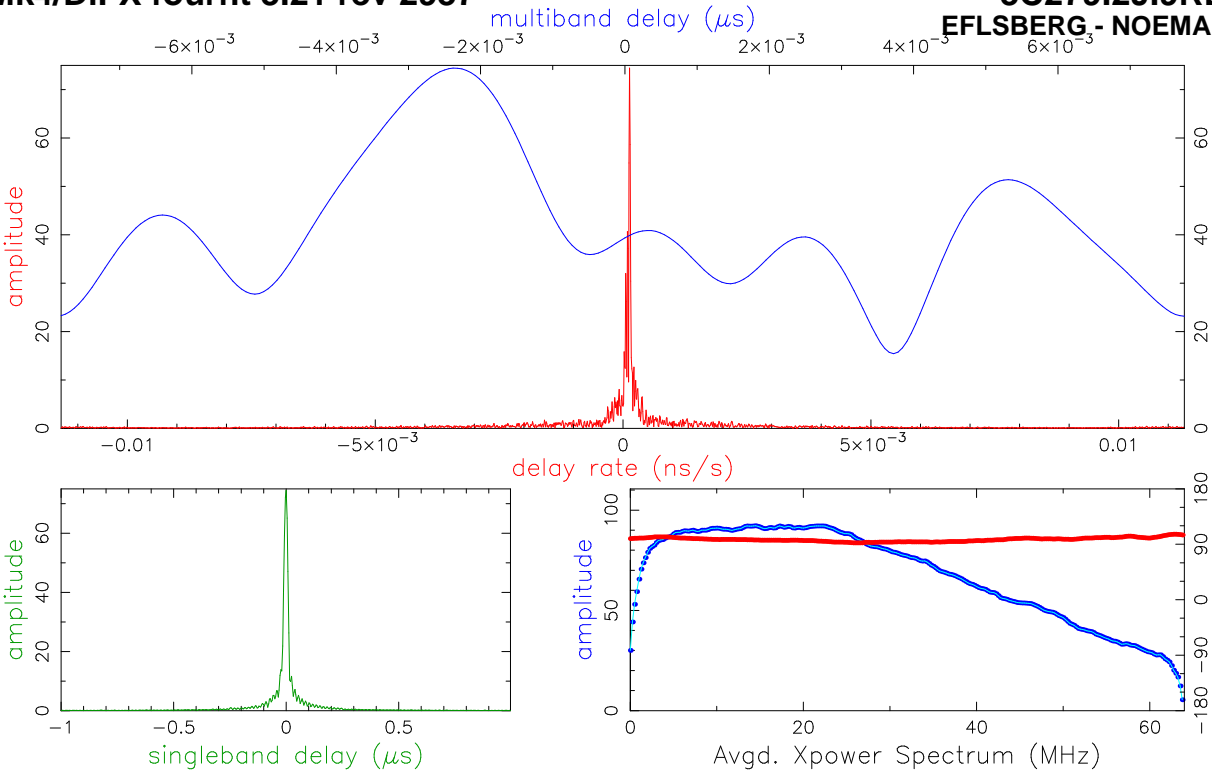


Mk4/DiFX fourfit 3.21 rev 2937

3C279.2J19RD, No0003, BN
EFLSBERG₃- NOEMA, fgroup W, pol LL

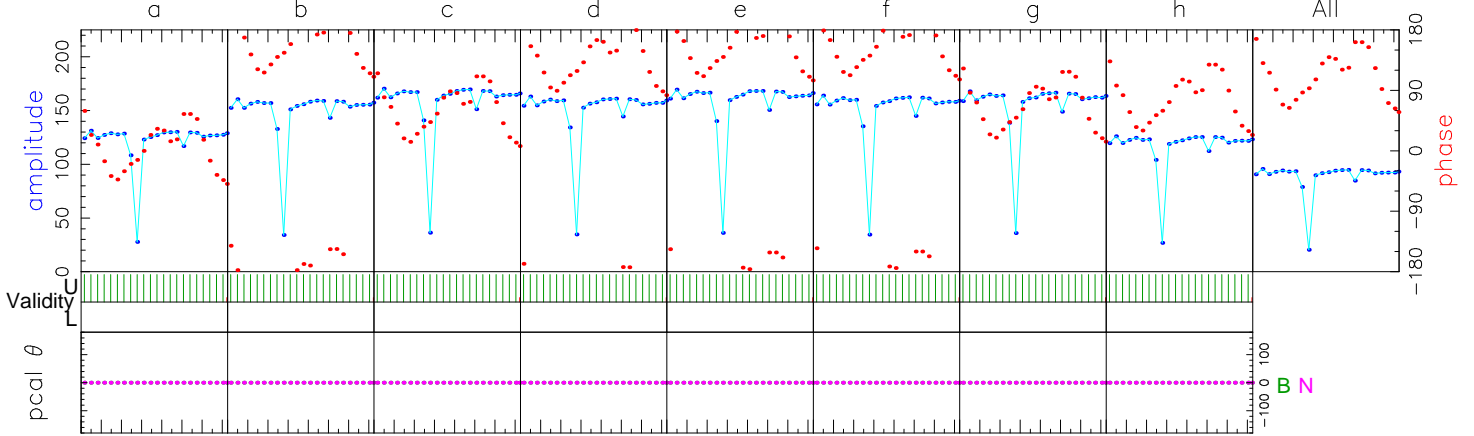


Fringe quality 2

SNR 4203.0
Int time 419.806
Amp 75.018
Phase 112.9
PFD 0.0e+00
Delays (us)
SBD -0.001189
MBD -0.002351
Fringe rate (Hz) 0.011328
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223000.00
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140328
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	6.3	165.2	62.1	138.3	159.9	161.5	68.7	79.3	Phase	112.9
	102.3	125.3	133.0	126.7	132.3	127.5	130.6	98.2	Ampl.	122.0
	255.3	256.4	257.4	257.4	257.5	257.3	257.0	255.8	Sbd box	256.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
N	0	0	0	0	0	0	0	0	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

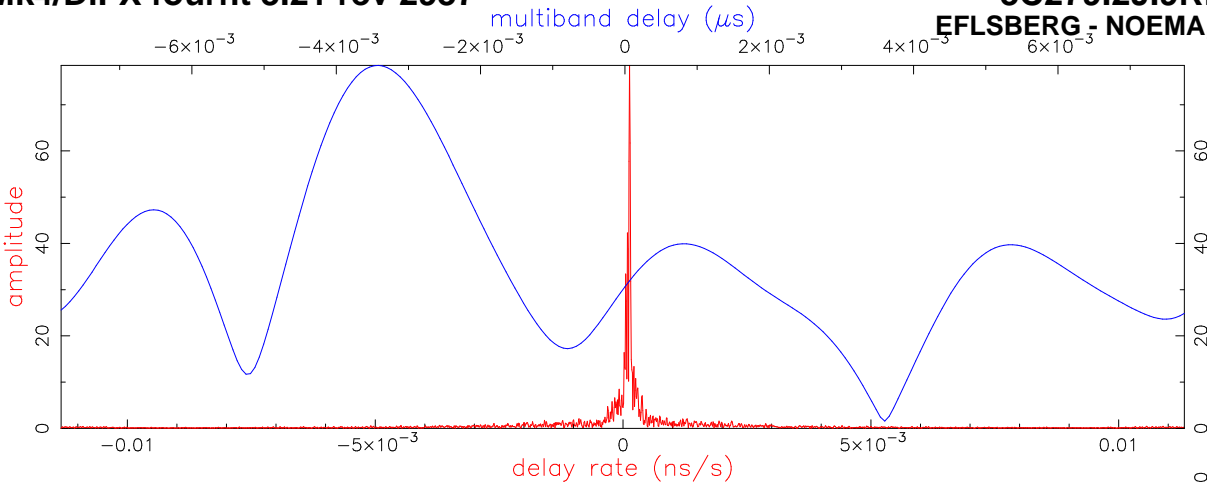
Group delay (usec)(sbd) -1.63117134254E+03 Apriori delay (usec) -1.63116899200E+03 Resid mbdelay (usec) -2.35054E-03 +/- 2.6E-07
 Sband delay (usec) -1.63117018125E+03 Apriori clock (usec) -1.6684263E+01 Resid sbdelay (usec) -1.18925E-03 +/- 2.0E-06
 Phase delay (usec) -1.63116898836E+03 Apriori clockrate (us/s) 1.2800000E-07 Resid phdelay (usec) 3.63948E-06 +/- 8.8E-10
 Delay rate (us/s) -5.18921813800E-02 Apriori rate (us/s) -5.18923128861E-02 Resid rate (us/s) 1.31506E-07 +/- 3.6E-12
 Total phase (deg) -236.5 Apriori accel (us/s/s) 7.78104006583E-06 Resid phase (deg) 112.9 +/- 0.0

RMS Theor. Amplitude 75.018 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 32.9 0.1 Search (2048X32) 73.780 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 27.3 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 64.5 0.0 Inc. seg. avg. 88.649 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 64.9 0.1 Inc. frq. avg. 122.001 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 159.2 el 31.5 pa -13.1 N: az 156.6 el 36.7 pa -16.0 u,v (fr/asec) 308.395 546.942 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/BN..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/BN.W.16.2J19RD

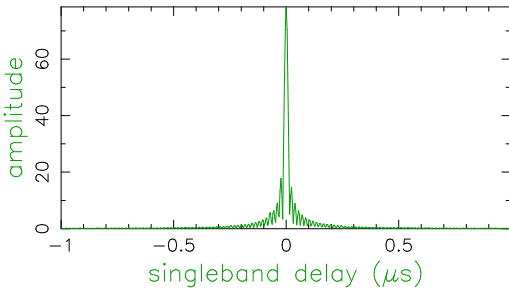
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2J19RD, No0003, BN
EFLSBERG - NOEMA, fgroup W, pol RR

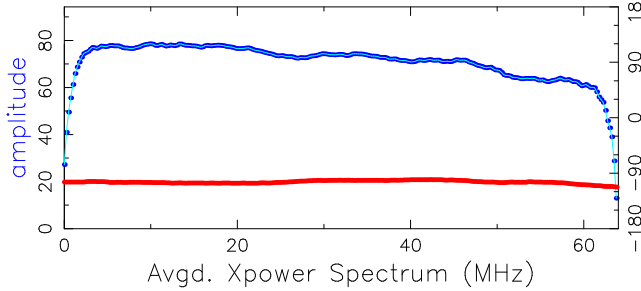


Fringe quality 2

SNR 4397.9
Int time 419.806
Amp 78.497
Phase -66.8
PFD 0.0e+00
Delays (us)
SBD -0.000196
MBD -0.003435
Fringe rate (Hz)
0.011322
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

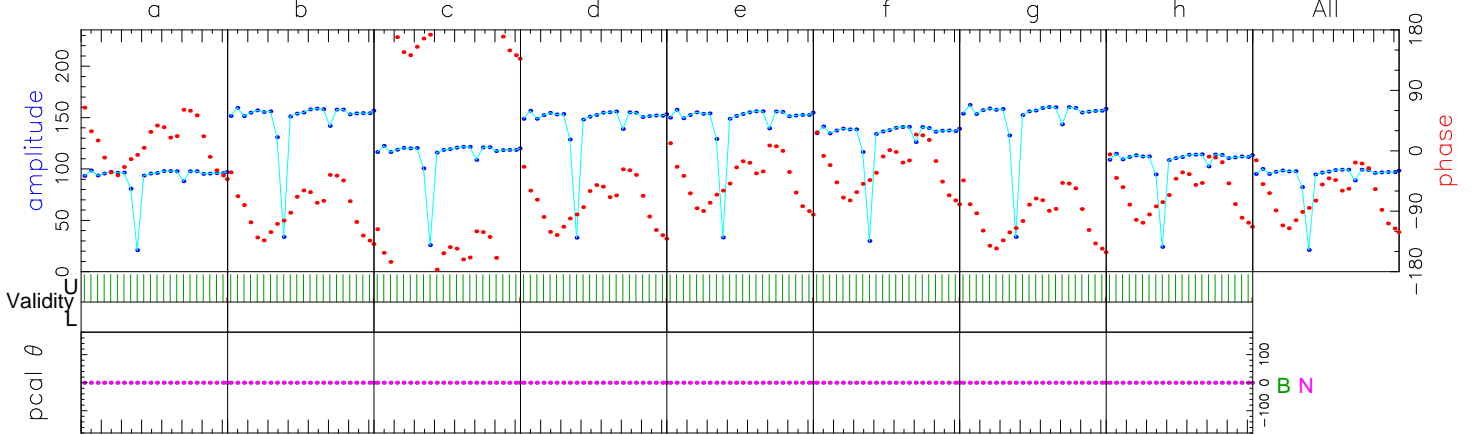


delay rate (ns/s)



Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223000.00
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140332
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

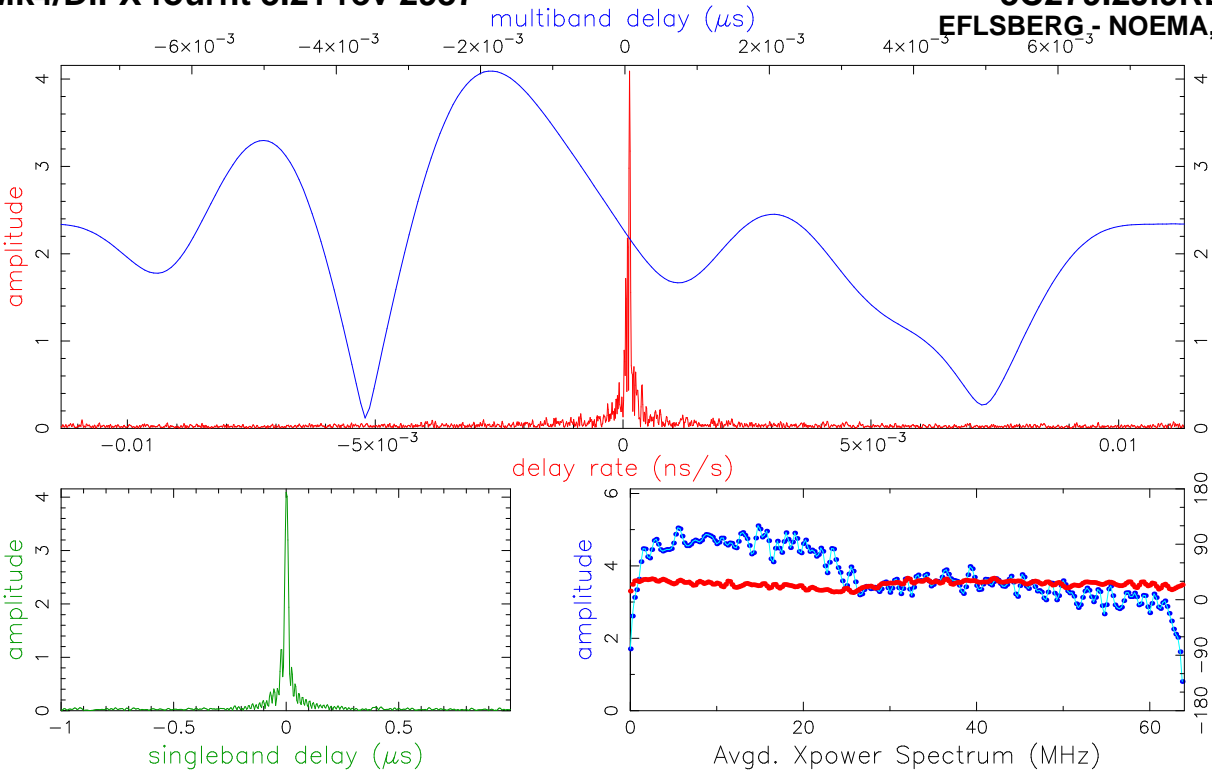
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	11.9	-84.8	-169.1	-76.6	-41.2	-25.0	-96.8	-58.2	Phase	-66.8
	77.6	125.2	96.1	122.9	123.5	111.1	126.6	90.0	Ampl.	109.1
	254.6	256.6	257.3	257.1	257.5	257.2	257.1	255.6	Sbd box	256.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
N	0	0	0	0	0	0	0	0	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	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	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.63117242660E+03		Apriori delay (usec)		-1.63116899200E+03		Resid mbdelay (usec)		-3.43460E-03	+/- 2.5E-07
Sband delay (usec)	-1.63116918850E+03		Apriori clock (usec)		-1.6684263E+01		Resid sbdelay (usec)		-1.96500E-04	+/- 2.0E-06
Phase delay (usec)	-1.63116899415E+03		Apriori clockrate (us/s)		1.2800000E-07		Resid phdelay (usec)		-2.15416E-06	+/- 8.4E-10
Delay rate (us/s)	-5.18921814530E-02		Apriori rate (us/s)		-5.18923128861E-02		Resid rate (us/s)		1.31433E-07	+/- 3.5E-12
Total phase (deg)			Apriori accel (us/s/s)		7.78104006583E-06		Resid phase (deg)		-66.8	+/- 0.0

	RMS	Theor.	Amplitude	78.497 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	32.4	0.1	Search (2048X32)	77.713	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	27.6	0.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	58.4	0.0	Inc. seg. avg.	93.022	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	45.0	0.1	Inc. frq. avg.	109.137	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
B: az 159.2 el 31.5 pa -13.1	N: az 156.6 el 36.7 pa -16.0		u,v (fr/asec) 308.395 546.942		ion window (TEC) 0.00 0.00	
simultaneous interpolator						

Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/BN..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/BN.W.32.2J19RD

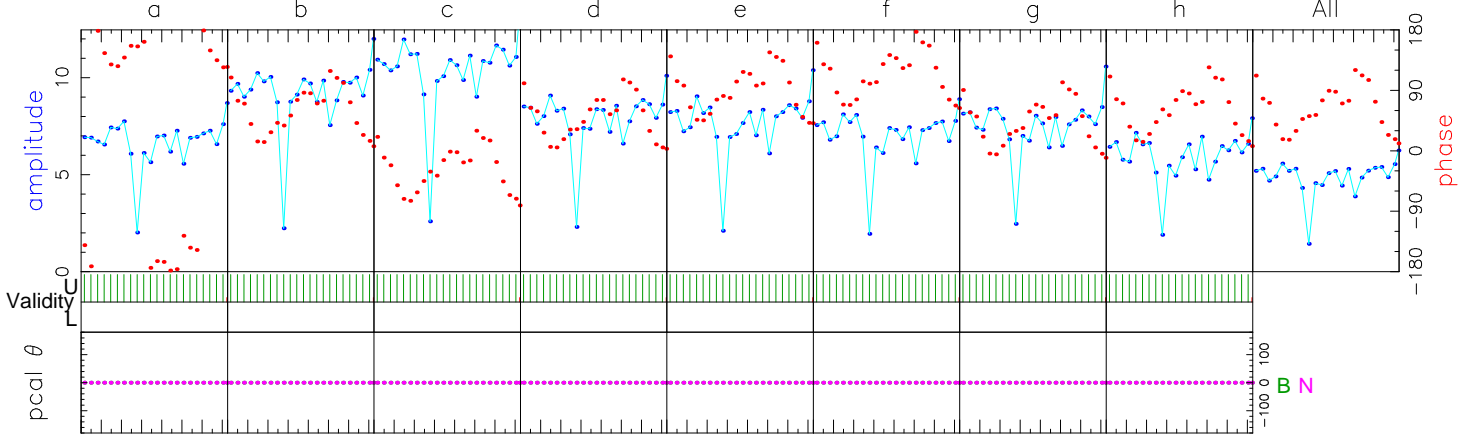


Fringe quality 2

SNR 232.9
Int time 419.806
Amp 4.157
Phase 62.7
PFD 0.0e+00
Delays (us)
SBD 0.001572
MBD -0.001821
Fringe rate (Hz)
0.011292
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223000.00
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140336
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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



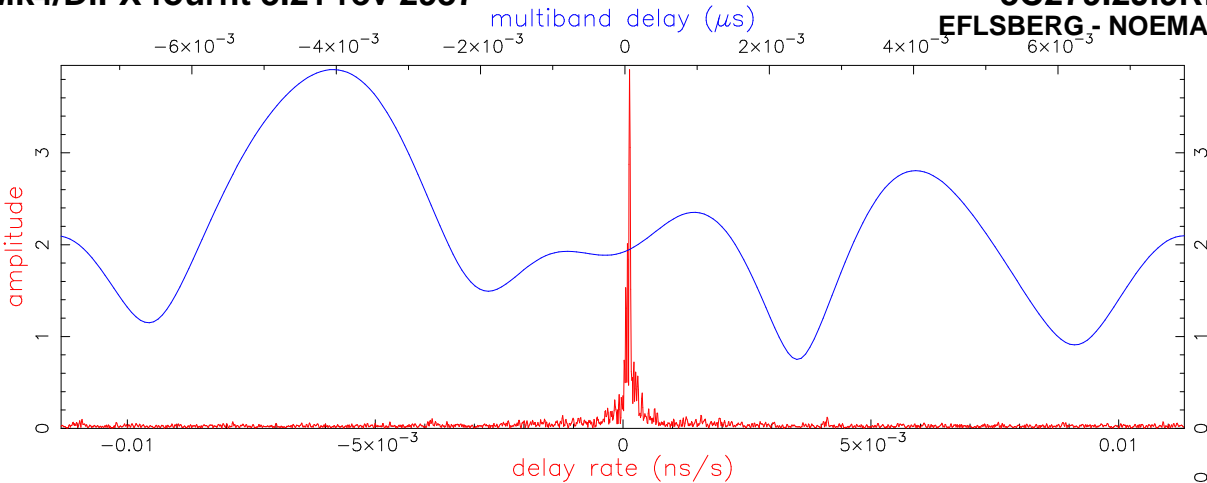
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	0	0	0	0	0	0	0	0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.63117081294E+03								Resid mbdelay (usec)	-1.82095E-03 +/- 4.7E-06
Sband delay (usec)	-1.63116742025E+03								Resid sbdelay (usec)	1.57175E-03 +/- 3.7E-05
Phase delay (usec)	-1.63116898997E+03								Resid phdelay (usec)	2.02350E-06 +/- 1.6E-08
Delay rate (us/s)	-5.18921817931E-02								Resid rate (us/s)	1.31093E-07 +/- 6.5E-11
Total phase (deg)			-286.6						Resid phase (deg)	62.7 +/- 0.5
	RMS	Theor.	Amplitude	4.157 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	32.1	1.2	Search (2048X32)	4.037					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	26.3	2.1	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	62.8	0.7	Inc. seg. avg.	4.835					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	63.3	1.2	Inc. frq. avg.	6.531					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 159.2 el 31.5 pa -13.1 N: az 156.6 el 36.7 pa -16.0 u,v (fr/asec) 308.395 546.942 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/BN..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/BN.W.45.2J19RD

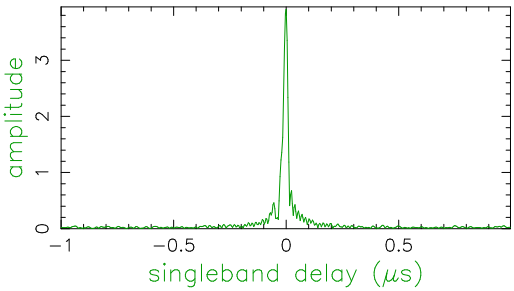
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2J19RD, No0003, BN
EFLSBERG - NOEMA, fgroup W, pol RL

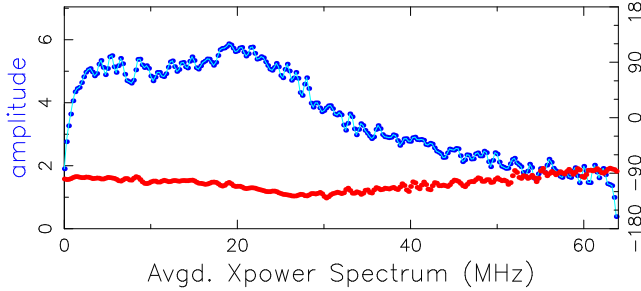


Fringe quality 2

SNR 221.5
Int time 419.806
Amp 3.953
Phase -75.3
PFD 0.0e+00
Delays (us)
SBD -0.001491
MBD -0.003999
Fringe rate (Hz)
0.011256
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

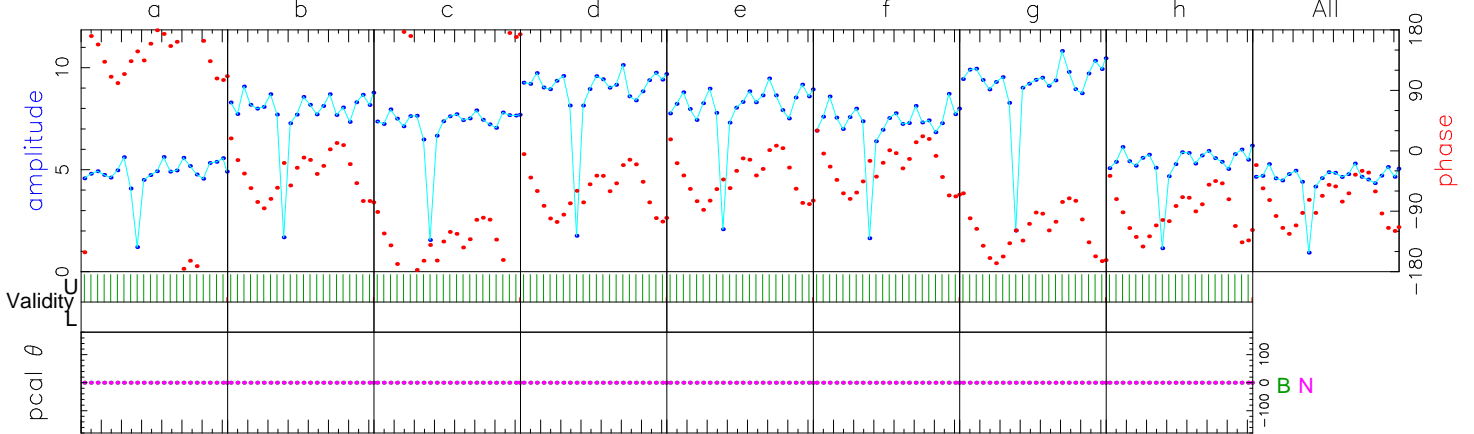


delay rate (ns/s)



Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223000.00
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140339
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	150.6	-34.9	-144.5	-60.4	-37.9	-25.0	-118.1	-91.8	Phase	-75.3
B	4.1	6.7	6.2	7.6	6.9	6.2	7.7	4.5	Ampl.	6.2
N	254.2	256.4	257.0	256.8	257.2	257.1	256.7	254.6	Sbd box	256.6
B:N	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B:N	0	0	0	0	0	0	0	0	PC freqs	
B:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.63117299069E+03	Apriori delay (usec)	-1.63116899200E+03	Resid mbdelay (usec)	-3.99870E-03	+/-	4.9E-06
Sband delay (usec)	-1.63117048275E+03	Apriori clock (usec)	-1.6684263E+01	Resid sbdelay (usec)	-1.49075E-03	+/-	3.9E-05
Phase delay (usec)	-1.63116899442E+03	Apriori clockrate (us/s)	1.2800000E-07	Resid phdelay (usec)	-2.42803E-06	+/-	1.7E-08
Delay rate (us/s)	-5.18921822168E-02	Apriori rate (us/s)	-5.18923128861E-02	Resid rate (us/s)	1.30669E-07	+/-	6.9E-11
Total phase (deg)	-64.7	Apriori accel (us/s/s)	7.78104006583E-06	Resid phase (deg)	-75.3	+/-	0.5

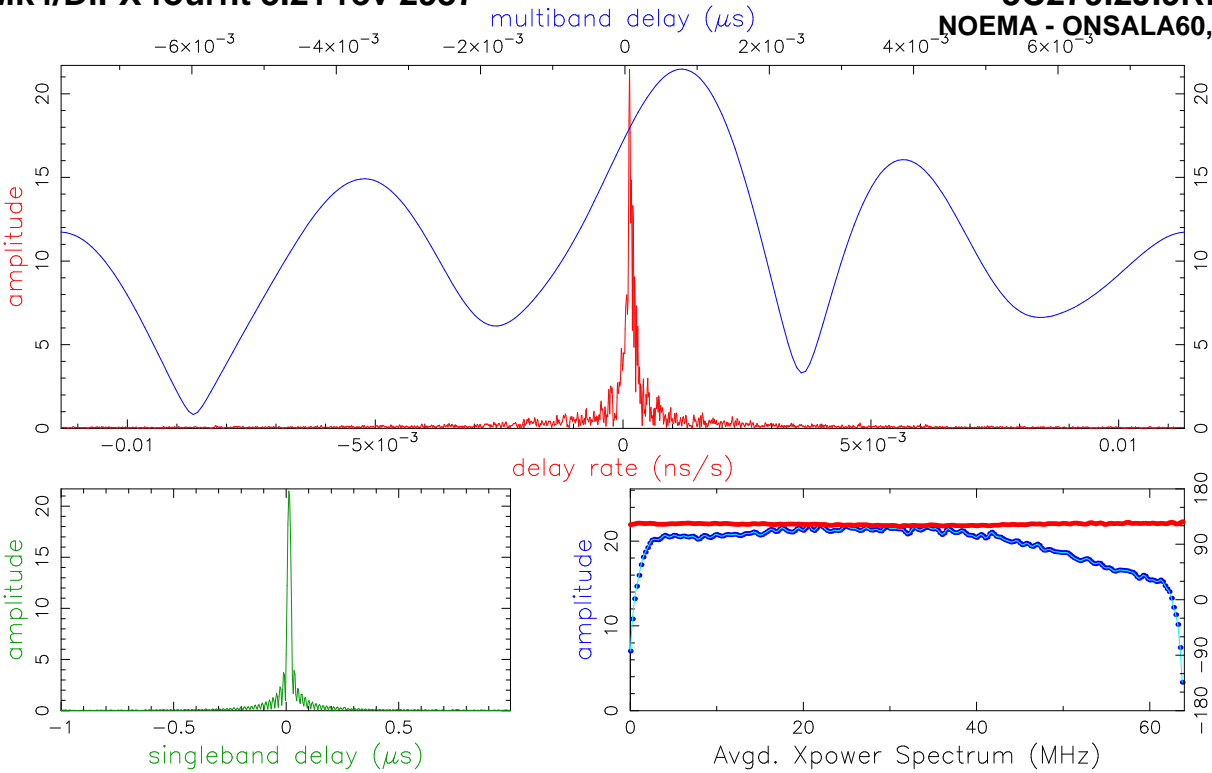
ph/seg (deg)	RMS 30.5	Theor. 1.2	Amplitude Search (2048X32)	3.953 +/- 0.018	3.829	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	25.9	2.2	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	71.5	0.7	Inc. seg. avg.	4.548	4.548	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	65.9	1.3	Inc. frq. avg.	6.243	6.243	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

B: az 159.2 el 31.5 pa -13.1 N: az 156.6 el 36.7 pa -16.0 u,v (fr/asec) 308.395 546.942 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/BN..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/BN.W.48.2J19RD

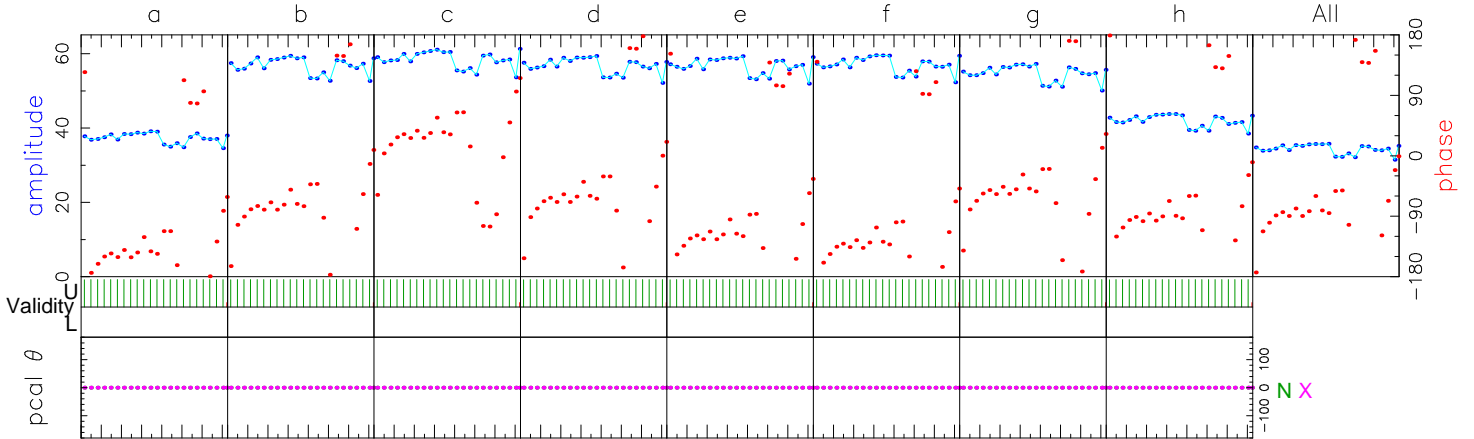
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2J19RD, No0003, NX
NOEMA - ONSALA60, fgroup W, pol RR



Fringe quality 1
SNR 1215.4
Int time 419.740
Amp 21.695
Phase -97.4
PFD 0.0e+00
Delays (us)
SBD 0.013070
MBD 0.000829
Fringe rate (Hz)
0.011811
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223000.00
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140328
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

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

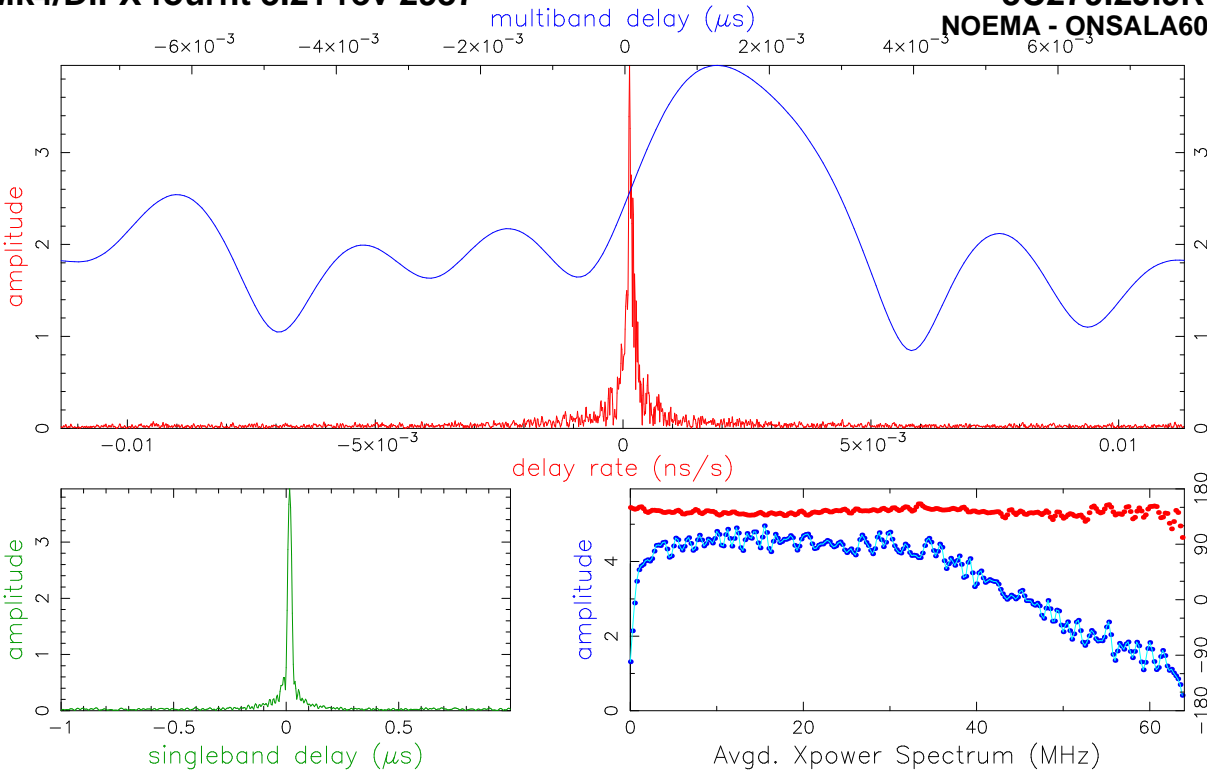


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-158.4	-87.7	19.1	-76.1	-131.9	-144.0	-64.9	-104.8	Phase	-97.4
	23.3	35.6	36.5	35.5	35.5	35.7	34.1	26.2	Ampl.	32.8
	261.8	260.7	260.4	260.0	259.7	260.3	260.5	261.4	Sbd box	260.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.39741717978E+03		Apriori delay (usec)		3.39740072585E+03		Resid mbdelay (usec)		8.28928E-04	+/- 8.9E-07
Sband delay (usec)	3.39741379560E+03		Apriori clock (usec)		-8.5965446E+01		Resid sbdelay (usec)		1.30697E-02	+/- 7.1E-06
Phase delay (usec)	3.39740072271E+03		Apriori clockrate (us/s)		-8.1100003E-07		Resid phdelay (usec)		-3.13971E-06	+/- 3.0E-09
Delay rate (us/s)	1.66296114447E-01		Apriori rate (us/s)		1.66295977335E-01		Resid rate (us/s)		1.37112E-07	+/- 1.3E-11
Total phase (deg)			Apriori accel (us/s/s)		-1.68979224402E-05		Resid phase (deg)		-97.4	+/- 0.1

ph/seg (deg) 56.9 0.2 Search (2048X32) 20.474 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 58.4 0.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 61.0 0.1 Inc. seg. avg. 34.295 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 55.6 0.2 Inc. frq. avg. 32.799 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
N: az 156.6 el 36.7 pa -16.0 X: az 166.0 el 25.9 pa -7.0 u,v (fr/asec) -978.274 -1096.258 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/NX..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/NX.W.18.2J19RD

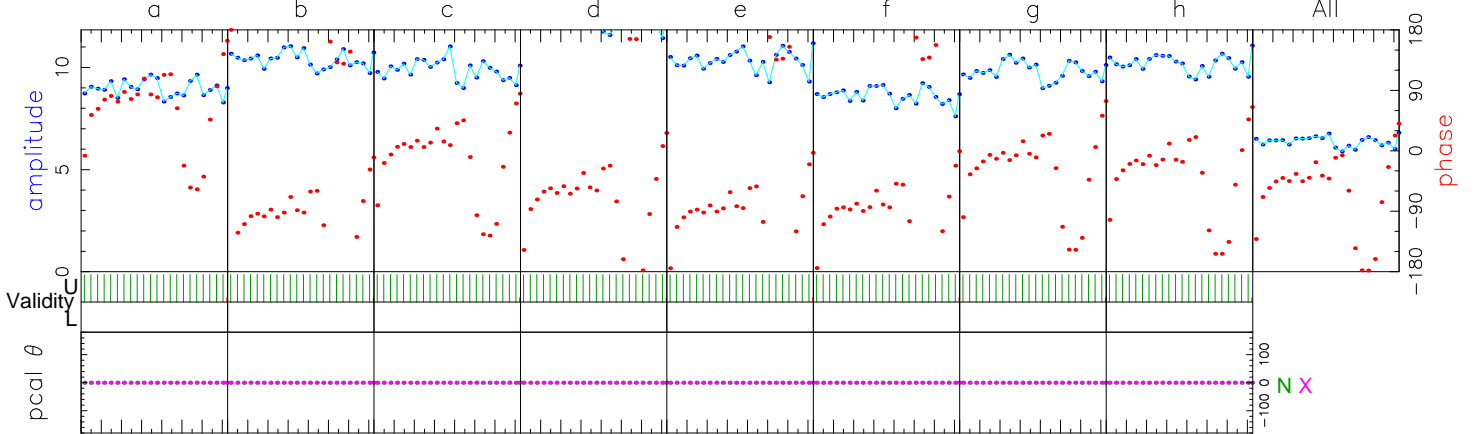
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2J19RD, No0003, NX
NOEMA - ONSALA60, fgroup W, pol LR



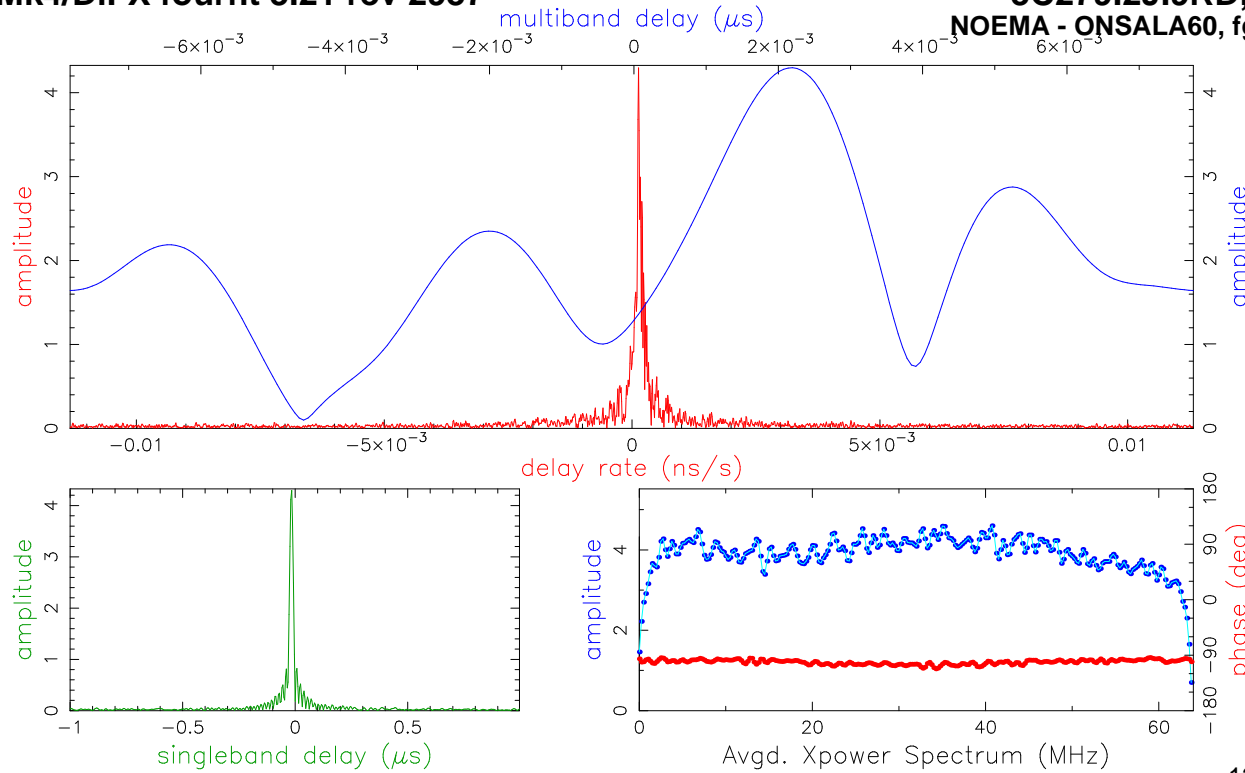
Fringe quality 1
SNR 221.1
Int time 419.740
Amp 3.947
Phase -53.8
PFD 0.0e+00
Delays (us)
SBD 0.015417
MBD 0.001279
Fringe rate (Hz)
0.011819
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223000.00
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140331
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	67.7	-106.0	-3.4	-70.9	-99.3	-97.0	-21.9	-28.0	Phase	-53.8
	5.6	6.5	6.2	7.8	6.4	5.3	6.1	6.3	Ampl.	6.3
	262.1	261.1	260.5	260.5	260.1	260.4	260.7	262.0	Sbd box	260.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.39741762950E+03		Apriori delay (usec)		3.39740072585E+03		Resid mbdelay (usec)		1.27865E-03	+/- 4.9E-06
Sband delay (usec)	3.39741614285E+03		Apriori clock (usec)		-8.5965446E+01		Resid sbdelay (usec)		1.54170E-02	+/- 3.9E-05
Phase delay (usec)	3.39740072411E+03		Apriori clockrate (us/s)		-8.1100003E-07		Resid phdelay (usec)		-1.73634E-06	+/- 1.7E-08
Delay rate (us/s)	1.66296114543E-01		Apriori rate (us/s)		1.66295977335E-01		Resid rate (us/s)		1.37208E-07	+/- 6.9E-11
Total phase (deg)	135.1		Apriori accel (us/s/s)		-1.68979224402E-05		Resid phase (deg)		-53.8	+/- 0.5

ph/seg (deg) 57.2 1.2 Search (2048X32) 3.802 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 61.4 2.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 65.7 0.7 Inc. seg. avg. 6.360 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 61.1 1.3 Inc. frq. avg. 6.261 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
N: az 156.6 el 36.7 pa -16.0 X: az 166.0 el 25.9 pa -7.0 u,v (fr/asec) -978.274 -1096.258 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/NX..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/NX.W.30.2J19RD

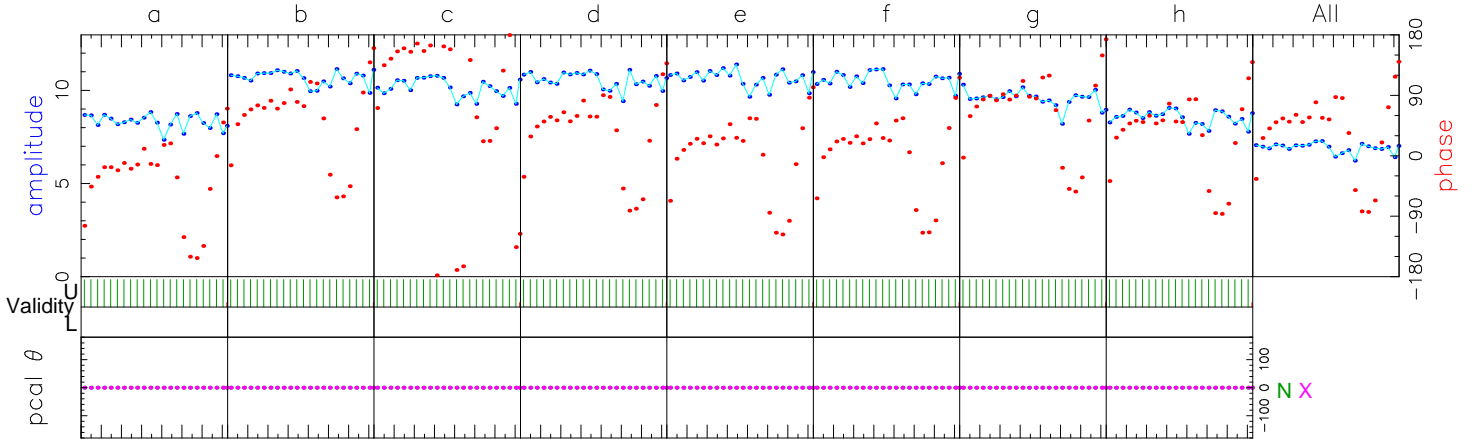


Fringe quality 1

SNR 242.4
Int time 419.740
Amp 4.326
Phase 41.9
PFD 0.0e+00
Delays (us)
SBD -0.016700
MBD 0.002142
Fringe rate (Hz)
0.011804
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

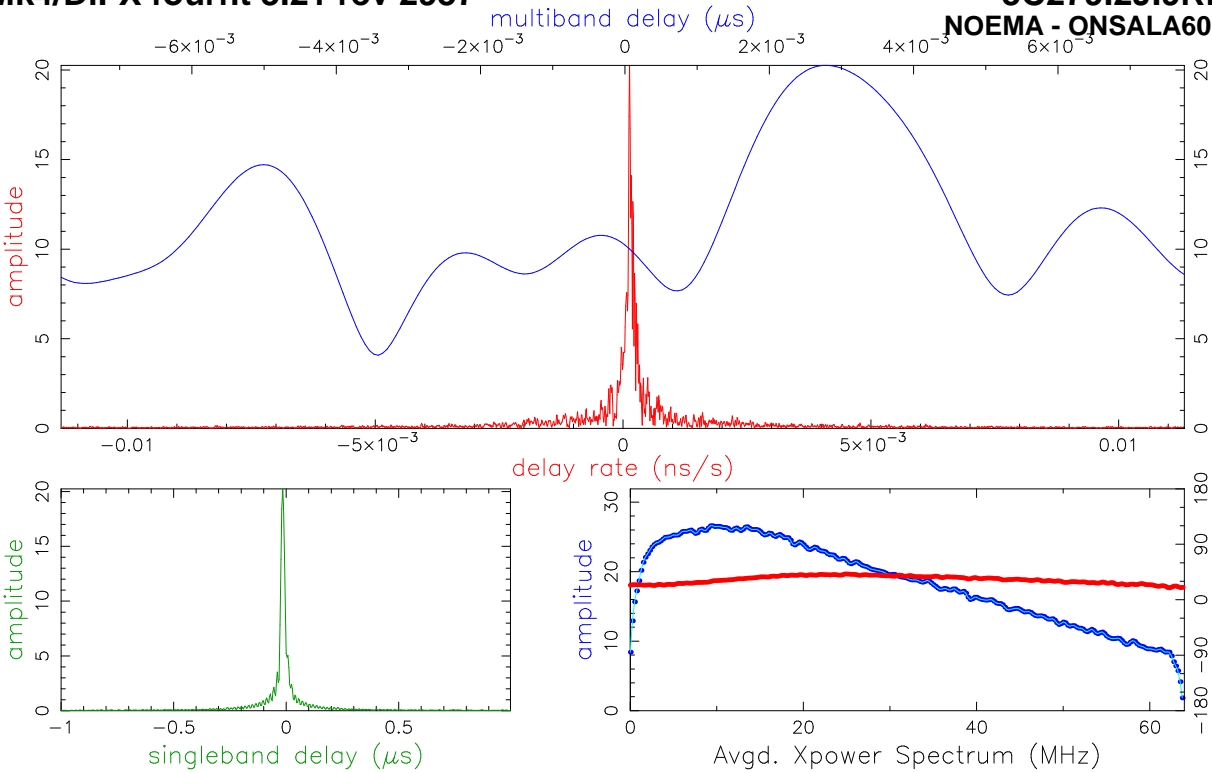
Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223000.00
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140335
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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



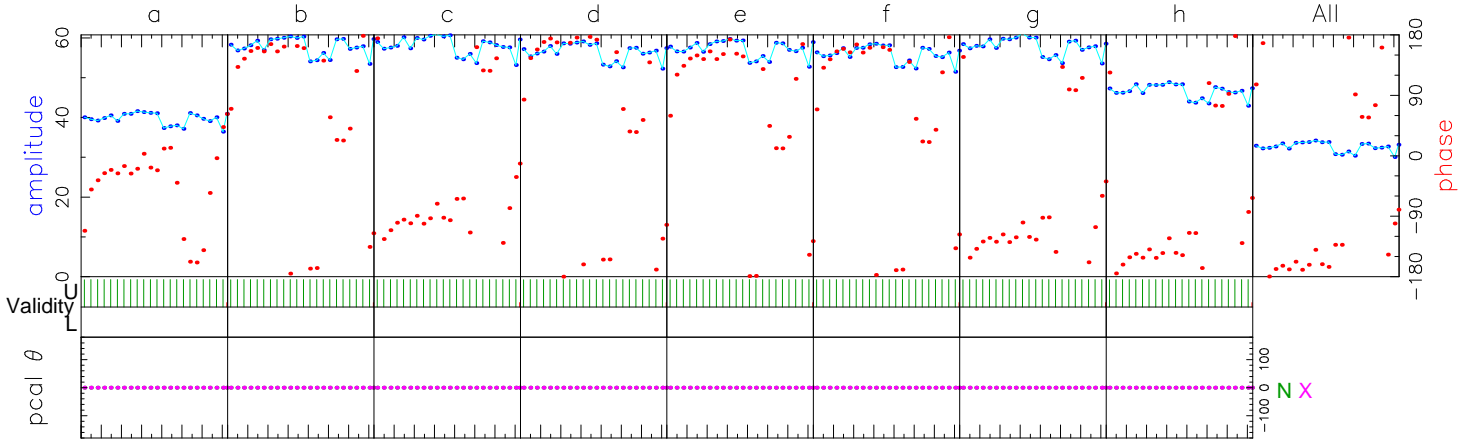
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-28.7	62.2	148.0	44.6	10.2	11.3	74.4	39.4	Phase	41.9
	5.2	6.6	6.3	6.6	6.6	6.6	6.0	5.3	Ampl.	6.1
	254.8	252.8	252.7	252.3	252.4	252.5	252.7	253.6	Sbd box	252.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.39738724240E+03		Apriori delay (usec)		3.39740072585E+03		Resid mbdelay (usec)		2.14155E-03	+/- 4.5E-06
Sband delay (usec)	3.39738402585E+03		Apriori clock (usec)		-8.5965446E+01		Resid sbdelay (usec)		-1.67000E-02	+/- 3.6E-05
Phase delay (usec)	3.39740072720E+03		Apriori clockrate (us/s)		-8.1100003E-07		Resid phdelay (usec)		1.35066E-06	+/- 1.5E-08
Delay rate (us/s)	1.66296114373E-01		Apriori rate (us/s)		1.66295977335E-01		Resid rate (us/s)		1.37038E-07	+/- 6.3E-11
Total phase (deg)	230.8		Apriori accel (us/s/s)		-1.68979224402E-05		Resid phase (deg)		41.9	+/- 0.5

ph/seg (deg) 57.5 1.1 Search (2048X32) 4.123 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.0 2.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.3 0.7 Inc. seg. avg. 6.906 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.1 1.2 Inc. frq. avg. 6.150 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 N: az 156.6 el 36.7 pa -16.0 X: az 166.0 el 25.9 pa -7.0 u,v (fr/asec) -978.274 -1096.258 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/NX..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/NX.W.39.2J19RD



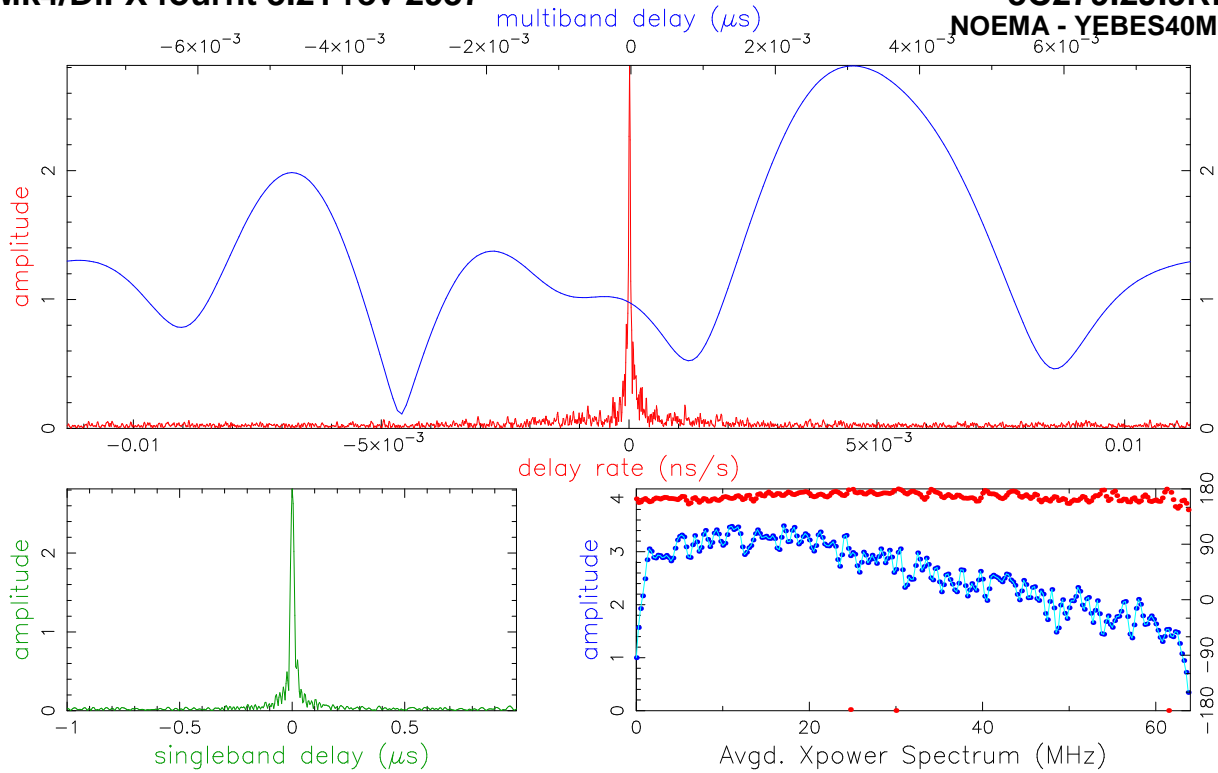
Fringe quality 1
SNR 1134.8
Int time 419.740
Amp 20.256
Phase -177.2
PFD 0.0e+00
Delays (us)
SBD -0.015478
MBD 0.002777
Fringe rate (Hz) 0.011814
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223000.00
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140325
2021:252:122852
RA & Dec (J2000) 12h56m11.166577s --5°47'21.525129"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-34.2	147.3	-108.4	160.8	135.9	145.9	-136.2	-159.7	Phase	-177.2
	24.7	36.0	36.2	35.1	35.5	34.9	36.0	28.9	Ampl.	33.4
	254.9	253.2	253.0	252.5	252.8	252.7	253.1	253.9	Sbd box	253.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.39738787797E+03		Apriori delay (usec)		3.39740072585E+03		Resid mbdelay (usec)		2.77712E-03 +/- 9.6E-07	
Sband delay (usec)	3.39738524760E+03		Apriori clock (usec)		-8.5965446E+01		Resid sbdelay (usec)		-1.54782E-02 +/- 7.6E-06	
Phase delay (usec)	3.39740072014E+03		Apriori clockrate (us/s)		-8.1100003E-07		Resid phdelay (usec)		-5.71342E-06 +/- 3.3E-09	
Delay rate (us/s)	1.66296114487E-01		Apriori rate (us/s)		1.66295977335E-01		Resid rate (us/s)		1.37153E-07 +/- 1.3E-11	
Total phase (deg)	11.8		Apriori accel (us/s/s)		-1.68979224402E-05		Resid phase (deg)		-177.2 +/- 0.1	

ph/seg (deg) 57.4 0.2 Search (2048X32) 19.596 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 61.1 0.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 73.6 0.1 Inc. seg. avg. 32.577 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 67.9 0.2 Inc. frq. avg. 33.419 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
N: az 156.6 el 36.7 pa -16.0 X: az 166.0 el 25.9 pa -7.0 u,v (fr/asec) -978.274 -1096.258 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/NX..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/NX.W.5.2J19RD simultaneous interpolator

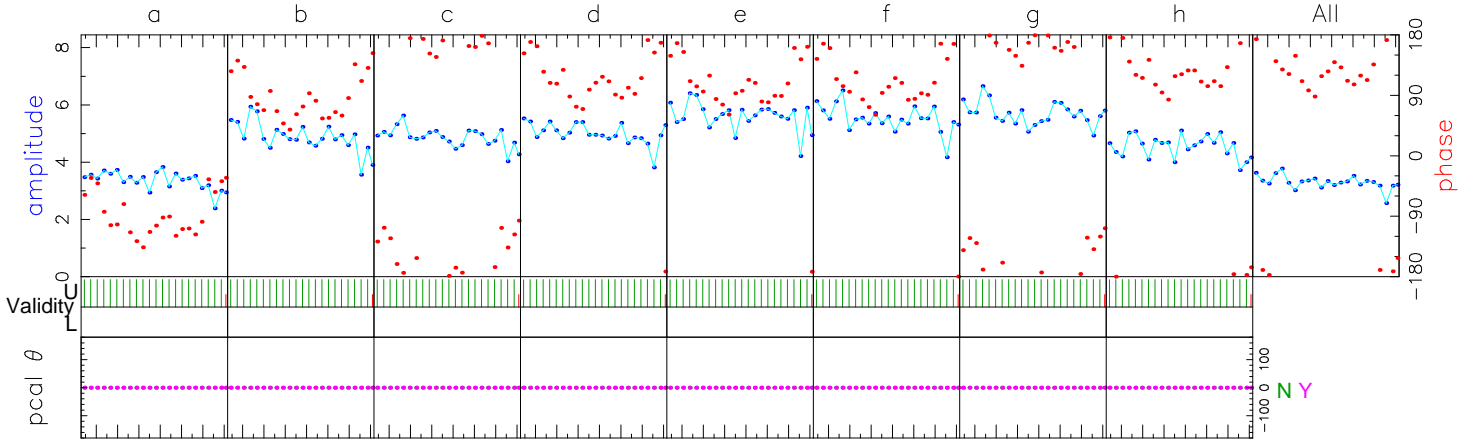


Fringe quality 3

SNR 154.5
Int time 402.261
Amp 2.816
Phase 137.7
PFD 0.0e+00
Delays (us)
SBD 0.000497
MBD 0.003064
Fringe rate (Hz) 0.001288
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223017.41
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140326
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

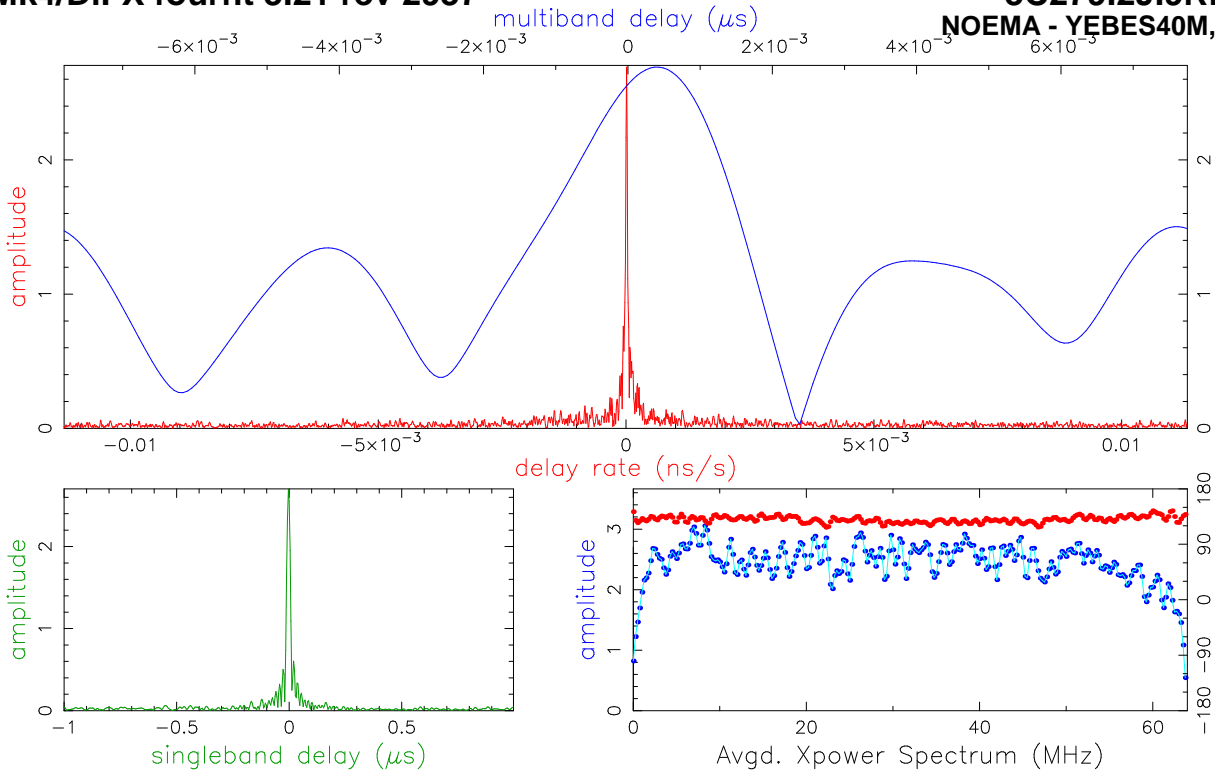
Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-89.3	86.0	-165.6	118.1	111.1	112.8	-172.8	131.9	Phase	137.7
	2.9	4.2	4.1	4.2	4.8	4.7	4.9	3.9	Ampl.	4.2
	259.3	257.6	256.9	256.9	256.9	256.7	257.1	256.8	Sbd box	257.1
U/L	786/0	786/0	786/0	786/0	786/0	786/0	786/0	786/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
N:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.20576913982E+02		Apriori delay (usec)		-1.20579978080E+02		Resid mbdelay (usec)		3.06410E-03	+/- 7.0E-06
Sband delay (usec)	-1.20579481080E+02		Apriori clock (usec)		7.5199738E+00		Resid sbdelay (usec)		4.97000E-04	+/- 5.6E-05
Phase delay (usec)	-1.20579973639E+02		Apriori clockrate (us/s)		1.3000000E-06		Resid phdelay (usec)		4.44128E-06	+/- 2.4E-08
Delay rate (us/s)	-1.93219559124E-01		Apriori rate (us/s)		-1.93219574079E-01		Resid rate (us/s)		1.49548E-08	+/- 1.0E-10
Total phase (deg)	25.5		Apriori accel (us/s/s)		6.52207378310E-08		Resid phase (deg)		137.7	+/- 0.7

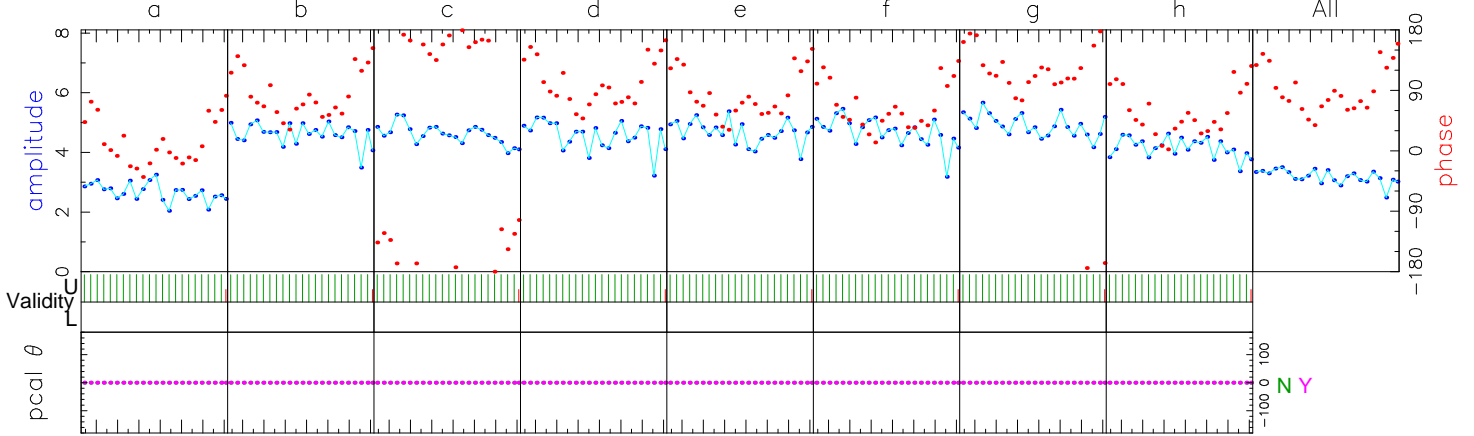
ph/seg (deg) 32.2 1.8 Theor. Amplitude 2.816 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 19.1 3.1 Search (2048X32) 2.726 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 68.0 1.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 54.0 1.8 Inc. seg. avg. 3.300 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 4.214 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

N: az 156.6 el 36.7 pa -16.0 Y: az 144.6 el 37.1 pa -25.6 u,v (fr/asec) 1112.668 467.913 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/NY..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/NY.W.10.2J19RD



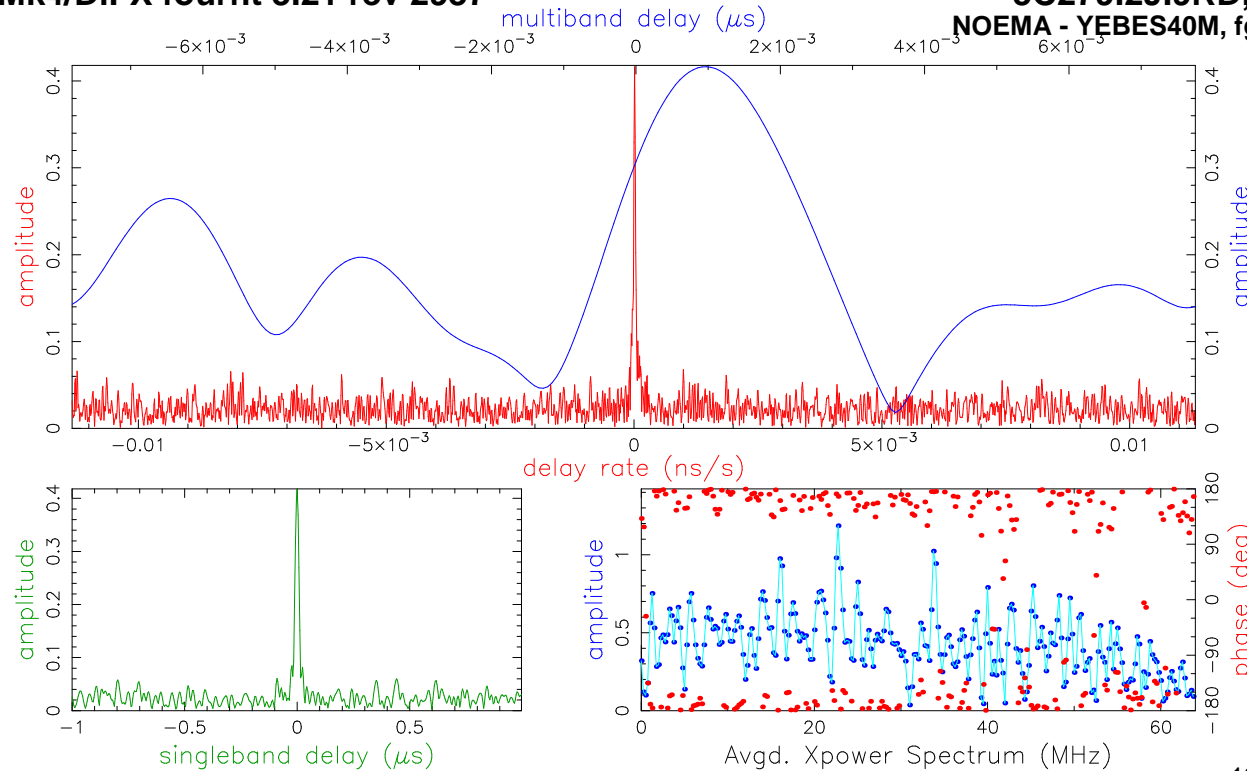
Fringe quality 3
SNR 148.3
Int time 402.261
Amp 2.704
Phase 89.7
PFD 0.0e+00
Delays (us)
SBD -0.003043
MBD 0.000429
Fringe rate (Hz) 0.001264
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223017.41
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140329
2021:252:122852
RA & Dec (J2000) 12h56m11.166577s --5°47'21.525129"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	10.4	81.9	-176.0	99.2	82.3	63.7	125.7	55.0	Phase	89.7
	2.2	3.9	3.9	3.9	3.9	4.0	4.2	3.5	Ampl.	3.7
	258.6	256.1	256.5	256.3	255.8	256.0	256.3	256.4	Sbd box	256.2
U/L	786/0	786/0	786/0	786/0	786/0	786/0	786/0	786/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
N:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.20579548638E+02			Apriori delay (usec)	-1.20579978080E+02			Resid mbdelay (usec)	4.29442E-04	+/- 7.3E-06
Sband delay (usec)	-1.20583021080E+02			Apriori clock (usec)	7.5199738E+00			Resid sbdelay (usec)	-3.04300E-03	+/- 5.8E-05
Phase delay (usec)	-1.20579975186E+02			Apriori clockrate (us/s)	1.3000000E-06			Resid phdelay (usec)	2.89390E-06	+/- 2.5E-08
Delay rate (us/s)	-1.93219559404E-01			Apriori rate (us/s)	-1.93219574079E-01			Resid rate (us/s)	1.46742E-08	+/- 1.1E-10
Total phase (deg)		-22.5		Apriori accel (us/s/s)	6.52207378310E-08			Resid phase (deg)	89.7	+/- 0.8

ph/seg (deg) 32.9 1.9 Search (2048X32) 2.622 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 19.8 3.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 55.6 1.1 Inc. seg. avg. 3.187 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 42.1 1.9 Inc. frq. avg. 3.688 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
N: az 156.6 el 36.7 pa -16.0 Y: az 144.6 el 37.1 pa -25.6 u,v (fr/asec) 1112.668 467.913 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/NY..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/NY.W.22.2J19RD

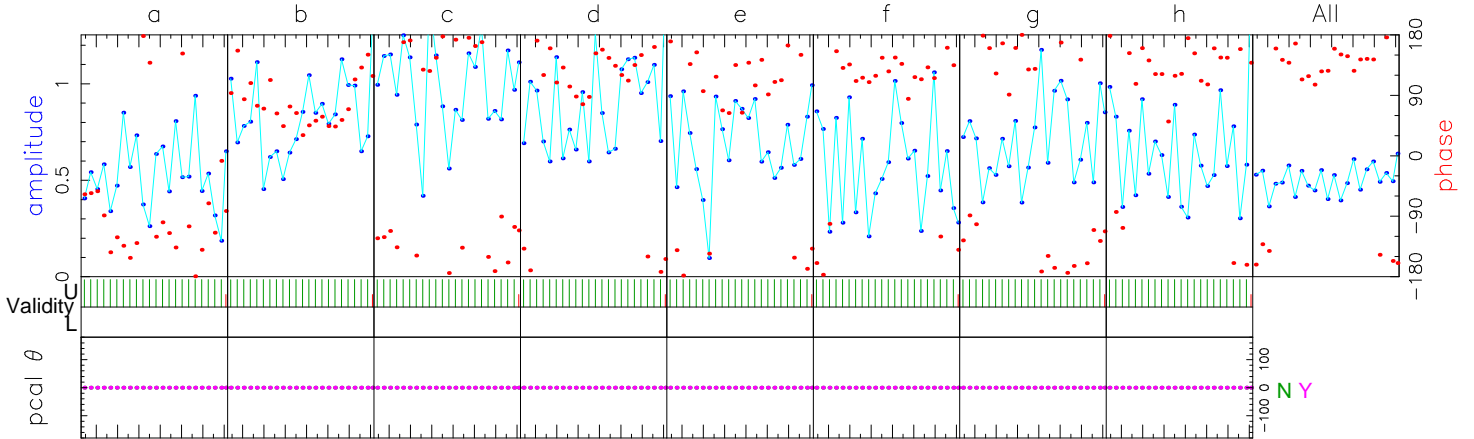


Fringe quality 7

SNR 22.9
Int time 402.261
Amp 0.418
Phase 156.0
PFD 0.0e+00
Delays (us)
SBD -0.000822
MBD 0.000979
Fringe rate (Hz) 0.001307
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223017.41
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140332
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

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

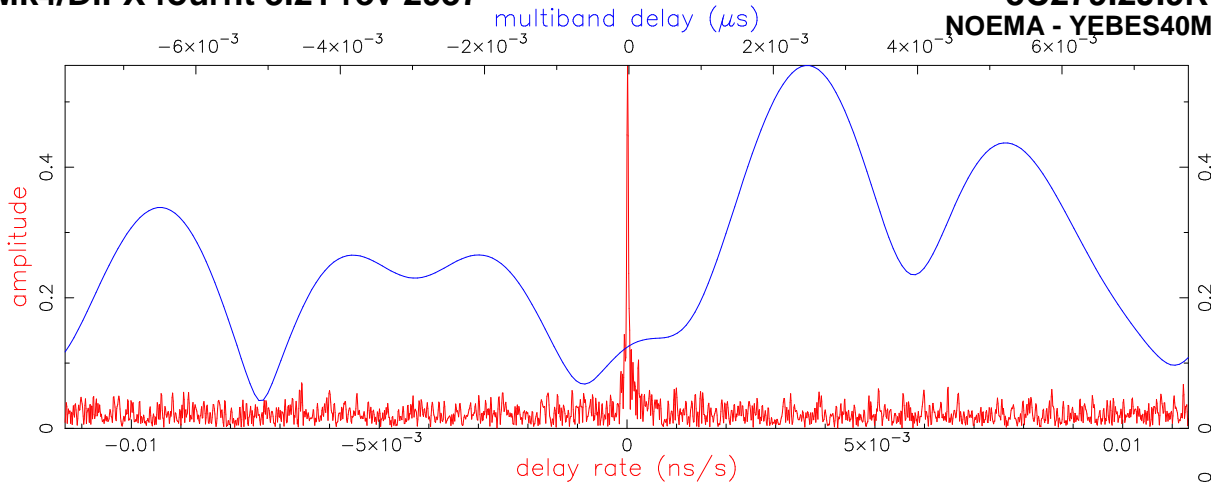


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-121.9	77.1	-165.3	144.1	137.0	141.2	-171.9	150.2	Phase	156.0
	0.4	0.7	0.8	0.7	0.5	0.5	0.5	0.5	Ampl.	0.6
	258.9	256.5	256.9	256.4	255.8	256.0	256.8	256.8	Sbd box	256.8
U/L	786/0	786/0	786/0	786/0	786/0	786/0	786/0	786/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
N:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.20578999200E+02		Apriori delay (usec)		-1.20579978080E+02		Resid mbdelay (usec)		9.78879E-04	+/- 4.7E-05
Sband delay (usec)	-1.20580800580E+02		Apriori clock (usec)		7.5199738E+00		Resid sbdelay (usec)		-8.22500E-04	+/- 3.8E-04
Phase delay (usec)	-1.20579973051E+02		Apriori clockrate (us/s)		1.3000000E-06		Resid phdelay (usec)		5.02899E-06	+/- 1.6E-07
Delay rate (us/s)	-1.93219558905E-01		Apriori rate (us/s)		-1.93219574079E-01		Resid rate (us/s)		1.51738E-08	+/- 6.9E-10
Total phase (deg)	43.7		Apriori accel (us/s/s)		6.52207378310E-08		Resid phase (deg)		156.0	+/- 5.0

	RMS	Theor.	Amplitude	0.418 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	34.8	12.0	Search (2048X32)	0.404	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	25.8	20.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	52.0	7.1	Inc. seg. avg.	0.491	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	46.6	12.3	Inc. frq. avg.	0.562	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
						ion window (TEC) 0.00 0.00

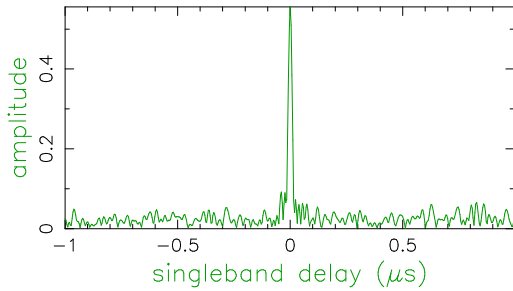
N: az 156.6 el 36.7 pa -16.0 Y: az 144.6 el 37.1 pa -25.6 u,v (fr/asec) 1112.668 467.913 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/NY..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/NY.W.33.2J19RD

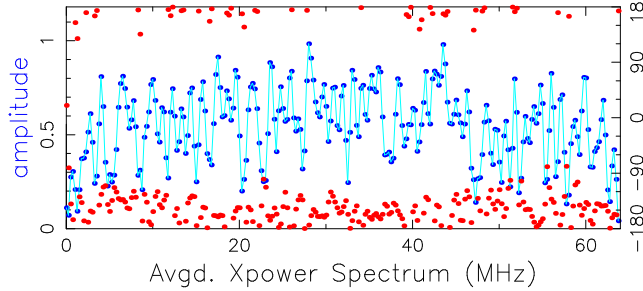


Fringe quality 4

SNR 30.5
Int time 402.261
Amp 0.556
Phase 176.7
PFD 0.0e+00
Delays (us)
SBD 0.000057
MBD 0.002473
Fringe rate (Hz)
0.001158
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

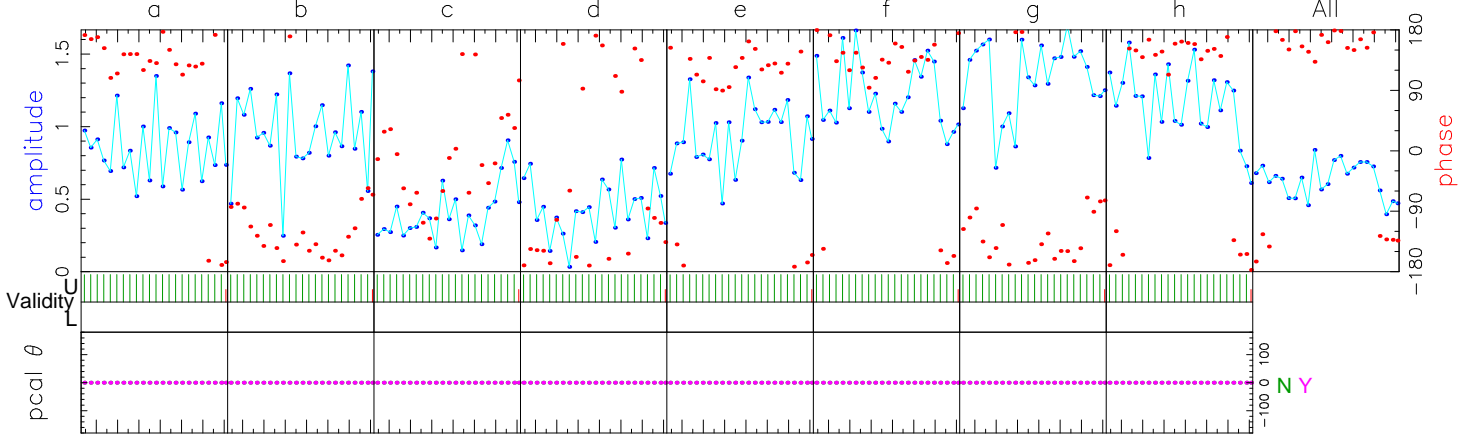


delay rate (ns/s)



Exp. c221d
Yr:day 16383
2022:356:203025
2023:010:140335
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	146.4	-126.3	-8.8	-170.3	139.7	148.6	-135.7	164.3	Phase	176.7
N	0.8	0.8	0.2	0.3	0.8	1.1	1.1	1.0	Ampl.	0.7
Y	0	0	0	0	0	0	0	0	Sbd box	257.0
N:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
N:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
Y	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Tracks	

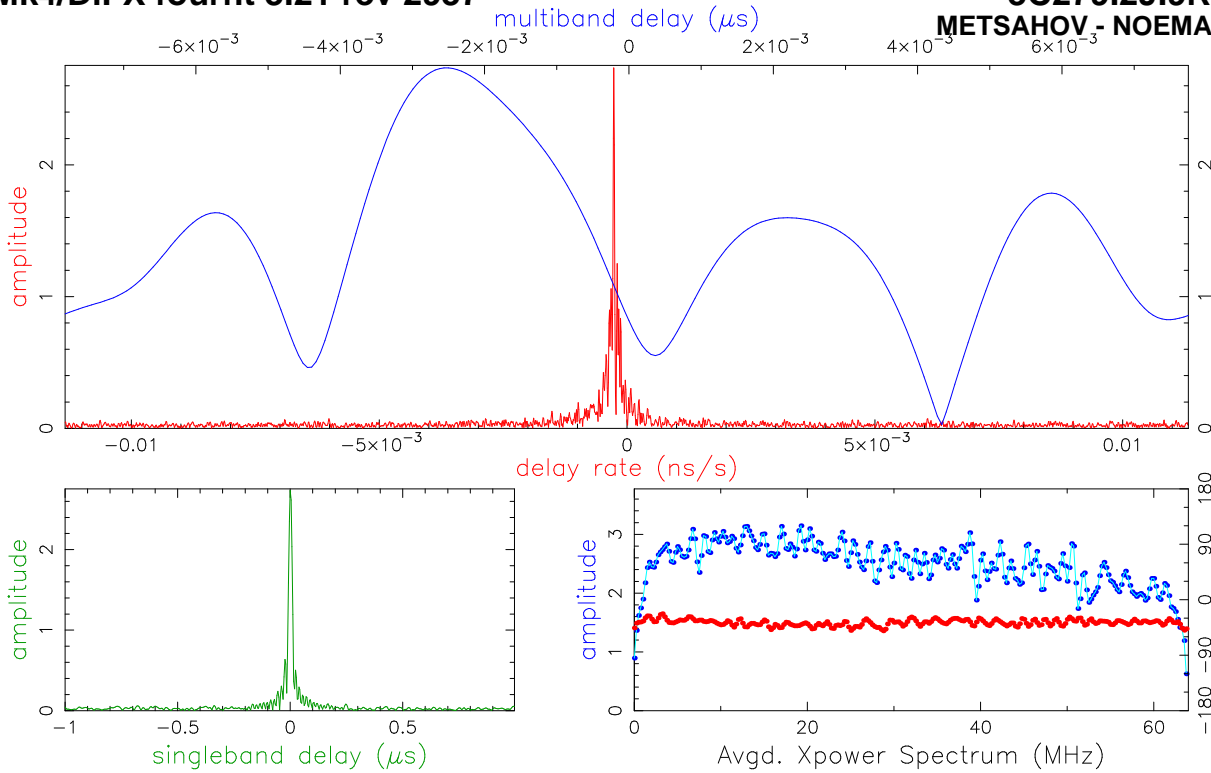
Group delay (usec)(sbd)	-1.20577505544E+02	Apriori delay (usec)	-1.20579978080E+02	Resid mbdelay (usec)	2.47254E-03	+/-	3.6E-05
Sband delay (usec)	-1.20579921580E+02	Apriori clock (usec)	7.5199738E+00	Resid sbdelay (usec)	5.65000E-05	+/-	2.8E-04
Phase delay (usec)	-1.20579972382E+02	Apriori clockrate (us/s)	1.3000000E-06	Resid phdelay (usec)	5.69813E-06	+/-	1.2E-07
Delay rate (us/s)	-1.93219560634E-01	Apriori rate (us/s)	-1.93219574079E-01	Resid rate (us/s)	1.34449E-08	+/-	5.2E-10
Total phase (deg)	64.5	Apriori accel (us/s/s)	6.52207378310E-08	Resid phase (deg)	176.7	+/-	3.8

ph/seg (deg)	RMS 30.8	Theor. 9.0	Amplitude Search (2048X32)	0.550	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	25.8	15.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	81.0	5.3	Inc. seg. avg.	0.630	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	67.1	9.3	Inc. frq. avg.	0.747	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

N: az 156.6 el 36.7 pa -16.0 Y: az 144.6 el 37.1 pa -25.6 u,v (fr/asec) 1112.668 467.913 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/NY..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/NY.W.42.2J19RD

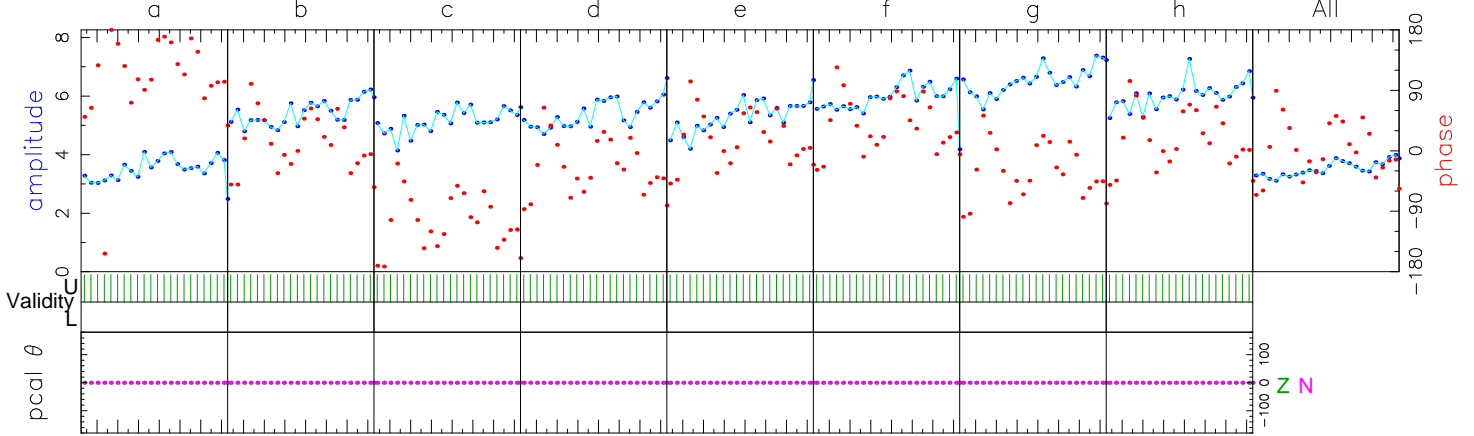
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2J19RD, No0003, ZN
METSCHOV - NOEMA, fgroup W, pol LR



Fringe quality 2
SNR 151.7
Int time 405.870
Amp 2.755
Phase 3.0
PFD 0.0e+00
Delays (us)
SBD 0.001041
MBD -0.002504
Fringe rate (Hz)
-0.022957
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223013.82
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140341
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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

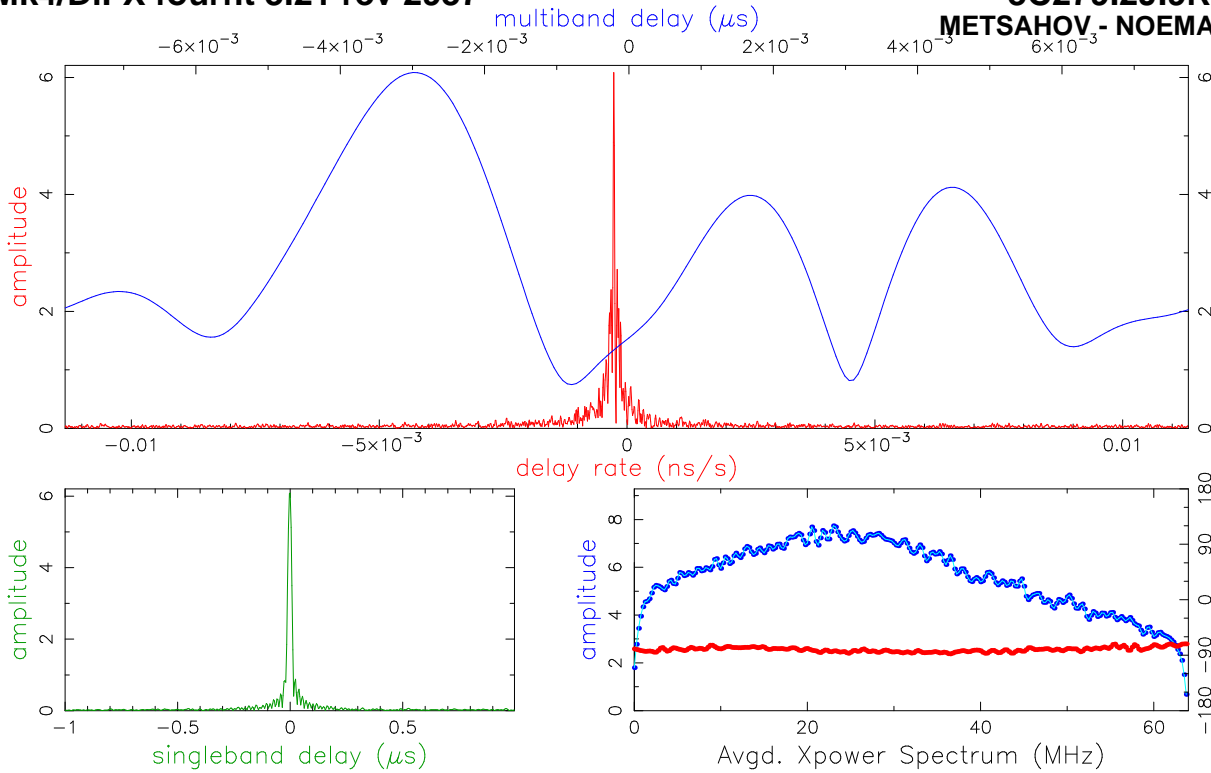


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	123.5	12.5	-103.9	-22.8	19.0	40.9	-29.5	19.6	Phase	3.0
	2.8	4.2	4.0	4.2	4.2	4.7	5.1	4.7	Ampl.	4.2
	254.8	256.5	257.1	257.4	257.7	257.4	257.3	256.6	Sbd box	257.3
U/L	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
N	0	0	0	0	0	0	0	0	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-4.17761212360E+03	Apriori delay (usec)	-4.17760961936E+03	Resid mbdelay (usec)	-2.50425E-03	+/-	7.2E-06
Sband delay (usec)	-4.17760857811E+03	Apriori clock (usec)	1.2785122E+01	Resid sbdelay (usec)	1.04125E-03	+/-	5.7E-05
Phase delay (usec)	-4.17760961926E+03	Apriori clockrate (us/s)	3.9799999E-07	Resid phdelay (usec)	9.58583E-08	+/-	2.4E-08
Delay rate (us/s)	-3.45688315822E-01	Apriori rate (us/s)	-3.45688049314E-01	Resid rate (us/s)	-2.66508E-07	+/-	1.0E-10
Total phase (deg)	-217.1	Apriori accel (us/s/s)	2.03601380588E-05	Resid phase (deg)	3.0	+/-	0.8

ph/seg (deg)	40.5	1.8	Search (2048X32)	2.702	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	28.9	3.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	70.4	1.1	Inc. seg. avg.	3.512	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	58.7	1.9	Inc. frq. avg.	4.237	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
Z: az 179.8 el 23.9 pa 0.4	N: az 156.6 el 36.7 pa -16.0	u, v (fr/asec)	2015.285 1294.818	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
Control file: cf_1234_gmva	Input file: /Exps/c221d/v1/3mm/3000/No0003/ZN..2J19RD	Output file: /Exps/c221d/v1/3mm/3000/No0003/ZN.W.12.2J19RD				ion window (TEC) 0.00 0.00

simultaneous interpolator

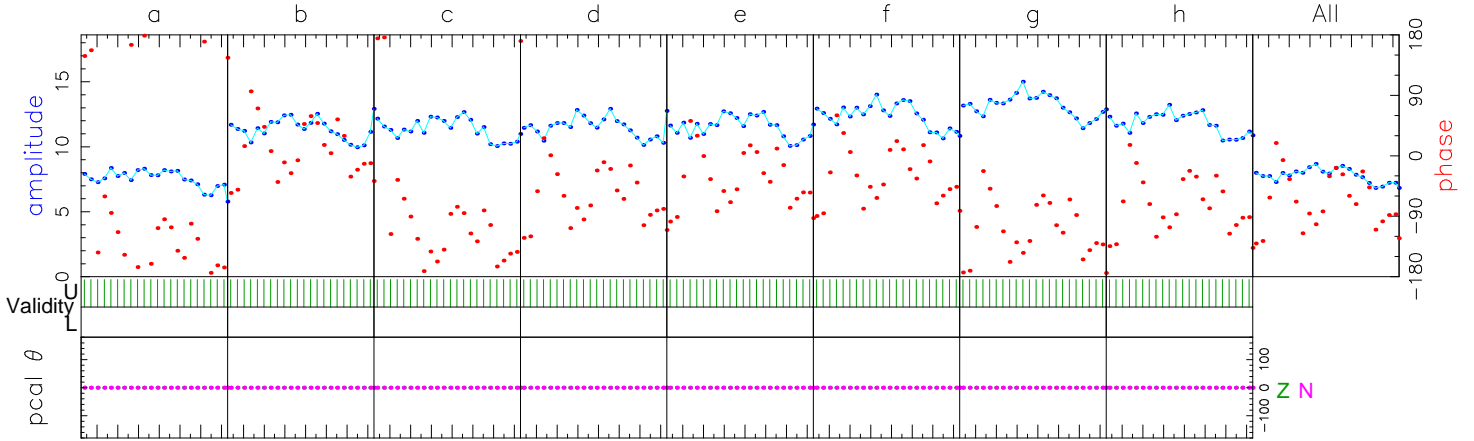


Fringe quality 2

SNR 341.8
Int time 405.870
Amp 6.206
Phase -66.8
PFD 0.0e+00
Delays (us)
SBD -0.001899
MBD -0.002979
Fringe rate (Hz)
-0.022889
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c221d
Exper # 16383
Yr:day 2022:093
Start 223013.82
Stop 223659.84
FRT 223330.00
Corr/FF/build
2022:356:203025
2023:010:140334
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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



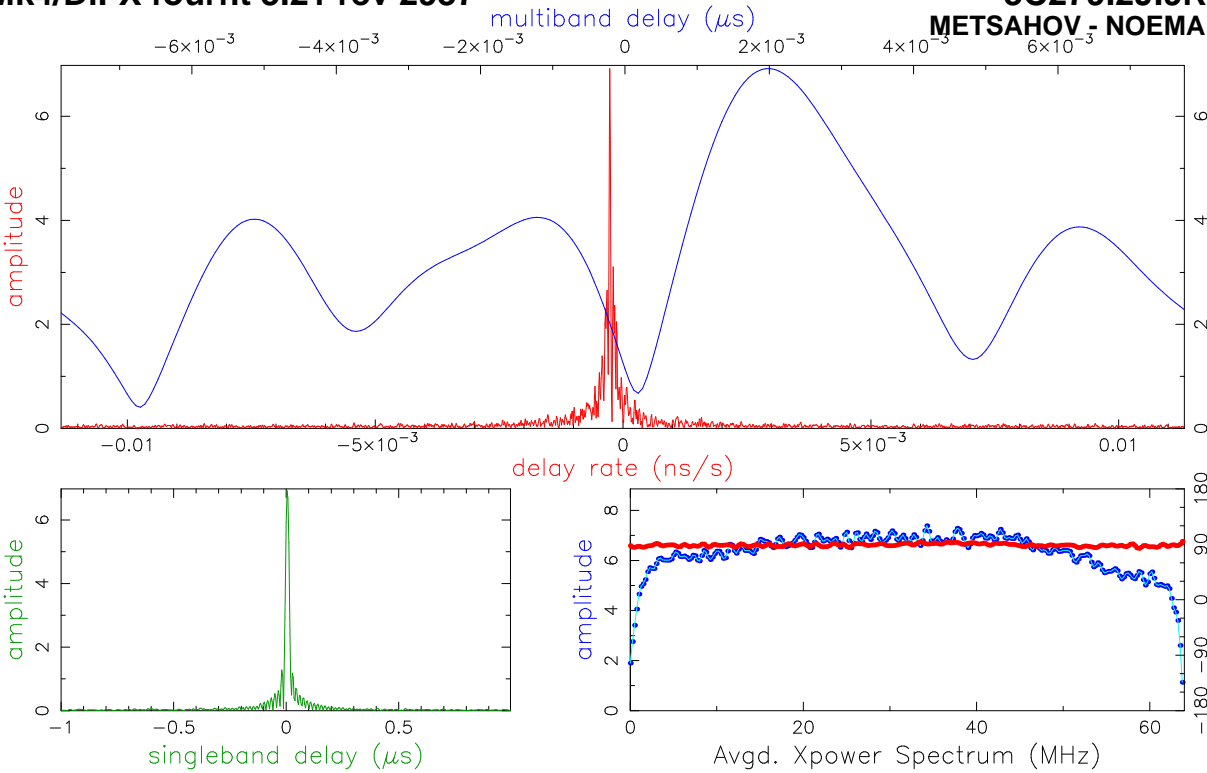
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0		
Z	0	0	0	0	0	0	0	0		
N	0	0	0	0	0	0	0	0		
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-4.17761259882E+03	Apriori delay (usec)	-4.17760961936E+03	Resid mbdelay (usec)	-2.97946E-03	+/-	3.2E-06
Sband delay (usec)	-4.17761151811E+03	Apriori clock (usec)	1.2785122E+01	Resid sbdelay (usec)	-1.89875E-03	+/-	2.5E-05
Phase delay (usec)	-4.17760962151E+03	Apriori clockrate (us/s)	3.9799999E-07	Resid phdelay (usec)	-2.15451E-06	+/-	1.1E-08
Delay rate (us/s)	-3.45688315032E-01	Apriori rate (us/s)	-3.45688049314E-01	Resid rate (us/s)	-2.65718E-07	+/-	4.6E-11
Total phase (deg)		Apriori accel (us/s/s)	2.03601380588E-05	Resid phase (deg)	-66.8	+/-	0.3

ph/seg (deg)	40.0	0.8	Amplitude	6.206 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	27.2	1.4	Search (2048X32)	6.029	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	57.2	0.5	Inc. seg. avg.	7.817	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	46.0	0.8	Inc. frq. avg.	8.802	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

Z: az 179.8 el 23.9 pa 0.4 N: az 156.6 el 36.7 pa -16.0 u,v (fr/asec) 2015.285 1294.818 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/ZN..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/ZN.W.1.2J19RD

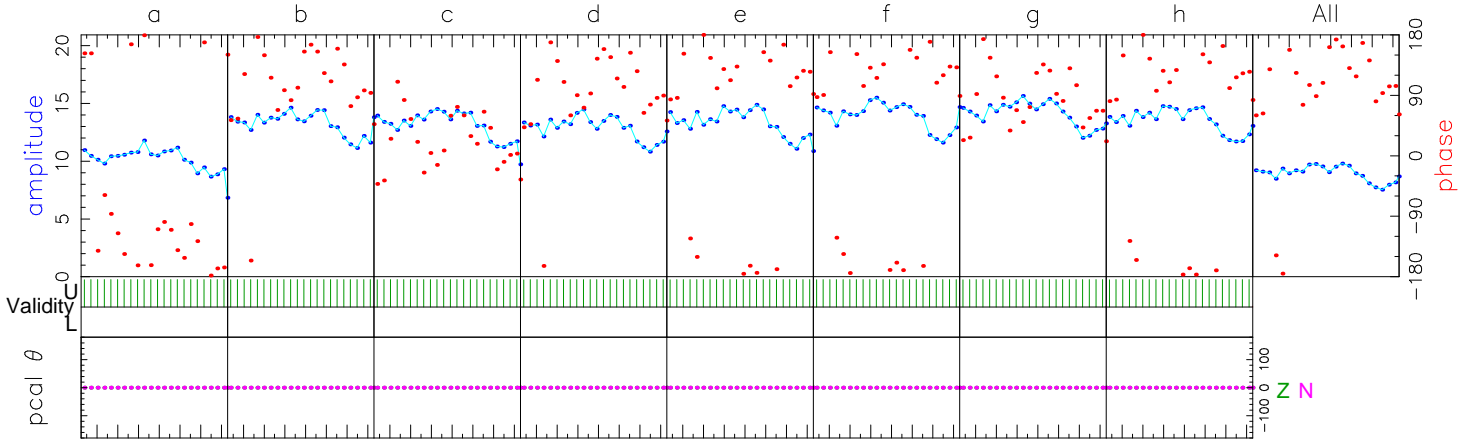


Fringe quality 2

SNR 384.5
 Int time 405.870
 Amp 6.980
 Phase 124.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.005112
 MBD 0.002011
 Fringe rate (Hz)
 -0.022885
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c221d
 Exper # 16383
 Yr:day 2022:093
 Start 223013.82
 Stop 223659.84
 FRT 223330.00
 Corr/FF/build
 2022:356:203025
 2023:010:140338
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-146.7	116.9	22.6	108.3	147.6	151.5	86.8	145.3	Phase	124.2
	8.0	10.2	10.2	9.9	10.3	10.8	11.0	10.5	Ampl.	10.1
	256.3	257.8	258.3	258.7	258.7	258.5	258.5	257.6	Sbd box	258.3
U/L	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
N	0	0	0	0	0	0	0	0	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.17760760866E+03		Apriori delay (usec)		-4.17760961936E+03		Resid mbdelay (usec)		2.01069E-03	+/- 2.8E-06
Sband delay (usec)	-4.17760450686E+03		Apriori clock (usec)		1.2785122E+01		Resid sbdelay (usec)		5.11250E-03	+/- 2.2E-05
Phase delay (usec)	-4.17760961535E+03		Apriori clockrate (us/s)		3.9799999E-07		Resid phdelay (usec)		4.00647E-06	+/- 9.6E-09
Delay rate (us/s)	-3.45688314982E-01		Apriori rate (us/s)		-3.45688049314E-01		Resid rate (us/s)		-2.65668E-07	+/- 4.1E-11
Total phase (deg)			Apriori accel (us/s/s)		2.03601380588E-05		Resid phase (deg)		124.2	+/- 0.3

ph/seg (deg) 40.4 0.7
 amp/seg (%) 29.6 1.2
 ph/frq (deg) 60.1 0.4
 amp/frq (%) 46.7 0.7

RMS Theor. Amplitude 6.980 +/- 0.018
 Search (2048X32) 6.835
 Interp. 0.000
 Inc. seg. avg. 8.940
 Inc. frq. avg. 10.118

Group delay (usec)(sbd) -4.17760961936E+03
 Apriori delay (usec) -4.17760961936E+03
 Apriori clock (usec) 1.2785122E+01
 Apriori clockrate (us/s) 3.9799999E-07
 Apriori rate (us/s) -3.45688049314E-01
 Apriori accel (us/s/s) 2.03601380588E-05

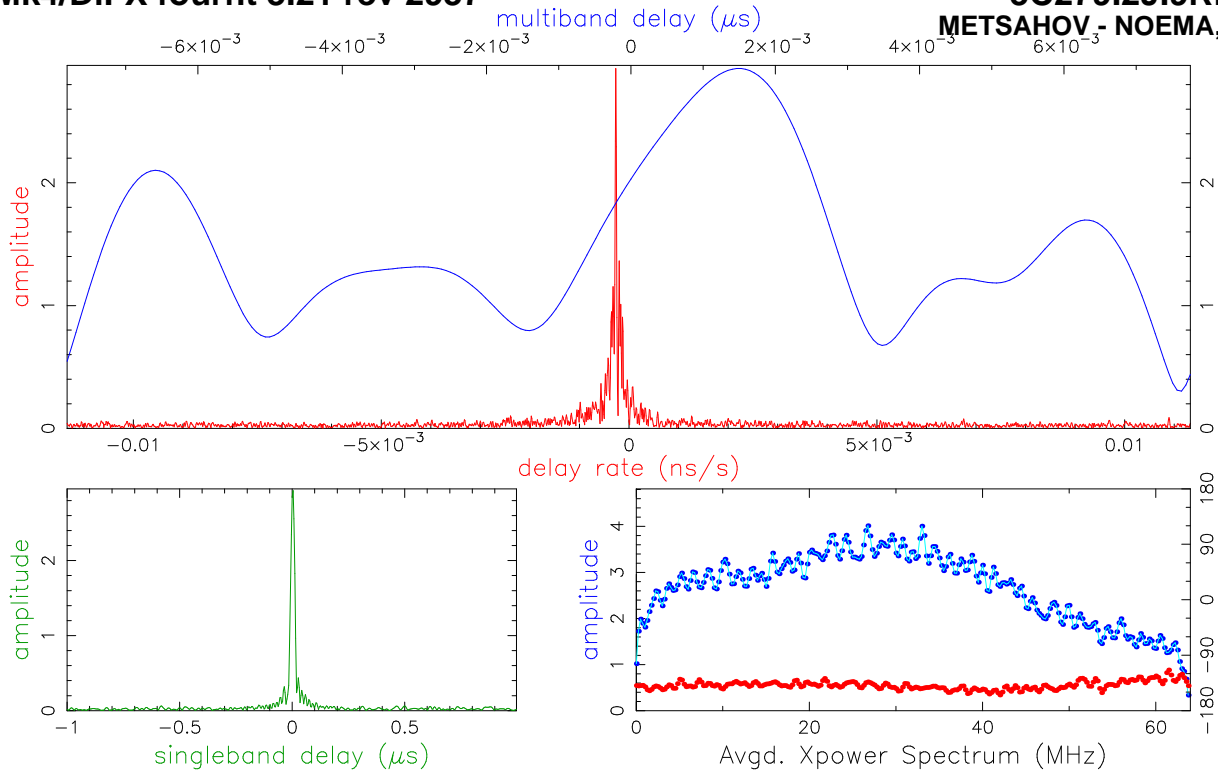
Pcal mode: MANUAL, MANUAL
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2
 Sample rate(MISamp/s): 128
 Data rate(Mb/s): 2048

PC period (AP's) 5, 5
 sb window (us) -1.000 1.000
 SampCntNorm: enabled
 mb window (us) -0.008 0.008
 dr window (ns/s) -0.011 0.011
 nlags: 256 t_cohere infinite
 ion window (TEC) 0.00 0.00

Z: az 179.8 el 23.9 pa 0.4
 N: az 156.6 el 36.7 pa -16.0
 u,v (fr/asec) 2015.285 1294.818

Control file: cf_1234_gmva
 Input file: /Exps/c221d/v1/3mm/3000/No0003/ZN..2J19RD
 Output file: /Exps/c221d/v1/3mm/3000/No0003/ZN.W.2.2J19RD

simultaneous interpolator

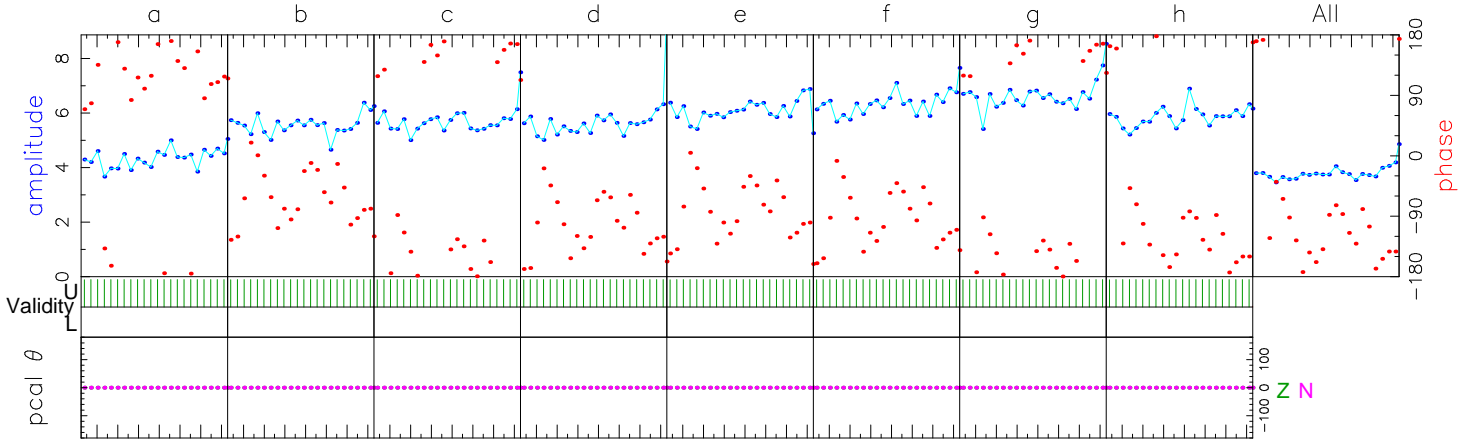


Fringe quality 2

SNR 162.8
 Int time 405.870
 Amp 2.956
 Phase -125.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.002656
 MBD 0.001515
 Fringe rate (Hz)
 -0.022951
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c221d
 Exper # 16383
 Yr:day 2022:093
 Start 223013.82
 Stop 223659.84
 FRT 223330.00
 Corr/FF/build
 2022:356:203025
 2023:010:140344
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	133.6	-62.0	-175.6	-103.2	-81.7	-92.9	-177.0	-132.5	Phase	-125.0
	3.4	4.3	4.4	4.4	4.8	4.9	5.2	4.6	Ampl.	4.5
	256.1	257.4	258.0	258.4	258.3	258.2	258.2	257.3	Sbd box	257.7
U/L	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
N	0	0	0	0	0	0	0	0	PC freqs	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-4.17760810426E+03	Apriori delay (usec)	-4.17760961936E+03	Resid mbdelay (usec)	1.51510E-03	+/-	6.7E-06
Sband delay (usec)	-4.17760696361E+03	Apriori clock (usec)	1.2785122E+01	Resid sbdelay (usec)	2.65575E-03	+/-	5.3E-05
Phase delay (usec)	-4.17760962339E+03	Apriori clockrate (us/s)	3.9799999E-07	Resid phdelay (usec)	-4.03063E-06	+/-	2.3E-08
Delay rate (us/s)	-3.45688315753E-01	Apriori rate (us/s)	-3.45688049314E-01	Resid rate (us/s)	-2.66439E-07	+/-	9.7E-11
Total phase (deg)	-345.1	Apriori accel (us/s/s)	2.03601380588E-05	Resid phase (deg)	-125.0	+/-	0.7

ph/seg (deg)	40.3	1.7	Search (2048X32)	2.897	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	28.3	2.9	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)	61.9	1.0	Inc. seg. avg.	3.771	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	54.3	1.7	Inc. frq. avg.	4.479	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 179.8 el 23.9 pa 0.4 N: az 156.6 el 36.7 pa -16.0 u,v (fr/asec) 2015.285 1294.818 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c221d/v1/3mm/3000/No0003/ZN..2J19RD Output file: /Exps/c221d/v1/3mm/3000/No0003/ZN.W.23.2J19RD