

# Results of the IMO Video Meteor Network – July 2011

Sirko Molau, Abenstalstr. 13b, 84072 Seysdorf

2011/09/09

## 1. Observers

Code	Name	Place	Camera	FOV [°]	St.LM [mag]	Eff.CA [km <sup>2</sup> ]	Nights	Time [h]	Tot. CA [10 <sup>3</sup> km <sup>2</sup> h]	Meteors			
BASLU	Bastiaens	Hove/BE	URANIA1 (0.95/4)*	4545	2.5	237	5	7.8	2.8	18			
BERER	Berko	Ludanyhalaszi/HU	HULUD1 (0.95/3)	2256	4.8	1540	22	93.7	79.8	447			
			HULUD2 (0.75/6)	4860	3.9	1103	25	94.9	51.1	241			
			HULUD3 (0.75/6)	4661	3.9	1052	23	77.1	44.3	167			
BREMA	Breukers	Hengelo/NL	MBB3(0.75/6)	2399	4.2	699	8	28.3	21.5	104			
BRIBE	Brinkmann	Herne/DE	HERMINE (0.8/6)	2374	4.2	678	16	43.7	-	161			
			Berg. Gladbach/DE	KLEMOI (0.8/6)	2286	4.6	1080	21	53.5	34.6	202		
CASFL	Castellani	Monte Baldo/IT	BMH1 (0.8/6)	2350	-	-	19	83.3	-	337			
			BMH2 (1.5/4.5)*	4243	-	-	24	73.4	-	276			
CRIST	Crivello	Valbrenna/IT	C3P8 (0.8/3.8)	5455	4.2	1586	25	119.2	122.7	553			
			STG38 (0.8/3.8)	5614	4.4	2007	19	95.8	151.3	719			
CSISZ	Csizmadia	Zalaegerszeg/HU	HUVCSE01 (0.95/5)	2423	3.4	361	19	47.8	9.5	111			
CURMA	Currie	Grove/UK	MIC4 (0.8/6)	2411	5.2	2373	13	38.1	-	162			
ELTMA	Eltri	Venezia/IT	MET38 (0.8/3.8)	5631	4.3	2151	21	113.9	-	455			
GONRU	Goncalves	Tomar/PT	TEMPLAR1 (0.8/6)	2179	5.3	1842	26	154.9	188.8	825			
			TEMPLAR2 (0.8/6)	2080	5.0	1508	28	147.6	119.1	692			
			TEMPLAR3 (0.8/8)	1438	4.3	571	5	19.7	11.0	117			
GOVMI	Govedic	Sredisce ob Dr./SI	ORION2 (0.8/8)	1447	5.5	1841	18	78.9	39.6	337			
			IGAAN	Igaz	Baja/HU	HUBAJ (0.8/3.8)	5552	2.8	403	18	68.8	21.2	253
JONKA	Jonas	Budapest/HU	HUHOD (0.8/3.8)	5502	3.4	764	27	118.6	60.4	412			
			KACJA	Kac	Kostanjevec/SI	HUPOL (1.2/4)	3790	3.3	475	19	41.7	19.8	125
			KACJA	Kac	Kamnik/SI	HUSOP (0.8/6)	2031	3.8	460	23	65.3	13.5	198
						HUSOR (0.95/4)	2286	3.9	445	23	101.2	-	347
KERST	Kerr	Glenlee/AU	METKA (0.8/8)*	1372	4.0	361	10	58.2	-	166			
			ORION1 (0.8/8)	1402	3.8	331	22	100.6	24.7	220			
KOSDE	Koschny	Noordwijkerh./NL	REZIKA (0.8/6)	2270	4.4	840	15	65.2	45.8	461			
			STEFKA (0.8/3.8)	5471	2.8	379	12	54.6	10.6	207			
LERAR	Leroy	FR	GOCAM1 (0.8/3.8)	5189	4.6	2550	30	291.7	669.3	3250			
			MOLSI	Molau	Seysdorf/DE	LIC4 (1.4/50)*	2027	-	-	9	34.7	74.6	174
MOLSI	Molau	Seysdorf/DE	SAPHIRA (1.2/6)	3260	3.4	301	16	59.5	23.3	65			
			AVIS2 (1.4/50)*	1776	6.1	3817	10	36.9	100.5	666			
			MINCAM1 (0.8/8)	1477	4.9	1084	23	61.3	45.3	281			
MORJO	Morvai	Fülöpszallas/HU	REMO1 (0.8/3.8)	5600	3.0	486	14	46.5	-	85			
			REMO2 (0.8/3.8)	5613	4.0	1186	16	54.5	31.2	153			
			REMOC (0.8/3.8)	5613	4.0	1186	16	54.5	31.2	153			
OTTMI	Otte	Pearl City/US	HUFUL (1.4/5)	2522	3.5	532	12	51.5	35.7	184			
PERZS	Perko	Becsehely/HU	ORIE1 (1.4/5.7)	3837	3.8	460	20	88.4	-	332			
ROTEC	Rothenberg	Berlin/DE	HUBEC (0.8/3.8)*	5498	2.9	460	24	72.5	-	343			
SARAN	Saraiva	Carnaxide/PT	ARMEFA (0.8/6)	2366	4.5	911	13	43.0	29.5	122			
			RO1 (0.75/6)	2362	3.7	381	25	89.0	-	402			
SCHHA	Schremmer	Niederkrüchten/DE	RO2 (0.75/6)	2381	3.8	459	23	86.5	46.3	353			
			DORAEMON (0.8/3.8)	4900	3.0	409	17	45.3	-	122			
SLAST	Slavec	Ljubljana/SI	KAYAK1 (1.8/28)	588	-	-	17	48.2	-	198			
STOEN	Stomeo	Scorze/IT	MIN38 (0.8/3.8)	5566	4.8	3270	20	95.7	179.0	687			
			NOA38 (0.8/3.8)	5609	4.2	1911	24	108.3	189.4	587			
			SCO38 (0.8/3.8)	5598	4.8	3306	24	107.8	185.7	767			
			OND1 (1.4/50)*	2195	5.8	4595	2	7.5	15.8	132			
STORO	Stork	Ondrejov/CZ	MINCAM2 (0.8/6)	2362	4.6	1152	10	24.1	21.4	70			
STRJO	Strunk	Herford/DE	MINCAM3 (0.8/12)	728	5.7	975	14	30.5	-	85			
			MINCAM5 (0.8/6)	2349	5.0	1896	12	33.2	34.7	143			
			HUMOB (0.8/6)	2388	4.8	1607	23	84.4	72.5	373			
TEPIS	Tepliczky	Budapest/HU	SRAKA (0.8/6)*	2222	-	-	21	75.9	-	280			
TRIMI	Triglav	Velenje/SI											
Sum							31	3722.7	-	18167			

\* active field of view smaller than video frame

## 2. Observing Times (h)

July	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
BASLU	-	-	-	-	-	-	0.2	-	3.5	0.3	0.7	-	-	-	-
BERER	-	3.3	-	5.5	4.4	5.7	5.7	5.7	5.8	3.7	5.8	5.0	4.7	-	5.8
	0.3	2.3	-	5.5	4.0	5.8	5.6	5.8	5.9	4.2	5.9	5.8	5.9	1.1	6.0
	0.3	1.5	-	5.4	3.3	5.8	5.8	3.7	5.9	3.7	5.6	5.8	3.5	-	5.6
BREMA	4.5	-	-	4.6	0.7	3.2	-	3.2	4.8	3.4	-	-	-	-	-
BRIBE	5.2	-	-	5.2	3.3	3.2	-	4.4	0.8	3.5	2.3	0.3	-	-	3.2
	4.1	-	3.8	5.4	3.1	3.8	1.1	-	1.2	2.8	2.9	1.5	-	-	2.4
CASFL	3.3	4.7	6.6	-	-	1.7	3.0	4.7	3.9	3.1	6.8	1.0	2.2	6.9	4.4

	2.4	5.2	5.0	-	0.9	-	2.5	3.7	1.2	-	0.3	2.2	-	1.7	0.5
CRIST	6.3	6.3	1.9	-	5.2	-	4.4	4.0	-	6.5	6.5	6.5	0.8	2.6	3.0
	6.2	1.5	1.1	-	-	-	-	-	3.1	-	-	-	-	-	-
CSISZ	-	1.5	-	-	0.5	2.4	2.1	3.5	4.7	4.4	5.6	2.7	0.3	-	2.2
CURMA	-	1.7	0.3	2.6	-	-	-	-	4.6	4.3	-	-	2.0	5.3	-
ELTMA	-	-	6.0	-	0.7	3.7	4.6	6.3	6.5	6.5	6.4	5.7	4.9	-	4.7
GONRU	7.0	3.1	-	7.0	6.9	5.7	6.9	-	2.6	5.7	4.2	5.2	5.1	6.1	3.4
	7.0	3.1	1.3	7.0	6.9	5.5	5.1	-	2.3	6.9	2.3	3.4	2.4	1.3	1.6
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GOVMI	1.2	3.8	-	5.9	4.6	5.8	6.0	4.7	6.0	6.0	4.9	4.8	3.0	-	-
IGAAN	-	-	-	-	-	2.6	6.3	1.5	6.3	6.4	6.4	6.4	5.1	2.4	1.5
	5.2	4.2	-	2.2	4.5	5.3	4.5	5.5	4.6	5.3	6.3	6.3	6.3	4.8	1.2
	-	-	-	-	0.1	0.5	-	4.0	0.2	-	3.0	1.9	-	-	6.1
	1.0	3.7	2.8	-	0.3	4.3	1.8	4.8	6.0	3.6	4.1	6.2	-	-	1.1
JONKA	4.7	3.7	-	-	4.7	5.8	5.9	5.9	5.9	5.9	5.9	6.0	4.4	-	5.1
KACJA	-	4.0	-	-	-	6.5	6.5	6.6	6.2	6.6	-	6.7	6.5	-	-
	0.4	6.0	2.6	4.1	-	6.0	5.9	6.2	6.2	6.2	4.6	5.3	6.3	4.8	3.5
	0.9	6.1	-	5.8	1.8	6.3	5.2	5.8	3.4	6.4	-	5.9	-	-	-
	0.8	5.7	-	6.2	-	6.3	2.1	5.8	3.3	6.4	-	5.5	-	-	-
KERST	9.9	11.3	7.6	10.4	10.3	9.9	11.1	10.4	11.4	11.4	10.0	10.9	7.2	4.3	-
KOSDE	-	-	-	-	-	-	1.1	-	4.4	4.4	-	-	-	-	-
LERAR	-	4.7	5.6	-	0.7	5.7	-	-	4.3	5.8	5.9	-	1.7	-	0.3
MOLSI	2.5	-	-	2.8	-	3.3	-	-	-	-	4.9	-	-	-	-
	5.6	2.5	-	5.7	1.3	2.7	-	0.8	-	1.8	5.4	1.2	1.1	1.3	6.0
	1.0	-	-	-	3.4	0.5	-	4.7	0.3	-	4.8	-	-	4.9	4.9
	4.4	-	-	-	4.6	1.2	-	4.7	2.7	-	4.8	-	-	4.7	2.2
MORJO	-	-	-	-	2.7	-	-	-	0.8	4.8	3.6	6.3	5.2	-	2.5
OTTMI	2.0	5.0	2.7	3.8	-	4.8	-	-	4.3	5.0	5.2	2.2	5.6	-	-
PERCZ	1.8	3.7	0.7	4.6	3.5	6.2	5.3	6.3	6.3	6.3	-	-	-	1.5	2.7
ROTEC	1.8	-	-	-	-	1.0	-	4.7	2.3	-	4.8	-	-	5.0	-
SARAN	3.2	1.2	-	5.0	0.2	4.5	5.0	-	1.7	4.0	4.6	1.9	3.9	4.5	2.3
	4.7	-	0.3	5.2	-	5.5	7.3	-	0.4	4.0	2.8	2.4	5.2	5.1	2.9
SCHHA	3.5	5.8	2.4	5.1	-	2.6	-	1.6	2.6	1.1	3.5	-	-	-	1.6
SLAST	-	4.7	4.5	-	0.3	3.2	3.0	3.3	4.1	4.7	2.1	0.8	-	-	-
STOEN	-	4.7	6.3	0.5	-	-	-	-	6.4	3.8	6.5	-	3.9	2.1	4.2
	-	4.6	6.3	0.8	3.2	3.1	4.8	5.6	6.4	2.4	6.5	-	3.0	2.4	4.7
	-	4.7	6.3	1.0	1.3	4.1	3.6	5.4	6.4	3.6	6.5	-	4.7	1.3	5.3
STORO	-	-	-	-	-	-	-	-	-	-	4.0	-	-	-	-
STRJO	1.9	-	-	1.3	2.8	2.4	-	3.1	-	3.0	2.3	-	-	-	1.5
	3.7	-	-	0.3	2.6	1.1	-	4.0	1.4	2.2	2.0	0.6	-	-	4.4
	1.7	-	-	1.5	3.9	2.1	-	4.1	0.3	4.1	4.0	-	-	-	4.4
TEPIS	2.0	2.1	-	-	5.3	5.3	5.4	5.4	5.4	5.5	5.5	5.6	5.6	-	5.6
TRIMI	2.8	4.8	2.5	3.2	0.7	4.9	4.8	1.7	5.3	3.6	5.2	3.2	-	-	-
Sum	113.3	131.2	76.6	123.6	102.7	170.0	142.6	161.6	182.1	193.3	195.4	135.2	110.5	74.1	116.8

July	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
BASLU	-	-	-	-	-	-	3.1	-	-	-	-	-	-	-	-	-
BERER	6.0	1.8	4.6	-	1.5	-	6.3	1.9	-	2.6	0.2	5.0	-	-	2.7	-
	6.0	4.1	1.9	-	0.5	-	5.9	0.3	-	2.7	0.9	4.8	-	-	3.4	0.3
	6.0	0.4	2.5	-	-	-	2.9	0.3	-	2.1	1.0	2.5	-	-	2.1	1.4
BREMA	-	-	-	-	-	3.9	-	-	-	-	-	-	-	-	-	-
BRIBE	-	0.7	2.5	-	-	1.3	2.6	-	-	-	-	-	1.6	-	-	3.6
	-	1.2	2.0	2.3	-	-	4.0	1.2	1.4	-	0.3	1.3	-	1.0	-	6.7
CASFL	4.8	-	-	-	-	7.2	4.1	-	7.3	4.4	3.2	-	-	-	-	-
	2.0	-	6.6	-	4.7	5.5	4.1	-	6.5	3.9	0.6	2.2	0.3	5.5	2.4	3.5
CRIST	0.5	-	-	0.9	6.8	4.8	-	4.2	7.0	7.0	7.1	3.7	2.8	5.9	7.2	7.3
	4.0	1.8	6.7	-	6.8	5.7	6.9	4.3	7.0	7.0	7.0	2.7	2.4	7.2	7.2	7.2
CSISZ	4.6	4.2	0.7	2.2	-	1.6	1.4	-	-	-	-	-	-	3.0	-	0.2
CURMA	1.8	-	-	-	-	-	-	3.3	5.3	-	-	4.0	0.2	-	2.7	-
ELTMA	4.9	1.3	6.8	-	6.4	6.1	5.9	-	-	-	6.6	-	6.6	6.7	-	6.6
GONRU	-	-	-	7.4	5.5	7.5	7.5	6.4	7.6	7.7	7.3	7.6	7.7	3.7	2.3	7.8
	-	7.3	-	6.1	4.7	7.6	7.6	7.6	7.6	7.0	7.4	7.7	7.7	3.8	2.5	6.9
	-	-	-	-	-	-	-	-	-	-	-	6.8	7.8	1.1	0.9	3.1
GOVMI	4.9	3.6	1.5	3.2	-	-	-	-	-	-	2.2	-	-	6.8	-	-
IGAAN	5.4	2.6	3.2	2.1	-	-	-	-	-	-	-	-	4.3	1.2	1.9	3.2
	5.4	5.2	3.1	2.2	3.6	4.3	3.8	-	-	2.5	0.3	5.8	5.8	-	5.7	4.7
	-	4.2	1.5	1.6	-	2.3	3.1	3.0	-	4.2	1.1	3.1	0.3	-	0.8	0.7

	6.3	2.3	4.6	1.9	-	0.4	0.7	2.0	-	-	1.3	1.6	-	3.0	-	1.5
JONKA	6.3	6.3	0.1	0.3	-	2.8	6.5	0.3	-	-	-	6.7	2.2	-	3.1	2.7
KACJA	6.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9
	6.4	-	2.5	-	-	3.7	-	-	-	-	3.8	-	5.1	7.0	0.3	3.7
	-	0.9	3.0	-	-	3.7	-	-	-	-	3.0	-	7.0	-	-	-
	-	-	-	-	-	3.6	-	-	-	-	2.8	-	6.1	-	-	-
KERST	2.4	7.9	9.7	11.2	9.1	11.2	8.1	10.7	11.0	10.4	10.2	10.8	10.1	11.2	10.4	11.2
KOSDE	-	-	-	4.0	-	-	1.2	-	4.7	-	-	4.2	5.3	-	-	5.4
LERAR	-	-	-	0.8	-	-	-	0.3	-	0.7	-	-	2.7	6.7	6.8	6.8
MOLSI	1.4	-	5.3	-	-	-	-	-	4.2	-	4.8	5.8	-	-	-	1.9
	2.7	-	0.3	-	-	0.1	-	0.7	6.5	0.6	6.6	6.7	-	0.5	0.5	0.7
	5.0	-	3.9	-	-	-	-	5.5	0.7	-	1.1	5.8	-	-	-	-
	3.6	-	5.2	1.2	-	-	-	5.5	1.4	-	2.4	5.6	0.3	-	-	-
MORJO	6.5	6.5	-	-	-	3.0	5.5	-	-	4.1	-	-	-	-	-	-
OTTMI	5.5	-	4.8	2.7	6.7	-	-	-	1.8	5.7	1.7	-	-	6.2	7.0	5.7
PERCZ	4.6	3.8	0.7	3.7	0.5	0.3	0.3	-	1.1	-	-	0.5	-	5.7	1.8	0.6
ROTEC	2.3	-	5.2	1.3	-	-	-	4.5	5.6	1.8	-	-	2.7	-	-	-
SARAN	0.7	2.6	-	5.5	3.5	-	-	-	5.5	6.3	4.7	7.9	2.7	1.8	1.3	4.5
	0.7	1.4	-	5.9	2.1	-	-	-	7.7	-	7.7	6.9	3.2	0.9	0.9	3.3
SCHHA	-	3.9	1.2	-	0.2	-	2.1	-	2.1	-	-	0.3	-	-	-	5.7
SLAST	2.2	-	0.3	-	-	1.7	-	-	-	-	2.3	-	5.2	4.1	-	1.7
STOEN	5.8	1.8	6.8	-	6.5	6.9	4.9	-	2.8	3.8	4.3	-	-	6.9	-	6.8
	6.1	0.8	6.8	-	6.5	6.9	4.4	-	3.8	1.8	3.7	-	-	6.9	-	6.8
	5.3	0.7	6.0	-	6.4	6.2	4.8	-	4.1	2.9	4.3	-	-	6.9	-	6.0
STORO	-	-	-	-	-	-	-	-	-	-	-	3.5	-	-	-	-
STRJO	-	2.0	-	-	-	3.8	-	-	-	-	-	-	-	-	-	-
	-	0.8	2.4	0.2	-	4.8	-	-	-	-	-	-	-	-	-	-
	-	1.2	1.2	-	-	4.7	-	-	-	-	-	-	-	-	-	-
TEPIS	5.6	4.7	0.5	0.2	-	-	4.3	0.6	-	0.8	0.9	5.1	-	1.8	-	1.2
TRIMI	5.9	4.4	-	3.1	0.5	2.1	-	-	-	-	1.3	-	5.5	4.5	-	5.9
Sum	148.3	90.4	114.1	70.0	82.5	123.7	112.0	62.6	112.7	90.0	112.1	128.6	105.6	120.0	73.9	147.2

### 3. Results (Meteors)

July	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
BASLU	-	-	-	-	-	-	1	-	8	1	2	-	-	-	-
BERER	-	5	-	33	17	33	27	28	29	9	49	21	12	-	32
	1	7	-	9	11	10	6	15	12	10	27	11	14	2	14
	1	6	-	9	10	9	10	7	8	10	19	9	5	-	13
BREMA	19	-	-	18	5	7	-	10	15	14	-	-	-	-	-
BRIBE	23	-	-	18	7	7	-	12	1	14	6	1	-	-	12
	13	-	9	28	9	7	1	-	1	10	13	5	-	-	8
CASFL	9	14	29	-	-	3	8	28	20	12	24	2	5	31	21
	8	15	18	-	1	-	12	19	7	-	1	4	-	4	4
CRIST	25	18	3	-	15	-	13	10	-	24	25	7	2	9	8
	43	2	1	-	-	-	-	-	15	-	-	-	-	-	-
CSISZ	-	5	-	-	2	4	3	8	10	11	13	10	1	-	3
CURMA	-	3	1	10	-	-	-	-	4	12	-	-	8	15	-
ELTMA	-	-	28	-	2	11	6	26	24	19	23	9	15	-	10
GONRU	40	5	-	31	38	16	36	-	16	19	14	28	22	20	23
	27	13	5	29	23	20	22	-	7	22	10	21	13	6	3
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GOVMI	2	30	-	21	15	29	28	26	25	35	28	18	4	-	-
IGAAN	-	-	-	-	-	9	13	4	15	23	30	28	15	7	3
	11	23	-	6	20	15	13	14	11	20	28	22	14	6	6
	-	-	-	-	1	2	-	8	2	-	10	9	12	-	19
	2	6	5	-	1	14	8	15	22	9	14	20	-	-	4
JONKA	21	11	-	-	17	12	16	15	12	22	31	19	9	-	16
KACJA	-	15	-	-	-	24	25	17	20	17	-	15	8	-	-
	1	7	11	3	-	13	12	13	19	17	6	4	7	7	2
	3	43	-	20	2	48	20	58	39	56	-	27	-	-	-
	2	17	-	11	-	23	7	19	18	17	-	9	-	-	-
KERST	88	97	71	103	104	84	82	89	99	102	82	79	61	19	-
KOSDE	-	-	-	-	-	-	2	-	21	15	-	-	-	-	-
LERAR	-	3	5	-	2	2	-	-	4	1	3	-	4	-	1
MOLSI	49	-	-	39	-	28	-	-	-	-	72	-	-	-	-

	10	5	-	17	5	10	-	3	-	3	27	3	2	10	33
	2	-	-	-	6	1	-	5	1	-	5	-	-	4	5
	4	-	-	-	16	1	-	10	3	-	10	-	-	18	9
MORJO	-	-	-	-	21	-	-	-	2	16	14	19	8	-	6
OTTMI	7	16	6	17	-	11	-	-	10	11	21	7	19	-	-
PERCZ	1	32	1	20	16	24	25	32	22	28	-	-	-	10	7
ROTEC	2	-	-	-	-	2	-	10	5	-	11	-	-	8	-
SARAN	12	5	-	16	2	18	34	-	4	19	17	7	21	15	13
	17	-	1	12	-	19	19	-	1	19	8	11	18	18	9
SCHHA	7	9	7	11	-	5	-	6	4	4	6	-	-	-	5
SLAST	-	30	15	-	2	11	5	12	11	19	8	1	-	-	-
STOEN	-	40	57	2	-	-	-	-	39	15	41	-	13	9	13
	-	31	43	3	24	7	14	46	23	13	25	-	10	4	16
	-	29	54	1	14	11	13	55	34	16	41	-	25	4	28
STORO	-	-	-	-	-	-	-	-	-	-	78	-	-	-	-
STRJO	6	-	-	2	7	5	-	11	-	9	4	-	-	-	3
	7	-	-	1	6	4	-	12	4	10	4	1	-	-	10
	14	-	-	2	13	9	-	29	1	14	10	-	-	-	16
TEPIS	4	6	-	-	19	23	21	18	34	20	36	32	20	-	27
TRIMI	17	15	7	9	2	17	13	13	23	17	12	4	-	-	-
Sum	498	563	377	501	455	608	514	703	697	753	906	463	367	226	402

July	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
BASLU	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-
BERER	31	9	19	-	4	-	28	5	-	9	1	20	-	-	26	-
	16	8	7	-	3	-	21	1	-	6	2	15	-	-	12	1
	12	1	9	-	-	-	11	1	-	4	1	5	-	-	5	2
BREMA	-	-	-	-	-	16	-	-	-	-	-	-	-	-	-	-
BRIBE	-	4	10	-	-	8	9	-	-	-	-	-	4	-	-	25
	-	2	7	6	-	-	9	1	8	-	1	2	-	6	-	56
CASFL	21	-	-	-	-	34	16	-	35	19	6	-	-	-	-	-
	6	-	14	-	21	26	8	-	23	14	2	8	1	30	17	13
CRIST	1	-	-	3	32	14	-	17	46	37	44	39	11	35	37	78
	11	5	10	-	58	21	29	23	59	76	80	26	6	93	72	89
CSISZ	10	8	2	4	-	2	4	-	-	-	-	-	-	10	-	1
CURMA	13	-	-	-	-	-	-	25	32	-	-	31	1	-	7	-
ELTMA	13	3	31	-	27	37	15	-	-	-	39	-	29	40	-	48
GONRU	-	-	-	37	27	50	42	30	49	36	52	77	65	17	6	29
	-	29	-	26	21	31	47	35	37	32	43	60	53	17	8	32
	-	-	-	-	-	-	-	-	-	-	-	52	46	4	1	14
GOVMI	15	8	6	6	-	-	-	-	-	-	8	-	-	33	-	-
IGAAN	18	8	9	9	-	-	-	-	-	-	-	-	11	5	11	35
	19	15	7	6	7	14	14	-	6	1	23	26	-	26	39	-
	-	14	6	2	-	5	9	9	-	14	2	10	1	-	5	2
	28	6	11	5	-	2	2	2	-	-	7	3	-	6	-	6
JONKA	15	20	1	1	-	12	33	1	-	-	-	33	6	-	8	16
KACJA	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
	20	-	4	-	-	11	-	-	-	-	11	-	13	21	1	17
	-	3	7	-	-	37	-	-	-	-	5	-	93	-	-	-
	-	-	-	-	-	29	-	-	-	-	3	-	52	-	-	-
KERST	9	40	83	96	103	98	115	137	141	164	150	176	203	203	181	191
KOSDE	-	-	-	17	-	-	6	-	26	-	-	15	40	-	-	32
LERAR	-	-	-	3	-	-	-	1	-	2	-	-	6	8	11	9
MOLSI	6	-	39	-	-	-	-	-	128	-	144	155	-	-	-	6
	4	-	1	-	-	1	-	2	43	3	42	49	-	2	4	2
	5	-	9	-	-	-	-	19	2	-	3	18	-	-	-	-
	8	-	14	4	-	-	-	22	2	-	8	23	1	-	-	-
MORJO	22	16	-	-	-	15	30	-	-	15	-	-	-	-	-	-
OTTMI	20	-	13	8	25	-	-	-	8	16	9	-	-	42	36	30
PERCZ	24	15	1	9	2	1	1	-	1	-	-	1	-	63	6	1
ROTEC	4	-	19	4	-	-	-	30	22	2	-	-	3	-	-	-
SARAN	2	6	-	22	12	-	-	-	27	24	23	40	21	7	13	22
	3	6	-	24	8	-	-	-	25	-	43	46	22	4	7	13
SCHHA	-	12	6	-	1	-	9	-	5	-	-	1	-	-	-	24
SLAST	6	-	1	-	-	3	-	-	-	-	8	-	35	25	-	6
STOEN	29	5	53	-	54	68	19	-	25	22	13	-	-	76	-	94
	21	2	30	-	47	50	22	-	19	4	12	-	-	58	-	63

	35	2	42	-	75	62	21	-	34	13	15	-	-	68	-	75
STORO	-	-	-	-	-	-	-	-	-	-	-	54	-	-	-	-
STRJO	-	8	-	-	-	15	-	-	-	-	-	-	-	-	-	-
	-	4	3	1	-	18	-	-	-	-	-	-	-	-	-	-
	-	8	6	-	-	21	-	-	-	-	-	-	-	-	-	-
TEPIS	25	21	2	1	-	-	21	4	-	3	1	28	-	3	-	4
TRIMI	17	12	-	8	3	12	-	-	-	-	4	-	27	14	-	34
Sum	511	300	482	302	530	713	541	365	797	521	783	1010	776	890	500	1112

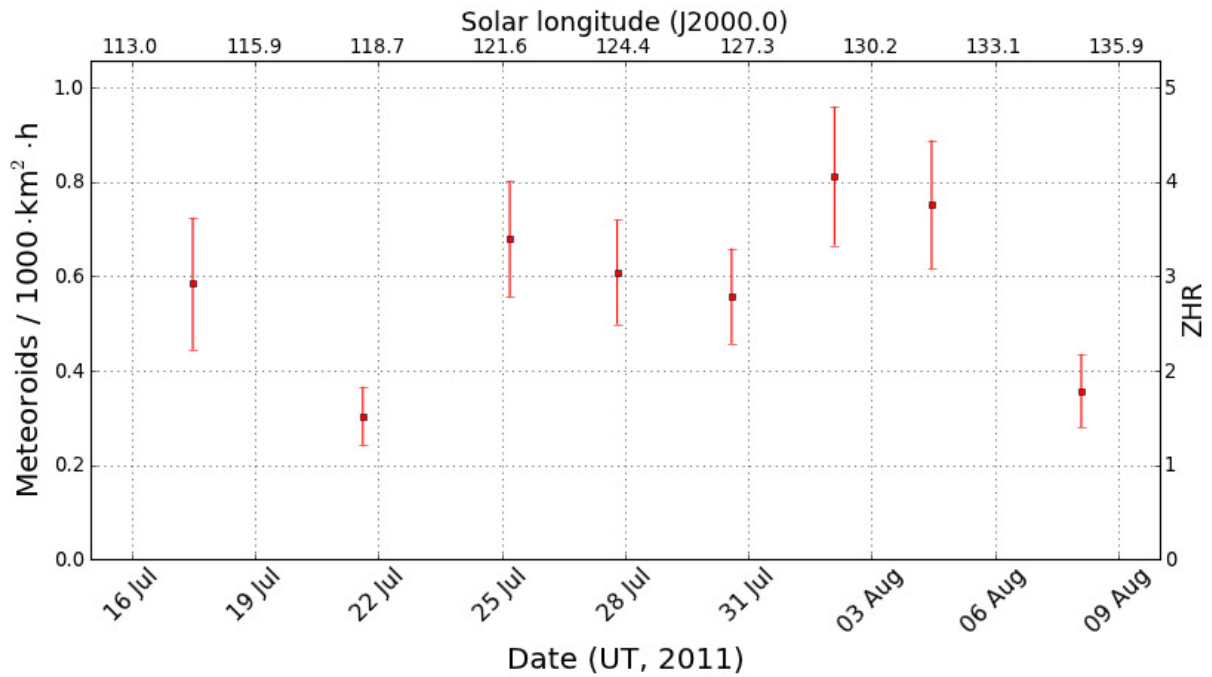
July 2011 was a fine month. Whereas in the first half of July all observers enjoyed excellent conditions – more than 40 cameras were active in selected nights – the weather deteriorated significantly only for the more northern observers in the second half. In southern and eastern Europe the conditions remained favorable, so that in total 23 out of 52 cameras collected twenty or more observing nights. Also Steve Kerr enjoyed the best winter observing conditions in Australia and collected almost 300 observing hours and more than 3,000 meteors in 30 nights. With a single camera, he currently ranks second with respect to meteor detections in the interim result behind Enrico Stomeo, who operates three cameras. However, the yield of Steve will reduce rapidly in the months to come, whereas the meteor season has just begun for the northern hemisphere observers.

Since July 2010 presented fine observing conditions, the increase is not as high in this month as before. With a total of 3,700 hours we collected less effective observing time than in March till May 2011, but still 700 hours more than in the last year. The meteor count increased by 3,000 to more than 18,000 compared to 2010.

In July we could welcome three new camera system to the IMO network at once, two of them operated from new countries. From France, Arnaud Leroy has begun submitting data. He operates the 902H2 Watec camera SAPHIRA with a 6 mm f/1.2 lens from a small suburb east of Paris. With Luc Bastiaens, we now also have a Belgian observer in our midst. His camera URANIA1 employs a Watec 902H2 camera as well, but with a vari-focal f/0.95 Fujinon lens. The current camera location is strongly illuminated and the field of view is restricted by nearby trees and houses, but Luc is already looking for a better place.

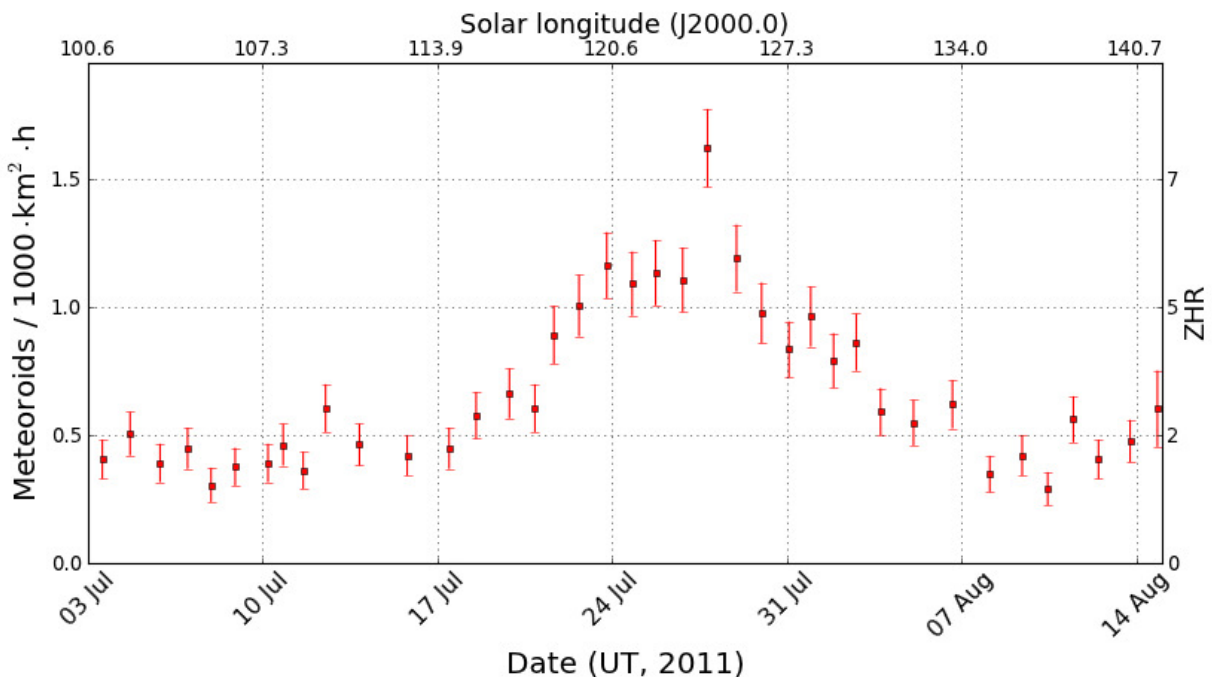
Finally, Erno Berko deployed his third camera HULUD3, which gives Hungary a further edge.

Now to the observing results: The IMO working list contains three showers in July which all have their maximum at the end of July. At first we shall mention the far southern shower of the Pisces Austrinids, which could not be confirmed by our 2009 meteor shower analysis. In the Australian data set of 2010 there are 62 meteors matching the PAU radiant (with 1,285 sporadics in parallel), equally distributed over the full activity interval. The flux density remained below 0.3 meteors per 1,000 km<sup>2</sup> and hour, which hints on chance alignments of sporadic meteors. If all other data are added, the data set expands to 207 meteors matching the PAU radiant (7,021 sporadic meteors in parallel). Because of some systematic variation, the flux density now reaches values up to 0.8, but remains essentially constant in the full interval (figure 1). Hence, also in this year the shower cannot be detected with any certainty.



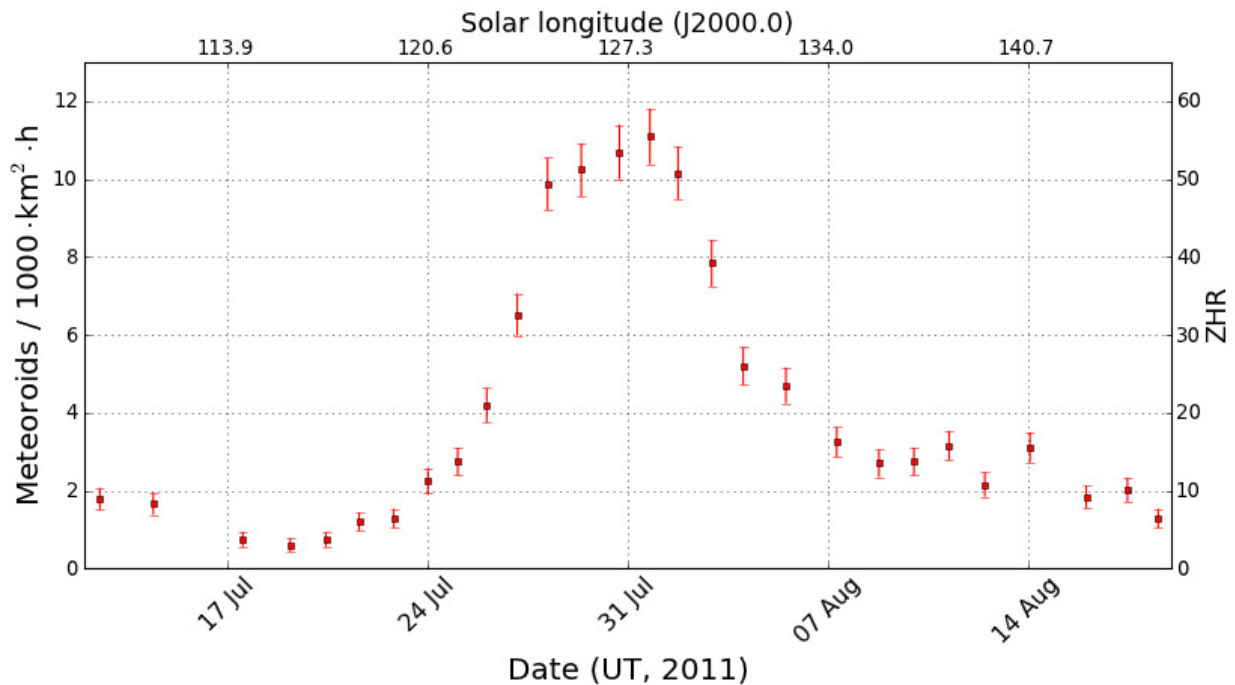
**Figure 1:** Flux density profile of the Pisces Austrinids from observations of the IMO Video Meteor Network in July/August 2011.

The alpha-Capricornids, on the contrary, were clearly detected in the 2009 meteor shower analyses. They were detected between 109 and 138 degrees solar longitude. The maximum occurred at 125 degrees, with a plateau of activity between 120 and 125 degrees.. The 2011 data set contains 1,788 shower meteors in the full activity interval until mid-August, with 13,562 sporadic meteors recorded at the same time. The flux density starts to increase at 115 degrees solar longitude and goes back to background level at 134 degrees. The plateau of activity between 120 and 125 degrees is confirmed at a level of slightly above 1 meteoroid per 1,000 km<sup>2</sup> and hour. There is a short peak at 124 degrees solar longitude (figure 2). Looking only at the Australian data, the plateau become more rounded and the peak disappears. The reason might be that as also in case of CAP shower the European data give on average slightly higher flux densities, and this particular interval falls right into the Australian daytime hours.



**Figure 2:** Flux density profile of the alpha-Capricornids from observations of the IMO Video Meteor Network in July/August 2011.

Finally we have the strongest shower of July – the southern delta-Aquariids. In the 2009 analysis they show a steep rise between 118 and 124 degrees solar longitude, followed by a short activity plateau with a peak at 127 degrees, and a slower drop which ends around 140 degrees. Based on 2,559 southern delta-Aquariids until mid-August (with 11,257 sporadic meteors recorded at the same time), the 2011 flux density profile has a similar shape (figure 3). With 11 meteoroids per 1,000 km<sup>2</sup> and hour, they are about half as strong at the “other“ Aquariids in May.



**Figure 3:** Flux density profile of the southern delta-Aquariids from observations of the IMO Video Meteor Network in July/August 2011.

In the end I would like to point to a special phenomenon: On July 8/9, the Polish observer Maciej Maciejewski managed to record two sprites with MetRec from his observing site in Chelm, even though MetRec is (contrary to UFOCapture) not designed for such events. Sprites are typically extremely short-lived events and occur in single video frames only. So they are filtered out in the standard configuration of MetRec to increase the sensitivity for faint meteors. In this case, some flash lights illuminated a lower cloud causing the “false detections” (figure 4). More details can be found at <http://www.pkim.org/?q=pl/node/1563>



**Figure 4:** Two sprites, recorded by chance by Maciej Maciejewski with MetRec in Poland on July 8/9, 2011.

On this occasion we learned that Hungarian observers had also recorded sprites with MetRec on some occasions previously, in one case even triggered by a meteor that appeared at the same time. Figure 5 shows two nice recordings by Zsolt Perko, taken with HUBEC from Becsehely on May 27, 2011. More details are given at <http://www.videometeor.hu/2011-majusi-lidercek>



**Figure 5:** Two further chance recordings, taken by HUBEC by Zsolt Perko of Hungary on May 27, 2011.