

1/2 year of AMOS at Canary Islands

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5 months of AMOS at Canary Islands



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Motivation

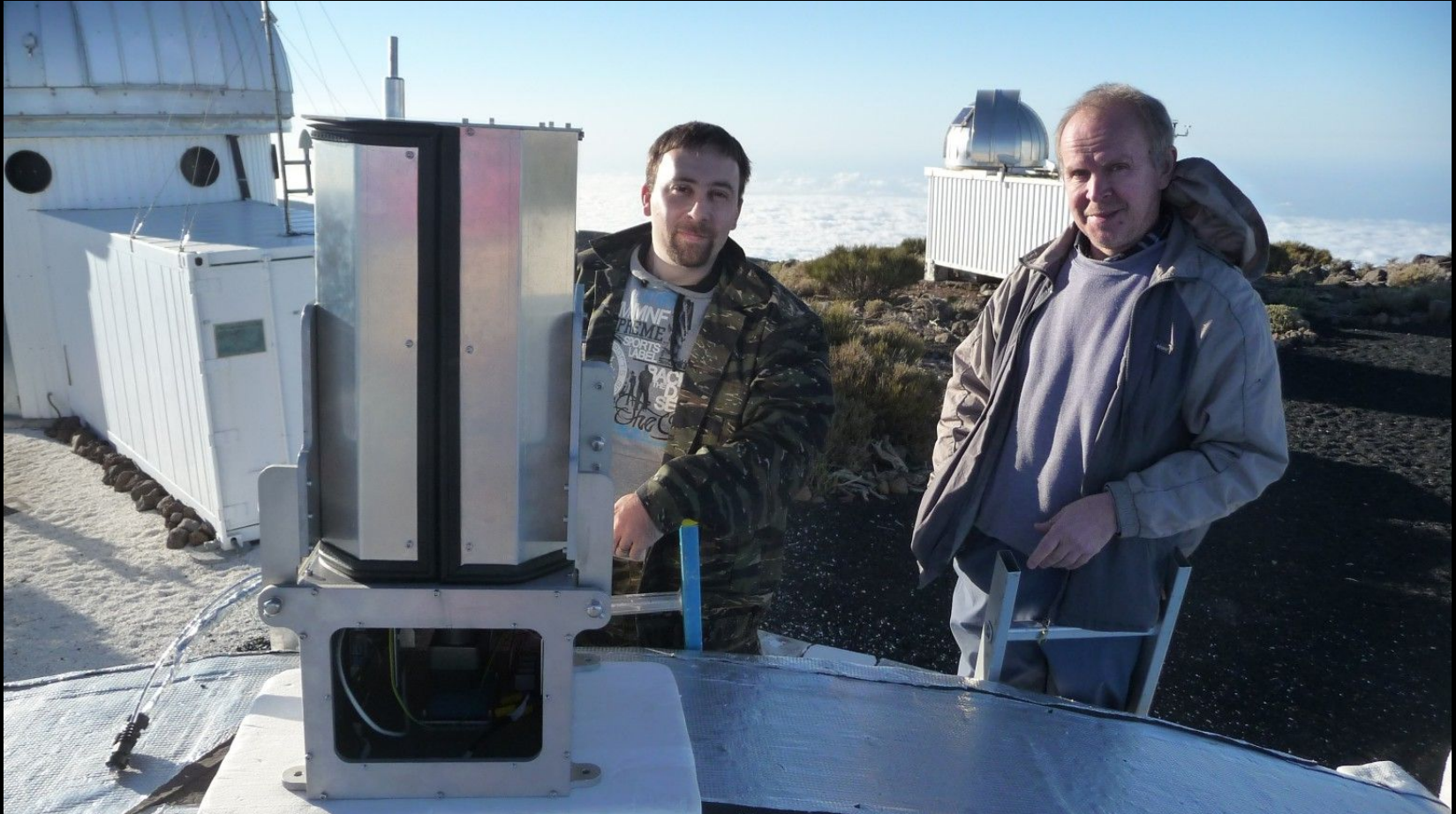
- 1. to better cover southern sky by systematic video observations**
- 2. to confirm the potential/predicted meteor shower of asteroidal origin**
e.g.
Příbram and Neuschwanstein meteorites
(Spurný et al, 2003, Tóth et al., 2011, Koten et al., 2014).
- 3. what are real showers?**
IAU MDC meteor shower confirmation list validation



AGO Modra – inventing, constructing, testing of AMOS cameras



Observatory Teide, IAC - installation March 2015





Observatory Teide, IAC



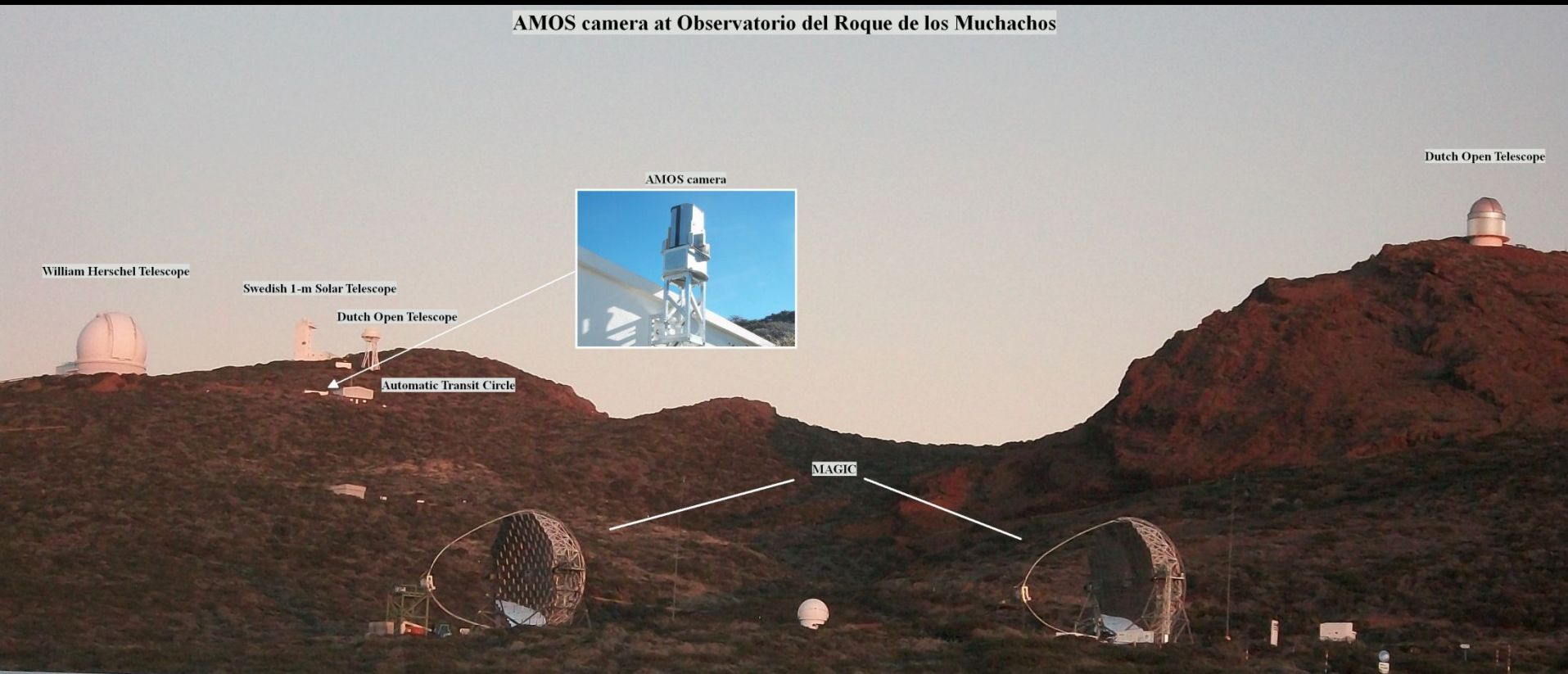
AMOS-CI



Observatory Roche de los Muchachos, IAC

- installation March 2015

AMOS camera at Observatorio del Roque de los Muchachos



Observatory Roche de los Muchachos, IAC - installation March 2015



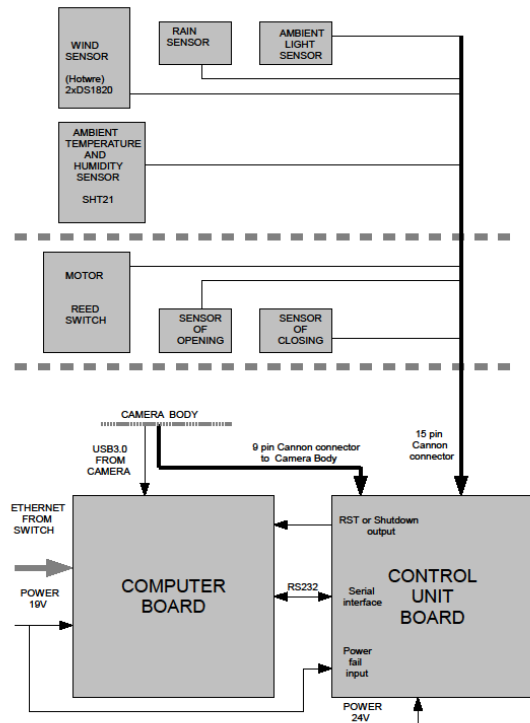
... done!
... even in frozen condition



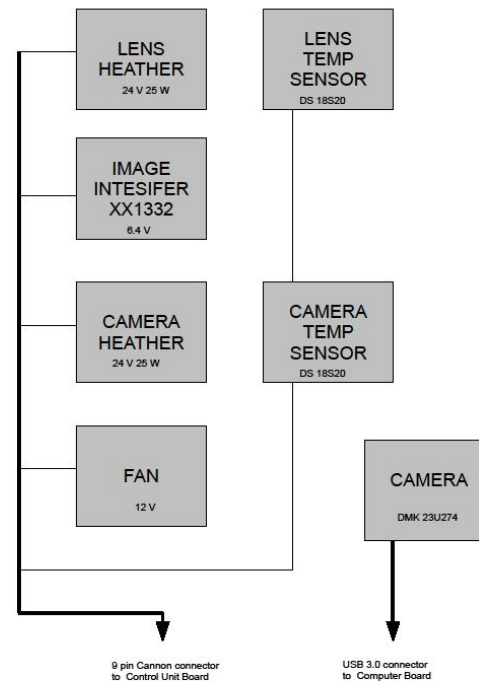
Scheme of AMOS-CI camera



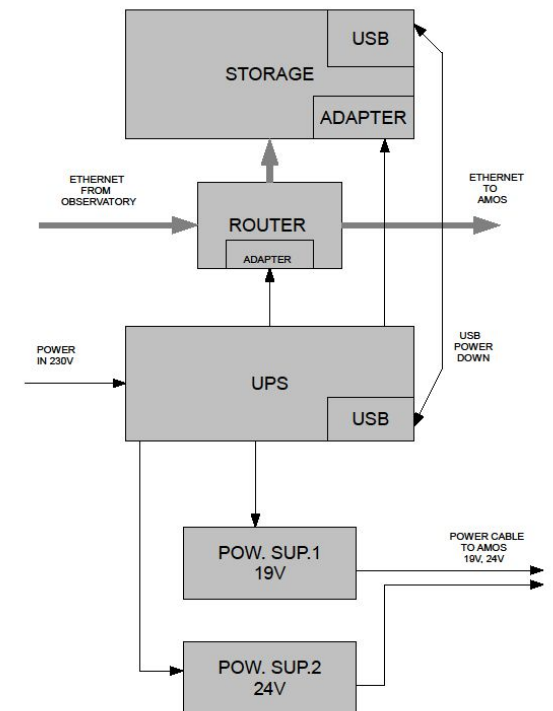
OUTER SHELL



CAMERA BODY



STORAGE & POWER SUPPLY UNIT



Spanish King inauguration of AMOS and other systems OT, IAC, June 2015

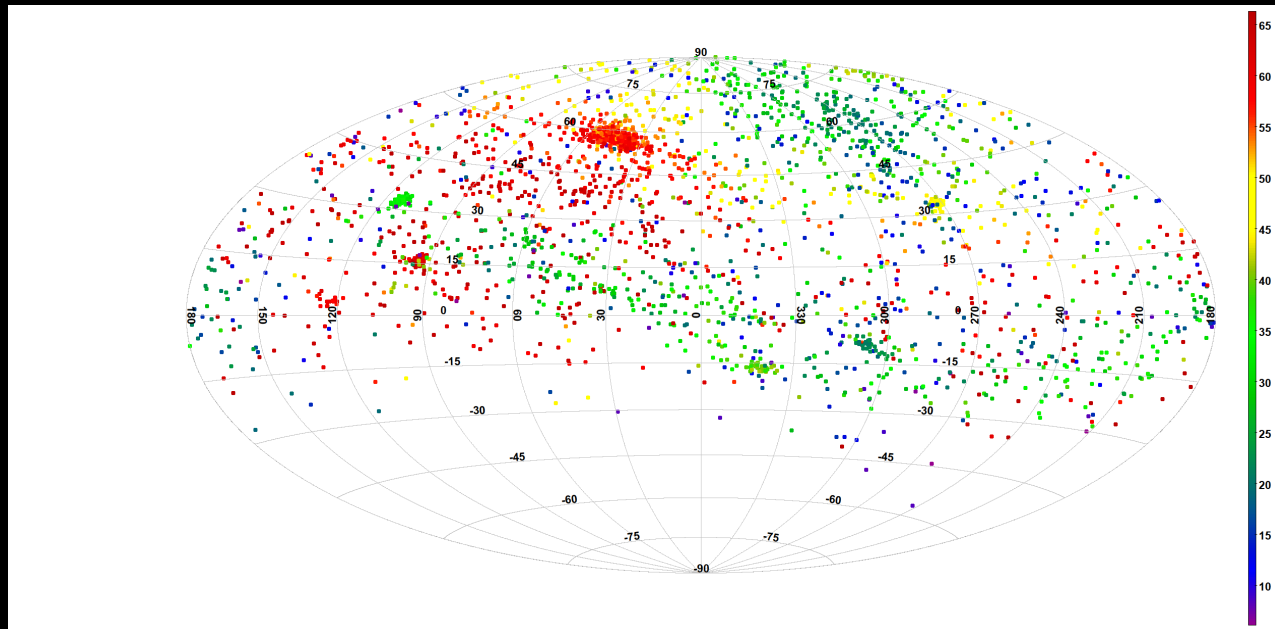


Results

- 1. 14 098 single station meteors (LP 9 225, TE 5 628)**
- 2. 1 539 orbits (17%, 27%)**
- 3. at least 22 meteor streams with 5 and more orbits**
- 4. two daytime (171) ARI orbits detected**
- 5. one fireball with meteorite fall on Tenerife island (Spurný, pers. comm.)**

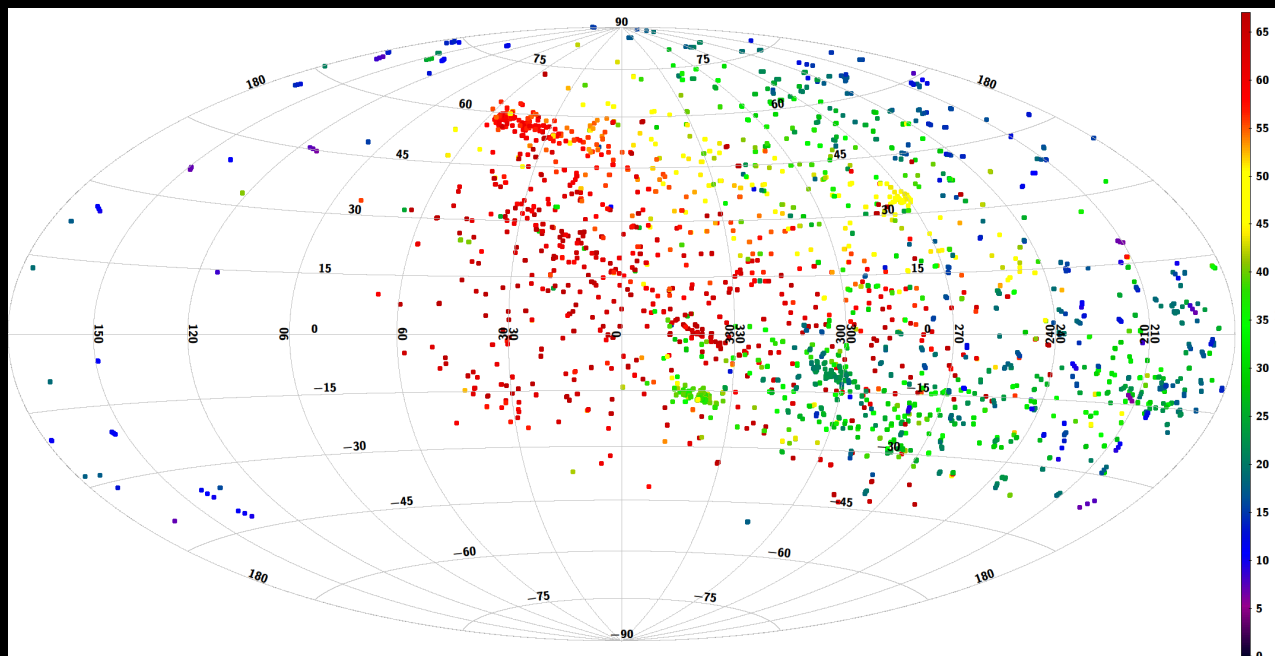


Radiant distribution from AMOS cameras



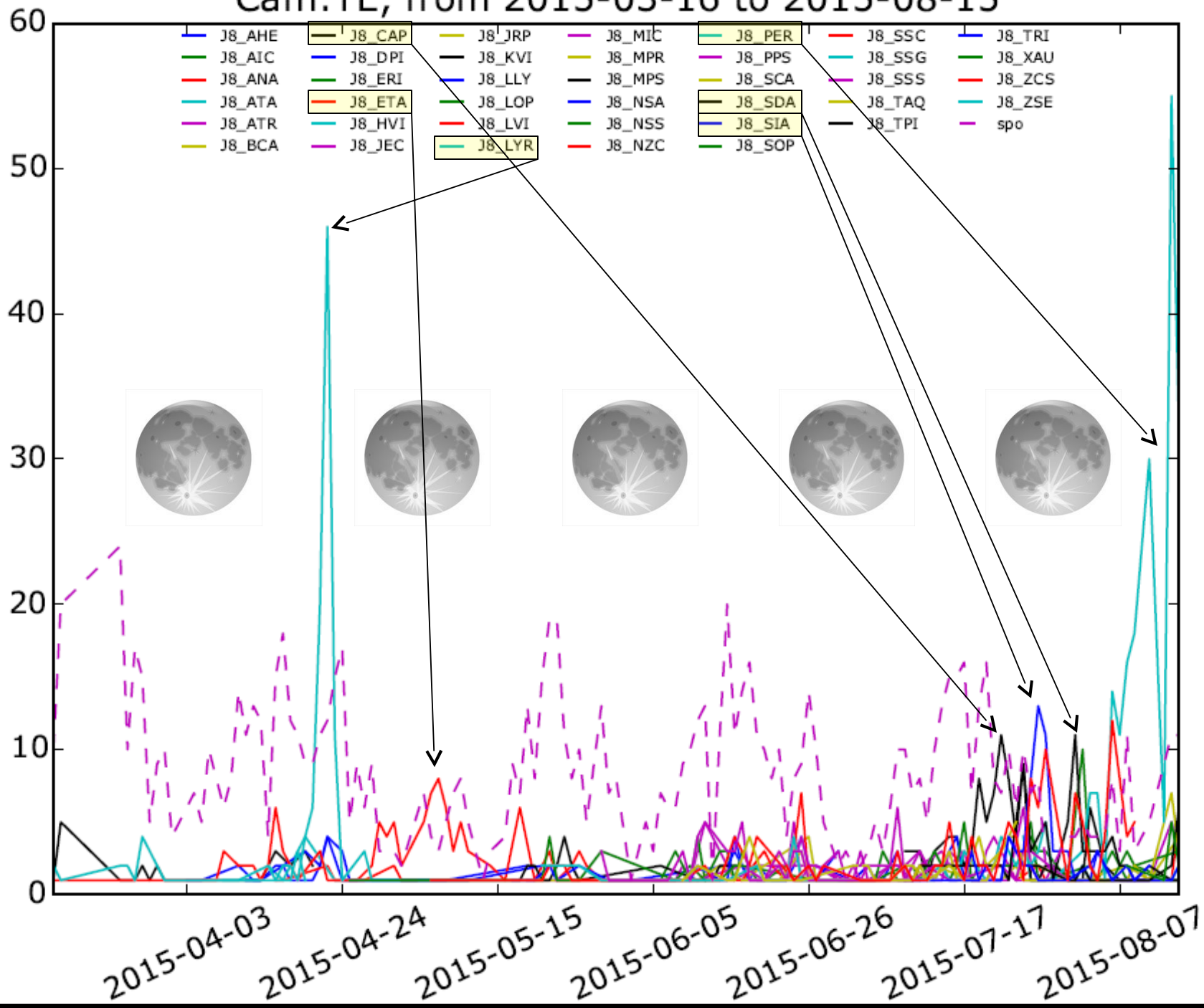
SVMN

2009-2014

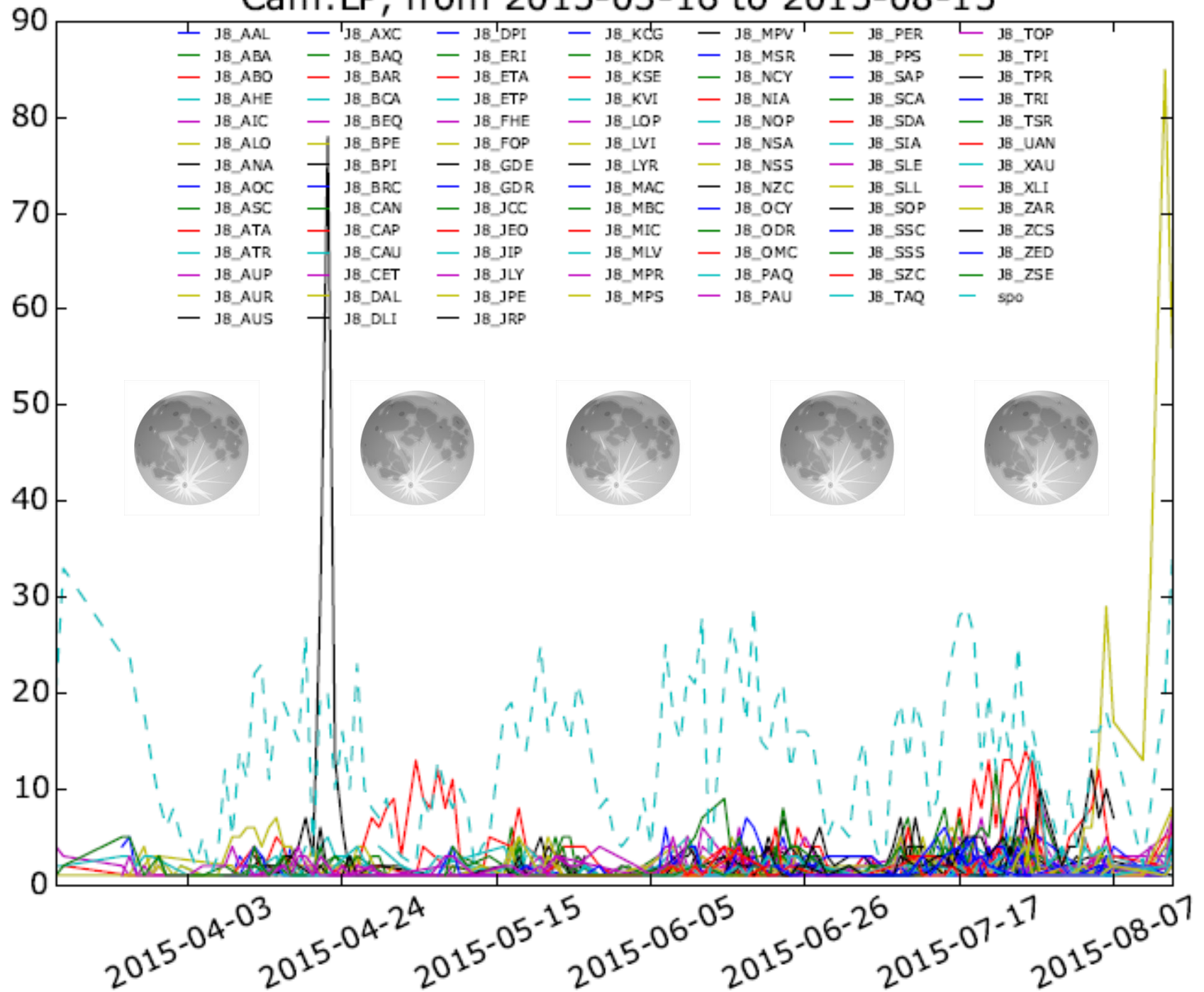


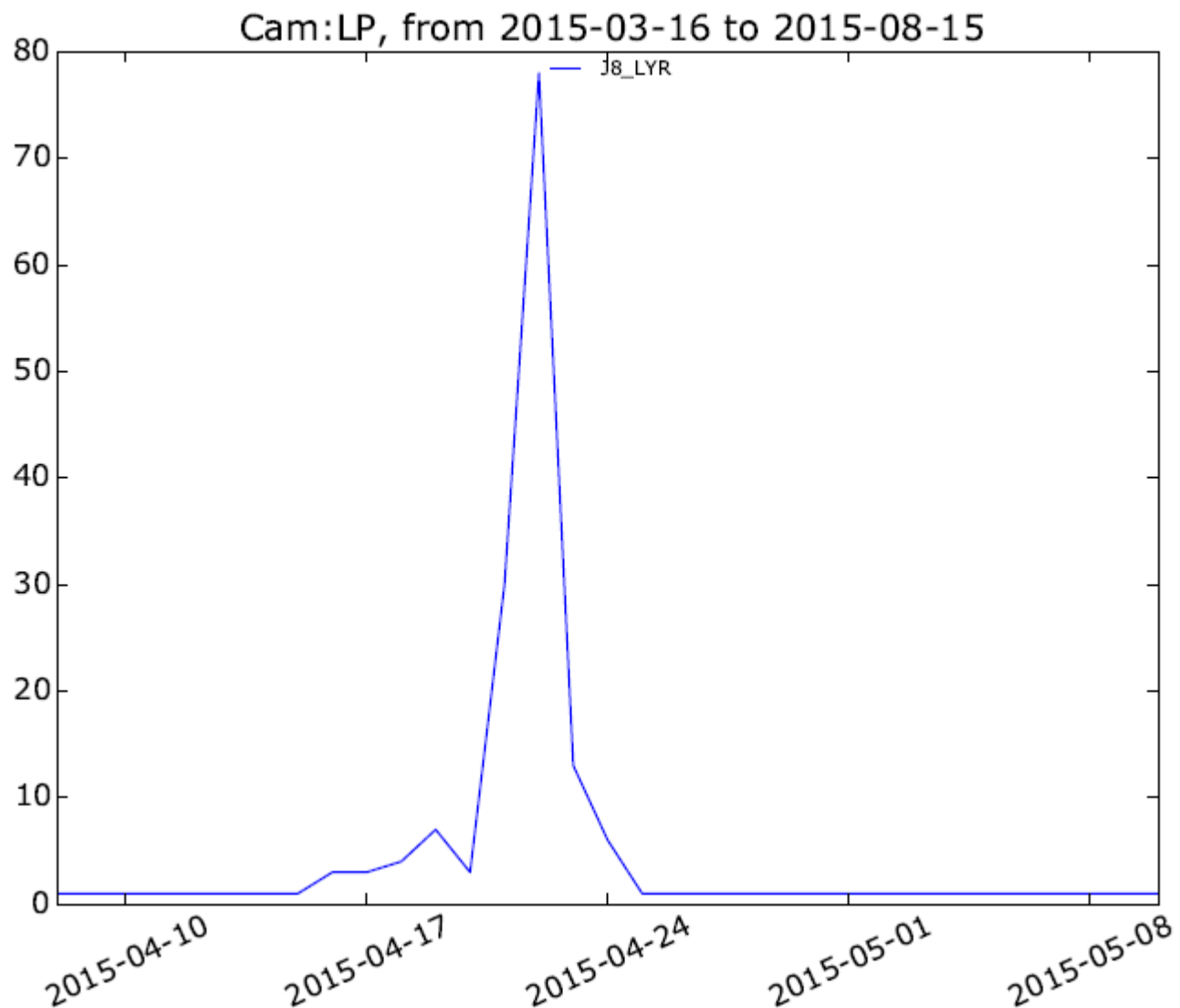
AMOS-CI
2015

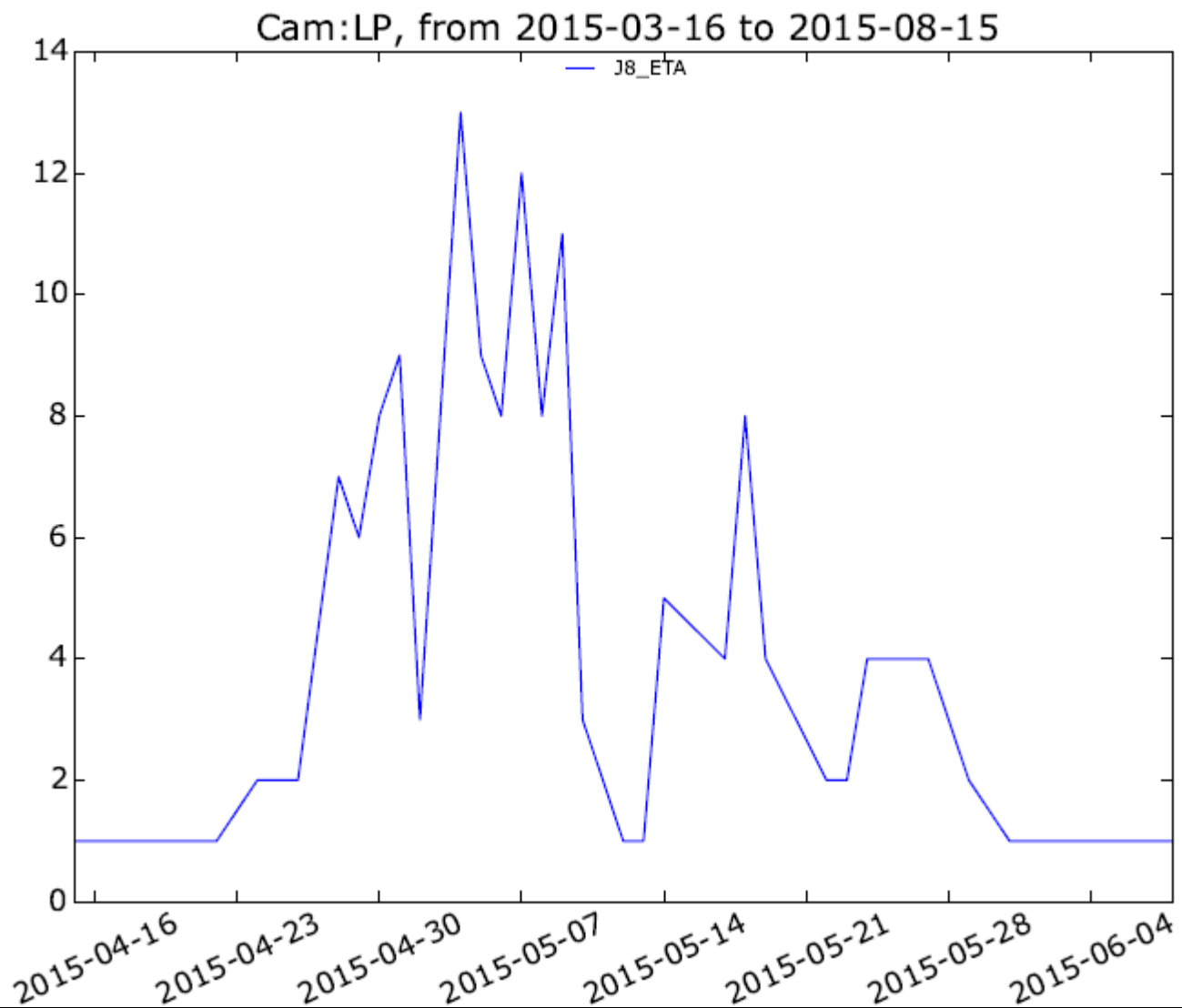
Cam:TE, from 2015-03-16 to 2015-08-15



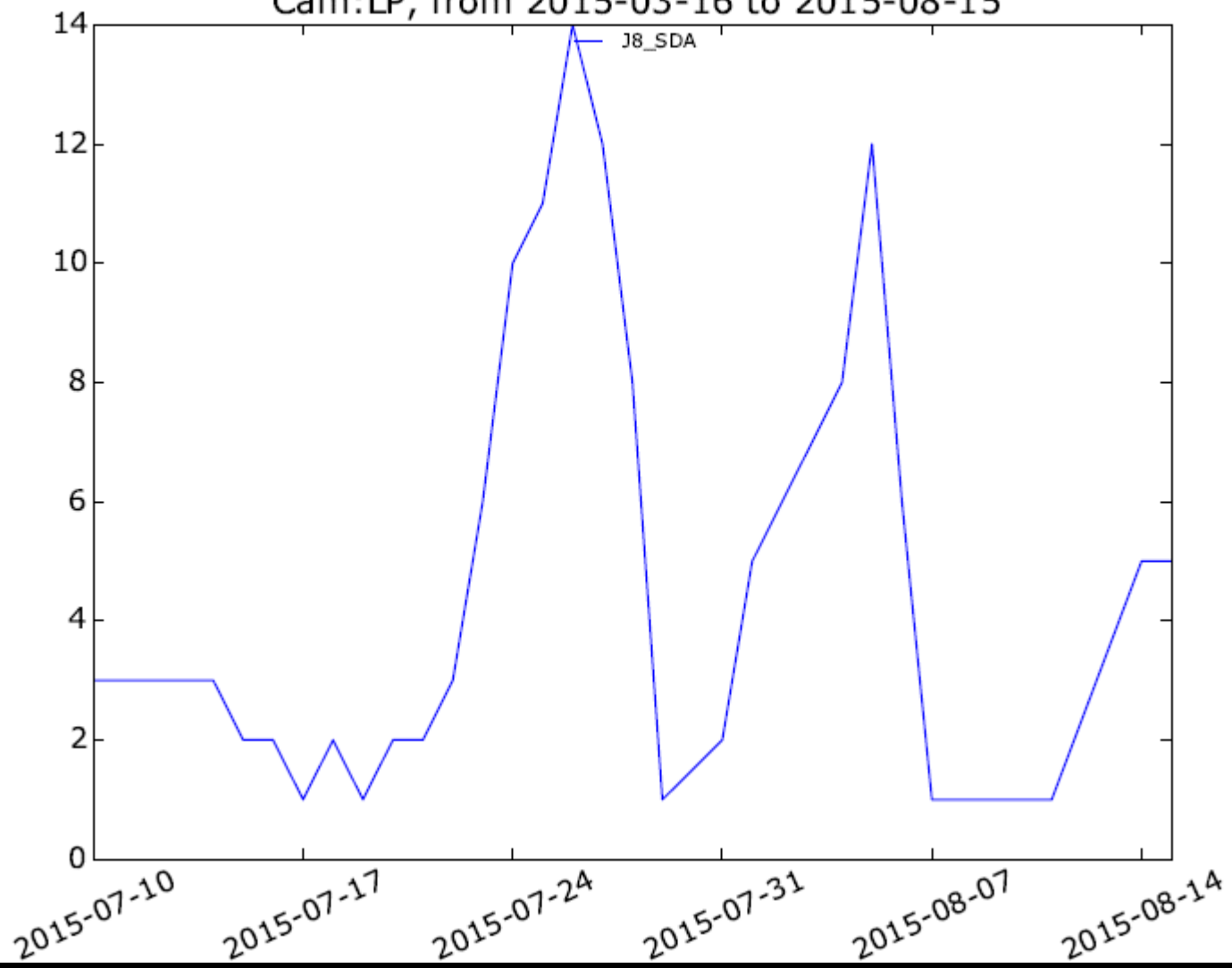
Cam:LP, from 2015-03-16 to 2015-08-15

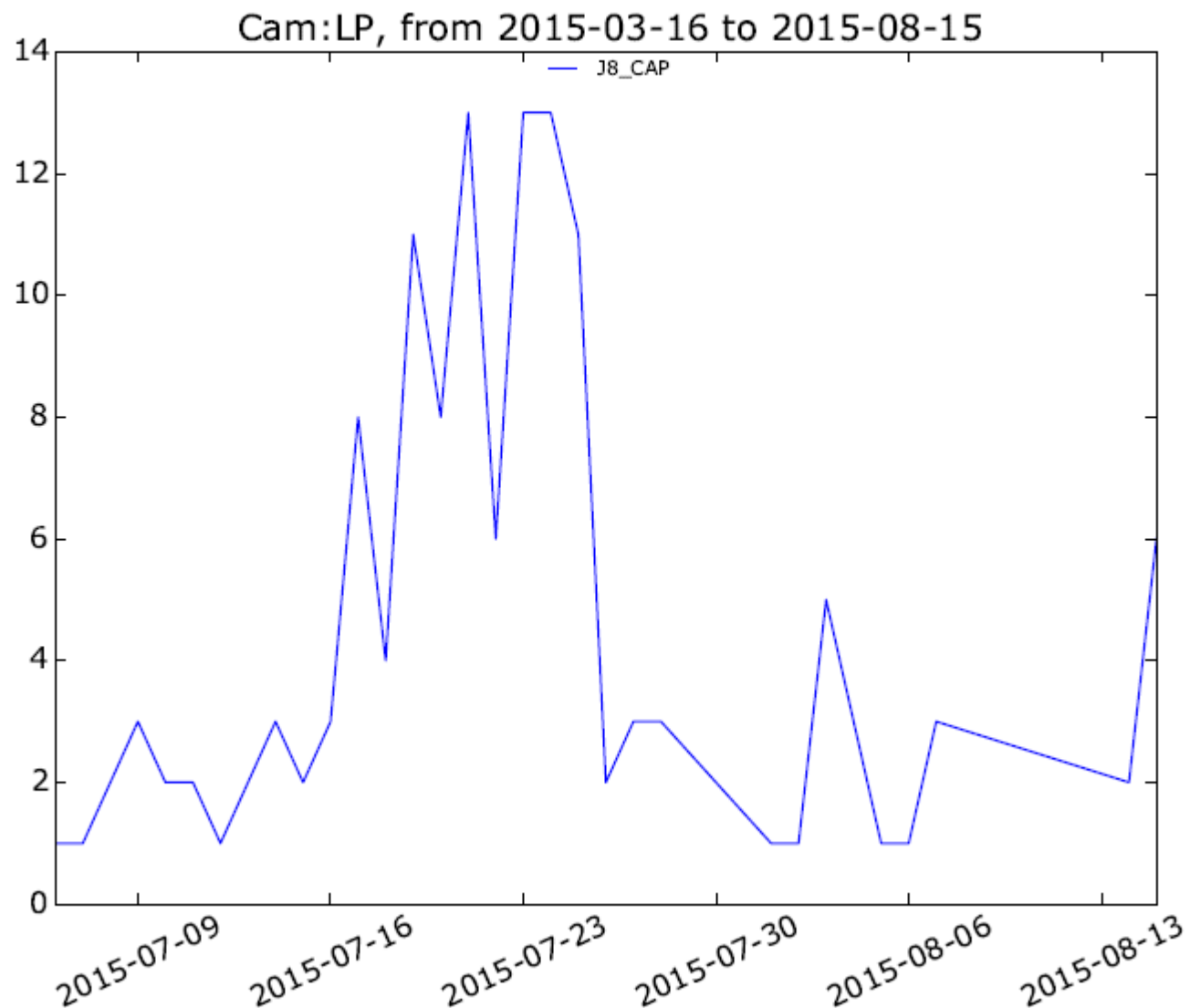


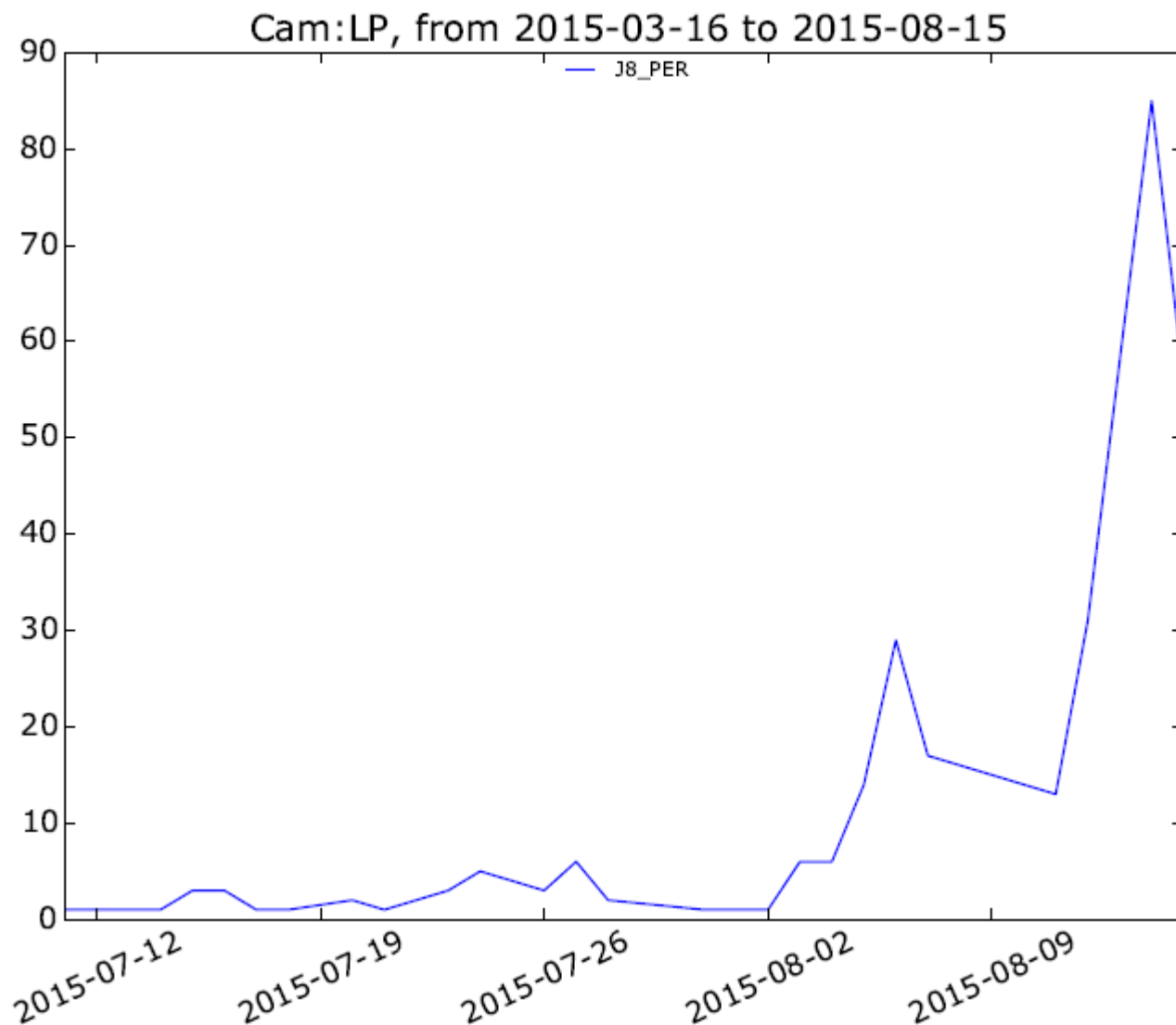




Cam:LP, from 2015-03-16 to 2015-08-15



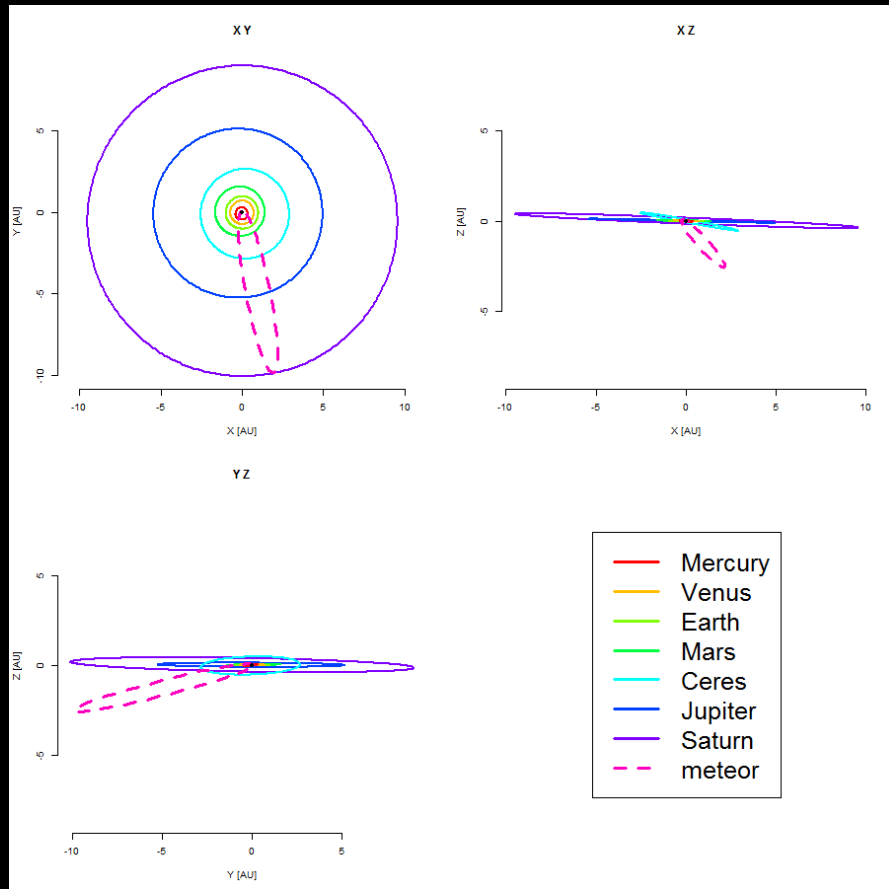




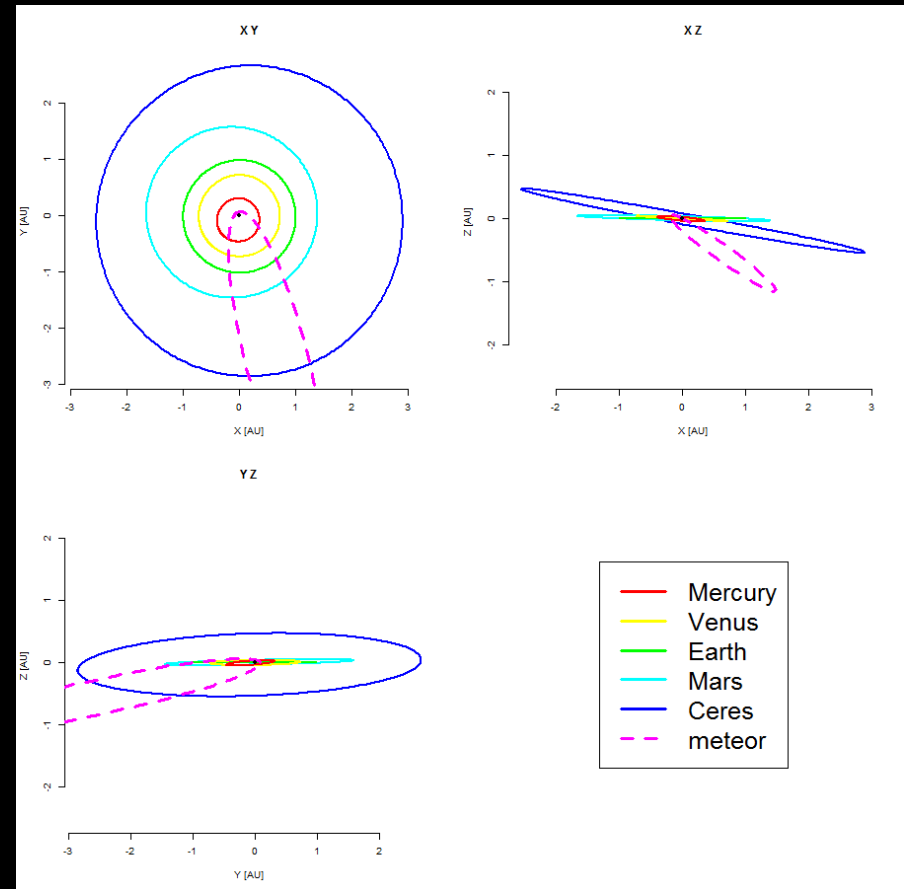
Two daytime (171 ÅRI) orbits

IAU MDC (Brown et al., 2008) $q = 0.082$ $e = 0.959$ $i = 24.8$

2015 06 07_050816 UT
 $q = 0.068$ $e = 0.986$ $i = 30.5$

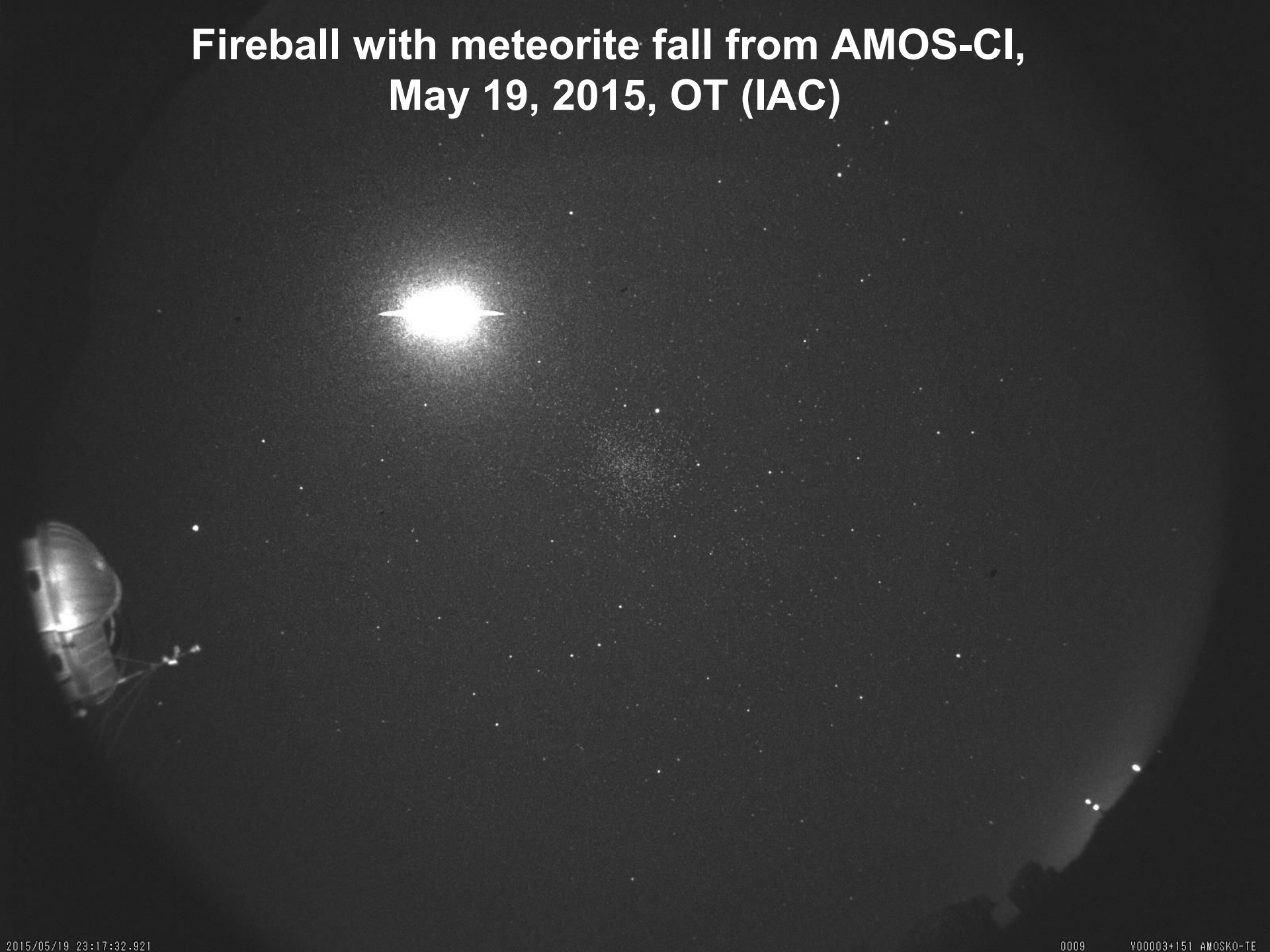


2015 06 11_050837 UT
 $q = 0.069$ $e = 0.974$ $i = 26.9$



Fireball with meteorite fall from AMOS-CI, May 19, 2015, ORM (IAC)

Fireball with meteorite fall from AMOS-CI, May 19, 2015, OT (IAC)



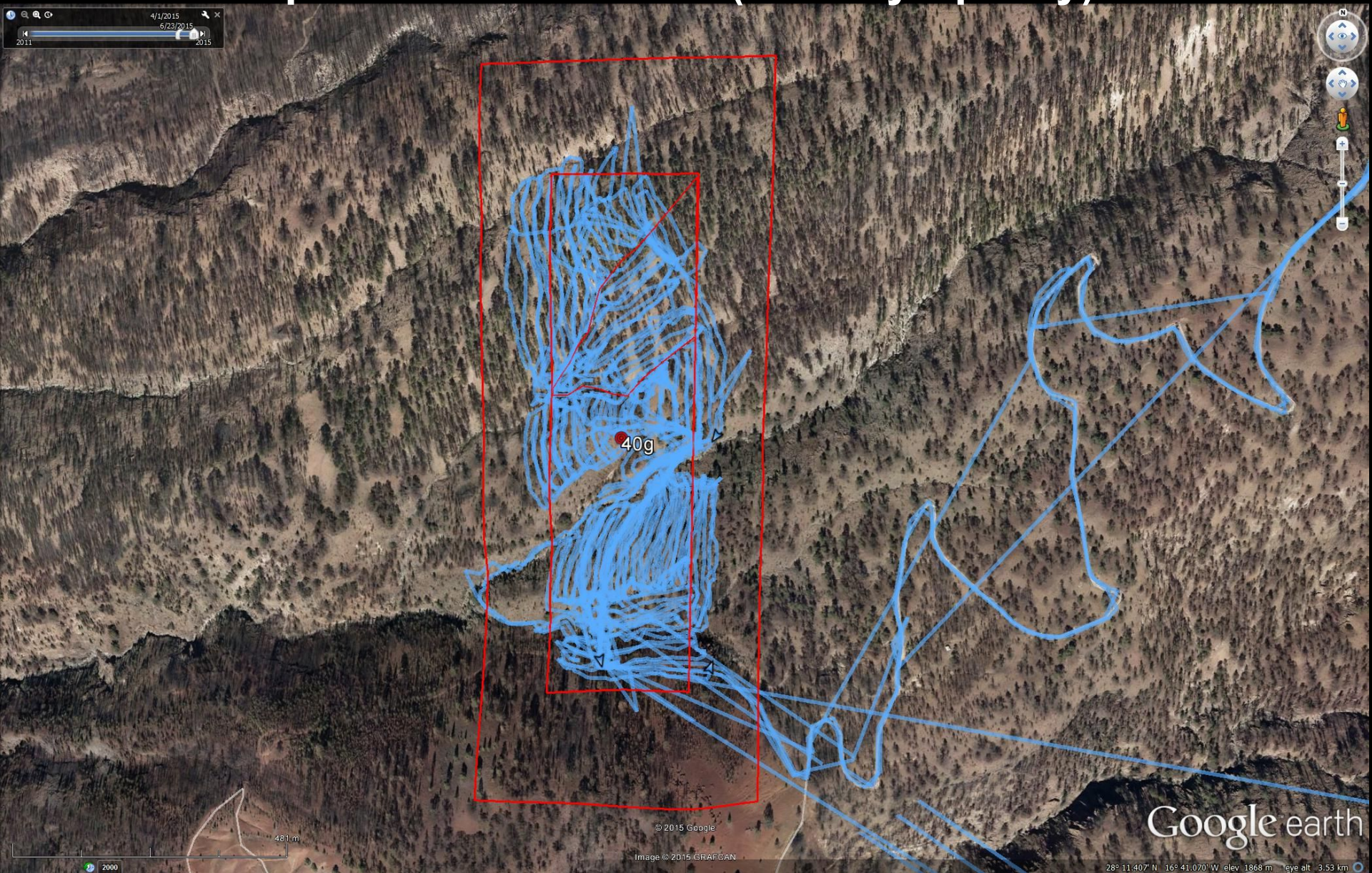
Fireball May 19, 2015

10/27/2011



Data: SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2015 TerraMetrics
© 2015 Google
Image © 2015 GRAFCAN

Impact area 700x200m (calc. by Spurný)



Google earth

© 2015 Google

Image © 2015 GRAFCAN

28° 11.407' N 16° 41.070' W elev 1868 m eye alt 3.53 km

2000

481 m

Impact area



Kosice meteorite and Tenerife stones ...



Special thanks to:

**Detlef Koschny, Felix Bettonvil, Jurgen Rendtel,
Ovidiu Vaduvescu, Javier Licandro, Miquel Serra-
Ricart, Juan Carlos Perez, Rafael Rebolo**

The background of the slide is a photograph showing the silhouettes of two people in profile, facing each other as if in conversation. They are positioned against a sunset sky with a gradient from dark blue at the top to a bright orange glow at the horizon. The person on the left is holding a lit cigarette. The overall mood is contemplative and professional.

Any questions?