

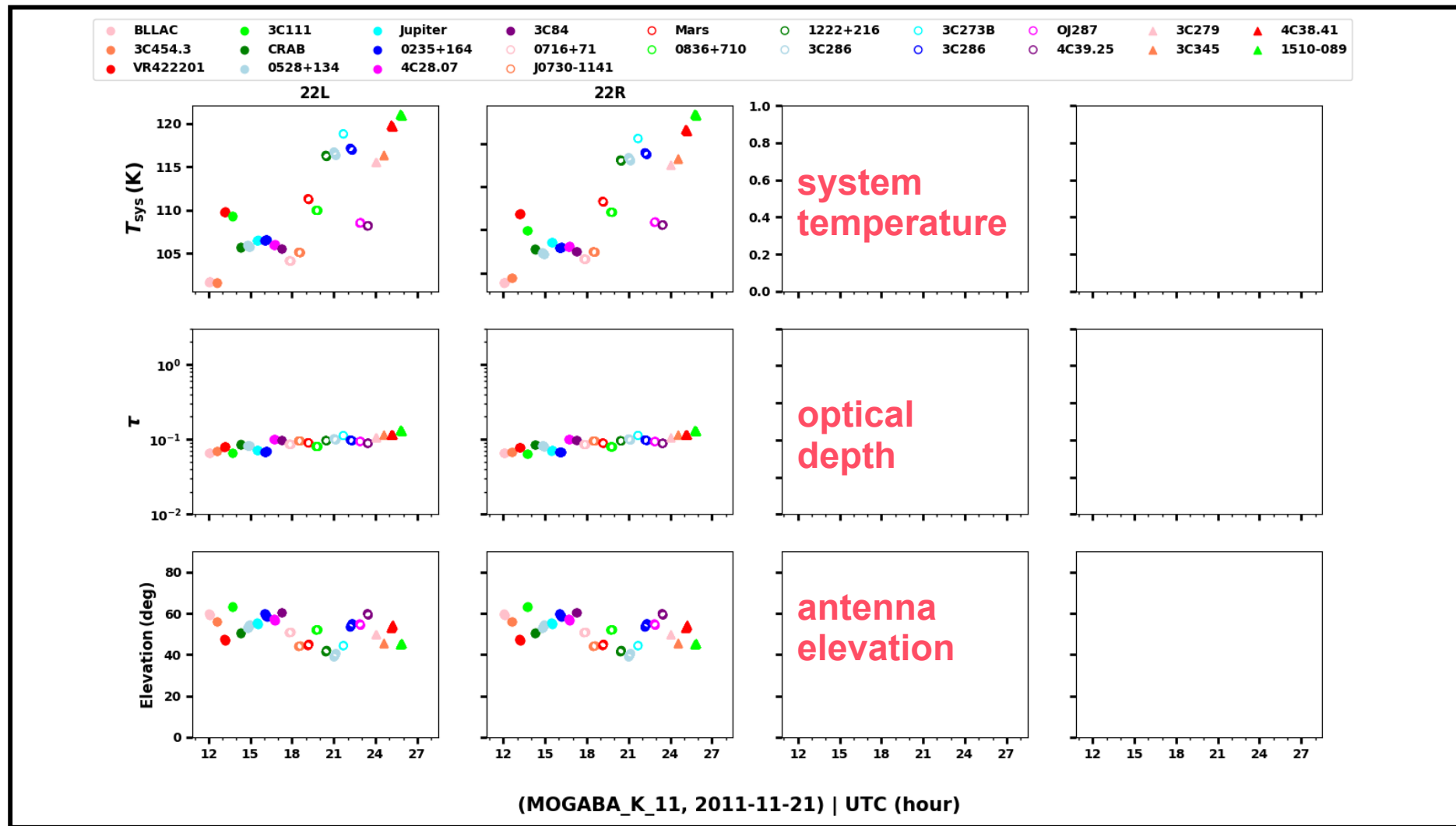
< mogaba_pipe_run.py > // toggle options and basic setting

```
SaveCSFit   = True      # if 'True', save cross-scan Gaussian fitting plots
SaveCSLog    = True      # if 'True', save cross-scan log info
SavePSLog    = True      # if 'True', save position-switching log info
SaveACPlot   = False     # if 'True', auto-correlation plots will be saved
Auto_Flag    = False     # if 'True', auto-flagging mode is applied in position-switching data
Run_CSFit    = True      # if 'True', cross-scan fit will be performed using the MCMC ; elsewhere, skip cs-fit
LR_Swap      = False     # if 'True', LR rx-pol switches to RL rx-pol
              # !!! Please note that LR-swapping is forecd at 129 GHz (@ line 353) !!!

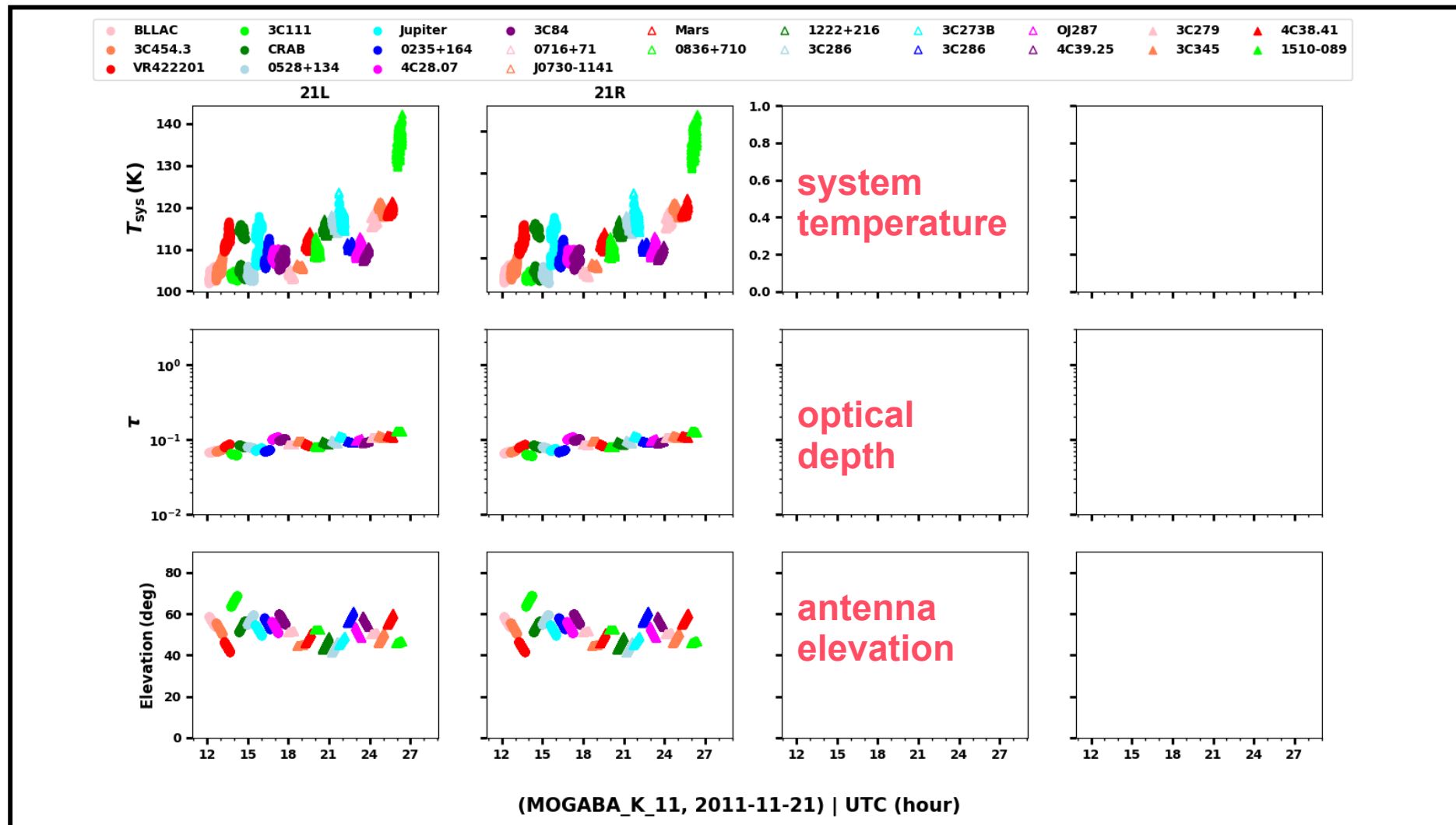
antenna = f"tn".upper()
station = f"K{antenna}"
nw, nr   = 5*2, 2000     # the number of walkers & total step of MCMC in cs-profile fitting
Polnum   = 0             # 0:all(1&2) / 1:1-only / 2:2-only
              # e.g., 1 and 2 mean K- and Q-band for KQ data
```

chnage toggle options and antenna name by your purpose

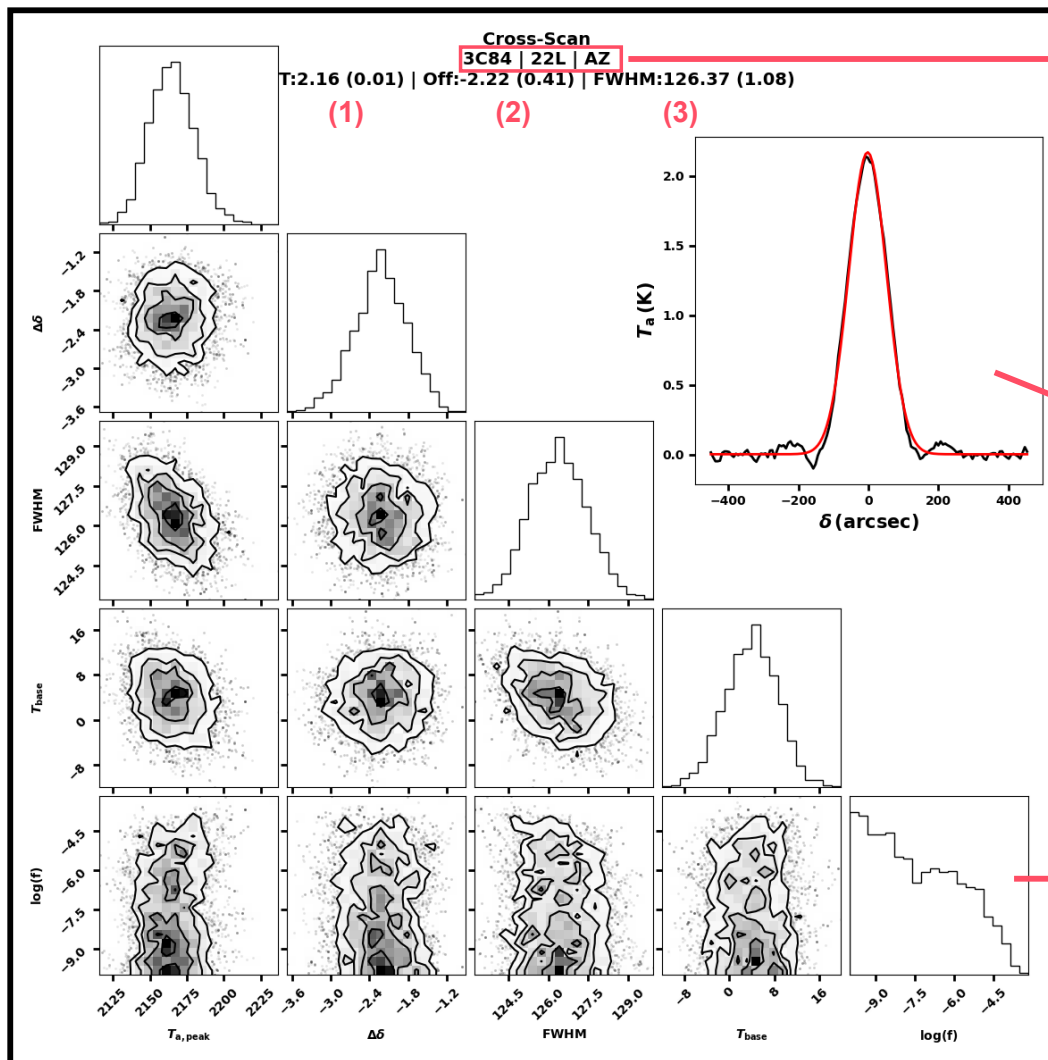
< PS log plot ('SaveCSLog') > // './Figures/cs/CS_Logs/'



< PS log plot ('SavePSLog') > // './Figures/ps/PS_Logs/'



< CS plots ('SaveCSFit') > // cross-scan corner plot ('./Figures/cs/<date>/')



Source | frequency & polarization | CS dirrection

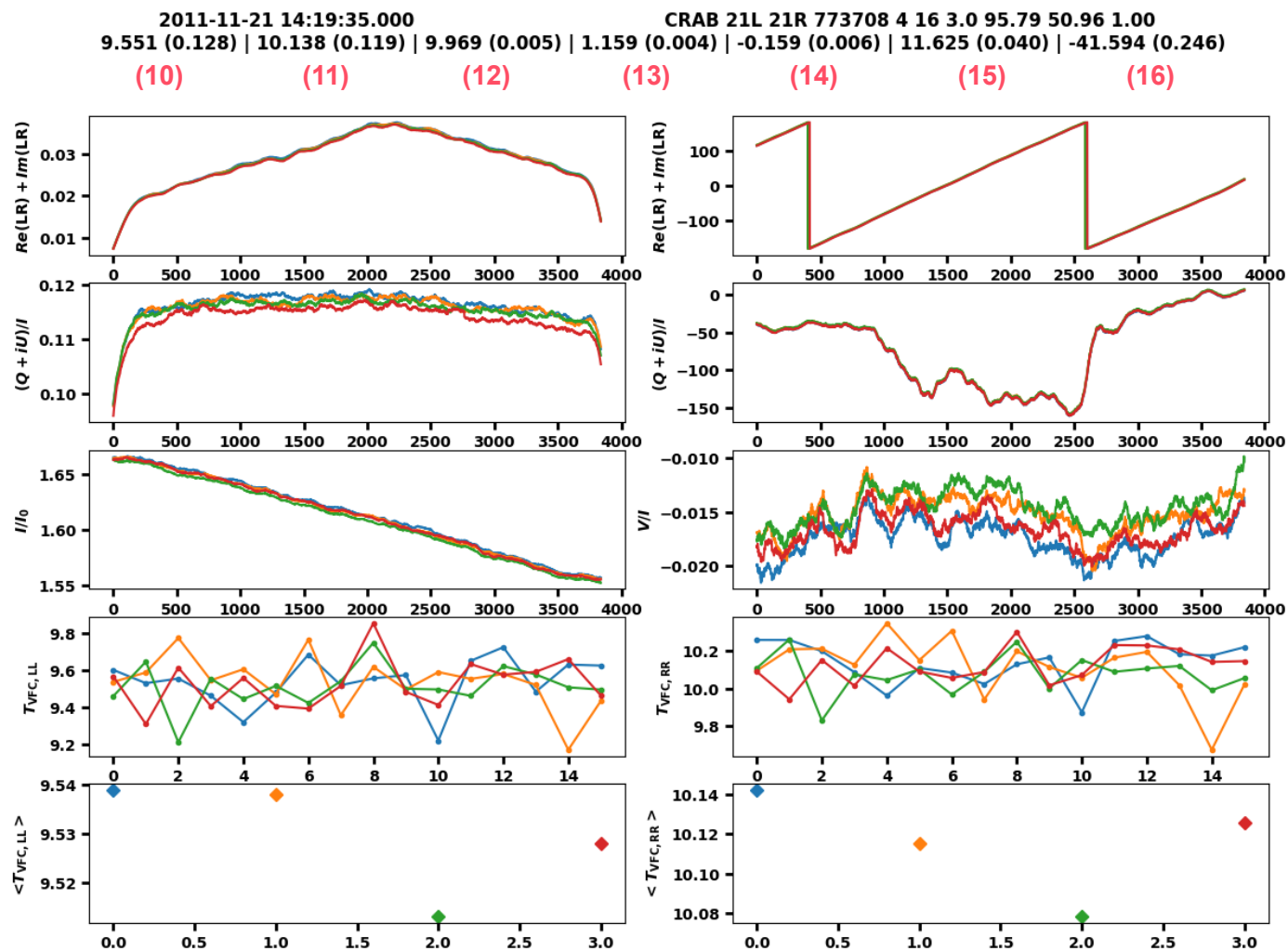
(1): peak antenna temperature (error)
(2): antenna offset (error)
(3): full-width half maximum (error)

black line: observed CS profile
red line: MCMC fitting profile

$\log(f)$ distribution
we don't need to care seriously
on this 'ugly' distribution.

< PS plots > // ('./Figures/ps/<frequency>/<date>/')

(1) (2) (3) (4)(5)(6) (8) (9)



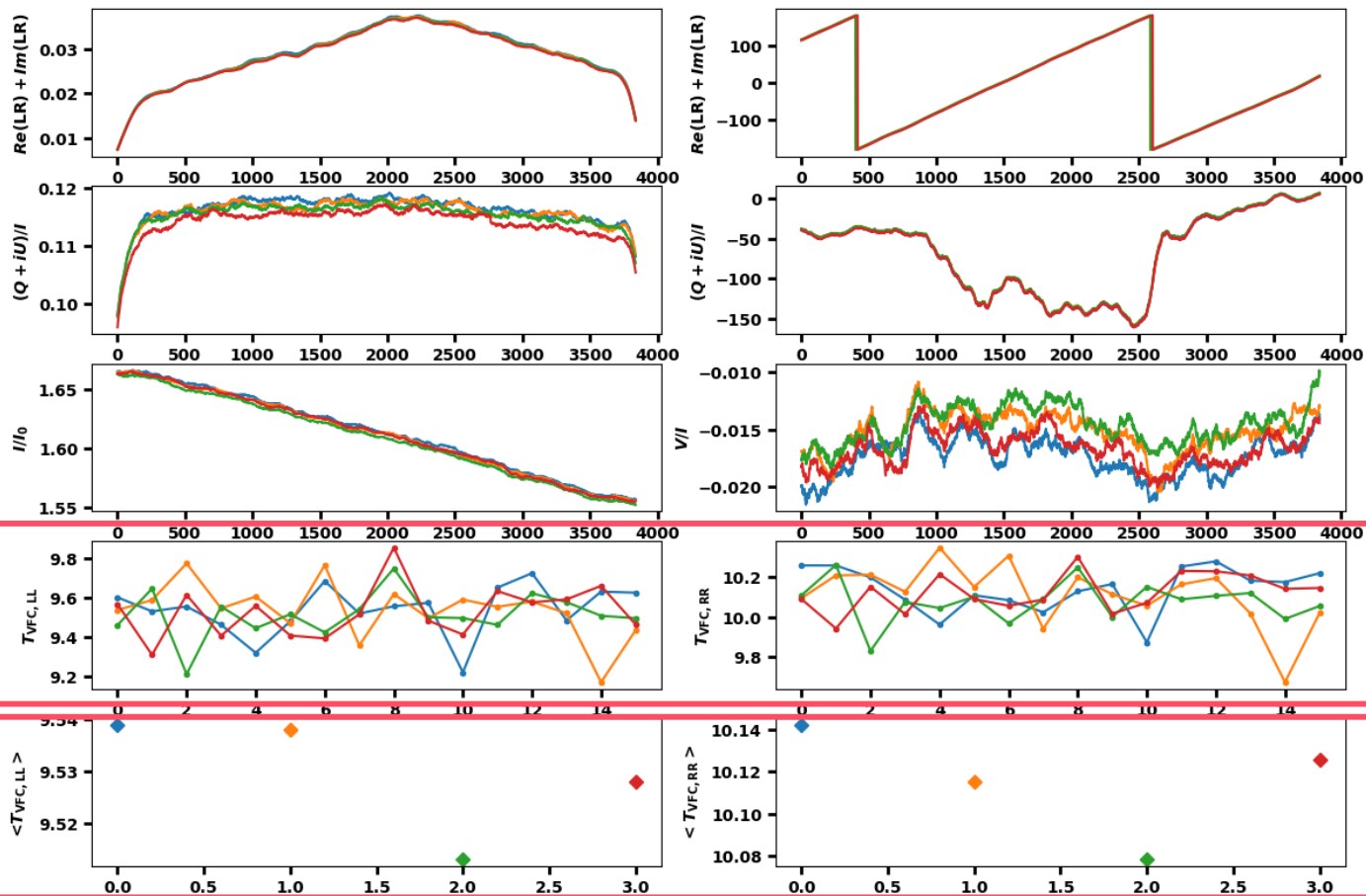
- (1): source name
- (2): frequency and polarization
- (3): scan number
- (4): number of sets (see page #11 & #12)
- (5): number of repeats (see page #11 & #12)
- (6): integration time [sec]
- (7): antenna azimuth
- (8): antenna elevation
- (9): gain based on KVN status report
& and antenna elevation
- (10): T_{ant} (std) // LCP
- (11): T_{ant} (std) // RCP
- (12): T_{ant} (std) // Stokes I
- (13): T_{ant} (std) // linear polarization
- (14): fractional polarization (Stokes V)
- (15): fractional linear polarization
- (16): crab-uncorrected polarization angle (deg)

< PS plots > // ('./Figures/ps/<frequency>/<date>/')

(1) (2) (3) (4)(5)(6) (8) (9)

2011-11-21 14:19:35.000 CRAB 21L 21R 773708 4 16 3.0 95.79 50.96 1.00
9.551 (0.128) | 10.138 (0.119) | 9.969 (0.005) | 1.159 (0.004) | -0.159 (0.006) | 11.625 (0.040) | -41.594 (0.246)

(10) (11) (12) (13) (14) (15) (16)



→ sub channels

→ main channels

< mogaba_pipe_run.py > // paths

```
path_p      = "absolute/path/to/your/sdd/files/"      # sdd directory (python)
path_c      = "relative/path/to/your/sdd/files/"      # sdd directory (GILDAS/CLASS)
path_dir    = "path/to/your/working/directory/"      # working directory
path_cslog  = "path/to/your/working/directory/data_cs/"
path_pslog  = path_p
```

change these variables

path_p : path to where '.sdd' files are located (absolute path, used in python)

path_c : path to where '.sdd' files are located (relative path, used in GILDAS/CLASS)

path_dir : path to base directory where 'mogaba_pipe_run.py' is located

path_cslog : path to directory where cross-scan logs ('.xlsx') are to be saved

path_pslog : path to directory where position-switching logs ('.xlsx') are to be saved

< CSlog > // ('./data_cs/')

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11)

	Source	Date	Year	MJD	ScanNum	Nseq	Nscan	Tsys_1	dTsys_1	Tsys_2	dTsys_2	Tau_1	dTau_1	Tau_2	dTau_2	Az	El	Scan1	Scan2
0	BLLAC	2011-11-21 12:02:14	2011.8893	55886.502	769368	1	16	97.790365	3.9323461	0	0	0.0660272	0.0005661	0	0	298.33624	59.862619	769368	769383
1	3C454.3	2011-11-21 12:36:01	2011.8893	55886.525	770456	1	8	98.018844	3.5934275	0	0	0.0685438	0.000569	0	0	247.21498	56.247721	770456	770463
2	VR422201	2011-11-21 13:08:35	2011.8894	55886.548	771530	1	16	105.81601	3.9605163	0	0	0.0786841	0.000862	0	0	298.36657	47.612183	771530	771545
3	3C111	2011-11-21 13:42:28	2011.8895	55886.571	772618	1	8	104.62921	4.6609259	0	0	0.0647133	0.0006627	0	0	430.3803	63.015776	772618	772625
4	CRAB	2011-11-21 14:16:54	2011.8895	55886.595	773692	1	8	101.73758	3.9660894	0	0	0.0855742	0.0004253	0	0	95.356653	50.402281	773692	773699
5	0528+134	2011-11-21 14:47:35	2011.8896	55886.616	774764	1	32	101.55793	4.29184	0	0	0.0820441	0.0006633	0	0	114.08863	52.846915	774764	774795
6	Jupiter	2011-11-21 15:28:10	2011.8897	55886.645	775886	1	16	102.54557	3.9770183	0	0	0.0713918	0.0004699	0	0	235.65551	55.596886	775886	775901
7	0235+164	2011-11-21 16:01:22	2011.8897	55886.668	776974	1	32	102.24673	4.3069618	0	0	0.0682368	0.0005424	0	0	242.59452	60.08919	776974	777005
8	4C28.07	2011-11-21 16:41:27	2011.8898	55886.695	778096	1	16	102.02832	3.9593505	0	0	0.1004678	0.0003754	0	0	272.36669	57.472456	778096	778111
9	3C84	2011-11-21 17:14:40	2011.8899	55886.719	779184	1	8	101.53143	4.0267596	0	0	0.096817	0.0002159	0	0	296.89015	60.699939	779184	779191
10	0716+71	2011-11-21 17:47:41	2011.8899	55886.741	780258	1	32	100.35233	3.7670268	0	0	0.0853147	0.0001954	0	0	368.56512	50.623183	780258	780289
11	J0730-1141	2011-11-21 18:28:01	2011.89	55886.769	781378	1	32	101.26415	3.8420133	0	0	0.0948745	0.0002606	0	0	167.84544	43.961812	781378	781409
12	Mars	2011-11-21 19:08:41	2011.8901	55886.798	782500	1	16	107.2638	3.9933853	0	0	0.0891264	0.0006355	0	0	108.20438	44.294965	782500	782515
13	0836+710	2011-11-21 19:43:09	2011.8902	55886.822	783588	1	32	105.99678	3.9569463	0	0	0.0795986	0.0004058	0	0	364.2438	51.926995	783588	783619
14	1222+216	2011-11-21 20:25:30	2011.8902	55886.851	784710	1	16	112.15069	4.0874637	0	0	0.0956033	0.0005981	0	0	90.038265	41.289112	784710	784725
15	3C286	2011-11-21 21:00:51	2011.8903	55886.876	785798	1	32	112.35353	4.1436775	0	0	0.0995367	0.0011936	0	0	75.648348	38.836773	785798	785829
16	3C273B	2011-11-21 21:40:31	2011.8904	55886.903	786920	1	8	114.7032	4.0804816	0	0	0.1122398	0.0003478	0	0	125.92974	44.23655	786920	786927
17	3C286	2011-11-21 22:11:09	2011.8904	55886.924	787992	2	32	112.93849	4.0729003	0	0	0.0968239	0.000731	0	0	82.438519	53.264797	787992	788023
18	OJ287	2011-11-21 22:52:00	2011.8905	55886.953	789114	1	16	104.70521	3.8101466	0	0	0.0934518	0.0003527	0	0	256.85027	55.027542	789114	789129
19	4C39.25	2011-11-21 23:25:11	2011.8906	55886.976	790202	1	16	104.36528	3.806466	0	0	0.0883571	0.0002776	0	0	291.58269	59.972585	790202	790217
20	3C279	2011-11-22 00:00:44	2011.8906	55887.001	791292	1	8	111.54193	3.9852967	0	0	0.1069579	0.000149	0	0	169.16726	50.046528	791292	791299
21	3C345	2011-11-22 00:33:13	2011.8907	55887.023	792364	1	8	112.32057	4.0375761	0	0	0.1147689	0.0002936	0	0	424.94675	45.452993	792364	792371
22	4C38.41	2011-11-22 01:05:10	2011.8908	55887.045	793438	1	32	115.68148	4.0682091	0	0	0.1153999	0.0008396	0	0	429.19138	52.851915	793438	793469
23	1510-089	2011-11-22 01:44:50	2011.8908	55887.073	794558	1	32	117.20221	3.800048	0	0	0.1308742	0.0005321	0	0	158.72346	44.978903	794558	794589

(1): scan number

(2): sequency number (for repeated obs. toward the same source)

(3): the number of scans

(4): system temperature in rx_pol1 [K]

(5): standard deviation of system temperature in rx_pol1 [K]

(6): optical depth

(7): optical depth in rx_pol1

(8): standard deviation of optical depth in rx_pol1

(9): antenna azimuth

(10): antenna elevation

(11): scan number (begin)

(12): scan number (end)

	Source	Date	Year	MJD	ScanNum	Nscan	Az	El	Tsys_1	Tsys_2	Tau_1	Tau_2	Nrep	Nswitch
0	BLLAC	2011-11-21 12:02	2011.0003	55886.505	769400	1056	298.16718	58.891421	103.66081		0.0686553		4	16
1	3C454.3	2011-11-21 12:30	2011.0004	55886.527	770472	1056	247.90311	55.73043	104.61105		0.0715284		4	16
2	VR422201	2011-11-21 13:12	2011.0004	55886.551	771562	1056	298.51899	46.645462	110.90244		0.0834153		4	16
3	3C111	2011-11-21 13:42	2011.0005	55886.573	772634	1056	430.37011	63.546366	103.31746		0.0634094		4	16
4	CRAB	2011-11-21 14:19	2011.0005	55886.597	773708	1056	95.792563	50.959922	106.04018		0.0820483		4	16
5	0528+134	2011-11-21 14:52	2011.0006	55886.624	774828	1056	116.78136	54.788321	103.42561		0.0787081		4	16
6	Jupiter	2011-11-21 15:32	2011.0007	55886.648	775918	1056	237.2634	54.683218	109.41487		0.074454		4	16
7	0235+164	2011-11-21 16:12	2011.0008	55886.675	777038	1056	245.61306	58.144902	106.759		0.0714112		4	16
8	4C28.07	2011-11-21 16:40	2011.0008	55886.699	778128	1056	273.00938	56.373308	108.00489		0.1050077		4	16
9	3C84	2011-11-21 17:12	2011.0009	55886.72	779200	1056	296.80513	60.194881	106.9837		0.09996		4	16
10	0716+71	2011-11-21 17:57	2011.0009	55886.749	780322	1056	367.34287	50.92086	103.29219		0.0847998		4	16
11	J0730-1141	2011-11-21 18:38	2011.0009	55886.777	781442	1056	171.31844	44.348418	105.66101		0.0941075		4	16
12	Mars	2011-11-21 19:12	2011.0001	55886.801	782532	1056	109.28335	45.334332	110.58306		0.0845315		4	16
13	0836+710	2011-11-21 19:52	2011.0002	55886.829	783652	1056	362.8679	52.061737	108.64062		0.0798085		4	16
14	1222+216	2011-11-21 20:30	2011.0003	55886.855	784742	1056	90.756022	42.372311	113.9506		0.0890631		4	16
15	3C286	2011-11-21 21:12	2011.0003	55886.883	785862	1056	76.624443	40.915196	115.57637		0.0921432		4	16
16	3C273B	2011-11-21 21:42	2011.0004	55886.905	786936	1056	126.6213	44.686803	116.87494		0.1073312		4	16
17	3C286	2011-11-21 22:22	2011.0005	55886.932	788056	1056	83.478797	55.390348	110.22399		0.0921966		4	16
18	OJ287	2011-11-21 22:52	2011.0005	55886.956	789146	1056	257.91043	53.960181	109.52383		0.0979476		4	16
19	4C39.25	2011-11-21 23:30	2011.0006	55886.979	790234	1056	291.61017	58.948938	108.31299		0.09172		4	16
20	3C279	2011-11-22 00:02	2011.0007	55887.002	791308	1056	170.19165	50.146754	116.24186		0.1063821		4	16
21	3C345	2011-11-22 00:32	2011.0007	55887.025	792380	1056	425.07152	45.965879	119.59244		0.1094538		4	16
22	4C38.41	2011-11-22 01:12	2011.0008	55887.052	793502	1056	429.55822	54.866442	118.83399		0.1102738		4	16
23	1510-089	2011-11-22 01:52	2011.0009	55887.08	794622	1056	162.21236	45.697896	133.91689		0.1284568		4	16

(1) - (6): same with those in CSlog

(7): number of sets of position-switching

(8): number of repeats in each set

< mogaba_pipe_run.py > // files and calibrators

```
pipe_log = f"mogaba_pipelogs_{antenna}_SE.log"
```

pipeline running log file name.
(change by your preference)

```
files = [  
    # files to run  
    # you may need to download the data from the server! (e.g., 'scp' command)  
    "MOGABA_K_11_KTN.sdd"  
]
```

List of '.sdd' files to run

```
# some data contains different epochs of recording into one '.sdd' file.  
# each number indicates the corresponding epoch by order.  
version=[1, 2, 3]
```

Sequence number of a data.
Set 'version=[2]',
if you want to run only second epoch
of the data that containing multiple epochs

```
flag_file = [  
    "files having some issues (optional)"  
]
```

(optional)
Add '.sdd' data having some issues
and that you do not want to run

```
# unpolarized sources (mainly planets)  
Unpols = ["JUPITER", "MARS", "VENUS", "SATURN"]  
  
# angle reference source  
Aref = "CRAB"
```

List of d-term calibrators (unpolarized)
and angle reference source.
Basically, you don't need to change this

< mogaba_pipe_run.py > // bad-scan flagging

```
flag_scan1 = [  
# Pol_1  
# [scannum, {channum:[subchans]}],  
    (1)      (2)      (3)  
# epoch 1 (2011-11-21)  
[775918, {0:[4,10], 1:[2,6,7], 2:[2], 3:[0,1,2,3,8]}],  
[769400, {0:[3,4,5,6,10,11,13,14,15], 1:[1,2,3,9,10,11,12], 2:[5,6,7,8,9,10], 3:[6,12,15]}],  
[770472, {0:[0,9,12,13,14,15], 1:[12]}],
```

(1): scan number

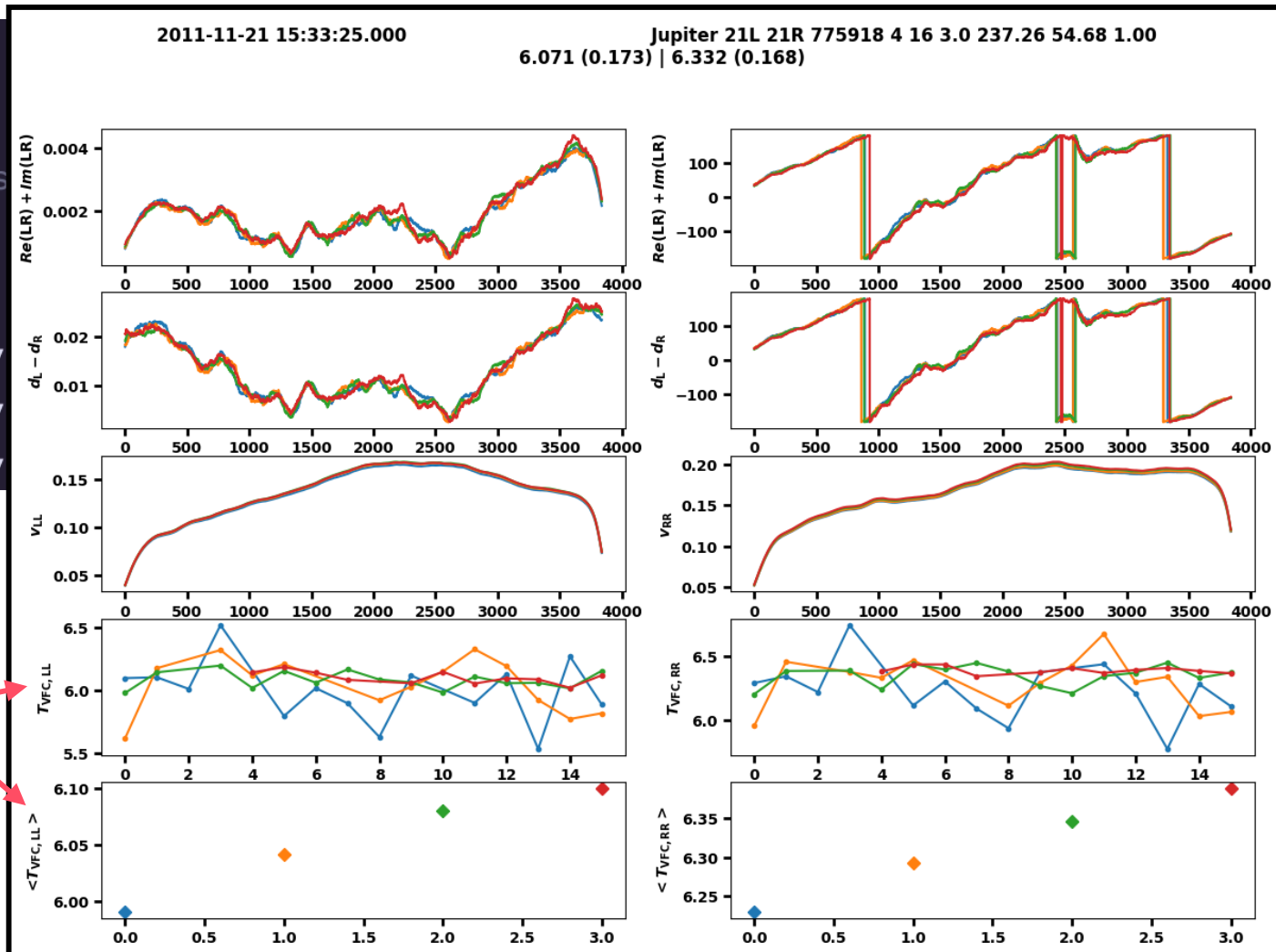
(2): main channel number(s)

(3): sub channel number(s)

< mogaba_pipe_run.py > // bad-scan flagging

```
flag_scan1 = [
# Pol_1
# [scannum, {channum:[subchans
(1)      (2)      (3)
# epoch 1 (2011-11-21)
[775918, {0:[4,10], 1:[2,6,7],
[769400, {0:[3,4,5,6,10,11,13,
[770472, {0:[0,9,12,13,14,15],
```

(1): scan number
(2): main channel number(s)
(3): sub channel number(s)



< CS data > // ('./data_cs/<freq>/')

					(1)	(2)	(3)			(4)			(5)	(6)		
	Source	MJD	Nseq	El	Peak_L	dPeak_L	stdT_L	Peak_R	dPeak_R	stdT_R	eta_L	eta_R	S_L	dS_L	S_R	dS_R
0	BLLAC	55886.502	1	59.862619	0.64783	0.00519	0.02386	0.68427	0.0052	0.02464	0.589	0.617	8.76861	0.07025	8.84152	0.06719
1	3C454.3	55886.525	1	56.247721	0.84068	0.00686	0.02955	0.88	0.00754	0.04095	0.589	0.617	11.3789	0.09285	11.37057	0.09743
2	VR422201	55886.548	1	47.612183	0.65089	0.00718	0.03412	0.69651	0.00468	0.01909	0.589	0.617	8.81002	0.09718	8.99968	0.06047
3	3C111	55886.571	1	63.015776	0.2266	0.01366	0.049	0.23927	0.00974	0.04637	0.589	0.617	3.06711	0.18489	3.09163	0.12585
4	CRAB	55886.595	1	50.402281	9.52494	0.13245	0.61757	10.21302	0.12479	0.62394	0.589	0.617	128.9234	1.79276	131.9635	1.61242
5	0528+134	55886.616	1	52.846915	0.14273	0.00329	0.01248	0.1454	0.00299	0.01297	0.589	0.617	1.9319	0.04453	1.87873	0.03863
6	Jupiter	55886.645	1	55.596886	6.14241	0.02337	0.09415	6.43565	0.02496	0.10073	0.589	0.617	83.13967	0.31632	83.15571	0.32251
7	0235+164	55886.668	1	60.08919	0.10594	0.00429	0.02006	0.11182	0.00311	0.01366	0.589	0.617	1.43394	0.05807	1.44484	0.04018
8	4C28.07	55886.695	1	57.472456	0.30901	0.00453	0.01946	0.32688	0.00384	0.01734	0.589	0.617	4.18256	0.06132	4.22365	0.04962
9	3C84	55886.719	1	60.699939	2.23237	0.01056	0.04678	2.31245	0.011	0.04298	0.589	0.617	30.21591	0.14293	29.87941	0.14213
10	0716+71	55886.741	1	50.623183	0.20375	0.00316	0.01268	0.2288	0.00335	0.01399	0.589	0.617	2.75783	0.04277	2.95635	0.04329
11	J0730-1141	55886.769	1	43.961812	0.28385	0.00401	0.01563	0.28369	0.00307	0.0132	0.589	0.617	3.84201	0.05428	3.66559	0.03967
12	Mars	55886.798	1	44.294965	0.17879	0.00448	0.01896	0.17759	0.00454	0.02124	0.589	0.617	2.41999	0.06064	2.29466	0.05866
13	0836+710	55886.822	1	51.926995	0.24693	0.00355	0.01605	0.25207	0.00374	0.01608	0.589	0.617	3.34228	0.04805	3.25702	0.04832
14	3C286	55886.876	1	38.836773	0.21783	0.00527	0.02506	0.2229	0.00576	0.02605	0.589	0.617	2.94841	0.07133	2.88011	0.07443
15	3C273B	55886.903	1	44.23655	1.59789	0.01093	0.03894	1.64582	0.01207	0.03981	0.589	0.617	21.628	0.14794	21.26581	0.15596
16	3C286	55886.924	2	53.264797	0.19303	0.00634	0.01415	0.19624	0.00552	0.01347	0.589	0.617	2.61273	0.08581	2.53564	0.07132
17	OJ287	55886.953	1	55.027542	0.50727	0.00523	0.01973	0.52282	0.00479	0.02076	0.589	0.617	6.86608	0.07079	6.75541	0.06189
18	4C39.25	55886.976	1	59.972585	0.73572	0.00862	0.03599	0.76954	0.00608	0.02244	0.589	0.617	9.95823	0.11667	9.94331	0.07856
19	3C279	55887.001	1	50.046528	2.2541	0.01136	0.04742	2.3605	0.01142	0.0501	0.589	0.617	30.51003	0.15376	30.50027	0.14756
20	3C345	55887.023	1	45.452993	0.44568	0.00622	0.03001	0.47022	0.00691	0.02852	0.589	0.617	6.03244	0.08419	6.07576	0.08928
21	4C38.41	55887.045	1	52.851915	0.27897	0.00519	0.02617	0.27523	0.00333	0.01388	0.589	0.617	3.77596	0.07025	3.55628	0.04303
22	1510-089	55887.073	1	44.978903	0.44091	0.0172	0.06399	0.46797	0.00938	0.03465	0.589	0.617	5.96787	0.23281	6.04669	0.1212

(1): peak antenna temperature [K] // (MCMC fitting)
(2): antenna temperature fitting error [K] // (MCMC fitting)
(3): standard deviation of residual profile [K]

(4): calculated antenna aperture efficiency
(5): flux density [Jy]
(6): flux density error [Jy]

< PS data > // ('./data_ps/<freq>/<date>/')

(1)

(2)

(3)

(4)

(5)

(6)

(7)

(8)

	Source	MJD	El	Ti	dTi	Tp	dTp	PM	dPM	PA	dPA	PA_c	dPA_c	Si	dSi	Sp	dSp	eta
0	Jupiter	55886.648	54.683218	6.19767	0.07581	0	0	0	0	0	0	0	0	81.96204	1.00257	0	0	0.60284
0	CRAB	55886.597	50.959922	9.99439	0.0069	1.16262	0.00484	11.633	0.048	-41.04388	0.23539	152	0	132.17244	0.09121	15.37527	0.06399	0.60284
0	BLLAC	55886.505	58.891421	0.69858	0.01534	0.04659	0.00046	6.669	0.047	-5.46227	0.4949	7.5816	0.54803	9.23848	0.20281	0.61608	0.00609	0.60284
0	3C454.3	55886.527	55.73043	0.85899	0.00541	0.03925	0.00072	4.569	0.059	84.66845	0.70449	97.71233	0.74277	11.35987	0.07157	0.51908	0.00955	0.60284
0	VR422201	55886.551	46.645462	0.69171	0.01149	0.0461	0.00071	6.665	0.072	-5.74167	0.39655	7.30221	0.46115	9.14763	0.15189	0.60966	0.00934	0.60284
0	3C111	55886.573	63.546366	0.25308	0.00791	0.00571	0.00046	2.254	0.129	-45.83963	2.60746	147.20425	2.61806	3.34685	0.10462	0.07545	0.0061	0.60284
0	0528+134	55886.624	54.788321	0.16444	0.01158	0.00137	0.00046	0.835	0.197	-64.86039	2.52462	128.18349	2.53557	2.17468	0.15313	0.01816	0.00607	0.60284
0	0235+164	55886.675	58.144902	0.0745	0.01074	0.00208	0.00086	2.788	0.819	-67.96462	10.70615	125.07925	10.70873	0.98529	0.14204	0.02747	0.01142	0.60284
0	4C28.07	55886.699	56.373308	0.3117	0.00645	0.01707	0.00084	5.478	0.19	-48.26226	0.93883	144.78162	0.96789	4.12208	0.08534	0.2258	0.01107	0.60284
0	3C84	55886.72	60.194881	2.27665	0.00672	0.00464	0.00051	0.204	0.016	2.50855	7.19037	15.55242	7.19422	30.10789	0.08881	0.0613	0.00673	0.60284
0	0716+71	55886.749	50.92086	0.21425	0.00333	0.00452	0.00042	2.111	0.137	-16.25593	4.44031	176.78795	4.44655	2.83343	0.04398	0.0598	0.00551	0.60284
0	J0730-1141	55886.777	44.348418	0.26991	0.00358	0.00292	0.0012	1.082	0.314	58.29007	15.58618	71.33395	15.58796	3.56942	0.04729	0.03861	0.01586	0.60284
0	Mars	55886.801	45.334332	0.15959	0.0108	0.00136	0.00074	0.854	0.33	-11.62358	16.64164	1.4203	16.6433	2.11047	0.14288	0.01802	0.00985	0.60284
0	0836+710	55886.829	52.061737	0.25443	0.00569	0.00502	0.00066	1.975	0.184	-78.44408	4.19992	114.5998	4.20651	3.36476	0.0753	0.06644	0.00876	0.60284
0	1222+216	55886.855	42.372311	0.2188	0.01177	0.00146	0.00093	0.669	0.301	77.33667	18.98007	90.38054	18.98153	2.89353	0.15564	0.01937	0.01233	0.60284
0	3C286	55886.883	40.915196	0.20687	0.00382	0.02368	0.00088	11.448	0.301	21.11449	1.60668	34.15837	1.62383	2.73581	0.05058	0.3132	0.01166	0.60284
0	3C273B	55886.905	44.686803	1.63497	0.01087	0.07967	0.00097	4.873	0.042	-55.14079	0.39748	137.90309	0.46195	21.62194	0.14381	1.05361	0.01287	0.60284
0	3C286	55886.932	55.390348	0.20656	0.00563	0.02417	0.00086	11.7	0.296	23.03495	1.15956	36.07882	1.18321	2.73164	0.07446	0.3196	0.01142	0.60284
0	OJ287	55886.956	53.960181	0.5215	0.00969	0.03472	0.00096	6.658	0.13	-37.24195	1.11283	155.80193	1.13745	6.89665	0.12813	0.4592	0.01272	0.60284
0	4C39.25	55886.979	58.948938	0.76804	0.00429	0.00114	0.00113	0.149	0.104	-30.08555	18.71251	162.95832	18.71399	10.15709	0.05679	0.01513	0.01498	0.60284
0	3C279	55887.002	50.146754	2.27745	0.00357	0.09653	0.00077	4.238	0.024	-55.2321	0.29999	137.81178	0.38132	30.11856	0.04718	1.27651	0.0102	0.60284
0	3C345	55887.025	45.965879	0.44597	0.0207	0.01802	0.00085	4.041	0.135	46.14085	0.47821	59.18473	0.53301	5.89785	0.27369	0.23836	0.01129	0.60284
0	4C38.41	55887.052	54.866442	0.19527	0.01242	0.00329	0.00043	1.684	0.156	27.10746	2.64426	40.15133	2.65472	2.58242	0.16431	0.0435	0.00571	0.60284
0	1510-089	55887.08	45.697896	0.43003	0.05663	0.01361	0.00129	3.165	0.211	56.99356	2.15813	70.03744	2.17093	5.687	0.74891	0.18001	0.017	0.60284

(1): antenna temperature (error) [K] // Stokes I
(2): antenna temperature (error) [K] // linear polarization
(3): degree of linear polarization (error) [%]
(4): crab-uncorrected polarization angle (error) [deg]

(5): crab-corrected polarization angle (error) [deg]
(6): flux density [Jy] (error) // Stokes I
(7): flux density [Jy] (error) // linear polarization
(8): applied antenna aperture efficiency