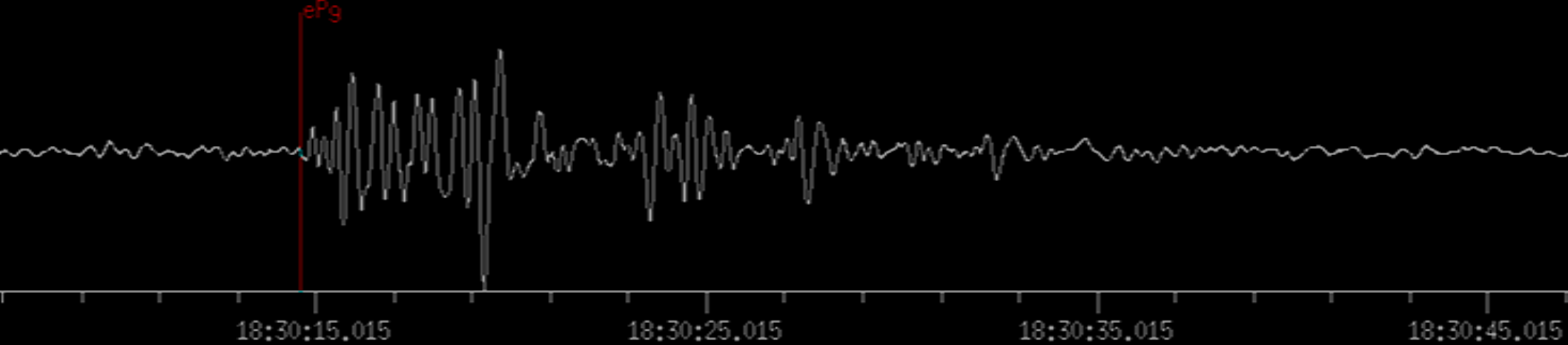




METEORSKA FORENZIKA

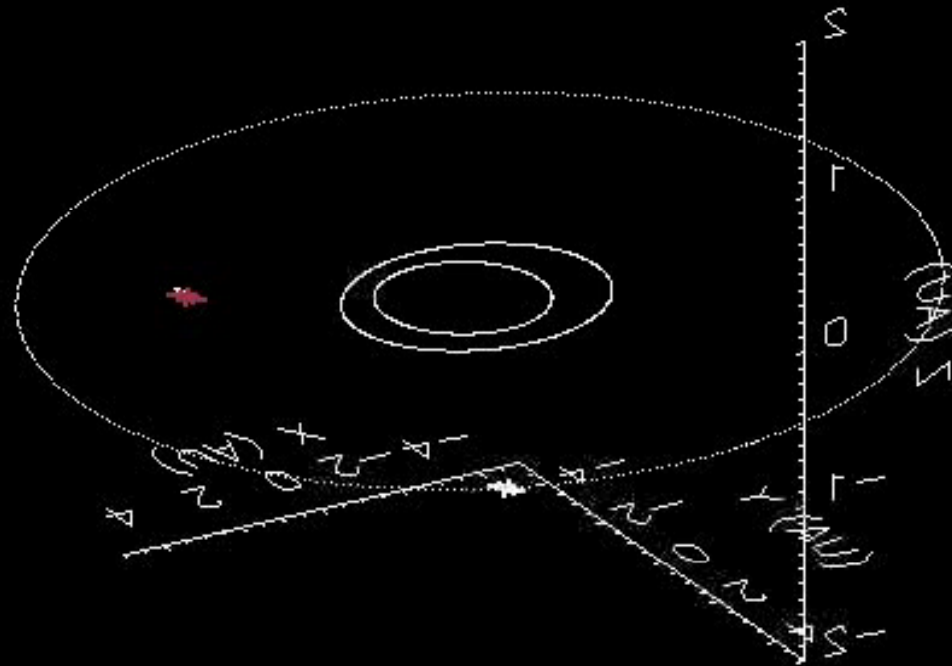
Igor Smolić
Laboratorija za primenu računara u nauci, IF
Astronomska opservatorija Beograd
Petnička meteorska grupa
igor.smolic@meteori.rs



Pojmovnik

- Meteoroid
 - Meteor
 - Meteorit
-
- Asteroid
 - Kometa

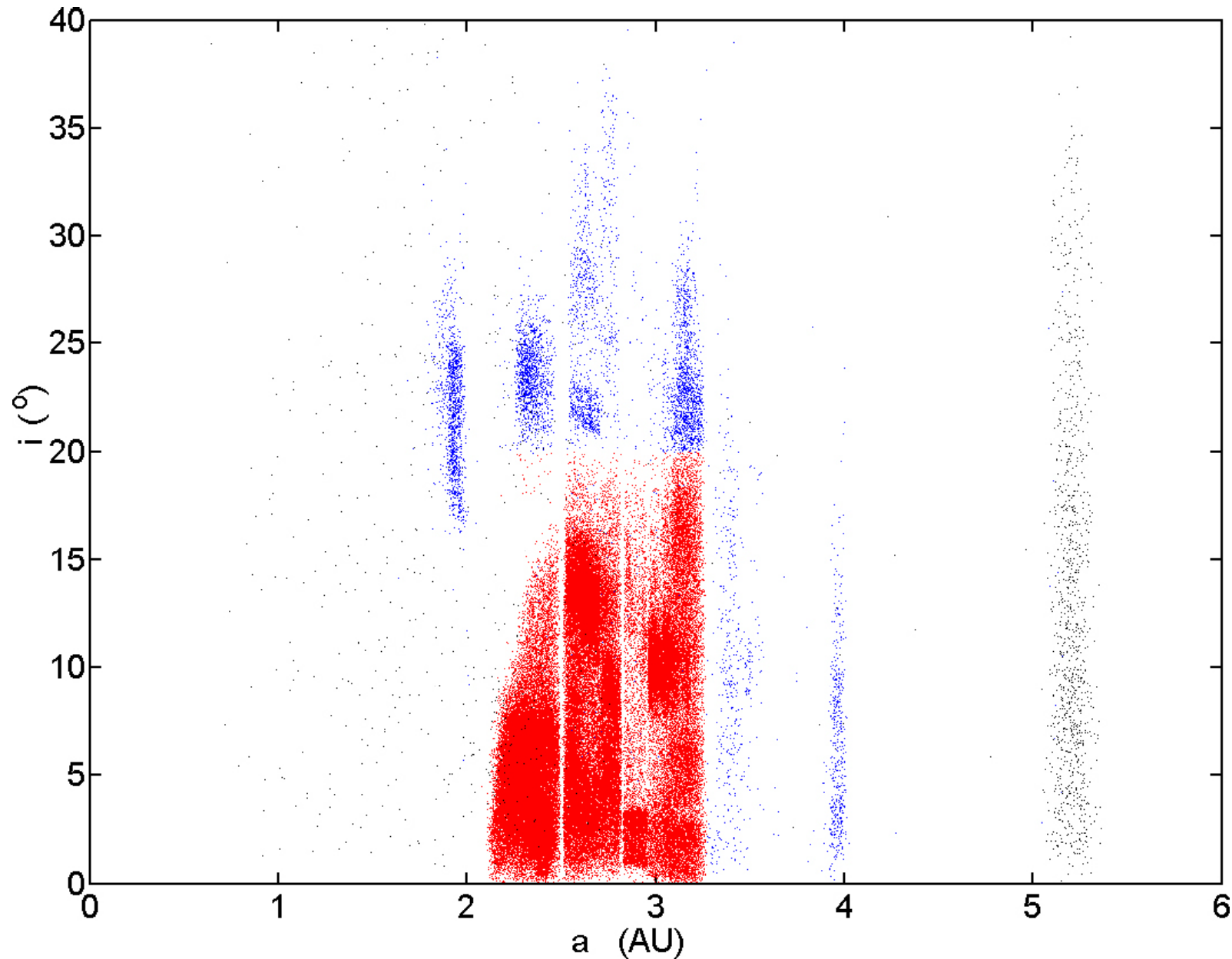
Meteoroidi kometskog porekla



Radijant



Meteoroidi - asteroidi



Zodijacká svetlost



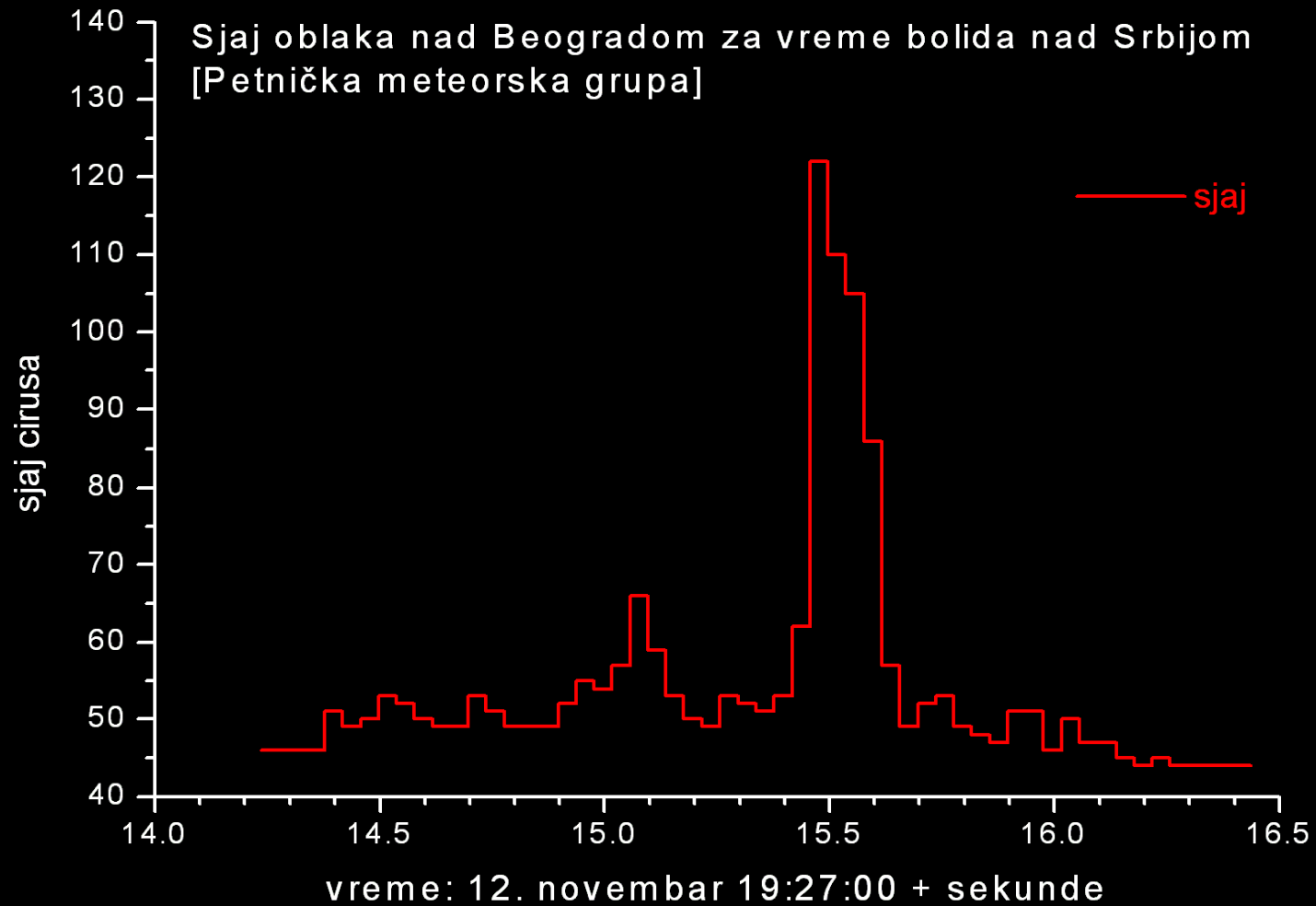
Info – 12. novembar 2010.

- TANJUG – primećen meteor u 19:32
- Svedočenja “očevidaca” o detonaciji, potresu i padu
- Pravac sever - jug

Kamera za snimanje meteora PMG na Institutu za fiziku Beograd



Shine On...

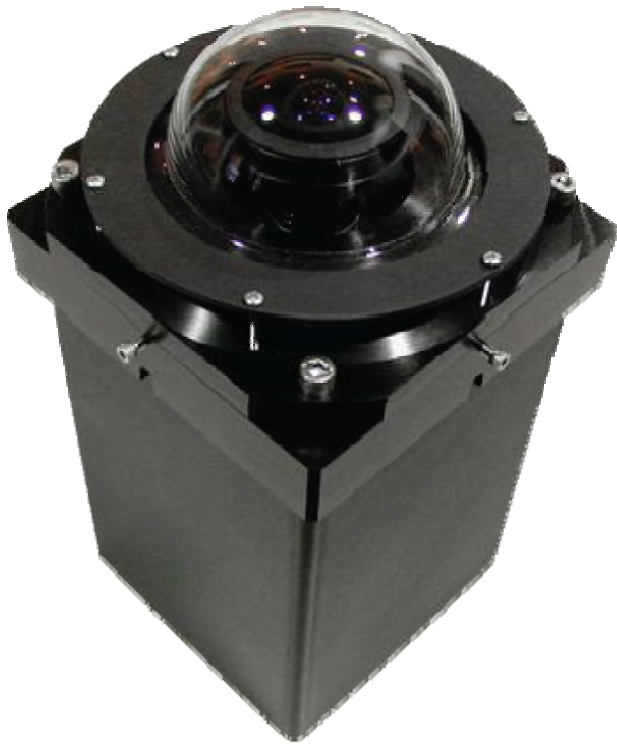


Zaključak I

- Tačno vreme eksplozije 19:27:15.5
- Postoje dva pojačanja sjaja (0.4 sekunde razmaka)

Astronomska stanica Vidojevica kod Prokuplja

- Postavljena i podešena all-sky kamera 6/7. novembra



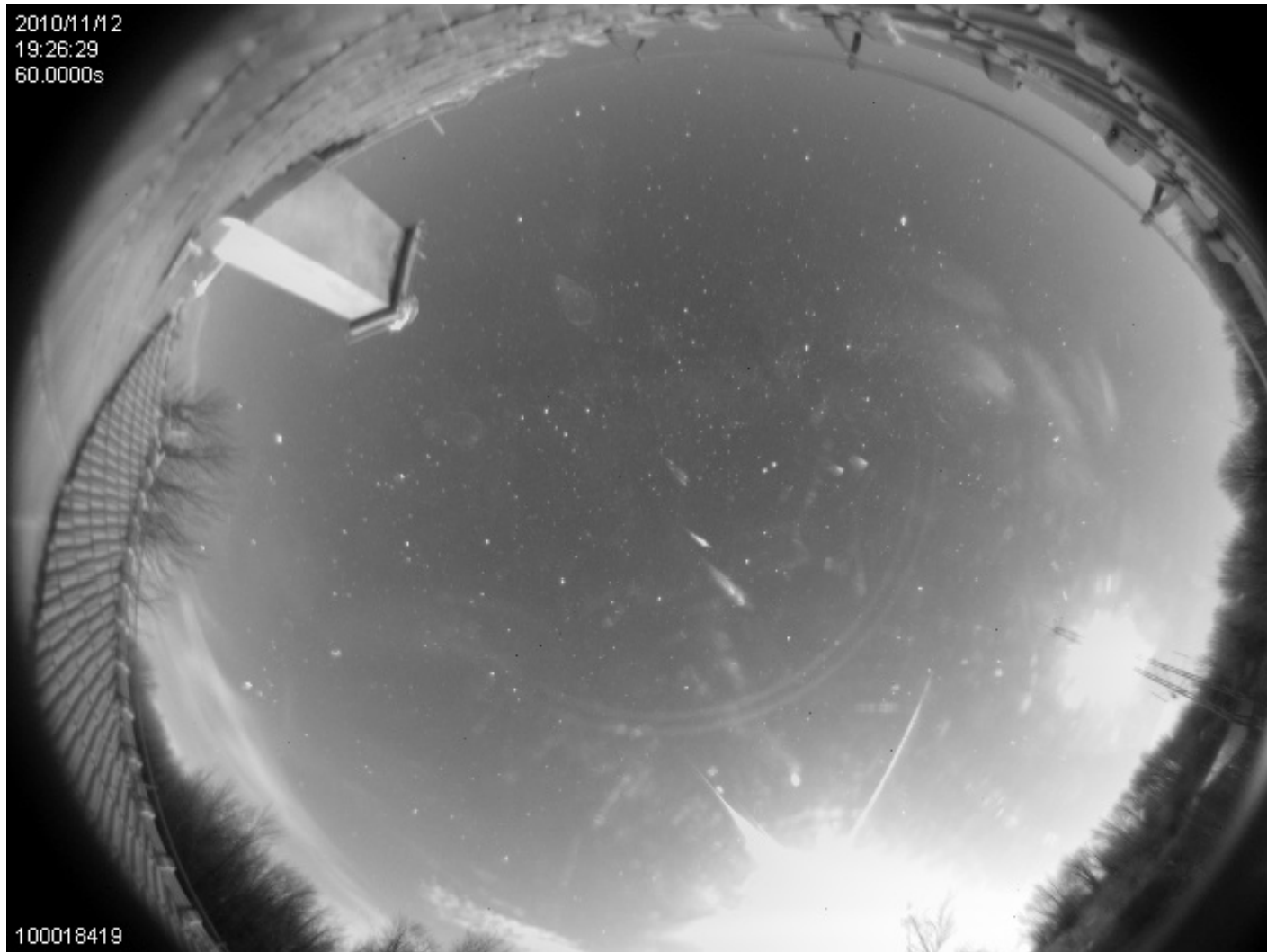
Sasvim običan meteor



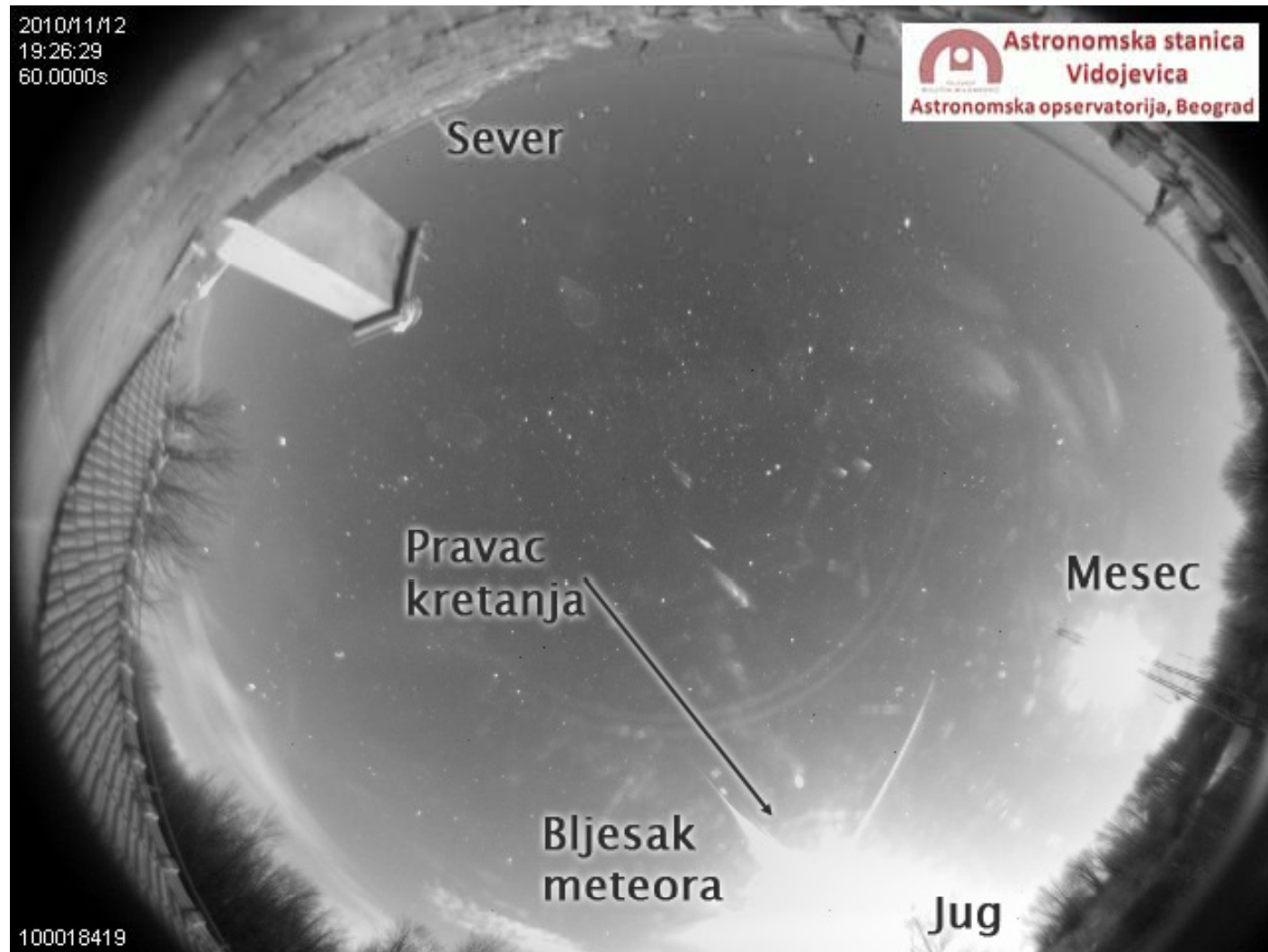
Noční snímek 12/13. novembar



... You Crazy...



Miodrag Sekulić Sekula u akciji



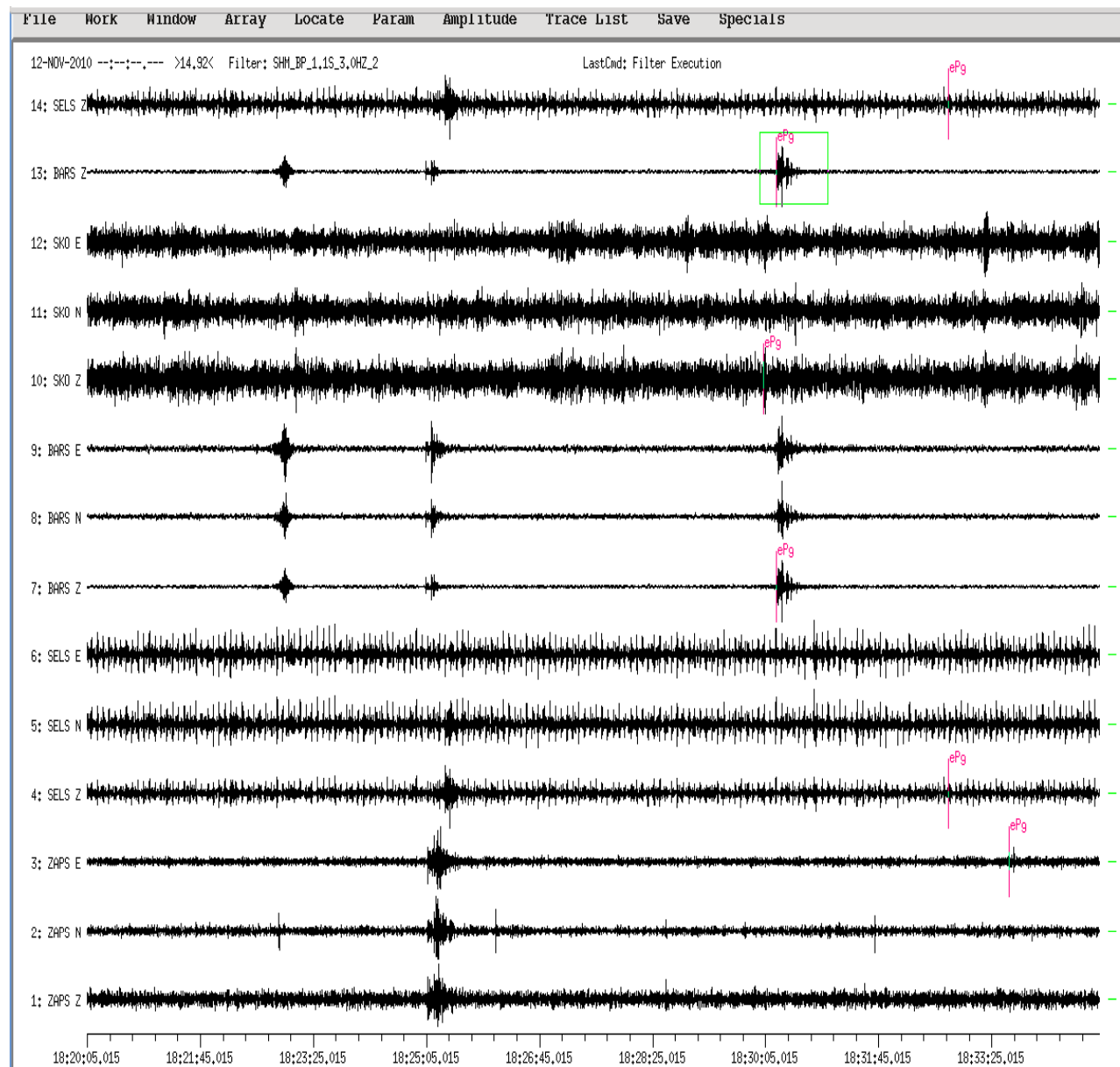
Zaključak II

- Veoma sjajan bljesak
- Azimut približno 170° , teško se određuje visina nad horizontom
- Kratak trag meteora
- Neophodne informacije sa juga

Koradova direktiva

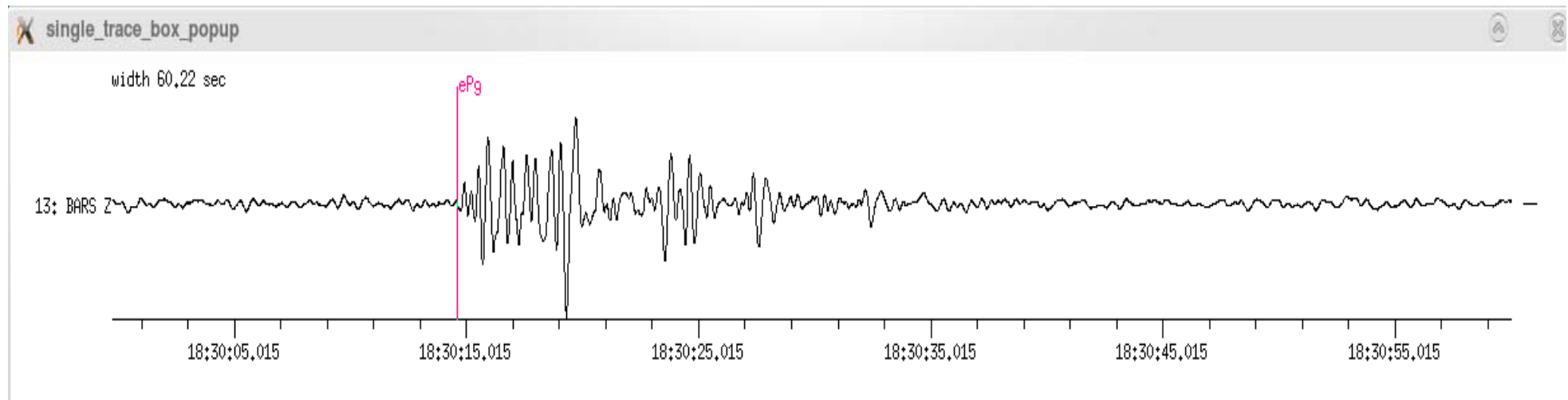
- Forsiranje uzbrdice Aberdareva -> Tašmajdan
- Postoje čudne detekcije na seizmogramima stanica BARS, SKO, ZAVS, SELS

Seizmogrami u trusnom području



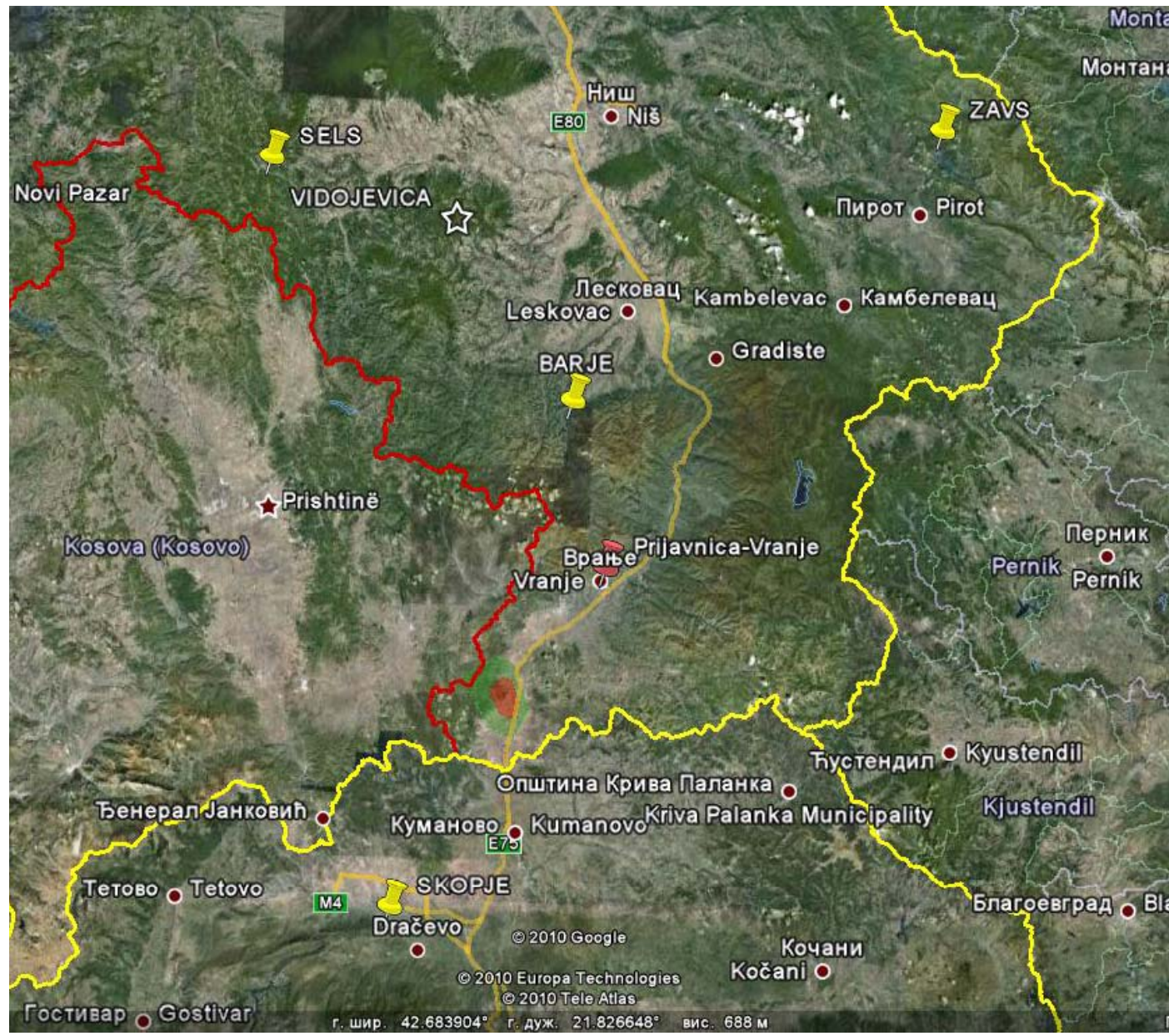
Definitivna detekcija na BARS

- Vertikalne oscilacije tla niskih frekvencija

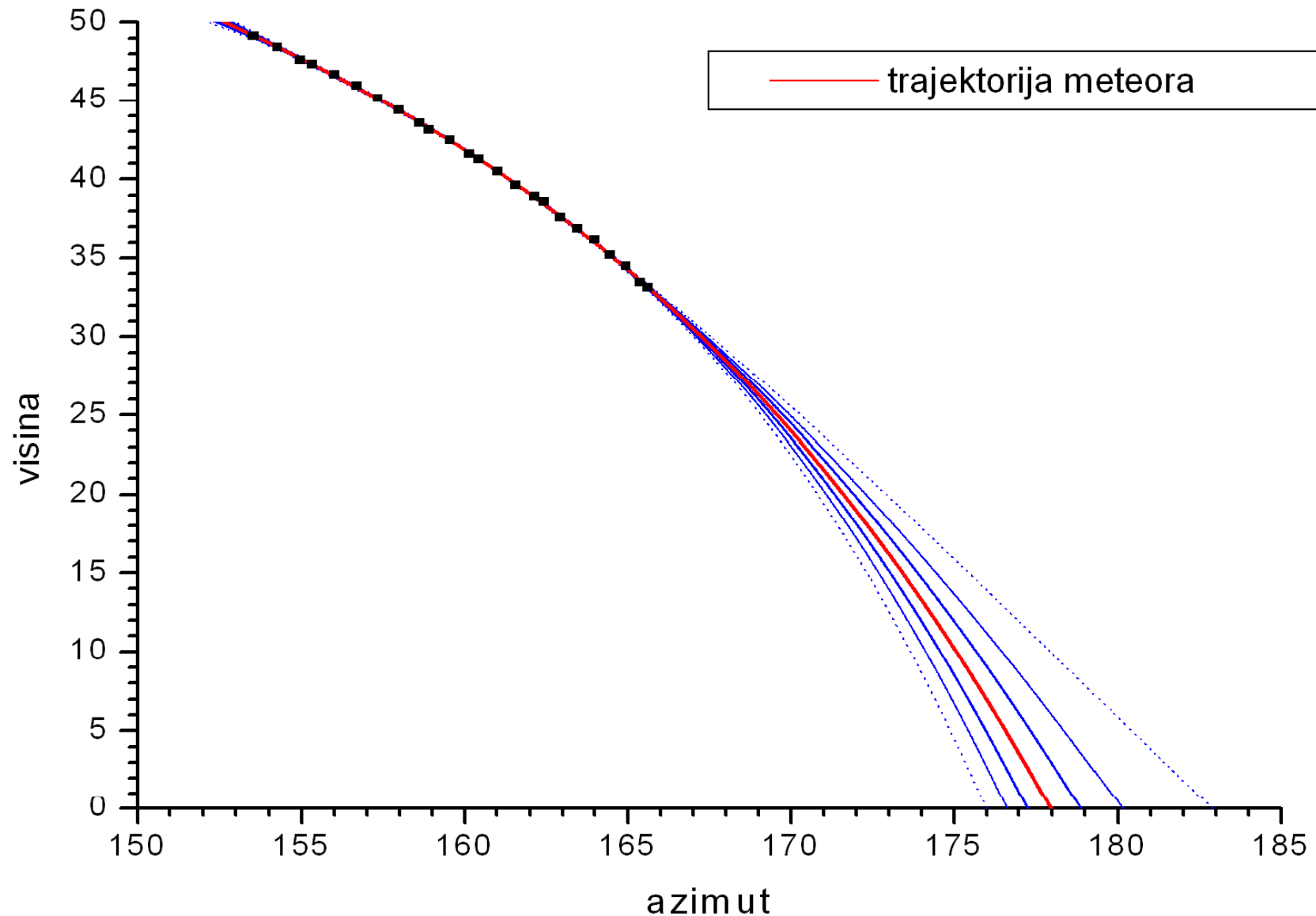


Kašnjenje zvuka

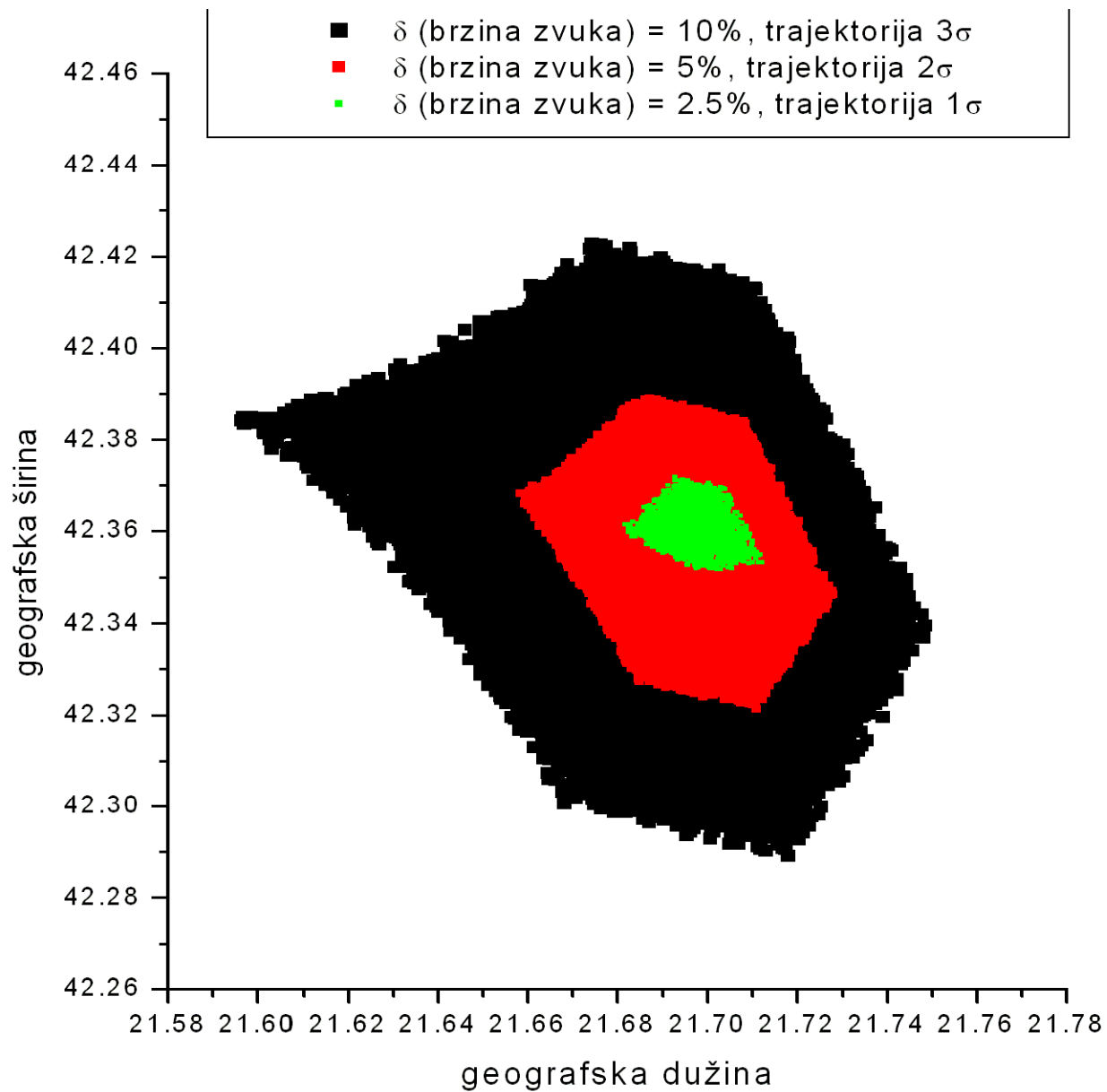
- SKO - 167 s
- BARS - 179 s
- SELS - 331 s
- ZAVS - 385 s



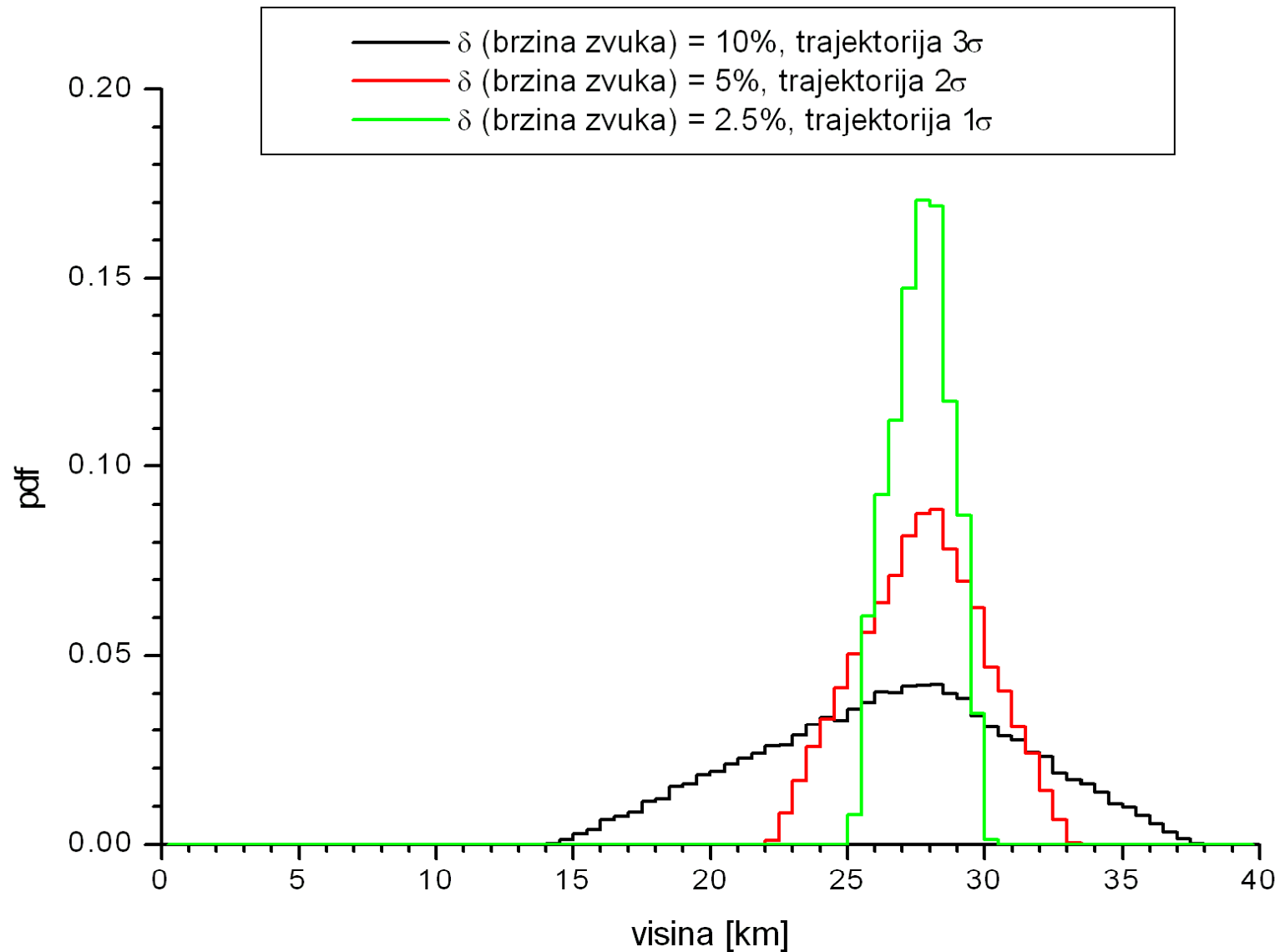
Projekcija trajektorije meteora sa ASV snimaka



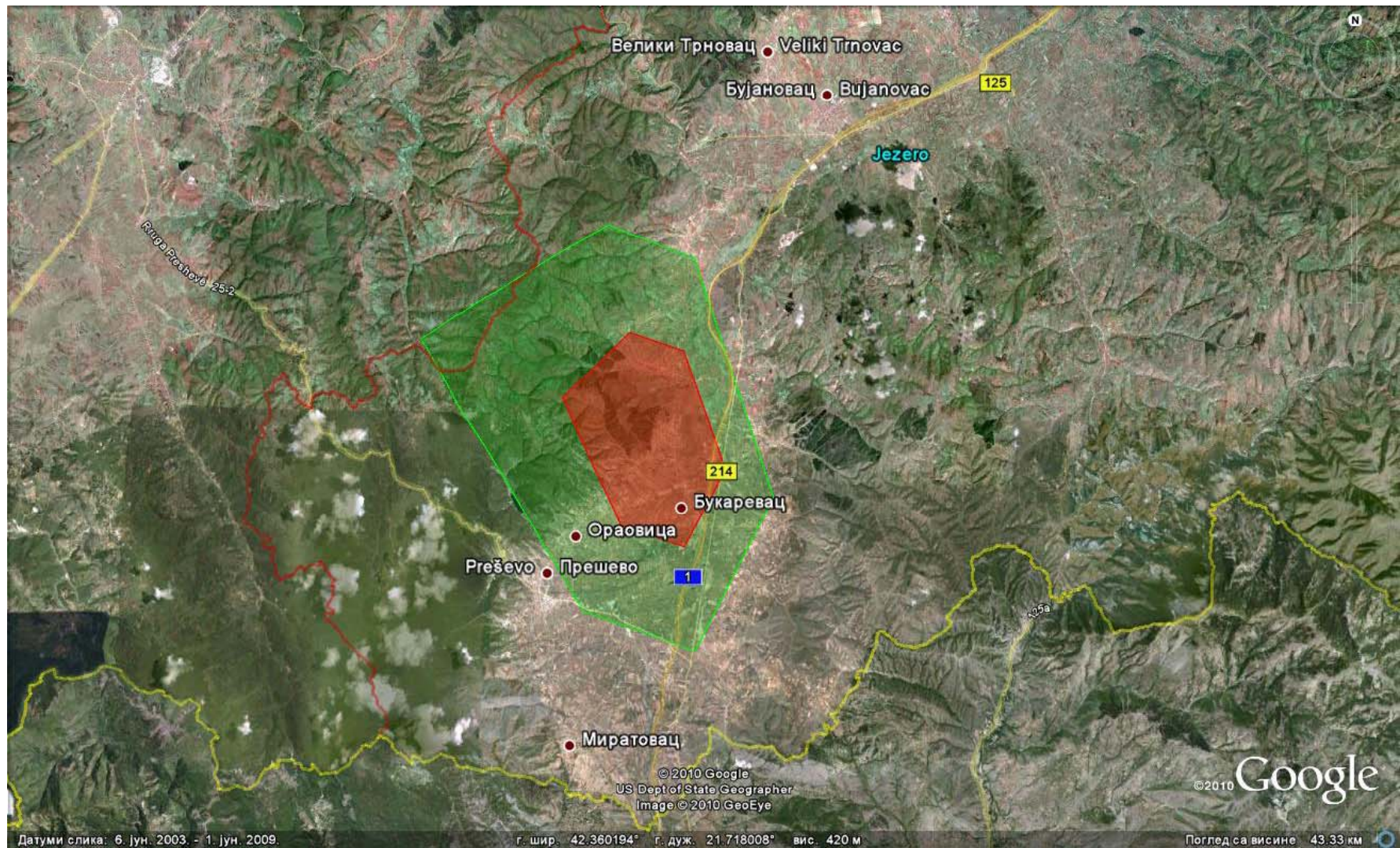
... Diamond!



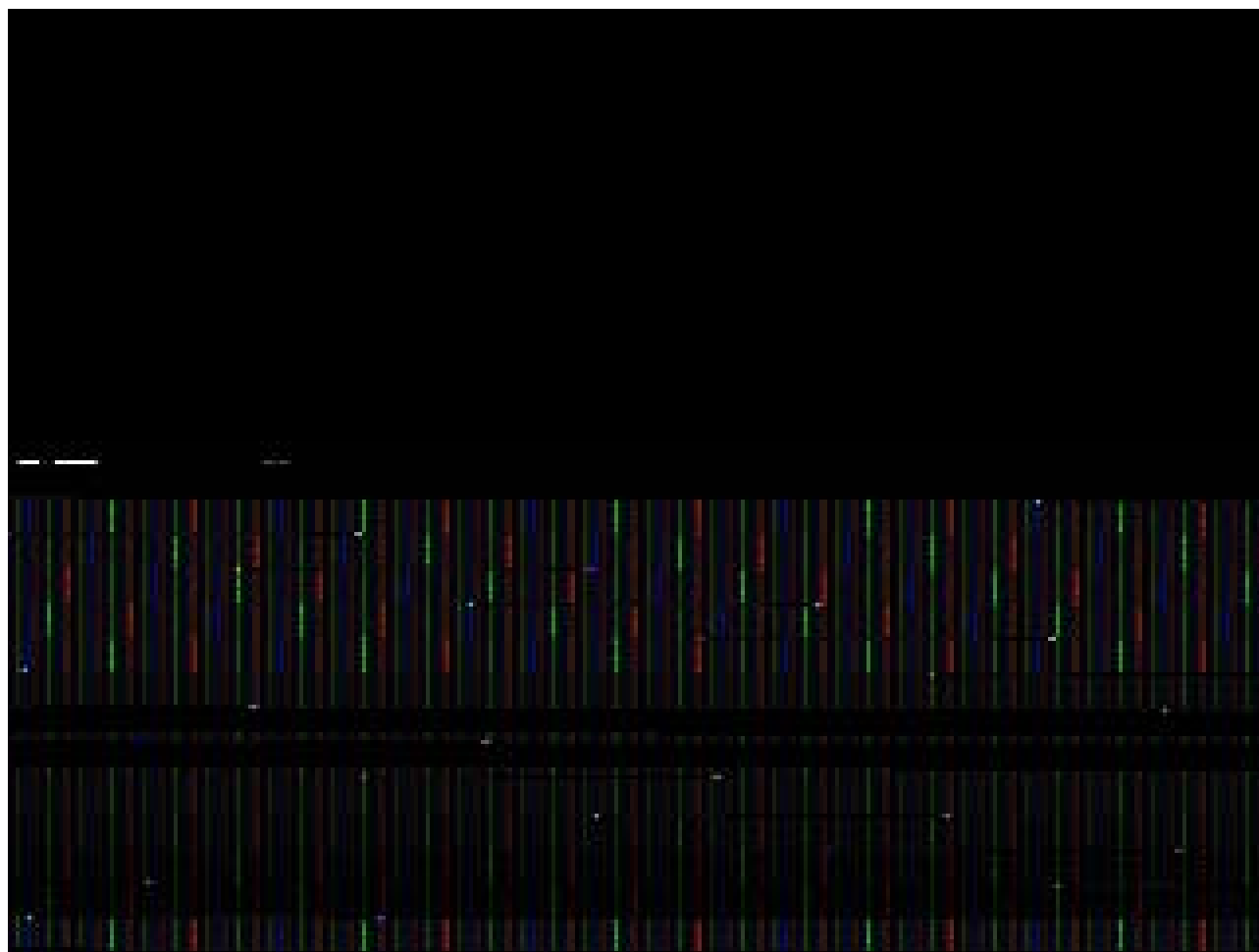
Visina eksplozije



Projekcija na Zemlju



Snimci iz Skoplja



Kontrola letenja

- 8 potrđenih viđenja
- JAT445 – “pre 2 minuta proleteli kroz dva osvetljenja oblačića”

Philip Morris, Niš



Peekskill bolid

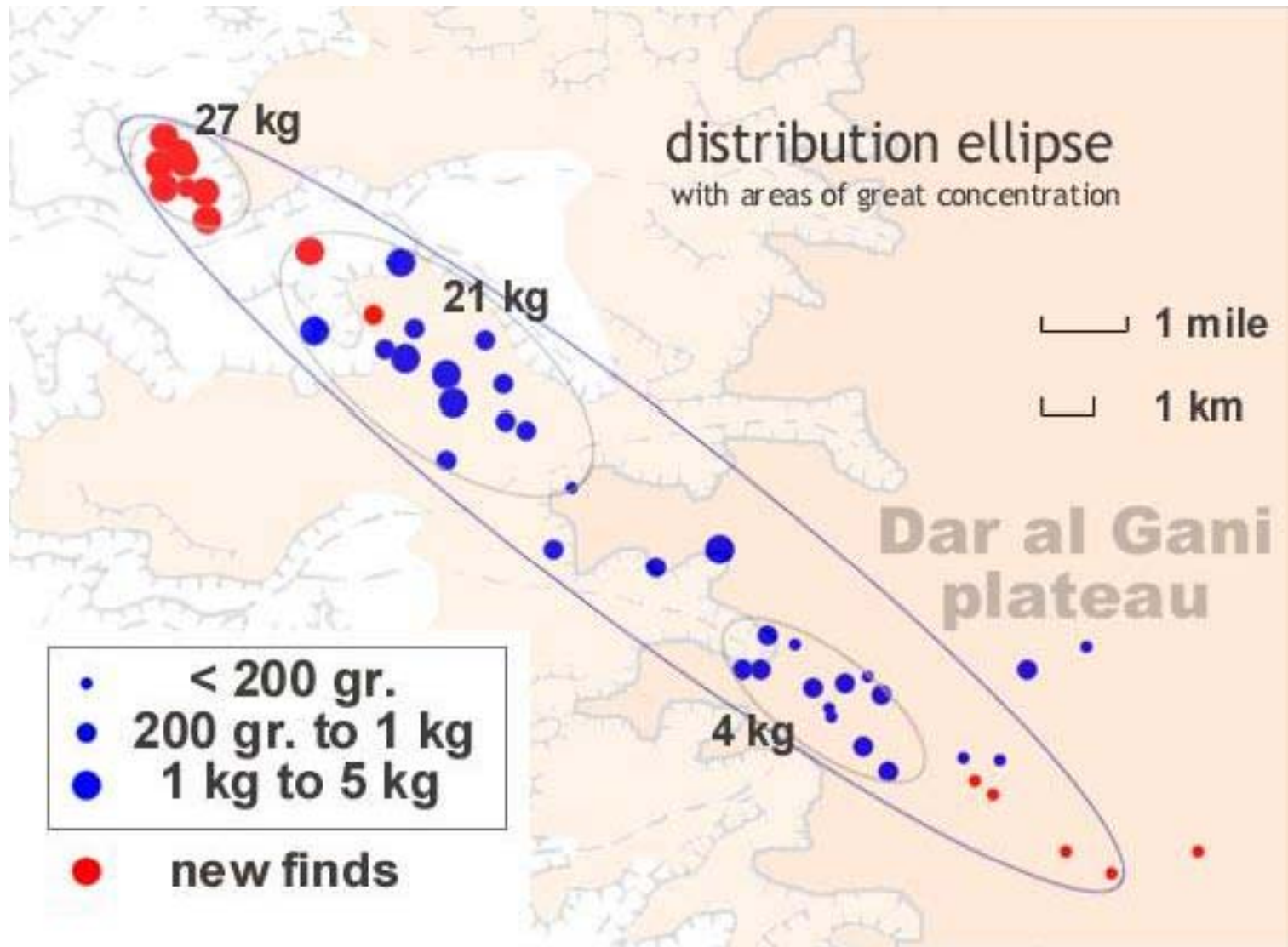


Hayabusa – povratak u atmosferu

Fragmentacija



Elipsa rasejanja



Meteoriti



Zaključak.

- Mala upadna brzina
- Mala visina eksplozije – kompaktan objekat
- Procenjene dimenzije – metar
- Eventualni fragmenti južno i zapadno od Preševa
- Dodatne informacije baza “Jug” i Bondsteel