# Results of the IMO Video Meteor Network – September 2010

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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 | TIMES4 (1.4/50) | 2359 | - | - | 16 | 62.1 | - | 186 |
| | | | TIMES5 (0.95/50) | 33 | 7.0 | 261 | 14 | 17.3 | - | 44 |
| BRIBE | Brinkmann | Herne | HERMINE (0.8/6) | 2374 | 4.2 | 1084 | 22 | 114.7 | - | 471 |
| CASFL | Castellani | Monte Baldo | BMH1 (0.8/6) | 2350 | - | - | 19 | 82.6 | - | 262 |
| | | | BMH2 (1.5/4.5)* | 4243 | - | - | 22 | 104.2 | - | 424 |
| CRIST | Crivello | Valbrevenna | C3P8 (0.8/3.8) | 5575 | - | - | 22 | 140.4 | - | 729 |
| | | | STG38 (0.8/3.8) | 5593 | - | - | 28 | 182.1 | - | 1431 |
| ELTMA | Eltri | Venezia | MET38 (0.8/3.8) | 5620 | - | - | 13 | 93.7 | - | 342 |
| GONRU | Goncalves | Tomar | TEMPLAR1 (0.8/6)* | 2188 | 5.3 | 2331 | 25 | 173.4 | 276.0 | 856 |
| | | | TEMPLAR2 (0.8/6)* | 2303 | 5.0 | 2397 | 25 | 154.8 | 299.1 | 628 |
| GOVMI | Govedic | Sredisce ob Dravi | ORION2 (0.8/8) | 1471 | 6.0 | 3916 | 22 | 101.7 | - | 403 |
| HERCA | Hergenrother | Tucson | SALSA3 (1.2/4)* | 4332 | 4.0 | 1471 | 28 | 169.9 | - | 662 |
| HINWO | Hinz | Brannenburg | AKM2 (0.85/25)* | 754 | 5.7 | 1306 | 13 | 65.3 | 79.8 | 327 |
| IGAAN | Igaz | Baja | HUBAJ (0.8/3.8) | 5600 | 4.3 | 3338 | 12 | 57.7 | 109.2 | 174 |
| | Igaz | Hodmezovasarhely | HUHOD (0.8/3.8) | 5609 | 4.2 | 3031 | 19 | 107.8 | 268.4 | 420 |
| | Igaz | Budapest | HUPOL (1.2/4) | 3929 | 3.5 | 1144 | 18 | 56.8 | 57.2 | 136 |
| JOBKL | Jobse | Oostkapelle | BETSY2 (1.2/85)* | 1725 | - | - | 4 | 21.3 | - | 558 |
| | | | KLARA2 (1.2/85)* | 1564 | - | - | 5 | 29.6 | - | 309 |
| KACJA | Kac | Kostanjevec | METKA (0.8/8)* | 1381 | 4.0 | 2246 | 10 | 44.5 | 37.5 | 136 |
| | | Ljubljana | ORION1 (0.8/8) | 1420 | 5.3 | 2336 | 20 | 56.4 | 51.3 | 218 |
| | | Kamnik | REZIKA (0.8/6) | 2307 | 5.0 | 2293 | 12 | 50.1 | 73.5 | 373 |
| | | | STEFKA (0.8/3.8) | 5540 | 4.2 | 2882 | 11 | 43.4 | 71.5 | 137 |
| KERST | Kerr | Glenlee | GOCAM1 (0.8/3.8) | 5238 | 4.2 | 2637 | 17 | 98.2 | 228.7 | 571 |
| KOSDE | Koschny | Noordwijkerhout | LIC4 (1.4/50)* | 2027 | - | - | 14 | 62.9 | - | 687 |
| | | | TEC1 (1.4/12) | 741 | 5.6 | 1133 | 19 | 28.8 | - | 89 |
| LUNRO | Lunsford | Chula Vista | BOCAM (1.4/50)* | 1860 | - | - | 14 | 74.5 | - | 365 |
| MOLSI | Molau | Seysdorf | AVIS2 (1.4/50)* | 1771 | 6.1 | 4182 | 17 | 93.1 | 215.3 | 1122 |
| | | | MINCAM1 (0.8/8) | 1477 | 4.9 | 1716 | 24 | 112.1 | 149.2 | 593 |
| | | Ketzür | REMO1 (0.8/3.8) | 5592 | 3.0 | 974 | 23 | 89.6 | 93.1 | 297 |
| | | | REMO2 (0.8/3.8) | 5635 | 4.3 | 2846 | 22 | 90.7 | 177.8 | 289 |
| MORJO | Morvai | Fülöpszallas | HUFUL (1.4/5) | 2522 | 3.5 | 532 | 20 | 83.1 | 44.5 | 209 |
| OCHPA | Ochner | Albiano | ALBIANO (1.2/4.5) | 1971 | - | - | 13 | 53.4 | - | 107 |
| OTTMI | Otte | Pearl City | ORIE1 (1.4/5.7) | 3837 | - | - | 13 | 59.3 | - | 247 |
| PERZS | Perko | Becsehely | HUBEC (0.8/3.8)* | 5448 | 3.4 | 1500 | 12 | 48.2 | 34.9 | 141 |
| ROBBI | Roberto | Verona | FIAMENE (0.8/3.8) | 5632 | - | - | 12 | 60.1 | - | 174 |
| ROTEC | Rothenberg | Berlin | ARMEFA (0.8/6) | 2369 | - | - | 18 | 85.6 | - | 332 |
| SCHHA | Schremmer | Niederkrüchten | DORAEMON (0.8/3.8) | 5537 | - | - | 16 | 59.6 | - | 195 |
| SLAST | Slavec | Ljubljana | KAYAK1 (1.8/28) | 596 | - | - | 11 | 35.2 | - | 107 |
| STOEN | Stomeo | Scorze | MIN38 (0.8/3.8) | 5631 | - | - | 19 | 122.8 | - | 876 |
| | | | NOA38 (0.8/3.8) | 5609 | - | - | 18 | 118.6 | - | 795 |
| | | | SCO38 (0.8/3.8) | 5598 | - | - | 19 | 124.0 | - | 1056 |
| STRJO | Strunk | Herford | MINCAM2 (0.8/6) | 2357 | - | - | 9 | 33.8 | - | 125 |
| | | | MINCAM3 (0.8/12) | 728 | - | - | 18 | 62.4 | - | 233 |
| | | | MINCAM5 (0.8/6) | 2344 | - | - | 9 | 48.6 | - | 234 |
| TEPIS | Tepliczky | Budapest | HUMOB (0.8/6) | 2375 | 4.9 | 2258 | 13 | 79.3 | 99.1 | 405 |
| YRJIL | Yrjölä | Kuusankoski | FINEXCAM (0.8/6) | 2337 | - | - | 17 | 65.5 | - | 299 |
| Sum | | | | | | | 30 | 3719.2 | | 18774 |

* active field of view smaller than video frame

## 2. Observing Times (h)

| September | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BENOR | 5.2 | 4.0 | - | 1.7 | - | - | 3.9 | 4.8 | 5.2 | 3.0 | 3.4 | - | - | - | - |
| | 0.7 | 0.1 | - | 1.3 | - | - | 1.4 | 0.5 | - | 0.7 | 0.8 | - | - | - | - |
| BRIBE | 7.6 | 3.3 | 6.9 | 8.3 | 9.5 | 2.8 | - | 7.1 | 7.8 | 2.2 | 5.5 | 4.0 | 1.0 | - | 3.4 |
| CASFL | 8.0 | - | 0.3 | - | - | - | - | 3.2 | 1.2 | 8.5 | 6.4 | 2.4 | 5.8 | 6.5 | 1.9 |
| | 8.2 | 3.2 | - | - | 0.3 | - | - | 4.1 | 2.8 | 9.4 | 8.8 | 6.1 | 4.3 | 10.0 | 1.5 |
| CRIST | 8.9 | 4.4 | 7.1 | 5.4 | - | - | - | 5.2 | 6.5 | 9.4 | 7.1 | 6.5 | 6.5 | 8.1 | - |
| | 9.0 | 6.9 | 8.1 | 5.8 | 8.0 | 1.5 | 1.0 | 9.1 | 7.6 | 9.4 | 9.1 | 7.2 | 8.1 | 9.7 | 6.1 |
| ELTMA | 7.9 | - | 7.0 | 3.0 | - | - | - | - | - | 7.1 | 5.4 | 7.2 | - | 6.9 | 5.7 |
| GONRU | 6.3 | 7.5 | 9.0 | 7.4 | 6.5 | - | 4.8 | 7.6 | 8.8 | 8.7 | 9.6 | 9.5 | 8.3 | 2.8 | 2.5 |
| | 7.2 | 8.3 | 7.4 | 7.9 | 5.2 | - | 3.8 | 7.1 | 7.5 | 8.4 | 8.9 | 8.3 | 8.6 | 4.2 | 2.2 |
| GOVMI | 7.8 | 6.7 | 0.6 | 3.5 | 1.5 | 4.4 | 0.4 | 0.4 | 0.7 | - | 3.6 | 9.6 | 1.8 | 4.6 | 5.2 |
| HERCA | 5.8 | 7.0 | 5.3 | 6.3 | 6.7 | 7.4 | 5.5 | 0.2 | 5.5 | 8.0 | 8.3 | 6.4 | 2.1 | 8.1 | 8.0 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HINWO | 6.0 | - | 1.4 | - | 2.5 | 1.4 | 1.3 | - | 2.6 | 2.0 | 8.9 | 5.0 | - | - | - |
| IGAAN | 8.9 | 5.1 | 3.4 | - | 4.7 | 2.5 | 4.9 | 3.1 | - | - | - | - | - | 9.4 | 4.7 |
| | 3.9 | 5.0 | 7.4 | - | 7.9 | 5.0 | - | 1.6 | - | - | - | 4.7 | 2.3 | 9.4 | - |
| | 6.6 | - | 1.8 | 1.0 | 6.9 | 5.8 | - | - | 0.4 | - | - | 2.2 | 3.5 | 1.5 | - |
| JOBKL | - | - | - | - | 7.9 | - | - | - | - | - | - | 6.7 | - | - | - |
| | - | - | - | - | - | - | - | - | - | - | - | 6.4 | - | - | - |
| KACJA | 6.7 | 4.7 | - | - | - | 2.9 | - | - | - | - | 6.3 | 6.8 | - | 0.9 | - |
| | 7.8 | 6.6 | 0.5 | 1.5 | - | 1.0 | - | - | - | 3.0 | 5.1 | 4.1 | 4.8 | 0.8 | 2.6 |
| | 9.0 | 6.5 | 0.7 | - | - | - | - | - | - | 0.3 | 6.8 | 3.3 | 0.3 | - | - |
| | 9.0 | 7.9 | 0.5 | - | - | - | - | - | - | 0.6 | 6.1 | 3.4 | 0.3 | - | - |
| KERST | 8.0 | 8.9 | 2.3 | 0.7 | 0.5 | - | 5.3 | 6.6 | 7.1 | - | 8.6 | 7.6 | 9.3 | 8.3 | 8.7 |
| KOSDE | 6.5 | 6.5 | 6.8 | 6.8 | 6.8 | 1.0 | 2.2 | - | 3.7 | - | - | 5.6 | - | 4.0 | 3.8 |
| | 1.9 | 3.6 | 2.8 | 4.2 | 3.0 | - | - | - | 0.3 | 1.1 | - | 1.0 | - | 1.7 | 1.2 |
| LUNRO | - | - | - | - | - | - | - | - | - | 5.8 | - | - | 6.8 | 5.6 | 4.4 |
| MOLSI | 6.2 | - | 4.5 | 3.2 | 6.8 | 4.9 | 1.1 | - | 7.3 | 4.8 | 8.5 | 3.7 | - | - | - |
| | 8.8 | - | 2.4 | 1.9 | 7.1 | 2.0 | 2.6 | 0.6 | 5.5 | 4.7 | 9.5 | 5.4 | 5.9 | 4.6 | 0.6 |
| | 3.1 | 2.3 | 1.9 | 2.9 | 7.2 | 8.8 | 5.3 | - | - | 5.6 | 4.8 | 0.2 | 1.6 | - | 3.8 |
| | 4.7 | - | 4.4 | 3.8 | 8.6 | 8.8 | 6.1 | - | - | 4.2 | 8.1 | 0.3 | 4.1 | - | 3.7 |
| MORJO | 5.4 | 1.7 | 4.0 | - | 0.7 | 6.7 | - | - | - | - | - | 6.4 | 1.7 | 4.1 | 2.5 |
| OCHPA | 2.1 | 3.2 | - | - | - | - | - | - | - | 1.2 | 2.3 | 4.2 | - | 2.3 | - |
| OTTMI | 0.1 | 2.9 | - | 4.6 | 6.8 | - | - | 7.2 | 5.3 | - | - | 6.4 | 7.2 | 3.0 | 7.7 |
| PERCZ | - | - | 0.9 | 3.8 | 2.5 | 6.8 | - | - | 2.4 | - | - | 8.0 | 1.0 | 7.3 | 7.5 |
| ROBBI | - | - | 0.7 | - | - | - | - | 1.5 | - | - | 7.0 | - | - | - | 1.5 |
| ROTEC | 6.7 | - | 4.9 | 4.2 | 8.8 | 4.1 | 5.1 | - | - | 7.6 | 9.2 | 0.3 | 5.2 | - | 2.3 |
| SCHHA | 6.2 | 1.7 | 7.4 | 3.9 | - | - | - | - | - | - | 3.7 | 1.1 | - | - | 2.2 |
| SLAST | - | 5.7 | - | 2.9 | 0.9 | - | - | - | - | - | - | - | - | 1.8 | 4.3 |
| STOEN | 7.6 | - | - | 2.7 | 2.3 | - | - | 5.2 | - | 9.6 | 9.6 | 8.0 | 9.7 | 8.4 | - |
| | - | - | - | 3.7 | 1.7 | - | - | 4.9 | - | 9.5 | 9.6 | 8.0 | 9.7 | 8.4 | - |
| | 7.5 | - | - | 2.1 | 1.3 | - | - | 6.4 | - | 9.6 | 9.6 | 7.9 | 8.6 | 8.0 | - |
| STRJO | 3.3 | 1.9 | - | 6.9 | 6.2 | 5.6 | - | - | - | - | 4.6 | - | - | - | - |
| | 3.7 | 1.2 | 0.7 | 6.8 | 6.9 | 7.7 | - | - | - | - | 6.0 | - | - | - | 0.9 |
| | 5.3 | 2.3 | - | 8.3 | 7.3 | 7.1 | - | - | - | - | 5.6 | - | - | - | - |
| TEPIS | 5.5 | - | 1.4 | - | 7.6 | 7.3 | - | - | - | - | - | 4.6 | - | 1.0 | - |
| YRJIL | 0.3 | - | - | - | - | 3.6 | - | 4.9 | 7.8 | 0.8 | - | - | - | 2.5 | 2.9 |
| Sum | 233.4 | 129.1 | 112.5 | 126.5 | 160.6 | 109.1 | 54.7 | 91.3 | 96.0 | 145.2 | 216.8 | 188.5 | 128.5 | 153.9 | 101.8 |

| September | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BENOR | - | 2.9 | 3.9 | 6.2 | 4.5 | - | - | - | - | - | - | 5.1 | 3.6 | 2.9 | 1.8 |
| | - | 1.4 | 1.9 | - | 3.3 | - | - | - | - | - | - | 3.3 | 0.6 | 1.0 | 0.3 |
| BRIBE | 0.5 | 2.5 | 10.0 | 2.4 | 7.0 | 7.0 | 8.7 | - | - | 2.2 | 5.0 | - | - | - | - |
| CASFL | - | - | 1.8 | 0.3 | 4.8 | 6.1 | 6.7 | 2.7 | - | 5.9 | - | - | 5.1 | 5.0 | - |
| | - | - | 2.1 | 0.5 | 9.3 | 5.7 | 7.7 | 1.3 | - | 1.8 | - | 2.6 | 5.9 | 8.2 | 0.4 |
| CRIST | - | - | 1.6 | 7.2 | 3.0 | 7.6 | 10.1 | 7.3 | 3.9 | 10.2 | 1.0 | - | 9.4 | 4.0 | - |
| | 0.5 | - | - | 9.2 | 2.8 | 8.8 | 9.6 | 7.5 | 3.0 | 9.4 | 5.0 | 1.8 | 8.4 | 7.6 | 1.9 |
| ELTMA | - | - | - | - | 9.9 | 9.2 | 8.5 | 6.5 | - | - | - | - | - | 9.4 | - |
| GONRU | 7.0 | 0.9 | 9.1 | 7.4 | 8.8 | 7.3 | - | - | - | - | 9.7 | 7.4 | 6.5 | 1.9 | 8.1 |
| | 5.7 | 0.6 | 5.5 | 4.6 | 5.4 | 5.1 | - | - | - | - | 9.8 | 6.7 | 7.1 | 1.6 | 7.7 |
| GOVMI | - | - | - | 10.0 | 10.0 | 10.1 | 8.2 | 7.8 | 0.3 | - | - | 2.5 | - | 2.0 | - |
| HERCA | 7.0 | 6.5 | 7.7 | 10.1 | 6.2 | 4.2 | - | 2.1 | 6.9 | - | 4.8 | 6.6 | 4.1 | 6.8 | 6.3 |
| HINWO | - | - | - | 9.4 | 9.4 | 9.5 | 5.9 | - | - | - | - | - | - | - | - |
| IGAAN | - | - | - | 3.4 | - | - | 2.6 | 5.0 | - | - | - | - | - | - | - |
| | - | - | - | 2.8 | 5.9 | 5.8 | 9.5 | 7.7 | 5.2 | - | - | 6.7 | 4.6 | 4.7 | 7.7 |
| | - | - | - | 6.4 | 2.5 | 0.4 | 2.8 | 3.0 | 5.2 | - | - | - | 0.8 | 5.2 | 0.8 |
| JOBKL | 5.1 | 1.6 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 6.1 | 4.6 | - | - | 3.5 | - | - | - | - | - | 9.0 | - | - | - | - |
| KACJA | - | - | - | - | - | 8.0 | 6.0 | - | - | - | - | 1.4 | - | 0.8 | - |
| | - | - | - | 1.5 | 4.0 | 3.7 | 2.7 | 0.3 | 0.1 | - | - | 1.4 | 0.6 | 4.3 | - |
| | - | - | - | 0.3 | 7.1 | 7.7 | 7.8 | 0.3 | - | - | - | - | - | - | - |
| | - | - | - | - | 2.7 | 3.9 | 6.2 | 2.8 | - | - | - | - | - | - | - |
| KERST | 5.1 | 1.2 | - | - | - | - | - | - | - | - | 3.2 | - | - | - | 6.8 |
| KOSDE | 1.3 | 3.5 | - | - | - | - | - | - | - | - | - | - | - | - | 4.4 |
| | 0.8 | 0.4 | - | - | 1.2 | 1.5 | 1.6 | - | 0.1 | 0.1 | 0.3 | - | - | - | 2.0 |
| LUNRO | 6.4 | 1.0 | 6.3 | 4.7 | 5.7 | - | - | - | 6.8 | 5.2 | 5.4 | 7.2 | 3.2 | - | - |
| MOLSI | - | - | - | 7.8 | 8.1 | 9.5 | 8.8 | 0.7 | - | - | - | 2.9 | - | 4.3 | - |
| | 0.8 | 7.5 | 5.2 | 9.9 | - | 8.6 | 6.5 | 3.8 | - | - | 4.1 | 1.7 | - | 2.4 | - |
| | 2.8 | 4.1 | 8.0 | - | 2.0 | 6.7 | 4.8 | 2.4 | 0.7 | - | - | - | 2.7 | 2.0 | 5.9 |
| | 1.9 | 0.7 | 4.0 | - | 4.2 | 6.4 | 4.9 | 6.5 | 0.8 | - | - | - | 0.2 | 0.7 | 3.6 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MORJO | 0.4 | - | - | 4.4 | 6.5 | 7.5 | 6.5 | 4.1 | 6.2 | - | - | 2.0 | 1.7 | 2.4 | 8.2 |
| OCHPA | - | - | - | - | 4.8 | 4.4 | 3.7 | 4.7 | - | 5.4 | - | - | 7.9 | 7.2 | - |
| OTTMI | 0.3 | 6.3 | 1.5 | - | - | - | - | - | - | - | - | - | - | - | - |
| PERCZ | - | - | - | - | - | - | - | - | - | - | - | 5.3 | 0.7 | 2.0 | - |
| ROBBI | - | - | - | - | 7.5 | 8.4 | 8.4 | 2.4 | - | 5.6 | - | 2.6 | 6.5 | 8.0 | - |
| ROTEC | 0.4 | 3.3 | 8.2 | 1.0 | 0.2 | 6.4 | 7.7 | - | - | - | - | - | - | - | - |
| SCHHA | 1.9 | 2.5 | 4.8 | 0.6 | 3.8 | 6.9 | - | - | 0.6 | 2.8 | 9.5 | - | - | - | - |
| SLAST | - | - | - | 2.4 | 5.1 | 4.4 | 3.4 | - | - | - | - | - | 1.0 | 3.3 | - |
| STOEN | - | - | - | 3.4 | 9.0 | 10.2 | 8.9 | 2.5 | - | 5.6 | 1.6 | 2.1 | 5.8 | 10.6 | - |
| | - | - | - | 3.4 | 10.0 | 9.2 | 8.4 | 2.2 | - | 7.4 | 2.1 | 3.6 | 6.2 | 10.6 | - |
| | - | - | - | 3.0 | 9.7 | 10.2 | 9.7 | 1.1 | - | 6.7 | 2.8 | 3.0 | 7.0 | 9.8 | - |
| STRJO | - | - | - | - | - | 2.8 | 1.5 | - | - | - | 1.0 | - | - | - | - |
| | - | 0.3 | 7.6 | 0.3 | 1.7 | 4.4 | 1.8 | 4.5 | - | - | 0.4 | - | 0.8 | 6.7 | - |
| | - | - | - | - | - | 7.4 | 4.9 | - | - | - | 0.4 | - | - | - | - |
| TEPIS | - | - | - | 8.9 | 9.0 | 9.6 | 8.1 | 8.3 | 3.8 | - | - | - | - | - | 4.2 |
| YRJIL | 1.7 | 1.1 | 3.7 | - | 2.3 | - | - | 1.4 | - | - | 7.5 | 6.2 | 8.6 | 1.0 | 9.2 |
| Sum | 55.7 | 52.9 | 92.9 | 131.5 | 200.9 | 234.6 | 202.6 | 98.9 | 43.6 | 68.3 | 82.6 | 82.1 | 109.0 | 136.4 | 79.3 |

**3. Results (Meteors)**

| September | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BENOR | 11 | 11 | - | 5 | - | - | 13 | 18 | 15 | 7 | 10 | - | - | - | - |
| | 3 | 1 | - | 2 | - | - | 3 | 2 | - | 2 | 2 | - | - | - | - |
| BRIBE | 27 | 10 | 31 | 42 | 53 | 6 | - | 25 | 26 | 5 | 16 | 15 | 2 | - | 19 |
| CASFL | 23 | - | 1 | - | - | - | - | 12 | 4 | 30 | 18 | 8 | 21 | 20 | 5 |
| | 30 | 7 | - | - | 1 | - | - | 24 | 16 | 41 | 28 | 16 | 25 | 45 | 5 |
| CRIST | 47 | 28 | 34 | 13 | - | - | - | 23 | 43 | 53 | 51 | 29 | 33 | 35 | - |
| | 100 | 56 | 59 | 49 | 60 | 3 | 6 | 57 | 80 | 91 | 92 | 51 | 71 | 82 | 24 |
| ELTMA | 31 | - | 18 | 7 | - | - | - | - | - | 35 | 27 | 35 | - | 26 | 12 |
| GONRU | 26 | 47 | 53 | 43 | 26 | - | 28 | 61 | 56 | 50 | 45 | 49 | 38 | 7 | 3 |
| | 25 | 30 | 24 | 41 | 20 | - | 12 | 35 | 42 | 36 | 37 | 31 | 36 | 12 | 7 |
| GOVMI | 40 | 25 | 2 | 21 | 2 | 9 | 1 | 1 | 1 | - | 13 | 53 | 5 | 14 | 15 |
| HERCA | 26 | 26 | 17 | 35 | 23 | 33 | 29 | 3 | 21 | 32 | 42 | 29 | 6 | 28 | 34 |
| HINWO | 37 | - | 2 | - | 26 | 1 | 4 | - | 4 | 18 | 62 | 27 | - | - | - |
| IGAAN | 47 | 11 | 12 | - | 9 | 14 | 13 | 6 | - | - | - | - | - | 27 | 10 |
| | 18 | 15 | 25 | - | 27 | 30 | - | 6 | - | - | - | 11 | 6 | 37 | - |
| | 25 | - | 3 | 6 | 18 | 10 | - | - | 1 | - | - | 4 | 7 | 1 | - |
| JOBKL | - | - | - | - | 273 | - | - | - | - | - | - | 157 | - | - | - |
| | - | - | - | - | - | - | - | - | - | - | - | 97 | - | - | - |
| KACJA | 26 | 10 | - | - | - | 6 | - | - | - | - | 12 | 33 | - | 2 | - |
| | 31 | 27 | 3 | 5 | - | 3 | - | - | - | 9 | 20 | 19 | 17 | 3 | 9 |
| | 54 | 39 | 6 | - | - | - | - | - | - | 1 | 39 | 69 | 3 | - | - |
| | 30 | 31 | 2 | - | - | - | - | - | - | 6 | 20 | 11 | 2 | - | - |
| KERST | 51 | 61 | 10 | 2 | 1 | - | 31 | 30 | 46 | - | 49 | 59 | 64 | 45 | 54 |
| KOSDE | 74 | 104 | 96 | 91 | 124 | 3 | 6 | - | 32 | - | - | 30 | - | 22 | 46 |
| | 7 | 8 | 7 | 11 | 9 | - | - | - | 2 | 3 | - | 3 | - | 5 | 6 |
| LUNRO | - | - | - | - | - | - | - | - | - | 35 | - | - | 33 | 32 | 15 |
| MOLSI | 107 | - | 30 | 24 | 164 | 15 | 19 | - | 101 | 31 | 123 | 39 | - | - | - |
| | 47 | - | 4 | 5 | 43 | 3 | 6 | 2 | 33 | 32 | 72 | 30 | 16 | 20 | 2 |
| | 6 | 9 | 7 | 8 | 27 | 33 | 15 | - | - | 12 | 29 | 1 | 2 | - | 8 |
| | 10 | - | 14 | 10 | 35 | 33 | 13 | - | - | 6 | 46 | 1 | 8 | - | 9 |
| MORJO | 17 | 6 | 6 | - | 2 | 18 | - | - | - | - | - | 11 | 6 | 12 | 5 |
| OCHPA | 2 | 3 | - | - | - | - | - | - | - | 2 | 3 | 5 | - | 4 | - |
| OTTMI | 1 | 12 | - | 17 | 39 | - | - | 30 | 15 | - | - | 33 | 25 | 12 | 25 |
| PERCZ | - | - | 2 | 12 | 6 | 20 | - | - | 5 | - | - | 42 | 6 | 17 | 11 |
| ROBBI | - | - | 2 | - | - | - | - | 9 | - | - | 18 | - | - | - | 4 |
| ROTEC | 27 | - | 26 | 22 | 30 | 18 | 24 | - | - | 23 | 48 | 2 | 20 | - | 7 |
| SCHHA | 15 | 5 | 23 | 11 | - | - | - | - | - | - | 16 | 17 | - | - | 9 |
| SLAST | - | 37 | - | 5 | 1 | - | - | - | - | - | - | - | - | 10 | 16 |
| STOEN | 79 | - | - | 6 | 13 | - | - | 41 | - | 69 | 104 | 61 | 81 | 67 | - |
| | - | - | - | 6 | 7 | - | - | 42 | - | 90 | 89 | 67 | 76 | 64 | - |
| | 75 | - | - | 4 | 9 | - | - | 57 | - | 100 | 98 | 72 | 84 | 90 | - |
| STRJO | 12 | 5 | - | 22 | 28 | 18 | - | - | - | - | 17 | - | - | - | - |
| | 18 | 3 | 4 | 22 | 29 | 24 | - | - | - | - | 22 | - | - | - | 4 |
| | 29 | 8 | - | 44 | 52 | 26 | - | - | - | - | 24 | - | - | - | - |
| TEPIS | 34 | - | 3 | - | 41 | 47 | - | - | - | - | - | 18 | - | 4 | - |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YRJIL | 1 | - | - | - | - | 23 | - | 16 | 49 | 2 | - | - | - | 9 | 17 |
| Sum | 1269 | 635 | 526 | 591 | 1198 | 396 | 223 | 500 | 592 | 821 | 1292 | 1235 | 693 | 752 | 381 |

| September | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BENOR | - | 12 | 10 | 20 | 12 | - | - | - | - | - | - | 15 | 12 | 9 | 6 |
| | - | 2 | 4 | - | 10 | - | - | - | - | - | - | 7 | 3 | 2 | 1 |
| BRIBE | 1 | 11 | 42 | 12 | 31 | 39 | 35 | - | - | 5 | 18 | - | - | - | - |
| CASFL | - | - | 6 | 1 | 17 | 17 | 22 | 8 | - | 21 | - | - | 16 | 12 | - |
| | - | - | 9 | 2 | 40 | 21 | 35 | 7 | - | 2 | - | 11 | 26 | 32 | 1 |
| CRIST | - | - | 3 | 55 | 13 | 27 | 48 | 28 | 18 | 61 | 4 | - | 69 | 14 | - |
| | 1 | - | - | 87 | 26 | 55 | 71 | 40 | 29 | 90 | 9 | 13 | 89 | 33 | 7 |
| ELTMA | - | - | - | - | 41 | 36 | 33 | 15 | - | - | - | - | - | 26 | - |
| GONRU | 36 | 4 | 44 | 31 | 38 | 22 | - | - | - | - | 29 | 40 | 37 | 7 | 36 |
| | 20 | 2 | 29 | 18 | 20 | 11 | - | - | - | - | 40 | 31 | 31 | 4 | 34 |
| GOVMI | - | - | - | 49 | 39 | 39 | 31 | 23 | 1 | - | - | 9 | - | 10 | - |
| HERCA | 33 | 27 | 24 | 23 | 20 | 13 | - | 6 | 21 | - | 22 | 26 | 15 | 22 | 26 |
| HINWO | - | - | - | 40 | 42 | 39 | 25 | - | - | - | - | - | - | - | - |
| IGAAN | - | - | - | 8 | - | - | 4 | 13 | - | - | - | - | - | - | - |
| | - | - | - | 6 | 28 | 20 | 28 | 24 | 15 | - | - | 35 | 26 | 22 | 41 |
| | - | - | - | 10 | 4 | 2 | 4 | 8 | 11 | - | - | - | 3 | 17 | 2 |
| JOBKL | 89 | 39 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 62 | 22 | - | - | 26 | - | - | - | - | - | 102 | - | - | - | - |
| KACJA | - | - | - | - | - | 21 | 18 | - | - | - | - | 5 | - | 3 | - |
| | - | - | - | 6 | 9 | 14 | 11 | 2 | 1 | - | - | 4 | 3 | 22 | - |
| | - | - | - | 1 | 57 | 57 | 46 | 1 | - | - | - | - | - | - | - |
| | - | - | - | - | 7 | 6 | 15 | 7 | - | - | - | - | - | - | - |
| KERST | 23 | 4 | - | - | - | - | - | - | - | - | 12 | - | - | - | 29 |
| KOSDE | 20 | 20 | - | - | - | - | - | - | - | - | - | - | - | - | 19 |
| | 3 | 1 | - | - | 3 | 6 | 4 | - | 1 | 1 | 2 | - | - | - | 7 |
| LUNRO | 25 | 10 | 42 | 17 | 31 | - | - | - | 28 | 31 | 24 | 32 | 10 | - | - |
| MOLSI | - | - | - | 130 | 138 | 86 | 72 | 2 | - | - | - | 19 | - | 22 | - |
| | 2 | 44 | 28 | 52 | - | 63 | 34 | 12 | - | - | 29 | 9 | - | 5 | - |
| | 10 | 7 | 30 | - | 8 | 14 | 18 | 8 | 4 | - | - | - | 15 | 8 | 18 |
| | 11 | 8 | 14 | - | 16 | 10 | 10 | 20 | 2 | - | - | - | 1 | 4 | 8 |
| MORJO | 1 | - | - | 9 | 15 | 21 | 17 | 12 | 16 | - | - | 5 | 6 | 4 | 20 |
| OCHPA | - | - | - | - | 10 | 10 | 16 | 7 | - | 13 | - | - | 20 | 12 | - |
| OTTMI | 1 | 32 | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| PERCZ | - | - | - | - | - | - | - | - | - | - | - | 12 | 2 | 6 | - |
| ROBBI | - | - | - | - | 23 | 24 | 24 | 7 | - | 17 | - | 8 | 20 | 18 | - |
| ROTEC | 1 | 4 | 31 | 2 | 2 | 22 | 23 | - | - | - | - | - | - | - | - |
| SCHHA | 4 | 9 | 12 | 2 | 9 | 28 | - | - | 2 | 5 | 28 | - | - | - | - |
| SLAST | - | - | - | 4 | 15 | 6 | 5 | - | - | - | - | - | 1 | 7 | - |
| STOEN | - | - | - | 36 | 69 | 75 | 44 | 12 | - | 22 | 5 | 10 | 37 | 45 | - |
| | - | - | - | 38 | 59 | 72 | 46 | 11 | - | 36 | 6 | 8 | 39 | 39 | - |
| | - | - | - | 47 | 93 | 83 | 77 | 12 | - | 30 | 8 | 13 | 54 | 50 | - |
| STRJO | - | - | - | - | - | 15 | 6 | - | - | - | 2 | - | - | - | - |
| | - | 1 | 37 | 1 | 8 | 15 | 6 | 12 | - | - | 1 | - | 2 | 24 | - |
| | - | - | - | - | - | 22 | 28 | - | - | - | 1 | - | - | - | - |
| TEPIS | - | - | - | 52 | 46 | 61 | 42 | 31 | 11 | - | - | - | - | - | 15 |
| YRJIL | 5 | 3 | 9 | - | 9 | - | - | 5 | - | - | 36 | 29 | 35 | 3 | 48 |
| Sum | 348 | 262 | 379 | 759 | 1034 | 1072 | 898 | 333 | 160 | 334 | 378 | 341 | 572 | 482 | 318 |

In September, the weather conditions in Europe slightly reversed: The more northern observers enjoyed better conditions than in the month before, whereas most observers south of the Alps collected fewer clear nights. 13 out of 48 cameras recorded meteors in twenty or more nights. With more than 3,700 hours, the effective observing time reduced by 350 hours compared to 2009. The number of meteors, however, increased by more than 3,000 to almost 19,000. Once more, the camera network grew slightly: Klaas Jobse started observation with his second intensified camera KLARA2 in September.

Until the end of the month, about half of all cameras had switched to the new version of MetRec, so that the effective collection area could be calculated. The total collection area, however, was given in table 1 only for those cameras that provided reliable limiting magnitudes and therefore effective collection areas in the full month. In addition we abstained from listing the same field of view for all cameras with the same lens contrary to what was announced in the last report. A closer analysis had revealed, that the small

deviations between the cameras are not only measurement errors, but represent also real differences due to tiny variations in the focal length.

With an long-term average of 4.5 meteors per hour, September is a transitional month between the peak months August (7.0) and October (5.9). The latest analysis of meteor showers in the Perseus-Auriga region showed, that there is a bunch of minor showers near the northern Apex source. With the September Perseids (208 SPE), one of these shall be analyzed here in more detail. Only recently the SPE were corrected in the IMO working list and "shifted" into the right position. In addition, we have a closer look at the nu Eridanids (337 NUE) and September iota Cassiopeiids (416 SIC) as in the last year. The analyses are based on data of 677 SPE, 91 SIC and 893 NUE atop of 14,000 sporadic meteors. As usual, the ratio of the shower and sporadic meteor counts per night was used as an activity measure.

In this year, the September epsilon Perseids show a classical profile with a distinct maximum of about 25% of the sporadic meteors in the night of September 9/10 (figure 1). That date matches perfectly to the value found in the last long-term analysis (solar longitude 167°). It is also consistent, that rates at the ascending are slightly higher than at the descending branch – only the maximum is more pronounced than in the long-term analysis.

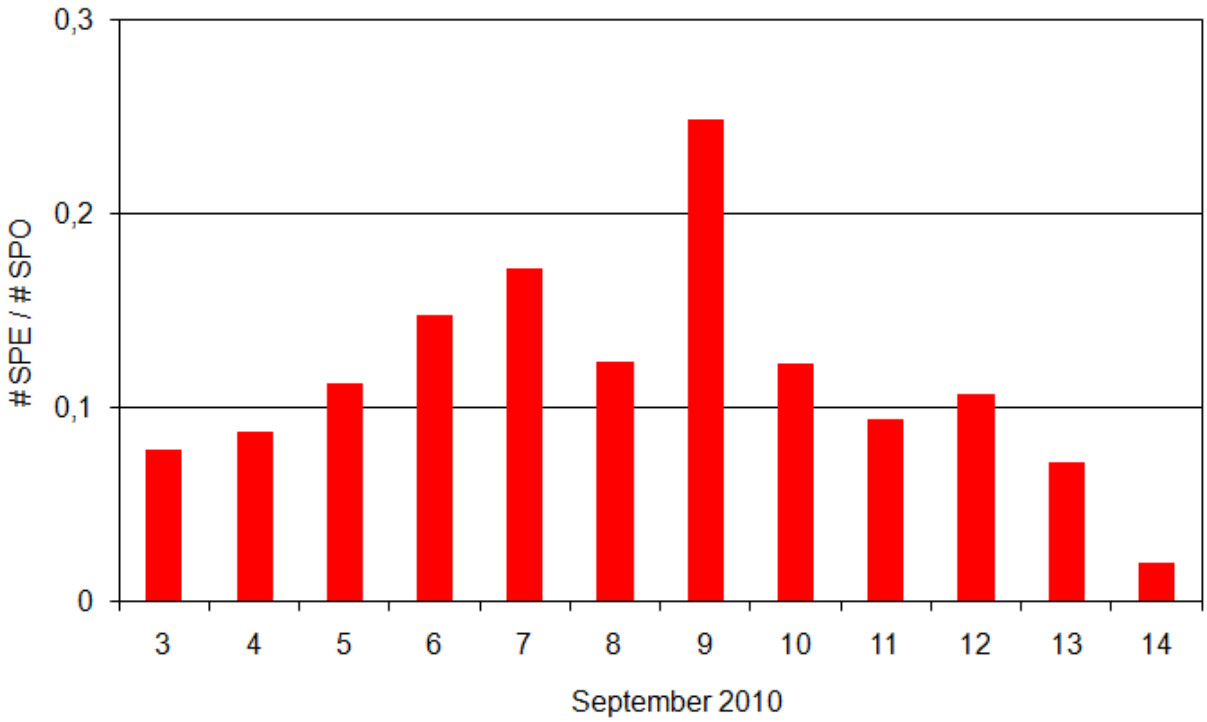


*Figure 1: Activity profile of the September Perseids in September 2010. The ratio of shower and sporadic meteor is plotted for each night.*

The nu Eridanids and September iota Cassiopeiids are even weaker showers. To assess, whether their activity graphs show real structures or only random fluctuations, the profile from the monthly analysis in September 2009 was plotted in parallel to the new 2010 values (figure 2).
In both years, the nu Eridanids show an approximately constant activity of 7-8% of the sporadic meteor count. The highest rate was observed on September 16, 2010, but the profile shows also a few sub-maxima. It is amazing that even these structures match reasonably well in both years.
The September iota Cassiopeiids reached again only about 4% of the sporadic meteor count. Their maximum (September 9) occured one day later than in the year before.

The good agreement between both years is encouraging. It indicates that activity profiles of even such weak showers do not only show random fluctuations.

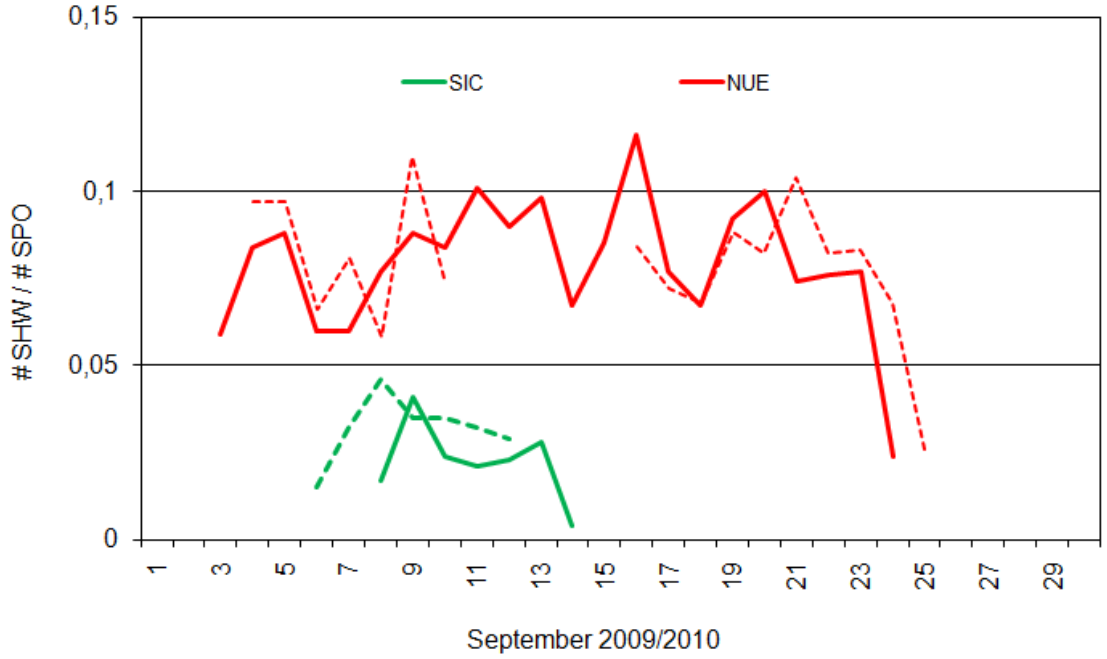


*Figure 2:Comparison of the activity profiles of the nu Eridanids and the September iota Cassiopeiids in September 2009 (dashed line) and 2010 (solid line).*

Finally we want to check, at what time the activity interval of the Orionids starts. The long-term analysis of 2009 showed first signs of this shower as early as September 26. However, the real start date was set to October 3, since only then the radiant position was reliable enough. In the recent analysis of the Perseus Auriga complex, which incorporated additional data from fall 2009, the shower could even be traced to mid-September.
Now we extended the activity interval artificially to September 1 and tested, how many meteors would fit to the extrapolated radiant position. A fairly constant rate of 5% of the sporadic meteors matched to that radiant in all of September (figure 3). Only starting from September 25, there was a marginal increase in meteors, which c201009ould reflect the onset of the Orionids in 2010. On September 30, the increase became prominent.

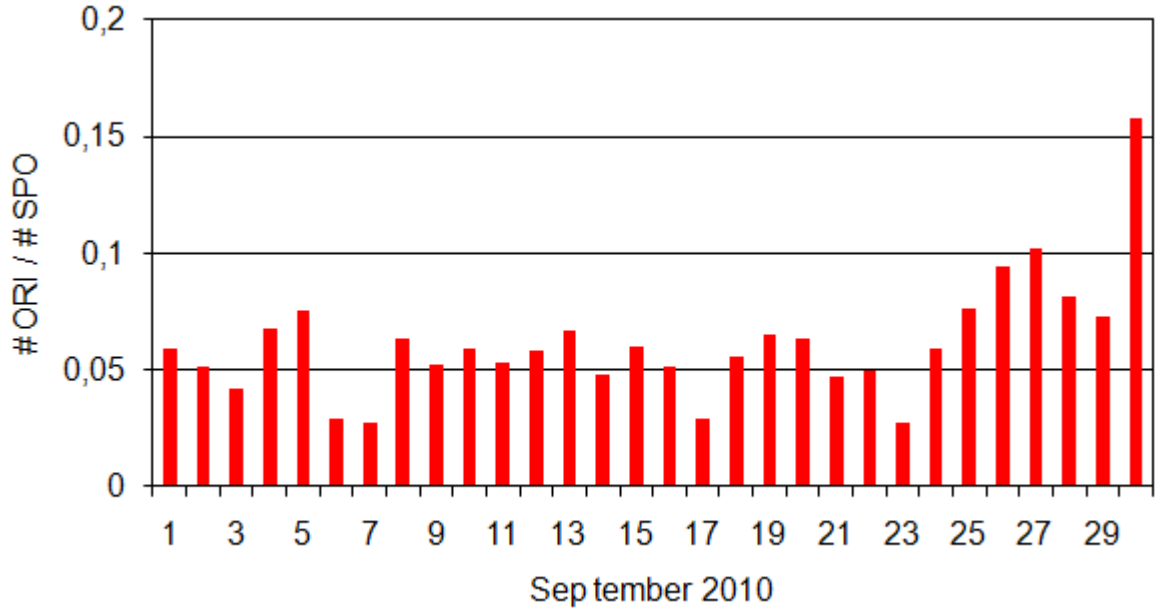


*Figure 3:Percentage of sporadic meteors that match to the extrapolated Orionid radiant. Starting from September 25, there is a small increase in rates that hints on the real shower.*