Results of the IMO Video Meteor Network – August 2010

Sirko Molau, Abenstalstr. 13b, 84072 Seysdorf *2010/10/07*

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	TIMES4 (1.4/50)	2359	-	-	7	12.9	-	38
			TIMES5 (0.95/50)	33	-	-	2	2.6	-	9
BERER	Berko	Ludanyhalaszi	HULUD (1.0/2.6)	6638	-	-	8	38.7	-	228
BRIBE	Brinkmann	Herne	HERMINE (0.8/6)	2374	-	-	25	109.1	-	613
CASFL	Castellani	Monte Baldo	BMH1 (0.8/6)	2350	-	-	30	138.8	-	471
			BMH2 (0.8/6)*	4243	-	-	29	173.9	-	863
CRIST	Crivello	Valbrevenna	C3P8 (0.8/3.8)	5575	-	-	22	123.1	-	803
			STG38 (0.8/3.8)	5593	-	-	29	162.5	-	1112
ELTMA	Eltri	Venezia	MET38 (0.8/3.8)	5620	-	-	28	168.8	-	921
GONRU	Goncalves	Tomar	TEMPLAR1 (0.8/6)*	2188	5.3	2331	26	172.8	266.2	1195
			TEMPLAR2 (0.8/6)*	2303	5.0	2397	26	164.9	308.8	879
GOVMI	Govedic	Sredisce ob Dravi	ORION2 (0.8/8)	1471	6.0	3916	21	116.5	187.4	960
HERCA	Hergenrother	Tucson	SALSA2 (1.2/4)	2900	-	-	2	1.6	-	8
			SALSA3 (1.2/4)*	4332	4.0	1471	26	128.6	150.8	750
HINWO	Hinz	Brannenburg	AKM2 (0.85/25)*	754	5.7	1306	12	49.9	49.7	257
IGAAN	Igaz	Baja	HUBAJ (0.8/3.8)	5600	4.3	3338	16	90.4	272.2	499
	Igaz	Hodmezovasarhely	HUHOD (0.8/3.8)	5609	4.2	3031	19	97.1	189.6	451
	Igaz	Budapest	HUPOL (1.2/4)	3929	3.5	1144	23	102.5	71.9	404
JOBKL	Jobse	Oostkapelle	BETSY2 (1.2/85)*	1725	-	-	12	64.8	-	852
KACJA	Kac	Kostanjevec	METKA (0.8/8)*	1381	4.0	2246	12	63.9	60.2	269
		Ljubljana	ORION1 (0.8/8)	1420	5.3	2336	28	132.8	147.5	957
		Kamnik	REZIKA (0.8/6)	2307	5.0	2293	20	91.6	-	911
			STEFKA (0.8/3.8)	5540	4.2	2882	19	78.4	151.9	556
KERST	Kerr	Glenlee	GOCAM1 (0.8/3.8)	5238	4.0	2215	24	186.2	-	2007
KOSDE	Koschny	Noordwijkerhout	LIC1 (1.4/50)*	2038	5.7	3123	5	13.9	-	264
			LIC4 (1.4/50)*	2027	-	-	11	47.5	-	580
			TEC1 (1.4/12)	741	-	-	9	32.7	-	98
LUNRO	Lunsford	Chula Vista	BOCAM (1.4/50)*	1860	-	-	1	4.3	-	294
MOLSI	Molau	Seysdorf	AVIS2 (1.4/50)*	1771	6.1	4182	10	38.6	85.5	662
			MINCAM1 (0.8/8)	1477	4.9	1716	22	101.6	101.7	624
		Ketzür	REMO1 (0.8/3.8)	5592	3.0	974	18	66.2	49.8	257
			REMO2 (0.8/3.8)	5635	4.3	2846	17	64.7	93.7	299
MORJO	Morvai	Fülöpszallas	HUFUL (1.4/5)	2522	-	-	25	105.0	-	386
OCHPA	Ochner	Albiano	ALBIANO (1.2/4.5)	1971	-	-	26	73.9	-	153
OTTMI	Otte	Pearl City	ORIE1 (1.4/16)	3837	-	-	21	125.1	-	644
PERZS	Perko	Becsehely	HUBEC (0.8/3.8)*	5448	3.4	1500	23	114.5	103.5	857
ROBBI	Roberto	Verona	FIAMENE (0.8/3.8)	5632	-	-	26	146.2	-	643
ROTEC	Rothenberg	Berlin	ARMEFA (0.8/6)	2369	-	-	19	76.8	-	440
SCHHA	Schremmer	Niederkrüchten	DORAEMON (0.8/3.8)	5537	-	-	21	93.7	-	447
SLAST	Slavec	Ljubljana	KAYAK1 (1.8/28)	596	-	-	22	98.1	-	473
STOEN	Stomeo	Scorze	MIN38 (0.8/3.8)	5631	-	-	27	177.6	-	1818
			NOA38 (0.8/3.8)	5609	-	-	27	171.4	-	1762
			SCO38 (0.8/3.8)	5598	-	-	27	183.3	-	2059
STORO	Stork	Kunzak	KUN1 (1.4/50)*	1913	5.4	2778	3	18.1	-	722
		Ondrejov	OND1 (1.4/50)*	2195	5.8	4595	3	19.9	-	747
STRJO	Strunk	Herford	MINCAM2 (0.8/6)	2357	-	-	15	49.2	-	226
			MINCAM3 (0.8/12)	728	-	-	13	41.8	-	224
			MINCAM5 (0.8/6)	2344	-	-	16	51.9	-	405
TEPIS	Tepliczky	Budapest	HUMOB (0.8/6)	2375	4.9	2258	17	103.5	134.7	951
YRJIL	Yrjölä	Kuusankoski	FINEXCAM (0.8/6)	2337	-	-	17	61.4	-	449
Sum							31	4553.3	-	32497

* active field of view smaller than video frame

2. Observing Times (h)

August	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
BENOR	-	-	-	-	-	-	-	-	-	-	1.0	4.1	2.6	2.4	1.3
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BERER	-	-	-	-	-	-	-	-	-	-	6.1	6.3	-	6.7	3.8
BRIBE	4.5	1.3	3.9	0.3	4.4	7.2	-	3.2	7.7	-	3.9	4.4	8.0	6.9	0.6
CASFL	7.1	1.8	2.6	0.3	0.3	4.4	7.5	7.5	5.9	7.6	0.5	3.9	7.8	-	3.4
	8.4	2.4	6.5	3.7	1.8	8.6	7.5	8.7	7.9	7.3	1.0	5.2	8.9	-	2.9
CRIST	7.3	1.0	5.0	-	5.3	7.5	7.4	-	6.6	6.4	-	-	7.6	1.5	4.4
	6.3	0.5	5.3	-	1.3	7.6	7.6	7.7	6.3	7.7	4.0	3.5	6.9	-	5.5
ELTMA	7.2	7.2	-	7.3	-	4.3	7.4	7.1	7.5	6.5	6.5	3.1	5.1	-	7.5
GONRU	5.8	8.0	8.0	7.0	7.2	8.0	3.7	1.4	6.8	8.0	5.6	8.2	8.3	8.3	8.0

	3.6	5.4	6.6	8.0	8.0	6.0	3.9	2.9	6.1	6.2	4.8	8.3	8.3	8.4	8.0
GOVMI	-	-	-	-	-	4.8	5.5	6.6	6.0	5.3	-	4.3	3.5	-	6.6
HERCA	0.3	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	6.6	8.4	6.8	6.1	1.4	0.7	1.3	6.8	7.4	7.5	8.3	7.4	2.5
HINWO	2.4	-	-	-	-	-	3.3	3.0	6.8	5.0	3.8	-	3.3	3.3	0.7
IGAAN	-	-	-	-	-	-	-	-	-	-	-	4.1	3.1	7.4	7.0
	-	-	-	-	-	-	5.3	-	-	2.7	6.2	1.1	2.7	8.0	-
	7.1	7.2	2.5	3.9	1.5	-	1.3	0.9	7.5	5.8	6.2	4.8	2.1	2.5	-
JOBKL	1.5	5.7	-	-	4.9	-	-	6.3	-	-	-	4.3	6.7	-	-
KACJA	7.2	5.8	-	-	-	-	-	-	-	-	7.3	6.3	-	-	7.5
	6.2	7.3	0.2	7.4	-	1.2	7.5	5.3	1.6	7.6	7.6	6.4	1.0	0.3	6.2
	-	6.6	-	7.4	-	-	4.5	0.5	-	-	7.7	5.9	-	-	6.6
	-	5.1	-	7.4	-	-	4.5	0.3	0.3	-	7.8	5.8	-	-	6.5
KERST	9.3	10.2	11.2	9.5	-	10.2	10.1	9.8	1.5	-	9.5	10.4	10.2	10.2	9.8
KOSDE	-	-	-	-	-	-	-	-	3.3	5.2	0.8	0.4	4.2	-	-
	3.4	5.4	-	1.8	5.1	1.5	-	2.7	5.5	-	5.5	5.5	-	-	-
	1.6	3.9	-	-	3.3	-	-	1.0	5.2	-	6.8	-	5.5	-	-
LUNRO	-	-	-	-	-	-	-	-	-	-	-	-	4.3	-	-
MOLSI	1.5	-	5.7	5.3	-	-	1.5	3.0	-	3.7	4.5	-	-	-	-
	1.9	-	6.3	4.7	-	-	7.1	7.3	7.4	7.5	1.8	0.2	0.3	6.4	-
	2.4	-	6.3	6.3	4.3	-	1.2	4.0	3.4	-	-	1.2	-	-	2.9
	3.8	-	-	6.2	6.4	-	1.7	4.4	3.4	-	-	1.2	-	-	2.0
MORJO	6.4	5.8	-	4.4	0.6	0.5	5.4	3.6	6.2	3.2	7.3	2.1	2.9	3.7	2.4
OCHPA	3.7	3.3	1.0	1.0	1.0	0.3	1.0	3.4	3.1	-	2.1	3.2	1.1	-	-
OTTMI	6.6	6.8	-	-	-	-	5.6	-	-	-	-	7.6	7.7	-	6.9
PERCZ	5.7	7.3	-	4.9	0.5	-	3.2	7.0	5.7	7.8	7.8	7.9	4.2	0.5	6.9
ROBBI	6.4	2.2	4.3	3.4	-	6.3	7.5	8.7	8.7	8.8	-	4.9	8.9	1.4	5.5
ROTEC	-	-	6.3	-	6.5	-	-	3.5	5.8	5.8	5.9	2.7	-	-	-
SCHHA	2.7	3.0	1.4	-	1.5	5.8	-	5.0	7.8	-	5.7	3.5	8.0	6.2	-
SLAST	5.8	4.9	-	2.7	-	-	6.7	4.8	2.1	6.3	7.5	5.3	4.9	-	6.7
STOEN	7.4	5.7	-	7.6	5.0	7.0	7.7	7.8	7.8	7.8	6.7	2.3	6.1	-	5.8
	7.4	5.9	-	7.6	4.8	7.0	7.7	7.8	7.8	7.8	6.5	1.6	5.9	-	5.3
	7.4	5.0	-	7.6	5.6	6.0	7.6	7.7	7.6	7.8	6.9	2.8	5.2	-	5.6
STORO	-	-	-	-	-	-	-	-	7.2	7.2	3.7	-	-	-	-
	-	-	-	-	-	-	-	-	6.6	7.1	6.2	-	-	-	-
STRJO	-	-	5.1	1.0	3.4	4.4	-	-	2.6	-	-	2.1	4.3	2.5	-
	-	-	5.8	-	1.5	4.1	-	-	1.8	-	-	2.6	0.9	3.6	1.7
	-	-	5.8	-	2.5	4.4	-	-	2.0	-	0.6	3.0	2.9	3.5	-
TEPIS	5.9	5.5	3.7	5.1	-	-	-	6.2	5.3	6.2	6.8	7.0	-	-	4.6
YRJIL	-	1.9	1.6	-	-	-	-	-	1.1	1.7	4.1	4.3	4.5	2.7	4.1
Sum	164.2	143.4	111.7	140.2	93.5	123.2	152.3	159.8	197.2	176.8	194.1	179.3	186.2	103.8	159.2

August	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
BENOR	1.2	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	0.3
BERER	-	-	-	4.2	2.8	4.4	-	-	-	-	-	-	-	-	-	4.4
BRIBE	-	-	2.2	8.4	8.5	7.9	0.9	1.1	2.8	-	-	1.0	1.6	0.2	9.0	9.2
CASFL	8.0	6.3	5.2	2.6	7.7	4.5	7.1	6.2	1.1	1.6	1.1	7.1	0.2	3.3	8.7	7.5
	9.1	7.5	9.2	2.8	6.0	5.0	5.5	6.2	4.6	2.8	-	8.7	3.0	5.8	9.8	7.1
CRIST	6.1	1.6	0.5	-	7.2	8.4	6.3	0.5	-	7.4	-	-	7.4	-	8.8	8.9
	6.3	4.5	5.6	3.3	7.0	7.9	8.4	4.4	1.4	5.6	2.6	2.5	8.7	6.4	8.8	8.9
ELTMA	5.6	6.0	8.1	3.5	4.1	7.2	8.3	8.3	3.9	6.3	5.2	7.0	2.1	4.2	6.5	5.8
GONRU	7.9	-	-	-	8.3	4.5	0.7	-	8.5	8.4	4.1	7.4	7.4	7.7	5.6	-
	7.7	-	-	-	7.8	5.1	-	-	5.0	7.9	3.1	8.2	6.8	6.9	8.0	3.9
GOVMI	5.7	-	2.3	5.2	8.3	8.3	6.3	8.4	-	4.7	7.8	-	4.1	3.0	7.6	2.2
HERCA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	0.3	6.1	6.2	5.3	1.4	4.2	5.5	4.2	-	-	1.2	4.8	7.4	7.4	3.4
HINWO	-	-	-	3.2	7.5	7.6	-	-	-	-	-	-	-	-	-	-
IGAAN	4.6	2.8	8.3	3.7	3.4	8.4	8.4	8.5	-	5.8	7.6	-	0.9	6.4	-	-
	2.9	2.5	8.0	5.1	6.9	-	8.3	7.2	4.5	6.7	8.6	2.3	0.5	7.6	-	-
	-	-	-	0.8	-	3.3	7.4	7.6	2.1	7.2	8.6	-	3.3	6.4	-	2.5
JOBKL	-	-	4.6	-	7.2	5.7	-	-	-	-	-	3.2	-	-	7.5	7.2
KACJA	-	0.5	-	-	1.7	5.0	6.1	-	-	-	3.7	-	-	-	8.0	4.8
	8.0	0.5	1.5	5.7	4.8	8.2	8.1	7.1	-	0.8	5.4	-	5.3	5.0	1.8	4.8
	8.0	0.7	0.3	5.6	3.2	8.1	6.8	4.8	-	-	3.9	-	0.3	1.6	4.2	4.9
	6.4	0.5	0.3	5.4	3.2	5.9	5.6	4.5	-	-	4.2	-	-	-	1.0	3.7
KERST	10.2	10.2	8.3	3.2	2.1	6.3	7.9	4.2	2.8	-	-	7.9	-	-	-	1.2
KOSDE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	4.6	-	-	-	-	-	-	6.5
	-	-	-	-	-	2.0	-	-	3.4	-	-	-	-	-	-	-
LUNRO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MOLSI	-	-	-	6.0	6.7	-	-	-	0.7	-	-	-	-	-	-	-
	-	0.6	4.4	8.0	8.1	8.1	6.4	-	5.9	0.7	0.4	-	3.1	-	-	5.0
	-	-	1.9	7.4	7.5	4.7	3.1	3.2	3.2	0.1	-	-	3.1	-	-	-

	-	-	5.4	7.5	7.5	6.0	1.3	3.9	1.2	0.1	-	-	2.7	-	-	-
MORJO	5.0	1.0	-	5.4	-	6.7	7.4	4.9	2.8	4.1	7.3	-	0.9	5.0	-	-
OCHPA	1.9	2.4	3.3	1.9	4.8	6.2	3.7	3.1	1.3	2.0	0.7	-	3.1	-	7.3	8.0
OTTMI	7.0	6.7	-	5.5	3.7	1.0	6.1	6.6	7.1	6.2	8.2	6.9	6.9	5.7	5.4	0.9
PERCZ	3.8	-	1.7	2.9	8.3	6.7	7.0	7.2	0.8	5.0	1.7	-	-	-	-	-
ROBBI	9.0	3.7	7.1	1.0	6.0	4.5	7.6	4.8	4.5	5.3	1.3	4.5	-	-	-	9.9
ROTEC	1.6	-	4.6	7.5	7.5	4.7	1.8	2.0	1.8	0.8	-	0.3	2.0	-	-	5.7
SCHHA	-	-	3.4	5.5	7.5	8.4	-	1.6	6.3	-	-	1.2	0.3	-	4.0	4.9
SLAST	6.6	1.7	-	6.3	4.2	5.9	-	3.4	-	1.3	1.7	-	-	2.3	2.3	4.7
STOEN	6.5	-	7.3	-	5.0	8.2	8.5	8.5	1.4	7.0	4.1	8.7	3.4	6.4	8.9	9.0
	6.5	-	7.0	-	4.2	8.3	8.5	6.8	1.5	7.1	5.7	8.8	3.6	7.6	8.9	3.8
	6.5	-	8.3	-	4.5	8.2	8.5	8.1	3.4	8.0	6.2	8.7	5.6	6.8	8.8	8.9
STORO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STRJO	-	-	1.2	5.5	5.0	5.6	-	-	-	-	-	-	0.4	-	5.7	0.4
	-	-	-	5.5	5.4	6.2	1.3	1.4	-	-	-	-	-	-	-	-
	-	-	1.0	7.1	6.8	6.4	-	0.5	-	-	-	-	0.3	-	4.4	0.7
TEPIS	6.1	-	-	7.5	-	7.6	6.0	6.8	-	7.0	-	-	-	6.2	-	-
YRJIL	4.2	-	4.9	5.3	0.8	-	4.1	5.8	-	4.7	-	-	-	-	-	5.6
Sum	162.4	60.3	132.0	164.7	216.5	238.5	187.6	163.1	90.8	124.6	103.2	95.6	91.8	111.9	160.7	164.7

3. Results (Meteors)

August	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
BENOR	-	-	-	-	-	-	-	-	-	-	5	10	8	7	4
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BERER	-	-	-	-	-	-	-	-	-	-	67	65	-	37	10
BRIBE	25	5	8	1	16	61	-	19	66	-	27	40	100	27	5
CASFL	29	6	7	1	1	18	28	27	23	19	2	11	58	-	6
	38	14	21	7	4	59	59	43	35	42	3	28	109	-	17
CRIST	49	2	42	-	17	80	70	-	52	40	-	-	111	8	18
	36	1	31	-	4	48	53	45	41	60	23	7	67	-	20
ELTMA	58	36	-	52	-	25	61	54	64	53	42	14	59	-	29
GONRU	34	45	61	39	62	69	18	5	30	48	52	121	120	68	50
	10	34	37	36	45	43	16	13	29	28	25	115	78	66	43
GOVMI	-	-	-	-	-	72	70	49	28	157	-	47	76	-	88
HERCA	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	28	41	45	34	2	4	15	46	57	97	124	49	3
HINWO	7	-	-	-	-	-	25	14	37	19	22	-	43	18	3
IGAAN	-	-	-	-	-	-	-	-	-	-	-	53	30	29	47
	-	-	-	-	-	-	21	-	-	11	41	6	16	46	-
	29	37	6	7	3	-	1	2	43	25	40	23	6	8	-
JOBKL	19	56	-	-	79	-	-	38	-	-	-	102	201	-	-
KACJA	23	27	-	-	-	-	-	-	-	-	45	38	-	-	27
	25	65	2	77	-	5	51	36	8	89	152	62	6	1	46
	-	78	-	70	-	-	90	5	-	-	144	88	-	-	71
	-	39	-	58	-	-	49	3	1	-	102	90	-	-	39
KERST	167	180	216	114	-	143	137	99	8	-	101	126	105	100	79
KOSDE	-	-	-	-	-	-	-	-	69	122	31	2	40	-	-
	20	32	-	11	64	9	-	15	106	-	156	102	-	-	-
	3	10	-	-	10	-	-	4	15	-	22	-	26	-	-
LUNRO	-	-	-	-	-	-	-	-	-	-	-	-	294	-	-
MOLSI	7	-	113	63	-	-	11	27	-	57	139	-	-	-	-
	4	-	62	28	-	-	32	45	89	33	7	4	1	40	-
	8	-	18	20	18	-	2	23	36	-	-	7	-	-	6
	19	-	-	34	36	-	8	23	38	-	-	2	-	-	3
MORJO	27	23	-	17	2	2	19	7	33	17	40	8	9	12	11
OCHPA	6	4	3	2	1	1	2	6	7	-	2	11	2	-	-
OTTMI	31	45	-	-	-	-	26	-	-	-	-	72	102	-	34
PERCZ	54	51	-	32	1	-	15	20	55	67	93	191	42	6	35
ROBBI	23	7	15	8	-	41	42	36	41	33	-	52	95	3	26
ROTEC	-	-	28	-	33	-	-	18	33	58	54	36	-	-	-
SCHHA	8	8	4	-	3	22	-	25	38	-	22	32	101	24	-
SLAST	15	16	-	7	-	-	41	34	3	45	46	39	17	-	45
STOEN	117	42	-	95	28	88	128	106	80	147	74	29	174	-	71
	99	36	-	82	26	89	140	102	71	162	83	23	172	-	76
	129	37	-	103	39	55	139	106	80	152	88	28	173	-	83
STORO	-	-	-	-	-	-	-	-	298	276	148	-	-	-	-
	-	-	-	-	-	-	-	-	280	231	236	-	-	-	-
STRJO	-	-	30	2	11	29	-	-	13	-	-	11	31	9	-
	-	-	37	-	7	24	-	-	11	-	-	18	17	21	6
	-	-	49	-	13	61	-	-	26	-	3	42	33	35	-
TEPIS	55	33	22	59	-	-	-	39	57	51	137	118	-	-	37

YRJIL	-	7	6	-	-	-	-	-	2	10	53	78	47	21	38
Sum	1175	983	846	1066	568	1078	1356	1092	1961	2098	2384	2048	2693	635	1076

August	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
BENOR	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	1
BERER	-	-	-	11	13	11	-	-	-	-	-	-	-	-	-	14
BRIBE	-	-	13	48	43	35	1	3	10	-	-	2	3	2	26	27
CASFL	25	20	21	10	16	15	22	14	4	4	3	18	2	10	24	27
	54	31	46	7	33	24	14	18	15	13	-	26	8	29	41	25
CRIST	25	5	1	-	36	51	33	1	-	27	-	-	34	-	51	50
	28	21	12	12	26	96	63	8	7	50	5	16	79	61	90	102
ELTMA	49	16	32	11	9	35	39	26	9	27	18	24	5	21	25	28
GONRU	42	-	-	-	48	23	2	-	48	49	14	47	32	47	21	-
	33	-	-	-	33	18	-	-	28	24	5	31	27	28	17	17
GOVMI	64	-	5	13	56	44	50	31	-	14	33	-	18	9	25	11
HERCA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	1	26	32	16	2	17	24	13	-	-	3	13	27	21	10
HINWO	-	-	-	8	29	32	-	-	-	-	-	-	-	-	-	-
IGAAN	27	9	24	7	16	41	33	57	-	42	46	-	8	30	-	-
	28	5	26	21	29	-	33	38	12	33	40	6	3	36	-	-
	-	-	-	4	-	8	34	29	7	16	33	-	15	21	-	7
JOBKL	-	-	51	-	99	44	-	-	-	-	-	28	-	-	73	62
KACJA	-	4	-	-	5	21	17	-	-	-	11	-	-	-	35	16
	60	3	2	24	28	40	51	19	-	5	26	-	27	13	3	31
	90	5	1	43	20	46	54	29	-	-	15	-	1	6	19	36
	25	2	1	23	18	28	22	18	-	-	14	-	-	-	2	22
KERST	86	73	48	16	9	40	57	13	15	-	-	71	-	-	-	4
KOSDE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	53
	-	-	-	-	-	2	-	-	6	-	-	-	-	-	-	-
LUNRO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MOLSI	-	-	-	113	125	-	-	-	7	-	-	-	-	-	-	-
	-	1	15	53	57	45	31	-	36	6	2	-	11	-	-	22
	-	-	7	30	32	11	7	12	8	1	-	-	11	-	-	-
	-	-	15	30	34	15	3	13	15	1	-	-	10	-	-	-
MORJO	20	2	-	14	-	15	26	20	7	14	25	-	2	14	-	-
OCHPA	5	5	8	4	13	13	9	5	2	5	2	-	3	-	16	16
OTTMI	39	28	-	25	10	3	24	21	23	31	21	34	28	21	22	4
PERCZ	18	-	3	12	18	28	30	59	2	18	7	-	-	-	-	-
ROBBI	39	11	26	3	21	21	18	12	16	13	6	11	-	-	-	24
ROTEC	5	-	10	34	35	16	12	15	14	3	-	1	7	-	-	28
SCHHA	-	-	19	23	23	27	-	7	27	-	-	4	1	-	9	20
SLAST	36	4	-	20	12	22	-	12	-	1	8	-	-	5	5	40
STOEN	88	-	66	-	41	53	65	50	5	28	10	38	10	37	67	81
	88	-	47	-	40	76	52	31	9	28	14	37	16	56	88	19
	100	-	72	-	52	81	76	59	13	42	23	59	27	62	88	93
STORO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STRJO	-	-	5	19	25	18	-	-	-	-	-	-	1	-	21	1
	-	-	-	15	25	32	4	7	-	-	-	-	-	-	-	-
	-	-	5	40	33	37	-	2	-	-	-	-	1	-	23	2
TEPIS	65	-	-	64	-	43	50	47	-	42	-	-	-	32	-	-
YRJIL	32	-	22	27	6	-	15	31	-	25	-	-	-	-	-	29
Sum	1174	247	629	816	1184	1212	964	731	370	562	381	456	403	567	820	922

The astronomical conditions were perfect in August 2010 - the Perseid maximum fell into the European night time hours of August 12/13, right after new moon. All that was missing now was the right weather. There were marvelous observing conditions indeed – but not at all observing sites. More southern locations experienced perfect conditions, whereas more northern observers were often hampered by clouds. There was a total of 25 cameras with twenty or more observing nights and often well above 100 hours of effective observing time, whereas other automated cameras gathered only about 50 hours.

The camera network grew a little further in August: Erno Berko has joined the network with a new station in northern Hungary. For the first time we reached a total of 50 active video systems. At the same time, we managed to surpass the record breaking output of August 2009 by a few percent. With more than 4,500 hours of effective observing time and 32,500 meteors, August 2010 is ranking now first in the long-term statistics of the IMO network.

As reported in the previous month, a new version of MetRec was introduced in July, that allows to measure both the limiting magnitude and the effective collection area. Some observers have used this software version already in August so that I can now present first results from a larger set of cameras. For this purpose, the observer overview (table 1) was reworked.

At first, the field of view (in square degrees) was calculated for each camera. Cameras with an active field of view that is smaller than the size of the video frame (e.g. the circular fov of an image intensifier) are marked with an asterisk. In these cases, only the active field of view was measured.

It is to expect, that cameras with identical objective lenses and without obstruction have the same field of view, which is apparently not the case. For thirteen cameras with the 3.8 mm Computar lens, the field of view varies between 5,537 and 5,632 square degrees, for example. The average is 5,598 ± 32. The variations result from inaccuracies in the determination of the plate constants, which yields noticeable deviations at the edges of the field of view. However, the variations are smaller than they appear at first glance, as the field of view is a square measure. If the cameras had a quadratic field of view, the edge length would be 74.8 ± 0,2 degrees. So the error is well below one percent. Similar variations are observed for lenses with longer focal length.

On average, the following values were obtained for the most common Computar lenses:

Focal length [mm]	2.6	3.8	6	8	12
Number of cameras	1	13	8	3	2
Field of view [square degrees]	6,636	5,598	2,352	1,456	735

This time, the individually obtained values are reported in table 1. In the future, only the average values will be given there.

The collection area is obtained from the field of view: Based on the observing direction of the camera it is calculated, how many square kilometers the field of view covers at 100 km altitude (discussions at the recent IMC have shown that this norm altitude is more sensible than the previously used 85 kilometers). The collection area is corrected for the absolute meteor magnitude and the extinction, i.e. the reduced limiting magnitude for meteors near the horizon (due to the larger distance from the observer and extinction) is converted into a reduction of the collection area. The corrected collection area varies by two orders of magnitude from 200 square kilometers for a camera with 50 mm lens to over 25,000 square kilometers for cameras with a 2.6 or 3.8 mm lens. The average is about 13,000 square kilometers.

The collection area alone does not yet fully characterize the performance of a camera – for that the limiting magnitude has to be considered as well. A camera with a smaller collection area but very good limiting magnitude can record more meteors than a camera with a larger collection area but a smaller limiting magnitude. Table 1 gives for those cameras, that used already the new software version in August, the best stellar limiting magnitudes measured in real. The values vary between about 3.5 and 6 mag, whereby image-intensified cameras and those with longer focus lenses have naturally better values.

The effective collection area is finally corrected for the difference in limiting magnitude to 6.5 mag. That is, the effective collection area is getting smaller, the lower the limiting magnitude of the camera. An important role plays the population index r. It describes, by what factor the number of meteors increases, when the limiting magnitude improves by one mag. At this time, a value of r=2.5 is used. The effective collection area of a camera with a limiting magnitude of 6.5 mag is left unchanged, for a camera with 5.5 mag it decreases by a factor of 2.5 (down to 40%), and for a camera with 4.5 mag it decreases by a factor of 2.5^2 (down to 16%).

The effective collection areas calculated this way and given in table 1 represent the real efficiency of the meteor camera under good observing conditions. The values range from almost 1,000 up to 4,500 square kilometers effective collection area (normalized to 6.5 mag). As expected, the highest values are achieved by image-intensified cameras. However, the gap between these and the best non-intensified cameras is smaller than observed in reality (based on meteor counts). Thus, the real average population index will be larger than 2.5.

Finally, table 1 contains in addition to the effective observing time the effective collection area accumulated over time (measured in thousand km^2 x h). As most cameras switched to the new software version at some time in August, the existing measures we extrapolated to the total effective observing time. The given value reflects not just the efficiency of the camera (collection area, sensitivity), but also the real observing conditions, i.e. how long each camera could observe at the respective site under what conditions (real limiting magnitude). The values vary between 50,000 and 300,000 km^2 x h in August. Primary factor was the difference in observing conditions mentioned earlier, which presented to some sites almost three times more clear skies than to other sites.

Note that these are all first analysis results for the different cameras. They help us to better understand the different camera systems and observing sites, and to verify the new software functions. In some cases the parameter choice was not yet perfect, so that the quality of the derived figures will further improve in the future.

After these considerations with respect to camera efficiency, we shall have a short view on the overall meteor activity of the major showers. Figure 1 gives the combined activity profiles for the Perseids (13,300 meteors), southern delta Aquariids (2,100 meteors) and alpha Capricornids (1,300 meteors) in July and August. Thanks to the size of our camera network, we can now derive activity profiles of individual showers each year. Further improved data quality is expected, when the scaling of shower meteor counts is not anymore based on sporadic meteors, but on the effective collection area per night.

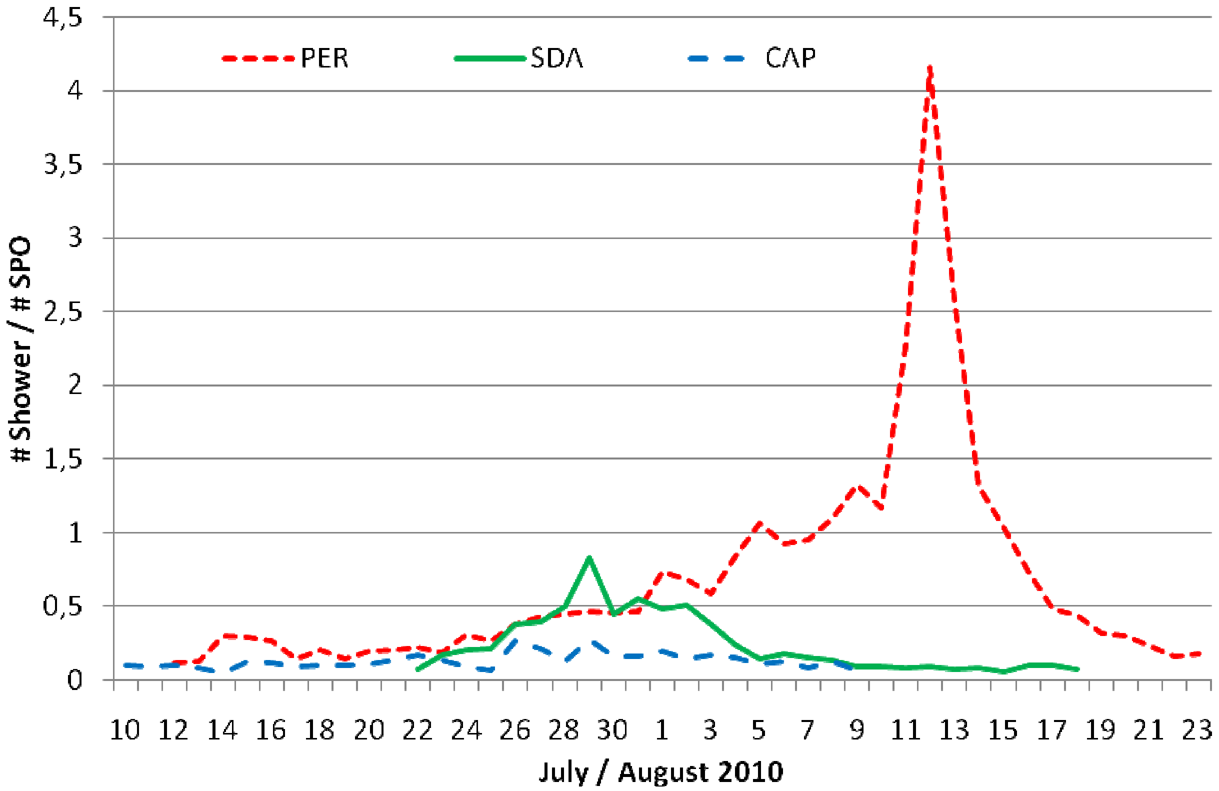

Figure 1: *Activity profile of the Perseids, southern delta Aquariids and alpha Capricornids in July/August 2010. Displayed is the number of shower meteors divided by the number of sporadics per night.*