

HVI (#0343): Total of 42 orbits. $\lambda_o = 40.6^\circ$, $\lambda_g - \lambda_o = 165.6^\circ$, $\beta_g = -1.3^\circ$, $\Delta r = 3^\circ$, $\Delta \lambda_o = 5^\circ$. This shower has a distinct periodic nature.

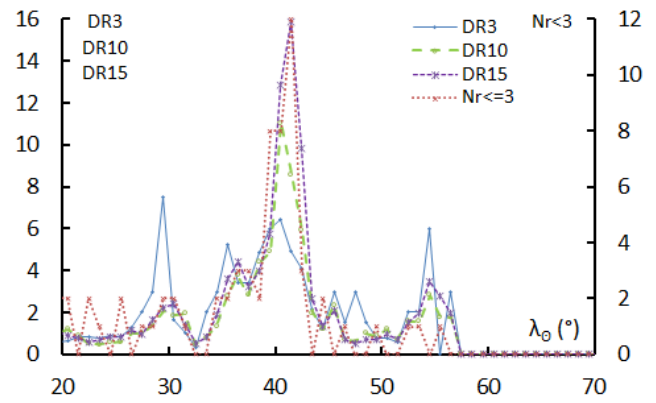
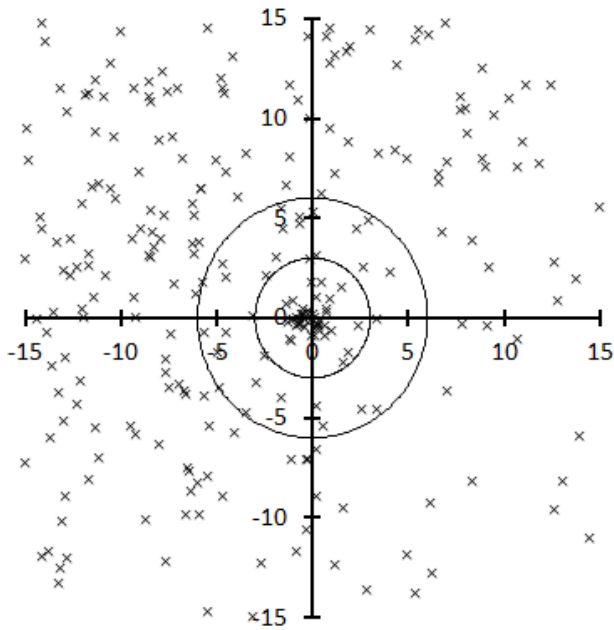


Table 1 – Number per year.

Year	N	Year	N
2007	0	2013	1
2008	13	2014	4
2009	14	2015	7
2010	0	2016	1
2011	0	2017	2
2012	0	2018	0

Table 2 – Activity profiles.

	λ_o	Max
Nr<=3	41.5	12
DR3	40.5	6.5
DR10	40.5	11.0
DR15	41.5	15.8

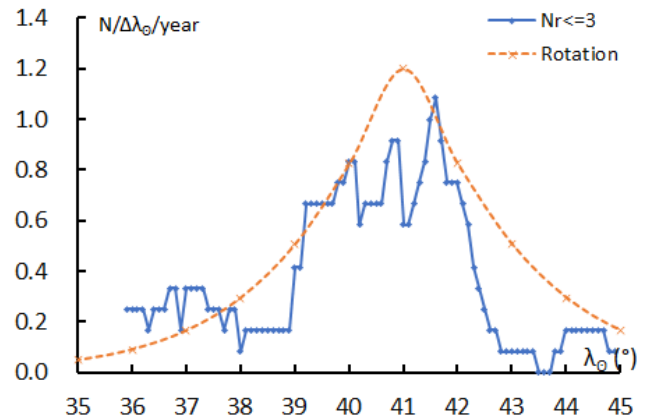


Table 3 – Evolution of the orbital parameters during the activity period.

λ_o	$\lambda_g - \lambda_o$	β_g	α_g	δ_g	v_g	e	q	i	ω	Ω	λ_{π}	β_{π}	a
30	173.3	-0.8	201.2	-9.8	20.2	0.730	0.675	0.5	77.2	210.0	287.2	0.5	2.50
31	172.5	-0.9	201.5	-10.0	20.0	0.729	0.685	0.5	75.9	211.0	286.9	0.5	2.53
32	171.8	-0.9	201.7	-10.1	19.8	0.729	0.694	0.6	74.6	212.0	286.6	0.5	2.56
33	171.1	-1.0	201.9	-10.3	19.5	0.728	0.704	0.6	73.2	213.0	286.2	0.6	2.59
34	170.3	-1.0	202.1	-10.4	19.3	0.727	0.713	0.6	72.0	214.0	286.0	0.6	2.61
35	169.6	-1.1	202.4	-10.5	19.0	0.726	0.723	0.6	70.7	215.0	285.7	0.6	2.64
36	168.8	-1.2	202.6	-10.7	18.8	0.725	0.732	0.7	69.5	216.0	285.5	0.6	2.66
37	168.1	-1.2	202.8	-10.8	18.6	0.724	0.741	0.7	68.2	217.0	285.2	0.6	2.68
38	167.4	-1.3	203.0	-11.0	18.3	0.722	0.749	0.7	67.0	218.0	285.0	0.6	2.70
39	166.6	-1.3	203.3	-11.1	18.1	0.721	0.758	0.7	65.8	219.0	284.8	0.6	2.72
40	165.9	-1.4	203.5	-11.3	17.8	0.719	0.766	0.7	64.6	220.0	284.6	0.6	2.73
41	165.1	-1.4	203.7	-11.4	17.6	0.718	0.775	0.7	63.5	221.0	284.5	0.7	2.74
42	164.4	-1.5	203.9	-11.6	17.4	0.716	0.783	0.7	62.3	222.0	284.3	0.7	2.75
43	163.6	-1.5	204.2	-11.7	17.1	0.714	0.790	0.8	61.2	223.0	284.2	0.7	2.76
44	162.9	-1.6	204.4	-11.8	16.9	0.711	0.798	0.8	60.1	224.0	284.1	0.7	2.76
45	162.2	-1.6	204.6	-12.0	16.6	0.709	0.806	0.8	59.0	225.0	284.0	0.7	2.77
46	161.4	-1.7	204.8	-12.1	16.4	0.706	0.813	0.8	58.0	226.0	284.0	0.7	2.77
47	160.7	-1.7	205.1	-12.3	16.2	0.703	0.820	0.8	56.9	227.0	283.9	0.7	2.76
48	159.9	-1.8	205.3	-12.4	15.9	0.700	0.827	0.8	55.9	228.0	283.9	0.7	2.76
49	159.2	-1.8	205.5	-12.5	15.7	0.697	0.834	0.8	54.8	229.0	283.8	0.7	2.75
50	158.5	-1.9	205.7	-12.7	15.5	0.693	0.840	0.8	53.8	230.0	283.8	0.7	2.74