Results of the IMO Video Meteor Network – May 2011

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1. Observers

Code	Name	Place	Camera	FOV [°²]	St.LM [mag]	Eff.CA [km²]	Nights	Time [h]	Tot. CA [10³km²h]	Meteors
BENOR	Benitez-S.	Las Palmas/ES	TIMES4 (1.4/50)	2359	3.2	252	8	21.3	15.4	75
BERER	Berko	Ludanyhalaszi/HU	HULUD1 (0.95/3)	2256	4.8	1540	23	120.1	131.6	330
			HULUD2 (0.75/6)	4860	3.9	1103	24	124.1	117.7	205
			HULUD3 (0.75/6)	4661	3.9	1052	22	128.8	90.2	150
BREMA	Breukers	Hengelo/NL	MBB3(0.75/6)	2399	4.2	699	8	35.8	-	73
BRIBE	Brinkmann	Herne/DE	HERMINE (0.8/6)	2374	4.2	678	19	64.2	-	194
		Berg. Gladbach/DE	KLEMOI (0.8/6)	2286	4.6	1080	29	98.1	-	247
CASFL	Castellani	Monte Baldo/IT	BMH1 (0.8/6)	2350	-	-	23	88.0	-	255
			BMH2 (1.5/4.5)*	4243	-	-	23	81.4	-	187
CRIST	Crivello	Valbrevenna/IT	C3P8 (0.8/3.8)	5455	4.2	1586	28	151.7	197.7	344
			STG38 (0.8/3.8)	5614	4.4	2007	29	188.5	321.9	629
CSISZ	Csizmadia	Zalaegerszeg/HU	HUVCSE01 (0.95/5)	2423	3.4	361	26	74.1	19.8	169
CURMA	Currie	Grove/UK	MIC4 (0.8/6)	2411	5.2	2373	13	51.4	-	114
ELTMA	Eltri	Venezia/IT	MET38 (0.8/3.8)	5631	4.3	2151	24	136.3	195.7	275
GONRU	Goncalves	Tomar/PT	TEMPLAR1 (0.8/6)*	2179	5.3	1842	18	103.2	164.1	327
			TEMPLAR2 (0.8/6)*	2080	5.0	1508	18	95.6	119.2	251
GOVMI	Govedic	Sredisce ob Dr./SI	ORION2 (0.8/8)	1447	5.5	1841	28	108.8	-	319
HERCA	Hergenrother	Tucson/US	SALSA3 (1.2/4)*	2198	4.6	894	28	218.7	274.1	386
HINWO	Hinz	Brannenburg/DE	AKM2 (0.85/25)*	767	5.7	1101	17	66.6	-	209
IGAAN	Igaz	Baja/HU	HUBAJ (0.8/3.8)	5552	2.8	403	23	85.7	34.5	188
		Hodmezovasar./HU	HUHOD (0.8/3.8)	5502	3.4	764	25	96.3	62.7	214
		Budapest/HU	HUPOL (1.2/4)	3790	3.3	475	22	19.4	13.5	49
		Sopron/HU	HUSOP (0.8/6)	2031	3.8	460	27	86.2	26.5	246
JONKA	Jonas	Budapest/HU	HUSOR (0.95/4)	2286	3.9	445	19	55.5	79.8	147
KACJA	Kac	Kostanjevec/SI	METKA (0.8/8)*	1372	4.0	361	16	91.9	-	180
		Ljubljana/SI	ORION1 (0.8/8)	1402	3.8	331	25	134.1	-	188
		Kamnik/SI	REZIKA (0.8/6)	2270	4.4	840	26	147.8	86.0	626
			STEFKA (0.8/3.8)	5471	2.8	379	24	140.3	40.1	308
KERST	Kerr	Glenlee/AU	GOCAM1 (0.8/3.8)	5189	4.6	2550	27	221.3	432.9	2019
KOSDE	Koschny	Noordwijkerh./NL	LIC4 (1.4/50)*	1986	5.3	2147	16	62.5	109.2	79
MOLSI	Molau	Seysdorf/DE	AVIS2 (1.4/50)*	1776	6.1	3817	22	114.7	321.4	938
			MINCAM1 (0.8/8)	1477	4.9	1084	23	131.4	143.3	328
		Ketzür/DE	REMO1 (0.8/3.8)	5600	3.0	486	27	108.5	33.9	119
			REMO2 (0.8/3.8)	5613	4.0	1186	24	108.7	88.2	209
MORJO	Morvai	Fülöpszallas/HU	HUFUL (1.4/5)	2509	3.1	194	20	56.6	16.4	126
OTTMI	Otte	Pearl City/US	ORIE1 (1.4/5.7)	3837	-	-	20	65.4	-	187
PERZS	Perko	Becsehely/HU	HUBEC (0.8/3.8)*	5498	2.9	460	26	108.6	54.9	310
ROTEC	Rothenberg	Berlin/DE	ARMEFA (0.8/6)	2366	4.5	911	19	75.2	106.7	155
SCHHA	Schremmer	Niederkrüchten/DE	DORAEMON (0.8/3.8)	4900	3.0	409	21	37.4	-	90
SLAST	Slavec	Ljubljana/SI	KAYAK1 (1.8/28)	588	-	-	20	66.8	-	193
STOEN	Stomeo	Scorze/IT	MIN38 (0.8/3.8)	5566	-	-	27	136.7	-	557
			NOA38 (0.8/3.8)	5609	4.2	1911	28	132.4	198.3	415
			SCO38 (0.8/3.8)	5598	-	-	29	131.2	-	547
STORO	Stork	Kunzak/CZ	KUN1 (1.4/50)*	2338	5.7	3778	3	15.1	55.1	207
		Ondrejov/CZ	OND1 (1.4/50)*	2265	6.2	6102	3	14.4	75.7	186
STRJO	Strunk	Herford/DE	MINCAM2 (0.8/6)	2362	4.6	1152	21	62.5	-	154
			MINCAM3 (0.8/12)	728	5.7	975	23	66.7	82.0	185
			MINCAM5 (0.8/6)	2349	5.0	1896	23	83.8	-	285
TEPIS	Tepliczky	Budapest/HU	HUMOB (0.8/6)	2388	4.8	1607	27	111.2	221.4	326
TRIMI	Triglav	Velenje/SI	SRAKA (0.8/6)*	2222	-	-	26	85.0	-	206
YRJIL	Yrjölä	Kuusankoski/FI	FINEXCAM (0.8/6)	2313	4.6	1046	10	16.1	39.5	34
ZELZO	Zelko	Budapest/HU	HUVCSE02 (0.95/5)	1606	3.8	390	3	19.6	12.6	31
Sum							31	4845.7		14771

* active field of view smaller than video frame

2. Observing Times (h)

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
BENOR	4.7	1.8	3.2	1.7	-	4.4	2.3	-	-	0.7	-	-	-	-	-
BERER	-	1.7	3.4	3.2	6.7	7.2	-	4.6	-	-	6.9	0.5	6.8	-	-
	-	2.6	0.3	2.5	7.4	7.3	-	4.6	2.9	-	5.9	-	6.9	-	-
	-	-	-	1.6	7.4	7.3	-	4.6	7.1	-	6.9	-	5.6	-	-
BREMA	3.3	5.0	6.8	4.5	-	-	-	-	-	-	-	-	-	-	-
BRIBE	6.3	2.2	5.7	5.5	2.5	5.0	2.0	3.5	-	-	-	-	-	-	-
	5.4	3.0	6.4	7.2	1.7	3.1	2.0	3.1	4.5	1.5	2.0	4.7	1.0	1.5	1.0
CASFL	1.7	-	0.3	0.5	5.2	7.9	4.8	-	4.4	5.5	2.2	2.5	-	-	5.3
	4.8	1.0	0.9	-	3.5	7.9	3.1	-	6.4	6.4	-	1.8	-	-	6.4
CRIST	5.3	2.6	3.0	7.7	2.2	7.6	7.5	1.2	5.7	5.7	5.0	-	-	-	7.0
	7.8	4.2	6.5	7.7	5.8	7.6	7.5	5.1	7.4	7.3	7.3	4.9	5.1	-	7.1
CSISZ	2.1	1.1	1.7	1.8	3.6	3.5	7.3	3.6	2.4	1.2	5.5	-	1.8	3.0	-
CURMA	3.3	7.0	5.5	-	-	-	-	6.1	2.3	-	4.7	6.3	0.5	1.9	2.3
ELTMA	7.0	7.6	1.8	4.8	-	7.3	6.7	5.5	7.3	7.2	1.9	4.8	4.7	-	-
GONRU	-	6.0	6.1	4.8	-	-	-	8.0	7.9	6.8	4.7	7.7	6.9	7.0	3.3
	-	5.3	8.2	6.6	-	-	-	5.4	8.0	7.8	5.6	7.8	3.7	4.1	2.3
GOVMI	2.6	4.3	4.3	4.8	-	6.1	4.9	3.9	7.2	7.1	4.1	1.3	2.6	2.8	-
HERCA	-	-	-	8.7	8.6	8.7	7.9	8.6	8.3	8.5	8.5	4.7	8.4	8.4	6.7
HINWO	-	-	-	3.5	5.5	4.6	5.7	3.0	5.5	2.0	-	-	1.1	-	-
IGAAN	-	4.2	-	7.6	7.6	7.5	0.3	-	2.6	3.8	1.9	6.2	7.1	1.0	-
	-	3.3	-	2.0	5.0	2.7	-	-	7.2	3.9	7.1	2.1	3.0	2.7	-
	-	1.0	0.7	-	1.1	-	-	0.3	0.3	0.9	1.1	0.3	0.7	-	-
	3.0	-	2.6	3.1	4.1	4.2	4.8	1.3	4.9	2.9	3.4	1.0	1.5	-	-
JONKA	-	4.1	1.7	4.5	4.9	2.3	1.1	1.7	5.0	2.7	2.9	2.0	3.0	0.5	-
KACJA	-	-	-	7.7	2.0	7.7	7.6	-	5.4	7.5	5.5	-	-	-	-
	1.3	2.9	-	4.6	7.3	7.6	7.5	4.4	7.4	7.4	7.3	-	3.6	1.3	-
	4.2	3.4	3.1	7.7	7.6	7.6	7.4	-	7.4	7.3	7.3	-	0.5	-	-
	1.3	1.0	-	6.2	7.7	7.6	7.5	-	7.4	7.3	7.3	-	-	-	-
KERST	11.0	8.5	4.1	10.9	6.9	8.2	5.1	-	4.7	11.0	10.0	9.3	9.1	8.9	-
KOSDE	4.8	6.9	6.9	6.8	6.8	6.8	0.5	-	0.8	-	-	0.7	-	-	-
MOLSI	4.3	-	5.8	6.5	6.5	6.4	6.3	6.3	6.2	6.2	3.9	5.6	6.0	-	-
	6.5	-	7.3	-	7.3	7.2	7.1	7.1	7.0	7.0	1.7	6.8	6.8	-	1.9
	6.8	0.3	1.2	6.6	6.5	6.5	6.4	6.3	6.2	6.1	0.7	2.7	1.7	0.4	5.8
	4.8	-	1.1	6.6	6.5	6.4	6.4	6.3	6.3	6.1	1.0	2.6	0.2	1.5	5.7
MORJO	-	2.4	0.7	4.9	3.4	3.6	-	-	5.3	3.1	4.1	3.7	4.5	2.2	-
OTTMI	0.3	6.6	5.8	5.2	-	-	-	4.5	-	0.4	1.3	2.4	-	-	3.5
PERCZ	0.8	2.2	-	-	5.3	6.1	5.2	4.0	5.5	6.1	7.3	-	3.8	3.6	-
ROTEC	3.0	-	-	6.7	6.6	3.3	3.8	6.3	6.3	1.1	-	1.5	-	1.4	3.8
SCHHA	5.4	2.5	-	-	0.3	1.3	-	1.0	2.5	-	2.3	1.3	2.5	0.8	-
SLAST	2.9	0.3	0.7	4.2	7.1	1.7	5.5	4.8	2.5	6.8	2.1	-	-	-	-
STOEN	7.9	6.9	-	4.3	7.5	7.6	6.9	5.6	7.3	5.0	2.4	4.5	1.5	-	-
	7.9	3.2	0.5	4.1	7.5	7.6	6.9	5.1	7.3	7.1	0.8	4.8	2.9	-	-
	6.7	4.6	0.4	3.2	7.5	7.6	7.6	5.3	5.4	6.1	2.8	4.6	2.9	0.7	-
STORO	-	-	1.8	-	6.7	6.6	-	-	-	-	-	-	-	-	-
	-	-	-	1.7	6.2	6.5	-	-	-	-	-	-	-	-	-
STRJO	3.9	1.9	5.6	5.2	1.9	3.1	1.3	2.3	4.3	1.3	0.3	3.6	-	1.2	-
	3.7	1.7	2.0	6.1	2.1	3.1	4.2	5.8	5.8	0.6	-	2.8	0.3	1.8	-
	5.1	2.9	5.8	4.7	3.8	3.9	5.7	5.9	5.8	0.9	0.5	4.9	0.3	2.2	-
TEPIS	4.0	2.8	4.5	4.3	6.9	3.6	2.5	2.6	5.4	5.9	6.5	1.5	0.5	-	-
TRIMI	2.8	4.6	-	2.4	3.8	5.4	2.2	3.4	2.9	4.6	4.9	-	1.2	1.0	-
YRJIL	-	-	1.6	-	1.8	2.4	2.2	1.4	1.1	2.6	0.5	-	1.7	0.8	-
ZELZO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sum	156.7	133.6	128.0	214.9	226.3	257.6	183.7	162.5	233.5	199.4	168.1	121.9	120.4	60.7	62.1

May	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
BENOR	-	-	-	-	-	-	2.5	-	-	-	-	-	-	-	-	-
BERER	5.2	6.5	6.5	6.5	6.2	5.9	5.6	6.1	6.0	-	6.2	1.1	-	6.0	5.3	6.0
	5.1	6.7	6.6	6.5	2.7	6.5	5.6	6.4	6.3	6.3	6.2	2.5	-	6.1	6.1	4.1
	5.1	6.7	6.6	6.4	6.2	5.9	6.4	6.4	6.0	6.3	6.2	1.9	-	6.1	6.1	6.0
BREMA	-	-	-	-	-	-	-	-	5.2	4.8	-	-	-	4.5	1.7	-
BRIBE	-	1.4	1.0	-	-	2.1	4.4	4.9	5.0	4.7	-	2.0	-	3.3	1.9	0.8
	-	1.5	0.3	1.6	1.7	6.2	4.1	6.1	6.0	5.9	-	4.7	0.3	4.6	4.7	2.3
CASFL	6.4	-	3.2	5.3	4.2	3.2	3.0	-	3.1	2.8	0.3	-	3.6	6.9	5.7	-
	5.4	1.4	2.5	4.6	2.8	2.5	5.0	1.4	2.3	2.3	1.3	-	2.0	5.7	-	-
CRIST	5.0	2.9	7.0	5.5	6.9	6.9	6.8	5.2	4.7	6.7	6.7	6.6	6.6	6.6	6.5	0.6

	7.1	4.2	7.0	6.9	6.9	6.9	6.8	5.1	6.7	6.7	6.7	6.6	6.6	6.5	6.5	-
CSISZ	1.9	4.2	4.6	2.0	2.5	-	2.6	1.2	1.5	2.4	4.6	0.9	4.9	2.2	-	-
CURMA	-	-	-	-	3.7	-	2.3	-	5.5	-	-	-	-	-	-	-
ELTMA	-	-	7.0	6.0	6.1	6.1	5.0	6.1	3.9	6.7	6.8	-	2.7	6.7	6.6	-
GONRU	-	-	-	-	5.3	3.5	3.3	-	7.5	5.2	-	4.5	-	-	-	4.7
	-	-	-	-	2.0	4.0	4.2	-	5.8	3.1	-	5.9	-	-	-	5.8
GOVMI	1.8	4.2	4.2	4.0	0.8	4.1	3.1	2.6	2.6	4.0	5.3	-	2.4	5.4	3.5	4.8
HERCA	8.4	8.3	8.3	8.3	6.6	8.2	8.1	3.4	8.2	8.2	8.1	8.1	6.4	8.1	8.0	8.0
HINWO	-	-	3.8	-	-	3.8	2.5	5.6	2.1	3.8	-	-	5.3	5.2	3.6	-
IGAAN	-	-	1.4	2.6	2.7	1.9	1.5	1.0	3.7	4.0	1.6	-	2.6	6.5	6.4	-
	0.2	1.9	3.7	6.8	1.2	1.3	1.4	3.1	6.5	6.5	5.0	6.4	-	6.4	3.7	3.2
	3.0	2.6	0.8	0.8	1.8	-	1.1	0.3	1.0	0.4	0.2	0.3	0.3	-	-	0.4
	1.6	2.7	4.7	5.0	2.5	3.5	2.7	2.2	3.8	3.7	4.0	-	4.0	2.7	2.7	3.6
JONKA	2.4	6.9	2.0	3.2	3.1	1.5	-	-	-	-	-	-	-	-	-	-
KACJA	-	-	1.1	7.2	1.4	-	5.4	-	-	6.8	6.8	-	-	6.8	6.5	6.5
	4.6	7.0	7.0	6.9	-	1.7	5.1	5.1	-	6.7	6.6	-	5.4	6.2	2.7	6.5
	3.3	2.9	7.0	6.9	5.6	5.3	6.8	6.8	2.4	6.7	6.6	-	4.6	6.5	6.5	6.4
	3.6	5.7	7.0	6.9	5.6	5.3	6.8	6.8	2.5	6.7	6.6	-	4.6	6.5	6.5	5.9
KERST	9.9	7.8	7.0	1.8	4.8	9.5	-	-	10.7	10.7	8.7	10.7	9.6	5.4	10.7	6.3
KOSDE	-	-	-	-	6.2	0.3	6.2	-	2.5	1.0	-	-	-	0.7	-	4.6
MOLSI	-	-	3.6	-	3.0	5.5	2.2	5.4	4.5	5.3	-	-	5.1	5.1	5.0	-
	-	2.2	6.5	-	6.4	6.3	3.1	6.3	4.9	6.2	-	-	6.0	6.0	3.8	-
	-	0.2	-	1.3	5.4	5.4	3.3	5.3	5.2	5.1	0.4	2.9	-	4.9	4.9	-
	-	-	5.6	-	5.4	5.4	0.3	5.3	5.2	5.2	-	5.0	-	4.9	4.9	-
MORJO	0.3	4.8	2.1	3.5	0.3	1.3	1.0	2.1	3.3	-	-	-	-	-	-	-
OTTMI	3.2	1.0	-	3.7	-	0.8	1.6	4.3	-	-	4.1	-	3.1	2.5	5.5	5.6
PERCZ	-	0.3	5.4	4.9	0.8	1.2	3.8	3.3	6.6	6.6	4.6	0.9	4.9	6.5	4.9	4.0
ROTEC	-	-	-	-	-	-	2.0	5.3	5.3	5.2	1.1	2.6	-	5.0	4.9	-
SCHHA	-	0.3	-	-	0.6	0.6	3.4	2.6	2.9	2.8	-	0.2	0.3	2.2	-	1.6
SLAST	-	0.4	-	0.7	-	2.5	-	1.4	-	2.1	4.6	-	-	6.2	4.1	6.2
STOEN	4.6	1.9	4.4	6.0	3.0	5.4	2.2	5.6	2.9	6.6	6.7	1.2	5.9	6.4	6.5	-
	6.0	2.7	5.0	6.0	1.5	6.9	1.7	4.6	2.0	5.2	6.7	0.9	4.6	6.4	6.5	-
	7.2	4.2	5.2	5.8	1.3	6.9	1.6	3.8	2.3	4.9	5.9	0.5	3.3	6.4	6.5	-
STORO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STRJO	-	-	-	-	-	3.5	3.5	4.7	4.5	3.6	-	1.7	-	2.4	2.7	-
	-	-	1.8	-	1.5	1.7	3.5	4.7	2.9	4.6	-	1.5	-	1.9	2.6	-
	-	-	2.1	-	-	3.7	3.8	3.3	3.2	4.5	-	3.4	-	3.1	4.3	-
TEPIS	5.3	4.0	4.3	6.0	6.0	1.1	3.1	3.9	5.8	4.5	5.8	-	1.4	5.6	3.4	-
TRIMI	-	5.0	1.8	2.7	0.8	2.8	1.8	1.4	3.7	4.1	4.9	-	5.5	4.5	4.4	2.4
YRJIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZELZO	-	-	-	-	-	-	-	-	-	4.4	7.0	-	-	-	8.2	-
Sum	106.6	112.5	158.1	152.3	135.5	167.1	160.2	159.1	186.7	214.0	156.3	83.0	112.0	211.6	195.0	106.3

3. Results (Meteors)

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
BENOR	14	5	16	8	-	13	10	-	-	2	-	-	-	-	-
BERER	-	2	5	9	24	23	-	21	-	-	22	1	22	-	-
	-	4	1	8	13	14	-	12	11	-	7	-	14	-	-
	-	-	-	8	14	8	-	8	9	-	7	-	8	-	-
BREMA	8	13	9	13	-	-	-	-	-	-	-	-	-	-	-
BRIBE	15	11	17	20	8	12	5	15	-	-	-	-	-	-	-
	15	11	13	20	6	7	4	11	8	4	5	14	3	7	1
CASFL	4	-	2	1	17	20	19	-	9	21	5	9	-	-	19
	7	3	1	-	11	17	12	-	13	10	-	11	-	-	15
CRIST	9	10	3	19	2	21	8	3	22	20	8	-	-	-	15
	20	16	8	32	12	35	27	8	35	33	24	19	15	-	24
CSISZ	4	2	5	9	9	12	16	7	6	8	15	-	2	4	-
CURMA	6	15	9	-	-	-	-	2	15	-	13	17	2	9	7
ELTMA	10	13	2	11	-	27	13	24	16	18	3	7	8	-	-
GONRU	-	27	20	13	-	-	-	31	31	15	18	32	18	16	11
	-	21	24	21	-	-	-	21	21	16	16	18	9	10	6
GOVMI	6	14	8	14	-	18	14	18	13	23	15	1	8	7	-
HERCA	-	-	-	15	18	24	19	17	17	15	14	8	21	21	13
HINWO	-	-	-	13	13	22	12	15	18	7	-	-	1	-	-
IGAAN	-	6	-	21	19	22	1	-	14	10	7	11	7	1	-
	-	16	-	7	21	12	-	-	9	11	12	4	5	5	-

	-	3	2	-	3	-	-	1	1	3	4	1	2	-	-
	10	-	11	8	17	11	14	7	13	14	7	3	3	-	-
JONKA	-	7	8	11	13	10	3	8	16	6	5	5	7	2	-
KACJA	-	-	-	18	9	13	18	-	14	18	14	-	-	-	-
	1	2	-	13	14	12	19	3	12	9	7	-	5	1	-
	21	7	6	36	33	46	44	-	39	43	41	-	2	-	-
	1	3	-	24	19	28	33	-	21	30	8	-	-	-	-
KERST	81	71	119	141	44	139	94	-	41	121	121	103	88	59	-
KOSDE	7	10	11	8	6	5	3	-	2	-	-	2	-	-	-
MOLSI	50	-	57	52	55	70	88	70	51	28	5	35	21	-	-
	12	-	19	-	21	18	16	31	32	11	4	14	3	-	3
	6	1	1	5	11	2	10	7	7	11	1	5	2	2	6
	13	-	2	8	14	9	18	15	8	8	2	5	1	4	11
MORJO	-	3	5	10	11	11	-	-	14	7	7	6	7	5	-
OTTMI	1	16	15	12	-	-	-	14	-	1	7	4	-	-	9
PERCZ	4	10	-	-	15	22	30	12	24	18	22	-	7	6	-
ROTEC	3	-	-	14	13	4	7	15	12	5	-	6	-	1	13
SCHHA	12	6	-	-	1	4	-	4	6	-	3	3	3	3	-
SLAST	6	2	2	16	29	5	17	13	13	19	4	-	-	-	-
STOEN	26	32	-	26	46	33	22	43	36	33	6	17	4	-	-
	12	20	1	12	30	26	23	37	26	20	2	16	5	-	-
	20	25	1	20	29	45	34	39	32	35	7	23	3	1	-
STORO	-	-	35	-	79	93	-	-	-	-	-	-	-	-	-
	-	-	-	41	68	77	-	-	-	-	-	-	-	-	-
STRJO	10	5	10	9	4	8	7	9	14	2	1	12	-	4	-
	15	7	5	11	4	6	8	19	20	2	-	9	1	6	-
	20	14	14	12	11	7	21	15	20	3	2	24	1	6	-
TEPIS	5	6	15	15	16	11	6	6	14	16	14	2	2	-	-
TRIMI	7	10	-	10	11	15	12	6	7	11	10	-	3	2	-
YRJIL	-	-	5	-	2	5	7	3	1	4	2	-	3	2	-
ZELZO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sum	461	449	487	794	815	1042	714	590	763	691	497	447	316	184	153

May	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
BENOR	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	-
BERER	19	16	15	25	5	12	15	13	7	-	29	4	-	15	11	15
	9	14	6	10	6	5	7	9	5	9	14	1	-	9	10	7
	7	5	5	6	8	7	5	3	10	8	9	2	-	6	4	3
BREMA	-	-	-	-	-	-	-	-	7	11	-	-	-	7	5	-
BRIBE	-	5	3	-	-	7	10	9	15	18	-	5	-	10	6	3
	-	2	1	2	2	10	9	12	18	16	-	10	1	18	13	4
CASFL	16	-	9	14	11	9	11	-	5	5	1	-	11	19	18	-
	10	3	8	8	6	4	14	2	5	5	2	-	5	15	-	-
CRIST	20	7	14	9	17	13	12	15	11	13	17	14	16	12	13	1
	26	7	23	16	26	16	21	10	28	24	23	27	26	24	24	-
CSISZ	3	7	8	4	2	-	5	3	5	8	8	4	9	4	-	-
CURMA	-	-	-	-	8	-	3	-	8	-	-	-	-	-	-	-
ELTMA	-	-	9	9	6	10	8	9	6	11	15	-	3	20	17	-
GONRU	-	-	-	-	11	12	10	-	16	9	-	21	-	-	-	16
	-	-	-	-	8	10	10	-	12	6	-	12	-	-	-	10
GOVMI	3	7	9	9	1	11	9	11	9	16	23	-	11	14	14	13
HERCA	8	17	9	11	17	12	11	6	7	9	17	15	9	13	13	10
HINWO	-	-	9	-	-	14	7	16	6	11	-	-	13	19	13	-
IGAAN	-	-	3	6	5	2	4	3	10	9	6	-	11	7	3	-
	1	4	8	7	3	5	2	8	11	13	12	9	-	9	10	10
	7	6	3	2	2	-	1	1	2	1	1	1	1	-	-	1
	4	16	12	10	4	8	3	6	13	11	7	-	10	8	6	10
JONKA	13	14	4	5	7	3	-	-	-	-	-	-	-	-	-	-
KACJA	-	-	3	10	4	-	9	-	-	11	13	-	-	9	9	8
	5	9	9	5	-	2	7	4	-	6	11	-	6	8	7	11
	3	9	14	19	10	17	18	21	15	28	30	-	31	38	30	25
	4	9	9	8	7	9	7	13	9	10	15	-	7	5	11	18
KERST	71	62	37	4	12	55	-	-	92	102	51	81	75	25	75	55
KOSDE	-	-	-	-	5	1	2	-	4	3	-	-	-	2	-	8
MOLSI	-	-	25	-	24	35	11	42	18	65	-	-	49	43	44	-
	-	7	14	-	12	21	4	17	11	20	-	-	17	13	8	-
	-	1	-	2	2	3	4	7	4	3	2	4	-	5	5	-
	-	-	12	-	6	13	1	12	10	10	-	8	-	13	6	-

MORJO	1	8	3	7	1	3	3	6	8	-	-	-	-	-	-	-
OTTMI	11	3	-	9	-	5	4	8	-	-	17	-	8	8	16	19
PERCZ	-	1	10	7	3	4	7	7	18	17	12	3	19	10	13	9
ROTEC	-	-	-	-	-	-	3	15	14	10	2	3	-	8	7	-
SCHHA	-	1	-	-	2	2	7	5	7	8	-	1	1	6	-	5
SLAST	-	2	-	2	-	7	-	2	-	3	12	-	-	16	14	9
STOEN	13	8	10	18	7	10	13	11	6	24	14	4	24	38	33	-
	12	7	17	14	4	12	5	9	2	10	13	3	23	27	27	-
	23	14	14	16	6	17	7	7	7	17	23	3	17	31	31	-
STORO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STRJO	-	-	-	-	-	5	8	12	11	11	-	3	-	5	4	-
	-	-	3	-	2	4	9	11	12	13	-	3	-	4	11	-
	-	-	4	-	-	8	13	15	14	22	-	14	-	14	11	-
TEPIS	17	14	10	17	20	2	10	12	21	19	16	-	6	22	12	-
TRIMI	-	10	4	8	3	5	4	5	7	9	10	-	11	11	7	8
YRJIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ZELZO	-	-	-	-	-	-	-	-	-	9	14	-	-	-	8	-
Sum	306	295	356	299	285	410	340	377	506	643	439	255	420	590	569	278

Thanks to the perfect weather conditions, March 2011 was an unusually successful month with more than 4,700 hours of effective observing time. Even though the nights were getting shorter, April was even better with over 4,800 observing hours. However, even that result was outperformed: The observing conditions were so perfect in May, that notwithstanding the short early summer nights (if we forget our single Australian observer for a moment) 4,850 observing hours could be collected. Also the number of meteors was impressive: Almost 15,000 registered events is more than what we recorded in the same month of the years 2008 till 2010 together! Contrary to the previous two months, the conditions in northern and southern Europe were comparable now. In total, 39 of the 52 cameras were active in 20 or more observing nights.

Once more we could welcome new observers and camera systems in the IMO network. Martin Breukers is contributing now observations with his camera MBB3 (a Watec camera with 6 mm f/0.75 Panasonic lens) not far from the German Dutch border. His field of view has a nice overlap with the cameras of Bernd Brinkmann and Jörg Strunk.
In the Hungarian city of Sopron, close to the border between Hungary, Austria and Slovakia, Antal Igaz installed HUSOP (a Mintron camera with 6 mm f/0.8 Computar lens). Zoltan Zelko extended the network with the camera HUVCSE02 in Budapest. For the first time in the history of the IMO network it not Germany that hosts most video systems (currently 12), but Hungary (currently 13). What a surprise if we remember that the first Hungarian camera was installed just two years ago! Congratulations to our diligent Hungarian observers – in particular Antal Igaz, who promoted and extended our network so successful in his home country.

Let's have a look at the observing results: With the eta-Aquariids and the eta-Lyrids, the IMO working list contains two showers in May. The activity profile of both could be followed with only little delay online at http://vmo.imo.net/flx/. Particularly interesting was the analysis of the eta-Aquariids. At mid-northern latitudes, where most cameras are located, this shower can only be observed for a short time before sunrise. Thus, each camera can contribute only a small effective collection area and each recorded eta-Aquariid increases the meteor shower flux notably. On the other hand, the radiant is well placed for our Australian observer presenting to him large meteor counts. More than one third of the 1554 eta-Aquariids available in total for the flux analysis were provided by GOCAM1. In the ideal case, when the limiting magnitude, the field of view and all other parameters are exactly determined and the procedures to determine the flux density are precise, that shouldn't make any difference. But what about the practice?

Figure 1 shows the flux density profile of the eta-Aquariids in the full activity interval between April 19 and May 28. Similar to the Lyrids, the ascending and descending activity branch are covered nicely with only little scatter. Between midnight of May 2/3 and 9/10, the flux density was higher than 10 meteoroids per 1,000 square kilometers an hour. In that time interval, the scatter is increasing and some outliers can be found. The maximum was reached between midnight of May 5/6 and mid-day of May 8 when the flux density hovered around 20 within the 60 hours time interval. Peak activity occurred at midnight of May 7/8.

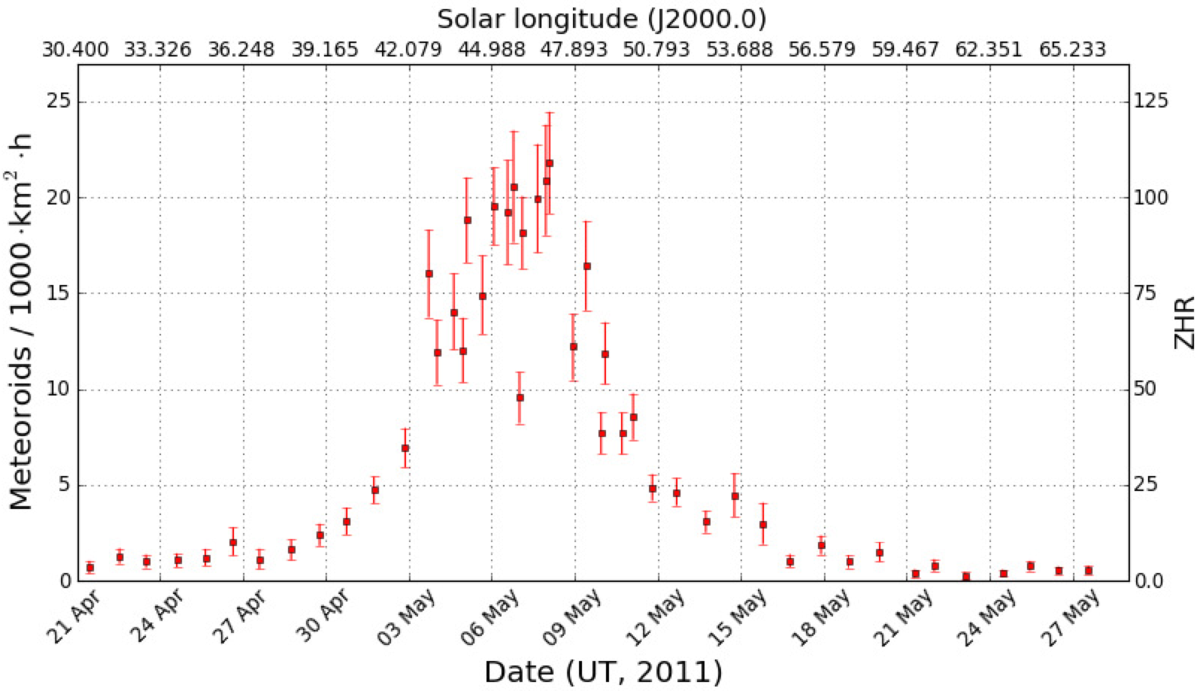
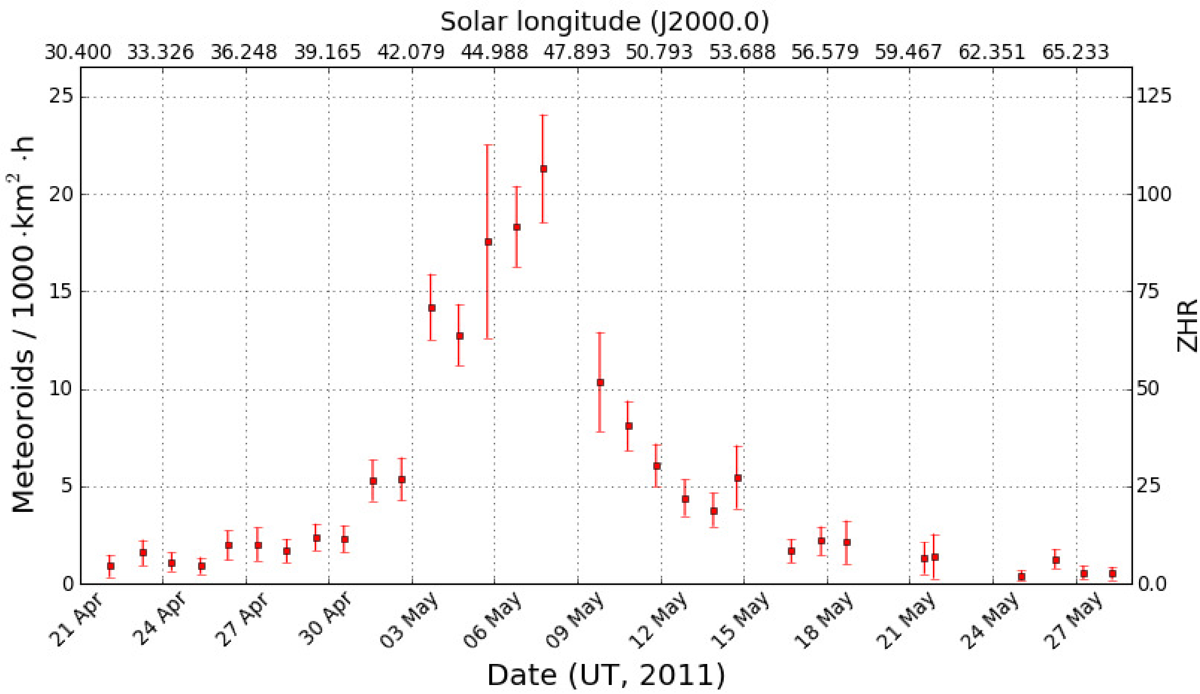


Figure 1: *Online flux density profile of the eta-Aquariids in April/May 2011 obtained from video observations of the IMO network.*

For comparison, the same activity profile is given, separated in figure 2 for GOCAM1 (upper graph) and all other cameras (lower graph). As expected, the Australian profile shows less scatter. In total there is a good agreement between the graphs, both with respect to the shape of the profile and the strength of the maximum. That is encouraging as it proves that sensible results can also be obtained under adverse conditions if only there are sufficient cameras that contribute data.

Note that the strong activity dip in the evening of May 6 can be explained by the fact that this interval contains only observations with a very low radiant. If the interval is extended, the outlier disappears.



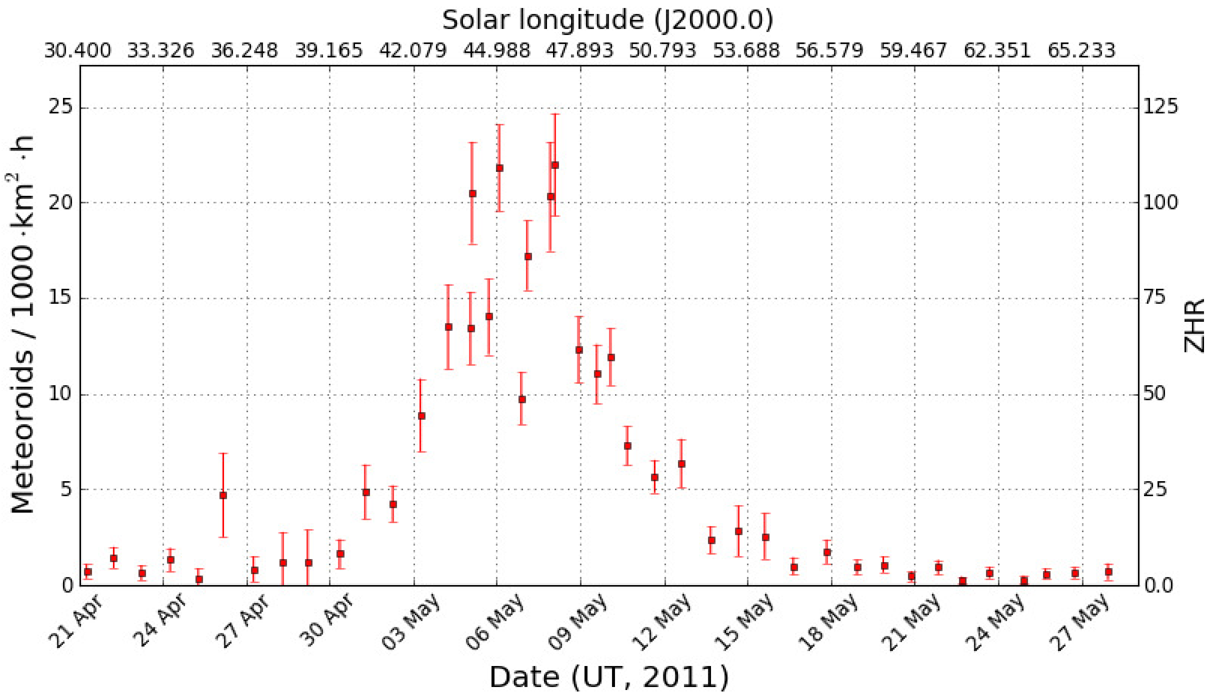


Figure 2: *Comparison of the flux density profiles of the eta-Aquariids obtained by a single Australian camera (upper graph) and all other cameras located mainly in Central Europe (lower graph).*

The activity profile of the eta-Lyrids (figure 3) is based on exactly 333 meteors and expectedly less exciting. The flux density remains below a level of one meteoroid per 1,000 square kilometers an hour. Peak activity was found near the end of the activity interval on May 11 (solar longitude 50 degrees). The 2009 long-term analysis revealed a nice symmetric activity profile for this shower with starting point at 48, peak at 50, and return to the start activity a 52 degrees solar longitude. Hence, the meteor shower list of MetRec has to be adapted so that in the future also the descending branch can be covered completely.

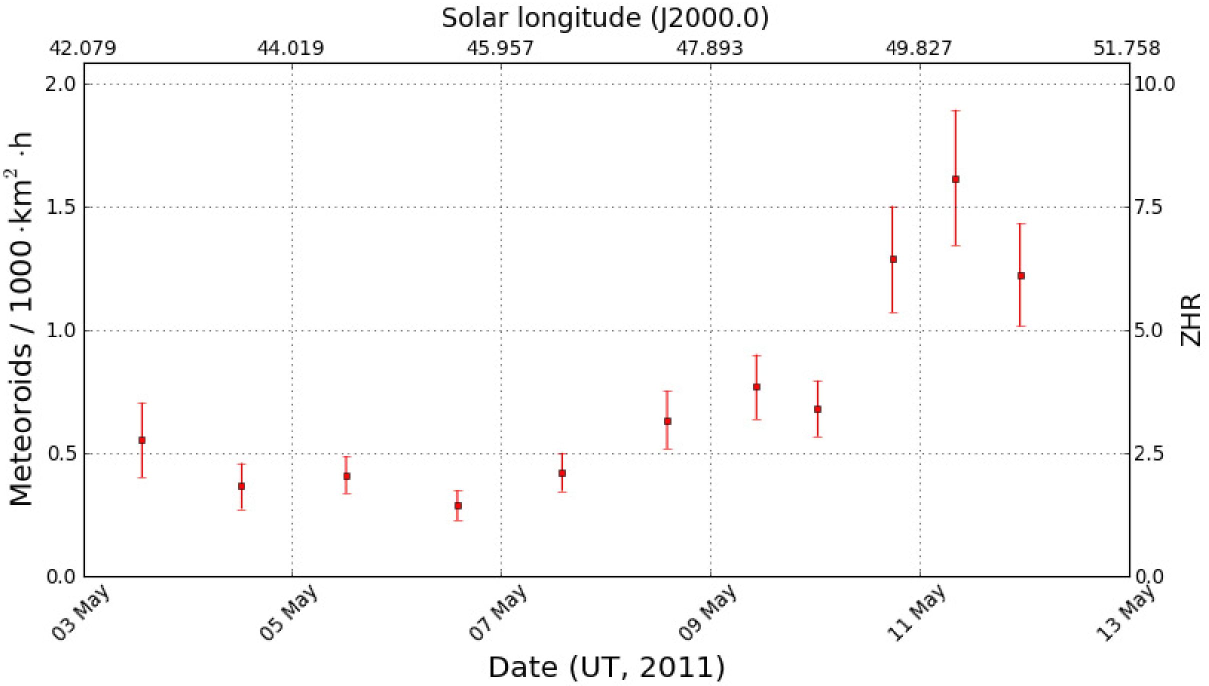


Figure 3: *Online flux density profile of the eta-Lyrids in May 2011 obtained from video observations of the IMO network.*

At the end let's have a look at an interesting phenomenon: When the flux density is plotted for those over 8,000 sporadic meteors recorded in May, there is significant scatter visible (figure 4). It is caused by the diurnal variation with maximum sporadic activity in the local morning hours. This variation was not modeled so far, as MetRec calculated with a fixed sporadic angular velocity and radiant altitude. In the latest software version, however, sporadic meteors are now modeled as a weighted mixture of the most important sporadic sources (N/S Apex, Helion, N/S Toroidal). The Antihelion source is not used, as it is covered by an own shower entry ANT in the meteor shower list. The weights of the sporadic sources are chosen such that the two Apex sources yield together 100%, and the other sources give and extra contribution.

First experiments have shown that the effective collection area for Sporadics is now increasing towards dawn as the Apex source rises. Hence, the scatter of the sporadic flux is reduced. How well the chosen sporadic model and the empirical weights are in reality can only be answered in fall, though, when there are sufficient observations from many observers.

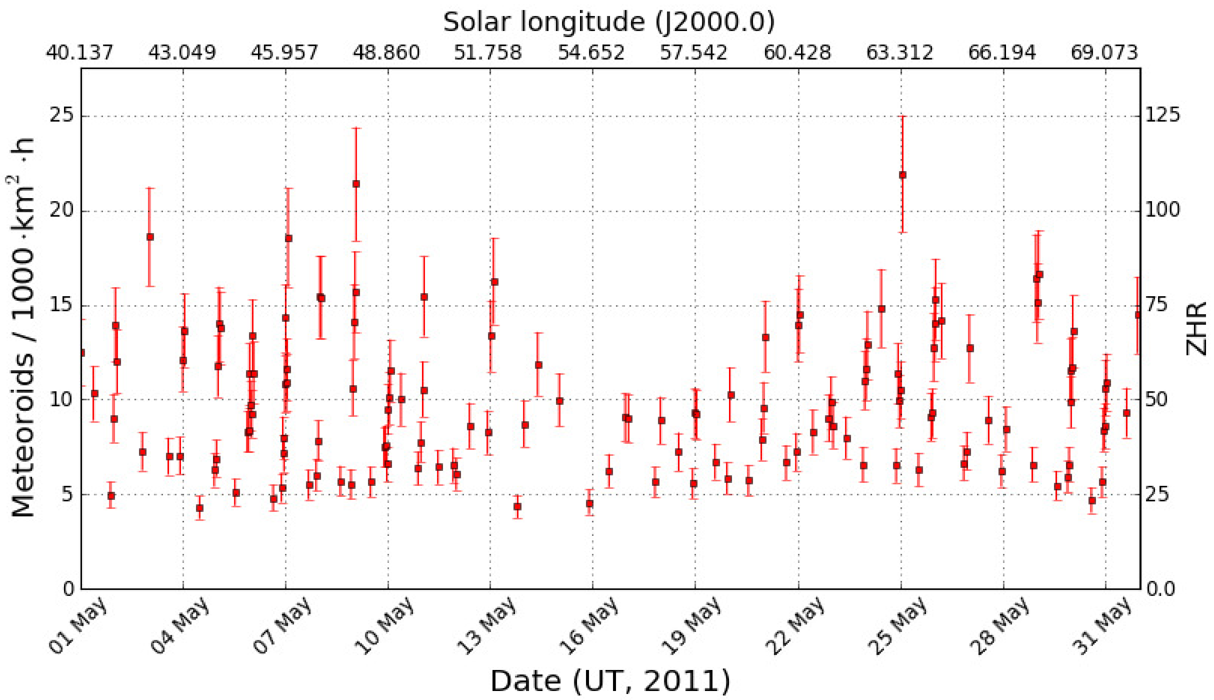


Figure 4: *Diurnal variation of the sporadic flux density in May 2011.*