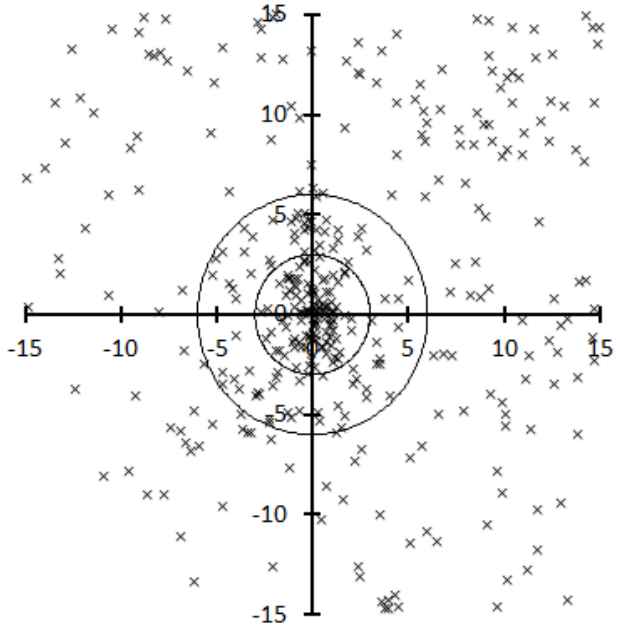
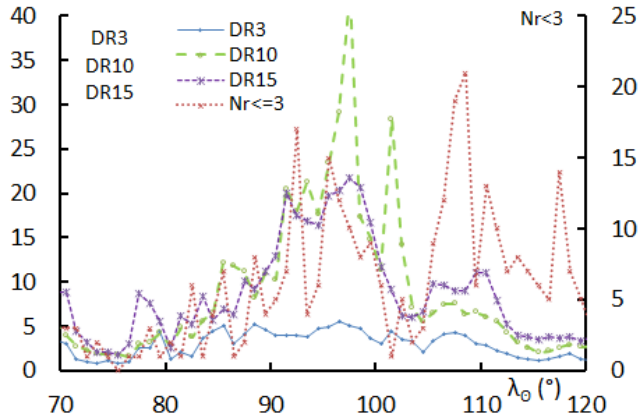
PPS_0 (#0372): Total of **113** orbits. $\lambda_\odot$ = 94°, λ_g–$\lambda_\odot$ = 282.4°, β_g = 16.4°, Δr = 3°, $\Delta\lambda_\odot$ = 7°. The listed maxima $\lambda_\odot$ of PPS in the shower database are widely dispersed from $\lambda_\odot$ =94° to 109.6°. We divide it into two components in *Tables 1 to 3*.





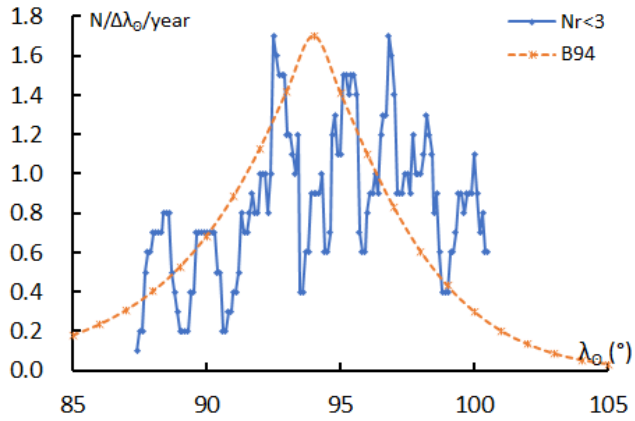


Table 1 – Number per year.

Year	N	Year	N
2007	3	2013	6
2008	2	2014	17
2009	15	2015	11
2010	8	2016	2
2011	9	2017	7
2012	17	2018	16

Table 2 – Activity profiles.

	$\lambda_\odot$	Max
Nr<=3	92.5	17
DR3	96.5	5.5
DR10	97.5	42.5
DR15	97.5	21.8

Table 3 – Evolution of the orbital parameters during the activity period.

$\lambda_\odot$	λ_g–$\lambda_\odot$	β_g	α_g	δ_g	v_g	e	q	i	ω	Ω	λ_Π	β_Π	a
77	286.1	12.8	357.6	12.9	66.1	0.871	0.793	155.8	122.0	77.0	312.6	20.3	6.13
78	285.9	13.0	358.3	13.4	66.1	0.872	0.797	155.5	122.6	78.0	312.9	20.4	6.21
79	285.8	13.1	359.1	13.9	66.1	0.873	0.802	155.3	123.3	79.0	313.1	20.5	6.29
80	285.6	13.3	359.8	14.4	66.1	0.874	0.806	155.0	123.9	80.0	313.4	20.5	6.38
81	285.5	13.5	0.5	14.9	66.2	0.875	0.811	154.7	124.6	81.0	313.7	20.6	6.47
82	285.4	13.7	1.2	15.4	66.2	0.876	0.815	154.4	125.2	82.0	313.9	20.6	6.57
83	285.2	13.8	1.9	15.9	66.2	0.877	0.819	154.2	125.9	83.0	314.2	20.7	6.67
84	285.1	14.0	2.6	16.4	66.2	0.878	0.824	153.9	126.5	84.0	314.5	20.7	6.78
85	284.9	14.2	3.4	16.9	66.3	0.880	0.828	153.6	127.2	85.0	314.7	20.7	6.89
86	284.8	14.4	4.1	17.4	66.3	0.881	0.832	153.4	127.9	86.0	315.0	20.7	7.01
87	284.7	14.5	4.8	17.9	66.3	0.883	0.836	153.1	128.5	87.0	315.3	20.7	7.13
88	284.5	14.7	5.5	18.4	66.3	0.884	0.840	152.8	129.2	88.0	315.5	20.7	7.27
89	284.4	14.9	6.3	18.9	66.3	0.886	0.845	152.6	129.8	89.0	315.8	20.7	7.41
90	284.2	15.1	7.0	19.4	66.4	0.888	0.849	152.3	130.5	90.0	316.1	20.7	7.56
91	284.1	15.2	7.7	19.9	66.4	0.889	0.853	152.0	131.1	91.0	316.3	20.7	7.71
92	284.0	15.4	8.4	20.4	66.4	0.891	0.857	151.8	131.8	92.0	316.6	20.7	7.88
93	283.8	15.6	9.2	20.9	66.4	0.893	0.861	151.5	132.4	93.0	316.9	20.6	8.06
94	283.7	15.7	9.9	21.4	66.5	0.895	0.864	151.2	133.1	94.0	317.1	20.6	8.25
95	283.5	15.9	10.6	21.9	66.5	0.834	0.856	29.8	130.7	95.0	229.7	22.1	5.15
96	283.4	16.1	11.4	22.4	66.5	0.899	0.872	150.7	134.4	96.0	317.7	20.5	8.66
97	283.2	16.3	12.1	22.9	66.5	0.902	0.876	150.5	135.1	97.0	318.0	20.4	8.89

Table 3 – Continued, evolution of the orbital parameters during the activity period.

$\lambda_\odot$	$\lambda_g-\lambda_\odot$	β_g	α_g	δ_g	v_g	e	q	i	ω	Ω	λ_Π	β_Π	a
98	283.1	16.4	12.9	23.4	66.6	0.904	0.880	150.2	135.7	98.0	318.2	20.3	9.14
99	283.0	16.6	13.6	23.9	66.6	0.906	0.883	149.9	136.4	99.0	318.5	20.2	9.40
100	282.8	16.8	14.4	24.4	66.6	0.908	0.887	149.7	137.0	100.0	318.8	20.1	9.69
101	282.7	17.0	15.1	24.9	66.6	0.911	0.890	149.4	137.7	101.0	319.1	20.0	10.00
102	282.5	17.1	15.9	25.3	66.6	0.913	0.894	149.2	138.3	102.0	319.4	19.9	10.33
103	282.4	17.3	16.6	25.8	66.7	0.916	0.897	148.9	139.0	103.0	319.7	19.8	10.69
104	282.2	17.5	17.4	26.3	66.7	0.919	0.901	148.7	139.6	104.0	320.0	19.7	11.09
105	282.1	17.6	18.1	26.8	66.7	0.922	0.904	148.4	140.3	105.0	320.3	19.6	11.52

