

NDA (#0026): Total of 310 orbits. $\lambda_o = 147^\circ$, $\lambda_g - \lambda_o = 207.3^\circ$, $\beta_g = 6.9^\circ$, $\Delta r = 3^\circ$, $\Delta \lambda_o = 10^\circ$. This activity should be distinguished from the traditional ‘Northern delta Aquariids’. The radiants do not show a clear concentration and the raw observed meteor number changes irregularly. It is suggested there might be several meteor shower activities.

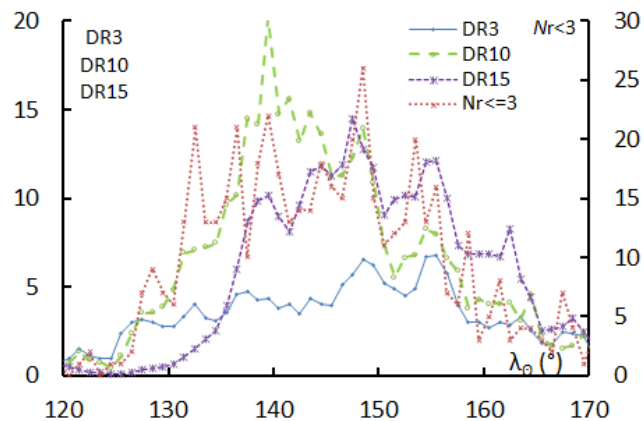
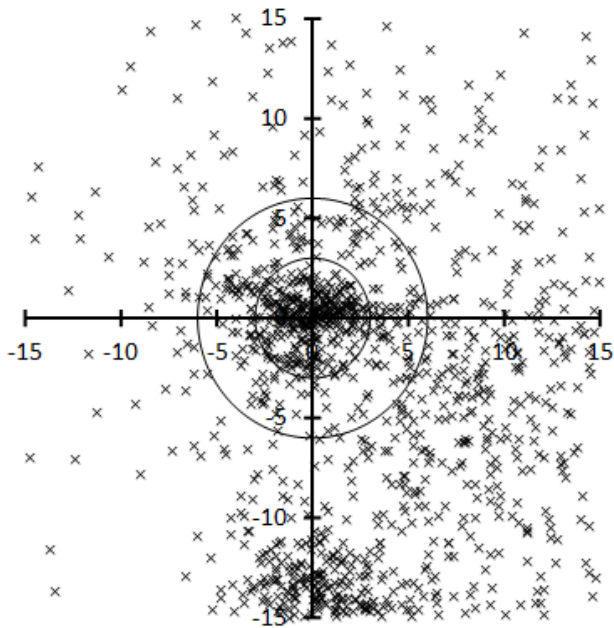


Table 1 – Number per year.

Year	N	Year	N
2007	33	2013	33
2008	8	2014	12
2009	30	2015	11
2010	35	2016	25
2011	8	2017	19
2012	49	2018	47

Table 2 – Activity profiles.

	λ_o	Max
Nr<=3	148.5	26
DR3	155.5	6.7
DR10	139.5	20.2
DR15	147.5	14.5

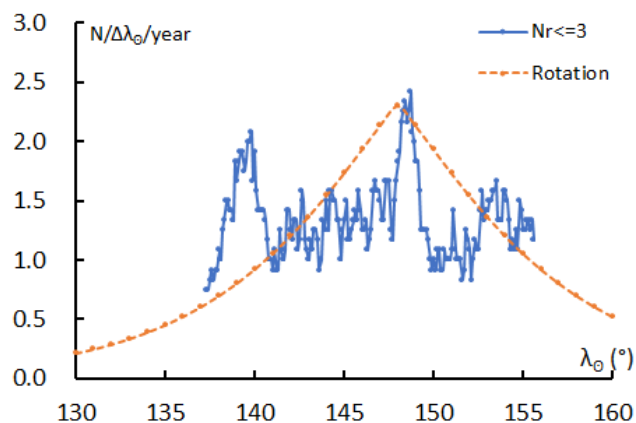


Table 3 – Evolution of the orbital parameters during the activity period.

λ_o	$\lambda_g - \lambda_o$	β_g	α_g	δ_g	v_g	e	q	i	ω	Ω	λ_{II}	β_{II}	a
130	208.9	6.1	338.2	-2.5	40.0	0.968	0.071	22.8	332.9	130.0	104.7	-10.2	2.21
131	208.8	6.2	339.0	-2.2	39.9	0.967	0.073	22.7	332.6	131.0	105.4	-10.2	2.21
132	208.7	6.2	339.8	-1.8	39.8	0.966	0.075	22.5	332.3	132.0	106.1	-10.3	2.21
133	208.6	6.3	340.6	-1.4	39.7	0.965	0.076	22.4	332.0	133.0	106.8	-10.3	2.21
134	208.5	6.3	341.4	-1.1	39.6	0.965	0.078	22.3	331.7	134.0	107.5	-10.3	2.20
135	208.4	6.4	342.2	-0.7	39.5	0.964	0.079	22.1	331.4	135.0	108.2	-10.4	2.20
136	208.2	6.4	343.0	-0.3	39.4	0.963	0.081	22.0	331.1	136.0	108.9	-10.4	2.20
137	208.1	6.4	343.8	0.1	39.3	0.962	0.083	21.9	330.8	137.0	109.6	-10.5	2.19
138	208.0	6.5	344.6	0.5	39.2	0.962	0.084	21.8	330.5	138.0	110.3	-10.5	2.19
139	207.9	6.5	345.4	0.9	39.1	0.961	0.086	21.7	330.2	139.0	111.0	-10.6	2.19
140	207.8	6.6	346.2	1.2	39.0	0.960	0.088	21.5	329.9	140.0	111.7	-10.6	2.18
141	207.7	6.6	347.0	1.6	38.9	0.959	0.089	21.4	329.6	141.0	112.4	-10.7	2.18
142	207.6	6.7	347.8	2.0	38.8	0.958	0.091	21.3	329.3	142.0	113.1	-10.7	2.18
143	207.5	6.7	348.6	2.4	38.7	0.957	0.093	21.2	329.0	143.0	113.8	-10.7	2.17
144	207.4	6.8	349.4	2.8	38.6	0.956	0.095	21.1	328.7	144.0	114.4	-10.8	2.17
145	207.2	6.8	350.2	3.2	38.5	0.956	0.096	21.0	328.4	145.0	115.1	-10.8	2.17
146	207.1	6.9	351.0	3.6	38.4	0.955	0.098	20.9	328.1	146.0	115.8	-10.9	2.16
147	207.0	6.9	351.8	4.0	38.3	0.954	0.100	20.8	327.8	147.0	116.5	-10.9	2.16
148	206.9	7.0	352.6	4.4	38.2	0.953	0.102	20.7	327.5	148.0	117.2	-10.9	2.16
149	206.8	7.0	353.4	4.8	38.1	0.952	0.103	20.6	327.2	149.0	117.9	-11.0	2.15

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

λ_{θ}	$\lambda_g - \lambda_{\theta}$	β_g	α_g	δ_g	v_g	e	q	i	ω	Ω	λ_{Π}	β_{Π}	a
150	206.7	7.0	354.2	5.1	38.0	0.951	0.105	20.5	326.9	150.0	118.6	-11.0	2.15
151	206.6	7.1	354.9	5.5	37.9	0.950	0.107	20.4	326.6	151.0	119.3	-11.0	2.15
152	206.5	7.1	355.7	5.9	37.8	0.949	0.109	20.3	326.3	152.0	120.0	-11.1	2.14
153	206.4	7.2	356.5	6.3	37.8	0.948	0.111	20.2	326.0	153.0	120.7	-11.1	2.14
154	206.2	7.2	357.3	6.7	37.7	0.947	0.113	20.1	325.7	154.0	121.4	-11.1	2.14
155	206.1	7.3	358.1	7.1	37.6	0.946	0.115	20.0	325.4	155.0	122.1	-11.2	2.13
156	206.0	7.3	358.9	7.5	37.5	0.945	0.116	19.9	325.1	156.0	122.8	-11.2	2.13
157	205.9	7.4	359.7	7.9	37.4	0.944	0.118	19.8	324.8	157.0	123.5	-11.2	2.13
158	205.8	7.4	0.5	8.3	37.3	0.943	0.120	19.7	324.6	158.0	124.2	-11.3	2.12
159	205.7	7.5	1.3	8.7	37.2	0.942	0.122	19.6	324.3	159.0	124.9	-11.3	2.12
160	205.6	7.5	2.1	9.1	37.1	0.941	0.124	19.5	324.0	160.0	125.6	-11.3	2.12