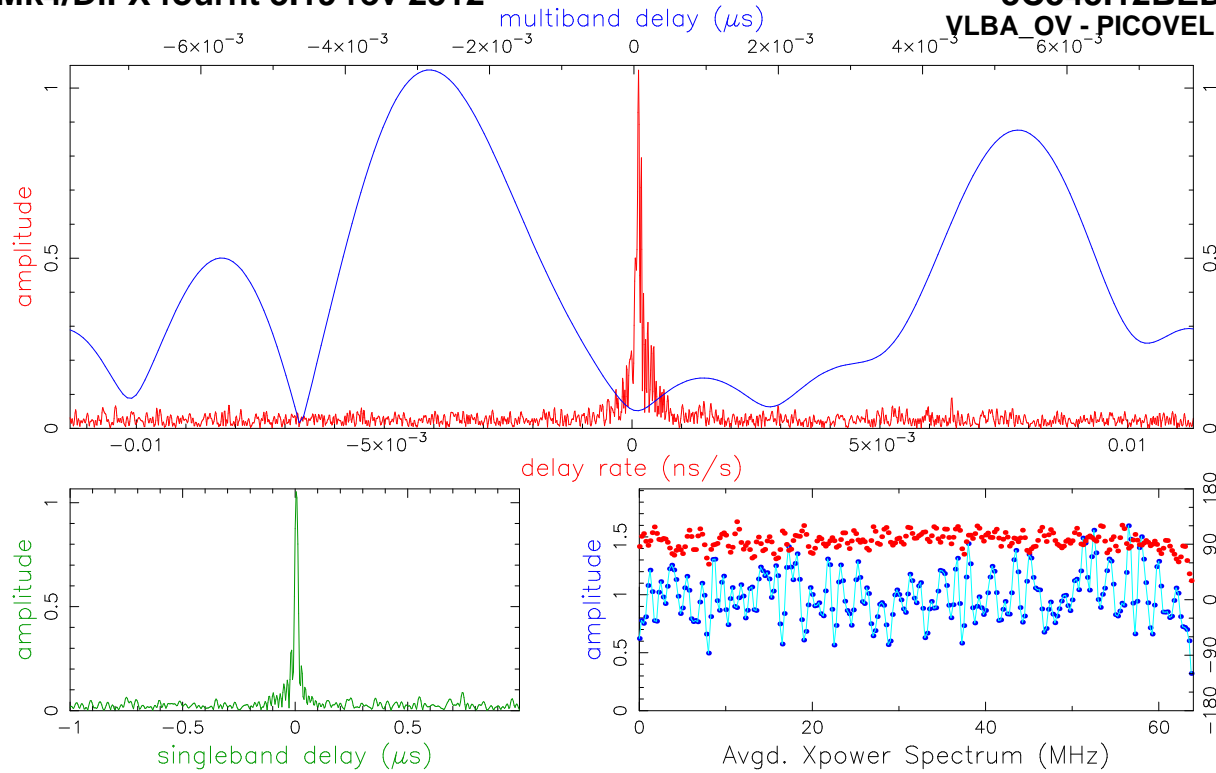
Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.82721121907E+03									
Sband delay (usec)	-1.82721148314E+03									
Phase delay (usec)	-1.82695435603E+03									
Delay rate (us/s)	1.44169655018E-02									
Total phase (deg)			-82.3							
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)									135.1	+/- 20.8
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

o: az 60.7 el 29.9 pa -64.6 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) -84.992 1115.195 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/op..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/op.W.271.12BED8

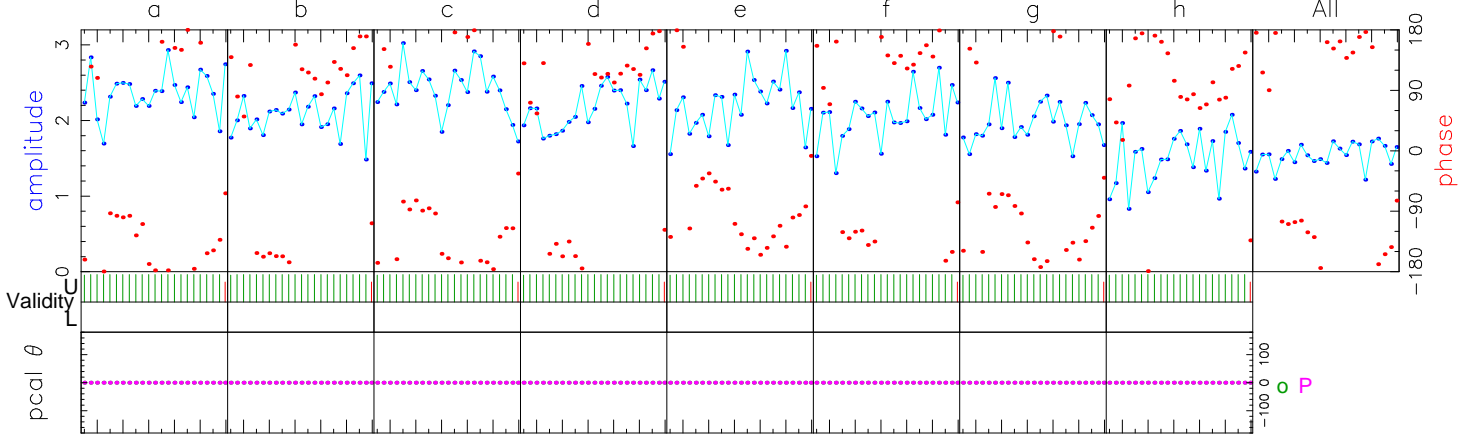


Fringe quality 2

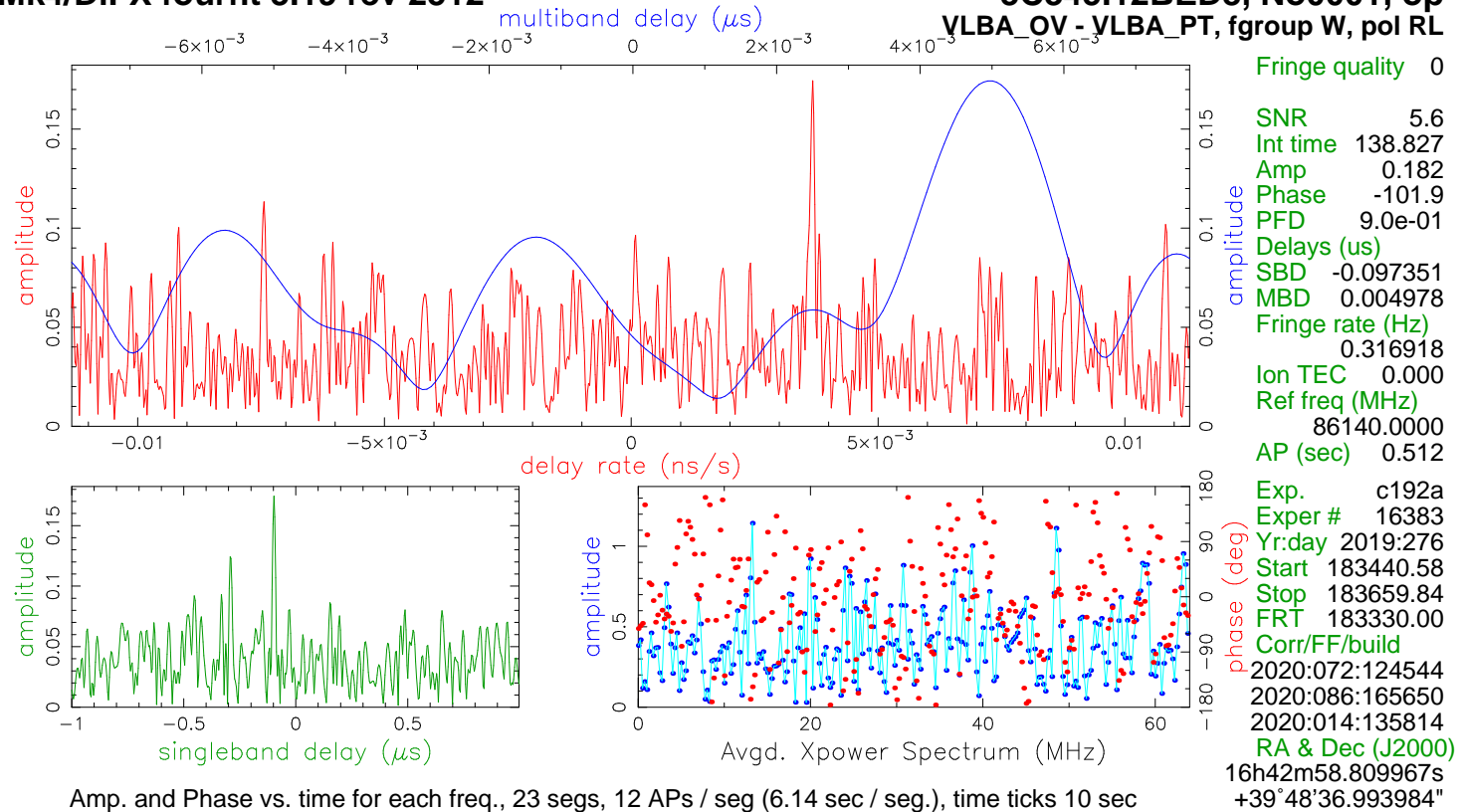
SNR 53.5
Int time 336.738
Amp 1.066
Phase -171.2
PFD 0.0e+00
Delays (us)
SBD 0.005314
MBD -0.002791
Fringe rate (Hz) 0.011305
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183122.43
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165649
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

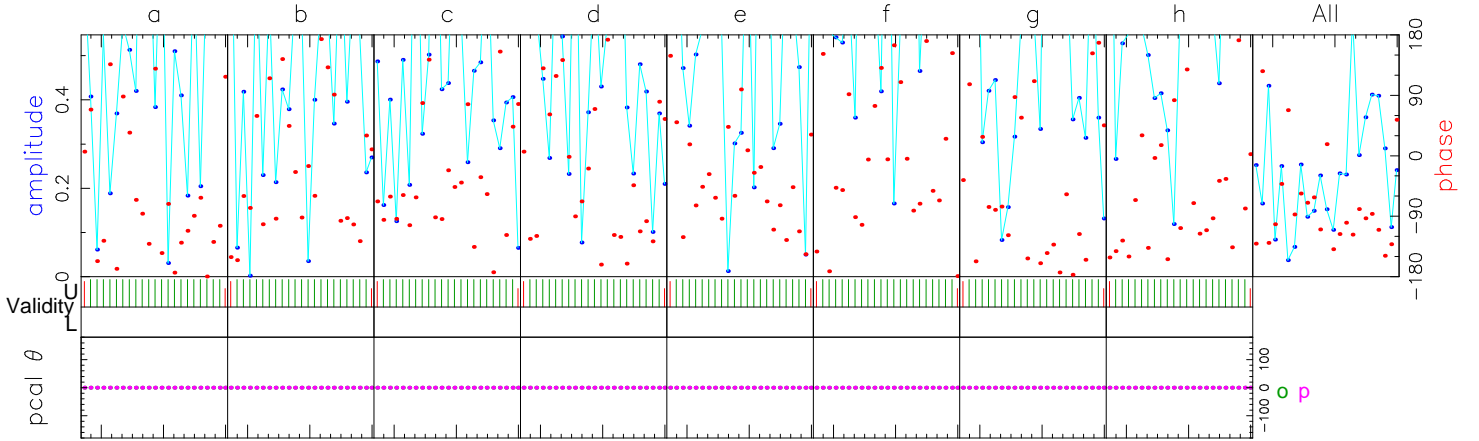
Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0		
o:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-7.92481490582E+03									
Sband delay (usec)	-7.92482242629E+03									
Phase delay (usec)	-7.92482774582E+03									
Delay rate (us/s)	1.49545775706E+00									
Total phase (deg)			-8.8							
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)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
Tracks										
Chan ids										
Tracks										
Chan ids										
Tracks										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
simultaneous interpolator										

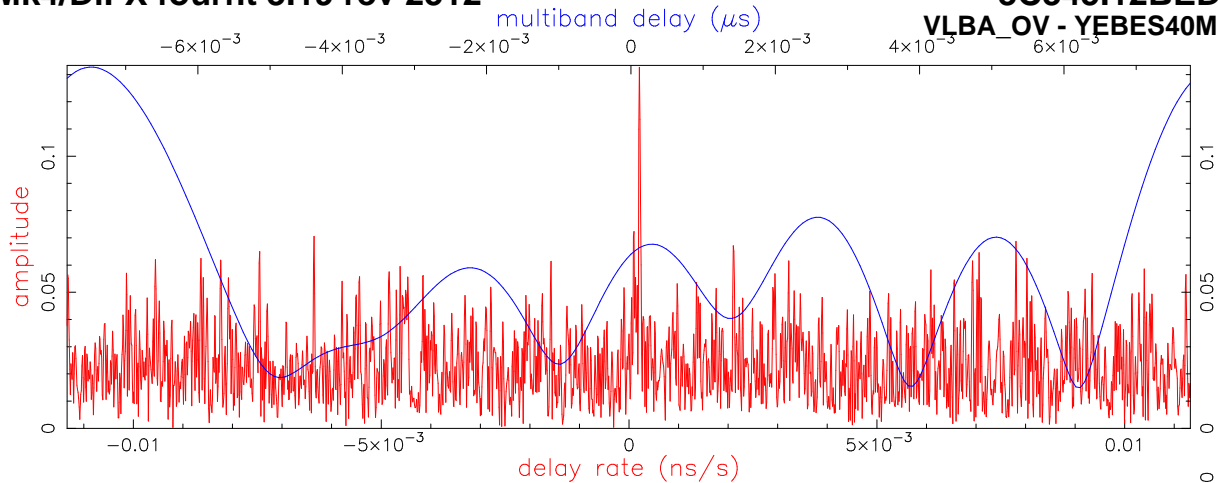


Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec

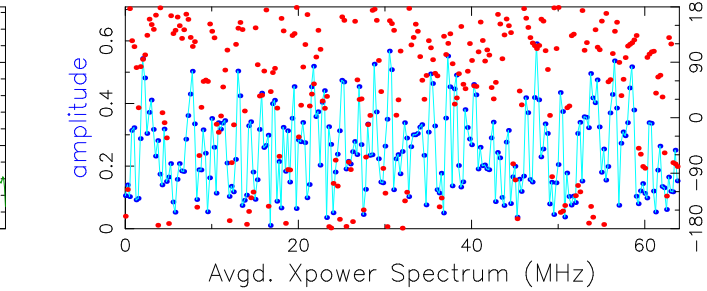
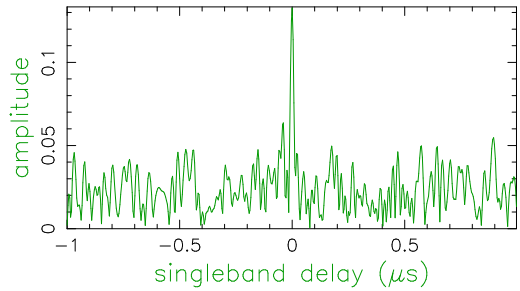


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-128.7	-118.2	-68.6	-136.4	-48.9	-76.4	-154.3	-100.8	Phase	-101.9
	0.3	0.1	0.3	0.2	0.3	0.1	0.3	0.3	Ampl.	0.2
	468.2	452.7	230.5	68.6	126.3	66.6	305.4	452.8	Sbd box	232.1
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.82705875756E+03					-1.82695436039E+03			Resid mbdelay (usec)	4.97783E-03 +/- 1.9E-04
Sband delay (usec)	-1.82705171189E+03					4.7238750E+00			Resid sbdelay (usec)	-9.73515E-02 +/- 1.5E-03
Phase delay (usec)	-1.82695436368E+03					-2.0290559E-07			Resid phdelay (usec)	-3.28663E-06 +/- 6.6E-07
Delay rate (us/s)	1.44246577096E-02					1.44209786063E-02			Resid rate (us/s)	3.67910E-06 +/- 8.2E-09
Total phase (deg)			-319.3			1.27269049504E-05			Resid phase (deg)	-101.9 +/- 20.4

	RMS	Theor.	Amplitude	0.182 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	64.0	48.9	Search (1024X32)	0.171	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	83.9	85.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	39.8	28.8	Inc. seg. avg.	0.182	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	44.8	50.3	Inc. frq. avg.	0.199	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			
o: az 60.7 el 29.9 pa -64.6 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) -84.992 1115.195 simultaneous interpolator									

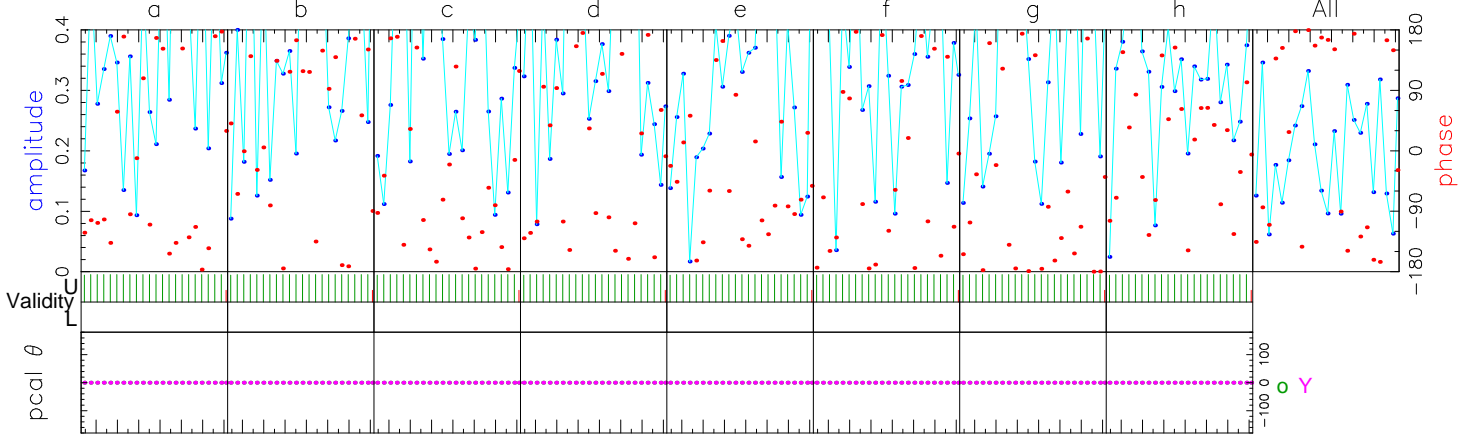


Fringe quality 9
SNR 7.3
Int time 401.317
Amp 0.133
Phase -162.0
PFD 8.7e-05
Delays (us)
SBD -0.000860
MBD -0.007521
Fringe rate (Hz)
0.017830
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183017.92
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165646
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 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	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

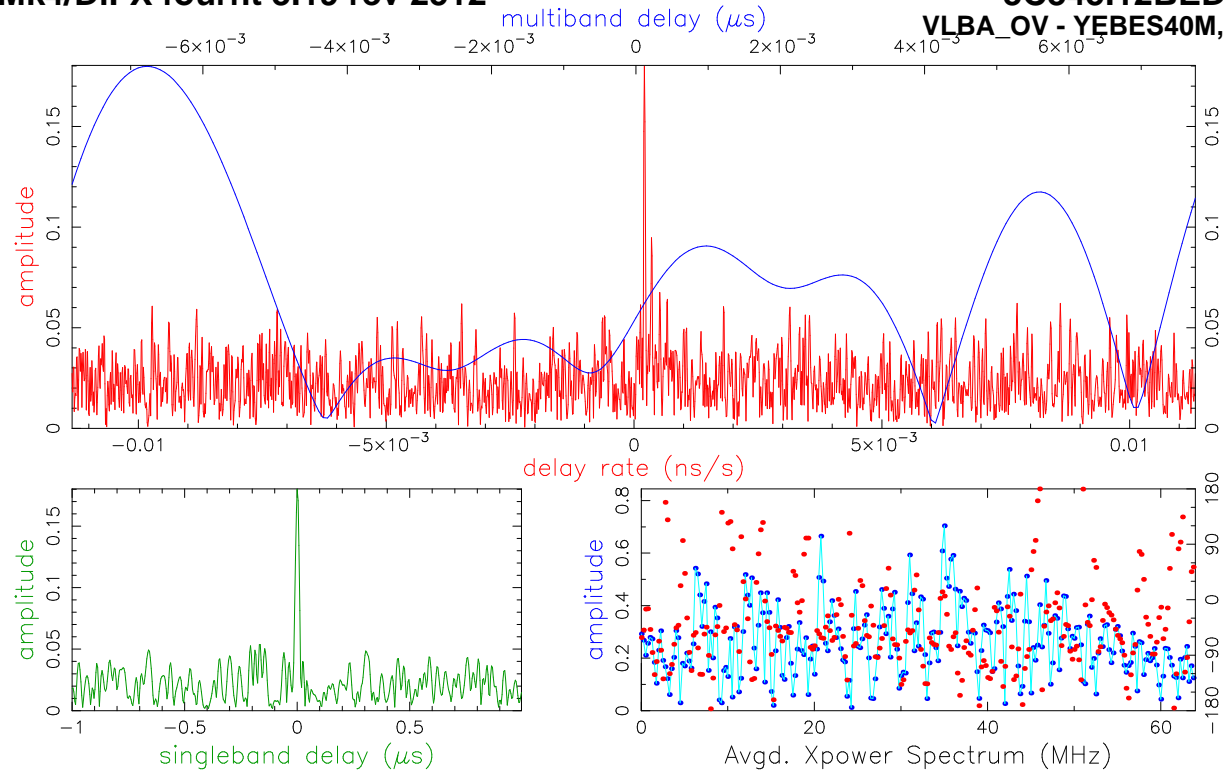
Group delay (usec)(sbd)	-8.03083165925E+03	Apriori delay (usec)	-8.03082413832E+03	Resid mbdelay (usec)	-7.52093E-03	+/-	1.5E-04
Sband delay (usec)	-8.03082499832E+03	Apriori clock (usec)	6.9777994E+00	Resid sbdelay (usec)	-8.60000E-04	+/-	1.2E-03
Phase delay (usec)	-8.03082414355E+03	Apriori clockrate (us/s)	-2.1901900E-07	Resid phdelay (usec)	-5.22535E-06	+/-	5.1E-07
Delay rate (us/s)	1.47259722651E+00	Apriori rate (us/s)	1.47259701952E+00	Resid rate (us/s)	2.06987E-07	+/-	2.2E-09
Total phase (deg)	-261.0	Apriori accel (us/s/s)	3.95125131510E-05	Resid phase (deg)	-162.0	+/-	15.7

ph/seg (deg)	56.5	Theor.	37.6	Amplitude	0.133 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	82.1		65.6	Search (2048X32)	0.129	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	71.8		22.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	45.7		38.7	Inc. seg. avg.	0.164	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.168	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

o: az 60.7 el 29.9 pa -64.6 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -10905.762 2412.301 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/oY..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/oY.W.258.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, oY
VLBA_OV - YEYES40M, fgroup W, pol RR

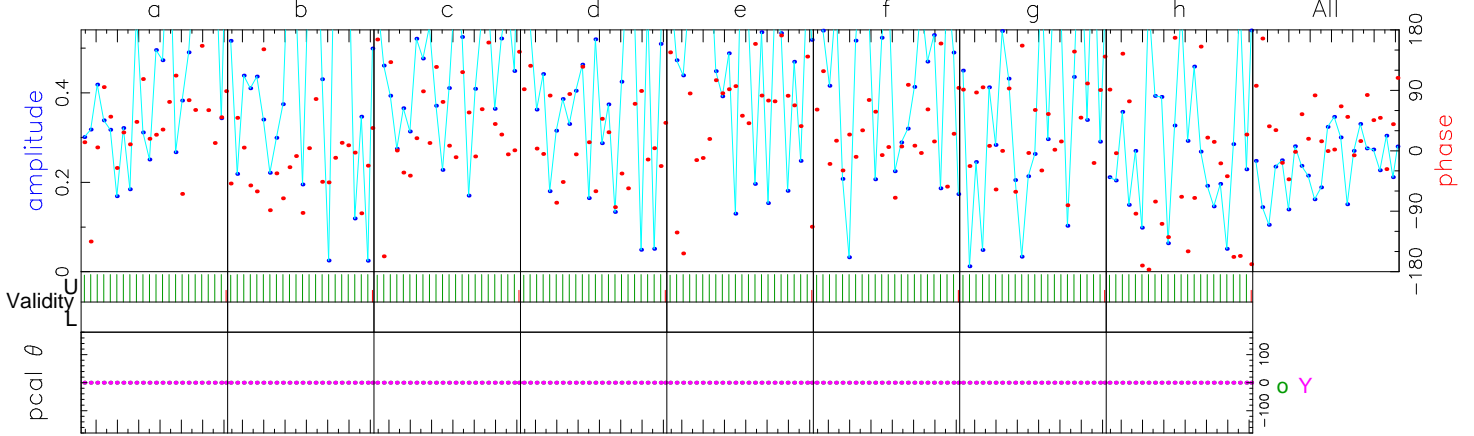


Fringe quality 9

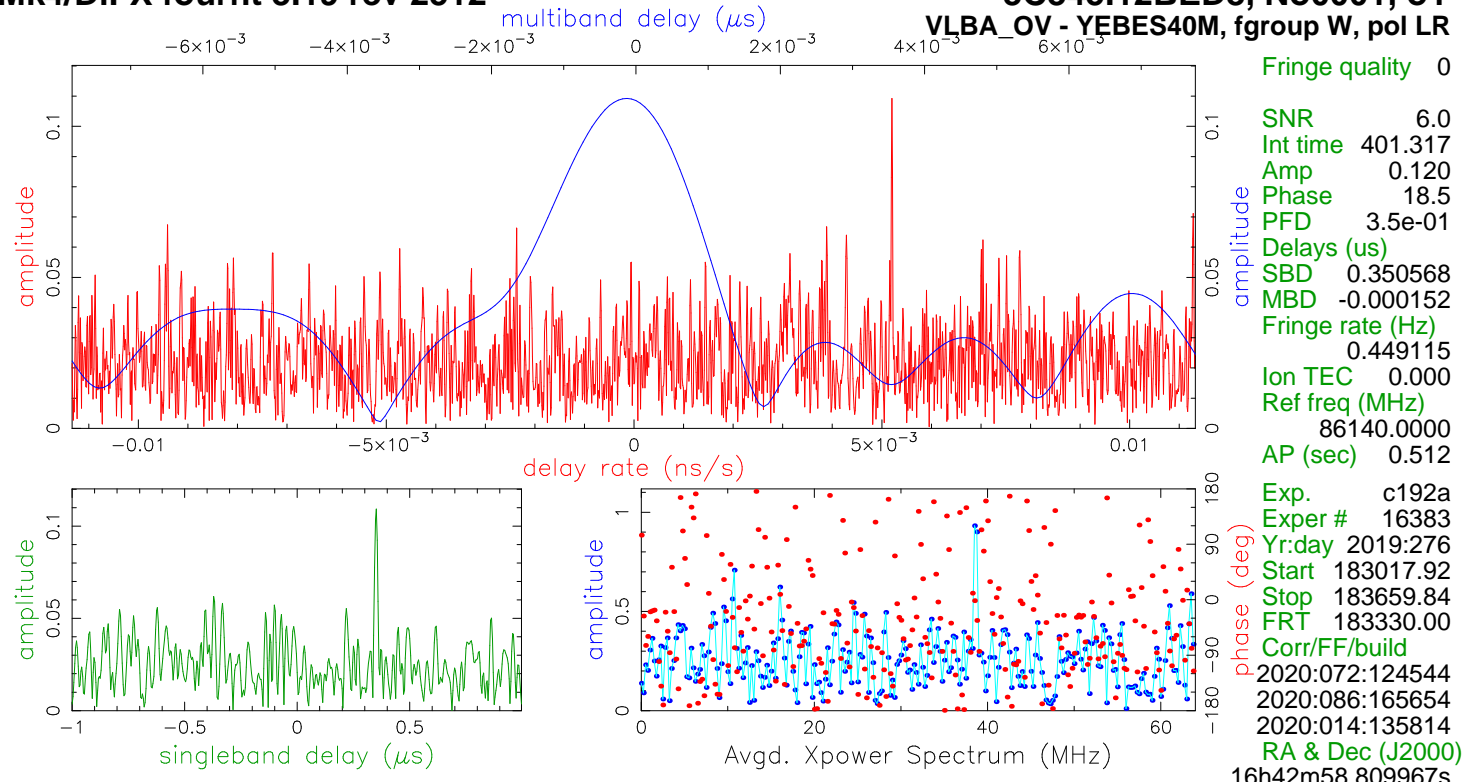
SNR 9.9
Int time 401.317
Amp 0.180
Phase 28.8
PFD 2.2e-14
Delays (us)
SBD 0.000702
MBD -0.006763
Fringe rate (Hz) 0.017963
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183017.92
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165650
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

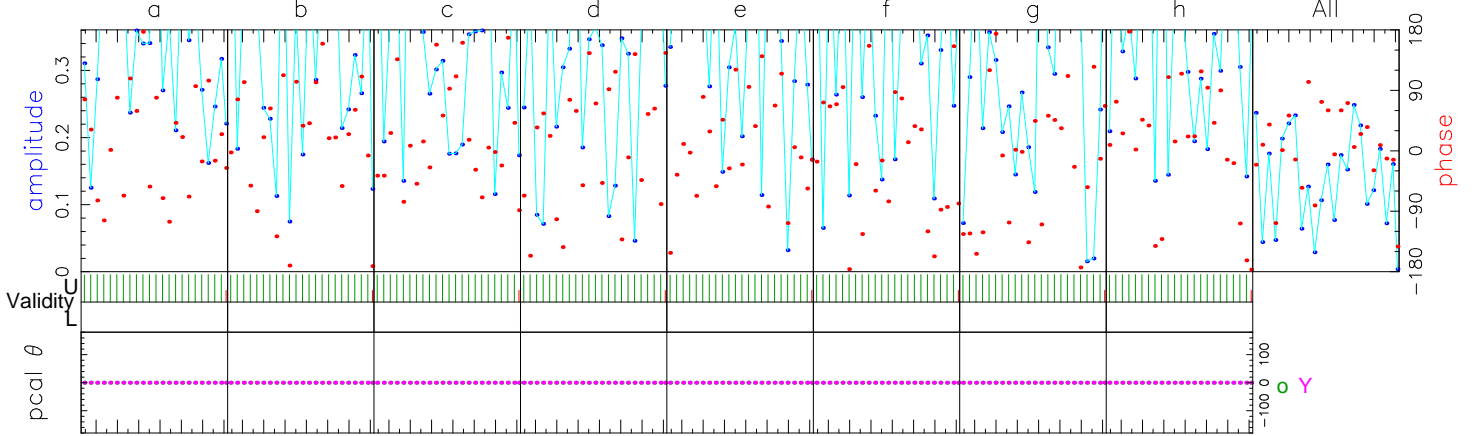
Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.03083090134E+03									
Sband delay (usec)	-8.03082343657E+03									
Phase delay (usec)	-8.03082413739E+03									
Delay rate (us/s)	1.47259722806E+00									
Total phase (deg)			-70.1							
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)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										



Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 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
	12.6	45.9	3.2	25.4	4.7	-0.0	-87.6	42.3	Phase	18.5
	0.1	0.2	0.2	0.1	0.2	0.1	0.0	0.1	Ampl.	0.1
	300.4	346.8	346.9	271.1	347.5	293.8	284.1	416.2	Sbd box	346.7
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	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)	-8.03048054067E+03		Apriori delay (usec)		-8.03082413832E+03		Resid mbdelay (usec)		-1.52351E-04	+/- 1.8E-04
Sband delay (usec)	-8.03047357057E+03		Apriori clock (usec)		6.9777994E+00		Resid sbdelay (usec)		3.50568E-01	+/- 1.4E-03
Phase delay (usec)	-8.03082413772E+03		Apriori clockrate (us/s)		-2.1901900E-07		Resid phdelay (usec)		5.98102E-07	+/- 6.1E-07
Delay rate (us/s)	1.47260223330E+00		Apriori rate (us/s)		1.47259701952E+00		Resid rate (us/s)		5.21378E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		3.95125131510E-05		Resid phase (deg)		18.5	+/- 19.0

	RMS	Theor.	Amplitude	0.120 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	55.2	45.6	Search (2048X32)	0.107	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	68.5	79.6	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	47.3	26.9	Inc. seg. avg.	0.117	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	51.2	46.9	Inc. frq. avg.	0.114	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

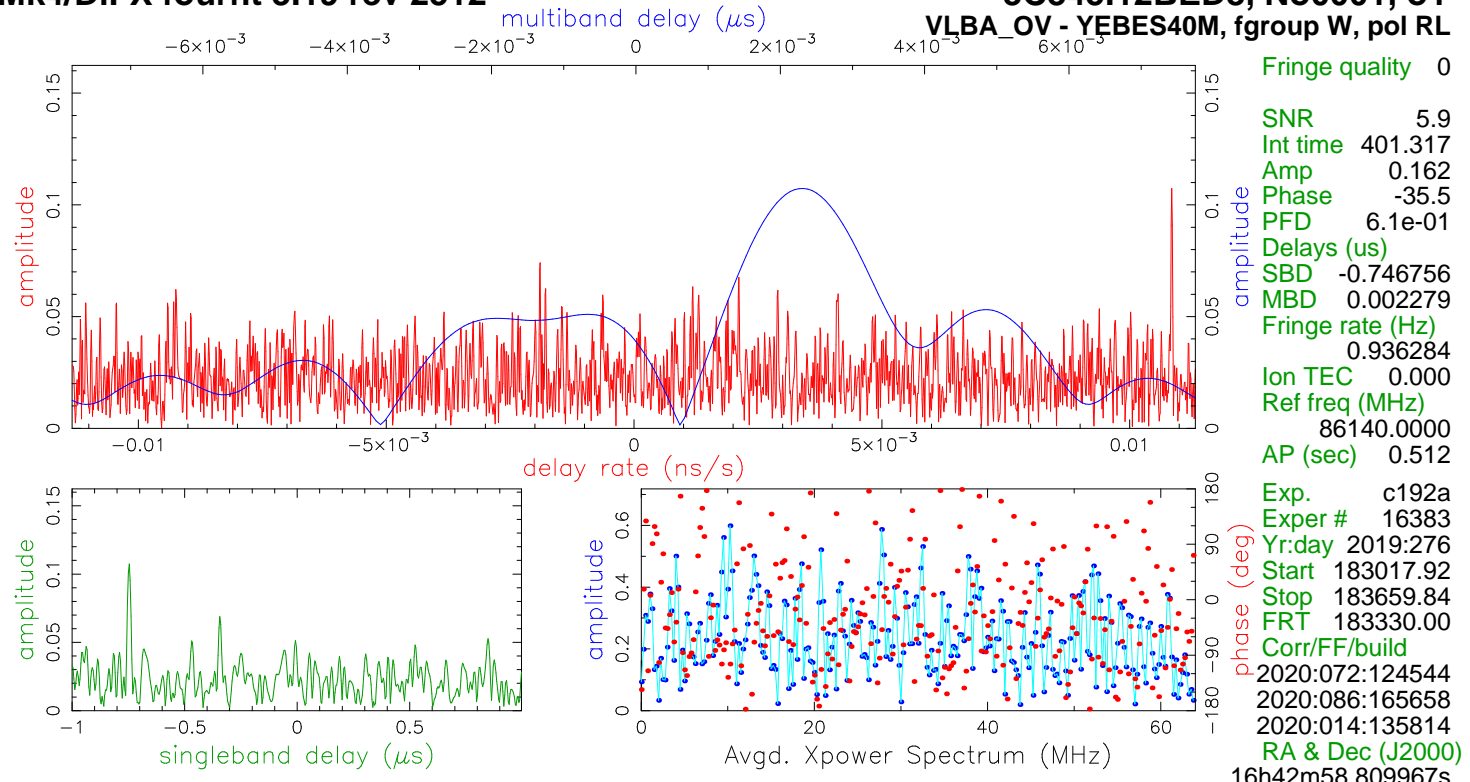
o: az 60.7 el 29.9 pa -64.6 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -10905.762 2412.301 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/oY..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/oY.W.303.12BED8

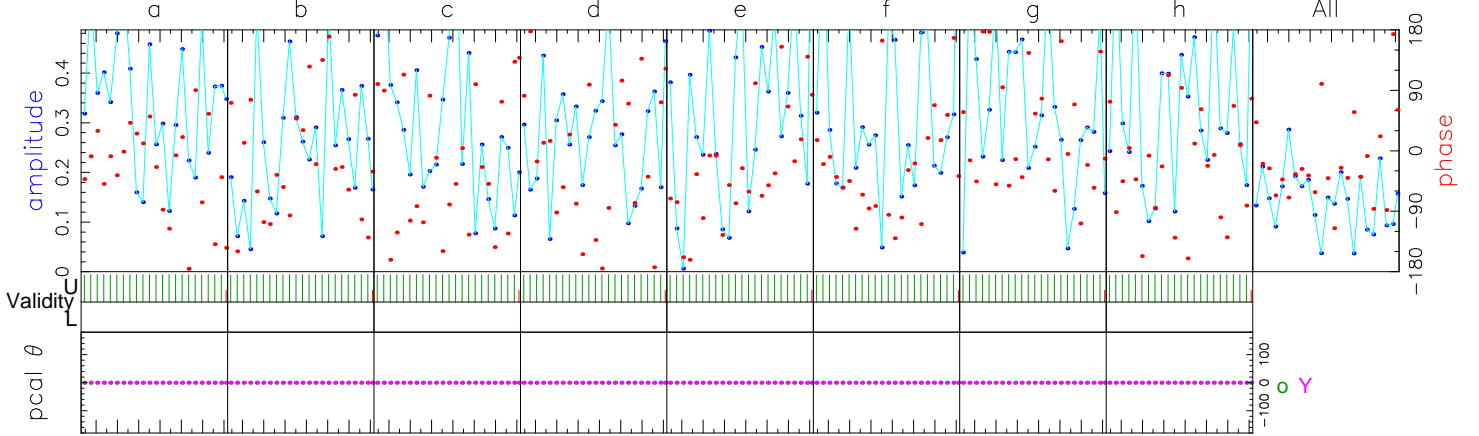
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, oY

VLBA_OV - YEBES40M, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec

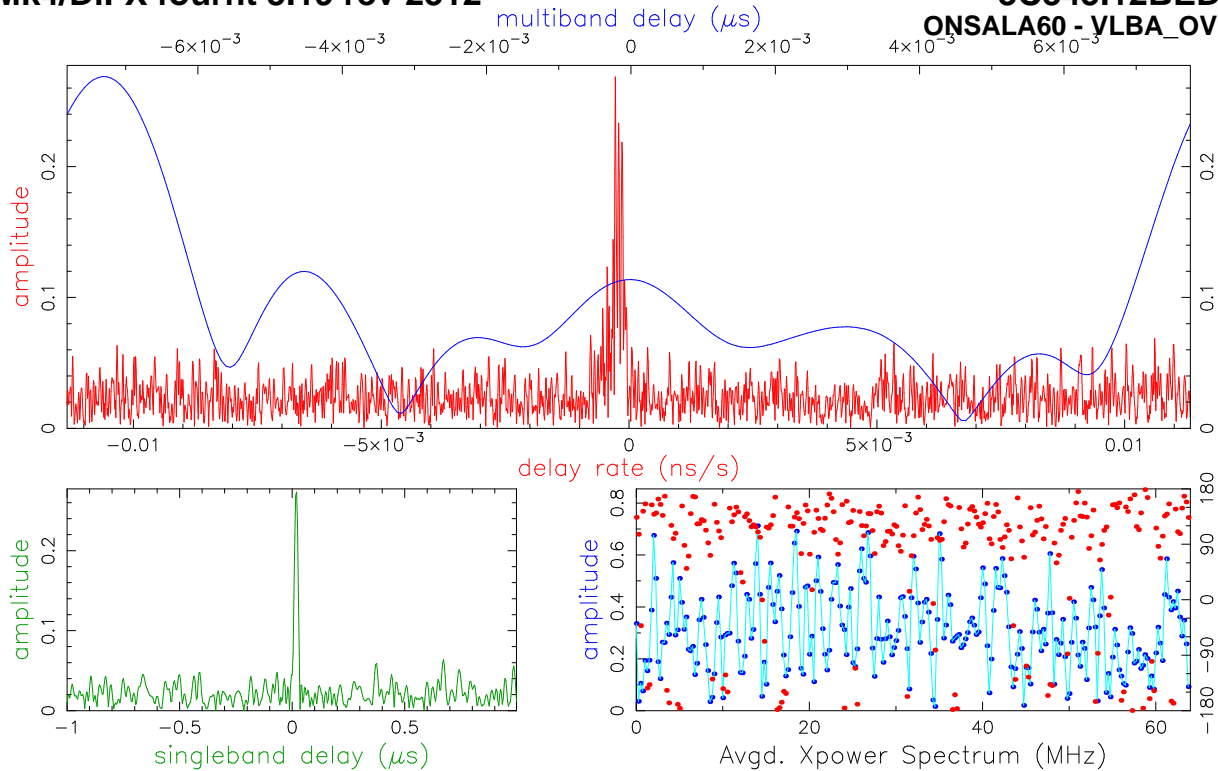


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-14.4	-59.1	-100.8	-64.1	-33.4	-48.2	-28.0	-12.7	Phase	-35.5
	0.3	0.1	0.1	0.0	0.2	0.3	0.2	0.2	Ampl.	0.2
	66.2	496.3	457.3	82.3	67.5	64.9	298.8	14.1	Sbd box	65.8
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	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)	-8.03157185948E+03		Apriori delay (usec)		-8.03082413832E+03		Resid mbdelay (usec)		2.27884E-03	+/- 1.8E-04
Sband delay (usec)	-8.03157089482E+03		Apriori clock (usec)		6.9777994E+00		Resid sbdelay (usec)		-7.46756E-01	+/- 1.5E-03
Phase delay (usec)	-8.03082413947E+03		Apriori clockrate (us/s)		-2.1901900E-07		Resid phdelay (usec)		-1.14511E-06	+/- 6.3E-07
Delay rate (us/s)	1.47260788885E+00		Apriori rate (us/s)		1.47259701952E+00		Resid rate (us/s)		1.08693E-05	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		3.95125131510E-05		Resid phase (deg)		-35.5	+/- 19.4

	RMS	Theor.	Amplitude	0.162 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	59.3	46.6	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	66.4	81.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	33.7	27.5	Inc. seg. avg.	0.164	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	52.7	48.0	Inc. frq. avg.	0.157	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

o: az 60.7 el 29.9 pa -64.6 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -10905.762 2412.301 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/oY..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/oY.W.319.12BED8

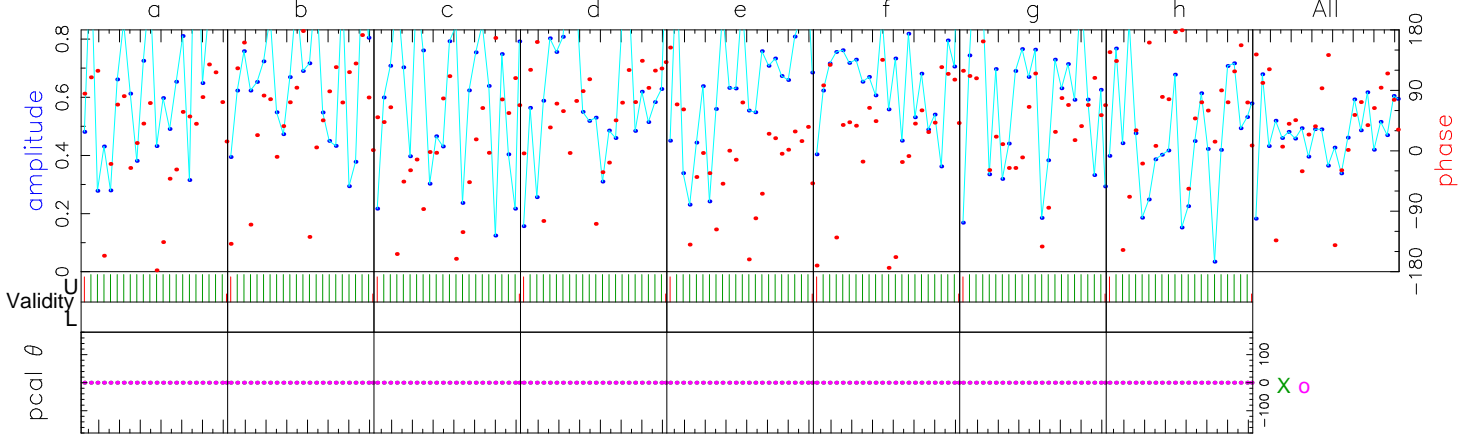


Fringe quality 8

SNR 15.3
 Int time 409.331
 Amp 0.277
 Phase 61.7
 PFD 2.8e-44
 Delays (us)
 SBD 0.017943
 MBD -0.007255
 Fringe rate (Hz)
 -0.023469
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

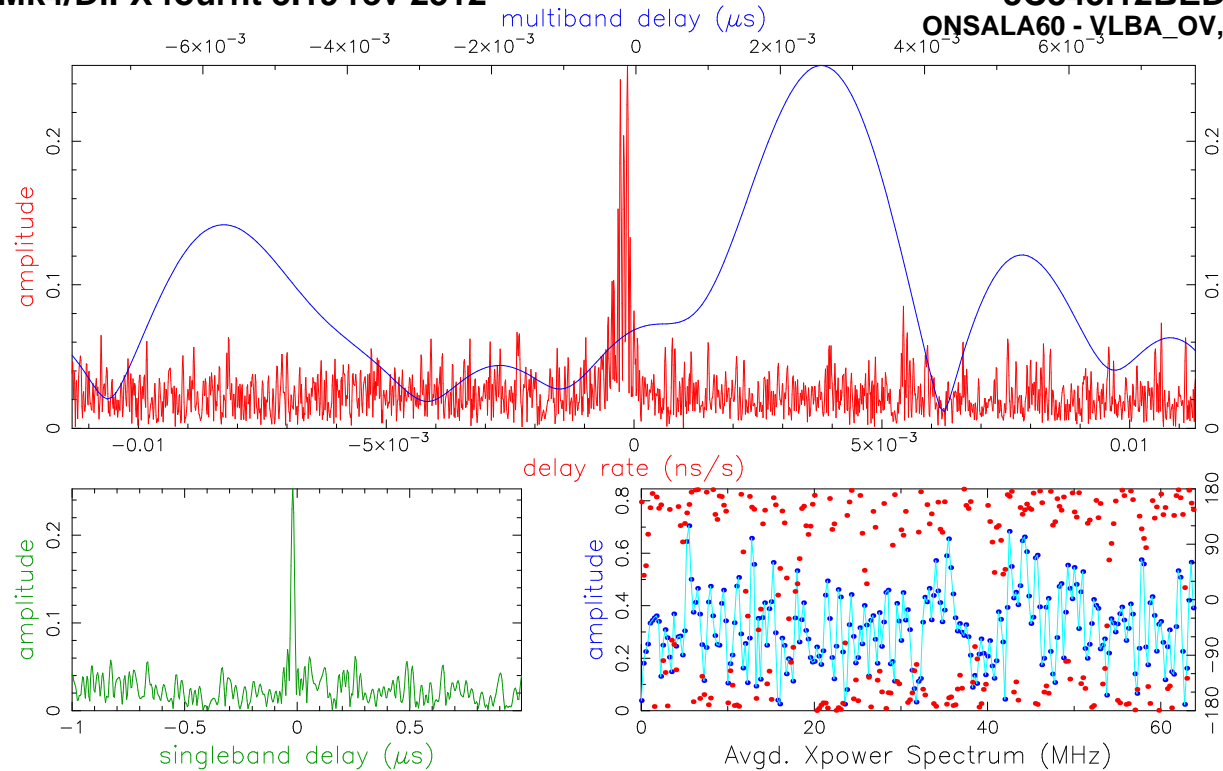
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165650
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0			
X	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
X:o	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			
o	1000	1000	1000	1000	1000	1000	1000	1000			
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)	6.16186708174E+03					6.16184308657E+03			Resid mbdelay (usec)	-7.25483E-03	+/- 7.1E-05
Sband delay (usec)	6.16186103007E+03					1.5695475E+01			Resid sbdelay (usec)	1.79435E-02	+/- 5.6E-04
Phase delay (usec)	6.16184308856E+03					5.2701902E-07			Resid phdelay (usec)	1.98981E-06	+/- 2.4E-07
Delay rate (us/s)	-1.43643817301E+00					-1.43643790055E+00			Resid rate (us/s)	-2.72454E-07	+/- 1.0E-09
Total phase (deg)			233.6			-1.55313353288E-05			Resid phase (deg)	61.7	+/- 7.5

ph/seg (deg) 67.8 17.9 Search (2048X32) 0.255 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.8 31.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.2 10.6 Inc. seg. avg. 0.452 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 26.9 18.4 Inc. frq. avg. 0.301 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10680.502 472.193 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Xo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Xo.W.285.12BED8

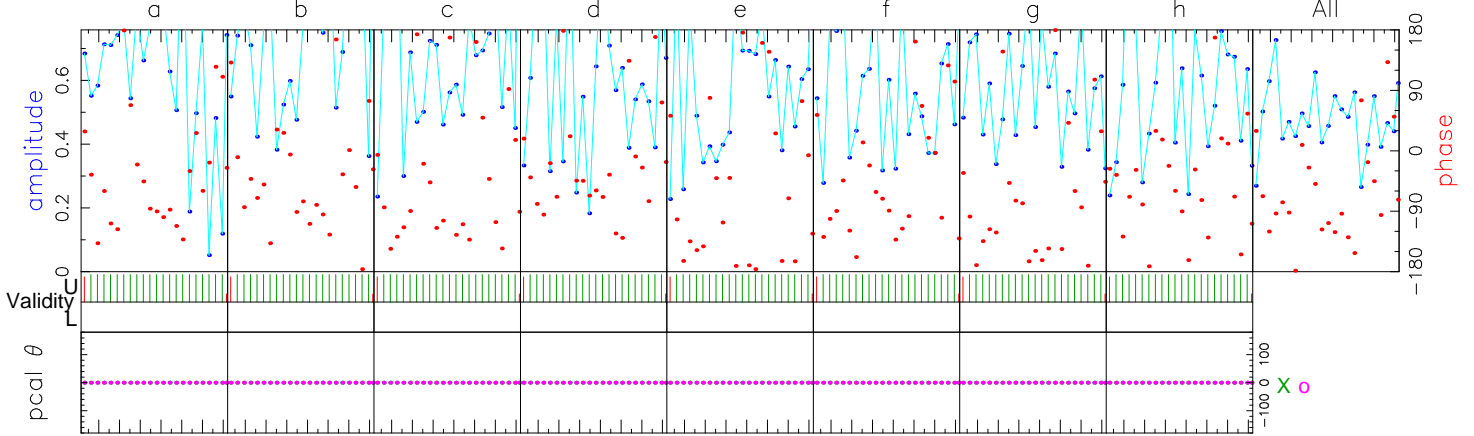


Fringe quality 9

SNR 14.0
Int time 409.331
Amp 0.253
Phase -85.8
PFD 1.1e-35
Delays (us)
SBD -0.019704
MBD 0.002560
Fringe rate (Hz)
-0.011037
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

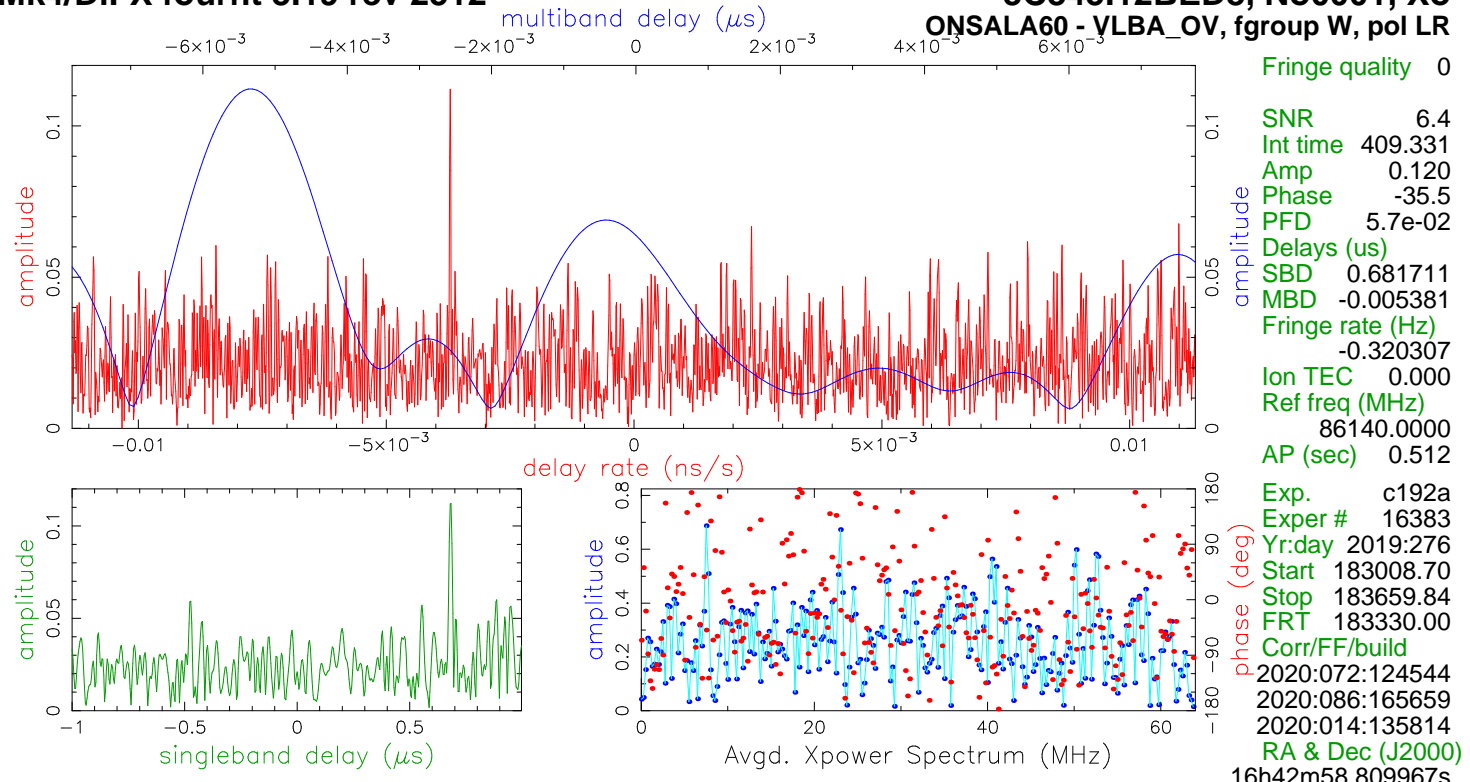
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165654
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	-82.6	-69.9	-111.7	-53.1	-152.9	-81.4	-125.0	-43.6	Phase	-85.8
	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.3	Ampl.	0.3
	252.0	251.9	252.5	251.9	253.1	345.4	252.4	252.1	Sbd box	252.0
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.16183002177E+03		Apriori delay (usec)		6.16184308657E+03		Resid mbdelay (usec)		2.56020E-03	+/- 7.8E-05
Sband delay (usec)	6.16182338282E+03		Apriori clock (usec)		1.5695475E+01		Resid sbdelay (usec)		-1.97037E-02	+/- 6.2E-04
Phase delay (usec)	6.16184308381E+03		Apriori clockrate (us/s)		5.2701902E-07		Resid phdelay (usec)		-2.76721E-06	+/- 2.6E-07
Delay rate (us/s)	-1.43643802868E+00		Apriori rate (us/s)		-1.43643790055E+00		Resid rate (us/s)		-1.28129E-07	+/- 1.1E-09
Total phase (deg)	86.1		Apriori accel (us/s/s)		-1.55313353288E-05		Resid phase (deg)		-85.8	+/- 8.2

ph/seg (deg) 72.5 19.6 Search (2048X32) 0.246 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 98.0 34.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 40.5 11.6 Inc. seg. avg. 0.452 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 28.0 20.2 Inc. frq. avg. 0.292 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
X: az 263.7 el 53.3 pa 44.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10680.502 472.193 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Xo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Xo.W.304.12BED8



Fringe quality 0

SNR 6.4

Int time 409.331

Amp 0.120

Phase -35.5

PFD 5.7e-02

Delays (us)

SBD 0.681711

MBD -0.005381

Fringe rate (Hz)

-0.320307

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183008.70

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:072:124544

2020:086:165659

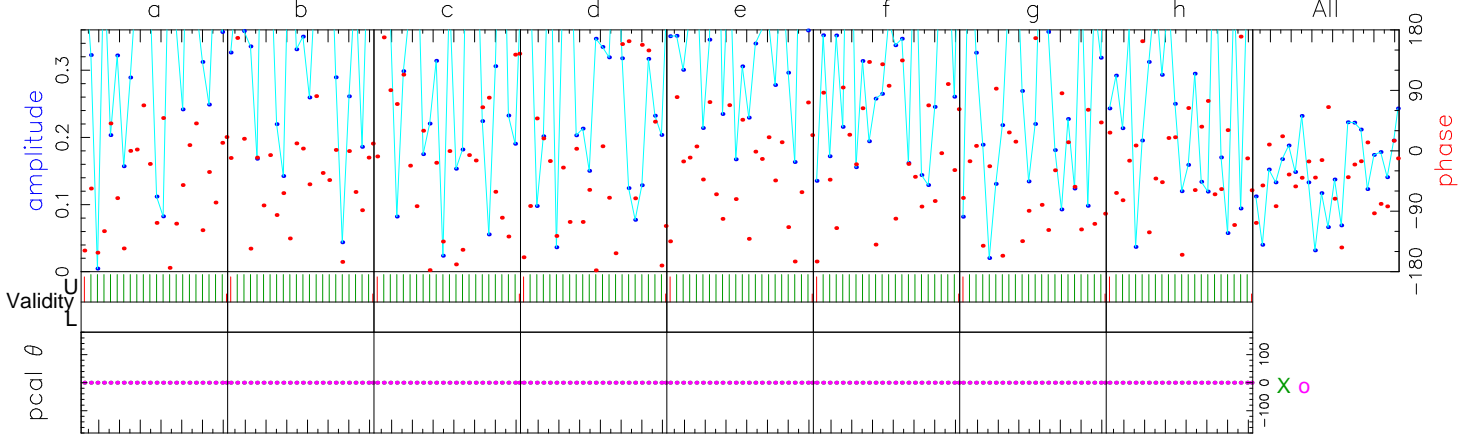
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	-42.0	-36.4	-29.3	-103.6	-13.4	32.8	-52.9	-41.1	Phase	-35.5
	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	131.9	432.2	123.7	220.3	137.4	338.3	475.1	29.9	Sbd box	431.5
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.16252520547E+03		Apriori delay (usec)		6.16184308657E+03		Resid mbdelay (usec)		-5.38110E-03	+/- 1.7E-04
Sband delay (usec)	6.16252479757E+03		Apriori clock (usec)		1.5695475E+01		Resid sbdelay (usec)		6.81711E-01	+/- 1.4E-03
Phase delay (usec)	6.16184308543E+03		Apriori clockrate (us/s)		5.2701902E-07		Resid phdelay (usec)		-1.14544E-06	+/- 5.8E-07
Delay rate (us/s)	-1.43644161900E+00		Apriori rate (us/s)		-1.43643790055E+00		Resid rate (us/s)		-3.71844E-06	+/- 2.5E-09
Total phase (deg)	136.4		Apriori accel (us/s/s)		-1.55313353288E-05		Resid phase (deg)		-35.5	+/- 18.0

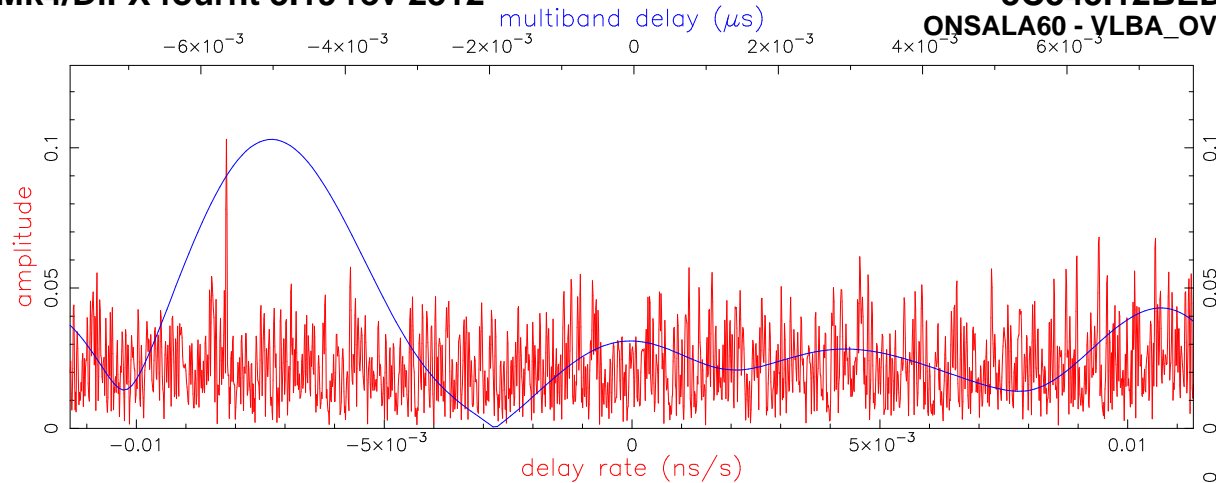
ph/seg (deg) 47.4 43.2 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 56.9 75.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 41.2 25.5 Inc. seg. avg. 0.119 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

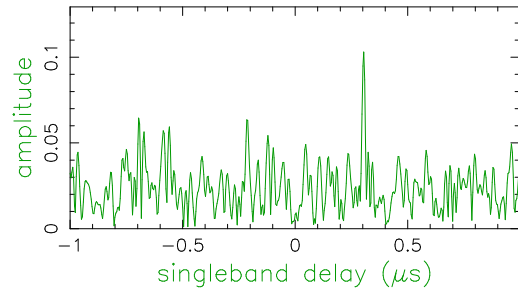
amp/frq (%) 37.7 44.5 Inc. frq. avg. 0.122 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

X: az 263.7 el 53.3 pa 44.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10680.502 472.193 simultaneous interpolator

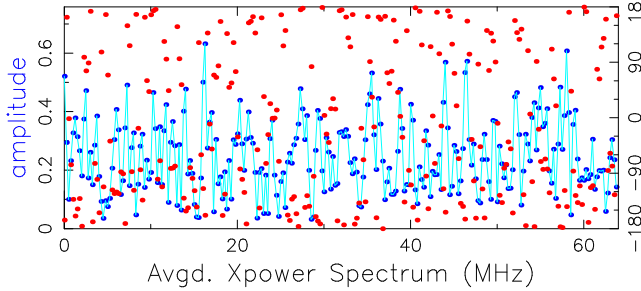


Fringe quality 0

SNR 5.7
Int time 409.331
Amp 0.129
Phase 163.7
PFD 9.3e-01
Delays (us)
SBD 0.304054
MBD -0.005029
Fringe rate (Hz)
-0.705587
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

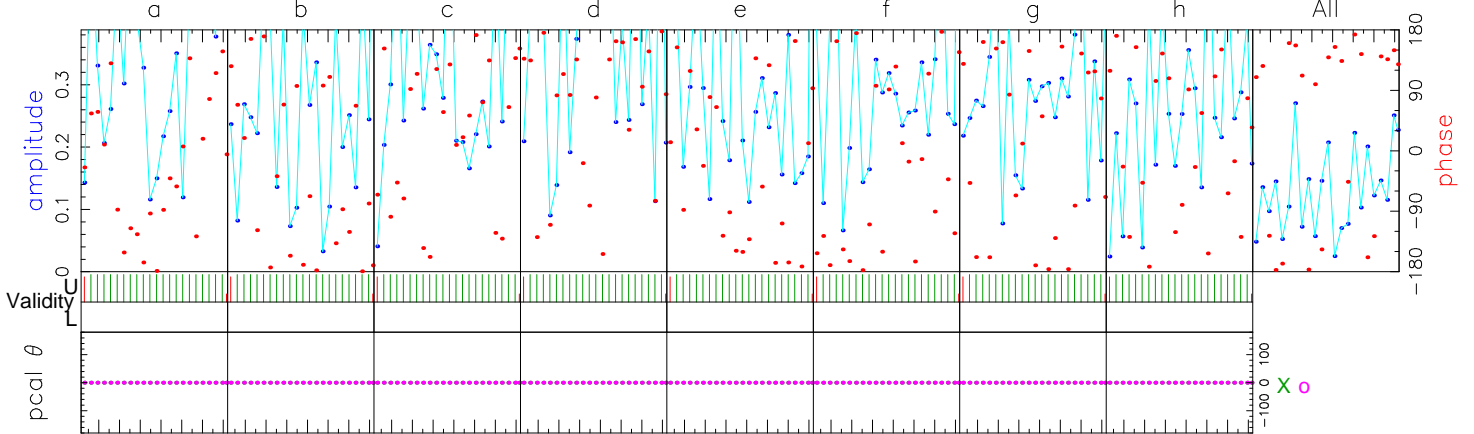


delay rate (ns/s)



Exp. c192a
Yr:day 16383
Start 2020:072:124544
Stop 2020:086:165702
FRT 183330.00
RA & Dec (J2000)
2020:014:135814
16h42m58.809967s
+39°48'36.993984"

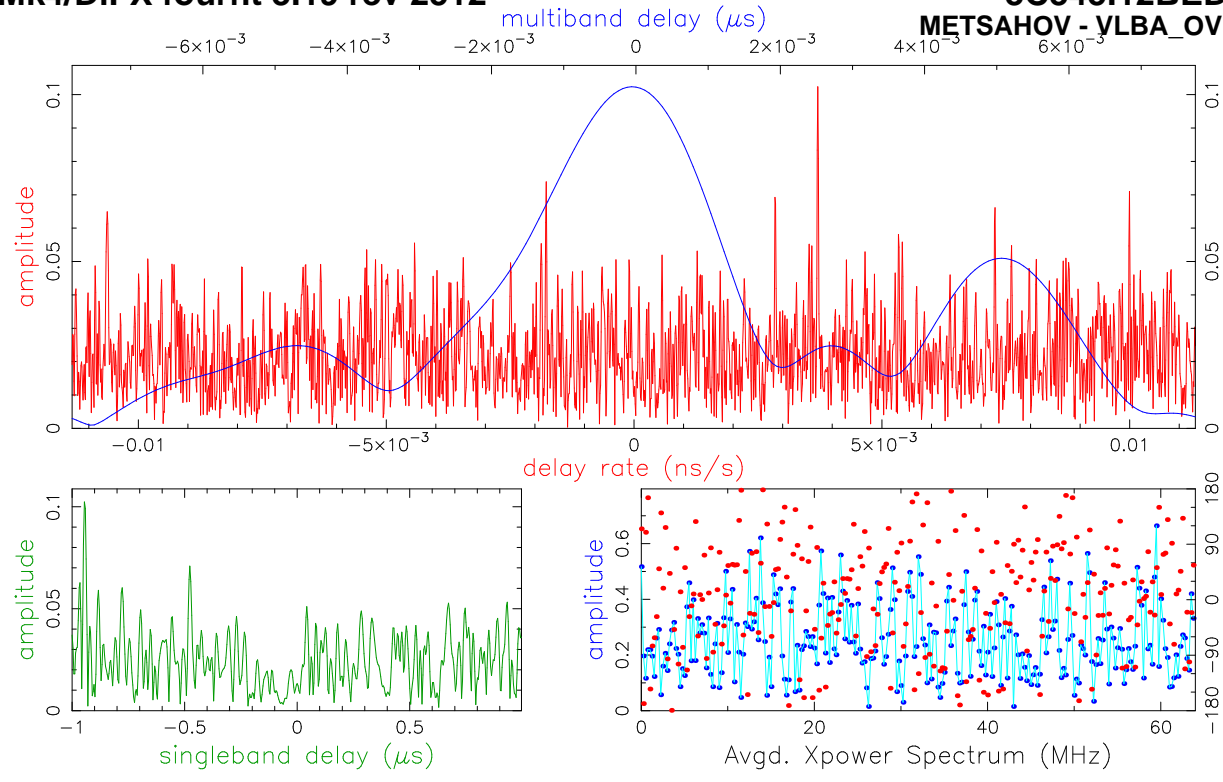
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-163.4	-170.1	129.3	148.6	158.6	-177.2	160.9	173.9	Phase	163.7
	0.0	0.1	0.1	0.3	0.1	0.2	0.2	0.1	Ampl.	0.1
	67.1	243.4	98.1	333.7	56.6	285.4	474.3	340.1	Sbd box	334.8
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.16215055748E+03		Apriori delay (usec)		6.16184308657E+03		Resid mbdelay (usec)		-5.02909E-03	+/- 1.9E-04
Sband delay (usec)	6.16214714057E+03		Apriori clock (usec)		1.5695475E+01		Resid sbdelay (usec)		3.04054E-01	+/- 1.5E-03
Phase delay (usec)	6.16184309185E+03		Apriori clockrate (us/s)		5.2701902E-07		Resid phdelay (usec)		5.27777E-06	+/- 6.5E-07
Delay rate (us/s)	-1.43644609172E+00		Apriori rate (us/s)		-1.43643790055E+00		Resid rate (us/s)		-8.19117E-06	+/- 2.7E-09
Total phase (deg)	335.5		Apriori accel (us/s/s)		-1.55313353288E-05		Resid phase (deg)		163.7	+/- 20.0

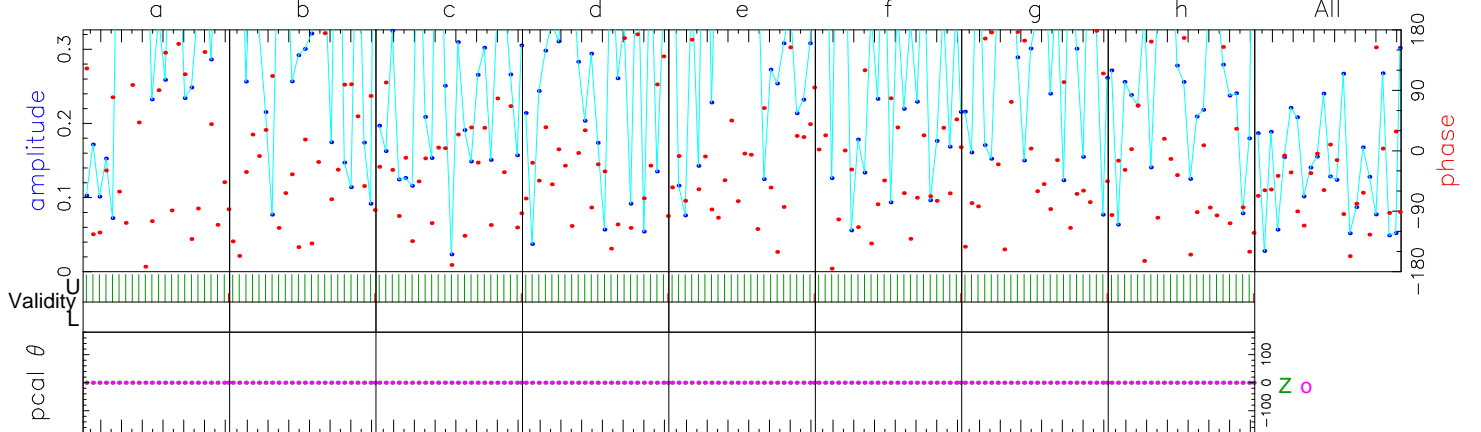
	RMS	Theor.	Amplitude	0.129 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	48.7	48.0	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	69.4	83.8	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	24.8	28.3	Inc. seg. avg.	0.120	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	52.2	49.5	Inc. frq. avg.	0.122					

X: az 263.7 el 53.3 pa 44.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10680.502 472.193 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Xo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Xo.W.339.12BED8



Fringe quality 0
 SNR 5.8
 Int time 410.463
 Amp 0.109
 Phase -52.9
 PFD 8.7e-01
 Delays (us)
 SBD -0.943892
 MBD -0.000065
 Fringe rate (Hz)
 0.320329
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165657
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

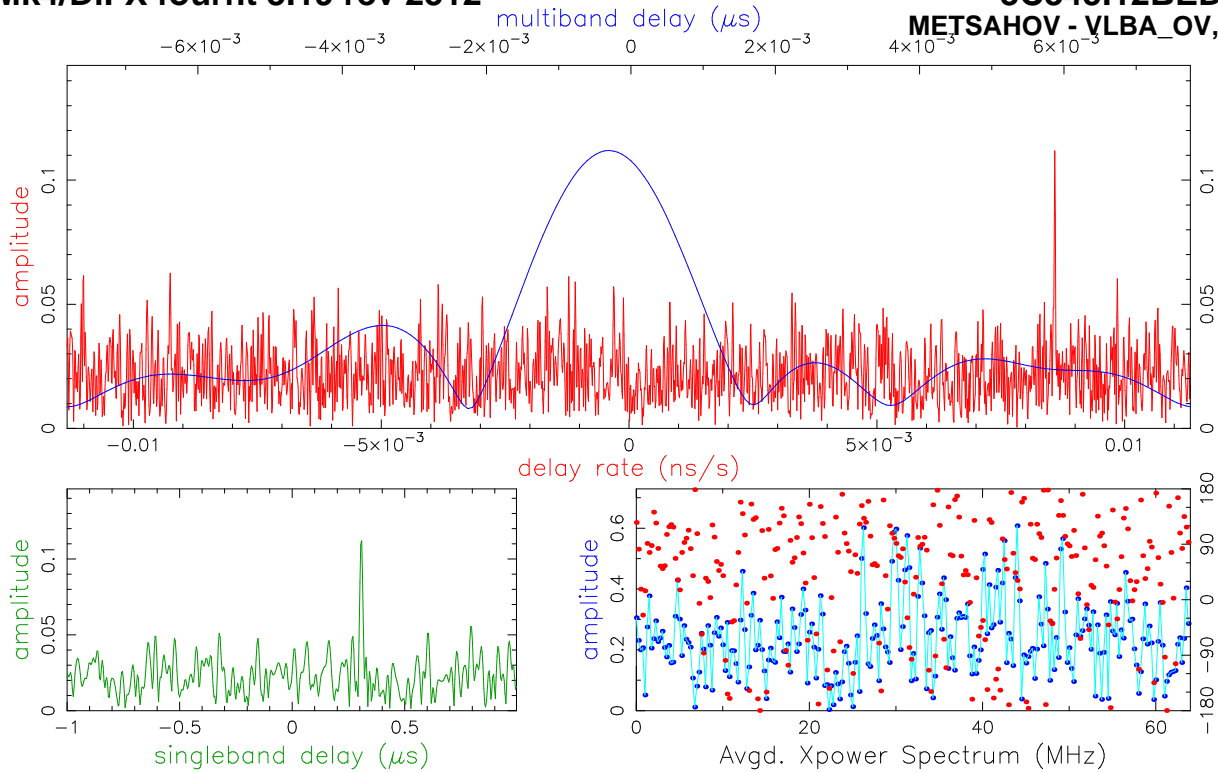


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-119.2	-51.7	-11.3	-68.7	-39.1	-25.4	-83.1	-71.3	Phase	-52.9
	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	255.0	140.1	369.2	87.0	441.8	378.7	453.1	201.4	Sbd box	15.4
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.55168907027E+03		Apriori delay (usec)		4.55262663482E+03		Resid mbdelay (usec)		-6.45520E-05	+/- 1.9E-04
Sband delay (usec)	4.55168274257E+03		Apriori clock (usec)		-1.6447569E+01		Resid sbdelay (usec)		-9.43892E-01	+/- 1.5E-03
Phase delay (usec)	4.55262663312E+03		Apriori clockrate (us/s)		1.5311808E-08		Resid phdelay (usec)		-1.70668E-06	+/- 6.4E-07
Delay rate (us/s)	-1.46576803931E+00		Apriori rate (us/s)		-1.46577175801E+00		Resid rate (us/s)		-3.71870E-06	+/- 2.7E-09
Total phase (deg)	63.6		Apriori accel (us/s/s)		-5.29754221444E-06		Resid phase (deg)		-52.9	+/- 19.9

ph/seg (deg) 55.9 47.7 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.4 83.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 37.8 28.1 Inc. seg. avg. 0.111 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 29.0 49.1 Inc. frq. avg. 0.112 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 271.4 el 46.7 pa 40.3 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10917.010 1312.934 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Zo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Zo.W.316.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, Zo
METSANOV - VLBA_OV, fgroup W, pol RR

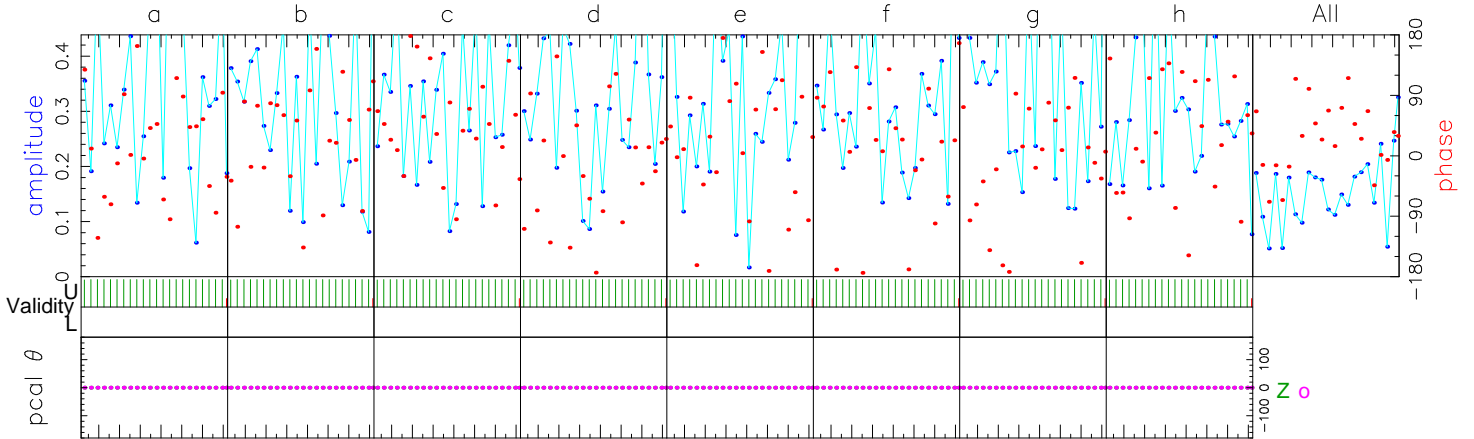


Fringe quality 0

SNR 6.3
Int time 410.463
Amp 0.146
Phase 34.1
PFD 7.1e-02
Delays (us)
SBD 0.306990
MBD -0.000354
Fringe rate (Hz)
0.740901
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165701
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		4.55293878074E+03			4.55262663482E+03				-3.54087E-04	+/- 1.7E-04
Sband delay (usec)		4.55293362507E+03			-1.6447569E+01				3.06990E-01	+/- 1.4E-03
Phase delay (usec)		4.55262663592E+03			1.5311808E-08				1.09885E-06	+/- 5.9E-07
Delay rate (us/s)		-1.46576315688E+00			-1.46577175801E+00				8.60113E-06	+/- 2.5E-09
Total phase (deg)			150.6						34.1	+/- 18.1
	RMS	Theor.	Amplitude	0.146 +/- 0.023						
ph/seg (deg)	51.6	43.5	Search (2048X32)	0.110						
amp/seg (%)	61.2	75.9	Interp.	0.000						
ph/frq (deg)	25.1	25.7	Inc. seg. avg.	0.151						
amp/frq (%)	25.3	44.8	Inc. frq. avg.	0.139						
Z: az 271.4 el 46.7 pa 40.3			o: az 60.7 el 29.9 pa -64.6							
			u,v (fr/asec) 10917.010 1312.934							
										simultaneous interpolator

Z: az 271.4 el 46.7 pa 40.3 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10917.010 1312.934 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Zo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Zo.W.336.12BED8

