

FA-GSW Report DOY 89 (March 30, 2010)

Flare-Advocate/Gamma-ray-Sky-Watcher report: DOY 89 (March 30, 2010)

On Duty Flare Advocates:

FA: Eric Wallace (wallacee@uw.edu)



Highlights

Extragalactic Science

- PKS 0426-380 detected at flux $(0.6 \pm 0.2) \times 10^{-6}$ ph/cm²/s
- PKS 0537-441 detected at flux $(1.1 \pm 0.3) \times 10^{-6}$
- 4C +21.35 at $(0.8 \pm 0.2) \times 10^{-6}$
- 3C 454.3 at $(7.0 \pm 0.8) \times 10^{-6}$

Galactic Science

- LS I+61 303, typical pulsars, typical fluxes
- 2 ASP sources listed as UNID probably associated with 1FGL sources; both low TS in confused regions.

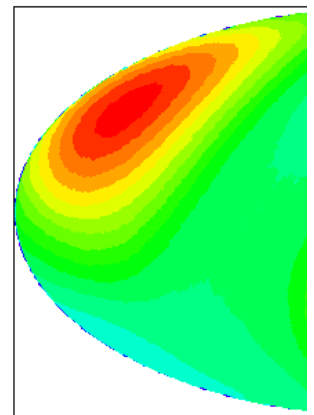
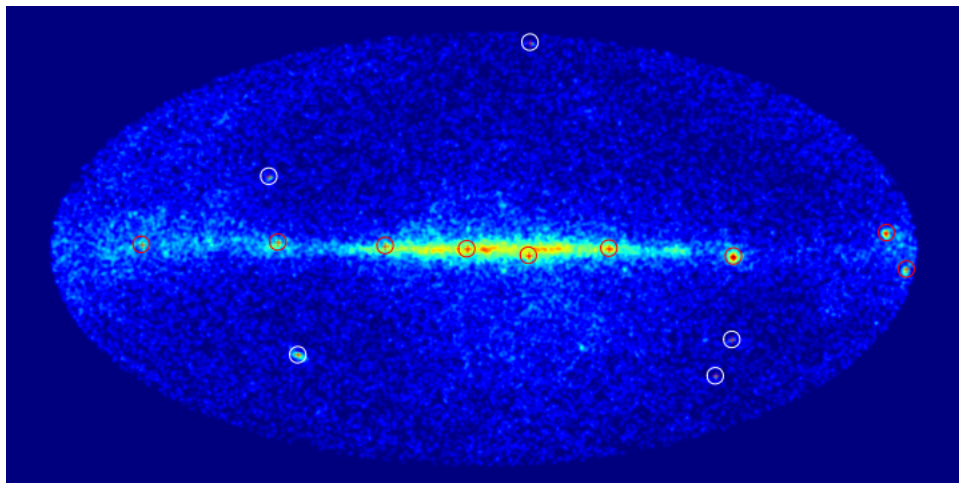


Technical notes

- Fluxes are given in units of $\text{ph} \times \text{cm}^{-2} \text{s}^{-1}$ in the $0.1 \div 300$ GeV energy band.
- Science Tools: v9r15p6
- Results are obtained with unbinned likelihood using iLat and the new FA-dedicated package, *fareport*, with its four scripts: *jobs.py*, *day.py*, *six.py* and *wiki.py*
- IRF used : P6_V3_DIFFUSE

Likelihood Analysis results:

Daily Run (n. 00644)

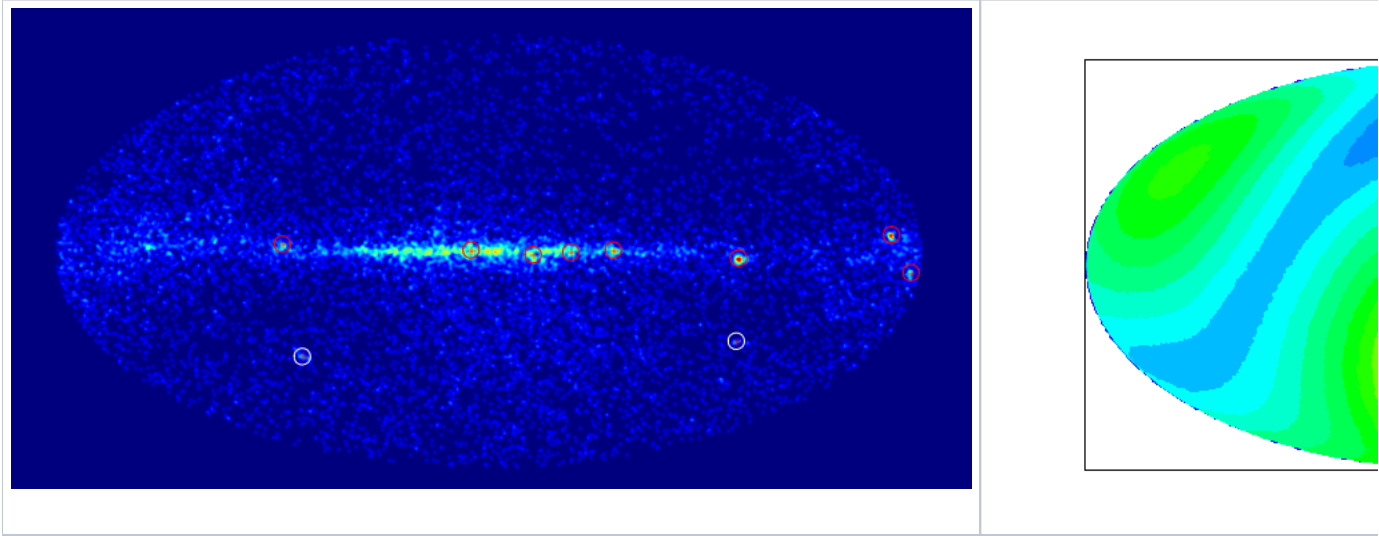


Extragalactic Sources	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux α	Flux err α	index	index err	Delta	1FGL	Type	Associations
ASPJ042833m374358	66.9584	-38.2379	241.109 5	-43.798 7	117	21	0.56	0.17	1.62	0.16	0°20.1'	1FGL J0428.6-3756	bzb	PKS 0426-380
BM_PKS0537m441	84.4989	-44.5846	250.632 3	-31.315 1	56	26	1.09	0.34	2.22	0.26	0°31.7'	1FGL J0538.8-4404	bzb	PKS 0537-441
BM_4C21_35	186.2734	21.3873	255.248 7	81.696 0	53	21	0.77	0.23	2.31	0.26	0° 4.4'	1FGL J1224.7+2121	bzq	4C +21.35
3C_454.3	343.1571	16.3882	85.9437 3	-37.806 3	557	148	6.95	0.78	2.43	0.10	0°24.2'	1FGL J2253.9+1608	BZQ	3C 454.3

Galactic Sources	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux α	Flux err α	index	index err	Delta	1FGL	Type	Associations
ASPJ023300p614500	39.5210	62.0275	135.0877	1.6993	34	41	1.13	0.34	2.48	0.24	0°51.0'	1FGL J0240.5+6113	HXB	LS I+61 303
Crab_Pulsar	83.4417	21.7950	184.6486	-6.0516	163	70	2.17	0.39	2.07	0.12	0°16.9'	1FGL J0534.5+2200	PSR /PWN	Crab
Geminga	98.2263	18.0285	194.7953	4.1729	552	146	4.34	0.48	1.97	0.08	0°21.0'	1FGL J0633.9+1746	PSR	Geminga
Vela_Pulsar	128.5286	-44.9898	263.2727	-2.8498	1000	297	11.19	0.88	1.98	0.05	0°17.2'	1FGL J0835.3-4510	PSR /PWN	Vela
ASPJ140636m610614	214.1524	-61.1360	313.0283	0.0550	44	82	2.82	0.64	2.50	0.19	0°18.6' 0°32.5' 0°49.1'	1FGL J1418.7-6057 1FGL J1420.1-6048 1FGL J1410.3-6128c	PSR PSR spp	LAT PSR J1418-6058 PSR J1420-6048
ASPJ170900m444500	257.1561	-44.2675	343.1580	-2.4000	153	98	2.18	0.41	2.03	0.11	0°17.5'	1FGL J1709.7-4429	PSR	PSR J1709-4429
ASPJ183525p591857	278.4485	59.1978	88.5622	25.2591	136	37	0.84	0.19	1.93	0.15	0°23.1'	1FGL J1836.2+5925	PSR	LAT PSR J1836+5925
ASPJ202214p402203	306.4496	40.7190	78.9176	1.5767	70	83	3.46	0.77	2.42	0.17	0°51.4'	1FGL J2021.5+4026	PSR	LAT PSR J2021+4044

UFOs or ID not found	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux α	Flux err α	index	index err	Delta	1FGL	Type	Associations
ASPJ175843m241914	270.5089	-23.5442	6.5131	-0.4375	24	66	1.80	0.55	2.38	0.21	0°13.8' 0°34.2'	1FGL J1801.3-2322c 1FGL J1800.5-2359c	spp	
ASPJ185827p040413	283.8501*	3.8750*	36.8321*	0.8860*	13	44	2.12	0.83	2.87	0.33	0°38.8'	1FGL J1857.9+0352c		

Six hours run (n. 02573)



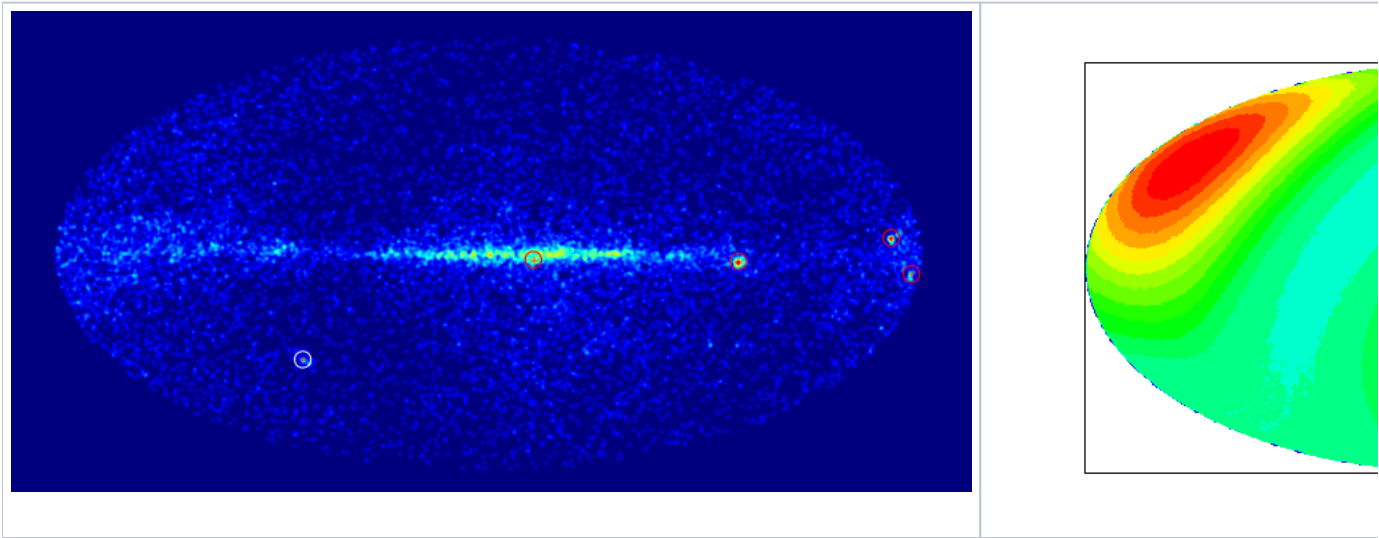
Extragalactic Sources	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux α	Flux err α	index	index err	Delta	1FGL	Type	Associations
BM_PKS0537m441	85.3755	-44.8364	251.0341	-30.7381	30	11	1.85	0.80	2.68	0.51	0°53.4'	1FGL J0538.8-4404	bzb	PKS 0537-441
3C_454.3	343.2307	16.5254	86.1146	-37.7317	89	28	5.59	1.48	2.51	0.25	0°27.2'	1FGL J2253.9+1608	BZQ	3C 454.3

Galactic Sources	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux α	Flux err α	index	index err	Delta	1FGL	Type	Associations
ASPJ053028p211725	83.5160	21.5979	184.8531	-6.0990	21	14	1.97	0.81	2.00	0.27	0°25.8'	1FGL J0534.5+2200	PSR /PWN	Crab
Geminga	98.1463	17.5499	195.1870	3.8862	119	32	4.12	0.96	1.85	0.15	0°23.0'	1FGL J0633.9+1746	PSR	Geminga
Vela_Pulsar	128.4169	-44.9544	263.1971	-2.8922	259	78	14.07	2.20	2.12	0.12	0°22.2'	1FGL J0835.3-4510	PSR /PWN	Vela

ASPJ141410m621049	214.6788	-61.5249	313.1398	-0.3951	27	26	5.09	1.66	2.33	0.26	0°33.8' 0°44.4' 0°50.3' 0°59.7'	1FGL J1418.7-6057 1FGL J1420.1-6048 1FGL J1413.4-6205 1FGL J1410.3-6128c	PSR PSR PSR spp	LAT PSR J1418-6058 PSR J1420-6048 LAT PSR J1413-6205
ASPJ170700m431500	256.5653*	-43.8834*	343.2106*	-1.8298*	4	12	1.77	1.21	2.53	0.51	0°51.8'	1FGL J1709.7-4429	PSR	PSR J1709-4429
ASPJ202138p413136	305.9572	40.8322	78.7954	1.9467	22	21	6.09	2.31	2.63	0.34	0°35.0' 0°43.3'	1FGL J2021.5+4026 1FGL J2020.0+4049	PSR spp	LAT PSR J2021+4044

UFOs or ID not found	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux α	Flux err α	index	index err	Delta	1FGL	Type	Associations
ASPJ160207m525005	239.6966	-53.5014	328.6452	-0.2537	1	4	0.55	0.81	2.04	0.76	0°39.7' 0°44.9'	1FGL J1554.8-5312c 1FGL J1554.0-5345c		
ASPJ175843m241914	270.3621	-23.6701	6.3371	-0.3828	9	20	2.17	1.03	2.31	0.31	0°17.3' 0°23.4'	1FGL J1801.3-2322c 1FGL J1800.5-2359c	spp	

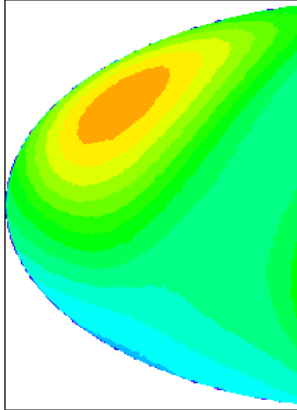
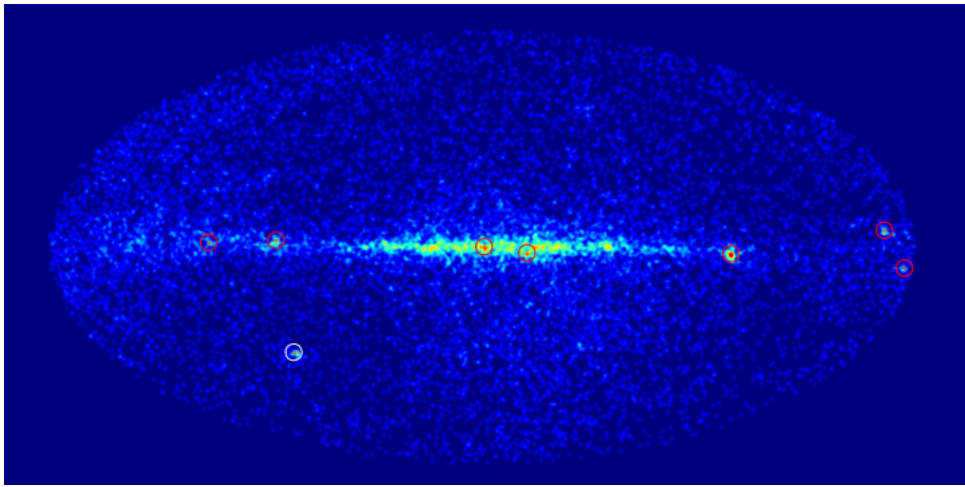
Six hours run (n. 02574)



Extragalactic Sources	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux α	Flux err α	index	index err	Delta	1FGL	Type	
Associations														
3C_454.3	343.5881	15.8999	86.0352	-38.4425	97	25	7.69	2.08	2.37	0.24	0°15.9'	1FGL J2253.9+1608	BZQ	3C 454.3

Galactic Sources	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux α	Flux err α	index	index err	Delta	1FGL	Type	A ssociations
Crab_Pulsar	83.3713	21.4310	184.9223	-6.3021	27	11	1.78	0.82	2.10	0.33	0°37.9'	1FGL J0534.5+2200	PSR /PWN	Crab
Geminga	98.2185	17.9295	194.8801	4.1211	142	32	4.42	1.03	1.86	0.15	0°17.5'	1FGL J0633.9+1746	PSR	Geminga
Vela_Pulsar	128.3848	-45.5357	263.6518	-3.2559	182	48	8.76	1.67	1.92	0.13	0°28.8'	1FGL J0835.3-4510	PSR /PWN	Vela
ASPJ170900m444500	257.2966*	-44.4151*	343.0988*	-2.5684*	23	18	2.55	1.19	2.03	0.29	0° 7.0'	1FGL J1709.7-4429	PSR	PSR J1709-4429

Six hours run (n. 02575)

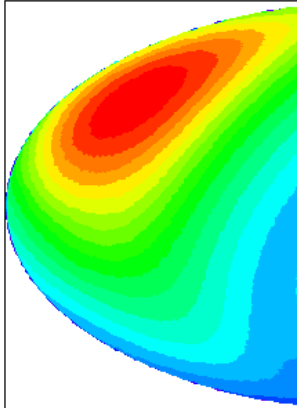
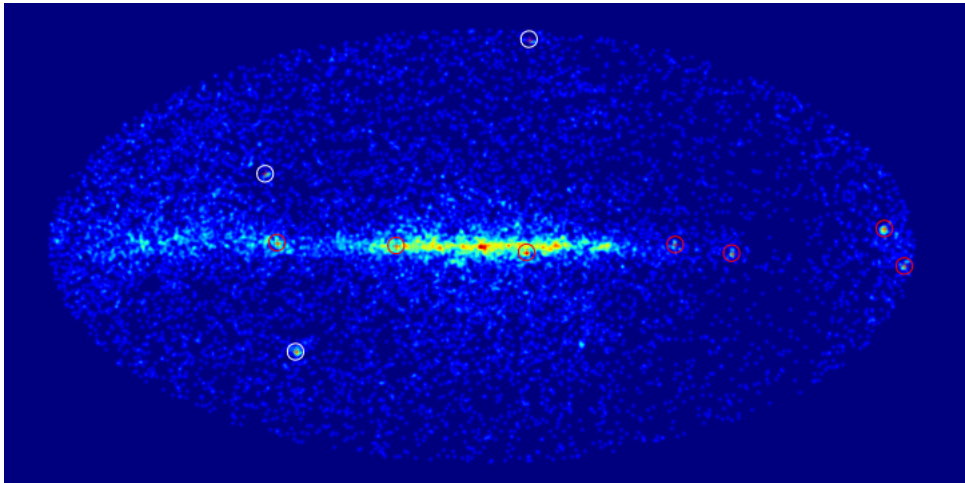


Extragalactic Sources	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux _α	Flux _{errα}	index	index _{err}	Delta	1FGL	Type	Associations
ASPJ225344p172649	343.5292	15.9203	85.9896	-38.3940	185	48	7.73	1.48	2.30	0.16	0°13.9'	1FGL J2253.9+1608	BZQ	3C 454.3

Galactic Sources	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux _α	Flux _{errα}	index	index _{err}	Delta	1FGL	Type	Associations
ASPJ053216p230319	83.5522	21.9081	184.6079	-5.9044	32	15	1.95	0.77	2.02	0.27	0° 7.8'	1FGL J0534.5+2200	PSR /PWN	Crab
Geminga	98.8094	18.1708	194.9216	4.7311	90	27	3.79	0.97	2.12	0.20	0°30.7'	1FGL J0633.9+1746	PSR	Geminga
Vela_Pulsar	128.7164	-45.0504	263.4007	-2.7794	342	99	11.76	1.57	1.95	0.09	0° 9.1'	1FGL J0835.3-4510	PSR /PWN	Vela
ASPJ170900m444500	257.1238*	-44.6383*	342.8459*	-2.6025*	30	29	2.28	0.80	2.29	0.26	0°15.9'	1FGL J1709.7-4429	PSR	PSR J1709-4429
ASPJ202214p402203	306.4649	40.5895	78.8187	1.4923	23	26	3.78	1.48	2.35	0.30	0°50.2'	1FGL J2021.5+4026	PSR	LAT PSR J2021+4044

UFOs or ID not found	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux _α	Flux _{errα}	index	index _{err}	Delta	1FGL	Type	Associations
ASPJ174500m291500	266.4013	-30.3150	358.8218	-0.7159	17	36	3.22	1.19	2.45	0.30	0°30.0' 0°51.3'	1FGL J1747.2-2958 1FGL J1744.0-2931c	PSR	
PSR J1747-2958														
ASPJ223043p584459	337.1041*	59.1324*	105.4829*	1.1944*	17	11	0.97	0.50	1.98	0.30	-	??		

Six hours run (n. 02576)



Extragalactic Sources	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux α	Flux err α	index	index err	Delta	1FGL	Type	Associations
BM_4C21_35	186.0330	20.9657	256.1614	81.2382	28	8	0.82	0.37	2.01	0.33	0°25.6'	1FGL J1224.7+2121	bzq	4C +21.35
3C_454.3	343.2408	15.9452	85.7140	-38.2186	94	27	8.21	2.20	2.84	0.29	0°19.1'	1FGL J2253.9+1608	BZQ	3C 454.3

Galactic Sources	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux α	Flux err α	index	index err	Delta	1FGL	Type	Associations
Crab_Pulsar	83.4070	21.8542	184.5810	-6.0471	37	14	2.47	1.01	2.05	0.27	0°15.8'	1FGL J0534.5+2200	PSR /PWN	Crab
Geminga	98.9844	17.7102	195.4092	4.6702	72	23	4.79	1.35	2.14	0.22	0°29.3'	1FGL J0633.9+1746	PSR	Geminga
Vela_Pulsar	129.1460	-44.9519	263.5041	-2.4773	60	16	9.16	3.16	1.90	0.22	0°18.8'	1FGL J0835.3-4510	PSR /PWN	Vela
ASPJ170900m444500	257.1310	-43.8422	343.4888	-2.1317	32	20	2.76	1.03	2.04	0.24	0°40.7'	1FGL J1709.7-4429	PSR	PSR J1709-4429
ASPJ183323p602605	279.1112	59.6693	89.1458	25.0210	32	12	1.07	0.41	2.14	0.32	0°14.7'	1FGL J1836.2+5925	PSR	LAT PSR J1836+5925

UFOs or ID not found	RA (J2000)	DEC (J2000)	L	B	TS	Npred	Flux α	Flux err α	index	index err	Delta	1FGL	Type	Associations
ASPJ103300m581500	159.6614*	-58.4111*	286.2648*	0.0965*	2	3	1.39	1.32	2.34	0.86	-	??		
ASPJ184820m01m2551	282.6021*	-1.0383*	31.8905*	-0.2444*	15	8	1.32	0.92	1.73	0.33	0°21.0' 0°22.0' 0°42.7' 0°54.6'	1FGL J1849.0-0055c 1FGL J1849.7-0121c 1FGL J1850.2-0019c 1FGL J1848.1-0145c		
ASPJ202958p395143	306.1056	39.5971	77.8492	1.1444	15	21	5.77	2.31	3.65	0.70	-	??		

α $F(E>100\text{MeV}) \times 10^{?6^{\wedge}}\text{ph cm}^{?2^{\wedge}}\text{s}^{?1^{\wedge}}$
 * Position is based on PGW-output only: handle with care.