

Expeditions 2014 with AMOS Cameras



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AMOS cameras at Canary Islands April 2-8, 2014



AMOS cameras in Canada May 22-24, 2014



Motivation

- 1. Test the Canary Islands observatories sites for future permanent AMOS stations**
- 2. Test the efficiency of AMOS cams in excellent observing conditions**
- 3. Confirm the potential/predicted meteor shower of asteroidal origin in the orbits of Příbram and Neuschwanstein meteorites (Spurný et al, 2003, Tóth et al., 2011, Koten et al., 2014).**



La Palma
Isla de la Palma

Santa Cruz de Tenerife
Tenerife
Tenerife
Canary Islands
Arona

Gran Canaria
Las Palmas de Gran Canaria
Maspalomas

Lanzarote
Arrecife
Puerto del Rosario
Fuerteventura



US Dept of State Geographer
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Image Landsat
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Imagery Date: 4/10/2013 lat 28.224885° lon -15.651909° elev 585 m eye alt 624.03 km

Google Earth
NWA 450° NWA
Beukra





Tenerife

Image © 2014 GRAFCAN
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Google

lat 28.301062° lon -16.510178° elev 2387 m

2000

152 m



AMOS
All-sky Meteor Orbit System



La Palma



Image © 2014 GRAPCAN
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Image Landsat
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

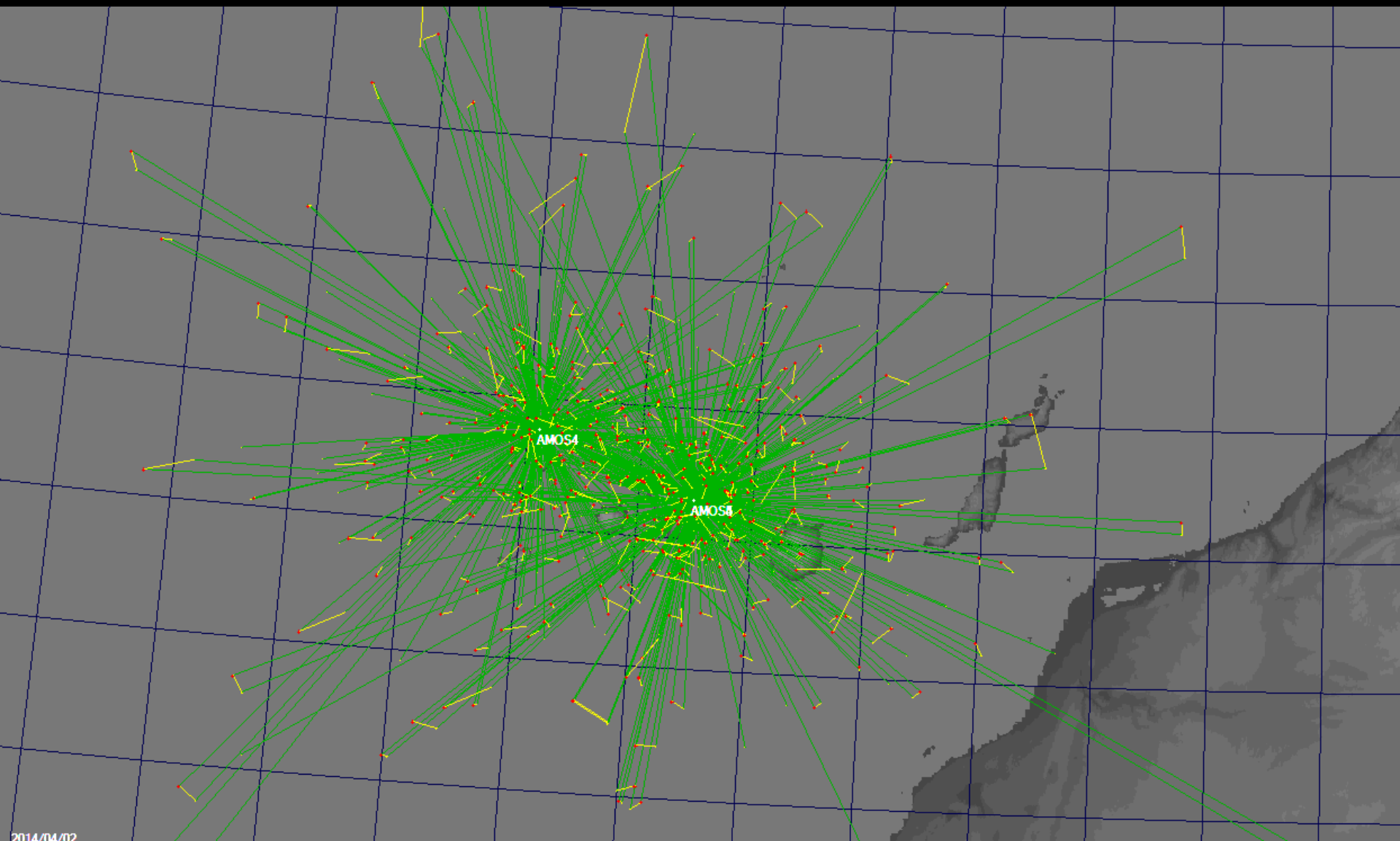
Google

Imagery Date: 12/29/2012 lat 28.763072° lon -17.896554° elev 2126 m ey





	La Palma AMOS4	Tenerife AMOS5	Slovakia AGO	Slovakia ARBO	Slovakia KNM	Slovakia VAZEC
2.4.2014	48	50	26	7	9	6
3.4.2014	49	50	2	1	6	15
4.4.2014	46	60	4	2	4	-
5.4.2014	55	68	-	-	-	-
6.4.2014	38	56	15	-	6	13
7.4.2014	45	48	11	-	5	16
8.4.2014	29	38	-	-	-	-
Σ	310	370	68	10	30	50
	100%	119%	22%	3%	10%	16%
4,3 x SlovakVideoMeteorNetwork						



AMOS4
1

AMOS4
2

AMOS cameras at Canary Islands, April 2-8, 2014

- 7 night of observations (sol. Long. 12.8 – 19.1°) -> 680 meteors**
- about 1/1 ratio of sporadic and shower meteors,**
- magnitude range -3 to +4, majority from 0 to +2**
- weak meteor activity (1 established shower, 10 working list)**

SPORADICS ~ 3 HR

LVI, KVI ~ 0.3 HR

ZSE, SLE, DAL, ALO ~ 0.2 HR

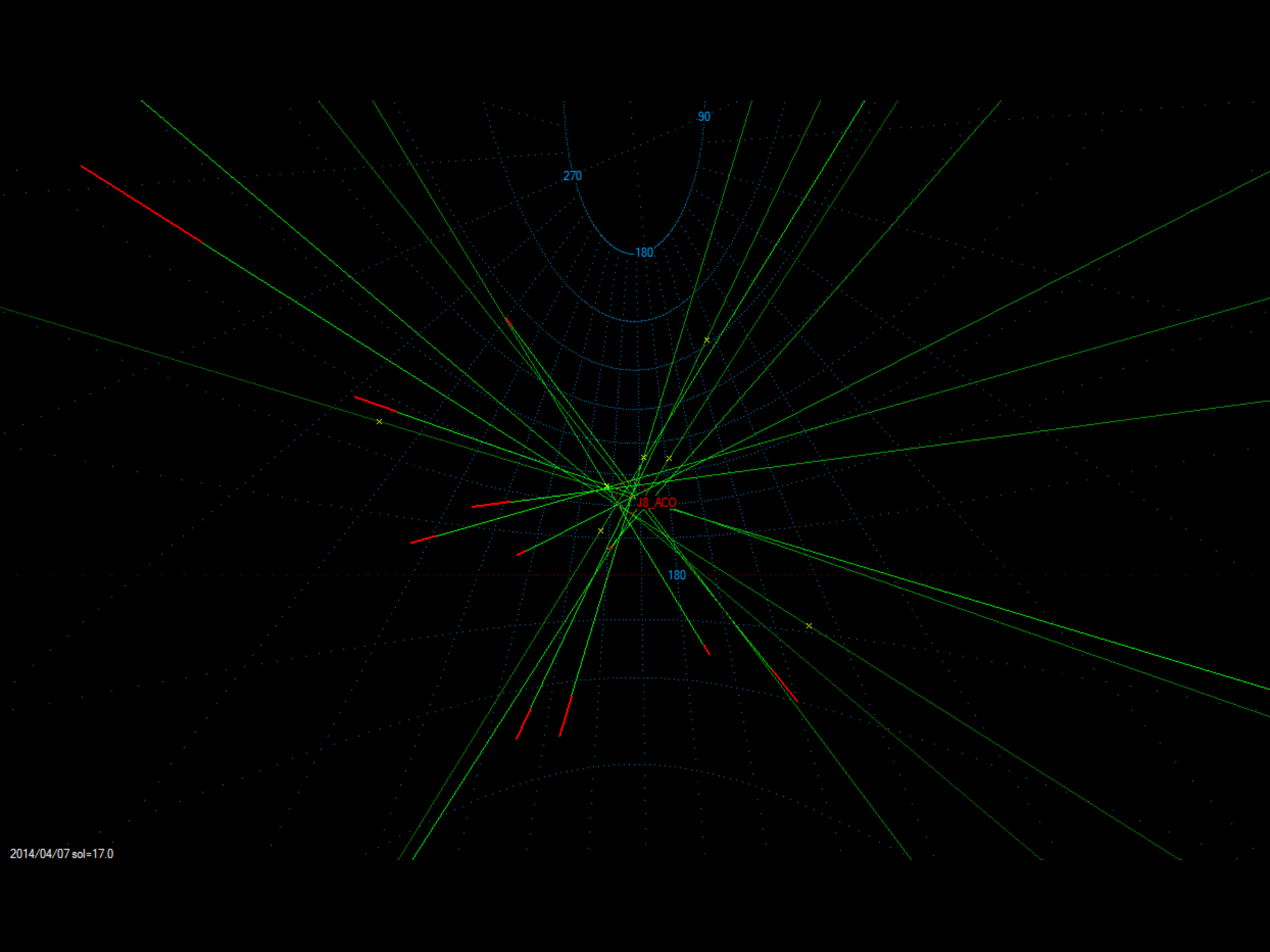
SVI, NVI ~0.1 HR

KSE ~ 0.1 HR

ACO, AAL ~ 0.1 HR

and others ...

- 5 nights of double station obs. (145 km distance) -> 516 meteors**
- about 20% of them simultaneously observed**
- geometrical and other selection criteria resulted into 54 orbits**
- 5 orbits suspected to have close relation to ACO (Pribramids) meteor stream, need to be critically analyzed, discussed**





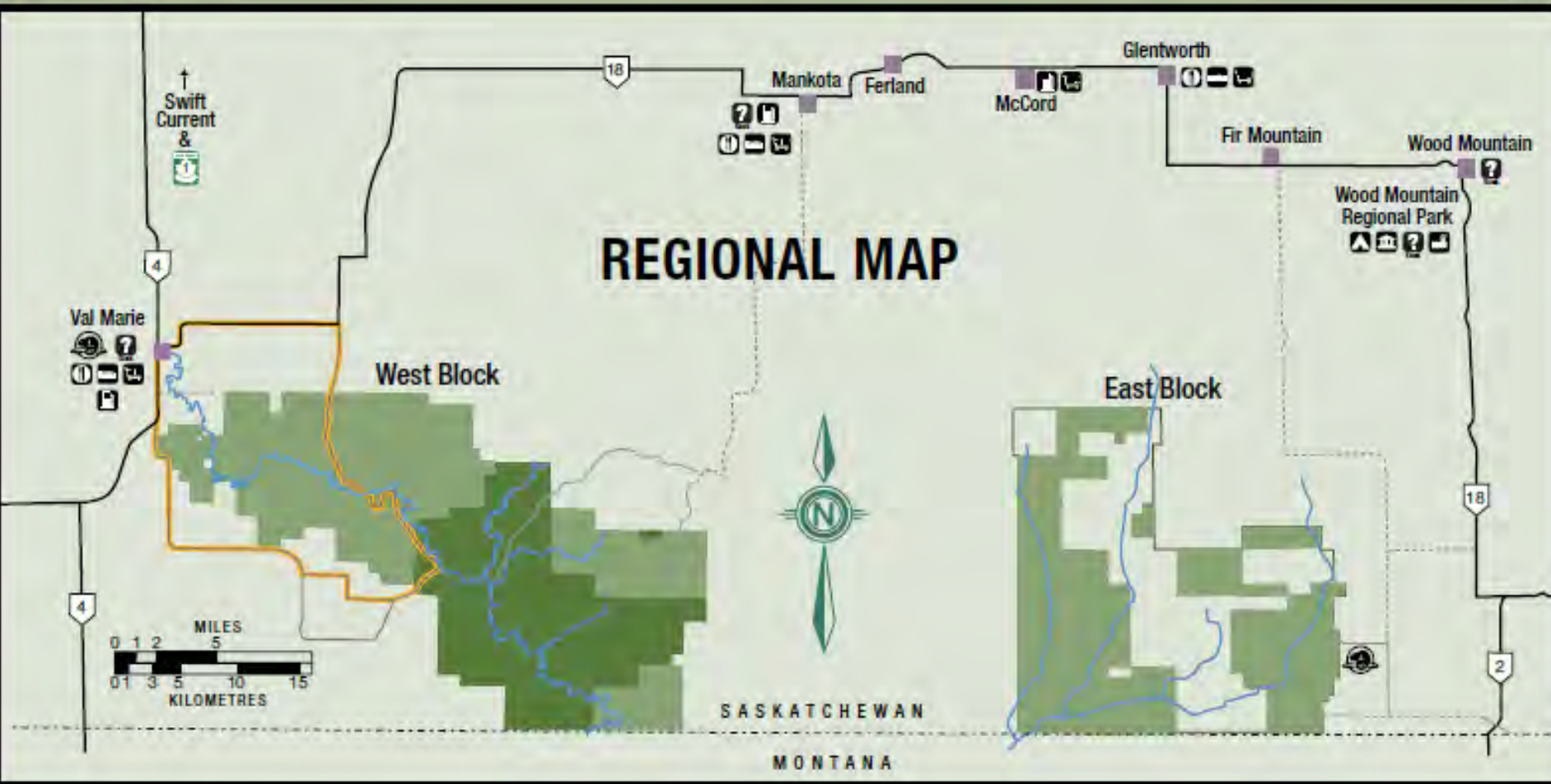
AMOS cameras in Saskatchewan and Camelopardalids 2014



Saskatchewan view



REGIONAL MAP



SASKATCHEWAN

MONTANA

Grassland National Park - West Block site



The Crossing Resort – P. Zigo installing cameras after transportation



The Crossing Resort – setup of AMOS cams



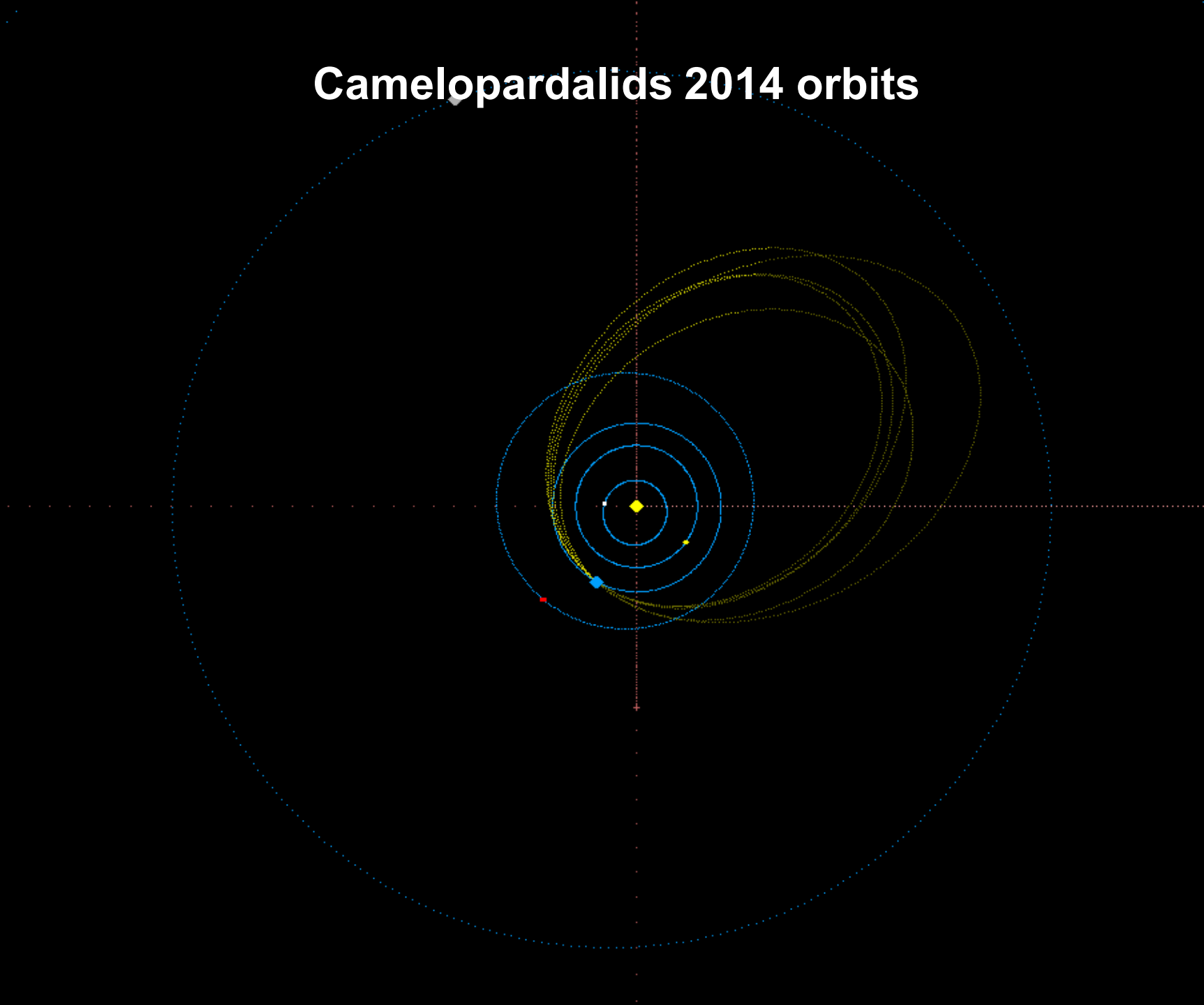
Wood Mountain site – awaiting ...



New morning after CAMs disapointment



Camelopardalids 2014 orbits





Any questions?