



The results of Orionids observations by the FAVOR camera in 2006-2008

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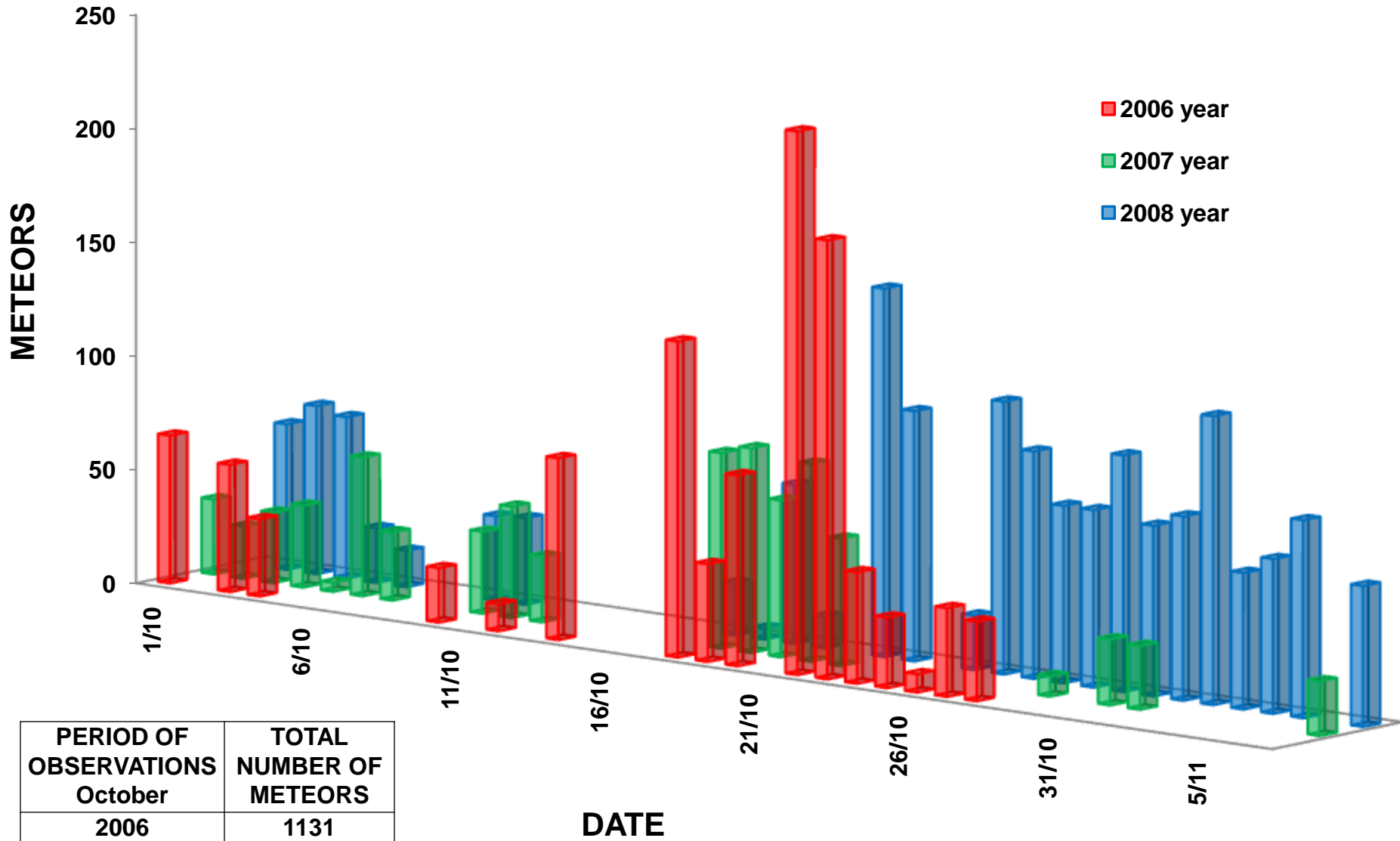
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CAMERA FAVOR

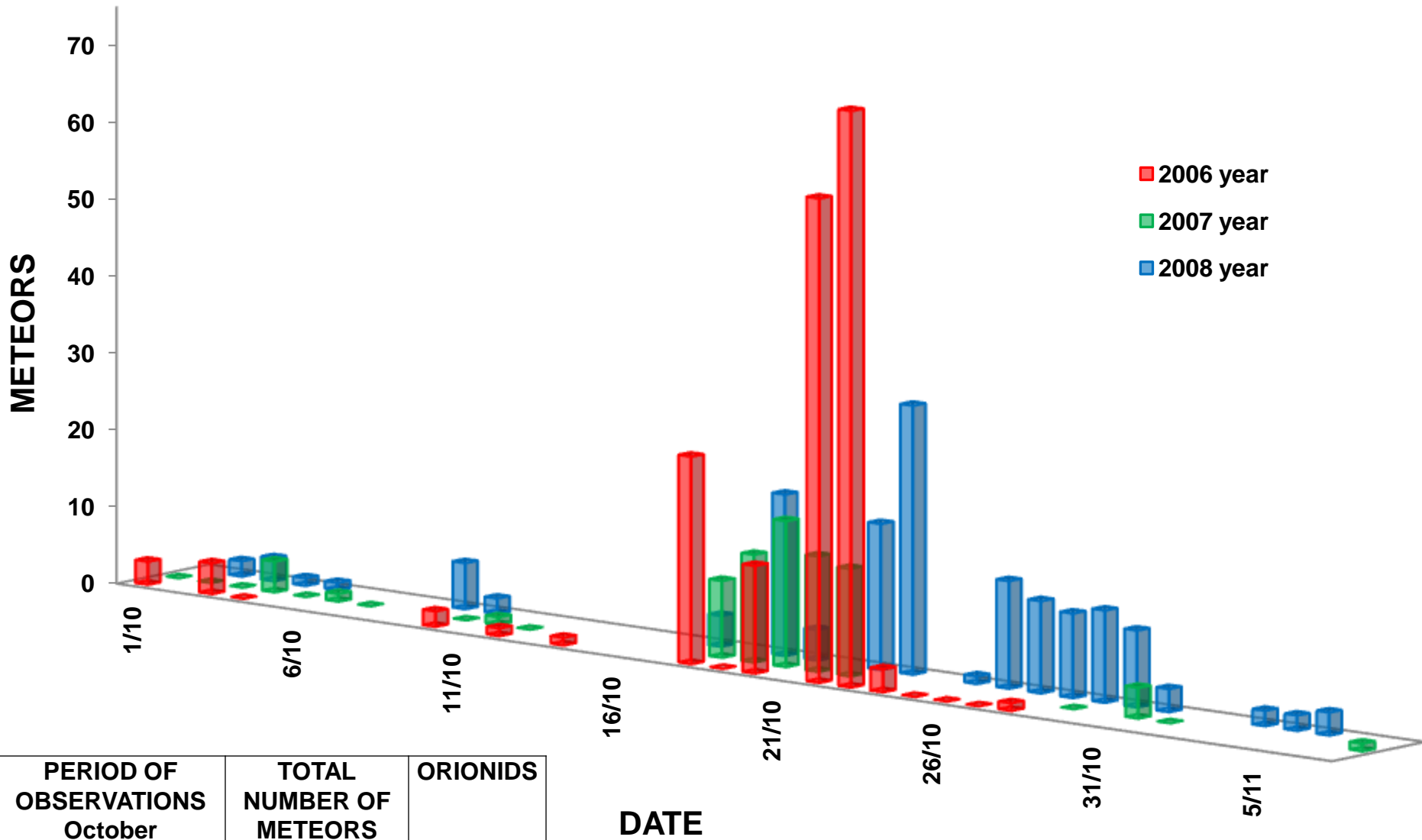


Field of view -18 x20
CCD- 1380x1024 pixels
The limiting magnitude is above 10^m for
meteors

| Period of observations | 2006 | 2007 | 2008 | 2009 |
|------------------------|-------------|-------------|-------------|------------|
| January | - | 169 | 668 | 229 |
| February | - | 190 | 411 | 194 |
| March | - | 201 | 62 | 150 |
| April | - | 100 | 122 | 122 |
| May | - | 312 | 192 | - |
| June | - | 229 | 196 | 110 |
| July | 36 | 389 | 21 | 134 |
| August | 911 | 332 | 558 | - |
| September | 671 | 471 | 296 | - |
| October | 1131 | 758 | 1302 | - |
| November | 486 | 135 | 799 | - |
| December | 525 | 313 | 420 | - |
| Total | 3724 | 3599 | 5047 | 939 |

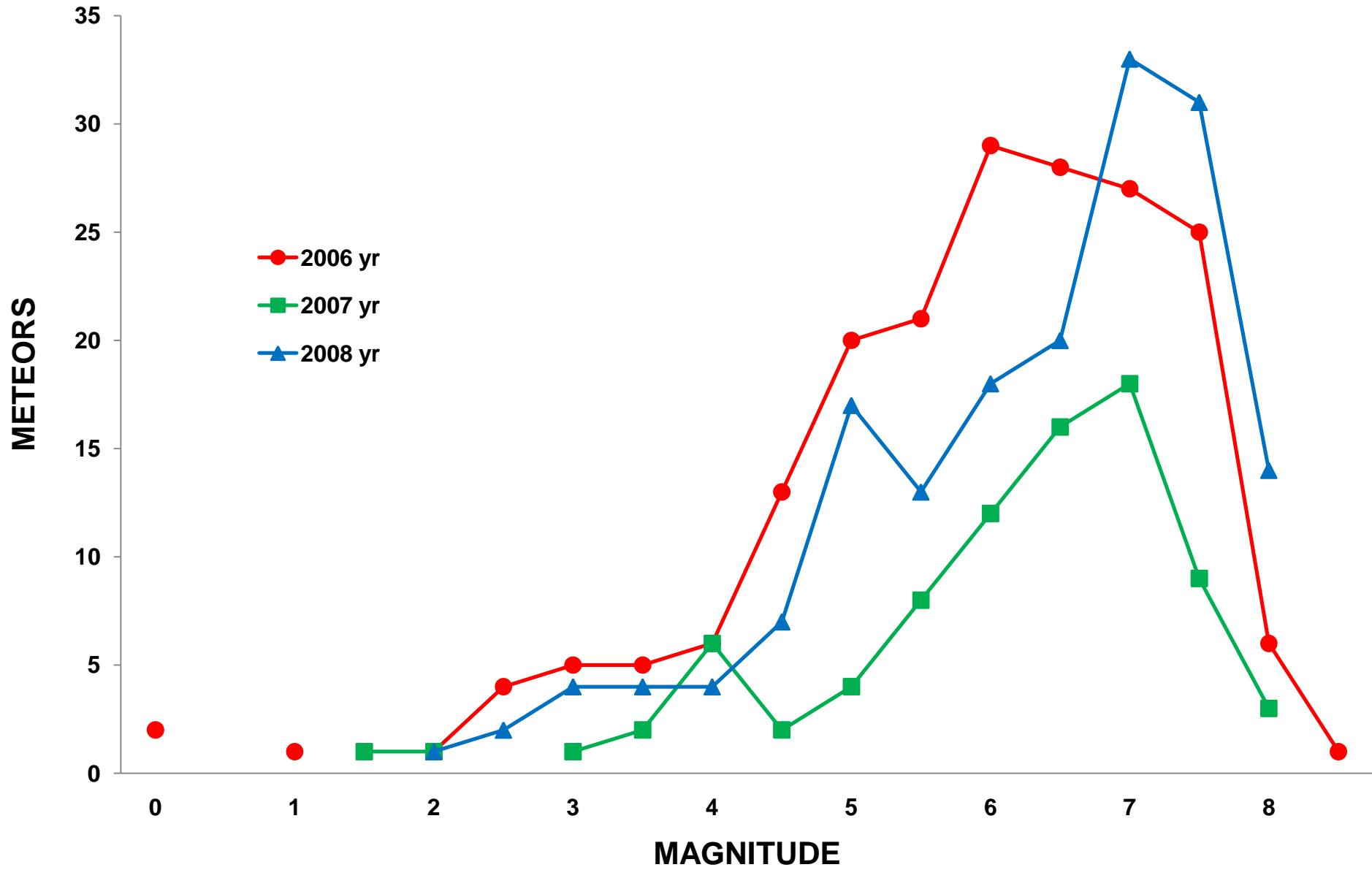


| PERIOD OF OBSERVATIONS | TOTAL NUMBER OF METEORS |
|------------------------|-------------------------|
| October | 1131 |
| 2006 | 1131 |
| 2007 | 810 |
| 2008 | 1772 |



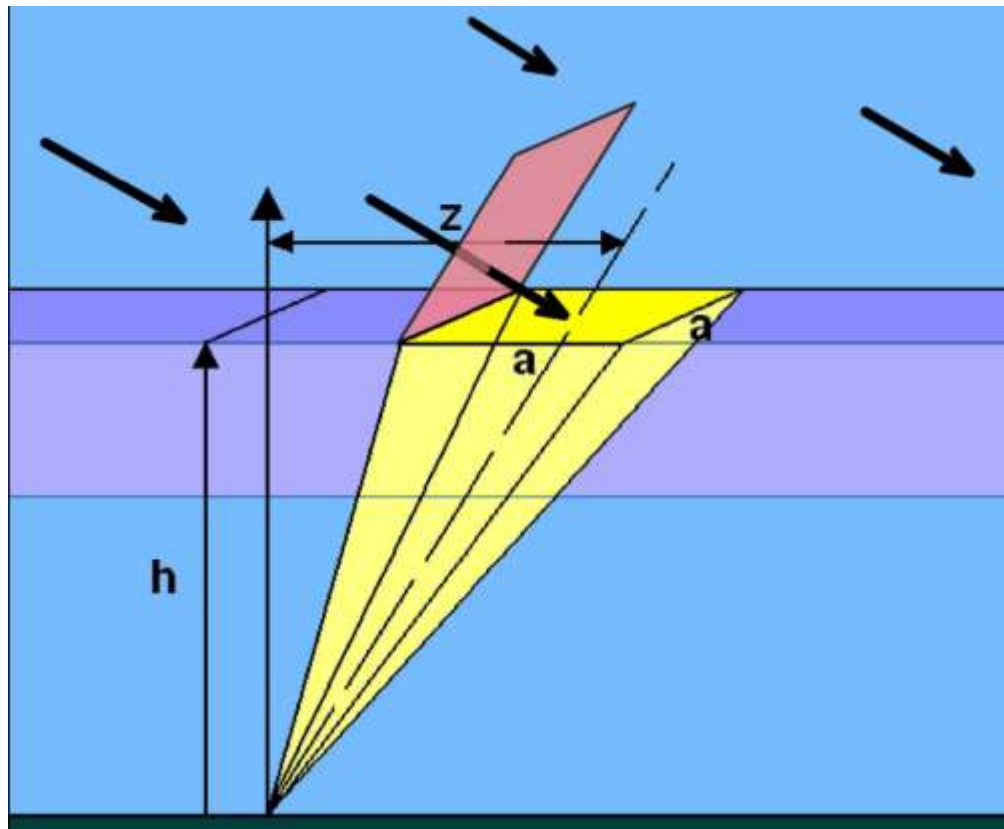
| PERIOD OF OBSERVATIONS | TOTAL NUMBER OF METEORS | ORIONIDS |
|------------------------|-------------------------|----------|
| October | | |
| 2006 | 1131 | 194 |
| 2007 | 810 | 83 |
| 2008 | 1772 | 172 |

MAGNITUDE OF ORIONIDS



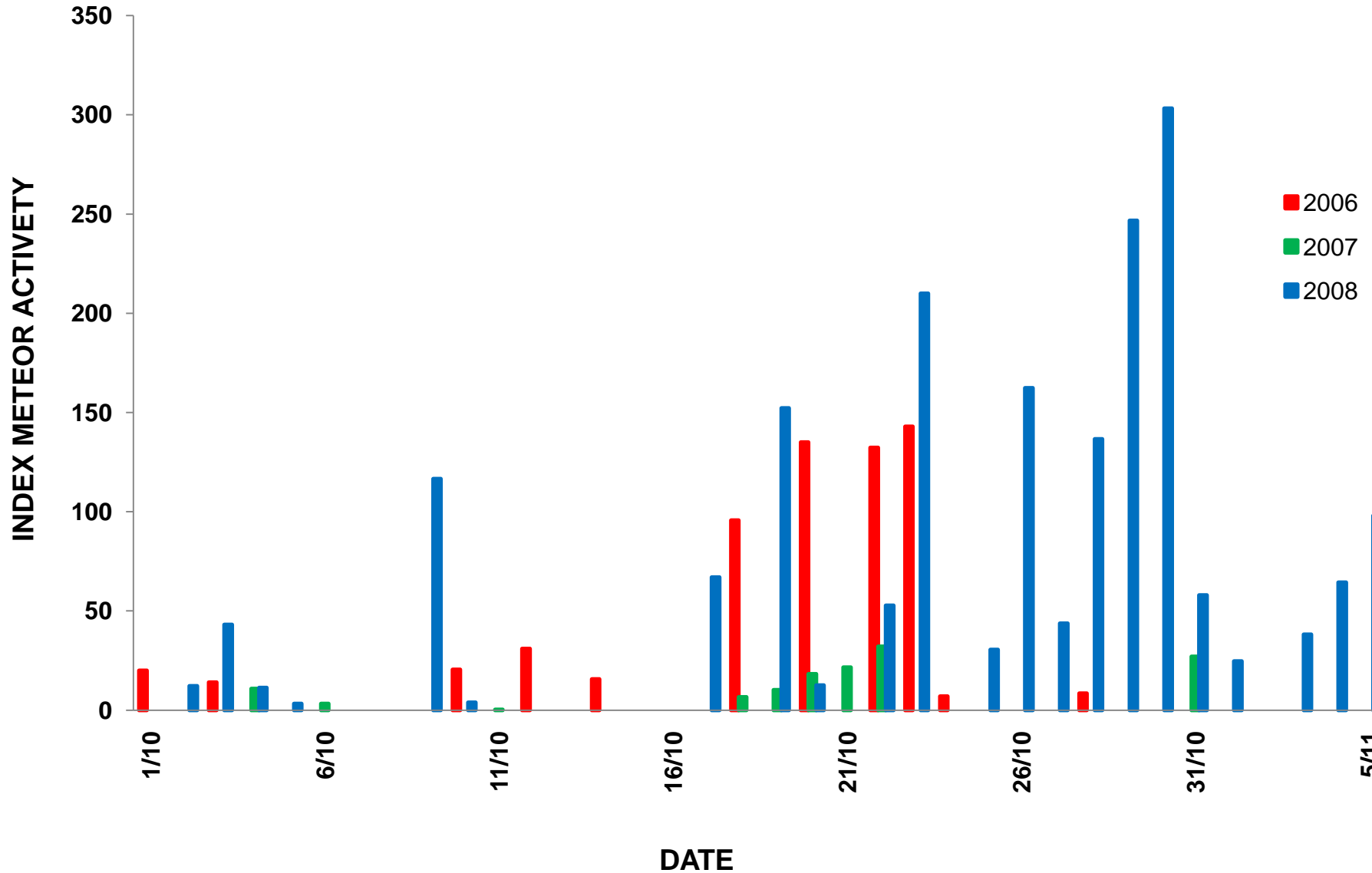
INDEX METEOR ACTIVITY

Index of meteor activity (IMA) - a total number of meteors crossing the area normal to the direction of a meteor particles movement per the unit of time (1 hour, 8 hour of night or per day).



INDEX METEOR ACTIVITY OF ORIONIDS

IMA /10³ (particles to the Earth per hour)



Conclusions

- 449 Orionid meteors were detected for 3 years of observations using the camera FAVOR.
- Most part of Orionid was observed from 20 to 23 October.
- The distribution of Orionid meteors by brightness from 2006 to 2008 was present.
- Most of Orionid meteors have 5-7 magnitudes.
- The IMA was calculated for Orionids. On 20 October the peak of the maximum activity of the Orionids is obtained and IMA was 135×10^3 (particles to the Earth per 1 hour) in 2006, $4-6 \times 10^3$ (particles to the Earth per 1 hour) in 2007 and 2008 years.
- The principle of IMA calculation can be used for other meteor showers. The IMA for sporadic meteors can be only approximately estimated from single station observations. To calculate the IMA of shower meteors and sporadic meteors we can estimate the influx meteor particles to the Earth per the unit time. We can investigate the distribution for the direction and variations of activity of meteor particles. To carry out more detailed investigation more observational data for longer period are required.

Thank you!