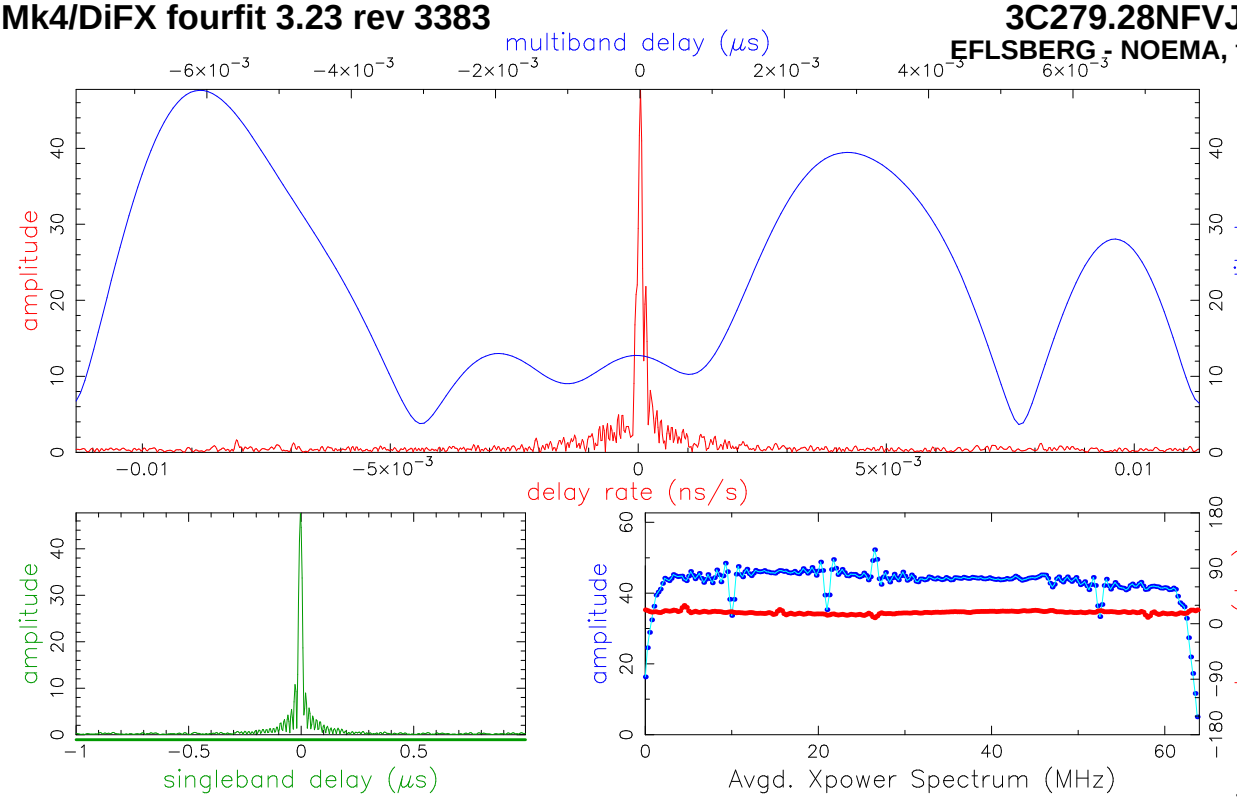
Mk4/DiFX fourfit 3.23 rev 3383

3C279.28NFVJ, No0056, BN

EFLSBERG - NOEMA, fgroup W, pol RR

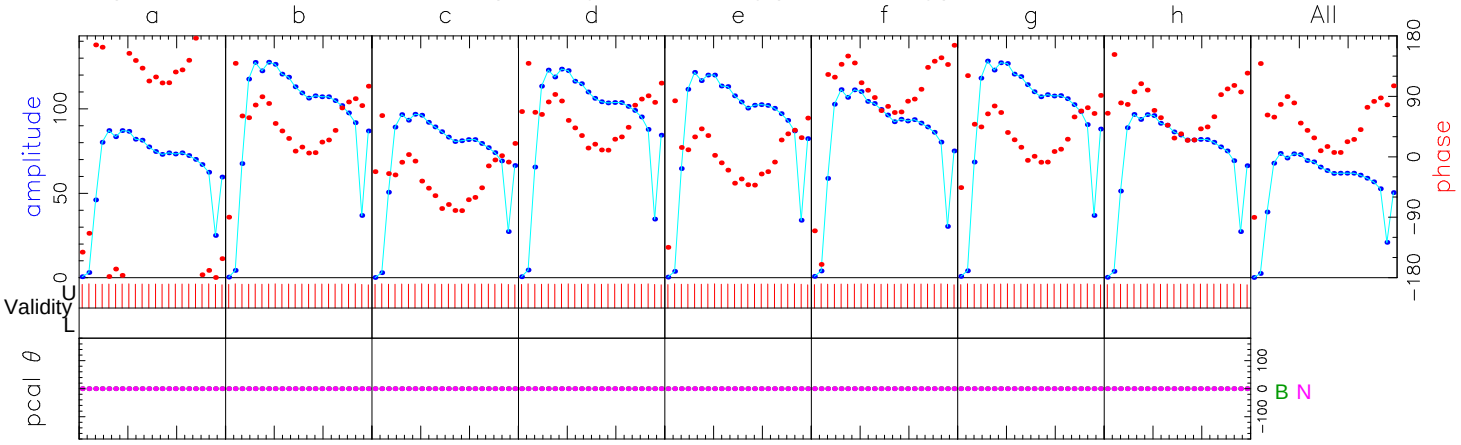


Fringe quality 1

SNR 1633.4
Int time 156.509
Amp 47.746
Phase 50.4
PFD 0.0e+00
Delays (us)
SBD -0.003262
MBD -0.006070
Fringe rate (Hz)
0.004092
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. mk013b
Exper # 16383
Yr:day 2021:113
Start 022000.00
Stop 022300.22
FRT 022130.00
Corr/FF/build
2022:164:113250
2022:164:132718
2022:109:102128
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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
	153.9	49.6	-35.9	54.0	2.1	110.2	36.1	69.2	Phase	50.4
	56.5	82.5	62.5	80.0	78.4	71.9	82.8	62.8	Ampl.	72.2
	254.0	255.9	256.6	256.5	256.9	256.6	256.3	254.9	Sbd box	256.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids Tracks	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids Tracks	

Group delay (usec) (SBD)	-1.20145549163E+03	Apriori delay (usec)	-1.20144942192E+03	Resid mbdelay (usec)	-6.06971E-03	+/-	6.6E-07
Sband delay (usec)	-1.20145268417E+03	Apriori clock (usec)	-8.7300882E+00	Resid sbdelay (usec)	-3.26225E-03	+/-	5.3E-06
Phase delay (usec)	-1.20144942030E+03	Apriori clockrate (us/s)	1.3000000E-07	Resid phdelay (usec)	1.62452E-06	+/-	2.3E-09
Delay rate (us/s)	9.11361988493E-02	Apriori rate (us/s)	9.11361513405E-02	Resid rate (us/s)	4.75088E-08	+/-	2.2E-11
Total phase (deg)	-23.2	Apriori accel (us/s/s)	5.53843394732E-06	Resid phase (deg)	50.4	+/-	0.1

	RMS	Theor.	Amplitude	47.746 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	45.9	0.2	Search (1024X32)	46.644	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
amp/seg (%)	46.1	0.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	64.1	0.1	Inc. seg. avg.	55.288	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011
amp/frq (%)	55.0	0.2	Inc. frq. avg.	72.168	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

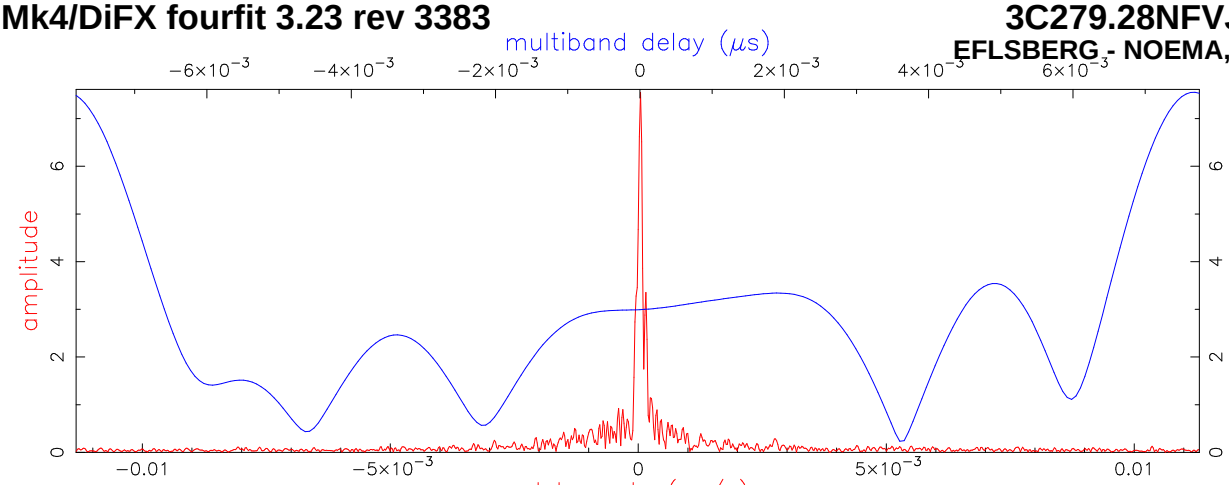
B: az 241.5 el 14.3 pa 34.2 N: az 242.2 el 17.7 pa 39.3 u,v (fr/asec) -521.606 564.724 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/mk013b/v1_pc1/5099/No0056/BN..28NFVJ Output file: /Exps/mk013b/v1_pc1/5099/No0056/BN.W.11.28NFVJ

Mk4/DiFX fourfit 3.23 rev 3383

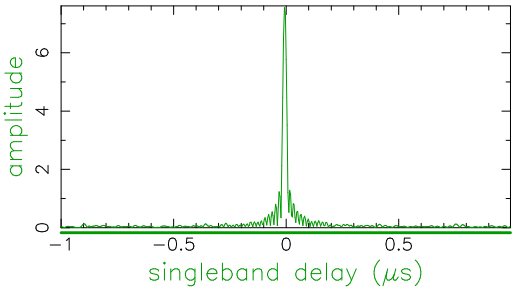
3C279.28NFVJ, No0056, BN

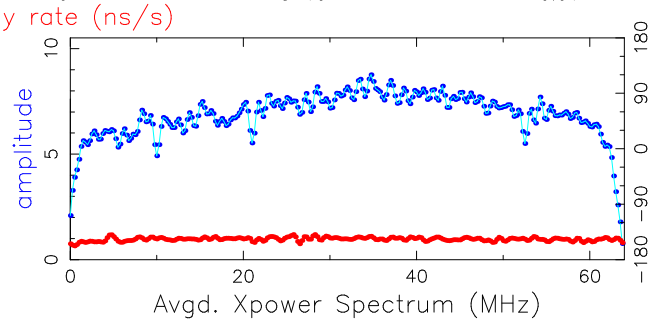
EFLSBERG - NOEMA, fgroup W, pol RL



Fringe quality 2

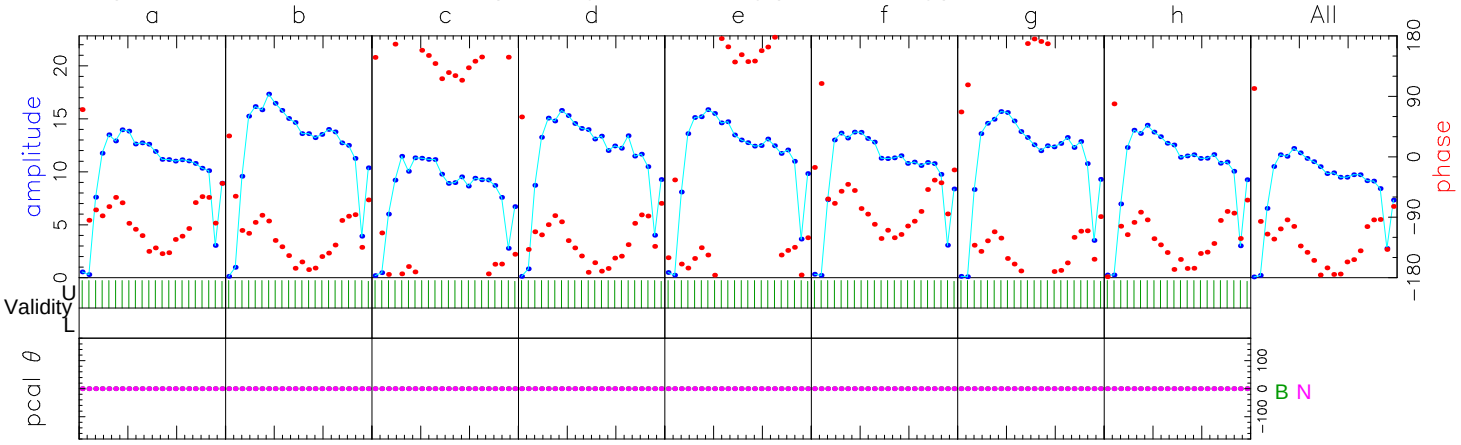
SNR 279.3
Int time 179.979
Amp 7.613
Phase -131.5
PFD 0.0e+00
Delays (us)
SBD -0.006624
MBD -0.007915
Fringe rate (Hz)
0.004324
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512





Exp. mk013b
Exper # 16383
Yr:day 2021:113
Start 022000.00
Stop 022300.22
FRT 022130.00
Corr/FF/build
2022:164:113250
2022:164:132730
2022:109:102128
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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
	-97.5	-123.1	160.2	-125.6	-174.5	-76.0	-148.1	-121.0	Phase	-131.5
	8.7	10.6	7.1	9.8	9.9	8.7	9.8	8.9	Ampl.	9.2
	253.6	255.1	256.1	255.9	256.2	256.1	255.8	254.5	Sbd box	255.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	

Group delay (usec) (SBD)	-1.20145733663E+03	Apriori delay (usec)	-1.20144942192E+03	Resid mbdelay (usec)	-7.91471E-03	+/-	3.9E-06
Sband delay (usec)	-1.20145604542E+03	Apriori clock (usec)	-8.7300882E+00	Resid sbdelay (usec)	-6.62350E-03	+/-	3.1E-05
Phase delay (usec)	-1.20144942616E+03	Apriori clockrate (us/s)	1.3000000E-07	Resid phdelay (usec)	-4.23905E-06	+/-	1.3E-08
Delay rate (us/s)	9.11362015362E-02	Apriori rate (us/s)	9.11361513405E-02	Resid rate (us/s)	5.01956E-08	+/-	1.3E-10
Total phase (deg)	-205.0	Apriori accel (us/s/s)	5.53843394732E-06	Resid phase (deg)	-131.5	+/-	0.4

	RMS	Theor.	Amplitude	7.613 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	40.5	1.0	Search (1024X32)	7.406	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
amp/seg (%)	46.7	1.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	43.3	0.6	Inc. seg. avg.	8.732	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011
amp/frq (%)	24.6	1.0	Inc. frq. avg.	9.191	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

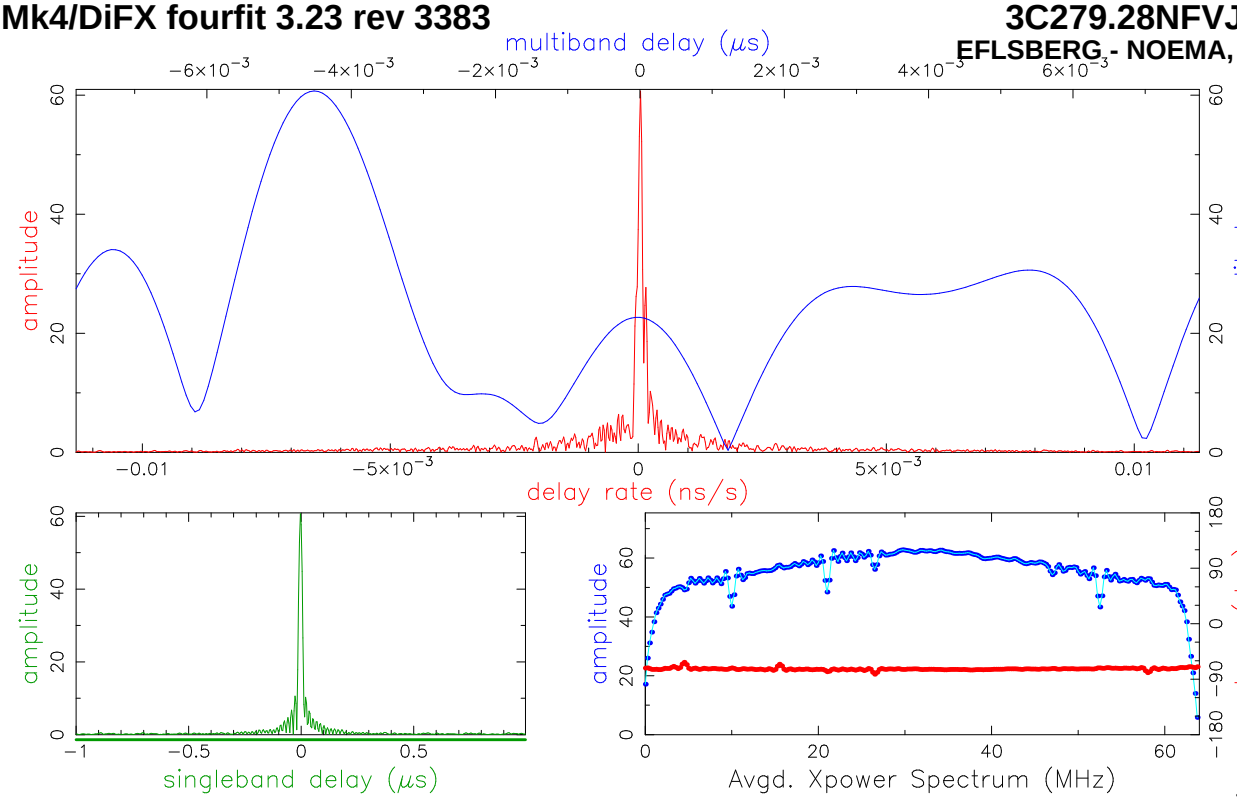
B: az 241.5 el 14.3 pa 34.2 N: az 242.2 el 17.7 pa 39.3 u,v (fr/asec) -521.606 564.724 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/mk013b/v1_pc1/5099/No0056/BN..28NFVJ Output file: /Exps/mk013b/v1_pc1/5099/No0056/BN.W.125.28NFVJ

Mk4/DiFX fourfit 3.23 rev 3383

3C279.28NFVJ, No0056, BN

EFLSBERG - NOEMA, fgroup W, pol LL

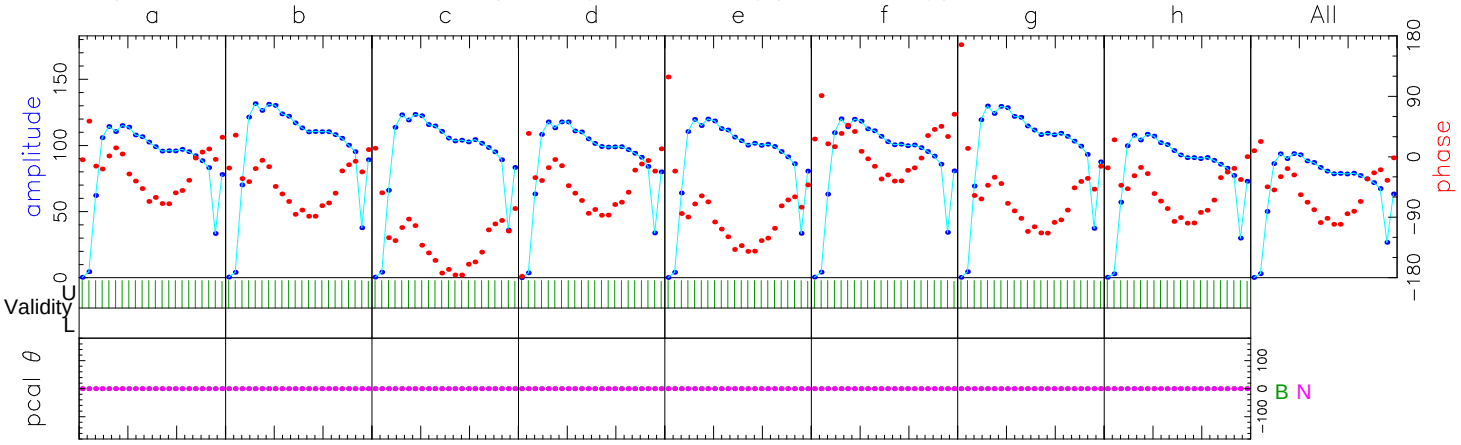


Fringe quality 2

SNR 2236.4
Int time 179.979
Amp 60.961
Phase -56.7
PFD 0.0e+00
Delays (us)
SBD -0.003022
MBD -0.004483
Fringe rate (Hz)
0.004083
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. mk013b
Exper # 16383
Yr:day 2021:113
Start 022000.00
Stop 022300.22
FRT 022130.00
Corr/FF/build
2022:164:113250
2022:164:132715
2022:109:102128
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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
	-25.6	-44.5	-132.1	-43.2	-97.0	7.8	-69.6	-55.0	Phase	-56.7
	74.5	85.1	80.0	76.4	77.6	77.3	83.9	69.9	Ampl.	78.1
	254.9	256.0	256.9	257.0	257.1	257.0	256.5	255.3	Sbd box	256.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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 Tracks	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids Tracks	

Group delay (usec) (SBD)	-1.20145390523E+03	Apriori delay (usec)	-1.20144942192E+03	Resid mbdelay (usec)	-4.48331E-03	+/-	4.9E-07
Sband delay (usec)	-1.20145244392E+03	Apriori clock (usec)	-8.7300882E+00	Resid sbdelay (usec)	-3.02200E-03	+/-	3.9E-06
Phase delay (usec)	-1.20144942375E+03	Apriori clockrate (us/s)	1.3000000E-07	Resid phdelay (usec)	-1.82855E-06	+/-	1.7E-09
Delay rate (us/s)	9.11361987430E-02	Apriori rate (us/s)	9.11361513405E-02	Resid rate (us/s)	4.74025E-08	+/-	1.6E-11
Total phase (deg)	-130.3	Apriori accel (us/s/s)	5.53843394732E-06	Resid phase (deg)	-56.7	+/-	0.1

	RMS	Theor.	Amplitude	60.961 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	36.5	0.1	Search (1024X32)	60.075	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
amp/seg (%)	45.9	0.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	46.5	0.1	Inc. seg. avg.	70.285	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011
amp/frq (%)	29.1	0.1	Inc. frq. avg.	78.088	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

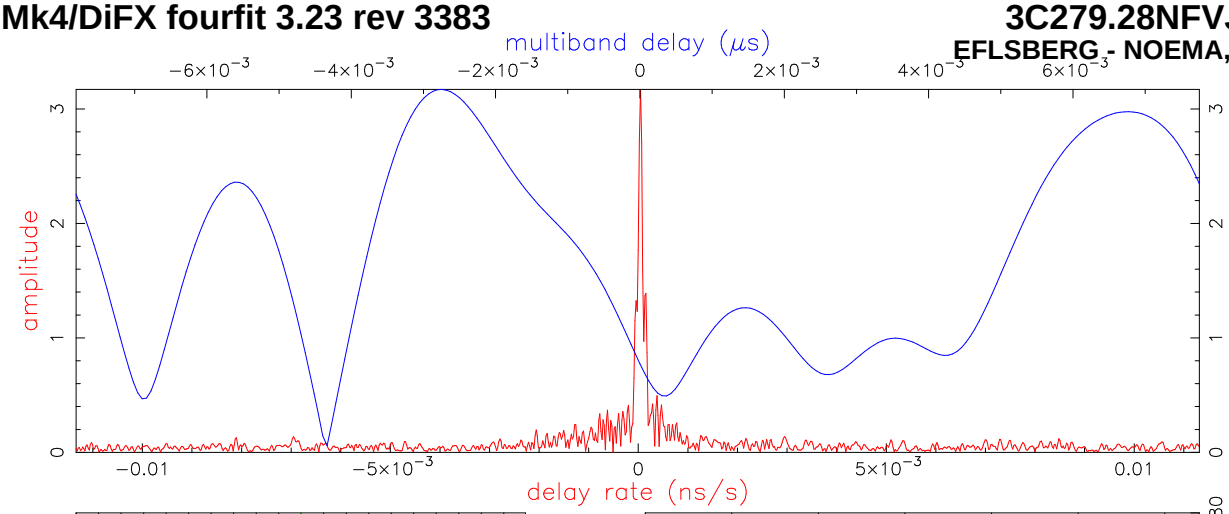
B: az 241.5 el 14.3 pa 34.2 N: az 242.2 el 17.7 pa 39.3 u,v (fr/asec) -521.606 564.724 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/mk013b/v1_pc1/5099/No0056/BN..28NFVJ Output file: /Exps/mk013b/v1_pc1/5099/No0056/BN.W.2.28NFVJ

Mk4/DiFX fourfit 3.23 rev 3383

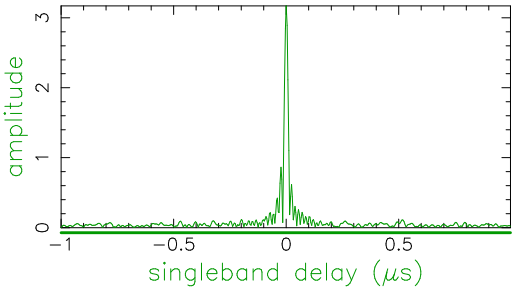
3C279.28NFVJ, No0056, BN

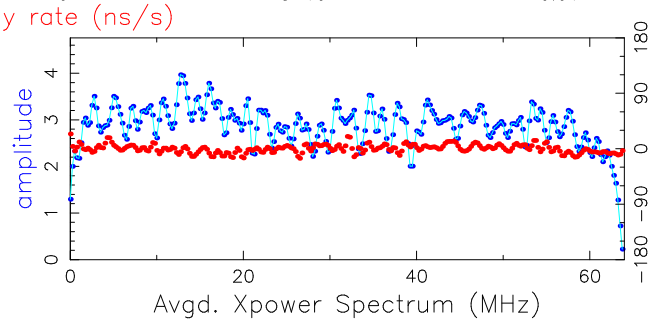
EFLSBERG - NOEMA, fgroup W, pol LR



Fringe quality 1

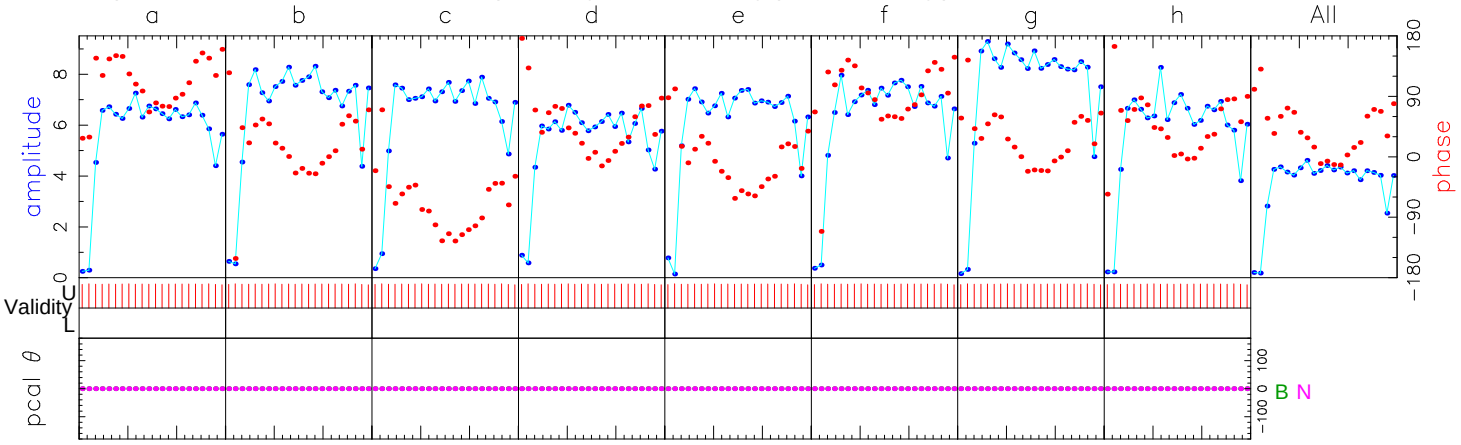
SNR 108.5
Int time 156.509
Amp 3.171
Phase 33.4
PFD 0.0e+00
Delays (us)
SBD 0.000148
MBD -0.002750
Fringe rate (Hz)
0.004266
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512





Exp. mk013b
Exper # 16383
Yr:day 2021:113
Start 022000.00
Stop 022300.22
FRT 022130.00
Corr/FF/build
2022:164:113250
2022:164:132727
2022:109:102128
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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
	116.6	19.2	-77.3	39.6	-13.1	100.7	22.3	45.8	Phase	33.4
	4.9	5.6	5.4	4.6	5.2	5.4	6.4	4.9	Ampl.	5.3
	255.3	256.7	257.2	257.7	257.7	257.4	256.8	256.1	Sbd box	257.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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 Tracks	
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids Tracks	

Group delay (usec) (SBD)	-1.20145217148E+03	Apriori delay (usec)	-1.20144942192E+03	Resid mbdelay (usec)	-2.74956E-03	+/-	1.0E-05
Sband delay (usec)	-1.20144927367E+03	Apriori clock (usec)	-8.7300882E+00	Resid sbdelay (usec)	1.48250E-04	+/-	7.9E-05
Phase delay (usec)	-1.20144942084E+03	Apriori clockrate (us/s)	1.3000000E-07	Resid phdelay (usec)	1.07818E-06	+/-	3.4E-08
Delay rate (us/s)	9.11362008602E-02	Apriori rate (us/s)	9.11361513405E-02	Resid rate (us/s)	4.95197E-08	+/-	3.3E-10
Total phase (deg)	-40.1	Apriori accel (us/s/s)	5.53843394732E-06	Resid phase (deg)	33.4	+/-	1.1

	RMS	Theor.	Amplitude	3.171 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	38.5	2.5	Search (1024X32)	3.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
amp/seg (%)	41.4	4.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	66.3	1.5	Inc. seg. avg.	3.700	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011
amp/frq (%)	68.9	2.6	Inc. frq. avg.	5.293	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 241.5 el 14.3 pa 34.2 N: az 242.2 el 17.7 pa 39.3 u,v (fr/asec) -521.606 564.724 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/mk013b/v1_pc1/5099/No0056/BN..28NFVJ Output file: /Exps/mk013b/v1_pc1/5099/No0056/BN.W.99.28NFVJ