

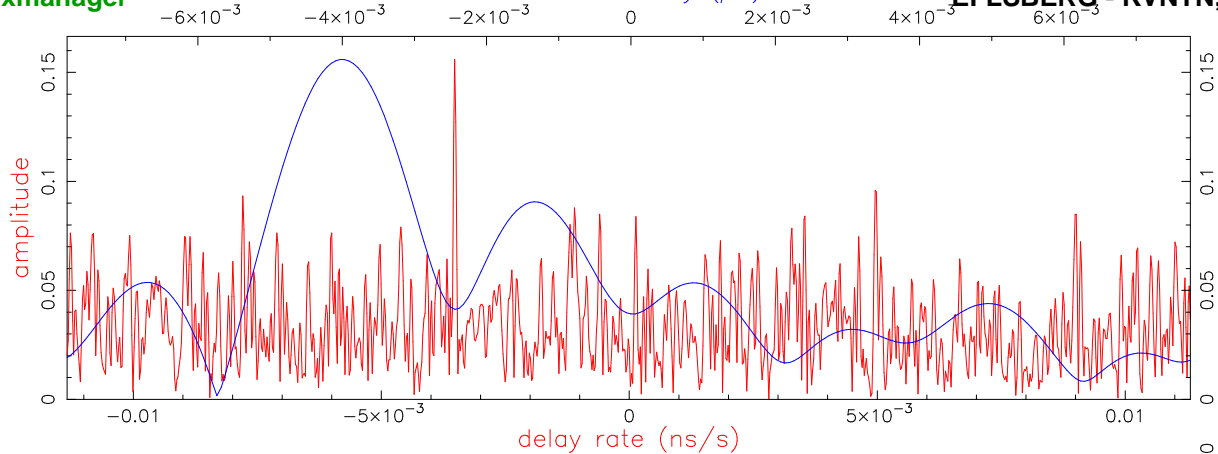
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, Bt

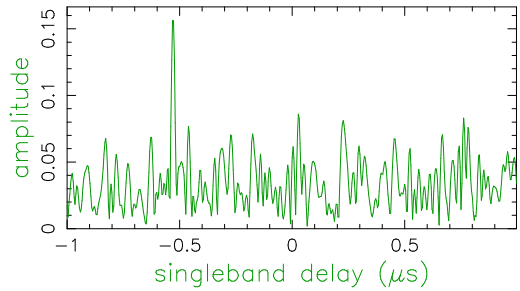
EFLSBERG - KVNTN, fgroup W, pol RL

multiband delay (μ s)

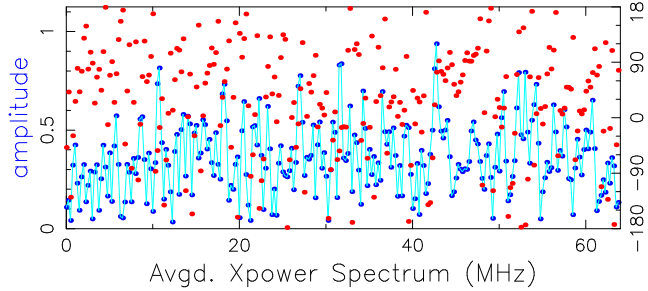


Fringe quality 0

SNR 5.9
Int time 179.778
Amp 0.167
Phase 122.8
PFD 4.3e-01
Delays (us)
SBD -0.529330
MBD -0.004014
Fringe rate (Hz)
-0.303940
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

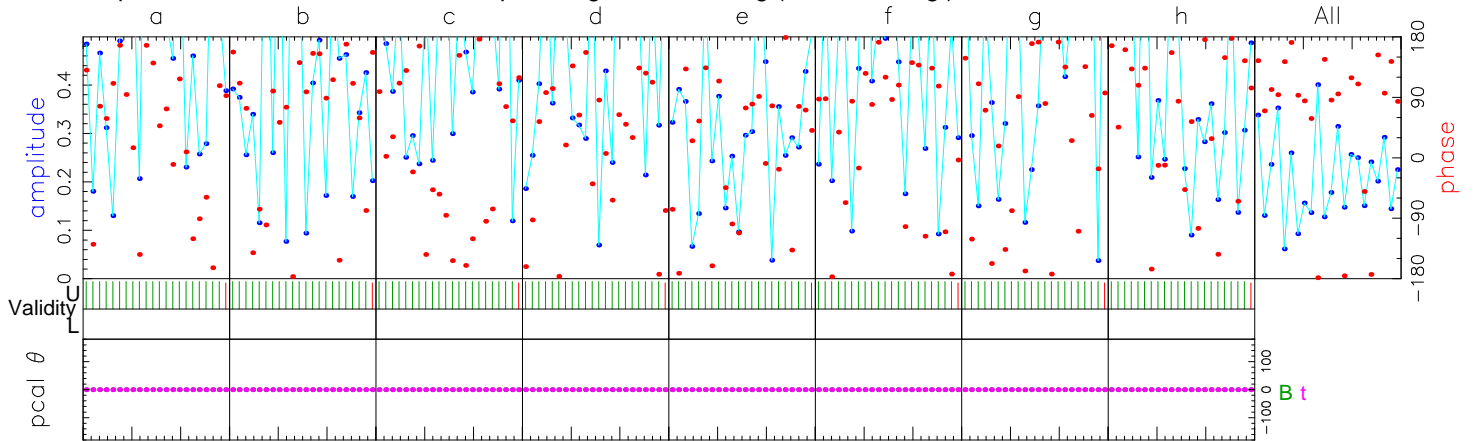


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 083000.00
Stop 083300.22
FRT 083130.00
Corr/FF/build
2021:006:162416
2021:010:134208
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
B	1000	1000	1000	1000	1000	1000	1000	1000			
t	1000	1000	1000	1000	1000	1000	1000	1000			
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
B	1000	1000	1000	1000	1000	1000	1000	1000			
t	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)		9.87223333727E+02				9.87758597527E+02			Resid mbdelay (usec)	-4.01380E-03	+/- 1.9E-04
Sband delay (usec)		9.87229267277E+02				8.7493124E+00			Resid sbdelay (usec)	-5.29330E-01	+/- 1.5E-03
Phase delay (usec)		9.87758601487E+02				-2.9999999E-07			Resid phdelay (usec)	3.95919E-06	+/- 6.3E-07
Delay rate (us/s)		-1.01094890040E+00				-1.01094537197E+00			Resid rate (us/s)	-3.52844E-06	+/- 6.1E-09
Total phase (deg)			335.5			1.62640495468E-05			Resid phase (deg)	122.8	+/- 19.5
RMS	52.9	45.8							PCal mode: MANUAL, MANUAL		
ph/seg (deg)	64.1	80.0							PCal rate: 0.000E+00, 0.000E+00 (us/s)		
amp/seg (%)	32.8	27.6							Bits/sample: 2x2		
ph/frq (deg)	33.8	48.2							SampCntNorm: enabled		
amp/frq (%)									Sample rate(MISamp/s): 128		
									Data rate(Mb/s): 2048		
									nlags: 256		
									t_cohere infinite		
									ion window (TEC)	0.00	0.00

B: az 336.8 el 24.6 pa 29.4 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 11096.765 3069.017 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/Bt.1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/Bt.W.106.1HR8HE

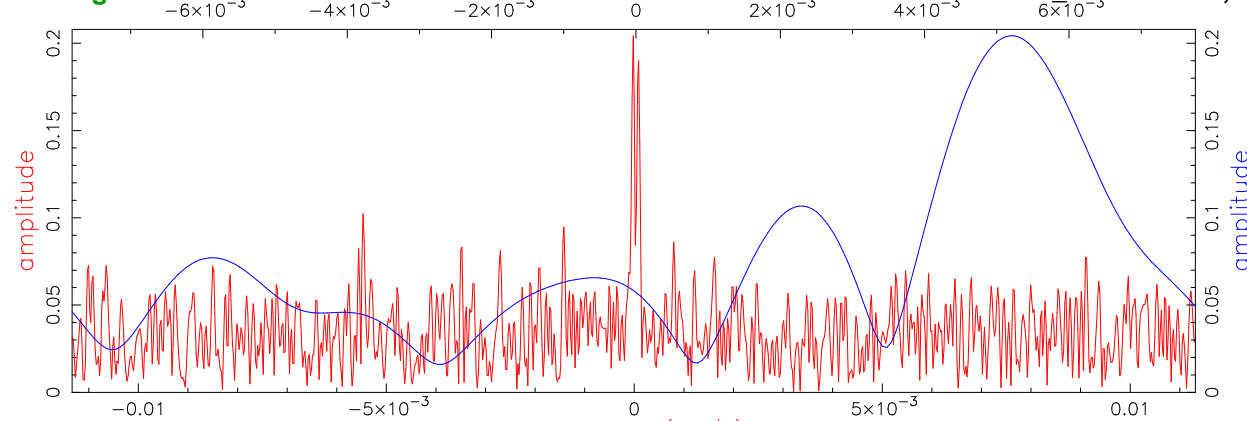
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, bt

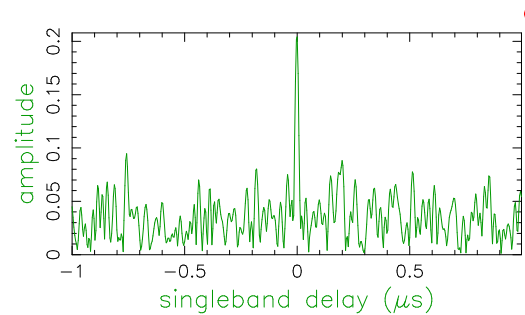
VLBA_BR - KVNTN, fgroup W, pol LL

multiband delay (μ s)

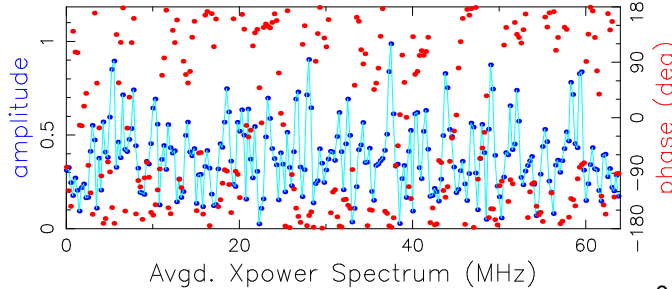


Fringe quality 9

SNR 7.6
 Int time 179.973
 Amp 0.208
 Phase 112.4
 PFD 3.9e-06
 Delays (us)
 SBD -0.001709
 MBD 0.005171
 Fringe rate (Hz)
 -0.001964
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

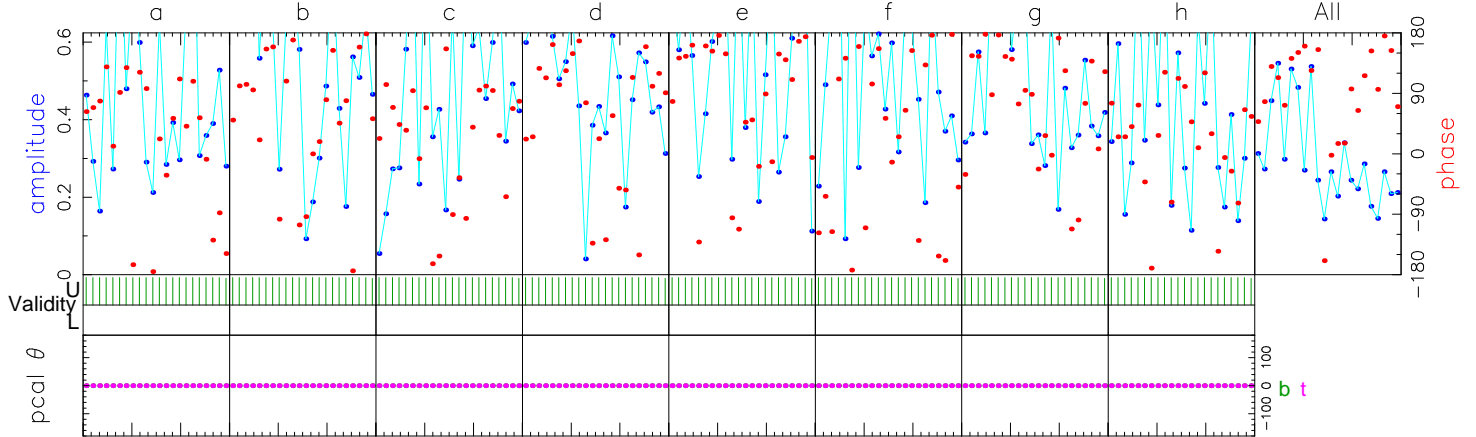


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134158
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.29768581241E+04	Apriori delay (usec)	1.29768529536E+04	Resid mbdelay (usec)	5.17051E-03	+/-	1.4E-04
Sband delay (usec)	1.29768512448E+04	Apriori clock (usec)	-3.0832291E+00	Resid sbdelay (usec)	-1.70875E-03	+/-	1.1E-03
Phase delay (usec)	1.29768529572E+04	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	3.62540E-06	+/-	4.8E-07
Delay rate (us/s)	-7.59647938298E-01	Apriori rate (us/s)	-7.59647915500E-01	Resid rate (us/s)	-2.27986E-08	+/-	4.7E-09
Total phase (deg)	264.2	Apriori accel (us/s/s)	-5.01768533985E-05	Resid phase (deg)	112.4	+/-	15.0

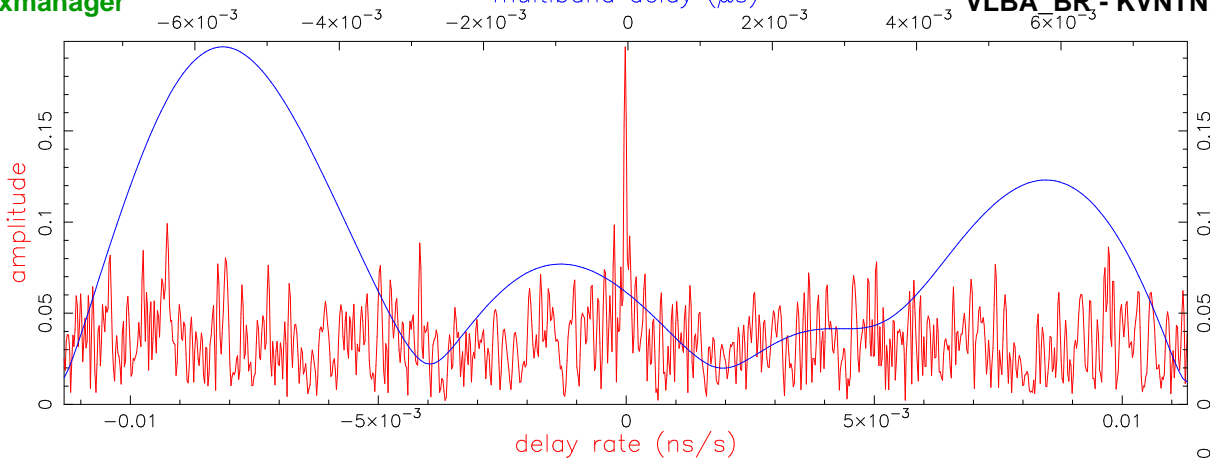
ph/seg (deg)	54.6	RMS	35.2	Theor.	0.208 +/- 0.027	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	74.7	Search (1024X32)	0.202	Interp.	0.000	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	42.1	Inc. seg. avg.	0.254	Inc. frq. avg.	0.229	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	26.8	Inc. frq. avg.	0.229	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011

b: az 333.6 el 78.0 pa 145.2 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 8286.909 -5564.706 simultaneous interpolator

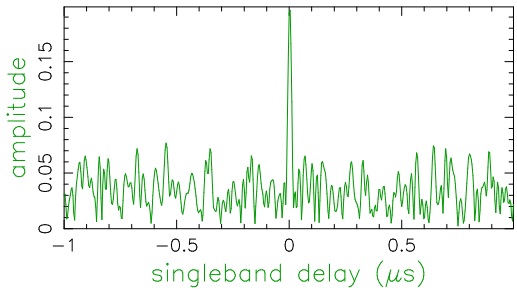
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/bt..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/bt.W.26.1HR8HE

multiband delay (μs)

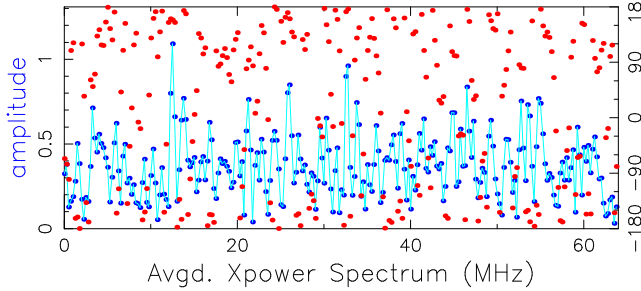
Fringe quality 9



SNR 7.3
Int time 179.973
Amp 0.199
Phase -113.8
PFD 4.3e-05
Delays (us)
SBD 0.002246
MBD -0.005659
Fringe rate (Hz)
-0.002400
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

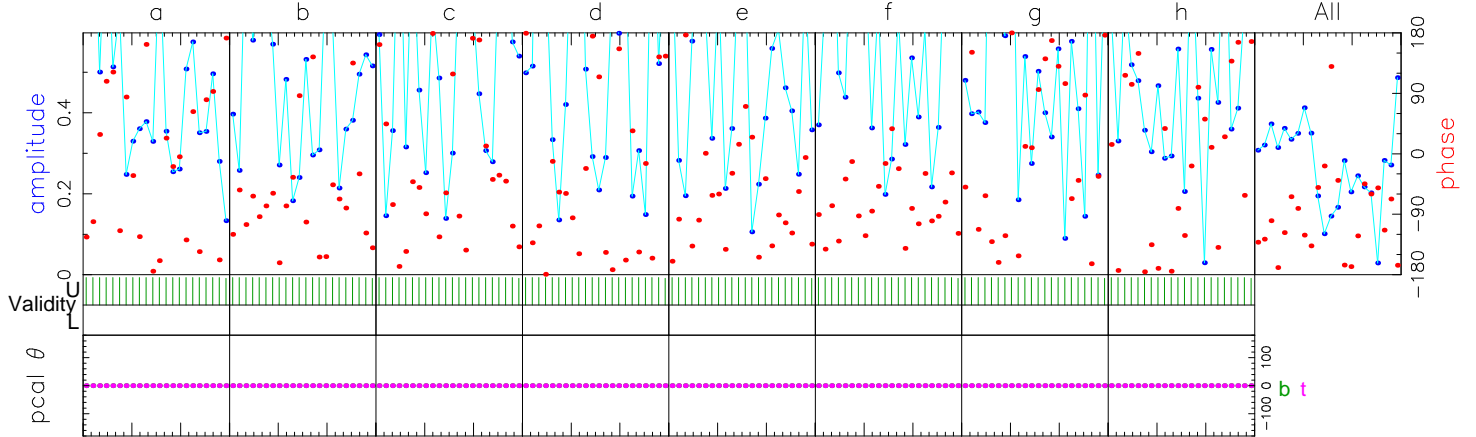


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 083000.00
Stop 083300.22
FRT 083130.00
Corr/FF/build
2021:006:162416
2021:010:134200
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-165.2	-96.6	-112.0	-150.9	-79.7	-74.7	-153.5	130.6	Phase	-113.8
	0.1	0.3	0.2	0.4	0.2	0.4	0.2	0.1	Ampl.	0.2
	482.6	258.2	85.8	257.9	259.6	257.6	255.8	116.9	Sbd box	257.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.29768629200E+04		Apriori delay (usec)		1.29768529536E+04		Resid mbdelay (usec)		-5.65855E-03	+/- 1.5E-04
Sband delay (usec)	1.29768551996E+04		Apriori clock (usec)		-3.0832291E+00		Resid sbdelay (usec)		2.24600E-03	+/- 1.2E-03
Phase delay (usec)	1.29768529499E+04		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		-3.67133E-06	+/- 5.1E-07
Delay rate (us/s)	-7.59647943364E-01		Apriori rate (us/s)		-7.59647915500E-01		Resid rate (us/s)		-2.78647E-08	+/- 4.9E-09
Total phase (deg)	37.9		Apriori accel (us/s/s)		-5.01768533985E-05		Resid phase (deg)		-113.8	+/- 15.7

	RMS	Theor.	Amplitude	0.199 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	53.3	36.8	Search (1024X32)	0.191	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	63.3	64.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	60.5	22.2	Inc. seg. avg.	0.224	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	61.9	38.7	Inc. frq. avg.	0.228	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 333.6 el 78.0 pa 145.2 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 8286.909 -5564.706 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/bt..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/bt.W.44.1HR8HE

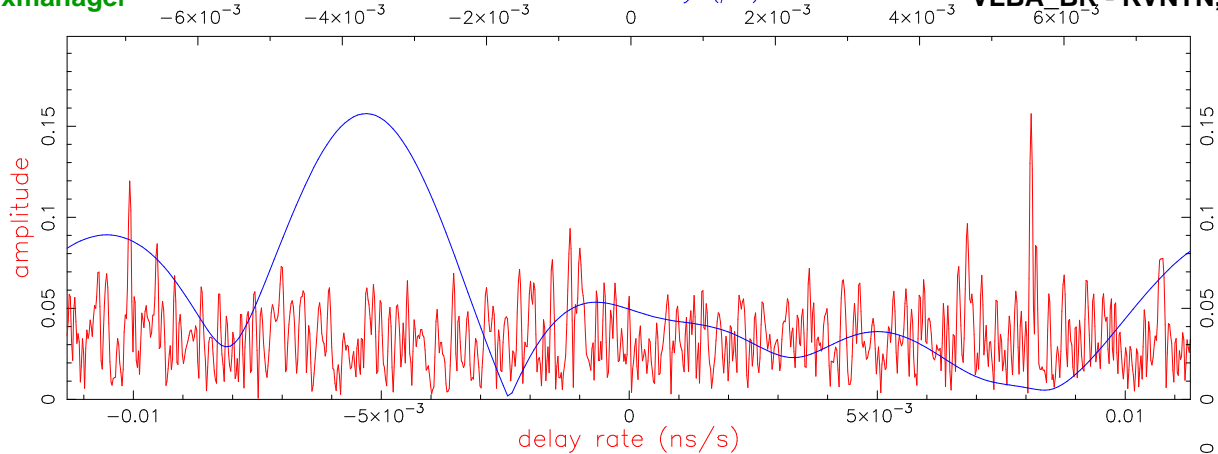
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, bt

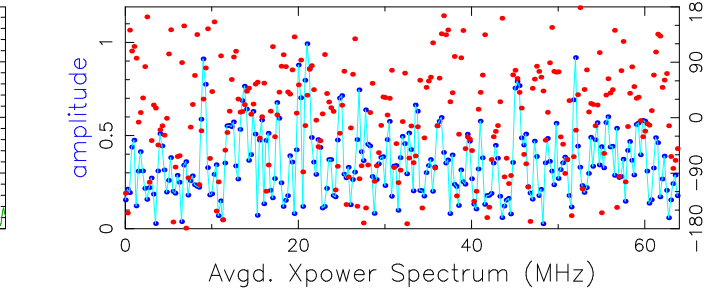
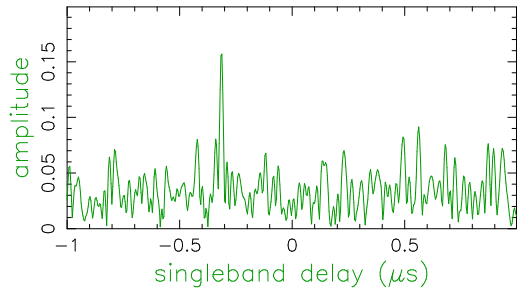
VLBA_BR - KVNTN, fgroup W, pol LR

multiband delay (μ s)



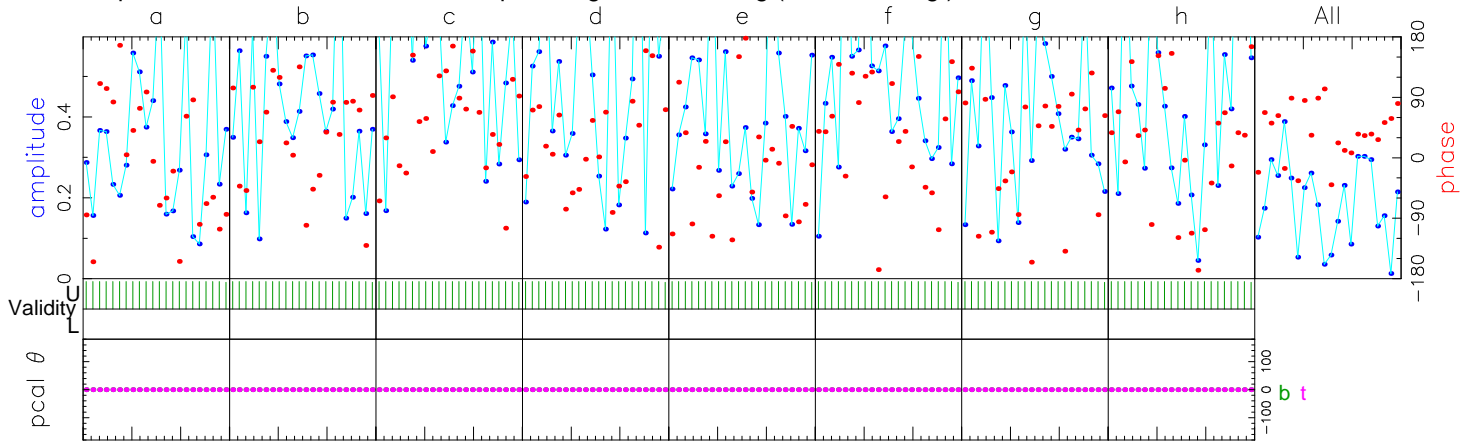
Fringe quality 0

SNR 5.9
 Int time 179.973
 Amp 0.199
 Phase 41.0
 PFD 4.3e-01
 Delays (us)
 SBD -0.314242
 MBD -0.003709
 Fringe rate (Hz)
 0.699184
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134203
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
t	1000	1000	1000	1000	1000	1000	1000	1000			
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
t	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)		1.29765367451E+04			1.29768529536E+04				Resid mbdelay (usec)	-3.70853E-03	+/- 1.9E-04
Sband delay (usec)		1.29765387116E+04			-3.0832291E+00				Resid sbdelay (usec)	-3.14242E-01	+/- 1.5E-03
Phase delay (usec)		1.29768529549E+04			-9.9999991E-08				Resid phdelay (usec)	1.32114E-06	+/- 6.3E-07
Delay rate (us/s)		-7.59639798662E-01			-7.59647915500E-01				Resid rate (us/s)	8.11684E-06	+/- 6.1E-09
Total phase (deg)			192.7		-5.01768533985E-05				Resid phase (deg)	41.0	+/- 19.5
	RMS	Theor.	Amplitude	0.199 +/- 0.034					Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5
ph/seg (deg)	40.3	45.8	Search (1024X32)	0.150					Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000
amp/seg (%)	65.1	80.0	Interp.	0.000					Bits/sample: 2x2		SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	40.6	27.6	Inc. seg. avg.	0.178					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	34.7	48.2	Inc. frq. avg.	0.207					Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 333.6 el 78.0 pa 145.2 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 8286.909 -5564.706 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/bt..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/bt.W.70.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

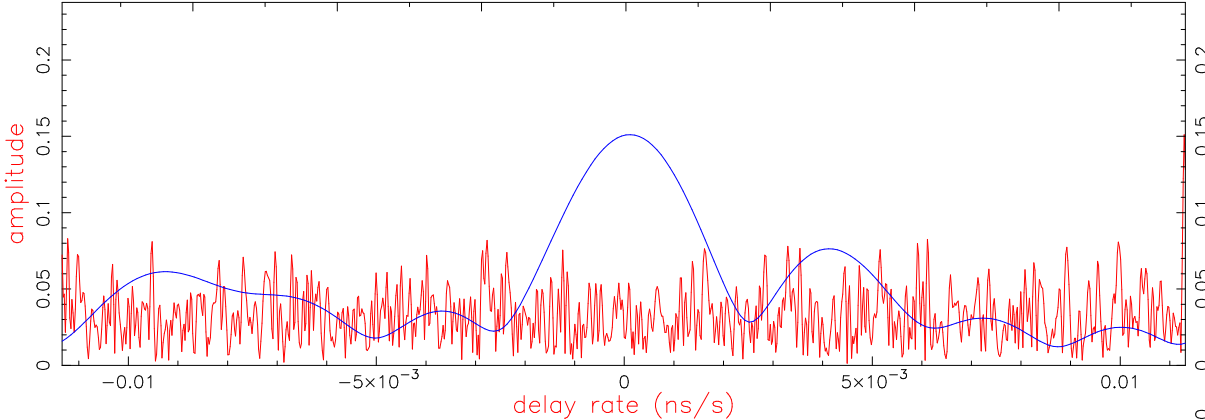
0102+584.1HR8HE, No0110, Bt

EFLSBERG - KVNTN, fgroup W, pol LL

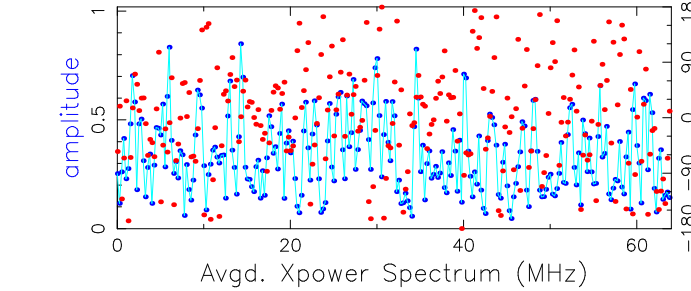
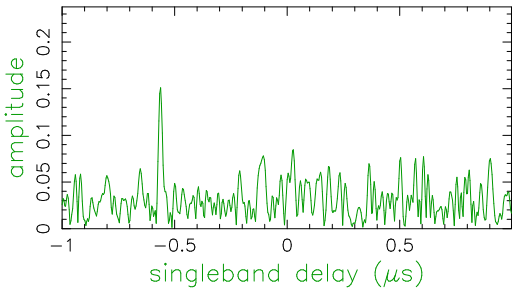
multiband delay (μ s)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}

Fringe quality 0

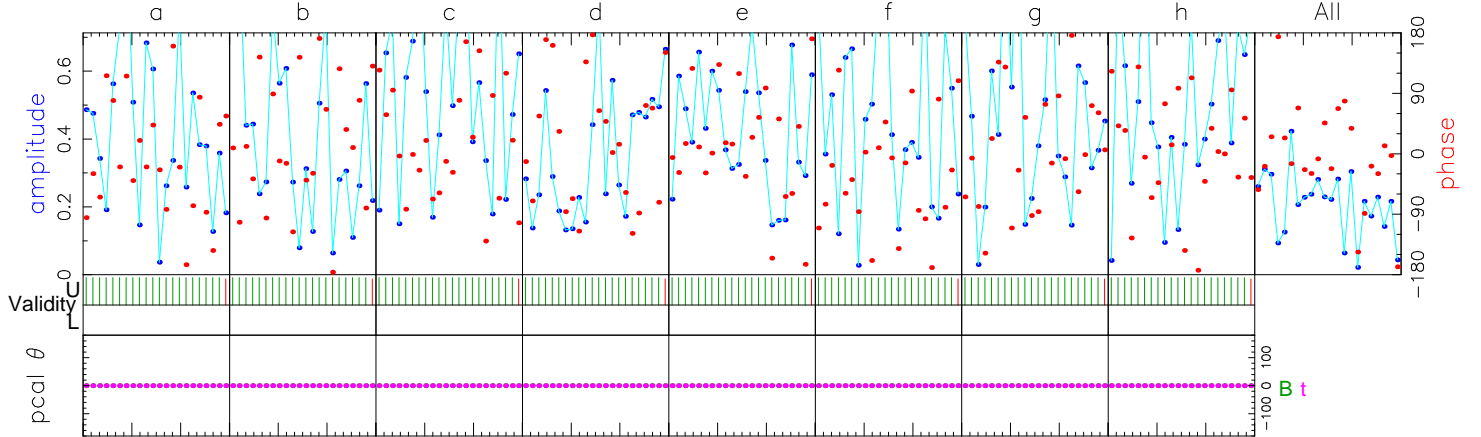


SNR 5.6
 Int time 179.778
 Amp 0.238
 Phase -1.3
 PFD 9.6e-01
 Delays (us)
 SBD -0.563434
 MBD 0.000035
 Fringe rate (Hz)
 0.973917
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134203
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	9.87196133024E+02					9.87758597527E+02			3.54961E-05	+/- 2.0E-04
Sband delay (usec)	9.87195163027E+02					8.7493124E+00			-5.63434E-01	+/- 1.5E-03
Phase delay (usec)	9.87758597486E+02					-2.9999999E-07			-4.14962E-08	+/- 6.6E-07
Delay rate (us/s)	-1.01093406575E+00					-1.01094537197E+00			1.13062E-05	+/- 6.4E-09
Total phase (deg)			211.5			1.62640495468E-05			-1.3	+/- 20.6
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)										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 71.7 48.3 Search (1024X32) 0.147 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.1 84.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.5 29.1 Inc. seg. avg. 0.243 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.2 50.8 Inc. frq. avg. 0.225 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 336.8 el 24.6 pa 29.4 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 11096.765 3069.017 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/Bt.1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/Bt.W.74.1HR8HE

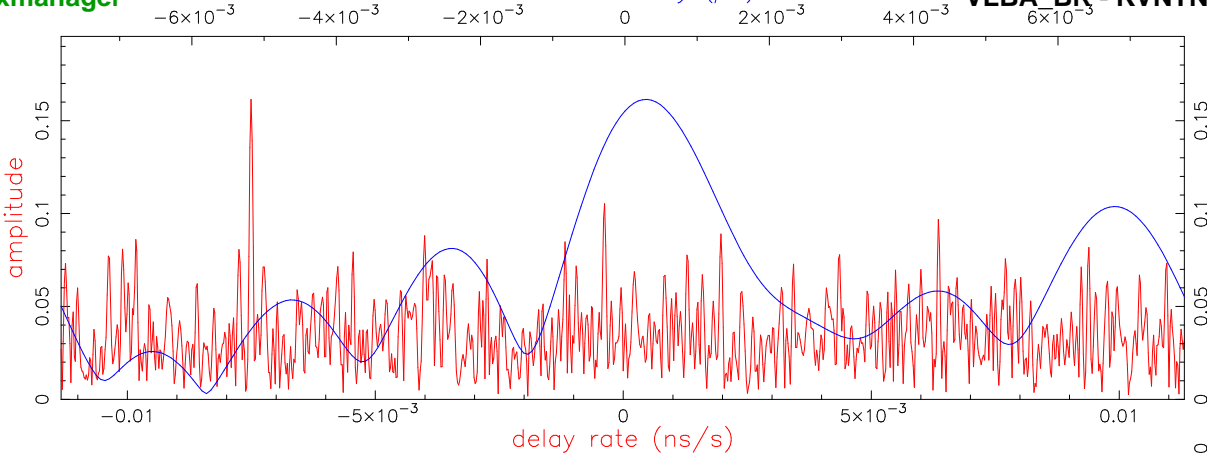
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, bt

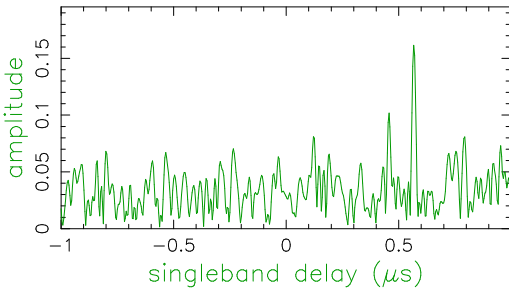
VLBA_BR - KVNTN, fgroup W, pol RL

multiband delay (μ s)

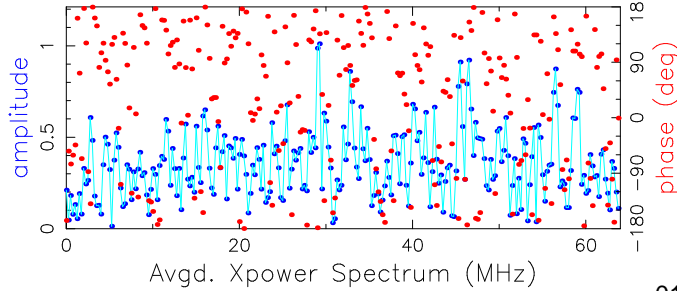


Fringe quality 0

SNR 5.9
 Int time 179.973
 Amp 0.195
 Phase -178.9
 PFD 3.1e-01
 Delays (us)
 SBD 0.567076
 MBD 0.000302
 Fringe rate (Hz)
 -0.648207
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

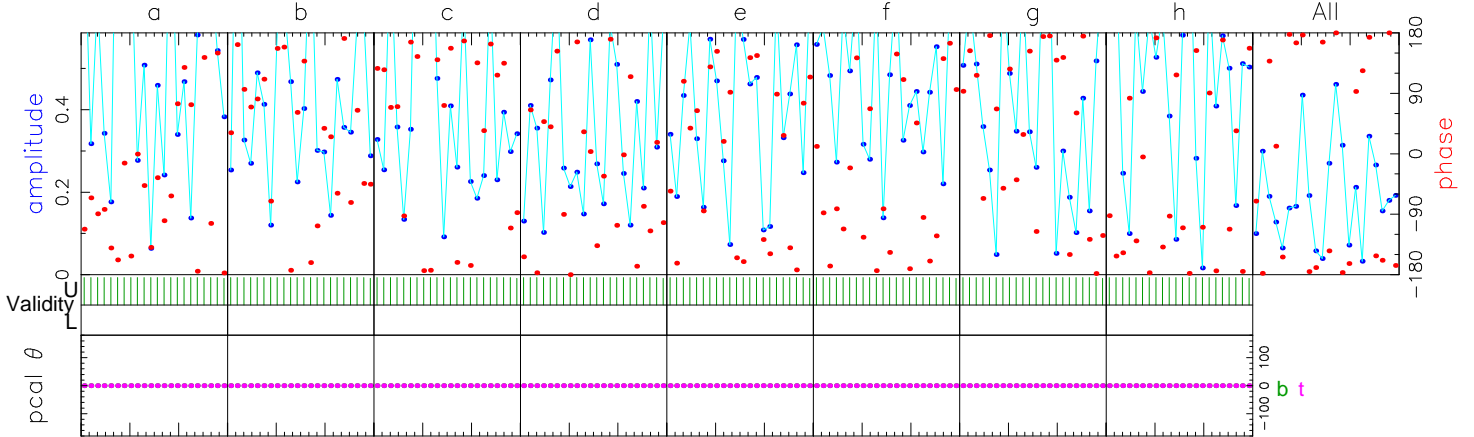


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134204
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-121.4	144.9	153.9	-143.2	137.6	-168.7	172.2	-160.1	Phase	-178.9
	0.3	0.2	0.4	0.1	0.2	0.2	0.2	0.3	Ampl.	0.2
	308.4	288.4	402.0	510.2	135.9	407.0	130.4	399.5	Sbd box	402.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.29774157561E+04		Apriori delay (usec)		1.29768529536E+04		Resid mbdelay (usec)		3.02494E-04 +/- 1.8E-04	
Sband delay (usec)	1.29774200293E+04		Apriori clock (usec)		-3.0832291E+00		Resid sbdelay (usec)		5.67076E-01 +/- 1.5E-03	
Phase delay (usec)	1.29768529478E+04		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		-5.77033E-06 +/- 6.2E-07	
Delay rate (us/s)	-7.59655440537E-01		Apriori rate (us/s)		-7.59647915500E-01		Resid rate (us/s)		-7.52504E-06 +/- 6.0E-09	
Total phase (deg)			Apriori accel (us/s/s)		-5.01768533985E-05		Resid phase (deg)		-178.9 +/- 19.3	

	RMS	Theor.	Amplitude	0.195 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	51.2	45.3	Search (1024X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	75.7	79.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	38.9	27.3	Inc. seg. avg.	0.181	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	46.5	47.6	Inc. frq. avg.	0.208	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 333.6 el 78.0 pa 145.2 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 8286.909 -5564.706 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/bt..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/bt.W.80.1HR8HE

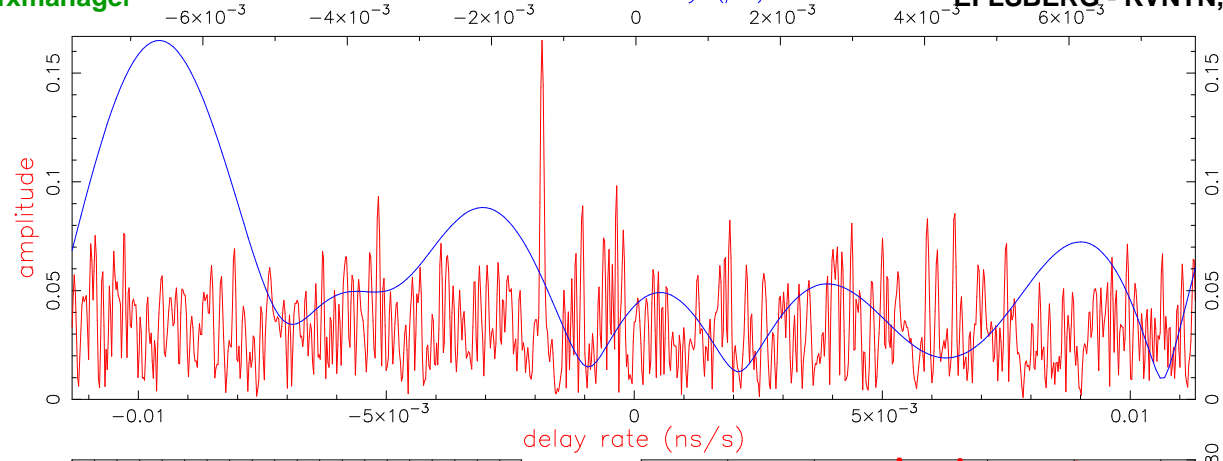
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

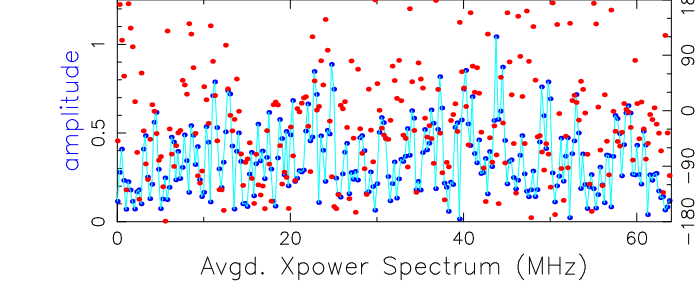
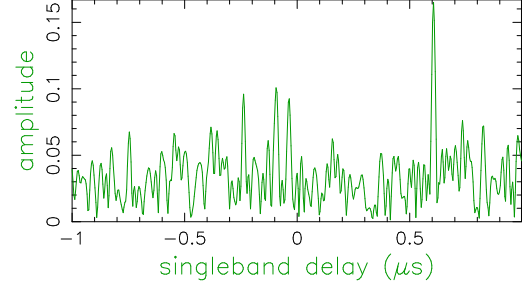
0102+584.1HR8HE, No0110, Bt

EFLSBERG - KVNTN, fgroup W, pol RR

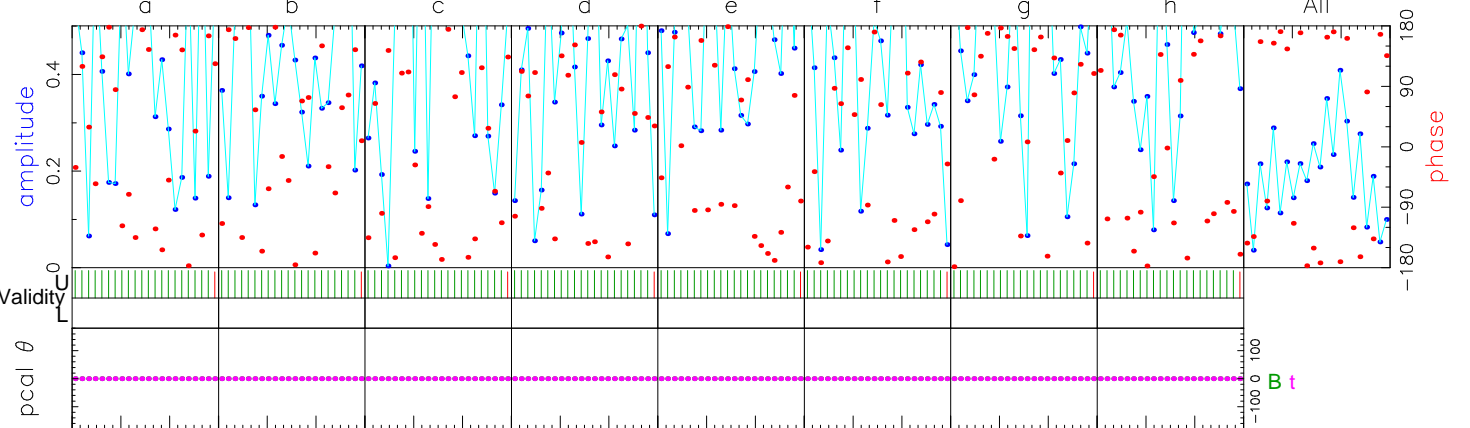
multiband delay (μ s)



Fringe quality 0
 SNR 6.1
 Int time 179.778
 Amp 0.167
 Phase -177.6
 PFD 1.7e-01
 Delays (us)
 SBD 0.605560
 MBD -0.006602
 Fringe rate (Hz)
 -0.161323
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134205
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		9.88361370963E+02				9.87758597527E+02			Resid mbdelay (usec)	-6.60156E-03 +/- 1.8E-04
Sband delay (usec)		9.88364158027E+02				8.7493124E+00			Resid sbdelay (usec)	6.05560E-01 +/- 1.4E-03
Phase delay (usec)		9.87758591801E+02				-2.9999999E-07			Resid phdelay (usec)	-5.72638E-06 +/- 6.1E-07
Delay rate (us/s)		-1.01094724477E+00				-1.01094537197E+00			Resid rate (us/s)	-1.87280E-06 +/- 5.9E-09
Total phase (deg)			35.2			1.62640495468E-05			Resid phase (deg)	-177.6 +/- 18.9
ph/seg (deg)	42.2	44.4							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	59.2	77.5							PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	31.6	26.8							Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%)	44.7	46.7							Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
									Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 336.8 el 24.6 pa 29.4 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 11096.765 3069.017 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/Bt.1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/Bt.W.81.1HR8HE

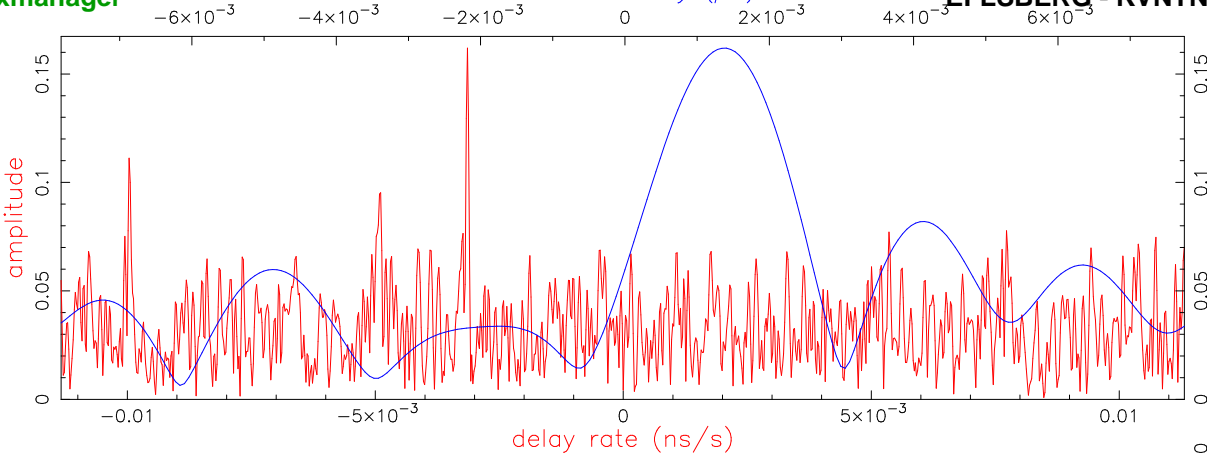
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, Bt

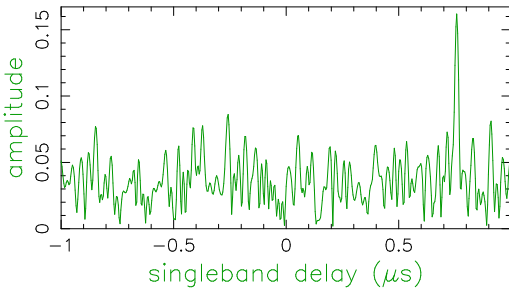
EFLSBERG - KVNTN, fgroup W, pol LR

multiband delay (μ s)

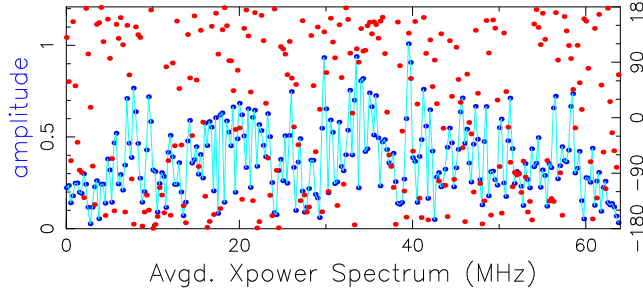


Fringe quality 0

SNR 5.9
Int time 179.778
Amp 0.167
Phase -130.6
PFD 3.0e-01
Delays (us)
SBD 0.757447
MBD 0.001376
Fringe rate (Hz)
-0.271720
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

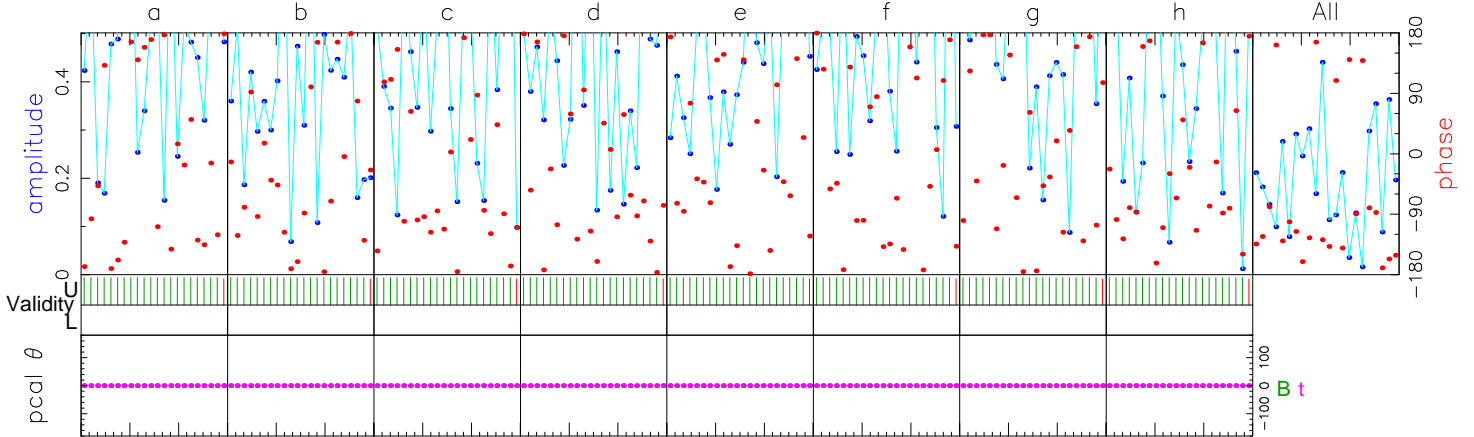


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 083000.00
Stop 083300.22
FRT 083130.00
Corr/FF/build
2021:006:162416
2021:010:134206
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	9.88509973290E+02				9.87758597527E+02				1.37576E-03	+/- 1.8E-04
Sband delay (usec)	9.88516045027E+02				8.7493124E+00				7.57447E-01	+/- 1.4E-03
Phase delay (usec)	9.87758593315E+02				-2.9999999E-07				-4.21232E-06	+/- 6.2E-07
Delay rate (us/s)	-1.01094852636E+00				-1.01094537197E+00				-3.15440E-06	+/- 6.0E-09
Total phase (deg)			82.1		1.62640495468E-05				-130.6	+/- 19.3
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 49.1 45.2 Search (1024X32) 0.151 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 71.7 78.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 28.6 27.3 Inc. seg. avg. 0.157 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 37.2 47.6 Inc. frq. avg. 0.164 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
B: az 336.8 el 24.6 pa 29.4 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 11096.765 3069.017 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/Bt.1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/Bt.W.90.1HR8HE

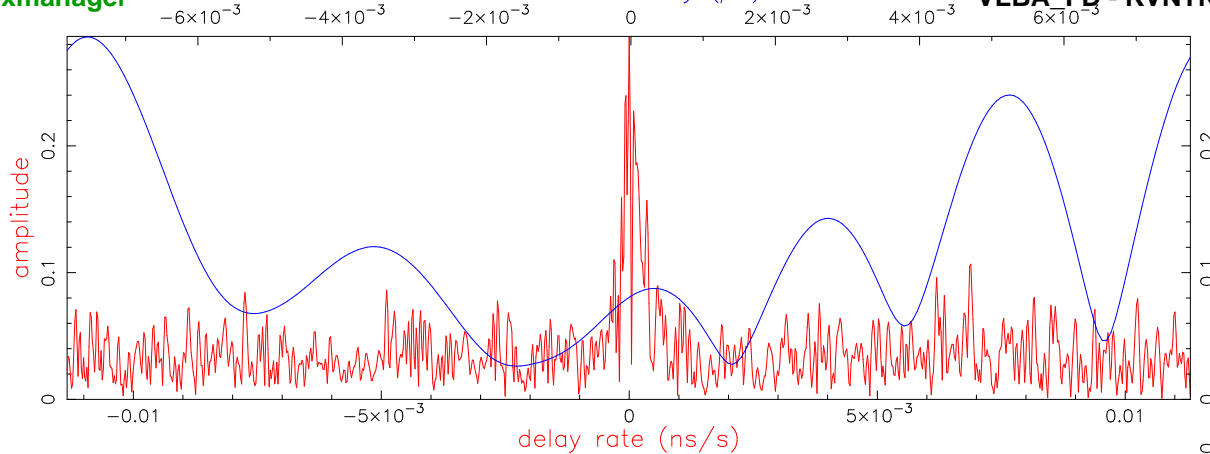
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, ft

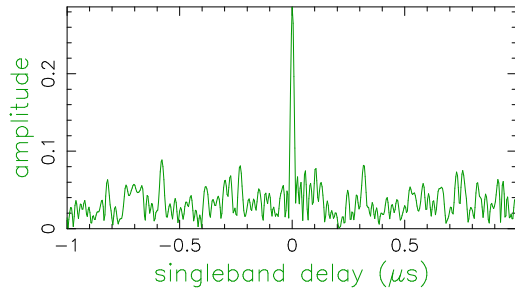
VLBA_FD - KVNTN, fgroup W, pol LL

multiband delay (μ s)

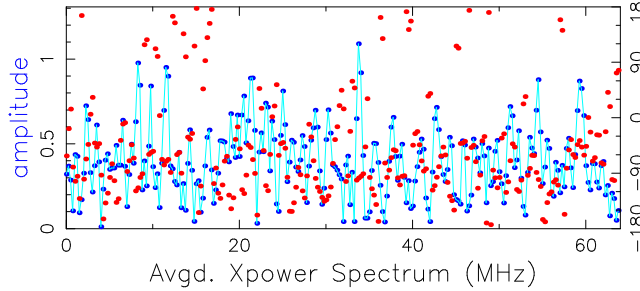


Fringe quality 9

SNR 10.5
 Int time 179.976
 Amp 0.286
 Phase 10.3
 PFD 1.8e-17
 Delays (us)
 SBD 0.000508
 MBD -0.007508
 Fringe rate (Hz)
 0.000809
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

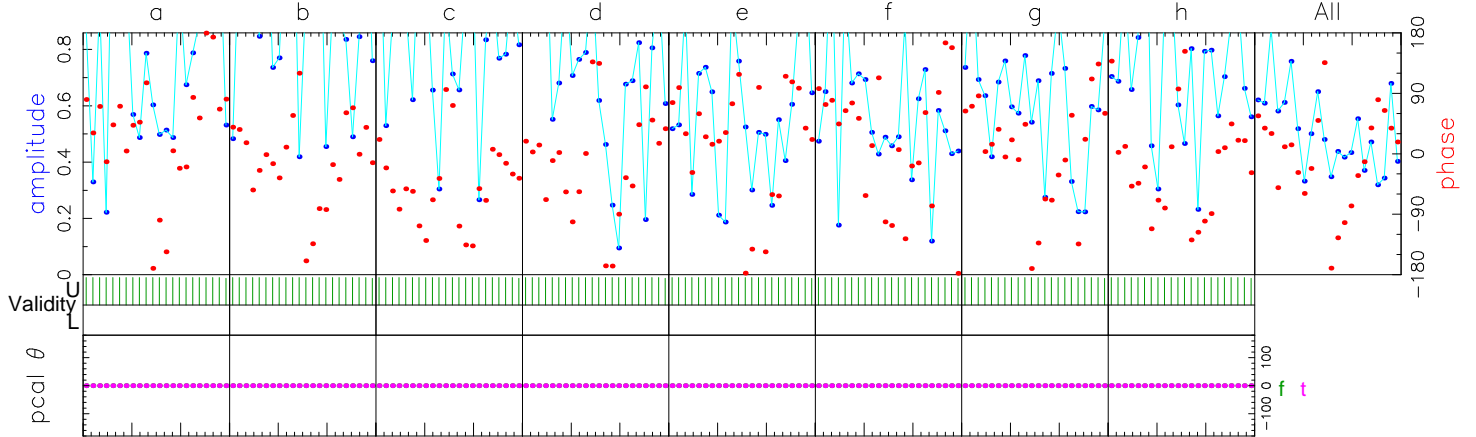


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134209
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
f	1000	1000	1000	1000	1000	1000	1000	1000			
t	1000	1000	1000	1000	1000	1000	1000	1000			
f:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
ft	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			
t	1000	1000	1000	1000	1000	1000	1000	1000			
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)		1.00087584903E+04			1.00087503733E+04				Resid mbdelay (usec)	-7.50797E-03	+/- 1.0E-04
Sband delay (usec)		1.00087508808E+04			6.4616861E+00				Resid sbdelay (usec)	5.07500E-04	+/- 8.2E-04
Phase delay (usec)		1.00087503736E+04			2.9999999E-07				Resid phdelay (usec)	3.31523E-07	+/- 3.5E-07
Delay rate (us/s)		-9.69649071980E-01			Apriori rate (us/s)				Resid rate (us/s)	9.39122E-09	+/- 3.4E-09
Total phase (deg)			64.9		Apriori accel (us/s/s)				Resid phase (deg)	10.3	+/- 10.9

ph/seg (deg) 72.1 25.6 Search (1024X32) 0.267 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 94.3 44.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.0 15.4 Inc. seg. avg. 0.468 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 46.3 26.9 Inc. frq. avg. 0.362 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 335.2 el 57.0 pa 136.3 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 10585.196 -7531.385 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/ft.1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/ft.W.115.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

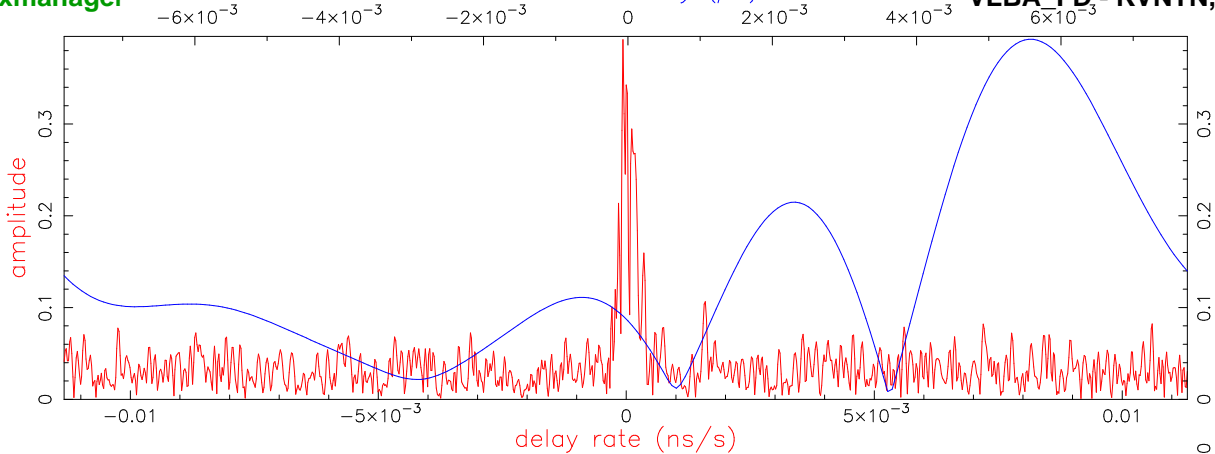
fxmanager

0102+584.1HR8HE, No0110, ft

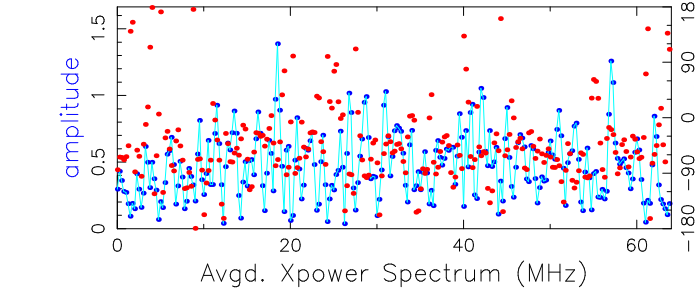
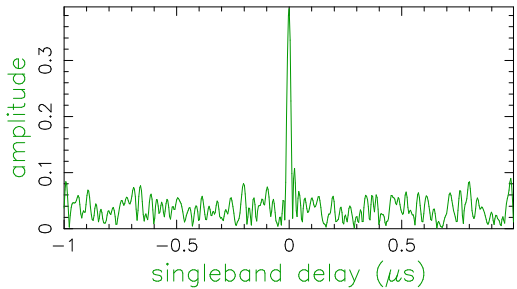
VLBA_FD - KVNTN, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 7

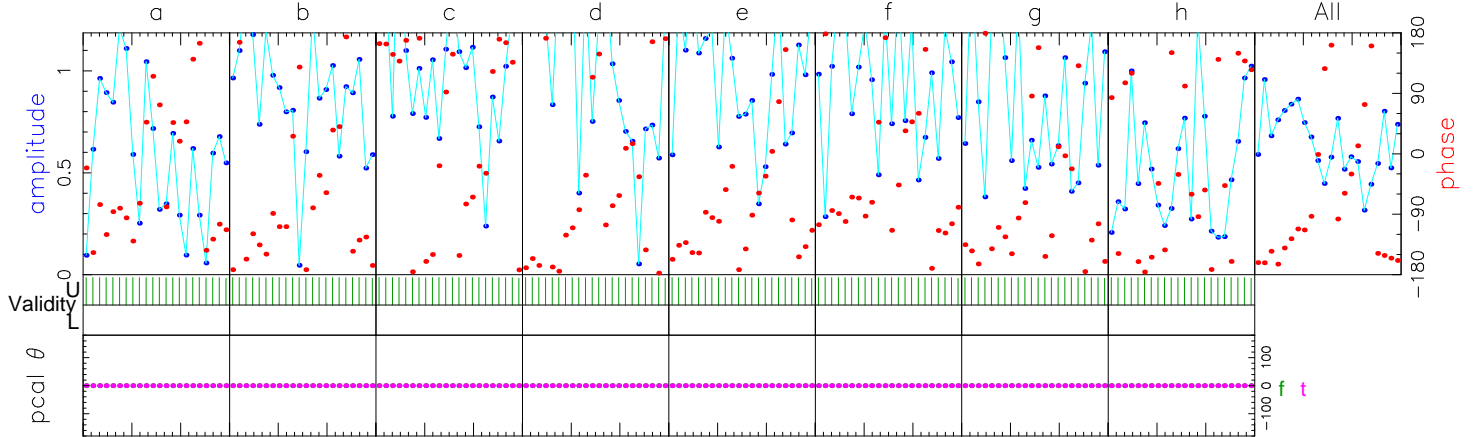


SNR 14.5
 Int time 179.976
 Amp 0.395
 Phase -136.1
 PFD 3.3e-39
 Delays (us)
 SBD -0.001251
 MBD 0.005515
 Fringe rate (Hz)
 -0.005464
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134211
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
f:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ft	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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.00087558882E+04			1.00087503733E+04				5.51498E-03	+/- 7.5E-05
Sband delay (usec)		1.00087491218E+04			6.4616861E+00				-1.25150E-03	+/- 5.9E-04
Phase delay (usec)		1.00087503689E+04			2.9999999E-07				-4.38735E-06	+/- 2.5E-07
Delay rate (us/s)		-9.69649144798E-01			-9.69649081371E-01				-6.34272E-08	+/- 2.4E-09
Total phase (deg)			-81.4		-5.69539561449E-05				-136.1	+/- 7.9
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
ph/seg (deg)	69.3	18.5								
amp/seg (%)	75.3	32.3								
ph/frq (deg)	39.0	11.2								
amp/frq (%)	41.1	19.5								
f: az 335.2 el 57.0 pa 136.3										
t: az 33.0 el 21.4 pa -60.6										
u,v (fr/asec)					10585.196	-7531.385				simultaneous interpolator

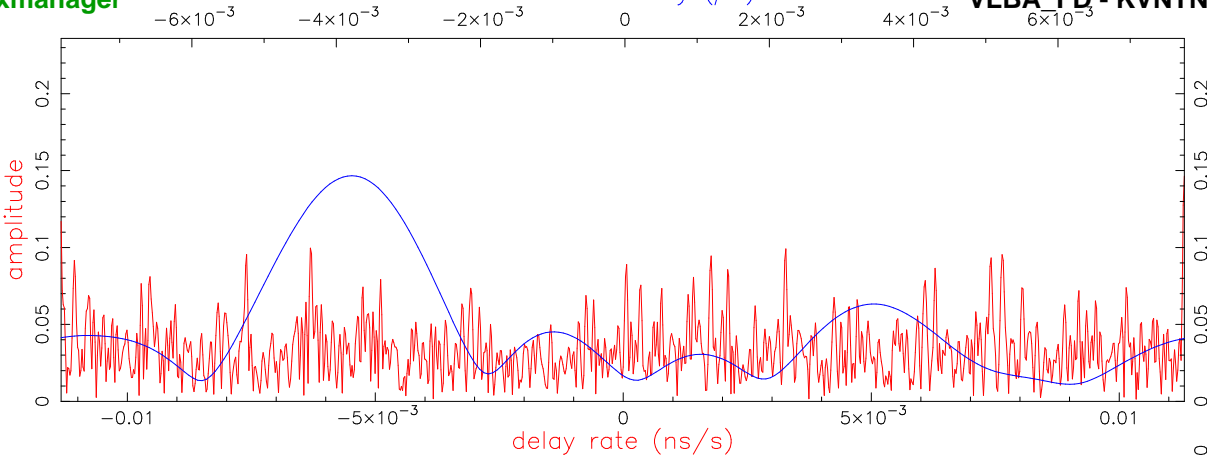
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, ft

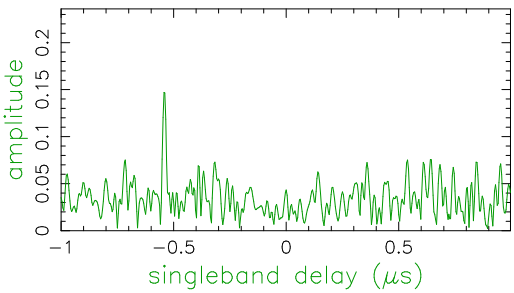
VLBA_FD - KVNTN, fgroup W, pol RL

multiband delay (μ s)

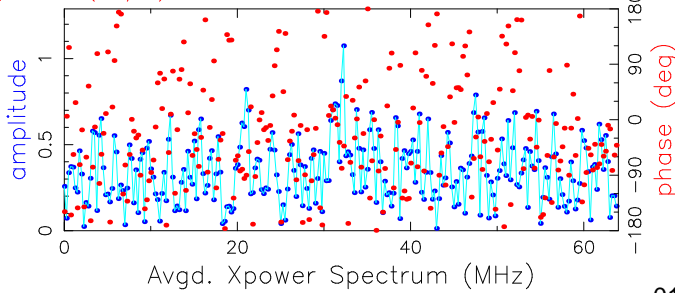


Fringe quality 0

SNR 5.5
 Int time 179.976
 Amp 0.236
 Phase -113.5
 PFD 9.8e-01
 Delays (us)
 SBD -0.541095
 MBD -0.003847
 Fringe rate (Hz)
 0.975330
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

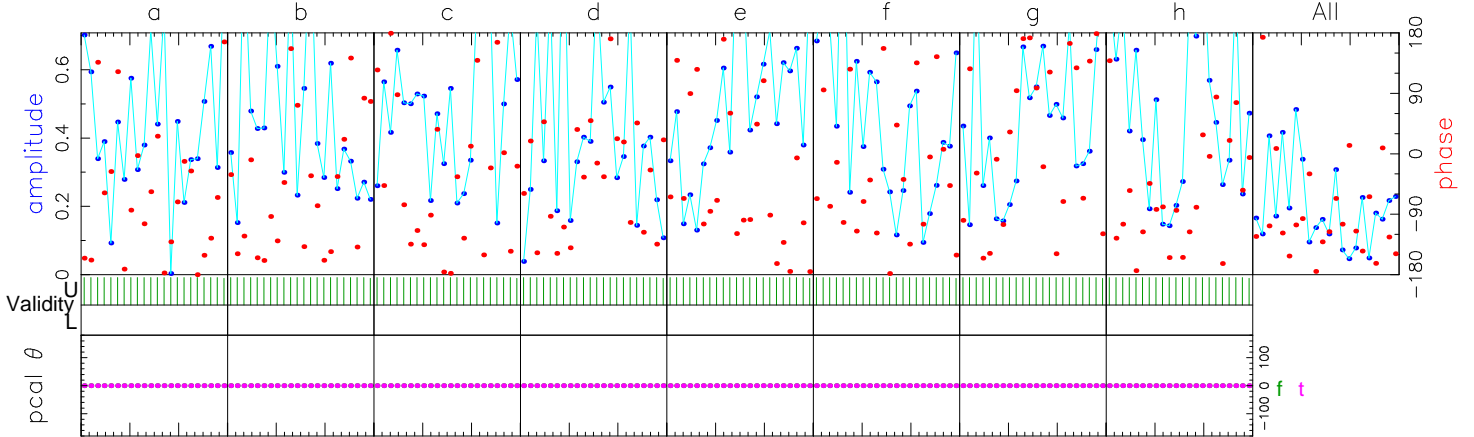


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134215
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-128.9	-114.8	-123.1	-68.4	-127.7	-97.7	-159.9	-85.0	Phase	-113.5
	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	Ampl.	0.2
	413.0	393.9	262.5	162.0	489.1	110.5	28.0	414.0	Sbd box	118.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ft	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.00082152758E+04		Apriori delay (usec)		1.00087503733E+04		Resid mbdelay (usec)		-3.84744E-03	+/- 2.0E-04
Sband delay (usec)	1.00082092778E+04		Apriori clock (usec)		6.4616861E+00		Resid sbdelay (usec)		-5.41095E-01	+/- 1.6E-03
Phase delay (usec)	1.00087503696E+04		Apriori clockrate (us/s)		2.9999999E-07		Resid phdelay (usec)		-3.65951E-06	+/- 6.7E-07
Delay rate (us/s)	-9.69637758755E-01		Apriori rate (us/s)		-9.69649081371E-01		Resid rate (us/s)		1.13226E-05	+/- 6.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-5.69539561449E-05		Resid phase (deg)		-113.5	+/- 20.8

ph/seg (deg) 57.8 48.7 Search (1024X32) 0.145 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 85.7 85.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.0 29.4 Inc. seg. avg. 0.230 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 22.0 51.3 Inc. frq. avg. 0.225 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 335.2 el 57.0 pa 136.3 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 10585.196 -7531.385 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/ft..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/ft.W.162.1HR8HE

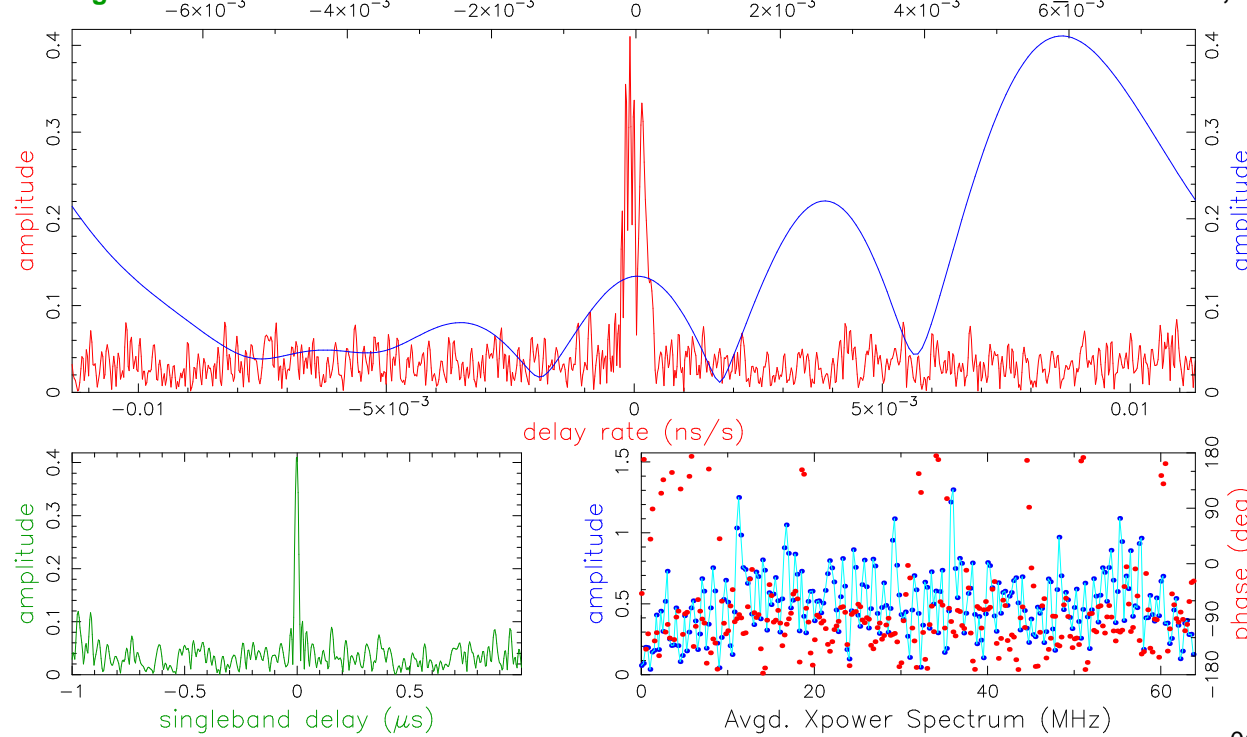
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, kt

VLBA_KP - KVNTN, fgroup W, pol LL

multiband delay (μ s)

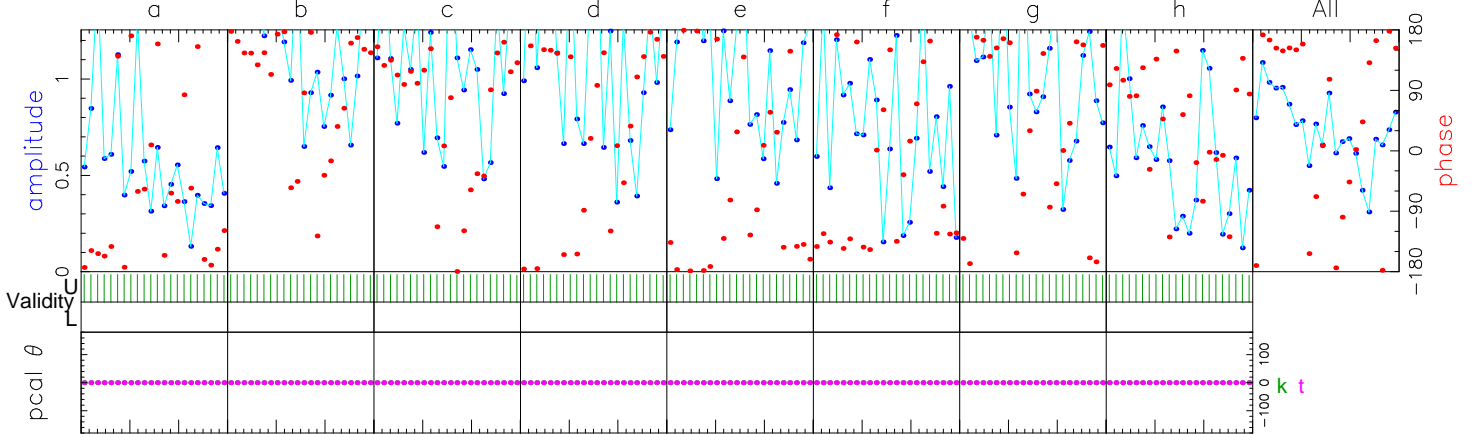


Fringe quality 8

SNR 15.3
 Int time 179.975
 Amp 0.418
 Phase 166.1
 PFD 1.1e-44
 Delays (us)
 SBD -0.001889
 MBD 0.005812
 Fringe rate (Hz)
 -0.007103
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134216
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
k:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:t	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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.07225305564E+04				1.07225247445E+04			5.81190E-03	+/- 7.1E-05
Sband delay (usec)		1.07225228555E+04				-1.0450001E+00			-1.88900E-03	+/- 5.6E-04
Phase delay (usec)		1.07225247499E+04				0.0000000E+00			5.35774E-06	+/- 2.4E-07
Delay rate (us/s)		-8.80333694020E-01				-8.80333611567E-01			-8.24534E-08	+/- 2.3E-09
Total phase (deg)			343.7						166.1	+/- 7.5
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)										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 74.8 17.5 Search (1024X32) 0.402 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 88.6 30.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.2 10.6 Inc. seg. avg. 0.709 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 39.3 18.4 Inc. frq. avg. 0.492 Sample rate(MISamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 340.4 el 60.7 pa 146.5 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 9604.182 -7684.508 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/kt..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/kt.W.169.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

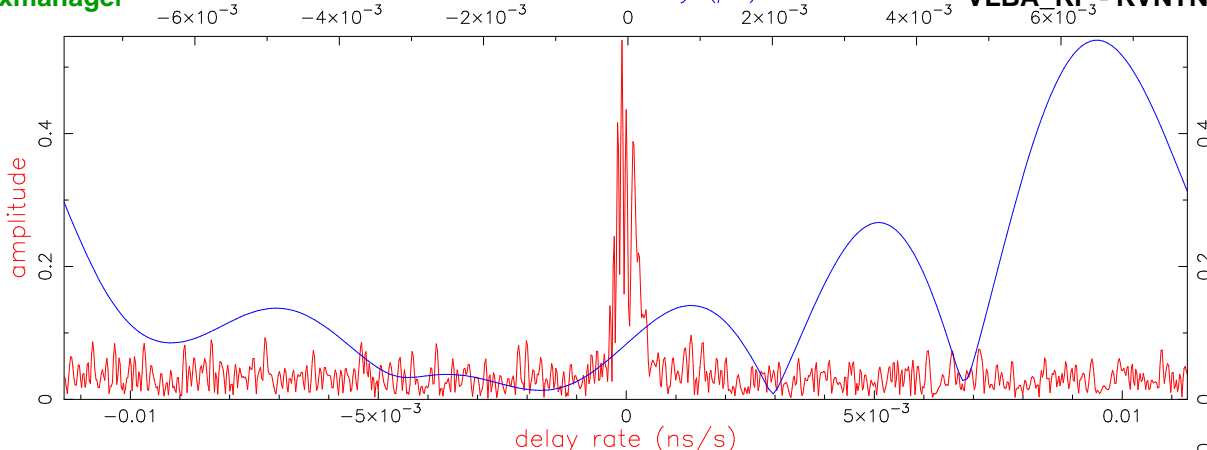
fxmanager

0102+584.1HR8HE, No0110, kt

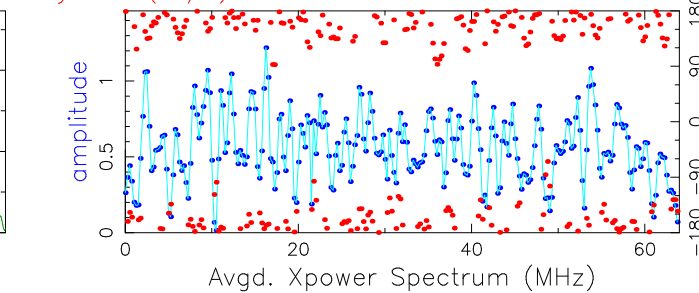
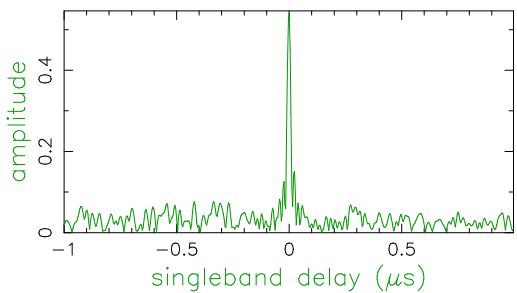
VLBA_KP - KVNTN, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 8

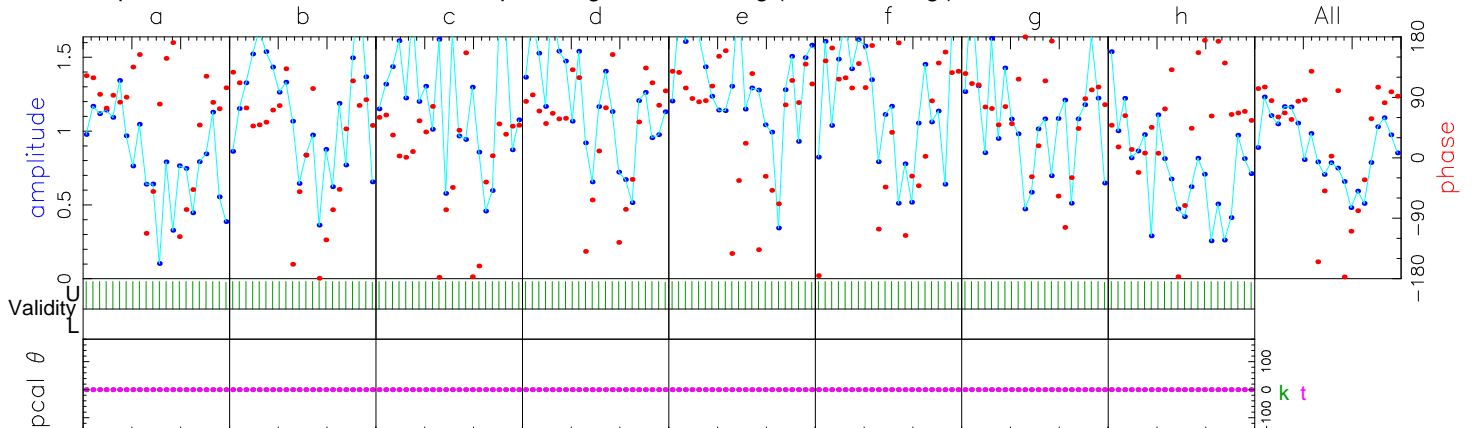


SNR 20.0
 Int time 179.975
 Amp 0.546
 Phase 85.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.001307
 MBD 0.006447
 Fringe rate (Hz)
 -0.007101
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134218
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
k:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:t	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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.07225311910E+04			1.07225247445E+04				6.44652E-03	+/- 5.4E-05
Sband delay (usec)		1.07225234378E+04			-1.0450001E+00				-1.30675E-03	+/- 4.3E-04
Phase delay (usec)		1.07225247473E+04			0.0000000E+00				2.74688E-06	+/- 1.8E-07
Delay rate (us/s)		-8.80333694002E-01			-8.80333611567E-01				-8.24350E-08	+/- 1.8E-09
Total phase (deg)			262.7						85.2	+/- 5.7
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 74.8 13.4 Search (1024X32) 0.522 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.1 23.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.6 8.1 Inc. seg. avg. 0.861 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 21.6 14.1 Inc. frq. avg. 0.596 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 340.4 el 60.7 pa 146.5 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 9604.182 -7684.508 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/kt..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/kt.W.185.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

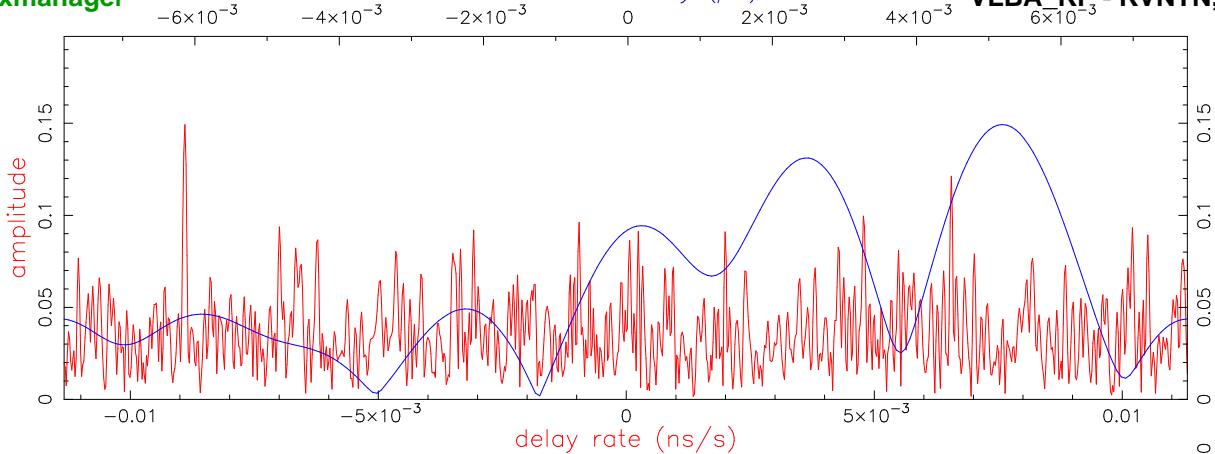
fxmanager

0102+584.1HR8HE, No0110, kt

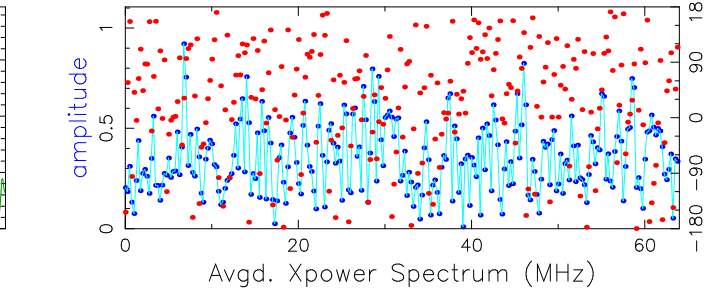
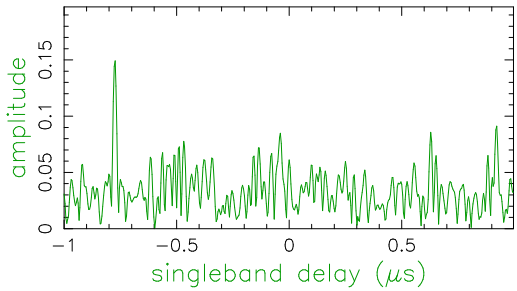
VLBA_KP - KVNTN, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

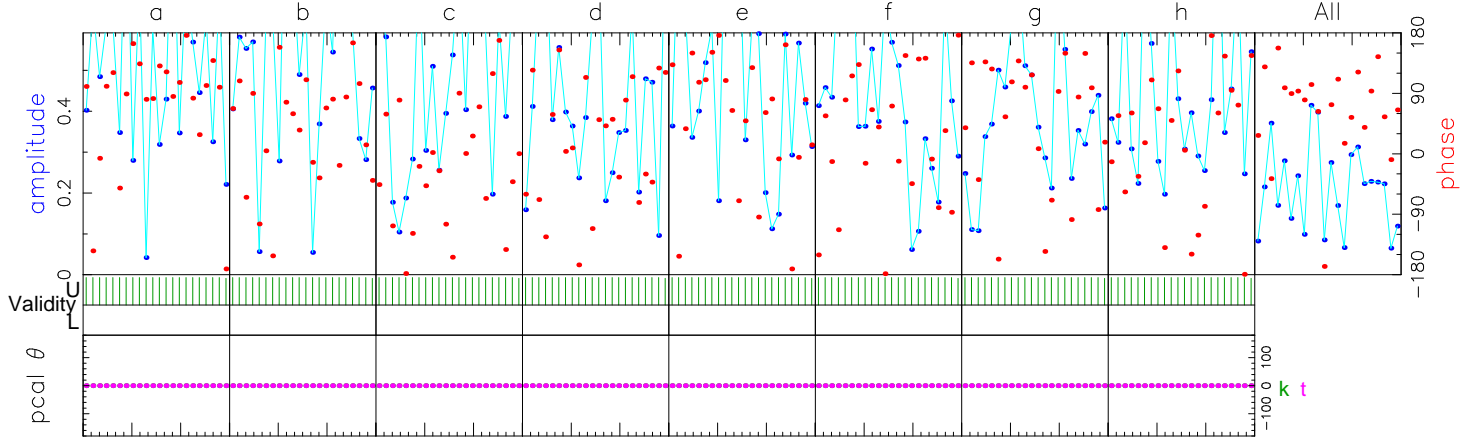


SNR 5.5
Int time 179.975
Amp 0.197
Phase 83.8
PFD 9.8e-01
Delays (us)
SBD -0.774698
MBD 0.005148
Fringe rate (Hz)
-0.768375
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 083000.00
Stop 083300.22
FRT 083130.00
Corr/FF/build
2021:006:162416
2021:010:134220
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
k:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:t	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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.07217486426E+04				1.07225247445E+04			Apriori delay (usec)	5.14812E-03 +/- 2.0E-04
Sband delay (usec)		1.07217500468E+04				-1.0450001E+00			Apriori clock (usec)	-7.74698E-01 +/- 1.6E-03
Phase delay (usec)		1.07225247472E+04				0.0000000E+00			Apriori clockrate (us/s)	2.70218E-06 +/- 6.7E-07
Delay rate (us/s)		-8.80342531641E-01				-8.80333611567E-01			Apriori rate (us/s)	-8.92007E-06 +/- 6.4E-09
Total phase (deg)			261.3			-5.88931137078E-05			Apriori accel (us/s/s)	83.8 +/- 20.7
	RMS	Theor.	Amplitude	0.197 +/- 0.036					Resid mbdelay (usec)	
ph/seg (deg)	52.9	48.6	Search (1024X32)	0.147					Resid sbdelay (usec)	
amp/seg (%)	80.0	84.8	Interp.	0.000					Resid phdelay (usec)	
ph/frq (deg)	46.0	29.3	Inc. seg. avg.	0.205					Resid rate (us/s)	
amp/frq (%)	60.7	51.2	Inc. frq. avg.	0.214					Resid phase (deg)	

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): 128
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite
 sb window (us) -1.000 1.000
 mb window (us) -0.008 0.008
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

k: az 340.4 el 60.7 pa 146.5 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 9604.182 -7684.508 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/kt..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/kt.W.199.1HR8HE

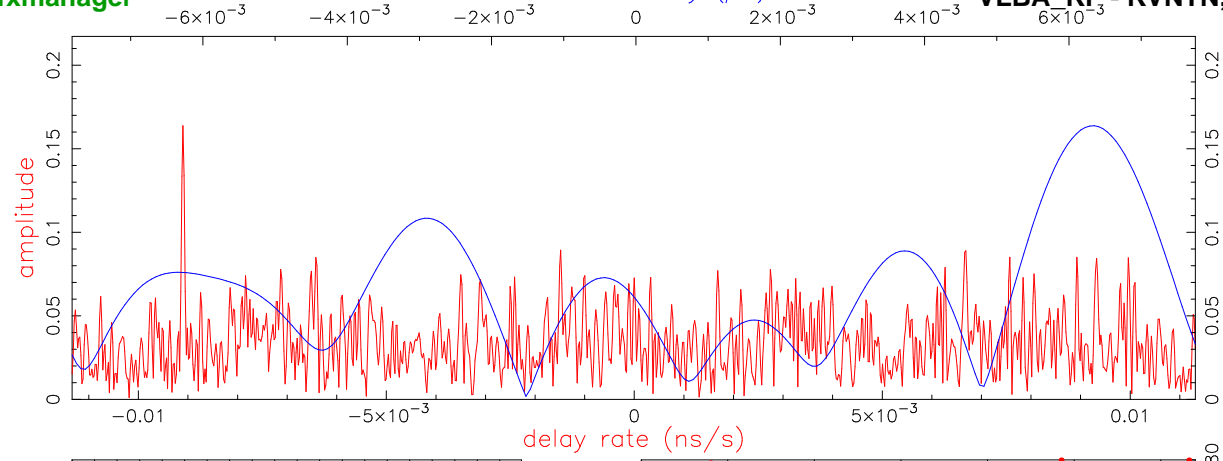
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

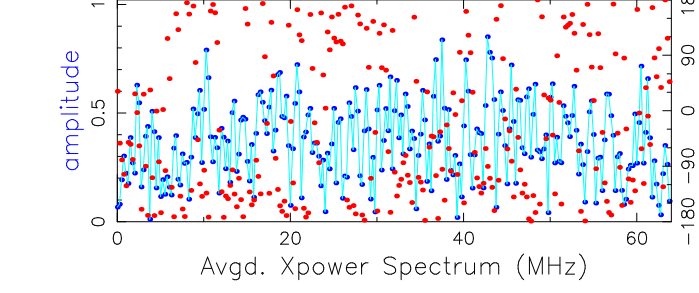
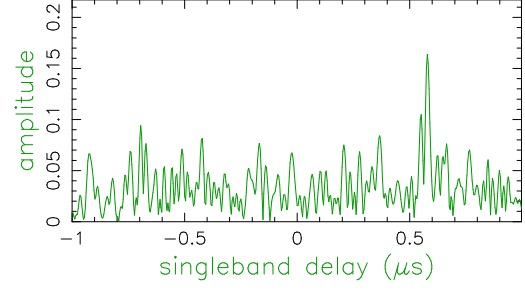
0102+584.1HR8HE, No0110, kt

VLBA_KP - KVNTN, fgroup W, pol RL

multiband delay (μ s)

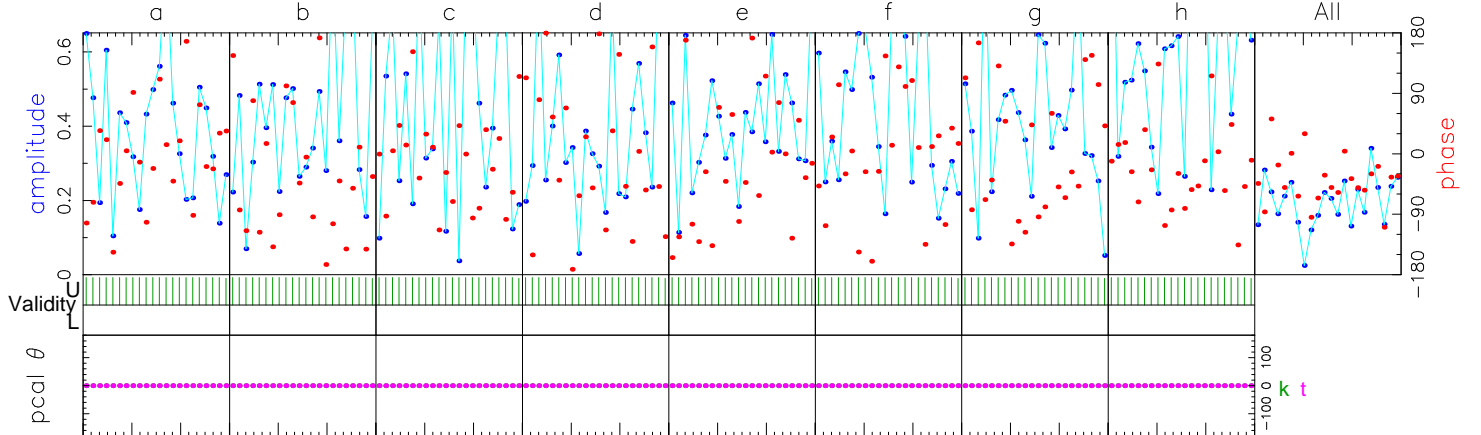


Fringe quality 0
 SNR 6.0
 Int time 179.975
 Amp 0.217
 Phase -38.2
 PFD 2.1e-01
 Delays (us)
 SBD 0.578501
 MBD 0.006340
 Fringe rate (Hz) -0.785719
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134223
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
k:t	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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.07231092095E+04				1.07225247445E+04			Resid mbdelay (usec)	6.33998E-03 +/- 1.8E-04
Sband delay (usec)		1.07231032450E+04				-1.0450001E+00			Resid sbdelay (usec)	5.78501E-01 +/- 1.4E-03
Phase delay (usec)		1.07225247433E+04				0.0000000E+00			Resid phdelay (usec)	-1.23208E-06 +/- 6.1E-07
Delay rate (us/s)		-8.80342732982E-01				-8.80333611567E-01			Resid rate (us/s)	-9.12142E-06 +/- 5.9E-09
Total phase (deg)			139.3			-5.88931137078E-05			Resid phase (deg)	-38.2 +/- 19.1
ph/seg (deg)	RMS 37.0	Theor. 44.7	Amplitude 0.217 +/- 0.036	Search (1024X32) 0.159	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			sb window (us)	-1.000 1.000
amp/seg (%)	45.1	78.0	Interp. 0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	Bits/sample: 2x2	SampCntNorm: enabled			mb window (us)	-0.008 0.008
ph/frq (deg)	31.0	27.0	Inc. seg. avg. 0.198	Sample rate(MISamp/s): 128	Data rate(Mb/s): 2048	nlags: 256			dr window (ns/s)	-0.011 0.011
amp/frq (%)	69.2	47.1	Inc. frq. avg. 0.214						ion window (TEC)	0.00 0.00

k: az 340.4 el 60.7 pa 146.5 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 9604.182 -7684.508 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/kt..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/kt.W.225.1HR8HE

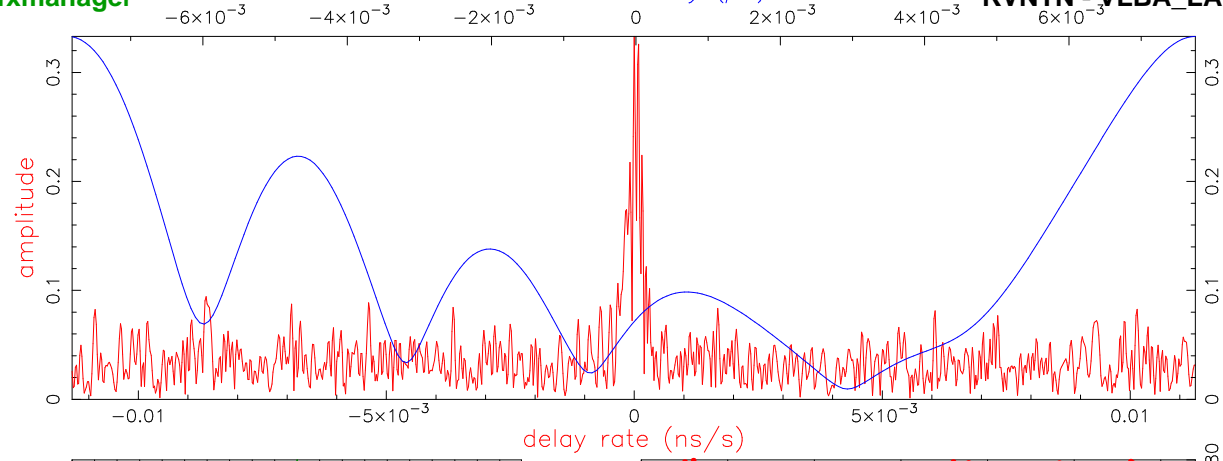
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tl

KVNTN - VLBA_LA, fgroup W, pol LL

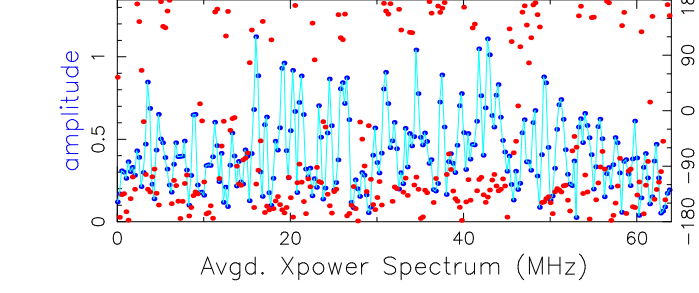
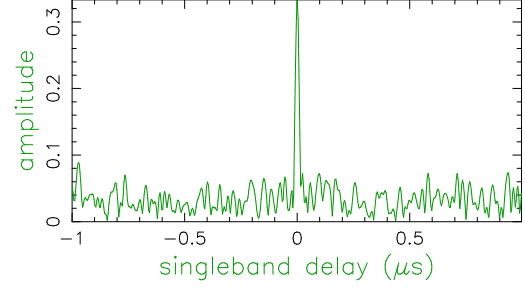
multiband delay (μ s)



Fringe quality 9

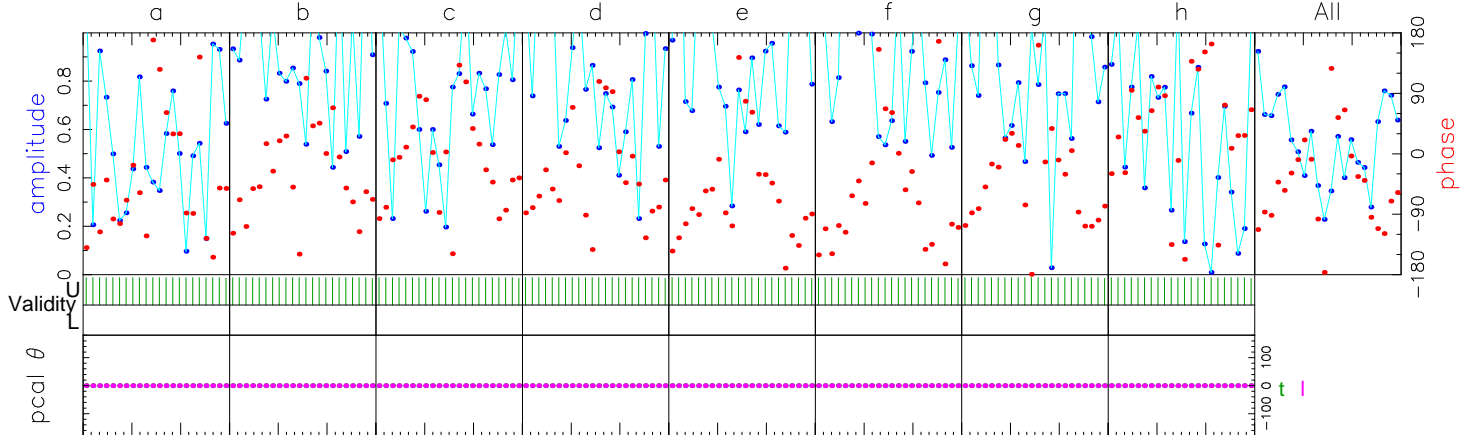
SNR 12.2
 Int time 179.975
 Amp 0.333
 Phase -57.8
 PFD 6.2e-26
 Delays (us)
 SBD -0.000049
 MBD -0.007882
 Fringe rate (Hz) 0.000004
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134237
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.10251339849E+04									
Sband delay (usec)	-1.10251417770E+04									
Phase delay (usec)	-1.10251417299E+04									
Delay rate (us/s)	9.28148823259E-01									
Total phase (deg)			-221.0							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
ion window (TEC)										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 68.4 22.0 Search (1024X32) 0.333 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 85.1 38.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 55.0 13.3 Inc. seg. avg. 0.519 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.7 23.1 Inc. frq. avg. 0.419 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 t: az 33.0 el 21.4 pa -60.6 l: az 333.0 el 62.5 pa 135.7 u,v (fr/asec) -10131.204 6955.403 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tl.1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tl.W.339.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

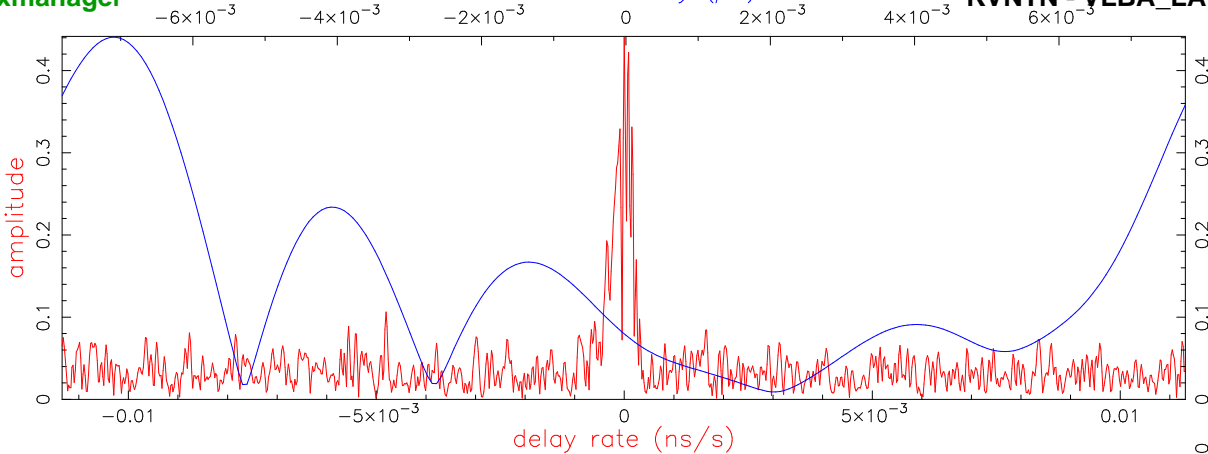
fxmanager

0102+584.1HR8HE, No0110, tl

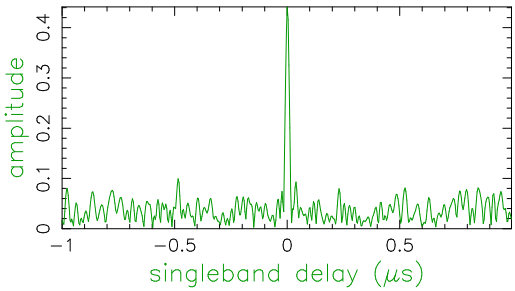
KVNTN - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

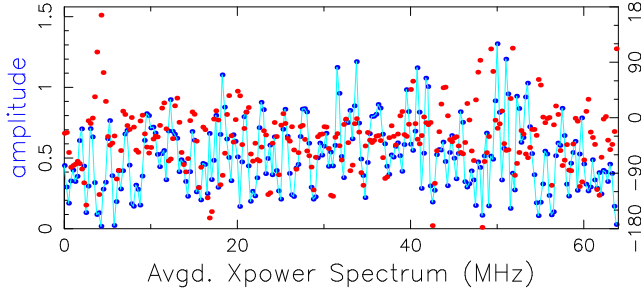
Fringe quality 8



SNR 16.2
Int time 179.975
Amp 0.442
Phase 55.5
PFD 0.0e+00
Delays (us)
SBD 0.000668
MBD -0.007062
Fringe rate (Hz) 0.000002
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

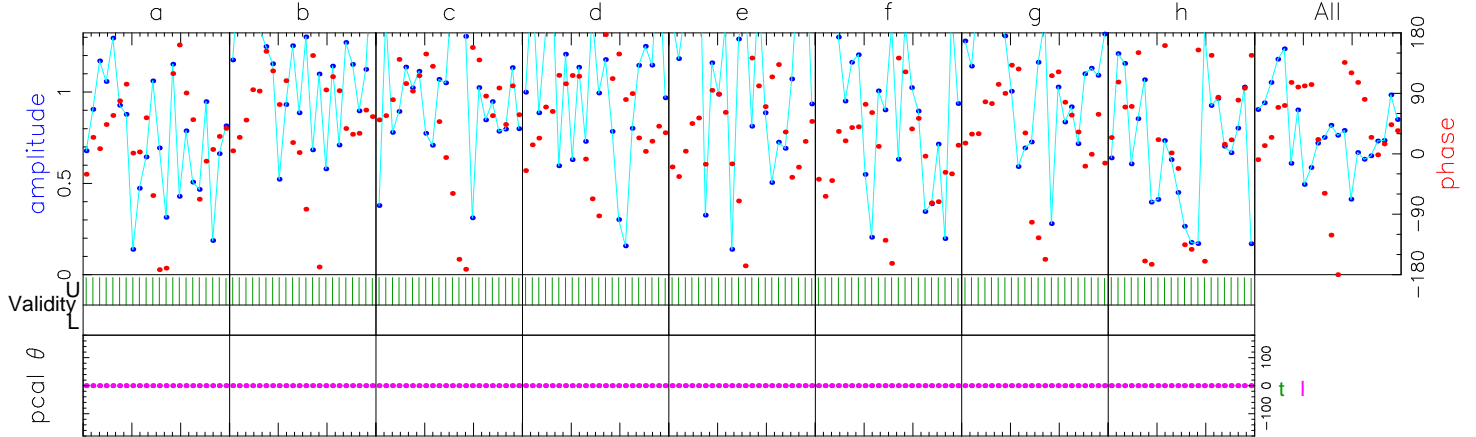


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 083000.00
Stop 083300.22
FRT 083130.00
Corr/FF/build
2021:006:162416
2021:010:134239
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
t	1000	1000	1000	1000	1000	1000	1000	1000			
l	1000	1000	1000	1000	1000	1000	1000	1000			
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
t	1000	1000	1000	1000	1000	1000	1000	1000			
l	1000	1000	1000	1000	1000	1000	1000	1000			
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	-1.10251487896E+04										
Sband delay (usec)	-1.10251410603E+04										
Phase delay (usec)	-1.10251417262E+04										
Delay rate (us/s)	9.28148823232E-01										
Total phase (deg)			-107.6								
				Apriori delay (usec)	-1.10251417280E+04				Resid mbdelay (usec)	-7.06159E-03	+/- 6.7E-05
				Apriori clock (usec)	1.7604589E+00				Resid sbdelay (usec)	6.67750E-04	+/- 5.3E-04
				Apriori clockrate (us/s)	1.9999998E-07				Resid phdelay (usec)	1.79131E-06	+/- 2.3E-07
				Apriori rate (us/s)	9.28148823209E-01				Resid rate (us/s)	2.26738E-11	+/- 2.2E-09
				Apriori accel (us/s/s)	5.51849093520E-05				Resid phase (deg)	55.5	+/- 7.1
ph/seg (deg)	66.6	16.6		Search (1024X32)	0.432				PCal mode: MANUAL, MANUAL		
amp/seg (%)	91.5	29.0		Interp.	0.000				PCal rate: 0.000E+00, 0.000E+00 (us/s)		
ph/frq (deg)	37.6	10.0		Inc. seg. avg.	0.760				SampCntNorm: enabled		
amp/frq (%)	30.0	17.5		Inc. frq. avg.	0.497				Bits/sample: 2x2		
									Sample rate(MISamp/s): 128		
									Data rate(Mb/s): 2048		
									nlags: 256		
									t_cohere infinite		
t: az 33.0 el 21.4 pa -60.6				l: az 333.0 el 62.5 pa 135.7					ion window (TEC)	0.00	0.00
Control file: cf_1234_gmva				Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tl.1HR8HE							
				Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tl.W.353.1HR8HE							

simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

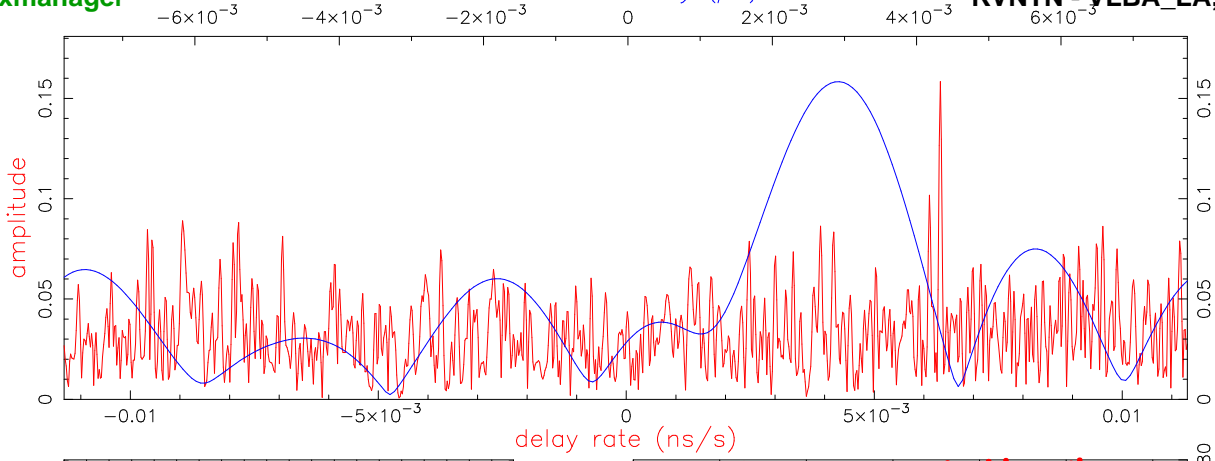
fxmanager

0102+584.1HR8HE, No0110, tl

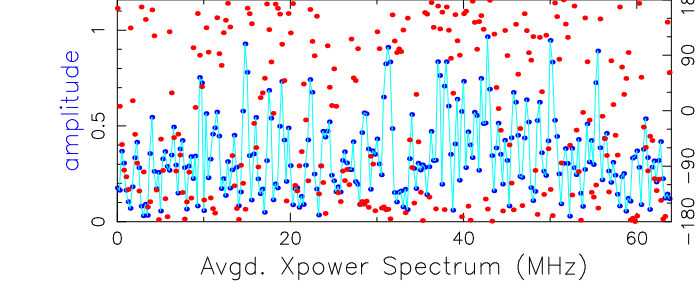
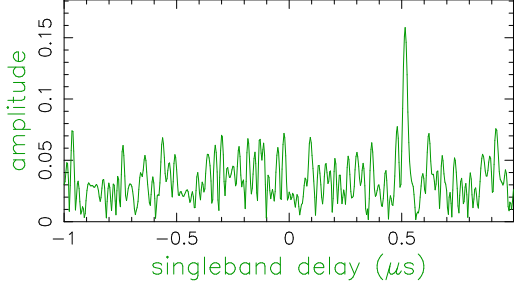
KVNTN - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

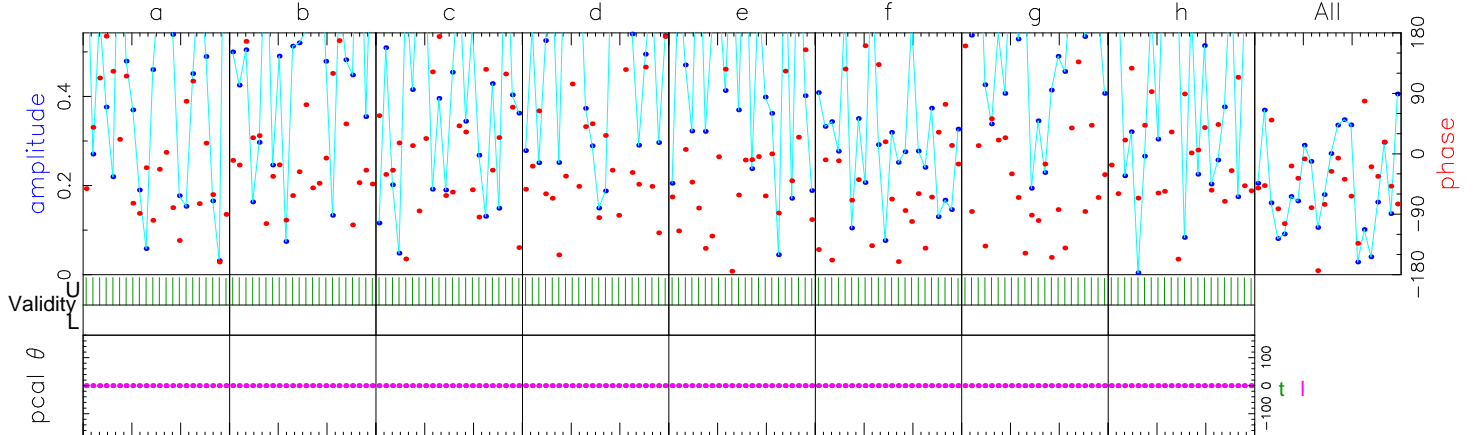


SNR 5.8
 Int time 179.975
 Amp 0.181
 Phase -39.0
 PFD 5.3e-01
 Delays (us)
 SBD 0.515085
 MBD 0.002907
 Fringe rate (Hz)
 0.545685
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134241
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.10246231963E+04								2.90676E-03	+/- 1.9E-04
Sband delay (usec)	-1.10246266433E+04								5.15085E-01	+/- 1.5E-03
Phase delay (usec)	-1.10251417293E+04								-1.25919E-06	+/- 6.4E-07
Delay rate (us/s)	9.28155158075E-01								6.33487E-06	+/- 6.1E-09
Total phase (deg)			-202.2						-39.0	+/- 19.7
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
RMS	54.9	46.2								
Theor.	46.2									
Amplitude										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
PC period (AP's) 5, 5										
SampCntNorm: enabled										
nlags: 256										
t_cohere infinite										
simultaneous interpolator										

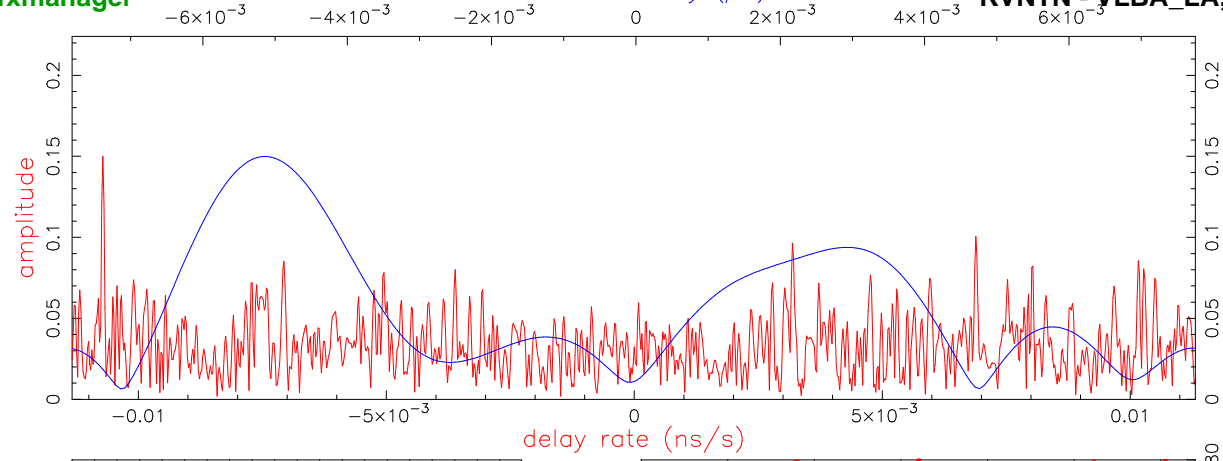
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tl

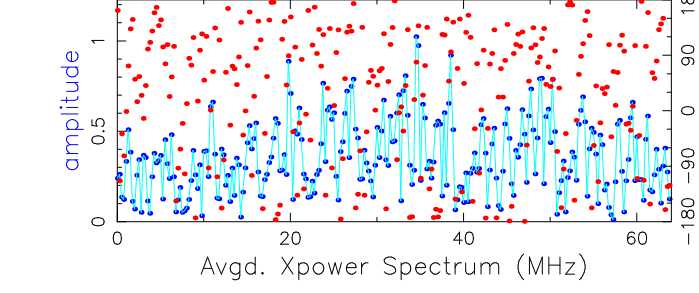
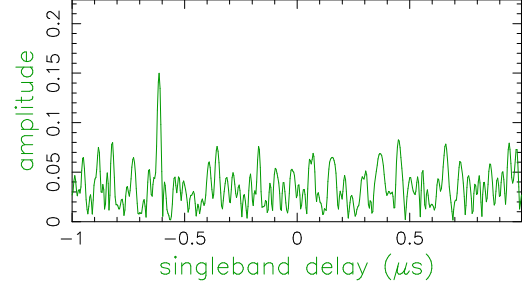
KVNTN - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)



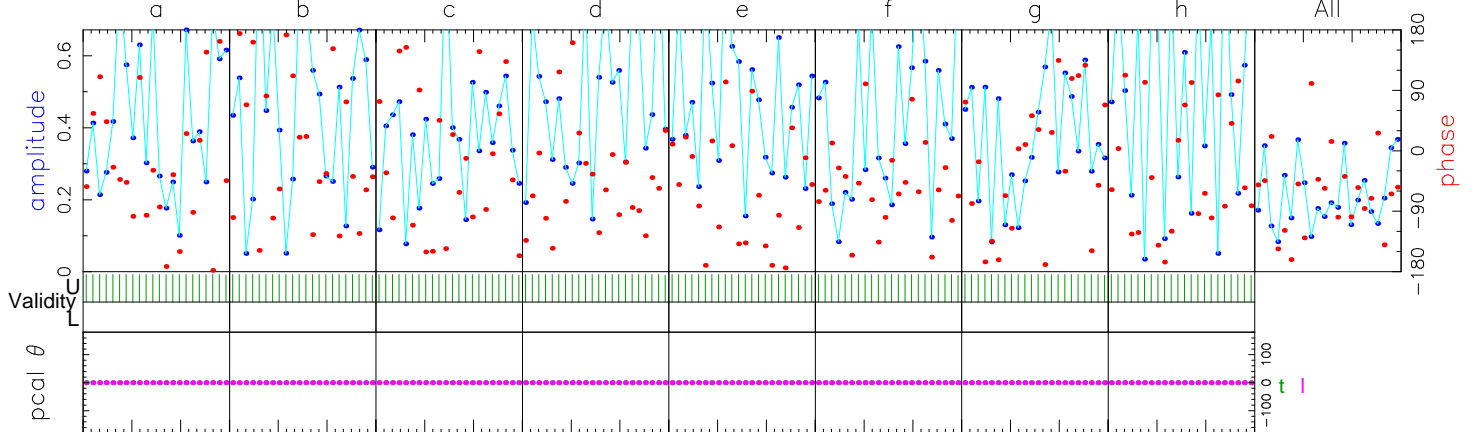
Fringe quality 0

SNR 5.5
 Int time 179.975
 Amp 0.224
 Phase -65.8
 PFD 9.9e-01
 Delays (us)
 SBD -0.613773
 MBD -0.005153
 Fringe rate (Hz)
 -0.924702
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134243
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-37.9	-87.4	-116.5	-62.4	-57.4	-55.6	81.5	-76.1		-65.8
	0.2	0.2	0.1	0.5	0.2	0.4	0.1	0.4		0.2
	46.6	23.2	286.2	100.5	167.3	99.8	227.1	233.9		99.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.10257562558E+04			Apriori delay (usec)	-1.1025147280E+04		Resid mbdelay (usec)	-5.15274E-03		+/- 2.0E-04
Sband delay (usec)	-1.10257555008E+04			Apriori clock (usec)	1.7604589E+00		Resid sbdelay (usec)	-6.13773E-01		+/- 1.6E-03
Phase delay (usec)	-1.10251417302E+04			Apriori clockrate (us/s)	1.9999998E-07		Resid phdelay (usec)	-2.12120E-06		+/- 6.7E-07
Delay rate (us/s)	9.28138088336E-01			Apriori rate (us/s)	9.28148823209E-01		Resid rate (us/s)	-1.07349E-05		+/- 6.4E-09
Total phase (deg)		-229.0		Apriori accel (us/s/s)	5.51849093520E-05		Resid phase (deg)	-65.8		+/- 20.8
	RMS	Theor.	Amplitude	0.224 +/- 0.041						
ph/seg (deg)	61.5	48.8	Search (1024X32)	0.144		Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
amp/seg (%)	73.2	85.2	Interp.	0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	65.6	29.4	Inc. seg. avg.	0.235		Bits/sample: 2x2	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011
amp/frq (%)	62.3	51.4	Inc. frq. avg.	0.222		Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
t: az 33.0 el 21.4 pa -60.6			l: az 333.0 el 62.5 pa 135.7			u,v (fr/asec) -10131.204 6955.403				simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tl.1HR8HE			Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tl.W.387.1HR8HE				

Mk4/DiFX fourfit 3.21 rev 2937

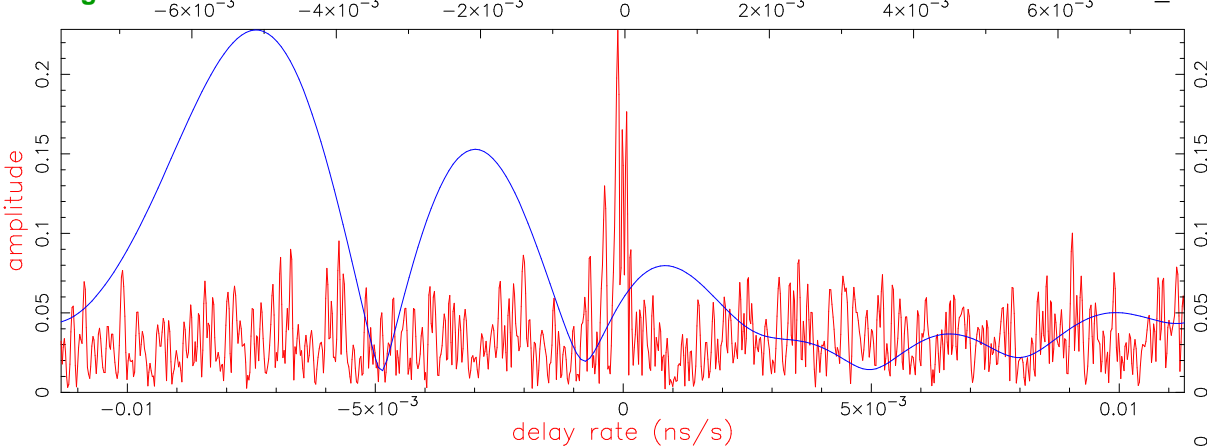
fxmanager

0102+584.1HR8HE, No0110, tm

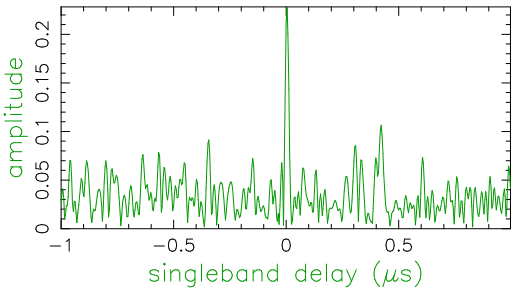
KVNTN - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

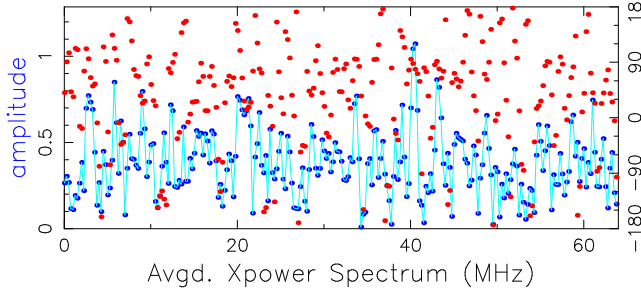
Fringe quality 9



SNR 8.4
 Int time 179.978
 Amp 0.228
 Phase 163.9
 PFD 9.9e-09
 Delays (us)
 SBD 0.003276
 MBD -0.005162
 Fringe rate (Hz)
 -0.009832
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

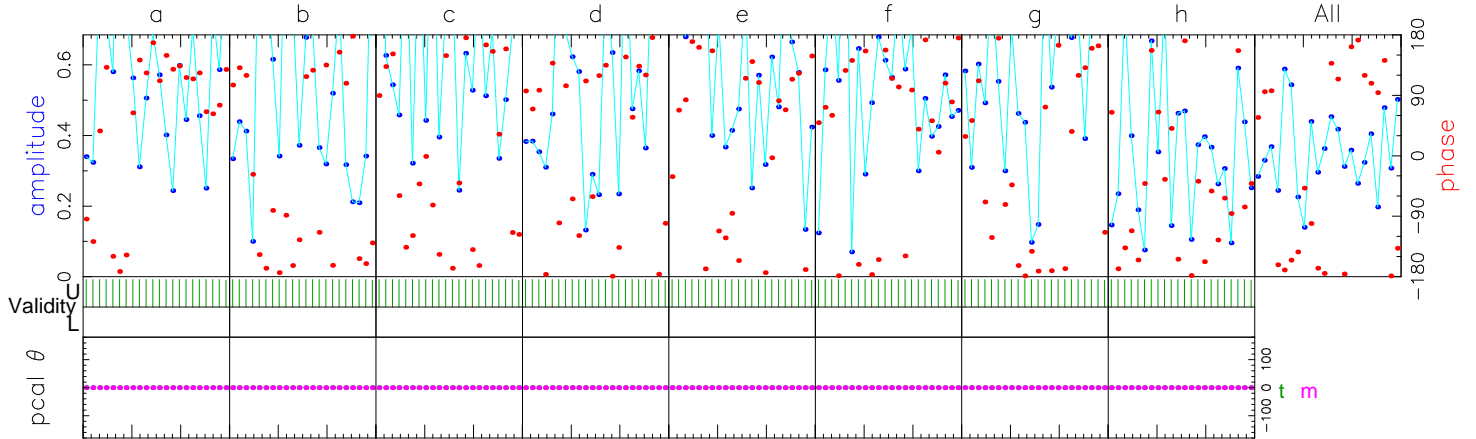


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134238
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
t:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-7.82466115960E+03	Apriori delay (usec)	-7.82467162282E+03	Resid mbdelay (usec)	-5.16178E-03	+/-	1.3E-04
Sband delay (usec)	-7.82466834707E+03	Apriori clock (usec)	-1.1985000E+01	Resid sbdelay (usec)	3.27575E-03	+/-	1.0E-03
Phase delay (usec)	-7.82467161754E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.28412E-06	+/-	4.4E-07
Delay rate (us/s)	3.35386883088E-01	Apriori rate (us/s)	3.35386997231E-01	Resid rate (us/s)	-1.14143E-07	+/-	4.2E-09
Total phase (deg)	-48.4	Apriori accel (us/s/s)	6.17020533647E-05	Resid phase (deg)	163.9	+/-	13.7

ph/seg (deg)	59.2	RMS	32.1	Theor.	Amplitude	0.228 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	74.3	Search (1024X32)	0.223	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	42.2	Inc. seg. avg.	0.308	Inc. frq. avg.	0.257	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	35.4	Inc. frq. avg.	0.257	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	dr window (ns/s)	-0.011	0.011
t: az 33.0 el 21.4 pa -60.6	m: az 19.3 el 47.1 pa -143.1	u, v (fr/asec)	-3627.772 8897.811	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00		

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tm..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tm.W.344.1HR8HE simultaneous interpolator

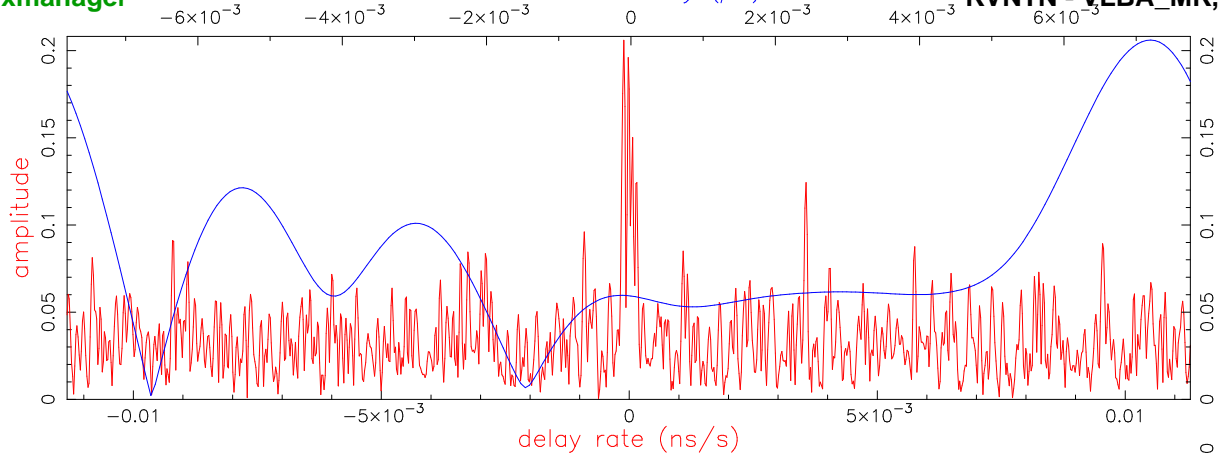
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tm

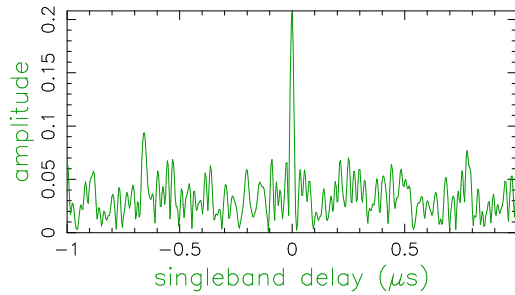
KVNTN - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

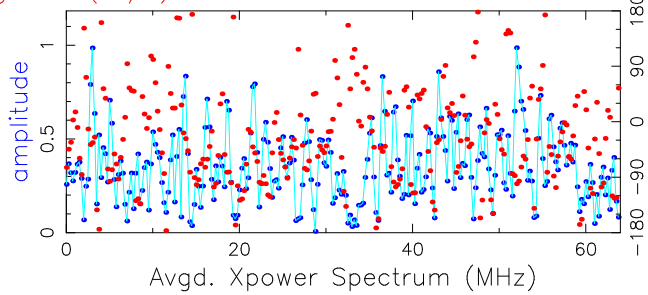


Fringe quality 9

SNR 7.6
 Int time 179.978
 Amp 0.208
 Phase -140.0
 PFD 3.7e-06
 Delays (us)
 SBD -0.001307
 MBD 0.007156
 Fringe rate (Hz)
 -0.009675
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

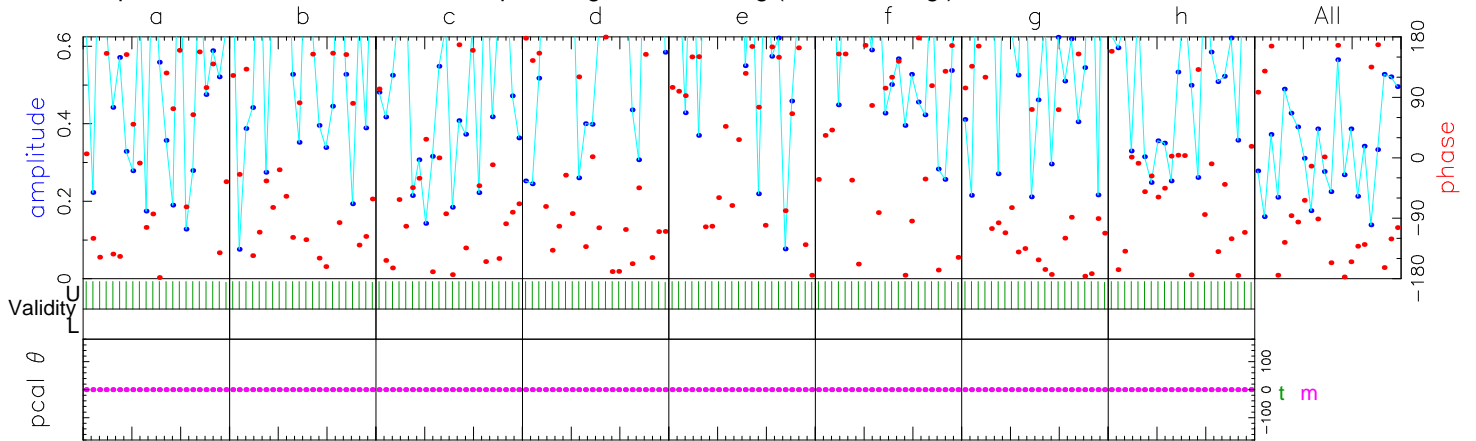


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134240
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



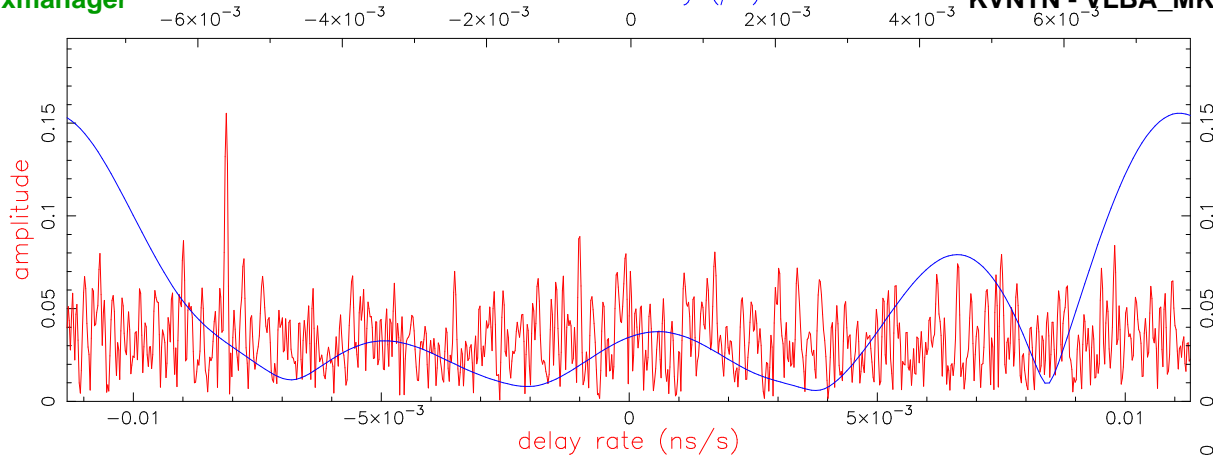
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
t:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) -7.82468009176E+03 Apriori delay (usec) -7.82467162282E+03 Resid mbdelay (usec) 7.15606E-03 +/- 1.4E-04
 Sband delay (usec) -7.82467293032E+03 Apriori clock (usec) -1.1985000E+01 Resid sbdelay (usec) -1.30750E-03 +/- 1.1E-03
 Phase delay (usec) -7.82467162733E+03 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -4.51444E-06 +/- 4.8E-07
 Delay rate (us/s) 3.35386884919E-01 Apriori rate (us/s) 3.35386997231E-01 Resid rate (us/s) -1.12312E-07 +/- 4.7E-09
 Total phase (deg) -352.3 Apriori accel (us/s/s) 6.17020533647E-05 Resid phase (deg) -140.0 +/- 15.0

RMS Theor. Amplitude 0.208 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 65.4 35.2 Search (1024X32) 0.204 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 87.3 61.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 49.4 21.2 Inc. seg. avg. 0.287 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 51.6 37.0 Inc. frq. avg. 0.237 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

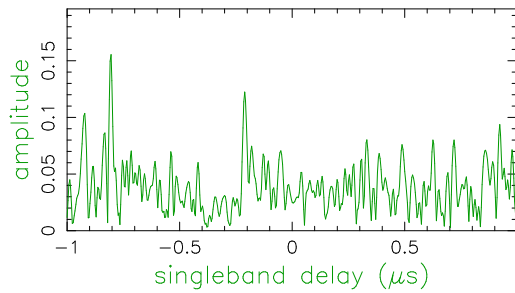
t: az 33.0 el 21.4 pa -60.6 m: az 19.3 el 47.1 pa -143.1 u,v (fr/asec) -3627.772 8897.811 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tm..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tm.W.361.1HR8HE

multiband delay (μ s)

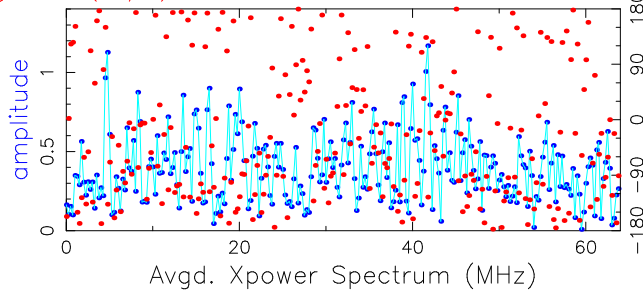


Fringe quality 0

SNR 5.8
Int time 179.978
Amp 0.196
Phase 54.4
PFD 6.6e-01
Delays (us)
SBD -0.805913
MBD -0.008042
Fringe rate (Hz)
-0.700337
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

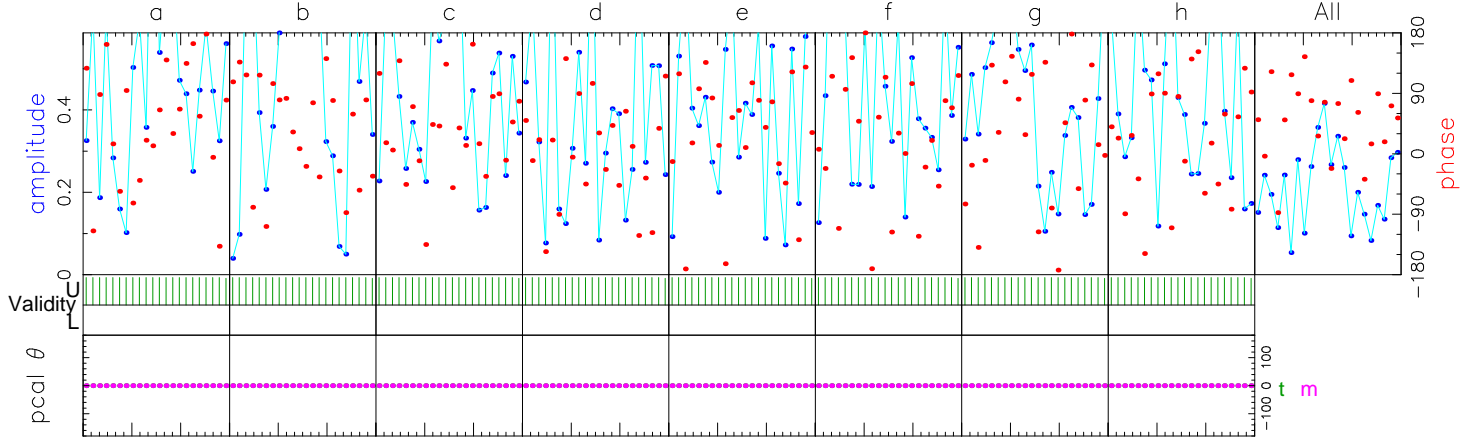


delay rate (ns/s)



Exp. c202a
Yr:day 16383
Start 2021:006:162416
Stop 2021:010:134241
FRT 2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-7.82547653982E+03									
Sband delay (usec)	-7.82547753582E+03									
Phase delay (usec)	-7.82467162107E+03									
Delay rate (us/s)	3.35378867009E-01									
Total phase (deg)			-157.9							
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)									54.4	+/- 19.9
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
ph/seg (deg)	55.0	46.7								
amp/seg (%)	70.3	81.5								
ph/frq (deg)	29.9	28.2								
amp/frq (%)	29.5	49.1								
Search (1024X32)										
Inc. seg. avg.										
Inc. frq. avg.										
0.196 +/- 0.034										
0.153										
0.000										
0.199										
0.191										
PCal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
-1.000 1.000										
-0.008 0.008										
-0.011 0.011										
0.00 0.00										
t: az 33.0 el 21.4 pa -60.6										
m: az 19.3 el 47.1 pa -143.1										
u,v (fr/asec) -3627.772 8897.811										
Control file: cf_1234_gmva										
Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tm..1HR8HE										
Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tm.W.376.1HR8HE										

simultaneous interpolator

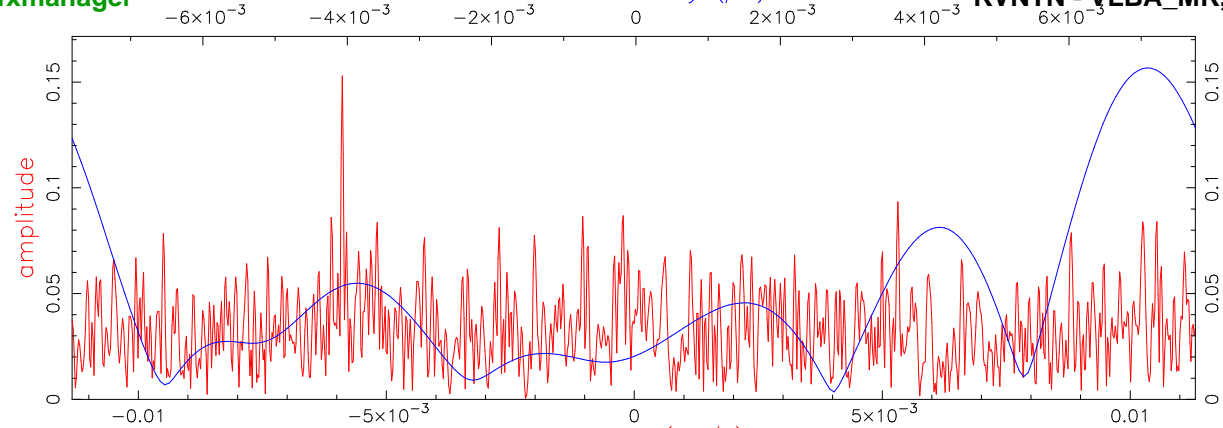
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tm

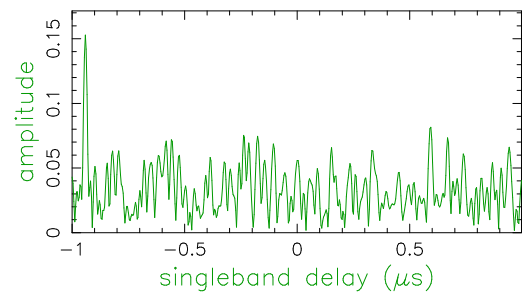
KVNTN - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

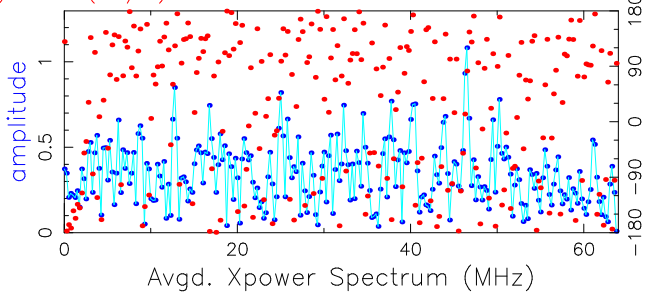


Fringe quality 0

SNR 5.6
 Int time 179.978
 Amp 0.172
 Phase -172.1
 PFD 9.1e-01
 Delays (us)
 SBD -0.940955
 MBD -0.008301
 Fringe rate (Hz)
 -0.508704
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

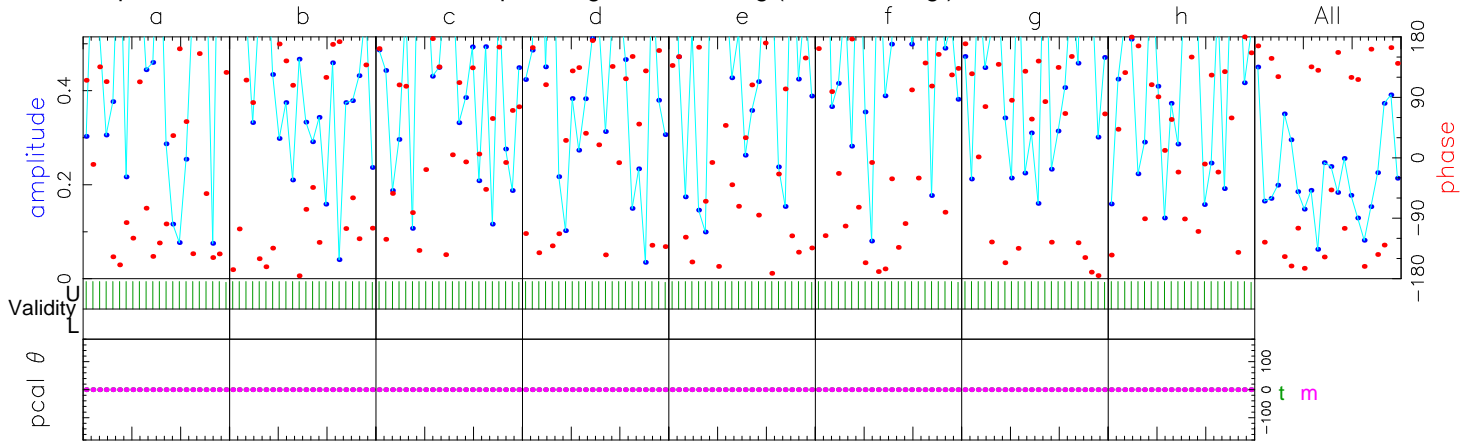


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134243
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
t:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-7.82561742360E+03	-7.82561257732E+03	-7.82467162837E+03	-7.82467162282E+03	-7.82467162282E+03	-1.1985000E+01	-1.1985000E+01	-1.1985000E+01		
Sband delay (usec)	-7.82561257732E+03	-7.82467162837E+03	-7.82467162282E+03	-7.82467162282E+03	-7.82467162282E+03	-1.1985000E+01	-1.1985000E+01	-1.1985000E+01		
Phase delay (usec)	-7.82467162837E+03	-7.82467162282E+03	-7.82467162282E+03	-7.82467162282E+03	-7.82467162282E+03	-1.1985000E+01	-1.1985000E+01	-1.1985000E+01		
Delay rate (us/s)	3.35381091684E-01	3.35381091684E-01	3.35381091684E-01	3.35381091684E-01	3.35381091684E-01	3.35381091684E-01	3.35381091684E-01	3.35381091684E-01		
Total phase (deg)			-24.4							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
ph/seg (deg)	51.2	47.9		0.172 +/- 0.031						
amp/seg (%)	77.4	83.5		0.000						
ph/frq (deg)	30.6	28.9		0.185						
amp/frq (%)	38.2	50.4		0.166						
t: az 33.0 el 21.4 pa -60.6										
m: az 19.3 el 47.1 pa -143.1										
u,v (fr/asec) -3627.772 8897.811										
Control file: cf_1234_gmva										
Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tm..1HR8HE										
Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tm.W.392.1HR8HE										

simultaneous interpolator

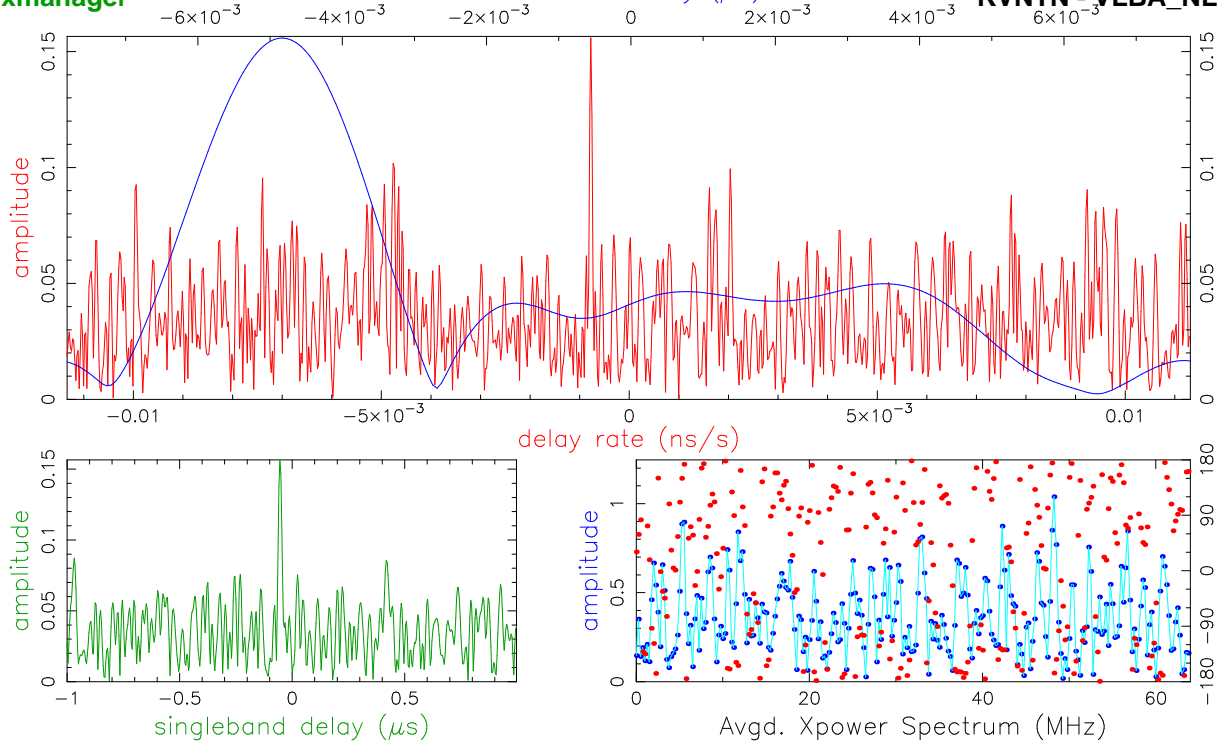
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tn

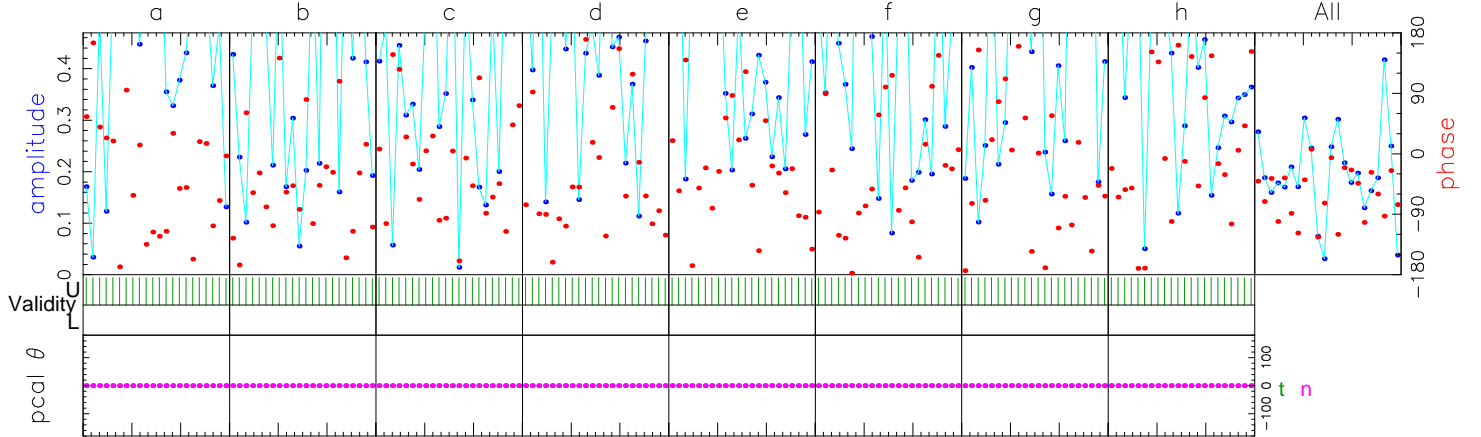
KVNTN - VLBA_NL, fgroup W, pol LL

multiband delay (μ s)



Fringe quality 0
 SNR 5.7
 Int time 179.975
 Amp 0.157
 Phase -56.0
 PFD 7.1e-01
 Delays (us)
 SBD -0.054014
 MBD -0.004828
 Fringe rate (Hz)
 -0.066279
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134238
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
tn	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.07297426511E+04									
Sband delay (usec)	-1.07297449625E+04									
Phase delay (usec)	-1.07296909503E+04									
Delay rate (us/s)	1.03847472352E+00									
Total phase (deg)			-166.1							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
ion window (TEC)										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

ph/seg (deg) 38.1 46.9 Search (1024X32) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.0 81.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.7 28.3 Inc. seg. avg. 0.148 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.6 49.3 Inc. frq. avg. 0.152 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 33.0 el 21.4 pa -60.6 n: az 318.3 el 60.9 pa 108.3 u,v (fr/asec) -11348.192 5378.153 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tn..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tn.W.348.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

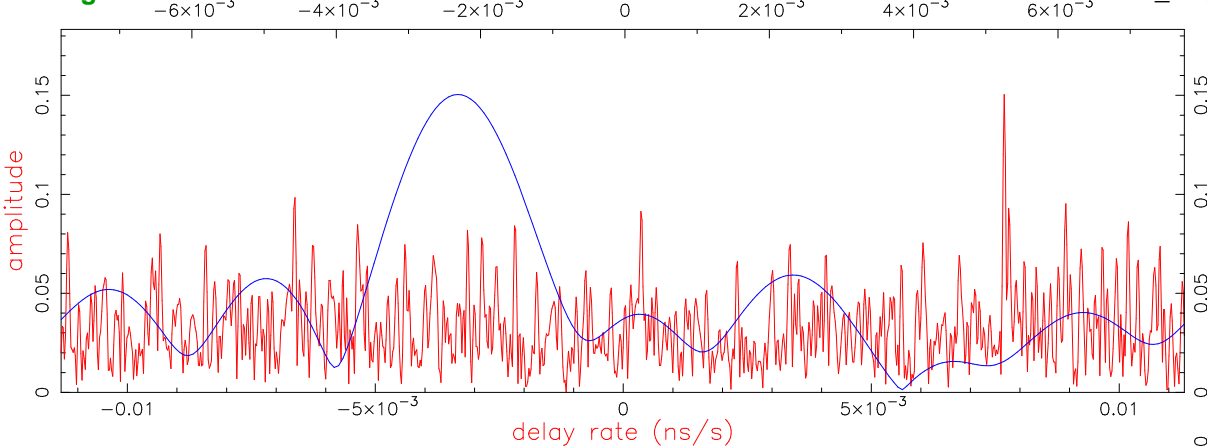
fxmanager

0102+584.1HR8HE, No0110, tn

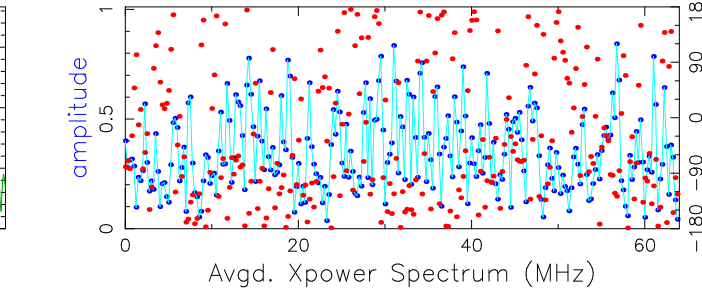
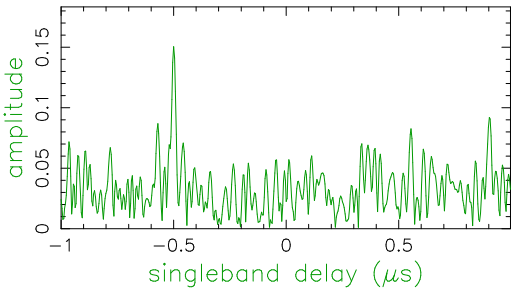
KVNTN - VLBA_NL, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 0

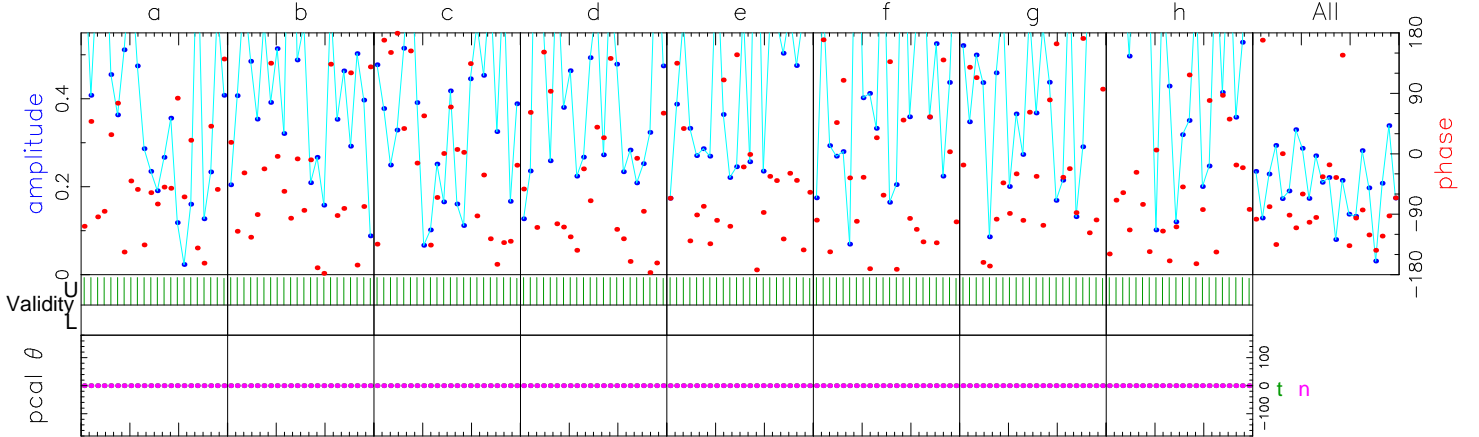


SNR 5.5
 Int time 179.975
 Amp 0.183
 Phase -92.9
 PFD 9.8e-01
 Delays (us)
 SBD -0.499679
 MBD -0.002302
 Fringe rate (Hz)
 0.662936
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134241
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
t:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
tn	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-1.07301932504E+04	Apriori delay (usec)	-1.07296909485E+04	Resid mbdelay (usec)	-2.30185E-03	+/-	2.0E-04
Sband delay (usec)	-1.07301906273E+04	Apriori clock (usec)	1.2430849E+00	Resid sbdelay (usec)	-4.99679E-01	+/-	1.6E-03
Phase delay (usec)	-1.07296909515E+04	Apriori clockrate (us/s)	-4.0000002E-07	Resid phdelay (usec)	-2.99611E-06	+/-	6.7E-07
Delay rate (us/s)	1.03848318898E+00	Apriori rate (us/s)	1.03847549296E+00	Resid rate (us/s)	7.69602E-06	+/-	6.4E-09
Total phase (deg)	-202.9	Apriori accel (us/s/s)	4.57801075354E-05	Resid phase (deg)	-92.9	+/-	20.8

ph/seg (deg)	50.4	Theor.	48.7	Amplitude	0.183 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	62.4	Search (1024X32)	0.143	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	26.8	Inc. seg. avg.	0.185	Inc. frq. avg.	0.172	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	29.8	Inc. frq. avg.	0.172			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
t: az 33.0 el 21.4 pa -60.6		n: az 318.3 el 60.9 pa 108.3		u,v (fr/asec)	-11348.192 5378.153	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tn..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tn.W.369.1HR8HE simultaneous interpolator

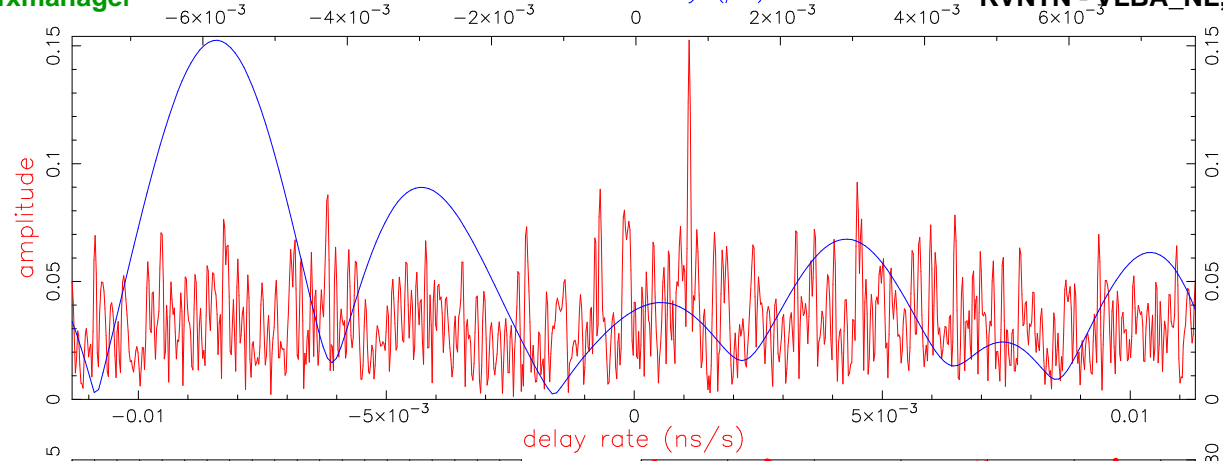
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

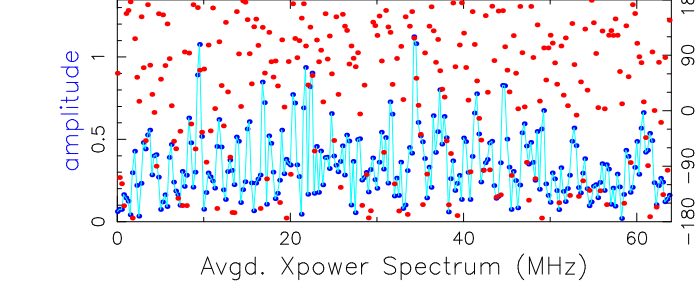
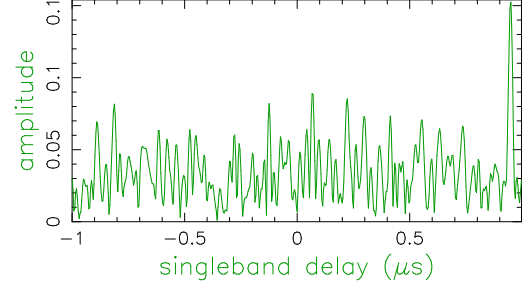
0102+584.1HR8HE, No0110, tn

KVNTN - VLBA_NL, fgroup W, pol LR

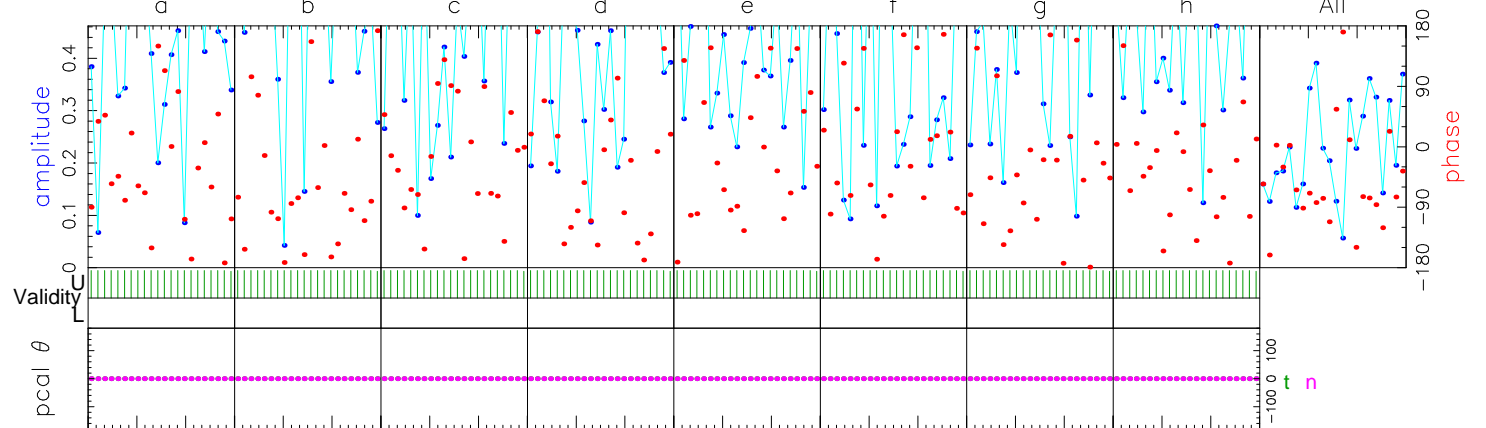
multiband delay (μ s)



Fringe quality 0
 SNR 5.6
 Int time 179.975
 Amp 0.154
 Phase -61.0
 PFD 8.9e-01
 Delays (us)
 SBD 0.948026
 MBD -0.005822
 Fringe rate (Hz) 0.096022
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134243
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
t:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
tn	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.07287436457E+04	-1.07287429223E+04	-1.07296909505E+04	1.03847660768E+00	-1.07296909485E+04	-4.0000002E-07	-1.07296909485E+04	-5.82214E-03		+/- 1.9E-04
Sband delay (usec)	-1.07287429223E+04	-1.07287429223E+04	-1.07296909505E+04	1.03847660768E+00	-1.07296909485E+04	-4.0000002E-07	-1.07296909485E+04	9.48026E-01		+/- 1.5E-03
Phase delay (usec)	-1.07296909505E+04	-1.07296909505E+04	-1.07296909505E+04	1.03847660768E+00	-1.07296909485E+04	-4.0000002E-07	-1.07296909485E+04	-1.96841E-06		+/- 6.6E-07
Delay rate (us/s)				1.03847660768E+00				1.11472E-06		+/- 6.3E-09
Total phase (deg)			-171.1		4.57801075354E-05			-61.0		+/- 20.4
pcal mode:	MANUAL, MANUAL		MANUAL		MANUAL		MANUAL		PC period (AP's) 5, 5	
pcal rate:	0.000E+00, 0.000E+00 (us/s)		0.000E+00 (us/s)		0.000E+00 (us/s)		0.000E+00 (us/s)		sb window (us) -1.000 1.000	
Bits/sample:	2x2		2x2		2x2		2x2		mb window (us) -0.008 0.008	
Sample rate(MISamp/s):	128		128		128		128		dr window (ns/s) -0.011 0.011	
Data rate(Mb/s):	2048		2048		2048		2048		ion window (TEC) 0.00 0.00	
nlags:	256		256		256		256		t_cohere infinite	

ph/seg (deg) 59.9 47.8 Search (1024X32) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 78.7 83.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.4 28.8 Inc. seg. avg. 0.171 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.2 50.3 Inc. frq. avg. 0.147 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 33.0 el 21.4 pa -60.6 n: az 318.3 el 60.9 pa 108.3 u,v (fr/asec) -11348.192 5378.153 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tn..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tn.W.391.1HR8HE

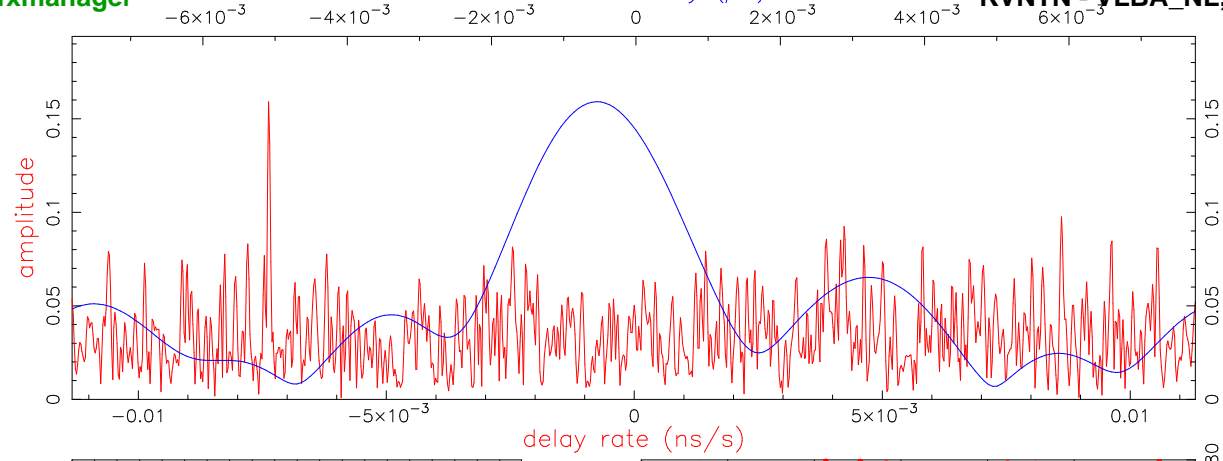
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tn

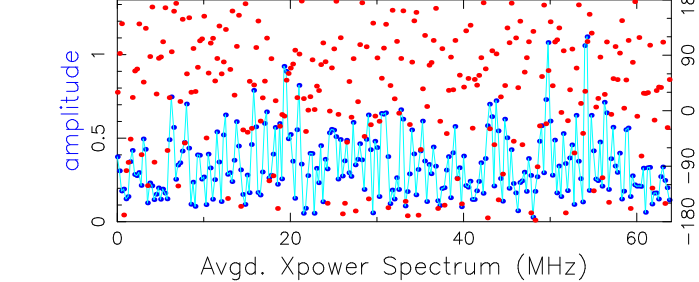
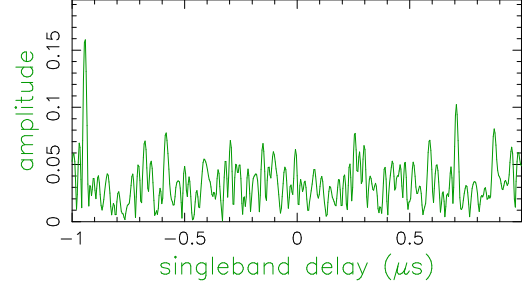
KVNTN - VLBA_NL, fgroup W, pol RL

multiband delay (μ s)



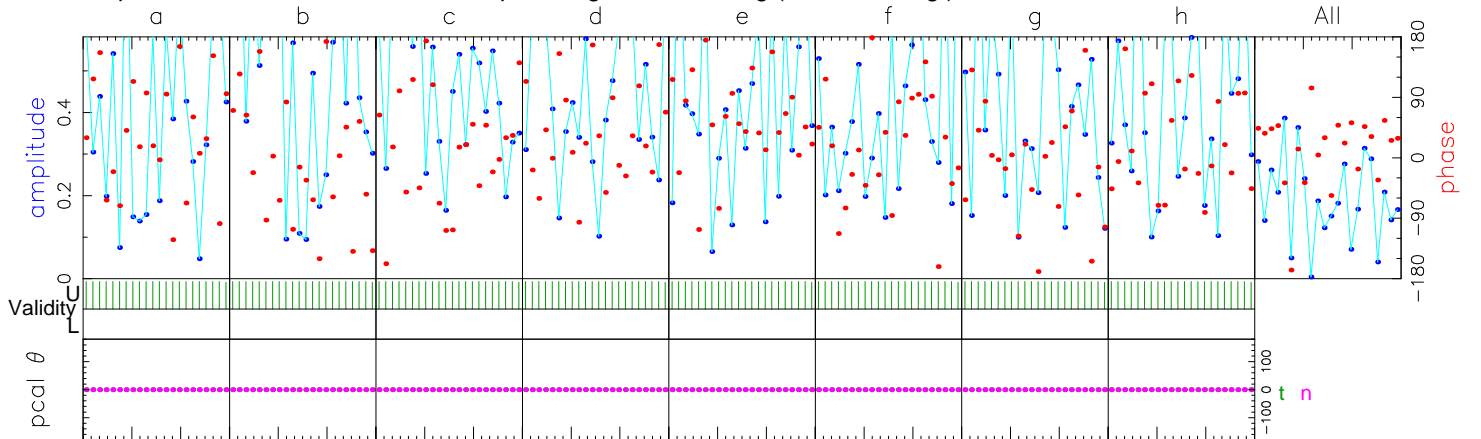
Fringe quality 0

SNR 5.9
 Int time 179.975
 Amp 0.194
 Phase 19.6
 PFD 3.1e-01
 Delays (us)
 SBD -0.943078
 MBD -0.000506
 Fringe rate (Hz)
 -0.635660
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134245
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
tn	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.07306289542E+04	Apriori delay (usec)	-1.07296909485E+04	Resid mbdelay (usec)	-5.05658E-04	+/-	1.8E-04
Sband delay (usec)	-1.07306340268E+04	Apriori clock (usec)	1.2430849E+00	Resid sbdelay (usec)	-9.43078E-01	+/-	1.5E-03
Phase delay (usec)	-1.07296909479E+04	Apriori clockrate (us/s)	-4.0000002E-07	Resid phdelay (usec)	6.31020E-07	+/-	6.2E-07
Delay rate (us/s)	1.03846811358E+00	Apriori rate (us/s)	1.03847549296E+00	Resid rate (us/s)	-7.37938E-06	+/-	6.0E-09
Total phase (deg)	-90.5	Apriori accel (us/s/s)	4.57801075354E-05	Resid phase (deg)	19.6	+/-	19.3

ph/seg (deg)	52.3	Theor.	45.2	Amplitude	0.194 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	64.9		79.0	Search (1024X32)	0.159	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	36.4		27.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	28.2		47.6	Inc. seg. avg.	0.177	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.193	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

t: az 33.0 el 21.4 pa -60.6 n: az 318.3 el 60.9 pa 108.3 u,v (fr/asec) -11348.192 5378.153 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tn..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tn.W.404.1HR8HE

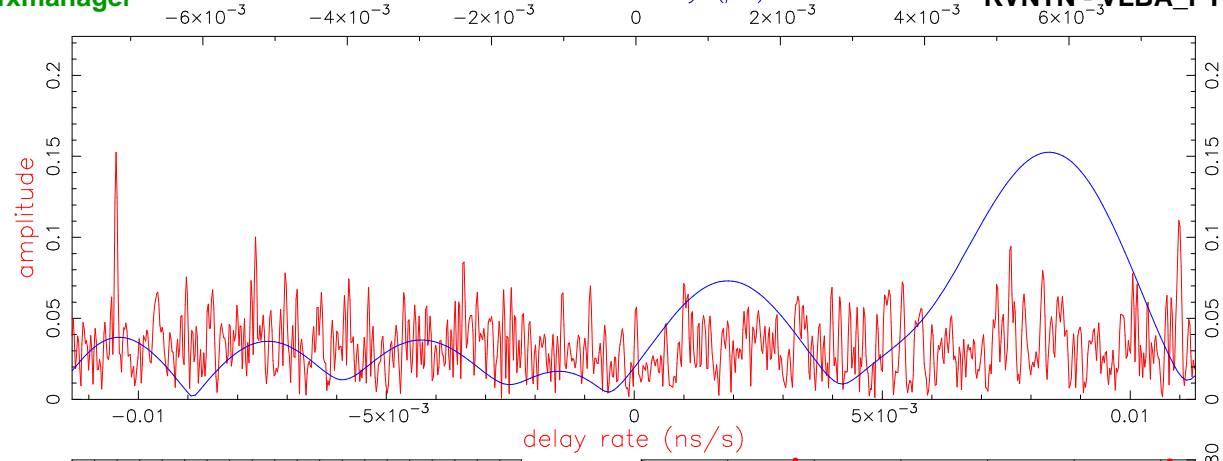
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

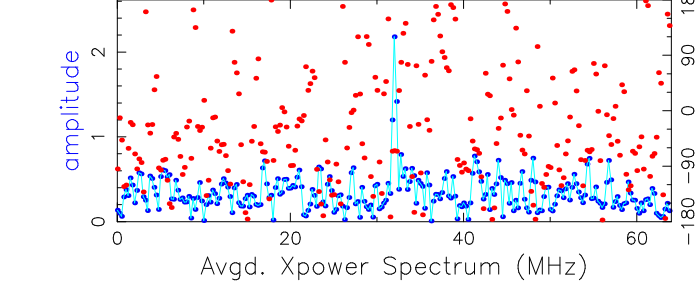
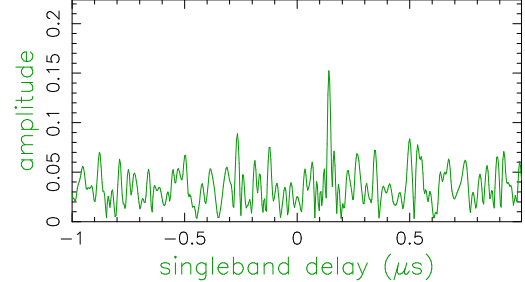
0102+584.1HR8HE, No0110, tp

KVNTN - VLBA_PT, fgroup W, pol LL

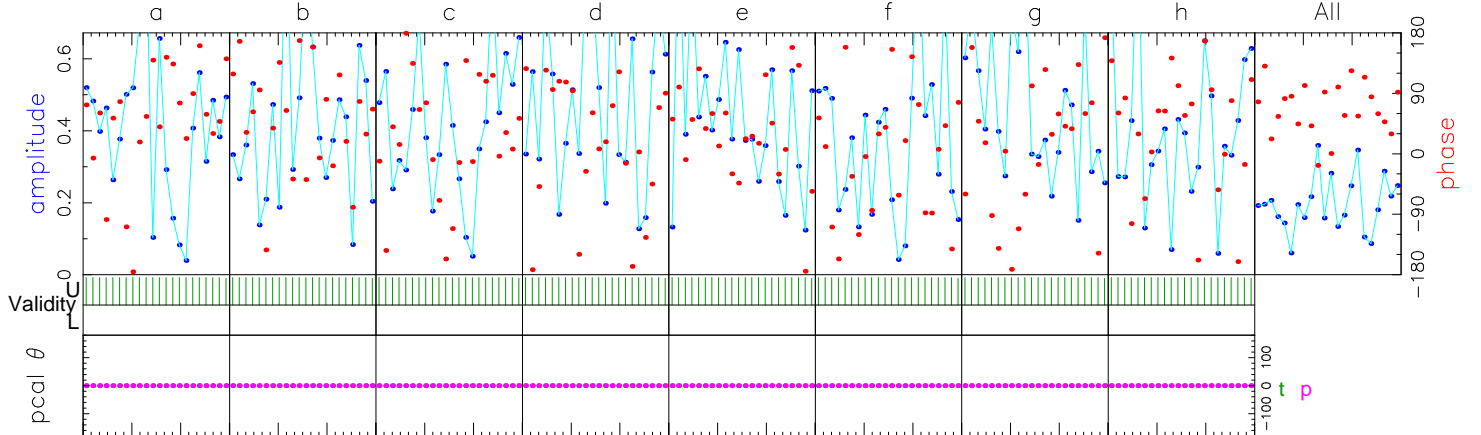
multiband delay (μ s)



Fringe quality 0
 SNR 5.6
 Int time 179.975
 Amp 0.224
 Phase 60.1
 PFD 9.0e-01
 Delays (us)
 SBD 0.141491
 MBD 0.005767
 Fringe rate (Hz) -0.902255
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134238
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

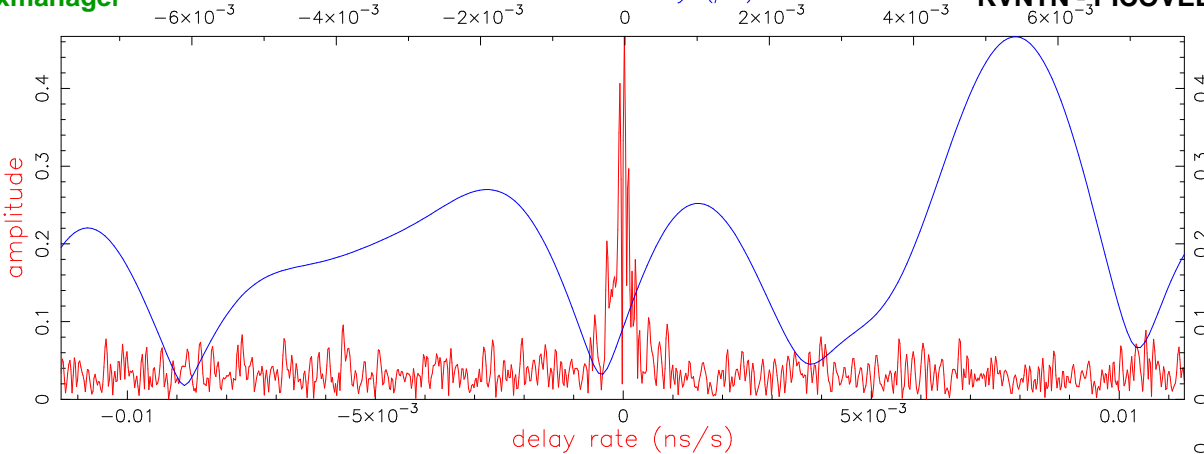


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.09129723427E+04									
Sband delay (usec)	-1.09129772441E+04									
Phase delay (usec)	-1.09131187329E+04									
Delay rate (us/s)	9.12853220110E-01									
Total phase (deg)			-234.5							
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)									60.1	+/- 20.4
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
pcal mode										
PC period (AP's)										
PC freqs										
PC phase										
Mani PC										
PC amp										
Chan ids										
Tracks										
Chan ids										
Tracks										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

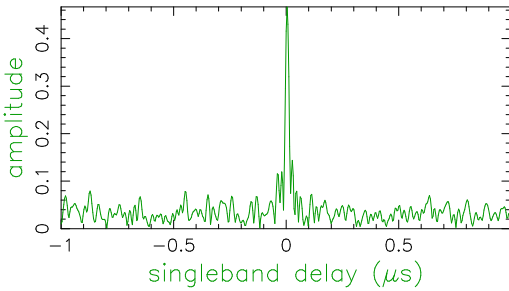
ph/seg (deg) 38.1 47.8
 amp/seg (%) 56.5 83.4
 ph/frq (deg) 25.8 28.8
 amp/frq (%) 39.5 50.3
 t: az 33.0 el 21.4 pa -60.6
 p: az 335.8 el 61.8 pa 138.9
 u,v (fr/asec) -9962.557 7234.598
 Control file: cf_1234_gmva
 Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tp..1HR8HE
 Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tp.W.342.1HR8HE

multiband delay (μ s)

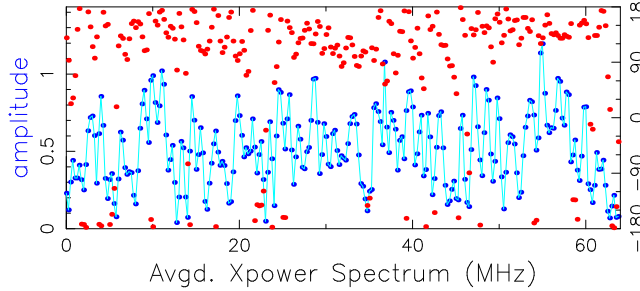
Fringe quality 8



SNR 17.1
 Int time 179.795
 Amp 0.467
 Phase 126.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.004252
 MBD 0.005416
 Fringe rate (Hz) 0.002100
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

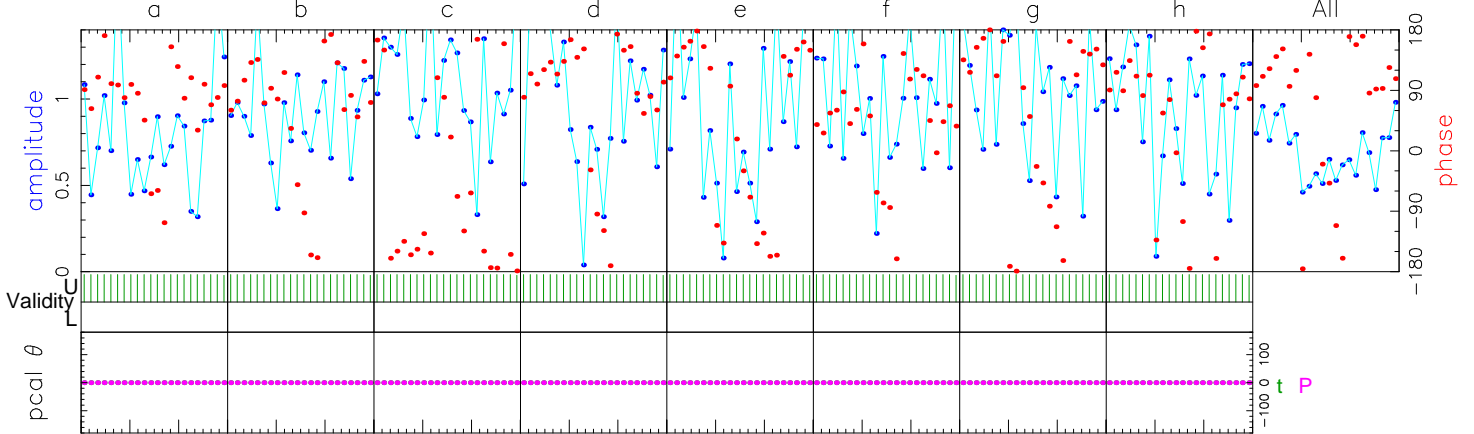


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134238
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	2.22178552504E+03	Apriori delay (usec)	2.22178010902E+03	Resid mbdelay (usec)	5.41602E-03	+/-	6.3E-05
Sband delay (usec)	2.22178436052E+03	Apriori clock (usec)	1.5504656E+00	Resid sbdelay (usec)	4.25150E-03	+/-	5.0E-04
Phase delay (usec)	2.22178011311E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	4.08791E-06	+/-	2.2E-07
Delay rate (us/s)	1.17797641989E+00	Apriori rate (us/s)	1.17797639551E+00	Resid rate (us/s)	2.43800E-08	+/-	2.1E-09
Total phase (deg)	339.6	Apriori accel (us/s/s)	-1.70093021423E-05	Resid phase (deg)	126.8	+/-	6.7

ph/seg (deg)	64.1	RMS	15.7	Theor.	15.7	Amplitude	0.467 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	61.2	Search (1024X32)	0.465	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	48.0	Inc. seg. avg.	0.678	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	35.0	Inc. frq. avg.	0.610										

t: az 33.0 el 21.4 pa -60.6 P: az 334.2 el 15.4 pa 42.1 u,v (fr/asec) -12929.712 -2374.153 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tP..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tP.W.345.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

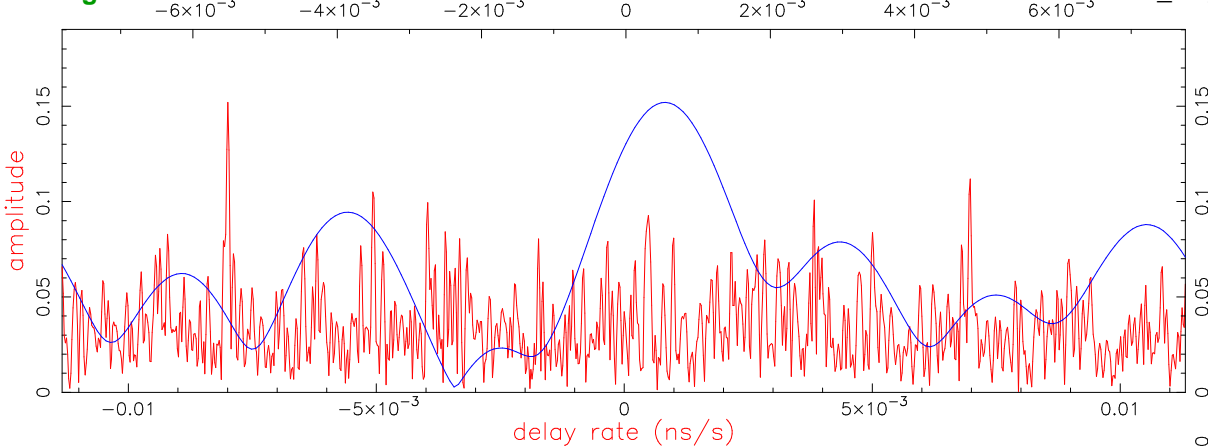
fxmanager

0102+584.1HR8HE, No0110, tp

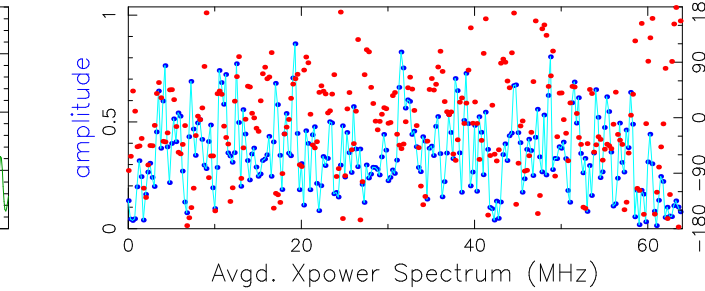
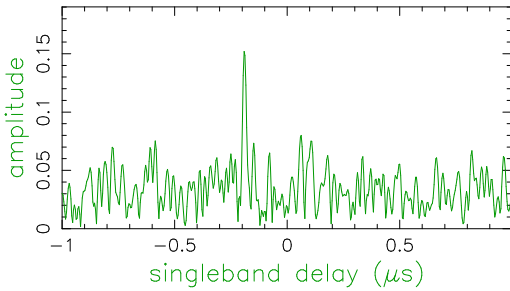
KVNTN - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 0

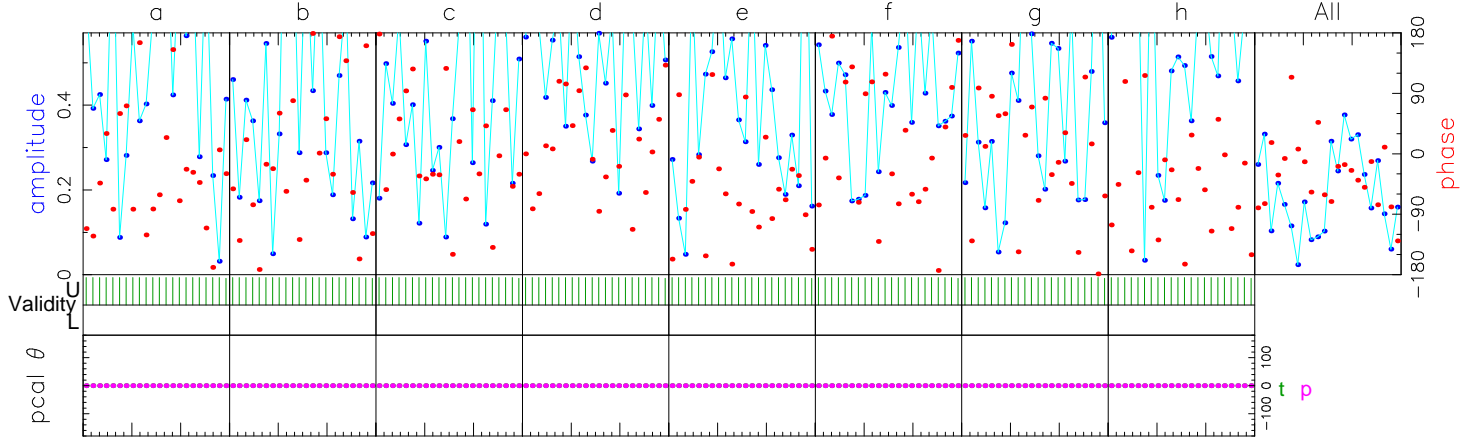


SNR 5.6
Int time 179.975
Amp 0.190
Phase -40.2
PFD 8.9e-01
Delays (us)
SBD -0.190028
MBD 0.000562
Fringe rate (Hz)
-0.690189
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 083000.00
Stop 083300.22
FRT 083130.00
Corr/FF/build
2021:006:162416
2021:010:134239
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

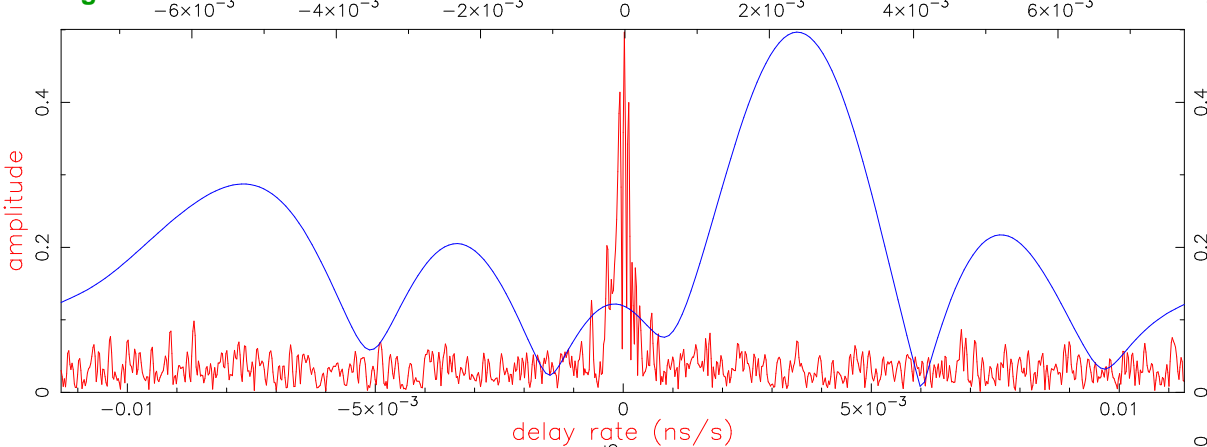


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-68.1	-33.2	-16.2	15.4	-71.1	-16.7	15.6	-65.1		Phase
	0.4	0.1	0.3	0.3	0.3	0.1	0.1	0.4		Ampl.
	208.0	59.3	502.1	433.8	70.7	162.6	502.1	208.1		Sbd box
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		208.4
t	1000	1000	1000	1000	1000	1000	1000	1000		APs used
p	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
t	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)	-1.09133056727E+04		Apriori delay (usec)		-1.09131187348E+04		Resid mbdelay (usec)		5.62121E-04	+/- 1.9E-04
Sband delay (usec)	-1.09133087626E+04		Apriori clock (usec)		1.3273144E+00		Resid sbdelay (usec)		-1.90028E-01	+/- 1.5E-03
Phase delay (usec)	-1.09131187361E+04		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-1.29544E-06	+/- 6.6E-07
Delay rate (us/s)	9.12855681993E-01		Apriori rate (us/s)		9.12863694398E-01		Resid rate (us/s)		-8.01240E-06	+/- 6.3E-09
Total phase (deg)			Apriori accel (us/s/s)		5.66094150344E-05		Resid phase (deg)		-40.2	+/- 20.3

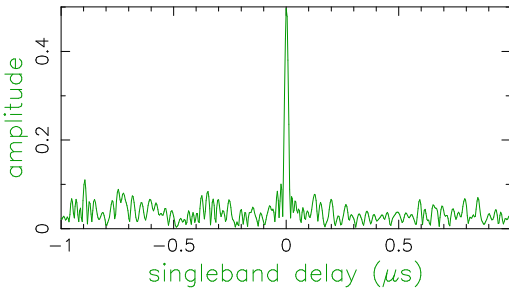
ph/seg (deg) 51.6 47.7 Search (1024X32) 0.147 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 69.8 83.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 40.3 28.8 Inc. seg. avg. 0.179 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 57.5 50.2 Inc. frq. avg. 0.199 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
t: az 33.0 el 21.4 pa -60.6 p: az 335.8 el 61.8 pa 138.9 u,v (fr/asec) -9962.557 7234.598 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tp..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tp.W.356.1HR8HE

multiband delay (μ s)

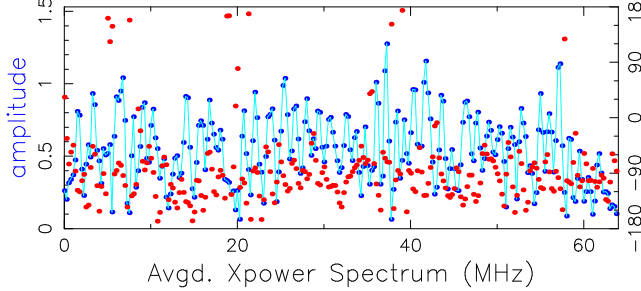
Fringe quality 8



SNR 18.4
 Int time 179.795
 Amp 0.501
 Phase -114.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.001139
 MBD 0.002403
 Fringe rate (Hz)
 0.002089
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

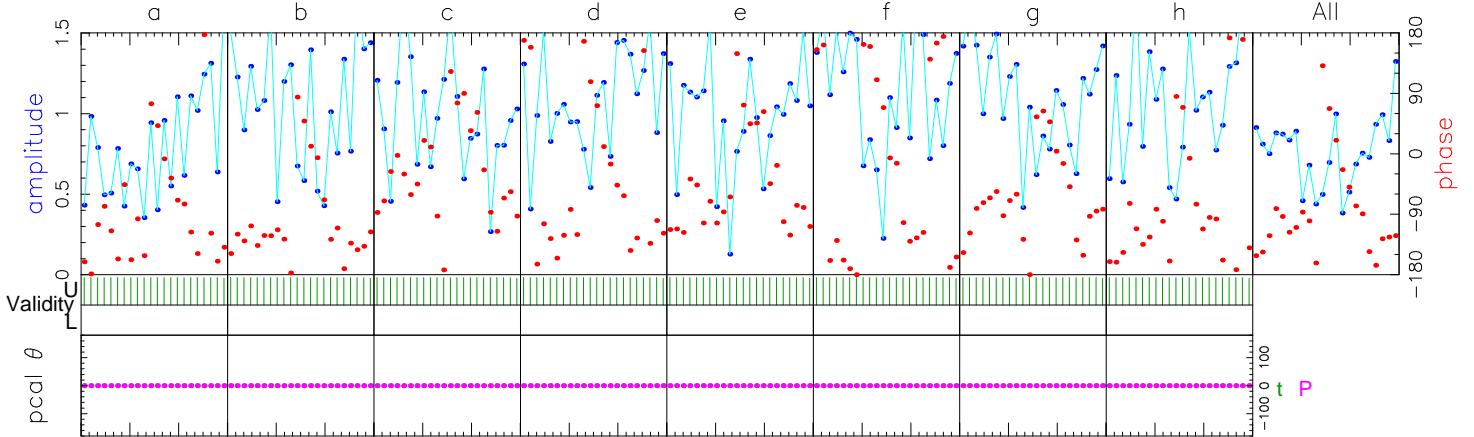


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134240
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-124.3	-129.2	-35.6	-125.2	-74.2	-161.9	-80.6	-128.9	Phase	-114.3
	0.5	0.8	0.4	0.6	0.5	0.8	0.7	0.7	Ampl.	0.6
	258.4	257.0	257.0	256.3	256.3	257.2	256.9	257.2	Sbd box	257.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.22178251245E+03	Apriori delay (usec)	2.22178010902E+03	Resid mbdelay (usec)	2.40342E-03	+/-	5.9E-05
Sband delay (usec)	2.22178124752E+03	Apriori clock (usec)	1.5504656E+00	Resid sbdelay (usec)	1.13850E-03	+/-	4.7E-04
Phase delay (usec)	2.22178010534E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	-3.68620E-06	+/-	2.0E-07
Delay rate (us/s)	1.17797641976E+00	Apriori rate (us/s)	1.17797639551E+00	Resid rate (us/s)	2.42511E-08	+/-	1.9E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.70093021423E-05	Resid phase (deg)	-114.3	+/-	6.2

ph/seg (deg)	63.5	Theor.	14.6	Amplitude	0.501 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	68.3		25.6	Search (1024X32)	0.495	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	44.5		8.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	32.8		15.4	Inc. seg. avg.	0.742	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.600	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

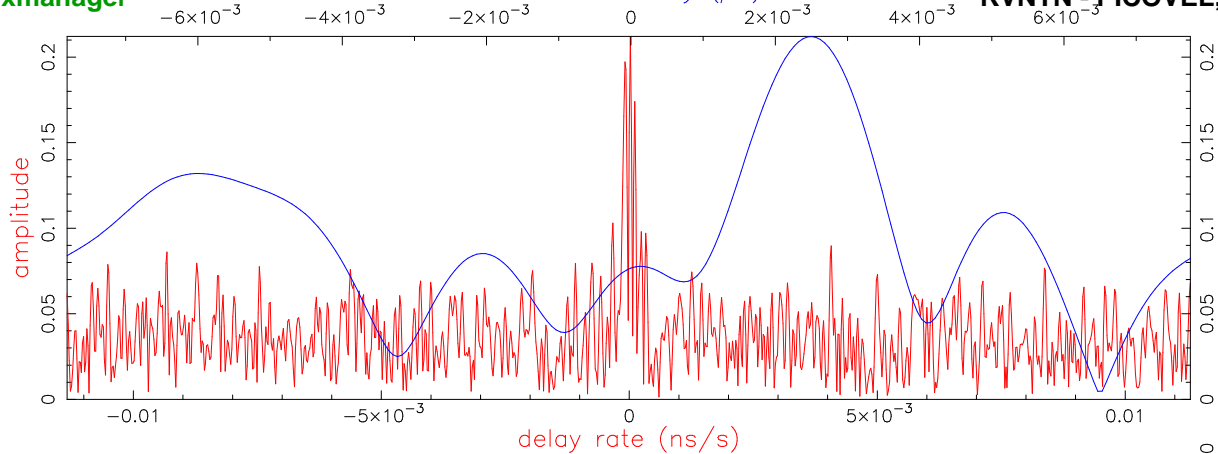
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tP

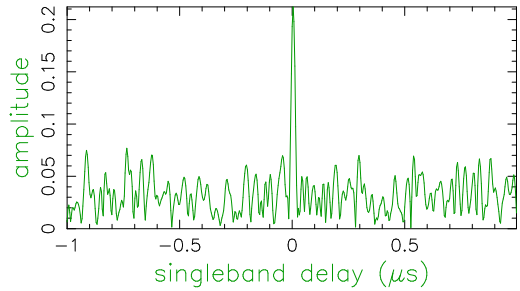
KVNTN - PICOVEL, fgroup W, pol LR

multiband delay (μ s)

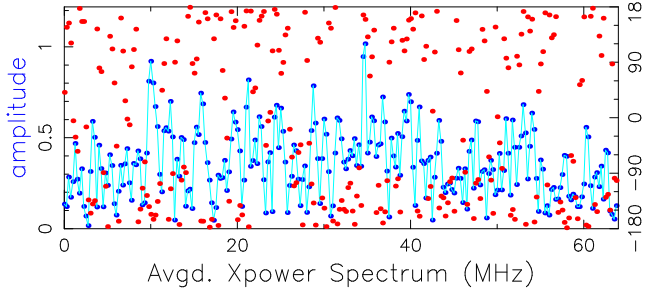


Fringe quality 9

SNR 7.8
 Int time 179.795
 Amp 0.212
 Phase -159.4
 PFD 1.2e-06
 Delays (us)
 SBD 0.004188
 MBD 0.002499
 Fringe rate (Hz) 0.001830
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

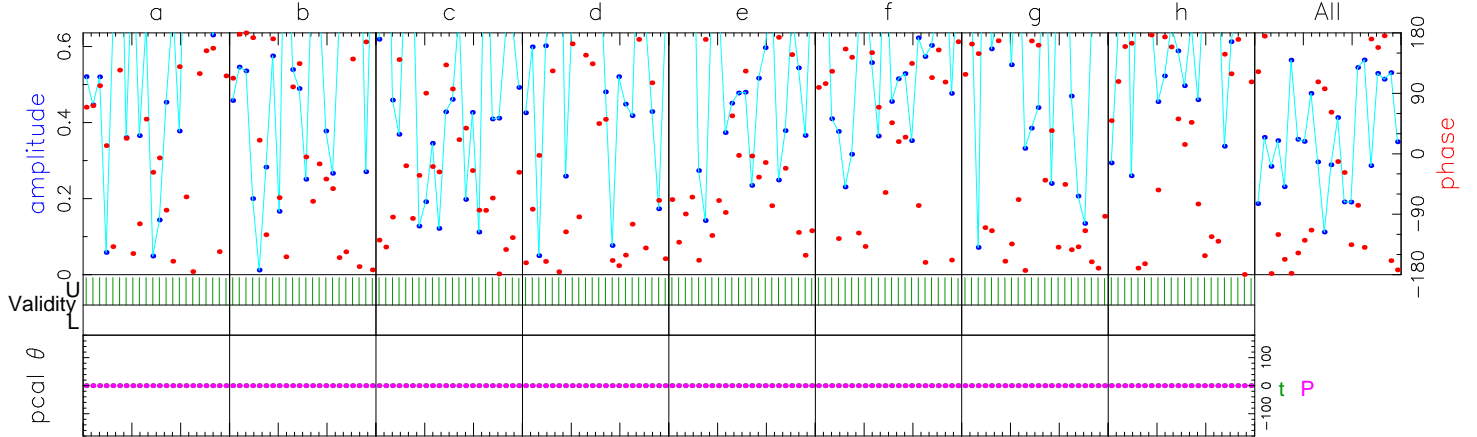


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134242
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	2.22178260789E+03	Apriori delay (usec)		2.22178010902E+03	Resid mbdelay (usec)		2.49886E-03	+/-	1.4E-04	
Sband delay (usec)	2.22178429727E+03	Apriori clock (usec)		1.5504656E+00	Resid sbdelay (usec)		4.18825E-03	+/-	1.1E-03	
Phase delay (usec)	2.22178010388E+03	Apriori clockrate (us/s)		5.0000000E-07	Resid phdelay (usec)		-5.13968E-06	+/-	4.8E-07	
Delay rate (us/s)	1.17797641675E+00	Apriori rate (us/s)		1.17797639551E+00	Resid rate (us/s)		2.12454E-08	+/-	4.6E-09	
Total phase (deg)	53.5		Apriori accel (us/s/s)		-1.70093021423E-05	Resid phase (deg)		-159.4	+/-	14.7

ph/seg (deg)	68.0	Theor. 34.6	Amplitude	0.212 +/- 0.027	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
amp/seg (%)	95.5	60.3	Search (1024X32)	0.212	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	52.4	20.8	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	44.3	36.4	Inc. seg. avg.	0.307	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	0.268	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00	
					nlags: 256		t_cohere infinite		

t: az 33.0 el 21.4 pa -60.6 P: az 334.2 el 15.4 pa 42.1 u,v (fr/asec) -12929.712 -2374.153 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tP..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tP.W.377.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

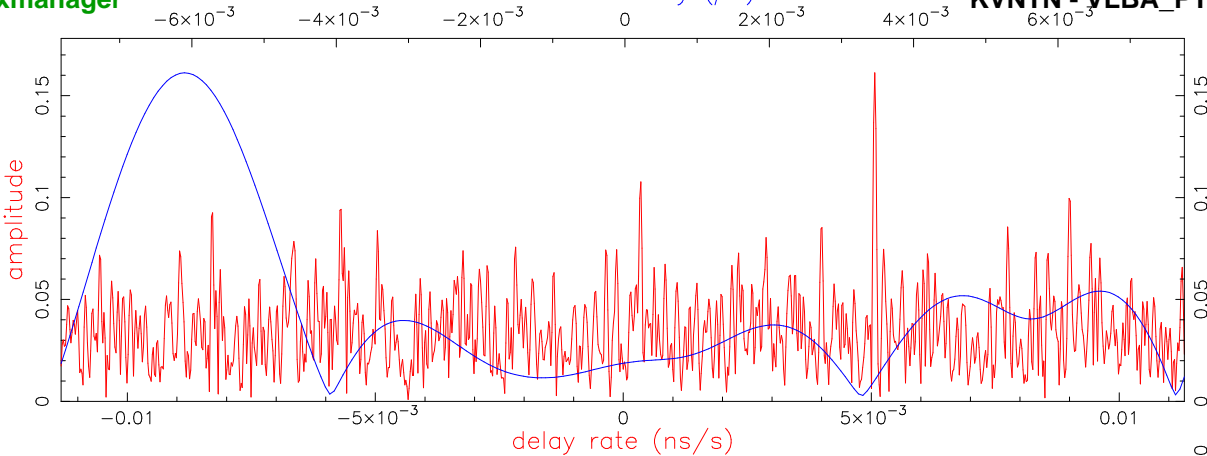
fxmanager

0102+584.1HR8HE, No0110, tp

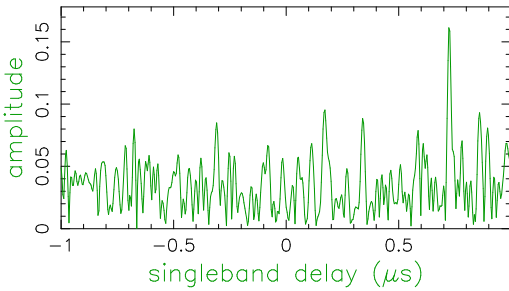
KVNTN - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

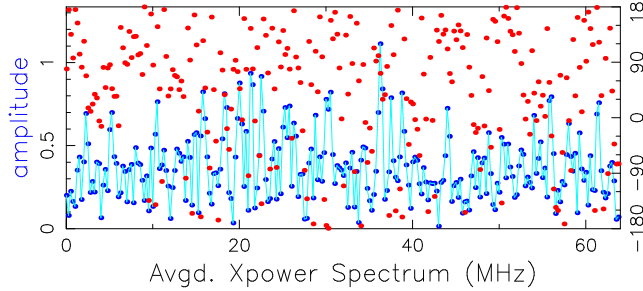
Fringe quality 0



SNR 6.0
Int time 179.975
Amp 0.178
Phase -133.6
PFD 2.2e-01
Delays (us)
SBD 0.724268
MBD -0.006111
Fringe rate (Hz)
0.437954
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

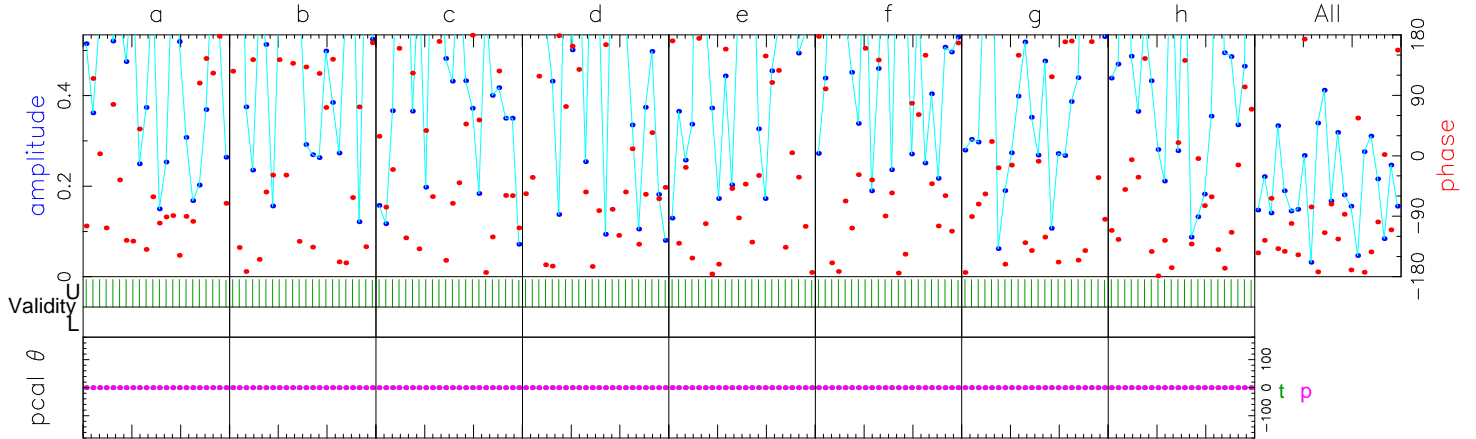


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 083000.00
Stop 083300.22
FRT 083130.00
Corr/FF/build
2021:006:162416
2021:010:134242
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-113.1	-164.1	-131.3	-108.6	-131.1	-146.6	-119.8	-138.7	Phase	-133.6
	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	Ampl.	0.2
	263.7	408.3	301.9	149.1	391.2	110.3	84.4	200.7	Sbd box	442.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.09123904712E+04		Apriori delay (usec)		-1.09131187348E+04		Resid mbdelay (usec)		-6.11139E-03	+/- 1.8E-04
Sband delay (usec)	-1.09123944666E+04		Apriori clock (usec)		1.3273144E+00		Resid sbdelay (usec)		7.24268E-01	+/- 1.4E-03
Phase delay (usec)	-1.09131187391E+04		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-4.30702E-06	+/- 6.2E-07
Delay rate (us/s)	9.12868778609E-01		Apriori rate (us/s)		9.12863694398E-01		Resid rate (us/s)		5.08421E-06	+/- 5.9E-09
Total phase (deg)			Apriori accel (us/s/s)		5.66094150344E-05		Resid phase (deg)		-133.6	+/- 19.1

ph/seg (deg) 59.3 44.7 Search (1024X32) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 64.2 78.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 19.9 27.0 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 25.5 47.1 Inc. frq. avg. 0.166 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
t: az 33.0 el 21.4 pa -60.6 p: az 335.8 el 61.8 pa 138.9 u,v (fr/asec) -9962.557 7234.598 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tp..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tp.W.380.1HR8HE

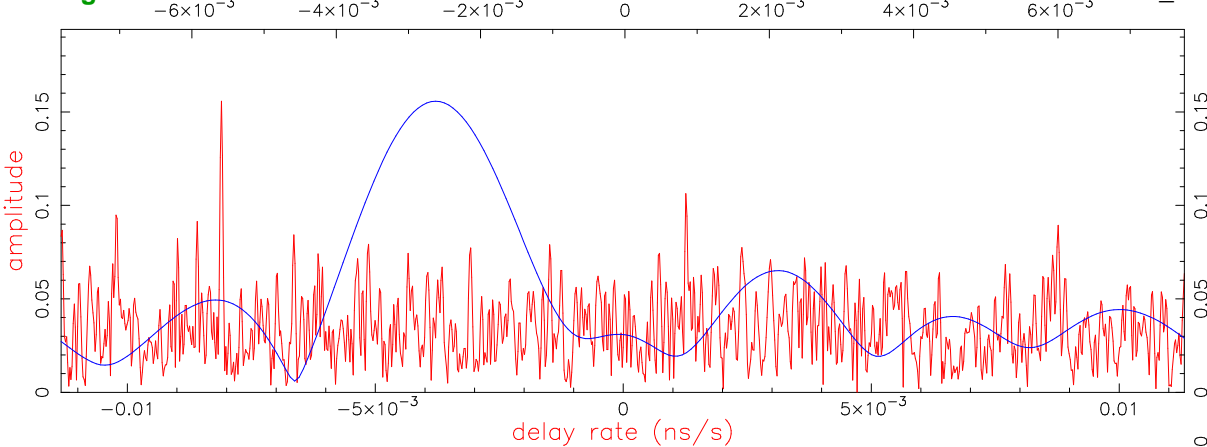
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tp

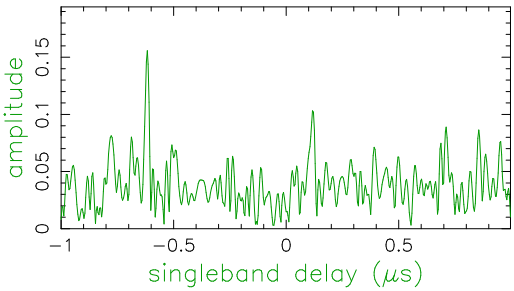
KVNTN - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

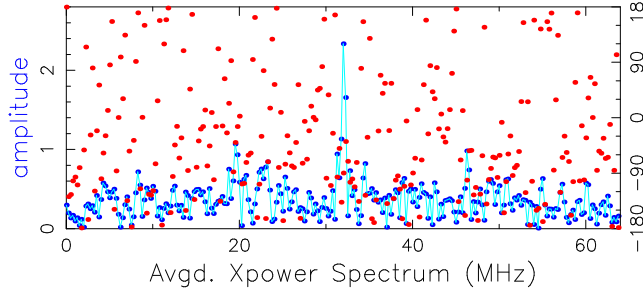


Fringe quality 0

SNR 5.7
 Int time 179.975
 Amp 0.194
 Phase 38.2
 PFD 7.4e-01
 Delays (us)
 SBD -0.617246
 MBD -0.002624
 Fringe rate (Hz)
 -0.699013
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

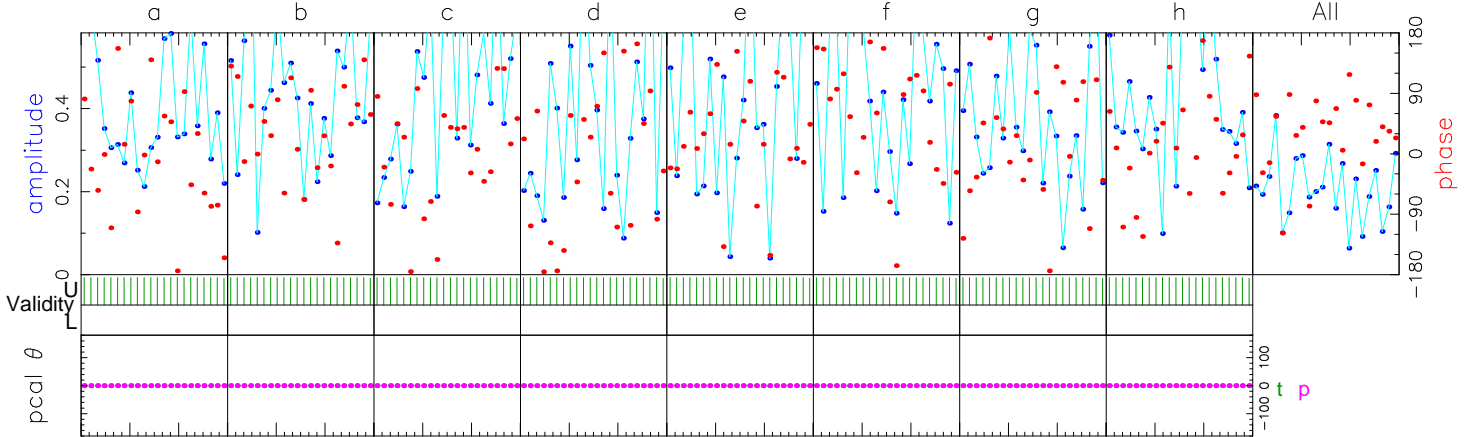


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134244
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.09137307334E+04	Apriori delay (usec)	-1.09131187348E+04	Resid mbdelay (usec)	-2.62358E-03	+/-	1.9E-04
Sband delay (usec)	-1.09137359808E+04	Apriori clock (usec)	1.3273144E+00	Resid sbdelay (usec)	-6.17246E-01	+/-	1.5E-03
Phase delay (usec)	-1.09131187336E+04	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	1.23058E-06	+/-	6.5E-07
Delay rate (us/s)	9.12855579546E-01	Apriori rate (us/s)	9.12863694398E-01	Resid rate (us/s)	-8.11485E-06	+/-	6.2E-09
Total phase (deg)		Apriori accel (us/s/s)	5.66094150344E-05	Resid phase (deg)	38.2	+/-	20.1

ph/seg (deg)	55.1	Theor.	47.0	Amplitude	0.194 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	60.0		82.1	Search (1024X32)	0.148	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	23.8		28.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.6		49.5	Inc. seg. avg.	0.194	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.185	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

t: az 33.0 el 21.4 pa -60.6 p: az 335.8 el 61.8 pa 138.9 u,v (fr/asec) -9962.557 7234.598 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tp..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tp.W.396.1HR8HE

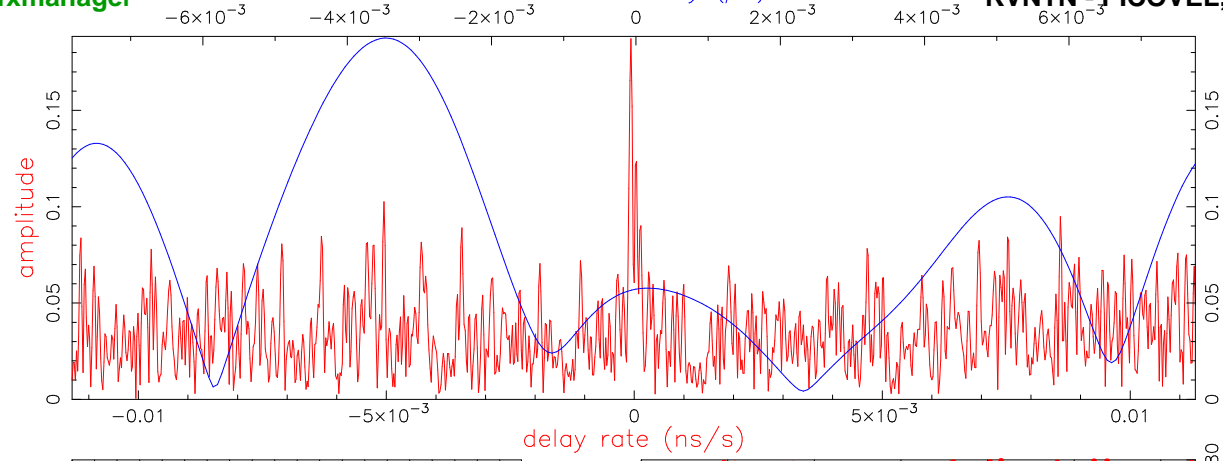
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tP

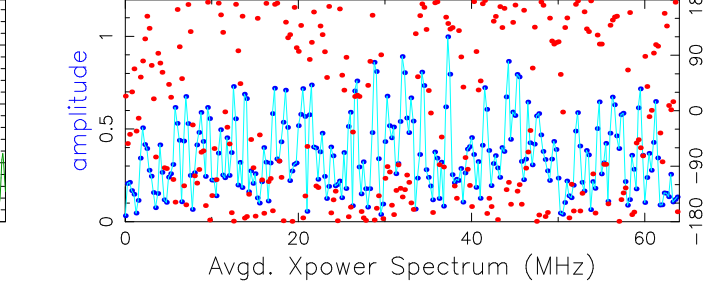
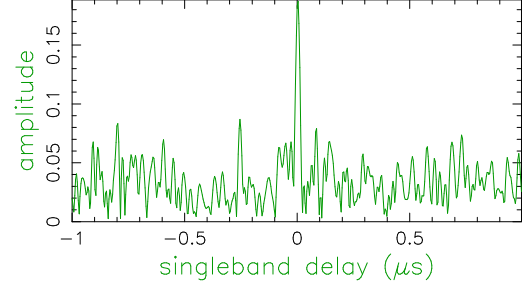
KVNTN - PICOVEL, fgroup W, pol RL

multiband delay (μs)



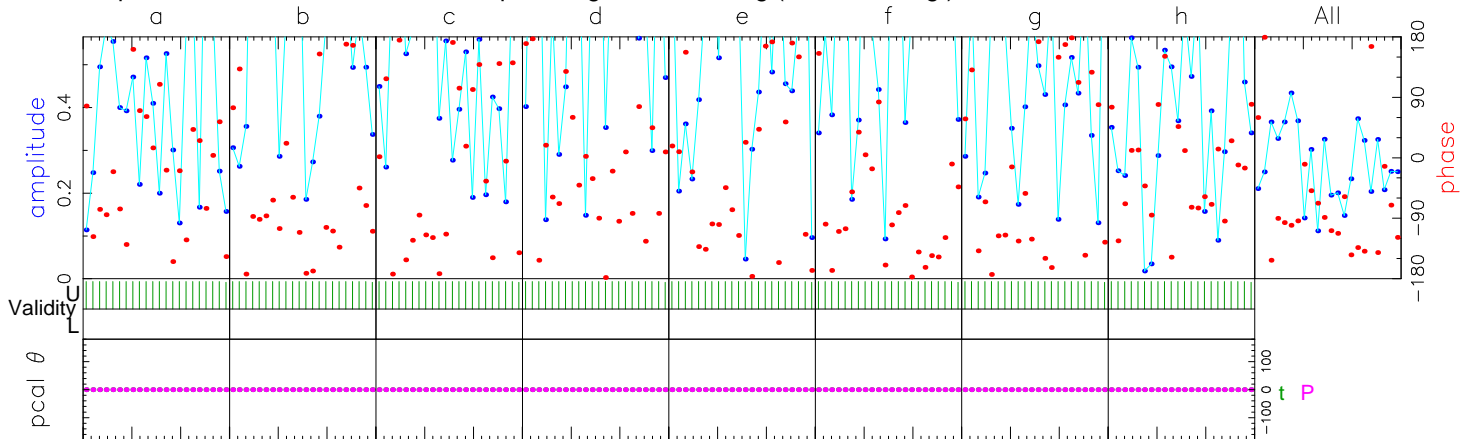
Fringe quality 0

SNR 6.9
 Int time 179.795
 Amp 0.188
 Phase -107.8
 PFD 7.2e-04
 Delays (us)
 SBD 0.002646
 MBD -0.003380
 Fringe rate (Hz)
 -0.006008
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134244
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

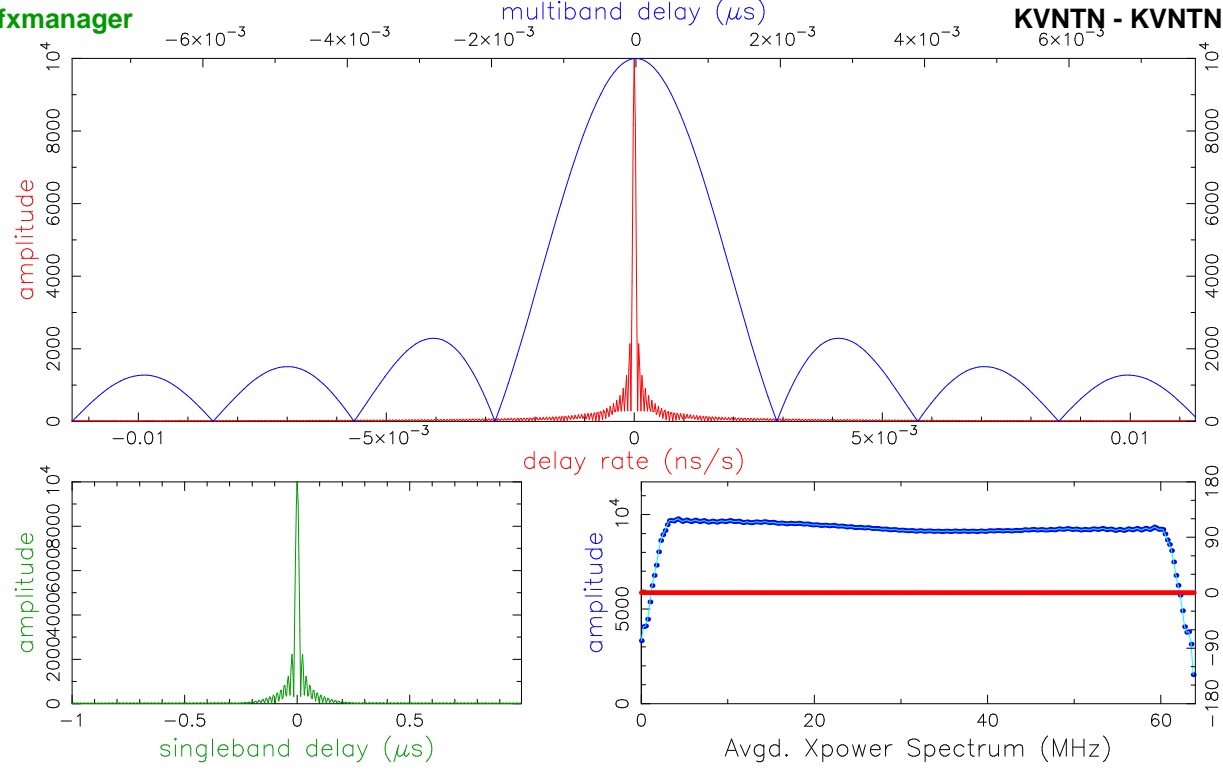


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-42.1	-104.7	-151.5	-67.1	-123.9	-110.1	-155.5	-12.7	Phase	-107.8
	0.1	0.4	0.3	0.2	0.2	0.3	0.3	0.2	Ampl.	0.2
	298.4	257.5	257.6	71.2	192.7	258.8	258.5	429.5	Sbd box	257.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.22177672928E+03	Apriori delay (usec)	2.22178010902E+03	Resid mbdelay (usec)	-3.37974E-03	+/-	1.6E-04
Sband delay (usec)	2.22178275527E+03	Apriori clock (usec)	1.5504656E+00	Resid sbdelay (usec)	2.64625E-03	+/-	1.2E-03
Phase delay (usec)	2.22178010555E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	-3.47611E-06	+/-	5.3E-07
Delay rate (us/s)	1.17797632576E+00	Apriori rate (us/s)	1.17797639551E+00	Resid rate (us/s)	-6.97433E-08	+/-	5.1E-09
Total phase (deg)	105.1	Apriori accel (us/s/s)	-1.70093021423E-05	Resid phase (deg)	-107.8	+/-	16.6

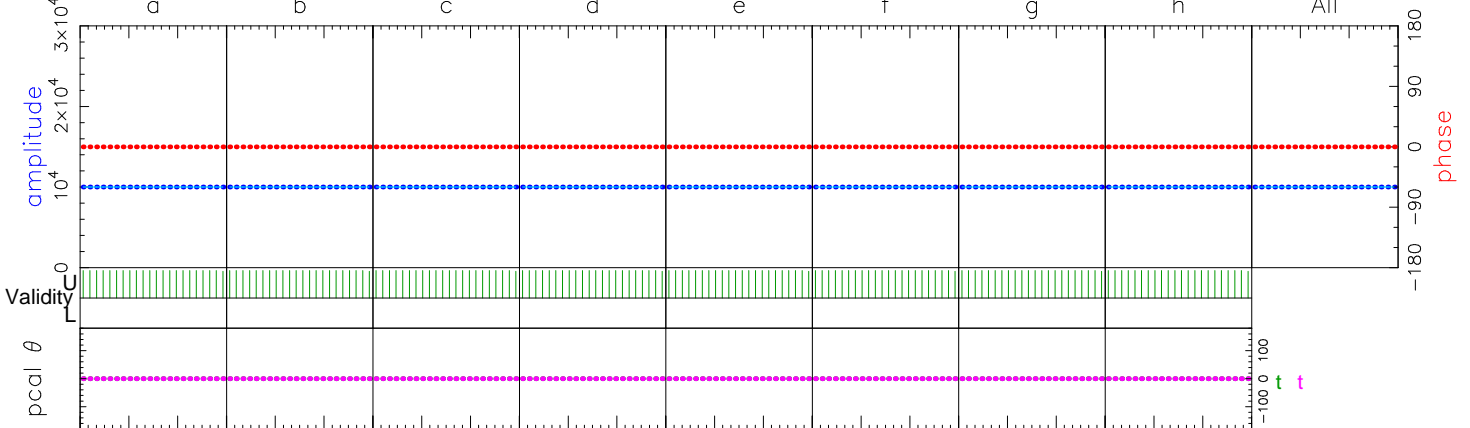
ph/seg (deg)	58.7	Theor.	38.9	Amplitude	0.188 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	62.4	Search (1024X32)	0.186	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	57.0	Inc. seg. avg.	0.219	Inc. frq. avg.	0.232	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	50.9	Inc. frq. avg.	0.232	Sample rate(MISamp/s): 128		Data rate(Mb/s): 2048	mb window (us) -0.008 0.008
				nlags: 256	t_cohere infinite		dr window (ns/s) -0.011 0.011
							ion window (TEC) 0.00 0.00

t: az 33.0 el 21.4 pa -60.6 P: az 334.2 el 15.4 pa 42.1 u,v (fr/asec) -12929.712 -2374.153 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tP..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tP.W.400.1HR8HE



Fringe quality 9
SNR 366873.9
Int time 179.986
Amp 10000.000
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. c202a
Yr:day 16383
Start 083000.00
Stop 083300.22
FRT 083130.00
Corr/FF/build
2021:006:162416
2021:010:134238
2020:247:085004
RA & Dec (J2000) 01h02m45.762375s +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	Ampl.	10000.0
t	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
t	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.3E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.000 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

t: az 33.0 el 21.4 pa -60.6 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tt.1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tt.W.347.1HR8HE

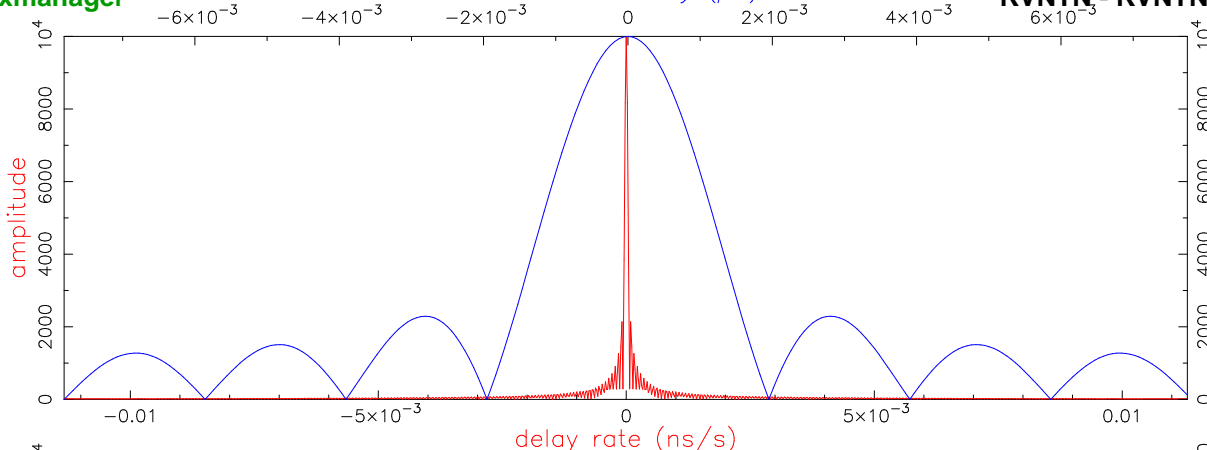
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

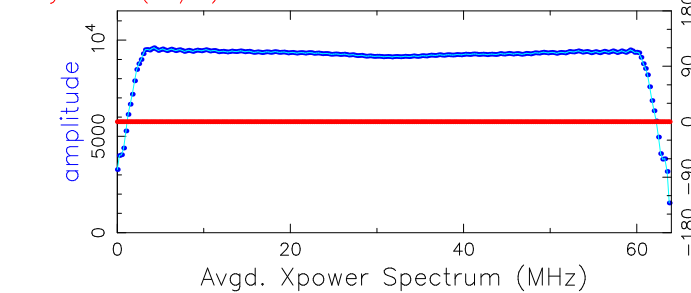
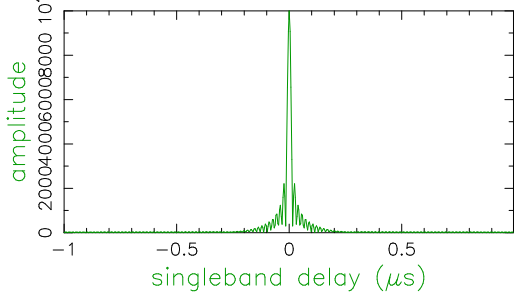
0102+584.1HR8HE, No0110, tt

KVNTN - KVNTN, fgroup W, pol RR

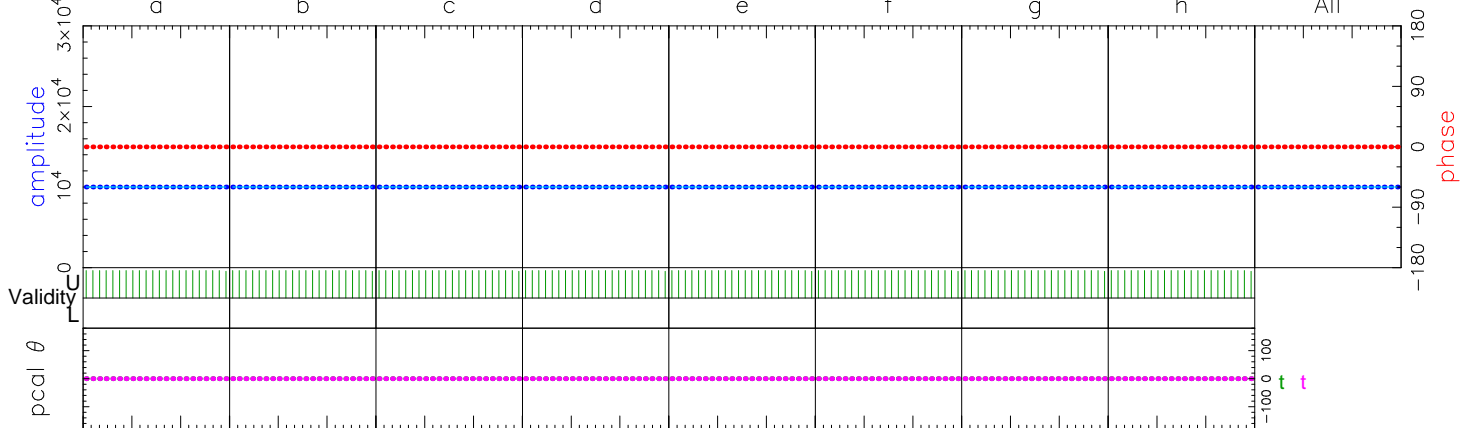
multiband delay (μ s)



Fringe quality 9
 SNR 366873.9
 Int time 179.986
 Amp 10000.000
 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. c202a
 Yr:day 16383
 Start 2020:283
 Stop 2020:283
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134240
 2020:247:085004
 RA & Dec (J2000) 01h02m45.762375s +58°24'11.136621"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		
Total phase (deg)			0.0							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
ion window (TEC)										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
simultaneous interpolator										

t: az 33.0 el 21.4 pa -60.6 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tt.1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tt.W.365.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

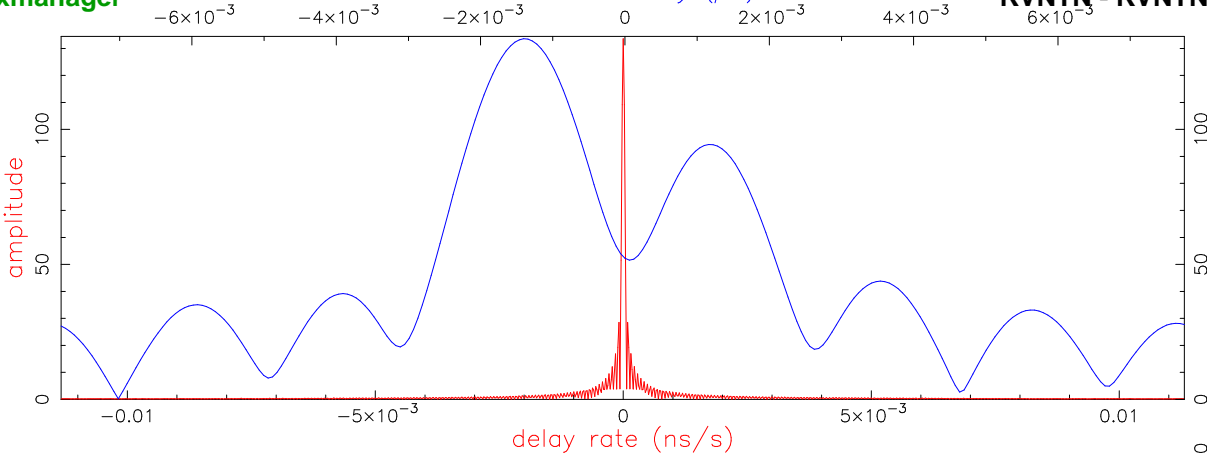
fxmanager

0102+584.1HR8HE, No0110, tt

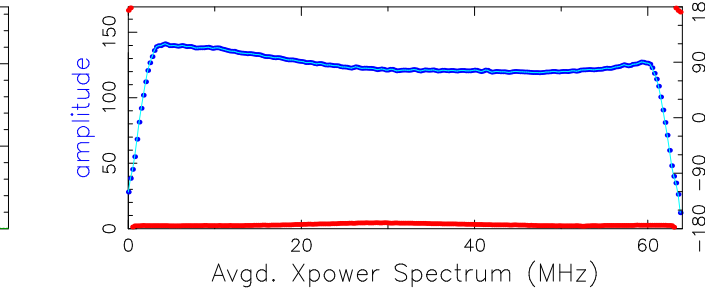
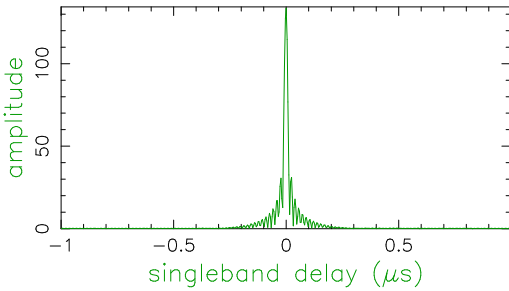
KVNTN - KVNTN, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 5

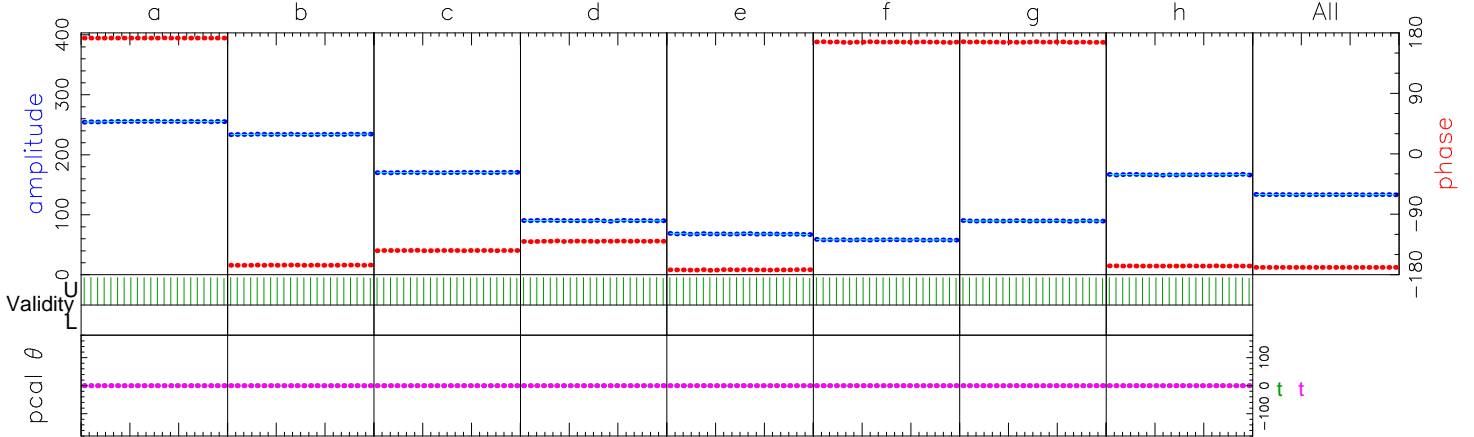


SNR 4933.1
 Int time 179.986
 Amp 134.464
 Phase -169.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.001012
 MBD -0.001392
 Fringe rate (Hz)
 -0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134242
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

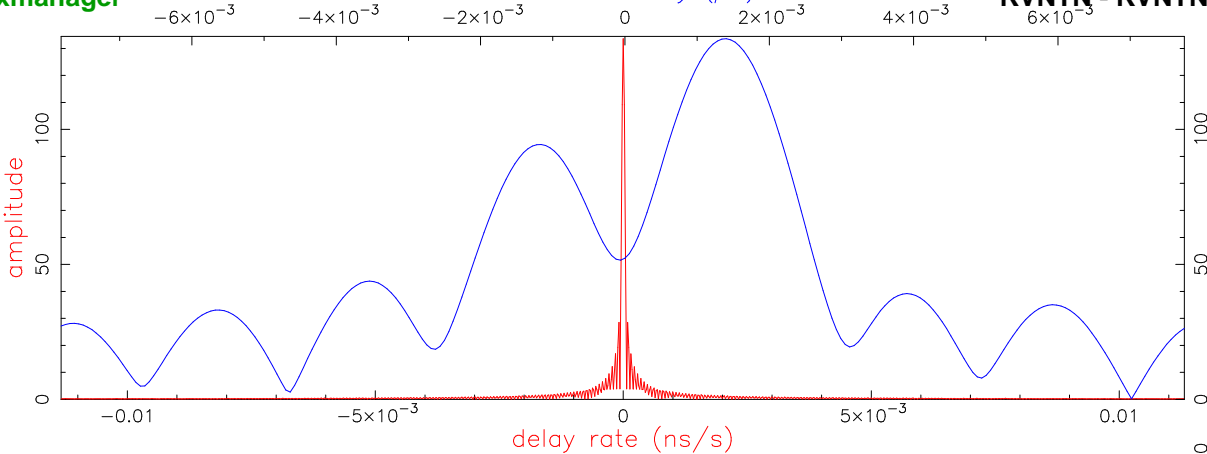
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



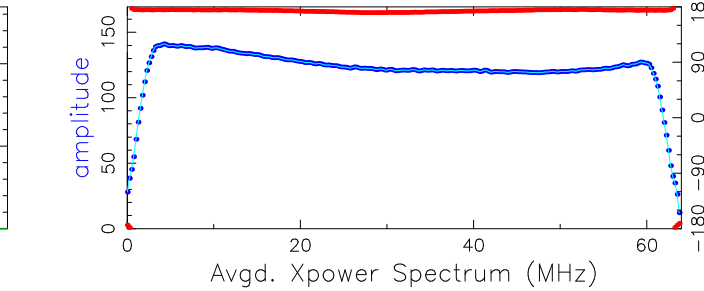
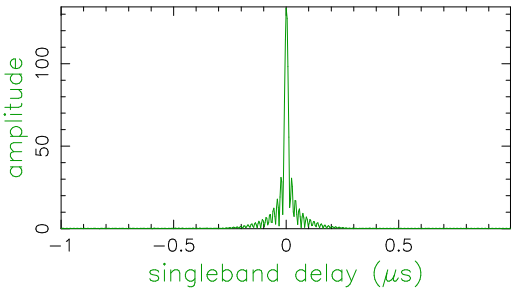
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
t	1000	1000	1000	1000	1000	1000	1000	1000	APs used		
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs		
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
t	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC		
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
Group delay (usec)(sbd)	-1.39243750000E-03								Resid mbdelay (usec)	-1.39244E-03 +/- 2.2E-07	
Sband delay (usec)	-1.01225000000E-03								Resid sbdelay (usec)	-1.01225E-03 +/- 1.7E-06	
Phase delay (usec)	-5.45162299845E-06								Resid phdelay (usec)	-5.45162E-06 +/- 7.5E-10	
Delay rate (us/s)	-1.41711523917E-12								Resid rate (us/s)	-1.41712E-12 +/- 7.2E-12	
Total phase (deg)			-169.1						Resid phase (deg)	-169.1 +/- 0.0	
RMS	0.0	0.1							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	0.0	0.1	Amplitude	134.464 +/- 0.027	Search (1024X32)	133.204	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	0.7	0.1	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	25.0	0.0	Inc. seg. avg.	133.590	Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011	0.011	
amp/frq (%)	53.3	0.1	Inc. frq. avg.	141.595	Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
t: az 33.0 el 21.4 pa -60.6			t: az 33.0 el 21.4 pa -60.6				u,v (fr/asec) 0.000	0.000		simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tt.1HR8HE				Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tt.W.385.1HR8HE				

multiband delay (μ s)

Fringe quality 5

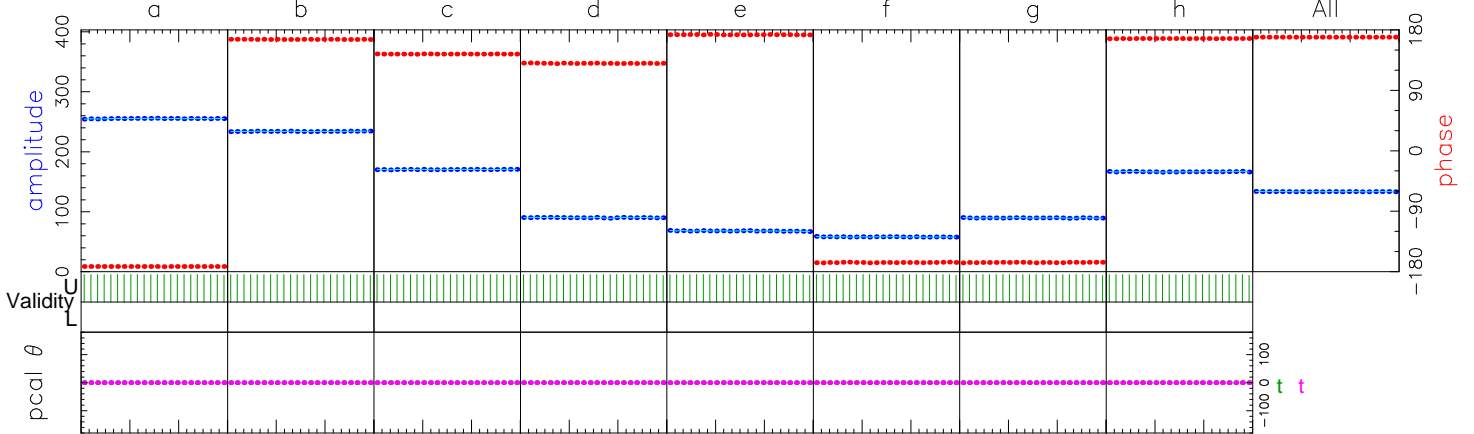


SNR 4933.1
Int time 179.986
Amp 134.464
Phase 169.1
PFD 0.0e+00
Delays (us)
SBD 0.001012
MBD 0.001392
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 083000.00
Stop 083300.22
FRT 083130.00
Corr/FF/build
2021:006:162416
2021:010:134244
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
t:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 1.39243750000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 1.39244E-03 +/- 2.2E-07
 Sband delay (usec) 1.01225000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 1.01225E-03 +/- 1.7E-06
 Phase delay (usec) 5.45162299845E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 5.45162E-06 +/- 7.5E-10
 Delay rate (us/s) 1.41711523917E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 1.41712E-12 +/- 7.2E-12
 Total phase (deg) 169.1 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 169.1 +/- 0.0

RMS Theor. Amplitude 134.464 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.1 Search (1024X32) 133.204 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.7 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 25.0 0.0 Inc. seg. avg. 133.590 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 53.3 0.1 Inc. frq. avg. 141.595 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

t: az 33.0 el 21.4 pa -60.6 t: az 33.0 el 21.4 pa -60.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tt.1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tt.W.398.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

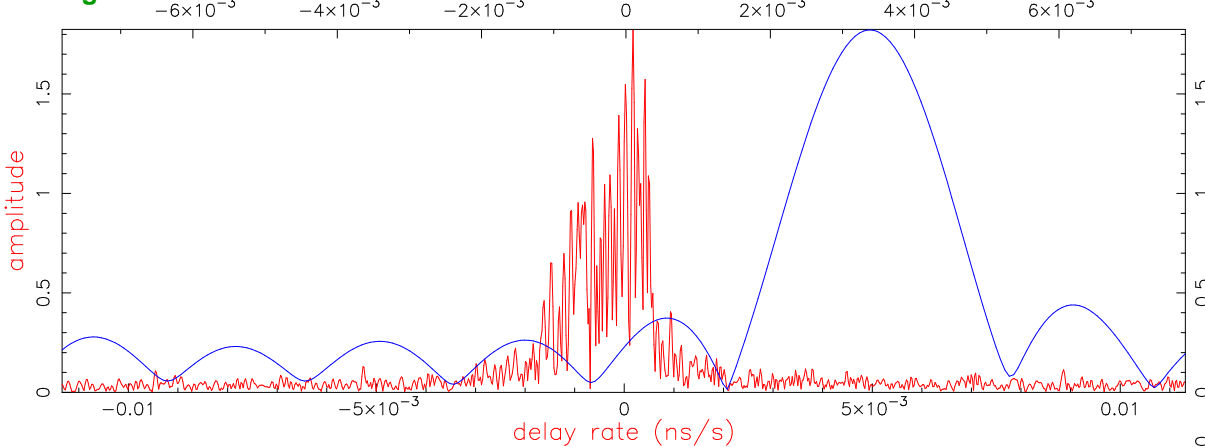
fxmanager

0102+584.1HR8HE, No0110, tu

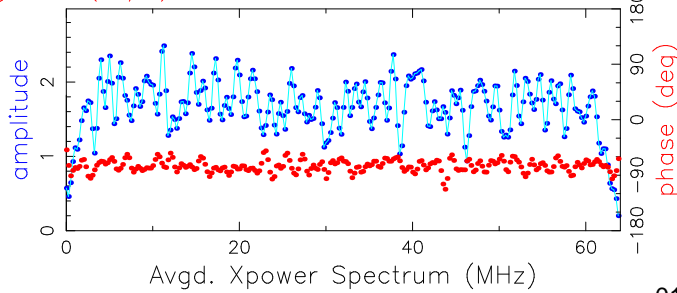
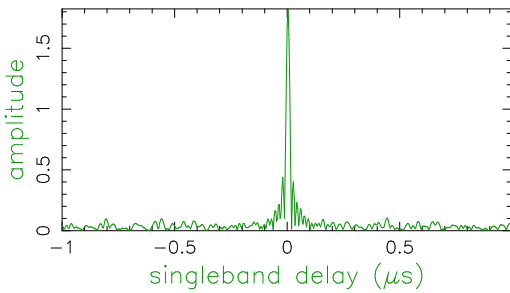
KVNTN - KVNUS, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 5

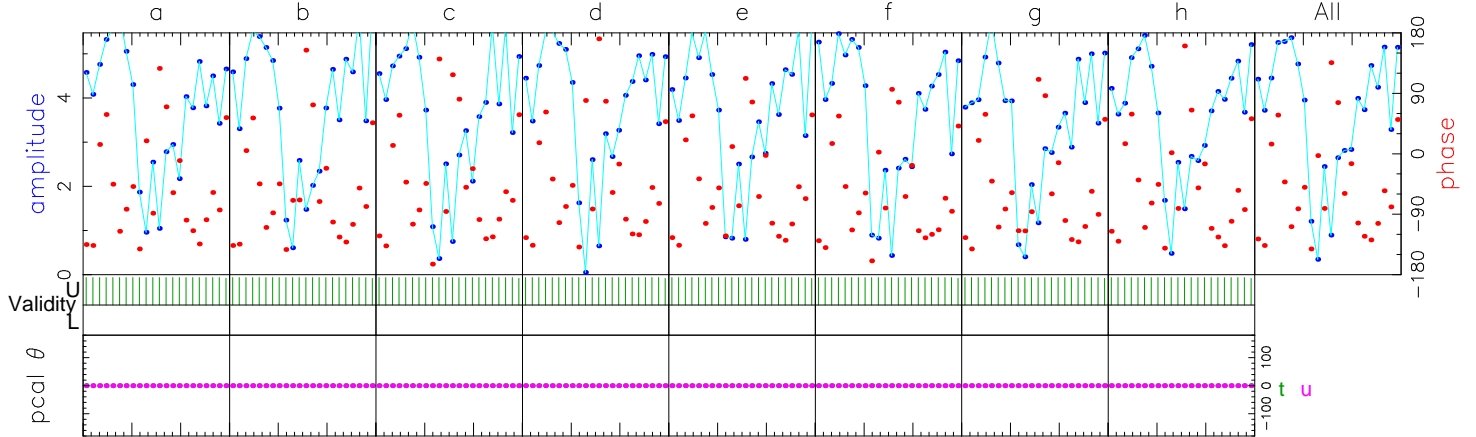


SNR 66.9
 Int time 179.972
 Amp 1.825
 Phase -73.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.003455
 MBD 0.003381
 Fringe rate (Hz)
 0.014327
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134238
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

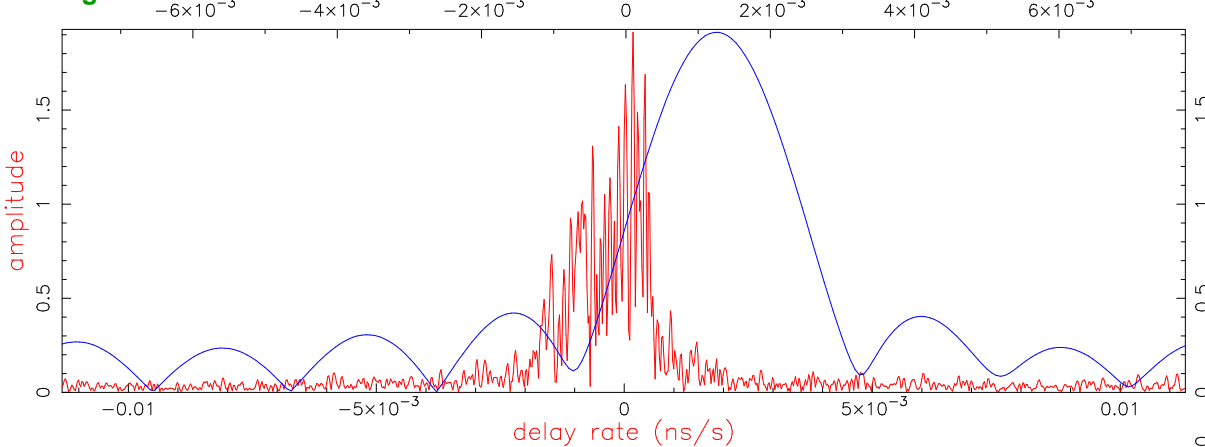


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-76.9	-73.1	-74.5	-70.1	-68.3	-80.2	-74.5	-73.8	Phase	-73.9
	1.8	1.9	1.9	1.9	1.8	1.9	1.6	1.8	Ampl.	1.8
	257.9	257.7	258.0	257.8	258.0	257.6	257.9	258.0	Sbd box	257.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.07605028985E+03			Apriori delay (usec)	-1.07605367123E+03			Resid mbdelay (usec)	3.38138E-03	+/- 1.6E-05
Sband delay (usec)	-1.07605021623E+03			Apriori clock (usec)	-1.1476865E+00			Resid sbdelay (usec)	3.45500E-03	+/- 1.3E-04
Phase delay (usec)	-1.07605367362E+03			Apriori clockrate (us/s)	-2.9999999E-07			Resid phdelay (usec)	-2.38363E-06	+/- 5.5E-08
Delay rate (us/s)	1.09168026019E-02			Apriori rate (us/s)	1.09166362780E-02			Resid rate (us/s)	1.66324E-07	+/- 5.3E-10
Total phase (deg)		-160.3		Apriori accel (us/s/s)	2.59464688683E-06			Resid phase (deg)	-73.9	+/- 1.7

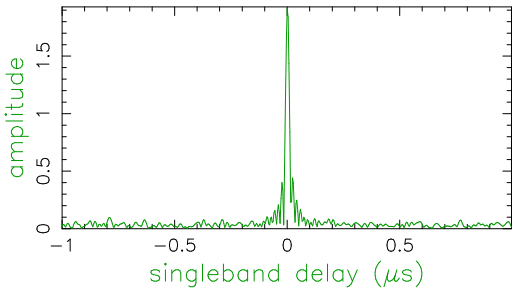
ph/seg (deg) 72.6 4.0 Search (1024X32) 1.732 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 127.9 7.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 4.0 2.4 Inc. seg. avg. 3.658 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 5.0 4.2 Inc. frq. avg. 1.824 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 33.0 el 21.4 pa -60.6 u: az 34.3 el 24.6 pa -61.9 u,v (fr/asec) -117.387 183.137 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tu..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tu.W.349.1HR8HE

multiband delay (μs)

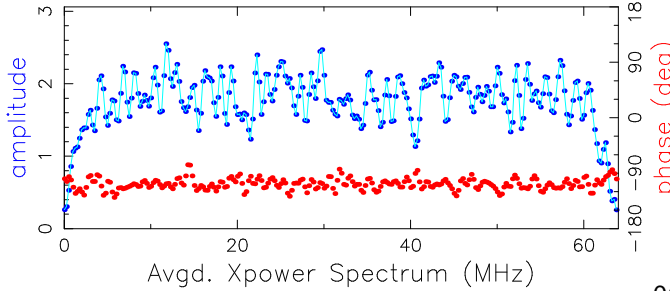
Fringe quality 5



SNR 70.8
Int time 179.972
Amp 1.929
Phase -109.5
PFD 0.0e+00
Delays (us)
SBD 0.001120
MBD 0.001258
Fringe rate (Hz)
0.014400
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

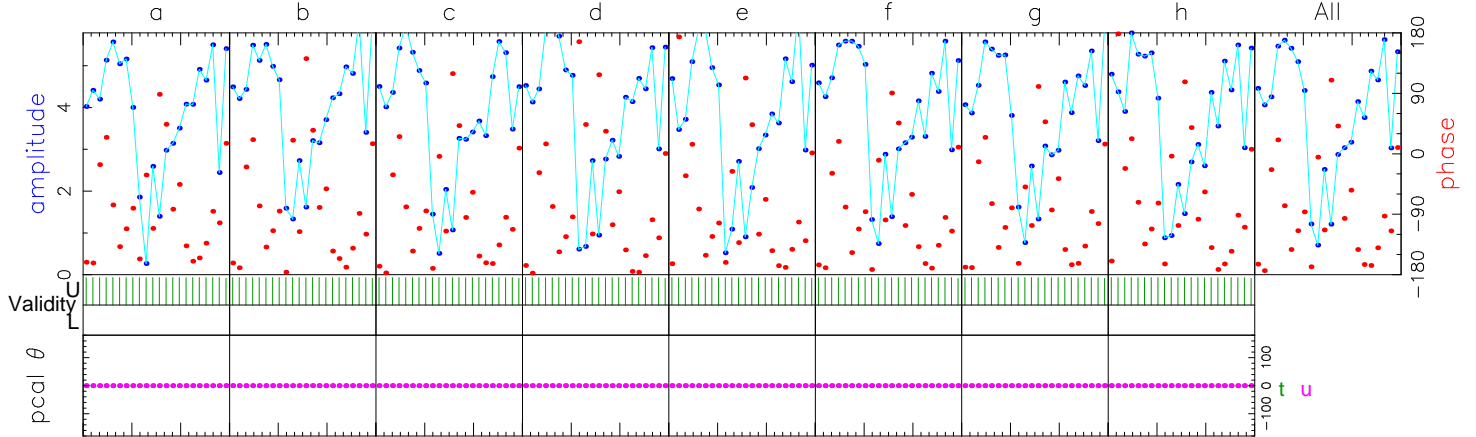


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 083000.00
Stop 083300.22
FRT 083130.00
Corr/FF/build
2021:006:162416
2021:010:134241
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-103.6	-107.8	-110.4	-114.9	-118.5	-108.4	-103.9	-107.2	Phase	-109.5
	1.9	1.9	2.0	1.9	2.1	2.0	1.8	1.8	Ampl.	1.9
	257.3	257.2	257.2	257.3	257.2	257.3	257.4	257.4	Sbd box	257.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.07605241371E+03	Apriori delay (usec)	-1.07605367123E+03	Resid mbdelay (usec)	1.25752E-03	+/-	1.5E-05
Sband delay (usec)	-1.07605255098E+03	Apriori clock (usec)	-1.1476865E+00	Resid sbdelay (usec)	1.12025E-03	+/-	1.2E-04
Phase delay (usec)	-1.07605367476E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	-3.53110E-06	+/-	5.2E-08
Delay rate (us/s)	1.09168034494E-02	Apriori rate (us/s)	1.09166362780E-02	Resid rate (us/s)	1.67171E-07	+/-	5.0E-10
Total phase (deg)	-195.9	Apriori accel (us/s/s)	2.59464688683E-06	Resid phase (deg)	-109.5	+/-	1.6

ph/seg (deg)	RMS 72.8	Theor. 3.8	Amplitude Search (1024X32)	1.790	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	125.0	6.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	5.6	2.3	Inc. seg. avg.	3.850	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	5.1	4.0	Inc. frq. avg.	1.919	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

t: az 33.0 el 21.4 pa -60.6 u: az 34.3 el 24.6 pa -61.9 u,v (fr/asec) -117.387 183.137 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tu..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tu.W.370.1HR8HE

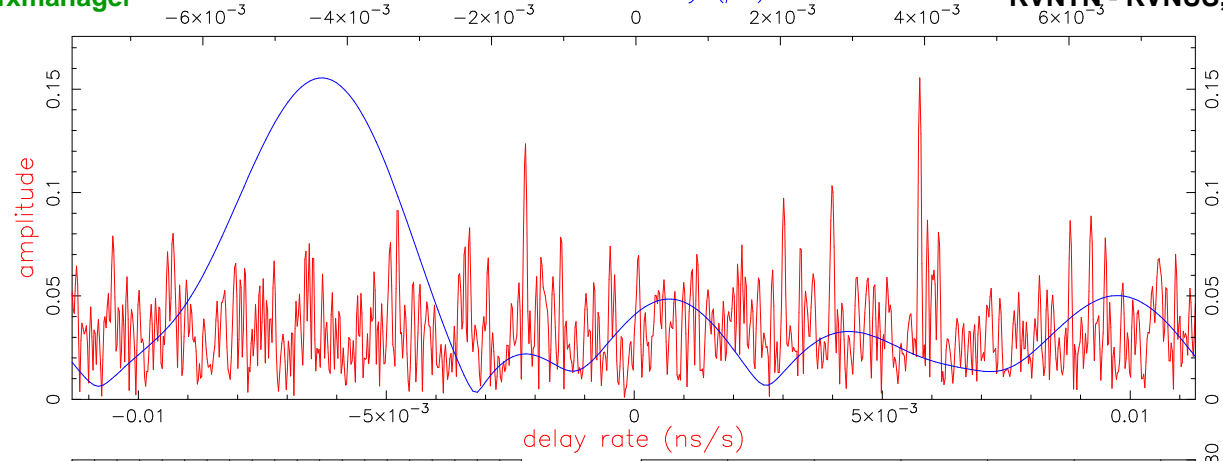
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tu

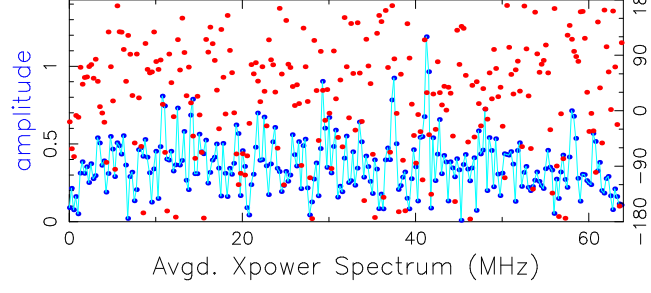
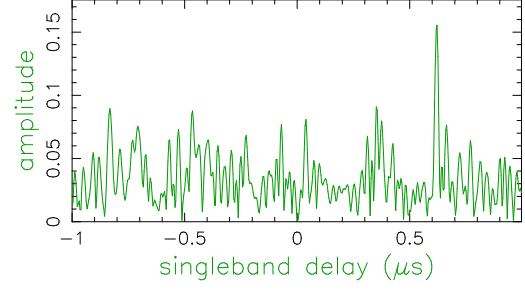
KVNTN - KVNUS, fgroup W, pol LR

multiband delay (μs)



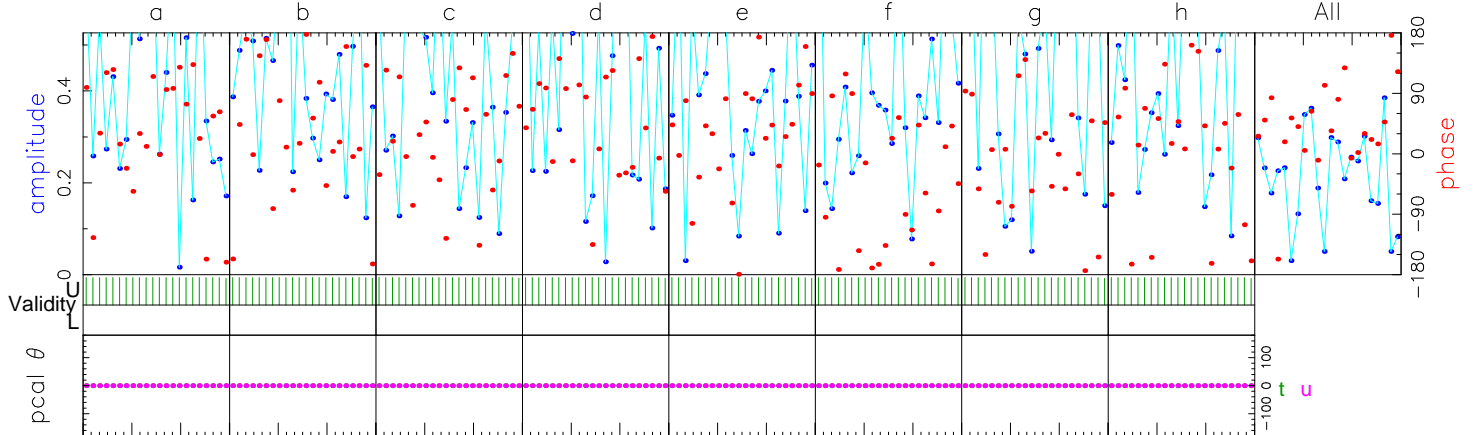
Fringe quality 0

SNR 5.8
 Int time 179.972
 Amp 0.176
 Phase 39.1
 PFD 6.1e-01
 Delays (us)
 SBD 0.619626
 MBD -0.004331
 Fringe rate (Hz)
 0.496205
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134242
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000		
t:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.07543300254E+03									
Sband delay (usec)	-1.07543404523E+03									
Phase delay (usec)	-1.07605366997E+03									
Delay rate (us/s)	1.09223967210E-02									
Total phase (deg)			-47.3							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Chan ids										
Tracks										
Chan ids										
Tracks										
Amplitude										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
RMS										
Theor.										
ph/seg (deg)										
amp/seg (%)										
ph/frq (deg)										
amp/frq (%)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Chan ids										
Tracks										
Chan ids										
Tracks										
Group delay (usec)(sbd)										
Sband delay (usec)										
Phase delay (usec)										
Delay rate (us/s)										
Total phase (deg)										
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Chan ids										
Tracks										
Chan ids										
Tracks										
Group delay (usec)(sbd)										
Sband delay (usec)										
Phase delay (usec)										
Delay rate (us/s)										
Total phase (deg)										
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Chan ids										
Tracks										
Chan ids										
Tracks										

t: az 33.0 el 21.4 pa -60.6 u: az 34.3 el 24.6 pa -61.9 u,v (fr/asec) -117.387 183.137 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tu..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tu.W.384.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

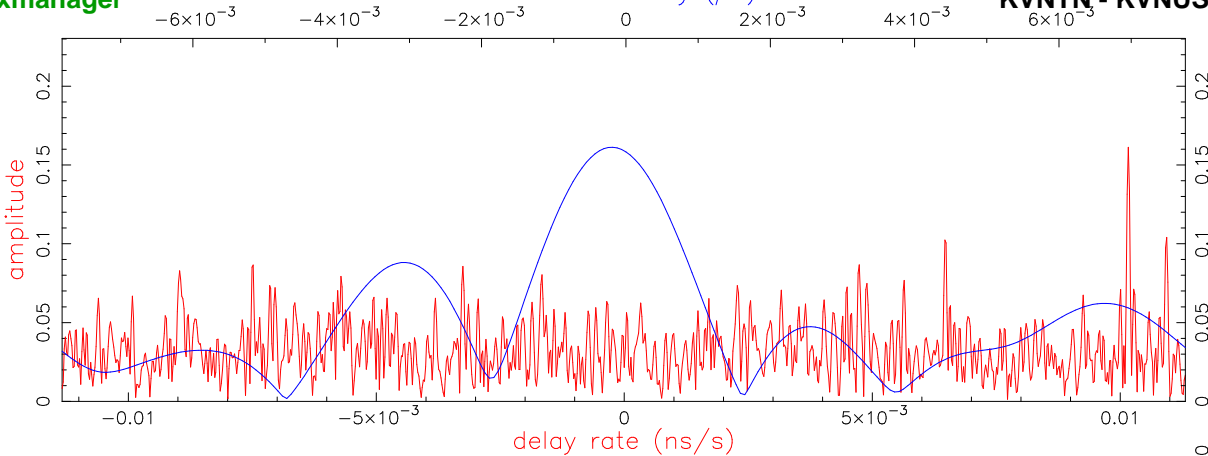
fxmanager

0102+584.1HR8HE, No0110, tu

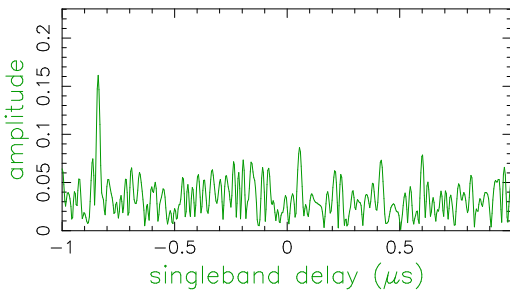
KVNTN - KVNUS, fgroup W, pol RL

multiband delay (μ s)

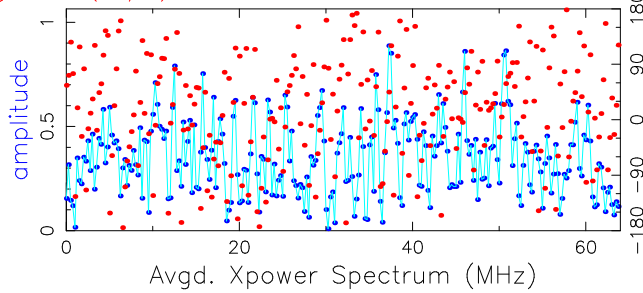
Fringe quality 0



SNR 5.9
 Int time 179.972
 Amp 0.230
 Phase 86.9
 PFD 3.4e-01
 Delays (us)
 SBD -0.839947
 MBD -0.000197
 Fringe rate (Hz) 0.876591
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

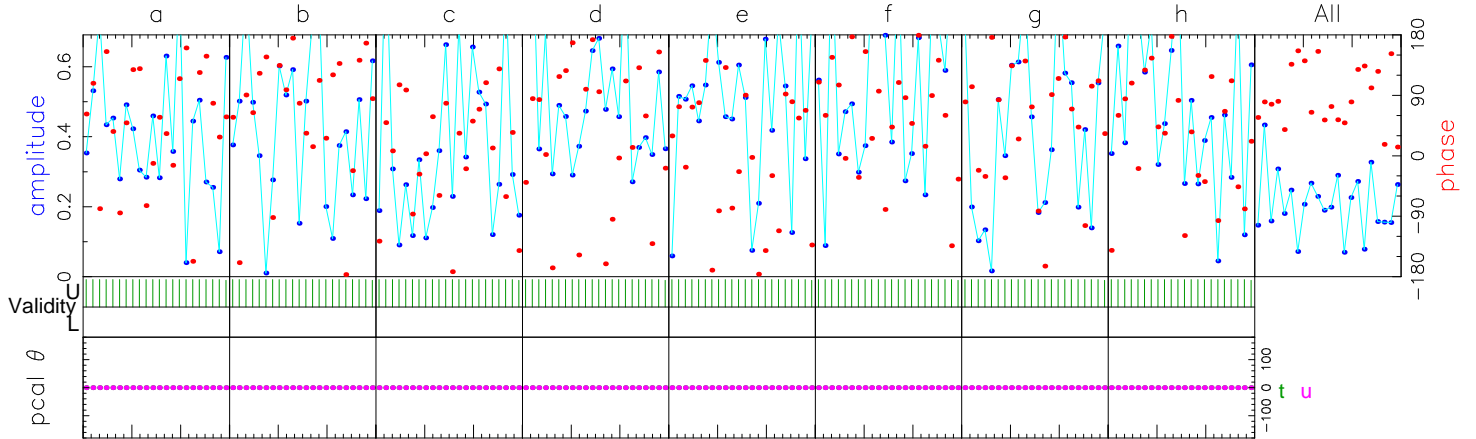


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134244
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-1.07689761849E+03									
Sband delay (usec)	-1.07689361798E+03									
Phase delay (usec)	-1.07605366843E+03									
Delay rate (us/s)	1.09268126278E-02									
Total phase (deg)			0.6							
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)									86.9	+/- 19.4
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 44.1 45.4
 amp/seg (%) 61.8 79.3
 ph/frq (deg) 26.6 27.4
 amp/frq (%) 35.6 47.8

t: az 33.0 el 21.4 pa -60.6
 u: az 34.3 el 24.6 pa -61.9
 u,v (fr/asec) -117.387 183.137

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tu..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tu.W.399.1HR8HE

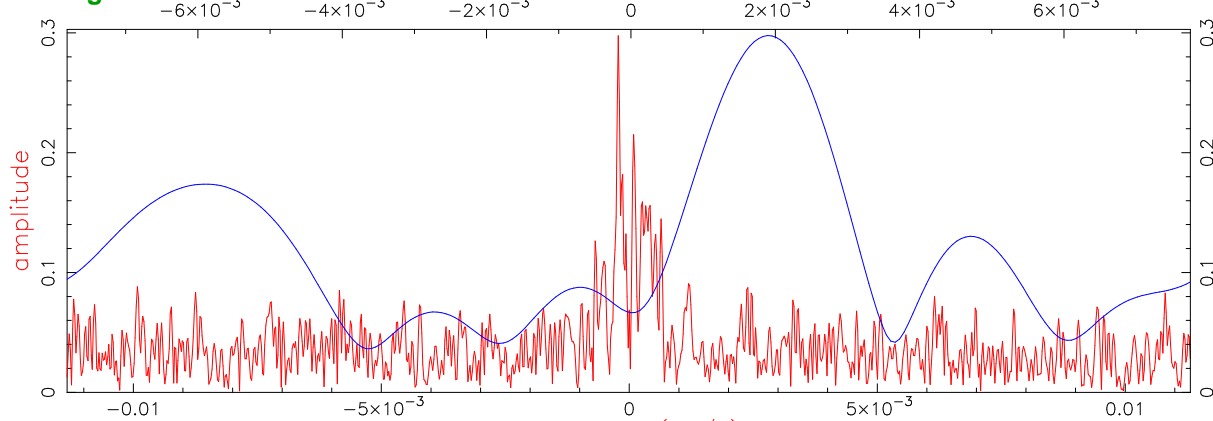
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tX

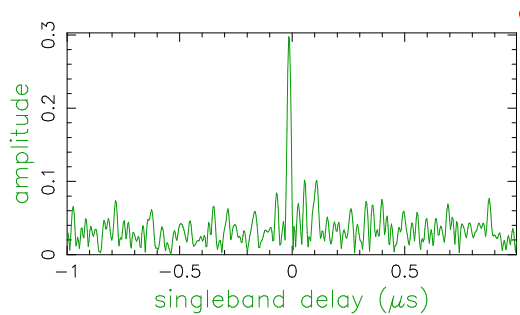
KVNTN - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

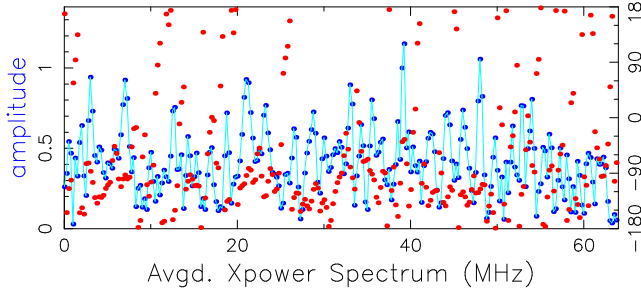


Fringe quality 9

SNR 11.1
 Int time 179.965
 Amp 0.303
 Phase 64.9
 PFD 2.6e-20
 Delays (us)
 SBD -0.013887
 MBD 0.001943
 Fringe rate (Hz)
 -0.019640
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

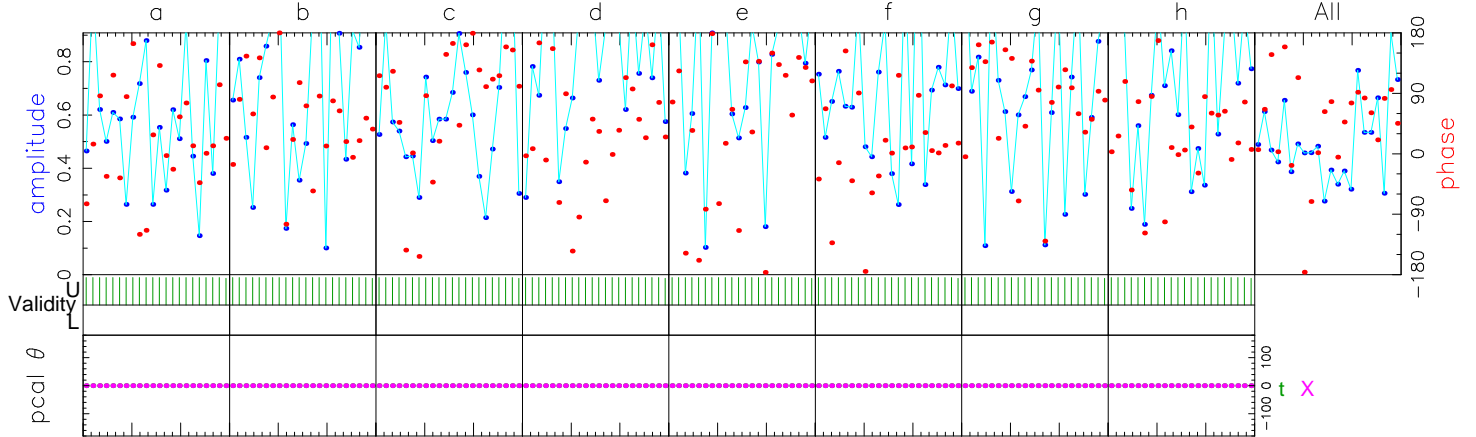


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134238
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.75251777267E+03	Apriori delay (usec)	-2.75250409074E+03	Resid mbdelay (usec)	1.94307E-03	+/-	9.8E-05
Sband delay (usec)	-2.75251797749E+03	Apriori clock (usec)	-4.6917171E+01	Resid sbdelay (usec)	-1.38867E-02	+/-	7.8E-04
Phase delay (usec)	-2.75250408864E+03	Apriori clockrate (us/s)	-4.2800003E-07	Resid phdelay (usec)	2.09371E-06	+/-	3.3E-07
Delay rate (us/s)	9.28180056743E-01	Apriori rate (us/s)	9.28180284739E-01	Resid rate (us/s)	-2.27995E-07	+/-	3.2E-09
Total phase (deg)	-70.5	Apriori accel (us/s/s)	-1.38804895261E-05	Resid phase (deg)	64.9	+/-	10.3

ph/seg (deg)	59.9	RMS	24.2	Theor.	59.9	Amplitude	0.303 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	84.6		42.2		84.6	Search (1024X32)	0.292	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	43.8		14.6		43.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	31.9		25.5		31.9	Inc. seg. avg.	0.463	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	0.360	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

t: az 33.0 el 21.4 pa -60.6 X: az 338.2 el 29.8 pa 22.7 u,v (fr/asec) -10186.946 -3094.322 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tX..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tX.W.346.1HR8HE

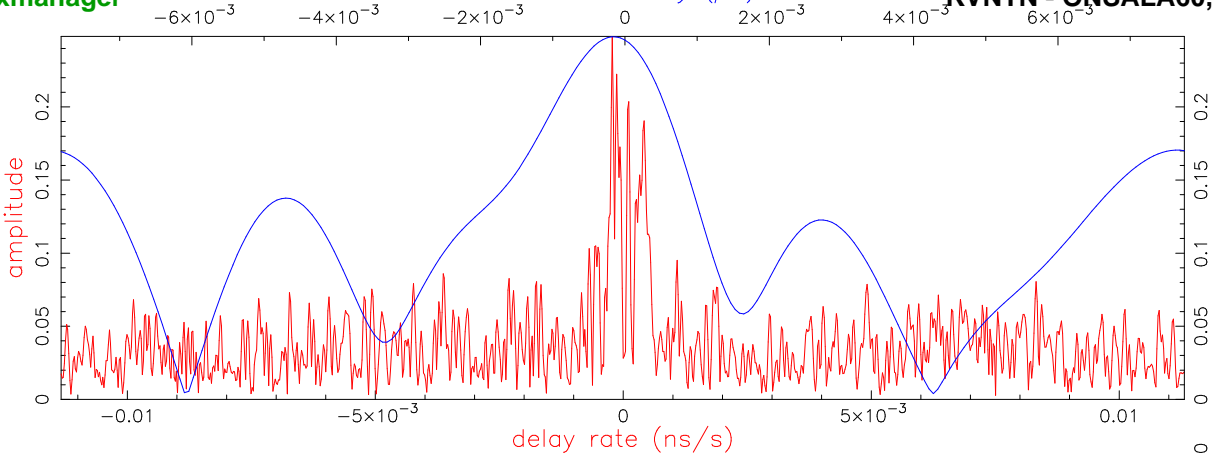
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tX

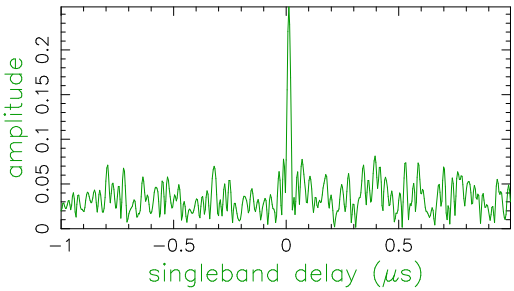
KVNTN - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

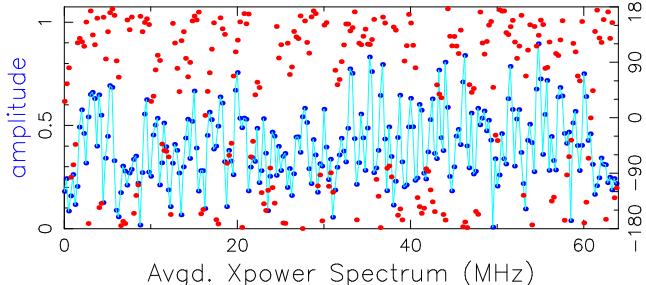


Fringe quality 9

SNR 9.1
 Int time 179.965
 Amp 0.248
 Phase -67.5
 PFD 1.7e-11
 Delays (us)
 SBD 0.012047
 MBD -0.000152
 Fringe rate (Hz)
 -0.019424
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

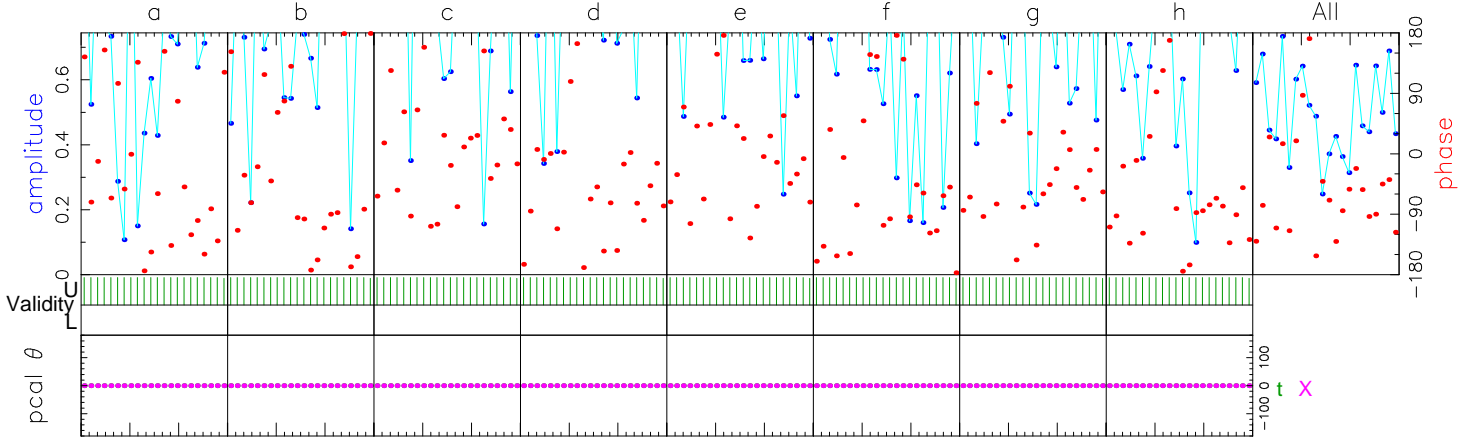


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134240
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-120.7	-118.9	6.7	-62.7	-21.3	-126.4	-47.1	-99.4	Phase	-67.5
	0.2	0.3	0.4	0.4	0.4	0.3	0.4	0.4	Ampl.	0.3
	55.7	260.9	260.6	259.7	259.3	260.5	259.7	259.7	Sbd box	260.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.75248861761E+03	Apriori delay (usec)	-2.75250409074E+03	Resid mbdelay (usec)	-1.51871E-04	+/-	1.2E-04
Sband delay (usec)	-2.75249204424E+03	Apriori clock (usec)	-4.6917171E+01	Resid sbdelay (usec)	1.20465E-02	+/-	9.5E-04
Phase delay (usec)	-2.75250409292E+03	Apriori clockrate (us/s)	-4.2800003E-07	Resid phdelay (usec)	-2.17793E-06	+/-	4.1E-07
Delay rate (us/s)	9.28180059246E-01	Apriori rate (us/s)	9.28180284739E-01	Resid rate (us/s)	-2.25493E-07	+/-	3.9E-09
Total phase (deg)	-203.0	Apriori accel (us/s/s)	-1.38804895261E-05	Resid phase (deg)	-67.5	+/-	12.6

ph/seg (deg)	63.6	Theor.	29.5	Amplitude	0.248 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	114.5	Search (1024X32)	0.243	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
ph/frq (deg)	54.8	Inc. seg. avg.	0.441	Bits/sample: 2x2		mb window (us)	-0.008 0.008
amp/frq (%)	52.2	Inc. frq. avg.	0.339	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011
				Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00

t: az 33.0 el 21.4 pa -60.6 X: az 338.2 el 29.8 pa 22.7 u,v (fr/asec) -10186.946 -3094.322 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tX..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tX.W.364.1HR8HE

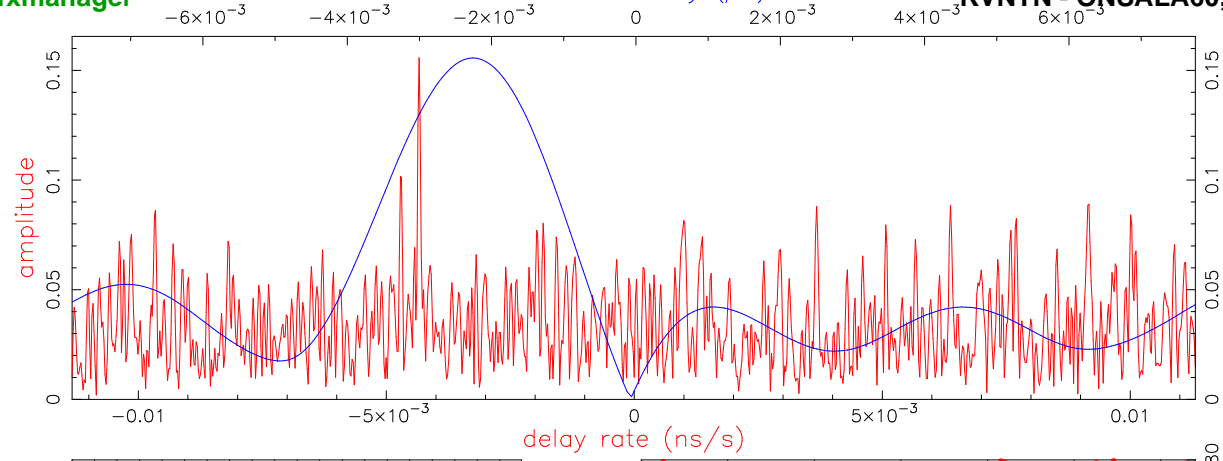
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

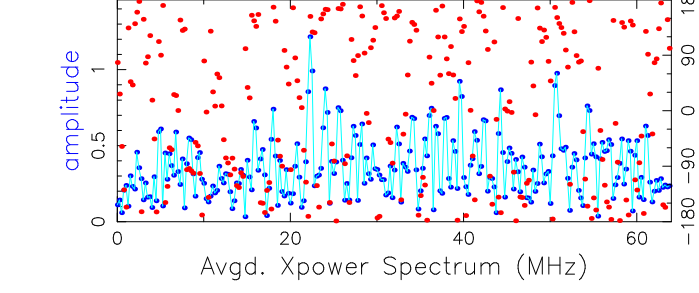
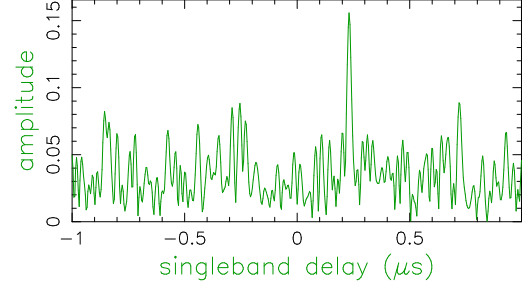
0102+584.1HR8HE, No0110, tX

KVNTN - ONSALA60, fgroup W, pol LR

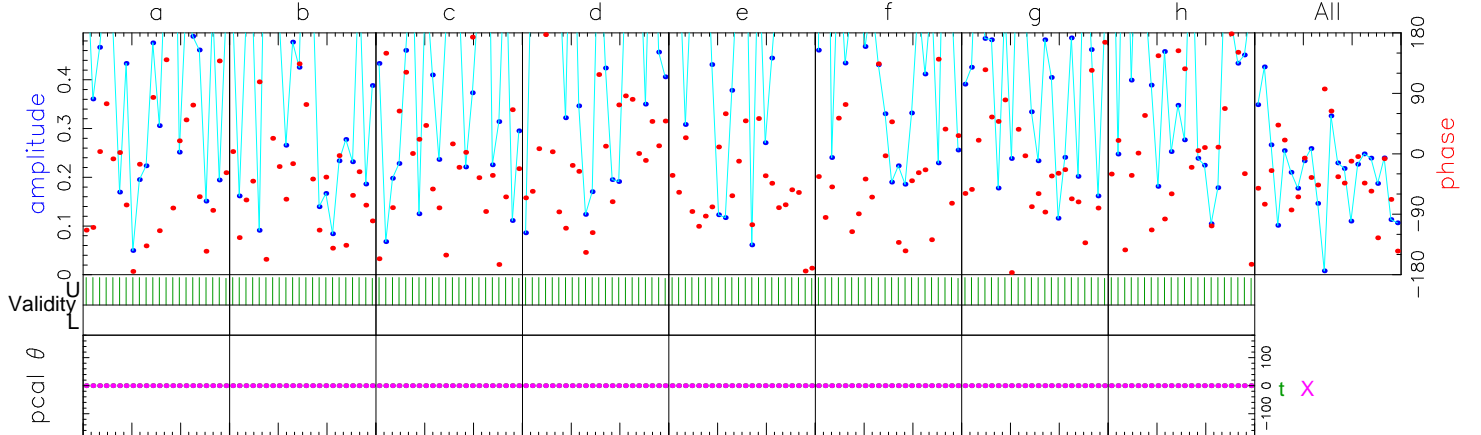
multiband delay (μ s)



Fringe quality 0
 SNR 5.7
 Int time 179.965
 Amp 0.166
 Phase -36.2
 PFD 7.5e-01
 Delays (us)
 SBD 0.230677
 MBD -0.002245
 Fringe rate (Hz)
 -0.373953
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134242
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-44.4	-36.5	-43.6	10.5	-60.3	-50.3	-18.2	-34.1	Phase	-36.2
	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.1	Ampl.	0.2
	111.6	39.9	496.3	315.0	316.9	314.1	506.5	191.3	Sbd box	316.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.75227196041E+03	Apriori delay (usec)	-2.75250409074E+03	Resid mbdelay (usec)	-2.24467E-03	+/-	1.9E-04
Sband delay (usec)	-2.75227341374E+03	Apriori clock (usec)	-4.6917171E+01	Resid sbdelay (usec)	2.30677E-01	+/-	1.5E-03
Phase delay (usec)	-2.75250409191E+03	Apriori clockrate (us/s)	-4.2800003E-07	Resid phdelay (usec)	-1.16838E-06	+/-	6.5E-07
Delay rate (us/s)	9.28175943514E-01	Apriori rate (us/s)	9.28180284739E-01	Resid rate (us/s)	-4.34122E-06	+/-	6.2E-09
Total phase (deg)	-171.6	Apriori accel (us/s/s)	-1.38804895261E-05	Resid phase (deg)	-36.2	+/-	20.1

ph/seg (deg)	54.9	Theor.	47.0	Amplitude	0.166 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	68.6	Search (1024X32)	0.154	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	23.9	Inc. seg. avg.	0.169	Inc. seg. avg.	0.169	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	40.4	Inc. frq. avg.	0.160	Inc. frq. avg.	0.160	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

t: az 33.0 el 21.4 pa -60.6 X: az 338.2 el 29.8 pa 22.7 u,v (fr/asec) -10186.946 -3094.322 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tX..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tX.W.381.1HR8HE

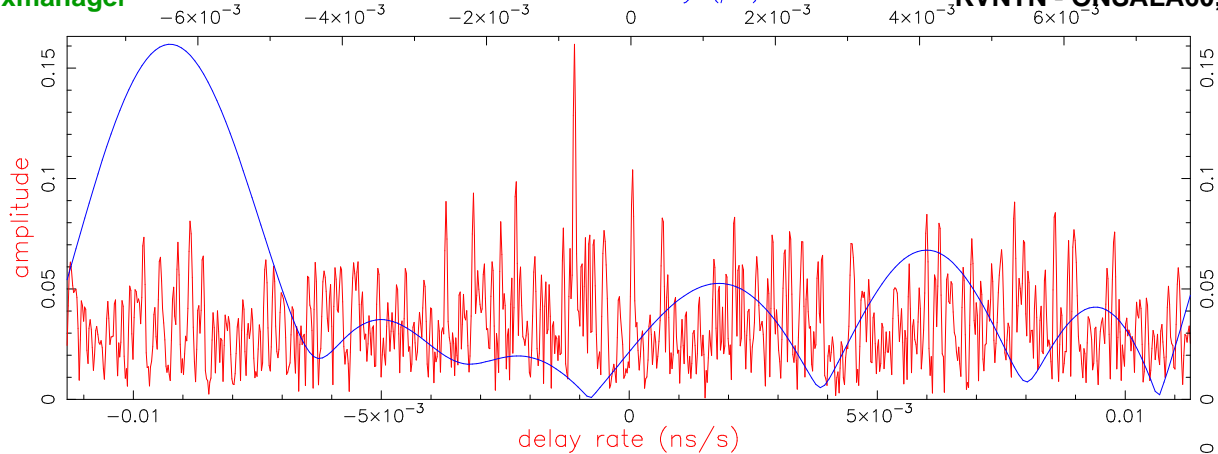
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tX

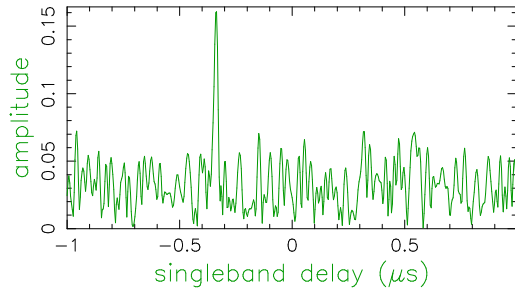
KVNTN - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

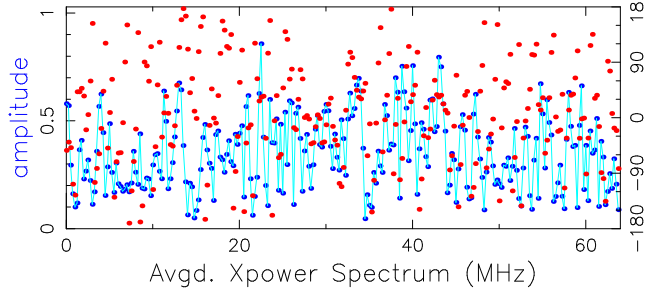


Fringe quality 0

SNR 6.0
 Int time 179.965
 Amp 0.164
 Phase 152.8
 PFD 2.2e-01
 Delays (us)
 SBD -0.337729
 MBD -0.006365
 Fringe rate (Hz)
 -0.096270
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

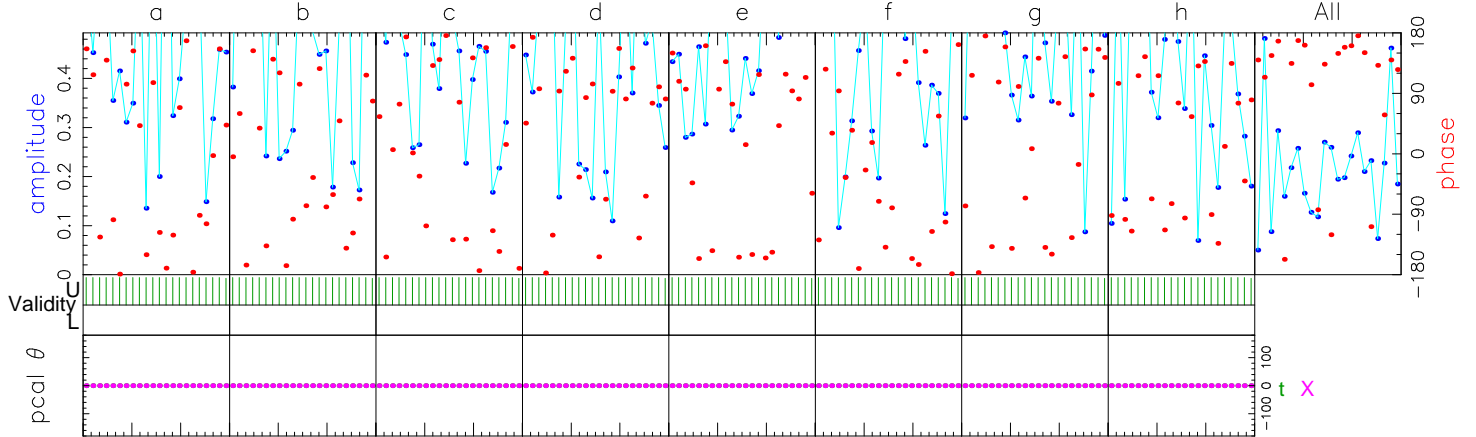


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134244
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.75283858035E+03									
Sband delay (usec)	-2.75284181974E+03									
Phase delay (usec)	-2.75250408581E+03									
Delay rate (us/s)	9.28179167145E-01									
Total phase (deg)			17.4							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
RMS	48.5	44.8								
Theor.	78.1	78.1								
Amplitude	0.164 +/- 0.027									
Search (1024X32)	0.152									
Interp.	0.000									
Inc. seg. avg.	0.168									
Inc. frq. avg.	0.152									
PC period (AP's) 5, 5										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
simultaneous interpolator										

t: az 33.0 el 21.4 pa -60.6 X: az 338.2 el 29.8 pa 22.7 u,v (fr/asec) -10186.946 -3094.322 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tX..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tX.W.395.1HR8HE

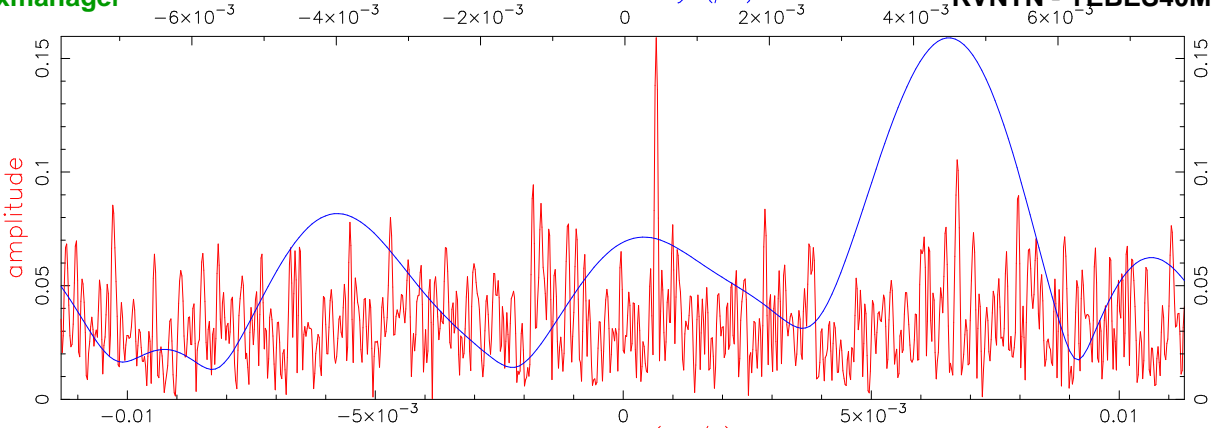
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tY

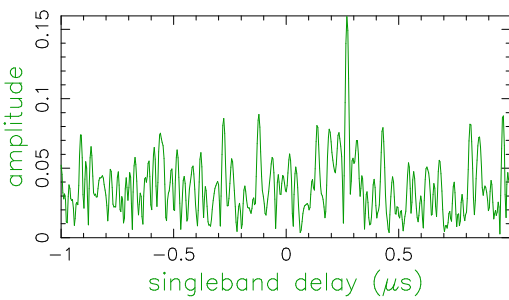
KVNTN - YEBES40M, fgroup W, pol LL

multiband delay (μ s)

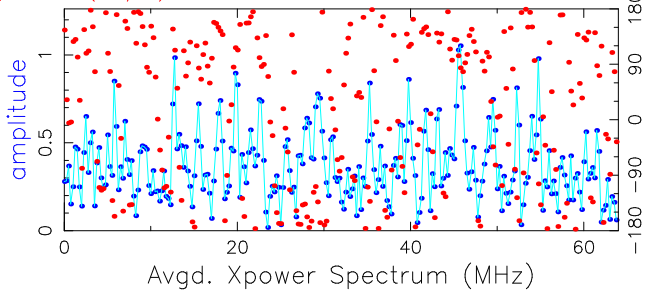


Fringe quality 0

SNR 5.6
 Int time 162.086
 Amp 0.160
 Phase -30.9
 PFD 9.7e-01
 Delays (us)
 SBD 0.270180
 MBD 0.004504
 Fringe rate (Hz)
 0.056786
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

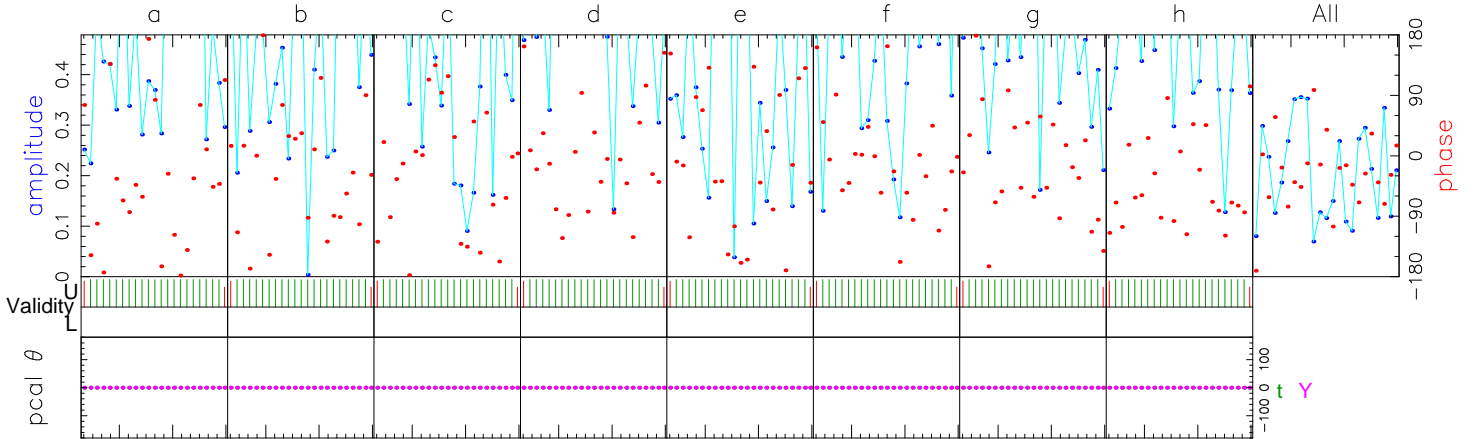


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083016.90
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134239
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-71.8	-8.1	15.2	-32.0	-129.1	-23.1	-13.8	-46.9	Phase	-30.9
	0.1	0.2	0.1	0.3	0.1	0.2	0.2	0.3	Ampl.	0.2
	173.8	261.8	310.2	367.1	188.6	325.3	34.7	326.9	Sbd box	326.2
U/L	319/0	319/0	319/0	319/0	319/0	319/0	319/0	319/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.14517178358E+03	Apriori delay (usec)	1.14490165415E+03	Resid mbdelay (usec)	4.50442E-03	+/-	2.0E-04
Sband delay (usec)	1.14517183440E+03	Apriori clock (usec)	-1.0303822E+01	Resid sbdelay (usec)	2.70180E-01	+/-	1.6E-03
Phase delay (usec)	1.14490165316E+03	Apriori clockrate (us/s)	-2.0000006E-08	Resid phdelay (usec)	-9.96736E-07	+/-	6.7E-07
Delay rate (us/s)	1.15139453631E+00	Apriori rate (us/s)	1.15139387708E+00	Resid rate (us/s)	6.59232E-07	+/-	7.1E-09
Total phase (deg)	145.1	Apriori accel (us/s/s)	-1.58547067278E-05	Resid phase (deg)	-30.9	+/-	20.6

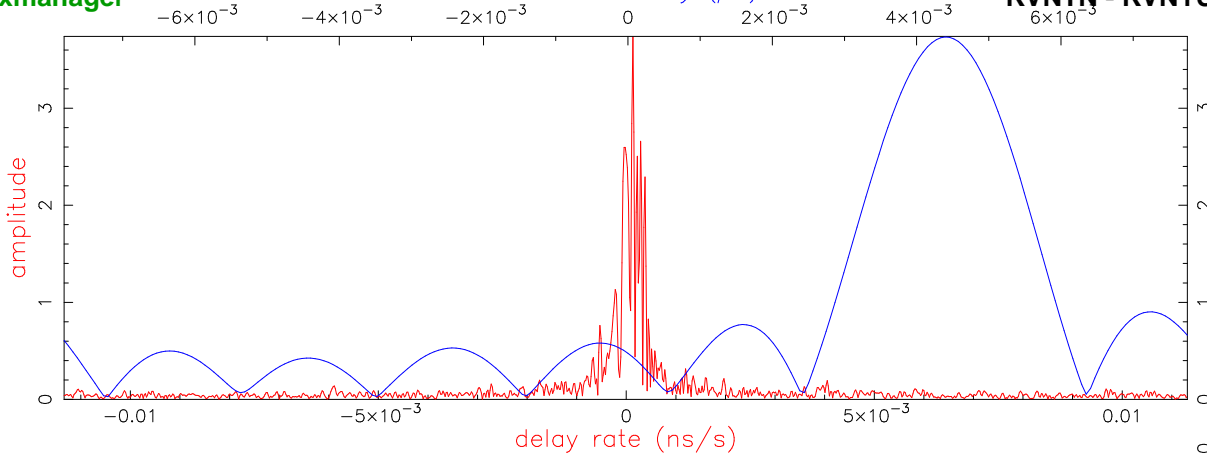
ph/seg (deg)	54.8	Theor.	49.5	Amplitude	0.160 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	66.9	Search (1024X32)	0.156	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	49.3	Inc. seg. avg.	0.151	Inc. frq. avg.	0.160	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	46.9	Inc. frq. avg.	0.160			Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

t: az 33.0 el 21.4 pa -60.6 Y: az 333.9 el 18.4 pa 39.8 u,v (fr/asec) -12637.049 -2444.224 simultaneous interpolator

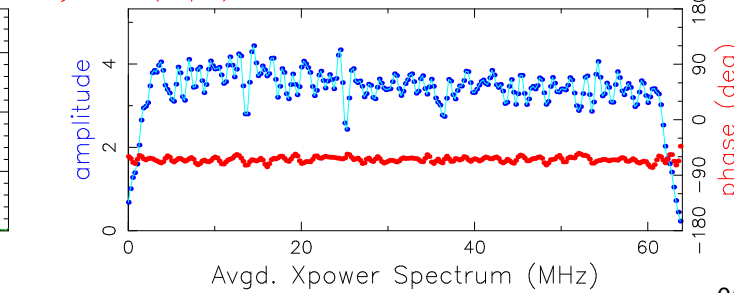
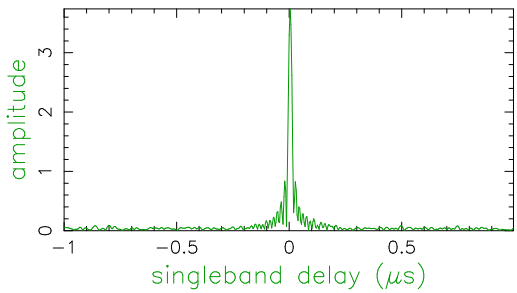
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tY..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tY.W.350.1HR8HE

multiband delay (μ s)

Fringe quality 5

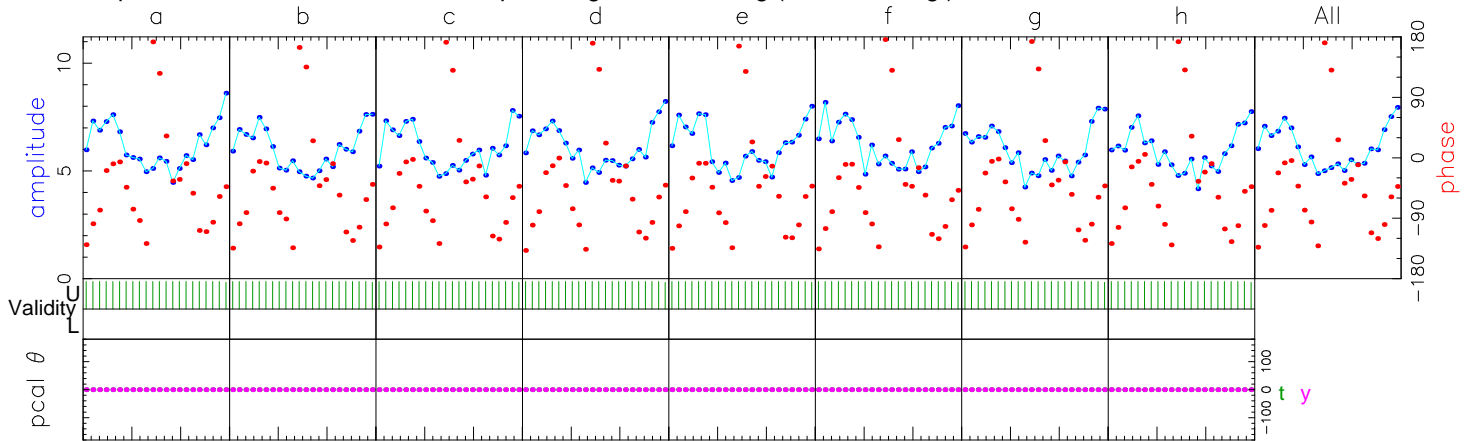


SNR 137.2
Int time 179.985
Amp 3.741
Phase -64.6
PFD 0.0e+00
Delays (us)
SBD 0.004420
MBD 0.004407
Fringe rate (Hz)
0.010567
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 083000.00
Stop 083300.22
FRT 083130.00
Corr/FF/build
2021:006:162416
2021:010:134239
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.28097055846E+03	Apriori delay (usec)	-1.28097496570E+03	Resid mbdelay (usec)	4.40724E-03	+/-	7.9E-06
Sband delay (usec)	-1.28097054520E+03	Apriori clock (usec)	1.3400078E-01	Resid sbdelay (usec)	4.42050E-03	+/-	6.3E-05
Phase delay (usec)	-1.28097496778E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.08414E-06	+/-	2.7E-08
Delay rate (us/s)	3.28162057720E-02	Apriori rate (us/s)	3.28160831051E-02	Resid rate (us/s)	1.22667E-07	+/-	2.6E-10
Total phase (deg)	-260.8	Apriori accel (us/s/s)	9.68552560261E-07	Resid phase (deg)	-64.6	+/-	0.8

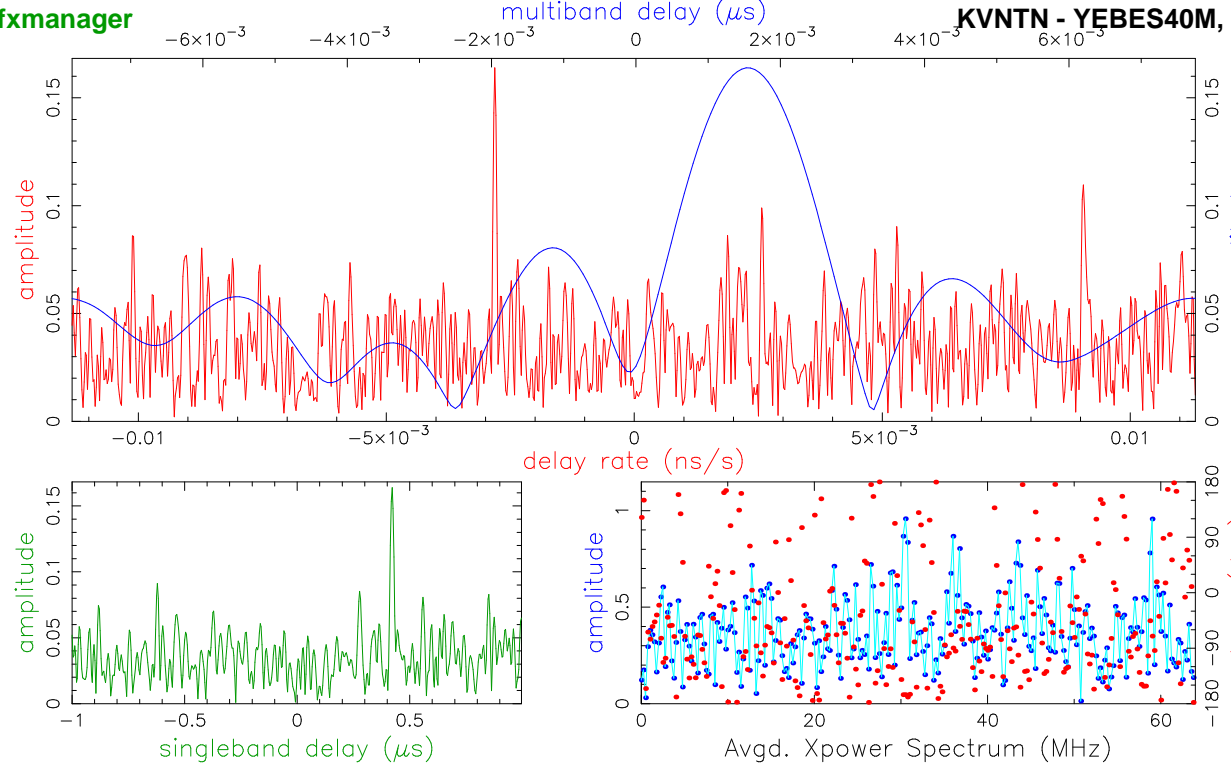
ph/seg (deg)	61.7	RMS	2.0	Theor.	3.741 +/- 0.027	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	67.4	Search (1024X32)	3.514	Search	3.514	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	2.9	Inc. seg. avg.	6.089	Inc. seg. avg.	6.089	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	2.9	Inc. frq. avg.	3.737	Inc. frq. avg.	3.737	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
t: az 33.0 el 21.4 pa -60.6		y: az 34.2 el 25.2 pa -59.0		u,v (fr/asec)	-358.685 -155.251	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tY

KVNTN - YEBES40M, fgroup W, pol RR

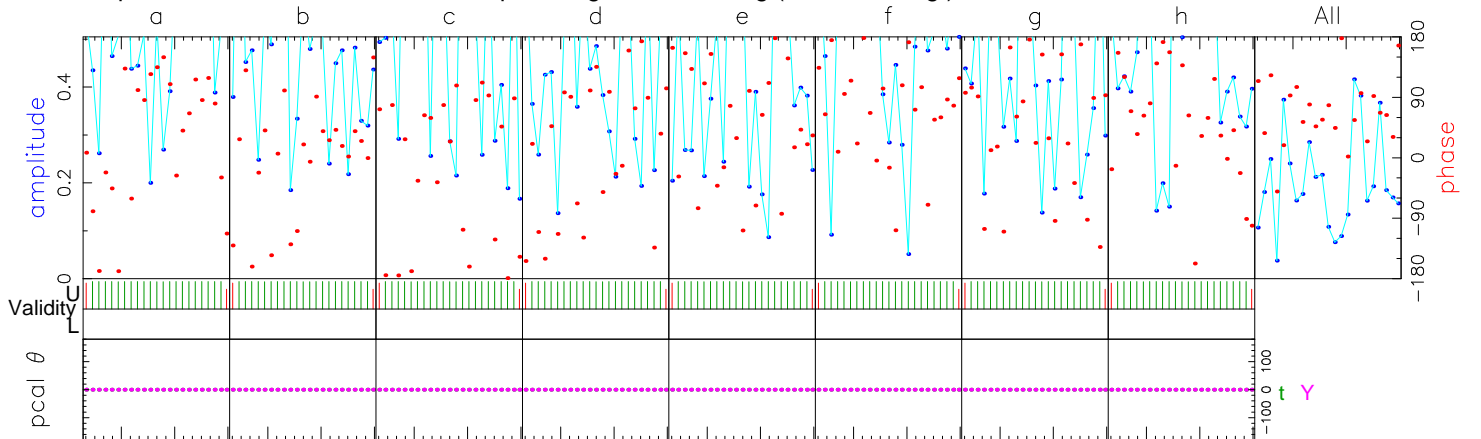


Fringe quality 0

SNR 5.7
 Int time 162.086
 Amp 0.168
 Phase 67.3
 PFD 7.5e-01
 Delays (us)
 SBD 0.421477
 MBD 0.001547
 Fringe rate (Hz)
 -0.242242
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083016.90
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134240
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	319/0	319/0	319/0	319/0	319/0	319/0	319/0	319/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
t:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	1.14532507611E+03	Apriori delay (usec)	1.14490165415E+03	Resid mbdelay (usec)	1.54696E-03	+/-	1.9E-04
Sband delay (usec)	1.14532313115E+03	Apriori clock (usec)	-1.0303822E+01	Resid sbdelay (usec)	4.21477E-01	+/-	1.5E-03
Phase delay (usec)	1.14490165632E+03	Apriori clockrate (us/s)	-2.0000006E-08	Resid phdelay (usec)	2.17058E-06	+/-	6.5E-07
Delay rate (us/s)	1.15139106489E+00	Apriori rate (us/s)	1.15139387708E+00	Resid rate (us/s)	-2.81219E-06	+/-	6.9E-09
Total phase (deg)	243.3	Apriori accel (us/s/s)	-1.58547067278E-05	Resid phase (deg)	67.3	+/-	20.1

ph/seg (deg)	48.9	Theor.	48.1	Amplitude	0.168 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	66.3	Search (1024X32)	0.160	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	28.4	Inc. seg. avg.	0.155	Inc. frq. avg.	0.159	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	46.0	Inc. frq. avg.	0.159	Sample rate(MSamp/s): 128		Data rate(Mb/s): 2048	nlags: 256
							t_cohere infinite
							ion window (TEC) 0.00 0.00

t: az 33.0 el 21.4 pa -60.6 Y: az 333.9 el 18.4 pa 39.8 u,v (fr/asec) -12637.049 -2444.224 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tY..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tY.W.366.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

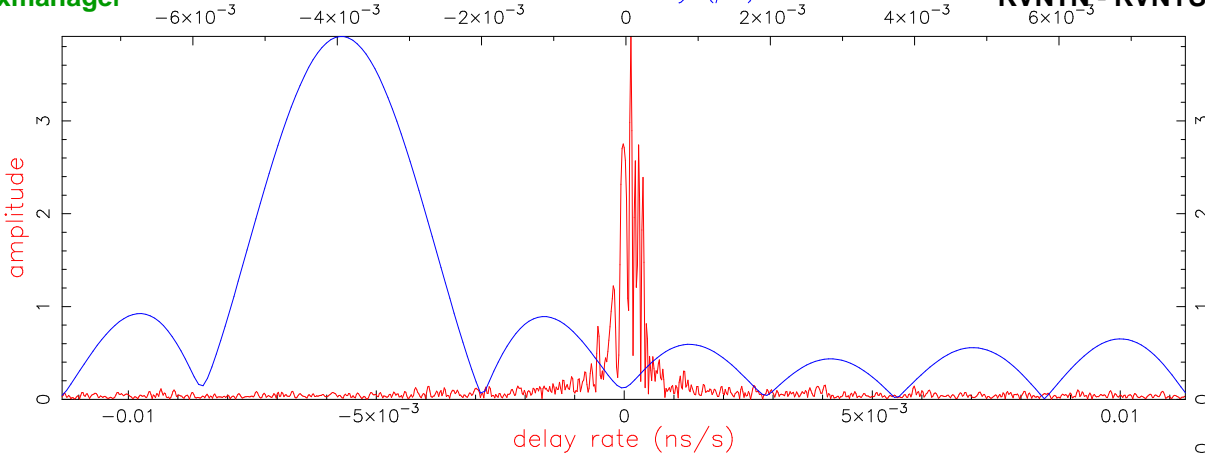
fxmanager

0102+584.1HR8HE, No0110, ty

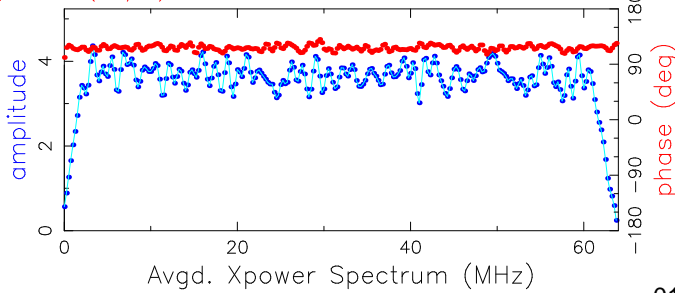
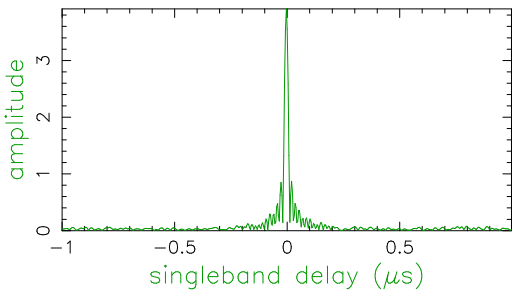
KVNTN - KVNY, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 5

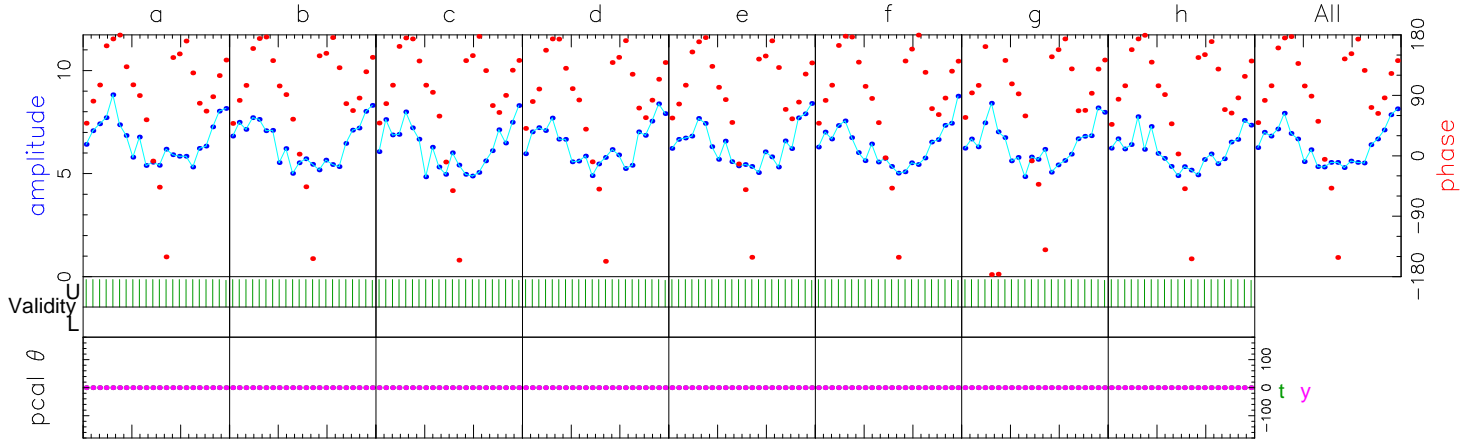


SNR 143.5
 Int time 179.985
 Amp 3.911
 Phase 117.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.003873
 MBD -0.003942
 Fringe rate (Hz)
 0.010553
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134240
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.28097890793E+03									
Sband delay (usec)	-1.28097883895E+03									
Phase delay (usec)	-1.28097496190E+03									
Delay rate (us/s)	3.28162056204E-02									
Total phase (deg)			-78.5							
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)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PCal period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

t: az 33.0 el 21.4 pa -60.6 y: az 34.2 el 25.2 pa -59.0 u,v (fr/asec) -358.685 -155.251 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/ty..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/ty.W.367.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

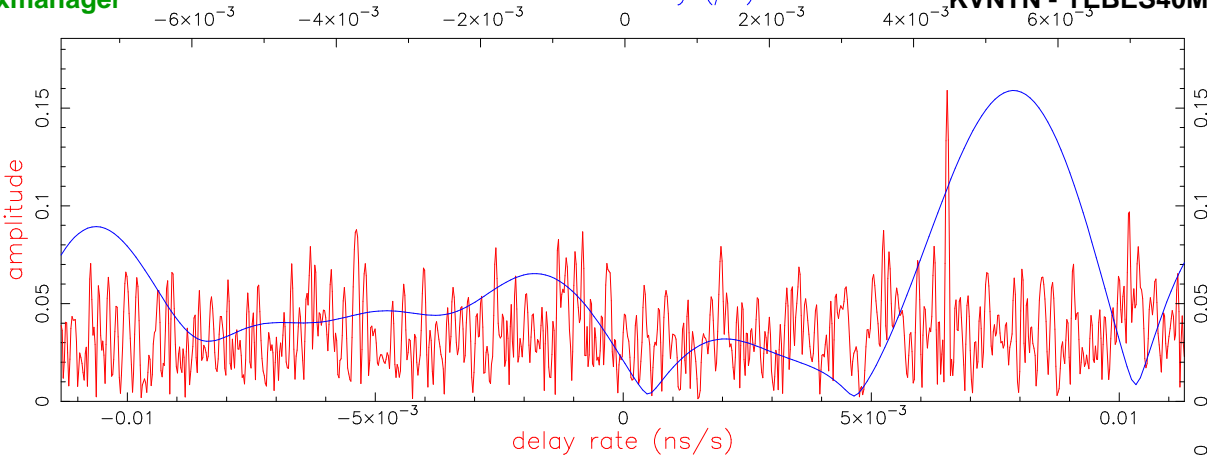
fxmanager

0102+584.1HR8HE, No0110, tY

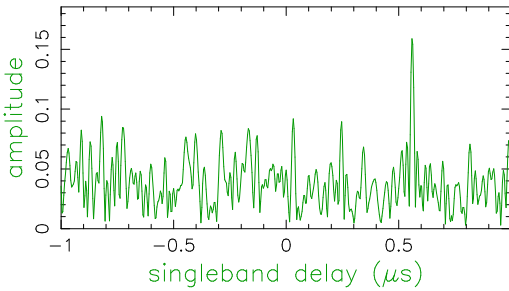
KVNTN - YEBES40M, fgroup W, pol LR

multiband delay (μ s)

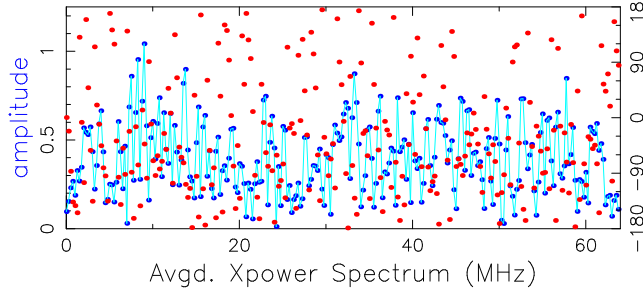
Fringe quality 0



SNR 5.6
 Int time 162.086
 Amp 0.186
 Phase -170.9
 PFD 9.1e-01
 Delays (us)
 SBD 0.559993
 MBD 0.005390
 Fringe rate (Hz) 0.564265
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

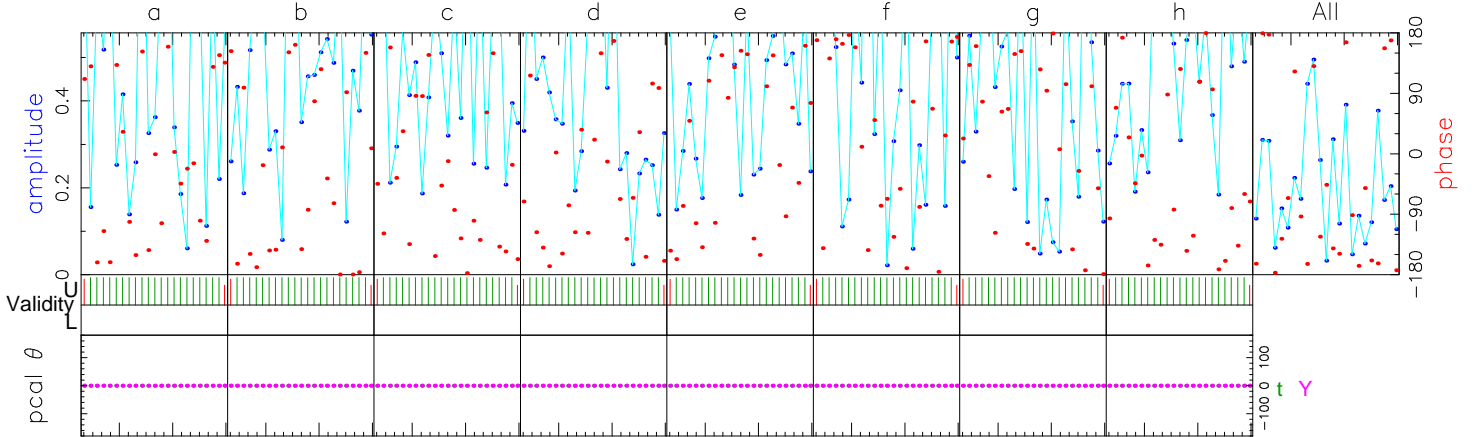


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083016.90
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134242
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-177.0	-179.0	-128.4	-152.8	147.7	-172.2	137.2	-139.9	Phase	-170.9
	0.2	0.3	0.2	0.1	0.2	0.3	0.2	0.2	Ampl.	0.2
	342.0	153.6	193.5	509.8	175.4	400.7	355.7	387.9	Sbd box	400.4
U/L	319/0	319/0	319/0	319/0	319/0	319/0	319/0	319/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

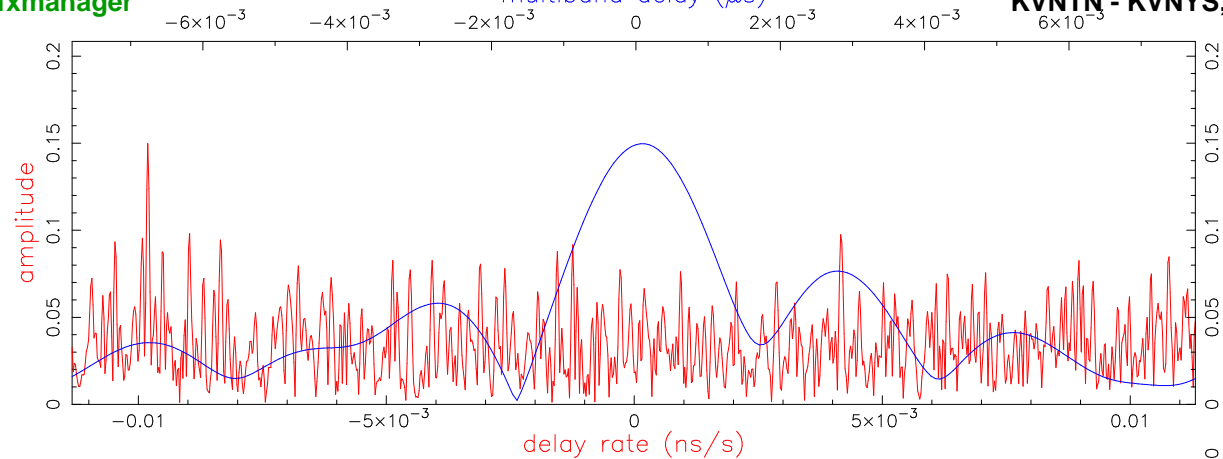
Group delay (usec)(sbd)	1.14545391952E+03	Apriori delay (usec)	1.14490165415E+03	Resid mbdelay (usec)	5.39036E-03	+/-	1.9E-04
Sband delay (usec)	1.14546164715E+03	Apriori clock (usec)	-1.0303822E+01	Resid sbdelay (usec)	5.59993E-01	+/-	1.5E-03
Phase delay (usec)	1.14490164864E+03	Apriori clockrate (us/s)	-2.0000006E-08	Resid phdelay (usec)	-5.51065E-06	+/-	6.6E-07
Delay rate (us/s)	1.15140042764E+00	Apriori rate (us/s)	1.15139387708E+00	Resid rate (us/s)	6.55056E-06	+/-	7.0E-09
Total phase (deg)	5.1	Apriori accel (us/s/s)	-1.58547067278E-05	Resid phase (deg)	-170.9	+/-	20.4

ph/seg (deg)	55.3	Theor.	49.0	Amplitude	0.186 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	85.4	Search (1024X32)	0.157	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	35.6	Inc. seg. avg.	0.176	Inc. frq. avg.	0.185	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	36.5	Inc. frq. avg.	0.185			Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
						Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

t: az 33.0 el 21.4 pa -60.6 Y: az 333.9 el 18.4 pa 39.8 u,v (fr/asec) -12637.049 -2444.224 simultaneous interpolator

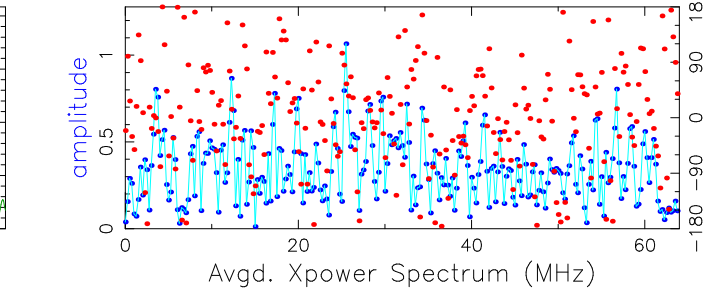
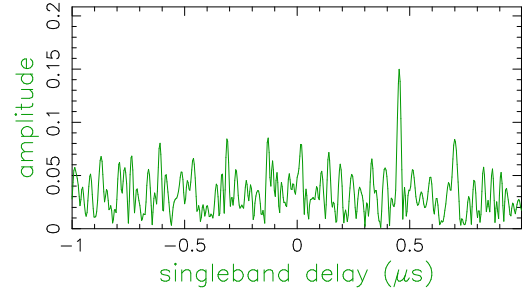
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tY..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tY.W.382.1HR8HE

multiband delay (μ s)



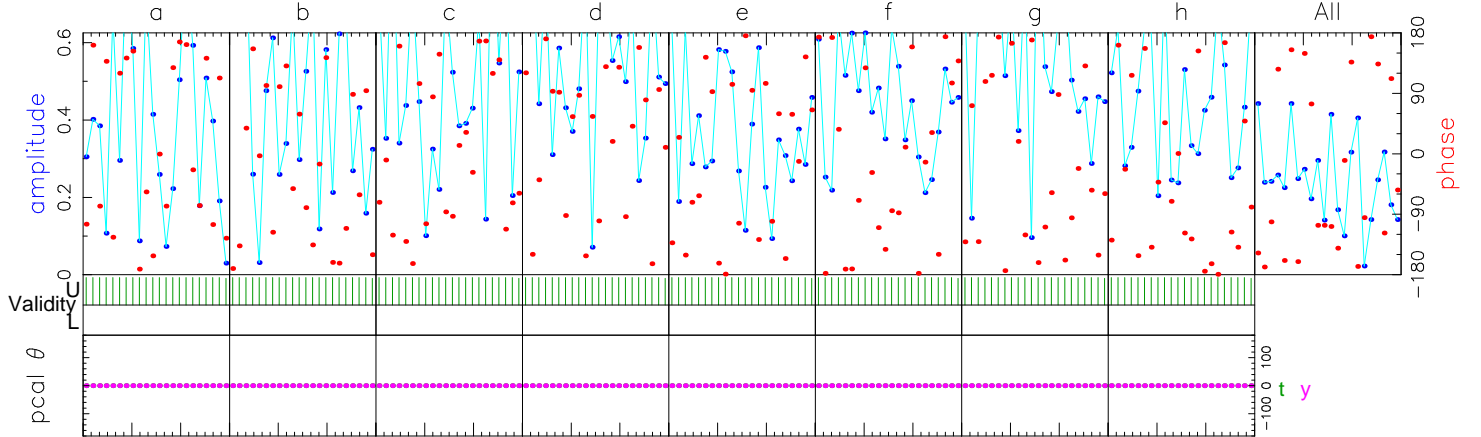
Fringe quality 0

SNR 5.5
 Int time 179.985
 Amp 0.208
 Phase -165.5
 PFD 9.9e-01
 Delays (us)
 SBD 0.453335
 MBD 0.000088
 Fringe rate (Hz)
 -0.846527
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134243
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.28052175277E+03					-1.28097496570E+03			8.79242E-05	+/- 2.0E-04
Sband delay (usec)	-1.28052163120E+03					1.3400078E-01			4.53335E-01	+/- 1.6E-03
Phase delay (usec)	-1.28097497103E+03					0.0000000E+00			-5.33713E-06	+/- 6.7E-07
Delay rate (us/s)	3.28062557708E-02					3.28160831051E-02			-9.82733E-06	+/- 6.5E-09
Total phase (deg)			-1.7			9.68552560261E-07			-165.5	+/- 20.9
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
SampCntNorm: enabled									-0.008	0.008
mb window (us)									-0.011	0.011
nlags: 256 t_cohere infinite									0.00	0.00
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 66.1 48.9 Search (1024X32) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 98.1 85.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.9 29.5 Inc. seg. avg. 0.253 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.6 51.5 Inc. frq. avg. 0.200 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 33.0 el 21.4 pa -60.6 y: az 34.2 el 25.2 pa -59.0 u,v (fr/asec) -358.685 -155.251 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/ty..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/ty.W.386.1HR8HE

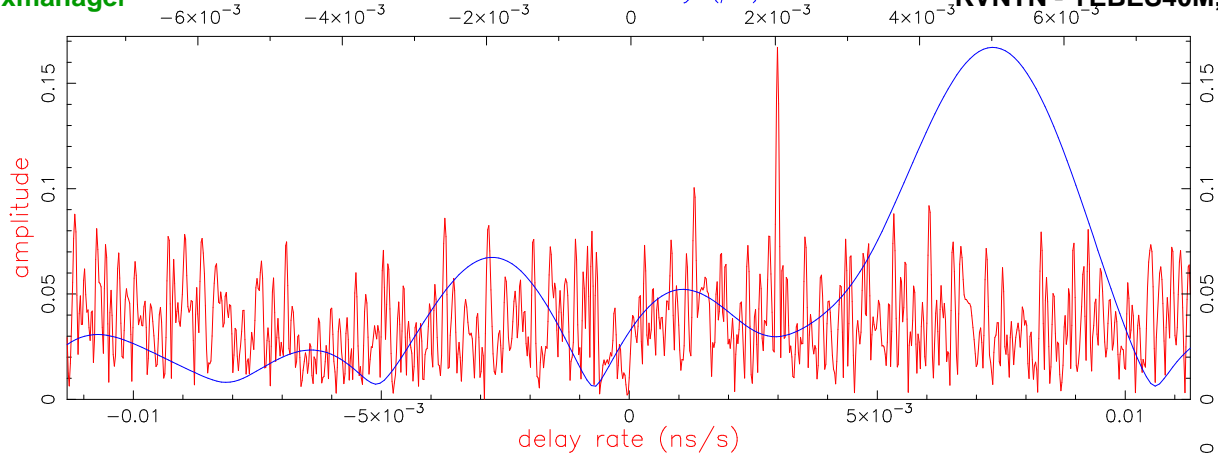
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tY

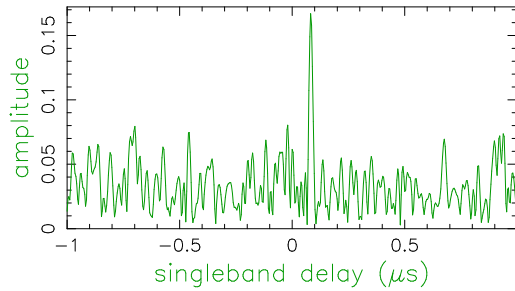
KVNTN - YEBES40M, fgroup W, pol RL

multiband delay (μ s)

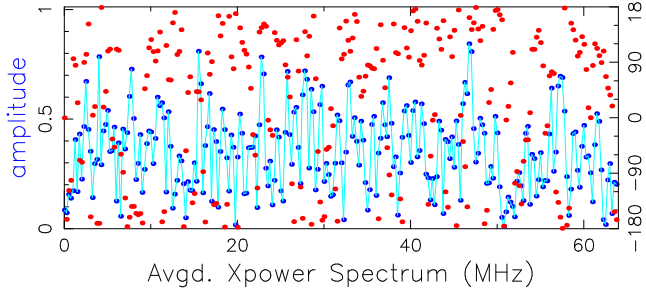


Fringe quality 0

SNR 5.8
 Int time 162.086
 Amp 0.172
 Phase -47.2
 PFD 5.1e-01
 Delays (us)
 SBD 0.082634
 MBD 0.005011
 Fringe rate (Hz)
 0.256963
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

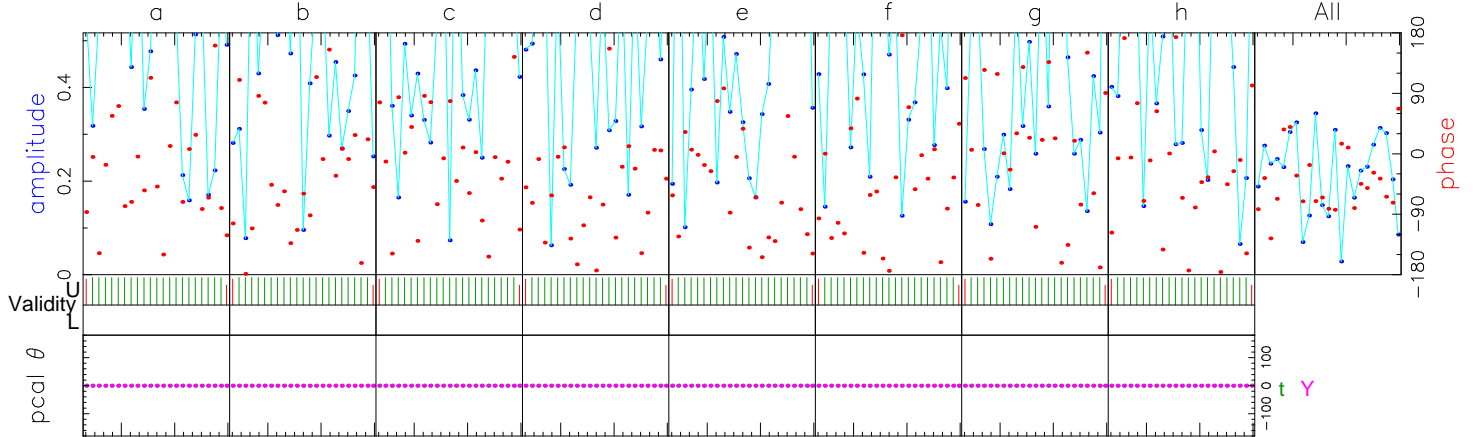


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083016.90
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134244
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-41.0	-63.2	-21.3	-57.5	-62.4	-71.5	27.6	-40.2	Phase	-47.2
	0.2	0.1	0.2	0.3	0.2	0.2	0.1	0.1	Ampl.	0.2
	74.3	221.5	511.0	279.9	259.7	451.0	134.5	73.6	Sbd box	278.2
U/L	319/0	319/0	319/0	319/0	319/0	319/0	319/0	319/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.14498478998E+03	Apriori delay (usec)	1.14490165415E+03	Resid mbdelay (usec)	5.01082E-03	+/-	1.9E-04
Sband delay (usec)	1.14498428815E+03	Apriori clock (usec)	-1.0303822E+01	Resid sbdelay (usec)	8.26340E-02	+/-	1.5E-03
Phase delay (usec)	1.14490165263E+03	Apriori clockrate (us/s)	-2.0000006E-08	Resid phdelay (usec)	-1.52071E-06	+/-	6.3E-07
Delay rate (us/s)	1.15139686016E+00	Apriori rate (us/s)	1.15139387708E+00	Resid rate (us/s)	2.98308E-06	+/-	6.7E-09
Total phase (deg)	128.8	Apriori accel (us/s/s)	-1.58547067278E-05	Resid phase (deg)	-47.2	+/-	19.7

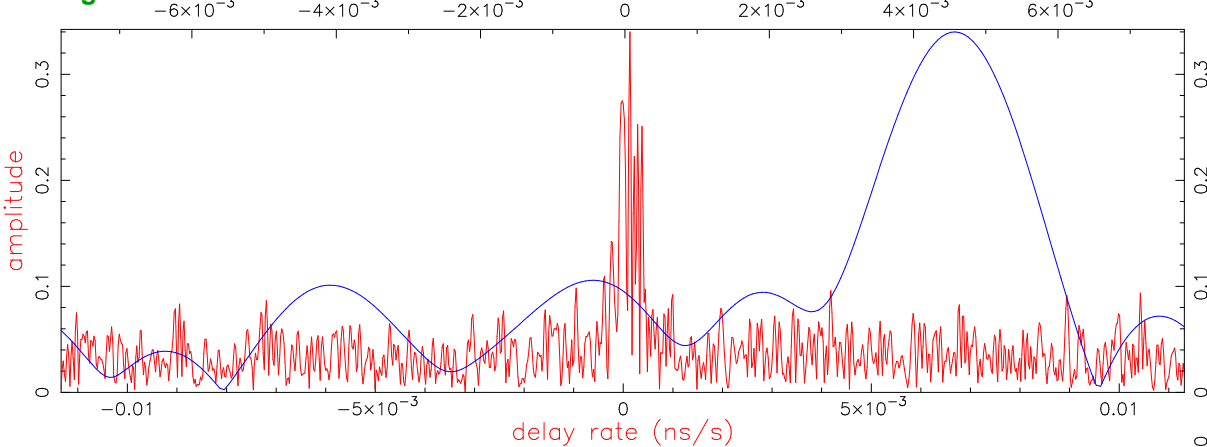
ph/seg (deg)	45.3	Theor.	47.1	Amplitude	0.172 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	59.5	Search (1024X32)	0.163	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	35.4	Inc. seg. avg.	0.168	Inc. frq. avg.	0.169	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	35.5	Inc. frq. avg.	0.169			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

t: az 33.0 el 21.4 pa -60.6 Y: az 333.9 el 18.4 pa 39.8 u,v (fr/asec) -12637.049 -2444.224 simultaneous interpolator

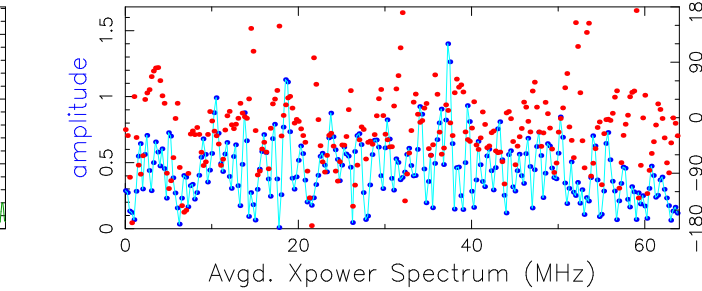
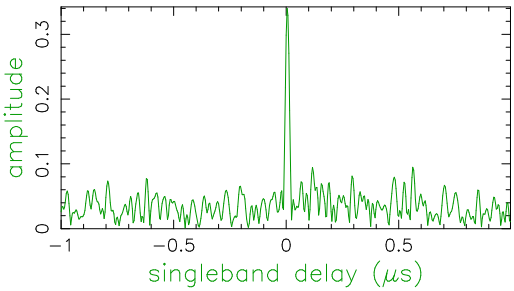
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tY..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tY.W.397.1HR8HE

multiband delay (μ s)

Fringe quality 9

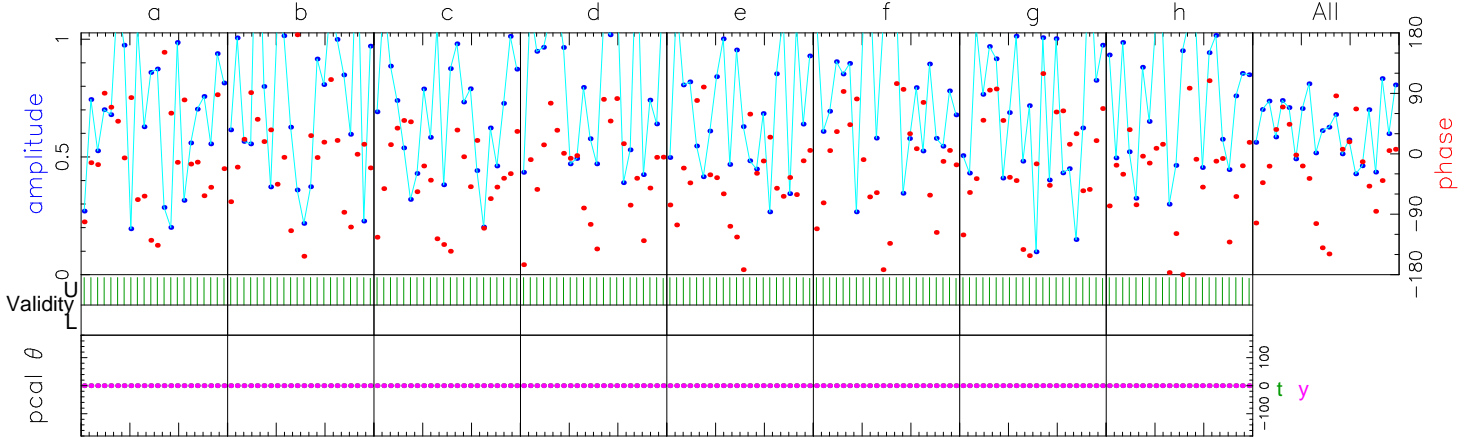


SNR 12.6
 Int time 179.985
 Amp 0.342
 Phase -14.0
 PFD 9.3e-28
 Delays (us)
 SBD 0.005063
 MBD 0.004567
 Fringe rate (Hz) 0.010581
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134245
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		258.3
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.28097039824E+03				-1.28097496570E+03				4.56745E-03	+/- 8.6E-05
Sband delay (usec)	-1.28096990245E+03				1.3400078E-01				5.06325E-03	+/- 6.9E-04
Phase delay (usec)	-1.28097496615E+03				0.0000000E+00				-4.51452E-07	+/- 2.9E-07
Delay rate (us/s)	3.28162059421E-02				3.28160831051E-02				1.22837E-07	+/- 2.8E-09
Total phase (deg)			-210.2		9.68552560261E-07				-14.0	+/- 9.1
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 64.0 21.4 Search (1024X32) 0.317 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 90.6 37.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.8 12.9 Inc. seg. avg. 0.587 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.8 22.5 Inc. frq. avg. 0.349 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 33.0 el 21.4 pa -60.6 y: az 34.2 el 25.2 pa -59.0 u,v (fr/asec) -358.685 -155.251 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/ty..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/ty.W.405.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

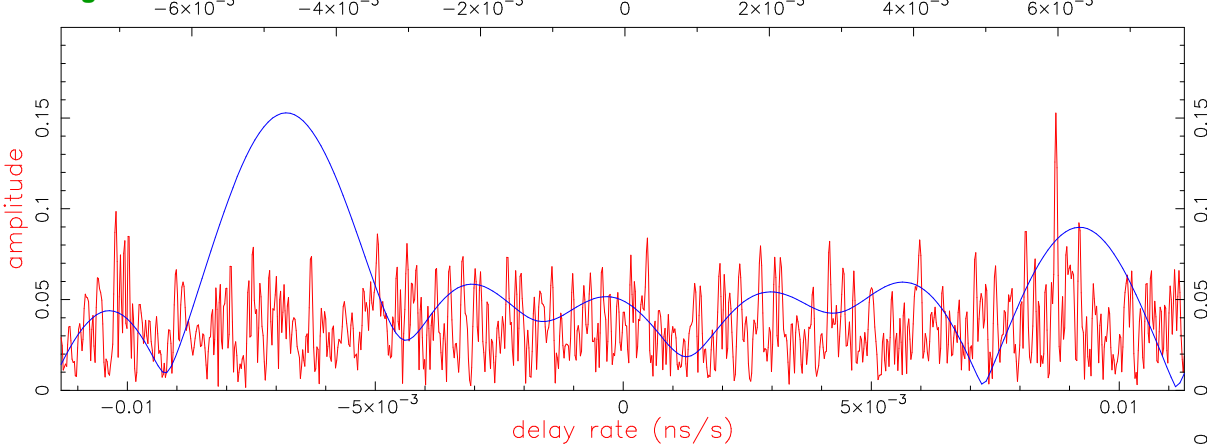
fxmanager

0102+584.1HR8HE, No0110, tZ

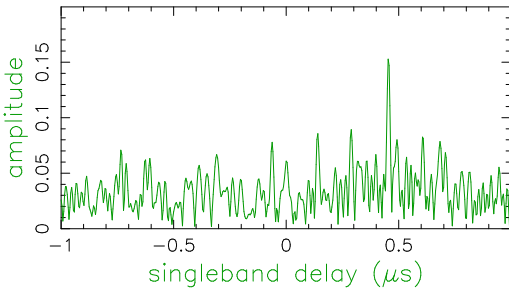
KVNTN - METSAHOV, fgroup W, pol LL

multiband delay (μ s)

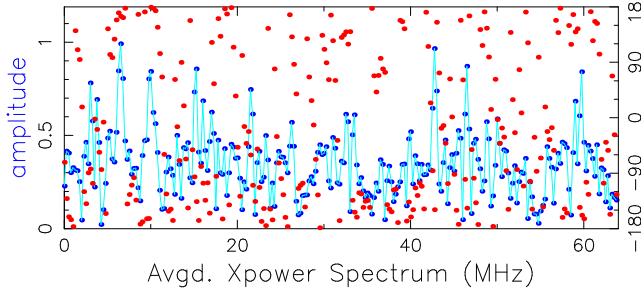
Fringe quality 0



SNR 5.7
 Int time 179.714
 Amp 0.200
 Phase 86.5
 PFD 8.3e-01
 Delays (us)
 SBD 0.454412
 MBD -0.004654
 Fringe rate (Hz)
 0.752308
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

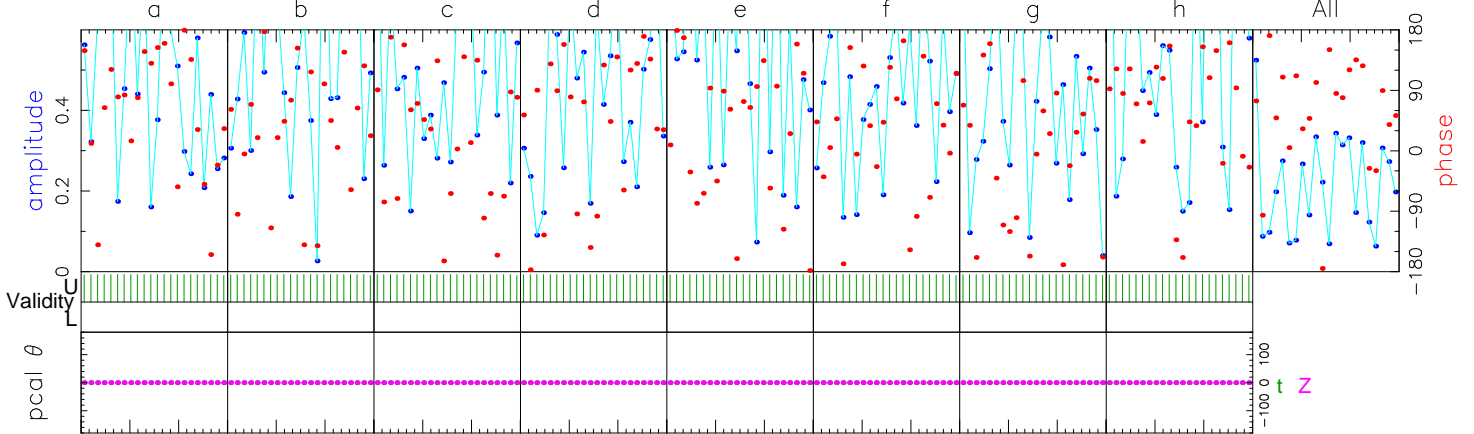


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134239
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.90830090537E+03	Apriori delay (usec)	-2.90874937643E+03	Resid mbdelay (usec)	-4.65394E-03	+/-	1.9E-04
Sband delay (usec)	-2.90829496418E+03	Apriori clock (usec)	1.2264442E+00	Resid sbdelay (usec)	4.54412E-01	+/-	1.5E-03
Phase delay (usec)	-2.90874937364E+03	Apriori clockrate (us/s)	8.3999986E-08	Resid phdelay (usec)	2.78852E-06	+/-	6.5E-07
Delay rate (us/s)	8.32594562689E-01	Apriori rate (us/s)	8.32585829142E-01	Resid rate (us/s)	8.73355E-06	+/-	6.3E-09
Total phase (deg)	-16.4	Apriori accel (us/s/s)	-1.52562441594E-05	Resid phase (deg)	86.5	+/-	20.2

ph/seg (deg)	67.9	Theor.	47.4	Amplitude	0.200 +/- 0.035	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	87.0	Search (1024X32)	0.146	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	22.0	Inc. seg. avg.	0.209	Inc. frq. avg.	0.185	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	57.0	Inc. frq. avg.	0.185			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

t: az 33.0 el 21.4 pa -60.6 Z: az 344.8 el 30.4 pa 14.7 u,v (fr/asec) -9139.778 -3393.811 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tZ..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tZ.W.352.1HR8HE

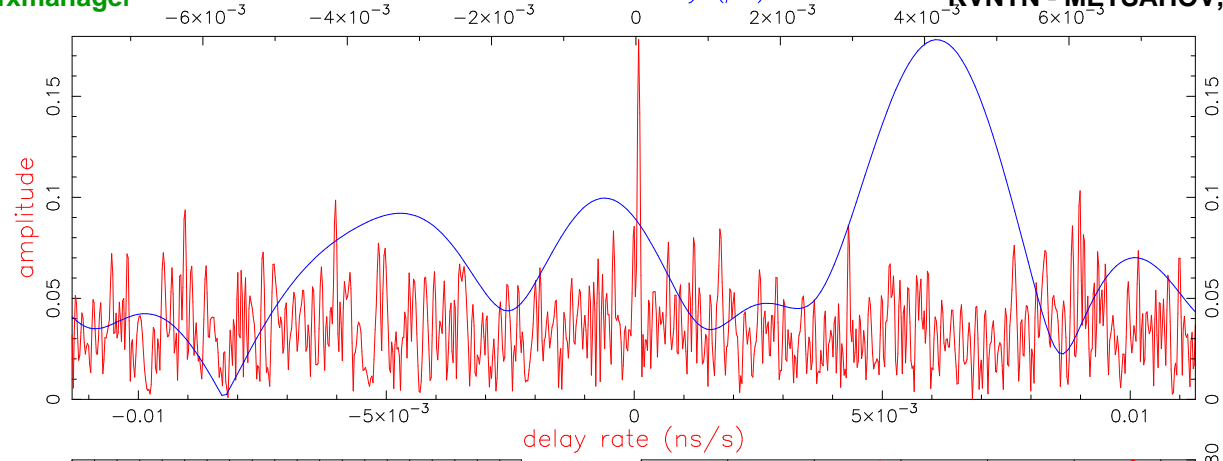
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HR8HE, No0110, tZ

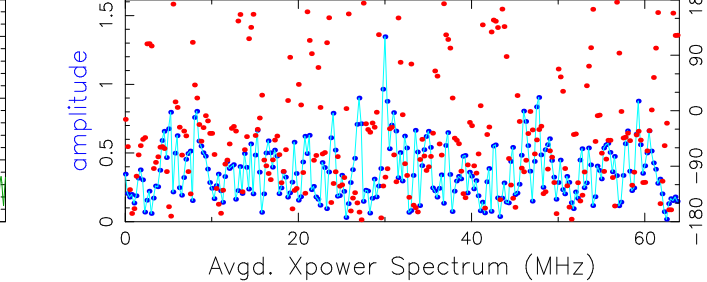
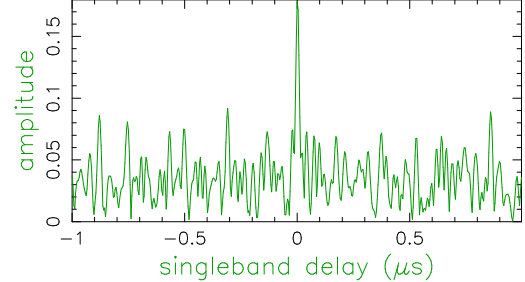
KVNTN - METSAHOV, fgroup W, pol RR

multiband delay (μ s)



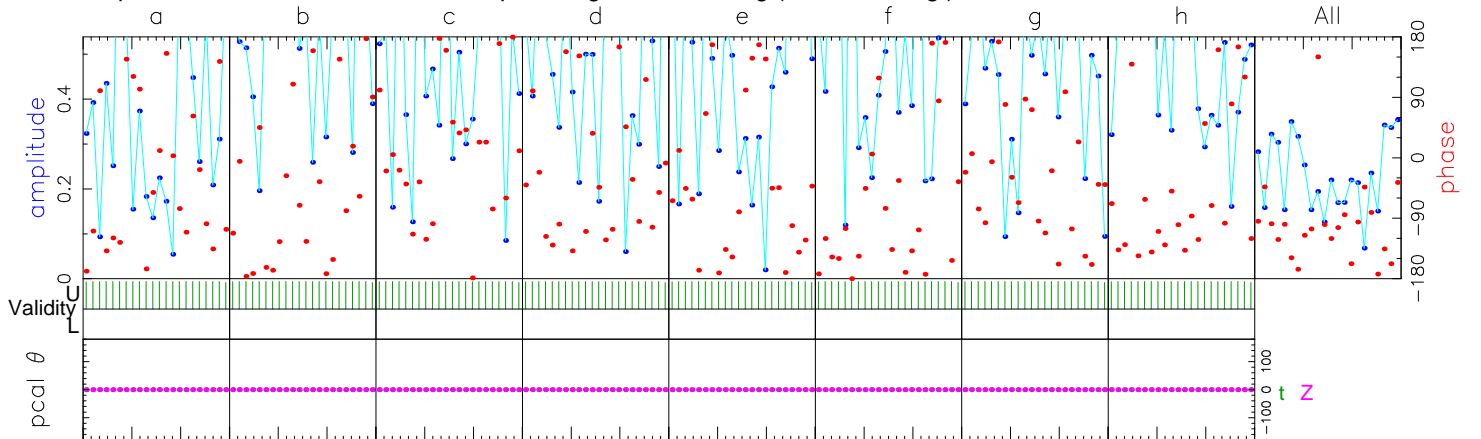
Fringe quality 0

SNR 6.6
 Int time 179.714
 Amp 0.180
 Phase -117.2
 PFD 6.5e-03
 Delays (us)
 SBD 0.001197
 MBD 0.004158
 Fringe rate (Hz)
 0.008063
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134241
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-129.0	-131.4	-12.0	-97.8	-106.1	-145.9	-56.6	-123.8	Phase	-117.2
	0.2	0.2	0.1	0.1	0.2	0.4	0.1	0.3	Ampl.	0.2
	504.2	61.6	421.9	266.3	406.4	256.1	288.5	257.5	Sbd box	257.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.90874521848E+03		Apriori delay (usec)		-2.90874937643E+03		Resid mbdelay (usec)		4.15795E-03	+/- 1.6E-04
Sband delay (usec)	-2.90874817968E+03		Apriori clock (usec)		1.2264442E+00		Resid sbdelay (usec)		1.19675E-03	+/- 1.3E-03
Phase delay (usec)	-2.90874938021E+03		Apriori clockrate (us/s)		8.3999986E-08		Resid phdelay (usec)		-3.78061E-06	+/- 5.6E-07
Delay rate (us/s)	8.32585922744E-01		Apriori rate (us/s)		8.32585829142E-01		Resid rate (us/s)		9.36019E-08	+/- 5.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.52562441594E-05		Resid phase (deg)		-117.2	+/- 17.4

ph/seg (deg) 42.9 40.8 Search (1024X32) 0.172 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.0 71.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.4 24.6 Inc. seg. avg. 0.185 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 51.3 43.0 Inc. frq. avg. 0.192 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 33.0 el 21.4 pa -60.6 Z: az 344.8 el 30.4 pa 14.7 u,v (fr/asec) -9139.778 -3393.811 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tZ..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tZ.W.373.1HR8HE

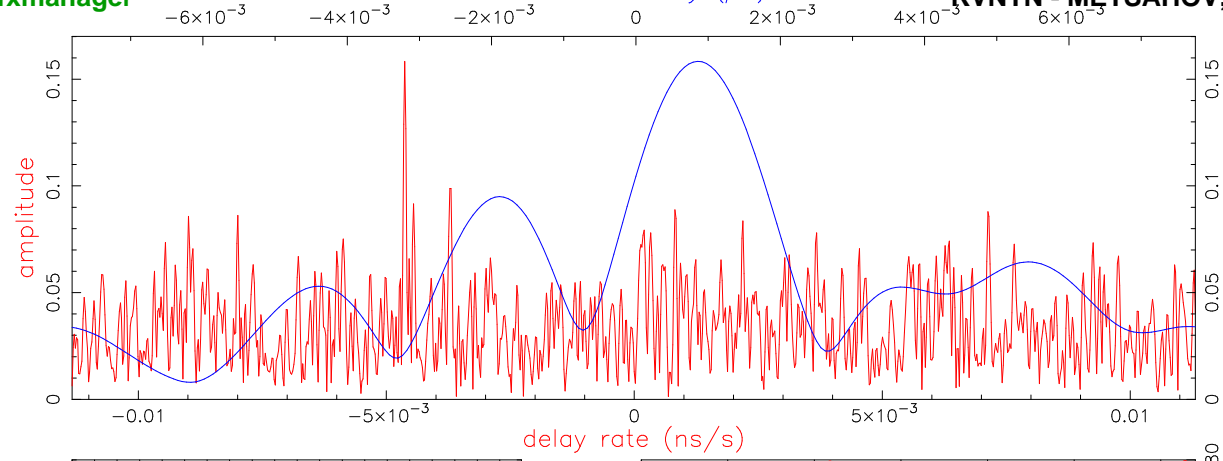
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

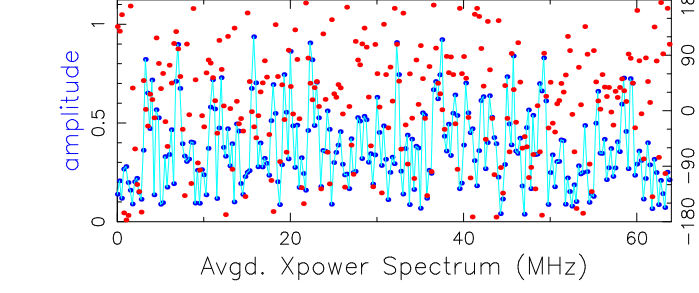
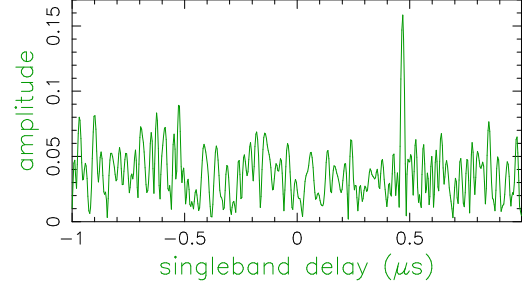
0102+584.1HR8HE, No0110, tZ

KVNTN - METSAHOV, fgroup W, pol LR

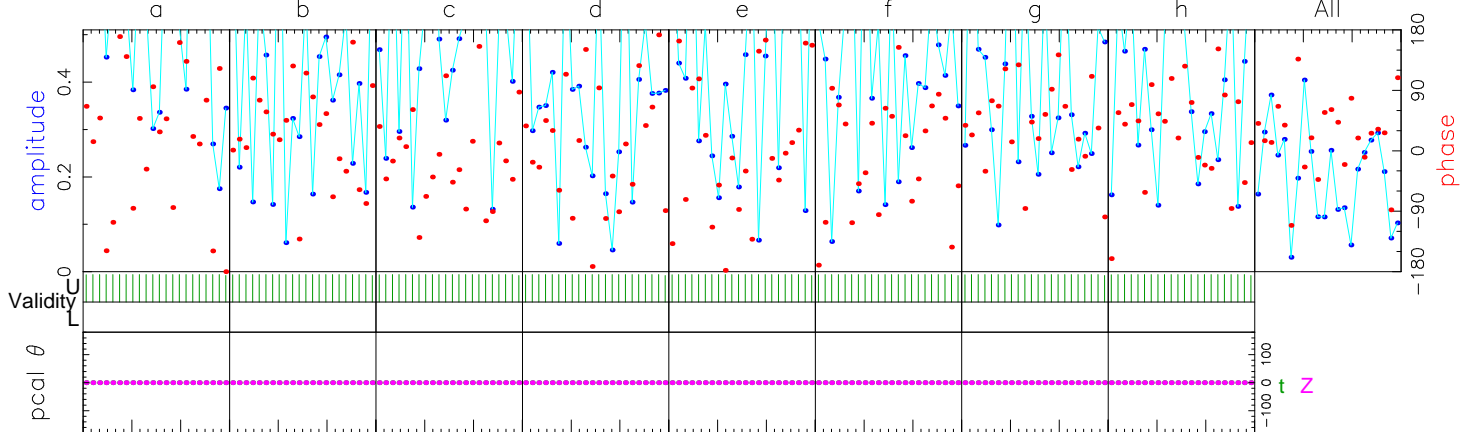
multiband delay (μ s)



Fringe quality 0
 SNR 5.8
 Int time 179.714
 Amp 0.170
 Phase 24.6
 PFD 5.4e-01
 Delays (μ s)
 SBD 0.468293
 MBD 0.000851
 Fringe rate (Hz) -0.399598
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134243
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.90827977501E+03				-2.90874937643E+03				8.51417E-04	+/- 1.9E-04
Sband delay (usec)	-2.90828108293E+03				1.2264442E+08				4.68293E-01	+/- 1.5E-03
Phase delay (usec)	-2.90874937564E+03				8.3999986E-08				7.94775E-07	+/- 6.4E-07
Delay rate (us/s)	8.32581190208E-01				8.32585829142E-01				-4.63893E-06	+/- 6.1E-09
Total phase (deg)			-78.2		-1.52562441594E-05				24.6	+/- 19.7
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
PC period (AP's) 5, 5										
simultaneous interpolator										

ph/seg (deg) 55.9 46.2 Search (1024X32) 0.170 +/- 0.029
 amp/seg (%) 68.1 80.7 Interp. 0.000
 ph/frq (deg) 31.0 27.9 Inc. seg. avg. 0.165
 amp/frq (%) 44.9 48.7 Inc. frq. avg. 0.170
 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): 128
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite
 t: az 33.0 el 21.4 pa -60.6 Z: az 344.8 el 30.4 pa 14.7 u,v (fr/asec) -9139.778 -3393.811
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tZ..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tZ.W.389.1HR8HE

Mk4/DiFX fourfit 3.21 rev 2937

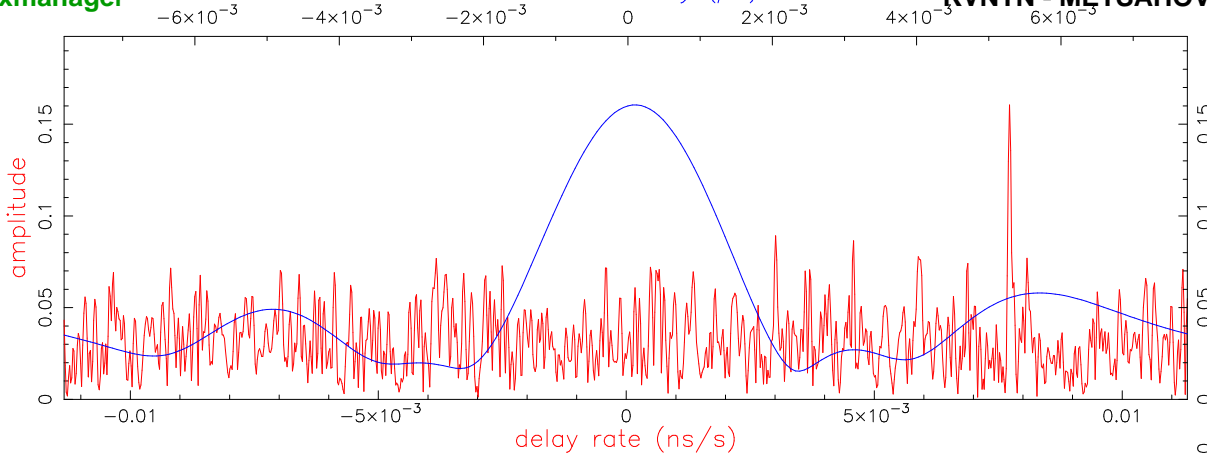
fxmanager

0102+584.1HR8HE, No0110, tZ

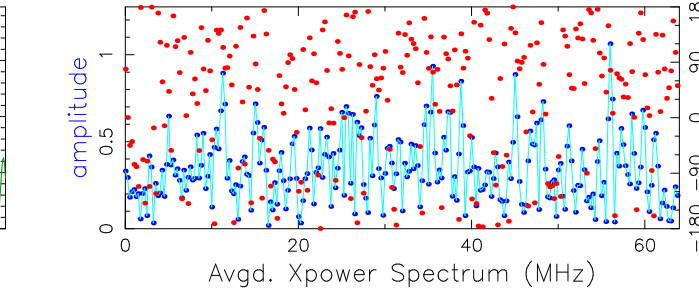
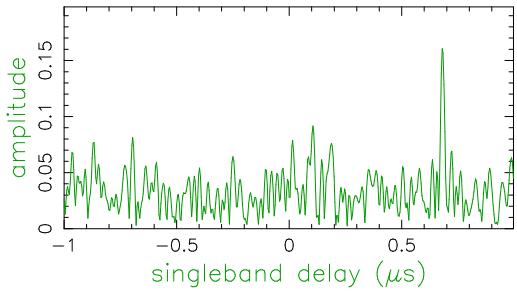
KVNTN - METSAHOV, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 0

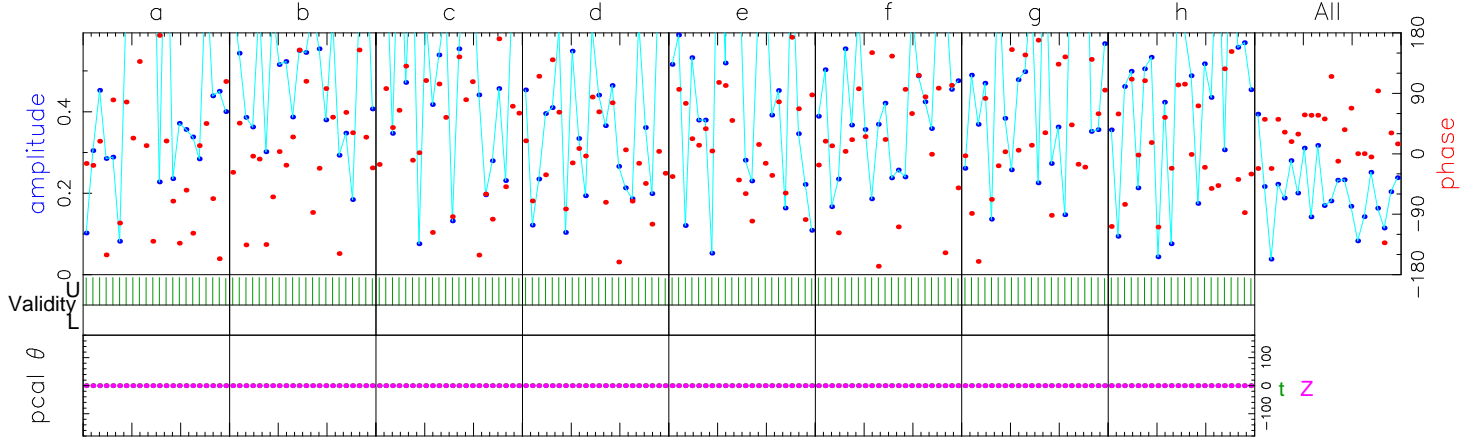


SNR 5.9
 Int time 179.714
 Amp 0.198
 Phase 32.3
 PFD 3.0e-01
 Delays (us)
 SBD 0.681048
 MBD 0.000099
 Fringe rate (Hz)
 0.665703
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 083000.00
 Stop 083300.22
 FRT 083130.00
 Corr/FF/build
 2021:006:162416
 2021:010:134245
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.90806177695E+03	Apriori delay (usec)	-2.90874937643E+03	Resid mbdelay (usec)	9.94840E-05	+/-	1.8E-04
Sband delay (usec)	-2.90806832868E+03	Apriori clock (usec)	1.2264442E+08	Resid sbdelay (usec)	6.81048E-01	+/-	1.4E-03
Phase delay (usec)	-2.90874937539E+03	Apriori clockrate (us/s)	8.3999986E-08	Resid phdelay (usec)	1.04233E-06	+/-	6.2E-07
Delay rate (us/s)	8.32593557291E-01	Apriori rate (us/s)	8.32585829142E-01	Resid rate (us/s)	7.72815E-06	+/-	6.0E-09
Total phase (deg)	-70.5	Apriori accel (us/s/s)	-1.52562441594E-05	Resid phase (deg)	32.3	+/-	19.3

ph/seg (deg)	49.5	Theor.	45.2	Amplitude	0.198 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	54.6		78.9	Search (1024X32)	0.159	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	28.9		27.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	33.4		47.6	Inc. seg. avg.	0.190	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
				Inc. frq. avg.	0.196	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

t: az 33.0 el 21.4 pa -60.6 Z: az 344.8 el 30.4 pa 14.7 u,v (fr/asec) -9139.778 -3393.811 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0110/tZ..1HR8HE Output file: /Exps/c202a/v1/v1_3mm/1234/No0110/tZ.W.403.1HR8HE