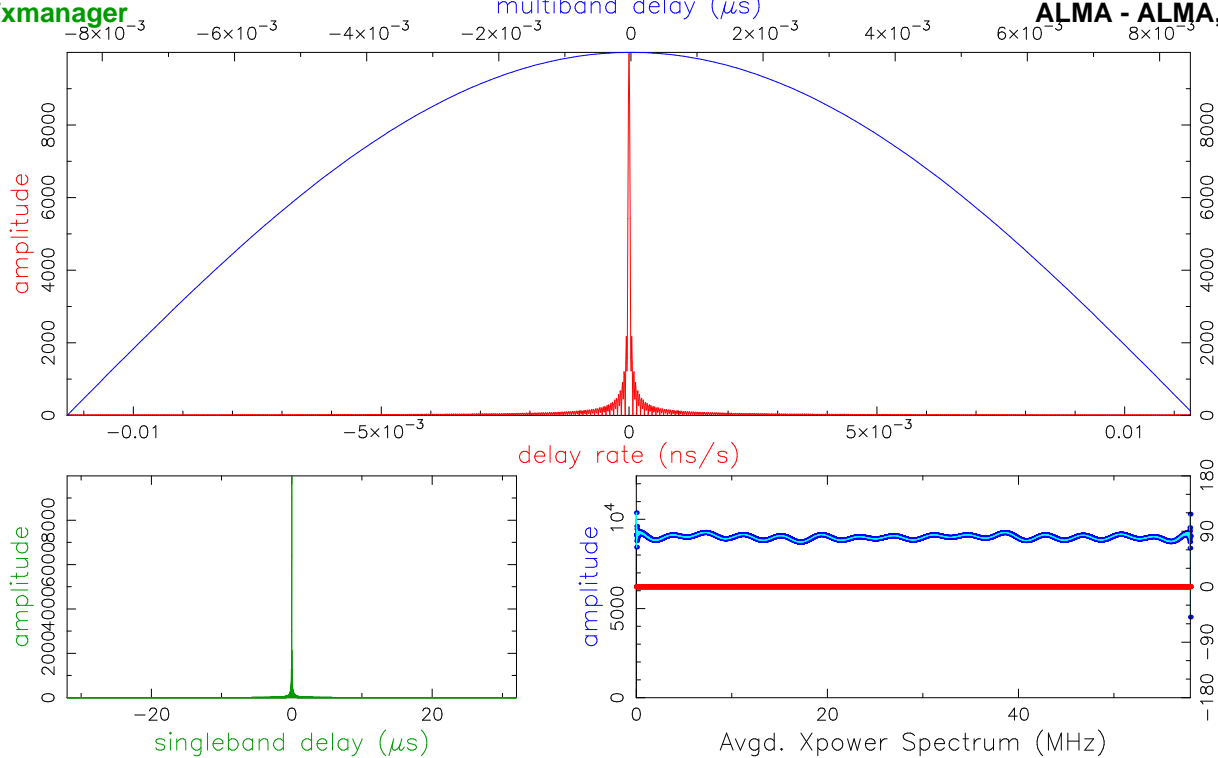


Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

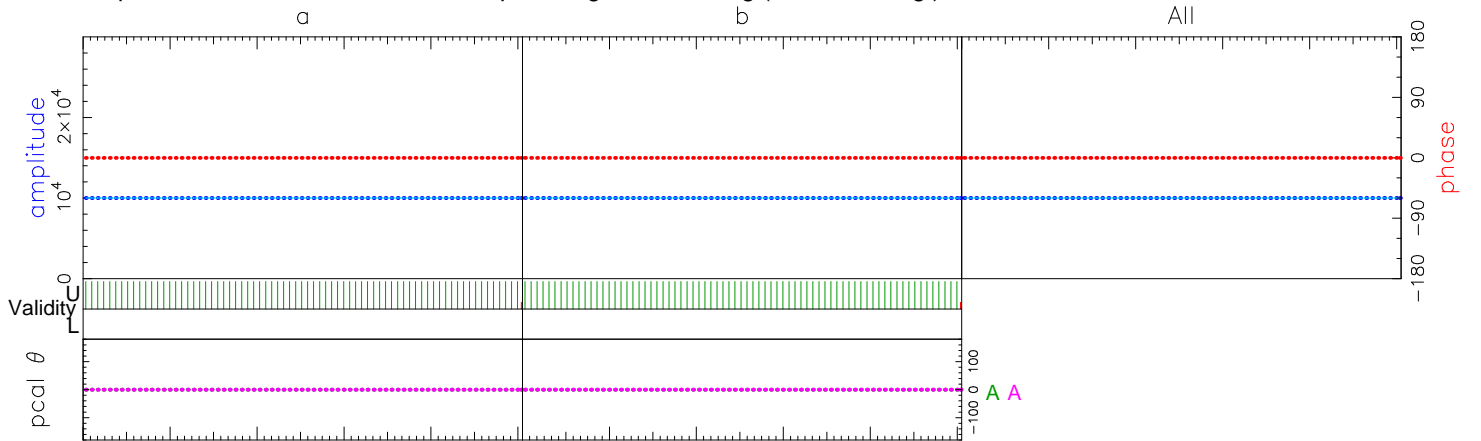
OJ287.1RFU7H, No0003, AA

ALMA - ALMA, fgroup W, pol XX



Fringe quality 9
 SNR 225443.6
 Int time 299.980
 Amp 9999.999
 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. c211d
 Exper # 16383
 Yr:day 2021:116
 Start 223000.00
 Stop 223500.03
 FRT 223230.00
 Corr/FF/build
 2021:194:221819
 2021:195:063141
 2021:057:122453
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 74 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



86209.70	86268.30	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
7425.0	7425.0	Sbd box	7425.0
U/L 586/0	586/0	APs used	
A 0	0	PC freqs	
A 0	0	PC freqs	
A:A 0:0	0:0	PC phase	
A:A 0:0	0:0	Manl PC	
A 1000	1000	PC amp	
A 1000	1000		
A W00UX	W01UX	Chan ids	
A W00UX	W01UX	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/- 2.4E-08
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/- 4.2E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/- 1.6E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/- 9.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/- 0.0

ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	9999.999 +/- 0.044	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	0.0	Search (2048X8)	9999.999	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-32.000 32.000
ph/frq (deg)	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	9999.999	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	0.0	Inc. frq. avg.	9999.999			Sample rate(MISamp/s): 116		dr window (ns/s)	-0.011 0.011
						Data rate(Mb/s): 464	nlags: 7424 t_cohere infinite	ion window (TEC)	0.00 0.00

A: az 12.4 el 46.0 pa -167.9 A: az 12.4 el 46.0 pa -167.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

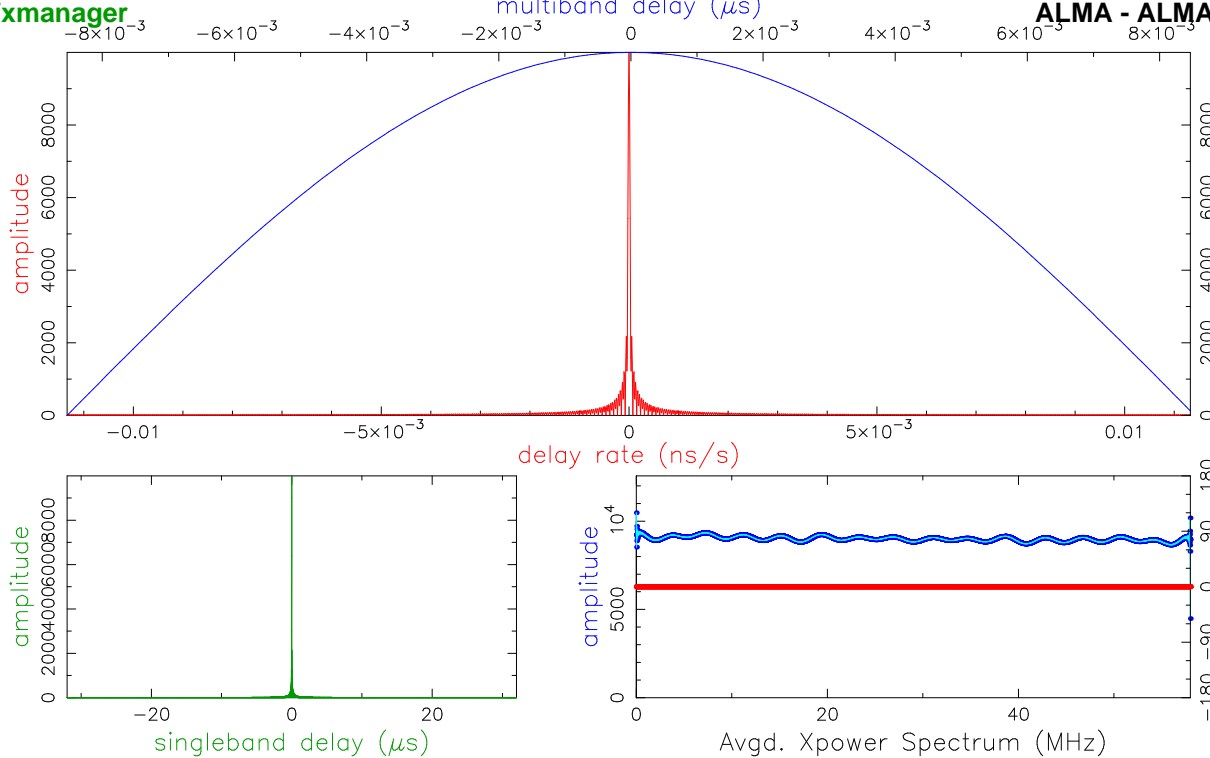
Control file: cf_1234_gmva Input file: /Exps/c211d/v1/1234/No0003/AA..1RFU7H Output file: /Exps/c211d/v1/1234/No0003/AA.W.3.1RFU7H

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

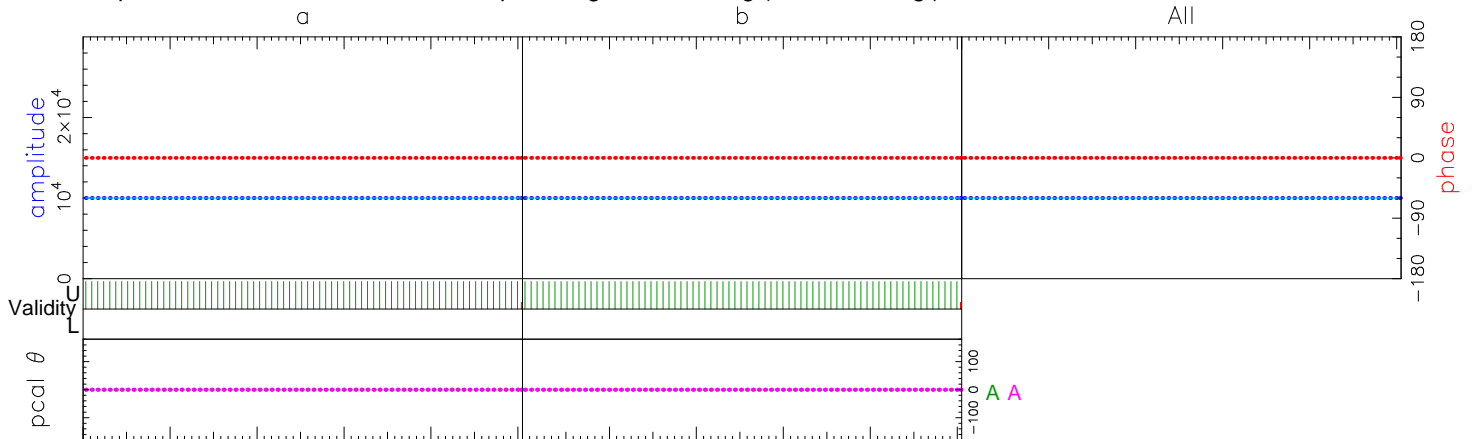
OJ287.1RFU7H, No0003, AA

ALMA - ALMA, fgroup W, pol YY



Fringe quality 9
 SNR 225443.6
 Int time 299.980
 Amp 9999.999
 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. c211d
 Exper # 16383
 Yr:day 2021:116
 Start 223000.00
 Stop 223500.03
 FRT 223230.00
 Corr/FF/build
 2021:194:221819
 2021:195:063201
 2021:057:122453
 RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

Amp. and Phase vs. time for each freq., 74 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



86209.70	86268.30	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
7425.0	7425.0	Sbd box	7425.0
U/L 586/0	586/0	APs used	
A 0	0	PC freqs	
A 0	0	PC freqs	
A:A 0:0	0:0	PC phase	
A:A 0:0	0:0	Manl PC	
A 1000	1000	PC amp	
A 1000	1000		
A W00UY	W01UY	Chan ids	
A W00UY	W01UY	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.4E-08
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.2E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.6E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	9.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	9999.999 +/- 0.044	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	Search (2048X8)	9999.999	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000	32.000	
ph/frq (deg)	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	9999.999	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.009	0.009
amp/frq (%)	0.0	Inc. frq. avg.	9999.999	u,v (fr/asec)	0.000	Sample rate (MSamp/s):	116	nlags:	7424	t_cohere	infinite
Data rate (Mb/s): 464											
ion window (TEC) 0.00 0.00											

A: az 12.4 el 46.0 pa -167.9 A: az 12.4 el 46.0 pa -167.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

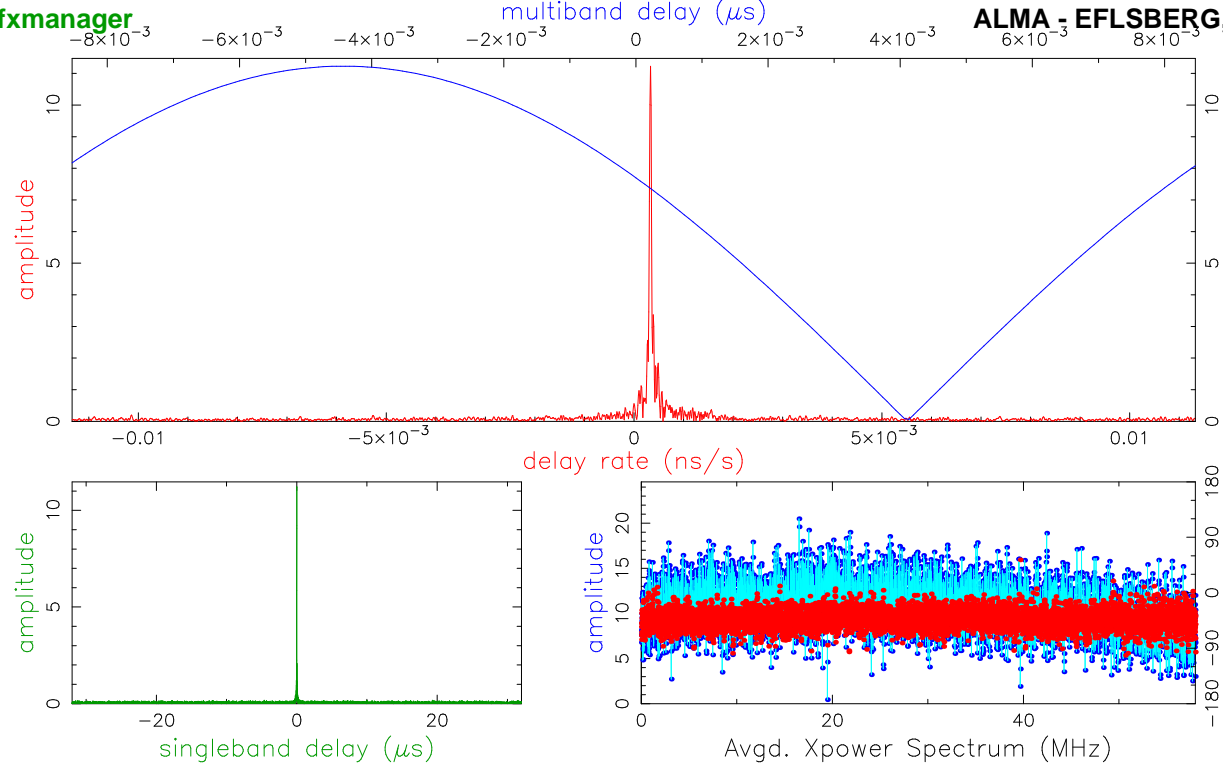
Control file: cf_1234_gmva Input file: /Exps/c211d/v1/1234/No0003/AA..1RFU7H Output file: /Exps/c211d/v1/1234/No0003/AA.W.6.1RFU7H

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

OJ287.1RFU7H, No0003, AB

ALMA - EFLSBERG, fgroup W, pol YL

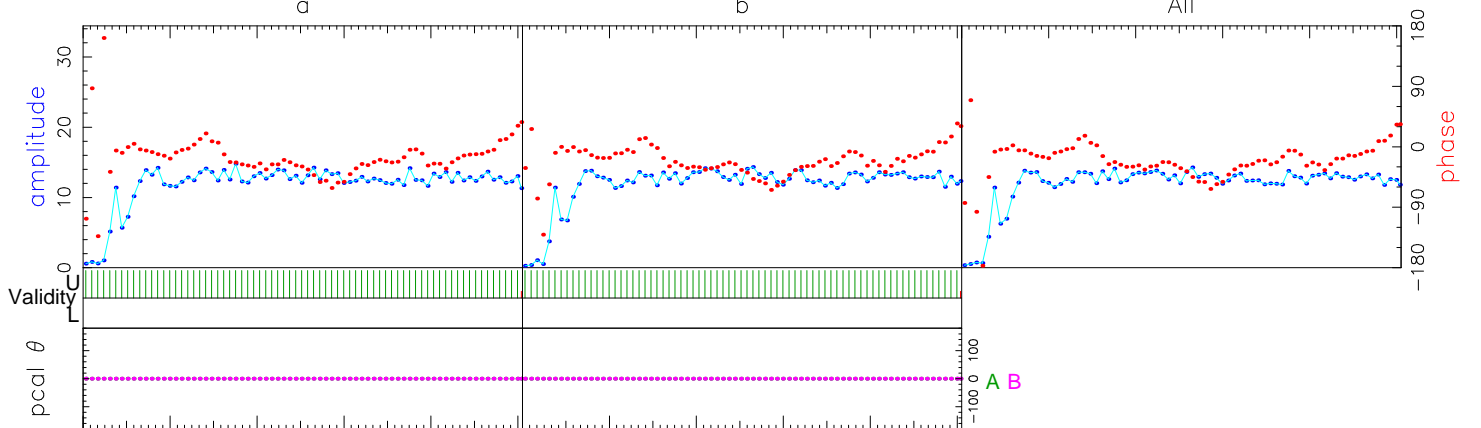


Fringe quality 6

SNR 258.6
 Int time 299.977
 Amp 11.476
 Phase -18.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.002050
 MBD -0.004283
 Fringe rate (Hz)
 0.028136
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211d
 Exper # 16383
 Yr:day 2021:116
 Start 223000.00
 Stop 223500.03
 FRT 223230.00
 Corr/FF/build
 2021:194:221819
 2021:195:063232
 2021:057:122453
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 74 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



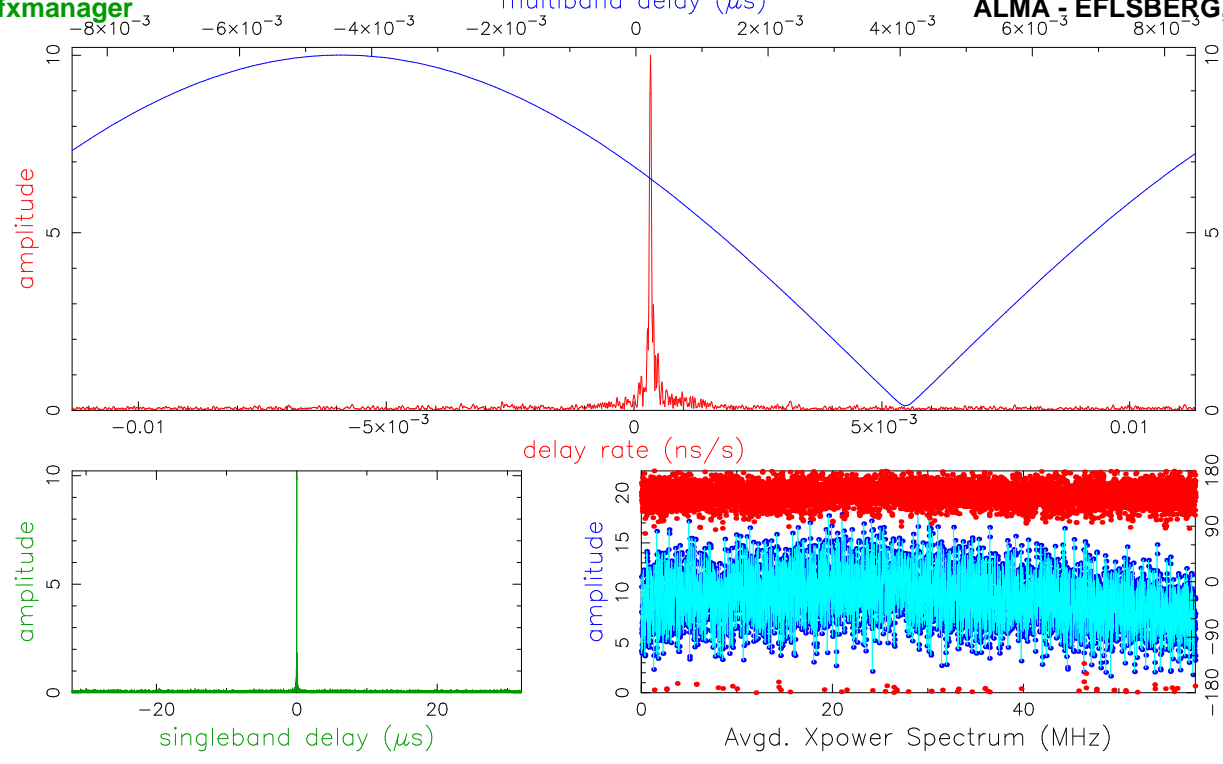
86209.70		86268.30		Freq (MHz)		All
	-17.0		-20.1		Phase	-18.6
	11.2		11.3		Ampl.	11.2
	7424.6		7424.5		Sbd box	7424.5
U/L	586/0		586/0		APs used	
A	0		0		PC freqs	
B	296		1000		PC freqs	
A:B	0:0		0:0		PC phase	
A:B	0:0		0:0		ManI PC	
A	1000		1000		PC amp	
B	1000		1000			
A	W00UY		W01UY		Chan ids	
B	W02UL		W03UL		Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	2.54851645206E+03	Apriori delay (usec)	2.54852073535E+03	Resid mbdelay (usec)	-4.28329E-03	+/- 2.1E-05
Sband delay (usec)	2.54851868487E+03	Apriori clock (usec)	-2.0855234E+03	Resid sbdelay (usec)	-2.05048E-03	+/- 3.7E-05
Phase delay (usec)	2.54852073475E+03	Apriori clockrate (us/s)	-1.2300000E-06	Resid phdelay (usec)	-5.98918E-07	+/- 1.4E-08
Delay rate (us/s)	1.04764887975E+00	Apriori rate (us/s)	1.04764855311E+00	Resid rate (us/s)	3.26637E-07	+/- 8.2E-11
Total phase (deg)	33.0	Apriori accel (us/s/s)	-6.94855689501E-05	Resid phase (deg)	-18.6	+/- 0.4
RMS	Theor.	Amplitude	11.476 +/- 0.044	Pcal mode:	MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	30.1 1.9	Search (2048X8)	10.865	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us) -32.000 32.000
amp/seg (%)	27.4 3.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled mb window (us) -0.009 0.009
ph/frq (deg)	0.0 0.3	Inc. seg. avg.	11.847	Sample rate(MISamp/s):	116	dr window (ns/s) -0.011 0.011
amp/frq (%)	2.1 0.5	Inc. frq. avg.	11.233	Data rate(Mb/s):	464	nlags: 7424 t_cohere infinite ion window (TEC) 0.00 0.00
A: az 12.4 el 46.0 pa -167.9		B: az 264.5 el 30.8 pa 42.3		u,v (fr/asec) -6431.198 -11638.219		simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211d/v1/1234/No0003/AB..1RFU7H Output file: /Exps/c211d/v1/1234/No0003/AB.W.10.1RFU7H						

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

OJ287.1RFU7H, No0003, AB

ALMA - EFLSBERG, fgroup W, pol XL

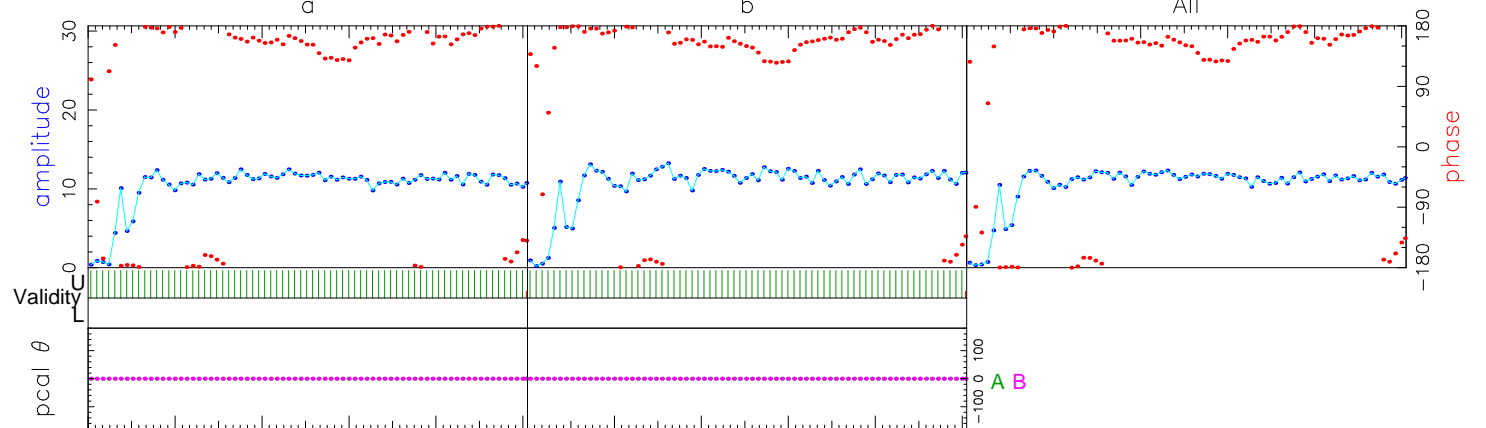


Fringe quality 6

SNR 230.4
 Int time 299.977
 Amp 10.222
 Phase 165.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.002038
 MBD -0.004310
 Fringe rate (Hz)
 0.028121
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211d
 Exper # 16383
 Yr:day 2021:116
 Start 223000.00
 Stop 223500.03
 FRT 223230.00
 Corr/FF/build
 2021:194:221819
 2021:195:063139
 2021:057:122453
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 74 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



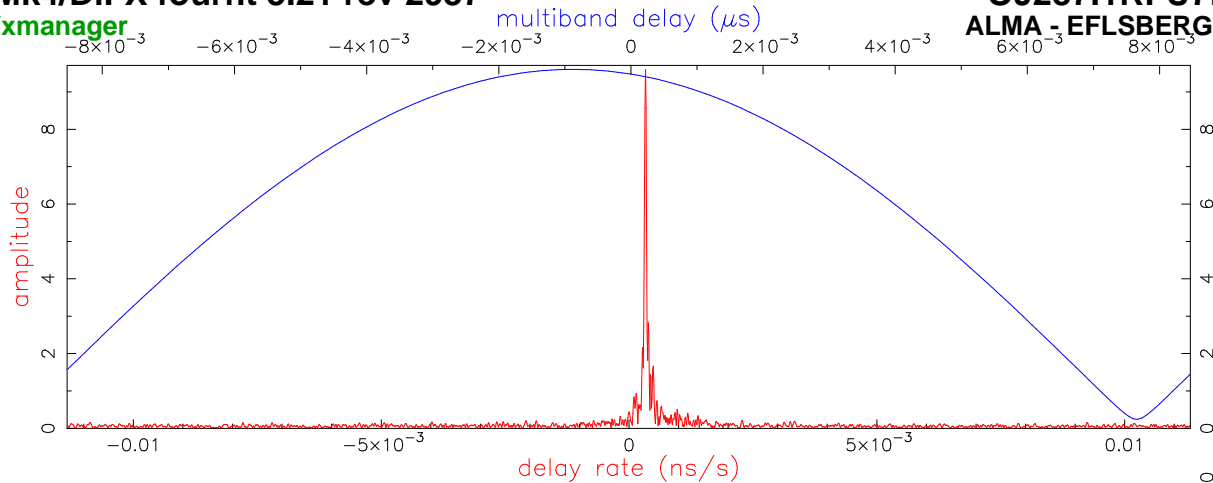
86209.70		86268.30		Freq (MHz)		All	
167.3		164.2		Phase		165.7	
9.9		10.1		Ampl.		10.0	
7424.6		7424.5		Sbd box		7424.5	
U/L 586/0		586/0		APs used			
A 0		0		PC freqs			
B 296		1000		PC freqs			
A:B 0:0		0:0		PC phase			
A:B 0:0		0:0		Manl PC			
A 1000		1000		PC amp			
B 1000		1000		Chan ids			
A W00UX		W01UX		Tracks			
B W02UL		W03UL		Chan ids			
				Tracks			
Group delay (usec)(sbd)		2.54851642528E+03		Apriori delay (usec)		2.54852073535E+03	
Sband delay (usec)		2.54851869783E+03		Apriori clock (usec)		-2.0855234E+03	
Phase delay (usec)		2.54852074070E+03		Apriori clockrate (us/s)		-1.2300000E-06	
Delay rate (us/s)		1.04764887956E+00		Apriori rate (us/s)		1.04764855311E+00	
Total phase (deg)		217.3		Apriori accel (us/s/s)		-6.94855689501E-05	
				Resid mbdelay (usec)		-4.31007E-03	
				Resid sbdelay (usec)		-2.03752E-03	
				Resid phdelay (usec)		5.34471E-06	
				Resid rate (us/s)		3.26452E-07	
				Resid phase (deg)		165.7	
						+/- 2.4E-05	
						+/- 4.1E-05	
						+/- 1.6E-08	
						+/- 9.3E-11	
						+/- 0.5	
ph/seg (deg)		RMS 26.0	Theor. 2.1	Amplitude 10.222 +/- 0.044	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5
amp/seg (%)		27.3	3.7	Search (2048X8) 9.689	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -32.000 32.000
ph/frq (deg)		0.0	0.4	Interp. 0.000	Bits/sample: 2x2		SampCntNorm: enabled
amp/frq (%)		2.4	0.6	Inc. seg. avg. 10.532	Sample rate(MISamp/s): 116		mb window (us) -0.009 0.009
				Inc. frq. avg. 10.008	Data rate(Mb/s): 464		dr window (ns/s) -0.011 0.011
					nlags: 7424 t_cohere infinite		ion window (TEC) 0.00 0.00
A: az 12.4 el 46.0 pa -167.9		B: az 264.5 el 30.8 pa 42.3		u,v (fr/asec) -6431.198 -11638.219		simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c211d/v1/1234/No0003/AB..1RFU7H		Output file: /Exps/c211d/v1/1234/No0003/AB.W.2.1RFU7H			

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

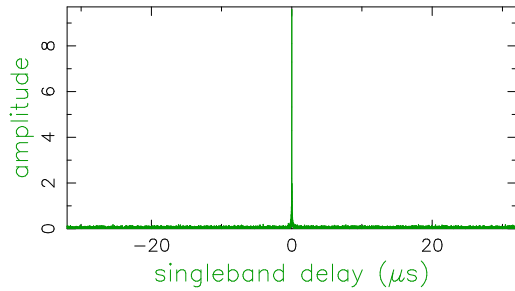
OJ287.1RFU7H, No0003, AB

ALMA - EFLSBERG, fgroup W, pol YR

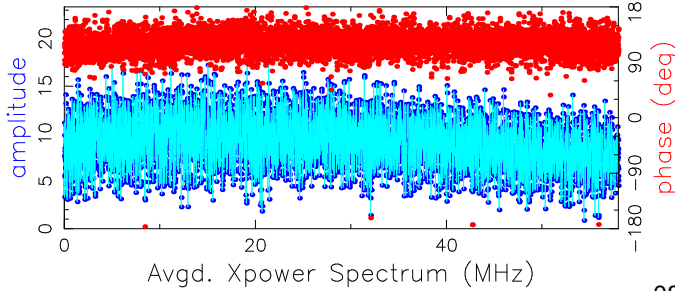


Fringe quality 6

SNR 218.8
 Int time 299.977
 Amp 9.709
 Phase 146.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.001457
 MBD -0.001021
 Fringe rate (Hz)
 0.028152
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

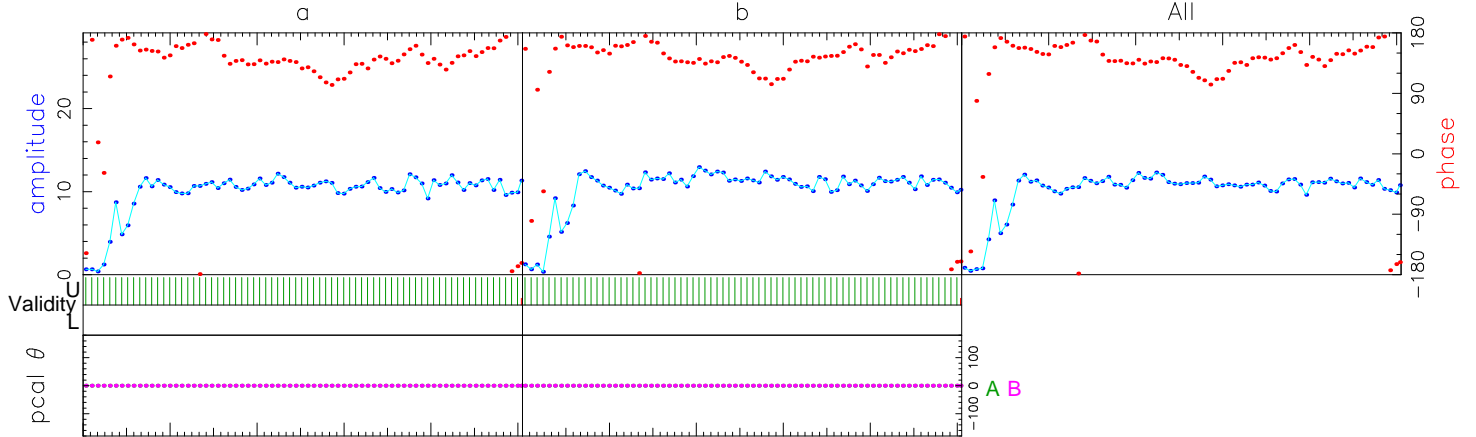


delay rate (ns/s)



Exp. c211d
 Yr:day 16383
 Start 2021:116
 Stop 2021:116
 FRT 223230.00
 Corr/FF/build
 2021:194:221819
 2021:195:063157
 2021:057:122453
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 74 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



86209.70	86268.30	Freq (MHz)	All
144.9	147.9	Phase	146.4
9.4	9.8	Ampl.	9.6
7425.5	7425.2	Sbd box	7425.3
U/L 586/0	586/0	APs used	
A 0	0	PC freqs	
B 296	1000	PC freqs	
A:B 0:0	0:0	PC phase	
A:B 0:0	0:0	ManI PC	
A 1000	1000	PC amp	
B 1000	1000		
A W00UY	W01UY	Chan ids	
B W02UR	W03UR	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	2.54851971426E+03	Apriori delay (usec)	2.54852073535E+03	Resid mbdelay (usec)	-1.02110E-03	+/- 2.5E-05
Sband delay (usec)	2.54852219273E+03	Apriori clock (usec)	-2.0855234E+03	Resid sbdelay (usec)	1.45738E-03	+/- 4.3E-05
Phase delay (usec)	2.54852074007E+03	Apriori clockrate (us/s)	-1.2300000E-06	Resid phdelay (usec)	4.72202E-06	+/- 1.7E-08
Delay rate (us/s)	1.04764887992E+00	Apriori rate (us/s)	1.04764855311E+00	Resid rate (us/s)	3.26814E-07	+/- 9.7E-11
Total phase (deg)	198.0	Apriori accel (us/s/s)	-6.94855689501E-05	Resid phase (deg)	146.4	+/- 0.5

ph/seg (deg)	RMS 30.1	Theor. 2.3	Amplitude 9.709 +/- 0.044	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	27.5	3.9	Search (2048X8) 9.181	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -32.000 32.000
ph/frq (deg)	0.0	0.4	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	2.7	0.6	Inc. seg. avg. 10.132	Sample rate(MISamp/s): 116	dr window (ns/s) -0.011 0.011
			Inc. frq. avg. 9.605	Data rate(Mb/s): 464	ion window (TEC) 0.00 0.00
				nlags: 7424 t_cohere infinite	

A: az 12.4 el 46.0 pa -167.9 B: az 264.5 el 30.8 pa 42.3 u,v (fr/asec) -6431.198 -11638.219 simultaneous interpolator

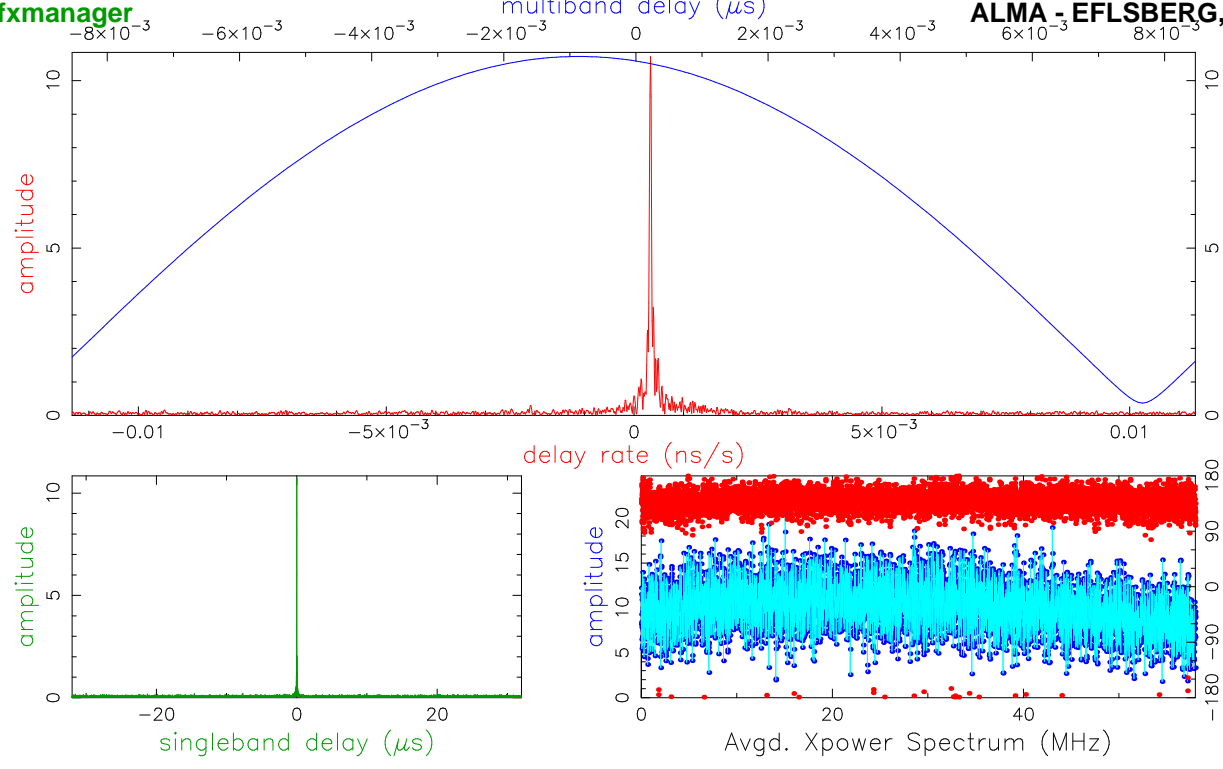
Control file: cf_1234_gmva Input file: /Exps/c211d/v1/1234/No0003/AB..1RFU7H Output file: /Exps/c211d/v1/1234/No0003/AB.W.5.1RFU7H

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

OJ287.1RFU7H, No0003, AB

ALMA - EFLSBERG, fgroup W, pol XR

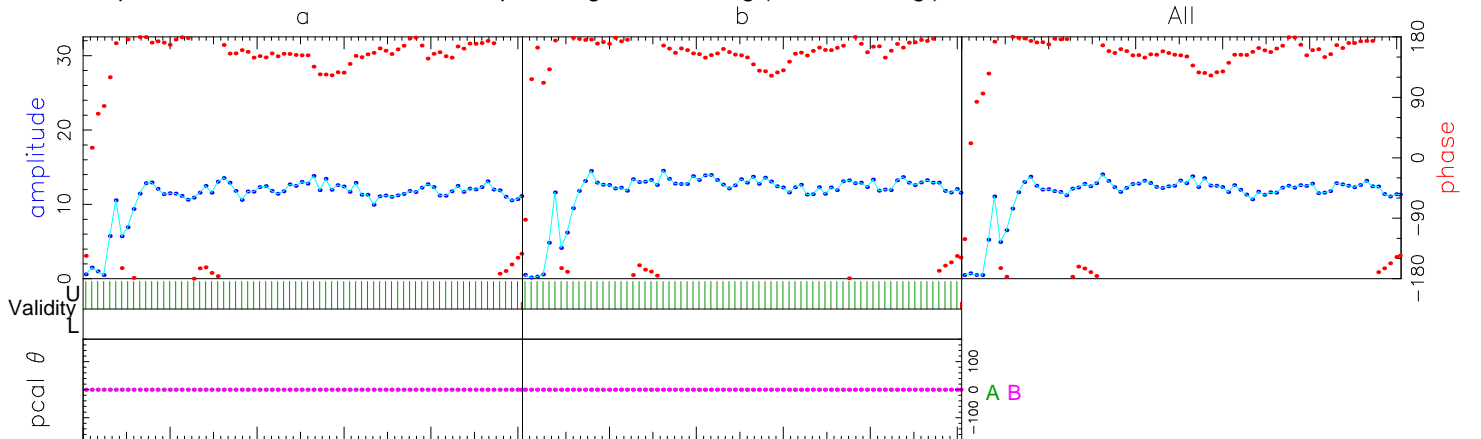


Fringe quality 6

SNR 244.4
 Int time 299.977
 Amp 10.847
 Phase 164.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.001478
 MBD -0.001001
 Fringe rate (Hz)
 0.028146
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211d
 Exper # 16383
 Yr:day 2021:116
 Start 223000.00
 Stop 223500.03
 FRT 223230.00
 Corr/FF/build
 2021:194:221819
 2021:195:063215
 2021:057:122453
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 74 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



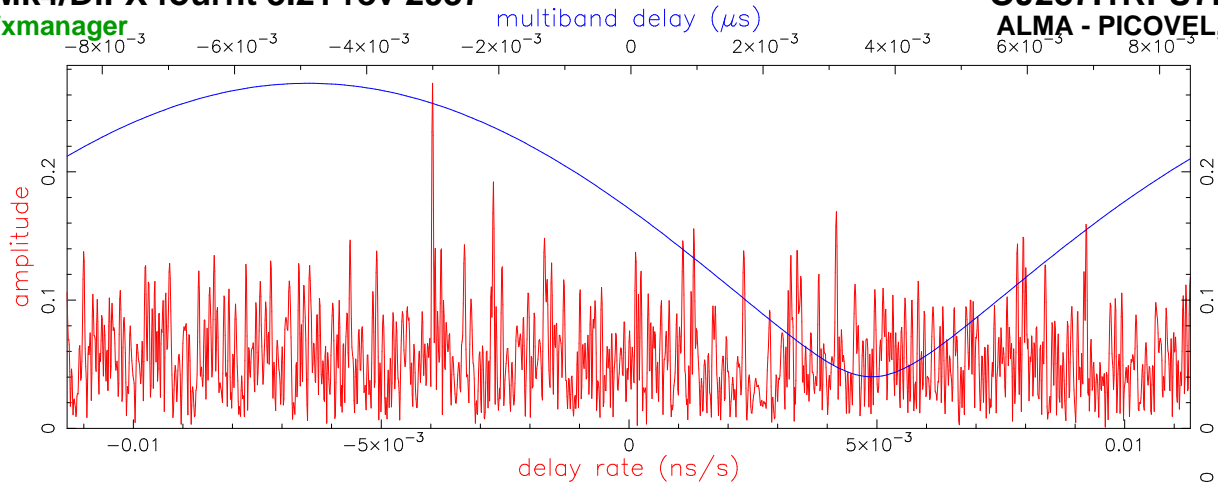
86209.70	86268.30	Freq (MHz)	All					
162.8	165.6	Phase	164.2					
10.4	11.1	Ampl.	10.7					
7425.6	7425.2	Sbd box	7425.3					
U/L 586/0	586/0	APs used						
A 0	0	PC freqs						
B 296	1000	PC freqs						
A:B 0:0	0:0	PC phase						
A:B 0:0	0:0	Manl PC						
A 1000	1000	PC amp						
B 1000	1000							
A W00UX	W01UX	Chan ids						
B W02UR	W03UR	Tracks						
		Chan ids						
		Tracks						
Group delay (usec)(sbd)	2.54851973460E+03	Apriori delay (usec)	2.54852073535E+03	Resid mbdelay (usec)	-1.00075E-03	+/-	2.2E-05	
Sband delay (usec)	2.54852221370E+03	Apriori clock (usec)	-2.0855234E+03	Resid sbdelay (usec)	1.47834E-03	+/-	3.9E-05	
Phase delay (usec)	2.54852074065E+03	Apriori clockrate (us/s)	-1.2300000E-06	Resid phdelay (usec)	5.29547E-06	+/-	1.5E-08	
Delay rate (us/s)	1.04764887986E+00	Apriori rate (us/s)	1.04764855311E+00	Resid rate (us/s)	3.26749E-07	+/-	8.7E-11	
Total phase (deg)	215.7	Apriori accel (us/s/s)	-6.94855689501E-05	Resid phase (deg)	164.2	+/-	0.5	
	RMS	Theor.	Amplitude	10.847 +/- 0.044	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
ph/seg (deg)	29.3	2.0	Search (2048X8)	10.245	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000 32.000	
amp/seg (%)	28.1	3.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
ph/frq (deg)	0.0	0.3	Inc. seg. avg.	11.341	Sample rate(MISamp/s): 116		dr window (ns/s)	-0.011 0.011
amp/frq (%)	3.5	0.6	Inc. frq. avg.	10.728	Data rate(Mb/s): 464	nlags: 7424 t_cohere infinite	ion window (TEC)	0.00 0.00
A: az 12.4 el 46.0 pa -167.9	B: az 264.5 el 30.8 pa 42.3	u,v (fr/asec)	-6431.198 -11638.219					simultaneous interpolator
Control file: cf_1234_gmva	Input file: /Exps/c211d/v1/1234/No0003/AB..1RFU7H	Output file: /Exps/c211d/v1/1234/No0003/AB.W.8.1RFU7H						

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

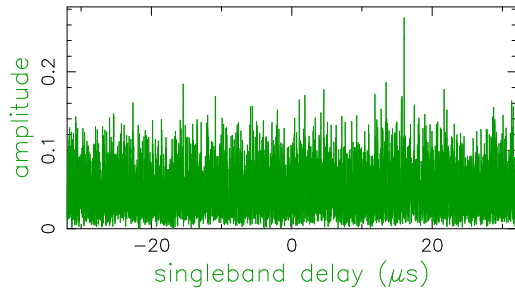
OJ287.1RFU7H, No0003, AP

ALMA - PICOVEL, fgroup W, pol XL

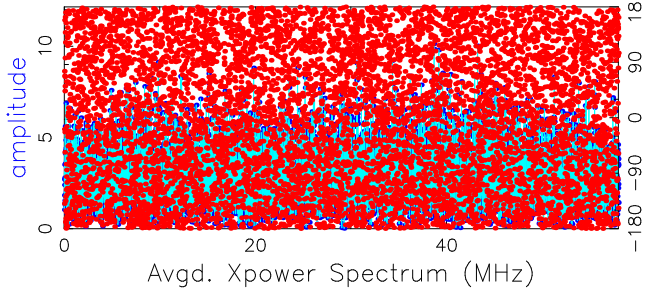


Fringe quality 0

SNR 6.1
 Int time 299.980
 Amp 0.283
 Phase -311.7
 PFD 9.2e-01
 Delays (us)
 SBD 16.008520
 MBD -0.004867
 Fringe rate (Hz)
 -0.340672
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

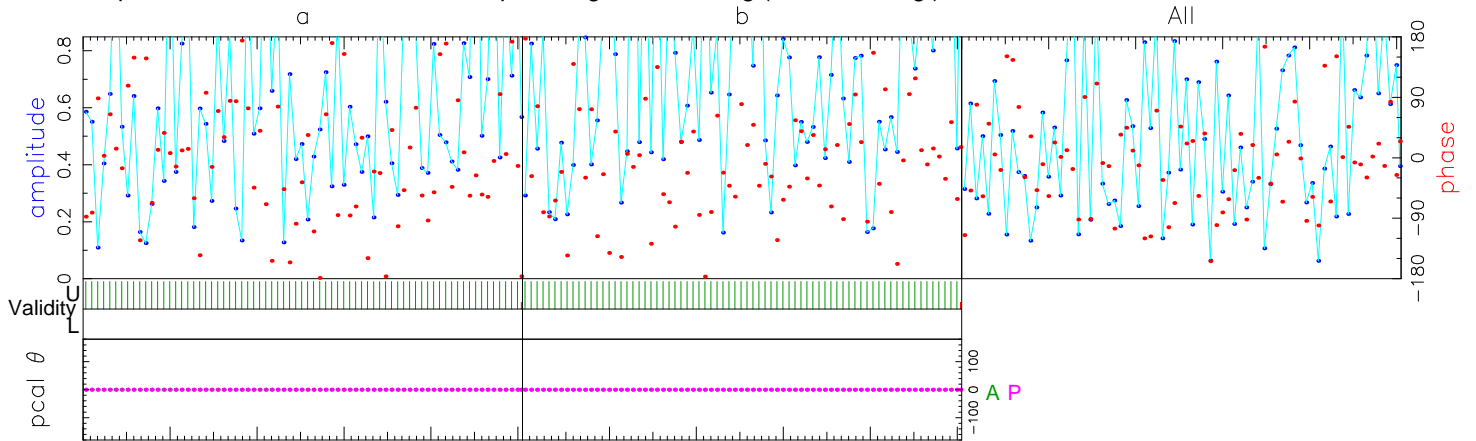


delay rate (ns/s)



Exp. c211d
 Exper # 16383
 Yr:day 2021:116
 Start 223000.00
 Stop 223500.03
 FRT 223230.00
 Corr/FF/build
 2021:194:221819
 2021:195:063138
 2021:057:122453
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 74 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



86209.70	86268.30	86268.30	Freq (MHz)	All
-7.3	-7.8	-7.8	Phase	-7.6
0.2	0.3	0.3	Ampl.	0.3
10541.4	11138.8	11138.8	Sbd box	11139.0
U/L 586/0	586/0	586/0	APs used	
A 0	0	0	PC freqs	
P 1000	1000	1000	PC freqs	
A:P 0:0	0:0	0:0	PC phase	
A:P 0:0	0:0	0:0	Manl PC	
A 1000	1000	1000	PC amp	
P 1000	1000	1000		
A W00UX	W01UX	W01UX	Chan ids	
P W02UL	W03UL	W03UL	Tracks	
			Chan ids	
			Tracks	

Group delay (usec)(sbd)	-4.22912558446E+01	Apriori delay (usec)	-5.82949226042E+01	Resid mbdelay (usec)	-4.86657E-03	+/-	9.0E-04
Sband delay (usec)	-4.22864028800E+01	Apriori clock (usec)	-2.1065159E-03	Resid sbdelay (usec)	1.60085E+01	+/-	1.6E-03
Phase delay (usec)	-5.82949228491E+01	Apriori clockrate (us/s)	-6.3000007E-07	Resid phdelay (usec)	-2.44931E-07	+/-	6.1E-07
Delay rate (us/s)	1.16274479151E+00	Apriori rate (us/s)	1.16274874638E+00	Resid rate (us/s)	-3.95487E-06	+/-	3.5E-09
Total phase (deg)	-179.6	Apriori accel (us/s/s)	-4.92026349836E-05	Resid phase (deg)	-311.7	+/-	18.9

ph/seg (deg)	RMS 71.0	Theor. 81.3	Amplitude Search (2048X8)	0.283 +/- 0.047	0.265	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-32.000	32.000
amp/seg (%)	133.3	141.8	Interp.	0.000	0.000E+00	0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.009	0.009
ph/frq (deg)	0.0	13.4	Inc. seg. avg.	0.262	Sample rate(MISamp/s): 116	Data rate(Mb/s): 464	nlags: 7424 t_cohere infinite	dr window (ns/s)	-0.011	0.011
amp/frq (%)	14.9	23.3	Inc. frq. avg.	0.276				ion window (TEC)	0.00	0.00

A: az 12.4 el 46.0 pa -167.9 P: az 266.3 el 39.3 pa 58.0 u,v (fr/asec) -7117.517 -9648.290 simultaneous interpolator

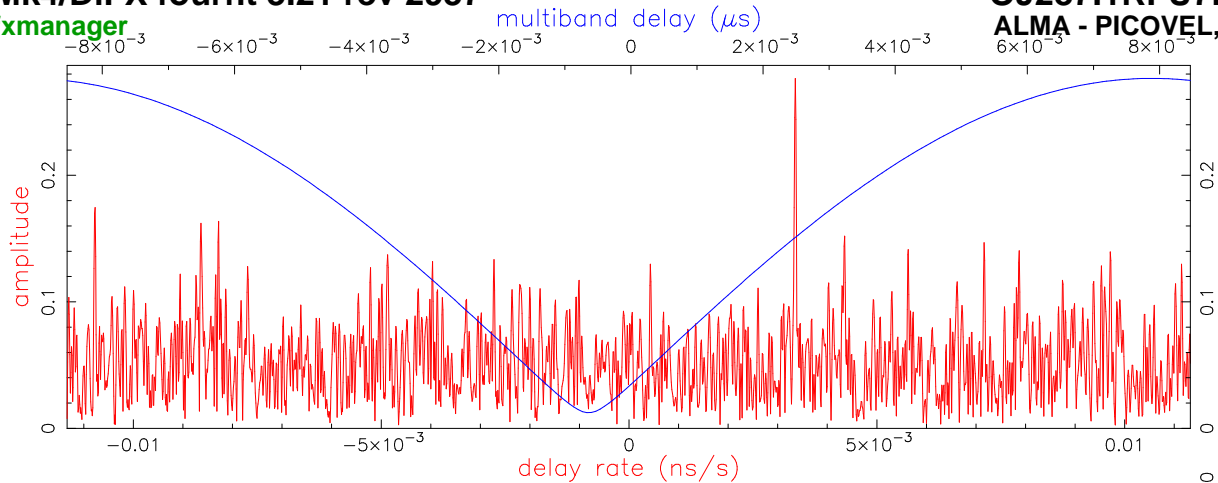
Control file: cf_1234_gmva Input file: /Exps/c211d/v1/1234/No0003/AP..1RFU7H Output file: /Exps/c211d/v1/1234/No0003/AP.W.1.1RFU7H

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

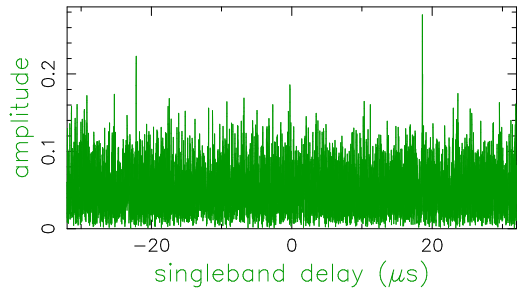
OJ287.1RFU7H, No0003, AP

ALMA - PICOVEL, fgroup W, pol YR

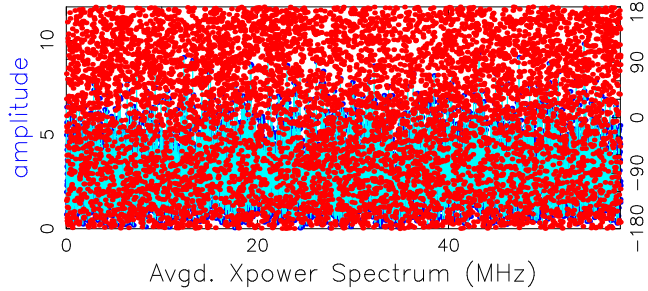


Fringe quality 0

SNR 6.2
 Int time 299.980
 Amp 0.287
 Phase -231.7
 PFD 5.8e-01
 Delays (us)
 SBD 18.598879
 MBD -0.009142
 Fringe rate (Hz)
 0.288254
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

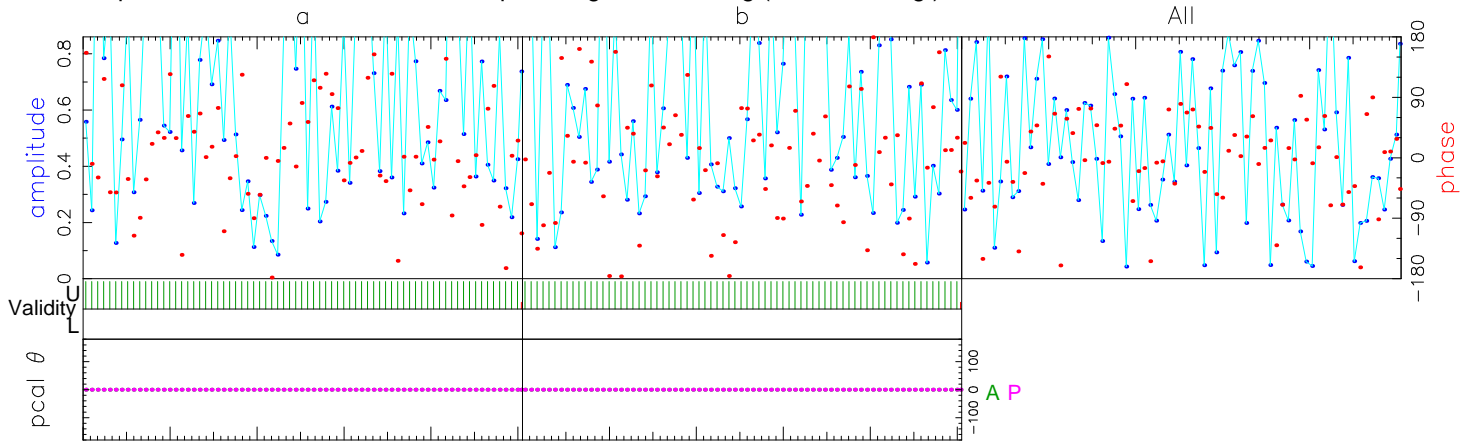


delay rate (ns/s)



Exp. c211d
 Exper # 16383
 Yr:day 2021:116
 Start 223000.00
 Stop 223500.03
 FRT 223230.00
 Corr/FF/build
 2021:194:221819
 2021:195:063155
 2021:057:122453
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 74 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



86209.70	86268.30	Freq (MHz)	All
7.7	7.0	Phase	7.4
0.3	0.3	Ampl.	0.3
11740.2	11739.7	Sbd box	11739.9
U/L 586/0	586/0	APs used	
A 0	0	PC freqs	
P 1000	1000	PC freqs	
A:P 0:0	0:0	PC phase	
A:P 0:0	0:0	Manl PC	
A 1000	1000	PC amp	
P 1000	1000		
A W00UY	W01UY	Chan ids	
		Tracks	
P W02UR	W03UR	Chan ids	
		Tracks	

Group delay (usec)(sbd)	-3.97013983438E+01	Apriori delay (usec)	-5.82949226042E+01	Resid mbdelay (usec)	-9.14241E-03	+/-	8.7E-04
Sband delay (usec)	-3.96960434318E+01	Apriori clock (usec)	-2.1065159E-03	Resid sbdelay (usec)	1.85989E+01	+/-	1.5E-03
Phase delay (usec)	-5.82949223665E+01	Apriori clockrate (us/s)	-6.3000007E-07	Resid phdelay (usec)	2.37665E-07	+/-	5.9E-07
Delay rate (us/s)	1.16275209273E+00	Apriori rate (us/s)	1.16274874638E+00	Resid rate (us/s)	3.34635E-06	+/-	3.4E-09
Total phase (deg)	-99.6	Apriori accel (us/s/s)	-4.92026349836E-05	Resid phase (deg)	-231.7	+/-	18.4

ph/seg (deg)	67.8	Theor.	79.0	Amplitude	0.287 +/- 0.046	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	121.0	Search (2048X8)	0.269	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000 32.000	
ph/frq (deg)	0.0	Inc. seg. avg.	0.254	Inc. frq. avg.	0.280	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	4.5	Inc. frq. avg.	0.280			Sample rate(MISamp/s): 116	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s): 464	ion window (TEC)	0.00 0.00	
						nlags: 7424 t_cohere infinite			

A: az 12.4 el 46.0 pa -167.9 P: az 266.3 el 39.3 pa 58.0 u,v (fr/asec) -7117.517 -9648.290 simultaneous interpolator

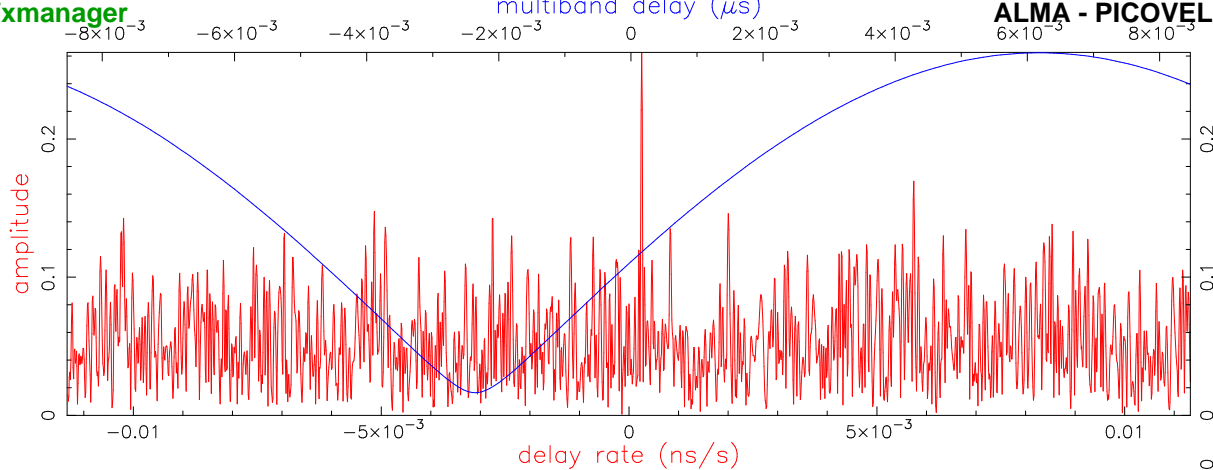
Control file: cf_1234_gmva Input file: /Exps/c211d/v1/1234/No0003/AP..1RFU7H Output file: /Exps/c211d/v1/1234/No0003/AP.W.4.1RFU7H

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

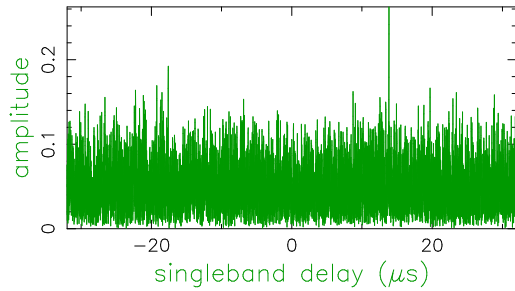
OJ287.1RFU7H, No0003, AP

ALMA - PICOVEL, fgroup W, pol XR

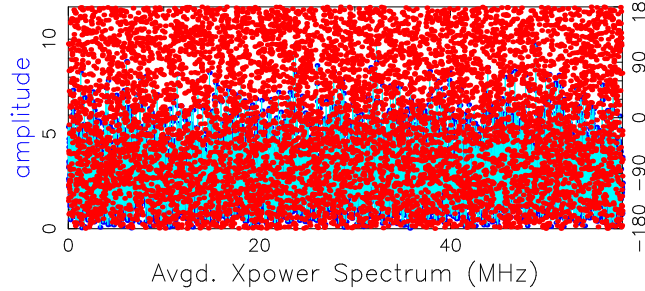


Fringe quality 0

SNR 5.9
 Int time 299.980
 Amp 0.263
 Phase -281.4
 PFD 1.0e+00
 Delays (us)
 SBD 13.836633
 MBD 0.006171
 Fringe rate (Hz)
 0.021908
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

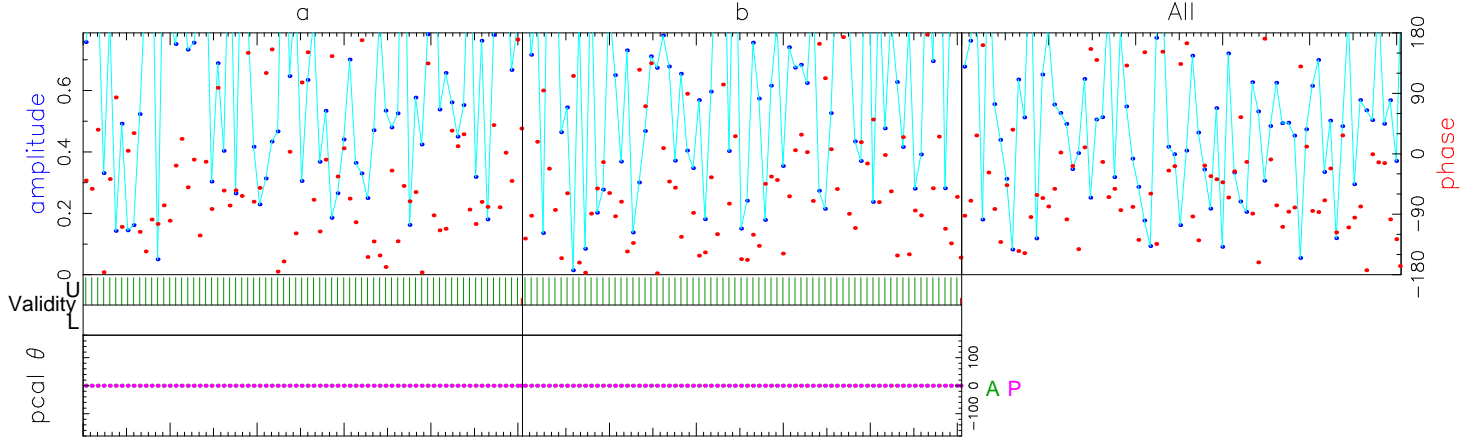


delay rate (ns/s)



Exp. c211d
 Exper # 16383
 Yr:day 2021:116
 Start 223000.00
 Stop 223500.03
 FRT 223230.00
 Corr/FF/build
 2021:194:221819
 2021:195:063212
 2021:057:122453
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 74 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



86209.70		86268.30		Freq (MHz)	All
-74.2		-74.0		Phase	-74.1
0.3		0.2		Ampl.	0.3
10635.4		10634.8		Sbd box	10635.1
U/L 586/0		586/0		APs used	
A 0		0		PC freqs	
P 1000		1000		PC freqs	
A:P 0:0		0:0		PC phase	
A:P 0:0		0:0		Manl PC	
A 1000		1000		PC amp	
P 1000		1000			
A W00UX		W01UX		Chan ids	
				Tracks	
P W02UR		W03UR		Chan ids	
				Tracks	
Group delay (usec)(sbd)	-4.44647513964E+01	Apriori delay (usec)	-5.82949226042E+01	Resid mbdelay (usec)	6.17121E-03 +/- 9.2E-04
Sband delay (usec)	-4.44582897766E+01	Apriori clock (usec)	-2.1065159E-03	Resid sbdelay (usec)	1.38366E+01 +/- 1.6E-03
Phase delay (usec)	-5.82949249930E+01	Apriori clockrate (us/s)	-6.3000007E-07	Resid phdelay (usec)	-2.38885E-06 +/- 6.2E-07
Delay rate (us/s)	1.16274900071E+00	Apriori rate (us/s)	1.16274874638E+00	Resid rate (us/s)	2.54332E-07 +/- 3.6E-09
Total phase (deg)	-149.4	Apriori accel (us/s/s)	-4.92026349836E-05	Resid phase (deg)	-281.4 +/- 19.4

ph/seg (deg)	RMS 70.7	Theor. 83.3	Amplitude Search (2048X8)	0.263 +/- 0.044	0.261	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-32.000	32.000
amp/seg (%)	126.7	145.3	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.009	0.009
ph/frq (deg)	0.0	13.7	Inc. seg. avg.	0.240	0.240	Bits/sample: 2x2	Sample rate(MISamp/s): 116	dr window (ns/s)	-0.011	0.011
amp/frq (%)	6.2	23.9	Inc. frq. avg.	0.255	0.255	Data rate(Mb/s): 464	nlags: 7424 t_cohere infinite	ion window (TEC)	0.00	0.00

A: az 12.4 el 46.0 pa -167.9 P: az 266.3 el 39.3 pa 58.0 u,v (fr/asec) -7117.517 -9648.290 simultaneous interpolator

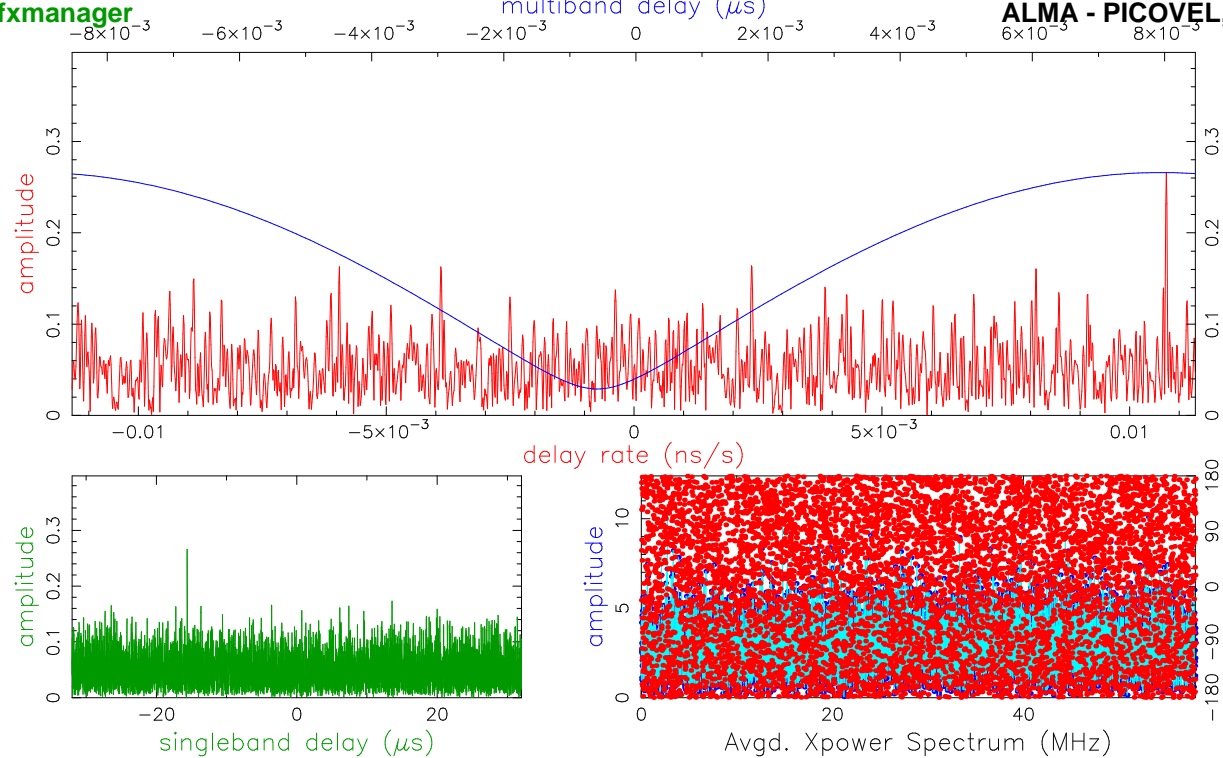
Control file: cf_1234_gmva Input file: /Exps/c211d/v1/1234/No0003/AP..1RFU7H Output file: /Exps/c211d/v1/1234/No0003/AP.W.7.1RFU7H

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

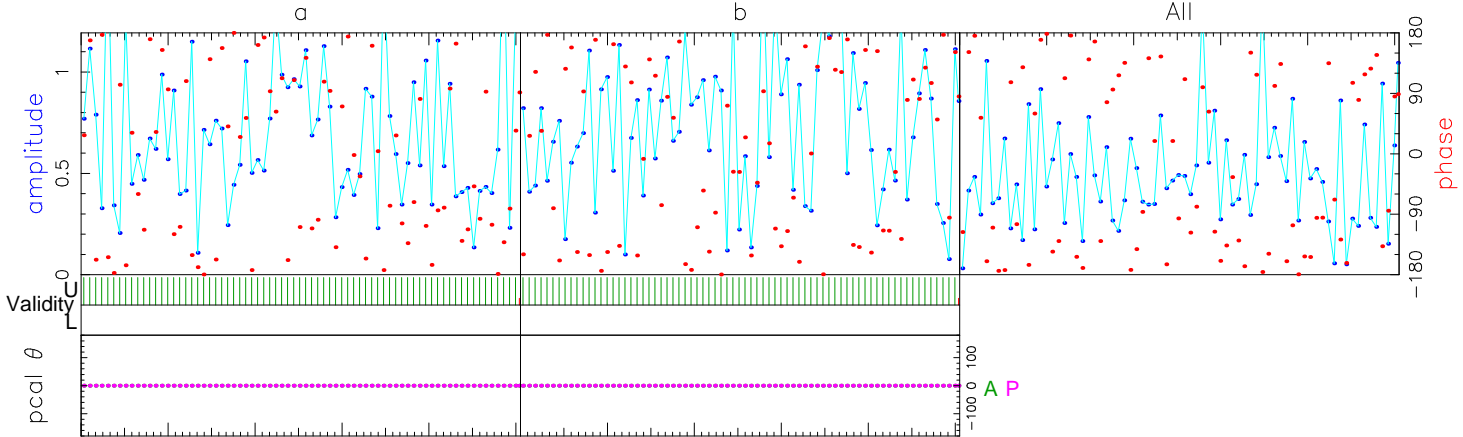
OJ287.1RFU7H, No0003, AP

ALMA - PICOVEL, fgroup W, pol YL



Fringe quality 0
 SNR 6.0
 Int time 299.980
 Amp 0.398
 Phase 356.0
 PFD 9.7e-01
 Delays (us)
 SBD -15.608407
 MBD 0.008062
 Fringe rate (Hz)
 0.924387
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211d
 Exper # 16383
 Yr:day 2021:116
 Start 223000.00
 Stop 223500.03
 FRT 223230.00
 Corr/FF/build
 2021:194:221819
 2021:195:063229
 2021:057:122453
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 74 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



86209.70	86268.30	Freq (MHz)	All				
-176.9	-179.3	Phase	-178.2				
0.4	0.4	Ampl.	0.4				
12040.9	7155.1	Sbd box	3803.8				
U/L 586/0	586/0	APs used					
A 0	0	PC freqs					
P 1000	1000	PC freqs					
A:P 0:0	0:0	PC phase					
A:P 0:0	0:0	Manl PC					
A 1000	1000	PC amp					
P 1000	1000						
A W00UY	W01UY	Chan ids					
P W02UL	W03UL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-7.39028609903E+01	Apriori delay (usec)	-5.82949226042E+01	Resid mbdelay (usec)	8.06161E-03	+/-	9.0E-04
Sband delay (usec)	-7.39033295007E+01	Apriori clock (usec)	-2.1065159E-03	Resid sbdelay (usec)	-1.56084E+01	+/-	1.6E-03
Phase delay (usec)	-5.82949283506E+01	Apriori clockrate (us/s)	-6.3000007E-07	Resid phdelay (usec)	-5.74646E-06	+/-	6.1E-07
Delay rate (us/s)	1.16275947760E+00	Apriori rate (us/s)	1.16274874638E+00	Resid rate (us/s)	1.07312E-05	+/-	3.5E-09
Total phase (deg)	128.1	Apriori accel (us/s/s)	-4.92026349836E-05	Resid phase (deg)	356.0	+/-	19.1

ph/seg (deg)	RMS 67.5	Theor. 82.0	Amplitude Search (2048X8)	0.398 +/- 0.066	0.262	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	132.1	143.1	Interp.	0.000	0.366	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -32.000 32.000	
ph/frq (deg)	0.0	13.5	Inc. seg. avg.	0.366	0.386	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.009 0.009
amp/frq (%)	10.8	23.5	Inc. frq. avg.	0.386		Sample rate(MISamp/s): 116	dr window (ns/s) -0.011 0.011	
						Data rate(Mb/s): 464	ion window (TEC) 0.00 0.00	
						nlags: 7424 t_cohere infinite		

A: az 12.4 el 46.0 pa -167.9 P: az 266.3 el 39.3 pa 58.0 u,v (fr/asec) -7117.517 -9648.290 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211d/v1/1234/No0003/AP..1RFU7H Output file: /Exps/c211d/v1/1234/No0003/AP.W.9.1RFU7H