# Update on the CAMS Spectrograph data processing pipeline and results

Timothy Beck, Professor of Physics and Astronomy, Mendocino College Peter Jenniskens, SETI Institute; NASA Ames Research Center Nicholas Bianez and Michael Preciado, Mendocino College

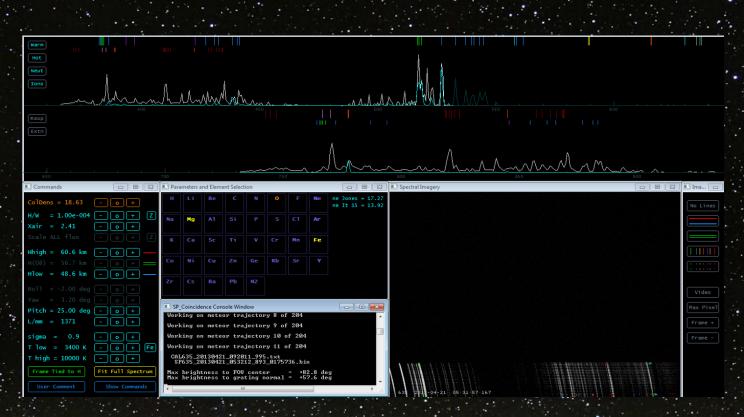
# CAMS Spectrograph (CAMSS)

- Sunnyvale, CA
- 16 Watec Wat902H2 Ultimate cameras w/12mm f1.2 lens
- 1x1cm *Ibsen Photonics FSTG-VIS1379-911* gratings
- 1379 lines/mm
- 1.1 nm/pixel dispersion
- 410-900nm wavelength

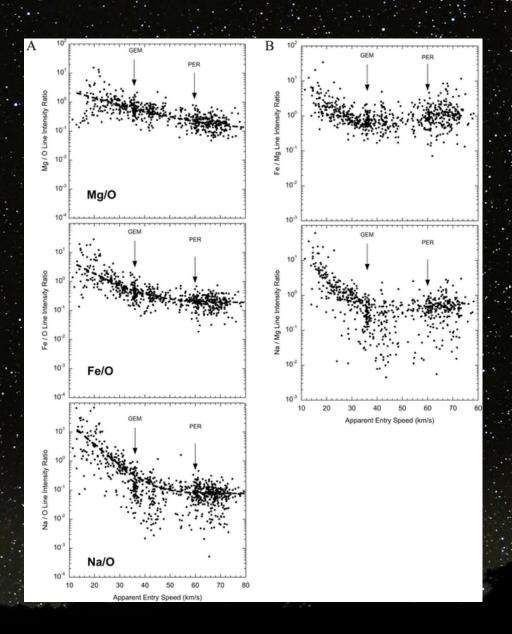


#### CAMS Spectrograph (CAMSS)

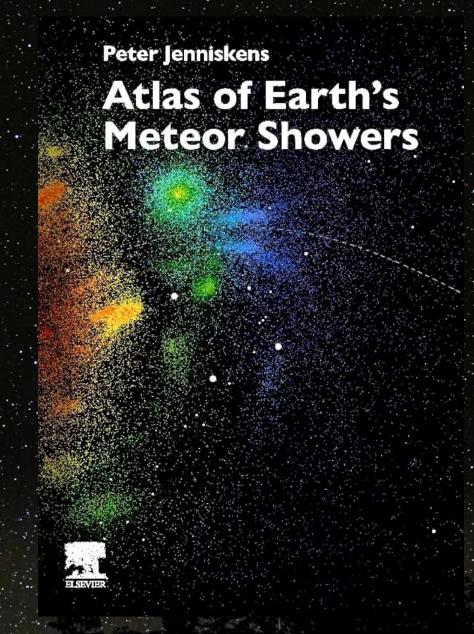
- Usable spectra brighter than peak magnitude +0.2
- Spectra fit to strong emission lines of Mg, Na and O
- Extracted spectrum in white, model spectrum in blue
- User selectable parameters
- CAMSS-CAMS coincidence information
- Single frame meteor spectrum



- June 2012-August 2013
- 1005 spectra recorded
- 462 assigned to showers



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journal homepage: www.elsevier.com/locate/icarus

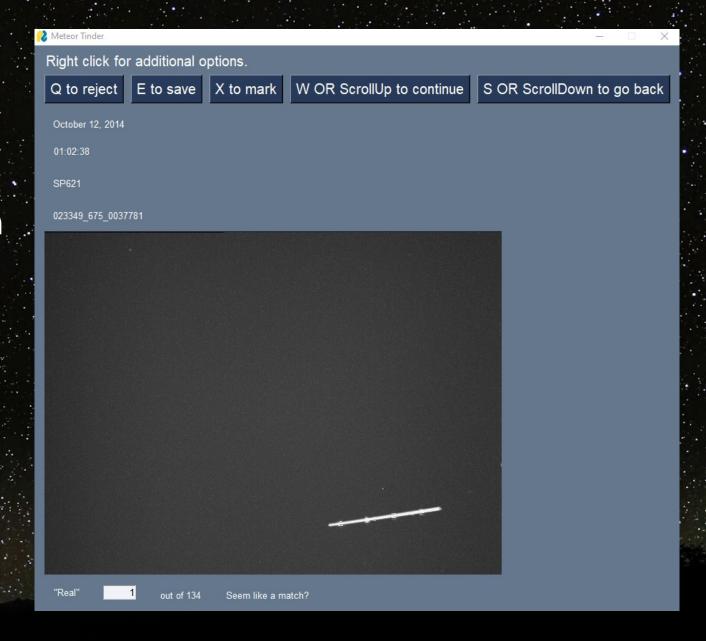
Properties of outer solar system pebbles during planetesimal formation from meteor observations

September 2013 September 2024

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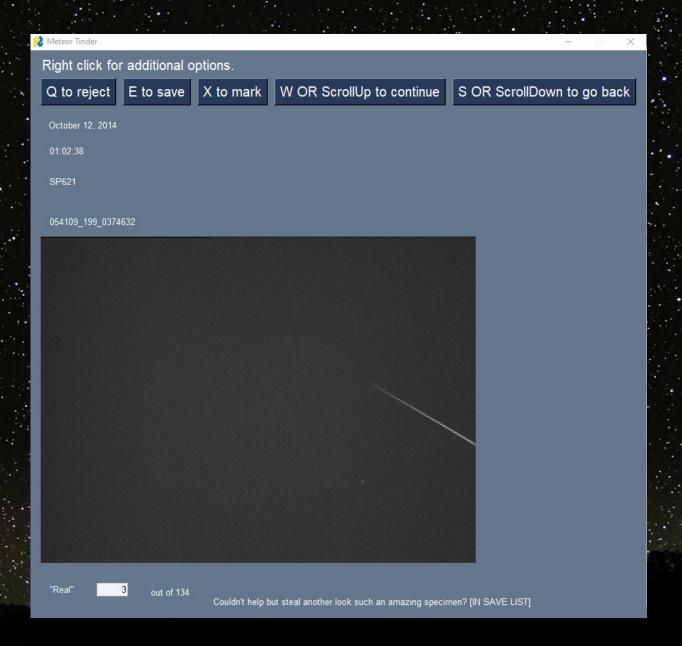
#### Meteor Tinder

- Python interface for quickly separating real meteors from false events
- User programmable keystrokes and/or mouse scroll
- Automatically archives SPFF files for spectra analysis



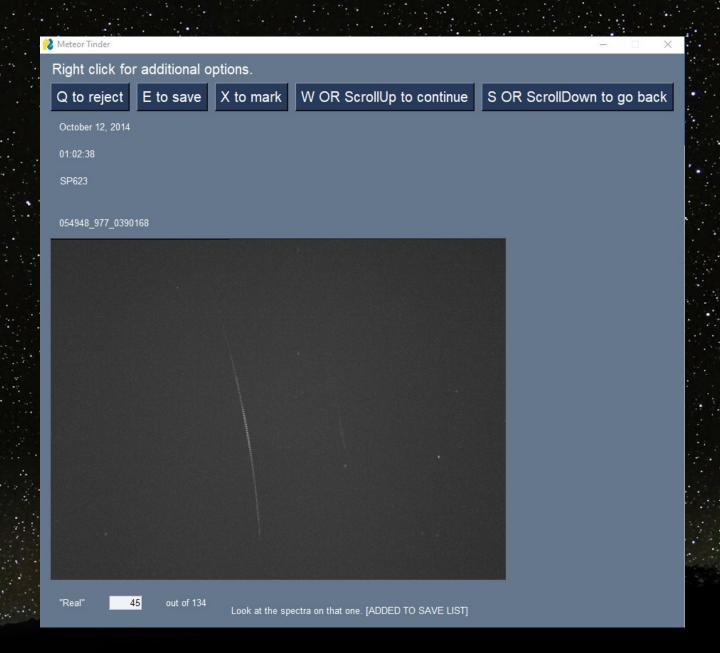
#### Meteor Tinder

 Right click for full 8 second video file

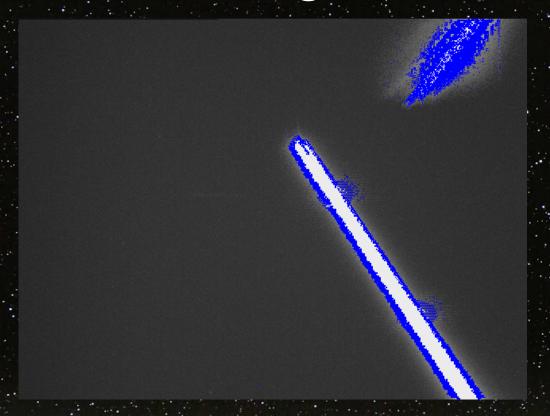


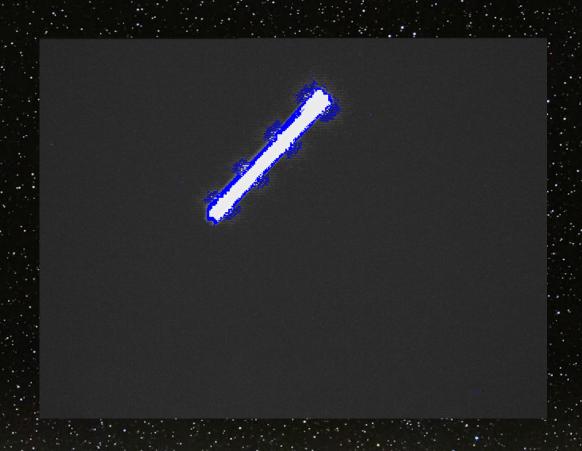
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# New Sorting Routine





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# Thanks Everybody!