„Ordinary“ Showers

#	MDC Number	Show Code	Shower Name	MDC Status	Number of Meteors	Solar Longitude		Right Ascension		Declination		V_{geo}		Comment
						Mean/ Max [°]	Interval [°]	Mean [°]	Drift [°]	Mean [°]	Drift [°]	Mean [km/s]	Drift [km/s]	
1	40	ZCY	zeta Cygnids	W	500	16	13-20	302	+0.3	+40	+0.2	40	-	NM; SS: α,δ,v_{geo}; DM: δ
2	131	DAL	delta Aquilids	W	200	20	17-23	308	+1.0	+12	+0.3	63	-	DM: δ
3	136	SLE	sigma Leonids	W	1,000	26	18-35	201	+0.6	+3	+0.0	19	-0.16	NM; DM: α,v_{geo}
4	348 409	ARC NCY	April rho Cygnids nu Cygnids	E W	1,700	33	13-44	314	+0.8	+44.5	+0.3	42	+0.00	ARC and NCY are identical
5	346	XHE	x Herculids	W	300	352	350-355	256	+0.8	+48.5	-0.0	35	-	NM
6	6	LYR	April Lyrids	E	4,000	32.5	28-35	272.6	+0.65	+33.2	-0.3	45.5	+0.25	
7	343	HVI	H Virginids	W	200	41	39-43	205	+0.7	-11	-0.5	17	-	NM; SD; NAD
8	31	ETA	eta Aquariids	E	3,800	47	38-59	339.1	+0.64	-0.5	+0.33	66.5	+0.1	
9	531	GAQ	gamma Aquilids	W	320	48	45-52	307	-0.1	+14.5	-0.1	66	-	NM; SS: α; Part of N Apex?
10	145	ELY	eta Lyrids	E	800	50	45-52	291.3	+0.15	+43.4	+0.0	42.6	-	Maybe active longer; DM: δ
11	520	MBC	May beta Capricornids	W	150	59	56-61	305	+0.7	-15	+0.3	68	-	NM; WS; similar to 7CCA
12	362	JMC	June mu Cassiopeiids	W	150	71	69-74	11	+2.8	+53	+0.5	42	-	WS; SS: α,δ,v_{geo}
13	171	ARI	Daytime Arietids	E	70	77	74-79	44	+1.0	+23.5	+0.1	42		NM; Daytime shower; DM: v_{geo}
14	164	NZC	Northern June Aquilids	E	200	82	79-84	293	+1.0	-12	-0.4	42	-	DM: v_{geo}
15	510 521	JRC JRP	June rho Cygnids	W	190	84	83-85	320.4	+0.8	44.7	-0.8	48	-	NM; SD; NAD; short & strong; JRP is identical to JRC
16	410	DPI	delta Piscids	W	220	92	89-95	11	+0.4	+5	+0.4	69	-	NM
17	170	JBO	June Bootids	E	170	92.5	92-93	224.5	+0.0	+48	+0.0	13	-	SD; NAD
18	431	JIP	June iota Pegasids	W	200	93.5	92-93	331.5	+0	+29	+0	59	-	SD; NAD; short & strong
19	412	FOP	F Ophiuchids	W	110	98	97-99	265	+1.5	+7.5	-2	17	-	SD; NAD
20	372	PPS	phi Piscids	W	4,000	101	80-122	15	+0.8	+25	+0.5	67.6	+0.00	
21	179	SCA	sigma Capricornids	W	2,400	105	88-121	313.2	+0.83	-4.5	+0.23	40.1	-0.12	DM: δ,v_{geo}
22	411 507	CAN UAN	C Andromedids upsilon Andromedids	W W	1,800	106	95-118	28.1	+1.13	+46.3	+0.38	59.1	-0.11	NM; UAN are early part of CAN; Similarity to TPR
23	370	MIC	Microscopids	W	500	105	98-111	320	+1.1	-27	+0.15	39	-0.07	NM
24	175 415 522	JPE AUP SAP	July Pegasids August Piscids Southern alpha Pegasids	E W W	2,100	108	103-131	347.6	+0.82	+11.0	+0.23	66.6	-0.03	Only JPE has status E, but parameters of AUP and SAP fit much better
25	187	PCA	psi Cassiopeiids	E	500	114	110-116	28	+1.3	+70	+1.1	46	-	NAD
26	533	JXA	July xi Arietids	W	1,100	118	106-129	40	+0.8	+9	+0.2	68	-	NM; WS
27	414	ATR	Alpha Triangulids	W	460	124	122-127	16	-1.1	+25	-0.2	67	-	NM; WS; DM: α,δ,v_{geo}
28	1	CAP	alpha Capricornids	E	6,000	125	113-137	305.3	+0.52	-10.0	+0.24	21.3	-0.19	Shower may start much earlier
29	184	GDR	July gamma Draconids	W	700	125	122-127	280.6	+0.0	+50.8	+0.1	24.1	-0.06	
30	5	SDA	Southern delta Aquariids	E	13,000	126	117-138	339.7	+0.80	-16.4	+0.21	42.7	-0.34	SPS; peak activity at SL 126°;
	505	AIC	August iota Cetids	W		152	139-165	1.3	+0.82	-7.7	+0.41	39.4	-0.04	AIC are late part of SDA

31	3	SIA	Southern iota Aquariids	E	1,000	127	118-135	316	+0.6	-11	+0.3	27	+0.26	NM; SS: α,δ,v_{geo}; DM: α,δ,v_{geo}
32	123	ERI	eta Eridanids	E	1,900	133	123-142	40.1	+0.82	-12.3	+0.41	65.7	+0.03	NM
33	190	BPE	beta Perseids	W	4,100	135	123-147	44.3	+1.10	+37.6	-0.22	67.0	+0.07	NM; SS: δ,v_{geo}
34	434	BAR	beta Arietids	W	700	136	133-139	31	-0.6	+21	+1.1	68	-	NM; WS; SS: α,v_{geo}
35	7 444	PER ZCS	Perseids zeta Cassiopeiids	E W	60,000	140	110-159	48.2	+1.48	+57.3	+0.23	58.2	+0.04	ZSC are early part of PER; additional peak at SL 113/114°
36	197	AUD	August Draconids	E	600	140	138-142	272	+1.8	+61	-0.5	20	-	NM; SD; NAD; AUD merge with KCG at the end of activity
37	33	NIA	Northern iota Aquariids	E	850	142	140-144	334	+0.4	-8	-0.5	27	-	NM
38	12	KCG	kappa-Cygnids	E	2,900	137	132-142	280	+1.0	+50	+0.6	19	+0.19	SPS; peak activity at SL 145°
						150	143-156	267	-1.7	+62	+0.5	20	+0.00	
39	508	TPI	theta Piscids	W	4,500	147	135-158	352.0	+0.78	+4.1	+0.36	39.0	-0.16	NM; ND
40	523	AGC	August gamma Cepheids	W	1,350	155	149-158	1	+0.3	+77	+0.0	41	-	
41	206	AUR	Aurigids	E	1,700	159	153-166	91.8	+1.00	+39.0	-0.01	66.8	-0.15	
42	208	SPE	September epsilon Perseids	E	5,000	167	162-185	47.9	+1.19	+39.6	+0.06	64.5	-	
43	81	SLY	September Lyncids	W	1,000	167	165-175	107.5	+2.0	+55.7	+0.1	58.6	-	
44	416	SIC	September iota Cassiopeiids	W	700	172	168-174	46	+2.8	+64	-0.3	55	-	
45	430	POR	September pi Orionids	W	400	176	174-177	62	-0.4	+6	+0.5	66	-	SD; NM; MD: α
46	210	BAU	beta Aurigids	W	1,100	180	178-182	88	-0.2	+48	-0.1	69	-	SS: α,δ,v_{geo}
47	215	NPI	Northern delta Piscids	W	900	182	180-184	10	+0.8	+6.5	+1.0	25	-	NM; SS: δ
48	224	DAU	October delta Aurigids	W	1,000	184	182-186	77	-0.9	+57	-1.0	61	-	NM
49	424	SOL	September October Lyncids	W	660	186	185-187	111	+0.6	+47	-0.2	65	-	SD
50	281	OCT	October Camelopardalids	W	260	192.5	192-193	168	+0	+78.5	+0	43	-	SD; NAD
51	9	DRA	October Draconids	E	2,500	195	194-196	262.0	-	+56.0	-	17.8	-	SD
52	282	DCY	Delta Cygnids	W	210	197	196-198	289	+3	+50.0	+1.2	14		WS; SD; NAD; SS: α
53	425	PSA	psi Aurigids	W	1,600	200	196-203	110	-0.7	+43	+0.6	67	-	NM; SS: α,δ,v_{geo}
54	333	OCU	October Ursae Majorid	W	1,200	202	201-205	144.1	+2.4	+64.3	-0.4	52.4	-	
55	480	TCA	tau Cancrids	W	3,000	204	196-212	134.2	+1.0	+29.4	+0.1	67.8	+0.22	NM
56	236	GPS	gamma Piscids	W	1,100	204	201-208	17.4	+1.1	+16.8	+0.7	20.8	-	NM; WS
57	228	OLY	October Lyncids	W	1,600	207	203-211	111	+1.1	+53	-0.2	63	-	NM; SS: α,δ,v_{geo}; DM: δ
58	8	ORI	Orionids	E	55,000	169	152-186	69.2	+0.78	+2.3	+0.39	67.0	-	SPS; Shower may last longer; Peak activity at SL 209°; ZTE and NUE are early part of ORI
	226	ZTA	zeta Taurids	E		209	187-227	96.6	+0.75	+15.2	+0.06	66.2	-0.02	
	337	NUE	nue Eridanids	W		232	228-236	117.2	+1.0	+14.9	-0.1	65.4	-	
59	23	EGE	epsilon Geminids	W	7,000	209	186-220	104.7	+0.84	+27.6	-0.11	69.6	+0.00	
60	22	LMI	Leonids Minorids	E	2,100	209	204-214	159.9	+1.0	+36.7	-0.2	59.9	-	
61	417	ETT	eta Taurids	W	1,600	211	202-215	55	+0.9	+23	+0.2	45	-	SS: δ,v_{geo}
62	524	LUM	lambda Ursae Majorids	W	600	214	211-219	156	+1.1	+49	-1.1	60.5	+0.00	
63	526	SLD	Southern lambda Draconids	W	350	221.5	220-223	161	-0.3	+68	-0.4	46	-	SD; NAD
64	388	CTA	chi Taurids	E	900	223	219-227	65.5	+0.6	25	+0.2	46	-	NM; SS: α,δ,v_{geo}
65	445	KUM	kappa Ursae Majorids	E	850	223	220-227	146	+0.4	+45	-0.4	62	-	SS: α,δ,v_{geo}
66	9	AND	Andromedids	E	1,700	226	213-238	22.7	+0.3	+29.4	+0.6	15.9	-0.19	Transition from AND to DPC
67	338	OER	omicron Eridanids	E	300	234	233-235	61	+1.0	-1	+1.0	25	-	SD; NAD
68	438	MLE	mu Leonids	W	630	235	234-236	145	+3	29	+0.5	66	-	SD, NAD

69	13	LEO	Leonids	E	15,000	236	223-248	154.3	+0.63	+21.5	-0.40	69.7	+0.00	Shower may last longer
70	392 441	NID NLD	November iota Draconids November lambda Draconids	W W	1,800	239	229-249	190	+0.8	+69	-0.5	41	-	NM; SS: α,δ,v_{geo}; both MDC showers fit
71	246	AMO	alpha Monocerotids	E	200	240	239-241	118	+0.8	+1	+0.0	68	-	SD; NAD; DM: v_{geo}
72	249	NAR	November nu Arietids	W	140	241.5	241-242	40.5	+0	21	+0	17	-	SD; NAD
73	527	UUM	upsilon Ursae Majorids	W	210	242.5	242-243	151	+0	+58.5	+0	54	-	SD; NAD
74	439	ASX	alpha Sextantids	W	700	243	238-246	150	-1.7	-5	-0.2	70	-	WS; SS: α,δ,v_{geo}
75	250	NOO	November Orionids	E	3,500	246	231-255	90.6	+0.75	+15.5	-0.04	43.7	-0.19	
76	446	DPC	December phi Cassiopeiids	W	700	249	244-253	23.3	-0.5	+52.6	+1.7	13.9	+0.00	NM; Transition from AND to DPC
77	336	DKD	December kappa Draconids	W	700	251	250-254	185.4	+1.3	+70.4	-0.8	41.4	-	
78	339	PSU	psi Ursae Majorids	W	1,300	252	249-264	169.0	+1.1	+43.7	-0.5	60.5	-	
79	16	HYD	sigma Hydrids	E	5,000	254	242-269	124.0	+0.81	+2.7	-0.19	60.7	-0.06	Secondary peak at SL 264°
80	442	RLE	rho Leonids	W	600	256	253-259	153	+0.1	-6	-1.3	68	-	NM; WS; DM: δ
81	19	MON	December Monocerotids	E	2,000	257	254-269	100.1	+0.64	+8.3	-0.13	40.5	-0.15	
82	529	EHY	eta Hydrids	W	1,000	260	258-263	137	+0.7	+1.5	-0.1	63	-	NM; WS; Close to HYD
83	4	GEM	Geminids	E	36,000	261.5	248-265	113.3	+1.07	+32.4	-0.09	33.7	+0.00	
84	335	XVI	December chi Virginids	W	900	265	256-272	192.8	+0.7	-11.2	-0.3	69.2	-	
85	334	DAD	December alpha Draconids	W	2,400	255	253-266	205.1	+0.8	+60.1	-0.3	41.3	-	Shower is detected in two time intervals, but not inbetween
						278	274-281	222.8	-0.7	+53.5	-0.1	41.5	-	
86	332	DLM	December Leonis Minorids	W	7,000	269	254-298	162.5	+0.88	+30.0	-0.43	63.1	+0.00	DLM were deleted from MDC list
87	428 513	DSV EPV	December sigma Virginids epsilon Virginids	W W	1,500	272	254-279	204.1	+0.79	+4.0	-0.22	68.2	-	NM; EPV are early part of DSV
88	15	URS	Ursids	E	1,700	270.5	266-272	218.1	+1.8	+75.1	-0.3	30.0	-	
89	331	AHY	alpha Hydrids	W	700	280	270-288	125.0	+0.7	-7.4	-0.2	43.0	-	
90	20	COM	December Comae Berenicids	E	1,000	280	272-283	185.7	+1.3	+11.7	-0.7	69.7	+0.00	
91	319	JLE	January Leonids	E	250	281	279-285	146.6	+0.6	+24.3	-0.2	59.4	-	DM: v_{geo}
92	10	QUA	Quadrantids	E	4,300	283	278-293	230.9	+0.1	+48.7	+0.0	40.9	-	
93	323	XCB	xi Coronae Borealids	E	200	295	291-298	249	+0.1	+30	+0.0	49	-	DM: v_{geo}
94	403	CVN	Canum Venaticids	W	270	295	293-298	210	-1.0	38	+1.2	55	-	NM; DM: α,δ
95	322	LBO	lambda Bootids	E	90	297	297-298	222	+0	+45	+0	41	-	SD; NAD
96	341	XUM	January xi Ursae Majorids	W	350	298	296-300	169	+0.3	+33	-0.5	44	-	DM: v_{geo}
97	432	NBO	nu Bootids	W	250	298	296-300	206	-3	+13	+0.9	67	-	NM; DM: v_{geo}
98	404	GUM	gamma Ursae Minorids	W	250	300	298-204	228	+1.0	+67	-0.7	30	-	SS: v_{geo}
99	530	ECV	eta Corvids	W	300	303	300-306	194	+0.5	-17	+0.6	69	-	NM; ND; Part of N Apex?
100	90	JCO	January Comae Berenicids	W	400	304	301-307	193	+0.8	+15	-0.2	65	-	NM
101	429	ACB	alpha Coronae Borealids	W	500	308	307-316	231	+1.8	+26	-1.0	57	-	SS: α,δ,v_{geo}
102	506	FEV	February epsilon Virginids	W	600	315	309-320	201	+0.9	+11	-0.3	64	-	NM; SS: v_{geo}
103	427	FED	February eta Draconids	W	150	315	314-317	240	+0.5	+61	-0.1	32	-	SD; NAD
104	101	PIH	pi Hydrids	W	280	318	315-321	210	-0.6	-21	+0.1	68	-	NM; SS: α,δ,v_{geo}
105	418	BHE	beta Herculids	W	150	325	324-327	246	-0.9	+25	+1.2	53	-	NM
106	516	FMV	February mu Virginids	W	340	337	326-343	243	+2	-2	+0.4	62	-	NM; N-Apex crossing? SL 328-337° missing

Antihelion Source Related Showers

#	MDC Number	Shower Code	Shower Name	MDC Status	Number of Meteors	Solar Longitude		Right Ascension		Declination		V_{geo}		Comment
						Mean/ Max [°]	Interval [°]	Mean [°]	Drift [°]	Mean [°]	Drift [°]	Mean [km/s]	Drift [km/s]	
A1	11 49	EVI LVI	eta Virginids lambda Virginids	W W	1,000	7	352-23	196	+0.9	-5	-0.7	27	-	NM; EVI and LVI are identical
A2	509	KVI	kappa Virginids	W	800	9	358-18	210	+0.75	-10	-0.4	35	-0.1	NM
A3	-	ANT	Antihelion	-	600	10	3-16	211	+0.4	-11	-0.7	35	-	NM
A4	-	ANT	Antihelion	-	270	20	17-22	229	+0.6	-4	+1.6	35	-	NM
A5	22	XLI	April chi Librids	W	500	34	31-40	234	+0.5	-14	+0.4	35	-	NM; DM: δ,v_{geo}
A6	47	DLI	mu Virginids	W	1,200	35	25-42	225	+1.0	-10	+0.2	28		DM: δ,v_{geo}
A7	149	NOP	Northern May Ophiuchids	W	500	43	39-48	239	+0.5	-19	-0.2	34	-	NM; SS: α,δ,v_{geo} DM: δ,v_{geo}
A8	55 150	ASC SOP	alpha Scorpiids Southern May Ophiuchids	W W	1,600	47	44-50	239	-0.1	-15	+0.4	28	-	NM; SPS; mixture of different sources
						54	51-57	247	+2.5	-17	-2.1	33	-	
						61	58-64	252	-2.5	-15.5	+1.1	29	-	
						70	65-75	248	+0.8	-11	+0.2	22	-	
A9	-	ANT	Antihelion	-	500	65	62-70	265	+1.1	-19	-0.3	36	-	SS: α,δ,v_{geo}
A10	66	NSC	Northern omega Scorpiids	W	300	71	67-72	259	+1.2	-17	+0.6	28	-	
A11	67	NSA	Northern mu Sagittariids	W	600	77	71-83	273	+1.6	-21	+0.1	31	-	NM; WS; SS: α,δ,v_{geo}; DM: δ,v_{geo}
A12	168	SSS	Southern sigma Sagittariids	W	360	82	79-84	270	+0.6	-26	+0.3	25	-	NM; SS: α,δ,v_{geo}
A13	504	OPI	omega Piscids	W	5,000	168	161-177	3.3	+0.85	+5.1	+0.25	28.7	-0.02	NM; OPI were deleted from MDC list
A14	2	STA	Southern Taurids	E	20,000	190	179-201	28.8	+0.84	+6.3	+0.33	28.6	-0.05	SPS; SOA are an early part, FTA are a late part of STA; Peak at SL 210° sl, secondary peak at SL 227°
	28	SOA	Southern October delta Arietids	W		215	202-227	47.0	+0.77	+12.3	+0.17	27.3	-0.08	
	286	FTA	omega Taurids	W		237	228-246	61.8	+0.55	+14.5	+0.01	22.8	-0.23	
A15	-	ANT	Antihelion	-	2300	211	206-215	43	+1.1	+19	+0.2	29	-	NM; SS: α,δ,v_{geo}
A16	17	NTA	Northern Taurids	E	11,000	229	212-252	58.4	+0.82	+22.4	+0.15	27.1	-0.10	
A17	256	ORN	Northern chi Orionids	W	1,200	257	256-263	83	+0.8	+26	+0.2	24	-	
A18	257	ORS	Southern chi Orionids	W	600	263	261-267	75	-0.2	+18	-1.8	18	-	NM; WS
A19	-	ANT	Antihelion	-	900	279	272-285	112	+1.4	+23	+0.0	29	-	NM; SS: α,δ,v_{geo}
A20	-	ANT	Antihelion	-	280	289	286-291	116	-0.2	+16	+0.4	23	-	NM
A21	96	NCC	Northern delta Cancrids	W	900	299	290-308	131	+0.4	+18	-0.2	28	-	NM; SS: α,δ,v_{geo}; mix of NCC/SCC?
A22	112	NDL	Northern delta Leonids	W	1,500	329	306-351	160	+0.8	+9	-0.2	27	-0.05	NM; DM: α,δ,v_{geo}
A23	123	NVI	Northern March Virginids	W	340	357	353-1	175	+0.0	+8	-0.5	19	-	NM

Shower „candidates”

#	Number of Meteors	Solar Longitude		Right Ascension		Declination		V_{geo}	Comment
		Mean/Max [°]	Interval [°]	Mean [°]	Drift [°]	Mean [°]	Drift [°]	Mean [km/s]	
C1	200	9	6-10	268	+1.5	+14	-0.1	63	N-Apex
C2	200	22	19-25	266	+0.5	-15	+0.3	66	NM; WS
C3	150	23	22-25	278	+1.0	-6	+0.1	69	NM; WS
C4	350	100	96-104	252	+0.2	54	+0.2	20	NM
C5	500	155	153-157	106	+1.8	+40	-0.3	54	NM; WS
C6	2,000	160	153-166	70	0.0	+41	+0.4	69	
C7	760	168	166-171	346	+0.3	+1	+1.5	21	NM; WS
C8	370	171	168-173	302	-0.0	+32	+0.9	14	
C9	1,100	180	177-185	113	+0.8	+30	+0.0	70	WS
C10	1,500	231	224-236	135	+2.4	+38	-1.2	65	NM; N-Apex
C11	450	333	327-338	232	-1.5	+5	-1.9	67	NM; N Apex? Crossing FMV
C12	200	339	335-342	190	+0.2	+0	+0.1	44	NM; Sub-radiant of Virginid compl
C13	180	340	338-343	244	+0.9	+43	+0.0	39	NM
C14	150	347	346-349	233	+0.6	+43	+0.0	41	NM

WS Weak shower (minimum rank >10)
SS Significant scatter in a meteor shower parameter
DM Significant deviation from a parameter given in the MDC list
SD Short duration (<5 ° solar longitude)
ND Newly detected shower
NAD Not automatically detected shower, only by manual search for MDC showers
SPS Cannot be described by a single parameter set
NM No clear maximum in activity profile, given SL is the mean between begin and end