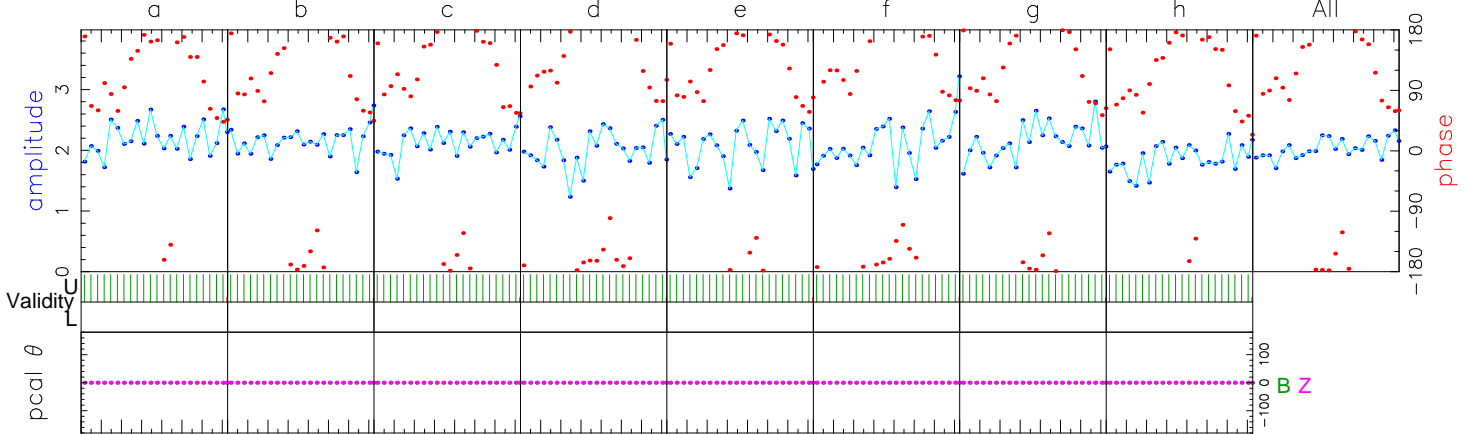


Fringe quality 4
SNR 74.4
Int time 419.362
Amp 1.328
Phase 138.4
PFD 0.0e+00
Delays (us)
SBD 0.002234
MBD 0.001797
Fringe rate (Hz) 0.003025
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165610
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

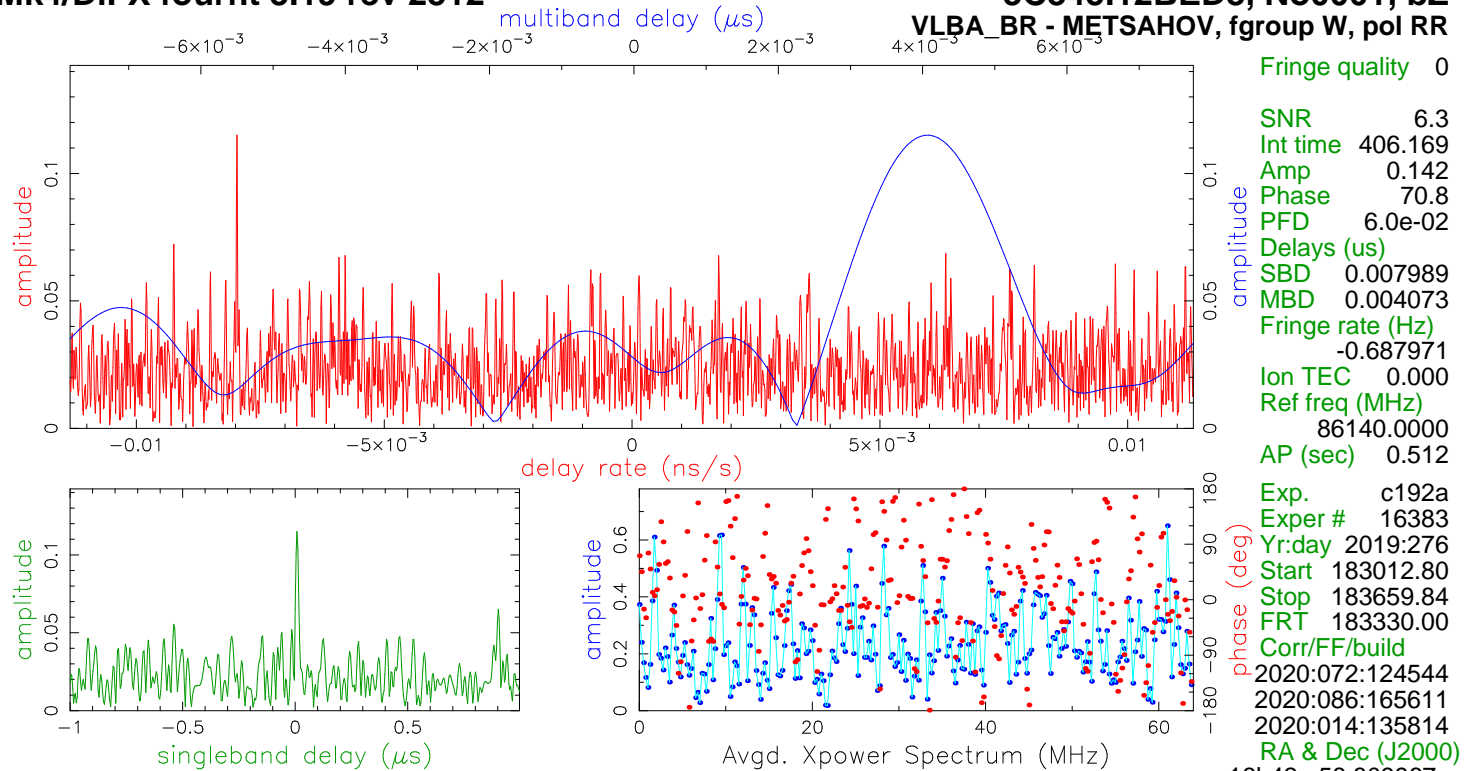


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	122.3	137.7	138.6	153.9	135.7	153.0	141.9	124.1	Phase	138.4
	1.4	1.3	1.4	1.3	1.4	1.3	1.3	1.2	Ampl.	1.3
	257.5	257.8	257.9	257.4	257.5	257.7	257.4	256.8	Sbd box	257.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.31190299598E+03		Apriori delay (usec)		2.31190119911E+03		Resid mbdelay (usec)		1.79687E-03	+/- 1.5E-05
Sband delay (usec)	2.31190343311E+03		Apriori clock (usec)		1.6656853E+01		Resid sbdelay (usec)		2.23400E-03	+/- 1.2E-04
Phase delay (usec)	2.31190120358E+03		Apriori clockrate (us/s)		-2.1629280E-07		Resid phdelay (usec)		4.46437E-06	+/- 5.0E-08
Delay rate (us/s)	-1.73964935323E-02		Apriori rate (us/s)		-1.73965286540E-02		Resid rate (us/s)		3.51218E-08	+/- 2.0E-10
Total phase (deg)	243.4		Apriori accel (us/s/s)		-1.91529033202E-05		Resid phase (deg)		138.4	+/- 1.5

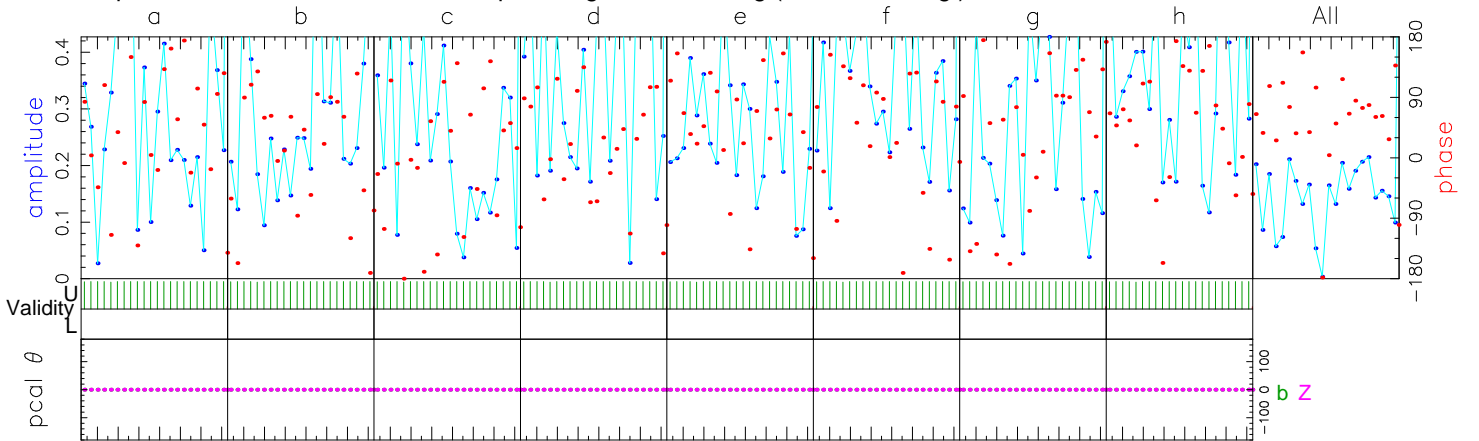
ph/seg (deg) 50.8 3.7 Search (2048X32) 1.290 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.4 6.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.5 2.2 Inc. seg. avg. 2.030 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 5.7 3.8 Inc. frq. avg. 1.329 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) 95.277 -1909.224 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/BZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/BZ.W.107.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, bZ
VLBA_BR - METSAHOV, fgroup W, pol RR

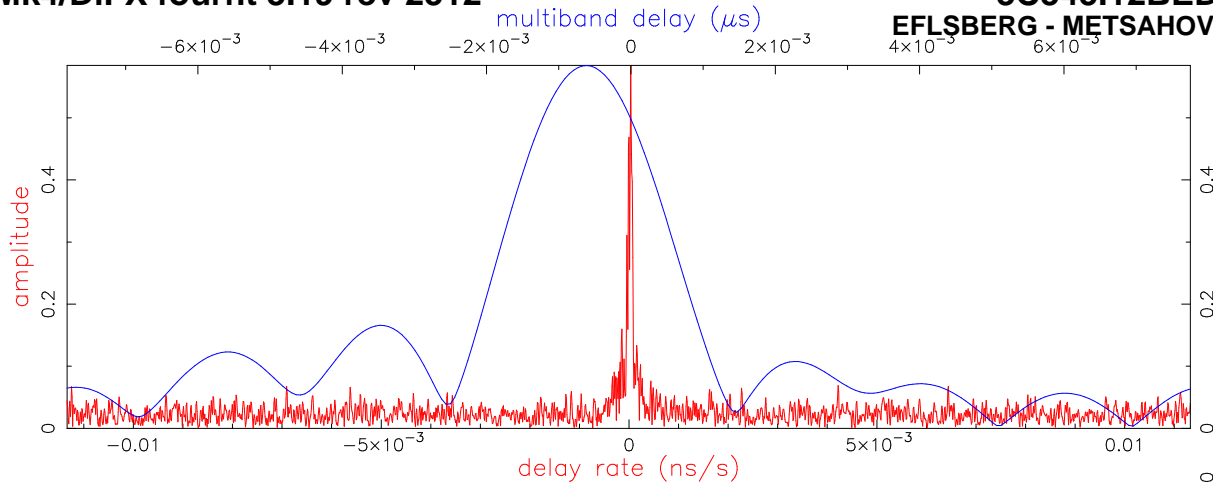


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



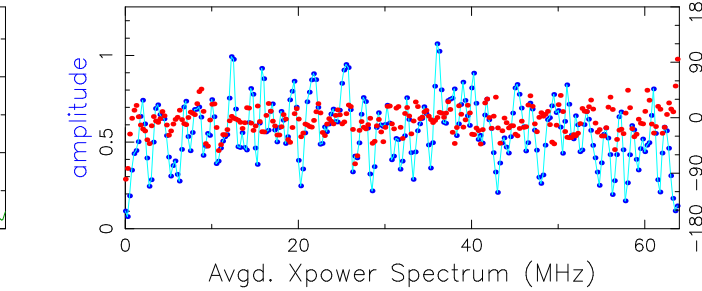
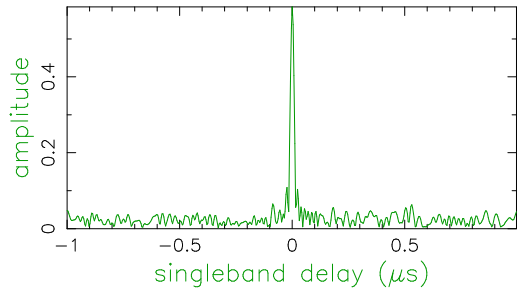
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	76.4	78.2	86.6	48.5	54.2	92.9	119.2	58.0	Phase	70.8
	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	Ampl.	0.1
	289.2	488.6	488.3	22.3	322.2	258.0	307.7	260.0	Sbd box	259.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.35229446864E+03		Apriori delay (usec)		-3.35229854166E+03		Resid mbdelay (usec)		4.07302E-03	+/- 1.7E-04
Sband delay (usec)	-3.35229055241E+03		Apriori clock (usec)		-7.9490691E-01		Resid sbdelay (usec)		7.98925E-03	+/- 1.4E-03
Phase delay (usec)	-3.35229853938E+03		Apriori clockrate (us/s)		-2.5868787E-07		Resid phdelay (usec)		2.28368E-06	+/- 5.8E-07
Delay rate (us/s)	1.31903051638E+00		Apriori rate (us/s)		1.31903850304E+00		Resid rate (us/s)		-7.98666E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		8.90330107089E-06		Resid phase (deg)		70.8	+/- 18.1

ph/seg (deg) 45.4 43.3 Search (2048X32) 0.107 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.1 75.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.2 25.6 Inc. seg. avg. 0.140 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.5 44.6 Inc. frq. avg. 0.138 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -9815.245 -139.631 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/bZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/bZ.W.109.12BED8



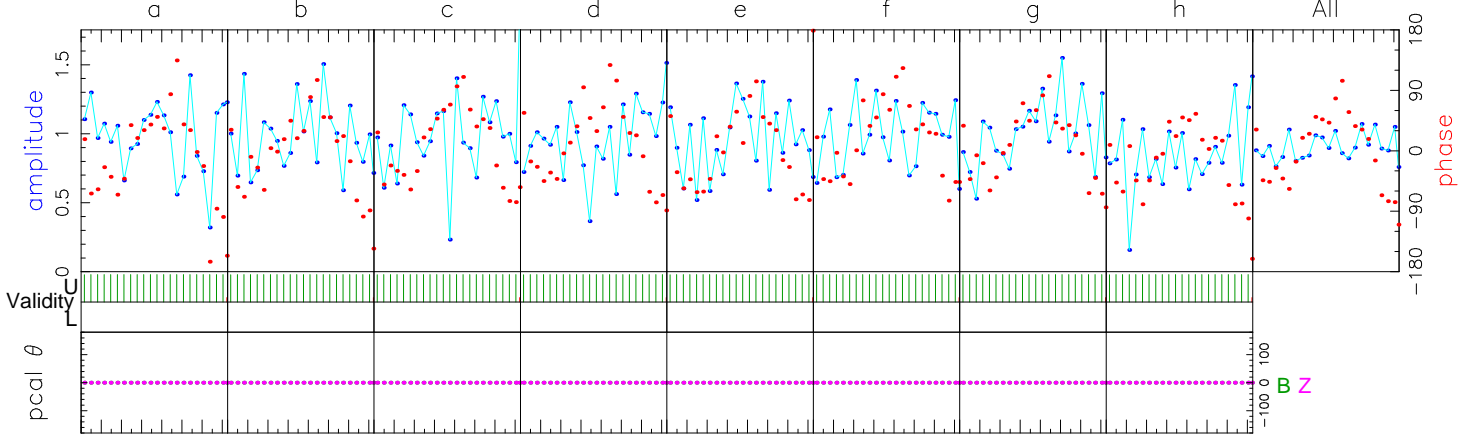
Fringe quality 6

SNR 32.7
Int time 419.362
Amp 0.584
Phase 3.5
PFD 0.0e+00
Delays (us)
SBD 0.000182
MBD -0.000614
Fringe rate (Hz)
0.003051
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165614
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	-2.9	2.0	8.0	3.6	1.3	17.0	14.0	-19.5		Phase 3.5
	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.5		Ampl. 0.6
	257.0	257.1	257.4	256.9	257.0	257.1	256.6	256.5		Sbd box 257.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used
B	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
Z	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
B:Z	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
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec)(sbd)	2.31190058545E+03	Apriori delay (usec)	2.31190119911E+03	Resid mbdelay (usec)	-6.13659E-04	+/-	3.3E-05
Sband delay (usec)	2.31190138136E+03	Apriori clock (usec)	1.6656853E+01	Resid sbdelay (usec)	1.82250E-04	+/-	2.6E-04
Phase delay (usec)	2.31190119922E+03	Apriori clockrate (us/s)	-2.1629280E-07	Resid phdelay (usec)	1.12648E-07	+/-	1.1E-07
Delay rate (us/s)	-1.73964932340E-02	Apriori rate (us/s)	-1.73965286540E-02	Resid rate (us/s)	3.54201E-08	+/-	4.7E-10
Total phase (deg)	108.4	Apriori accel (us/s/s)	-1.91529033202E-05	Resid phase (deg)	3.5	+/-	3.5

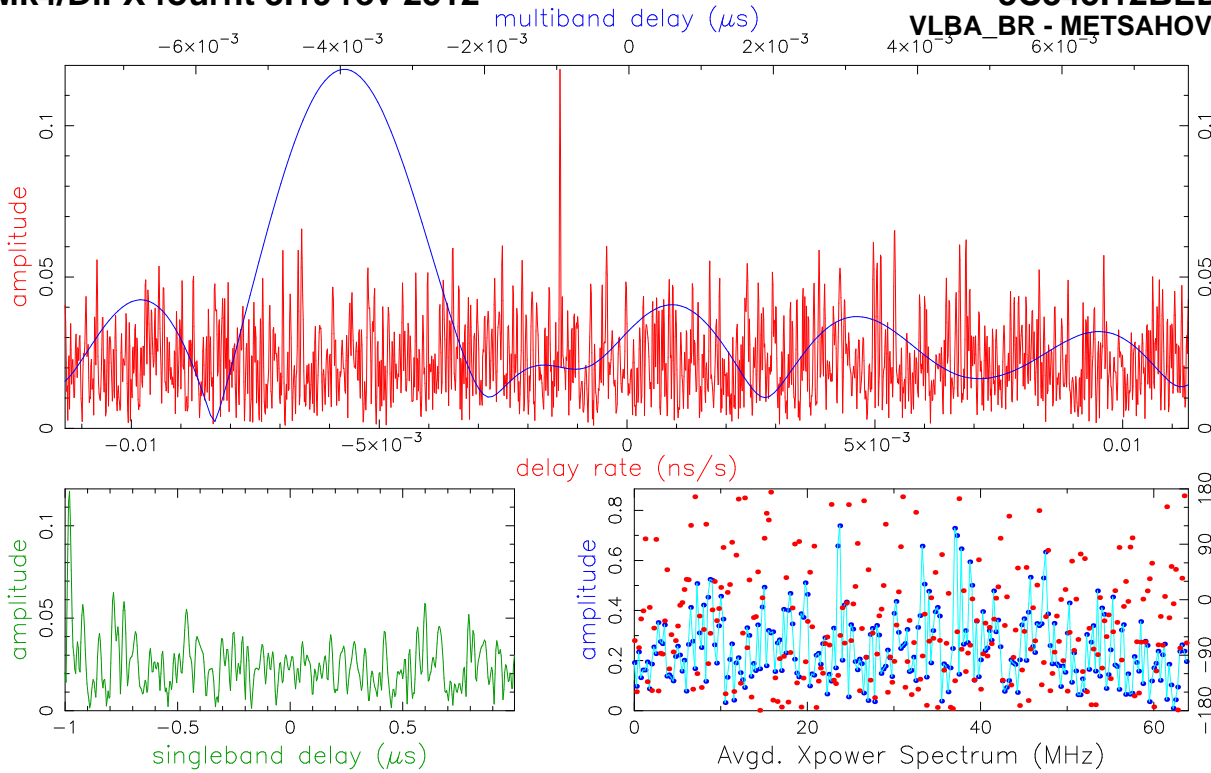
ph/seg (deg)	51.7	RMS	8.4	Theor.	5.74	Amplitude	0.584 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	58.0		14.7		8.4	Search (2048X32)	0.574	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	12.2		5.0		5.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	6.9		8.6		8.6	Inc. seg. avg.	0.901	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	0.592	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 269.2 el 56.7 pa 55.8 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) 95.277 -1909.224 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/BZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/BZ.W.124.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, bZ
VLBA_BR - METSAHOV, fgroup W, pol LR

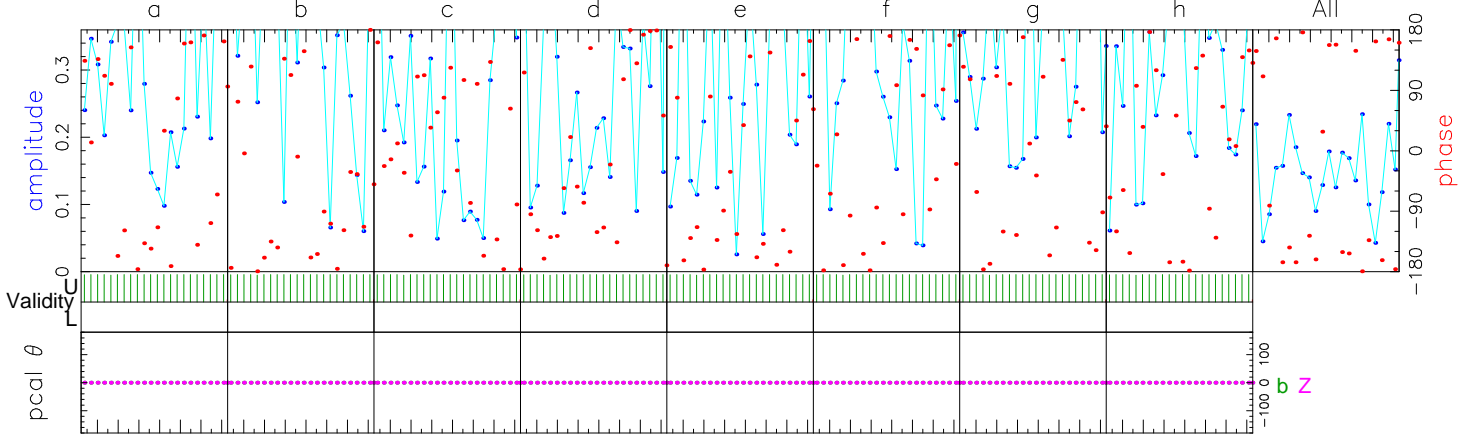


Fringe quality 0

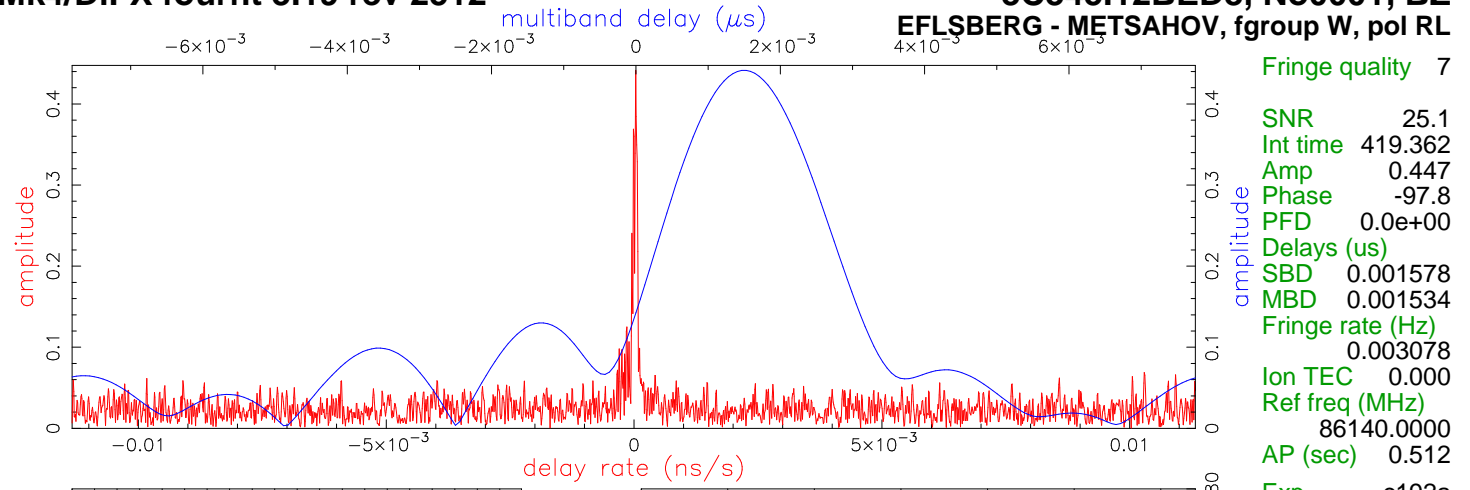
SNR 6.6
Int time 406.169
Amp 0.120
Phase -175.4
PFD 1.4e-02
Delays (us)
SBD -0.981407
MBD -0.003969
Fringe rate (Hz)
-0.116788
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165615
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

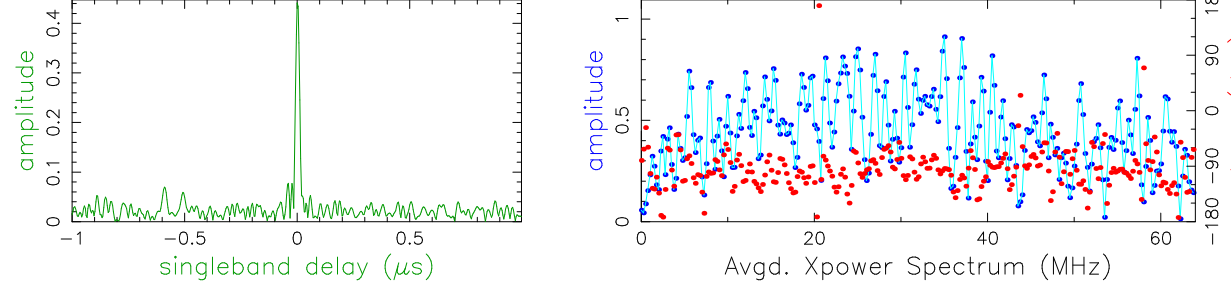
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



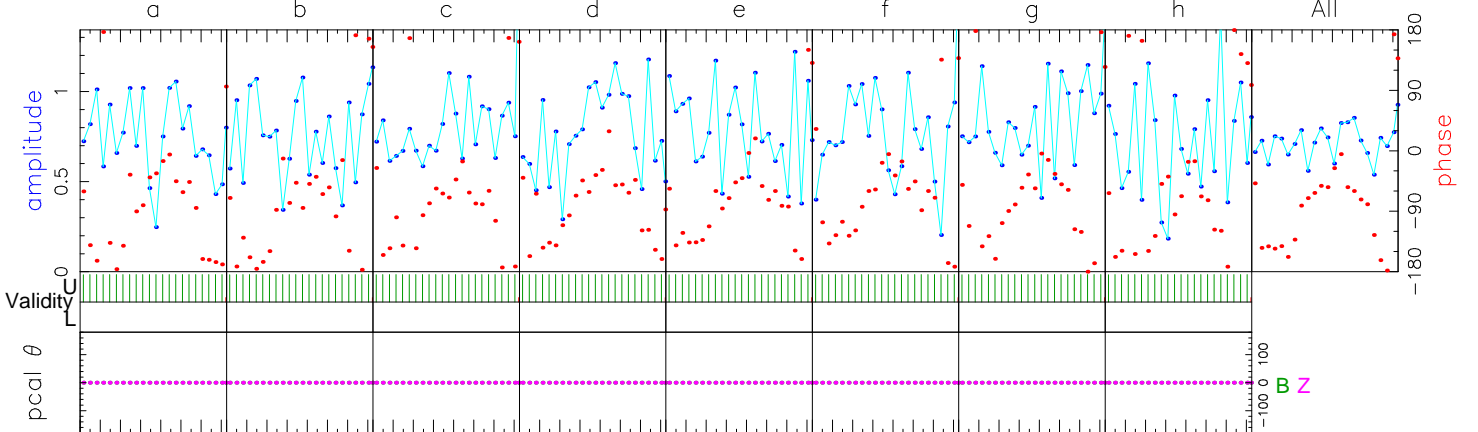
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.35328688561E+03									
Sband delay (usec)	-3.35327994891E+03									
Phase delay (usec)	-3.35229854732E+03									
Delay rate (us/s)	1.31903714725E+00									
Total phase (deg)			-311.7							
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										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										



Fringe quality 7
 SNR 25.1
 Int time 419.362
 Amp 0.447
 Phase -97.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.001578
 MBD 0.001534
 Fringe rate (Hz) 0.003078
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 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"



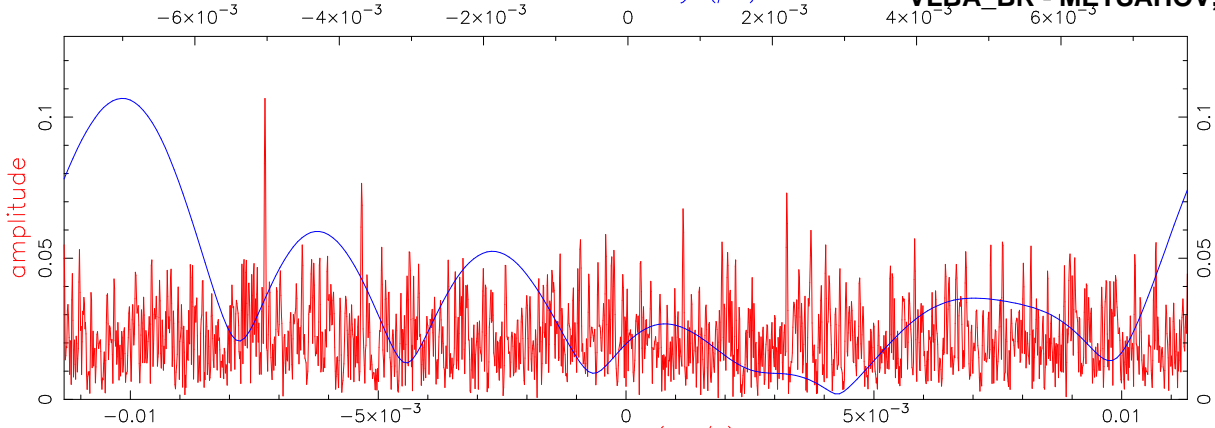
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-95.4	-119.0	-99.8	-77.7	-89.6	-84.1	-100.0	-126.5	Phase	-97.8
	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	Ampl.	0.5
	257.6	257.8	257.1	257.0	257.3	257.5	257.6	256.5	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.31190273361E+03		Apriori delay (usec)		2.31190119911E+03		Resid mbdelay (usec)		1.53450E-03	+/- 4.3E-05
Sband delay (usec)	2.31190277686E+03		Apriori clock (usec)		1.6656853E+01		Resid sbdelay (usec)		1.57775E-03	+/- 3.4E-04
Phase delay (usec)	2.31190119596E+03		Apriori clockrate (us/s)		-2.1629280E-07		Resid phdelay (usec)		-3.15520E-06	+/- 1.5E-07
Delay rate (us/s)	-1.73964929186E-02		Apriori rate (us/s)		-1.73965286540E-02		Resid rate (us/s)		3.57354E-08	+/- 6.1E-10
Total phase (deg)	7.1		Apriori accel (us/s/s)		-1.91529033202E-05		Resid phase (deg)		-97.8	+/- 4.6

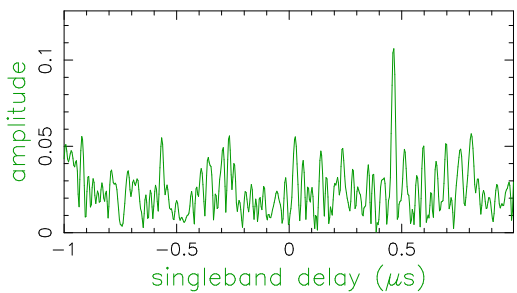
ph/seg (deg) 52.8 11.0 Theor. Amplitude 0.447 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.8 19.1 Search (2048X32) 0.436 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.0 6.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.5 11.3 Inc. seg. avg. 0.702 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 B: az 269.2 el 56.7 pa 55.8 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) 95.277 -1909.224 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/BZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/BZ.W.143.12BED8 simultaneous interpolator

multiband delay (μ s)

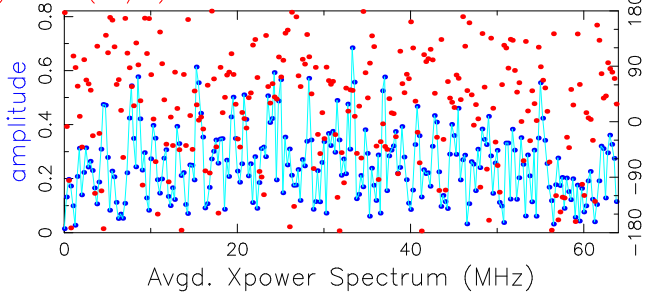


Fringe quality 0

SNR 5.9
 Int time 406.169
 Amp 0.129
 Phase 69.4
 PFD 5.2e-01
 Delays (us)
 SBD 0.463435
 MBD -0.006985
 Fringe rate (Hz)
 -0.628366
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

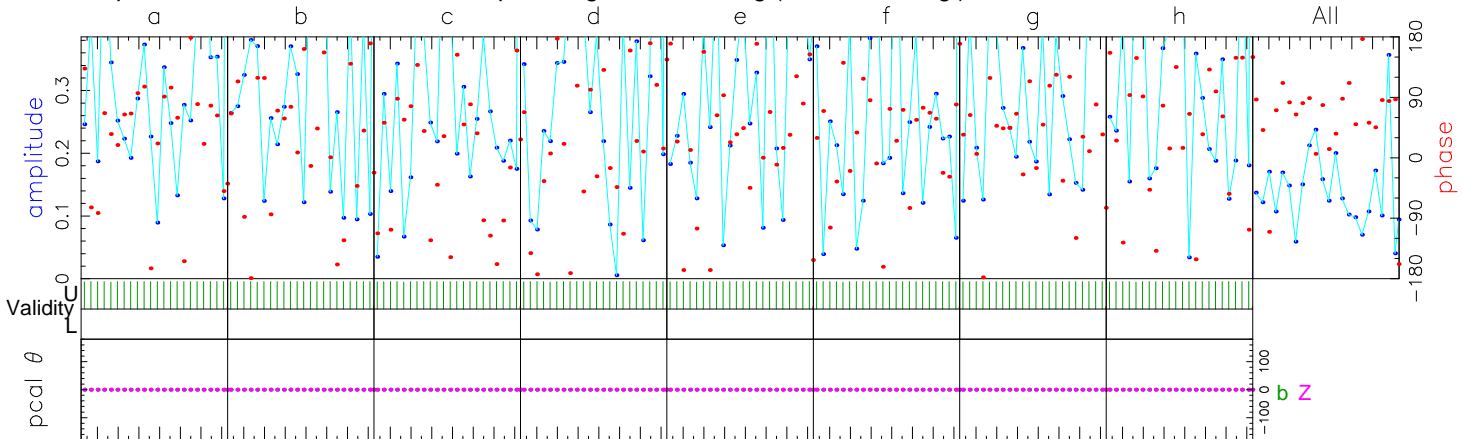


delay rate (ns/s)



Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183012.80
 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"

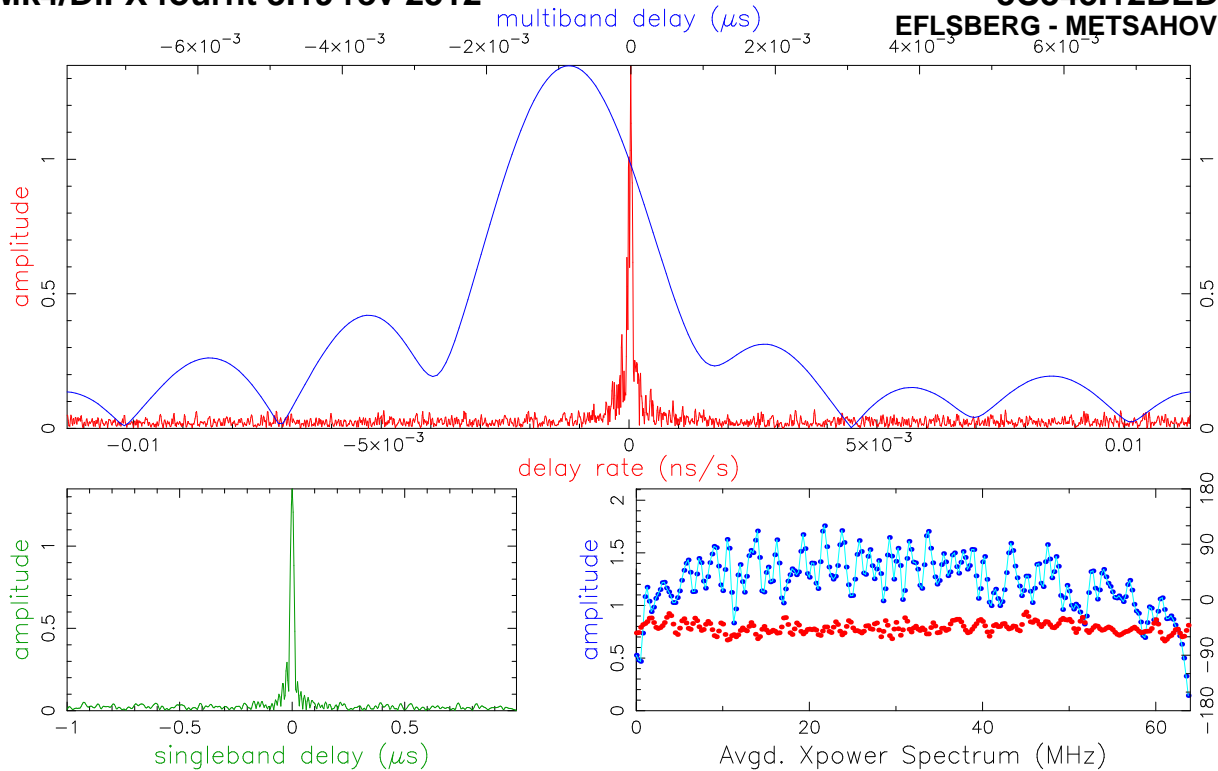
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

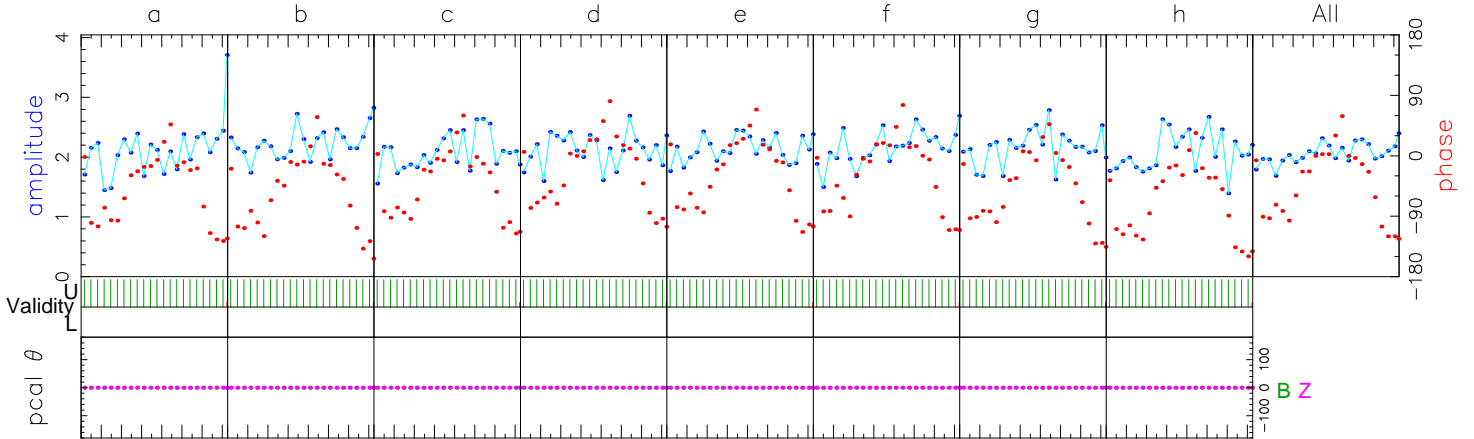
Group delay (usec)(sbd)	-3.35183677621E+03	Apriori delay (usec)	-3.35229854166E+03	Resid mbdelay (usec)	-6.98455E-03	+/-	1.8E-04
Sband delay (usec)	-3.35183510691E+03	Apriori clock (usec)	-7.9490691E-01	Resid sbdelay (usec)	4.63435E-01	+/-	1.5E-03
Phase delay (usec)	-3.35229853942E+03	Apriori clockrate (us/s)	-2.5868787E-07	Resid phdelay (usec)	2.23858E-06	+/-	6.2E-07
Delay rate (us/s)	1.31903120834E+00	Apriori rate (us/s)	1.31903850304E+00	Resid rate (us/s)	-7.29470E-06	+/-	2.6E-09
Total phase (deg)		Apriori accel (us/s/s)	8.90330107089E-06	Resid phase (deg)	69.4	+/-	19.3

ph/seg (deg)	52.7	Theor.	46.3	Amplitude	0.129 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	70.3	Search (2048X32)	0.104	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.	0.130	Inc. frq. avg.	0.126	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	44.1	Inc. frq. avg.	0.126			Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00



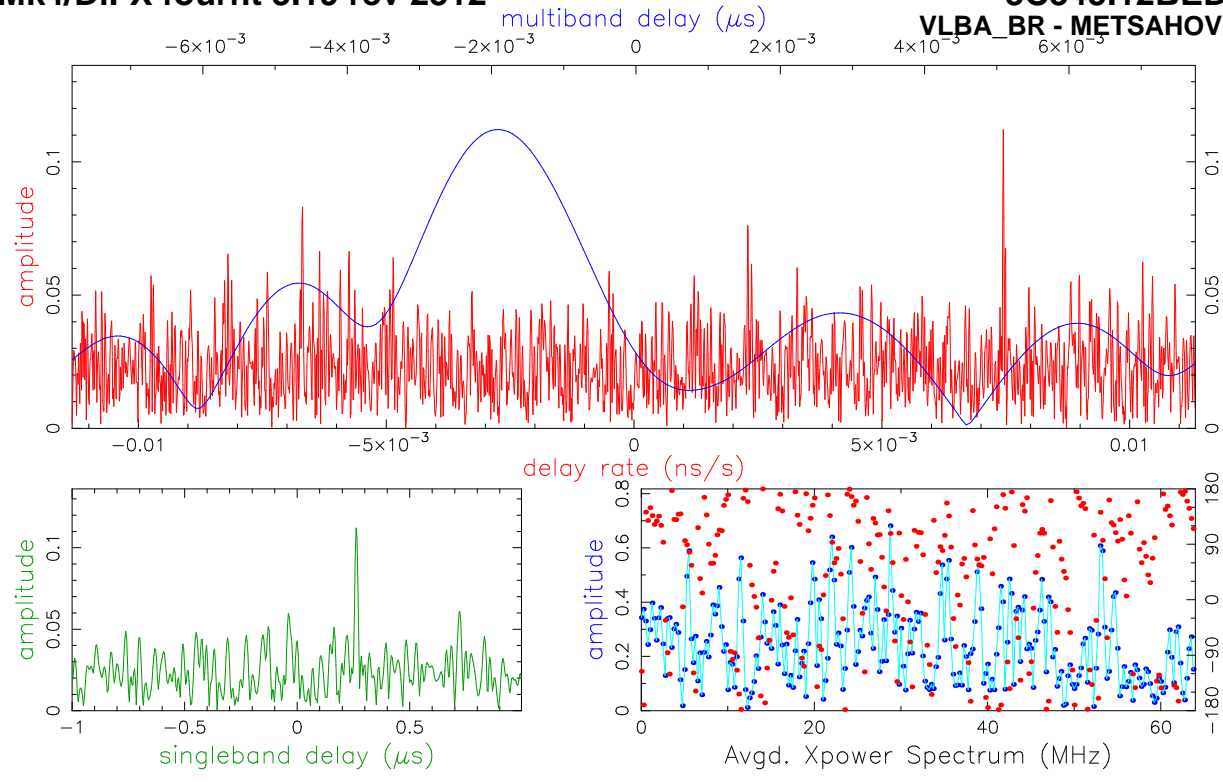
Fringe quality 4
SNR 75.5
Int time 419.362
Amp 1.349
Phase -40.0
PFD 0.0e+00
Delays (us)
SBD -0.000390
MBD -0.000869
Fringe rate (Hz) 0.003055
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165605
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



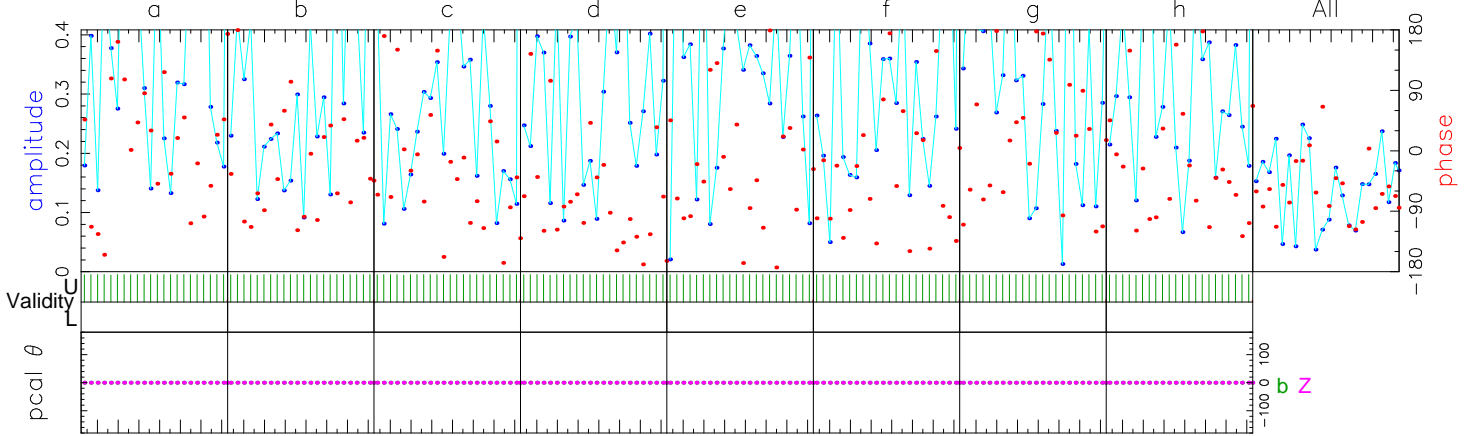
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-50.2	-54.4	-38.5	-21.3	-27.4	-23.7	-44.0	-61.5	Phase	-40.0
	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	Ampl.	1.4
	257.3	256.9	257.1	256.9	256.6	256.8	256.6	256.1	Sbd box	256.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.31190033027E+03		Apriori delay (usec)		2.31190119911E+03		Resid mbdelay (usec)		-8.68846E-04	+/- 1.4E-05
Sband delay (usec)	2.31190080936E+03		Apriori clock (usec)		1.6656853E+01		Resid sbdelay (usec)		-3.89750E-04	+/- 1.1E-04
Phase delay (usec)	2.31190119782E+03		Apriori clockrate (us/s)		-2.1629280E-07		Resid phdelay (usec)		-1.29001E-06	+/- 4.9E-08
Delay rate (us/s)	-1.73964931879E-02		Apriori rate (us/s)		-1.73965286540E-02		Resid rate (us/s)		3.54661E-08	+/- 2.0E-10
Total phase (deg)	64.9		Apriori accel (us/s/s)		-1.91529033202E-05		Resid phase (deg)		-40.0	+/- 1.5

ph/seg (deg) 50.2 3.6 Search (2048X32) 1.326 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.6 6.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 16.2 2.1 Inc. seg. avg. 2.050 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 3.7 3.7 Inc. frq. avg. 1.387 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) 95.277 -1909.224 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/BZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/BZ.W.86.12BED8



Fringe quality 0
SNR 6.2
Int time 406.169
Amp 0.136
Phase -59.3
PFD 1.1e-01
Delays (us)
SBD 0.262890
MBD -0.001881
Fringe rate (Hz)
0.642689
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
2020:086:165606
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

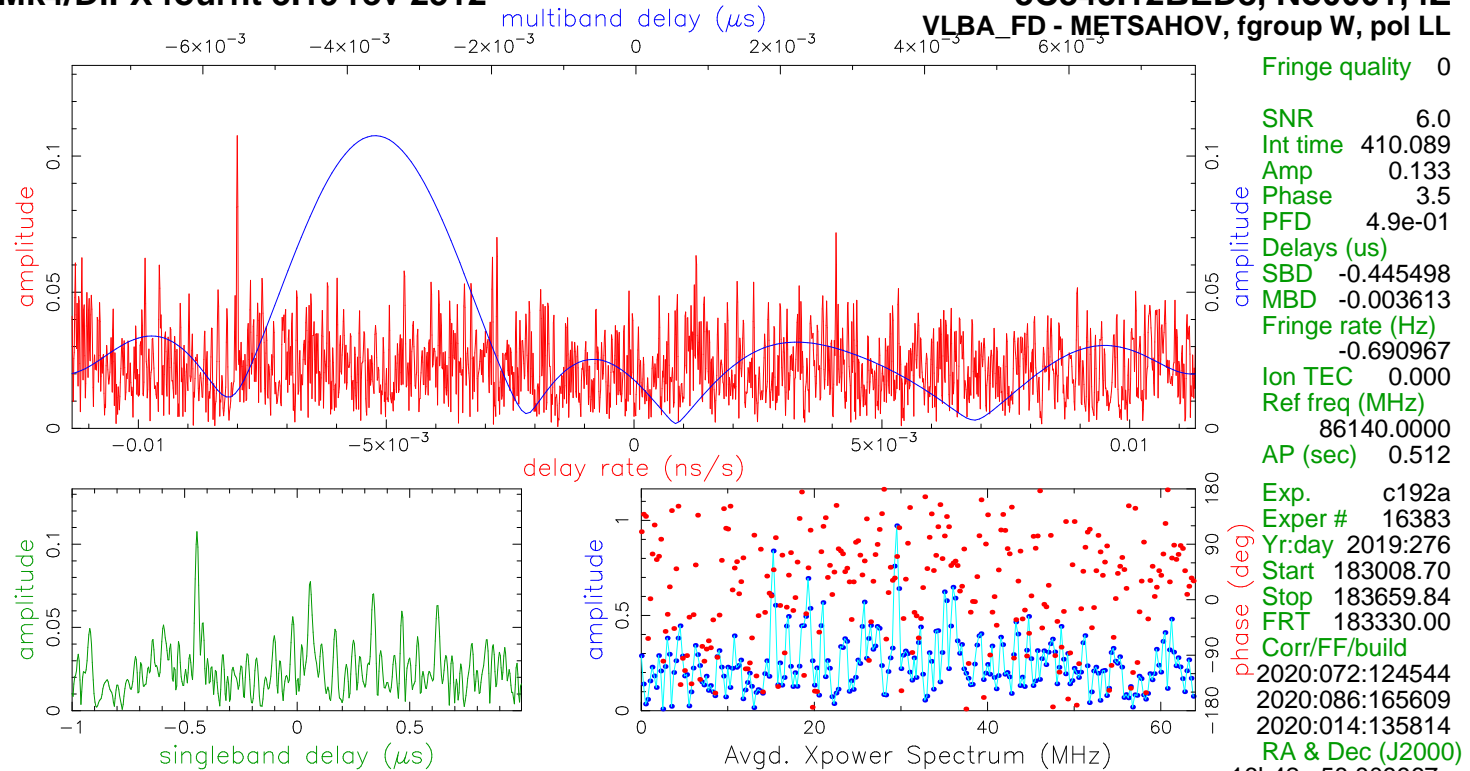


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

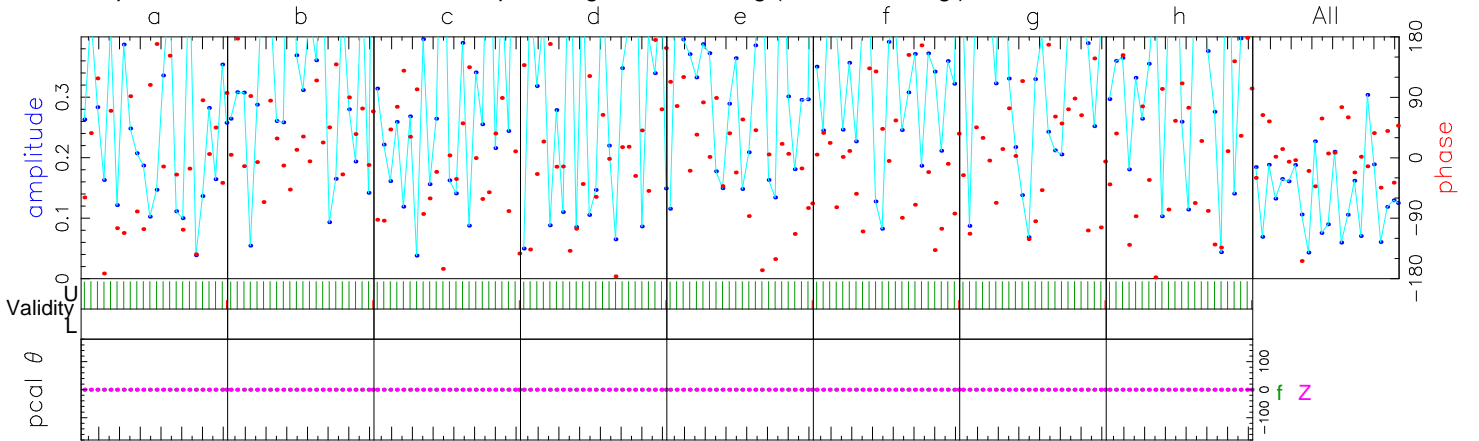
Group delay (usec)(sbd)	-3.35203479732E+03	Apriori delay (usec)	-3.35229854166E+03	Resid mbdelay (usec)	-1.88065E-03	+/-	1.7E-04
Sband delay (usec)	-3.35203565191E+03	Apriori clock (usec)	-7.9490691E-01	Resid sbdelay (usec)	2.62890E-01	+/-	1.4E-03
Phase delay (usec)	-3.35229854357E+03	Apriori clockrate (us/s)	-2.5868787E-07	Resid phdelay (usec)	-1.91084E-06	+/-	5.9E-07
Delay rate (us/s)	1.31904596403E+00	Apriori rate (us/s)	1.31903850304E+00	Resid rate (us/s)	7.46099E-06	+/-	2.5E-09
Total phase (deg)	-195.6	Apriori accel (us/s/s)	8.90330107089E-06	Resid phase (deg)	-59.3	+/-	18.4

ph/seg (deg)	43.6	RMS	44.1	Theor.	44.1	Amplitude	0.136 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	62.5	43.6	44.1	Search (2048X32)	0.112	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	43.0	62.5	76.9	Inc. seg. avg.	0.133	Inc. frq. avg.	0.141	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	44.1	43.0	26.0	Inc. frq. avg.	0.141	u,v (fr/asec)	-9815.245 -139.631	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
		44.1	45.3					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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -9815.245 -139.631 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/bZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/bZ.W.88.12BED8



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



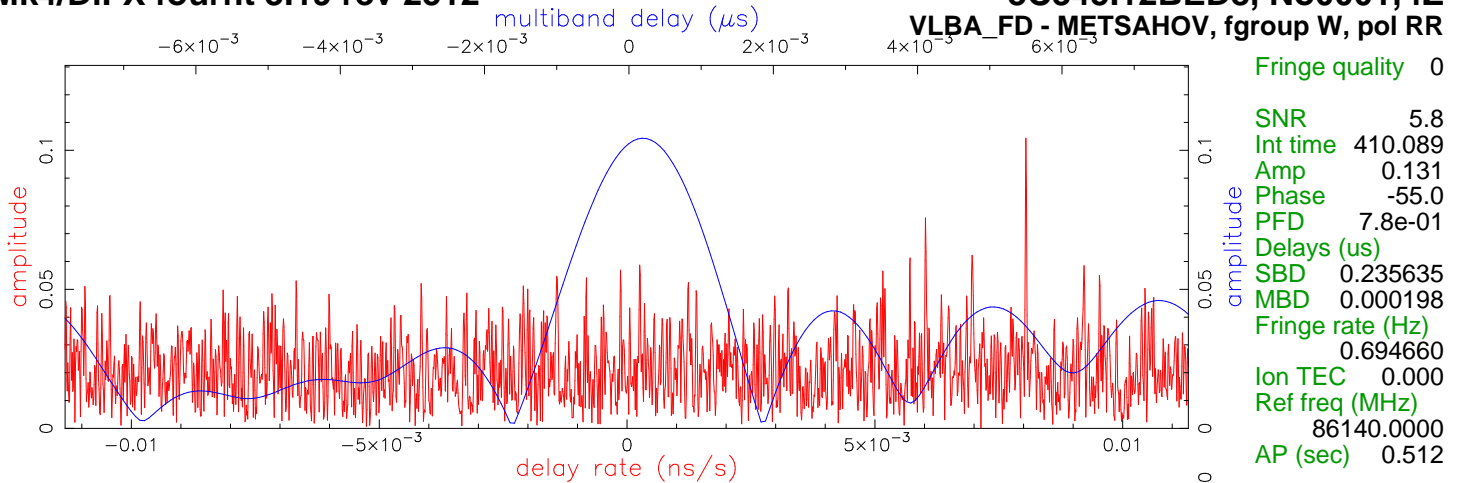
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
8.4	16.5	-21.9	-13.7	20.8	-22.1	17.1	7.2		Phase	3.5
0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1		Ampl.	0.1
384.6	142.9	110.6	180.2	376.7	335.1	454.9	426.4		Sbd box	143.0
U/L 803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		APs used	
f 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Z 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
f:Z 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
f:Z 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	
Z 1000	1000	1000	1000	1000	1000	1000	1000			
f W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
Z W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.32589236358E+03		Apriori delay (usec)	-2.32545125044E+03		Resid mbdelay (usec)	-3.61314E-03	+/-	1.8E-04	
Sband delay (usec)	-2.32589674794E+03		Apriori clock (usec)	0.100		Resid sbdelay (usec)	-4.45498E-01	+/-	1.4E-03	
Phase delay (usec)	-2.32545125032E+03		Apriori clockrate (us/s)	-1.0724231E-07		Resid phdelay (usec)	1.13350E-07	+/-	6.2E-07	
Delay rate (us/s)	1.45922930457E+00		Apriori rate (us/s)	1.45923732601E+00		Resid rate (us/s)	-8.02144E-06	+/-	2.6E-09	
Total phase (deg)		-253.0	Apriori accel (us/s/s)	-1.35162140689E-05		Resid phase (deg)	3.5	+/-	19.3	

ph/seg (deg) 49.2 46.2 Search (2048X32) 0.133 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.9 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) 19.5 27.2 Inc. seg. avg. 0.129 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.8 47.5 Inc. frq. avg. 0.125 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -10902.077 -3193.061 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/fZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/fZ.W.101.12BED8 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, fZ

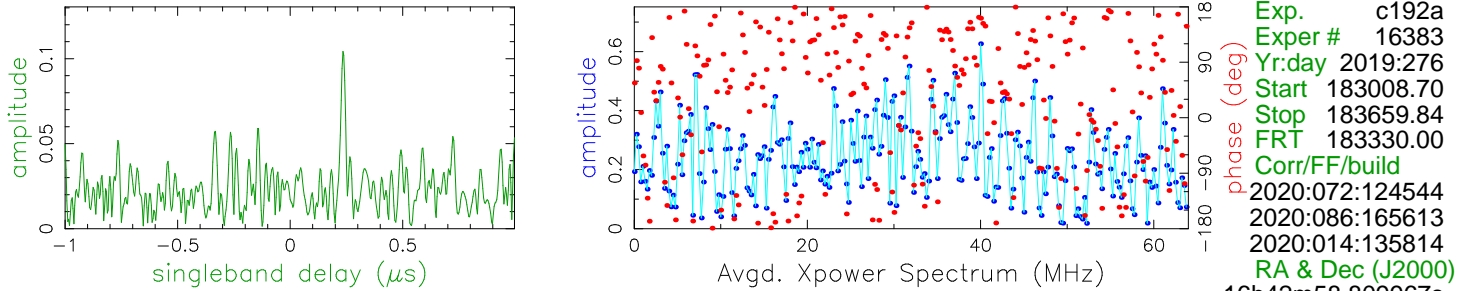
VLBA_FD - METSAHOV, fgroup W, pol RR



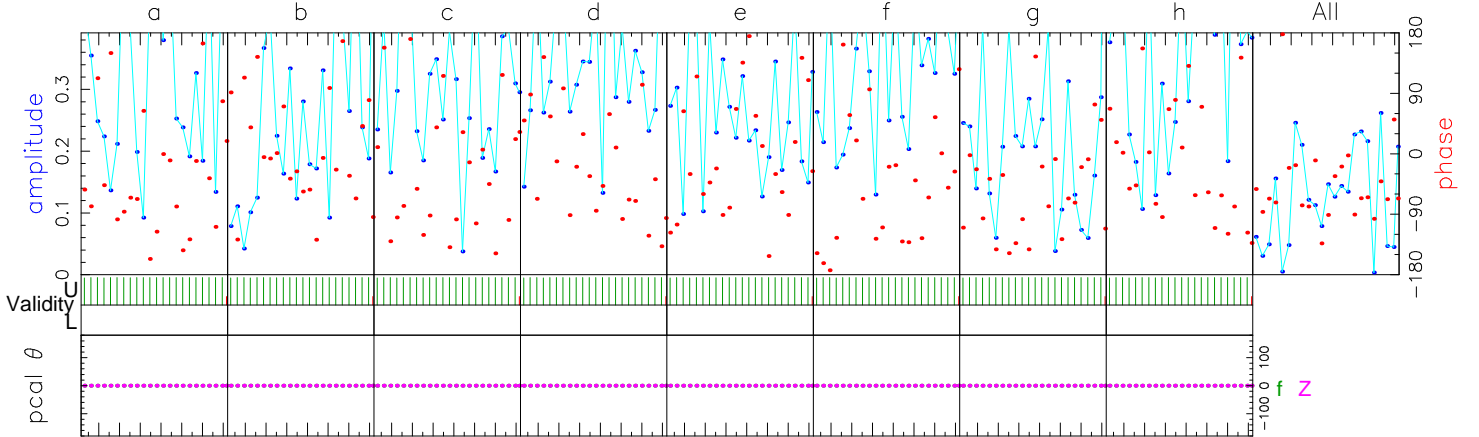
Fringe quality 0

SNR 5.8
 Int time 410.089
 Amp 0.131
 Phase -55.0
 PFD 7.8e-01
 Delays (us)
 SBD 0.235635
 MBD 0.000198
 Fringe rate (Hz)
 0.694660
 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
 2020:086:165613
 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



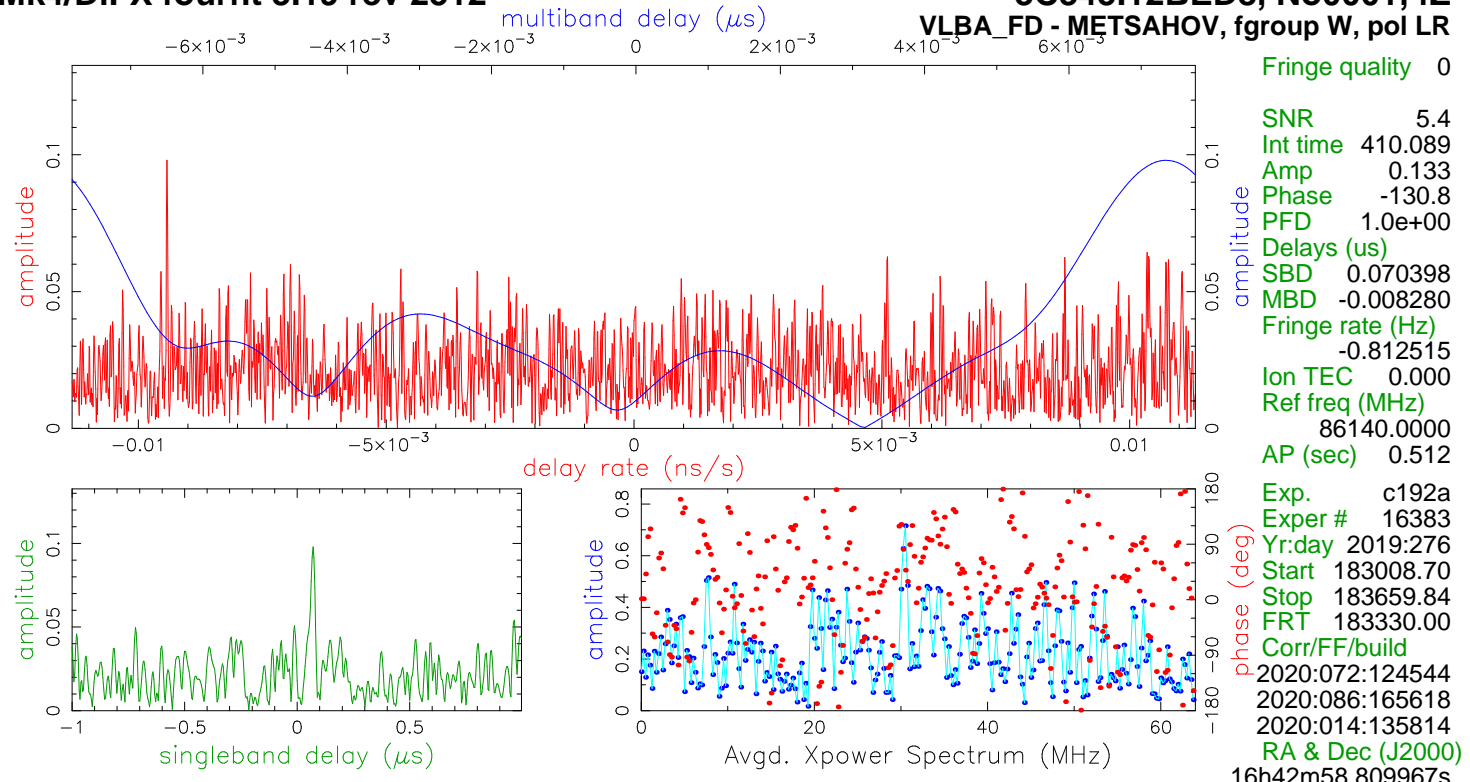
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-63.8	-24.4	-96.5	-30.4	-42.5	-64.9	-83.9	-37.4	Phase	-55.0
	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	330.5	231.5	148.0	340.0	169.1	374.1	142.9	376.1	Sbd box	317.3
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.32521667696E+03		Apriori delay (usec)		-2.32545125044E+03		Resid mbdelay (usec)		1.98476E-04	+/- 1.9E-04
Sband delay (usec)	-2.32521561569E+03		Apriori clock (usec)		2.7257115E-01		Resid sbdelay (usec)		2.35635E-01	+/- 1.5E-03
Phase delay (usec)	-2.32545125221E+03		Apriori clockrate (us/s)		-1.0724231E-07		Resid phdelay (usec)		-1.77307E-06	+/- 6.4E-07
Delay rate (us/s)	1.45924539032E+00		Apriori rate (us/s)		1.45923732601E+00		Resid rate (us/s)		8.06431E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.35162140689E-05		Resid phase (deg)		-55.0	+/- 19.7

ph/seg (deg) 47.4 47.2 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 78.5 82.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.1 27.9 Inc. seg. avg. 0.115 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.2 48.6 Inc. frq. avg. 0.127 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -10902.077 -3193.061 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/fZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/fZ.W.120.12BED8

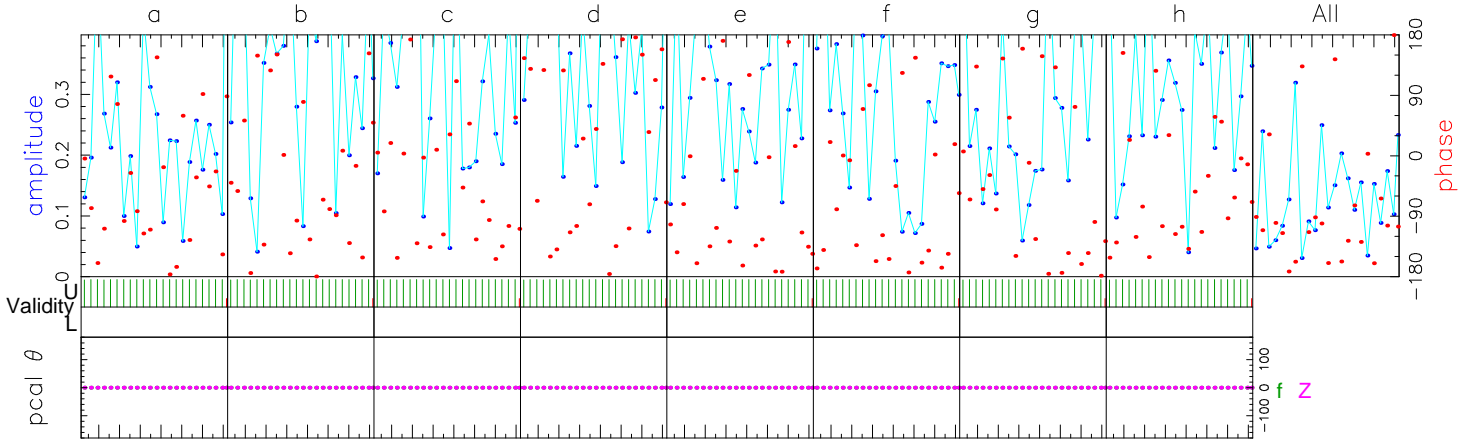
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, fZ

VLBA_FD - METSAHOV, fgroup W, pol LR



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

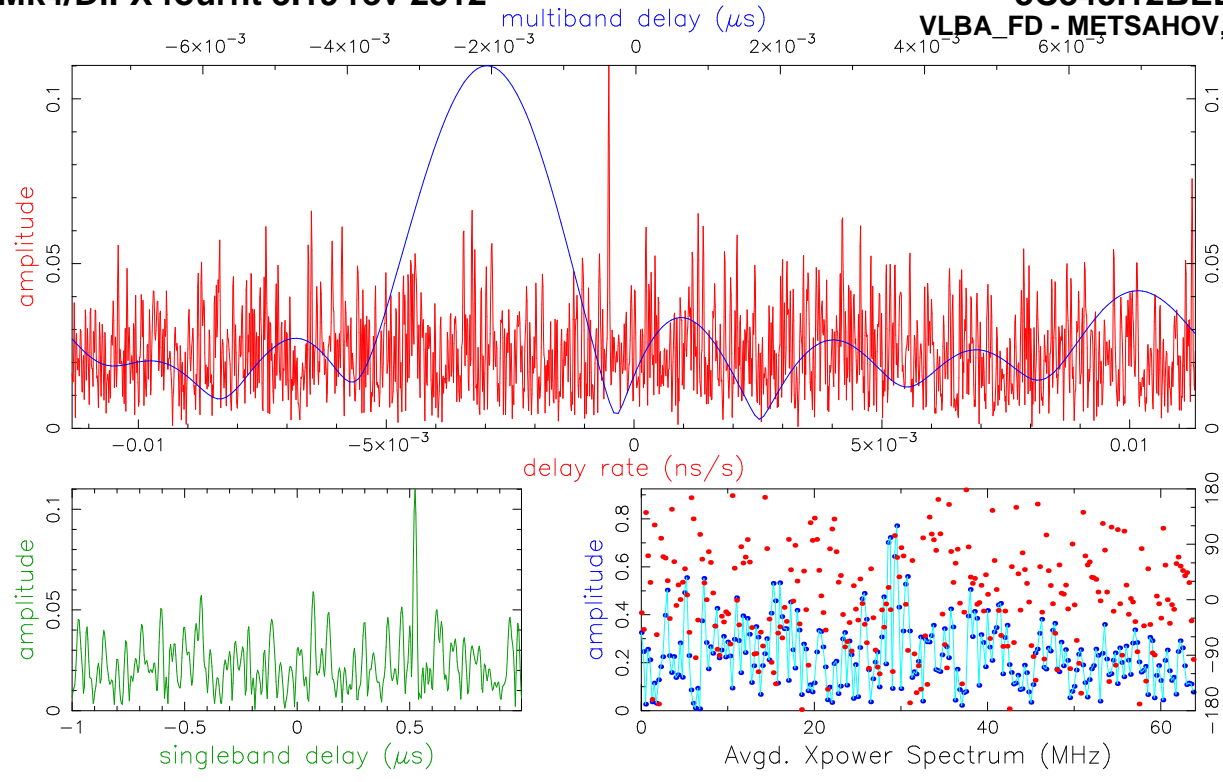


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-122.6	-102.9	-101.9	-172.0	-144.3	-130.8	-168.3	-80.4	Phase	-130.8
	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
	407.6	158.8	392.8	416.7	273.3	288.2	511.7	127.8	Sbd box	275.0
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.32538140570E+03		Apriori delay (usec)	-2.32545125044E+03	Resid mbdelay (usec)	-8.28027E-03	+/-	2.0E-04		
Sband delay (usec)	-2.32538085219E+03		Apriori clock (usec)	2.7257115E-01	Resid sbdelay (usec)	7.03982E-02	+/-	1.6E-03		
Phase delay (usec)	-2.32545125465E+03		Apriori clockrate (us/s)	-1.0724231E-07	Resid phdelay (usec)	-4.21706E-06	+/-	6.8E-07		
Delay rate (us/s)	1.45922789352E+00		Apriori rate (us/s)	1.45923732601E+00	Resid rate (us/s)	-9.43249E-06	+/-	2.9E-09		
Total phase (deg)		-27.3	Apriori accel (us/s/s)	-1.35162140689E-05	Resid phase (deg)	-130.8	+/-	21.1		

	RMS	Theor.	Amplitude	0.133 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
ph/seg (deg)	61.0	50.6	Search (2048X32)	0.097	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/seg (%)	82.1	88.4	Interp.	0.000	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
ph/frq (deg)	35.4	29.9	Inc. seg. avg.	0.126	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	37.5	52.1	Inc. frq. avg.	0.137						

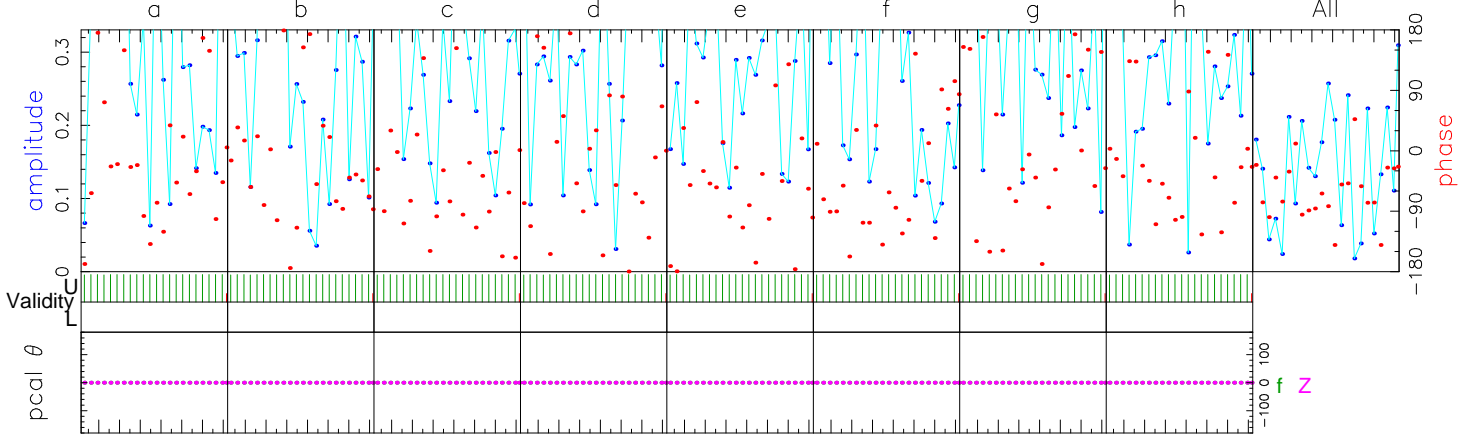
f: az 61.0 el 37.1 pa -78.2 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -10902.077 -3193.061 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/fZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/fZ.W.141.12BED8



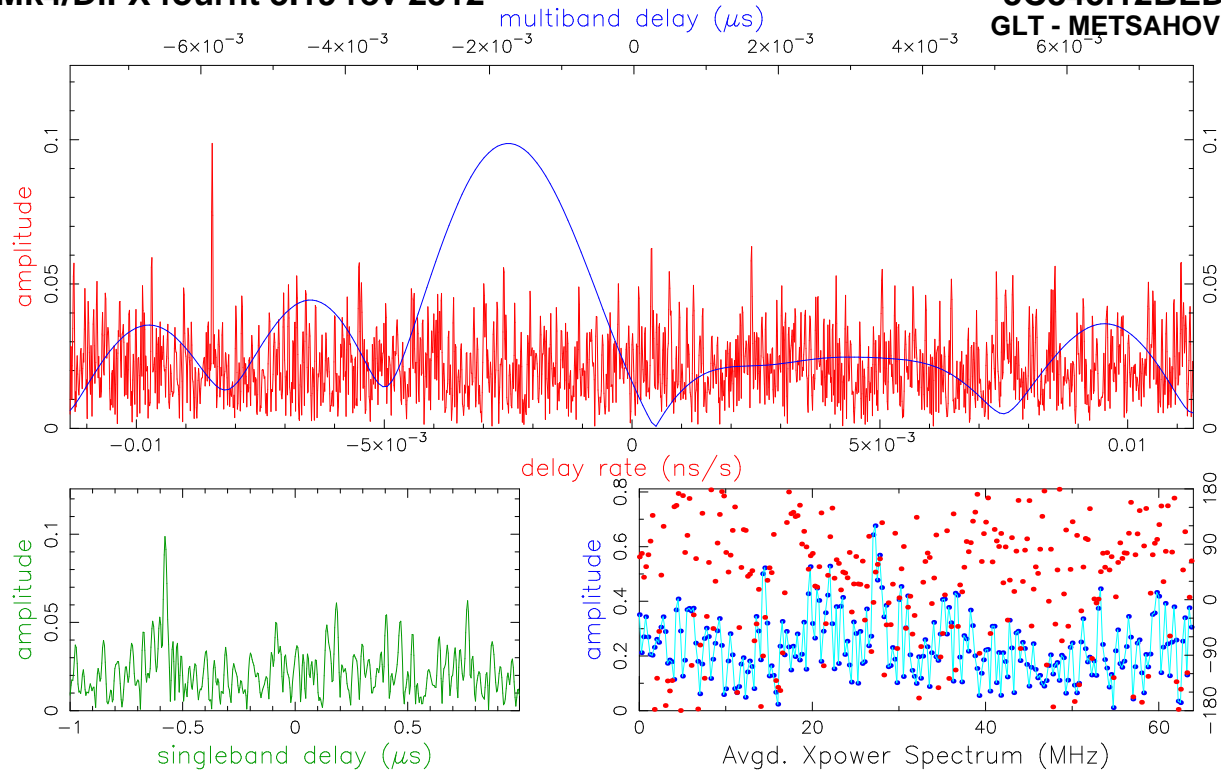
Fringe quality 0
SNR 6.1
Int time 410.089
Amp 0.110
Phase -64.4
PFD 2.5e-01
Delays (us)
SBD 0.523313
MBD -0.002064
Fringe rate (Hz)
-0.043865
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165623
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



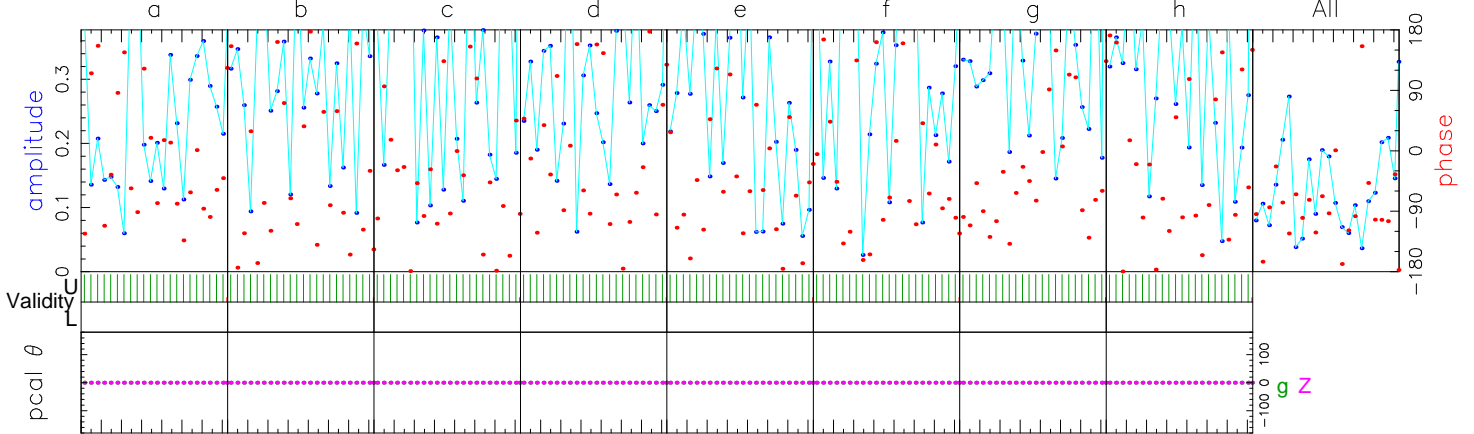
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-59.8	-58.5	-60.4	-92.2	-55.5	-73.5	-92.4	-50.3	Phase	-64.4
	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	Ampl.	0.1
	429.1	193.1	491.0	373.6	185.4	392.5	415.2	178.2	Sbd box	391.0
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.32492206485E+03		Apriori delay (usec)		-2.32545125044E+03		Resid mbdelay (usec)		-2.06442E-03	+/- 1.8E-04
Sband delay (usec)	-2.32492793769E+03		Apriori clock (usec)		2.7257115E-01		Resid sbdelay (usec)		5.23313E-01	+/- 1.4E-03
Phase delay (usec)	-2.32545125251E+03		Apriori clockrate (us/s)		-1.0724231E-07		Resid phdelay (usec)		-2.07750E-06	+/- 6.1E-07
Delay rate (us/s)	1.45923681677E+00		Apriori rate (us/s)		1.45923732601E+00		Resid rate (us/s)		-5.09234E-07	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.35162140689E-05		Resid phase (deg)		-64.4	+/- 18.8

ph/seg (deg) 43.0 45.1 Search (2048X32) 0.109 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.7 78.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.2 26.6 Inc. seg. avg. 0.106 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.6 46.4 Inc. frq. avg. 0.102 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -10902.077 -3193.061 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/fZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/fZ.W.163.12BED8



Fringe quality 0
SNR 5.5
Int time 419.218
Amp 0.126
Phase -90.7
PFD 1.0e+00
Delays (us)
SBD -0.577842
MBD -0.001742
Fringe rate (Hz)
-0.730342
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165624
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

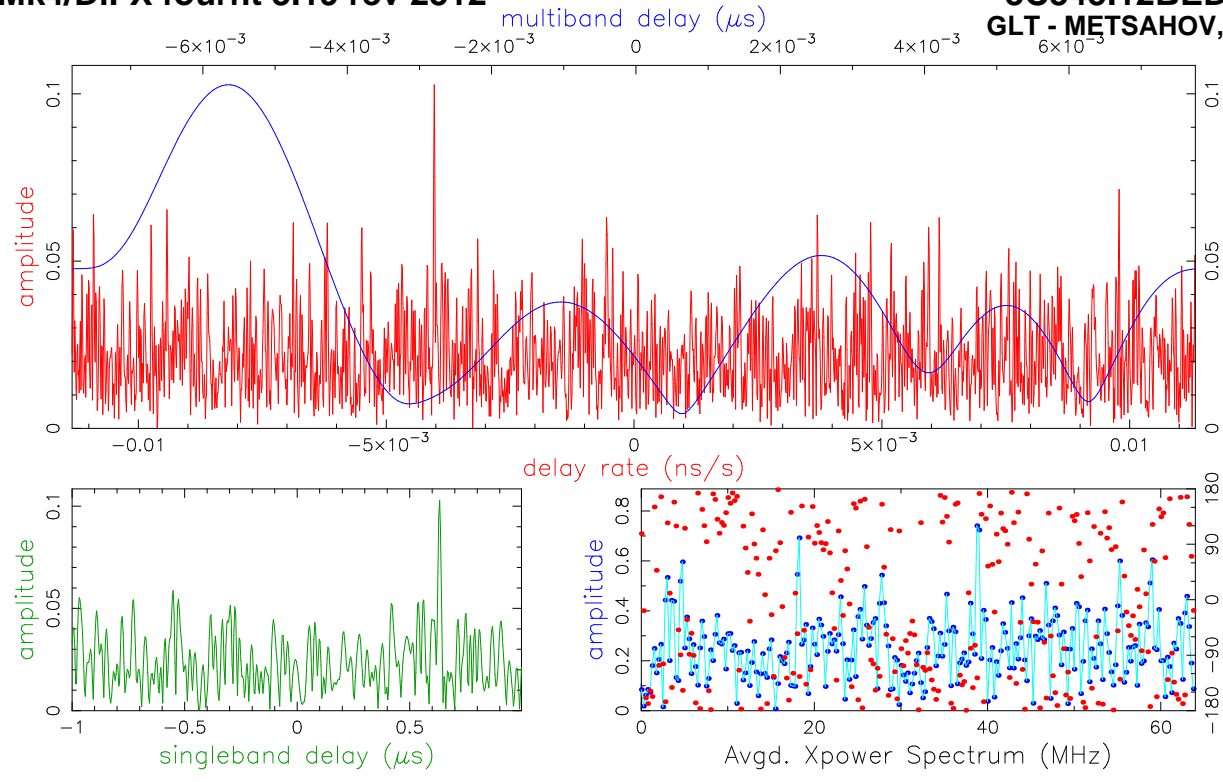


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-67.6	-140.3	-104.5	-59.0	-64.5	-111.0	-70.9	-112.5	Phase	-90.7
	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	363.7	20.0	207.6	503.4	467.0	11.8	220.0	292.8	Sbd box	109.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.20105083715E+03	Apriori delay (usec)	1.20163070427E+03	Resid mbdelay (usec)	-1.74212E-03	+/-	2.0E-04
Sband delay (usec)	1.20105286177E+03	Apriori clock (usec)	1.1139116E+00	Resid sbdelay (usec)	-5.77842E-01	+/-	1.6E-03
Phase delay (usec)	1.20163070135E+03	Apriori clockrate (us/s)	5.8707190E-08	Resid phdelay (usec)	-2.92381E-06	+/-	6.7E-07
Delay rate (us/s)	6.68986242808E-01	Apriori rate (us/s)	6.68994721357E-01	Resid rate (us/s)	-8.47855E-06	+/-	2.8E-09
Total phase (deg)	221.1	Apriori accel (us/s/s)	1.20134941382E-06	Resid phase (deg)	-90.7	+/-	20.7

ph/seg (deg)	RMS 46.9	Theor. 49.7	Amplitude Search (2048X32)	0.126 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	71.8	86.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	32.0	29.3	Inc. seg. avg.	0.118	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	21.2	51.2	Inc. frq. avg.	0.125	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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -4981.112 854.646 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/gZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/gZ.W.168.12BED8

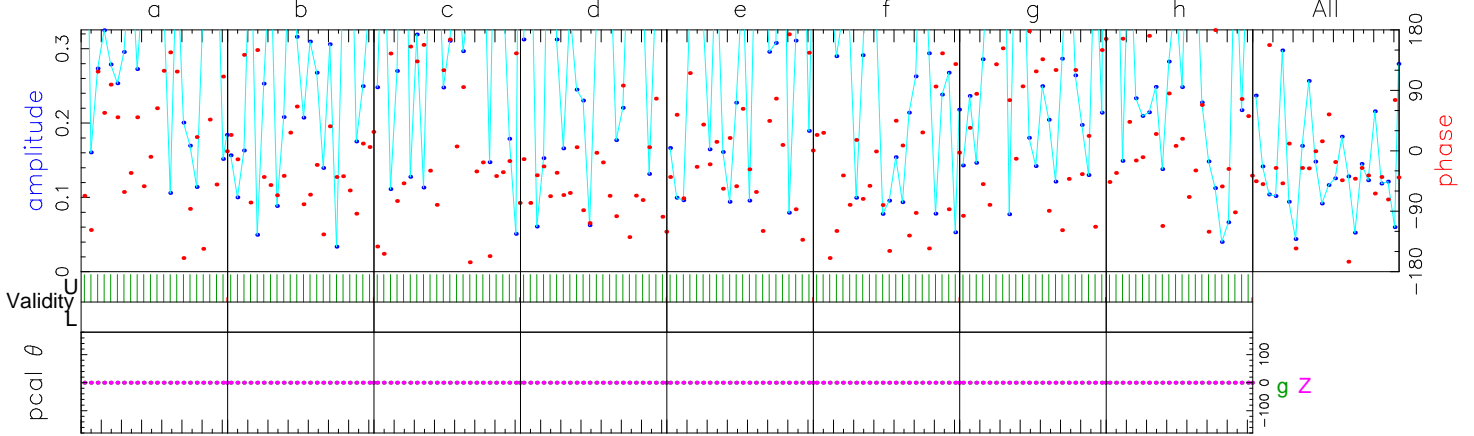


Fringe quality 0

SNR 5.8
Int time 419.262
Amp 0.108
Phase -34.9
PFD 8.7e-01
Delays (us)
SBD 0.632279
MBD -0.005648
Fringe rate (Hz)
-0.347861
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

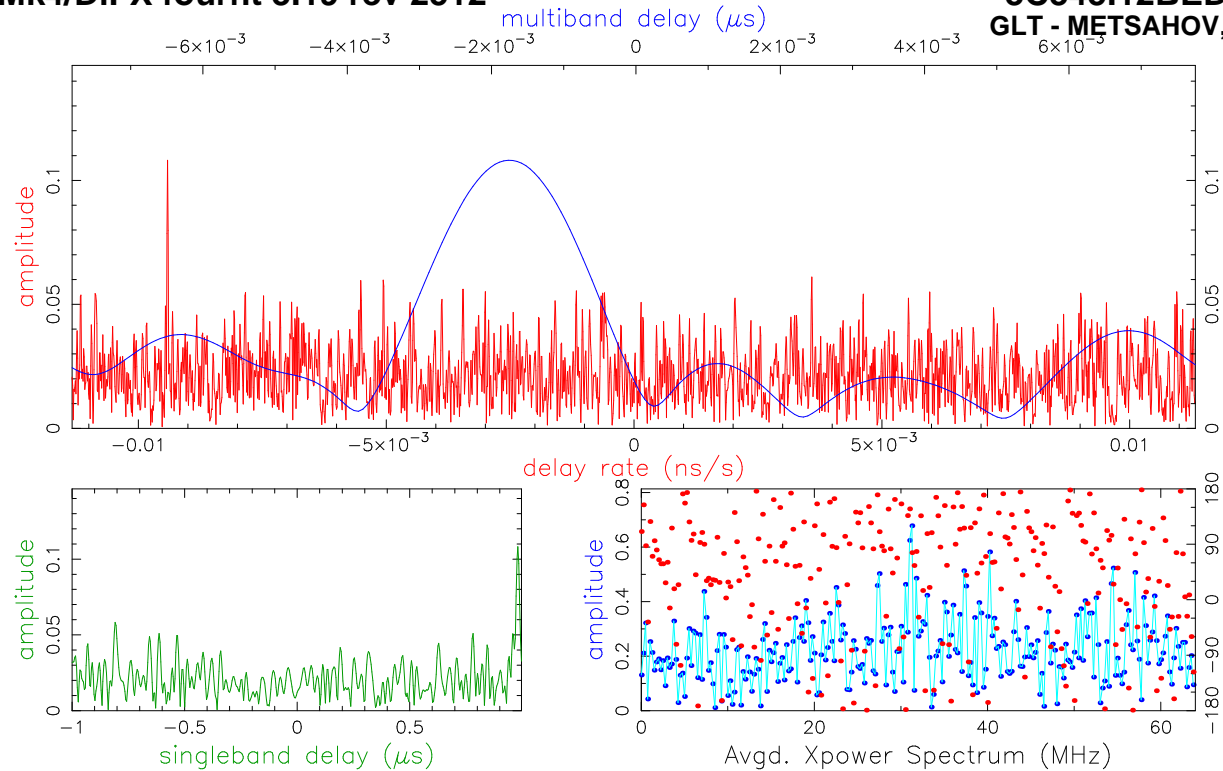
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165628
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



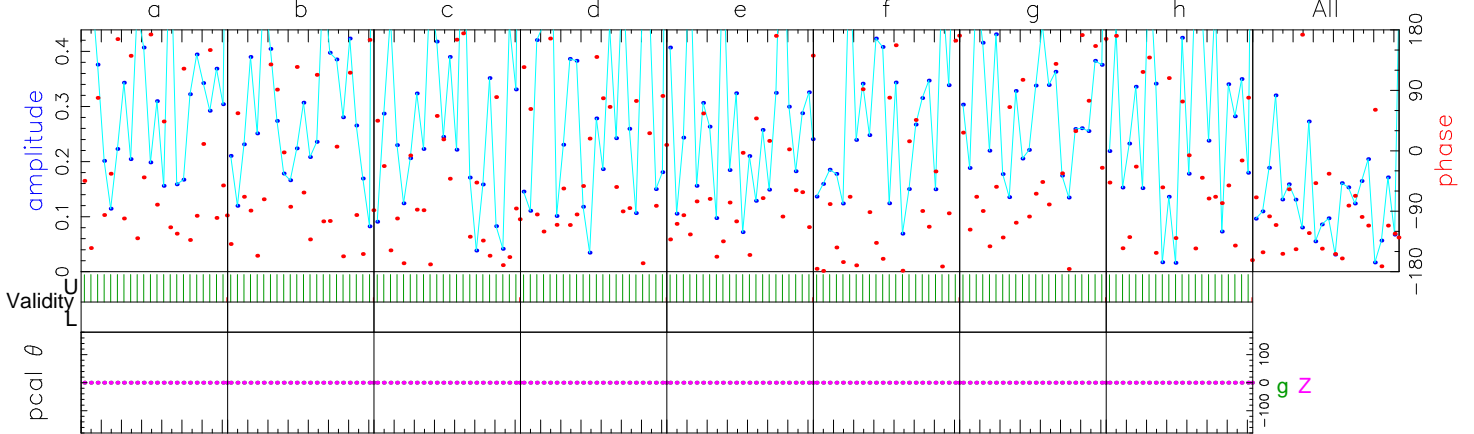
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	g Z	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		418.9
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	11.9	-28.1	-60.9	-57.9	-13.1	-50.2	167.6	-13.2		-34.9
Sband delay (usec)	0.1	0.2	0.1	0.2	0.1	0.1	0.0	0.2		0.1
Phase delay (usec)	437.6	418.7	176.1	419.2	337.3	440.5	141.3	489.7		418.9
Delay rate (us/s)	0	0	0	0	0	0	0	0		
Total phase (deg)			276.9							
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)										

ph/seg (deg) 62.5 47.7 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.6 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) 70.0 28.1 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 55.3 49.1 Inc. frq. avg. 0.112 Sample rate(MSamp/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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -4981.112 854.646 ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/gZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/gZ.W.185.12BED8



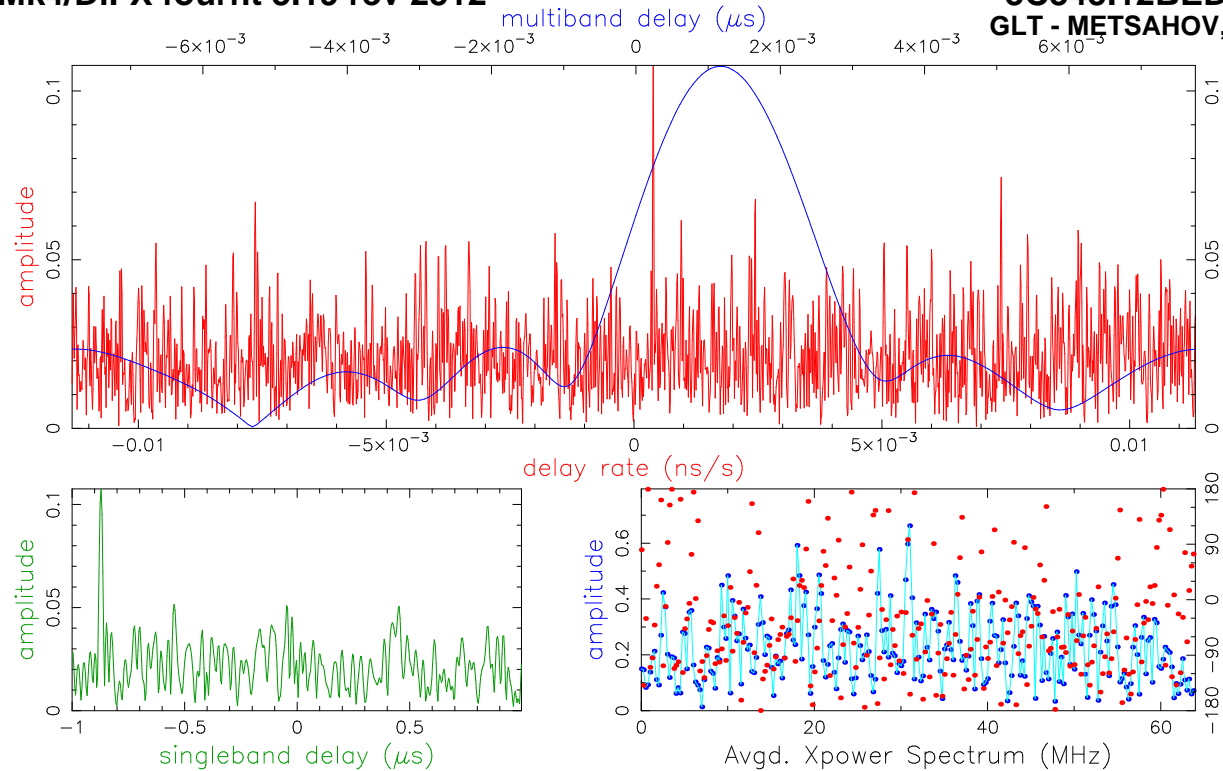
Fringe quality 0
SNR 6.1
Int time 419.218
Amp 0.146
Phase -112.6
PFD 3.0e-01
Delays (us)
SBD 0.980099
MBD -0.001771
Fringe rate (Hz)
-0.811375
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165632
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	-103.9	-114.0	-129.2	-112.8	-101.4	-148.8	-78.7	-104.8	Phase	-112.6
	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.1	Ampl.	0.1
	471.2	387.1	315.4	318.0	508.0	108.9	367.5	218.3	Sbd box	507.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.20261330802E+03		Apriori delay (usec)		1.20163070427E+03		Resid mbdelay (usec)		-1.77125E-03	+/- 1.8E-04
Sband delay (usec)	1.20261080352E+03		Apriori clock (usec)		1.1139116E+00		Resid sbdelay (usec)		9.80099E-01	+/- 1.4E-03
Phase delay (usec)	1.20163070064E+03		Apriori clockrate (us/s)		5.8707190E-08		Resid phdelay (usec)		-3.63052E-06	+/- 6.1E-07
Delay rate (us/s)	6.68985302096E-01		Apriori rate (us/s)		6.68994721357E-01		Resid rate (us/s)		-9.41926E-06	+/- 2.5E-09
Total phase (deg)	199.2		Apriori accel (us/s/s)		1.20134941382E-06		Resid phase (deg)		-112.6	+/- 18.9

ph/seg (deg) 55.2 79.1 Interp. 0.000 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.2 45.3 Search (2048X32) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.4 26.7 Inc. seg. avg. 0.137 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.9 46.7 Inc. frq. avg. 0.140 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -4981.112 854.646 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/gZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/gZ.W.198.12BED8

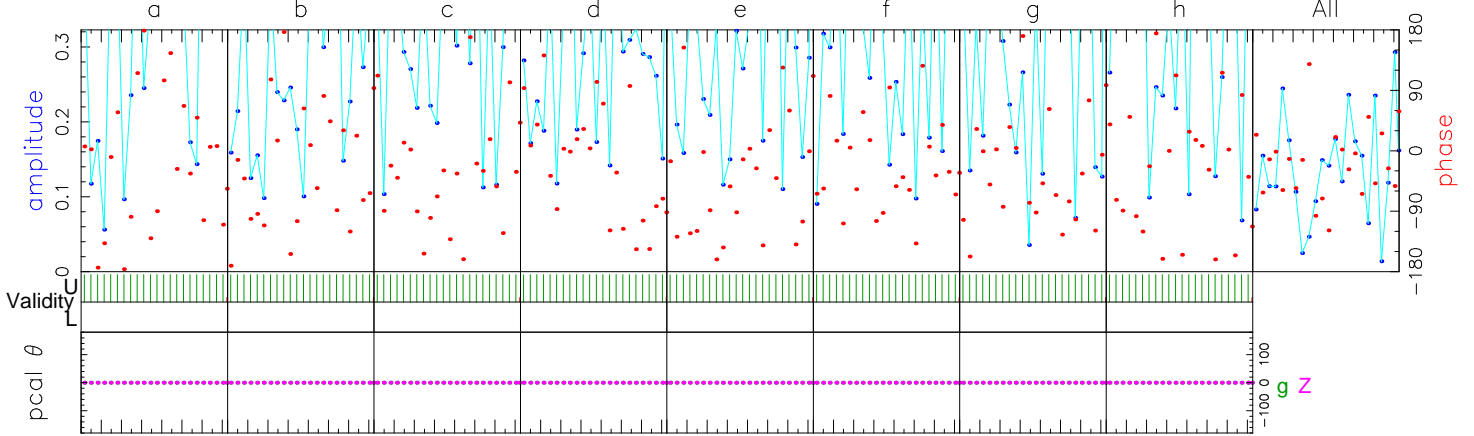


Fringe quality 0

SNR 6.0
Int time 419.262
Amp 0.108
Phase -35.2
PFD 3.6e-01
Delays (us)
SBD -0.871692
MBD 0.001176
Fringe rate (Hz)
0.033602
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Yr:day 16383
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165637
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



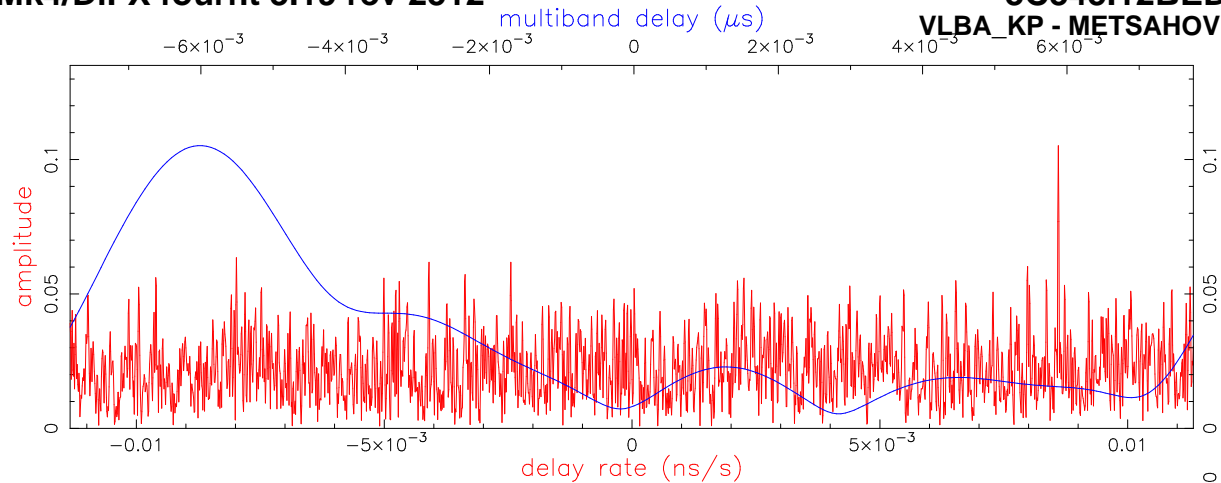
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.20075687998E+03	Apriori delay (usec)	1.20163070427E+03	Resid mbdelay (usec)	1.17571E-03	+/-	1.8E-04
Sband delay (usec)	1.20075901202E+03	Apriori clock (usec)	1.1139116E+00	Resid sbdelay (usec)	-8.71692E-01	+/-	1.4E-03
Phase delay (usec)	1.20163070314E+03	Apriori clockrate (us/s)	5.8707190E-08	Resid phdelay (usec)	-1.13529E-06	+/-	6.1E-07
Delay rate (us/s)	6.68995111447E-01	Apriori rate (us/s)	6.68994721357E-01	Resid rate (us/s)	3.90090E-07	+/-	2.5E-09
Total phase (deg)	276.6	Apriori accel (us/s/s)	1.20134941382E-06	Resid phase (deg)	-35.2	+/-	19.0

ph/seg (deg)	54.6	RMS	54.6	Theor.	45.6	Amplitude	0.108 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.2	Search (2048X32)	0.104	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	16.3	Inc. seg. avg.	0.105	Inc. frq. avg.	0.099	Bits/sample:	2x2	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	33.8	Inc. frq. avg.	0.099	u,v (fr/asec)	-4981.112 854.646	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00	0.00

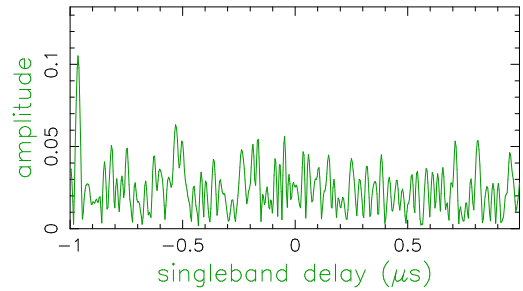
g: az 142.5 el 51.0 pa -10.6 Z: az 271.4 el 46.7 pa 40.3 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/gZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/gZ.W.221.12BED8

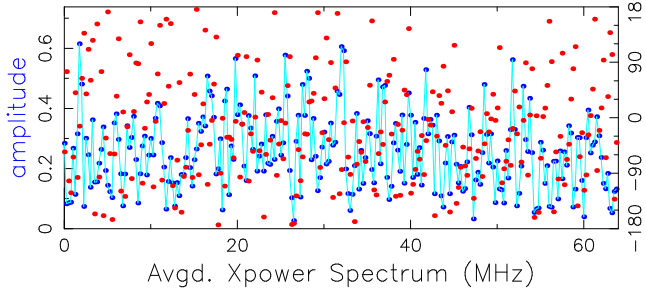


Fringe quality 0

SNR 5.8
 Int time 407.367
 Amp 0.135
 Phase 83.7
 PFD 8.0e-01
 Delays (us)
 SBD -0.964801
 MBD -0.006010
 Fringe rate (Hz)
 0.741981
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

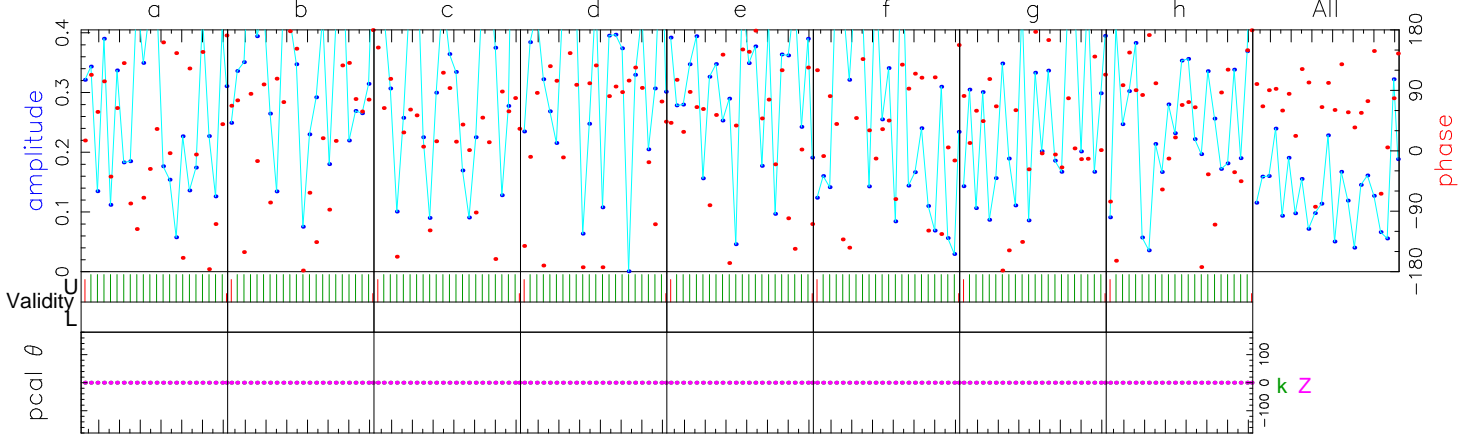


delay rate (ns/s)



Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165628
 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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.86782789986E+03	Apriori delay (usec)	-3.86686876465E+03	Resid mbdelay (usec)	-6.01021E-03	+/-	1.9E-04
Sband delay (usec)	-3.86783356540E+03	Apriori clock (usec)	-5.8413070E-01	Resid sbdelay (usec)	-9.64801E-01	+/-	1.5E-03
Phase delay (usec)	-3.86686876195E+03	Apriori clockrate (us/s)	-2.1087179E-07	Resid phdelay (usec)	2.70027E-06	+/-	6.4E-07
Delay rate (us/s)	1.49690146371E+00	Apriori rate (us/s)	1.49689285005E+00	Resid rate (us/s)	8.61367E-06	+/-	2.7E-09
Total phase (deg)	-55.6	Apriori accel (us/s/s)	-3.90160278613E-06	Resid phase (deg)	83.7	+/-	19.7

ph/seg (deg)	58.3	RMS	70.1	Theor.	47.3	Amplitude	0.135 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	70.1	Search (2048X32)	0.104	Inc. seg. avg.	0.131	Inc. frq. avg.	0.129	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	25.4	Interp.	0.000	Inc. frq. avg.	0.129	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	56.6	Search (2048X32)	0.104	Inc. frq. avg.	0.129	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011 0.011	
		Search (2048X32)	0.104	Inc. frq. avg.	0.129	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00 0.00	

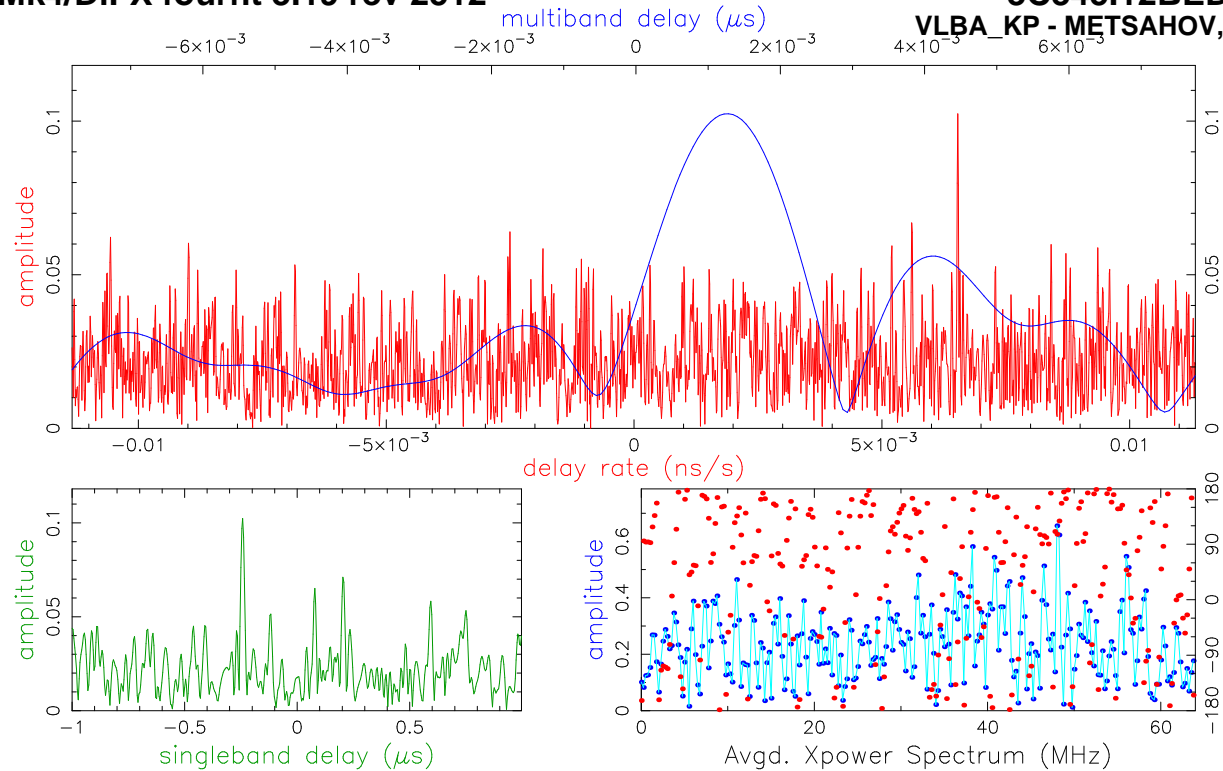
k: az 60.1 el 32.1 pa -73.4 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -11165.875 -2426.815 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/kZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/kZ.W.181.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

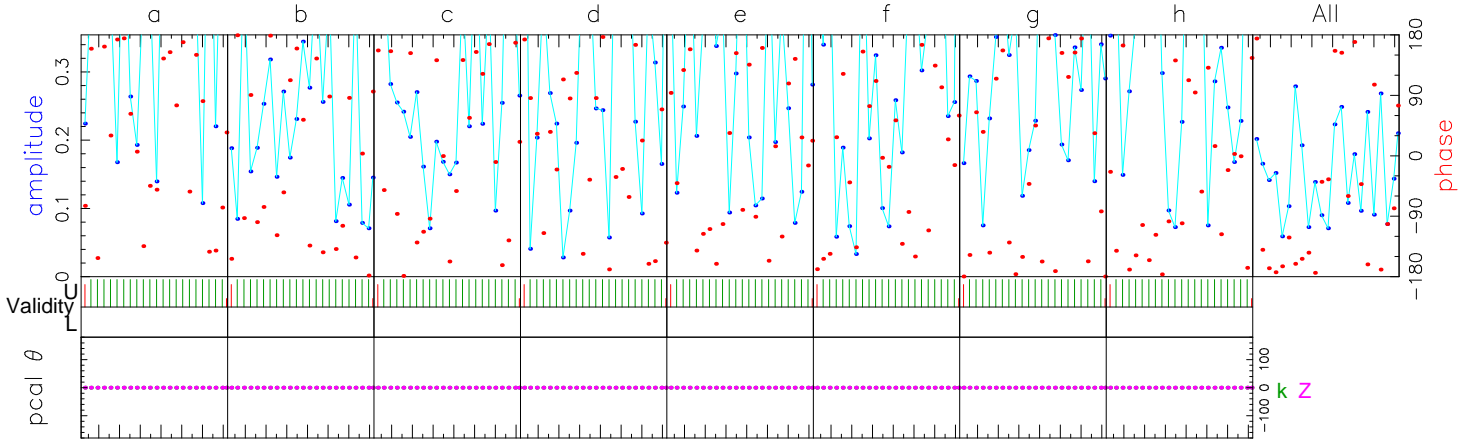
3C345.12BED8, No0001, kZ

VLBA_KP - METSAHOV, fgroup W, pol RR



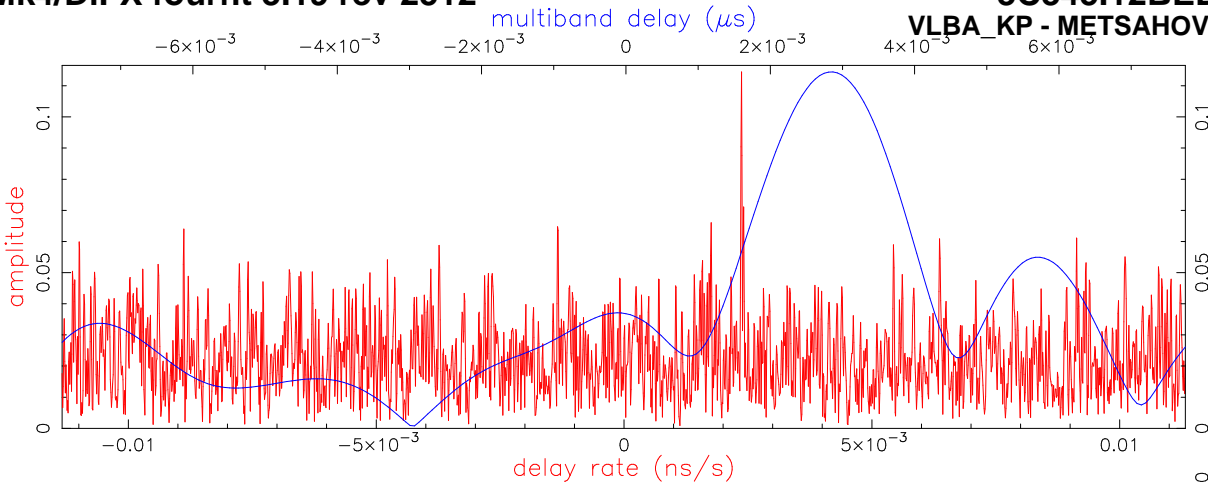
Fringe quality 0
 SNR 5.7
 Int time 407.367
 Amp 0.118
 Phase -162.2
 PFD 9.7e-01
 Delays (us)
 SBD -0.242834
 MBD 0.001247
 Fringe rate (Hz)
 0.563339
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165633
 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



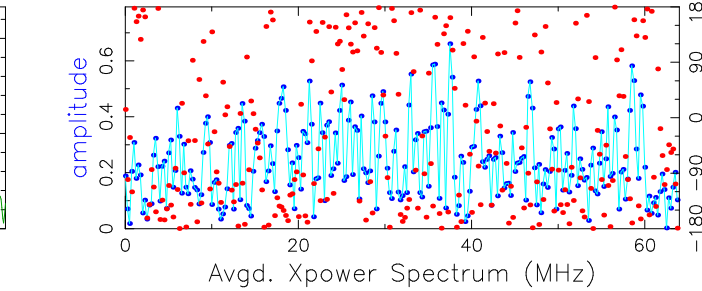
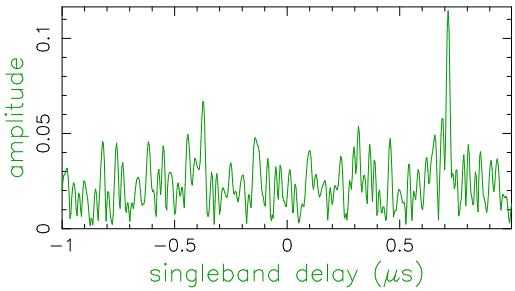
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-167.5	-162.3	-172.6	-103.7	-133.2	161.0	-178.4	-138.0	Phase	-162.2
	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	88.4	186.4	492.0	408.0	105.7	188.3	35.8	228.1	Sbd box	194.8
U/L	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.86711751729E+03		Apriori delay (usec)		-3.86686876465E+03		Resid mbdelay (usec)		1.24736E-03	+/- 1.9E-04
Sband delay (usec)	-3.86711159865E+03		Apriori clock (usec)		-5.8413070E-01		Resid sbdelay (usec)		-2.42834E-01	+/- 1.5E-03
Phase delay (usec)	-3.86686876988E+03		Apriori clockrate (us/s)		-2.1087179E-07		Resid phdelay (usec)		-5.23202E-06	+/- 6.5E-07
Delay rate (us/s)	1.49689938986E+00		Apriori rate (us/s)		1.49689285005E+00		Resid rate (us/s)		6.53981E-06	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.90160278613E-06		Resid phase (deg)		-162.2	+/- 20.2

ph/seg (deg) 63.1 48.5 Search (2048X32) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 81.6 84.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 33.2 28.6 Inc. seg. avg. 0.129 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 36.2 49.9 Inc. frq. avg. 0.115 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -11165.875 -2426.815 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/kZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/kZ.W.206.12BED8



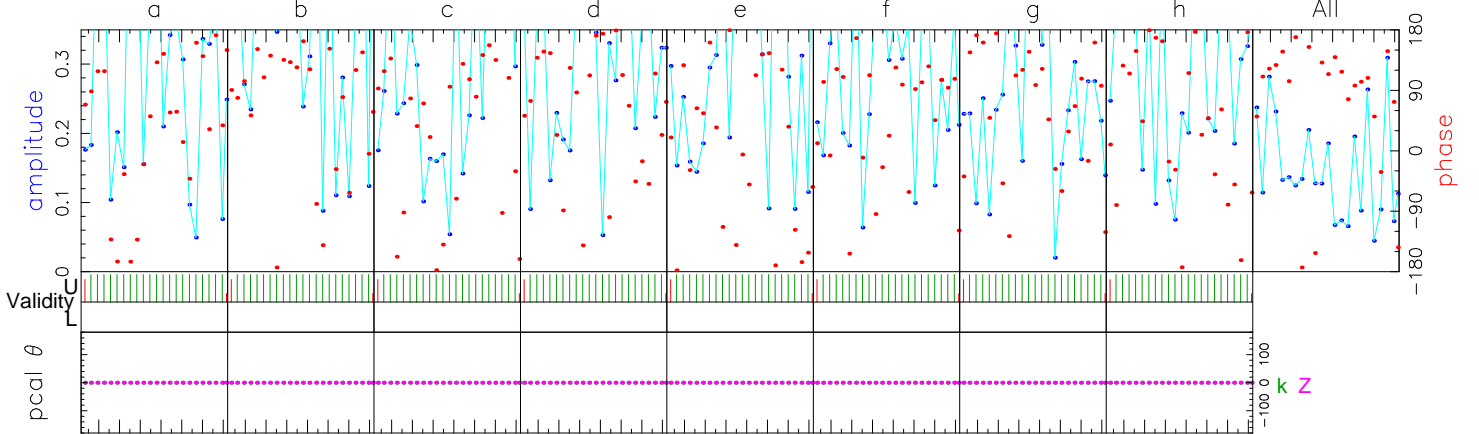
Fringe quality 0

SNR 6.3
 Int time 407.367
 Amp 0.117
 Phase 124.4
 PFD 7.0e-02
 Delays (us)
 SBD 0.714918
 MBD 0.002847
 Fringe rate (Hz)
 0.203990
 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
 2020:086:165637
 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



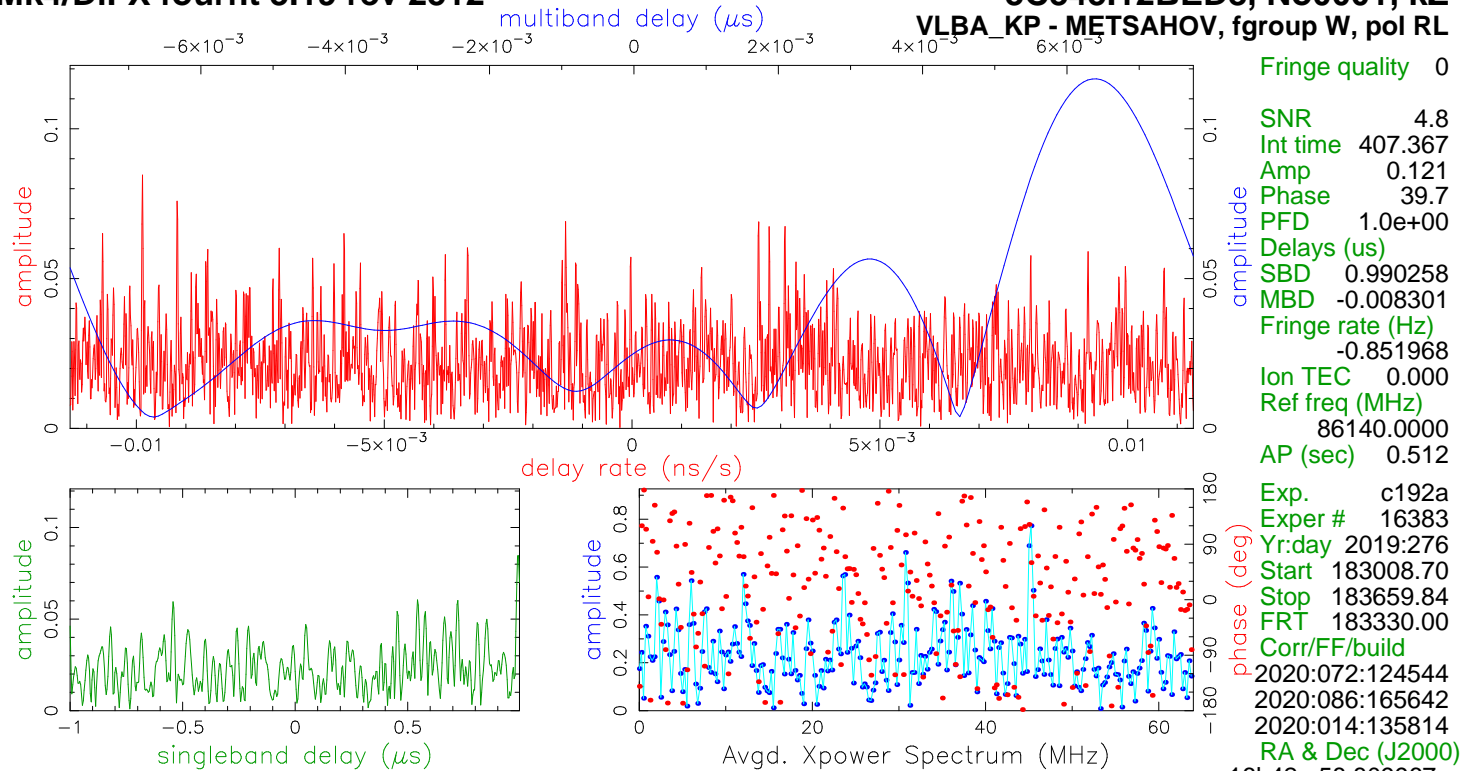
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	124.4	124.4
k	1000	1000	1000	1000	1000	1000	1000	1000	0.1	0.1
Z	1000	1000	1000	1000	1000	1000	1000	1000	0.1	0.1
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.1	0.1
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.1	0.1
k	1000	1000	1000	1000	1000	1000	1000	1000	0.1	0.1
Z	1000	1000	1000	1000	1000	1000	1000	1000	0.1	0.1
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	0.1	0.1
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	0.1	0.1
Group delay (usec)(sbd)	-3.86614716728E+03				-3.86686876465E+03				2.84737E-03	+/- 1.7E-04
Sband delay (usec)	-3.86615384615E+03				-5.8413070E-01				7.14918E-01	+/- 1.4E-03
Phase delay (usec)	-3.86686876064E+03				-2.1087179E-07				4.01004E-06	+/- 5.8E-07
Delay rate (us/s)	1.49689521816E+00				1.49689285005E+00				2.36812E-06	+/- 2.5E-09
Total phase (deg)			-15.0		-3.90160278613E-06				124.4	+/- 18.1

ph/seg (deg) 51.6 43.5 Search (2048X32) 0.113 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.8 75.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.4 25.7 Inc. seg. avg. 0.118 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.4 44.8 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
 k: az 60.1 el 32.1 pa -73.4 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -11165.875 -2426.815 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/kZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/kZ.W.223.12BED8

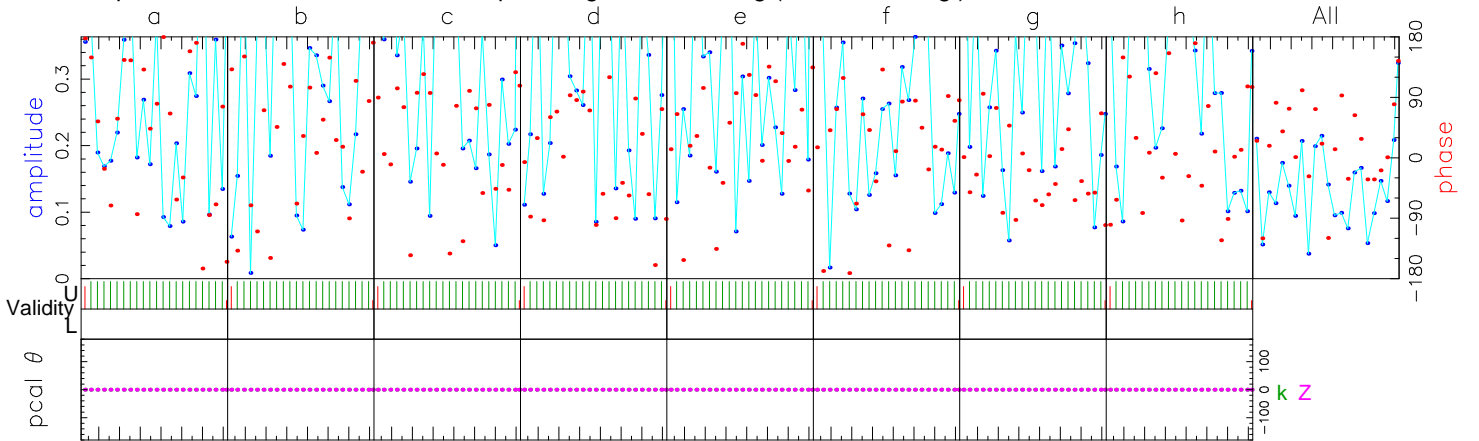
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, kZ

VLBA_KP - METSAHOV, fgroup W, pol RL



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
156.4	86.6	51.4	29.2	48.9	67.4	-25.5	-27.1		Phase	39.7
0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1		Ampl.	0.2
247.4	364.3	113.2	499.7	508.9	370.4	510.7	100.9		Sbd box	510.5
U/L 801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	APs used	
k 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Z 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z 0:0	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	1000	PC amp	
Z 1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.86587706543E+03		Apriori delay (usec)	-3.86686876465E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	2.3E-04		
Sband delay (usec)	-3.86587850665E+03		Apriori clock (usec)	-5.8413070E-01	Resid sbdelay (usec)	9.90258E-01	+/-	1.8E-03		
Phase delay (usec)	-3.86686876337E+03		Apriori clockrate (us/s)	-2.1087179E-07	Resid phdelay (usec)	1.27958E-06	+/-	7.7E-07		
Delay rate (us/s)	1.49688295955E+00		Apriori rate (us/s)	1.49689285005E+00	Resid rate (us/s)	-9.89050E-06	+/-	3.3E-09		
Total phase (deg)		-99.7	Apriori accel (us/s/s)	-3.90160278613E-06	Resid phase (deg)	39.7	+/-	24.0		

ph/seg (deg) 65.5 57.4 Search (2048X32) 0.116 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

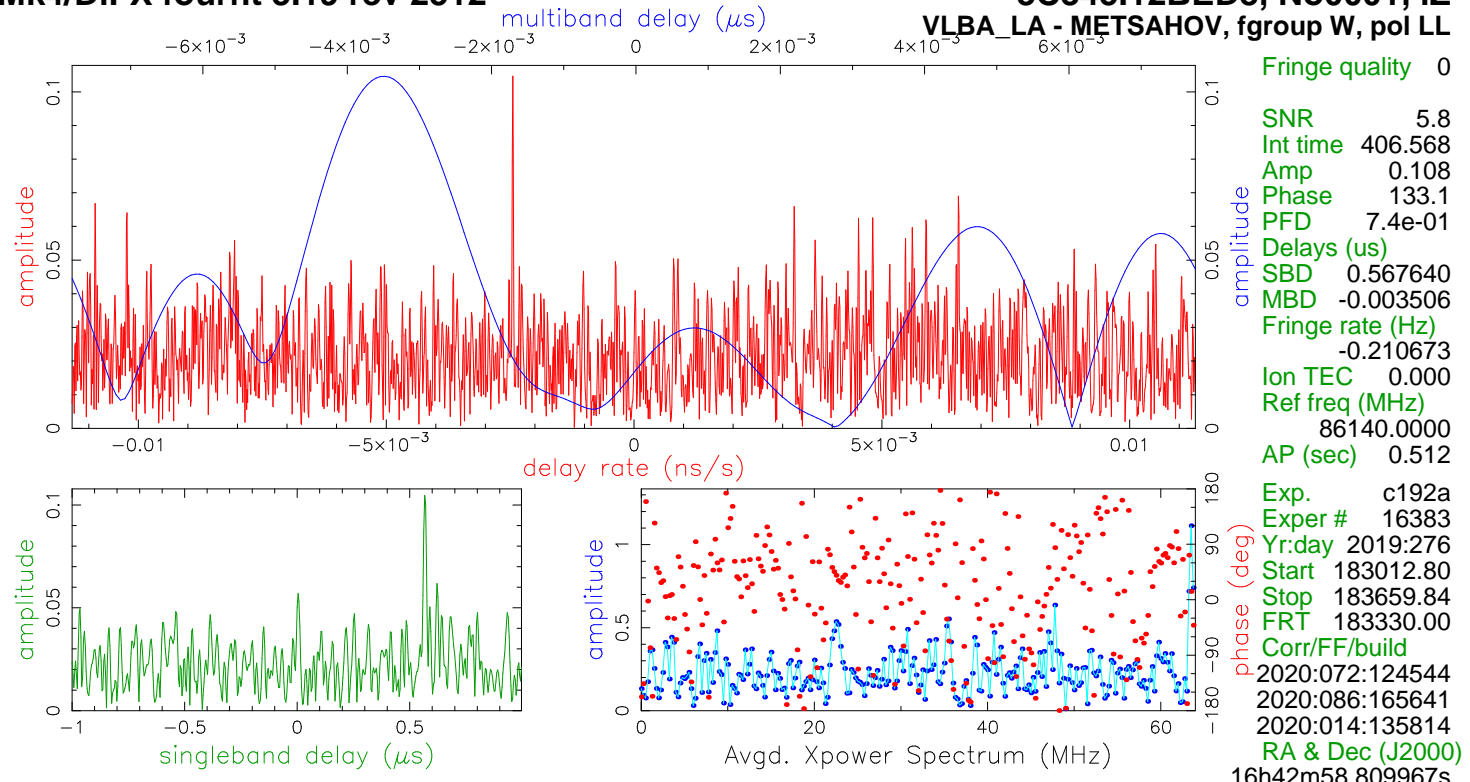
amp/seg (%) 87.0 100.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 65.4 33.9 Inc. seg. avg. 0.126 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

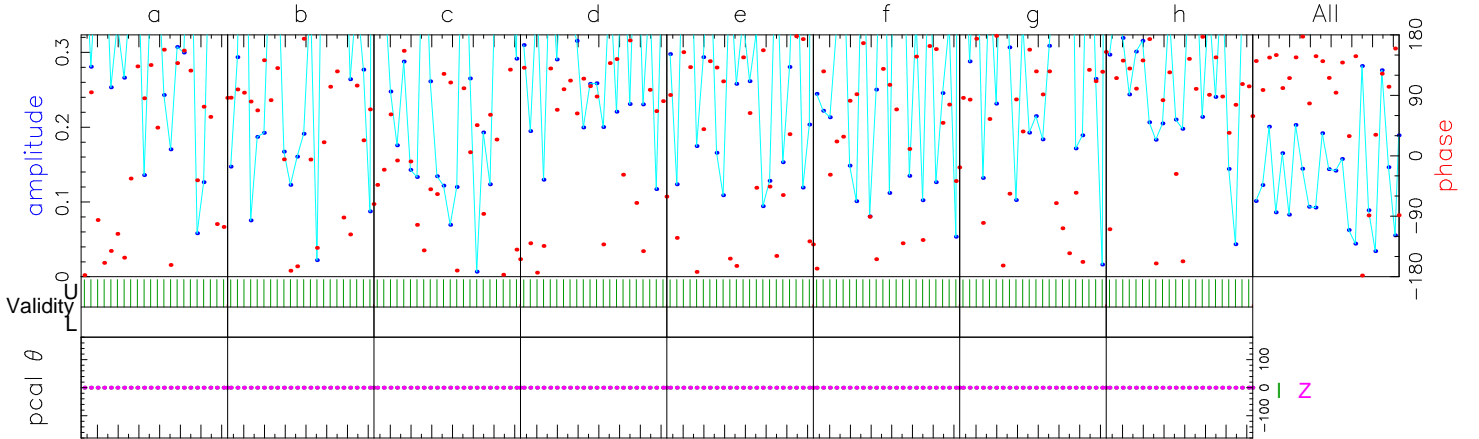
amp/frq (%) 71.9 59.1 Inc. frq. avg. 0.154 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

k: az 60.1 el 32.1 pa -73.4 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -11165.875 -2426.815 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/kZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/kZ.W.244.12BED8



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
	166.6	89.9	37.6	119.7	162.5	117.8	163.8	122.2	Phase	133.1
	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	27.9	400.6	346.4	415.1	121.1	474.5	362.4	433.1	Sbd box	402.3
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

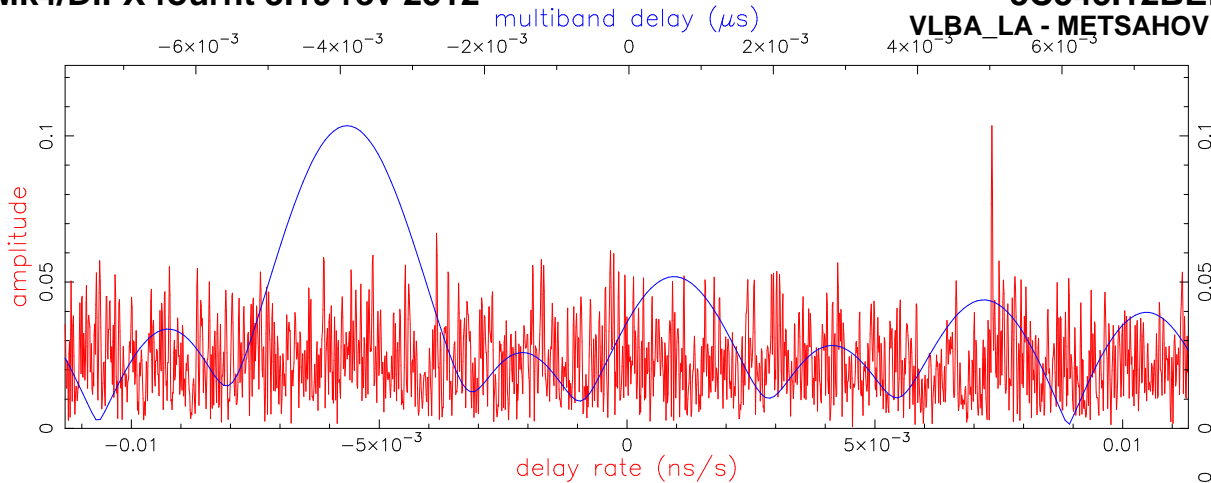
Group delay (usec)(sbd)	-2.13955634263E+03	Apriori delay (usec)	-2.14013096163E+03	Resid mbdelay (usec)	-3.50600E-03	+/-	1.9E-04
Sband delay (usec)	-2.13956332213E+03	Apriori clock (usec)	-9.2246437E-01	Resid sbdelay (usec)	5.67640E-01	+/-	1.5E-03
Phase delay (usec)	-2.14013095734E+03	Apriori clockrate (us/s)	-3.6776479E-07	Resid phdelay (usec)	4.29196E-06	+/-	6.3E-07
Delay rate (us/s)	1.42285729755E+00	Apriori rate (us/s)	1.42285974325E+00	Resid rate (us/s)	-2.44571E-06	+/-	2.7E-09
Total phase (deg)	120.5	Apriori accel (us/s/s)	-9.09270875951E-06	Resid phase (deg)	133.1	+/-	19.6

ph/seg (deg)	50.6	Theor.	47.1	Amplitude	0.108 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	67.8		47.1	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	49.1		27.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	49.3		48.5	Inc. seg. avg.	0.101	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
				Inc. frq. avg.	0.107	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
I: az 63.9 el 37.8 pa -72.0	Z: az 271.4 el 46.7 pa 40.3	u, v (fr/asec)	-10622.239 -2396.320			ion window (TEC)	0.00 0.00

Mk4/DiFX fourfit 3.19 rev 2512

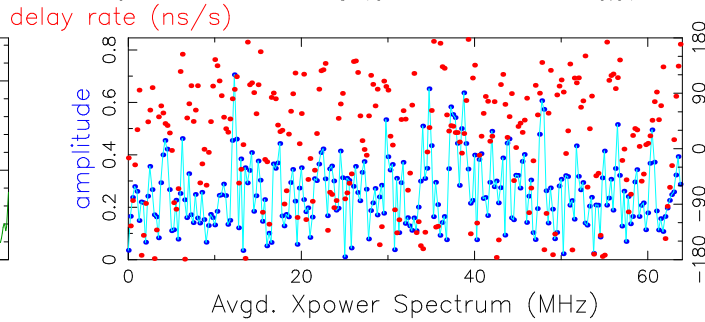
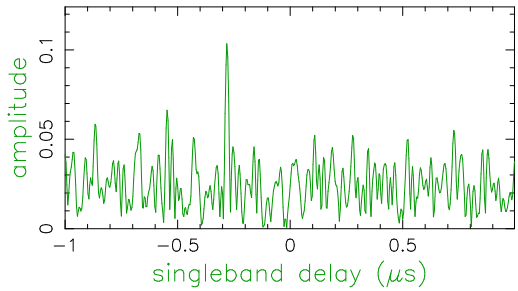
3C345.12BED8, No0001, IZ

VLBA_LA - METSAHOV, fgroup W, pol RR



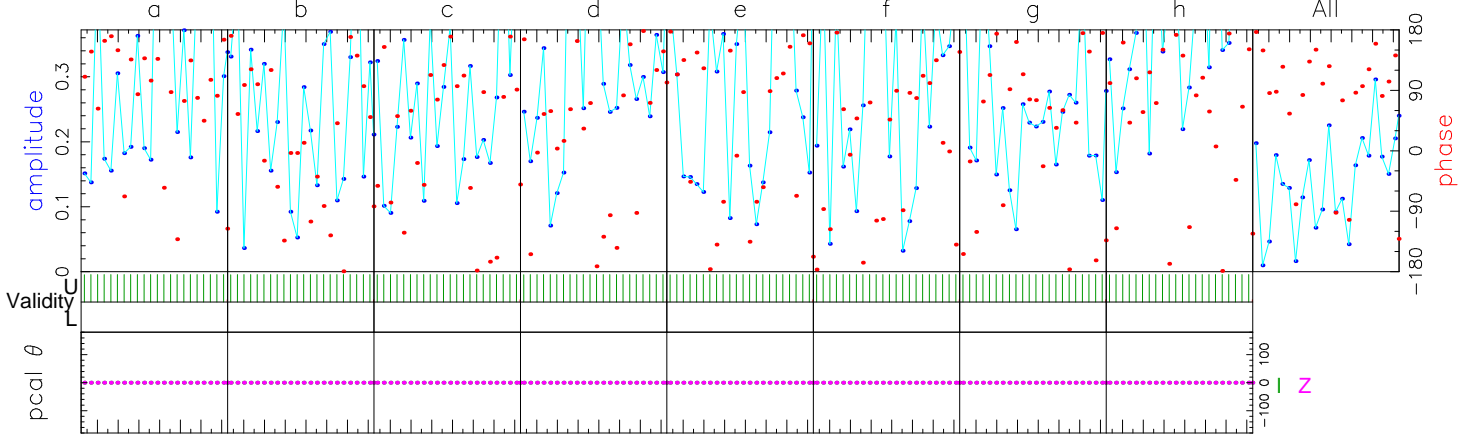
Fringe quality 0

SNR 5.7
 Int time 406.568
 Amp 0.124
 Phase 117.5
 PFD 9.3e-01
 Delays (us)
 SBD -0.280785
 MBD -0.003900
 Fringe rate (Hz)
 0.635084
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

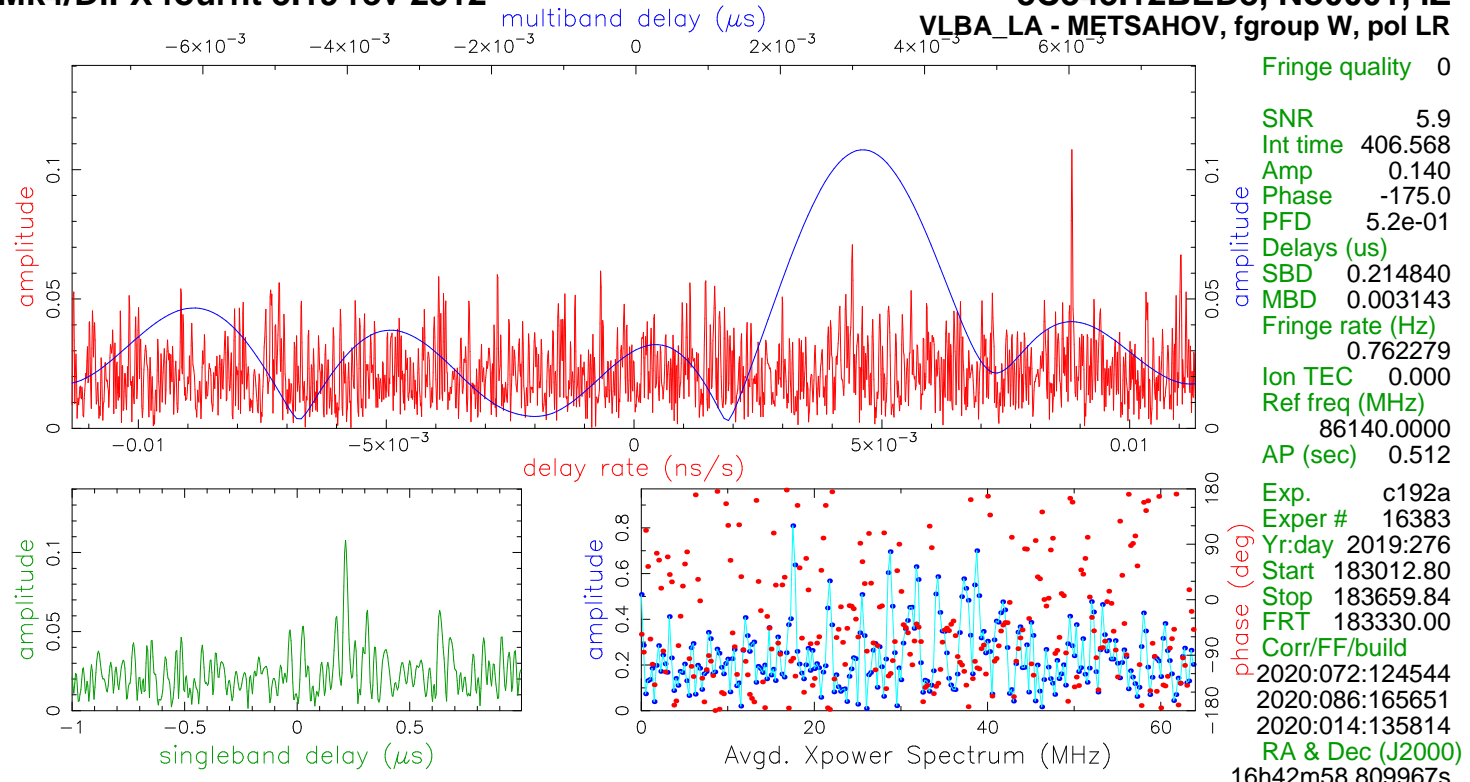


Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183012.80
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165645
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

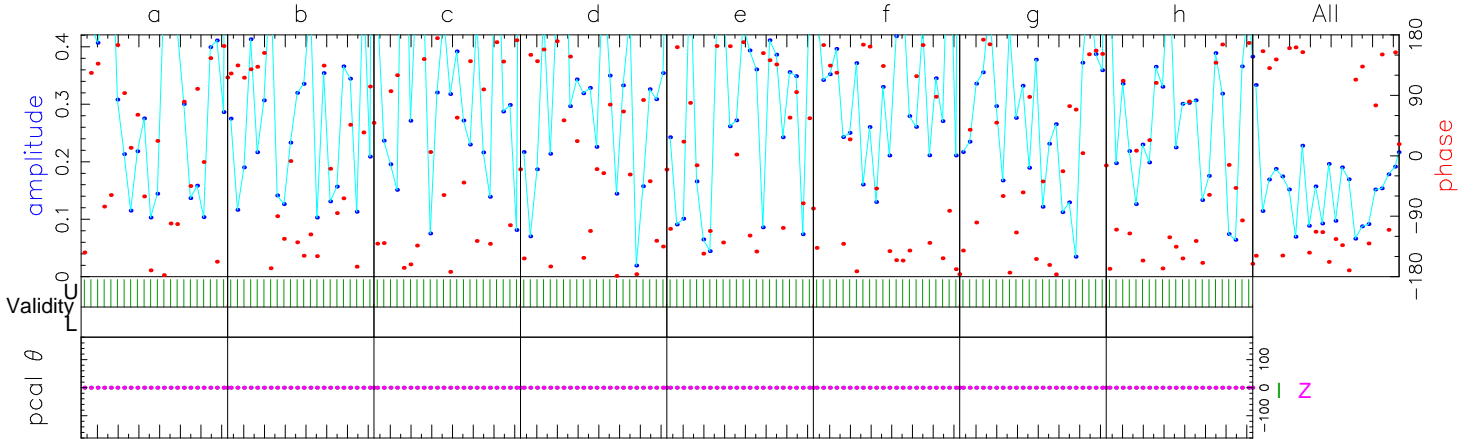
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.1404161185E+03									
Sband delay (usec)	-2.14041174638E+03									
Phase delay (usec)	-2.14013095784E+03									
Delay rate (us/s)	1.42286711595E+00									
Total phase (deg)			104.9							
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										
Chan ids										
Tracks										
Chan ids										
Tracks										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

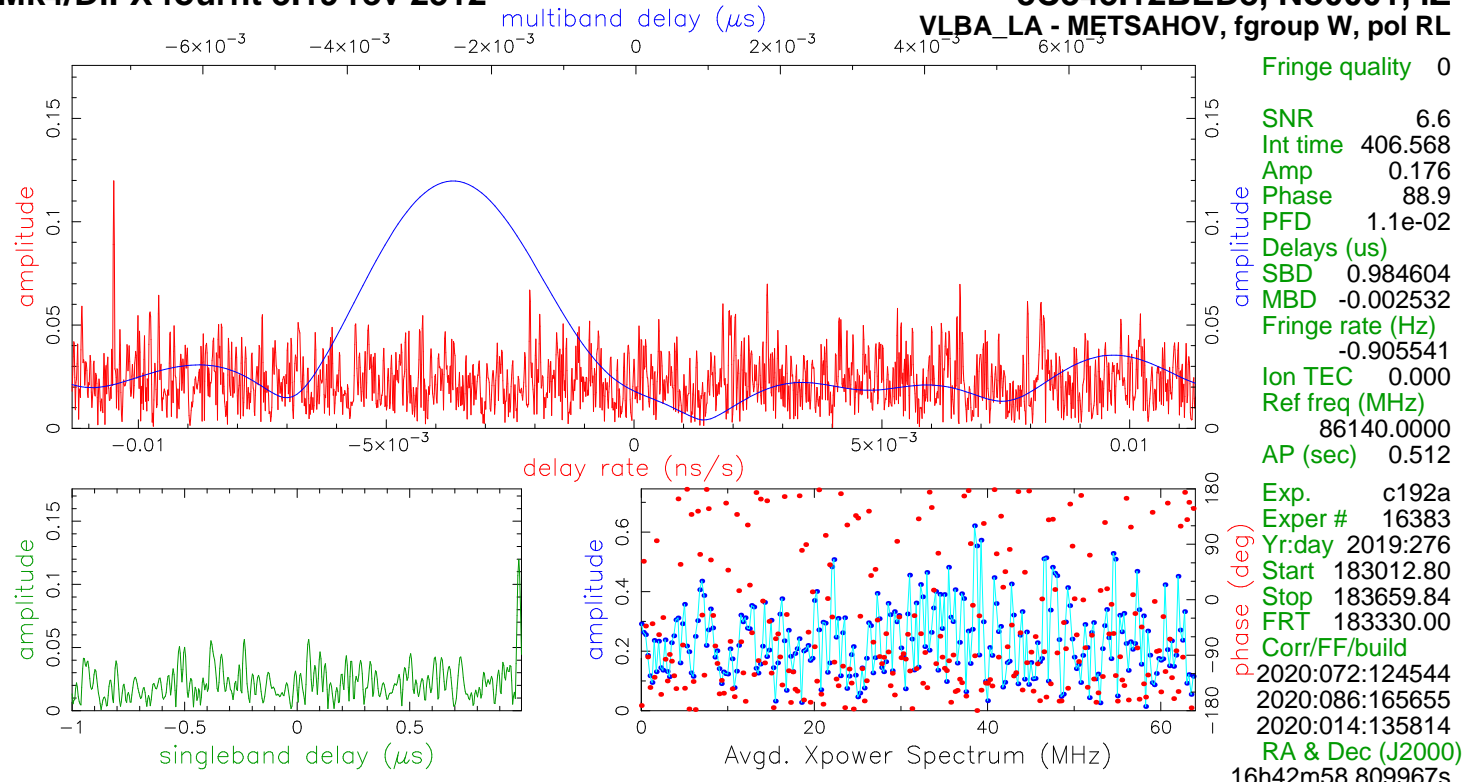


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

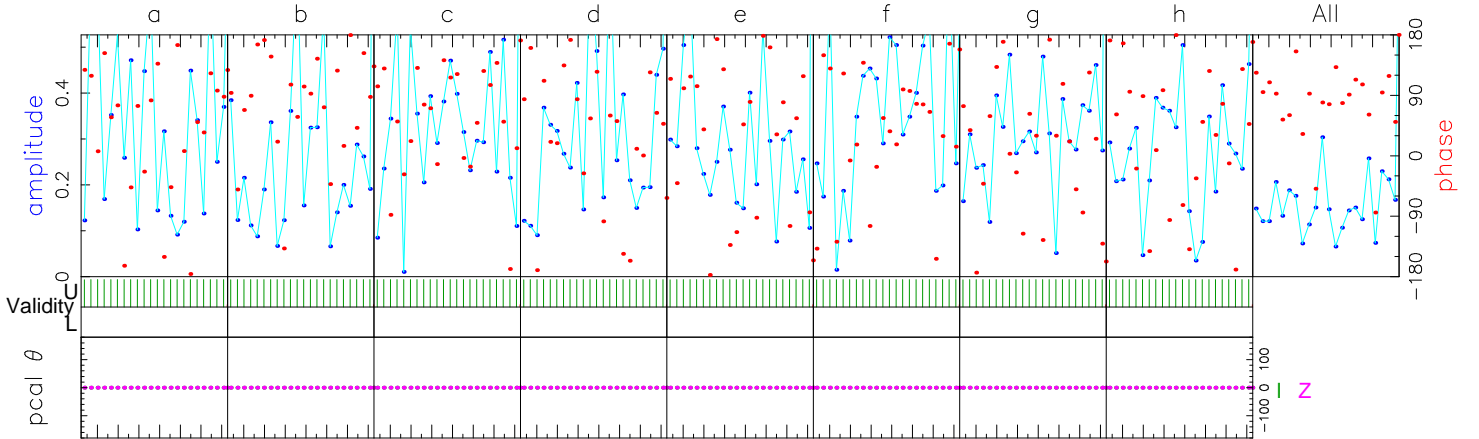


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-159.7	165.8	-166.7	142.6	155.5	-173.3	-177.5	-165.0	Phase	-175.0
	0.1	0.1	0.2	0.0	0.1	0.3	0.1	0.2	Ampl.	0.1
	300.0	233.8	312.1	38.3	16.9	312.1	26.4	78.1	Sbd box	312.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.13990906820E+03		Apriori delay (usec)	-2.14013096163E+03	Resid mbdelay (usec)	3.14343E-03	+/-	1.8E-04		
Sband delay (usec)	-2.13991612188E+03		Apriori clock (usec)	-9.2246437E-01	Resid sbdelay (usec)	2.14840E-01	+/-	1.5E-03		
Phase delay (usec)	-2.14013096728E+03		Apriori clockrate (us/s)	-3.6776479E-07	Resid phdelay (usec)	-5.64353E-06	+/-	6.2E-07		
Delay rate (us/s)	1.42286859255E+00		Apriori rate (us/s)	1.42285974325E+00	Resid rate (us/s)	8.84930E-06	+/-	2.6E-09		
Total phase (deg)		-187.6	Apriori accel (us/s/s)	-9.09270875951E-06	Resid phase (deg)	-175.0	+/-	19.3		

	RMS	Theor.	Amplitude	0.140 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	49.0	46.3	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	69.7	80.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	24.0	27.3	Inc. seg. avg.	0.149	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	51.5	47.6	Inc. frq. avg.	0.130	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		



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

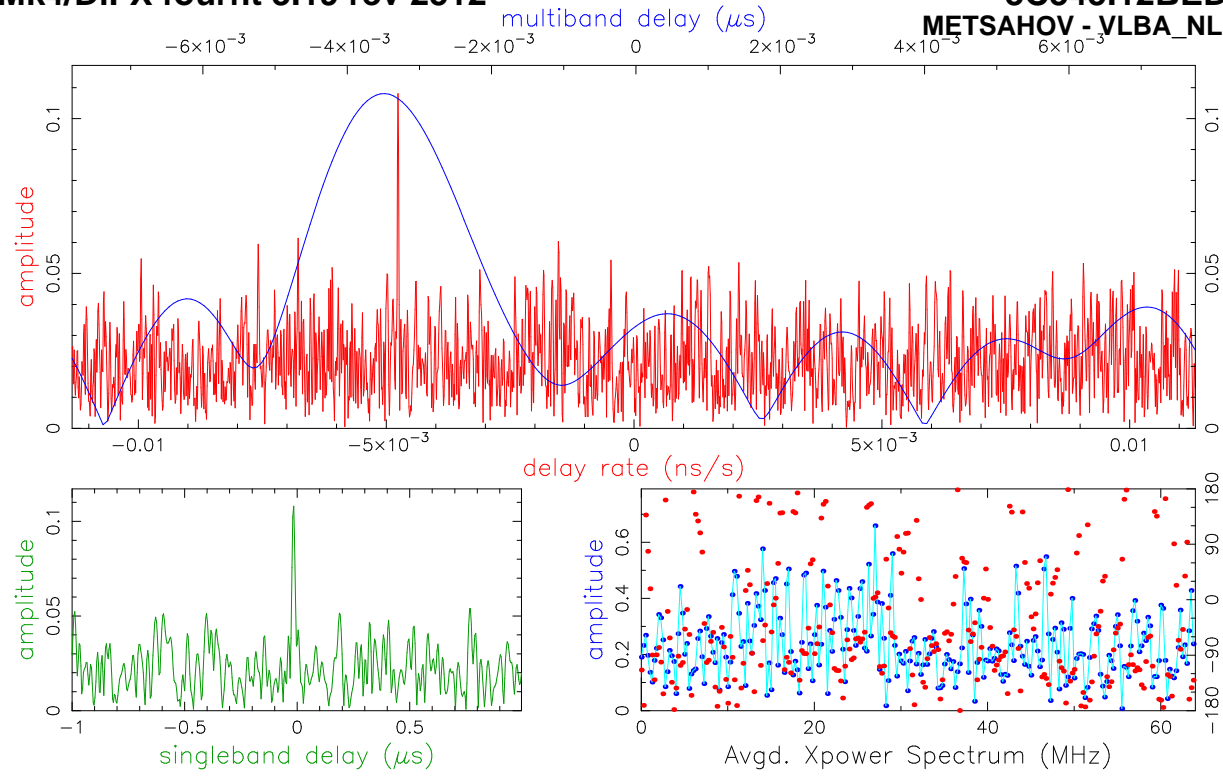


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
86.5	96.1	80.5	75.2	130.7	81.9	46.6	91.4	88.9	Phase	88.9
0.2	0.2	0.3	0.2	0.2	0.2	0.0	0.1	0.2	Ampl.	0.2
172.4	509.1	508.2	289.2	242.1	268.9	178.8	25.0	509.1	Sbd box	509.1
U/L 795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
I 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:Z 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Z 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z 1000	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.13914911858E+03		Apriori delay (usec)	-2.14013096163E+03	Resid mbdelay (usec)	-2.53195E-03	+/-	1.6E-04		
Sband delay (usec)	-2.13914635763E+03		Apriori clock (usec)	-9.2246437E-01	Resid sbdelay (usec)	9.84604E-01	+/-	1.3E-03		
Phase delay (usec)	-2.14013095876E+03		Apriori clockrate (us/s)	-3.6776479E-07	Resid phdelay (usec)	2.86725E-06	+/-	5.6E-07		
Delay rate (us/s)	1.42284923081E+00		Apriori rate (us/s)	1.42285974325E+00	Resid rate (us/s)	-1.05124E-05	+/-	2.4E-09		
Total phase (deg)		76.3	Apriori accel (us/s/s)	-9.09270875951E-06	Resid phase (deg)	88.9	+/-	17.3		

ph/seg (deg) 55.2 41.6 Search (2048X32) 0.112 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.1 72.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.5 24.5 Inc. seg. avg. 0.183 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 43.1 42.8 Inc. frq. avg. 0.169 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 I: az 63.9 el 37.8 pa -72.0 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -10622.239 -2396.320 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/IZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/IZ.W.308.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, Zn
 METSAHOV - VLBA_NL, fgroup W, pol LL

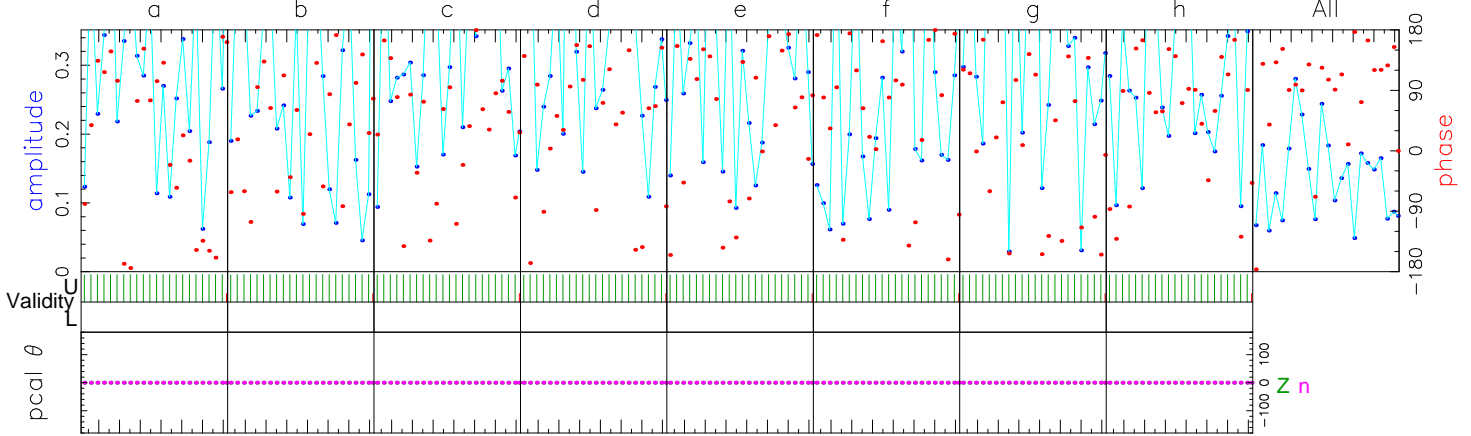


Fringe quality 0

SNR 6.0
 Int time 410.457
 Amp 0.117
 Phase 111.4
 PFD 3.5e-01
 Delays (us)
 SBD -0.016618
 MBD -0.003520
 Fringe rate (Hz)
 -0.411088
 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



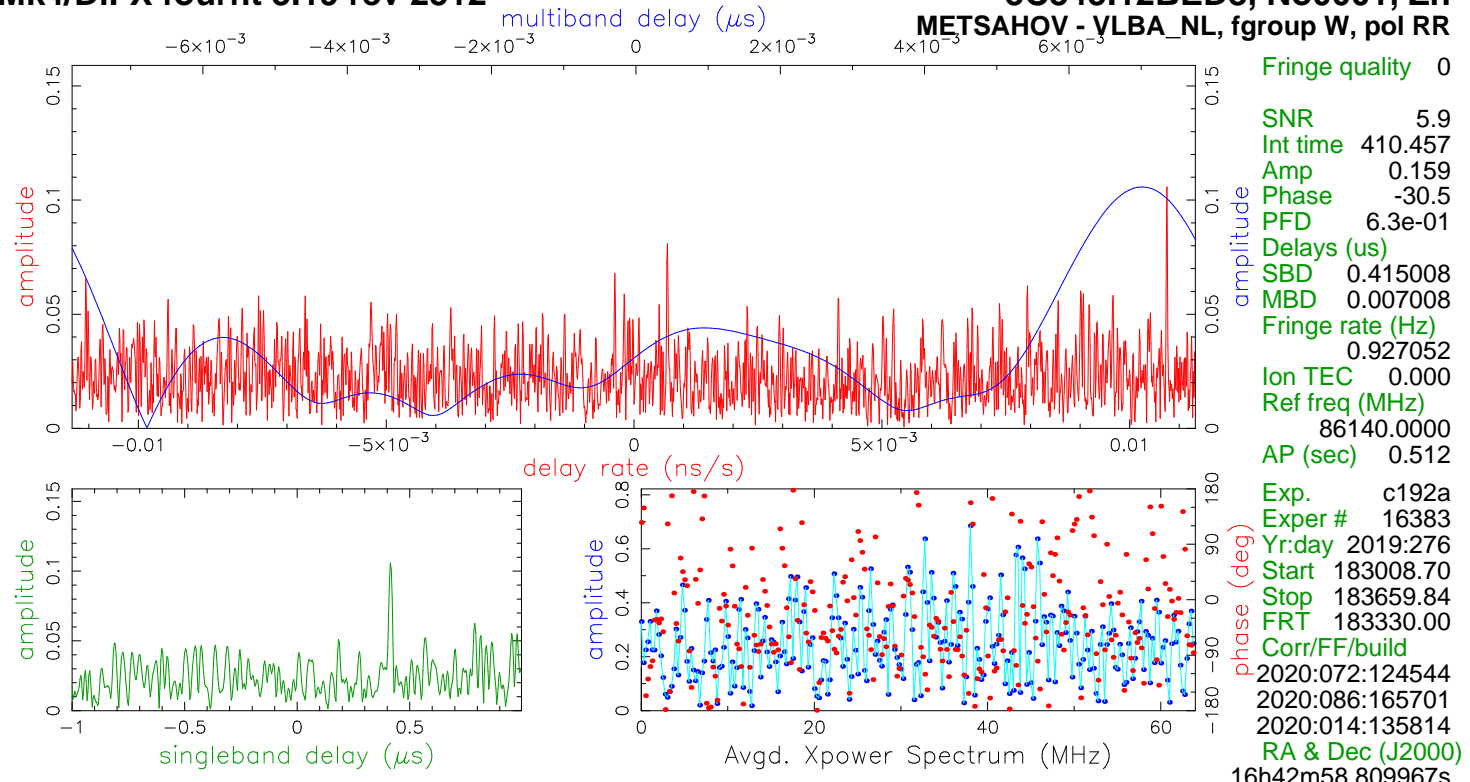
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.24726966143E+03	Apriori delay (usec)	-1.24725051616E+03	Resid mbdelay (usec)	-3.52027E-03	+/-	1.8E-04
Sband delay (usec)	-1.24726713416E+03	Apriori clock (usec)	-2.6293127E+01	Resid sbdelay (usec)	-1.66180E-02	+/-	1.4E-03
Phase delay (usec)	-1.24725051256E+03	Apriori clockrate (us/s)	-1.1793070E-07	Resid phdelay (usec)	3.59265E-06	+/-	6.1E-07
Delay rate (us/s)	-1.23492178259E+00	Apriori rate (us/s)	-1.23491701027E+00	Resid rate (us/s)	-4.77232E-06	+/-	2.6E-09
Total phase (deg)	-54.8	Apriori accel (us/s/s)	2.10846431478E-05	Resid phase (deg)	111.4	+/-	19.0

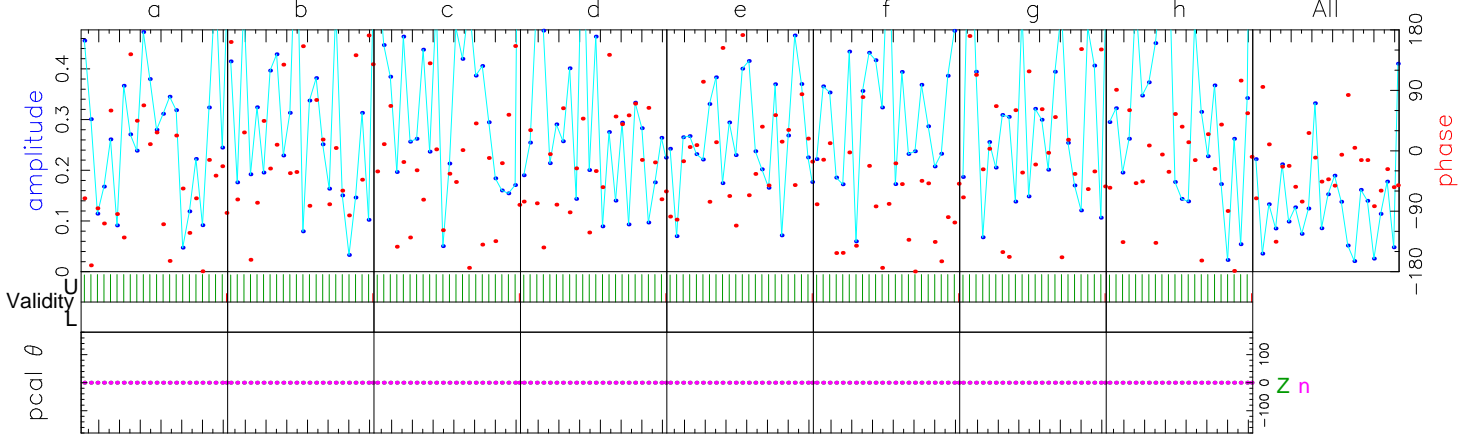
ph/seg (deg)	56.8	Theor.	45.6	Amplitude	0.117 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	63.2		79.6	Search (2048X32)	0.107	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	36.4		26.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	24.7		46.9	Inc. seg. avg.	0.114	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.119	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 271.4 el 46.7 pa 40.3 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 9241.054 2643.159 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Zn..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Zn.W.315.12BED8

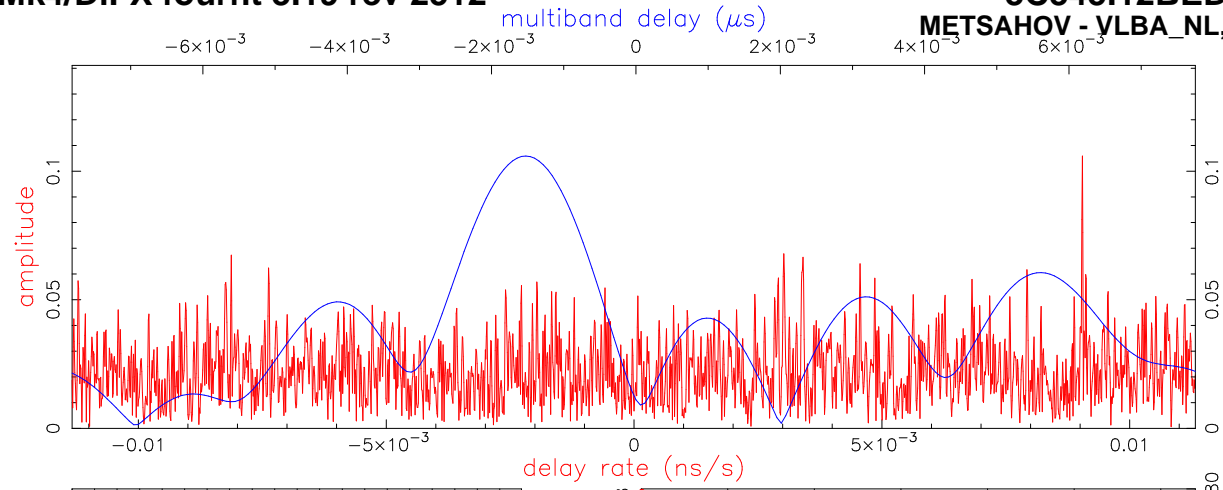


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

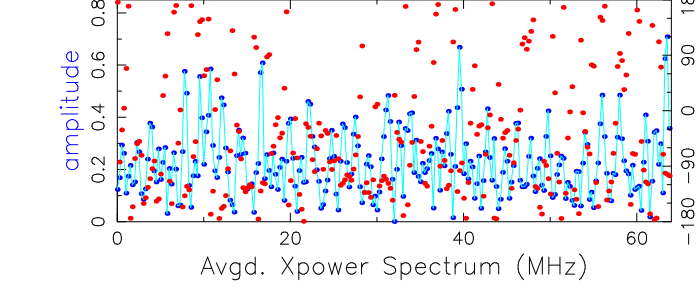
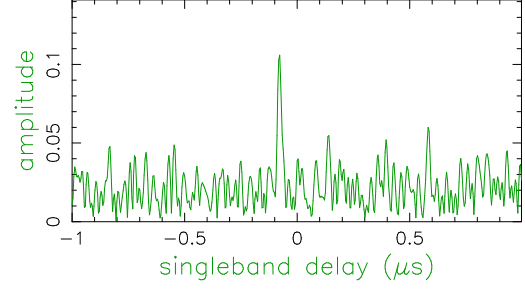


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-44.4	-14.2	-31.3	-20.6	-16.8	-71.5	-15.0	-13.0	Phase	-30.5
	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	106.9	13.8	510.7	224.7	179.0	204.3	154.5	363.1	Sbd box	363.2
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.24683725794E+03		Apriori delay (usec)		-1.24725051616E+03		Resid mbdelay (usec)		7.00822E-03	+/- 1.8E-04
Sband delay (usec)	-1.24683550766E+03		Apriori clock (usec)		-2.6293127E+01		Resid sbdelay (usec)		4.15008E-01	+/- 1.5E-03
Phase delay (usec)	-1.24725051714E+03		Apriori clockrate (us/s)		-1.1793070E-07		Resid phdelay (usec)		-9.84630E-07	+/- 6.3E-07
Delay rate (us/s)	-1.23490624812E+00		Apriori rate (us/s)		-1.23491701027E+00		Resid rate (us/s)		1.07622E-05	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.10846431478E-05		Resid phase (deg)		-30.5	+/- 19.5

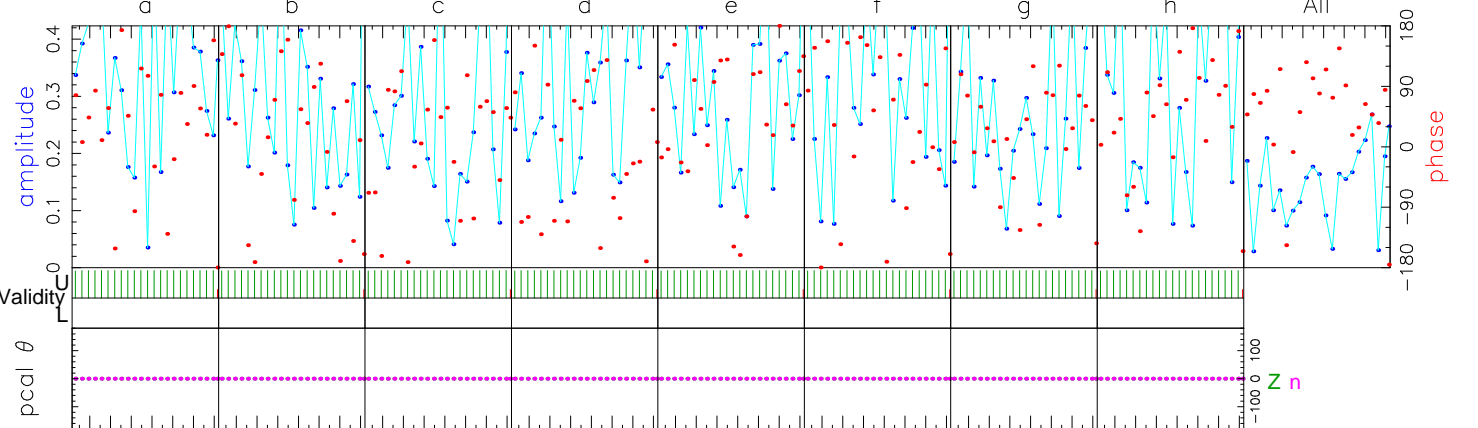
ph/seg (deg) 50.4 46.7 Search (2048X32) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.6 81.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.3 27.5 Inc. seg. avg. 0.145 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 39.2 48.0 Inc. frq. avg. 0.152 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 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 9241.054 2643.159 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Zn..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Zn.W.332.12BED8



Fringe quality 0
 SNR 5.9
 Int time 410.457
 Amp 0.141
 Phase 73.2
 PFD 5.5e-01
 Delays (us)
 SBD -0.079467
 MBD -0.001533
 Fringe rate (Hz)
 0.779977
 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
 2020:086:165704
 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

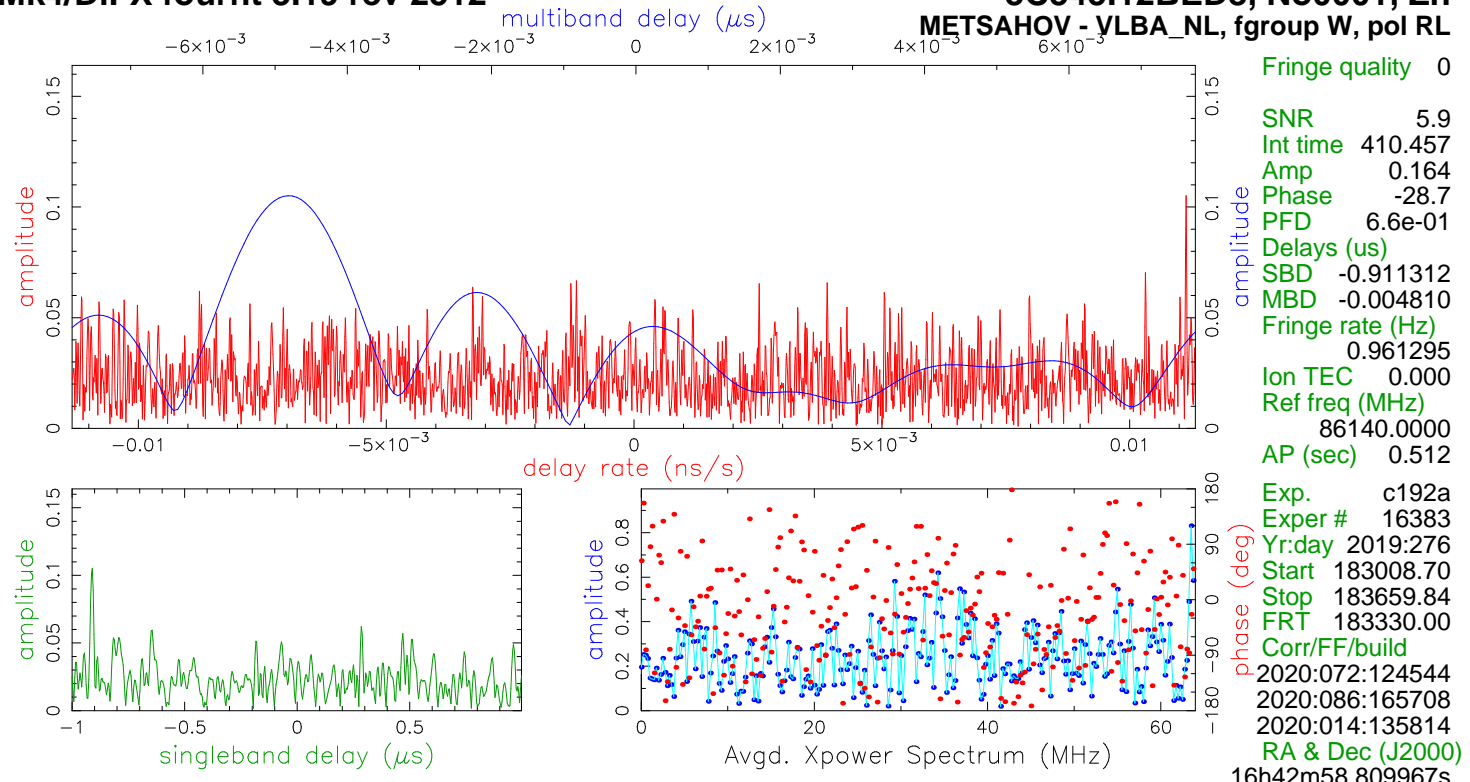


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.24733017452E+03									
Sband delay (usec)	-1.24732998316E+03									
Phase delay (usec)	-1.24725051379E+03									
Delay rate (us/s)	-1.23490795552E+00									
Total phase (deg)			-93.0							
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)									73.2	+/- 19.3
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
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								

Z: az 271.4 el 46.7 pa 40.3 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 9241.054 2643.159 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Zn..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Zn.W.344.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, Zn
 METSAHOV - VLBA_NL, fgroup W, pol RL



Fringe quality 0

SNR 5.9

Int time 410.457

Amp 0.164

Phase -28.7

PFD 6.6e-01

Delays (us)

SBD -0.911312

MBD -0.004810

Fringe rate (Hz)

0.961295

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

2020:086:165708

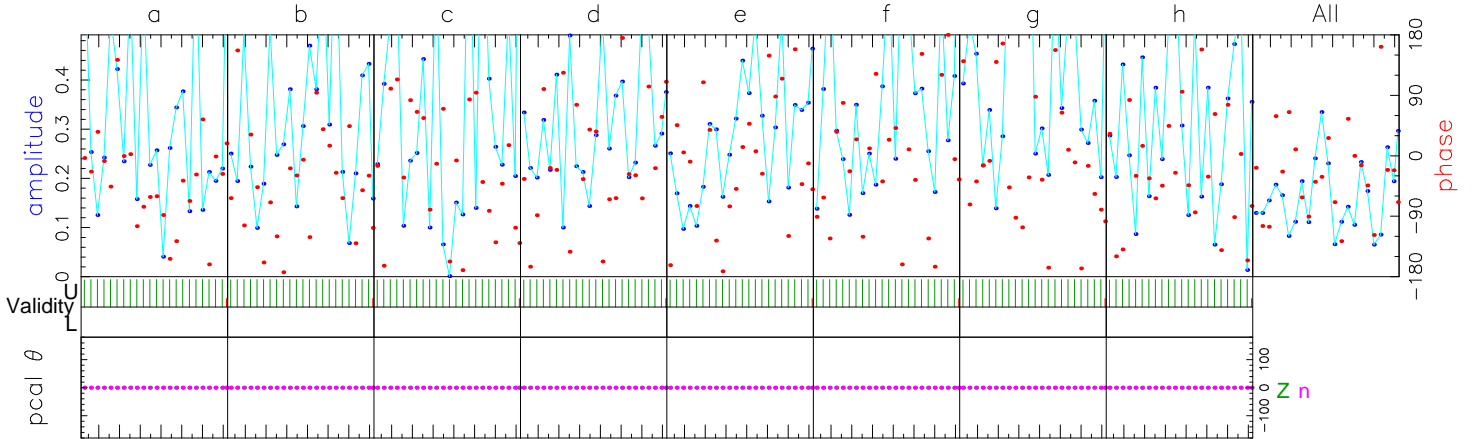
2020:014:135814

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
	-35.5	-44.7	25.8	-40.6	9.0	-17.3	-51.7	-24.1	Phase	-28.7
	0.3	0.2	0.1	0.1	0.1	0.1	0.3	0.2	Ampl.	0.2
	90.9	376.9	239.7	388.2	371.4	484.3	22.6	334.1	Sbd box	23.7
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	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.24816157619E+03		Apriori delay (usec)		-1.24725051616E+03		Resid mbdelay (usec)		-4.81003E-03	+/- 1.8E-04
Sband delay (usec)	-1.24816182791E+03		Apriori clock (usec)		-2.6293127E+01		Resid sbdelay (usec)		-9.11312E-01	+/- 1.5E-03
Phase delay (usec)	-1.24725051708E+03		Apriori clockrate (us/s)		-1.1793070E-07		Resid phdelay (usec)		-9.26015E-07	+/- 6.3E-07
Delay rate (us/s)	-1.23490585059E+00		Apriori rate (us/s)		-1.23491701027E+00		Resid rate (us/s)		1.11597E-05	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		2.10846431478E-05		Resid phase (deg)		-28.7	+/- 19.5

RMS Theor. Amplitude 0.164 +/- 0.028

ph/seg (deg) 65.1 46.8 Search (2048X32) 0.102

amp/seg (%) 84.2 81.7 Interp. 0.000

ph/frq (deg) 30.3 27.6 Inc. seg. avg. 0.188

amp/frq (%) 45.1 48.2 Inc. frq. avg. 0.159

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

Pcal rate: 0.000E+00, 0.000E+00 (us/s)

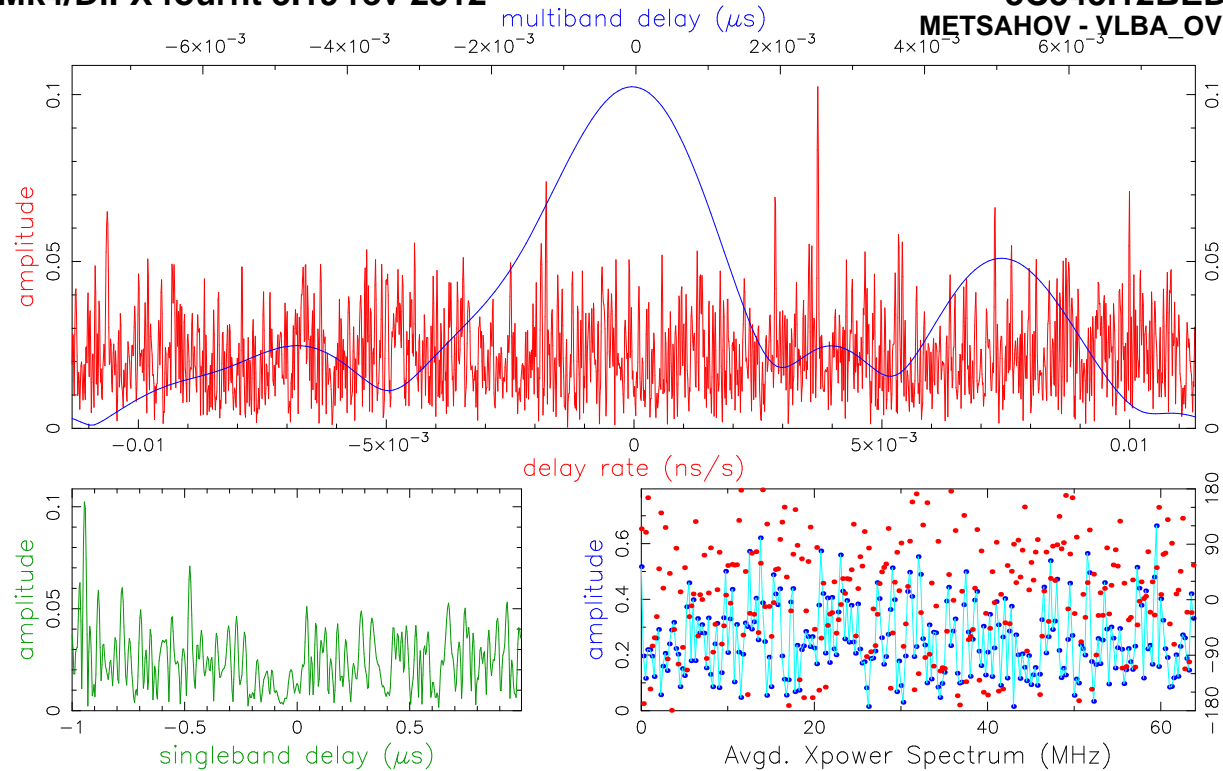
Bits/sample: 2x2 SampCntNorm: enabled sb window (us) -1.000 1.000

Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011

Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

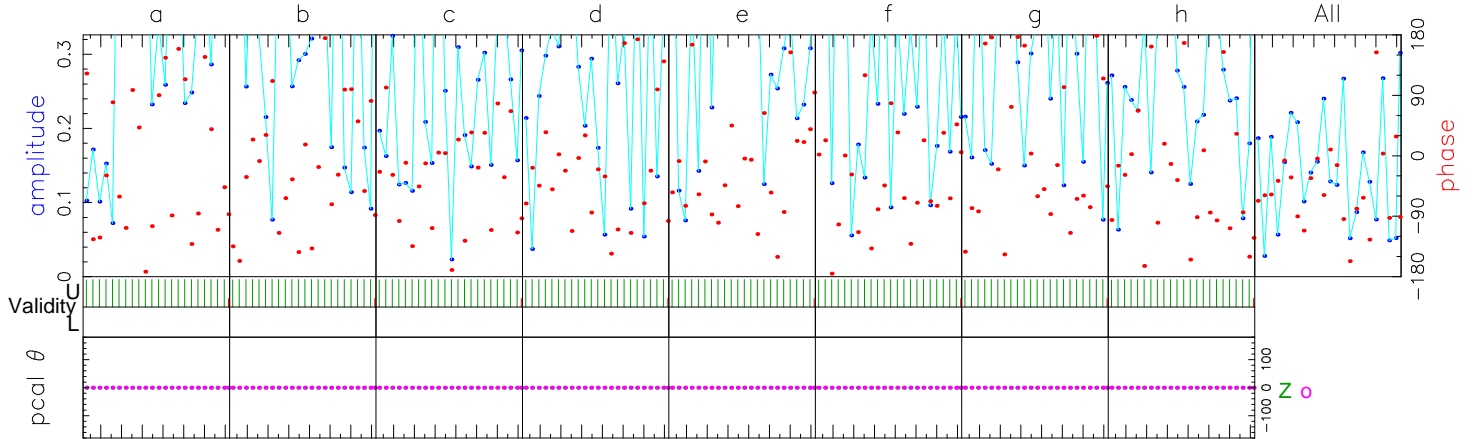
Z: az 271.4 el 46.7 pa 40.3 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 9241.054 2643.159 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Zn..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Zn.W.354.12BED8



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

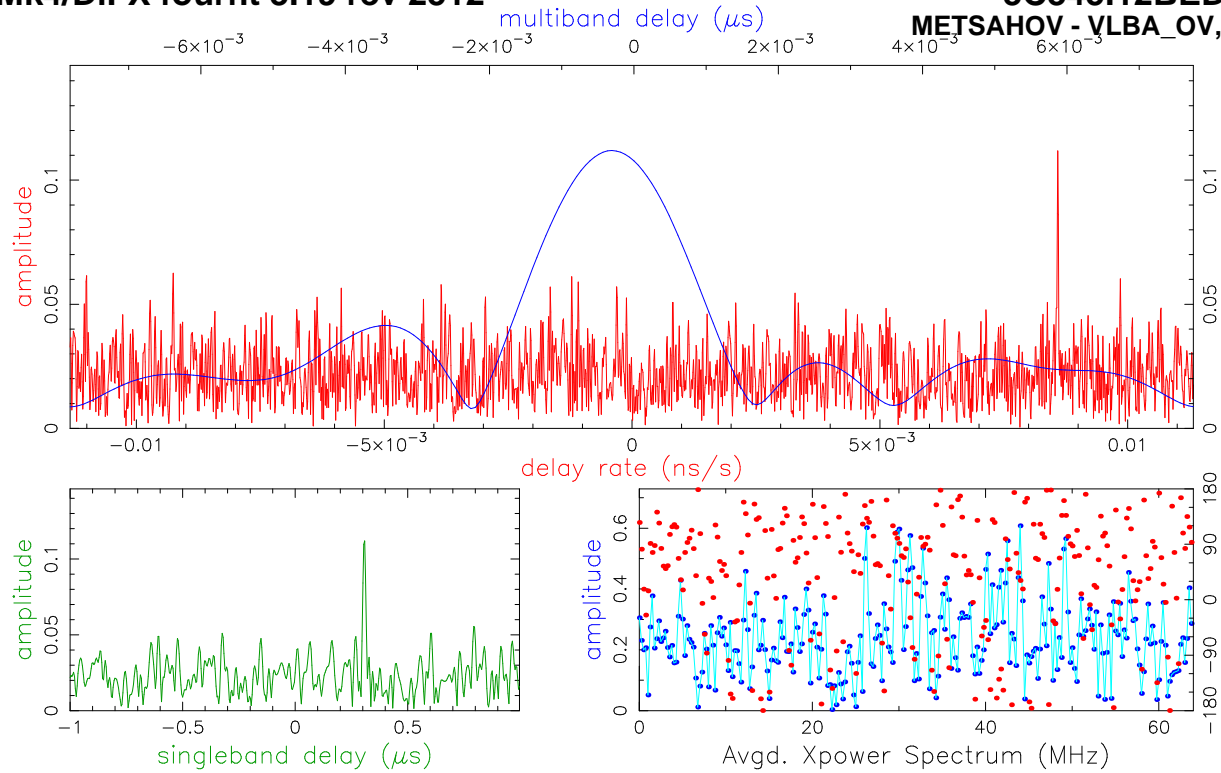


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-119.2	-51.7	-11.3	-68.7	-39.1	-25.4	-83.1	-71.3	Phase	-52.9
	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	255.0	140.1	369.2	87.0	441.8	378.7	453.1	201.4	Sbd box	15.4
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	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	
									Chan ids	
									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

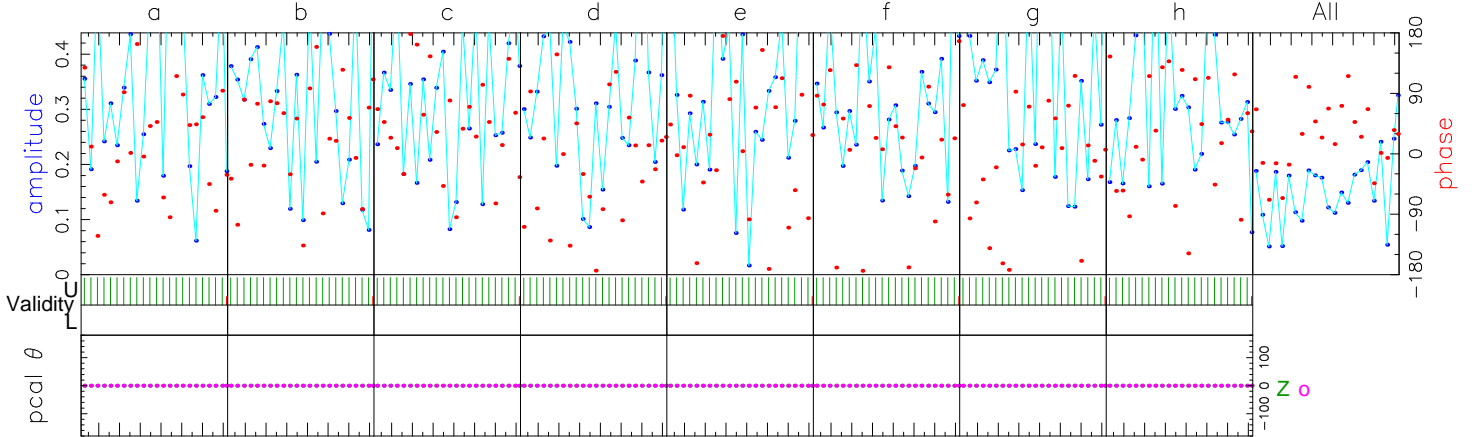


Fringe quality 0

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

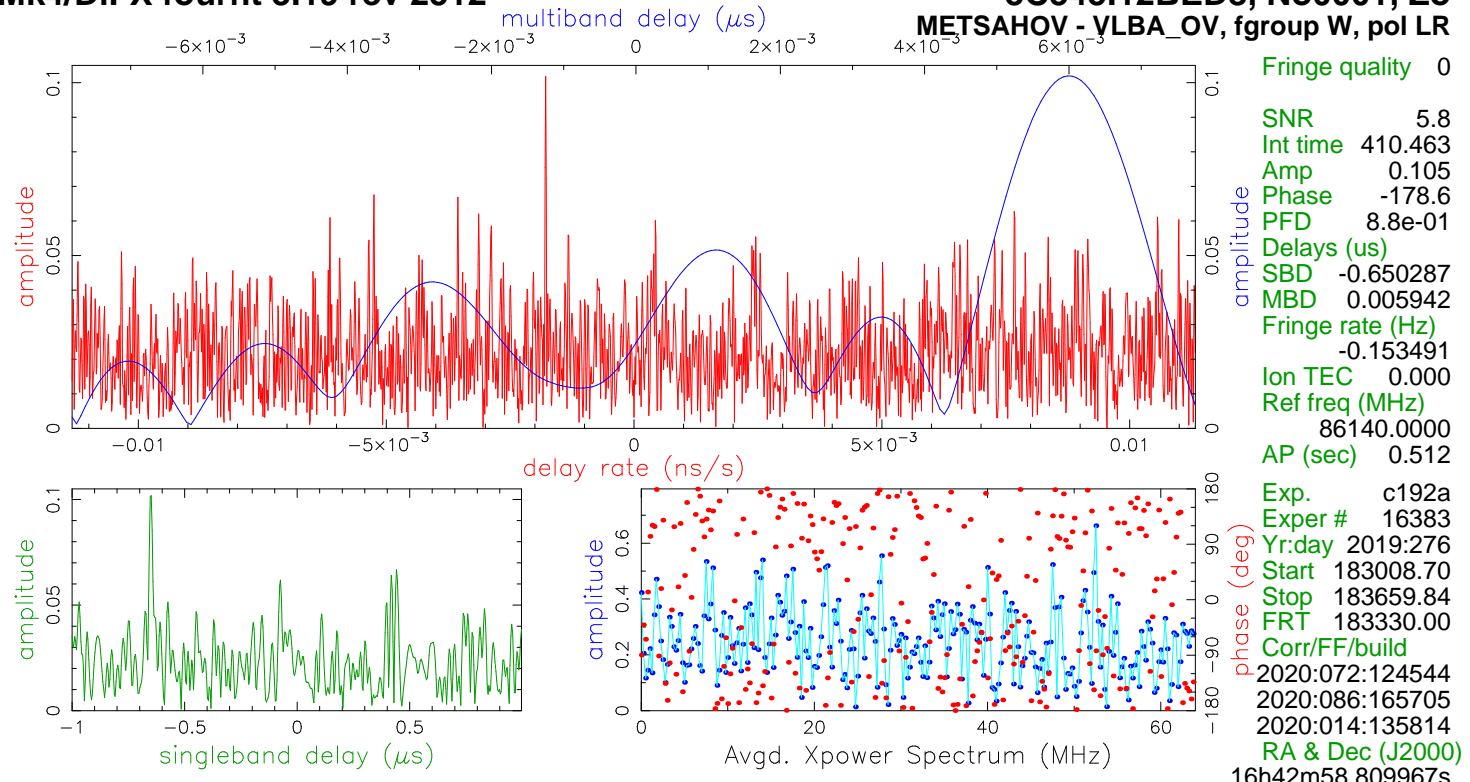


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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

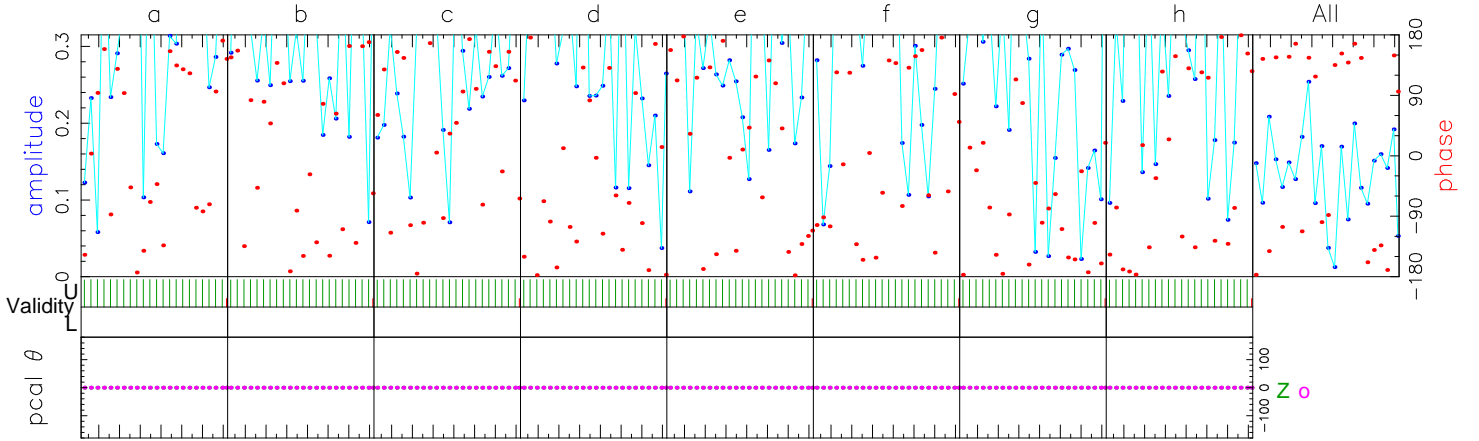
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Zo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Zo.W.336.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

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



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
	-178.9	-178.1	146.2	-157.7	158.9	-171.8	-121.9	177.6		-178.6
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2		0.1
	207.2	271.2	359.5	212.2	199.6	491.9	36.7	398.0		90.5
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		4.55197632641E+03	Apriori delay (usec)		4.55262663482E+03	Resid mbdelay (usec)		5.94159E-03	+/- 1.9E-04	
Sband delay (usec)		4.55197634757E+03	Apriori clock (usec)		-1.6447569E+01	Resid sbdelay (usec)		-6.50287E-01	+/- 1.5E-03	
Phase delay (usec)		4.55262662907E+03	Apriori clockrate (us/s)		1.5311808E-08	Resid phdelay (usec)		-5.75798E-06	+/- 6.4E-07	
Delay rate (us/s)		-1.46577353989E+00	Apriori rate (us/s)		-1.46577175801E+00	Resid rate (us/s)		-1.78188E-06	+/- 2.7E-09	
Total phase (deg)			-62.0	Apriori accel (us/s/s)		-5.29754221444E-06	Resid phase (deg)		-178.6	+/- 19.9

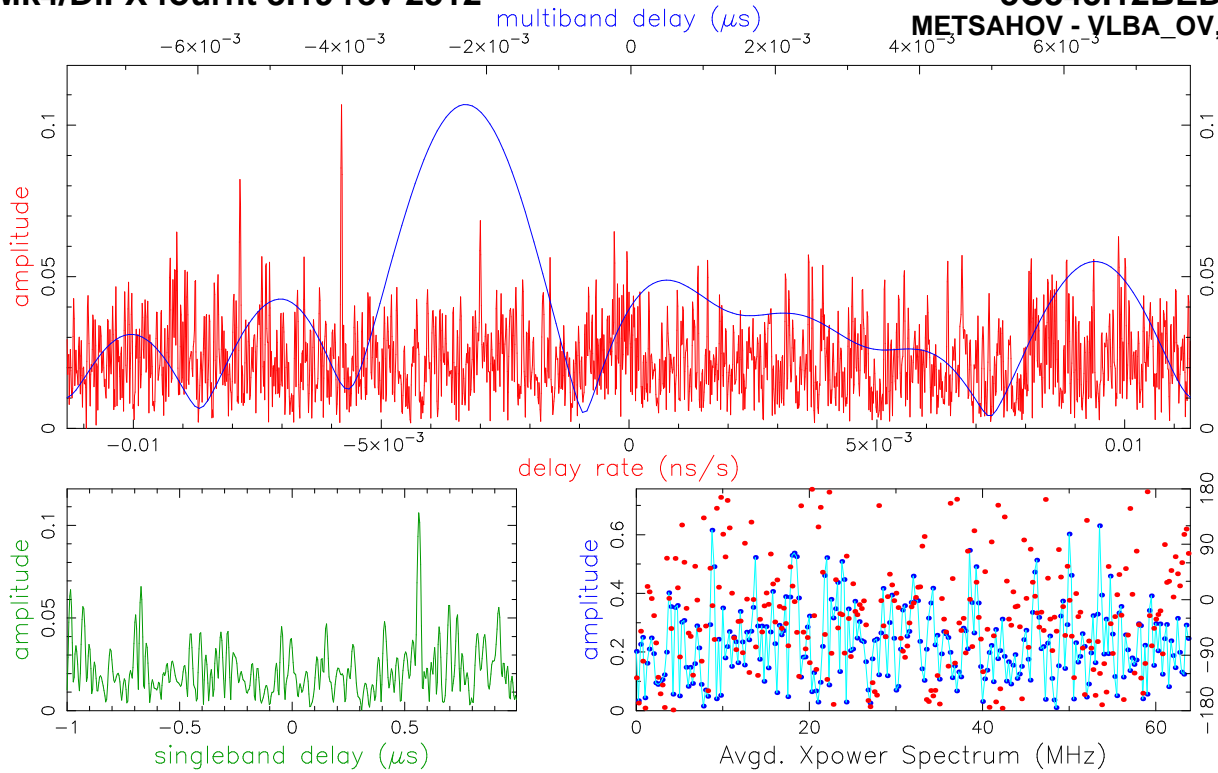
	RMS	Theor.	Amplitude	0.105 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	46.7	47.7	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	62.3	83.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	30.2	28.1	Inc. seg. avg.	0.103	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	36.1	49.1	Inc. frq. avg.	0.099	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

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.349.12BED8

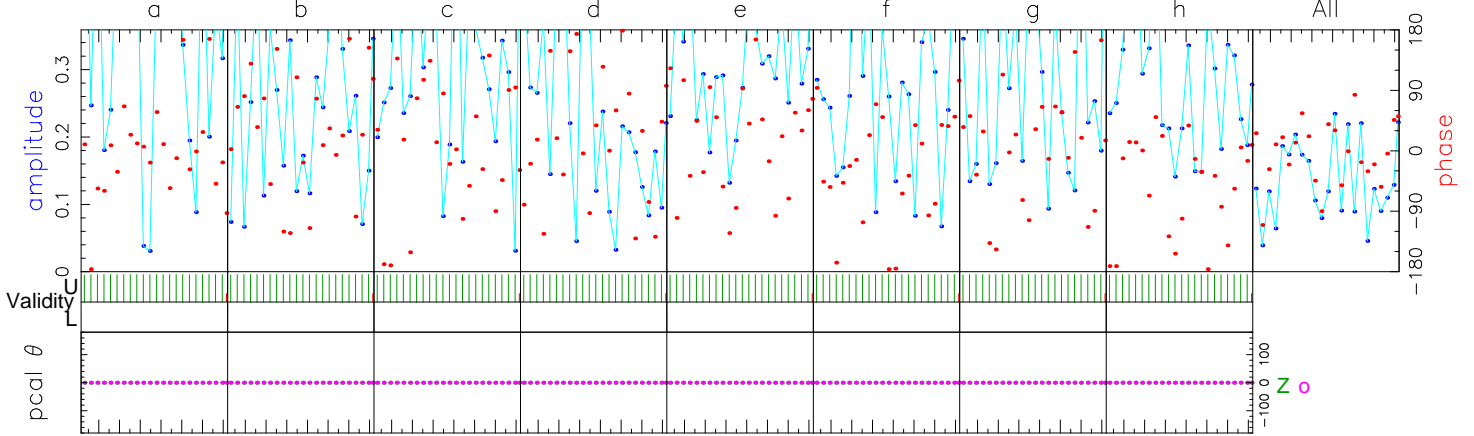
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, Zo
 METSAHOV - VLBA_OV, fgroup W, pol RL



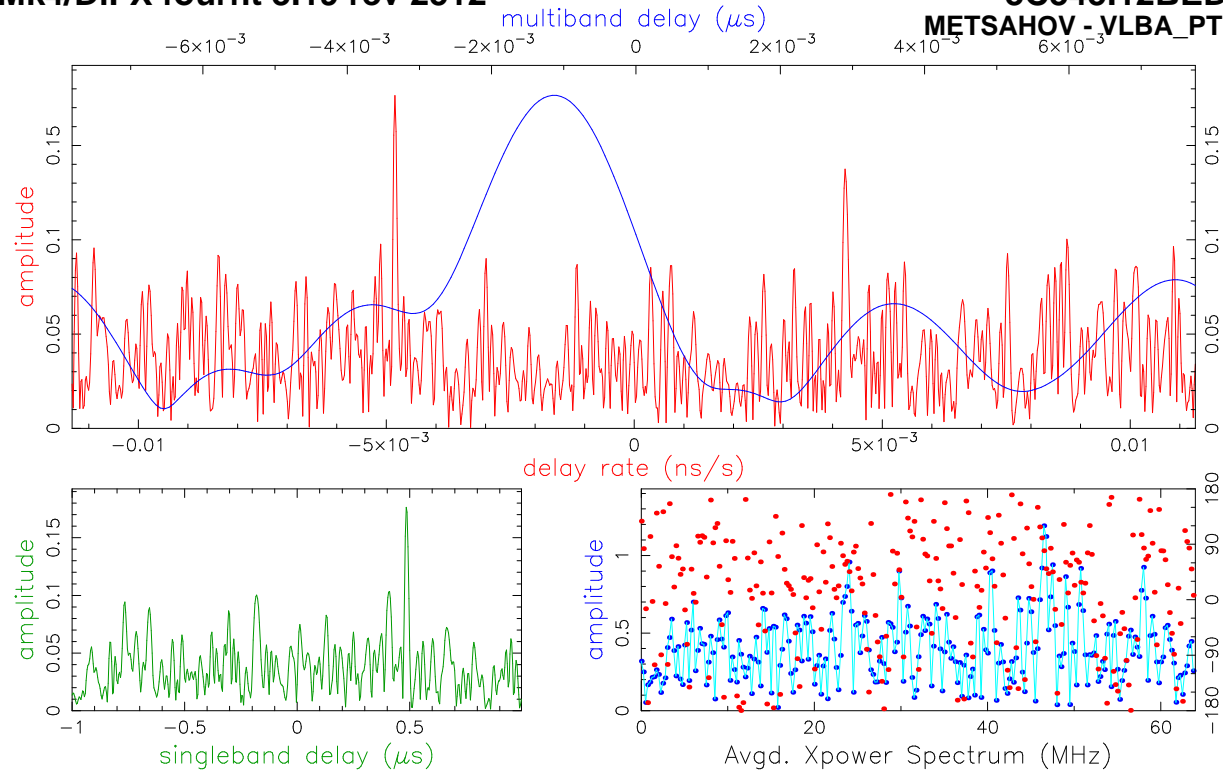
Fringe quality 0
 SNR 5.9
 Int time 410.463
 Amp 0.120
 Phase 5.2
 PFD 5.3e-01
 Delays (us)
 SBD 0.563358
 MBD -0.002253
 Fringe rate (Hz)
 -0.500847
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165708
 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		
	-5.8	35.1	45.5	-34.7	24.5	-9.1	24.9	-21.0	Phase	5.2		
	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1		
	402.1	242.1	233.8	1.5	78.2	291.1	353.7	491.3	Sbd box	401.2		
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	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)	4.55318688218E+03		Apriori delay (usec)		4.55262663482E+03		Resid mbdelay (usec)		-2.25265E-03	+/- 1.8E-04		
Sband delay (usec)	4.55318999332E+03		Apriori clock (usec)		-1.6447569E+01		Resid sbdelay (usec)		5.63358E-01	+/- 1.5E-03		
Phase delay (usec)	4.55262663499E+03		Apriori clockrate (us/s)		1.5311808E-08		Resid phdelay (usec)		1.66712E-07	+/- 6.2E-07		
Delay rate (us/s)	-1.46577757234E+00		Apriori rate (us/s)		-1.46577175801E+00		Resid rate (us/s)		-5.81433E-06	+/- 2.6E-09		
Total phase (deg)	121.7		Apriori accel (us/s/s)		-5.29754221444E-06		Resid phase (deg)		5.2	+/- 19.3		
	RMS	Theor.	Amplitude	0.120 +/- 0.020		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	47.1	46.3	Search (2048X32)	0.104		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	58.1	80.8	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	31.3	27.3	Inc. seg. avg.	0.112		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	47.9	47.6	Inc. frq. avg.	0.117		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
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.358.12BED8

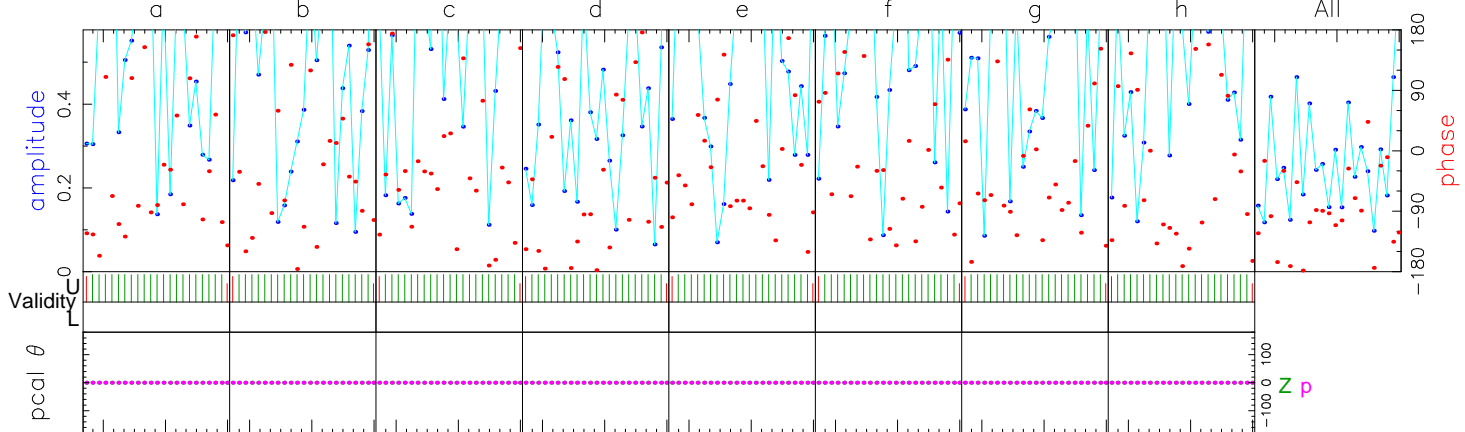


Fringe quality 0

SNR 5.7
 Int time 138.657
 Amp 0.192
 Phase -88.1
 PFD 6.9e-01
 Delays (us)
 SBD 0.485756
 MBD -0.001084
 Fringe rate (Hz)
 -0.417183
 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
 2020:086:165657
 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

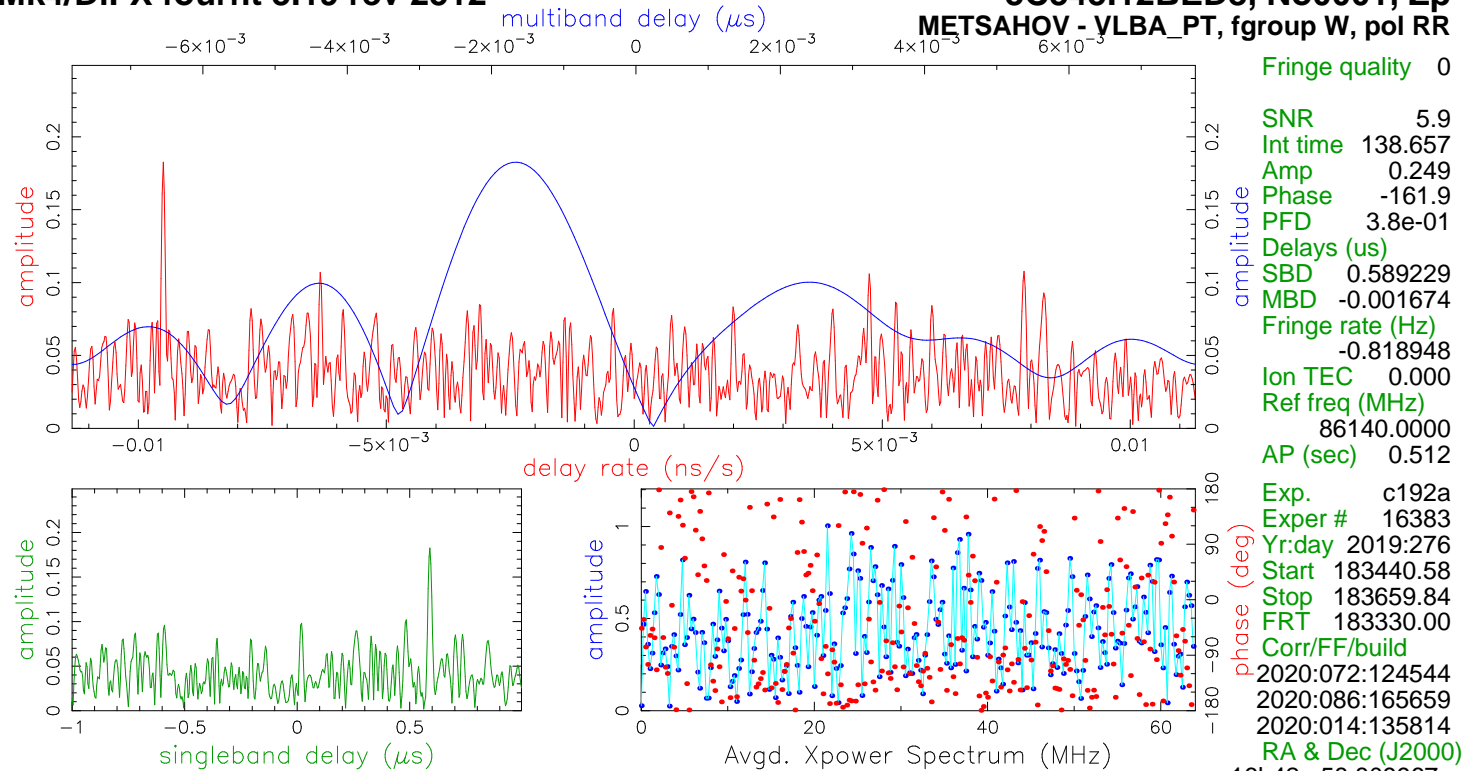


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-116.1	-94.7	-53.4	-133.5	-57.9	-75.5	-81.7	-131.6	Phase	-88.1
	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
	215.8	399.6	271.8	49.1	305.0	23.4	131.5	61.0	Sbd box	381.4
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

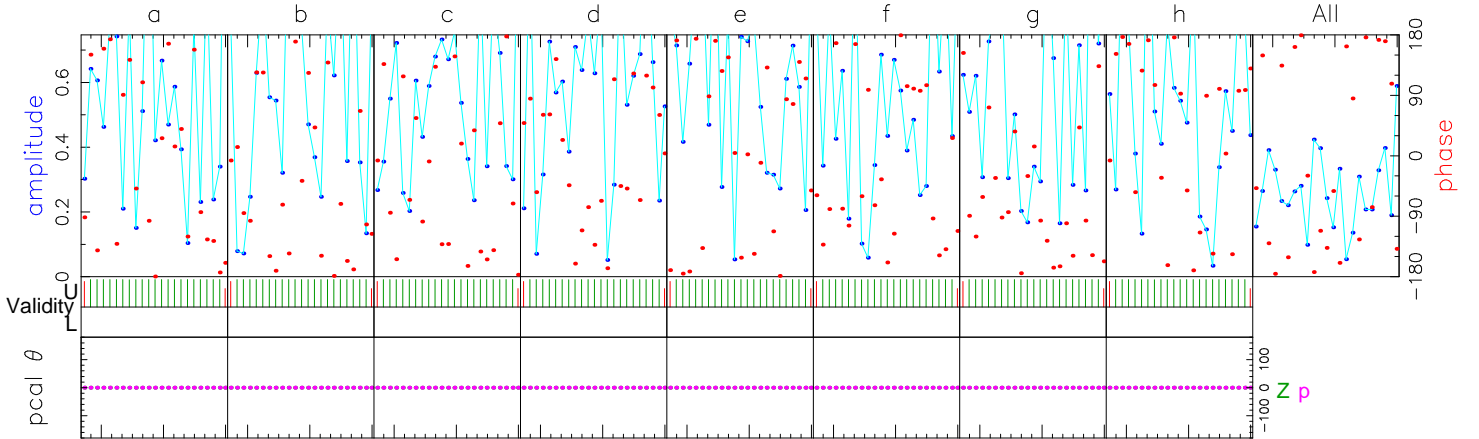
Group delay (usec)(sbd) 2.72615556560E+03 Apriori delay (usec) 2.72567227443E+03 Resid mbdelay (usec) -1.08383E-03 +/- 1.9E-04
 Sband delay (usec) 2.72615802993E+03 Apriori clock (usec) -1.1723695E+01 Resid sbdelay (usec) 4.85756E-01 +/- 1.5E-03
 Phase delay (usec) 2.72567227159E+03 Apriori clockrate (us/s) -1.8759378E-07 Resid phdelay (usec) -2.84010E-06 +/- 6.4E-07
 Delay rate (us/s) -1.45135562248E+00 Apriori rate (us/s) -1.45135077940E+00 Resid rate (us/s) -4.84308E-06 +/- 8.0E-09
 Total phase (deg) 171.0 Apriori accel (us/s/s) 7.42936273599E-06 Resid phase (deg) -88.1 +/- 20.0

RMS Theor. Amplitude 0.192 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 58.0 47.9 Search (1024X32) 0.174 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 91.1 83.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 34.4 28.2 Inc. seg. avg. 0.216 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 33.1 49.3 Inc. frq. avg. 0.195 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 271.4 el 46.7 pa 40.3 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 10832.018 2428.129 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Zp..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Zp.W.313.12BED8



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

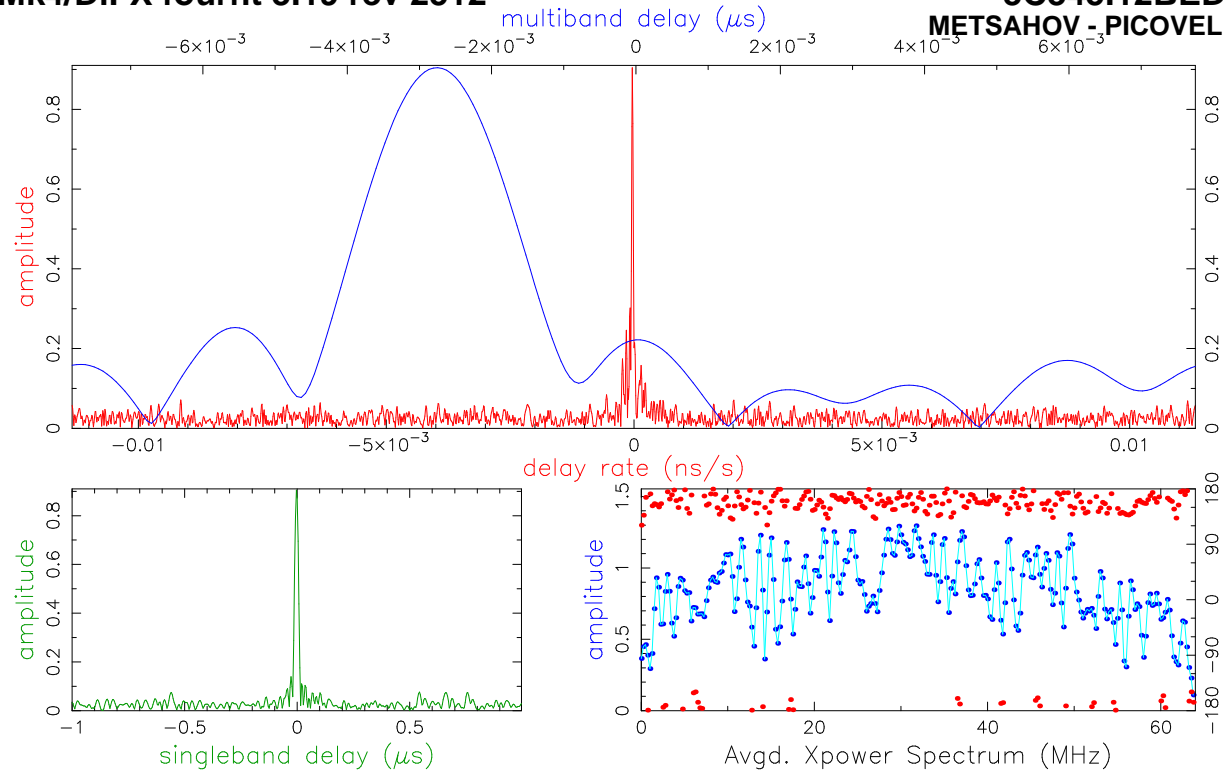


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-165.0	-164.4	-156.5	21.9	171.3	-122.6	-122.7	154.2	Phase	-161.9
	0.4	0.3	0.2	0.1	0.4	0.3	0.3	0.3	Ampl.	0.3
	322.1	43.9	39.7	446.4	321.7	141.0	469.6	399.2	Sbd box	407.8
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.72626435090E+03		Apriori delay (usec)		2.72567227443E+03		Resid mbdelay (usec)		-1.67353E-03	+/- 1.8E-04
Sband delay (usec)	2.72626150318E+03		Apriori clock (usec)		-1.1723695E+01		Resid sbdelay (usec)		5.89229E-01	+/- 1.5E-03
Phase delay (usec)	2.72567226921E+03		Apriori clockrate (us/s)		-1.8759378E-07		Resid phdelay (usec)		-5.22040E-06	+/- 6.3E-07
Delay rate (us/s)	-1.45136028658E+00		Apriori rate (us/s)		-1.45135077940E+00		Resid rate (us/s)		-9.50717E-06	+/- 7.8E-09
Total phase (deg)	97.2		Apriori accel (us/s/s)		7.42936273599E-06		Resid phase (deg)		-161.9	+/- 19.4

	RMS	Theor.	Amplitude	0.249 +/- 0.042	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	62.2	46.6	Search (1024X32)	0.178	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	76.6	81.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	78.3	27.5	Inc. seg. avg.	0.272	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	45.3	48.0	Inc. frq. avg.	0.269	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00
Z: az 271.4 el 46.7 pa 40.3	p: az 62.4 el 35.8 pa -72.8		u, v (fr/asec) 10832.018 2428.129				simultaneous interpolator	
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Zp..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Zp.W.325.12BED8								

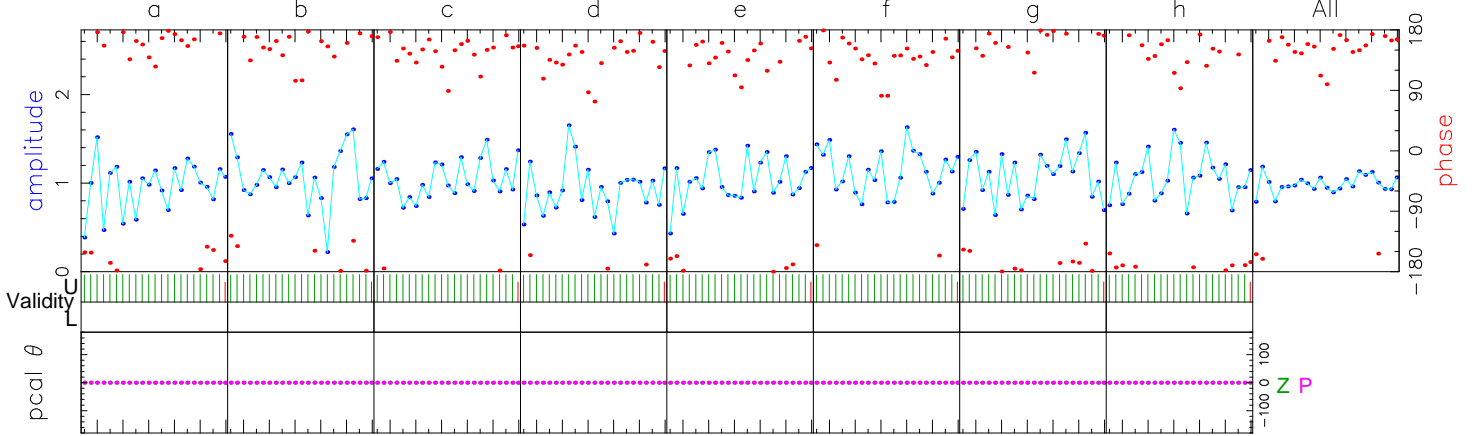
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, ZP
 METSAHOV - PICOVEL, fgroup W, pol LL



Fringe quality 7
 SNR 45.7
 Int time 336.424
 Amp 0.910
 Phase 159.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.002831
 MBD -0.002727
 Fringe rate (Hz)
 -0.003253
 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
 2020:086:165659
 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		
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

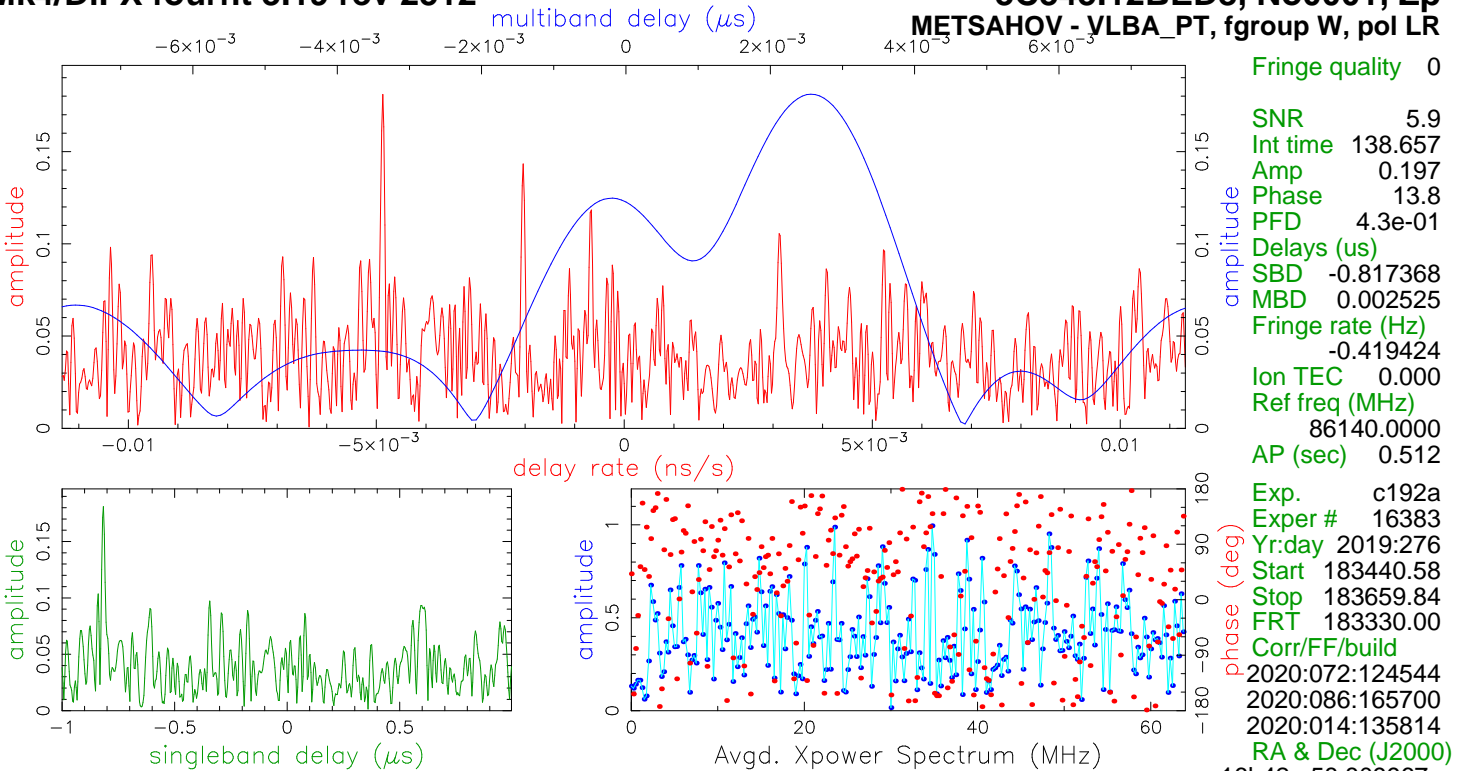
Group delay (usec)(sbd)	-3.37220383236E+03	Apriori delay (usec)	-3.37220110547E+03	Resid mbdelay (usec)	-2.72688E-03	+/-	2.4E-05
Sband delay (usec)	-3.37220393597E+03	Apriori clock (usec)	2.7217829E-01	Resid sbdelay (usec)	-2.83050E-03	+/-	1.9E-04
Phase delay (usec)	-3.37220110032E+03	Apriori clockrate (us/s)	3.6929281E-07	Resid phdelay (usec)	5.15200E-06	+/-	8.1E-08
Delay rate (us/s)	2.96858300445E-02	Apriori rate (us/s)	2.96858678057E-02	Resid rate (us/s)	-3.77612E-08	+/-	4.2E-10
Total phase (deg)	78.7	Apriori accel (us/s/s)	3.70859582674E-05	Resid phase (deg)	159.8	+/-	2.5

	RMS	Theor.	Amplitude	0.910 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	24.8	6.0	Search (2048X32)	0.867	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	13.7	10.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	13.5	3.5	Inc. seg. avg.	0.985	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	6.6	6.2	Inc. frq. avg.	0.922	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00

Z: az 271.4 el 46.7 pa 40.3 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -153.419 4234.117 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZP..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZP.W.326.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, Zp
 METSAHOV - VLBA_PT, fgroup W, pol LR

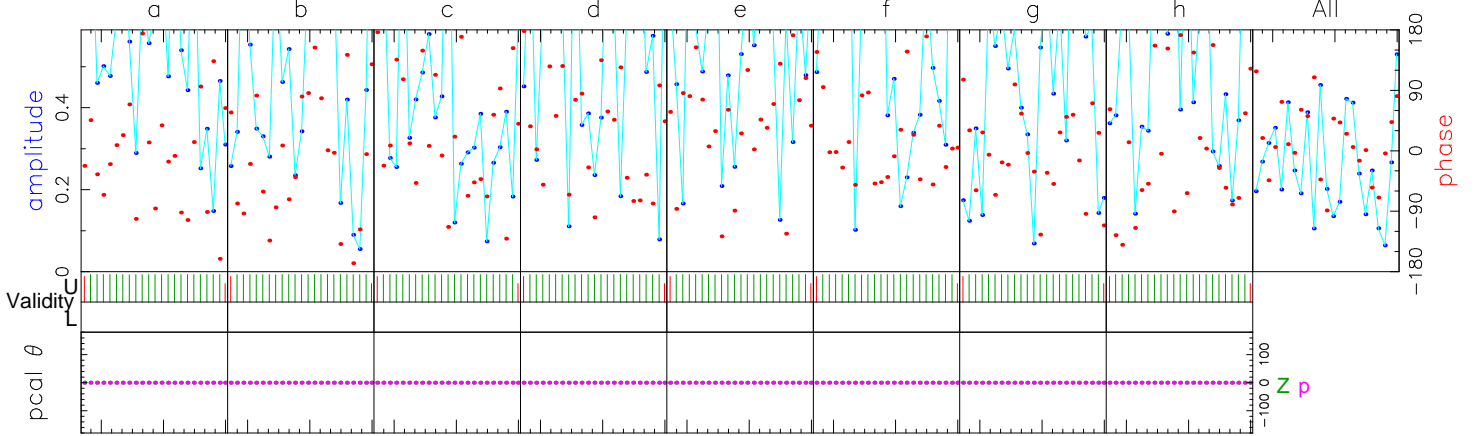


Fringe quality 0

SNR 5.9
 Int time 138.657
 Amp 0.197
 Phase 13.8
 PFD 4.3e-01
 Delays (us)
 SBD -0.817368
 MBD 0.002525
 Fringe rate (Hz)
 -0.419424
 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
 2020:086:165700
 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

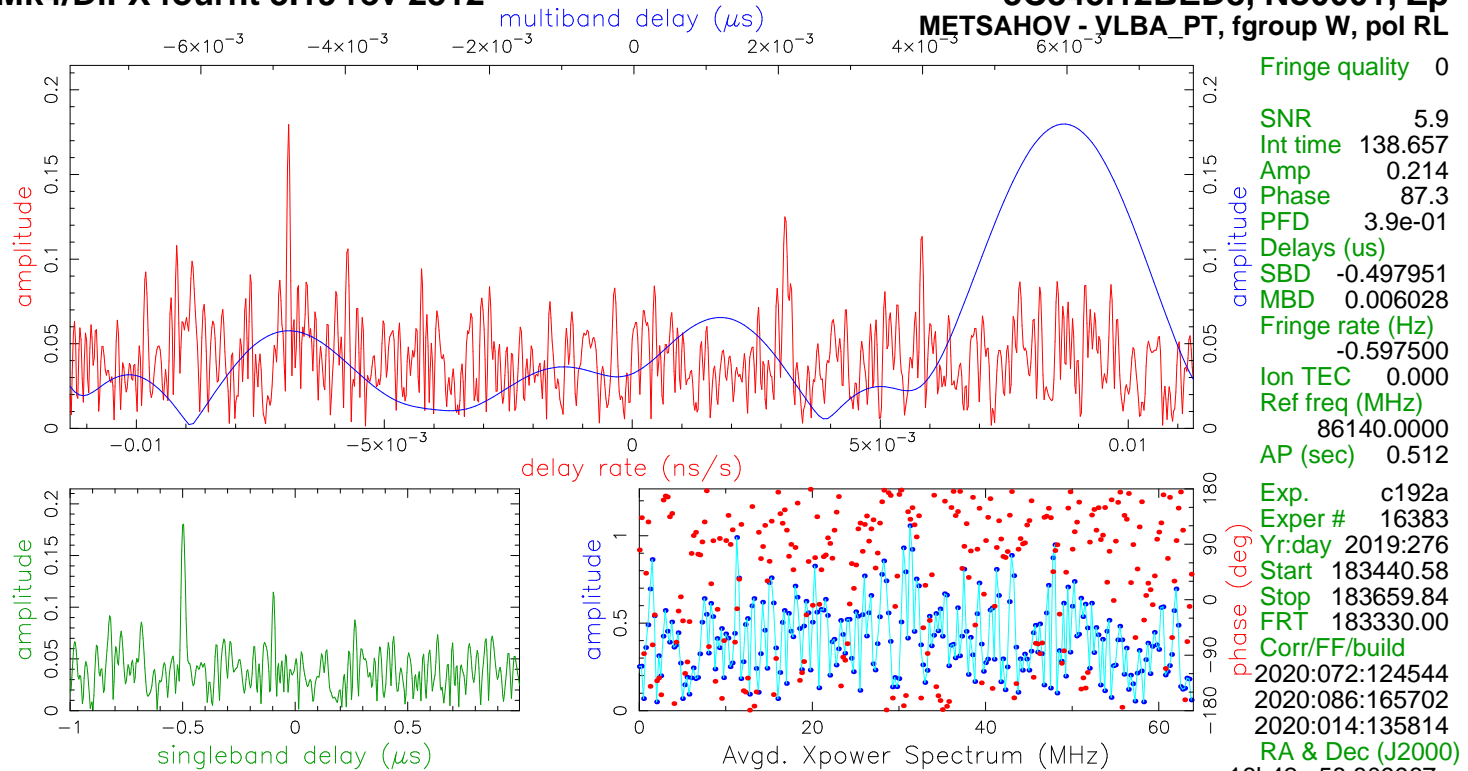


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-7.1	-2.3	5.1	26.5	59.3	8.4	-1.7	-25.2		13.8
	0.3	0.1	0.0	0.2	0.4	0.4	0.3	0.1	Ampl.	0.2
	288.7	431.5	276.6	407.2	49.3	47.5	47.8	268.0	Sbd box	47.8
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.72486229951E+03		Apriori delay (usec)		2.72567227443E+03		Resid mbdelay (usec)		2.52508E-03	+/- 1.9E-04
Sband delay (usec)	2.72485490643E+03		Apriori clock (usec)		-1.1723695E+01		Resid sbdelay (usec)		-8.17368E-01	+/- 1.5E-03
Phase delay (usec)	2.72567227488E+03		Apriori clockrate (us/s)		-1.8759378E-07		Resid phdelay (usec)		4.44310E-07	+/- 6.3E-07
Delay rate (us/s)	-1.45135564850E+00		Apriori rate (us/s)		-1.45135077940E+00		Resid rate (us/s)		-4.86910E-06	+/- 7.8E-09
Total phase (deg)	272.9		Apriori accel (us/s/s)		7.42936273599E-06		Resid phase (deg)		13.8	+/- 19.5

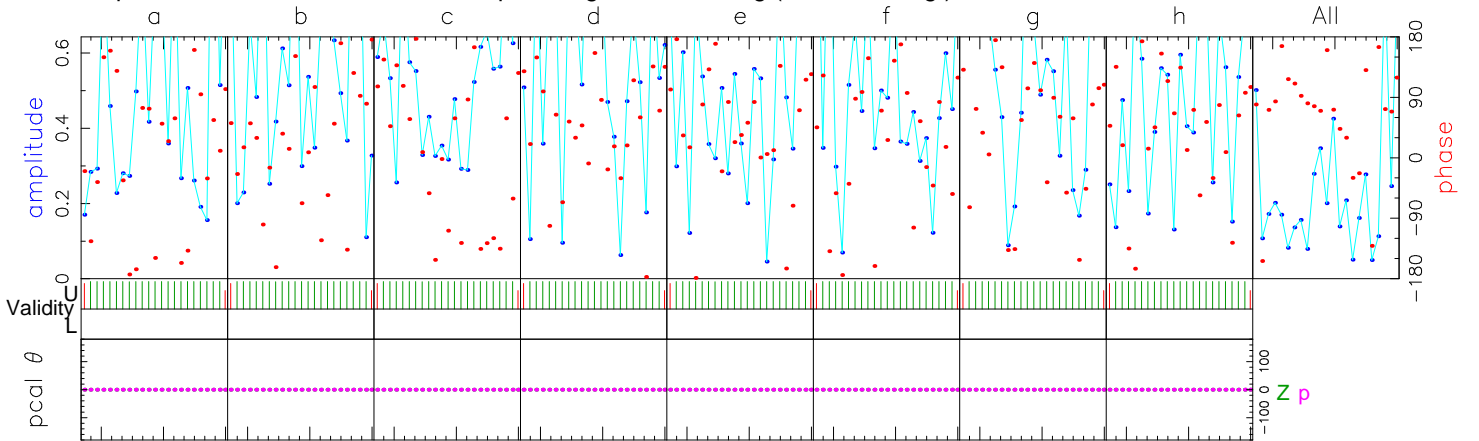
ph/seg (deg) 52.7 46.9 Search (1024X32) 0.177 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 78.8 81.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.2 27.6 Inc. seg. avg. 0.211 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 63.8 48.2 Inc. frq. avg. 0.193 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 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 10832.018 2428.129 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Zp..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Zp.W.331.12BED8 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, Zp
 METSAHOV - VLBA_PT, fgroup W, pol RL



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

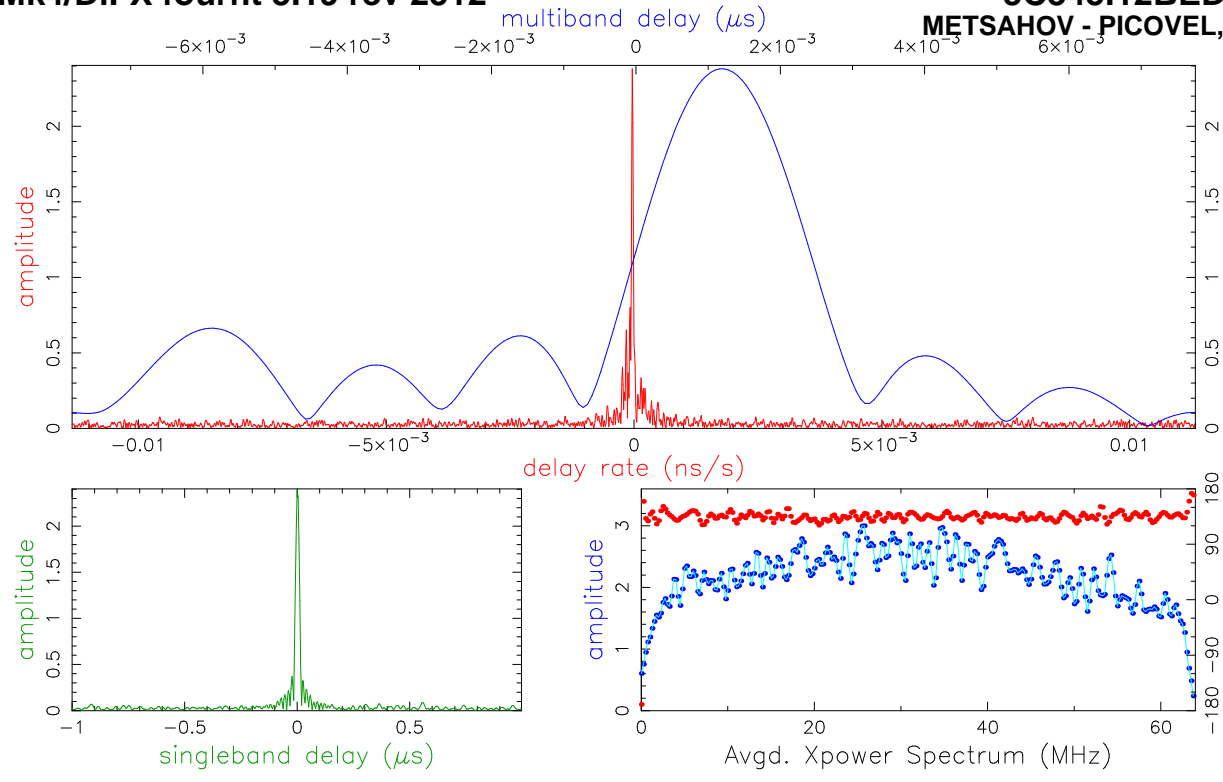


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	92.5	71.4	141.9	76.2	88.8	91.6	80.6	82.1	Phase	87.3
	0.2	0.1	0.1	0.3	0.3	0.2	0.3	0.2	Ampl.	0.2
	421.9	323.8	325.2	466.4	177.7	494.6	136.0	340.0	Sbd box	129.5
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z	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)	2.72517830287E+03		Apriori delay (usec)		2.72567227443E+03		Resid mbdelay (usec)		6.02844E-03	+/- 1.8E-04
Sband delay (usec)	2.72517432368E+03		Apriori clock (usec)		-1.1723695E+01		Resid sbdelay (usec)		-4.97951E-01	+/- 1.5E-03
Phase delay (usec)	2.72567227725E+03		Apriori clockrate (us/s)		-1.8759378E-07		Resid phdelay (usec)		2.81500E-06	+/- 6.3E-07
Delay rate (us/s)	-1.45135771578E+00		Apriori rate (us/s)		-1.45135077940E+00		Resid rate (us/s)		-6.93638E-06	+/- 7.8E-09
Total phase (deg)			Apriori accel (us/s/s)		7.42936273599E-06		Resid phase (deg)		87.3	+/- 19.5

RMS Theor. Amplitude 0.214 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 62.6 46.6 Search (1024X32) 0.177 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 106.4 81.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 24.1 27.5 Inc. seg. avg. 0.209 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 30.1 48.0 Inc. frq. avg. 0.197 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

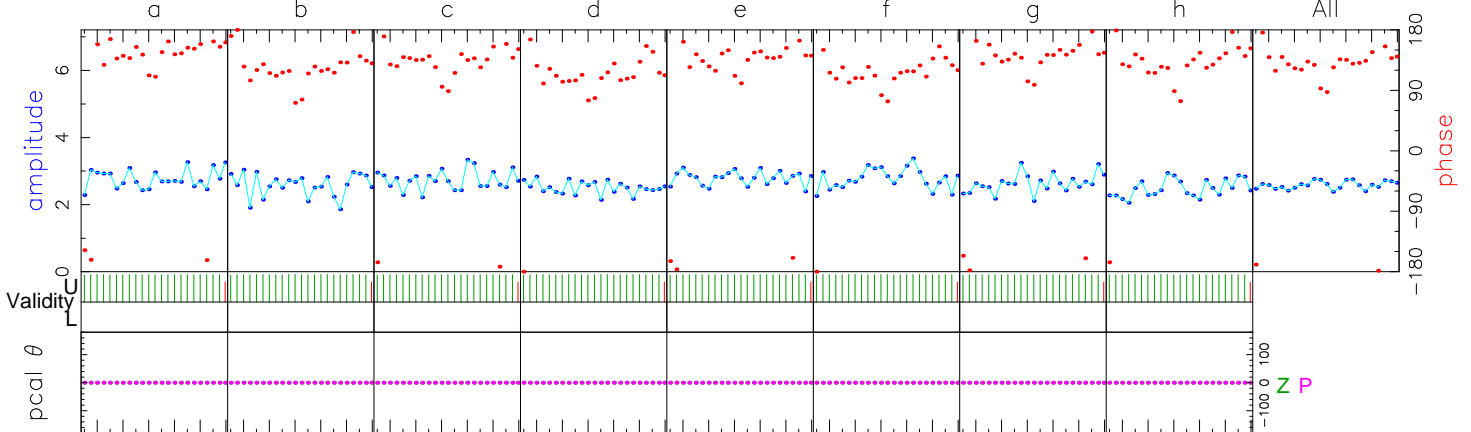
Z: az 271.4 el 46.7 pa 40.3 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 10832.018 2428.129 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Zp..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Zp.W.338.12BED8



Fringe quality 6
 SNR 120.6
 Int time 336.424
 Amp 2.404
 Phase 135.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.001305
 MBD 0.001224
 Fringe rate (Hz)
 -0.003209
 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
 2020:086:165702
 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

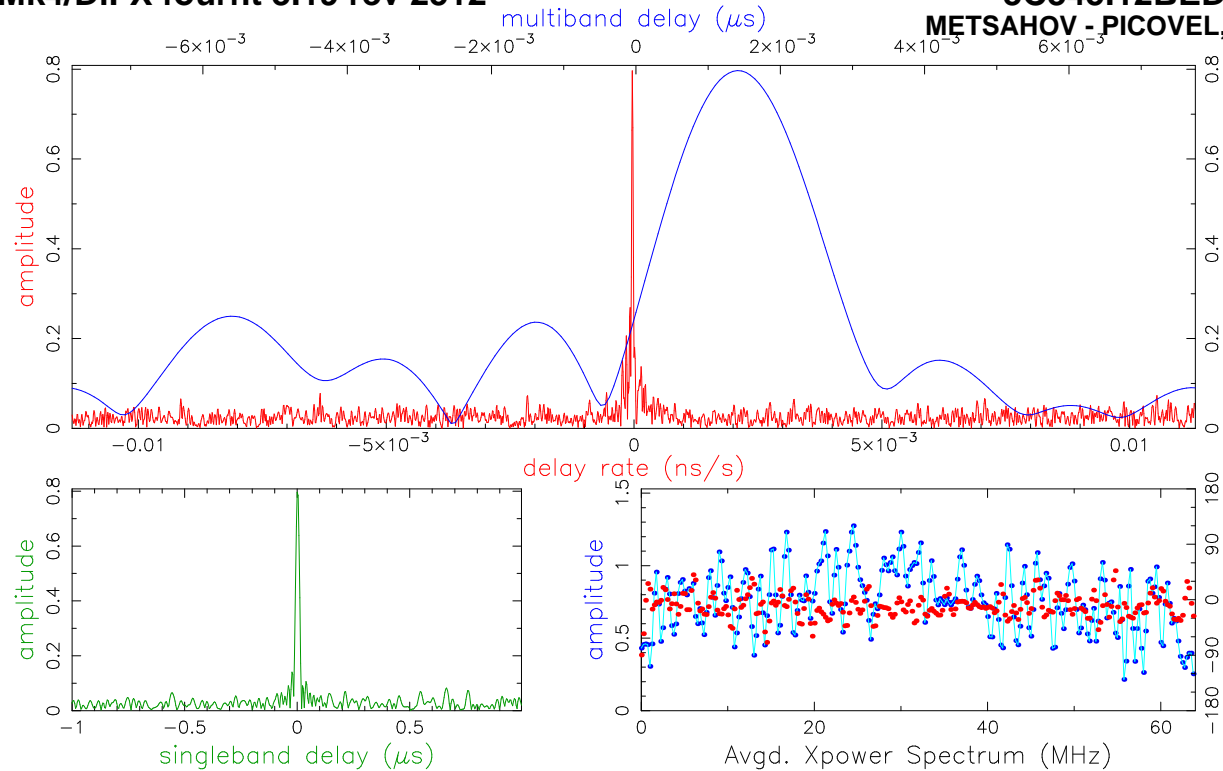


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	153.0	125.5	138.8	118.1	144.9	119.2	147.9	134.6	Phase	135.5
	2.6	2.3	2.5	2.3	2.6	2.6	2.4	2.2	Ampl.	2.4
	256.8	256.8	257.1	257.3	257.4	257.2	257.5	256.7	Sbd box	257.3
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) -3.37219988136E+03 Apriori delay (usec) -3.37220110547E+03 Resid mbdelay (usec) 1.22412E-03 +/- 9.0E-06
 Sband delay (usec) -3.37219980072E+03 Apriori clock (usec) 2.7217829E-01 Resid sbdelay (usec) 1.30475E-03 +/- 7.1E-05
 Phase delay (usec) -3.37220110110E+03 Apriori clockrate (us/s) 3.6929281E-07 Resid phdelay (usec) 4.36939E-06 +/- 3.1E-08
 Delay rate (us/s) 2.96858305497E-02 Apriori rate (us/s) 2.96858678057E-02 Resid rate (us/s) -3.72560E-08 +/- 1.6E-10
 Total phase (deg) 54.4 Apriori accel (us/s/s) 3.70859582674E-05 Resid phase (deg) 135.5 +/- 1.0

RMS Theor. Amplitude 2.404 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 23.4 2.3 Search (2048X32) 2.282 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 9.0 4.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 14.3 1.3 Inc. seg. avg. 2.583 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 5.4 2.3 Inc. frq. avg. 2.437 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 271.4 el 46.7 pa 40.3 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -153.419 4234.117 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZP..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZP.W.341.12BED8

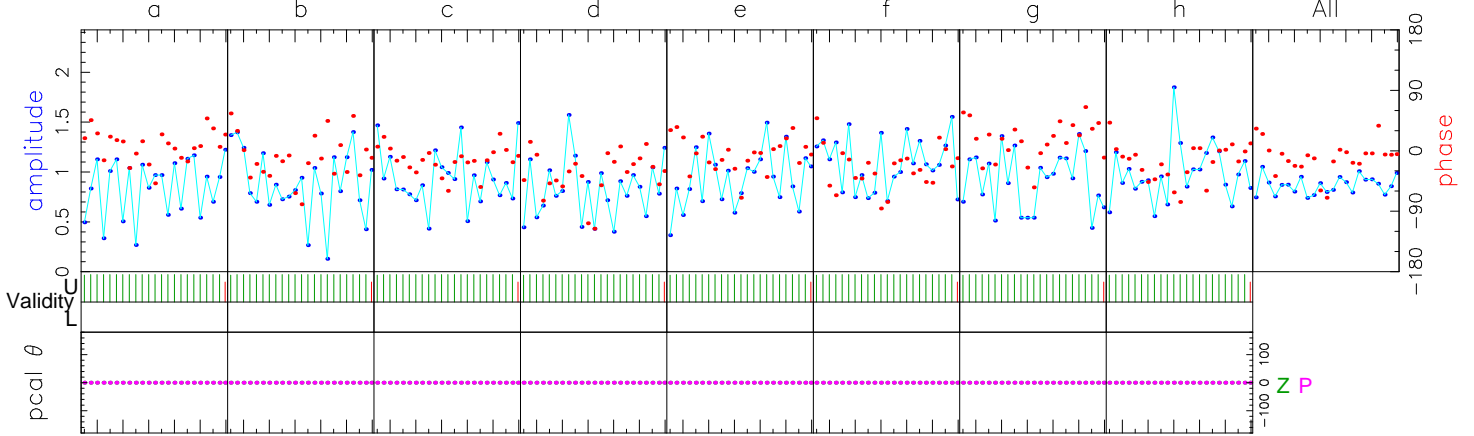


Fringe quality 7

SNR 40.6
 Int time 336.424
 Amp 0.808
 Phase -9.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.001606
 MBD 0.001452
 Fringe rate (Hz) -0.003284
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c192a
 Yr:day 16383
 2020:072:124544
 2020:086:165705
 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		
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-3.37219965332E+03								1.45215E-03	+/- 2.7E-05
Sband delay (usec)	-3.37219949997E+03								1.60550E-03	+/- 2.1E-04
Phase delay (usec)	-3.37220110578E+03								-3.05739E-07	+/- 9.1E-08
Delay rate (us/s)	2.96858296768E-02								-3.81289E-08	+/- 4.7E-10
Total phase (deg)			-90.6						-9.5	+/- 2.8
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
RMS	24.0	6.8								
Theor.										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
nlags: 256										
t_cohere infinite										

ph/seg (deg) 24.0 6.8
 amp/seg (%) 12.8 11.8
 ph/frq (deg) 18.6 4.0
 amp/frq (%) 9.6 7.0

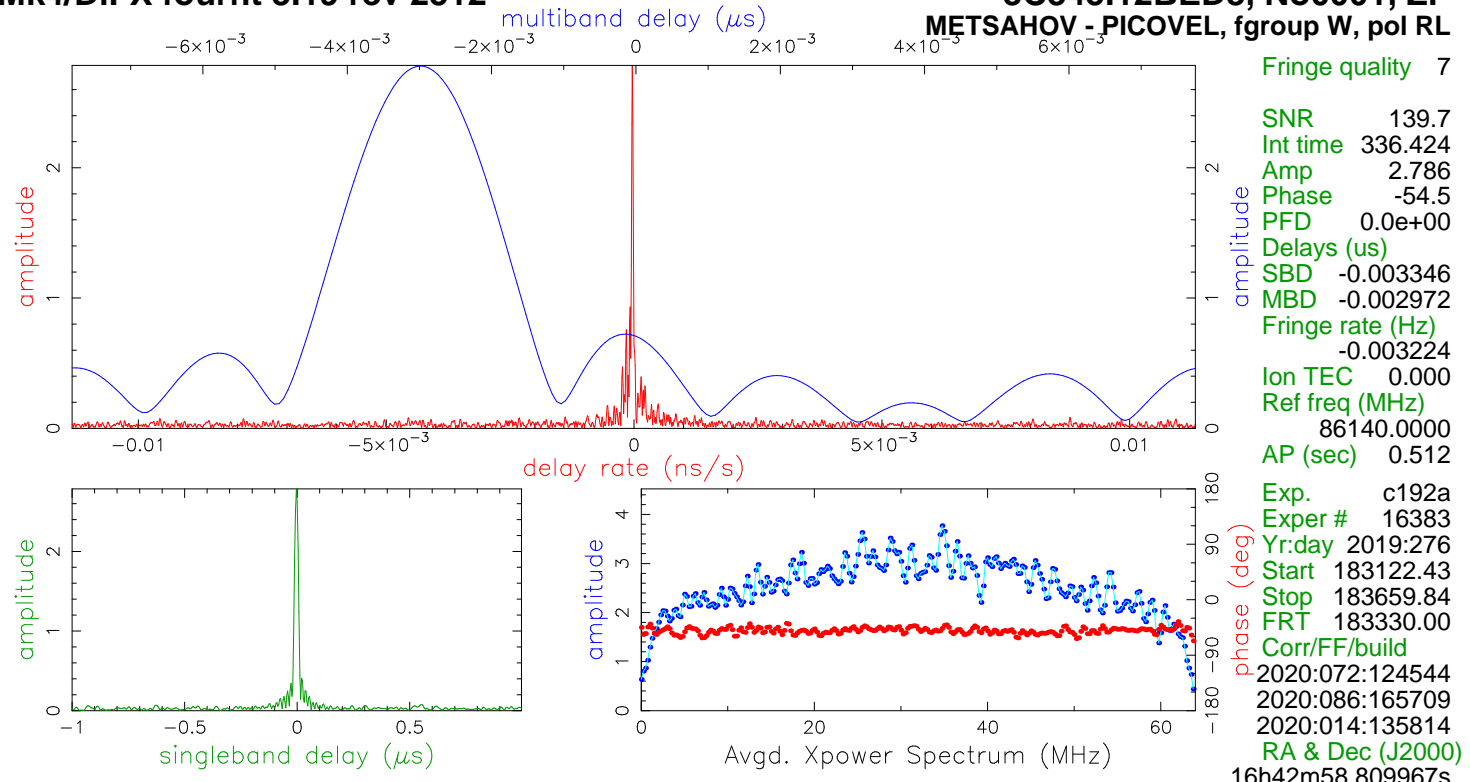
Z: az 271.4 el 46.7 pa 40.3 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -153.419 4234.117

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZP..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZP.W.350.12BED8

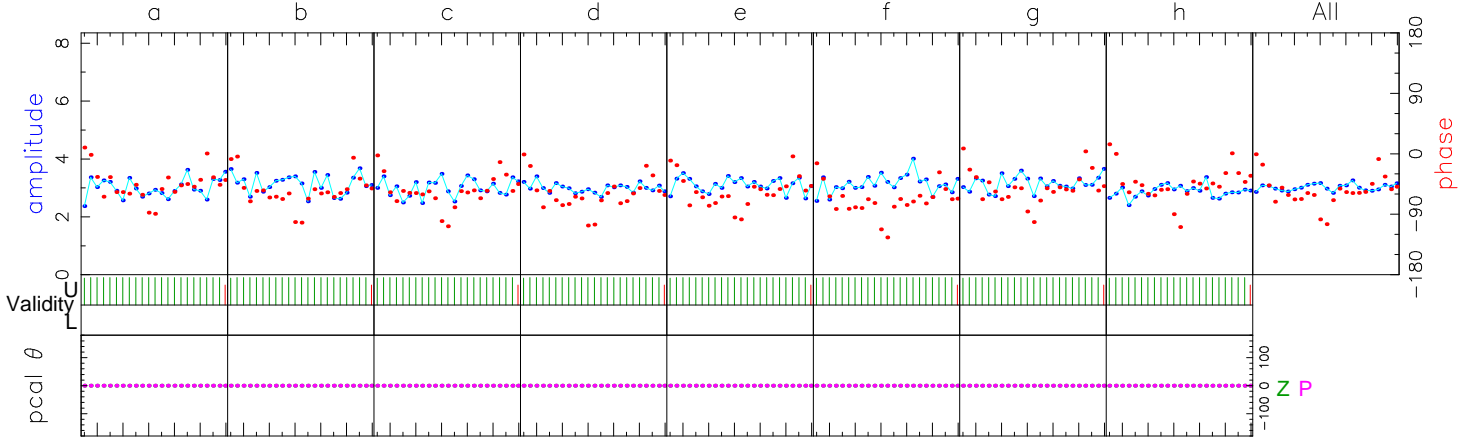
simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, ZP
 METSAHOV - PICOVEL, fgroup W, pol RL



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



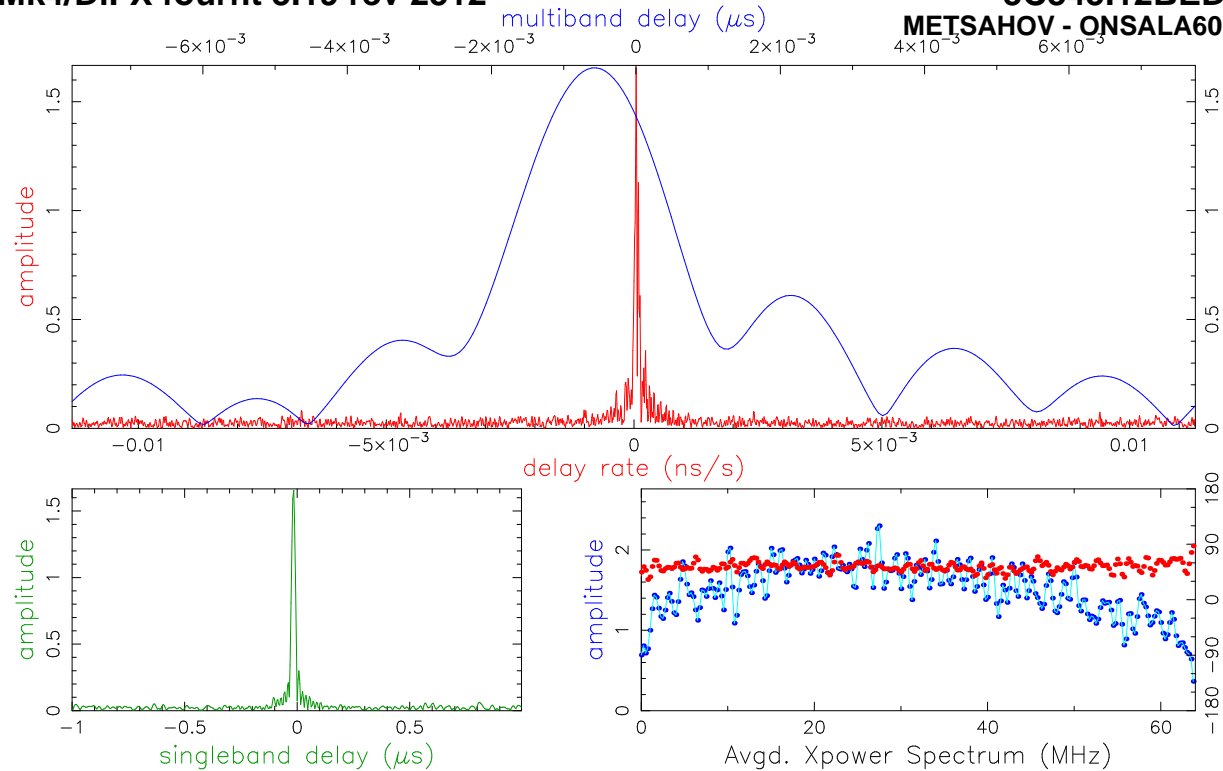
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Group delay (usec)(sbd)	-45.3	-54.2	-55.3	-59.5	-56.0	-69.9	-49.7	-45.3	Phase	-54.5
Sband delay (usec)	2.8	2.9	2.8	2.7	2.9	2.9	2.9	2.6	Ampl.	2.8
Phase delay (usec)	255.7	255.9	256.0	256.2	256.3	256.2	256.6	255.7	Sbd box	256.1
Delay rate (us/s)	2.8	2.9	2.8	2.7	2.9	2.9	2.9	2.6	APs used	
Total phase (deg)									PC freqs	
									PC freqs	
									PC phase	
									Mani PC	
									PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd)	-3.37220407739E+03	Apriori delay (usec)	-3.37220110547E+03	Resid mbdelay (usec)	-2.97192E-03	+/-	7.8E-06
Sband delay (usec)	-3.37220445122E+03	Apriori clock (usec)	2.7217829E-01	Resid sbdelay (usec)	-3.34575E-03	+/-	6.2E-05
Phase delay (usec)	-3.37220110723E+03	Apriori clockrate (us/s)	3.6929281E-07	Resid phdelay (usec)	-1.75767E-06	+/-	2.6E-08
Delay rate (us/s)	2.96858303761E-02	Apriori rate (us/s)	2.96858678057E-02	Resid rate (us/s)	-3.74296E-08	+/-	1.4E-10
Total phase (deg)	-135.6	Apriori accel (us/s/s)	3.70859582674E-05	Resid phase (deg)	-54.5	+/-	0.8

ph/seg (deg)	23.4	RMS	2.0	Theor.	2.786 +/- 0.020	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	9.2	Search (2048X32)	2.711	Interp.	0.000	PCal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	8.7	Inc. seg. avg.	3.017	Inc. frq. avg.	2.805	Bits/sample:	2x2	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	3.6	Inc. frq. avg.	2.805	nlags:	256	Data rate (Mb/s):	2048	t_cohere:	infinite	ion window (TEC)	0.00	0.00

Z: az 271.4 el 46.7 pa 40.3 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -153.419 4234.117 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZP..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZP.W.359.12BED8

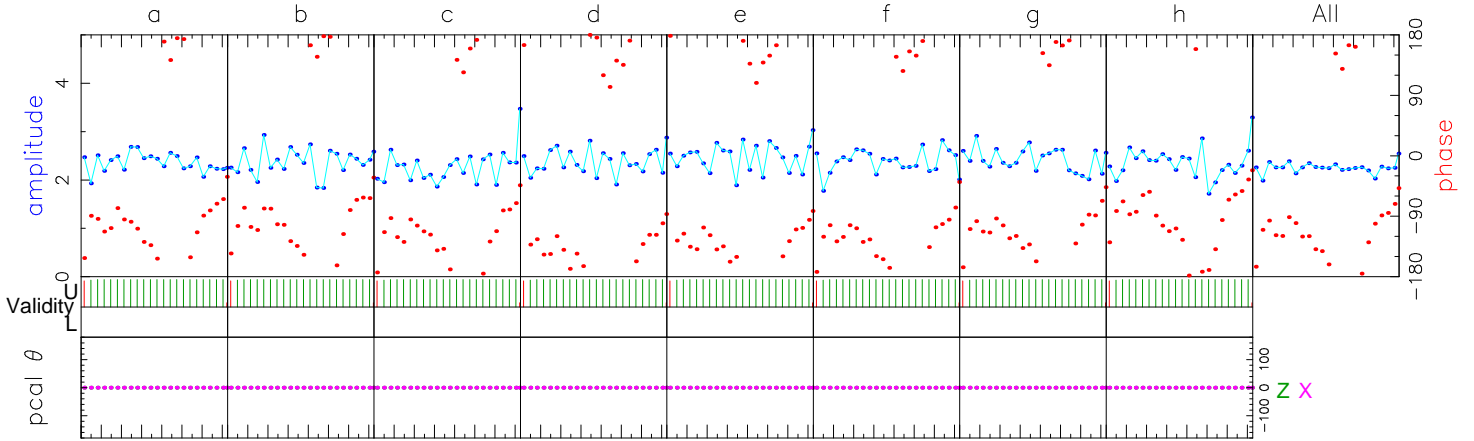


Fringe quality 5

SNR 93.2
 Int time 417.864
 Amp 1.667
 Phase -131.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.016713
 MBD -0.000596
 Fringe rate (Hz) 0.003717
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

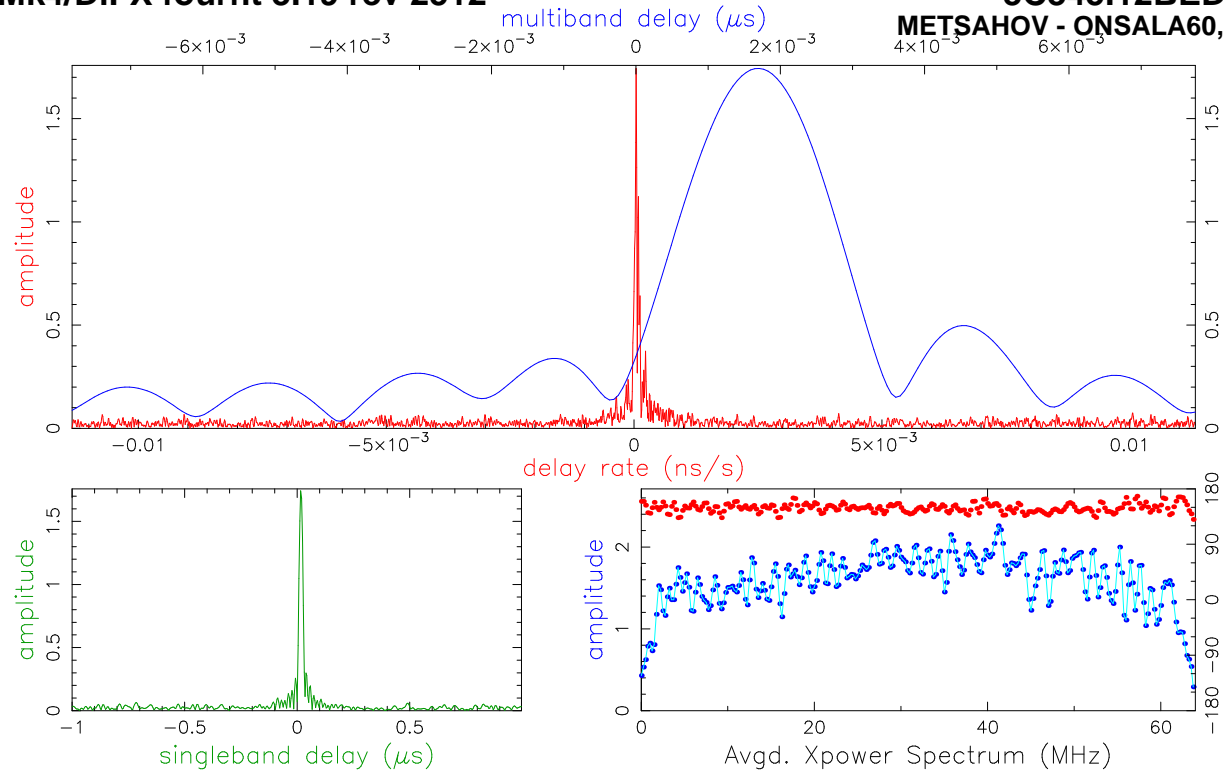
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165659
 2020:014:135814
 RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	-120.1	-115.4	-131.2	-160.3	-150.7	-139.1	-131.4	-97.9	Phase	-131.1
	1.8	1.7	1.6	1.8	1.8	1.8	1.8	1.7	Ampl.	1.7
	252.6	252.6	252.6	252.7	253.1	252.7	253.3	253.1	Sbd box	252.7
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.60923267262E+03		Apriori delay (usec)		-1.60921645175E+03		Resid mbdelay (usec)		-5.95868E-04 +/- 1.2E-05	
Sband delay (usec)	-1.60923316475E+03		Apriori clock (usec)		-3.2143044E+01		Resid sbdelay (usec)		-1.67130E-02 +/- 9.2E-05	
Phase delay (usec)	-1.60921645598E+03		Apriori clockrate (us/s)		-5.1170721E-07		Resid phdelay (usec)		-4.22822E-06 +/- 4.0E-08	
Delay rate (us/s)	-2.93338143038E-02		Apriori rate (us/s)		-2.93338574563E-02		Resid rate (us/s)		4.31526E-08 +/- 1.6E-10	
Total phase (deg)			Apriori accel (us/s/s)		1.02337931143E-05		Resid phase (deg)		-131.1 +/- 1.2	

ph/seg (deg) 44.0 2.9 Search (2048X32) 1.643 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 35.1 5.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.5 1.7 Inc. seg. avg. 2.241 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 6.2 3.0 Inc. frq. avg. 1.745 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 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZX.W.324.12BED8

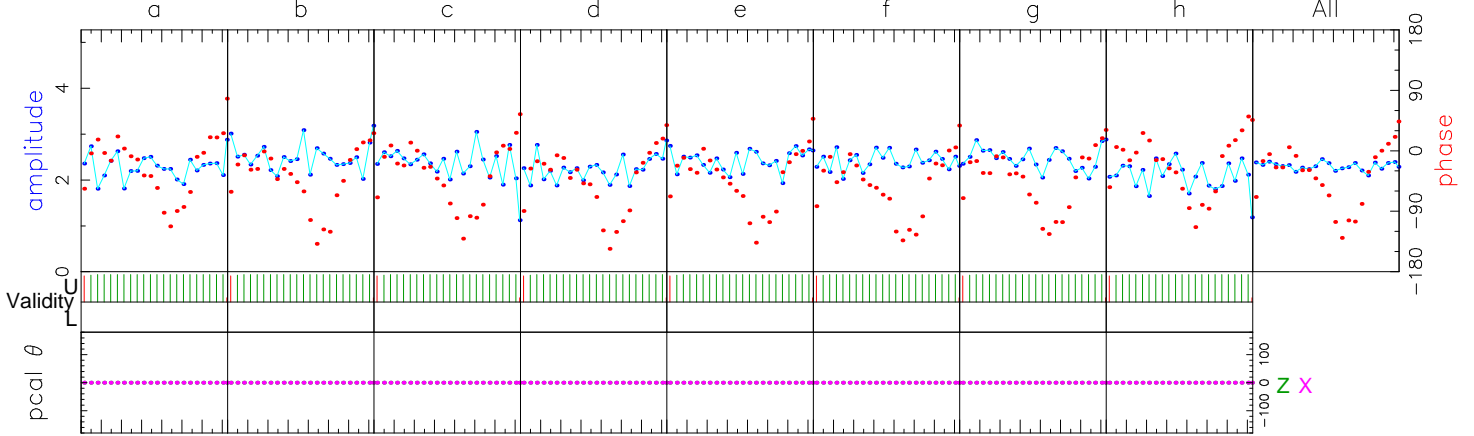


Fringe quality 5

SNR 98.3
 Int time 417.864
 Amp 1.758
 Phase -37.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.016842
 MBD 0.001722
 Fringe rate (Hz) 0.003713
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

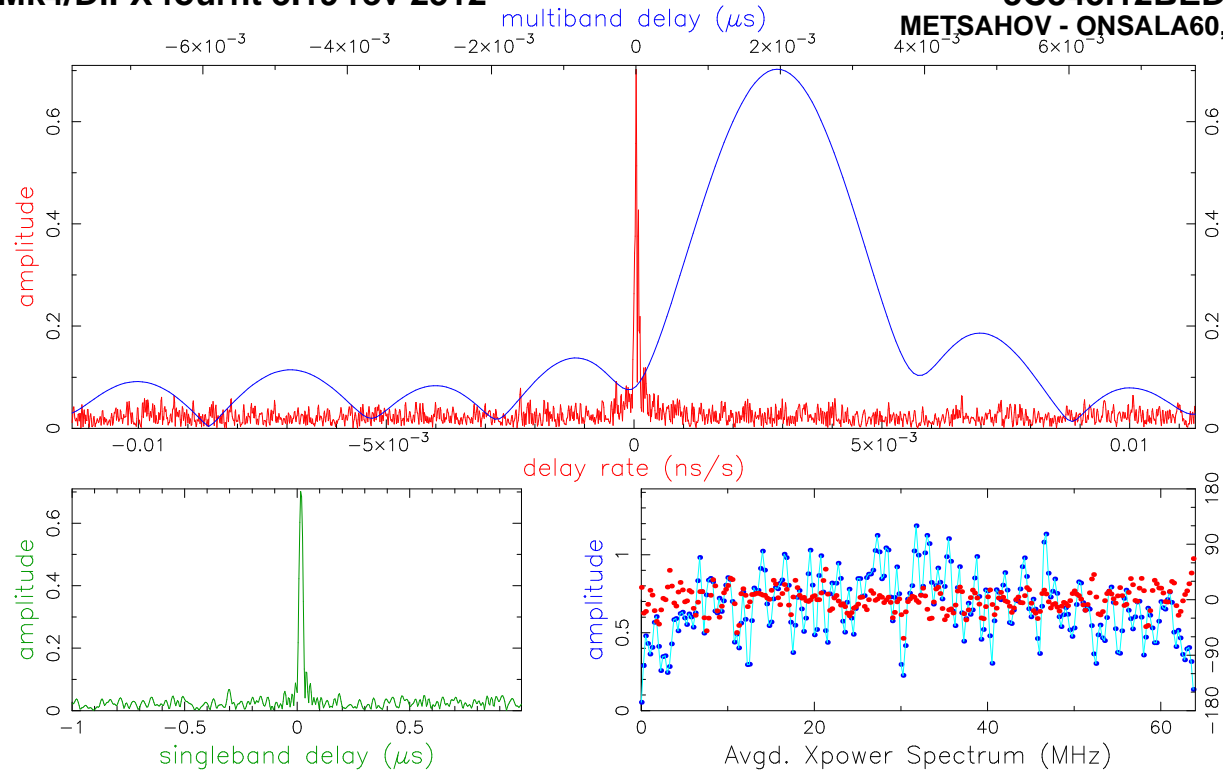
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165702
 2020:014:135814
 RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	-22.7	-39.0	-35.4	-41.1	-42.3	-51.1	-42.8	-19.1		-37.0
	1.7	1.9	1.8	1.6	1.8	1.8	1.9	1.6		1.8
	260.9	261.1	261.2	261.4	261.4	261.4	261.8	261.8		261.3
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.60919910499E+03		Apriori delay (usec)		-1.60921645175E+03		Resid mbdelay (usec)		1.72176E-03	+/- 1.1E-05
Sband delay (usec)	-1.60919961000E+03		Apriori clock (usec)		-3.2143044E+01		Resid sbdelay (usec)		1.68418E-02	+/- 8.8E-05
Phase delay (usec)	-1.60921645294E+03		Apriori clockrate (us/s)		-5.1170721E-07		Resid phdelay (usec)		-1.19444E-06	+/- 3.8E-08
Delay rate (us/s)	-2.93338143491E-02		Apriori rate (us/s)		-2.93338574563E-02		Resid rate (us/s)		4.31072E-08	+/- 1.6E-10
Total phase (deg)			Apriori accel (us/s/s)		1.02337931143E-05		Resid phase (deg)		-37.0	+/- 1.2

ph/seg (deg) 42.3 2.8 Search (2048X32) 1.702 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 31.4 4.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.6 1.6 Inc. seg. avg. 2.301 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 5.8 2.9 Inc. frq. avg. 1.768 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 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZX.W.340.12BED8

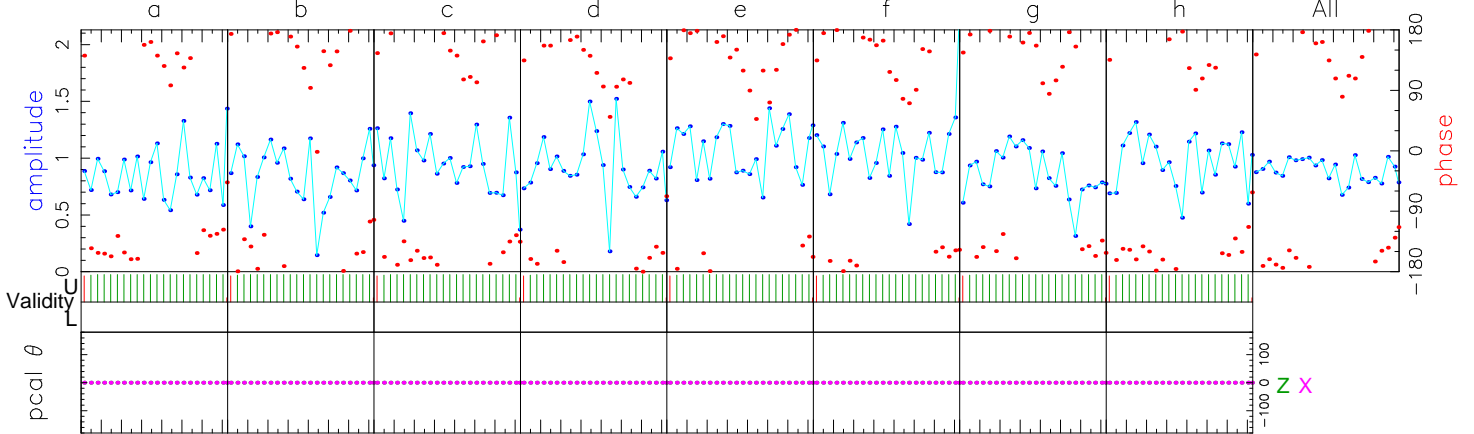


Fringe quality 7

SNR 39.7
 Int time 417.864
 Amp 0.710
 Phase 173.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.017025
 MBD 0.001992
 Fringe rate (Hz)
 0.003714
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

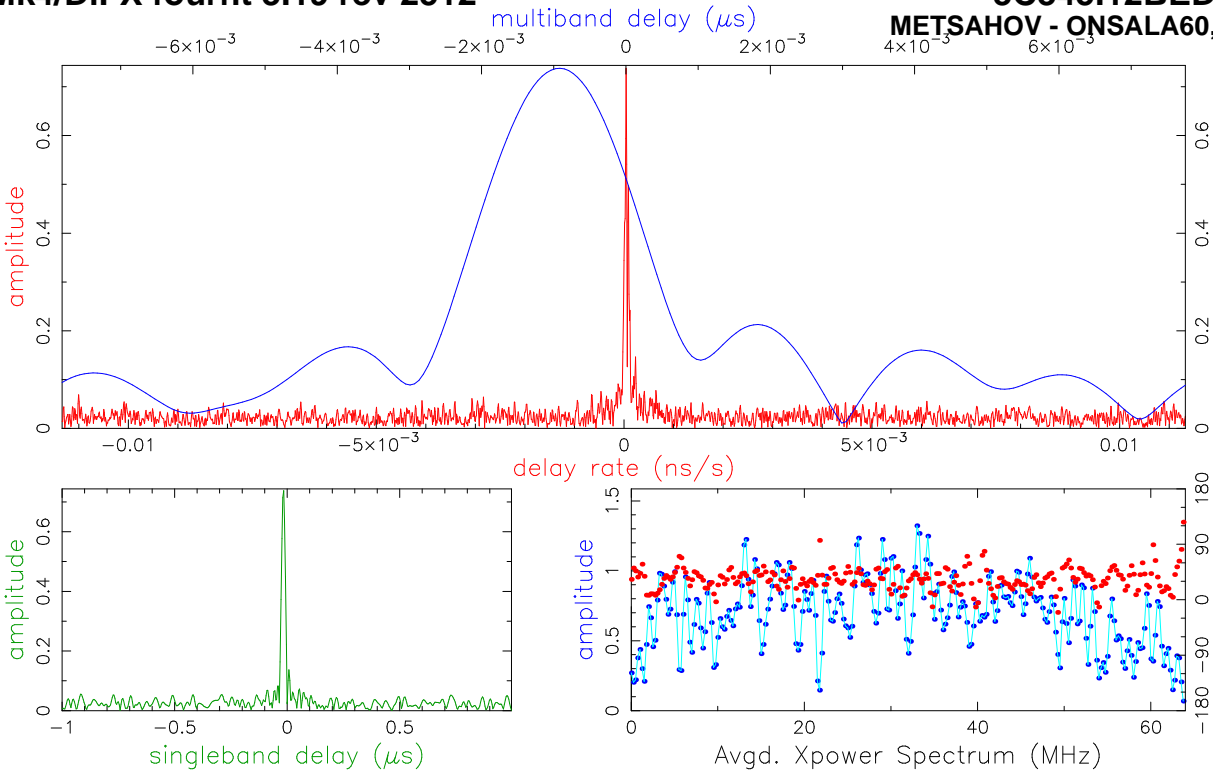
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165706
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



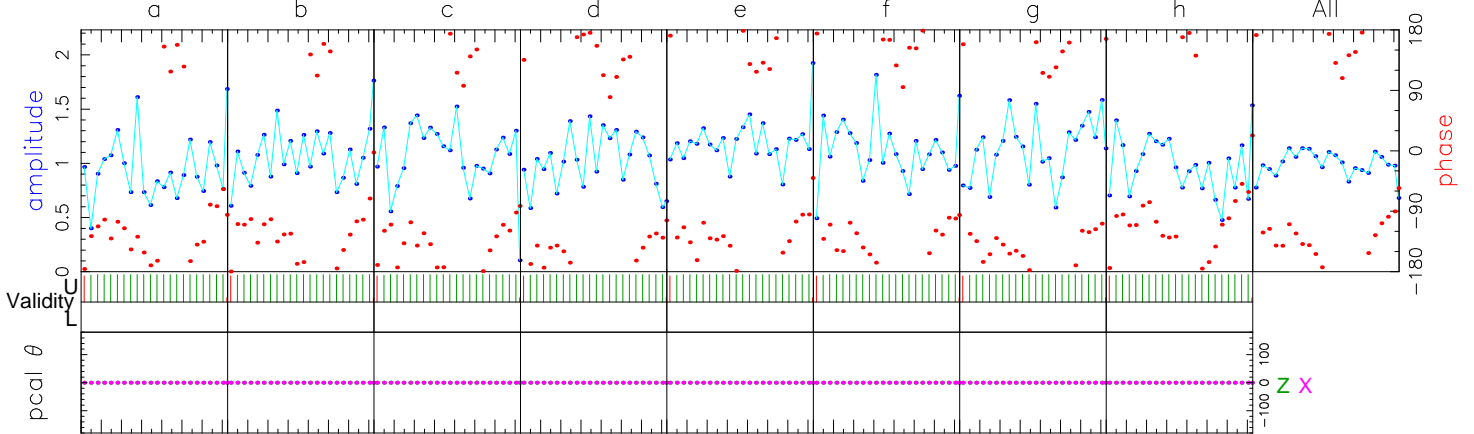
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-174.0	-177.9	178.5	158.0	158.7	165.0	177.4	-175.2	Phase	173.2
	0.6	0.7	0.8	0.7	0.8	0.7	0.8	0.7	Ampl.	0.7
	261.0	261.1	261.2	261.4	261.2	261.7	262.0	261.7	Sbd box	261.4
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.60919883446E+03		Apriori delay (usec)		-1.60921645175E+03		Resid mbdelay (usec)		1.99229E-03	+/- 2.7E-05
Sband delay (usec)	-1.60919942675E+03		Apriori clock (usec)		-3.2143044E+01		Resid sbdelay (usec)		1.70250E-02	+/- 2.2E-04
Phase delay (usec)	-1.60921644616E+03		Apriori clockrate (us/s)		-5.1170721E-07		Resid phdelay (usec)		5.58656E-06	+/- 9.3E-08
Delay rate (us/s)	-2.93338143378E-02		Apriori rate (us/s)		-2.93338574563E-02		Resid rate (us/s)		4.31186E-08	+/- 3.8E-10
Total phase (deg)			Apriori accel (us/s/s)		1.02337931143E-05		Resid phase (deg)		173.2	+/- 2.9

ph/seg (deg) 40.7 6.9 Search (2048X32) 0.700 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 29.6 12.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.5 4.1 Inc. seg. avg. 0.890 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.3 7.1 Inc. frq. avg. 0.713 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 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZX.W.351.12BED8



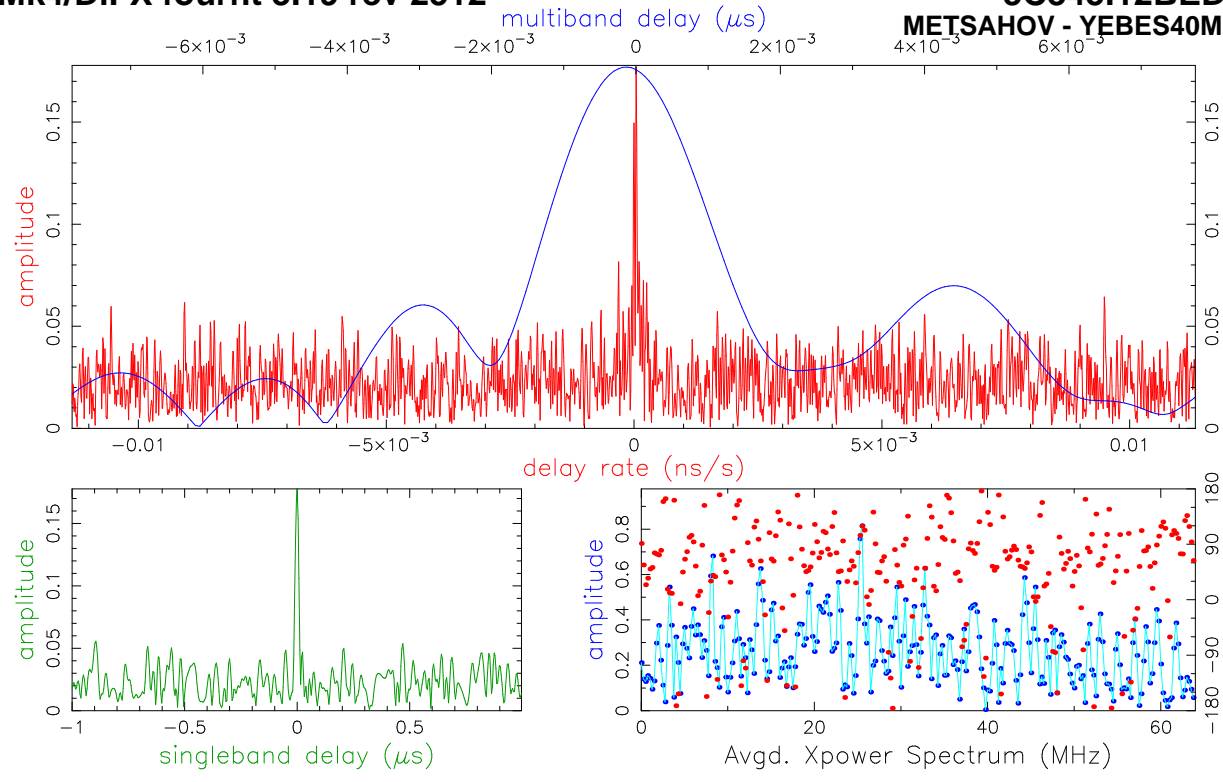
Fringe quality 7
 SNR 41.6
 Int time 417.864
 Amp 0.744
 Phase -149.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.016822
 MBD -0.000944
 Fringe rate (Hz) 0.003635
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165709
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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
	-137.3	-139.7	-151.4	178.6	-152.9	-153.3	-159.6	-117.0	Phase	-149.9
	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.7	Ampl.	0.8
	252.8	252.3	252.5	252.8	252.9	252.8	253.2	252.6	Sbd box	252.7
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.60923302106E+03		Apriori delay (usec)		-1.60921645175E+03		Resid mbdelay (usec)		-9.44305E-04	+/- 2.6E-05
Sband delay (usec)	-1.60923327400E+03		Apriori clock (usec)		-3.2143044E+01		Resid sbdelay (usec)		-1.68223E-02	+/- 2.1E-04
Phase delay (usec)	-1.60921645658E+03		Apriori clockrate (us/s)		-5.1170721E-07		Resid phdelay (usec)		-4.83312E-06	+/- 8.9E-08
Delay rate (us/s)	-2.93338152553E-02		Apriori rate (us/s)		-2.93338574563E-02		Resid rate (us/s)		4.22010E-08	+/- 3.7E-10
Total phase (deg)			Apriori accel (us/s/s)		1.02337931143E-05		Resid phase (deg)		-149.9	+/- 2.8

ph/seg (deg) 44.8 6.6 Search (2048X32) 0.729 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 37.1 11.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.2 3.9 Inc. seg. avg. 0.995 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.7 6.8 Inc. frq. avg. 0.769 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 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZX.W.360.12BED8

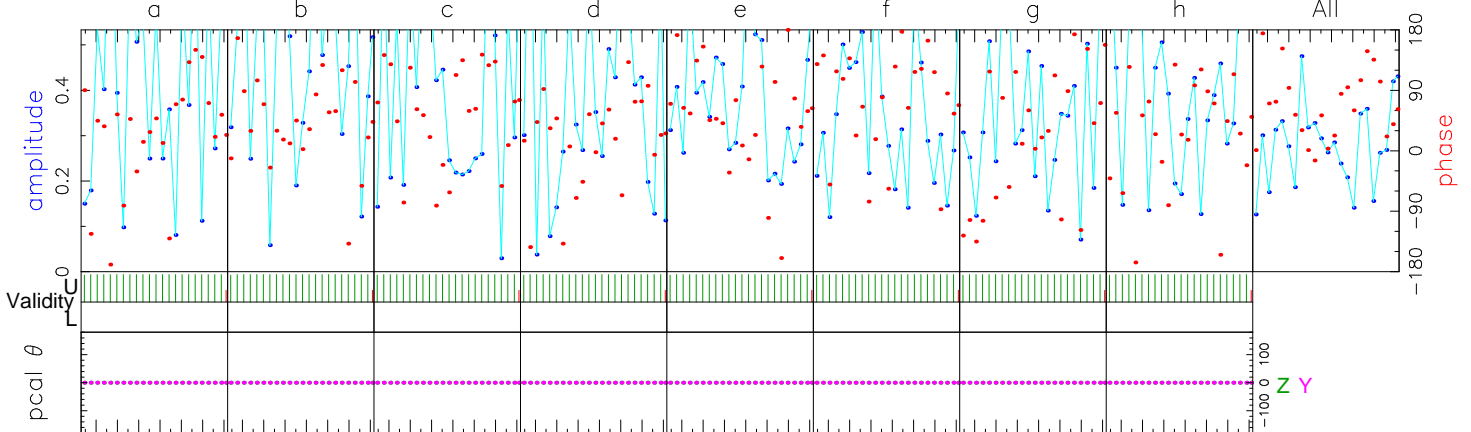


Fringe quality 9

SNR 9.7
 Int time 400.959
 Amp 0.178
 Phase 64.8
 PFD 8.8e-14
 Delays (us)
 SBD -0.000876
 MBD -0.000146
 Fringe rate (Hz) 0.003731
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

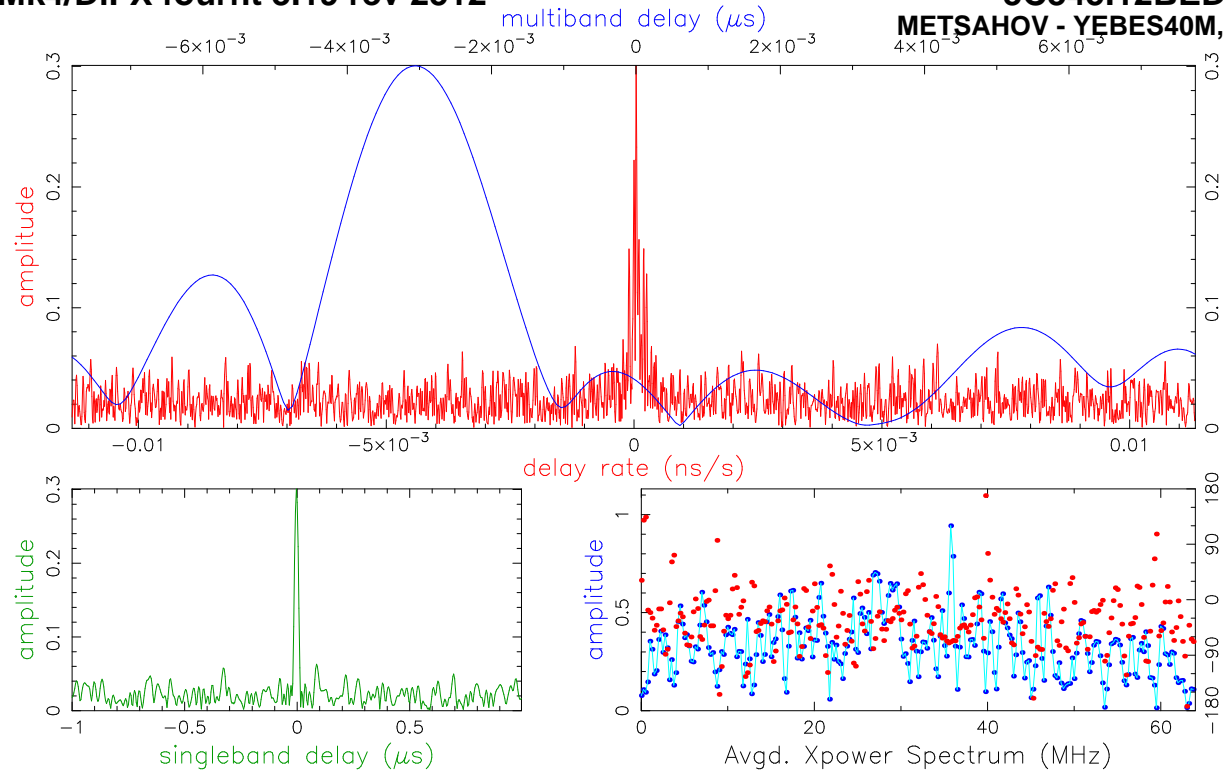
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183017.92
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165701
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:Y	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		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-3.47819764925E+03									
Sband delay (usec)	-3.47819838000E+03									
Phase delay (usec)	-3.47819750141E+03									
Delay rate (us/s)	6.82530482583E-03									
Total phase (deg)			-277.7							
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)									64.8	+/- 11.8
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

ph/seg (deg) 52.1 28.2 Search (2048X32) 0.175 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.3 49.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.7 16.6 Inc. seg. avg. 0.249 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.0 29.1 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
 Z: az 271.4 el 46.7 pa 40.3 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) 11.248 3725.235 Data rate(Mb/s): 2048 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/ZY..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZY.W.333.12BED8 simultaneous interpolator

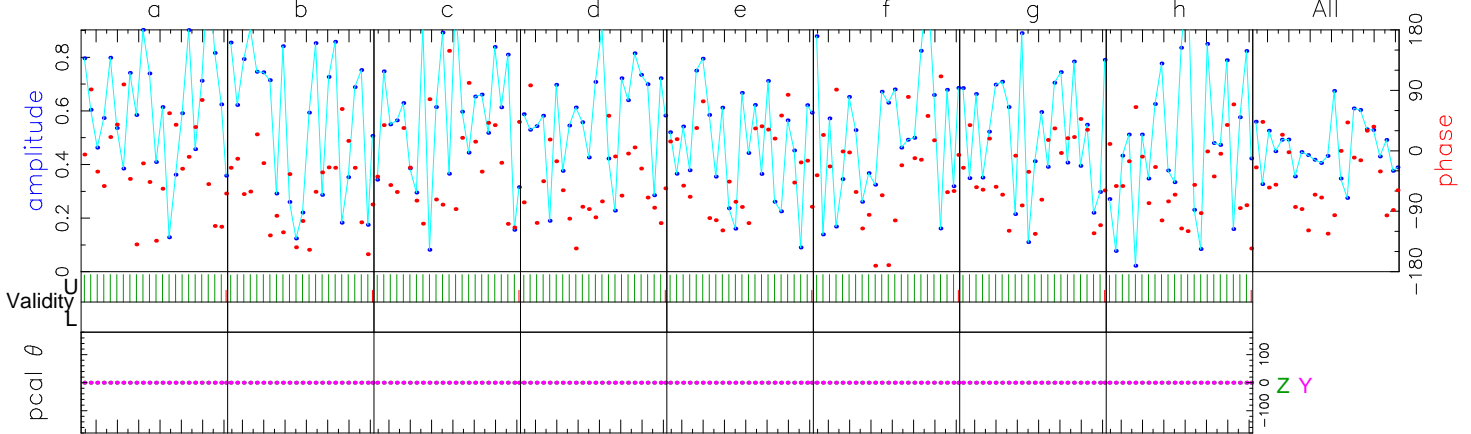


Fringe quality 9

SNR 16.5
 Int time 400.959
 Amp 0.301
 Phase -39.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.003390
 MBD -0.003043
 Fringe rate (Hz) 0.003657
 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
 2020:086:165704
 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

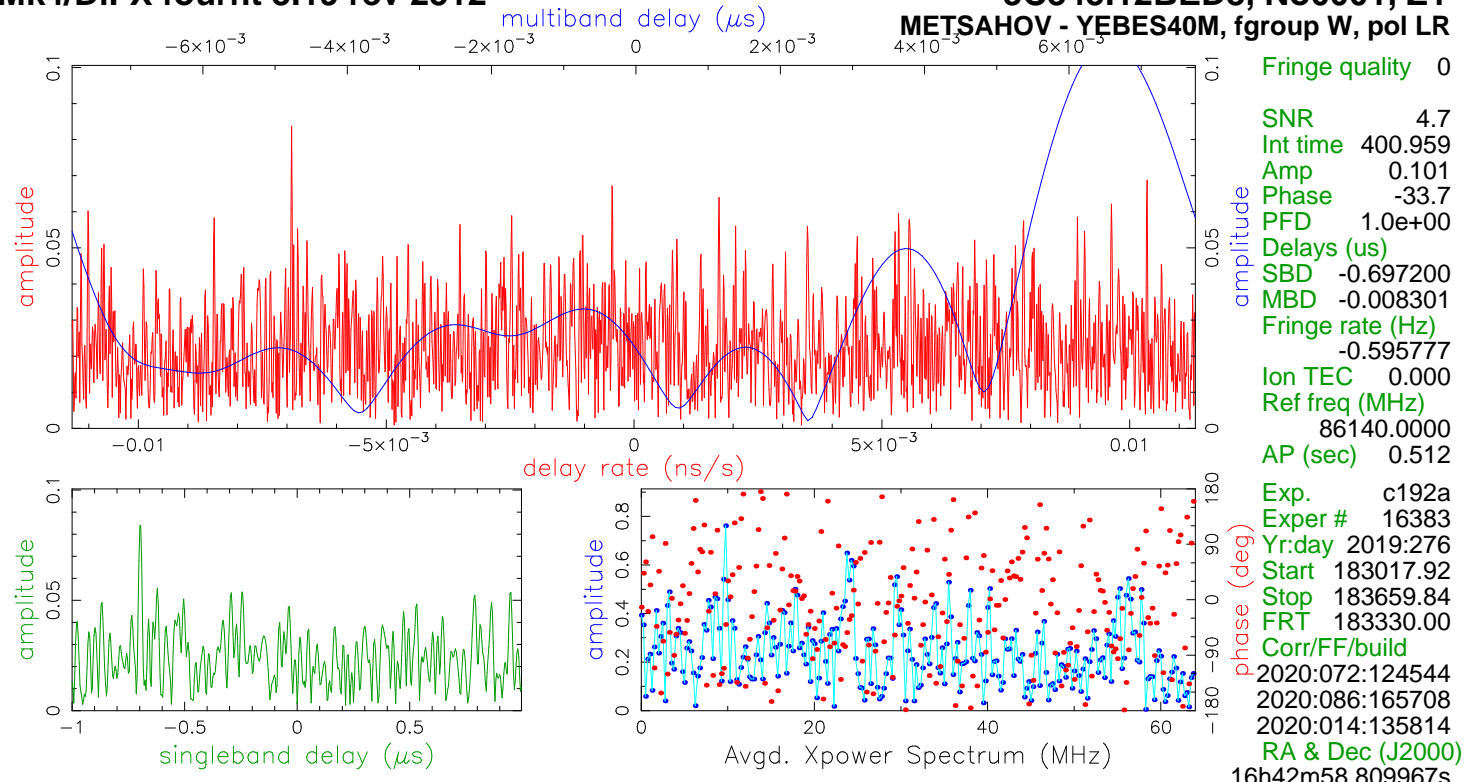


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-24.9	-53.9	-33.7	-61.3	-14.8	-26.6	-30.4	-55.9	Phase	-39.7
	0.3	0.4	0.3	0.4	0.2	0.3	0.3	0.3	Ampl.	0.3
	256.5	255.8	256.1	255.8	255.6	255.8	256.1	256.0	Sbd box	256.1
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

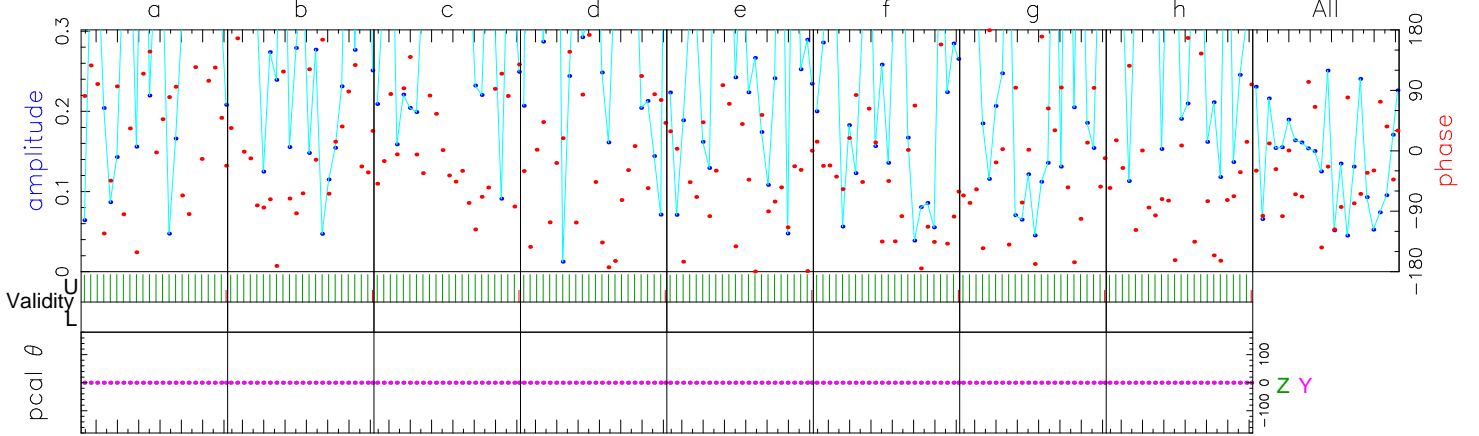
Group delay (usec)(sbd) -3.47820054606E+03 Apriori delay (usec) -3.47819750350E+03 Resid mbdelay (usec) -3.04257E-03 +/- 6.6E-05
 Sband delay (usec) -3.47820089375E+03 Apriori clock (usec) -9.4697704E+00 Resid sbdelay (usec) -3.39025E-03 +/- 5.2E-04
 Phase delay (usec) -3.47819750478E+03 Apriori clockrate (us/s) -2.0370720E-07 Resid phdelay (usec) -1.27915E-06 +/- 2.2E-07
 Delay rate (us/s) 6.82530396635E-03 Apriori rate (us/s) 6.82526151312E-03 Resid rate (us/s) 4.24532E-08 +/- 9.7E-10
 Total phase (deg) -22.1 Apriori accel (us/s/s) 3.42149709366E-05 Resid phase (deg) -39.7 +/- 7.0

RMS Theor. Amplitude 0.301 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.2 16.7 Search (2048X32) 0.295 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 62.6 29.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 18.5 9.8 Inc. seg. avg. 0.444 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 17.1 17.2 Inc. frq. avg. 0.308 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 271.4 el 46.7 pa 40.3 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) 11.248 3725.235 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZY..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZY.W.345.12BED8



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



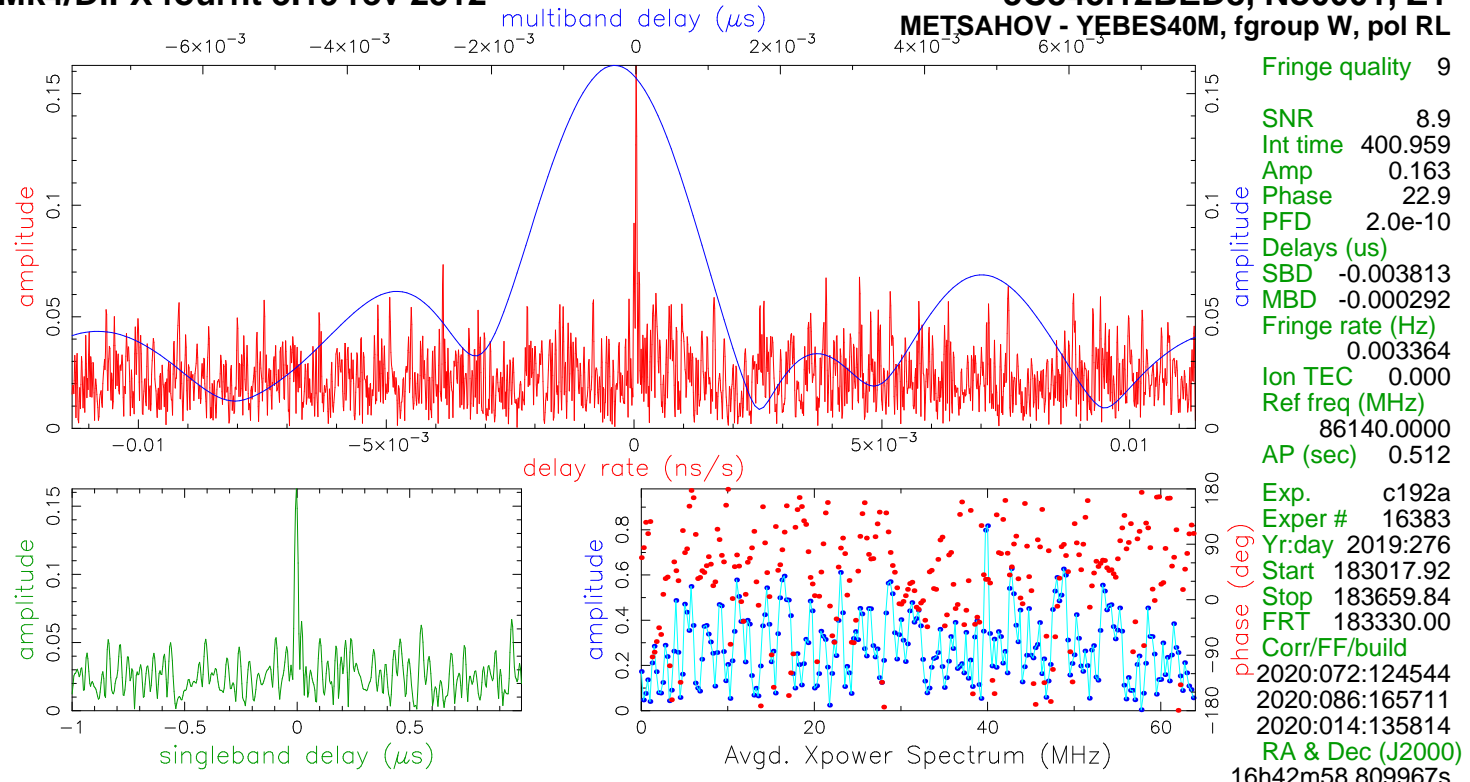
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	86.9	-7.8	-4.1	-57.0	-25.2	-58.0	-57.6	-78.8	Phase	-33.7
	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	Ampl.	0.1
	13.5	166.5	79.8	467.0	479.4	128.8	361.5	77.2	Sbd box	78.5
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-3.47889330428E+03	Apriori delay (usec)	-3.47819750350E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	2.3E-04
Sband delay (usec)	-3.47889470325E+03	Apriori clock (usec)	-9.4697704E-07	Resid sbdelay (usec)	-6.97200E-01	+/-	1.8E-03
Phase delay (usec)	-3.47819750459E+03	Apriori clockrate (us/s)	-2.0370720E-07	Resid phdelay (usec)	-1.08820E-06	+/-	7.9E-07
Delay rate (us/s)	6.81834512915E-03	Apriori rate (us/s)	6.82526151312E-03	Resid rate (us/s)	-6.91638E-06	+/-	3.4E-09
Total phase (deg)	-16.2	Apriori accel (us/s/s)	3.42149709366E-05	Resid phase (deg)	-33.7	+/-	24.4

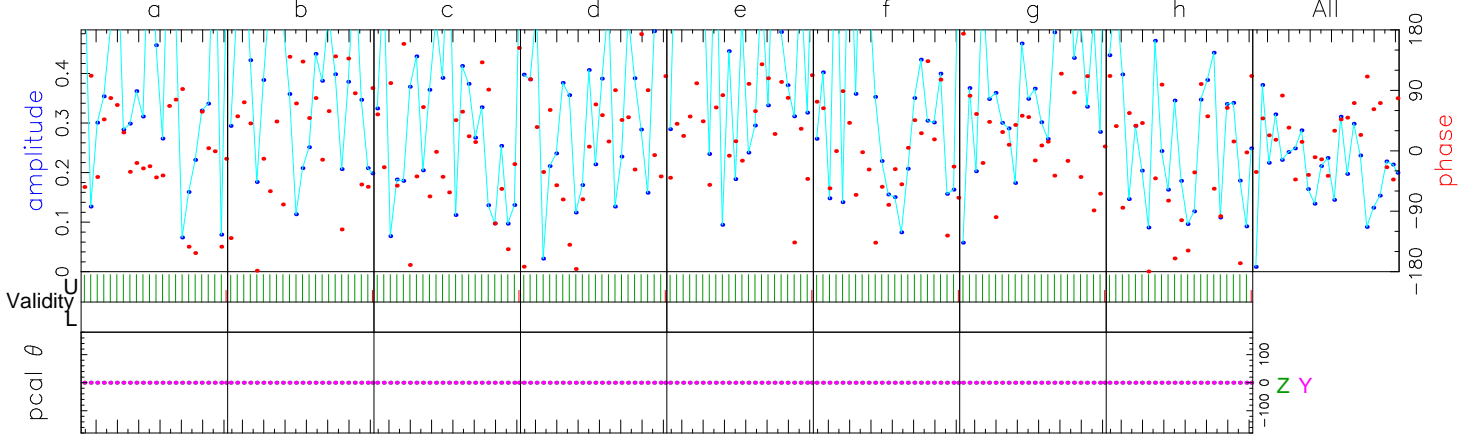
ph/seg (deg)	65.9	Theor.	58.4	Amplitude	0.101 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	97.1	Search (2048X32)	0.107	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	57.6	Inc. seg. avg.	0.110	Inc. frq. avg.	0.116	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	45.4	Inc. frq. avg.	0.116			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

Z: az 271.4 el 46.7 pa 40.3 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) 11.248 3725.235 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZY..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZY.W.355.12BED8

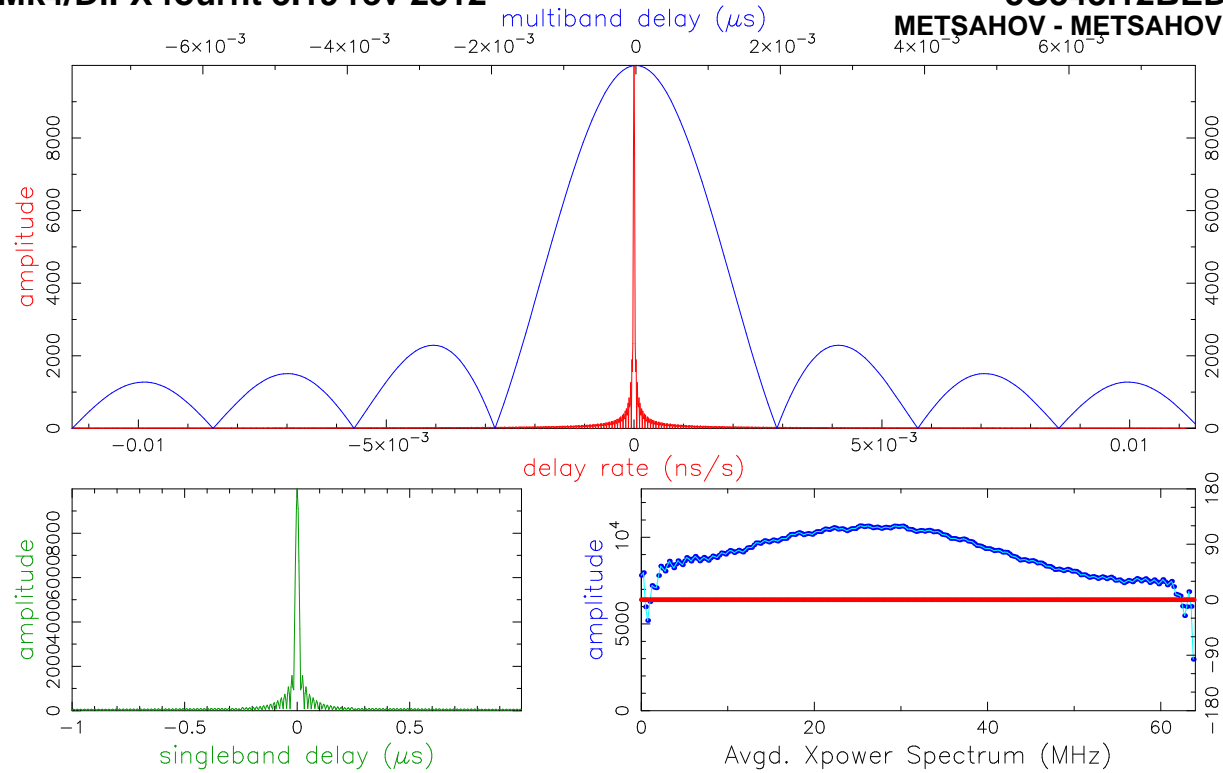


Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	12.1	53.5	-13.7	24.5	48.3	6.9	12.7	26.5	Phase	22.9
	0.2	0.1	0.1	0.1	0.3	0.2	0.2	0.1	Ampl.	0.2
	255.4	398.9	12.0	244.4	256.6	256.4	218.4	301.6	Sbd box	256.0
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.47819779513E+03		Apriori delay (usec)		-3.47819750350E+03		Resid mbdelay (usec)		-2.91630E-04	+/- 1.2E-04
Sband delay (usec)	-3.47820131600E+03		Apriori clock (usec)		-9.4697704E-07		Resid sbdelay (usec)		-3.81250E-03	+/- 9.7E-04
Phase delay (usec)	-3.47819750276E+03		Apriori clockrate (us/s)		-2.0370720E-07		Resid phdelay (usec)		7.37508E-07	+/- 4.1E-07
Delay rate (us/s)	6.82530057023E-03		Apriori rate (us/s)		6.82526151312E-03		Resid rate (us/s)		3.90571E-08	+/- 1.8E-09
Total phase (deg)	-319.6		Apriori accel (us/s/s)		3.42149709366E-05		Resid phase (deg)		22.9	+/- 12.9

ph/seg (deg) 44.3 30.9 Search (2048X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 57.7 53.9 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 18.2 Inc. seg. avg. 0.185 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.3 31.8 Inc. frq. avg. 0.165 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 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) 11.248 3725.235 ion window (TEC) 0.00 0.00
 simultaneous interpolator

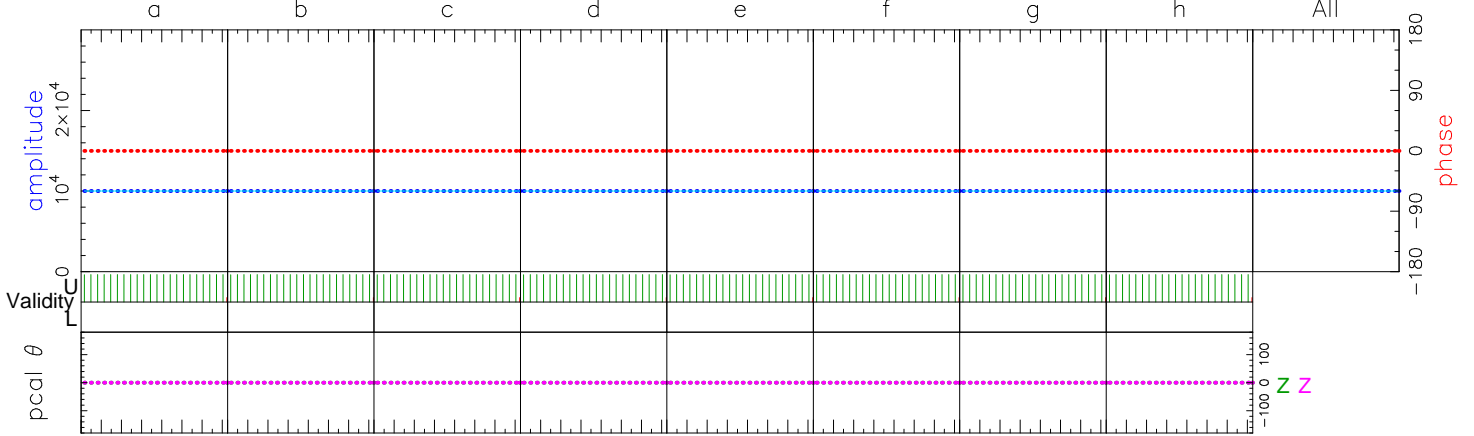


Fringe quality 9

SNR 560004.9
 Int time 419.362
 Amp 9999.994
 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 183000.00
 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, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

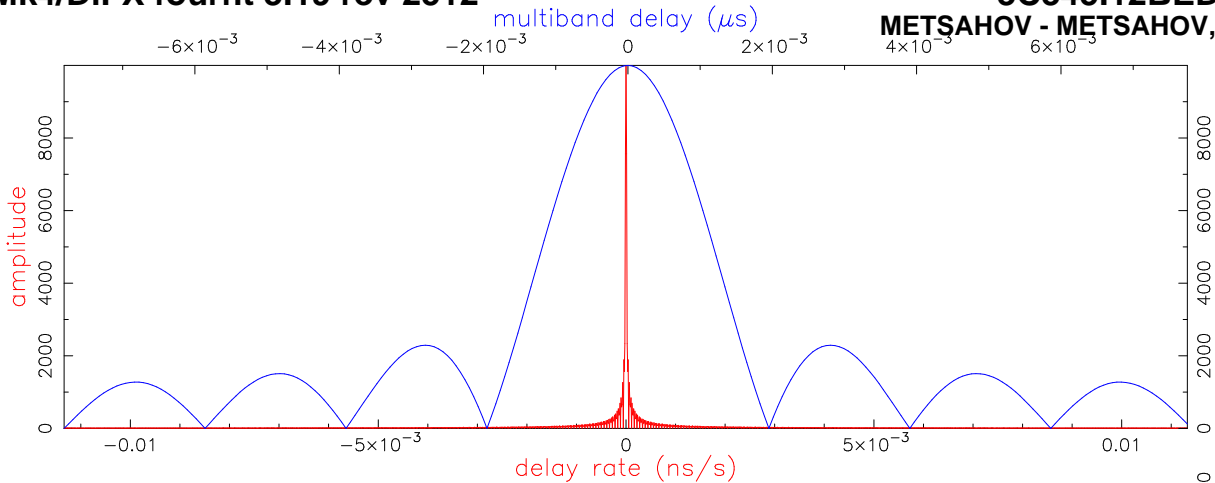


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.5E-08
 Phase delay (usec) -3.67829388893E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -3.67829E-20 +/- 6.6E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

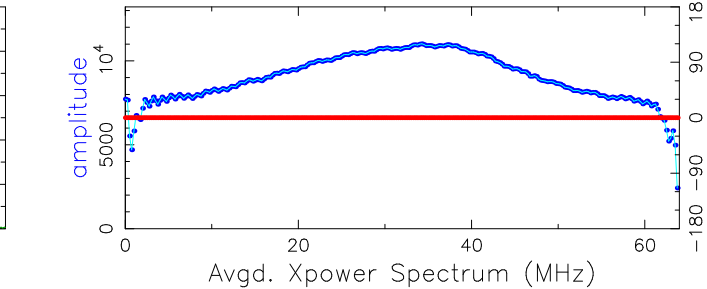
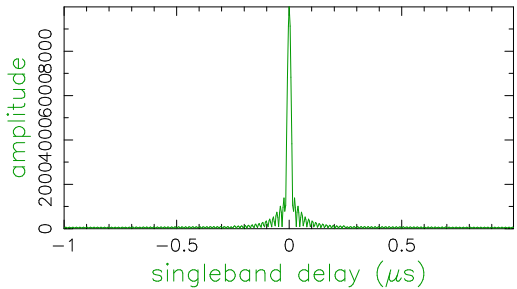
RMS Theor. Amplitude 9999.994 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.994 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 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. 9999.994 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator



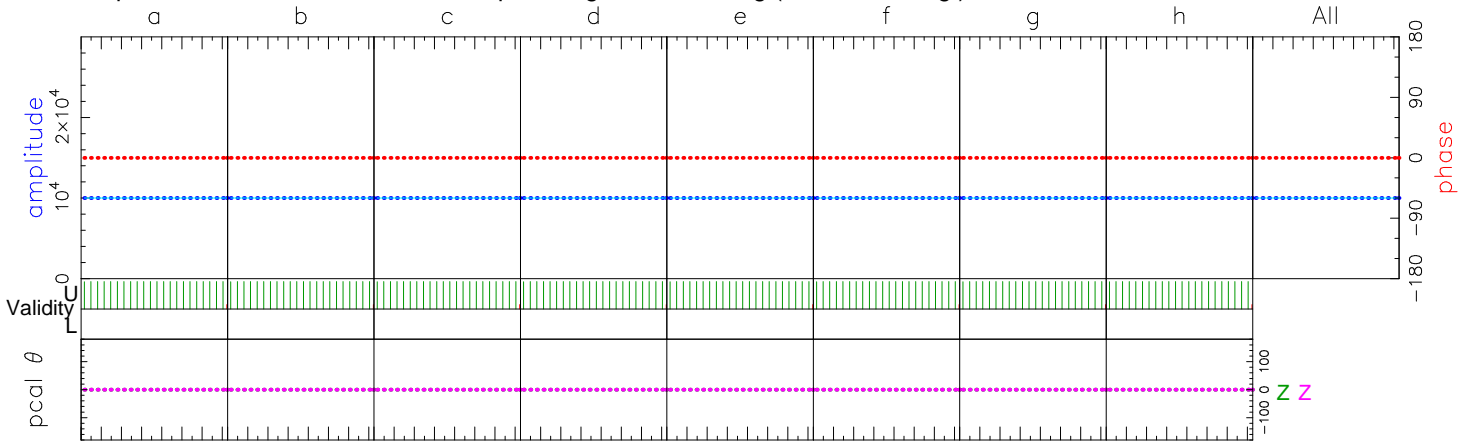
Fringe quality 9

SNR 560004.9
 Int time 419.362
 Amp 9999.994
 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
 Yr:day 16383
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165705
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

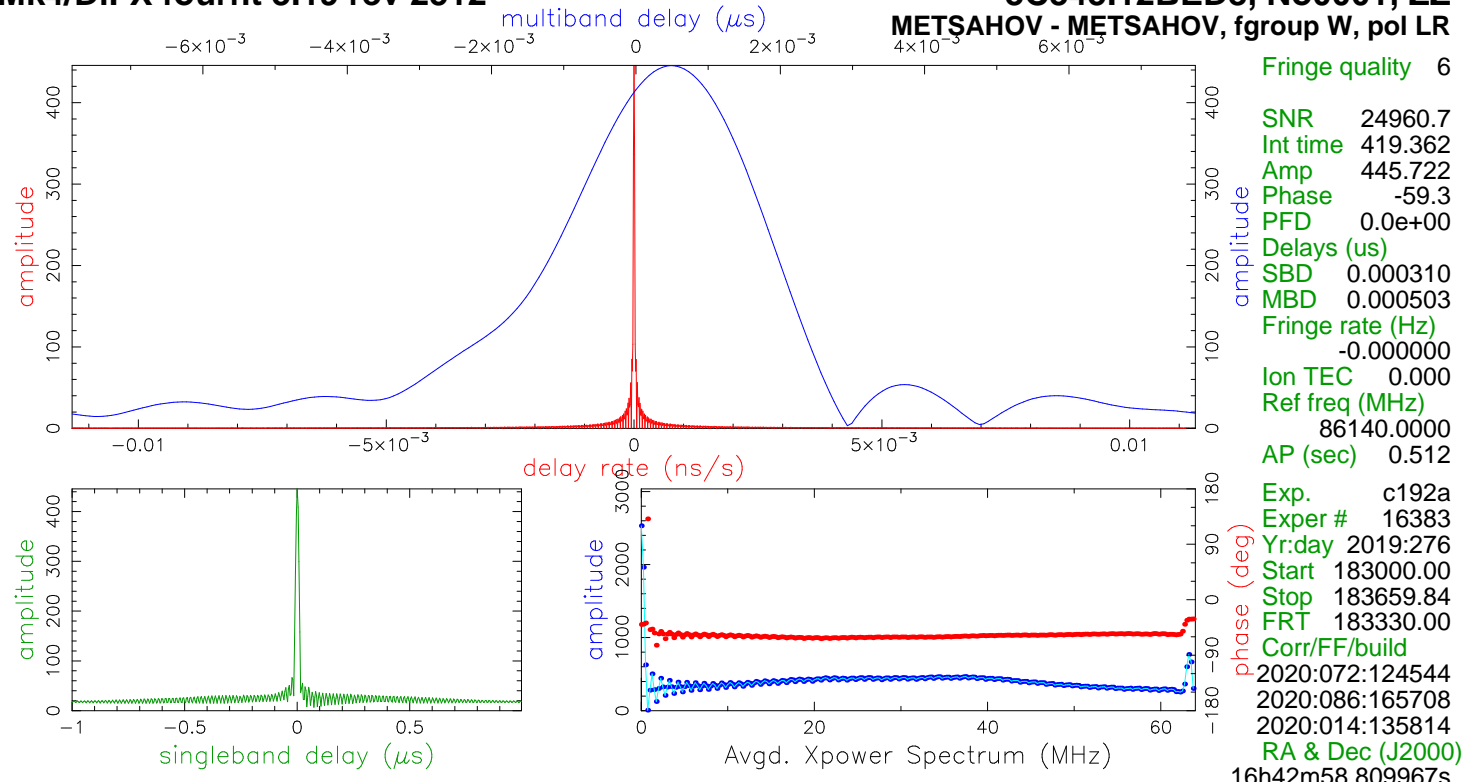


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

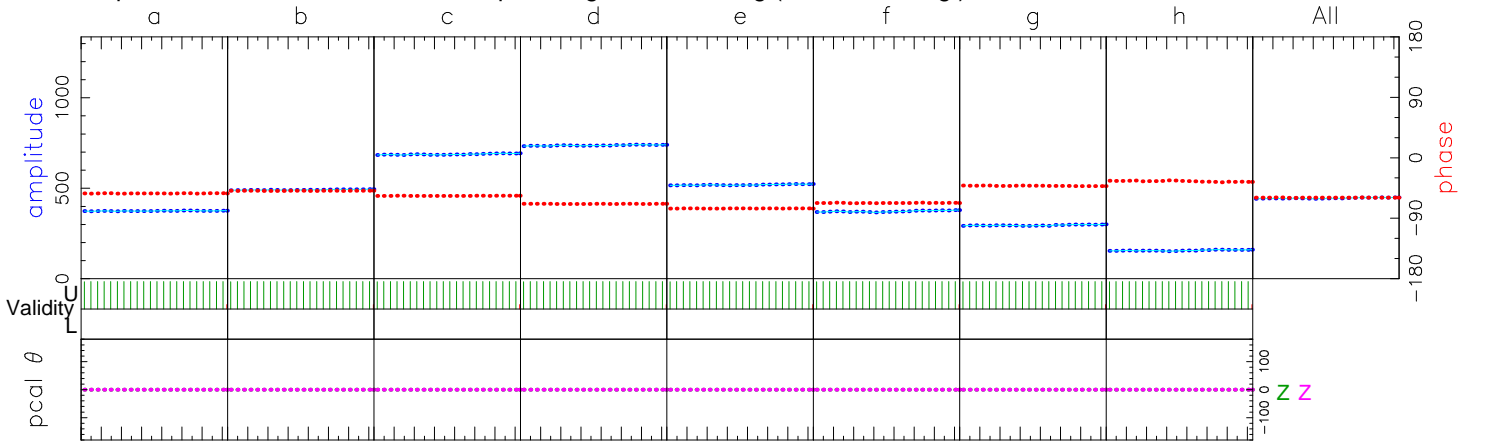
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.5E-08
 Phase delay (usec) 6.48600447117E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 6.48600E-20 +/- 6.6E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.994 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.994 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. 9999.994 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZZ.W.348.12BED8

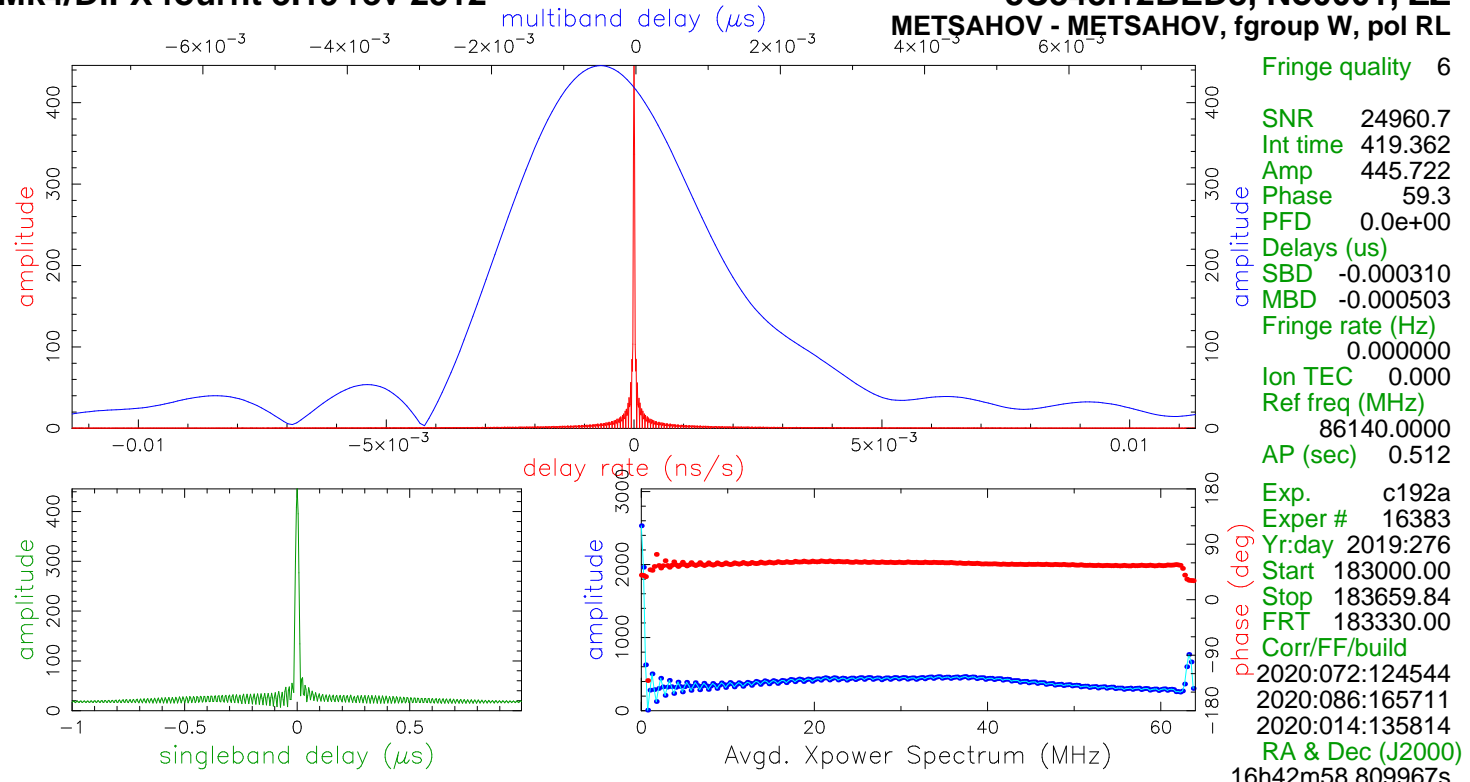


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

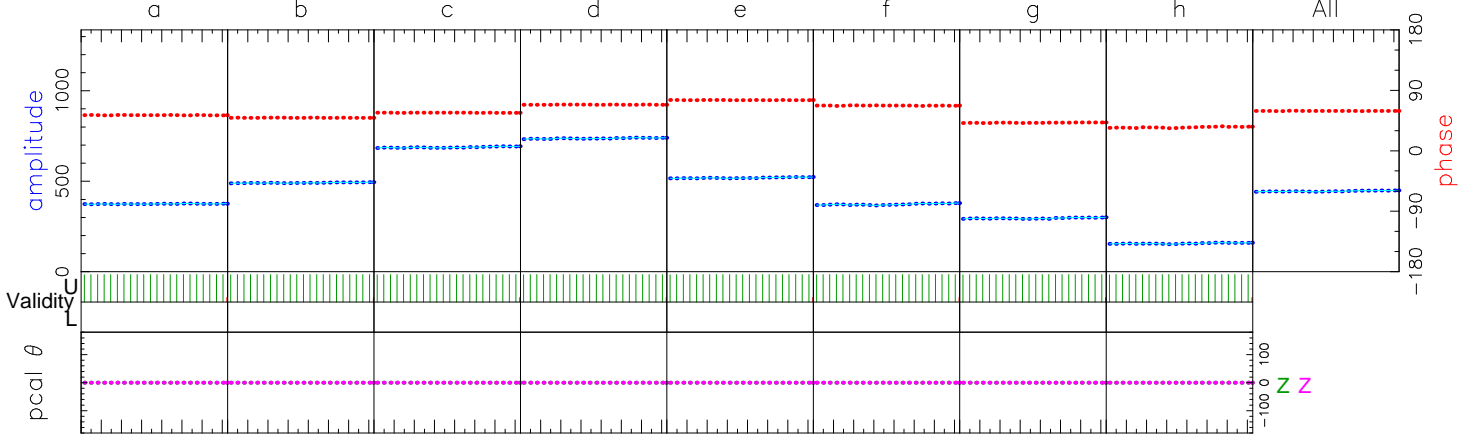


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-53.0	-49.1	-56.6	-68.6	-75.4	-67.2	-41.7	-34.9	Phase	-59.3
	375.0	491.7	687.9	737.0	519.2	372.6	295.5	156.7	Ampl.	454.4
	257.3	257.1	257.2	256.9	257.2	257.0	257.3	257.1	Sbd box	257.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	5.030000000000E-04		Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	5.03000E-04	+/-	4.3E-08		
Sband delay (usec)	3.102500000000E-04		Apriori clock (usec)	0.000000000000E+00	Resid sbdelay (usec)	3.10250E-04	+/-	3.5E-07		
Phase delay (usec)	-1.91227307903E-06		Apriori clockrate (us/s)	0.000000000000E+00	Resid phdelay (usec)	-1.91227E-06	+/-	1.5E-10		
Delay rate (us/s)	-1.41711523917E-12		Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	-1.41712E-12	+/-	6.1E-13		
Total phase (deg)		-59.3	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	-59.3	+/-	0.0		

ph/seg (deg) 0.1 0.0 Search (2048X32) 445.449 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.5 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.6 0.0 Inc. seg. avg. 445.440 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.0 0.0 Inc. frq. avg. 454.450 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZZ.W.357.12BED8



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 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	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		-5.03000000000E-04				0.00000000000E+00			Resid mbdelay (usec)	-5.03000E-04 +/- 4.3E-08
Sband delay (usec)		-3.10250000000E-04				0.0000000E+00			Resid sbdelay (usec)	-3.10250E-04 +/- 3.5E-07
Phase delay (usec)		1.91227307913E-06				0.0000000E+00			Resid phdelay (usec)	1.91227E-06 +/- 1.5E-10
Delay rate (us/s)		1.41711523917E-12				0.00000000000E+00			Resid rate (us/s)	1.41712E-12 +/- 6.1E-13
Total phase (deg)			59.3			0.00000000000E+00			Resid phase (deg)	59.3 +/- 0.0

RMS Theor. Amplitude 445.722 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.1 0.0 Search (2048X32) 445.449 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.5 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 15.6 0.0 Inc. seg. avg. 445.440 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 41.0 0.0 Inc. frq. avg. 454.450 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Z: az 271.4 el 46.7 pa 40.3 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZZ..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZZ.W.362.12BED8