

Fringe quality 0

SNR 6.0

Int time 406.169

Amp 0.154

Phase -73.3

PFD 4.8e-01

Delays (us)

SBD -0.904289

MBD 0.013975

Fringe rate (Hz)

0.873898

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

2020:083:003228

2020:093:042752

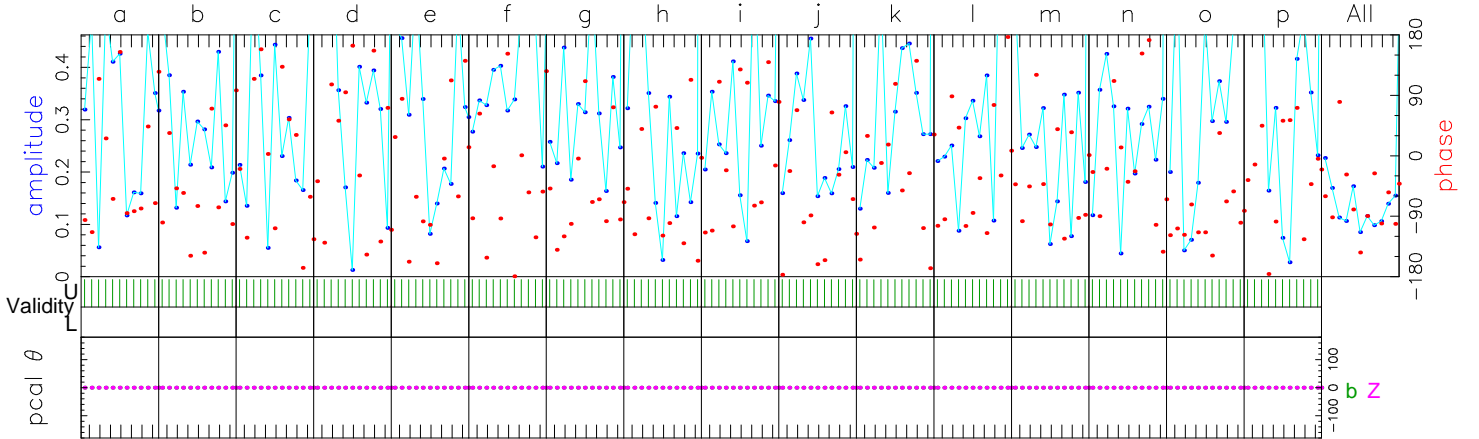
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-65.1	-74.6	167.1	-156.7	-50.6	-77.0	-75.2	-84.5	-88.4	-59.5	-34.2	-80.6	-65.7	-90.6	-93.9	-16.1		Phase -73.3
	0.2	0.2	0.0	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.4	0.2		Ampl. 0.1
	151.7	49.7	91.5	141.4	32.0	172.4	110.1	177.2	89.5	149.1	124.0	204.9	159.2	187.2	13.0	101.9		Sbd box 13.3
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
																		Chan ids
																		Tracks
Group delay (usec)(sbd)	-3.35319081688E+03			Apriori delay (usec)			-3.35229854166E+03			Resid mbdelay (usec)			1.39748E-02			+/- 1.8E-04		
Sband delay (usec)	-3.35320283066E+03			Apriori clock (usec)			-7.9490691E-01			Resid sbdelay (usec)			-9.04289E-01			+/- 2.9E-03		
Phase delay (usec)	-3.35229854403E+03			Apriori clockrate (us/s)			-2.5868787E-07			Resid phdelay (usec)			-2.36515E-06			+/- 6.2E-07		
Delay rate (us/s)	1.31904864813E+00			Apriori rate (us/s)			1.31903850304E+00			Resid rate (us/s)			1.01451E-05			+/- 2.6E-09		
Total phase (deg)	-209.7			Apriori accel (us/s/s)			8.90330107089E-06			Resid phase (deg)			-73.3			+/- 19.2		

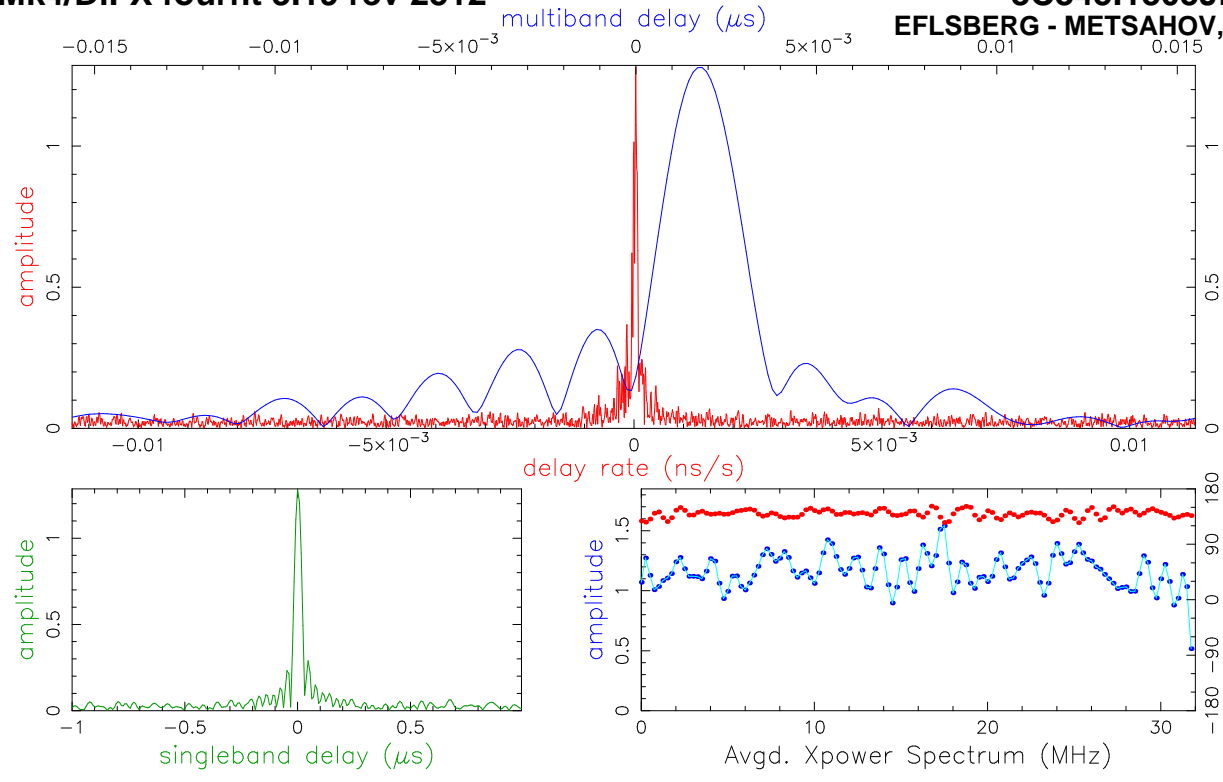
ph/seg (deg) 56.6 33.3 Search (2048X64) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 50.9 58.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 44.7 38.5 Inc. seg. avg. 0.167 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 48.5 67.1 Inc. frq. avg. 0.133 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 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 ion window (TEC) 0.00 0.00 simultaneous interpolator

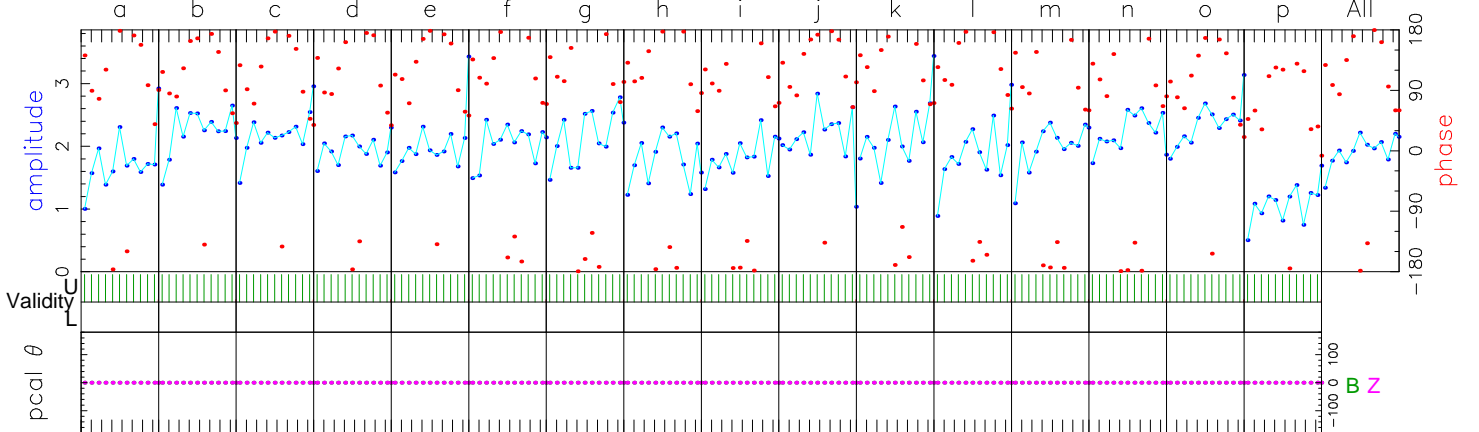


Fringe quality 4

SNR 72.0
Int time 419.362
Amp 1.286
Phase 138.6
PFD 0.0e+00
Delays (us)
SBD 0.001668
MBD 0.001786
Fringe rate (Hz) 0.003031
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
2020:083:003228
2020:093:042755
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

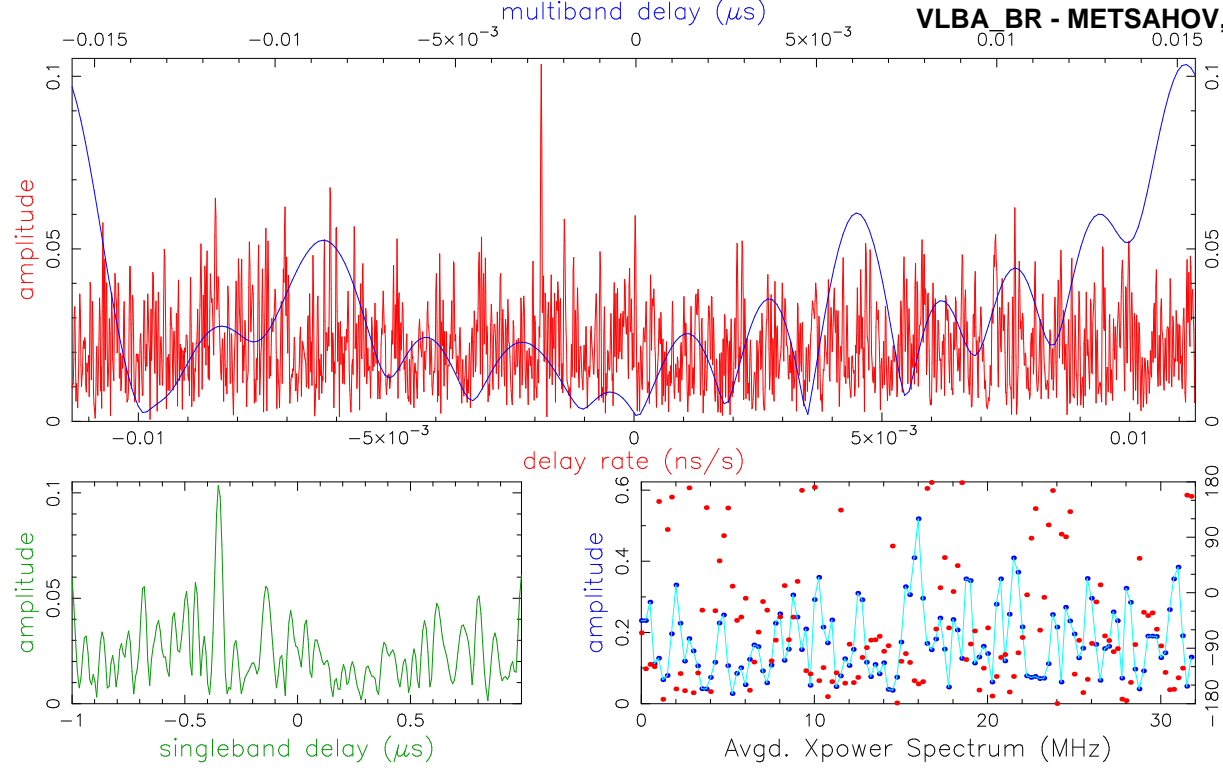


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	86140.00	138.6
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	86140.00	1.3
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	86140.00	129.2
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	86140.00	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	86140.00	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	86140.00	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	86140.00	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	86140.00	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	86140.00	
Group delay (usec)(sbd)	2.31190298555E+03			Apriori delay (usec)			2.31190119911E+03			Resid mbdelay (usec)			1.78644E-03			+/- 1.5E-05		
Sband delay (usec)	2.31190286661E+03			Apriori clock (usec)			1.6656853E+01			Resid sbdelay (usec)			1.66750E-03			+/- 2.4E-04		
Phase delay (usec)	2.31190120358E+03			Apriori clockrate (us/s)			-2.1629280E-07			Resid phdelay (usec)			4.46967E-06			+/- 5.1E-08		
Delay rate (us/s)	-1.73964934621E-02			Apriori rate (us/s)			-1.73965286540E-02			Resid rate (us/s)			3.51919E-08			+/- 2.1E-10		
Total phase (deg)	243.5			Apriori accel (us/s/s)			-1.91529033202E-05			Resid phase (deg)			138.6			+/- 1.6		

ph/seg (deg) 47.8 2.8 Search (2048X64) 1.252 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 51.9 4.8 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 3.2 Inc. seg. avg. 1.908 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 16.1 5.6 Inc. frq. avg. 1.310 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/BZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/BZ.W.120.1305JH

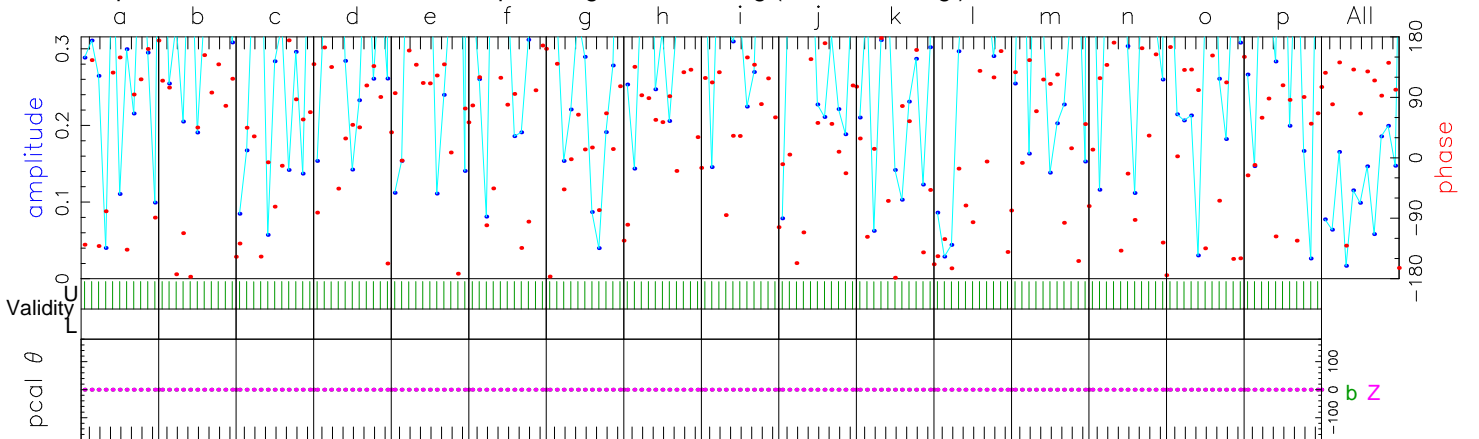
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bZ
VLBA_BR - METSAHOV, fgroup W, pol LR



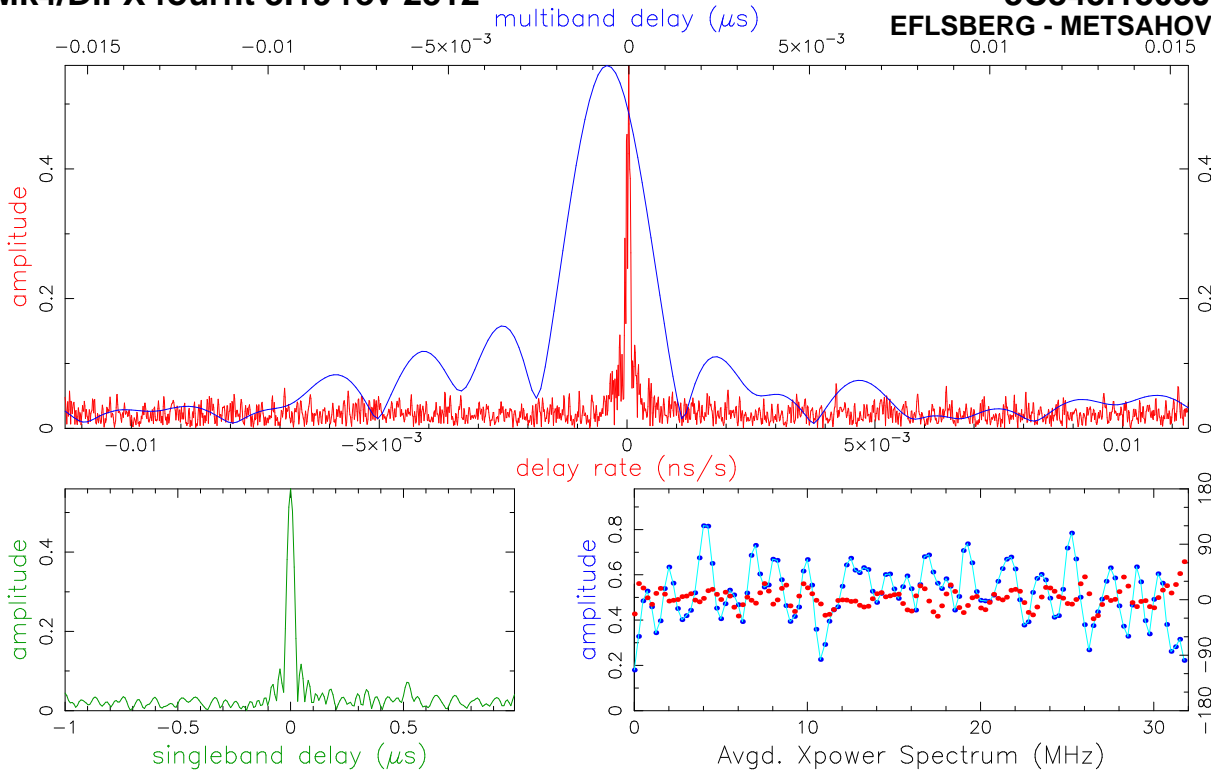
Fringe quality 0
SNR 5.7
Int time 406.169
Amp 0.105
Phase 118.0
PFD 9.1e-01
Delays (us)
SBD -0.349735
MBD -0.016037
Fringe rate (Hz)
-0.161164
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042756
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
161.6	129.8	48.5	97.3	130.0	118.2	77.4	80.6	96.1	133.2	-120.8	-137.8	77.7	171.1	175.3	78.8	Phase	118.0	
0.2	0.3	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1	
68.9	83.4	127.8	253.6	134.3	117.8	205.1	232.5	84.5	109.1	117.1	58.8	248.8	139.9	3.2	208.2	Sbd box	84.2	
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	-3.35265832910E+03			Apriori delay (usec)			-3.35229854166E+03			Resid mbdelay (usec)			-1.60374E-02			+/- 1.9E-04		
Sband delay (usec)	-3.35264827666E+03			Apriori clock (usec)			-7.9490691E-01			Resid sbdelay (usec)			-3.49735E-01			+/- 3.0E-03		
Phase delay (usec)	-3.35229853786E+03			Apriori clockrate (us/s)			-2.5868787E-07			Resid phdelay (usec)			3.80499E-06			+/- 6.4E-07		
Delay rate (us/s)	1.31903663208E+00			Apriori rate (us/s)			1.31903850304E+00			Resid rate (us/s)			-1.87096E-06			+/- 2.7E-09		
Total phase (deg)	-18.3			Apriori accel (us/s/s)			8.90330107089E-06			Resid phase (deg)			118.0			+/- 20.0		
ph/seg (deg)	RMS	Theor.	Amplitude	0.105 +/- 0.018			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5			sb window (us)		-1.000	1.000		
amp/seg (%)	41.8	34.6	Search (2048X64)	0.102			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			SampCntNorm: enabled			mb window (us)		-0.016	0.016		
ph/frq (deg)	57.3	40.0	Interp.	0.000			Sample rate(MSamp/s): 64			Data rate(Mb/s): 2048			dr window (ns/s)		-0.011	0.011		
amp/frq (%)	71.2	69.8	Inc. seg. avg.	0.100			nlags: 128			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/v2/1234/No0001/bZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/bZ.W.124.1305JH

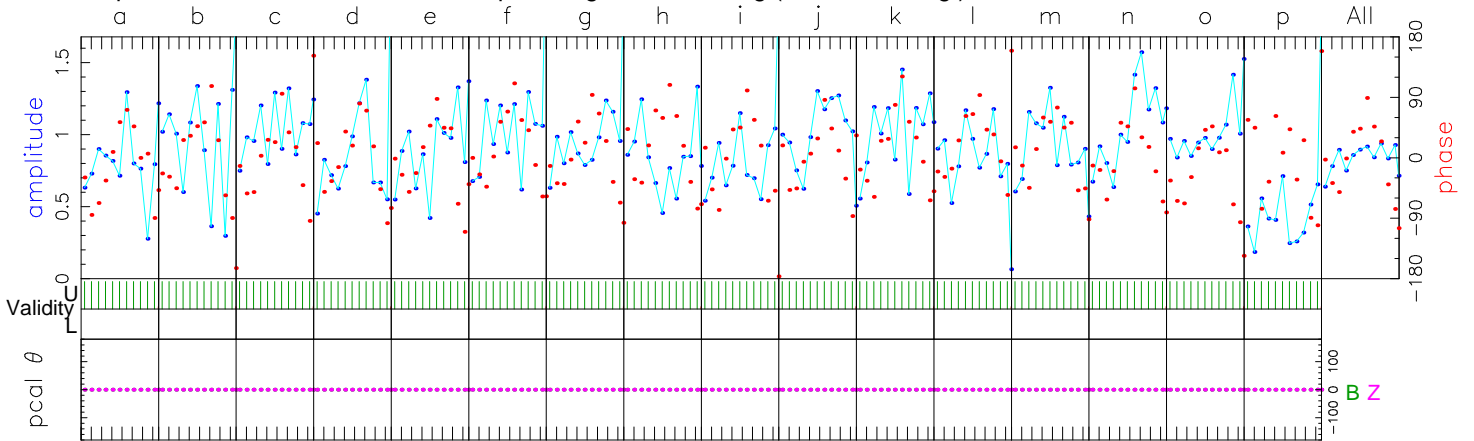


Fringe quality 7

SNR 31.3
Int time 419.362
Amp 0.560
Phase 3.3
PFD 0.0e+00
Delays (us)
SBD -0.000392
MBD -0.000599
Fringe rate (Hz) 0.003048
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
2020:083:003228
2020:093:042801
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

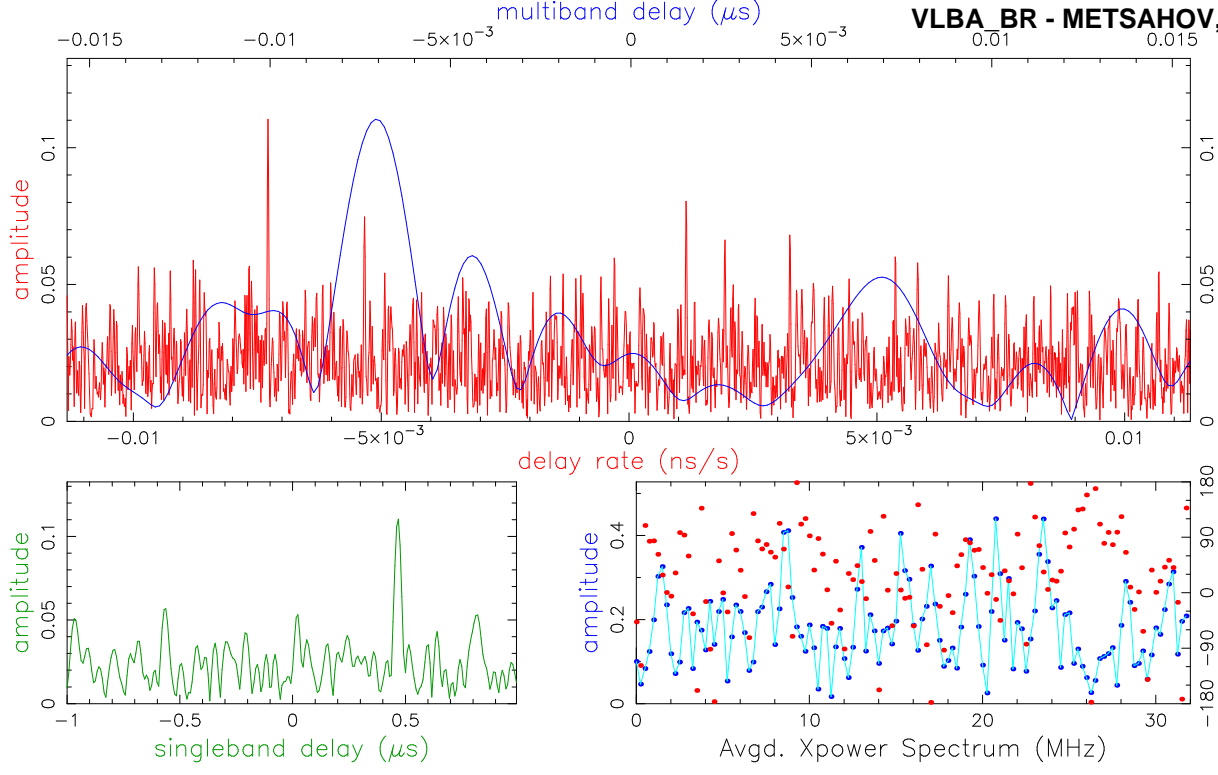


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-7.8	1.4	-4.1	13.0	-4.7	15.7	1.9	2.5	-1.6	3.2	10.4	21.8	18.1	8.2	-24.3	-21.3		Phase	3.3
	0.5	0.6	0.7	0.5	0.5	0.6	0.6	0.5	0.4	0.7	0.6	0.6	0.7	0.7	0.7	0.2		Ampl.	0.6
	127.8	129.0	128.8	128.8	129.4	129.2	129.3	128.5	129.5	129.0	129.2	128.8	128.7	128.9	128.6	120.2		Sbd box	128.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)	2.31190059986E+03			Apriori delay (usec)			2.31190119911E+03			Resid mbdelay (usec)			-5.99252E-04			+/-	3.4E-05		
Sband delay (usec)	2.31190080711E+03			Apriori clock (usec)			1.6656853E+01			Resid sbdelay (usec)			-3.92000E-04			+/-	5.5E-04		
Phase delay (usec)	2.31190119922E+03			Apriori clockrate (us/s)			-2.1629280E-07			Resid phdelay (usec)			1.06912E-07			+/-	1.2E-07		
Delay rate (us/s)	-1.73964932694E-02			Apriori rate (us/s)			-1.73965286540E-02			Resid rate (us/s)			3.53847E-08			+/-	4.9E-10		
Total phase (deg)	108.2			Apriori accel (us/s/s)			-1.91529033202E-05			Resid phase (deg)			3.3			+/-	3.7		

ph/seg (deg) 48.8 6.3 Search (2048X64) 0.551 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.9 11.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 13.4 7.3 Inc. seg. avg. 0.838 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 23.2 12.8 Inc. frq. avg. 0.567 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/BZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/BZ.W.140.1305JH

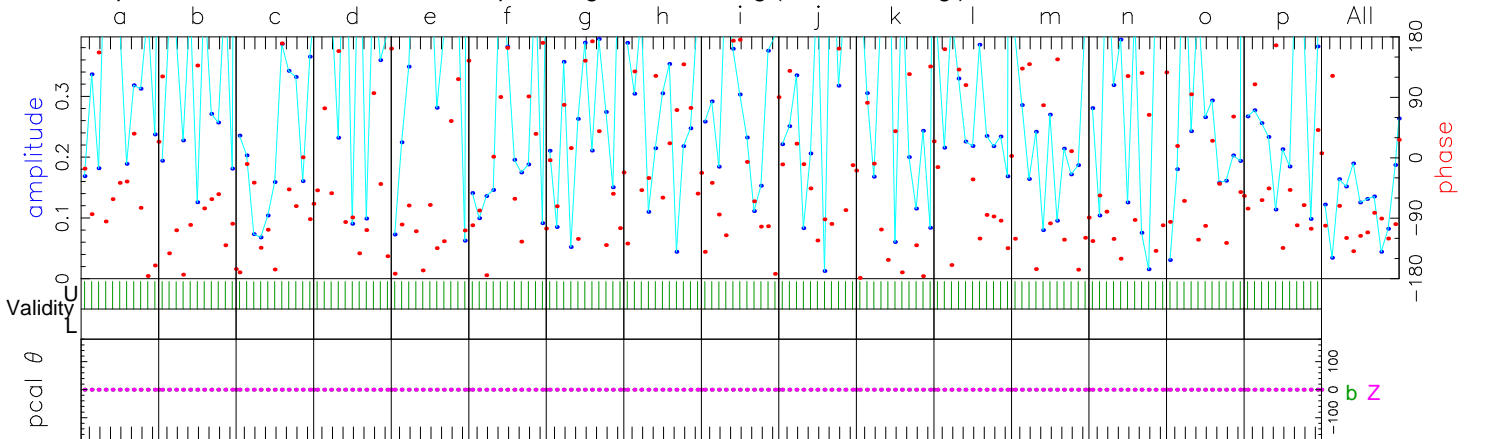
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bZ
 VLBA_BR - METSAHOV, fgroup W, pol RL



Fringe quality 0
 SNR 6.1
 Int time 406.169
 Amp 0.133
 Phase -106.8
 PFD 2.1e-01
 Delays (us)
 SBD 0.466570
 MBD -0.007030
 Fringe rate (Hz)
 -0.628206
 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
 2020:083:003228
 2020:093:042801
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec

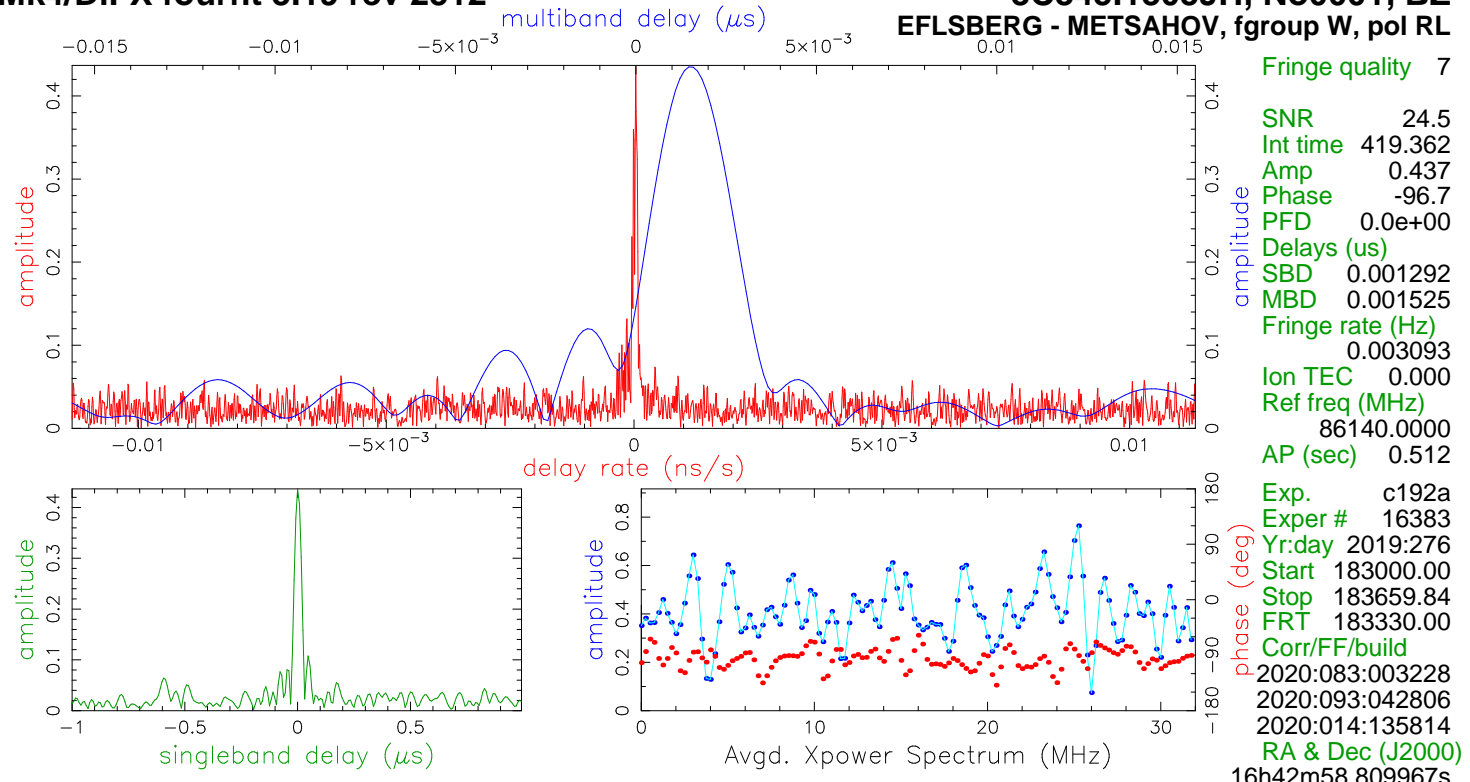


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-78.0	-112.3	-94.4	-103.1	-122.2	95.3	-115.7	-31.9	-125.1	-62.0	-168.5	-116.4	-145.5	-115.4	-57.6	-72.9	Phase	-106.8					
	0.2	0.3	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.3	0.1	0.2	Ampl.	0.1					
	30.9	150.3	239.2	92.9	248.7	201.7	61.0	149.4	221.2	79.3	43.6	95.7	136.7	155.0	134.9	225.4	Sbd box	188.7					
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs						
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase						
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC						
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp						
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids						
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks						
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids						
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks						
Group delay (usec)(sbd)			-3.35183682211E+03														Apriori delay (usec)	-3.35229854166E+03	Resid mbdelay (usec)	-7.03045E-03	+/-	1.8E-04	
Sband delay (usec)			-3.35183197166E+03															Apriori clock (usec)	-7.9490691E-01	Resid sbdelay (usec)	4.66570E-01	+/-	2.8E-03
Phase delay (usec)			-3.35229854510E+03															Apriori clockrate (us/s)	-2.5868787E-07	Resid phdelay (usec)	-3.44303E-06	+/-	6.0E-07
Delay rate (us/s)			1.31903121019E+00															Apriori rate (us/s)	1.31903850304E+00	Resid rate (us/s)	-7.29285E-06	+/-	2.6E-09
Total phase (deg)					-243.1													Apriori accel (us/s/s)	8.90330107089E-06	Resid phase (deg)	-106.8	+/-	18.7

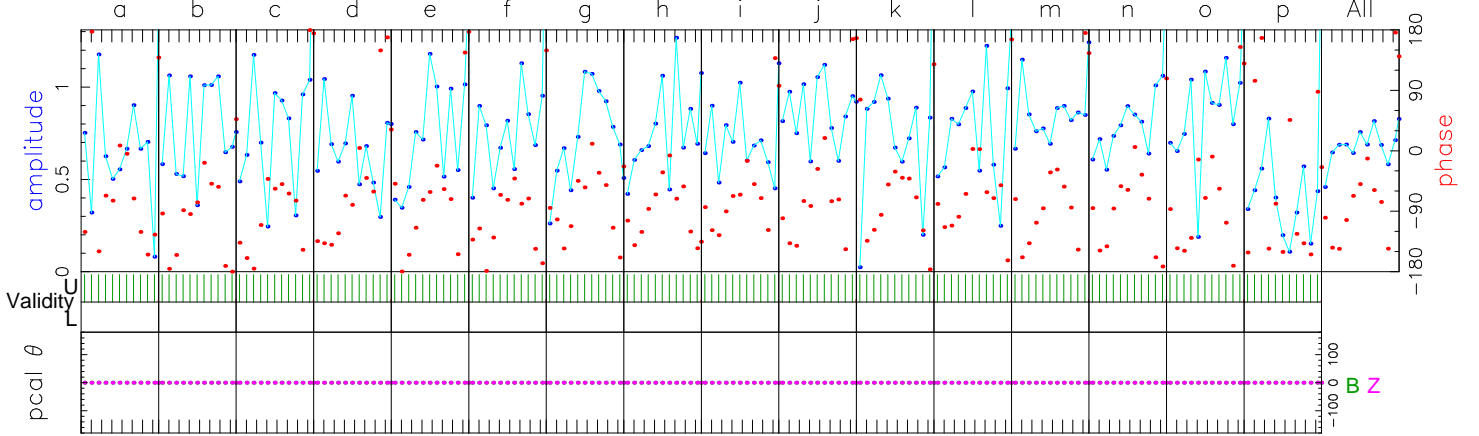
ph/seg (deg) 44.3 32.4 Search (2048X64) 0.133 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 46.8 56.5 Interp. 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 55.6 37.4 Inc. seg. avg. 0.128 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 55.5 65.3 Inc. frq. avg. 0.134 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 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 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/bZ.W.142.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, BZ
EFLSBERG - METSAHOV, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

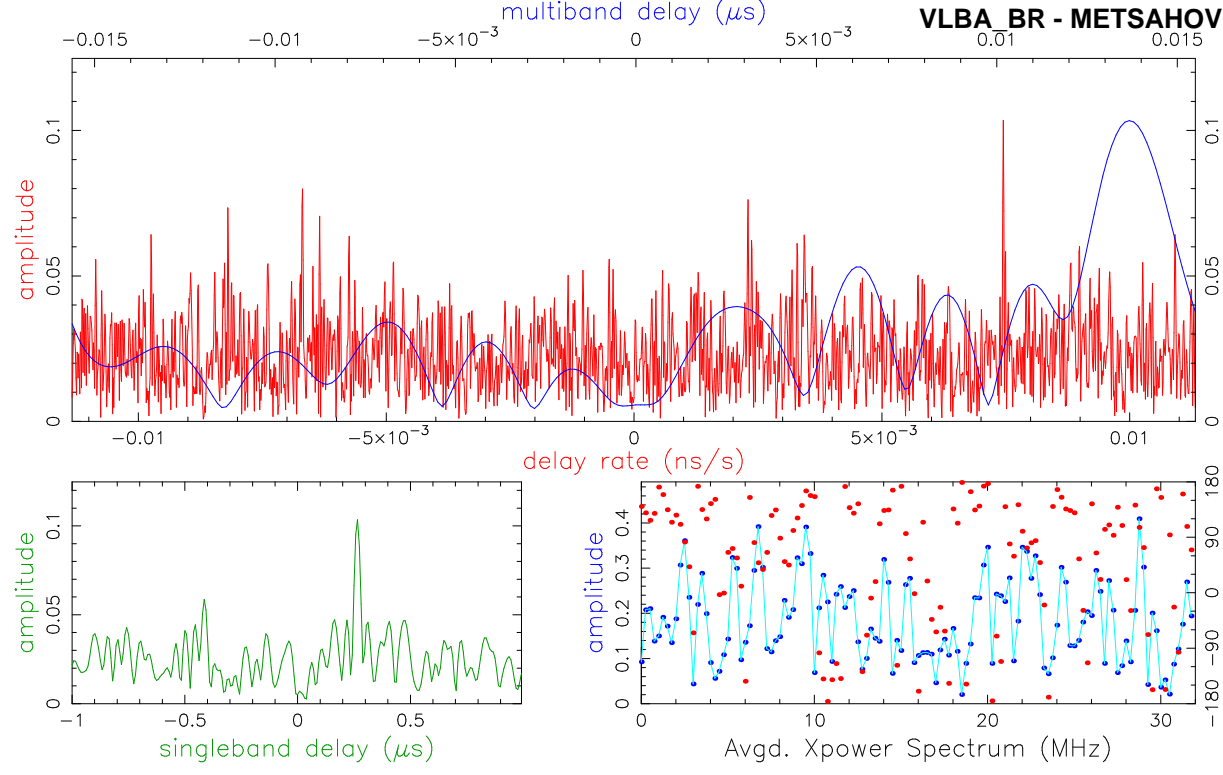


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	86492.00	Freq (MHz)	All
	-103.3	-96.9	-120.0	-108.0	-89.8	-109.0	-69.6	-85.0	-83.0	-94.7	-86.6	-77.1	-102.9	-93.7	-112.0	-159.4	-159.4	Phase	-96.7
	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.2	0.2	Ampl.	0.4
	128.9	129.3	129.4	129.3	129.7	129.1	128.8	129.0	129.9	129.2	129.0	129.1	129.4	129.0	128.9	128.8	128.8	Sbd box	129.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	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	0:0	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	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	W15UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	W15UL	Tracks	
																		Tracks	
Group delay (usec)(sbd)	2.31190272417E+03		Apriori delay (usec)		2.31190119911E+03		Resid mbdelay (usec)		1.52506E-03		+/-		4.4E-05						
Sband delay (usec)	2.31190249161E+03		Apriori clock (usec)		1.6656853E+01		Resid sbdelay (usec)		1.29250E-03		+/-		7.0E-04						
Phase delay (usec)	2.31190119599E+03		Apriori clockrate (us/s)		-2.1629280E-07		Resid phdelay (usec)		-3.11788E-06		+/-		1.5E-07						
Delay rate (us/s)	-1.73964927458E-02		Apriori rate (us/s)		-1.73965286540E-02		Resid rate (us/s)		3.59083E-08		+/-		6.2E-10						
Total phase (deg)	8.2		Apriori accel (us/s/s)		-1.91529033202E-05		Resid phase (deg)		-96.7		+/-		4.7						

ph/seg (deg) 50.4 8.1 Theor. Amplitude 0.437 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 57.4 14.2 Search (2048X64) 0.429 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.9 9.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 19.4 16.4 Inc. seg. avg. 0.664 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.449 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/BZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/BZ.W.158.1305JH

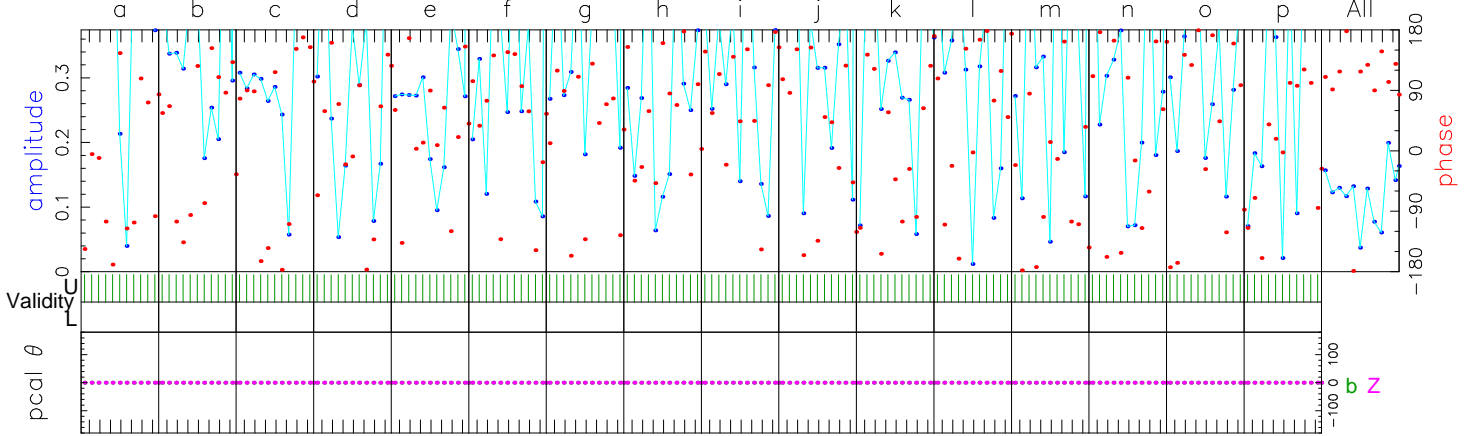


Fringe quality 0

SNR 5.7
Int time 406.169
Amp 0.125
Phase 124.4
PFD 9.3e-01
Delays (us)
SBD 0.264382
MBD 0.013674
Fringe rate (Hz) 0.642555
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 2020:083:003228
2020:093:042747
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec

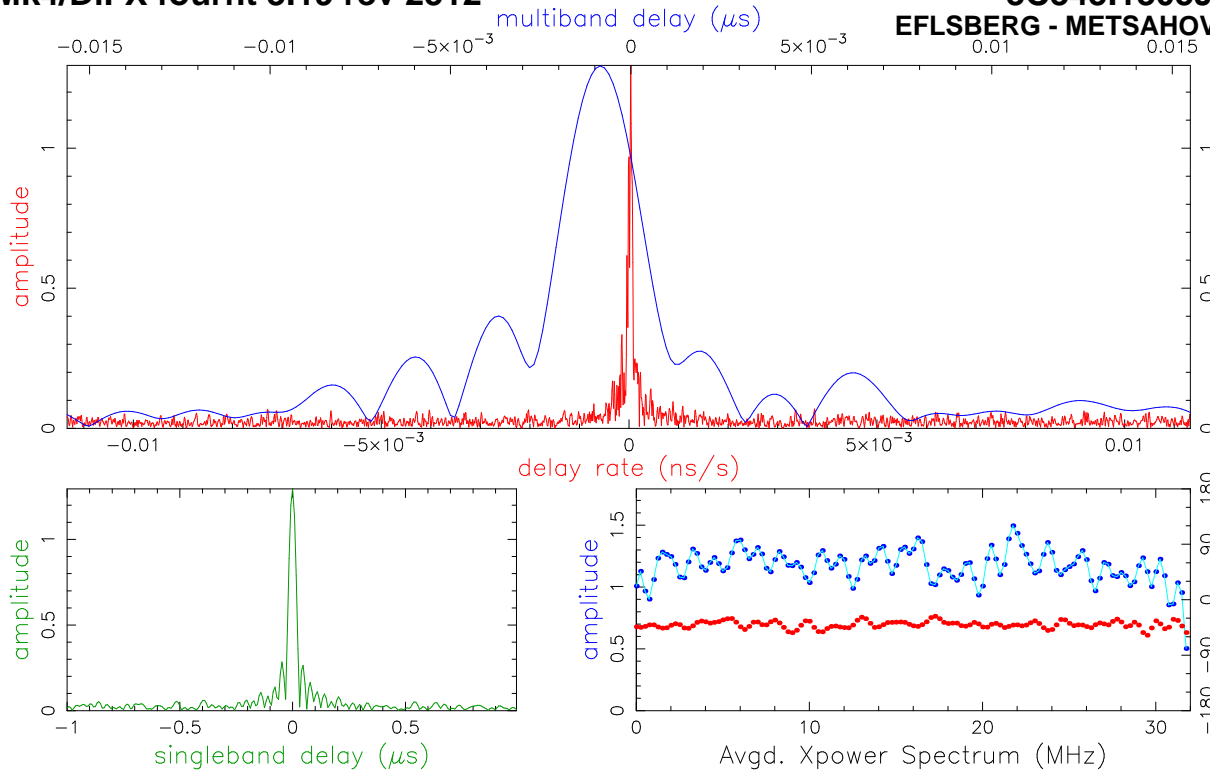


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-128.1	118.3	147.9	102.7	52.6	120.8	97.0	69.3	127.1	116.5	112.8	146.5	-79.2	172.8	147.7	80.4	Phase	124.4
	0.1	0.1	0.3	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.1	Ampl.	0.1
	30.8	214.8	109.9	101.2	93.3	70.2	161.9	169.1	108.3	149.6	127.7	120.0	112.4	147.4	111.0	105.1	Sbd box	162.8
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) -3.35203486800E+03 Apriori delay (usec) -3.35229854166E+03 Resid mbdelay (usec) 1.36737E-02 +/- 1.9E-04
 Sband delay (usec) -3.35203415966E+03 Apriori clock (usec) -7.9490691E-01 Resid sbdelay (usec) 2.64382E-01 +/- 3.0E-03
 Phase delay (usec) -3.35229853765E+03 Apriori clockrate (us/s) -2.5868787E-07 Resid phdelay (usec) 4.01160E-06 +/- 6.5E-07
 Delay rate (us/s) 1.31904596247E+00 Apriori rate (us/s) 1.31903850304E+00 Resid rate (us/s) 7.45943E-06 +/- 2.8E-09
 Total phase (deg) -11.9 Apriori accel (us/s/s) 8.90330107089E-06 Resid phase (deg) 124.4 +/- 20.0

RMS Theor. Amplitude 0.125 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 29.8 34.7 Search (2048X64) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 44.3 60.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 60.7 40.1 Inc. seg. avg. 0.121 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 58.3 70.0 Inc. frq. avg. 0.131 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/bZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/bZ.W.88.1305JH

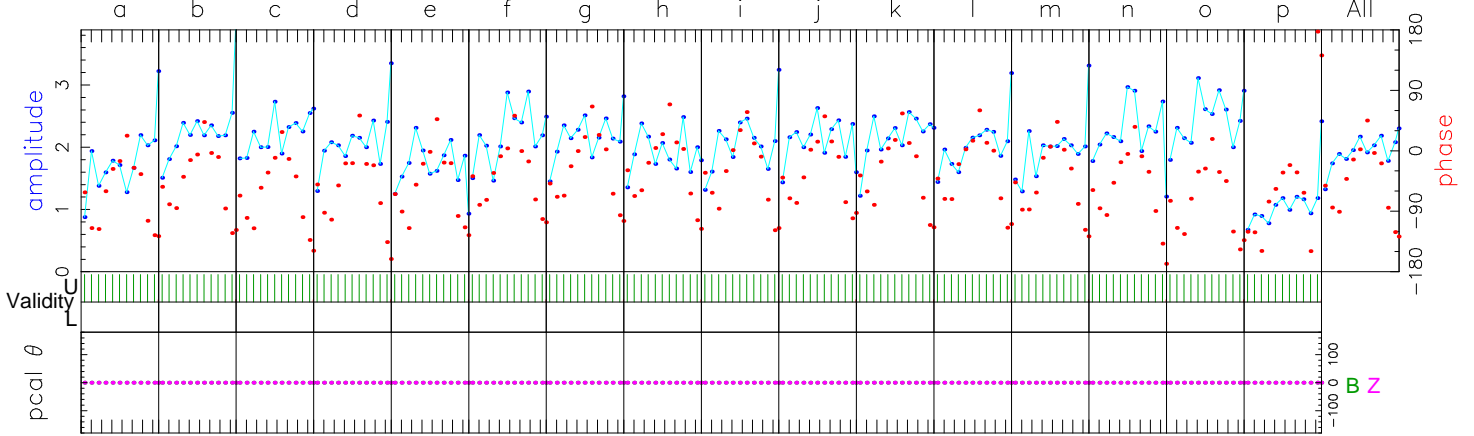


Fringe quality 4

SNR 72.5
Int time 419.362
Amp 1.295
Phase -41.0
PFD 0.0e+00
Delays (us)
SBD -0.000969
MBD -0.000855
Fringe rate (Hz) 0.003055
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

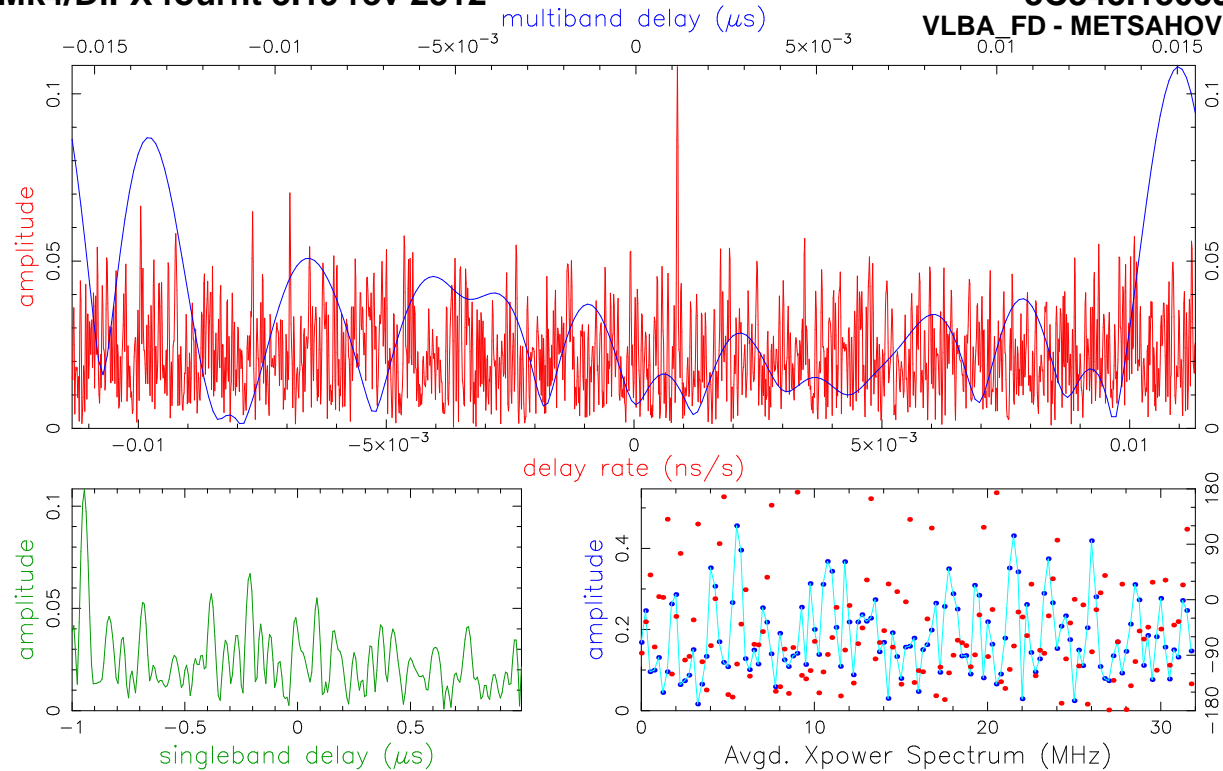
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042750
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



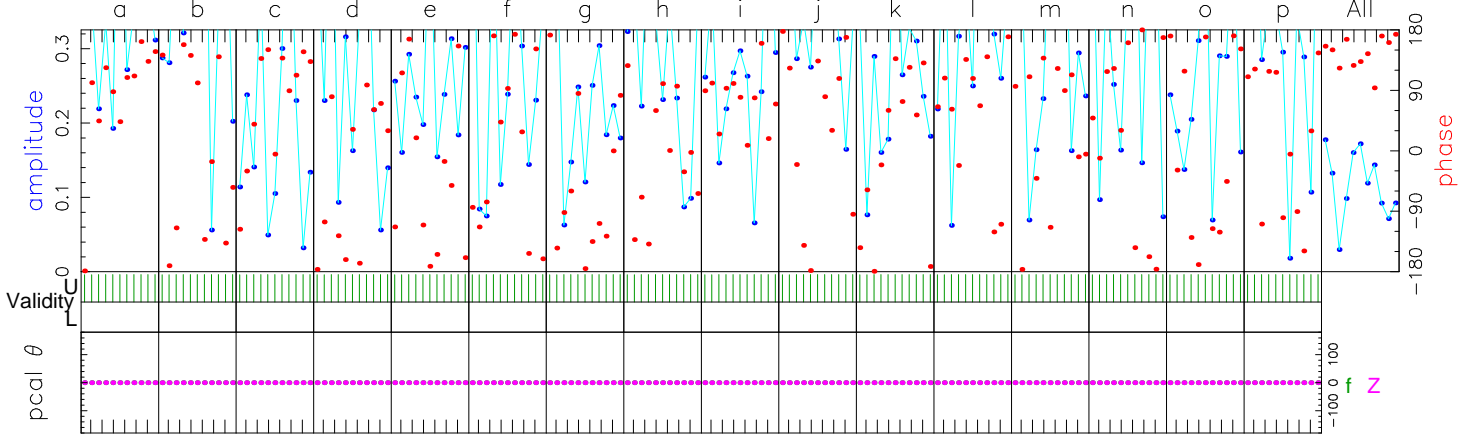
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-64.5	-40.9	-58.6	-50.4	-49.3	-31.0	-23.7	-21.7	-24.4	-30.1	-26.7	-24.4	-41.8	-46.6	-65.0	-85.2	Phase	-41.0
	1.2	1.5	1.5	1.3	1.2	1.6	1.5	1.3	1.2	1.5	1.5	1.3	1.3	1.5	1.6	0.6	Ampl.	1.3
	129.6	128.9	128.9	128.9	129.1	128.7	129.0	129.0	128.8	128.8	129.0	128.9	128.8	128.7	128.4	129.1	Sbd box	128.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	2.31190034405E+03			Apriori delay (usec)			2.31190119911E+03			Resid mbdelay (usec)			-8.55065E-04			+/- 1.5E-05		
Sband delay (usec)	2.31190023011E+03			Apriori clock (usec)			1.6656853E+01			Resid sbdelay (usec)			-9.69000E-04			+/- 2.4E-04		
Phase delay (usec)	2.31190119779E+03			Apriori clockrate (us/s)			-2.1629280E-07			Resid phdelay (usec)			-1.32201E-06			+/- 5.1E-08		
Delay rate (us/s)	-1.73964931836E-02			Apriori rate (us/s)			-1.73965286540E-02			Resid rate (us/s)			3.54704E-08			+/- 2.1E-10		
Total phase (deg)	63.9			Apriori accel (us/s/s)			-1.91529033202E-05			Resid phase (deg)			-41.0			+/- 1.6		

ph/seg (deg) 47.8 2.7 Search (2048X64) 1.273 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.1 4.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.3 3.2 Inc. seg. avg. 1.900 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 18.8 5.5 Inc. frq. avg. 1.345 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/BZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/BZ.W.98.1305JH



Fringe quality 0
SNR 6.0
Int time 410.089
Amp 0.108
Phase 143.7
PFD 4.1e-01
Delays (us)
SBD -0.946380
MBD 0.015016
Fringe rate (Hz) 0.075701
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 2020:083:003228
2020:093:042750
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

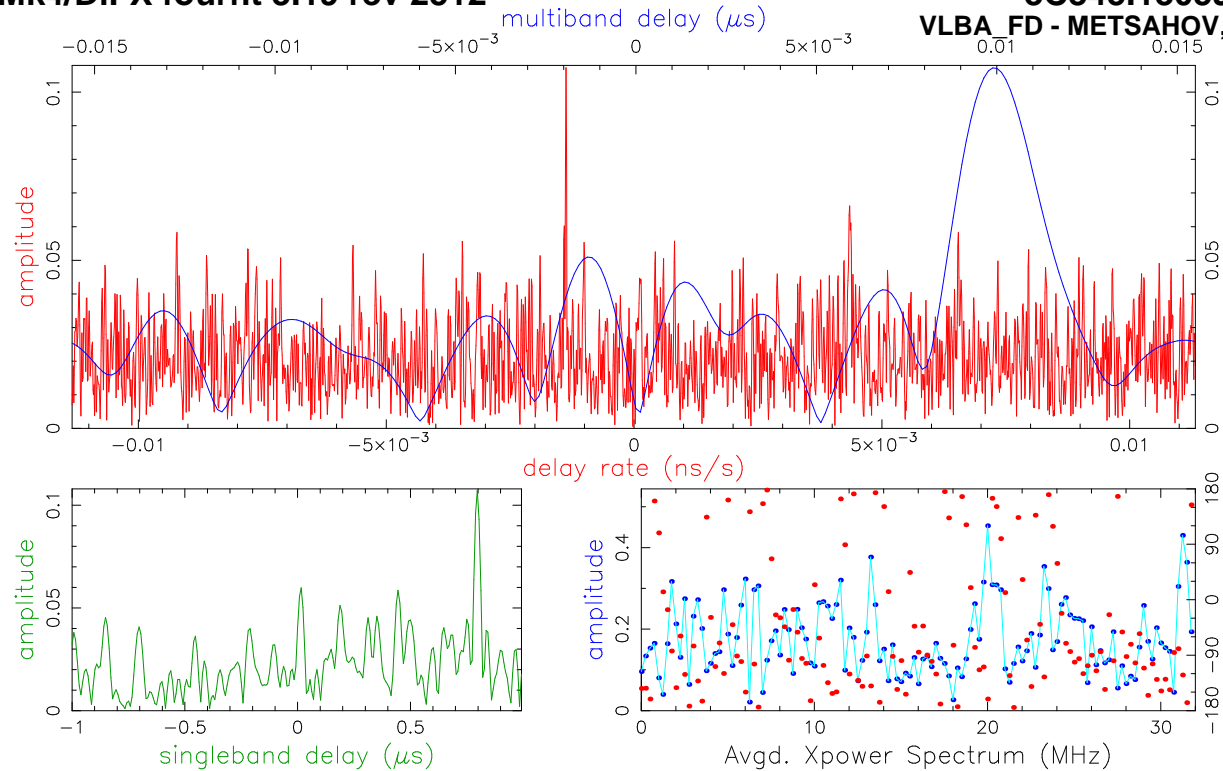


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	117.4	-171.2	106.9	126.0	-147.3	-168.9	-148.3	-69.7	69.6	129.0	129.7	116.1	111.3	161.1	-165.6	152.0	Phase	143.7
	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	Ampl.	0.1
	49.7	6.6	42.6	250.3	107.1	98.9	98.8	26.9	8.0	206.8	102.1	114.1	119.5	113.4	59.0	106.9	Sbd box	7.9
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) -2.32640498470E+03 Apriori delay (usec) -2.32545125044E+03 Resid mbdelay (usec) 1.50157E-02 +/- 1.8E-04
 Sband delay (usec) -2.32639763044E+03 Apriori clock (usec) 2.7257115E-01 Resid sbdelay (usec) -9.46380E-01 +/- 2.9E-03
 Phase delay (usec) -2.32545124580E+03 Apriori clockrate (us/s) -1.0724231E-07 Resid phdelay (usec) 4.63239E-06 +/- 6.2E-07
 Delay rate (us/s) 1.45923820482E+00 Apriori rate (us/s) 1.45923732601E+00 Resid rate (us/s) 8.78808E-07 +/- 2.6E-09
 Total phase (deg) -112.9 Apriori accel (us/s/s) -1.35162140689E-05 Resid phase (deg) 143.7 +/- 19.1

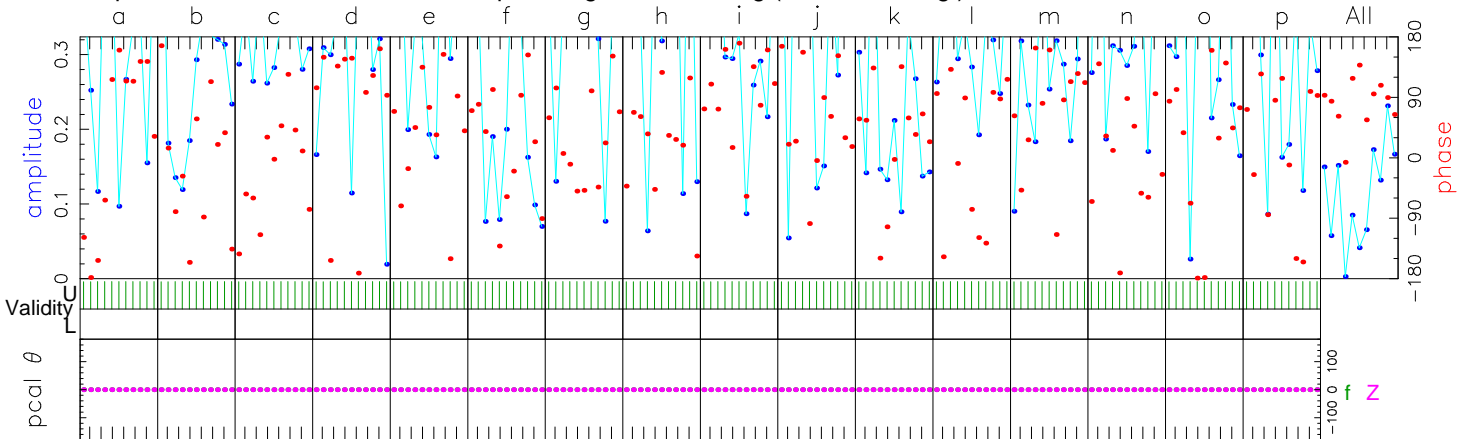
RMS Theor. Amplitude 0.108 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 23.2 31.7 Search (2048X64) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 41.1 55.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 58.7 38.2 Inc. seg. avg. 0.102 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 60.5 66.8 Inc. frq. avg. 0.118 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

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/v2/1234/No0001/fZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/fZ.W.102.1305JH



Fringe quality 0
SNR 5.9
Int time 410.089
Amp 0.108
Phase 87.3
PFD 5.1e-01
Delays (us)
SBD 0.796416
MBD 0.009919
Fringe rate (Hz)
-0.118240
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
2020:083:003228
2020:093:042800
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

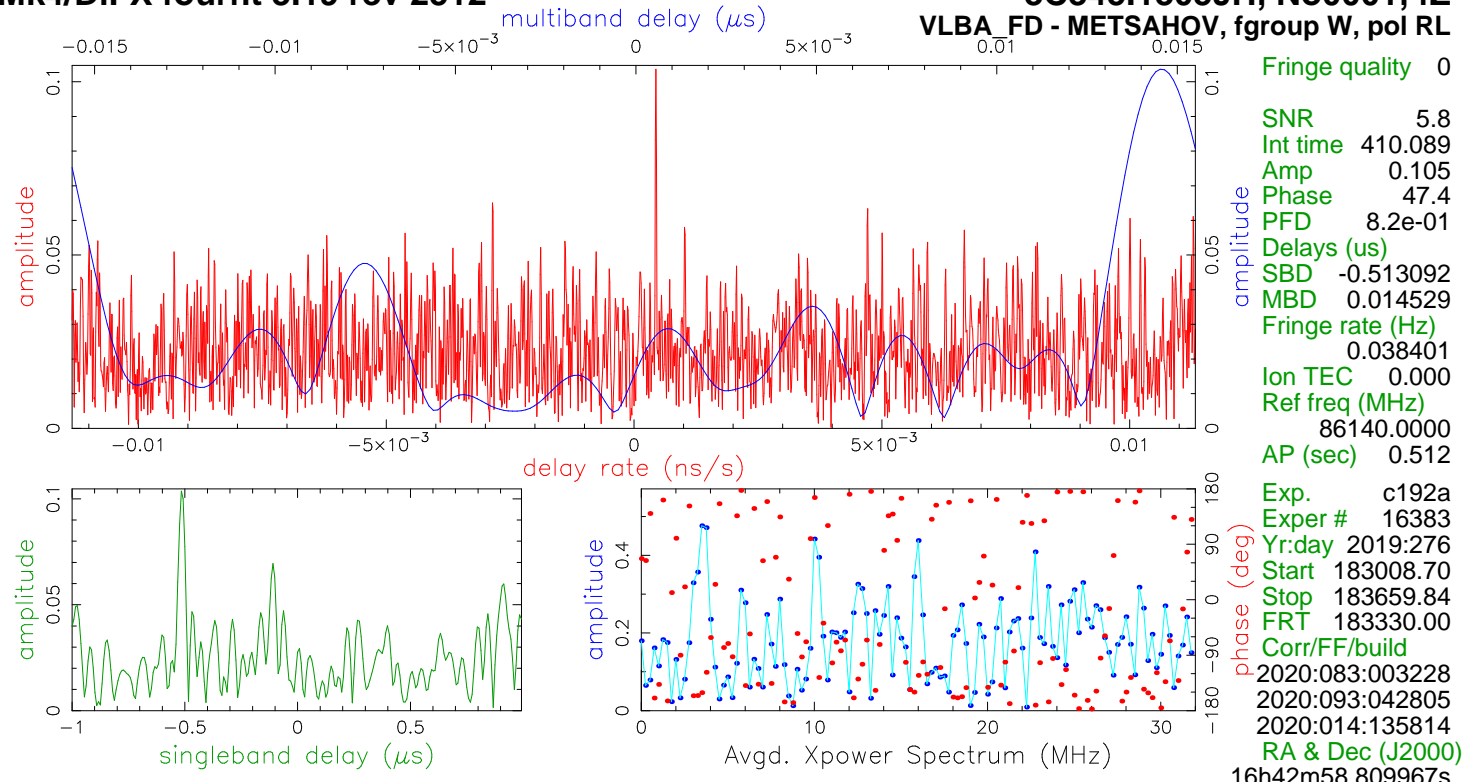


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	141.3	98.6	-11.6	145.7	76.3	56.6	30.4	44.2	104.5	65.0	71.2	132.7	106.5	50.6	122.1	78.3	Phase	87.3
	0.1	0.0	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	173.0	150.2	1.8	220.5	157.7	28.0	29.6	87.1	188.9	54.2	67.0	185.5	101.4	185.7	231.7	132.8	Sbd box	230.9
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) -2.32466008143E+03 Apriori delay (usec) -2.32545125044E+03 Resid mbdelay (usec) 9.91901E-03 +/- 1.8E-04
 Sband delay (usec) -2.32465483444E+03 Apriori clock (usec) 2.7257115E-01 Resid sbdelay (usec) 7.96416E-01 +/- 2.9E-03
 Phase delay (usec) -2.32545124762E+03 Apriori clockrate (us/s) -1.0724231E-07 Resid phdelay (usec) 2.81454E-06 +/- 6.2E-07
 Delay rate (us/s) 1.45923595336E+00 Apriori rate (us/s) 1.45923732601E+00 Resid rate (us/s) -1.37265E-06 +/- 2.6E-09
 Total phase (deg) -169.3 Apriori accel (us/s/s) -1.35162140689E-05 Resid phase (deg) 87.3 +/- 19.3

RMS Theor. Amplitude 0.108 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 36.9 32.0 Search (2048X64) 0.106 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 61.3 55.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 45.1 38.6 Inc. seg. avg. 0.100 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 58.7 67.3 Inc. frq. avg. 0.115 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

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/v2/1234/No0001/fZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/fZ.W.138.1305JH



Fringe quality 0

SNR 5.8

Int time 410.089

Amp 0.105

Phase 47.4

PFD 8.2e-01

Delays (us)

SBD -0.513092

MBD 0.014529

Fringe rate (Hz) 0.038401

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

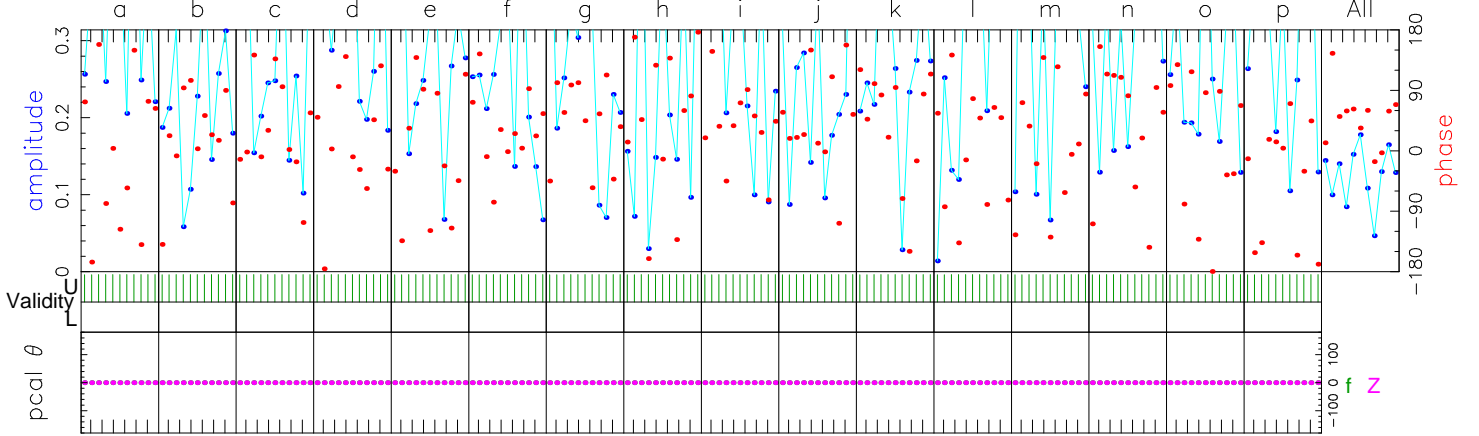
Corr/FF/build 2020:083:003228

2020:093:042805

2020:014:135814

RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks

Group delay (usec)(sbd) -2.32596797128E+03 Apriori delay (usec) -2.32545125044E+03 Resid mbdelay (usec) 1.45292E-02 +/- 1.9E-04

Sband delay (usec) -2.32596434244E+03 Apriori clock (usec) 2.7257115E-01 Resid sbdelay (usec) -5.13092E-01 +/- 3.0E-03

Phase delay (usec) -2.32545124891E+03 Apriori clockrate (us/s) -1.0724231E-07 Resid phdelay (usec) 1.52891E-06 +/- 6.4E-07

Delay rate (us/s) 1.45923777181E+00 Apriori rate (us/s) 1.45923732601E+00 Resid rate (us/s) 4.45801E-07 +/- 2.7E-09

Total phase (deg) -209.1 Apriori accel (us/s/s) -1.35162140689E-05 Resid phase (deg) 47.4 +/- 19.8

ph/seg (deg) 41.1 32.8 Amplitude 0.105 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 39.9 57.2 Search (2048X64) 0.101 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

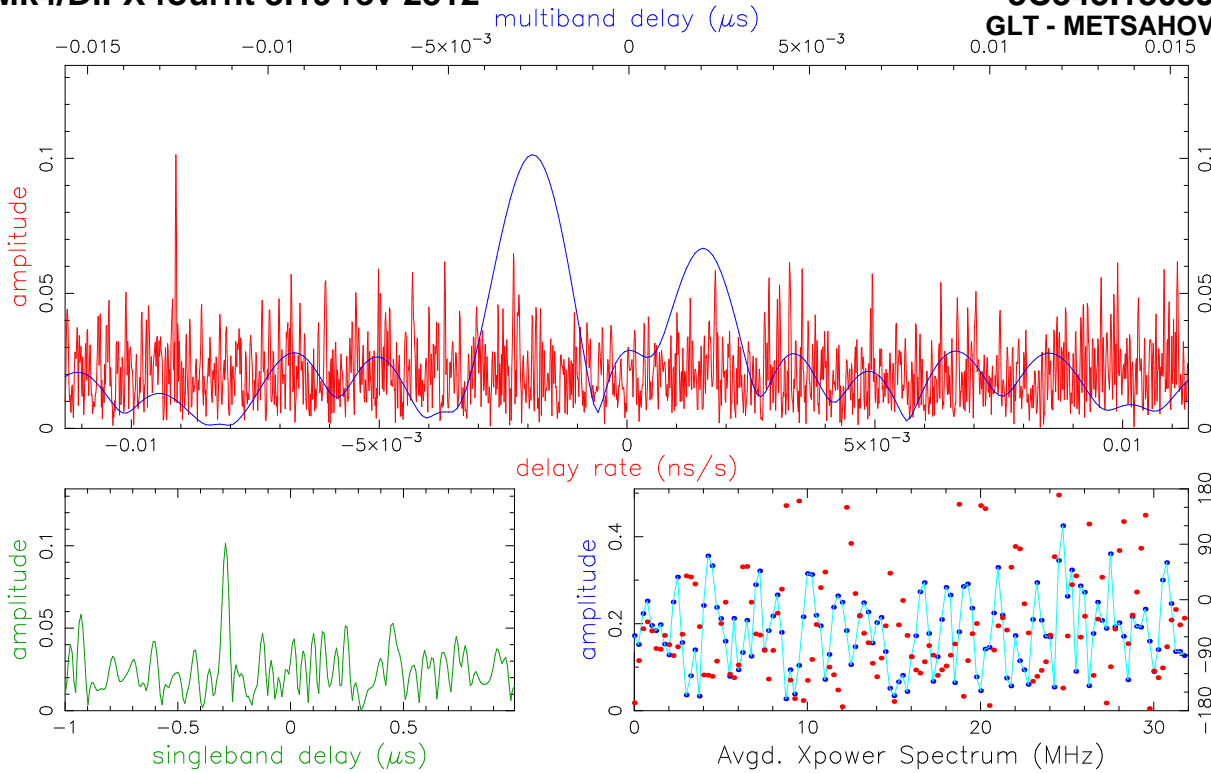
ph/frq (deg) 62.3 39.5 Inc. seg. avg. 0.108 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 48.0 69.0 Inc. frq. avg. 0.102 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 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

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gZ
GLT - METSAHOV, fgroup W, pol LL

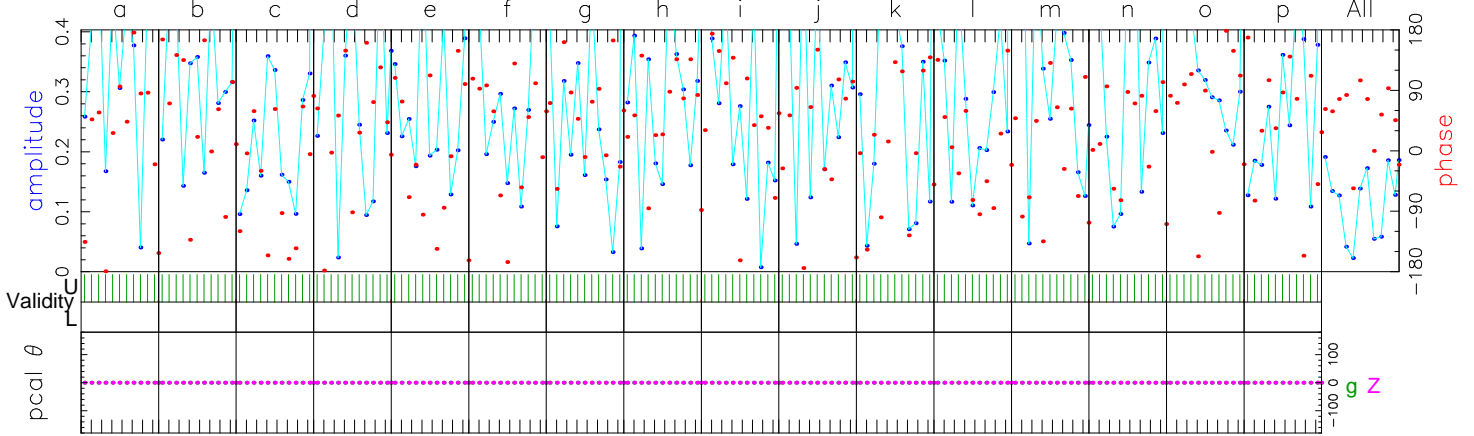


Fringe quality 0

SNR 5.7
Int time 419.223
Amp 0.134
Phase 69.5
PFD 9.6e-01
Delays (us)
SBD -0.288238
MBD -0.002662
Fringe rate (Hz)
-0.784788
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
2020:083:003228
2020:093:042808
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
59.9	90.5	33.2	90.3	-134.7	72.3	64.2	72.5	93.0	95.7	67.0	3.2	22.6	45.7	103.6	92.2	92.2	Phase	69.5
0.2	0.1	0.1	0.1	0.0	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.1	Ampl.	0.1
116.4	73.3	201.1	88.1	83.8	104.6	202.7	81.0	182.9	200.4	9.9	168.7	146.7	25.7	223.4	52.4	52.4	Sbd box	92.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 1.20134679267E+03 Apriori delay (usec) 1.20163070427E+03 Resid mbdelay (usec) -2.66161E-03 +/- 1.9E-04
 Sband delay (usec) 1.20134246577E+03 Apriori clock (usec) 1.1139116E+00 Resid sbdelay (usec) -2.88238E-01 +/- 3.0E-03
 Phase delay (usec) 1.20163070652E+03 Apriori clockrate (us/s) 5.8707190E-08 Resid phdelay (usec) 2.24242E-06 +/- 6.5E-07
 Delay rate (us/s) 6.68985610751E-01 Apriori rate (us/s) 6.68994721357E-01 Resid rate (us/s) -9.11061E-06 +/- 2.7E-09
 Total phase (deg) 21.3 Apriori accel (us/s/s) 1.20134941382E-06 Resid phase (deg) 69.5 +/- 20.2

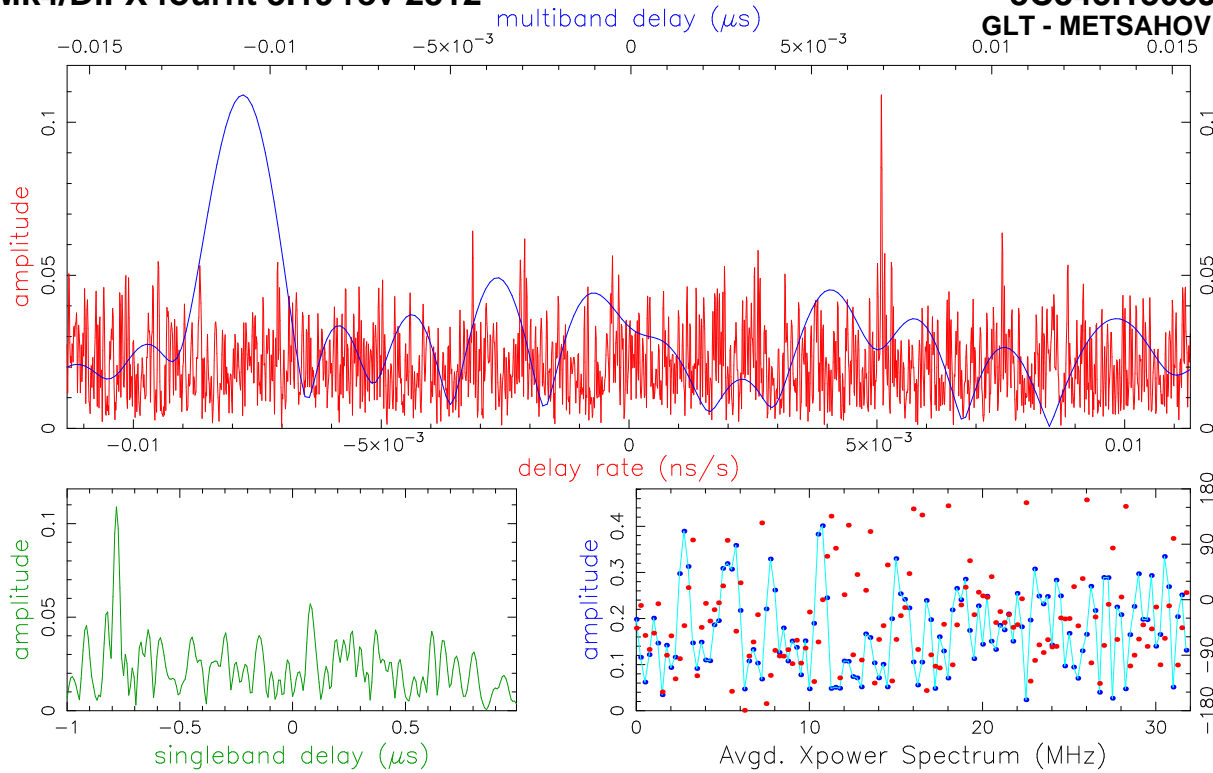
RMS Theor. Amplitude 0.134 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 46.8 34.9 Search (2048X64) 0.098 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 58.1 61.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 51.2 40.3 Inc. seg. avg. 0.128 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 56.4 70.4 Inc. frq. avg. 0.124 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/gZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/gZ.W.170.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gZ
GLT - METSAHOV, fgroup W, pol RR

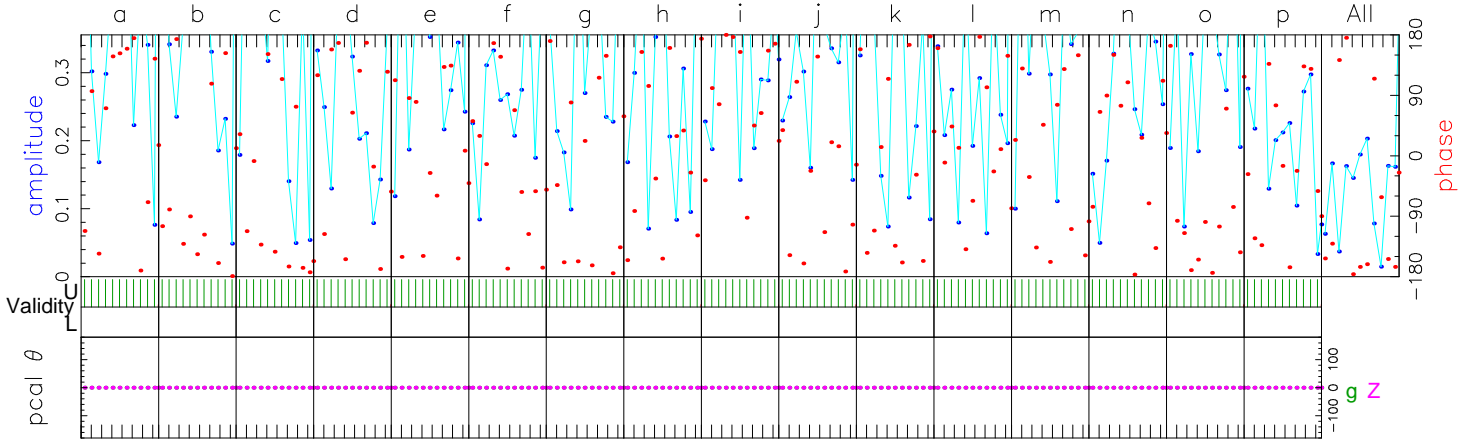


Fringe quality 0

SNR 6.1
Int time 419.266
Amp 0.119
Phase -165.1
PFD 2.4e-01
Delays (us)
SBD -0.780820
MBD -0.010762
Fringe rate (Hz)
0.439399
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
2020:083:003228
2020:093:042814
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

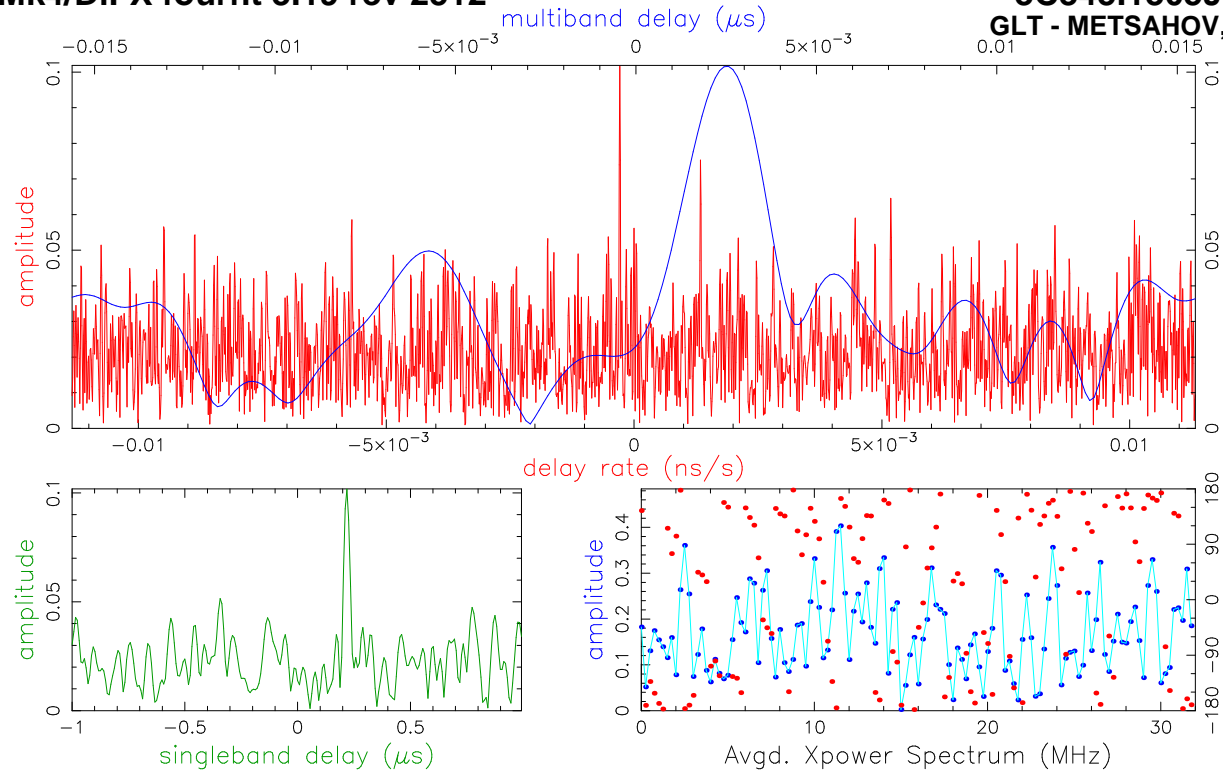


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
170.6	-127.9	-148.5	158.2	-161.5	-143.1	-176.2	-140.1	148.8	169.9	-147.4	-69.7	173.0	-126.3	-161.6			Phase	-165.1
0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.0	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
28.7	28.1	245.9	159.9	242.9	177.5	30.3	78.8	177.4	195.9	248.5	104.0	73.0	209.2	91.0	58.6		Sbd box	29.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	1.20083869224E+03			Apriori delay (usec)			1.20163070427E+03			Resid mbdelay (usec)			-1.07620E-02			+/- 1.8E-04		
Sband delay (usec)	1.20084988377E+03			Apriori clock (usec)			1.1139116E+00			Resid sbdelay (usec)			-7.80820E-01			+/- 2.8E-03		
Phase delay (usec)	1.20163069895E+03			Apriori clockrate (us/s)			5.8707190E-08			Resid phdelay (usec)			-5.32301E-06			+/- 6.1E-07		
Delay rate (us/s)	6.68999822348E-01			Apriori rate (us/s)			6.68994721357E-01			Resid rate (us/s)			5.10099E-06			+/- 2.5E-09		
Total phase (deg)	146.7			Apriori accel (us/s/s)			1.20134941382E-06			Resid phase (deg)			-165.1			+/- 18.8		

ph/seg (deg) 46.0 32.5 Search (2048X64) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.4 56.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.9 37.6 Inc. seg. avg. 0.119 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 63.2 65.6 Inc. frq. avg. 0.117 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/gZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/gZ.W.187.1305JH

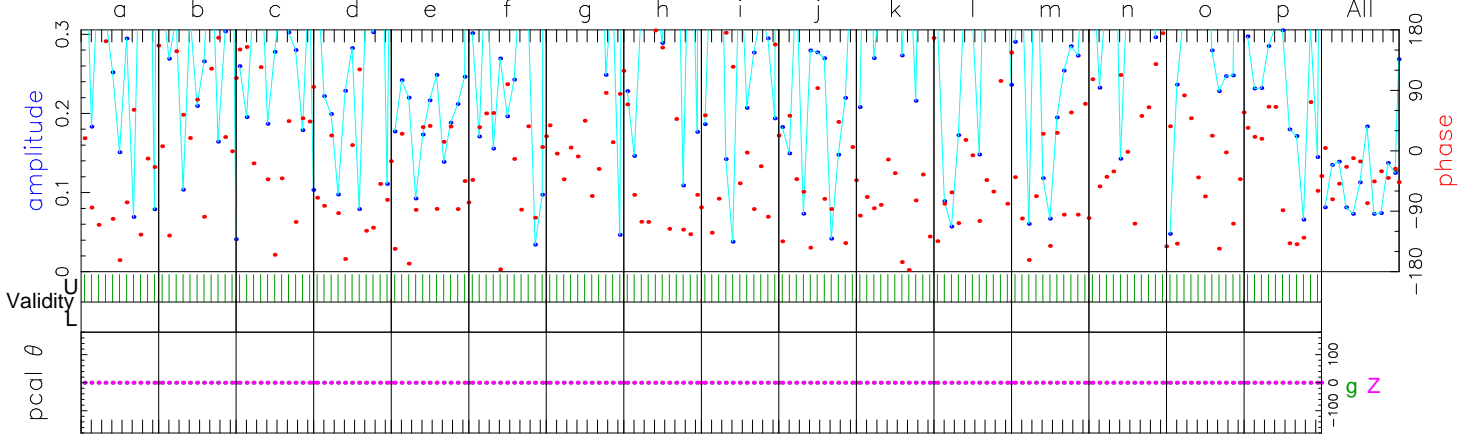
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gZ
GLT - METSAHOV, fgroup W, pol LR



Fringe quality 0
SNR 5.7
Int time 419.223
Amp 0.102
Phase -40.8
PFD 9.5e-01
Delays (us)
SBD 0.217808
MBD 0.002496
Fringe rate (Hz)
-0.024782
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
2020:083:003228
2020:093:042819
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-73.0	40.3	37.9	-72.6	-34.4	15.3	-4.0	-119.8	-69.8	-46.6	-70.3	-53.8	-52.6	8.2	-26.5	25.5	Phase	-40.8	
	0.1	0.1	0.0	0.2	0.1	0.1	0.3	0.1	0.2	0.1	0.3	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1	
	97.9	154.3	165.6	147.4	13.0	2.3	157.6	228.3	80.8	205.9	157.4	155.1	171.1	85.4	253.9	229.1	Sbd box	156.9	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	0	0	0	0	0	0	0	0	PC freqs		
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks		
																	Chan ids		
																	Tracks		
Group delay (usec)(sbd)			1.20185195074E+03								1.20163070427E+03						Resid mbdelay (usec)	2.49647E-03	+/- 1.9E-04
Sband delay (usec)			1.20184851277E+03								1.1139116E+00						Resid sbdelay (usec)	2.17808E-01	+/- 3.0E-03
Phase delay (usec)			1.20163070296E+03								5.8707190E-08						Resid phdelay (usec)	-1.31432E-06	+/- 6.5E-07
Delay rate (us/s)			6.68994433658E-01								6.68994721357E-01						Resid rate (us/s)	-2.87698E-07	+/- 2.7E-09
Total phase (deg)				271.0							1.20134941382E-06						Resid phase (deg)	-40.8	+/- 20.1

ph/seg (deg) 24.3 34.8
amp/seg (%) 38.0 60.7
ph/frq (deg) 49.7 40.2
amp/frq (%) 75.8 70.1

RMS Theor. Amplitude 0.102 +/- 0.018
Search (2048X64) 0.100
Interp. 0.000
Inc. seg. avg. 0.094
Inc. frq. avg. 0.107

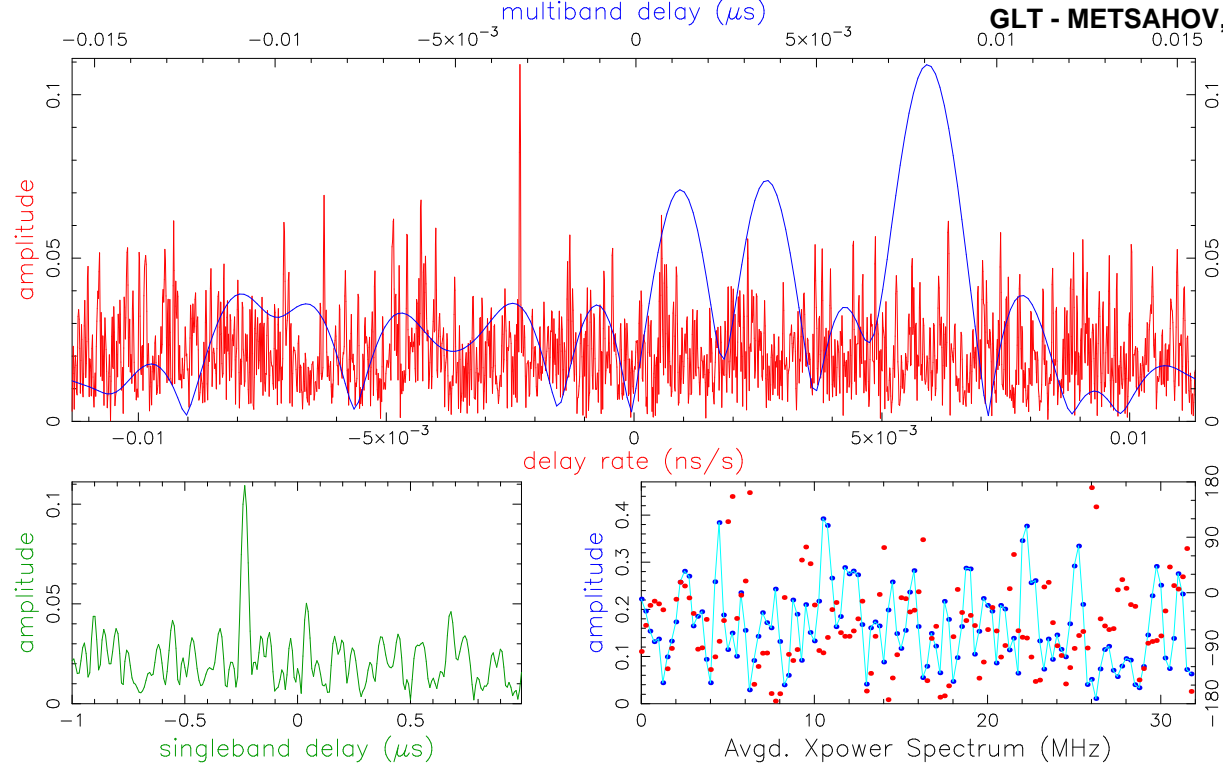
g: az 142.5 el 51.0 pa -10.6 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -4981.112 854.646

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/gZ.W.206.1305JH

simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gZ
GLT - METSAHOV, fgroup W, pol RL

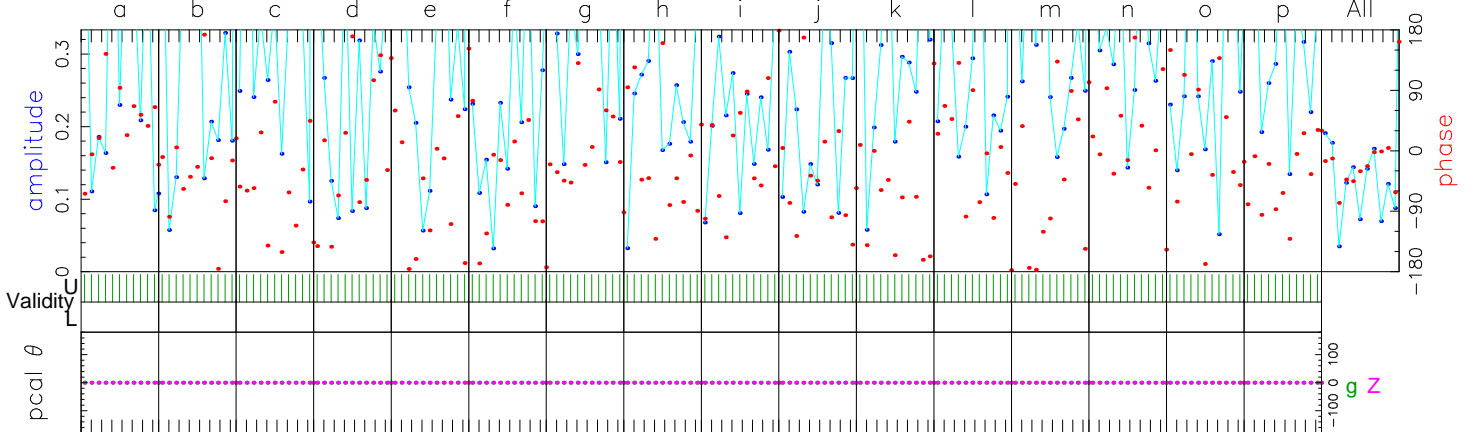


Fringe quality 0

SNR 6.1
Int time 419.266
Amp 0.111
Phase -22.5
PFD 2.2e-01
Delays (us)
SBD -0.234673
MBD 0.008079
Fringe rate (Hz)
-0.198202
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
2020:083:003228
2020:093:042825
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	17.1	-34.1	-61.8	-18.2	20.1	-14.0	3.2	-76.5	-16.2	-74.0	-58.1	-4.0	-131.9	31.7	6.0	-30.2	Phase	-22.5
	0.2	0.2	0.2	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1
	7.1	98.1	97.8	152.2	106.5	129.8	99.0	17.9	5.4	118.0	107.9	215.6	179.7	129.5	32.6	99.0	Sbd box	99.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 1.20138878377E+03 Apriori delay (usec) 1.20163070427E+03 Resid mbdelay (usec) 8.07950E-03 +/- 1.8E-04
 Sband delay (usec) 1.20139603127E+03 Apriori clock (usec) 1.1139116E+00 Resid sbdelay (usec) -2.34673E-01 +/- 2.8E-03
 Phase delay (usec) 1.20163070355E+03 Apriori clockrate (us/s) 5.8707190E-08 Resid phdelay (usec) -7.24101E-07 +/- 6.0E-07
 Delay rate (us/s) 6.68992420431E-01 Apriori rate (us/s) 6.68994721357E-01 Resid rate (us/s) -2.30093E-06 +/- 2.5E-09
 Total phase (deg) 289.3 Apriori accel (us/s/s) 1.20134941382E-06 Resid phase (deg) -22.5 +/- 18.7

RMS Theor. Amplitude 0.111 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 29.7 32.4 Search (2048X64) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 51.1 56.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 45.4 37.5 Inc. seg. avg. 0.108 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 64.2 65.4 Inc. frq. avg. 0.117 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

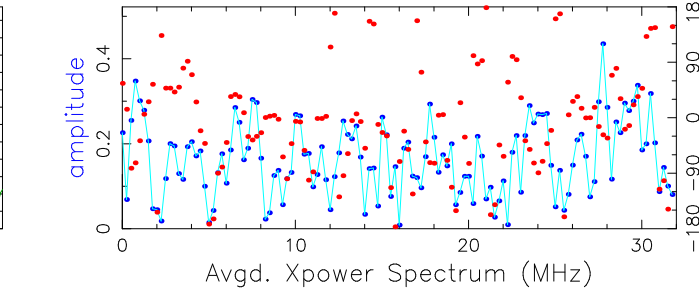
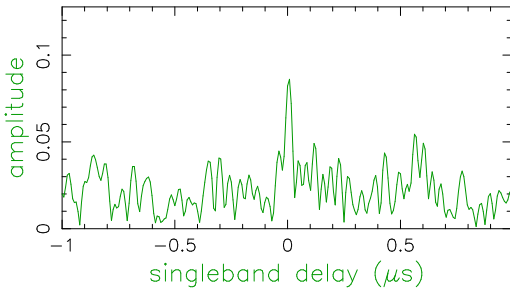
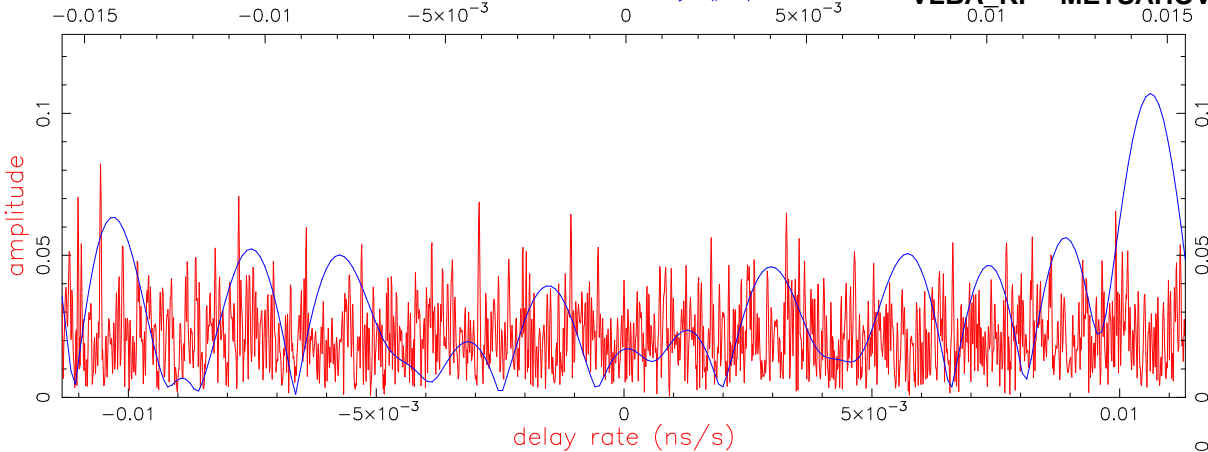
g: az 142.5 el 51.0 pa -10.6 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -4981.112 854.646 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/gZ.W.227.1305JH

multiband delay (μ s)

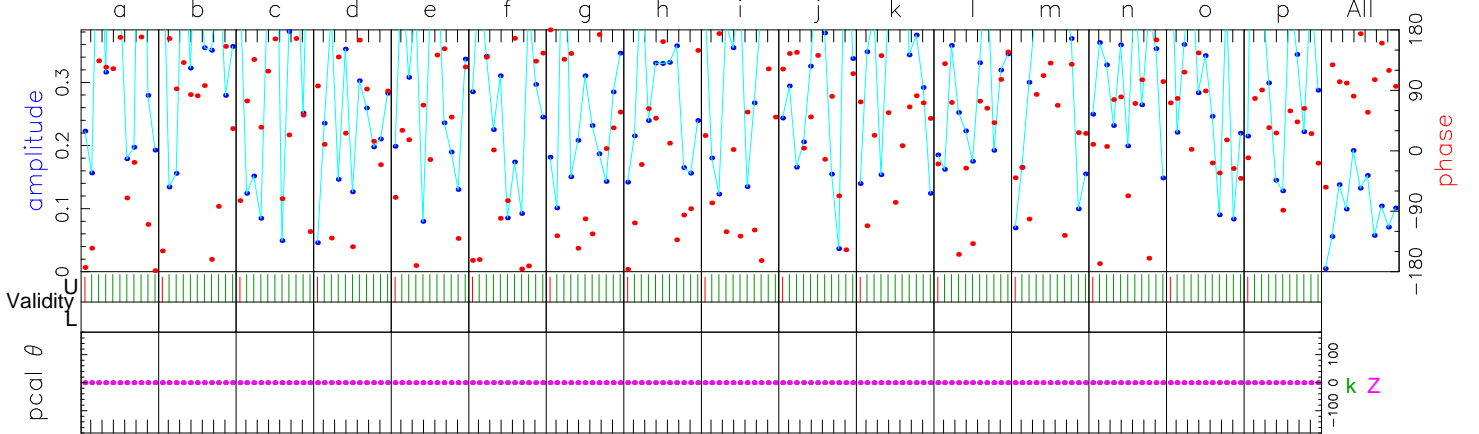
Fringe quality 0

SNR 4.8
 Int time 407.367
 Amp 0.128
 Phase 106.9
 PFD 1.0e+00
 Delays (us)
 SBD 0.005627
 MBD -0.016113
 Fringe rate (Hz)
 -0.910927
 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
 2020:083:003228
 2020:093:042816
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"



Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	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	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		-3.86685362793E+03																
Sband delay (usec)		-3.86686313815E+03																
Phase delay (usec)		-3.86686876121E+03																
Delay rate (us/s)		1.49688227509E+00																
Total phase (deg)					-32.5													
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)																		
SampCntNorm: enabled																		
nlags: 128 t_cohere infinite																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

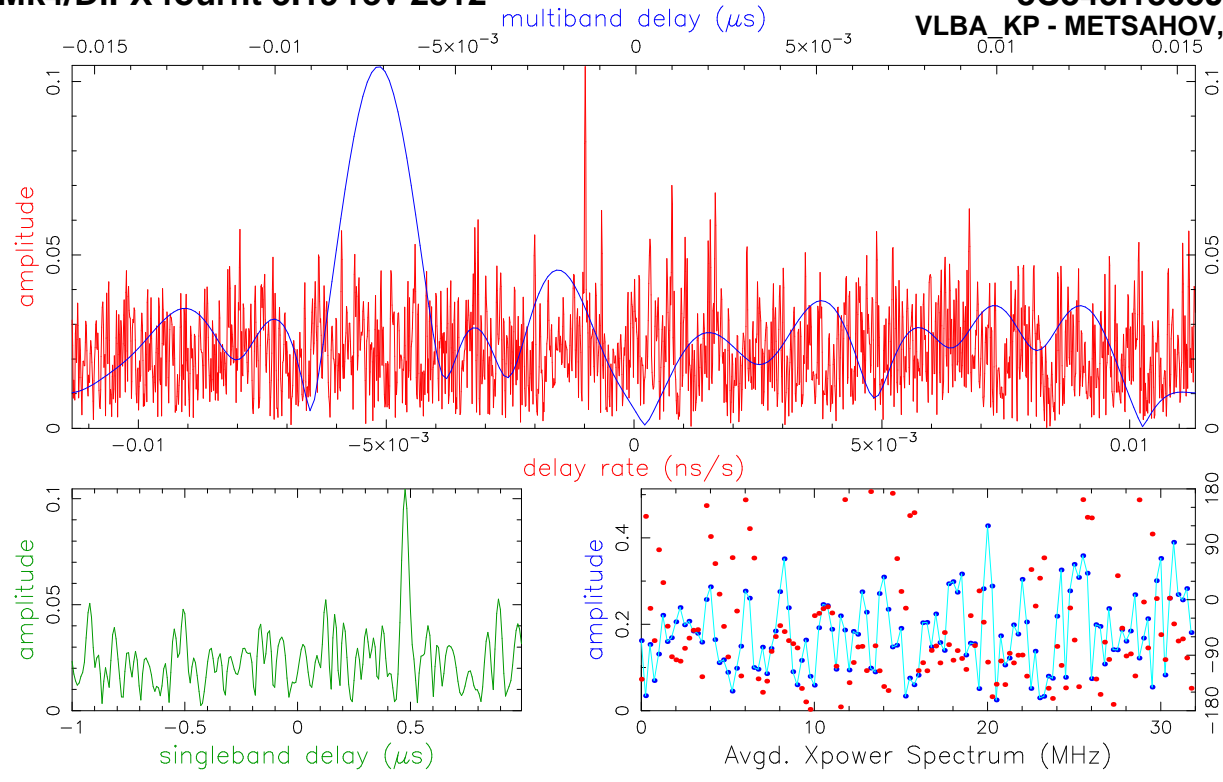
	RMS	Theor.	Amplitude	0.128 +/- 0.027	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	56.5	39.7	Search (2048X64)	0.105	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	59.5	69.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	70.8	47.9	Inc. seg. avg.	0.121	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	97.5	83.6	Inc. frq. avg.	0.143	Data rate(Mb/s): 2048	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/v2/1234/No0001/kZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/kZ.W.199.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kZ
VLBA_KP - METSAHOV, fgroup W, pol RR

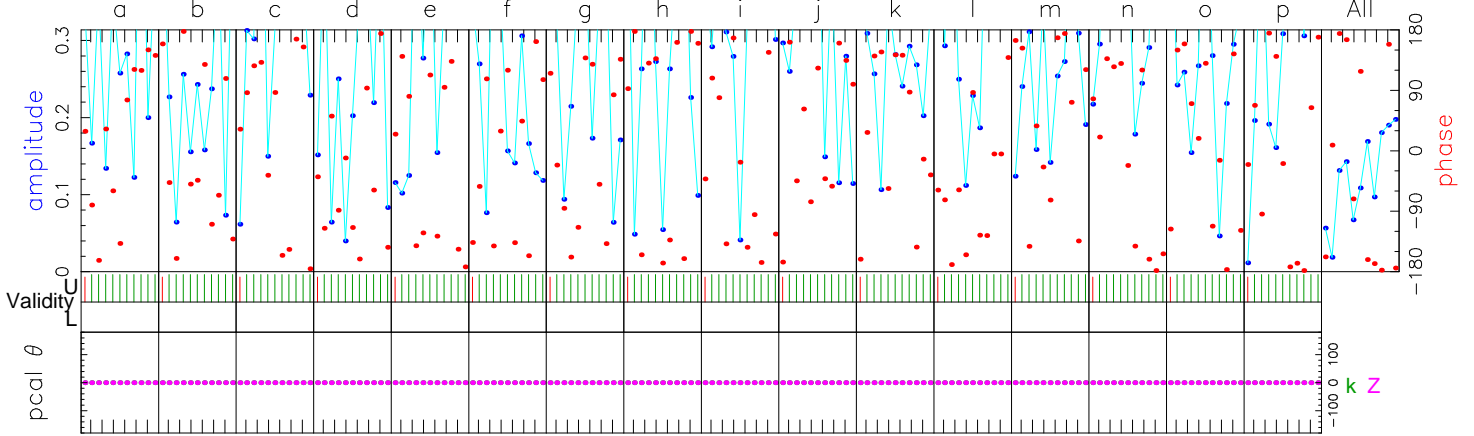


Fringe quality 0

SNR 5.8
Int time 407.367
Amp 0.105
Phase 178.3
PFD 8.8e-01
Delays (us)
SBD 0.476662
MBD -0.007131
Fringe rate (Hz)
-0.085450
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
2020:083:003228
2020:093:042821
2020:014:135814
RA & Dec (J2000)
16h42m58.80967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)		-3.86640714519E+03																
Sband delay (usec)		-3.86639210265E+03																
Phase delay (usec)		-3.86686875890E+03																
Delay rate (us/s)		1.49689185806E+00																
Total phase (deg)					38.9													
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) 65.2 33.0
amp/seg (%) 57.4 57.5
ph/frq (deg) 36.3 39.8
amp/frq (%) 61.3 69.5

RMS Theor. Amplitude 0.105 +/- 0.018
Search (2048X64) 0.098
Interp. 0.000
Inc. seg. avg. 0.107
Inc. frq. avg. 0.099

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
Sample rate(MISamp/s): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

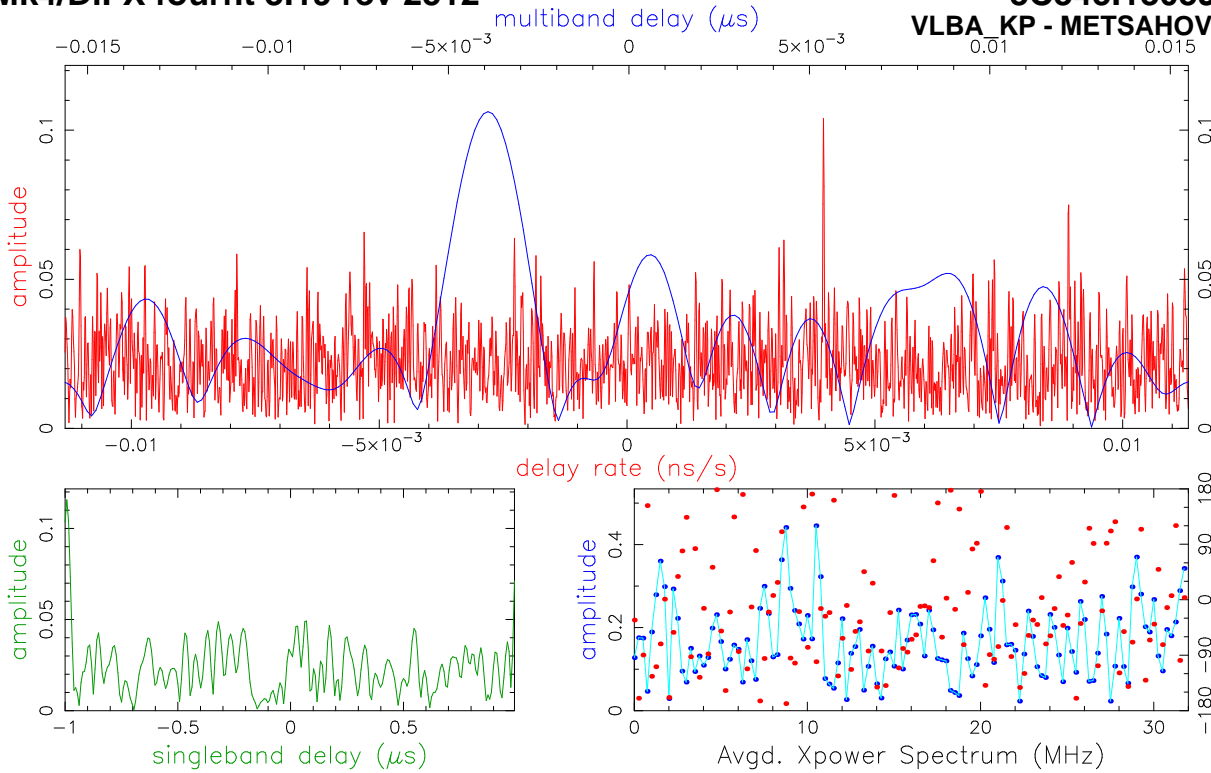
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

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/v2/1234/No0001/kZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/kZ.W.216.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kZ
VLBA_KP - METSAHOV, fgroup W, pol LR

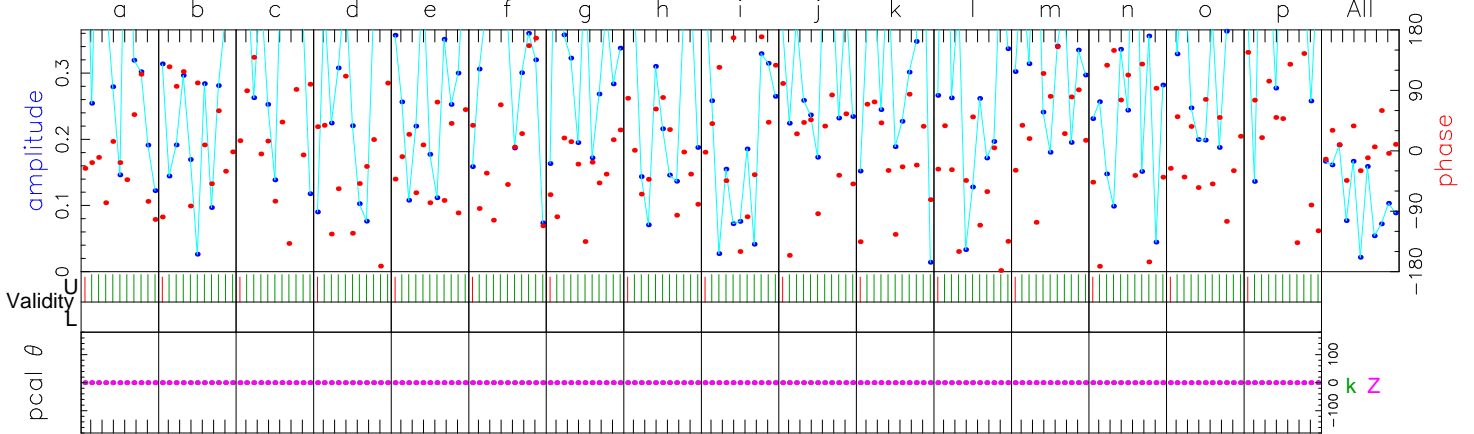


Fringe quality 0

SNR 6.4
Int time 407.367
Amp 0.122
Phase 8.2
PFD 4.6e-02
Delays (us)
SBD -0.992235
MBD -0.004128
Fringe rate (Hz)
0.342277
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
2020:083:003228
2020:093:042826
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-23.5	8.1	44.6	64.6	-14.7	-31.9	-36.4	5.9	46.0	42.7	27.6	-56.2	43.6	-15.8	-14.5	105.4	Phase	8.2				
	0.3	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.0	0.2	0.2	0.1	0.1	0.0	0.3	0.1	Ampl.	0.1				
	1.5	231.3	167.4	37.4	133.0	254.5	89.4	188.1	69.4	136.7	135.4	196.8	162.3	214.1	2.2	227.8	Sbd box	2.0				
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
k:Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
Group delay (usec)(sbd)			-3.86787289273E+03														Apriori delay (usec)	-3.86686876465E+03	Resid mbdelay (usec)	-4.12808E-03	+/-	1.7E-04
Sband delay (usec)			-3.86786099915E+03														Apriori clock (usec)	-5.8413070E-01	Resid sbdelay (usec)	-9.92235E-01	+/-	2.7E-03
Phase delay (usec)			-3.86686876439E+03														Apriori clockrate (us/s)	-2.1087179E-07	Resid phdelay (usec)	2.64832E-07	+/-	5.8E-07
Delay rate (us/s)			1.49689682354E+00														Apriori rate (us/s)	1.49689285005E+00	Resid rate (us/s)	3.97349E-06	+/-	2.4E-09
Total phase (deg)					-131.2												Apriori accel (us/s/s)	-3.90160278613E-06	Resid phase (deg)	8.2	+/-	17.9

ph/seg (deg) 28.8 29.7
amp/seg (%) 46.5 51.9
ph/frq (deg) 45.2 35.9
amp/frq (%) 63.4 62.6

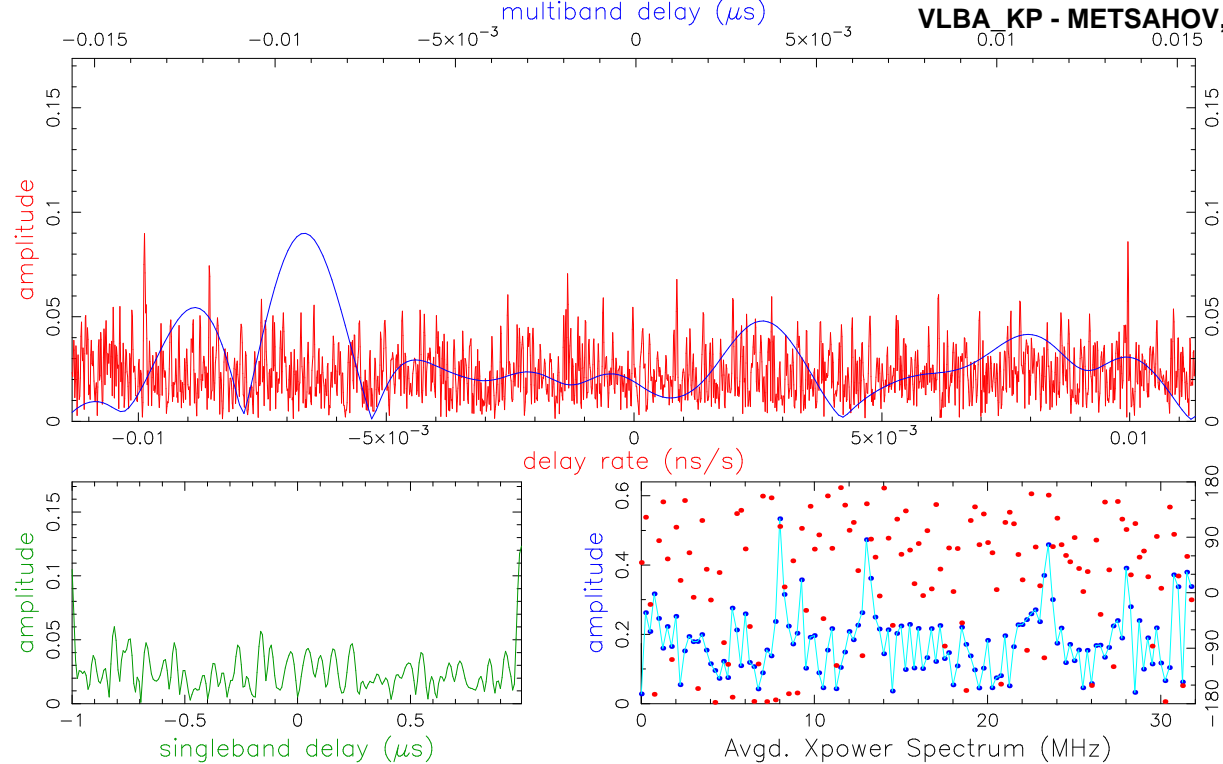
RMS Theor. Amplitude 0.122 +/- 0.019
Search (2048X64) 0.114
Interp. 0.000
Inc. seg. avg. 0.106
Inc. frq. avg. 0.116

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
Sample rate(MISamp/s): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

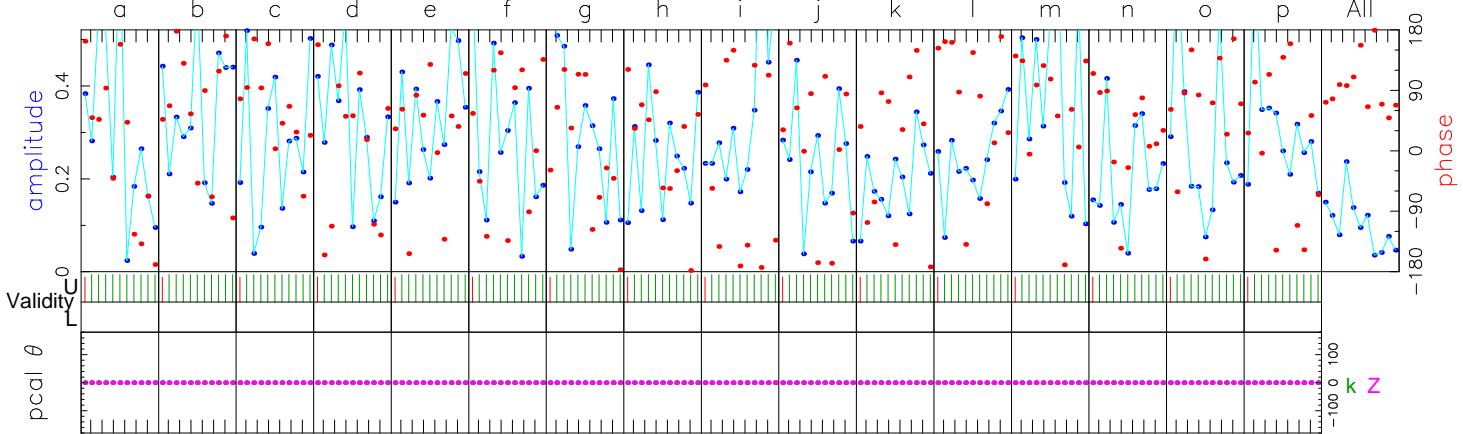
k: az 60.1 el 32.1 pa -73.4 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -11165.875 -2426.815 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/kZ.W.237.1305JH



Fringe quality 0
SNR 6.9
Int time 407.367
Amp 0.174
Phase 90.5
PFD 2.1e-03
Delays (us)
SBD 0.990083
MBD -0.009256
Fringe rate (Hz) -0.851770
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 2020:083:003228
2020:093:042831
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

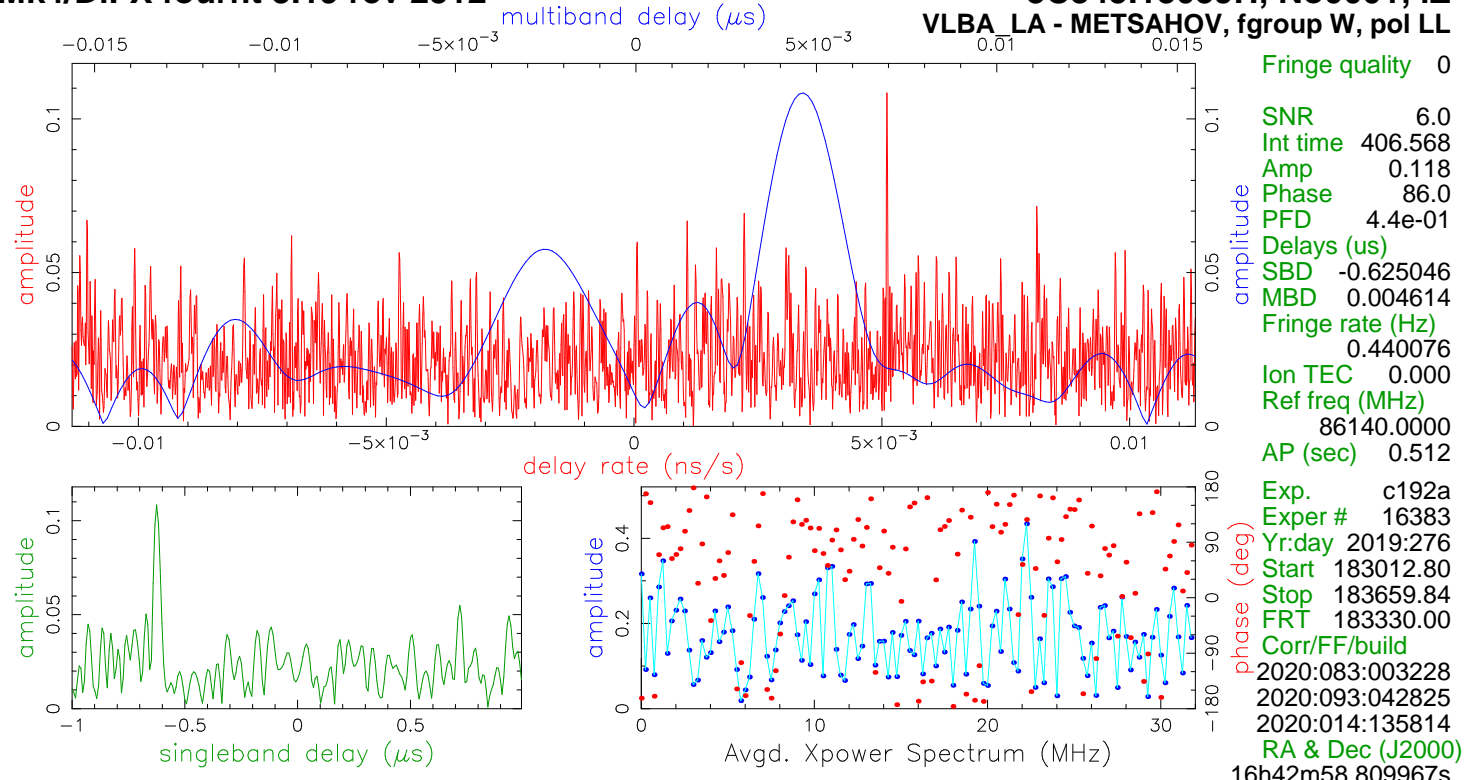


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
125.2	112.3	53.2	106.8	62.9	111.6	34.5	36.0	176.4	81.4	134.5	127.3	84.3	59.4	89.8	126.9	126.9	Phase	90.5
0.1	0.1	0.2	0.1	0.3	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.1	Ampl.	0.1
125.4	185.8	236.4	182.4	182.5	56.5	208.2	33.7	253.0	80.4	185.2	238.1	255.2	49.2	50.9	86.7	86.7	Sbd box	255.7
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	

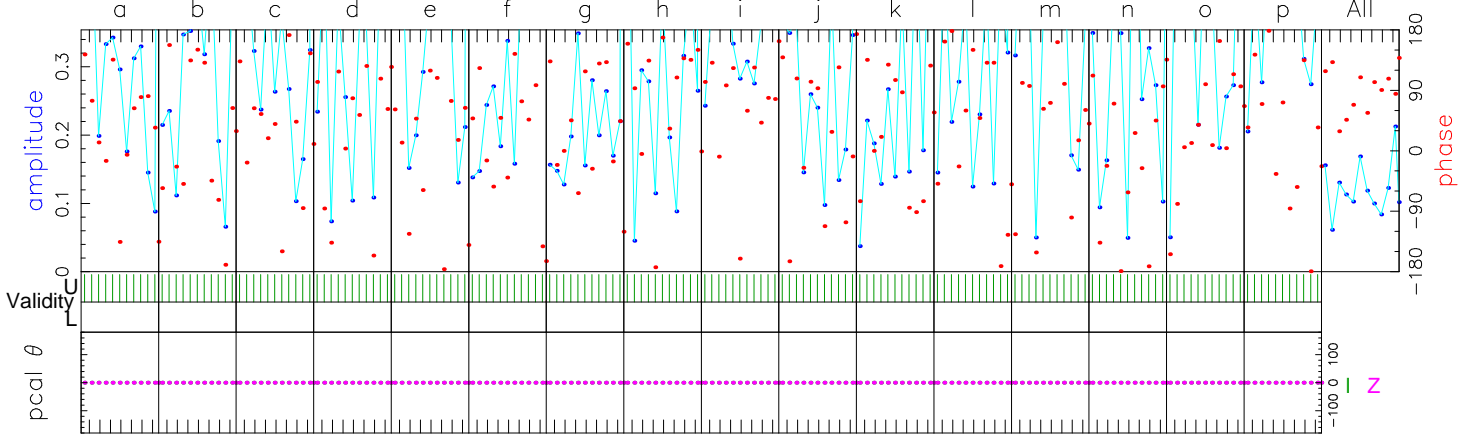
Group delay (usec)(sbd) -3.86587802053E+03 Apriori delay (usec) -3.86686876465E+03 Resid mbdelay (usec) -9.25588E-03 +/- 1.6E-04
 Sband delay (usec) -3.86587868215E+03 Apriori clock (usec) -5.8413070E-01 Resid sbdelay (usec) 9.90083E-01 +/- 2.5E-03
 Phase delay (usec) -3.86686876173E+03 Apriori clockrate (us/s) -2.1087179E-07 Resid phdelay (usec) 2.91996E-06 +/- 5.4E-07
 Delay rate (us/s) 1.49688296184E+00 Apriori rate (us/s) 1.49689285005E+00 Resid rate (us/s) -9.88820E-06 +/- 2.3E-09
 Total phase (deg) -48.8 Apriori accel (us/s/s) -3.90160278613E-06 Resid phase (deg) 90.5 +/- 16.7

RMS Theor. Amplitude 0.174 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 38.9 27.7 Search (2048X64) 0.121 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 48.3 48.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 41.2 33.4 Inc. seg. avg. 0.130 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 47.4 58.4 Inc. frq. avg. 0.141 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/kZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/kZ.W.256.1305JH



Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



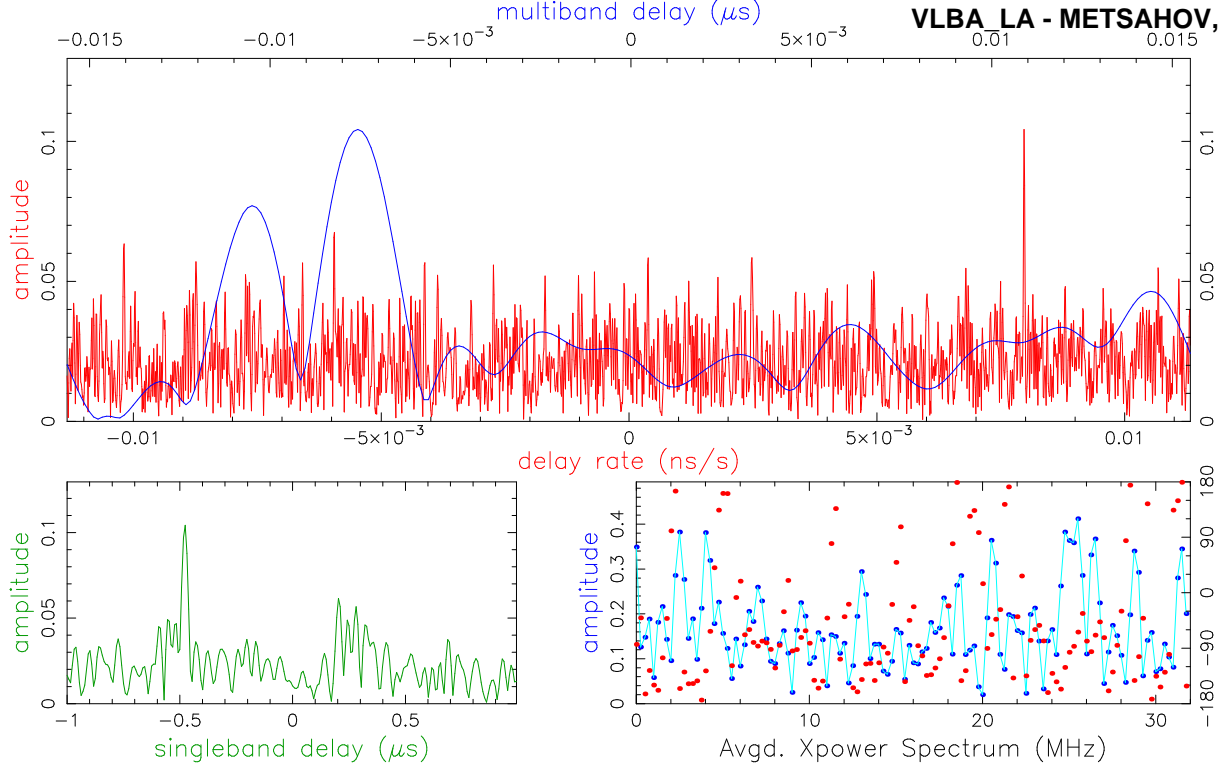
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	78.8	109.8	66.3	88.3	73.9	55.0	25.2	139.2	89.9	102.1	115.9	151.5	93.0	63.7	40.9	79.9	Phase	86.0
	0.1	0.0	0.1	0.2	0.2	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	136.2	251.2	128.3	73.9	151.8	154.7	151.3	138.8	17.4	166.2	195.9	11.3	49.3	133.8	227.1	87.9	Sbd box	49.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	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	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd)	-2.14075134728E+03	Apriori delay (usec)	-2.14013096163E+03	Resid mbdelay (usec)	4.61436E-03	+/-	1.8E-04
Sband delay (usec)	-2.14075600813E+03	Apriori clock (usec)	-9.2246437E-01	Resid sbdelay (usec)	-6.25046E-01	+/-	2.9E-03
Phase delay (usec)	-2.14013095886E+03	Apriori clockrate (us/s)	-3.6776479E-07	Resid phdelay (usec)	2.77225E-06	+/-	6.2E-07
Delay rate (us/s)	1.42286485210E+00	Apriori rate (us/s)	1.42285974325E+00	Resid rate (us/s)	5.10885E-06	+/-	2.6E-09
Total phase (deg)	73.4	Apriori accel (us/s/s)	-9.09270875951E-06	Resid phase (deg)	86.0	+/-	19.2

ph/seg (deg)	RMS 30.9	Theor. 33.2	Amplitude Search (2048X64)	0.118 +/- 0.020	0.099	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	39.7	57.9	Interp.	0.000	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	34.6	38.3	Inc. seg. avg.	0.116	0.111	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	63.0	66.9	Inc. frq. avg.	0.111	0.111	Sample rate(MISamp/s): 64	mb window (us) -0.016 0.016
						Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 128	t_cohere infinite
							ion window (TEC) 0.00 0.00

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/v2/1234/No0001/IZ_.1305JH Output file: /Exps/c192a/v2/1234/No0001/IZ.W.231.1305JH

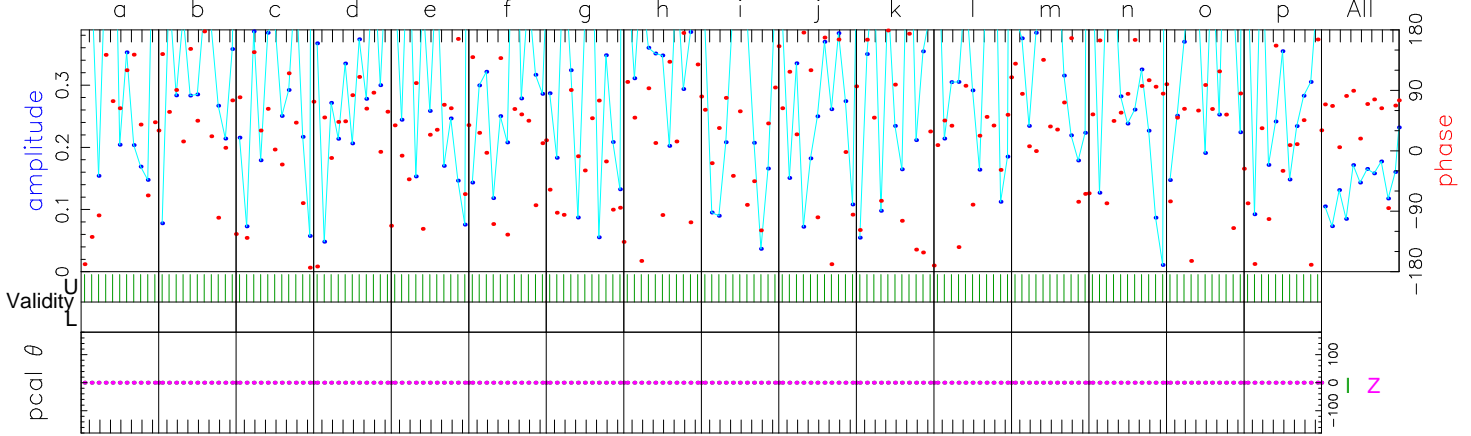


Fringe quality 0

SNR 5.8
Int time 406.568
Amp 0.130
Phase 58.8
PFD 8.5e-01
Delays (us)
SBD -0.478170
MBD -0.007589
Fringe rate (Hz) 0.687717
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

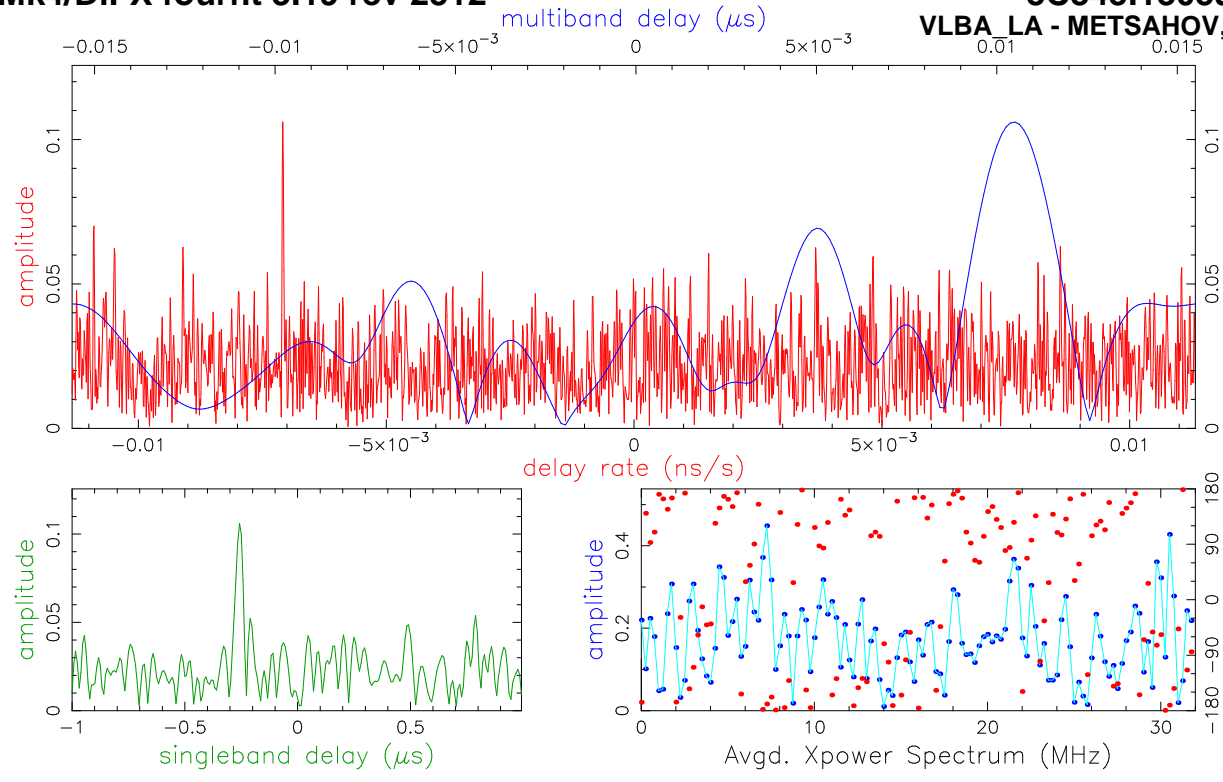
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042830
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	101.9	62.6	52.8	64.8	12.8	38.5	-33.5	113.6	29.4	132.0	165.3	36.9	56.6	74.4	75.6	-14.7	Phase	58.8				
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.0	Ampl.	0.1				
	20.3	15.4	97.3	86.4	58.6	110.3	228.9	193.7	136.4	52.8	171.4	69.0	70.1	201.0	137.3	179.6	Sbd box	67.8				
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	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	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-2.14060730049E+03														Apriori delay (usec)	-2.14013096163E+03	Resid mbdelay (usec)	-7.58886E-03	+/-	1.9E-04
Sband delay (usec)			-2.14060913113E+03														Apriori clock (usec)	-9.2246437E-01	Resid sbdelay (usec)	-4.78170E-01	+/-	3.0E-03
Phase delay (usec)			-2.14013095974E+03														Apriori clockrate (us/s)	-3.6776479E-07	Resid phdelay (usec)	1.89581E-06	+/-	6.4E-07
Delay rate (us/s)			1.42286772696E+00														Apriori rate (us/s)	1.42285974325E+00	Resid rate (us/s)	7.98371E-06	+/-	2.7E-09
Total phase (deg)				46.2													Apriori accel (us/s/s)	-9.09270875951E-06	Resid phase (deg)	58.8	+/-	19.8

ph/seg (deg) 49.8 34.4 Search (2048X64) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 44.2 60.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 53.4 39.7 Inc. seg. avg. 0.142 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.0 69.2 Inc. frq. avg. 0.140 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 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 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/IZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/IZ.W.251.1305JH simultaneous interpolator

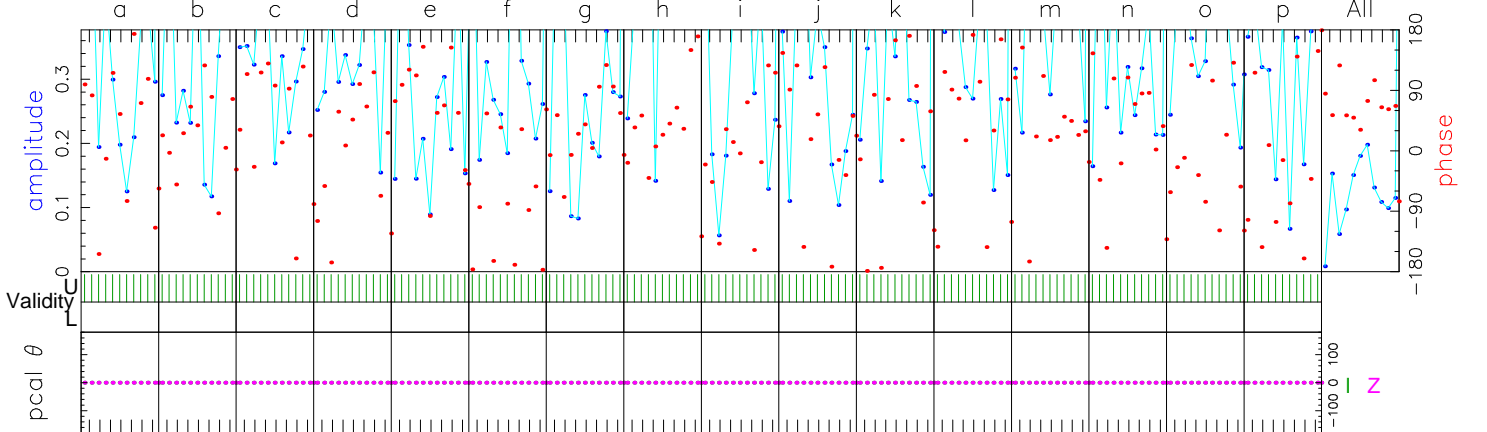


Fringe quality 0

SNR 5.9
Int time 406.568
Amp 0.126
Phase 62.8
PFD 6.8e-01
Delays (us)
SBD -0.256409
MBD 0.010450
Fringe rate (Hz)
-0.611335
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
2020:083:003228
2020:093:042835
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All						
	89.5	20.7	83.1	53.4	89.2	-156.7	45.6	34.2	10.3	114.0	97.1	124.8	56.6	63.6	-13.4	-148.8		Phase 62.8						
	0.2	0.3	0.2	0.1	0.2	0.1	0.2	0.3	0.2	0.1	0.1	0.2	0.3	0.1	0.1	0.1		Ampl. 0.1						
	8.1	94.7	62.1	132.1	166.3	179.0	94.5	96.4	17.1	121.2	55.7	78.4	96.7	59.6	109.1	207.0		Sbd box 96.2						
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	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	1000	1000	1000	1000	1000	1000	1000		PC freqs						
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase						
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC						
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp						
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids						
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks						
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids						
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks						
Group delay (usec)(sbd)			-2.14040176190E+03															Apriori delay (usec)	-2.14013096163E+03	Resid mbdelay (usec)	1.04497E-02	+/-	1.8E-04	
Sband delay (usec)			-2.14038737113E+03																Apriori clock (usec)	-9.2246437E-01	Resid sbdelay (usec)	-2.56409E-01	+/-	2.9E-03
Phase delay (usec)			-2.14013095961E+03																Apriori clockrate (us/s)	-3.6776479E-07	Resid phdelay (usec)	2.02489E-06	+/-	6.3E-07
Delay rate (us/s)			1.42285264625E+00																Apriori rate (us/s)	1.42285974325E+00	Resid rate (us/s)	-7.09700E-06	+/-	2.7E-09
Total phase (deg)				50.2															Apriori accel (us/s/s)	-9.09270875951E-06	Resid phase (deg)	62.8	+/-	19.5

ph/seg (deg) 28.1 33.8
amp/seg (%) 61.7 59.1
ph/frq (deg) 67.0 39.1
amp/frq (%) 64.5 68.2

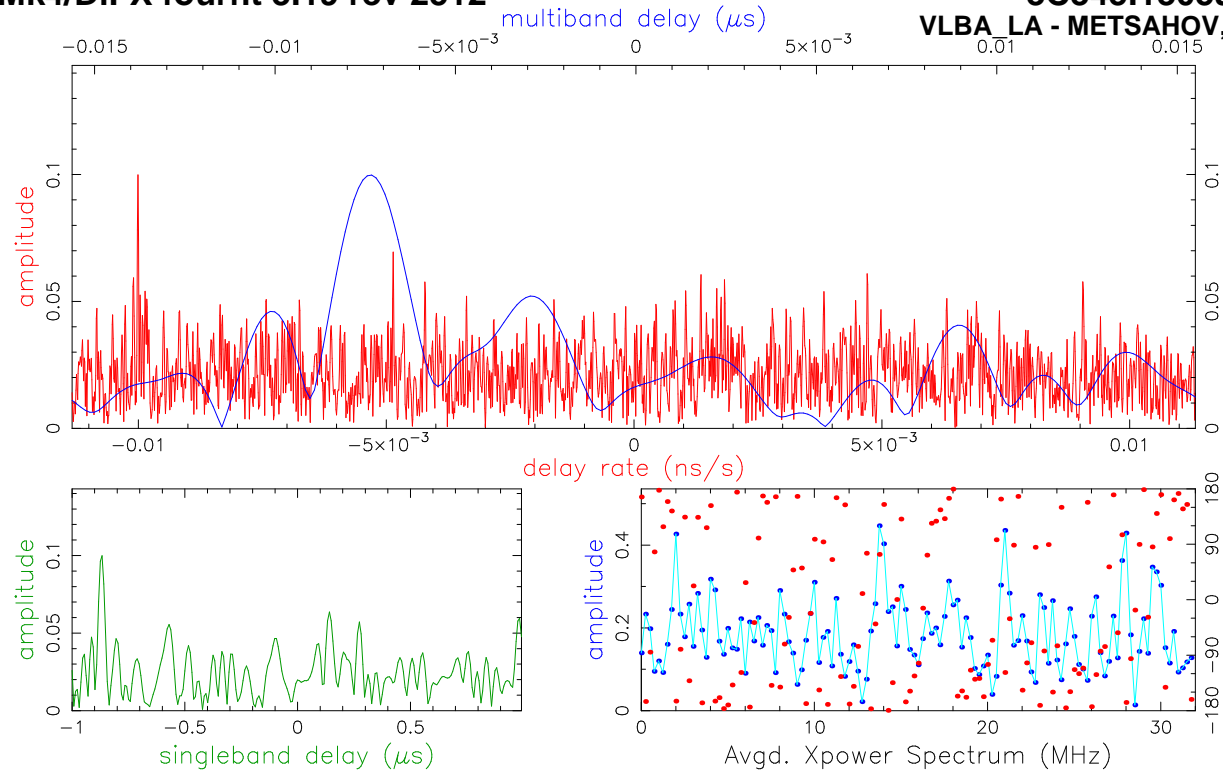
RMS Theor. Amplitude 0.126 +/- 0.021
Search (2048X64) 0.104
Interp. 0.000
Inc. seg. avg. 0.121
Inc. frq. avg. 0.144

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
Sample rate(MISamp/s): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

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/v2/1234/No0001/IZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/IZ.W.268.1305JH

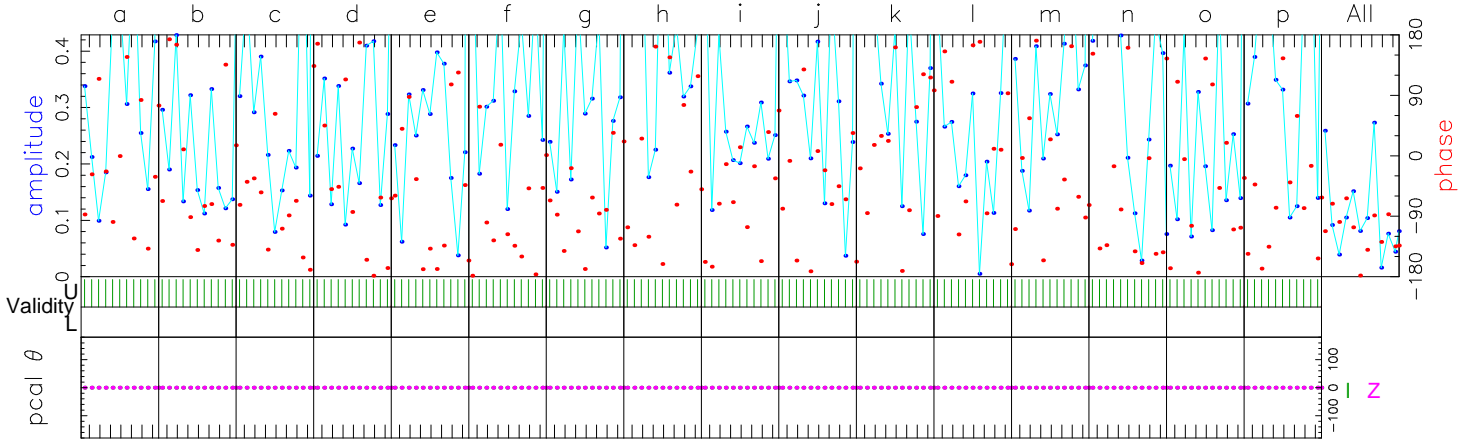


Fringe quality 0

SNR 5.6
Int time 406.568
Amp 0.143
Phase -103.9
PFD 1.0e+00
Delays (us)
SBD -0.869939
MBD -0.007372
Fringe rate (Hz)
-0.863128
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
2020:083:003228
2020:093:042840
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-70.4	-118.7	-88.9	-146.5	-143.9	-131.2	-97.0	-141.4	-80.4	-55.6	12.7	163.7	-99.4	-131.2	-85.5	-98.5		Phase -103.9				
	0.2	0.2	0.3	0.1	0.1	0.2	0.3	0.1	0.2	0.2	0.1	0.0	0.2	0.3	0.1	0.2		Ampl. 0.1				
	230.7	110.4	187.1	65.1	92.4	99.1	153.1	236.1	139.5	116.1	57.5	223.7	1.8	141.7	253.4	72.1		Sbd box 17.6				
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	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	1000	1000	1000	1000	1000	1000	1000		PC freqs				
Z	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000		PC amp				
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp				
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids				
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks				
																		Chan ids				
																		Tracks				
Group delay (usec)(sbd)			-2.14101333365E+03															Apriori delay (usec)	-2.14013096163E+03	Resid mbdelay (usec)	-7.37202E-03	+/- 1.9E-04
Sband delay (usec)			-2.14100090063E+03															Apriori clock (usec)	-9.2246437E-01	Resid sbdelay (usec)	-8.69939E-01	+/- 3.1E-03
Phase delay (usec)			-2.14013096498E+03															Apriori clockrate (us/s)	-3.6776479E-07	Resid phdelay (usec)	-3.34901E-06	+/- 6.6E-07
Delay rate (us/s)			1.42284972319E+00															Apriori rate (us/s)	1.42285974325E+00	Resid rate (us/s)	-1.00201E-05	+/- 2.8E-09
Total phase (deg)																		Apriori accel (us/s/s)	-9.09270875951E-06	Resid phase (deg)	-103.9	+/- 20.5

ph/seg (deg) 32.6 35.5
amp/seg (%) 79.9 62.0
ph/frq (deg) 48.8 41.0
amp/frq (%) 50.3 71.6

RMS Theor. Amplitude 0.143 +/- 0.026
Search (2048X64) 0.099
Interp. 0.000
Inc. seg. avg. 0.134
Inc. frq. avg. 0.136

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

Group delay (usec)(sbd) -2.14101333365E+03
Sband delay (usec) -2.14100090063E+03
Phase delay (usec) -2.14013096498E+03
Delay rate (us/s) 1.42284972319E+00
Total phase (deg) -116.4

Apriori delay (usec) -2.14013096163E+03
Apriori clock (usec) -9.2246437E-01
Apriori clockrate (us/s) -3.6776479E-07
Apriori rate (us/s) 1.42285974325E+00
Apriori accel (us/s/s) -9.09270875951E-06

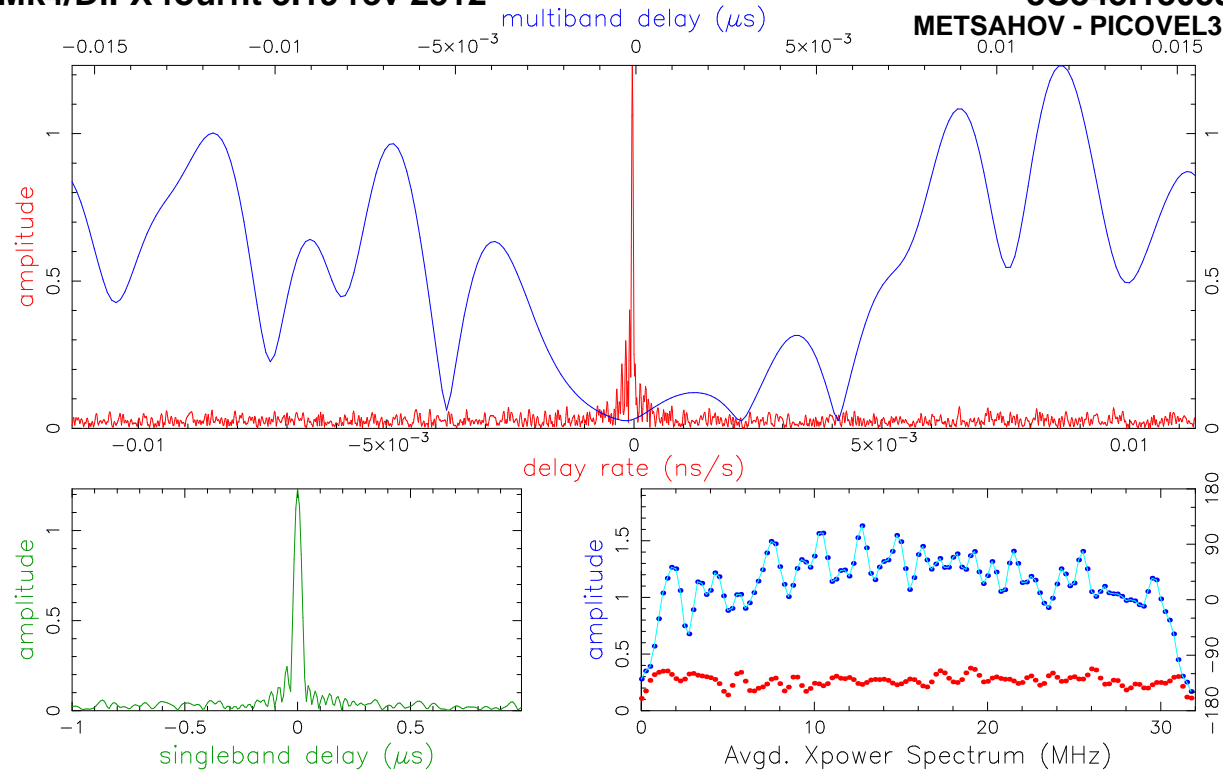
Resid mbdelay (usec) -7.37202E-03
Resid sbdelay (usec) -8.69939E-01
Resid phdelay (usec) -3.34901E-06
Resid rate (us/s) -1.00201E-05
Resid phase (deg) -103.9

PCal mode: MANUAL, MANUAL
PCal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2
Sample rate(MISamp/s): 64
Data rate(Mb/s): 2048
PC period (AP's) 5, 5
SampCntNorm: enabled
nlags: 128 t_cohere infinite

sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

simultaneous interpolator

Control file: cf_1234_gmva
Input file: /Exps/c192a/v2/1234/No0001/IZ..1305JH
Output file: /Exps/c192a/v2/1234/No0001/IZ.W.292.1305JH

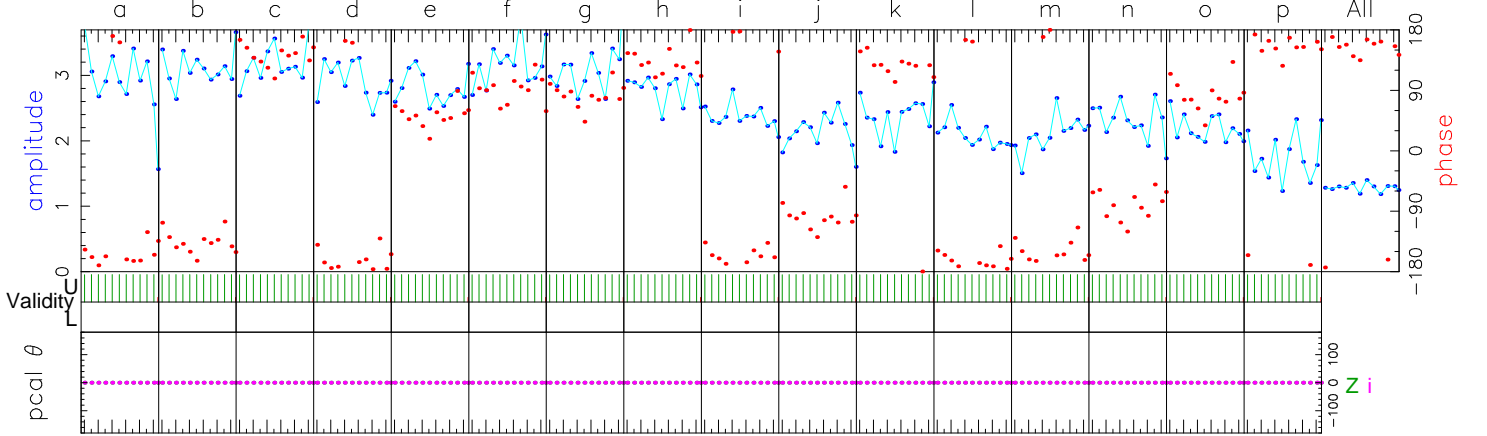


Fringe quality 4

SNR 59.7
Int time 313.804
Amp 1.232
Phase 161.9
PFD 0.0e+00
Delays (us)
SBD 0.000180
MBD 0.011783
Fringe rate (Hz)
-0.003023
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183145.47
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042844
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 55 APs / seg (28.16 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-161.7	-134.6	141.1	-169.4	52.6	94.6	82.5	135.2	-160.2	-98.5	134.3	-168.4	-154.0	-80.8	84.0	163.7	Phase	161.9				
	2.8	3.0	3.0	2.8	2.7	3.0	2.9	2.7	2.3	2.1	2.2	2.0	2.0	2.2	2.0	1.6	Ampl.	2.4				
	128.5	129.1	128.9	129.1	128.8	129.2	129.0	129.3	129.1	129.2	129.1	129.0	129.2	129.2	129.6	129.5	Sbd box	129.0				
U/L	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	APs used					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
Z:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Tracks					
Group delay (usec)(sbd)			-3.37179048212E+03														Apriori delay (usec)	-3.37180226547E+03	Resid mbdelay (usec)	1.17833E-02	+/-	1.8E-05
Sband delay (usec)			-3.37180208547E+03														Apriori clock (usec)	6.7117828E-01	Resid sbdelay (usec)	1.80000E-04	+/-	2.9E-04
Phase delay (usec)			-3.37180226025E+03														Apriori clockrate (us/s)	3.6929281E-07	Resid phdelay (usec)	5.22189E-06	+/-	6.2E-08
Delay rate (us/s)			2.96858327158E-02														Apriori rate (us/s)	2.96858678057E-02	Resid rate (us/s)	-3.50899E-08	+/-	3.4E-10
Total phase (deg)				108.8													Apriori accel (us/s/s)	3.70859582674E-05	Resid phase (deg)	161.9	+/-	1.9

ph/seg (deg) 17.3 3.3
amp/seg (%) 6.7 5.8
ph/frq (deg) 68.1 3.8
amp/frq (%) 105.2 6.7

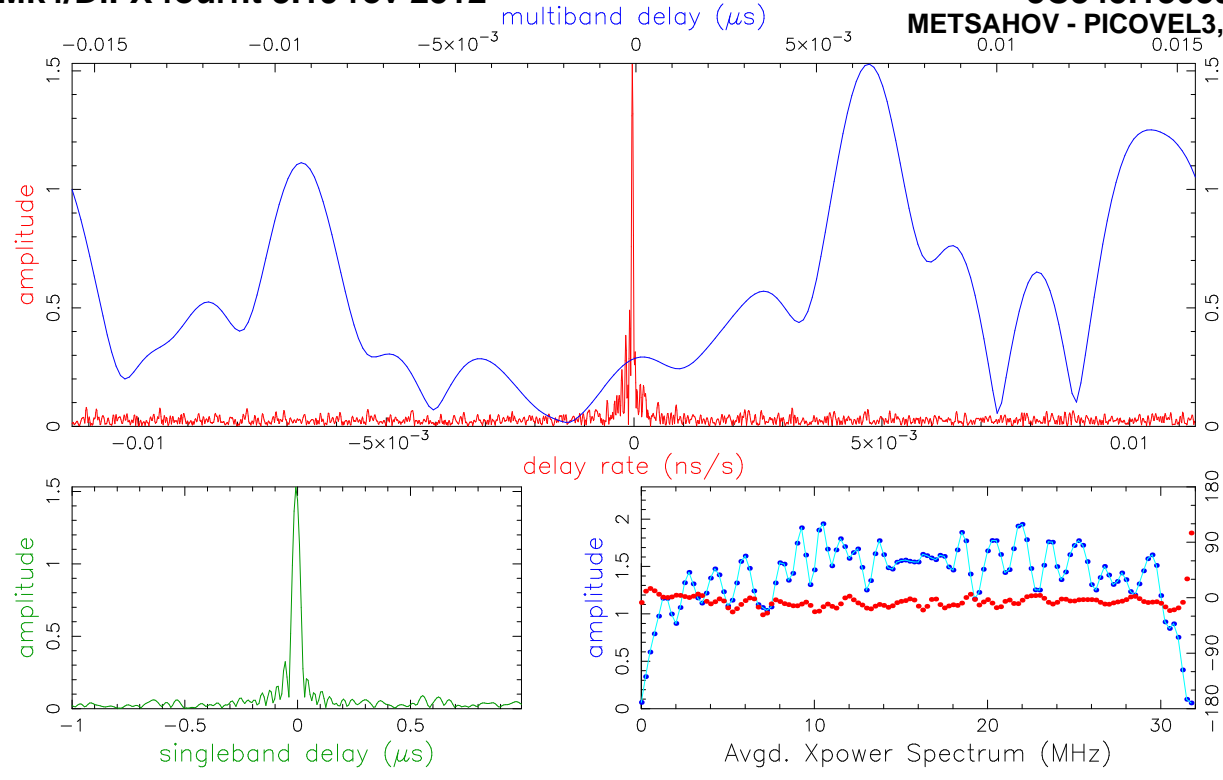
RMS Theor. Amplitude 1.232 +/- 0.021
Search (2048X64) 1.223
Interp. 0.000
Inc. seg. avg. 1.287
Inc. frq. avg. 2.447

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
Sample rate(MISamp/s): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
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 i: 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/v2/1234/No0001/Zi..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zi.W.311.1305JH

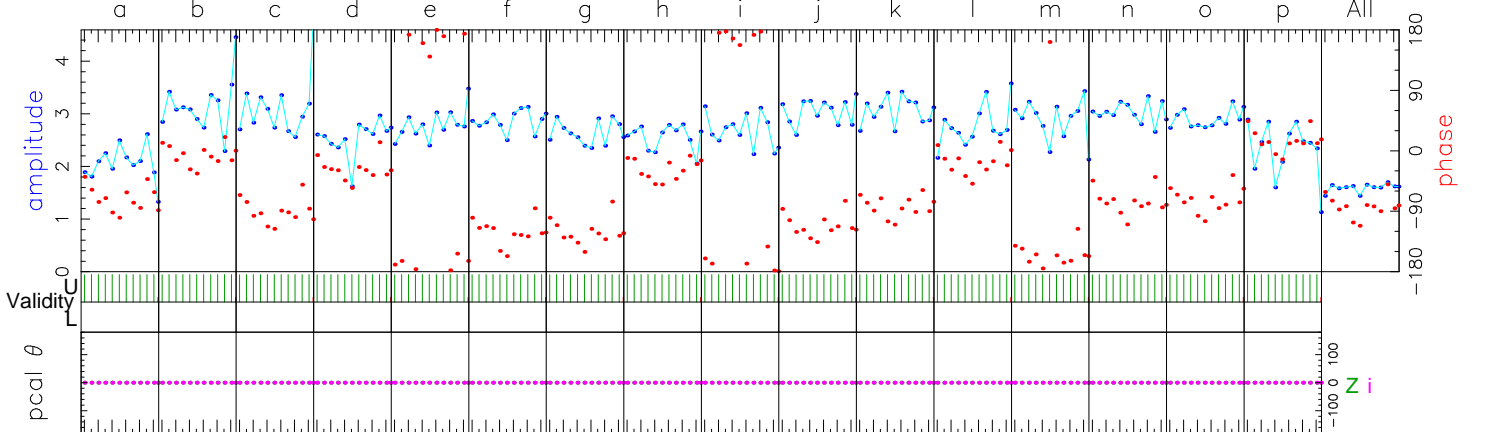


Fringe quality 4

SNR 74.2
 Int time 313.804
 Amp 1.532
 Phase -82.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.006640
 MBD 0.006451
 Fringe rate (Hz)
 -0.002974
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183145.47
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042849
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 55 APs / seg (28.16 sec / seg.), time ticks 30 sec

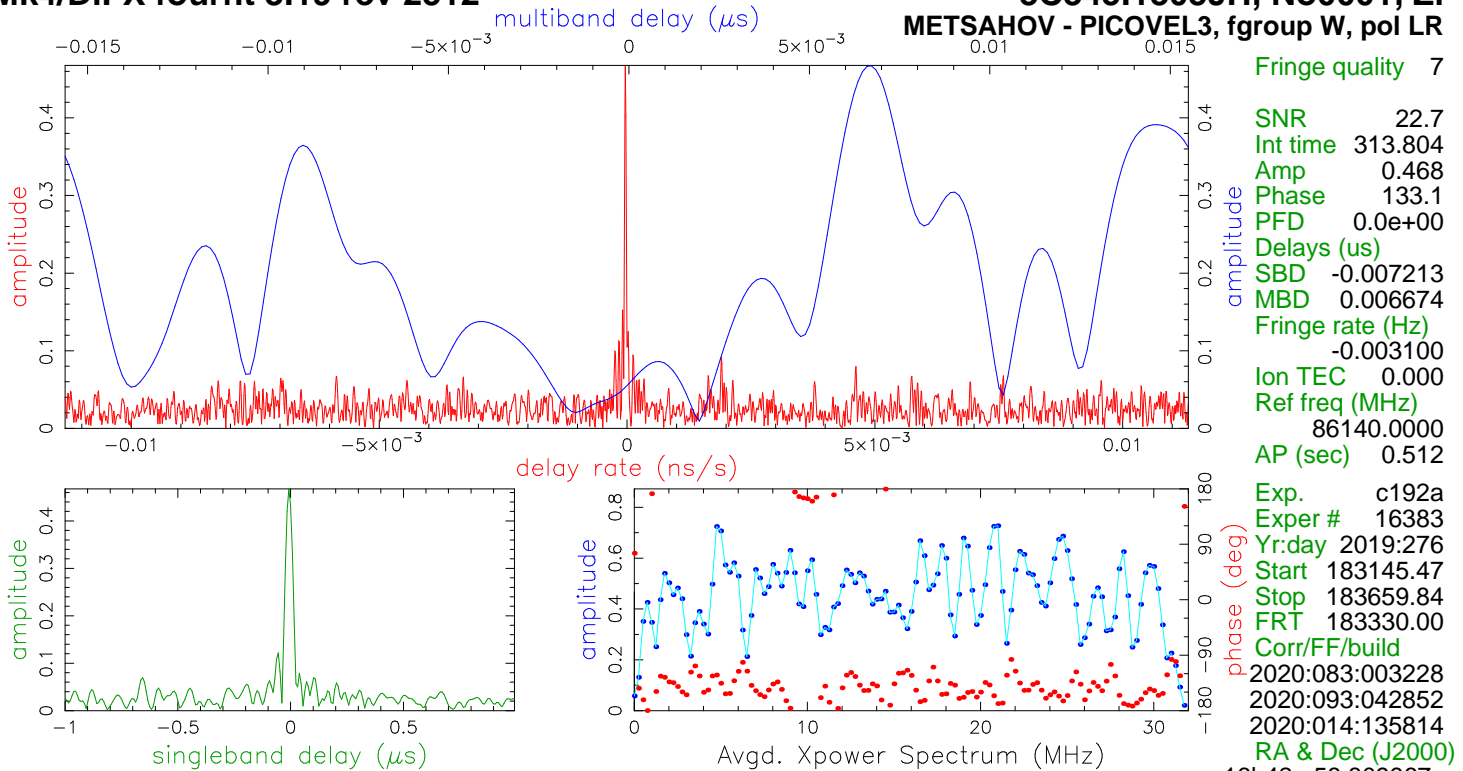


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-69.7	-7.6	-89.0	-25.8	178.7	-121.1	-120.3	-27.9	-176.7	-110.5	-83.2	-18.2	-156.7	-76.0	-73.5	16.3	Phase	-82.7
	2.0	3.0	2.9	2.4	2.6	2.7	2.5	2.6	2.9	3.0	2.6	2.8	2.9	2.7	2.3	2.3	Ampl.	2.6
	129.4	128.6	128.7	128.8	128.6	128.5	129.0	128.9	128.4	128.9	128.7	128.8	129.0	128.9	129.2	129.0	Sbd box	128.2
U/L	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Zi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Zi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

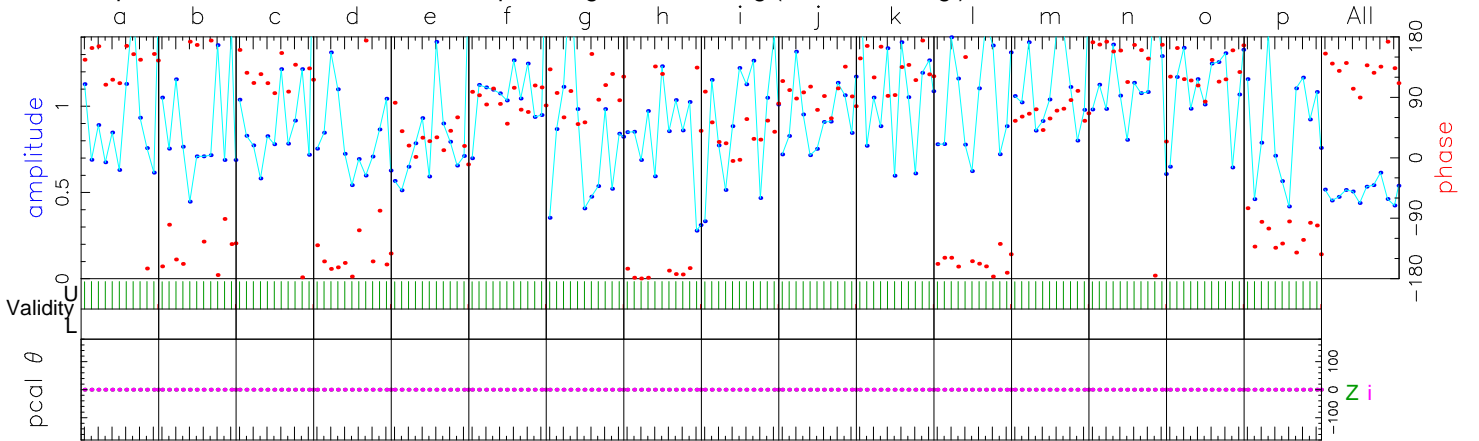
Group delay (usec)(sbd) -3.37179581434E+03 Apriori delay (usec) -3.37180226547E+03 Resid mbdelay (usec) 6.45113E-03 +/- 1.5E-05
 Sband delay (usec) -3.37180890597E+03 Apriori clock (usec) 6.7117828E-01 Resid sbdelay (usec) -6.64050E-03 +/- 2.3E-04
 Phase delay (usec) -3.37180226814E+03 Apriori clockrate (us/s) 3.6929281E-07 Resid phdelay (usec) -2.66785E-06 +/- 5.0E-08
 Delay rate (us/s) 2.96858332791E-02 Apriori rate (us/s) 2.96858678057E-02 Resid rate (us/s) -3.45266E-08 +/- 2.7E-10
 Total phase (deg) -135.9 Apriori accel (us/s/s) 3.70859582674E-05 Resid phase (deg) -82.7 +/- 1.5

RMS Theor. Amplitude 1.532 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 16.7 2.7 Search (2048X64) 1.518 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 6.5 4.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 62.0 3.1 Inc. seg. avg. 1.592 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 74.8 5.4 Inc. frq. avg. 2.644 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 271.4 el 46.7 pa 40.3 i: 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/v2/1234/No0001/Zi..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zi.W.331.1305JH

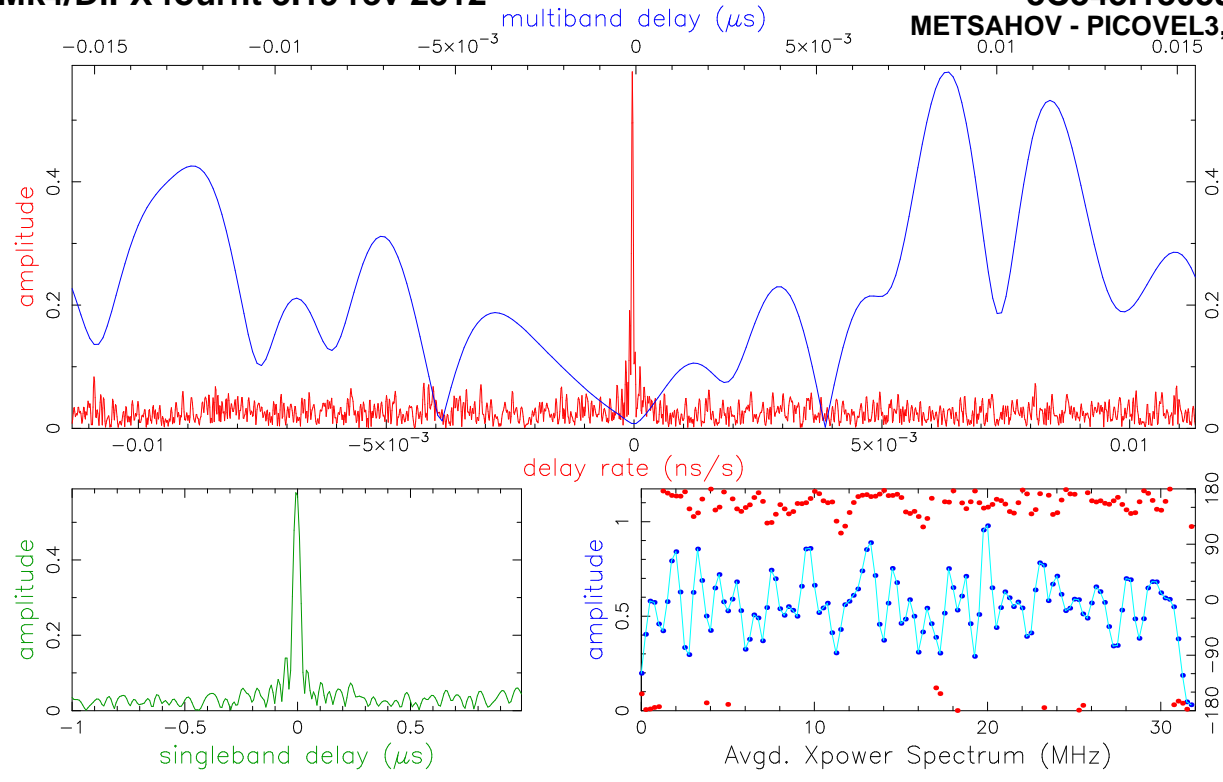


Amp. and Phase vs. time for each freq., 12 segs, 55 APs / seg (28.16 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	149.6	-150.1	134.1	-149.8	28.8	86.6	91.3	175.1	34.1	96.1	135.0	-161.2	67.0	163.2	124.3	-110.3	Phase	133.1
	0.8	0.8	0.8	0.7	0.7	1.0	0.7	0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.0	0.8	Ampl.	0.9
	128.5	129.2	128.2	129.2	128.3	128.5	128.8	128.7	128.8	129.1	128.8	128.6	128.9	128.5	129.3	129.2	Sbd box	128.1
UL	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			-3.37179559181E+03					Apriori delay (usec)		-3.37180226547E+03				Resid mbdelay (usec)		6.67366E-03	+/-	4.8E-05
Sband delay (usec)			-3.37180947897E+03					Apriori clock (usec)		6.7117828E-01				Resid sbdelay (usec)		-7.21350E-03	+/-	7.6E-04
Phase delay (usec)			-3.37180226118E+03					Apriori clockrate (us/s)		3.6929281E-07				Resid phdelay (usec)		4.29148E-06	+/-	1.6E-07
Delay rate (us/s)			2.96858318166E-02					Apriori rate (us/s)		2.96858678057E-02				Resid rate (us/s)		-3.59891E-08	+/-	9.0E-10
Total phase (deg)					79.9			Apriori accel (us/s/s)		3.70859582674E-05				Resid phase (deg)		133.1	+/-	5.1

ph/seg (deg) RMS Theor. Amplitude 0.468 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 13.1 15.3 Search (2048X64) 0.457 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 67.1 10.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 90.9 17.7 Inc. seg. avg. 0.494 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Z: az 271.4 el 46.7 pa 40.3 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -153.419 4234.117 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Zi..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zi.W.343.1305JH simultaneous interpolator

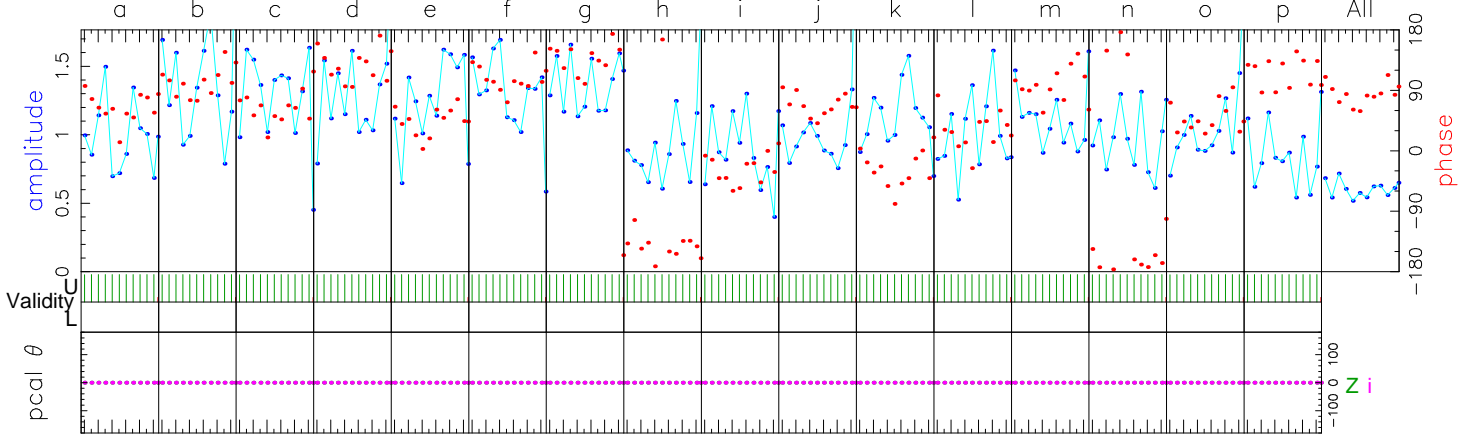


Fringe quality 7

SNR 28.5
 Int time 313.804
 Amp 0.589
 Phase 84.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.004482
 MBD 0.008642
 Fringe rate (Hz)
 -0.003068
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

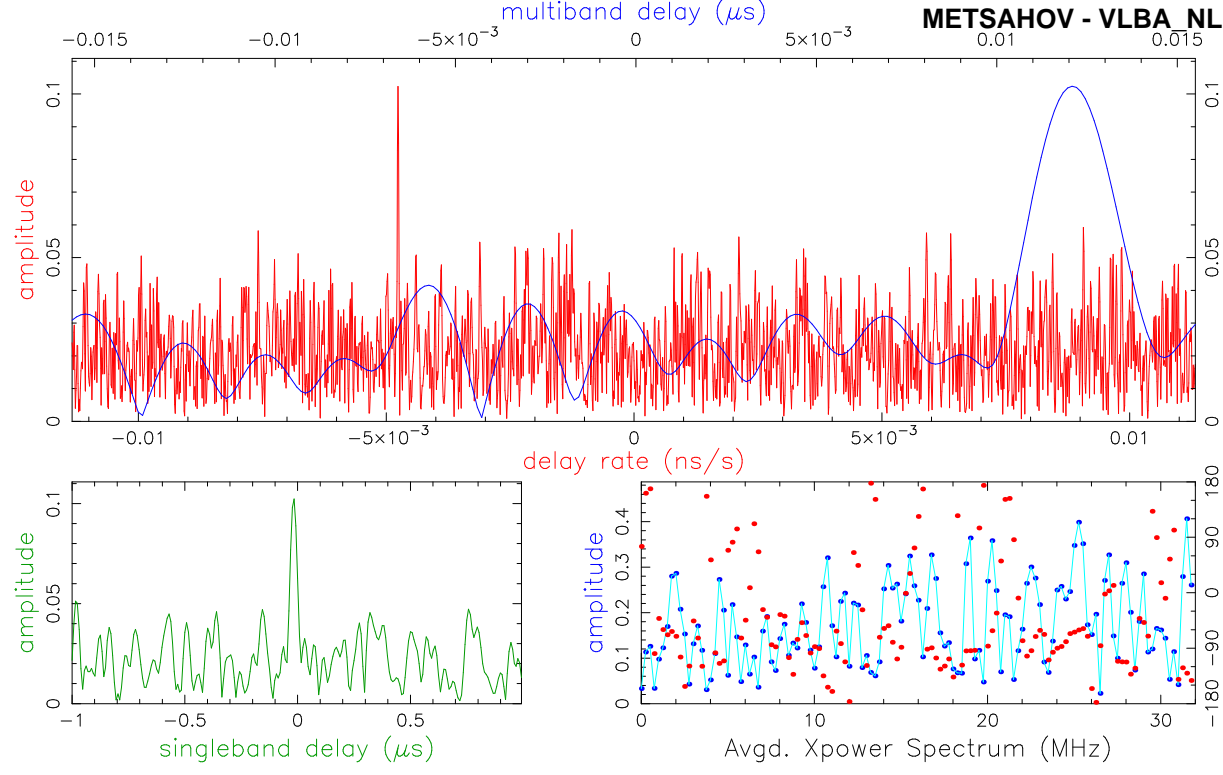
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183145.47
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042855
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 55 APs / seg (28.16 sec / seg.), time ticks 30 sec



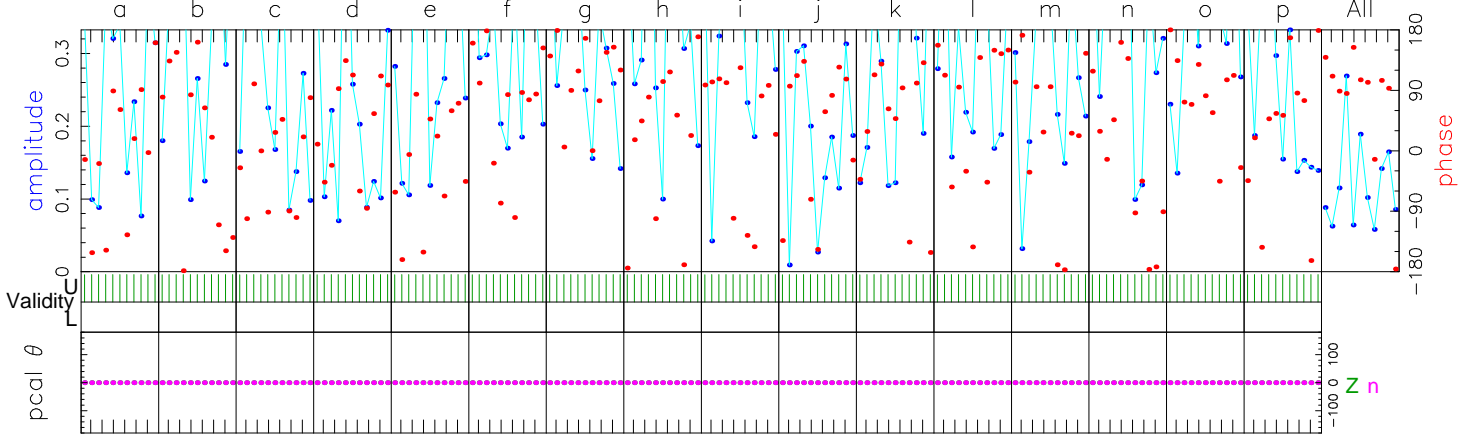
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	128.4	128.4	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Zi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
Zi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR			
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL			
Group delay (usec)(sbd)			-3.37179362365E+03																
Sband delay (usec)			-3.37180674797E+03																
Phase delay (usec)			-3.37180226275E+03																
Delay rate (us/s)			2.96858321837E-02																
Total phase (deg)				31.1															
Apriori delay (usec)																			
Apriori clock (usec)																			
Apriori clockrate (us/s)																			
Apriori rate (us/s)																			
Apriori accel (us/s/s)																			
Resid mbdelay (usec)																			
Resid sbdelay (usec)																			
Resid phdelay (usec)																			
Resid rate (us/s)																			
Resid phase (deg)																			
Pcal mode: MANUAL, MANUAL																			
Pcal rate: 0.000E+00, 0.000E+00 (us/s)																			
Bits/sample: 2x2																			
Sample rate(MSamp/s): 64																			
Data rate(Mb/s): 2048																			
nlags: 128																			
t_cohere infinite																			
sb window (us)																			
mb window (us)																			
dr window (ns/s)																			
ion window (TEC)																			

ph/seg (deg) 16.0 7.0 Search (2048X64) 0.566 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 10.2 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) 69.5 8.0 Inc. seg. avg. 0.597 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 81.1 14.0 Inc. frq. avg. 1.025 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 271.4 el 46.7 pa 40.3 i: 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/v2/1234/No0001/Zi..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zi.W.351.1305JH



Fringe quality 0
 SNR 5.7
 Int time 410.457
 Amp 0.111
 Phase 103.8
 PFD 9.4e-01
 Delays (us)
 SBD -0.017702
 MBD 0.012142
 Fringe rate (Hz)
 -0.411094
 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
 2020:083:003228
 2020:093:042847
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
41.0	173.1	12.4	77.6	43.3	115.6	117.5	92.1	108.1	122.3	137.2	136.9	72.9	136.7	83.7	73.8	73.8	Phase	103.8
0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.3	0.1	0.1	Ampl.	0.1
11.4	41.6	3.4	83.6	78.0	152.9	164.5	109.1	140.1	57.9	210.0	194.4	51.8	174.5	28.5	124.4	124.4	Sbd box	126.7
UL	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

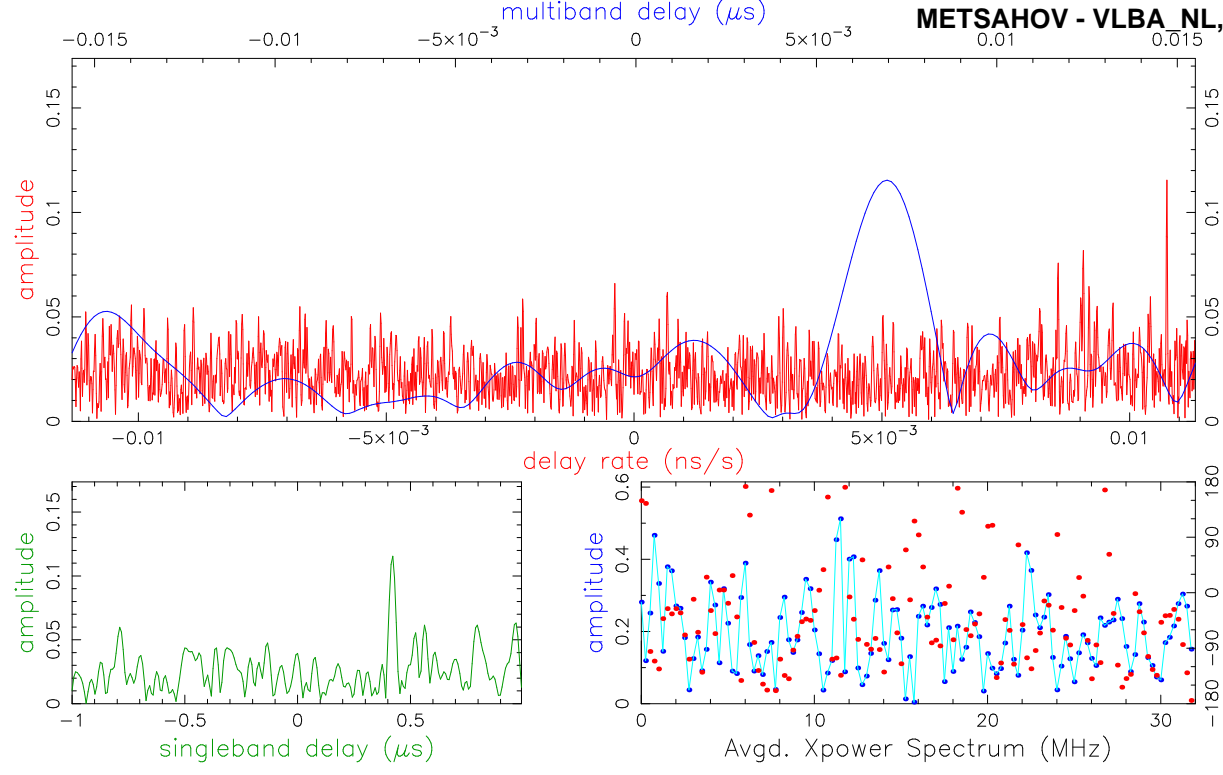
Group delay (usec)(sbd) -1.24726962377E+03 Apriori delay (usec) -1.24725051616E+03 Resid mbdelay (usec) 1.21424E-02 +/- 1.9E-04
 Sband delay (usec) -1.24726821816E+03 Apriori clock (usec) -2.6293127E+01 Resid sbdelay (usec) -1.77020E-02 +/- 3.0E-03
 Phase delay (usec) -1.24725051281E+03 Apriori clockrate (us/s) -1.1793070E-07 Resid phdelay (usec) 3.34596E-06 +/- 6.5E-07
 Delay rate (us/s) -1.23492178267E+00 Apriori rate (us/s) -1.23491701027E+00 Resid rate (us/s) -4.77240E-06 +/- 2.7E-09
 Total phase (deg) -62.4 Apriori accel (us/s/s) 2.10846431478E-05 Resid phase (deg) 103.8 +/- 20.1

RMS Theor. Amplitude 0.111 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 47.2 33.3 Search (2048X64) 0.101 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 62.9 58.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 44.6 40.2 Inc. seg. avg. 0.112 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 57.5 70.1 Inc. frq. avg. 0.111 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/Zn..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zn.W.321.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Zn
 METSAHOV - VLBA_NL, fgroup W, pol RR

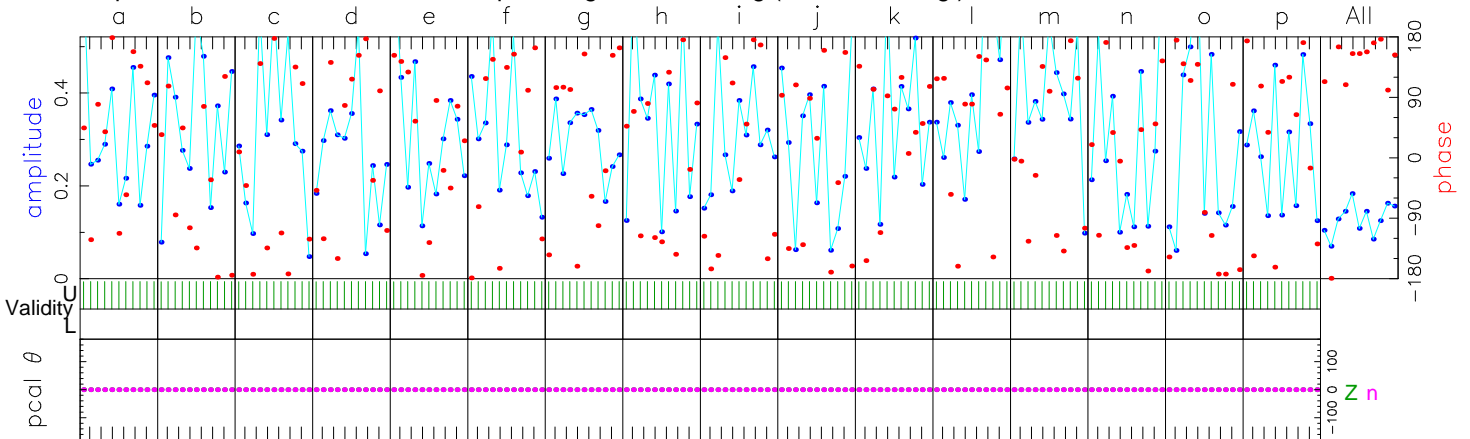


Fringe quality 0

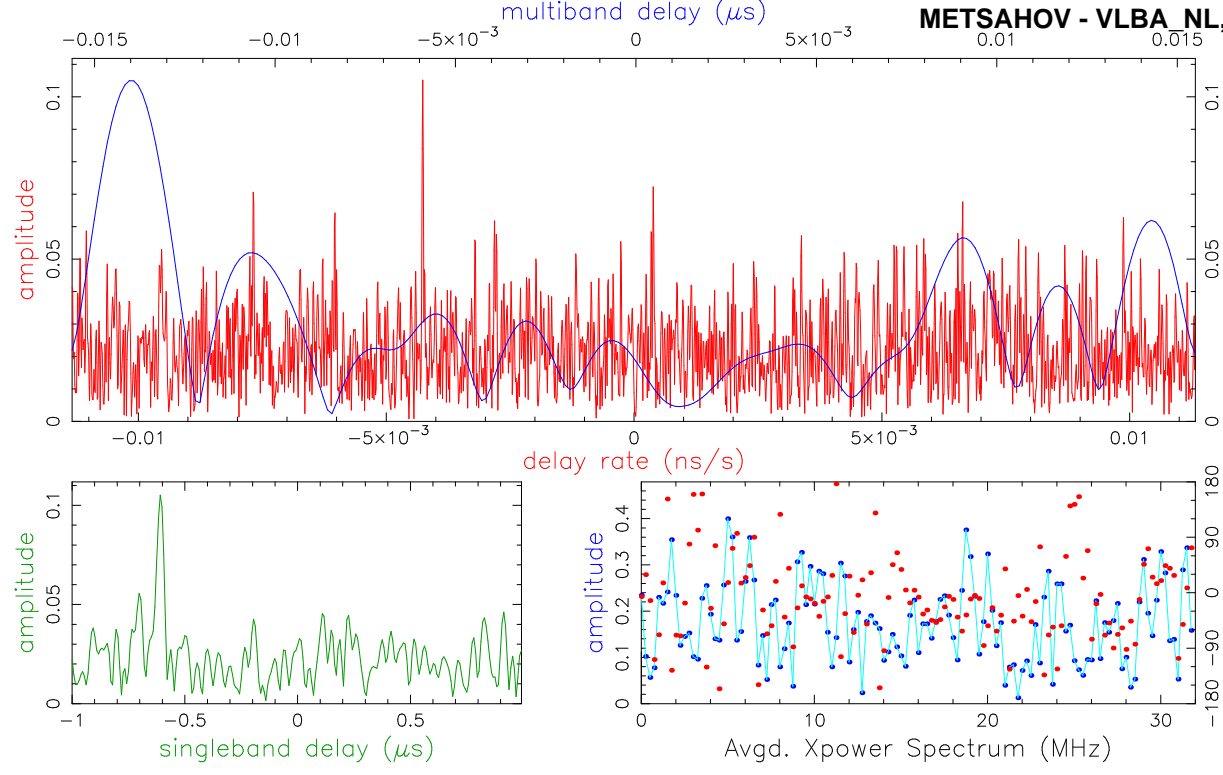
SNR 6.4
 Int time 410.457
 Amp 0.174
 Phase 146.7
 PFD 3.4e-02
 Delays (us)
 SBD 0.419975
 MBD 0.006976
 Fringe rate (Hz) 0.926924
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build 2020:083:003228
 2020:093:042851
 2020:014:135814
 RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
95.6	169.5	176.1	165.4	101.9	156.1	165.6	134.7	-164.2	160.9	87.9	128.0	175.4	113.8	162.9	161.7	146.7	Phase	146.7
0.2	0.1	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.1	0.1	0.3	0.2	0.2	Ampl.	0.2
16.9	246.2	47.7	199.6	130.1	81.8	6.5	180.6	25.2	212.0	103.3	183.7	7.3	72.7	131.7	28.0	28.0	Sbd box	182.8
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Z:n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-1.24683728984E+03			Apriori delay (usec)			-1.24725051616E+03			Resid mbdelay (usec)			6.97631E-03			+/-	1.7E-04	
Sband delay (usec)	-1.24683054066E+03			Apriori clock (usec)			-2.6293127E+01			Resid sbdelay (usec)			4.19975E-01			+/-	2.7E-03	
Phase delay (usec)	-1.24725051142E+03			Apriori clockrate (us/s)			-1.1793070E-07			Resid phdelay (usec)			4.73196E-06			+/-	5.7E-07	
Delay rate (us/s)	-1.23490624960E+00			Apriori rate (us/s)			-1.23491701027E+00			Resid rate (us/s)			1.07607E-05			+/-	2.4E-09	
Total phase (deg)	-19.4			Apriori accel (us/s/s)			2.10846431478E-05			Resid phase (deg)			146.7			+/-	17.8	
ph/seg (deg)	RMS	Theor.	Amplitude	0.174 +/- 0.027			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5								
amp/seg (%)	26.9	29.5	Search (2048X64)	0.114			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000					
ph/frq (deg)	30.2	51.5	Interp.	0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016			
amp/frq (%)	33.6	35.6	Inc. seg. avg.	0.170			Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011					
	49.8	62.2	Inc. frq. avg.	0.170			Data rate(Mb/s): 2048			nlags: 128 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/v2/1234/No0001/Zn..1305JH			Output file: /Exps/c192a/v2/1234/No0001/Zn.W.339.1305JH														

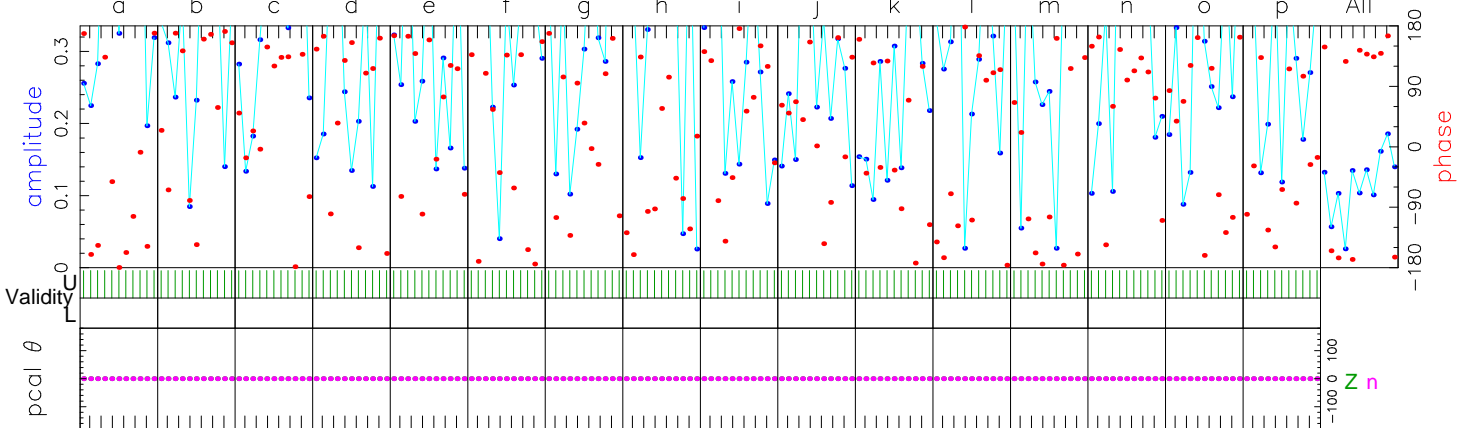


Fringe quality 0

SNR 5.8
 Int time 410.457
 Amp 0.112
 Phase 162.3
 PFD 7.3e-01
 Delays (us)
 SBD -0.607950
 MBD -0.013987
 Fringe rate (Hz)
 -0.367464
 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
 2020:083:003228
 2020:093:042855
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

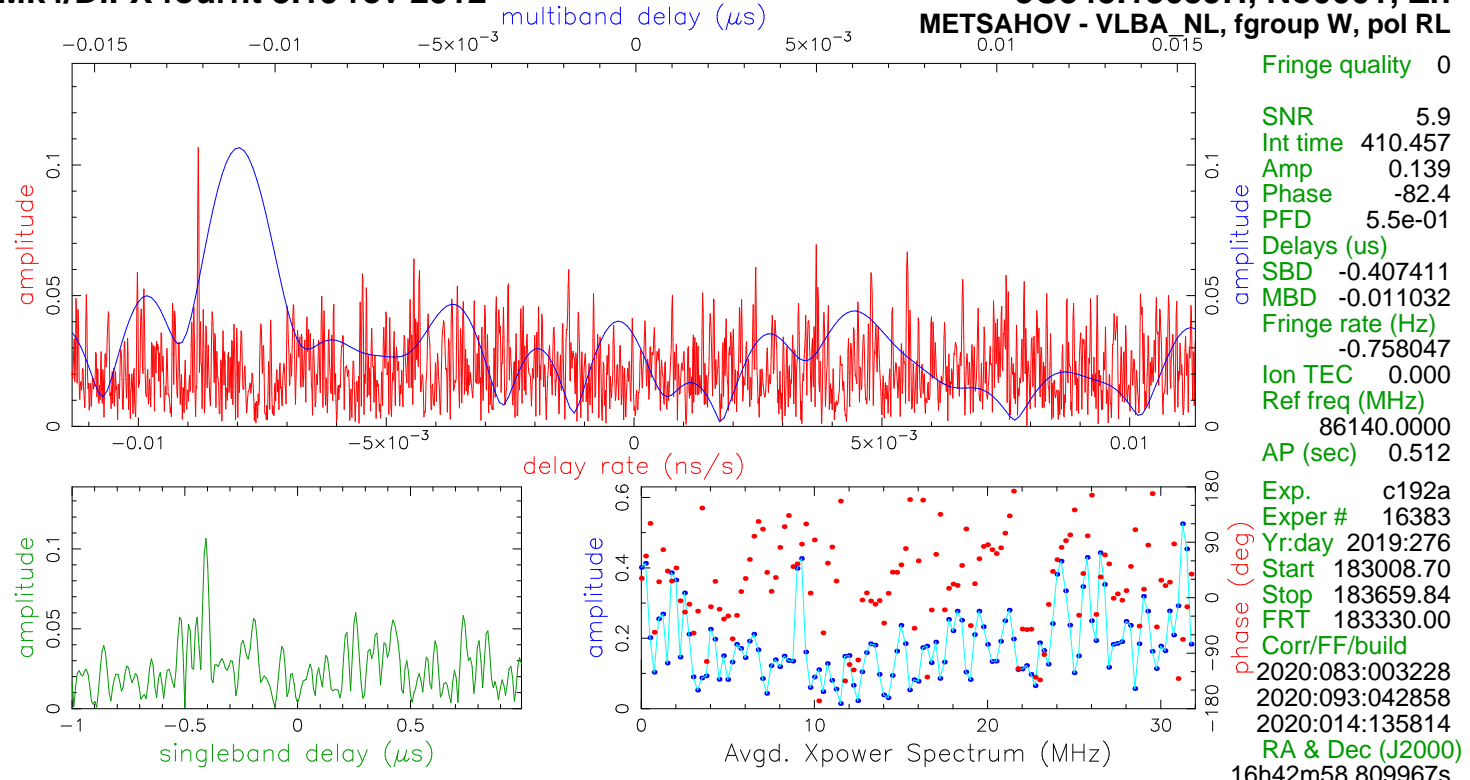


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-136.2	154.3	127.6	156.2	153.1	153.8	126.4	-117.5	121.9	82.6	163.8	-171.6	174.2	131.1	170.5	-78.2	Phase	162.3
	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.2	0.2	0.3	0.1	0.1	Ampl.	0.1
	197.8	156.3	71.4	155.5	140.7	49.8	130.7	25.8	190.3	127.9	29.8	235.0	75.3	122.7	29.6	44.7	Sbd box	51.2
UL	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) -1.24785825360E+03 Apriori delay (usec) -1.24725051616E+03 Resid mbdelay (usec) -1.39874E-02 +/- 1.8E-04
 Sband delay (usec) -1.24785846616E+03 Apriori clock (usec) -2.6293127E+01 Resid sbdelay (usec) -6.07950E-01 +/- 2.9E-03
 Phase delay (usec) -1.24725051092E+03 Apriori clockrate (us/s) -1.1793070E-07 Resid phdelay (usec) 5.23257E-06 +/- 6.3E-07
 Delay rate (us/s) -1.23492127616E+00 Apriori rate (us/s) -1.23491701027E+00 Resid rate (us/s) -4.26589E-06 +/- 2.7E-09
 Total phase (deg) -3.9 Apriori accel (us/s/s) 2.10846431478E-05 Resid phase (deg) 162.3 +/- 19.6

RMS Theor. Amplitude 0.112 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 28.1 32.5 Search (2048X64) 0.100 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 42.4 56.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 51.5 39.2 Inc. seg. avg. 0.106 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 65.0 68.5 Inc. frq. avg. 0.117 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/Zn..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zn.W.349.1305JH



Fringe quality 0

SNR 5.9

Int time 410.457

Amp 0.139

Phase -82.4

PFD 5.5e-01

Delays (us)

SBD -0.407411

MBD -0.011032

Fringe rate (Hz)

-0.758047

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

2020:083:003228

2020:093:042858

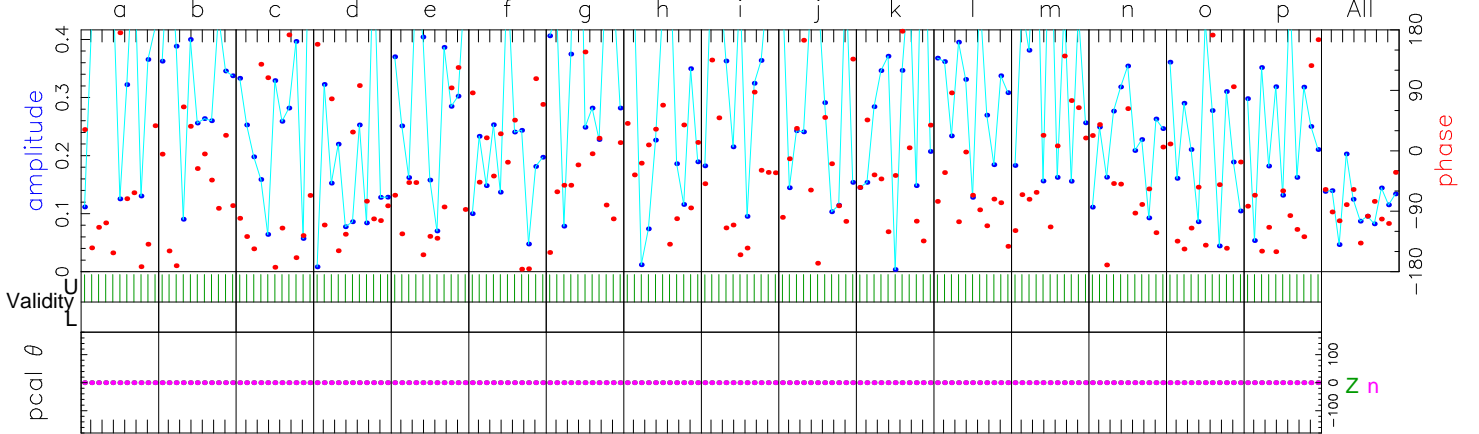
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-112.4	-47.9	-131.2	-112.2	-95.6	13.3	-51.8	-11.5	-46.7	-97.4	-78.1	-77.5	-58.5	-37.7	-136.0	-127.1		Phase	-82.4				
	0.3	0.2	0.2	0.1	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.1	0.2		Ampl.	0.1				
	67.0	89.6	128.8	243.3	189.8	226.9	172.5	247.9	213.9	233.2	61.5	162.2	244.7	52.4	248.5	75.8		Sbd box	76.9				
UL	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
n	1000	1000	1000	1000	1000	1000	1000	1000	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	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	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Tracks					
Group delay (usec)(sbd)			-1.24766779835E+03															Apriori delay (usec)	-1.24725051616E+03	Resid mbdelay (usec)	-1.10322E-02	+/-	1.8E-04
Sband delay (usec)			-1.24765792716E+03															Apriori clock (usec)	-2.6293127E+01	Resid sbdelay (usec)	-4.07411E-01	+/-	2.9E-03
Phase delay (usec)			-1.24725051881E+03															Apriori clockrate (us/s)	-1.1793070E-07	Resid phdelay (usec)	-2.65870E-06	+/-	6.2E-07
Delay rate (us/s)			-1.23492581045E+00															Apriori rate (us/s)	-1.23491701027E+00	Resid rate (us/s)	-8.80017E-06	+/-	2.6E-09
Total phase (deg)					-248.6													Apriori accel (us/s/s)	2.10846431478E-05	Resid phase (deg)	-82.4	+/-	19.3

ph/seg (deg) 28.0 32.1 Search (2048X64) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

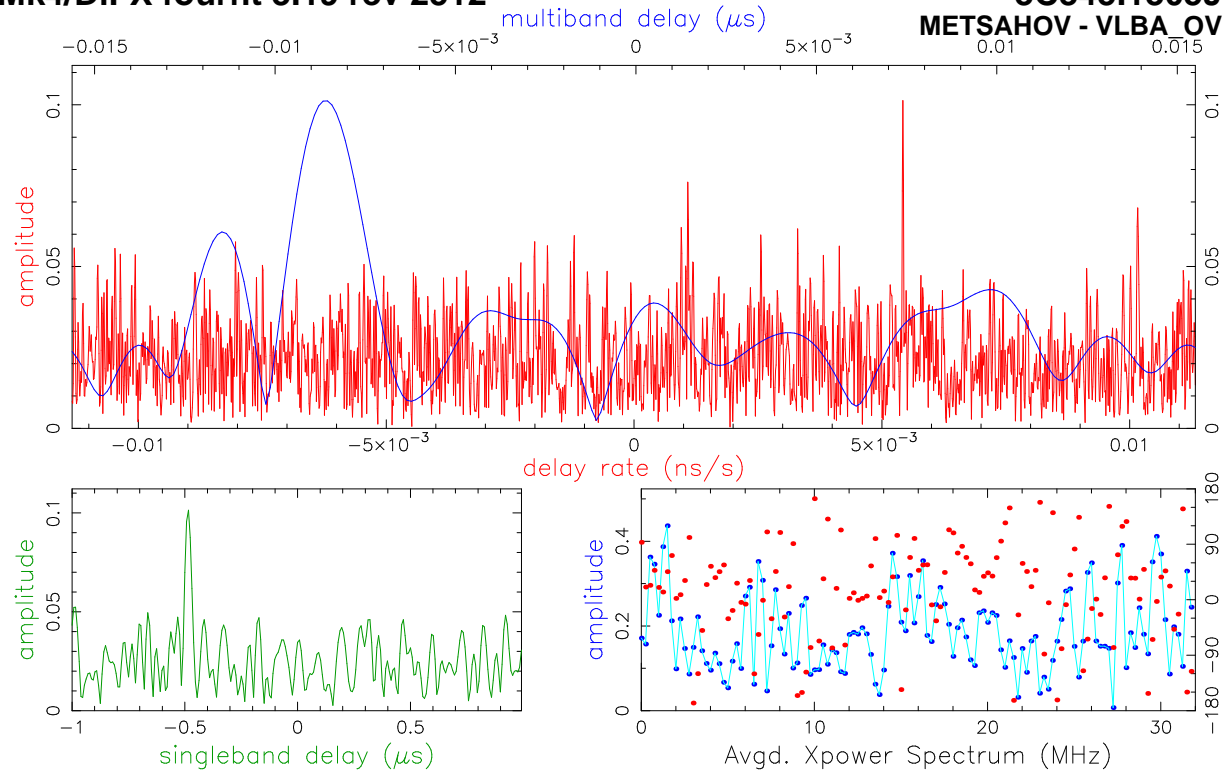
amp/seg (%) 38.4 56.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 46.0 38.7 Inc. seg. avg. 0.134 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 54.6 67.5 Inc. frq. avg. 0.144 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/Zn..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zn.W.357.1305JH

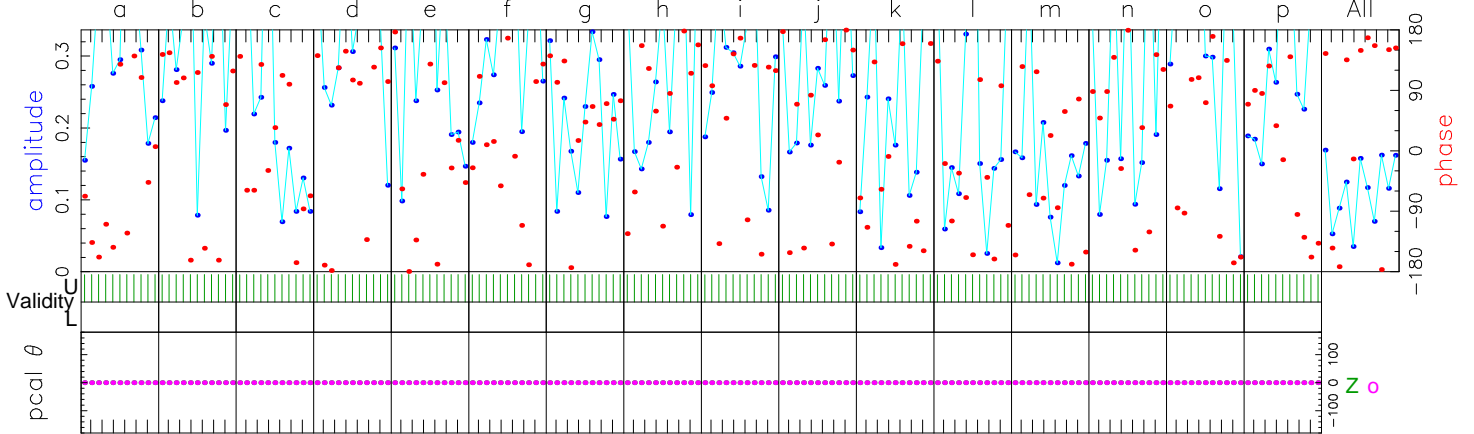


Fringe quality 0

SNR 5.6
 Int time 410.463
 Amp 0.112
 Phase 159.6
 PFD 9.8e-01
 Delays (us)
 SBD -0.486172
 MBD -0.008607
 Fringe rate (Hz)
 0.468198
 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
 2020:083:003228
 2020:093:042847
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

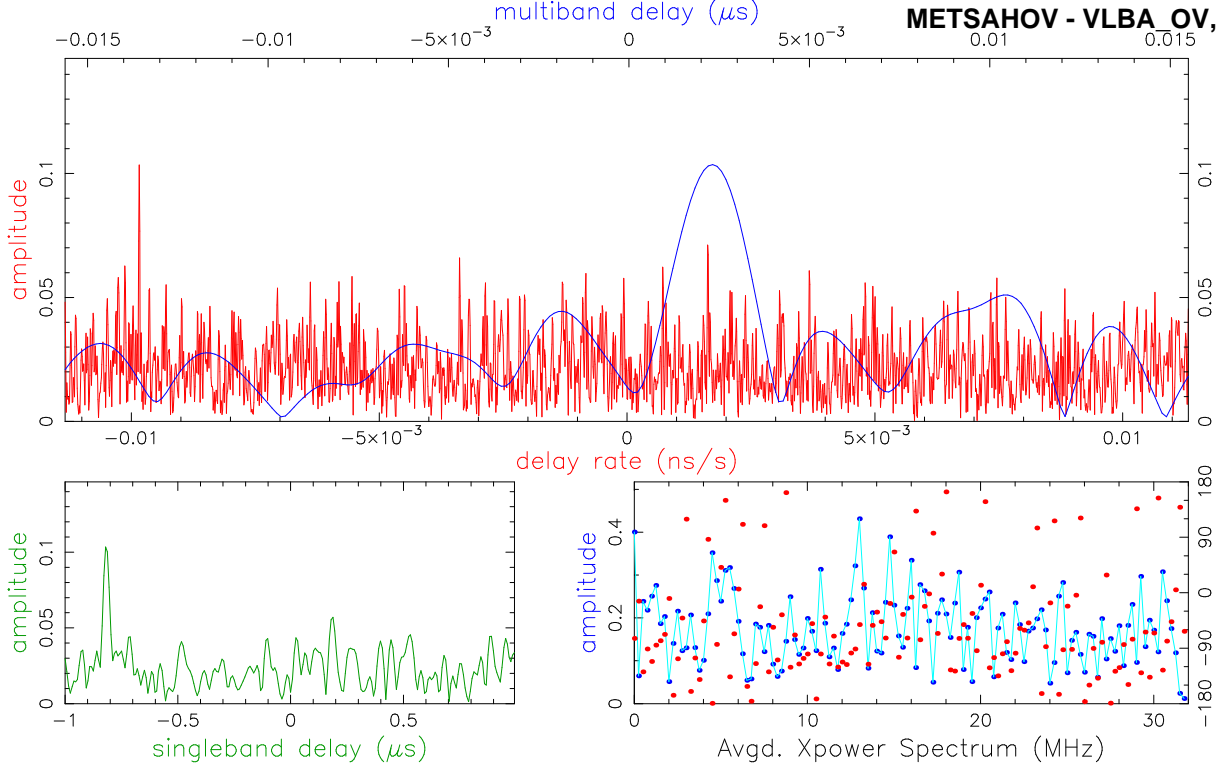


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-149.5	152.2	-33.3	142.8	155.2	81.0	79.6	-175.5	147.7	-178.7	-175.6	-147.5	-119.4	144.4	138.4	153.2	Phase	159.6
	0.2	0.3	0.0	0.3	0.1	0.0	0.2	0.1	0.2	0.2	0.2	0.1	0.0	0.2	0.2	0.1	Ampl.	0.1
	105.7	67.3	164.5	66.8	53.5	119.3	39.0	41.4	97.1	126.7	201.8	31.1	63.5	34.1	30.5	192.9	Sbd box	66.8
UL	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	4.55214927733E+03			Apriori delay (usec)			4.55262663482E+03			Resid mbdelay (usec)			-8.60750E-03			+/- 1.9E-04		
Sband delay (usec)	4.55214046332E+03			Apriori clock (usec)			-1.6447569E+01			Resid sbdelay (usec)			-4.86172E-01			+/- 3.1E-03		
Phase delay (usec)	4.55262663997E+03			Apriori clockrate (us/s)			1.5311808E-08			Resid phdelay (usec)			5.14566E-06			+/- 6.5E-07		
Delay rate (us/s)	-1.46576632269E+00			Apriori rate (us/s)			-1.46577175801E+00			Resid rate (us/s)			5.43532E-06			+/- 2.8E-09		
Total phase (deg)	276.1			Apriori accel (us/s/s)			-5.29754221444E-06			Resid phase (deg)			159.6			+/- 20.3		

ph/seg (deg) 56.5 33.7 Search (2048X64) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 45.7 58.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 62.9 40.6 Inc. seg. avg. 0.107 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 69.9 70.9 Inc. frq. avg. 0.114 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/Zo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zo.W.319.1305JH

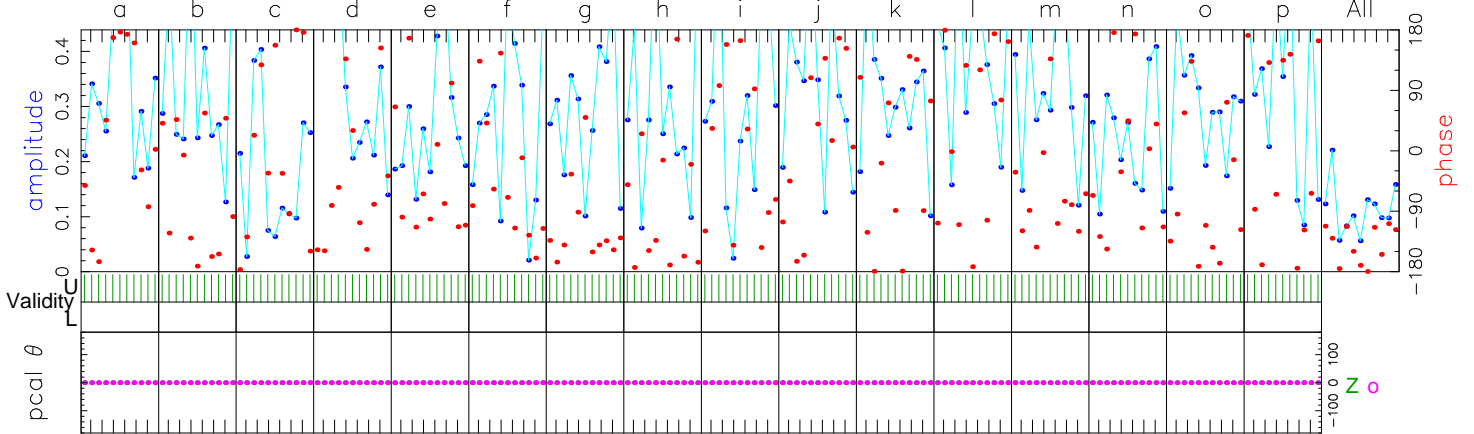
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Zo
 METSAHOV - VLBA_OV, fgroup W, pol RR



Fringe quality 0
 SNR 5.8
 Int time 410.463
 Amp 0.146
 Phase -134.2
 PFD 7.8e-01
 Delays (us)
 SBD -0.817486
 MBD 0.002368
 Fringe rate (Hz)
 -0.848934
 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
 2020:083:003228
 2020:093:042851
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

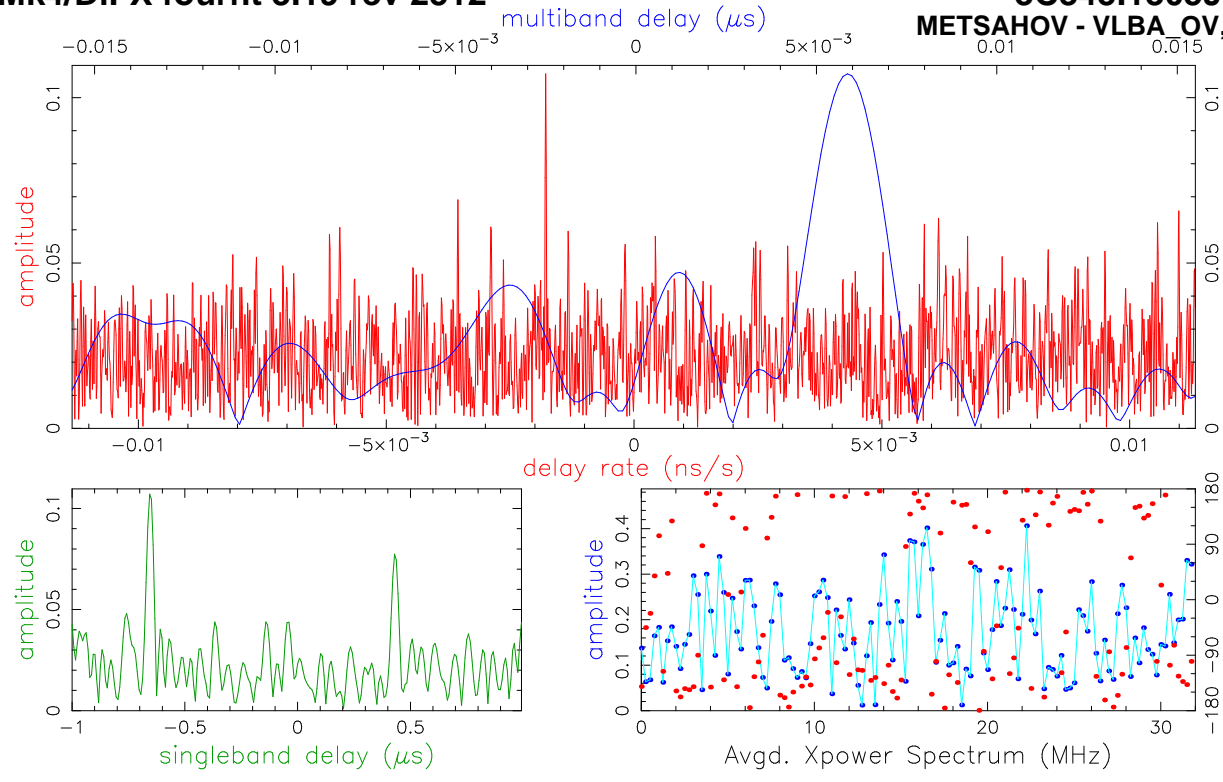
Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-167.1	-119.4	167.2	-117.6	-84.7	-83.1	-130.7	-147.9	-167.6	123.2	-160.4	-169.8	-83.9	-48.6	-144.5	-160.6	Phase	-134.2
	0.2	0.1	0.1	0.3	0.1	0.2	0.3	0.3	0.1	0.1	0.1	0.3	0.3	0.1	0.1	0.2	Ampl.	0.1
	60.0	173.2	86.6	25.1	134.0	236.6	208.1	92.9	179.8	18.5	60.4	55.3	78.8	196.5	37.1	219.2	Sbd box	24.4
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) 4.55181650290E+03 Apriori delay (usec) 4.55262663482E+03 Resid mbdelay (usec) 2.36808E-03 +/- 1.9E-04
 Sband delay (usec) 4.55180914932E+03 Apriori clock (usec) -1.6447569E+01 Resid sbdelay (usec) -8.17486E-01 +/- 3.0E-03
 Phase delay (usec) 4.55262663049E+03 Apriori clockrate (us/s) 1.5311808E-08 Resid phdelay (usec) -4.32884E-06 +/- 6.4E-07
 Delay rate (us/s) -1.46578161329E+00 Apriori rate (us/s) -1.46577175801E+00 Resid rate (us/s) -9.85528E-06 +/- 2.7E-09
 Total phase (deg) -17.7 Apriori accel (us/s/s) -5.29754221444E-06 Resid phase (deg) -134.2 +/- 19.7

ph/seg (deg) RMS Theor. Amplitude 0.146 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 43.4 57.0 Search (2048X64) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.7 39.4 Inc. seg. avg. 0.136 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 65.3 68.8 Inc. frq. avg. 0.145 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/Zo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zo.W.336.1305JH

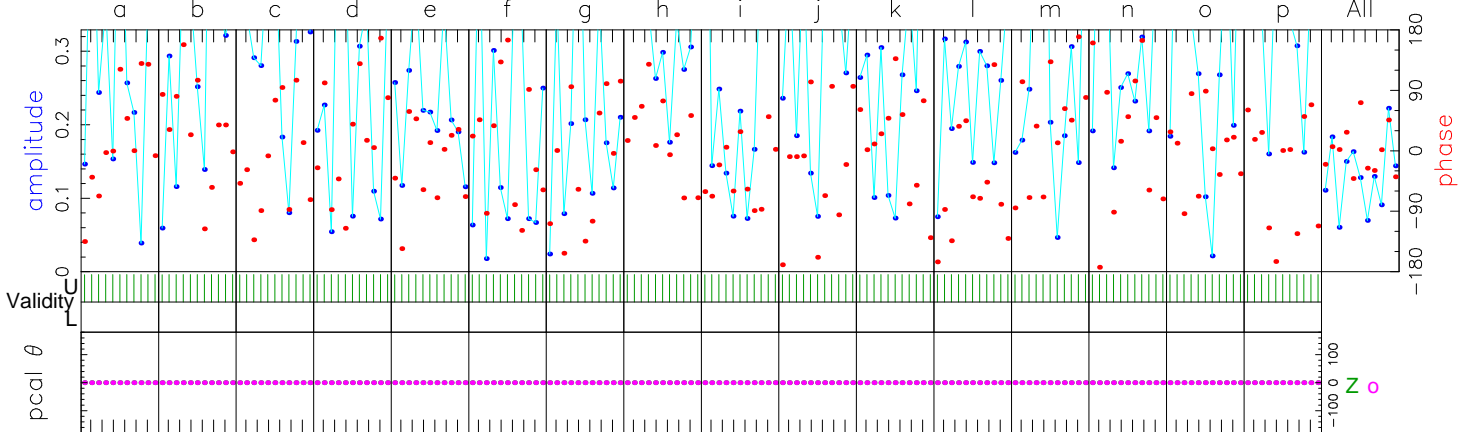


Fringe quality 0

SNR 6.0
 Int time 410.463
 Amp 0.110
 Phase 2.2
 PFD 3.7e-01
 Delays (us)
 SBD -0.653286
 MBD 0.005896
 Fringe rate (Hz)
 -0.153416
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

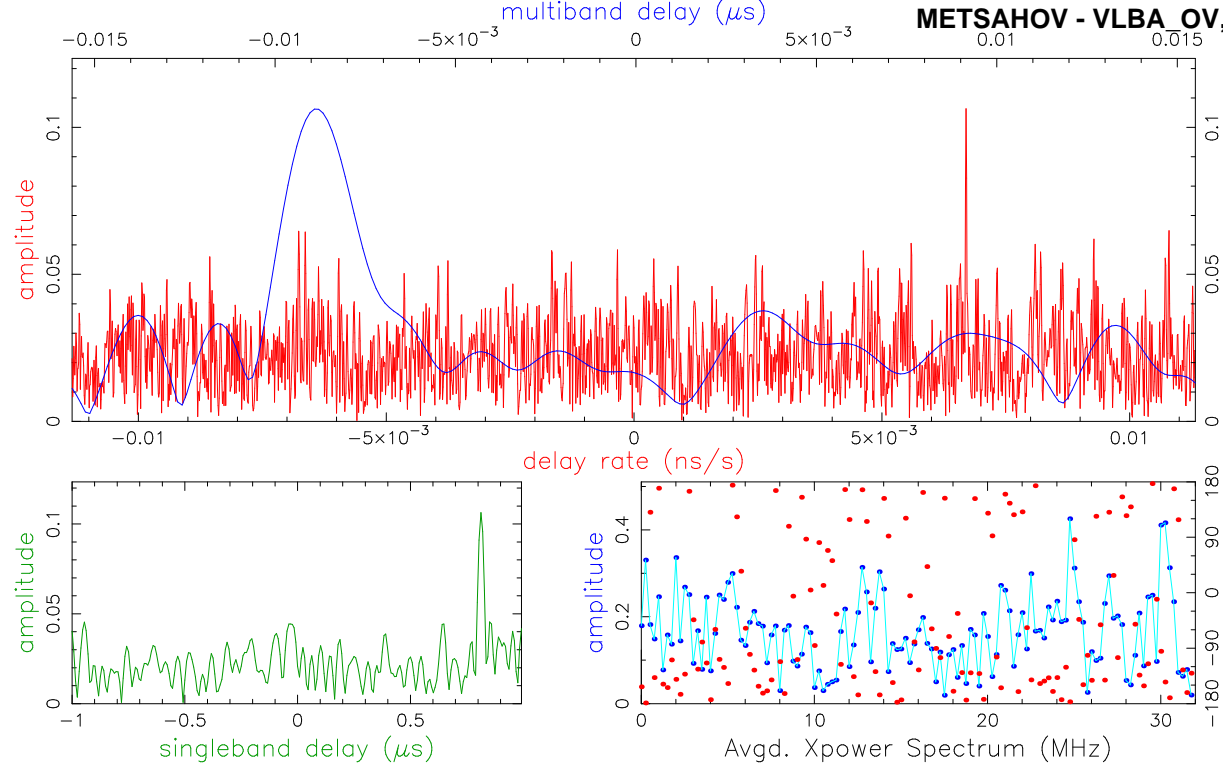
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042854
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	12.1	20.3	-12.3	8.2	2.1	-22.0	4.4	27.9	-29.6	-10.1	24.1	-75.1	18.2	108.4	-6.3	12.8		Phase	2.2
	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1		Ampl.	0.1
	118.2	104.9	134.9	134.5	73.0	180.2	116.7	108.9	99.9	230.6	245.8	79.4	143.9	18.9	224.8	193.8		Sbd box	45.4
UL	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)			4.55197628095E+03																
Sband delay (usec)			4.55197334932E+03																
Phase delay (usec)			4.55262663489E+03																
Delay rate (us/s)			-1.46577353901E+00																
Total phase (deg)					118.7														
ph/seg (deg)		RMS	Theor.																
amp/seg (%)		34.7	31.6																
ph/frq (deg)		47.7	55.1																
amp/frq (%)		39.0	38.1																
		48.4	66.5																
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																			
Control file: cf_1234_gmva																			
Input file: /Exps/c192a/v2/1234/No0001/Zo..1305JH																			
Output file: /Exps/c192a/v2/1234/No0001/Zo.W.347.1305JH																			

simultaneous interpolator

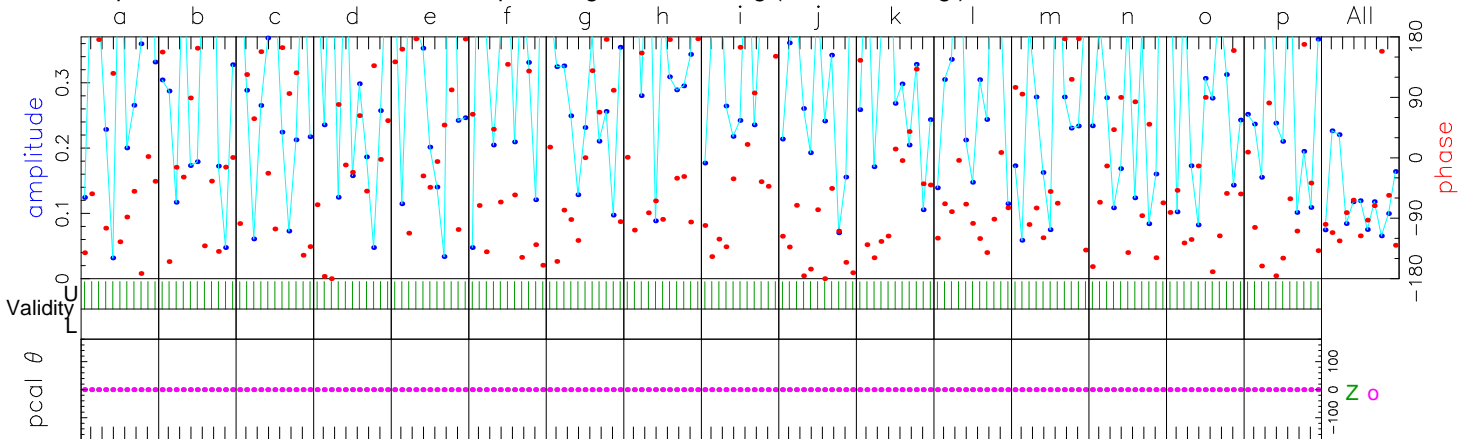


Fringe quality 0

SNR 5.9
 Int time 410.463
 Amp 0.123
 Phase -103.9
 PFD 6.1e-01
 Delays (us)
 SBD 0.813245
 MBD -0.008843
 Fringe rate (Hz)
 0.577716
 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
 2020:083:003228
 2020:093:042858
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



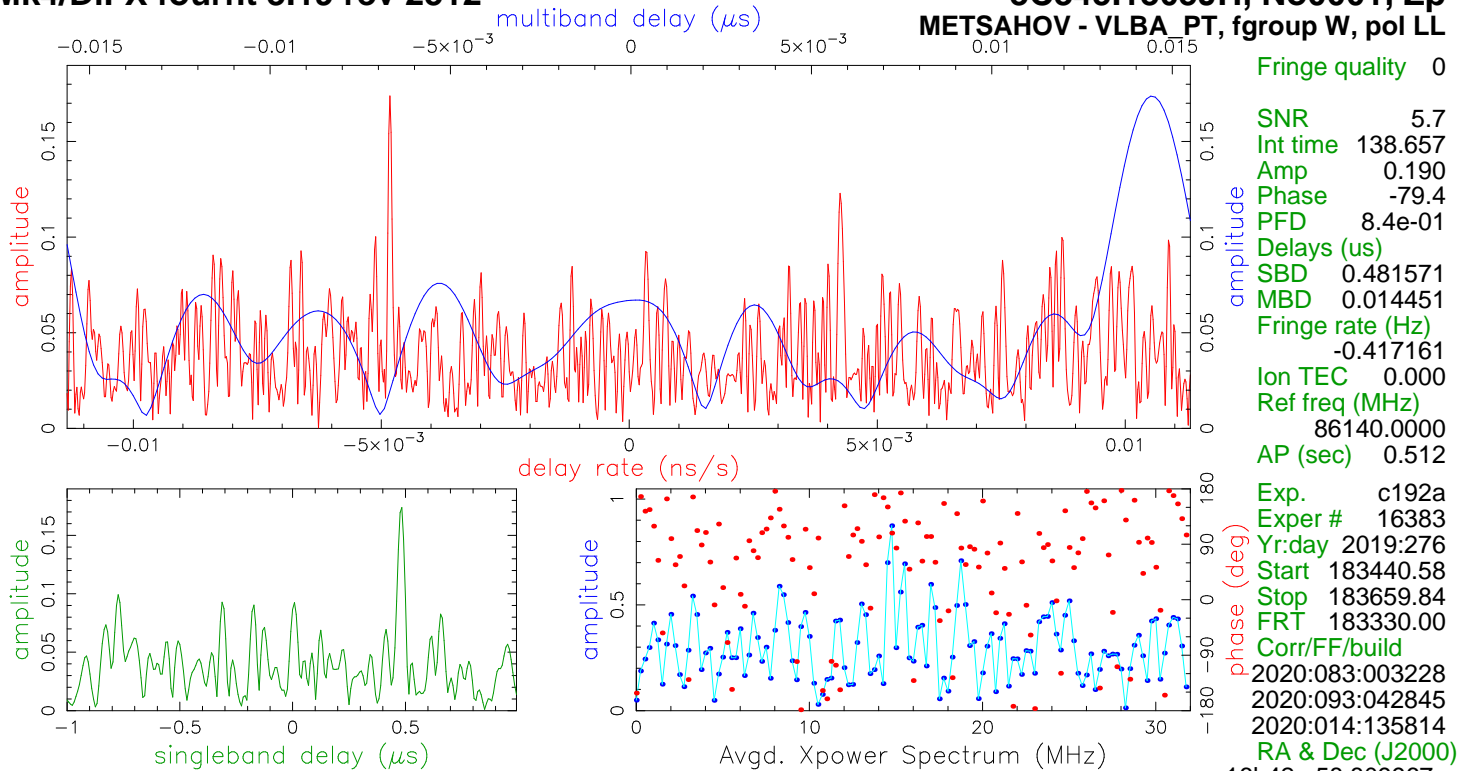
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-75.5	-70.4	-143.6	4.8	164.3	-135.7	-105.6	-103.1	-91.5	-126.3	-112.0	-67.2	-121.9	-81.4	-103.9	-124.5	Phase	-103.9
	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.3	0.2	0.2	0.2	0.1	Ampl.	0.1
	241.2	53.9	96.9	12.3	184.9	180.3	133.7	233.2	198.2	169.1	246.0	196.7	181.3	200.0	111.4	86.5	Sbd box	233.1
UL	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 4.55343029148E+03 Apriori delay (usec) 4.55262663482E+03 Resid mbdelay (usec) -8.84335E-03 +/- 1.8E-04
 Sband delay (usec) 4.55343987932E+03 Apriori clock (usec) -1.6447569E+01 Resid sbdelay (usec) 8.13245E-01 +/- 2.9E-03
 Phase delay (usec) 4.55262663147E+03 Apriori clockrate (us/s) 1.5311808E-08 Resid phdelay (usec) -3.35076E-06 +/- 6.3E-07
 Delay rate (us/s) -1.46576505130E+00 Apriori rate (us/s) -1.46577175801E+00 Resid rate (us/s) 6.70671E-06 +/- 2.6E-09
 Total phase (deg) 12.6 Apriori accel (us/s/s) -5.29754221444E-06 Resid phase (deg) -103.9 +/- 19.4

ph/seg (deg) RMS Theor. Amplitude 0.123 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 38.7 32.2 Search (2048X64) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 53.3 56.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 44.8 38.9 Inc. seg. avg. 0.124 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 50.9 67.8 Inc. frq. avg. 0.121 Data rate(Mb/s): 2048 nlags: 128 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/v2/1234/No0001/Zo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zo.W.356.1305JH



Fringe quality 0

SNR 5.7

Int time 138.657

Amp 0.190

Phase -79.4

PFD 8.4e-01

Delays (us)

SBD 0.481571

MBD 0.014451

Fringe rate (Hz)

-0.417161

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

2020:083:003228

2020:093:042845

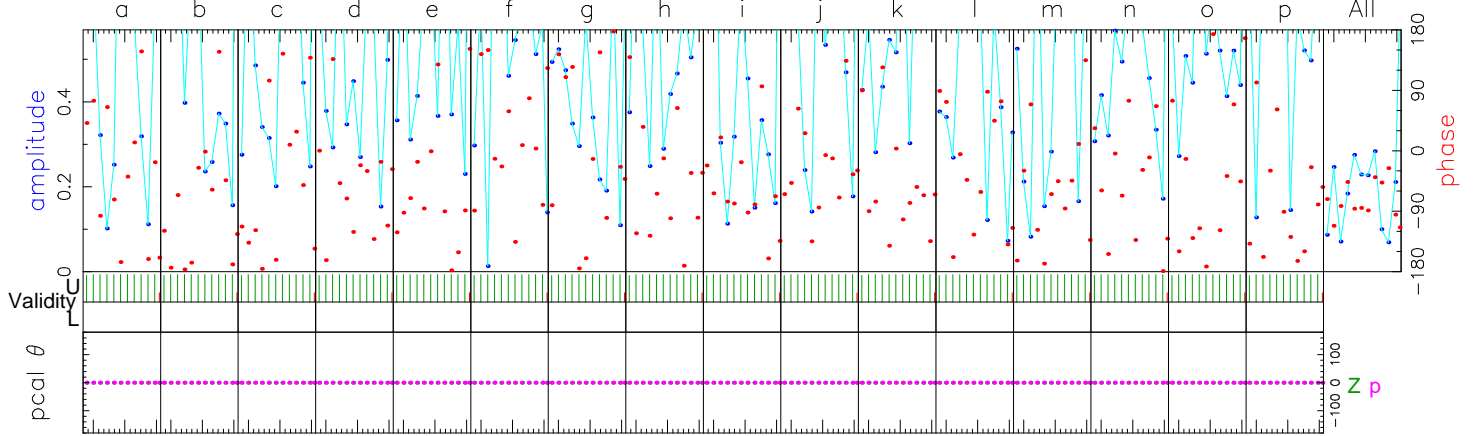
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 24 APs / seg (12.29 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-25.8	-113.6	-153.8	-64.7	-97.3	-5.5	178.5	-79.0	-58.8	-40.8	-85.2	-19.8	-96.3	-32.8	-131.9	-102.4		Phase -79.4					
	0.1	0.3	0.1	0.3	0.3	0.2	0.2	0.2	0.3	0.4	0.3	0.1	0.3	0.2	0.2	0.3		Ampl. 0.2					
	37.1	107.9	199.1	37.6	129.9	136.5	73.7	10.3	203.8	181.3	12.1	102.4	180.8	66.4	31.4	108.0		Sbd box 190.6					
UL	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	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	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	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			2.72615547582E+03															Apriori delay (usec)	2.72567227443E+03	Resid mbdelay (usec)	1.44514E-02	+/-	1.9E-04
Sband delay (usec)			2.72615384593E+03															Apriori clock (usec)	-1.1723695E+01	Resid sbdelay (usec)	4.81571E-01	+/-	3.0E-03
Phase delay (usec)			2.72567227187E+03															Apriori clockrate (us/s)	-1.8759378E-07	Resid phdelay (usec)	-2.56078E-06	+/-	6.5E-07
Delay rate (us/s)			-1.45135562223E+00															Apriori rate (us/s)	-1.45135077940E+00	Resid rate (us/s)	-4.84283E-06	+/-	8.1E-09
Total phase (deg)				179.7														Apriori accel (us/s/s)	7.42936273599E-06	Resid phase (deg)	-79.4	+/-	20.2

ph/seg (deg) RMS Theor. Amplitude 0.190 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 63.3 61.2 Search (1024X64) 0.171 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 51.6 40.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

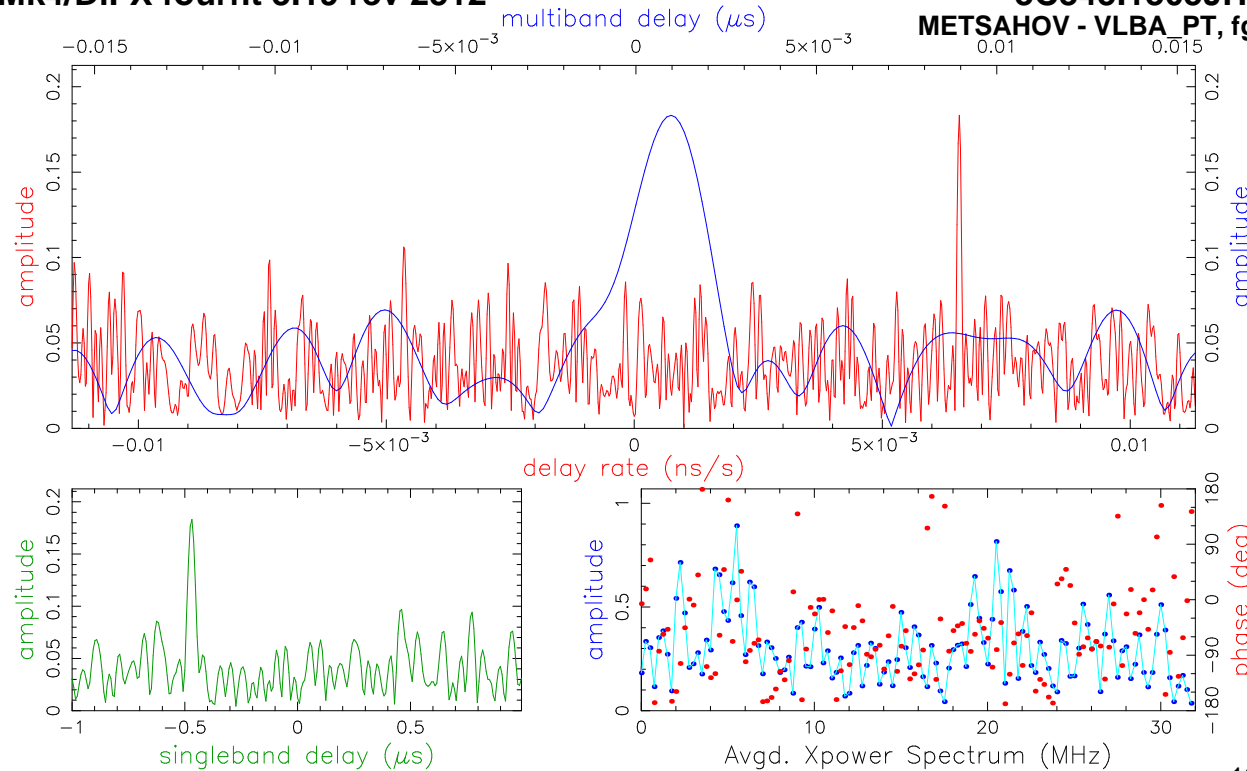
amp/frq (%) 58.6 70.6 Inc. seg. avg. 0.177 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

Z: az 271.4 el 46.7 pa 40.3 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 10832.018 2428.129 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Zp..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zp.W.312.1305JH

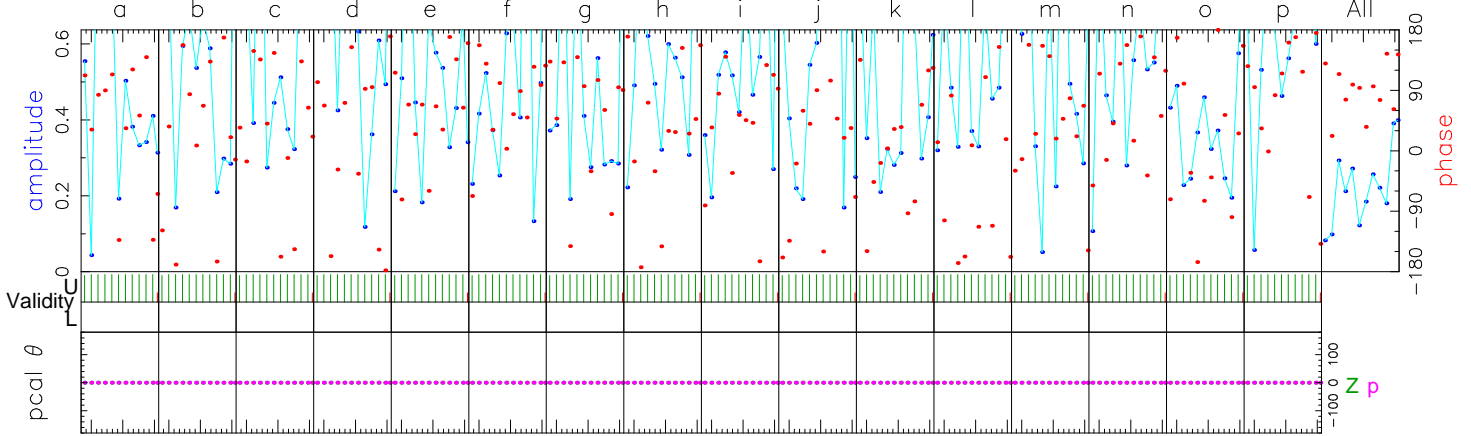
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Zp
 METSAHOV - VLBA_PT, fgroup W, pol RR



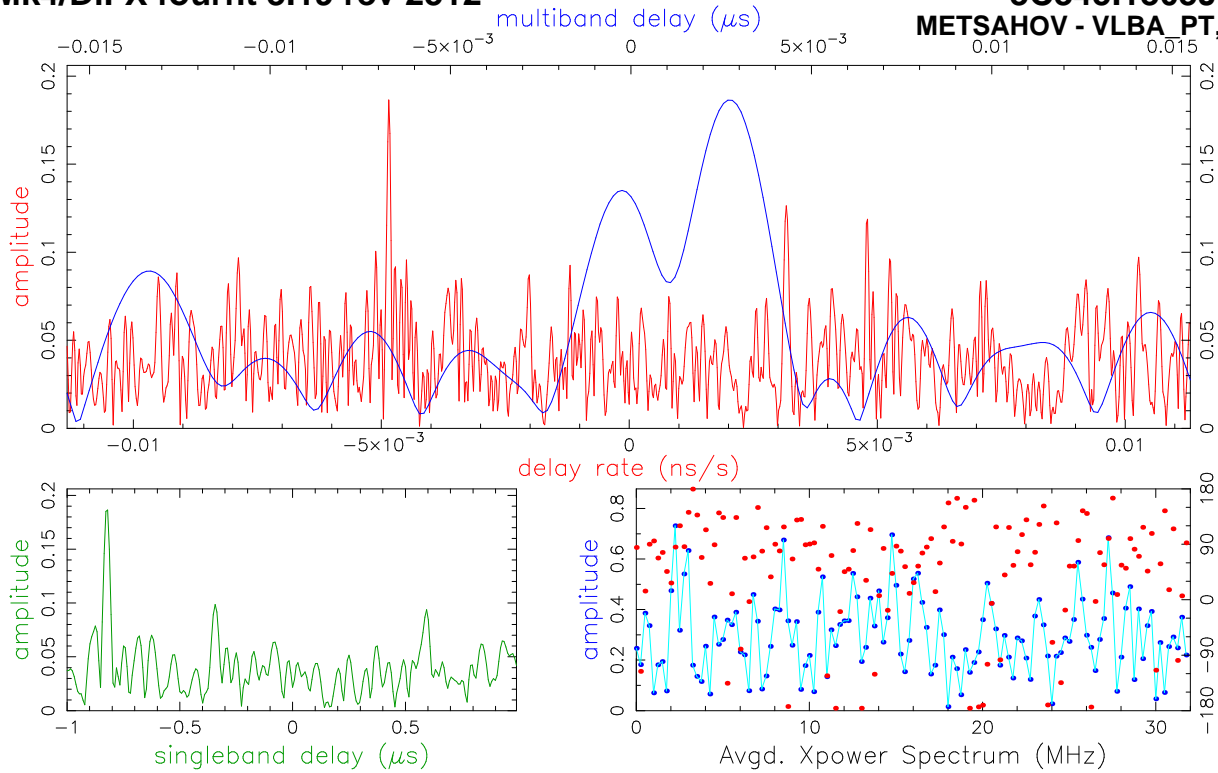
Fringe quality 0
 SNR 5.9
 Int time 138.657
 Amp 0.212
 Phase 89.1
 PFD 3.2e-01
 Delays (us)
 SBD -0.470832
 MBD 0.000955
 Fringe rate (Hz)
 0.566355
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183440.58
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042847
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 24 APs / seg (12.29 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		2.72520447909E+03																
Sband delay (usec)		2.72520144293E+03																
Phase delay (usec)		2.72567227731E+03																
Delay rate (us/s)		-1.45134420458E+00																
Total phase (deg)					348.2													
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): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 36.2 33.5 Amplitude 0.212 +/- 0.036 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.6 58.4 Interp. 0.182 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 69.2 38.6 Inc. seg. avg. 0.213 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 51.2 67.4 Inc. frq. avg. 0.211 Sample rate(MISamp/s): 64 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 -72.0 u,v (fr/asec) 10832.018 2428.129 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Zp..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zp.W.318.1305JH simultaneous interpolator

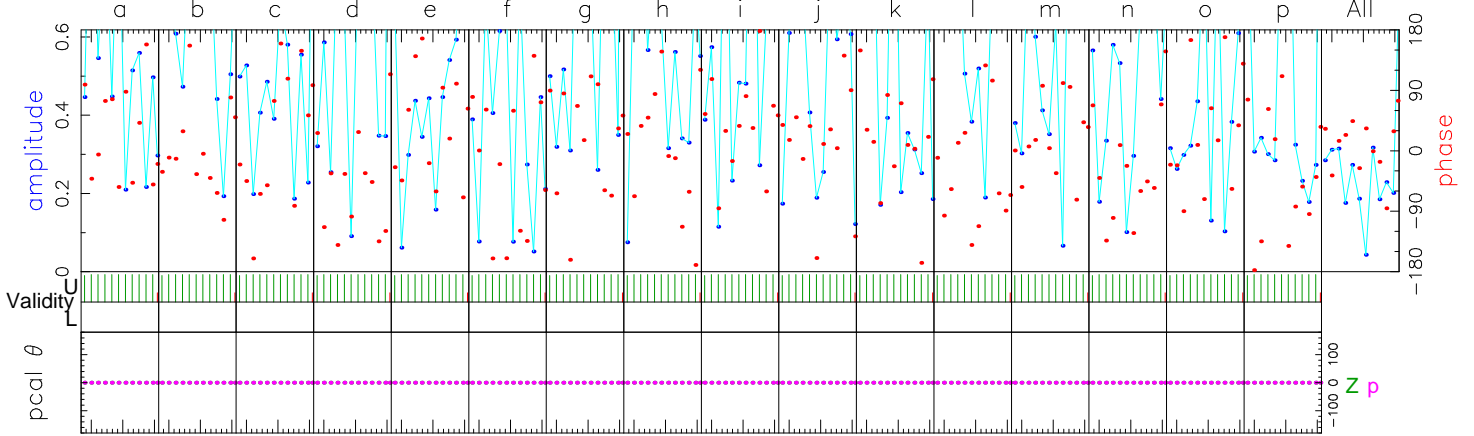


Fringe quality 0

SNR 6.1
 Int time 138.657
 Amp 0.206
 Phase 7.0
 PFD 1.0e-01
 Delays (us)
 SBD -0.823953
 MBD 0.002695
 Fringe rate (Hz)
 -0.419213
 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
 2020:083:003228
 2020:093:042849
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 24 APs / seg (12.29 sec / seg.), time ticks 10 sec



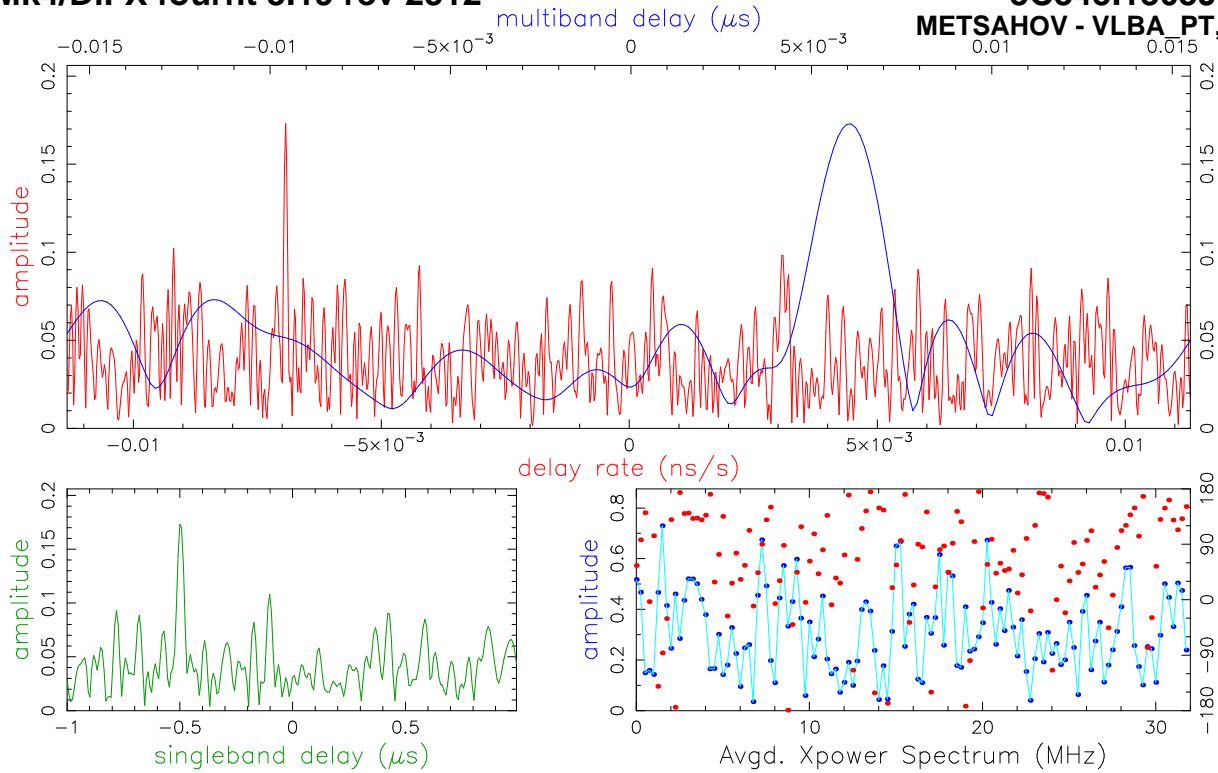
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
0.7	-15.6	84.7	-56.3	23.7	176.4	37.4	33.1	43.4	39.0	21.5	-57.9	14.4	-46.7	-4.6	131.3	131.3	Phase	7.0	
0.3	0.4	0.0	0.2	0.2	0.0	0.3	0.1	0.5	0.4	0.4	0.4	0.4	0.2	0.2	0.1	0.1	Ampl.	0.2	
204.7	22.6	209.4	50.5	138.8	49.0	26.0	202.3	23.6	9.7	164.8	88.0	97.4	208.2	135.2	184.3	184.3	Sbd box	23.5	
UL	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	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	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	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	0:0	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	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	

Group delay (usec)(sbd) 2.72486246989E+03 Apriori delay (usec) 2.72567227443E+03 Resid mbdelay (usec) 2.69545E-03 +/- 1.8E-04
 Sband delay (usec) 2.72484832143E+03 Apriori clock (usec) -1.1723695E+01 Resid sbdelay (usec) -8.23953E-01 +/- 2.8E-03
 Phase delay (usec) 2.72567227466E+03 Apriori clockrate (us/s) -1.8759378E-07 Resid phdelay (usec) 2.26107E-07 +/- 6.0E-07
 Delay rate (us/s) -1.45135564605E+00 Apriori rate (us/s) -1.45135077940E+00 Resid rate (us/s) -4.86664E-06 +/- 7.5E-09
 Total phase (deg) 266.1 Apriori accel (us/s/s) 7.42936273599E-06 Resid phase (deg) 7.0 +/- 18.6

RMS Theor. Amplitude 0.206 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 39.1 32.3 Search (1024X64) 0.184 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 59.9 56.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 68.9 37.3 Inc. seg. avg. 0.224 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 72.9 65.1 Inc. frq. avg. 0.214 Data rate(Mb/s): 2048 nlags: 128 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 -72.0 u,v (fr/asec) 10832.018 2428.129 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Zp..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zp.W.332.1305JH

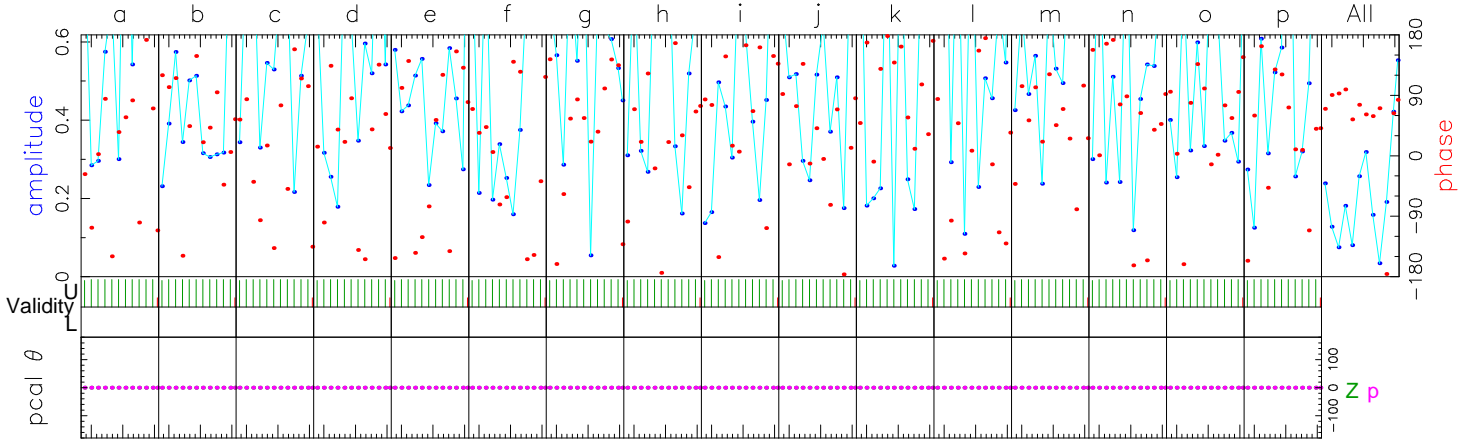


Fringe quality 0

SNR 5.7
 Int time 138.657
 Amp 0.206
 Phase 77.5
 PFD 8.4e-01
 Delays (us)
 SBD -0.496846
 MBD 0.006063
 Fringe rate (Hz)
 -0.597242
 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
 2020:083:003228
 2020:093:042851
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 24 APs / seg (12.29 sec / seg.), time ticks 10 sec



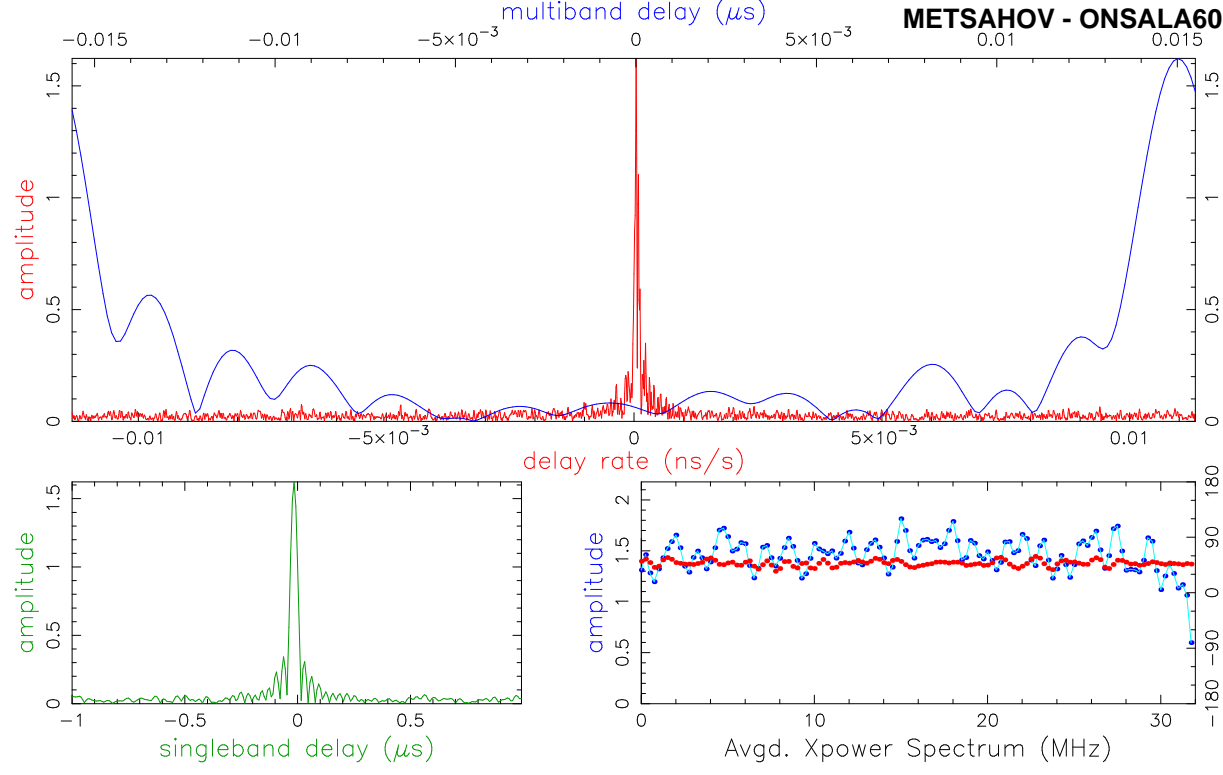
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
UL	47.2	64.4	48.0	68.6	167.6	91.8	95.4	39.3	137.7	37.2	107.9	178.2	63.6	79.5	72.6	72.6	Phase	77.5
Z	0.1	0.3	0.1	0.3	0.3	0.1	0.4	0.3	0.2	0.3	0.3	0.0	0.4	0.3	0.2	0.3	Ampl.	0.2
p	138.0	211.7	161.5	67.7	254.2	163.7	239.1	235.6	90.0	167.7	247.3	123.1	181.0	15.2	113.6	34.7	Sbd box	65.4
Z-p	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
Z:p	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	

Group delay (usec)(sbd) 2.72517833706E+03 Apriori delay (usec) 2.72567227443E+03 Resid mbdelay (usec) 6.06263E-03 +/- 1.9E-04
 Sband delay (usec) 2.72517542893E+03 Apriori clock (usec) -1.1723695E+01 Resid sbdelay (usec) -4.96846E-01 +/- 3.0E-03
 Phase delay (usec) 2.72567227693E+03 Apriori clockrate (us/s) -1.8759378E-07 Resid phdelay (usec) 2.49989E-06 +/- 6.5E-07
 Delay rate (us/s) -1.45135771279E+00 Apriori rate (us/s) -1.45135077940E+00 Resid rate (us/s) -6.93339E-06 +/- 8.1E-09
 Total phase (deg) 336.6 Apriori accel (us/s/s) 7.42936273599E-06 Resid phase (deg) 77.5 +/- 20.2

RMS Theor. Amplitude 0.206 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 34.8 35.1 Search (1024X64) 0.169 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 72.0 61.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 45.3 40.5 Inc. seg. avg. 0.198 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 54.7 70.7 Inc. frq. avg. 0.195 Data rate(Mb/s): 2048 nlags: 128 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 -72.0 u,v (fr/asec) 10832.018 2428.129 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Zp..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zp.W.337.1305JH

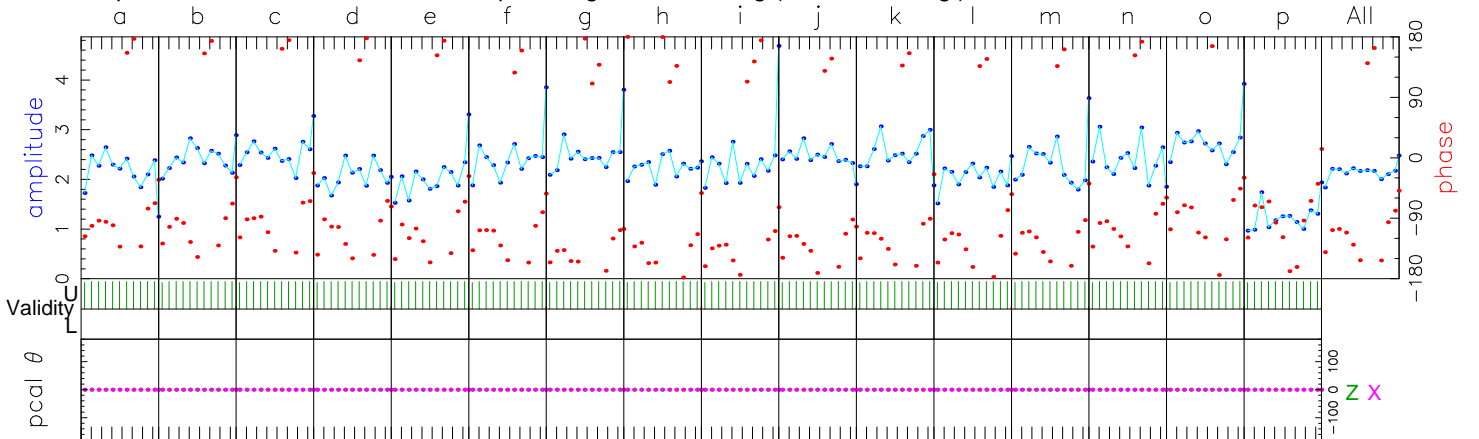


Fringe quality 5

SNR 90.7
 Int time 417.864
 Amp 1.623
 Phase -131.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.016212
 MBD 0.015020
 Fringe rate (Hz) 0.003718
 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
 2020:083:003228
 2020:093:042848
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



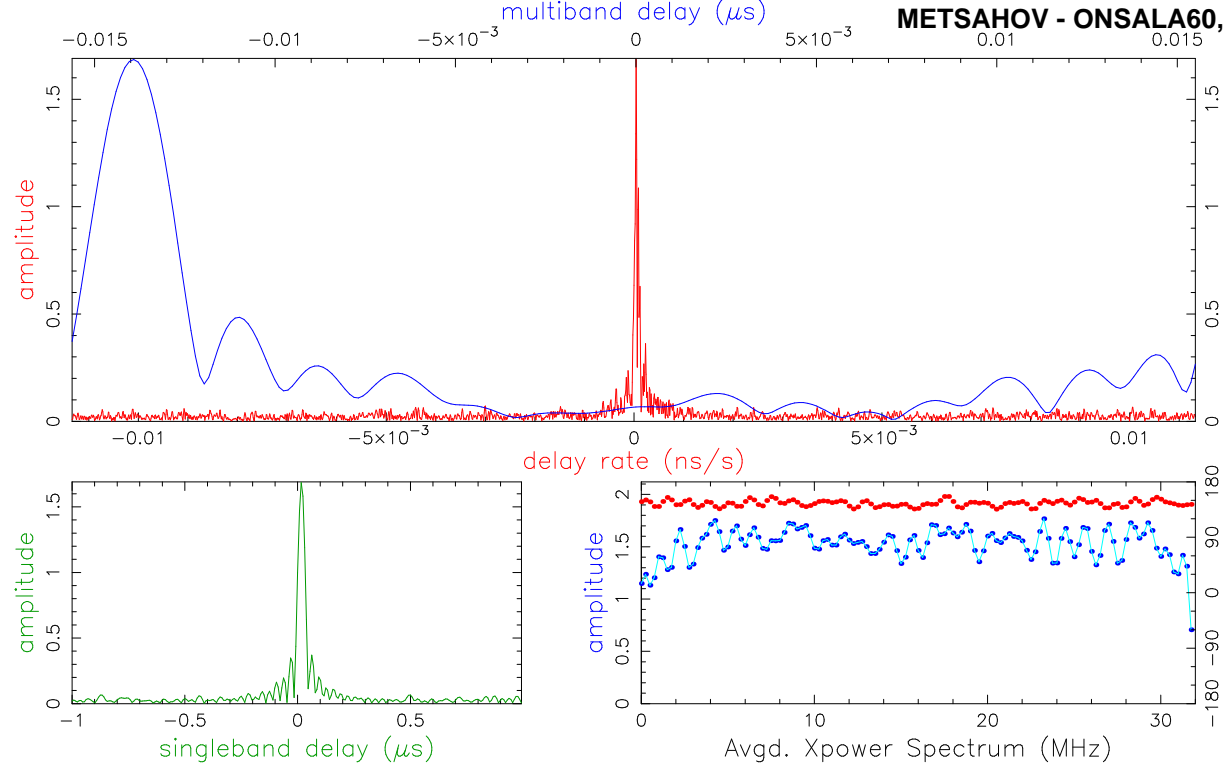
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	-113.5	-122.9	-111.7	-127.6	-127.0	-132.5	-158.1	-163.5	-155.2	-145.6	-137.0	-144.0	-140.3	-122.3	-100.2	-93.0	Phase	-131.9
	1.7	1.9	1.9	1.6	1.5	1.7	1.9	1.7	1.7	1.9	2.0	1.5	1.7	1.8	2.0	0.9	Ampl.	1.7
	126.8	126.8	127.1	126.7	126.9	126.7	126.6	127.2	126.9	127.1	126.9	126.7	127.2	127.2	127.1	127.5	Sbd box	126.9
UL	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) -1.60923268184E+03 Apriori delay (usec) -1.60921645175E+03 Resid mbdelay (usec) 1.50199E-02 +/- 1.2E-05
 Sband delay (usec) -1.60923266325E+03 Apriori clock (usec) -3.2143044E+01 Resid sbdelay (usec) -1.62115E-02 +/- 1.9E-04
 Phase delay (usec) -1.60921645600E+03 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) -4.25202E-06 +/- 4.1E-08
 Delay rate (us/s) -2.93338142889E-02 Apriori rate (us/s) -2.93338574563E-02 Resid rate (us/s) 4.31675E-08 +/- 1.7E-10
 Total phase (deg) -187.2 Apriori accel (us/s/s) 1.02337931143E-05 Resid phase (deg) -131.9 +/- 1.3

RMS Theor. Amplitude 1.623 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 41.6 2.2 Search (2048X64) 1.606 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 32.1 3.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 20.9 2.5 Inc. seg. avg. 2.130 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 16.4 4.4 Inc. frq. avg. 1.712 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

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/v2/1234/No0001/ZX..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZX.W.324.1305JH

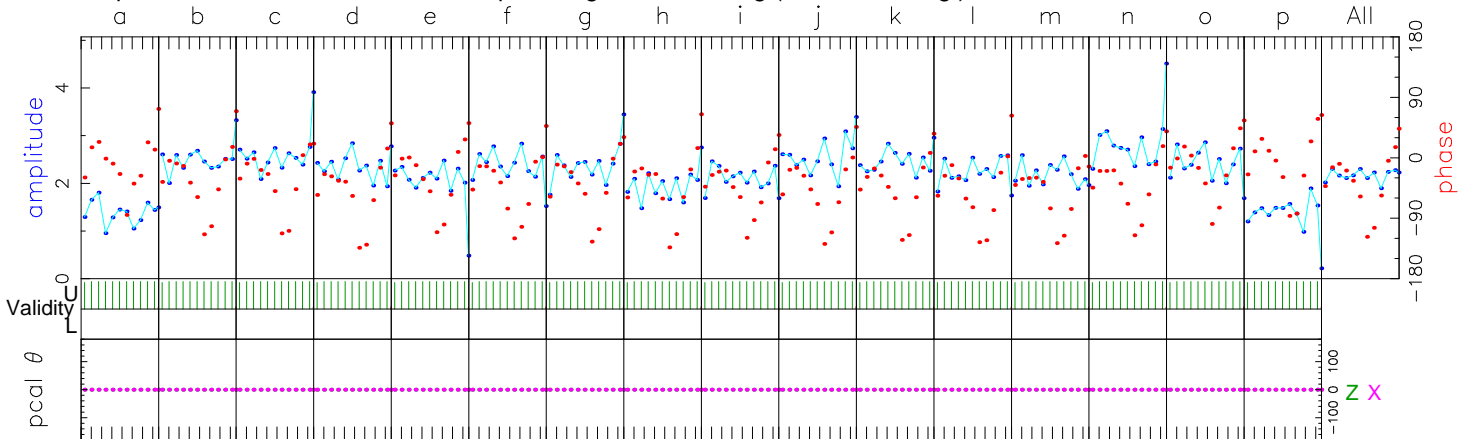


Fringe quality 5

SNR 94.5
 Int time 417.864
 Amp 1.691
 Phase -36.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.017066
 MBD -0.013914
 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
 2020:083:003228
 2020:093:042851
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



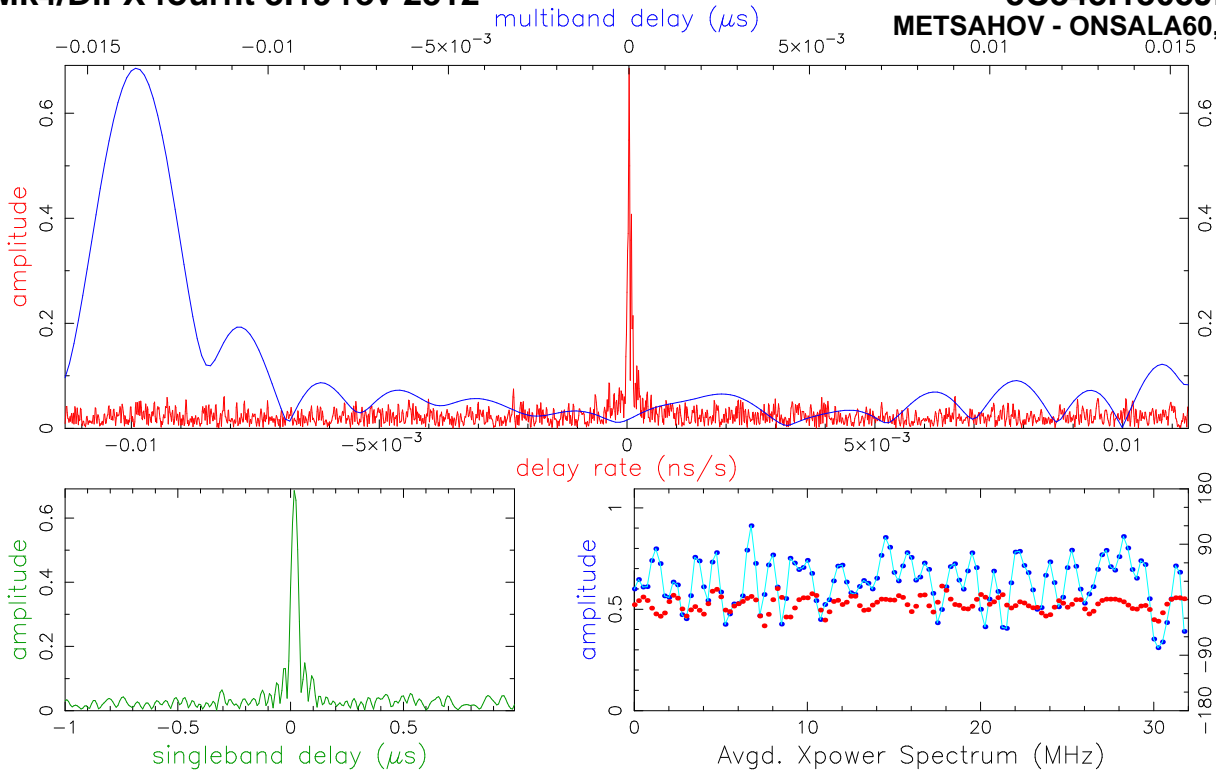
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	-8.1	-33.9	-30.1	-47.3	-29.6	-42.9	-35.8	-41.4	-40.9	-46.3	-45.4	-51.5	-51.9	-38.8	-13.5	-6.9		Phase	-36.6
	1.2	1.9	2.0	1.8	1.6	1.9	1.8	1.4	1.7	1.9	1.9	1.7	1.7	2.2	1.9	1.1		Ampl.	1.7
	130.7	131.0	131.0	131.2	130.9	131.1	131.3	131.4	131.0	131.3	131.3	131.1	131.1	131.4	131.5	131.5		Sbd box	131.2
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

Group delay (usec)(sbd) -1.60919911546E+03 Apriori delay (usec) -1.60921645175E+03 Resid mbdelay (usec) -1.39137E-02 +/- 1.1E-05
 Sband delay (usec) -1.60919938575E+03 Apriori clock (usec) -3.2143044E+01 Resid sbdelay (usec) 1.70660E-02 +/- 1.8E-04
 Phase delay (usec) -1.60921645293E+03 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) -1.18111E-06 +/- 3.9E-08
 Delay rate (us/s) -2.93338143569E-02 Apriori rate (us/s) -2.93338574563E-02 Resid rate (us/s) 4.30994E-08 +/- 1.6E-10
 Total phase (deg) -92.0 Apriori accel (us/s/s) 1.02337931143E-05 Resid phase (deg) -36.6 +/- 1.2

RMS Theor. Amplitude 1.691 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 40.2 2.1 Search (2048X64) 1.643 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 29.0 3.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 15.0 2.4 Inc. seg. avg. 2.165 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 16.9 4.2 Inc. frq. avg. 1.726 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

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/v2/1234/No0001/ZX..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZX.W.340.1305JH

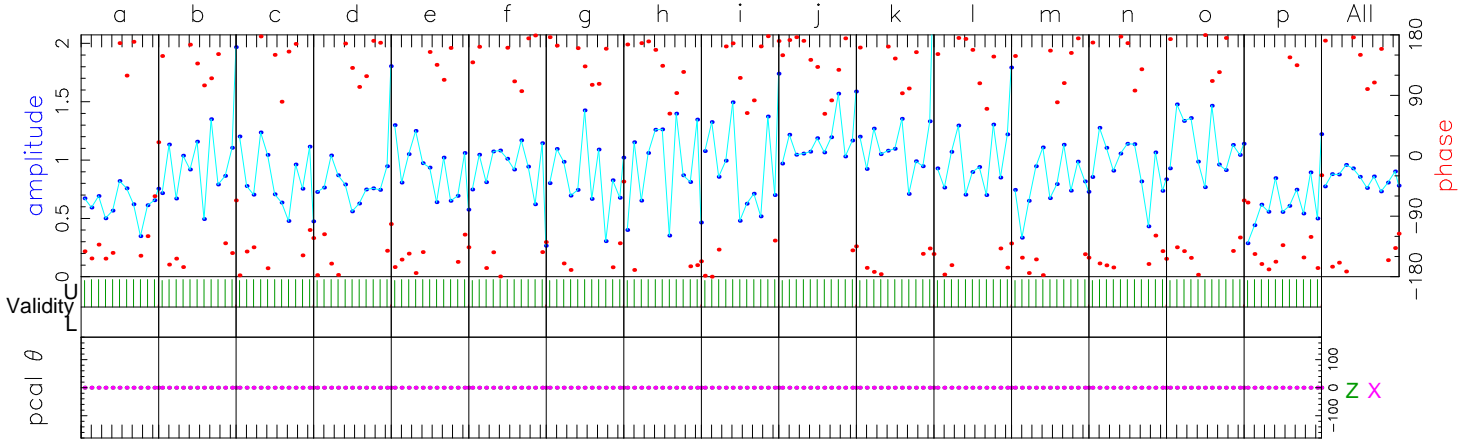


Fringe quality 6

SNR 38.6
 Int time 417.864
 Amp 0.691
 Phase 174.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.017804
 MBD -0.013641
 Fringe rate (Hz) 0.003705
 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
 2020:083:003228
 2020:093:042856
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



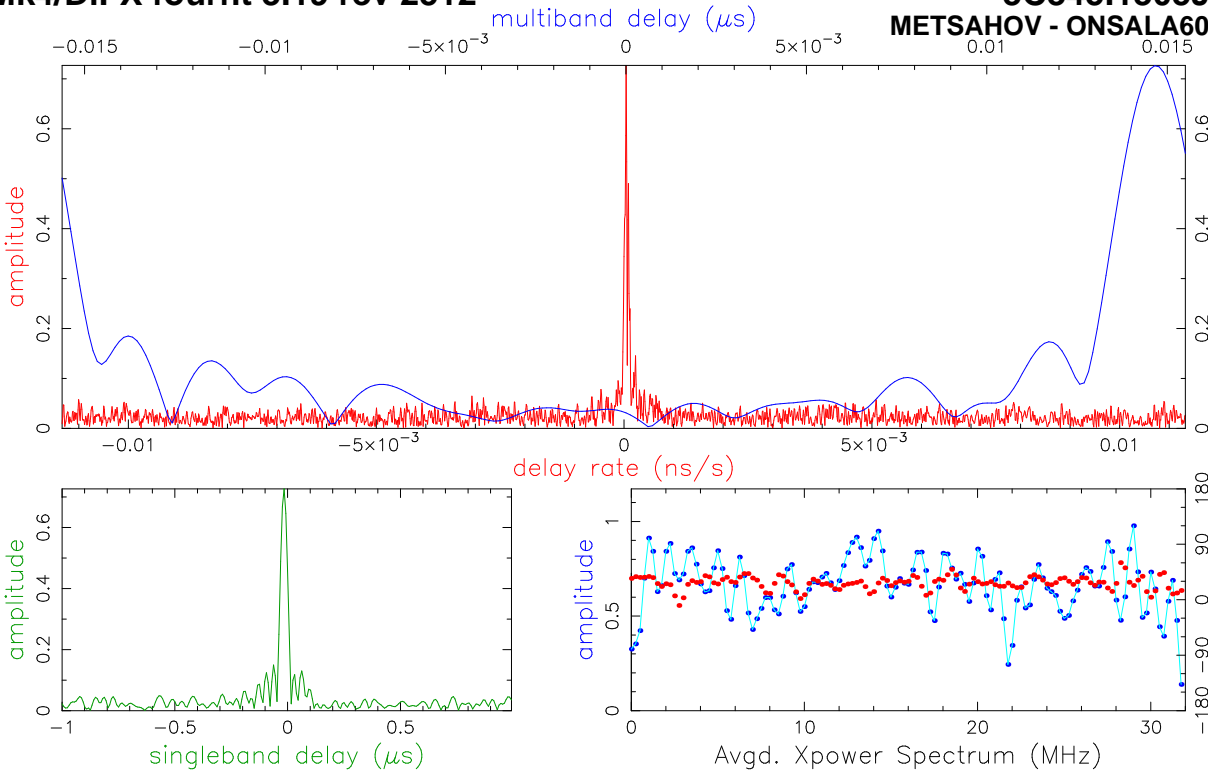
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-155.1	172.0	-170.5	177.3	-171.9	168.2	162.6	156.3	169.8	148.1	168.8	167.4	165.3	-177.9	-168.7	-159.3		Phase	174.3
	0.4	0.7	0.7	0.6	0.8	0.8	0.7	0.8	0.7	0.9	0.9	0.8	0.6	0.8	0.9	0.5		Ampl.	0.7
	129.4	131.4	130.6	131.0	131.2	131.3	131.3	131.1	131.4	131.3	131.6	131.7	130.9	131.7	131.1	131.6		Sbd box	131.3
UL	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

Group delay (usec)(sbd) -1.60919884268E+03 Apriori delay (usec) -1.60921645175E+03 Resid mbdelay (usec) -1.36409E-02 +/- 2.8E-05
 Sband delay (usec) -1.60919864725E+03 Apriori clock (usec) -3.2143044E+01 Resid sbdelay (usec) 1.78045E-02 +/- 4.5E-04
 Phase delay (usec) -1.60921644613E+03 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) 5.61951E-06 +/- 9.6E-08
 Delay rate (us/s) -2.93338144455E-02 Apriori rate (us/s) -2.93338574563E-02 Resid rate (us/s) 4.30109E-08 +/- 4.0E-10
 Total phase (deg) 118.9 Apriori accel (us/s/s) 1.02337931143E-05 Resid phase (deg) 174.3 +/- 3.0

RMS Theor. Amplitude 0.691 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 37.7 5.1 Search (2048X64) 0.682 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 24.9 9.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 16.4 5.9 Inc. seg. avg. 0.845 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 17.4 10.4 Inc. frq. avg. 0.705 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

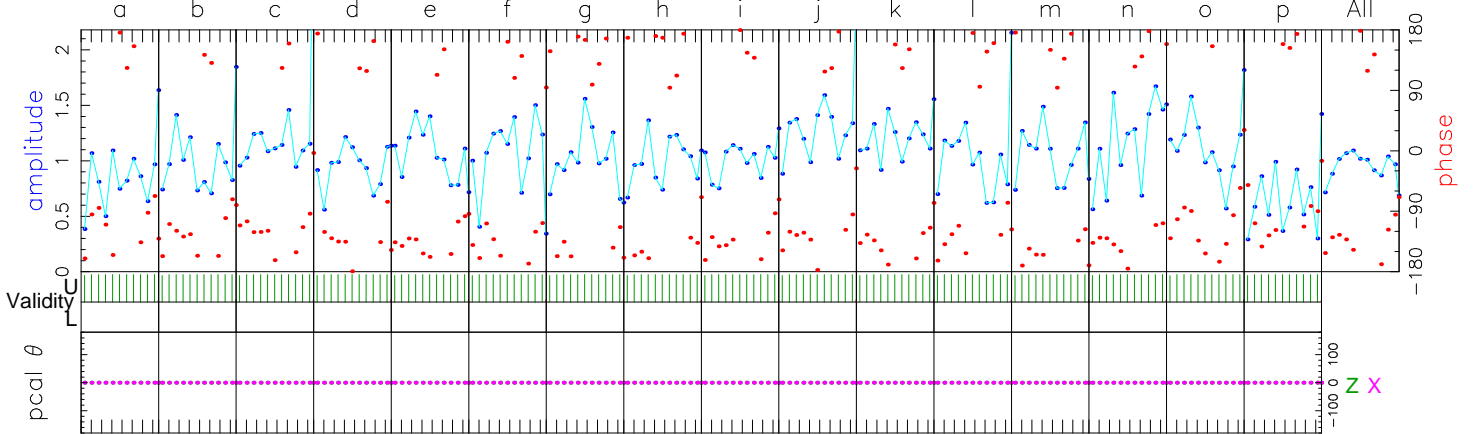
Z: az 271.4 el 46.7 pa 40.3 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ZX..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZX.W.352.1305JH



Fringe quality 5
 SNR 40.6
 Int time 417.864
 Amp 0.727
 Phase -151.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.016231
 MBD 0.014676
 Fringe rate (Hz) 0.003646
 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
 2020:083:003228
 2020:093:042859
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

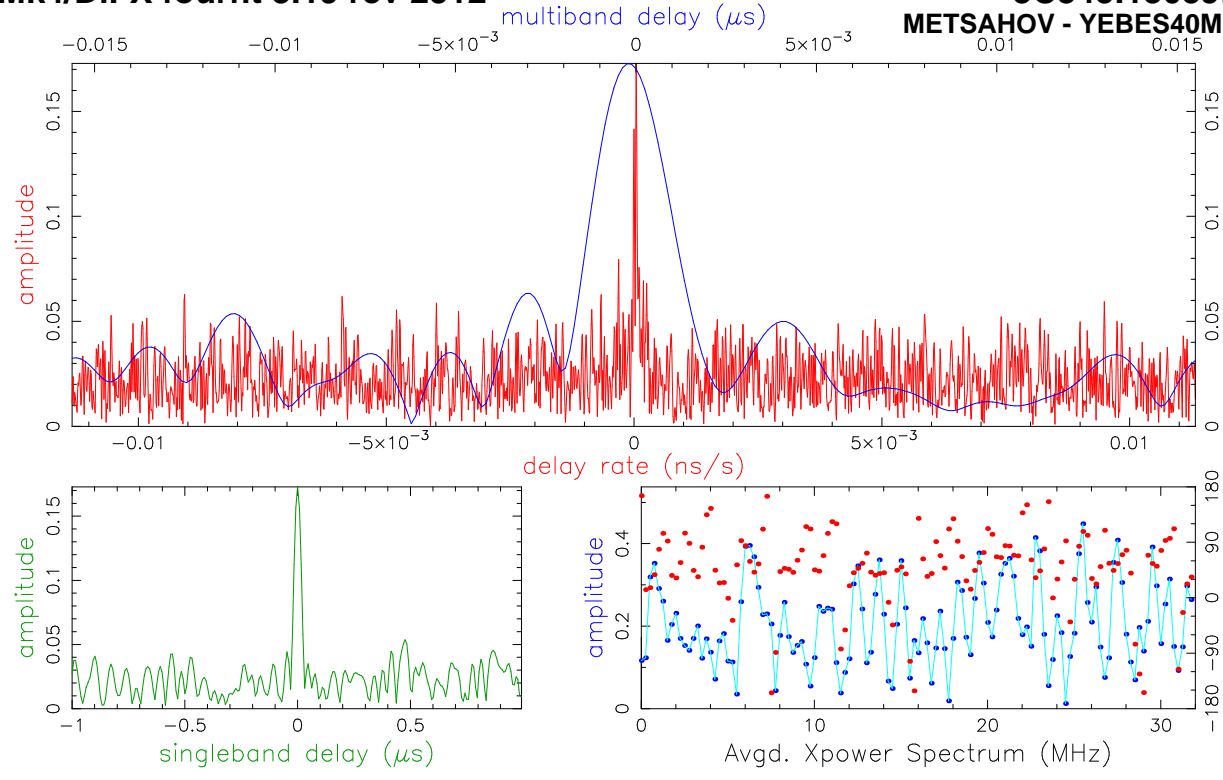


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-135.1	-134.1	-135.5	-158.6	-146.8	-153.9	177.4	179.4	-152.8	-150.8	-157.0	-150.2	-167.7	-151.3	-117.0	-131.3		Phase	-151.0
	0.5	0.7	0.8	0.6	0.9	0.8	0.8	0.7	0.8	0.8	1.0	0.7	0.9	0.9	0.8	0.4		Ampl.	0.8
	128.0	126.9	126.9	126.7	126.9	126.5	126.9	127.2	127.0	127.2	126.6	127.1	127.0	127.2	127.1	126.4		Sbd box	126.9
UL	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	

Group delay (usec)(sbd) -1.60923302546E+03 Apriori delay (usec) -1.60921645175E+03 Resid mbdelay (usec) 1.46763E-02 +/- 2.7E-05
 Sband delay (usec) -1.60923268325E+03 Apriori clock (usec) -3.2143044E+01 Resid sbdelay (usec) -1.62315E-02 +/- 4.2E-04
 Phase delay (usec) -1.60921645662E+03 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) -4.86996E-06 +/- 9.1E-08
 Delay rate (us/s) -2.93338151314E-02 Apriori rate (us/s) -2.93338574563E-02 Resid rate (us/s) 4.23250E-08 +/- 3.8E-10
 Total phase (deg) -206.4 Apriori accel (us/s/s) 1.02337931143E-05 Resid phase (deg) -151.0 +/- 2.8

RMS Theor. Amplitude 0.727 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 42.5 4.9 Search (2048X64) 0.719 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 35.5 8.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 18.1 5.6 Inc. seg. avg. 0.959 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 18.6 9.8 Inc. frq. avg. 0.755 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

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/v2/1234/No0001/ZX..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZX.W.359.1305JH

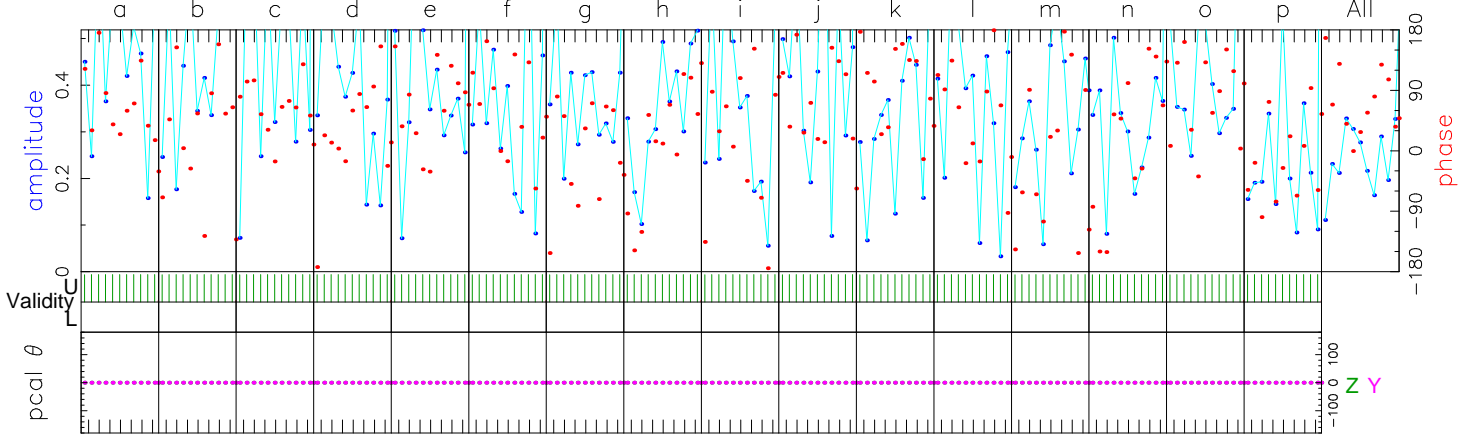


Fringe quality 9

SNR 9.5
 Int time 400.959
 Amp 0.173
 Phase 63.9
 PFD 1.2e-12
 Delays (us)
 SBD -0.000084
 MBD -0.000197
 Fringe rate (Hz) 0.003752
 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 2020:083:003228
 2020:093:042848
 2020:014:135814
 RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	69.8	47.2	74.4	35.3	70.4	82.7	25.3	48.9	63.9	67.2	105.0	84.1	78.3	93.2	63.9	-7.0	63.9	Phase	
	0.3	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	
	128.4	130.9	129.0	39.0	208.7	123.5	32.3	241.4	246.6	128.7	130.3	68.4	180.3	142.2	216.4	82.1	82.1	Sbd box	
UL	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	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	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	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	0:0	0:0	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	0:0	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL			Chan ids
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL			Tracks

Group delay (usec)(sbd) -3.47819770028E+03 Apriori delay (usec) -3.47819750350E+03 Resid mbdelay (usec) -1.96786E-04 +/- 1.1E-04
 Sband delay (usec) -3.47819758700E+03 Apriori clock (usec) -9.4697704E+00 Resid sbdelay (usec) -8.35000E-05 +/- 1.8E-03
 Phase delay (usec) -3.47819750144E+03 Apriori clockrate (us/s) -2.0370720E-07 Resid phdelay (usec) 2.06030E-06 +/- 3.9E-07
 Delay rate (us/s) 6.82530507524E-03 Apriori rate (us/s) 6.82526151312E-03 Resid rate (us/s) 4.35621E-08 +/- 1.7E-09
 Total phase (deg) -278.5 Apriori accel (us/s/s) 3.42149709366E-05 Resid phase (deg) 63.9 +/- 12.1

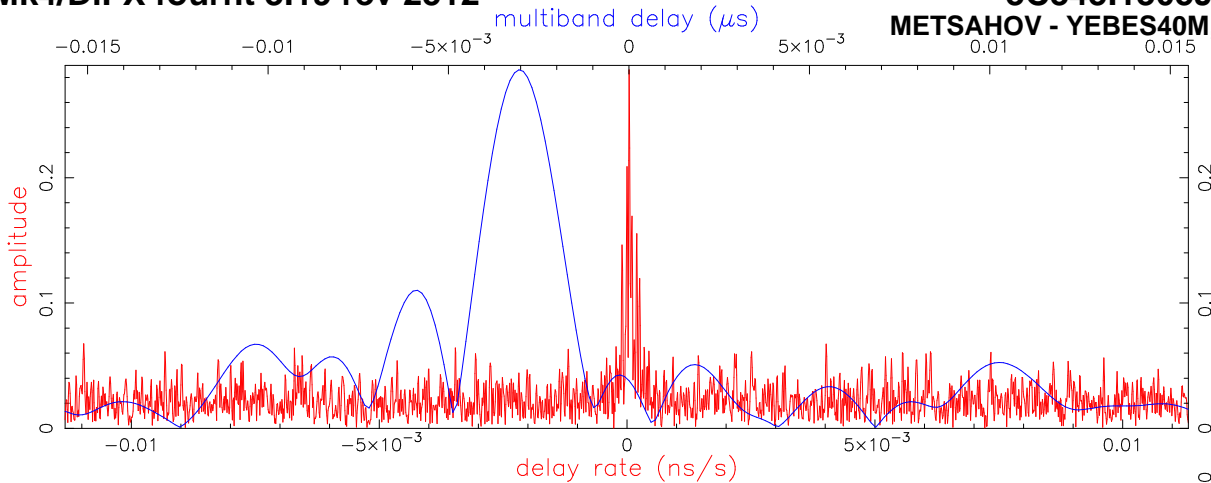
RMS Theor. Amplitude 0.173 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 50.4 21.0 Search (2048X64) 0.170 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 57.5 36.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 28.7 24.2 Inc. seg. avg. 0.228 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 42.6 42.3 Inc. frq. avg. 0.174 Data rate(Mb/s): 2048 nlags: 128 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 77.1 u,v (fr/asec) 11.248 3725.235 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ZY..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZY.W.326.1305JH

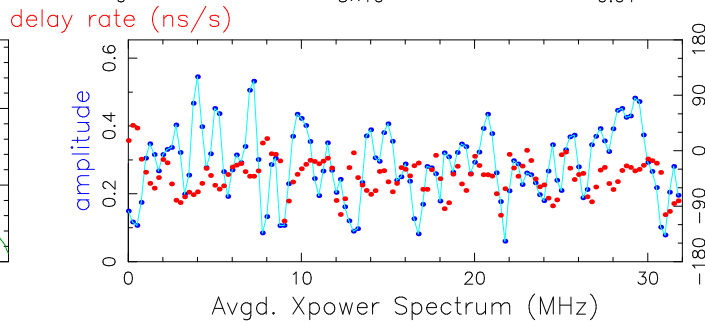
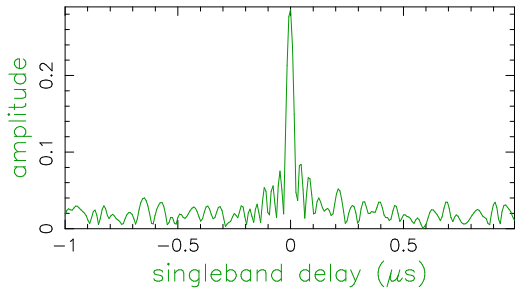
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, ZY
 METSAHOV - YEBES40M, fgroup W, pol RR



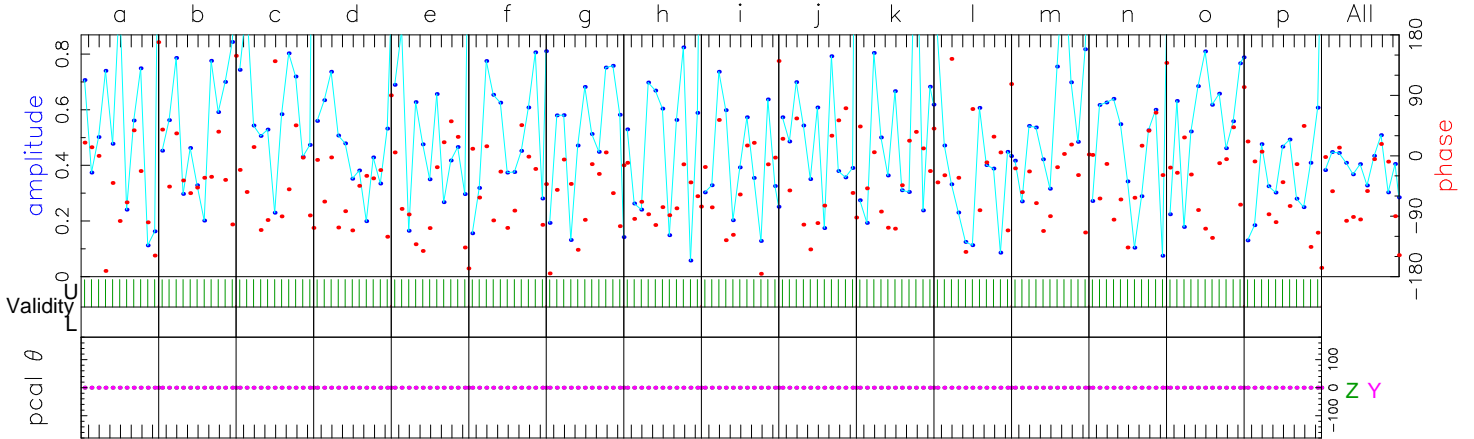
Fringe quality 9

SNR 15.9
 Int time 400.959
 Amp 0.290
 Phase -40.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.002680
 MBD -0.003039
 Fringe rate (Hz)
 0.003642
 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
 2020:083:003228
 2020:093:042852
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-35.7	-26.3	-47.3	-55.2	-56.4	-31.8	-52.0	-64.8	-17.2	-13.6	-14.1	-42.5	-35.9	-29.7	-47.9	-62.3		Phase	-40.6				
	0.2	0.4	0.4	0.3	0.2	0.3	0.3	0.4	0.2	0.2	0.3	0.2	0.4	0.2	0.4	0.2		Ampl.	0.3				
	129.9	128.7	128.0	129.2	252.0	128.2	128.6	128.6	128.0	127.5	128.8	128.0	128.5	128.3	128.8	136.2		Sbd box	128.7				
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
Y	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-3.47820054203E+03															Apriori delay (usec)	-3.47819750350E+03	Resid mbdelay (usec)	-3.03854E-03	+/-	6.8E-05
Sband delay (usec)			-3.47820018300E+03															Apriori clock (usec)	-9.4697704E+00	Resid sbdelay (usec)	-2.67950E-03	+/-	1.1E-03
Phase delay (usec)			-3.47819750480E+03															Apriori clockrate (us/s)	-2.0370720E-07	Resid phdelay (usec)	-1.30780E-06	+/-	2.3E-07
Delay rate (us/s)			6.82530379771E-03															Apriori rate (us/s)	6.82526151312E-03	Resid rate (us/s)	4.22846E-08	+/-	1.0E-09
Total phase (deg)																		Apriori accel (us/s/s)	3.42149709366E-05	Resid phase (deg)	-40.6	+/-	7.2

ph/seg (deg) 44.6 12.5
 amp/seg (%) 43.5 21.8
 ph/frq (deg) 17.3 14.4
 amp/frq (%) 28.0 25.2

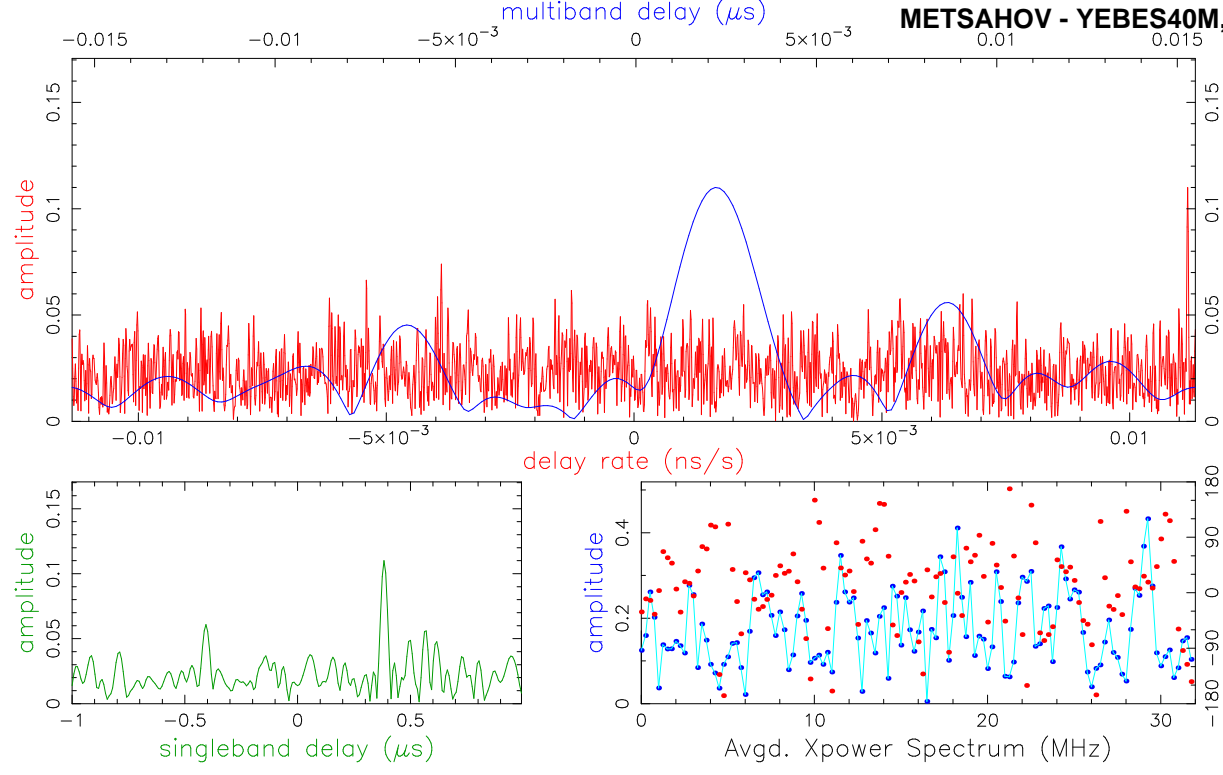
RMS Theor. Amplitude 0.290 +/- 0.018
 Search (2048X64) 0.282
 Interp. 0.000
 Inc. seg. avg. 0.393
 Inc. frq. avg. 0.288

Group delay (usec)(sbd) -3.47820054203E+03 Apriori delay (usec) -3.47819750350E+03 Resid mbdelay (usec) -3.03854E-03 +/- 6.8E-05
 Sband delay (usec) -3.47820018300E+03 Apriori clock (usec) -9.4697704E+00 Resid sbdelay (usec) -2.67950E-03 +/- 1.1E-03
 Phase delay (usec) -3.47819750480E+03 Apriori clockrate (us/s) -2.0370720E-07 Resid phdelay (usec) -1.30780E-06 +/- 2.3E-07
 Delay rate (us/s) 6.82530379771E-03 Apriori rate (us/s) 6.82526151312E-03 Resid rate (us/s) 4.22846E-08 +/- 1.0E-09
 Total phase (deg) -23.0 Apriori accel (us/s/s) 3.42149709366E-05 Resid phase (deg) -40.6 +/- 7.2

pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 128 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 77.1 u,v (fr/asec) 11.248 3725.235 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ZY..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZY.W.341.1305JH

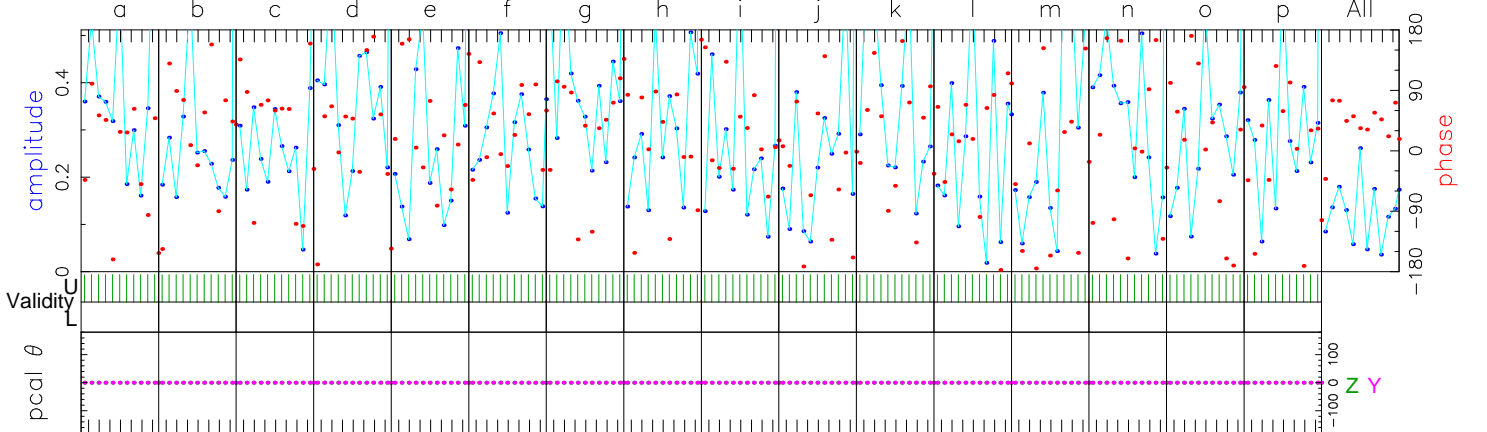


Fringe quality 0

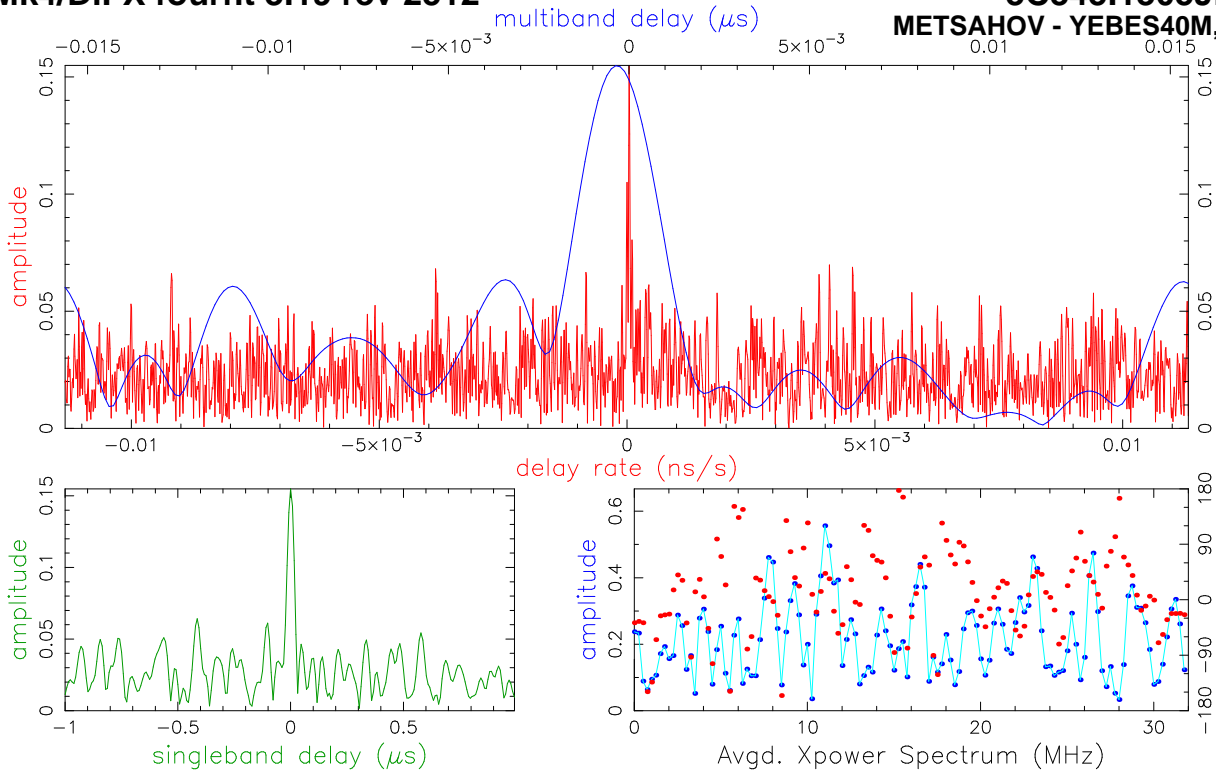
SNR 6.0
Int time 400.959
Amp 0.171
Phase 47.9
PFD 3.5e-01
Delays (us)
SBD 0.383368
MBD 0.002226
Fringe rate (Hz) 0.964115
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183017.92
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042855
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	40.5	53.2	102.1	62.5	5.9	31.9	68.6	46.7	26.4	12.0	78.3	49.2	88.9	-136.1	30.5	33.4	Phase	47.9					
	0.3	0.2	0.1	0.2	0.2	0.3	0.3	0.1	0.3	0.1	0.3	0.3	0.1	0.1	0.2	0.1	Ampl.	0.2					
	80.4	13.0	147.9	168.7	94.0	8.9	176.8	160.2	17.1	162.4	231.2	18.2	239.0	17.8	222.2	73.5	Sbd box	178.1					
UL	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs						
Y	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids						
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks						
																	Chan ids						
																	Tracks						
Group delay (usec)(sbd)			-3.47782027763E+03														Apriori delay (usec)	-3.47819750350E+03	Resid mbdelay (usec)	2.22587E-03	+/-	1.8E-04	
Sband delay (usec)			-3.47781413550E+03														Apriori clock (usec)	-9.4697704E+00	Resid sbdelay (usec)	3.83368E-01	+/-	2.9E-03	
Phase delay (usec)			-3.47819750195E+03														Apriori clockrate (us/s)	-2.0370720E-07	Resid phdelay (usec)	1.54416E-06	+/-	6.1E-07	
Delay rate (us/s)			6.83645393250E-03														Apriori rate (us/s)	6.82526151312E-03	Resid rate (us/s)	1.11924E-05	+/-	2.6E-09	
Total phase (deg)																	Apriori accel (us/s/s)	3.42149709366E-05	Resid phase (deg)	47.9	+/-	19.0	
		RMS	Theor.																PCal mode: MANUAL, MANUAL				
ph/seg (deg)		32.0	32.9																PCal rate: 0.000E+00, 0.000E+00 (us/s)				
amp/seg (%)		59.1	57.5																Bits/sample: 2x2				
ph/frq (deg)		54.5	38.0																SampCntNorm: enabled				
amp/frq (%)		48.8	66.4																Sample rate(MISamp/s): 64				
																			Data rate(Mb/s): 2048				
																			nlags: 128				
																			t_cohere infinite				
Z: az 271.4 el 46.7 pa 40.3																							
Y: az 280.2 el 62.9 pa 77.1																							
u,v (fr/asec) 11.248 3725.235																							
Control file: cf_1234_gmva																							
Input file: /Exps/c192a/v2/1234/No0001/ZY..1305JH																							
Output file: /Exps/c192a/v2/1234/No0001/ZY.W.350.1305JH																							

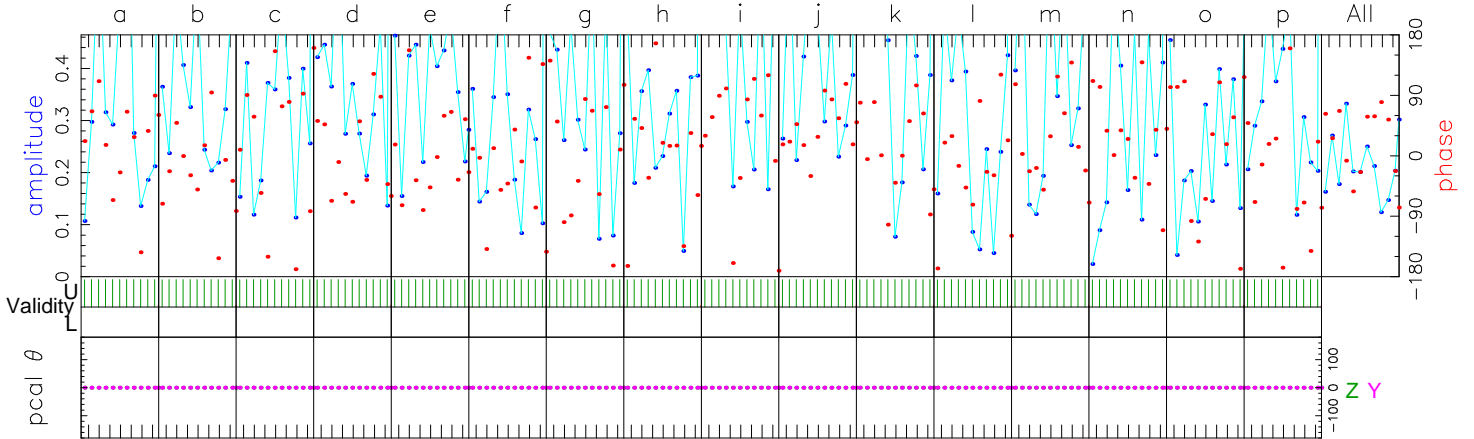


Fringe quality 9

SNR 8.5
Int time 400.959
Amp 0.155
Phase 23.5
PFD 8.1e-09
Delays (us)
SBD 0.000712
MBD -0.000332
Fringe rate (Hz) 0.003432
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
2020:083:003228
2020:093:042859
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All							
UL	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	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	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	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	0:0	0:0	0:0	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	0:0	0:0	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR				Chan ids					
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				Tracks					
																				Tracks					
Group delay (usec)(sbd)			-3.47819783588E+03																	Apriori delay (usec)	-3.47819750350E+03	Resid mbdelay (usec)	-3.32380E-04	+/-	1.3E-04
Sband delay (usec)			-3.47819679150E+03																	Apriori clock (usec)	-9.4697704E+00	Resid sbdelay (usec)	7.12000E-04	+/-	2.0E-03
Phase delay (usec)			-3.47819750274E+03																	Apriori clockrate (us/s)	-2.0370720E-07	Resid phdelay (usec)	7.58728E-07	+/-	4.4E-07
Delay rate (us/s)			6.82530135602E-03																	Apriori rate (us/s)	6.82526151312E-03	Resid rate (us/s)	3.98429E-08	+/-	1.9E-09
Total phase (deg)																				Apriori accel (us/s/s)	3.42149709366E-05	Resid phase (deg)	23.5	+/-	13.5

ph/seg (deg) 44.3 23.4
amp/seg (%) 50.4 40.8
ph/frq (deg) 39.5 27.0
amp/frq (%) 47.5 47.2

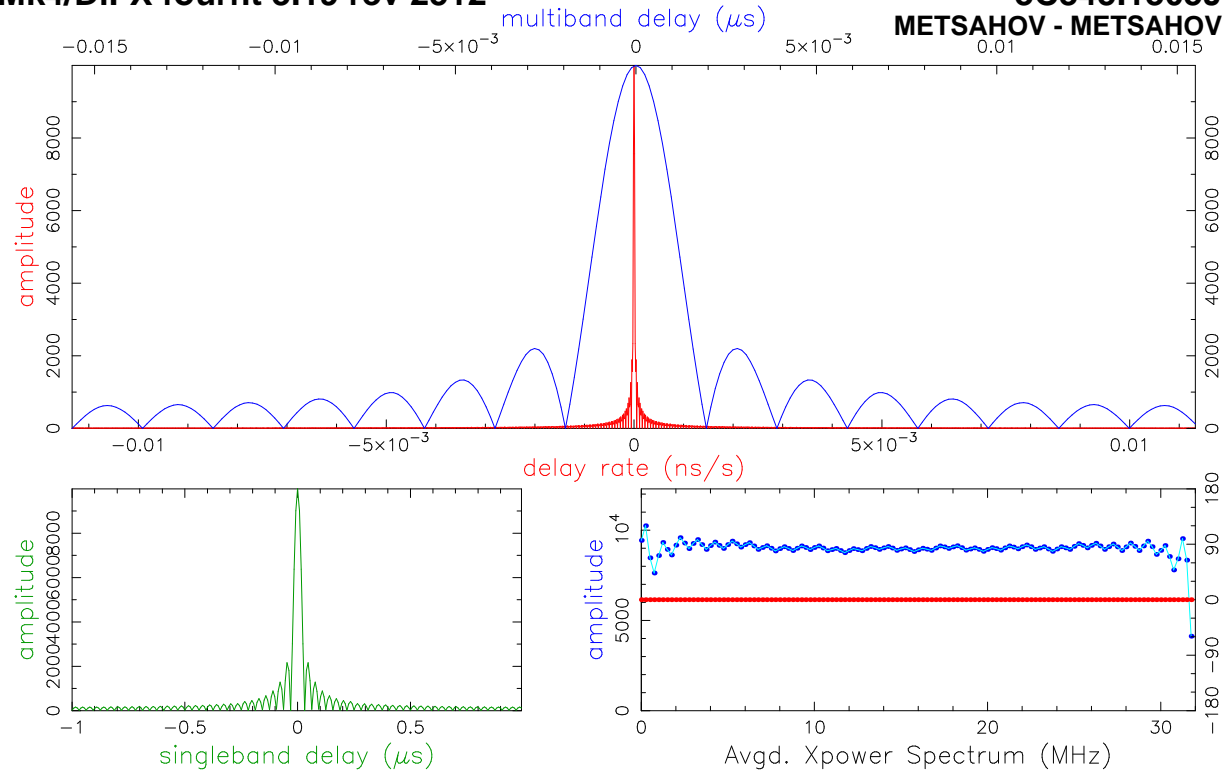
RMS Theor. Amplitude 0.155 +/- 0.018
Search (2048X64) 0.148
Interp. 0.000
Inc. seg. avg. 0.192
Inc. frq. avg. 0.164

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
Sample rate(MISamp/s): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
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 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) 11.248 3725.235 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ZY..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZY.W.358.1305JH

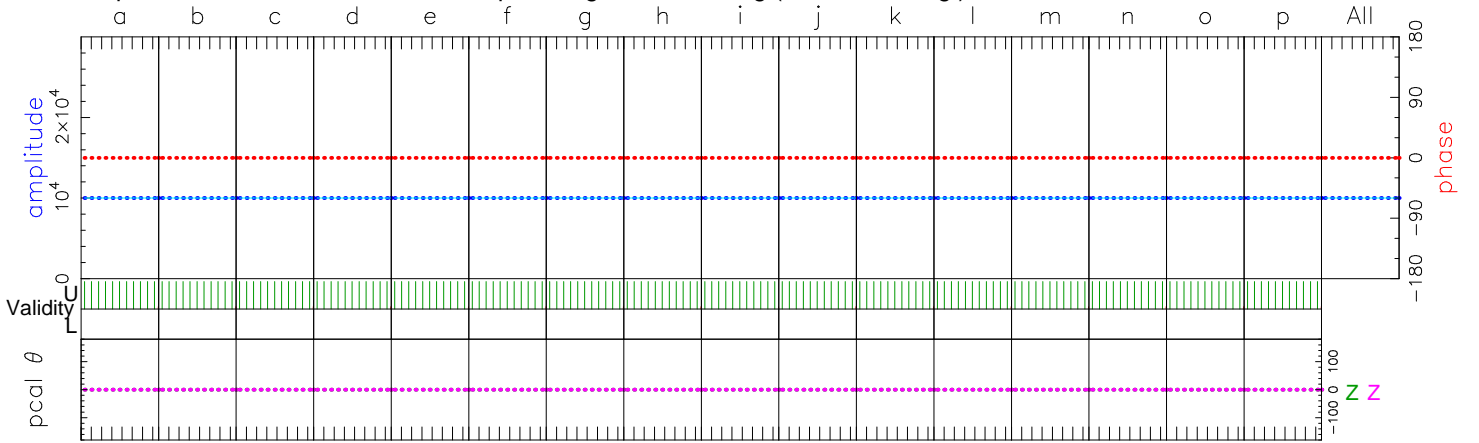


Fringe quality 9

SNR 560005.0
 Int time 419.362
 Amp 9999.996
 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 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042850
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-0.0	0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0		Phase	-0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0		Ampl.	10000.0
	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0		Sbd box	129.0
UL	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	

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 +/- 3.1E-08
 Phase delay (usec) -4.58739937950E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -4.58740E-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

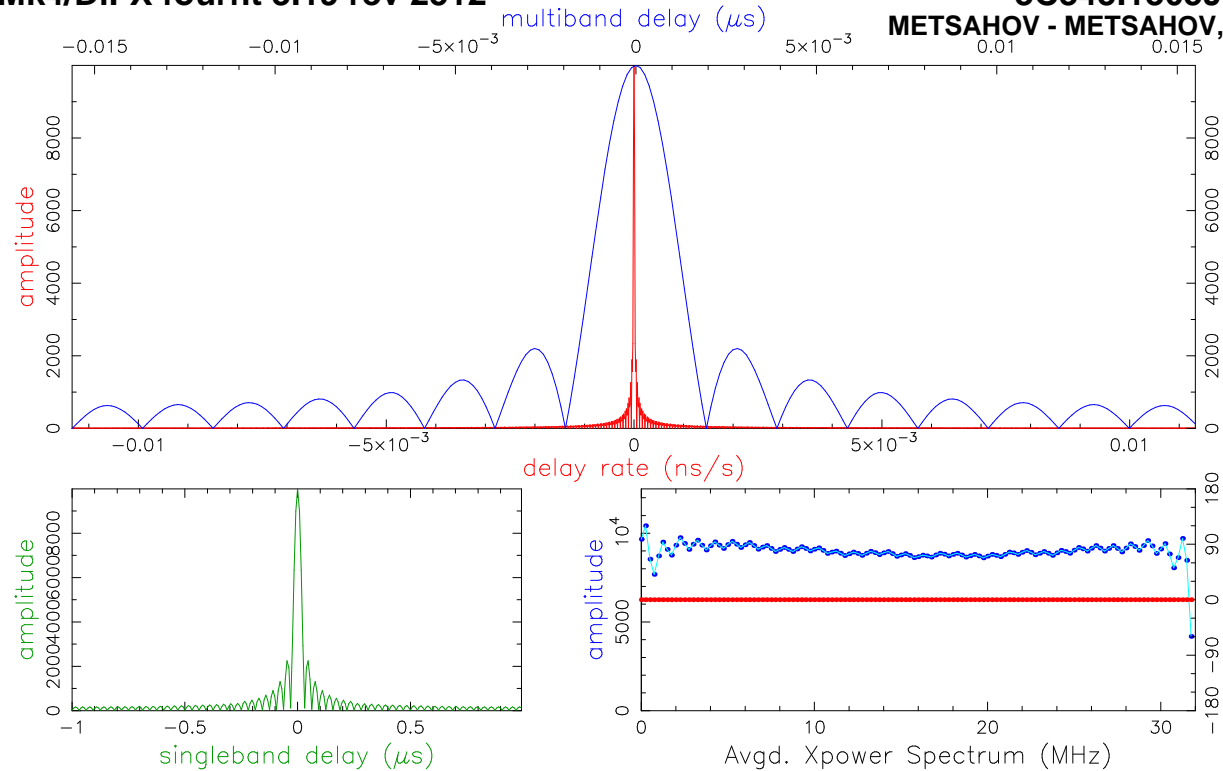
RMS Theor. Amplitude 9999.996 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 9999.996 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.996 Data rate(Mb/s): 2048 nlags: 128 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

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, ZZ

METSAHOV - METSAHOV, fgroup W, pol RR

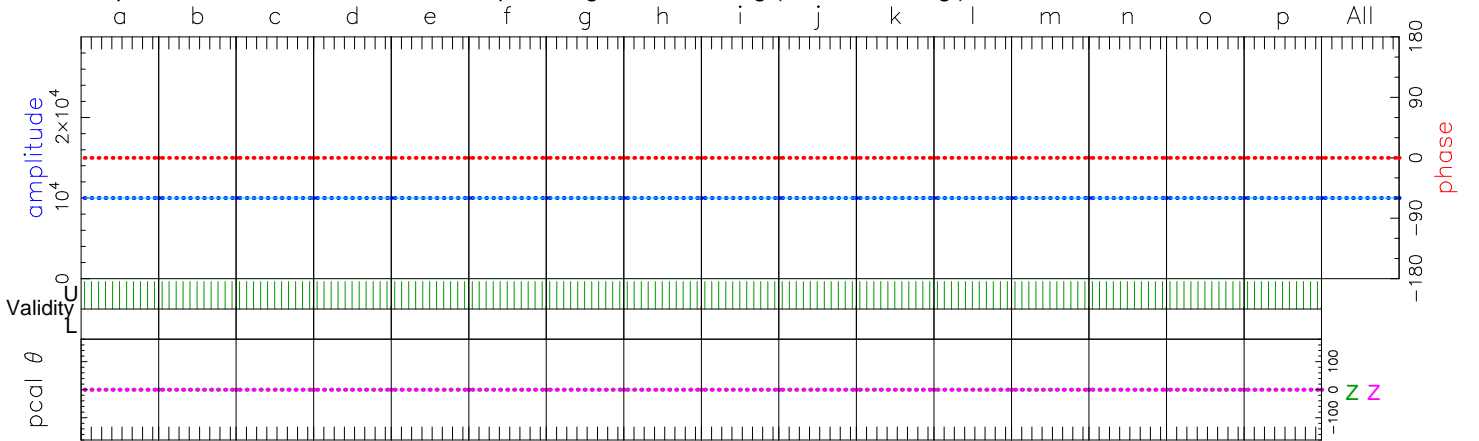


Fringe quality 9

SNR 560005.0
 Int time 419.362
 Amp 9999.996
 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
 2020:083:003228
 2020:093:042853
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



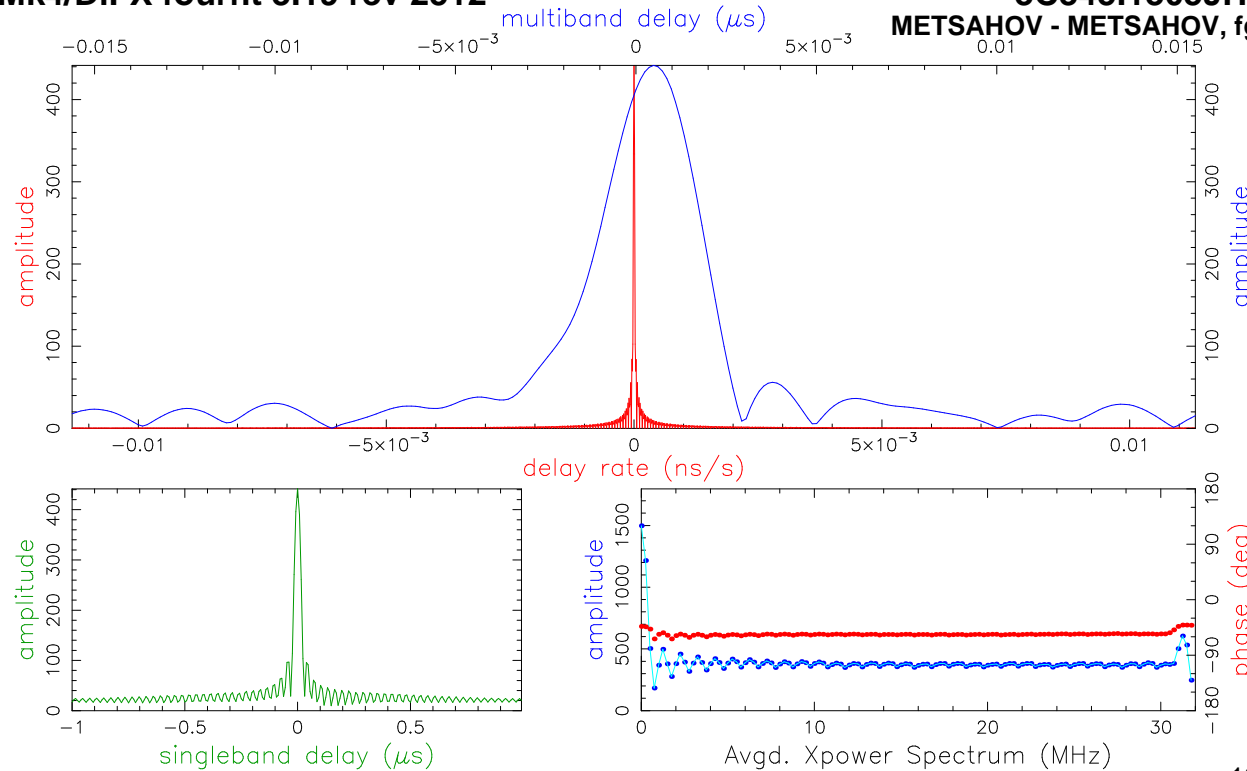
86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	-0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
Z:Z 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Z:Z 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
Z 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Z 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
Z W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
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		+/- 3.1E-08						
Phase delay (usec)	8.21102065993E-20		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		8.21102E-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						

ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.996 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X64) 9999.996 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 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 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ZZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZZ.W.346.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, ZZ

METSAHOV - METSAHOV, fgroup W, pol LR

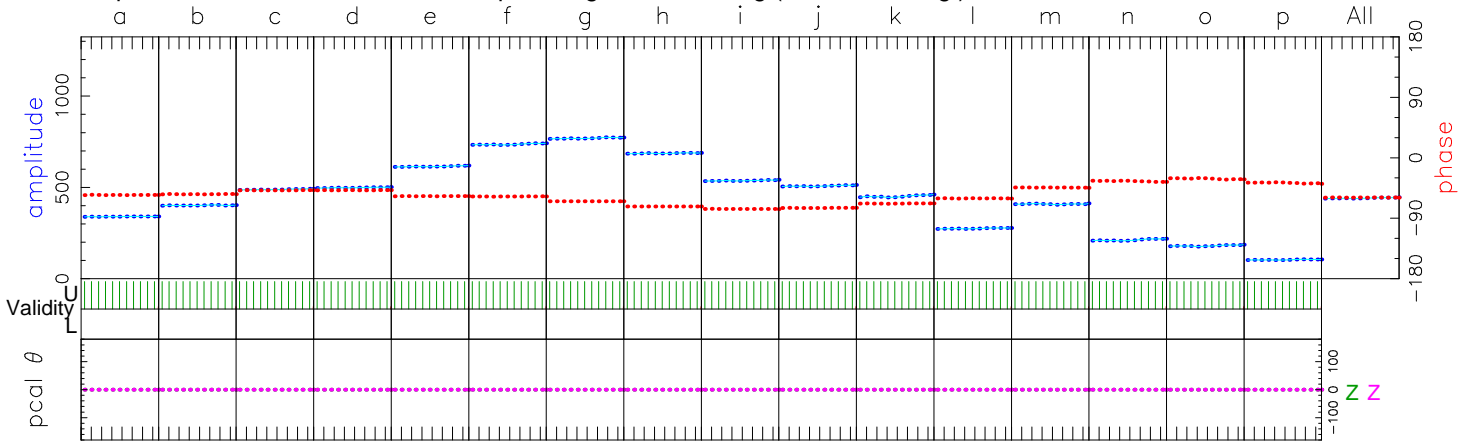


Fringe quality 6

SNR 24726.0
 Int time 419.362
 Amp 441.532
 Phase -59.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.000258
 MBD 0.000496
 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
 2020:083:003228
 2020:093:042857
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



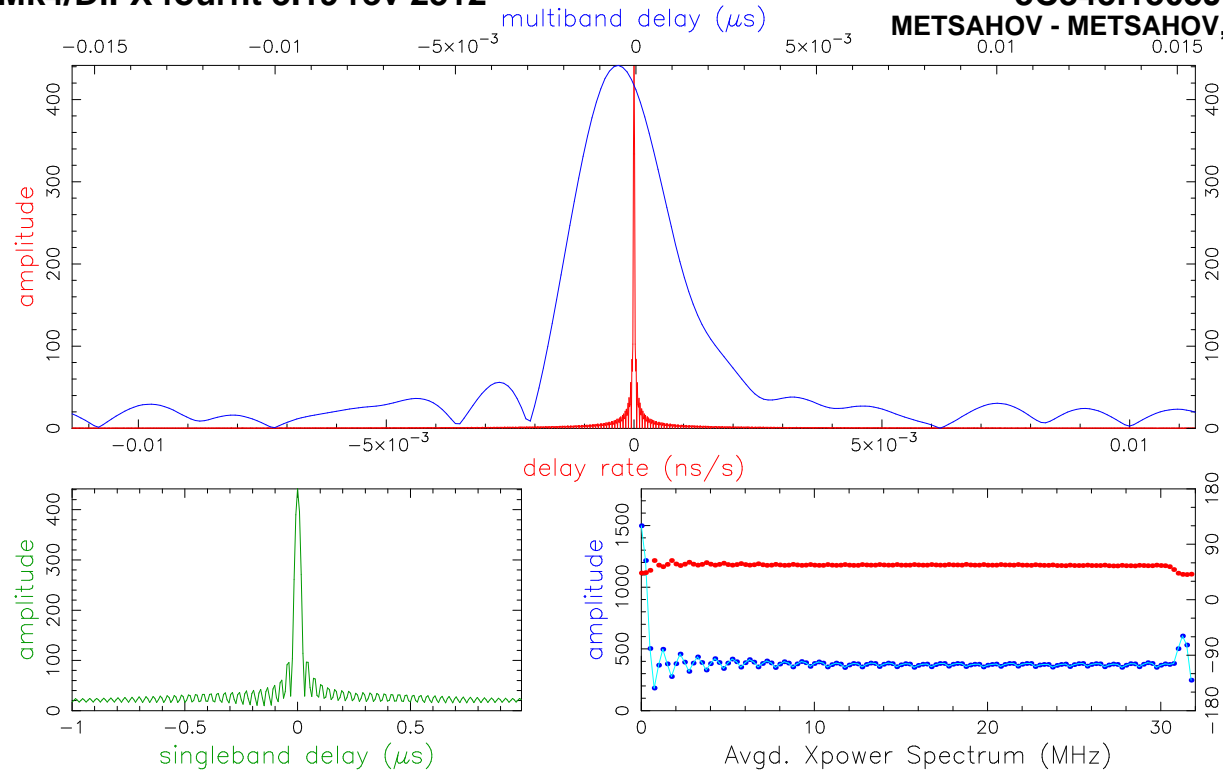
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-55.4	-54.2	-48.3	-48.3	-57.1	-57.6	-64.8	-72.5	-76.1	-74.6	-68.1	-60.4	-44.3	-34.7	-31.1	-37.3		Phase	-59.1
	340.3	401.9	489.0	498.9	614.8	736.0	769.3	687.1	537.2	508.1	451.3	275.2	409.0	212.3	180.5	103.9		Ampl.	450.9
	128.2	129.6	128.9	129.0	128.9	129.3	128.8	128.9	129.0	129.3	128.7	128.7	129.2	129.1	129.4	128.0		Sbd box	129.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)	4.96218750000E-04			Apriori delay (usec)			0.00000000000E+00			Resid mbdelay (usec)			4.96219E-04			+/-	4.4E-08		
Sband delay (usec)	-2.57500000000E-04			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			-2.57500E-04			+/-	7.0E-07		
Phase delay (usec)	-1.90731741319E-06			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			-1.90732E-06			+/-	1.5E-10		
Delay rate (us/s)	-2.12567285875E-12			Apriori rate (us/s)			0.00000000000E+00			Resid rate (us/s)			-2.12567E-12			+/-	6.2E-13		
Total phase (deg)	-59.1			Apriori accel (us/s/s)			0.00000000000E+00			Resid phase (deg)			-59.1			+/-	0.0		

ph/seg (deg) 0.1 0.0 Theor. Amplitude 441.532 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.5 0.0 Search (2048X64) 441.464 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 43.1 0.0 Inc. seg. avg. 441.479 Sample rate(MISamp/s): 64 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 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ZZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZZ.W.355.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, ZZ

METSAHOV - METSAHOV, fgroup W, pol RL

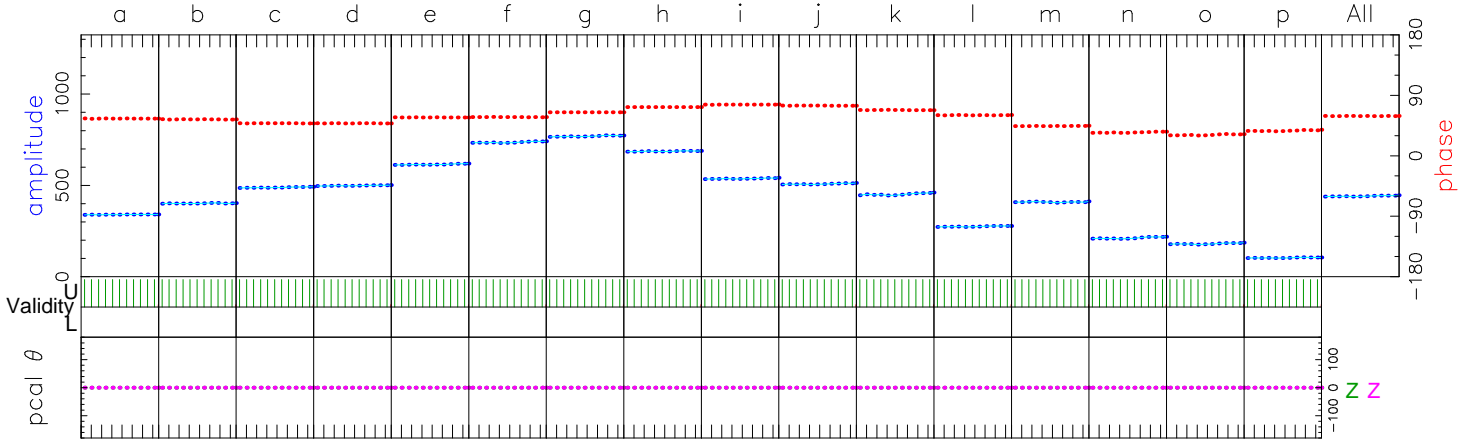


Fringe quality 6

SNR 24726.0
 Int time 419.362
 Amp 441.532
 Phase 59.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.000258
 MBD -0.000496
 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
 2020:083:003228
 2020:093:042900
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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	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	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	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	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
																		Tracks
Group delay (usec)(sbd)	-4.96218750000E-04			Apriori delay (usec)			0.00000000000E+00			Resid mbdelay (usec)			-4.96219E-04			+/- 4.4E-08		
Sband delay (usec)	2.57500000000E-04			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			2.57500E-04			+/- 7.0E-07		
Phase delay (usec)	1.90731741322E-06			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			1.90732E-06			+/- 1.5E-10		
Delay rate (us/s)	2.12567285875E-12			Apriori rate (us/s)			0.00000000000E+00			Resid rate (us/s)			2.12567E-12			+/- 6.2E-13		
Total phase (deg)	59.1			Apriori accel (us/s/s)			0.00000000000E+00			Resid phase (deg)			59.1			+/- 0.0		

ph/seg (deg) 0.1 0.0 Theor. Amplitude 441.532 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.5 0.0 Search (2048X64) 441.464 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 43.1 0.0 Inc. seg. avg. 441.479 Sample rate(MISamp/s): 64 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 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ZZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZZ.W.360.1305JH simultaneous interpolator