

Meteoroid Flux Determination using Image Intensified Video Camera Data from the CILBO Double Station

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- Magnitude Distribution
- Detection Probability
- Mass Distribution
- Flux
- Conclusion and Outlook



June 2013 – May 2014

Las Palmas de Gran C

(ICC7) Googie earth

Gran Canari

Santa Cruz de Tenerife

Canary Islands

Arona

Isla de la Palma

© 2014 Google US Dept of State Geographer © 2009 GeoBasis-DE/BKG Data SIO, NOAA, U.S. Navy, NGA, GEBCO

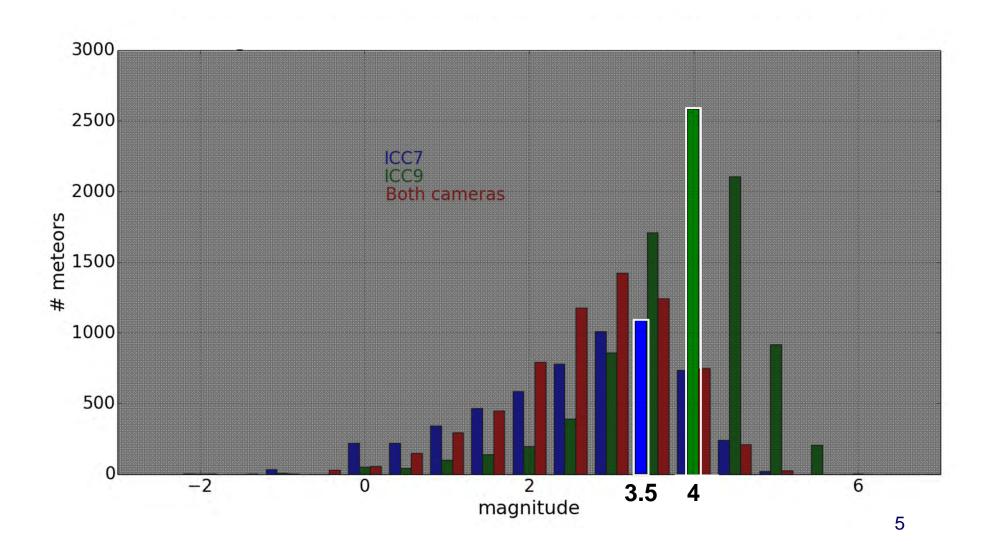


Magnitude Distribution

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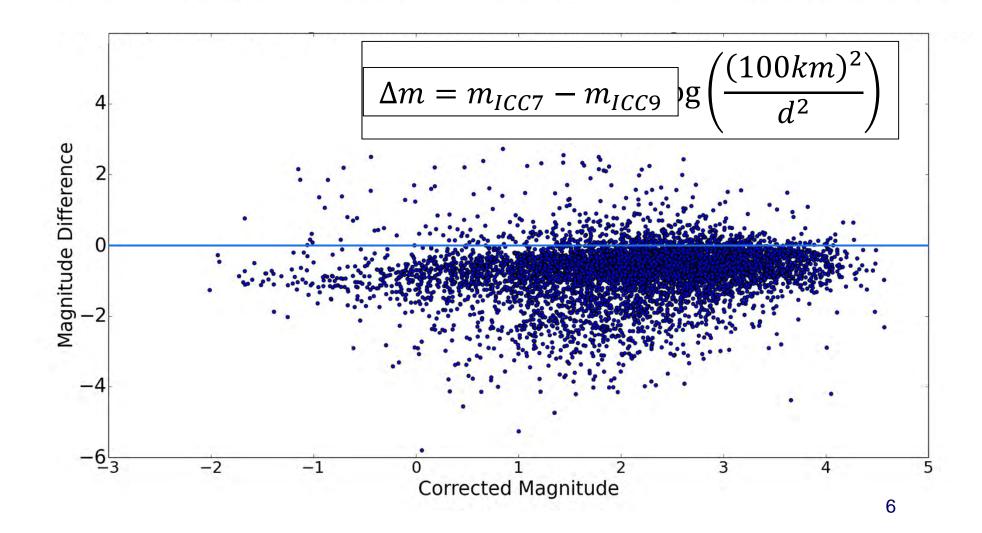


Detected Magnitudes



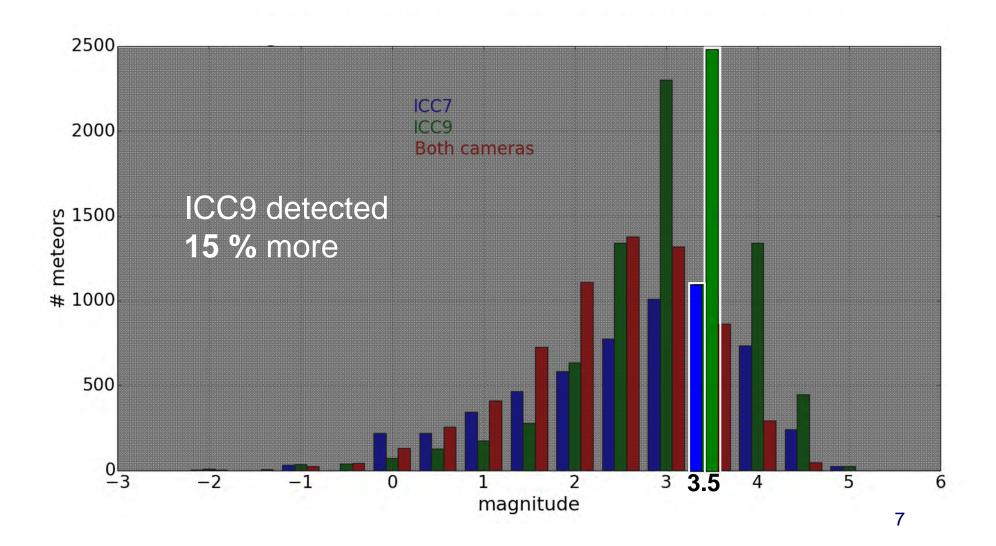


Absolute Magnitude





Corrected Magnitude

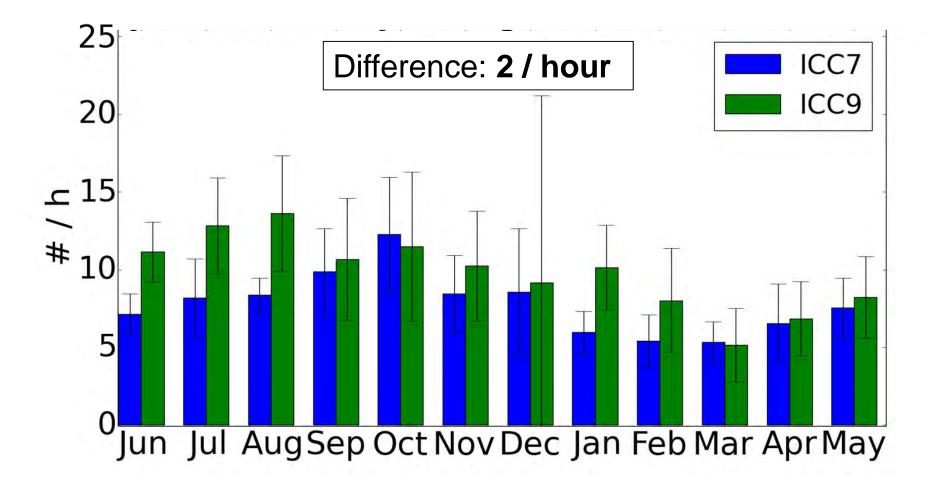




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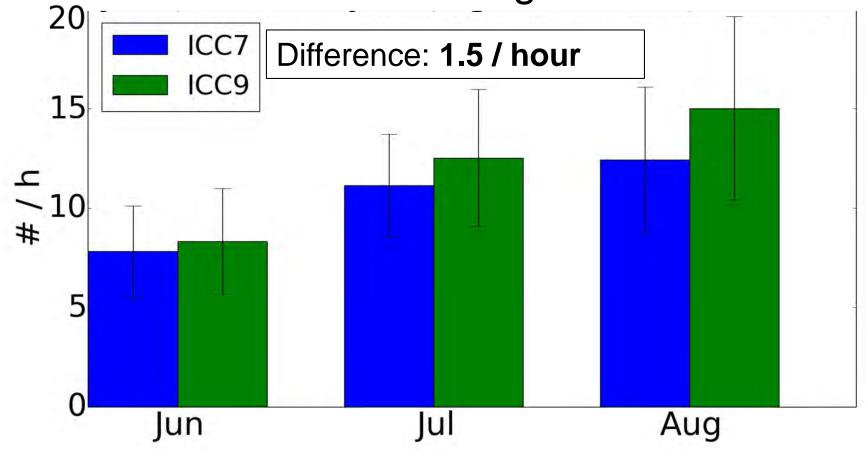
Hourly Rate Old Settings





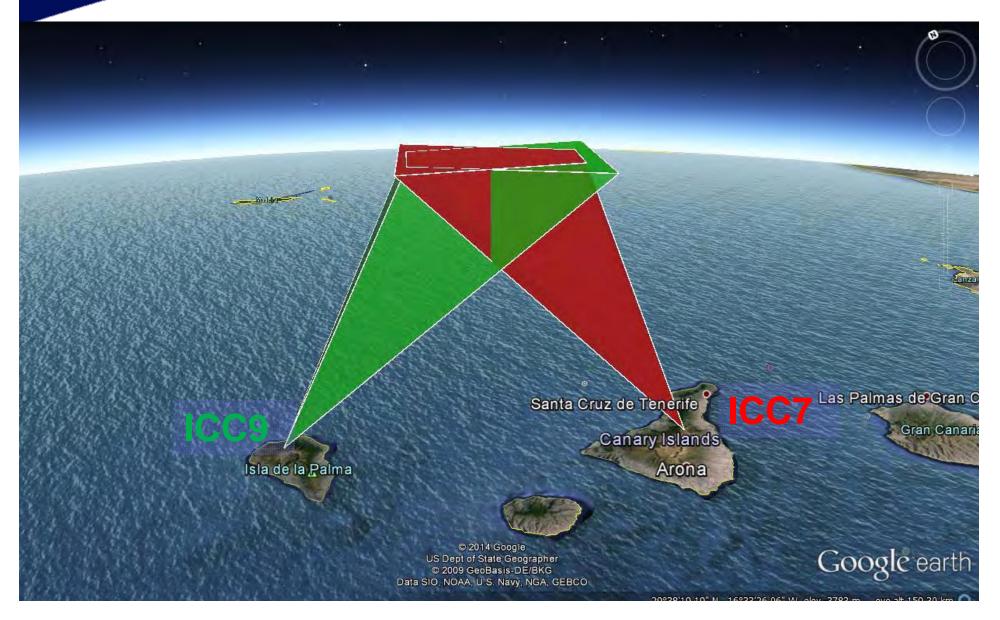
Hourly Rate Corrected Settings

June 2014 – August 2014



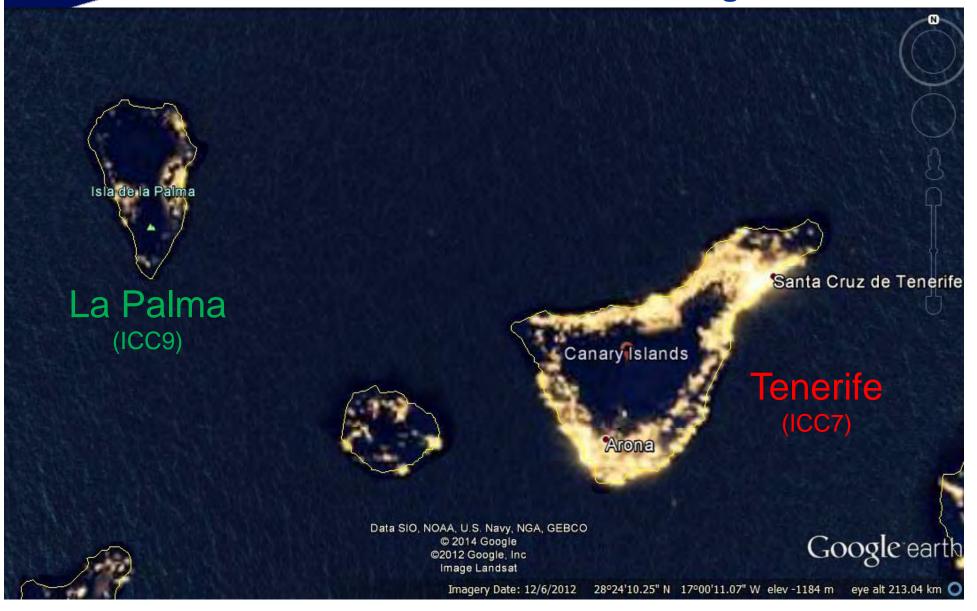


Observation Sky



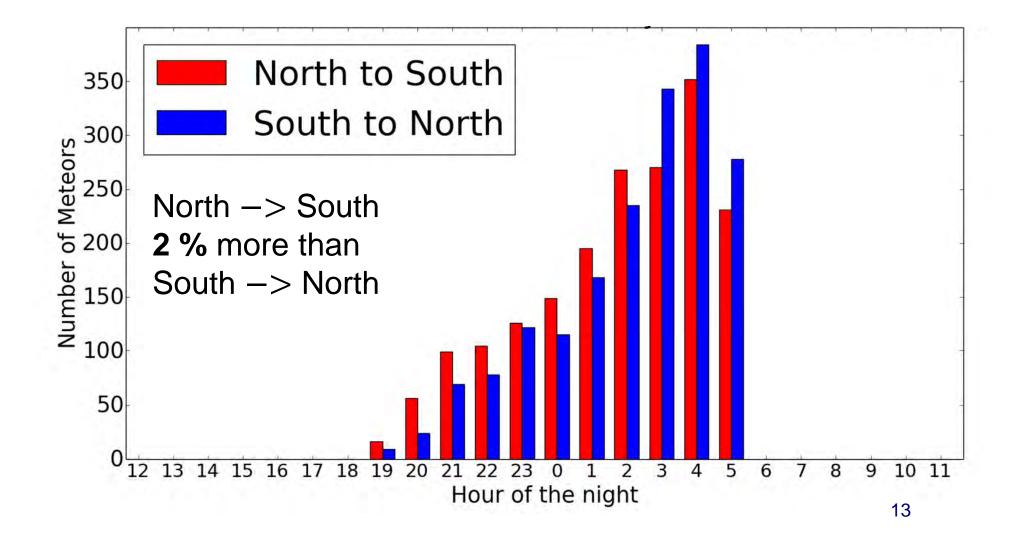


Light Pollution



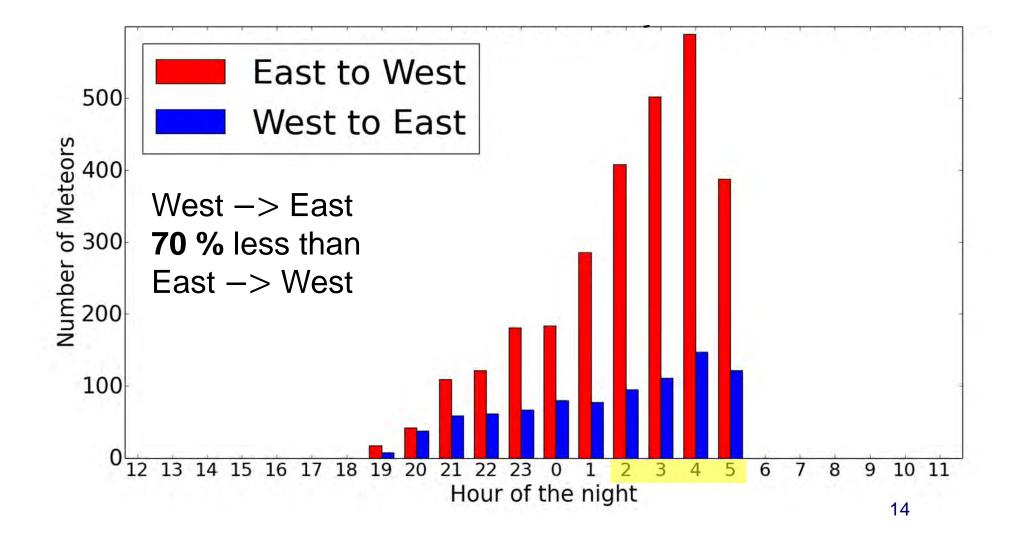


Sporadic Meteor Distribution North -> South



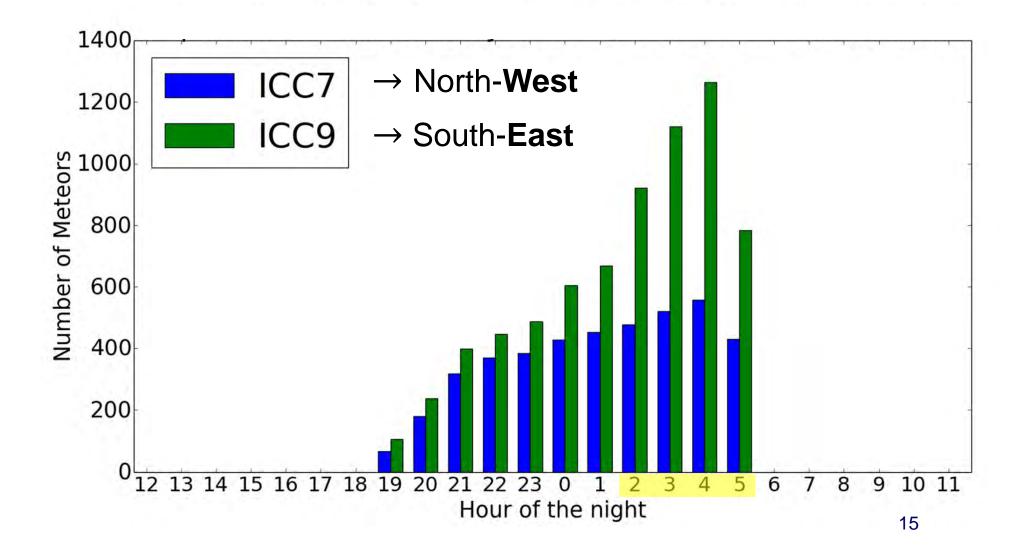


Sporadic Meteor Distribution East -> West





Sporadic Meteor Distribution

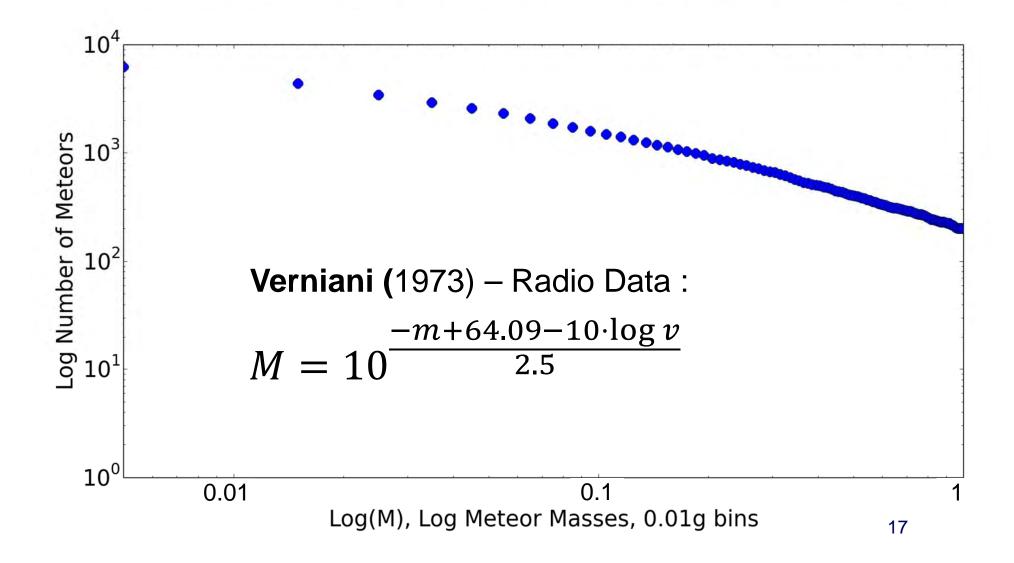




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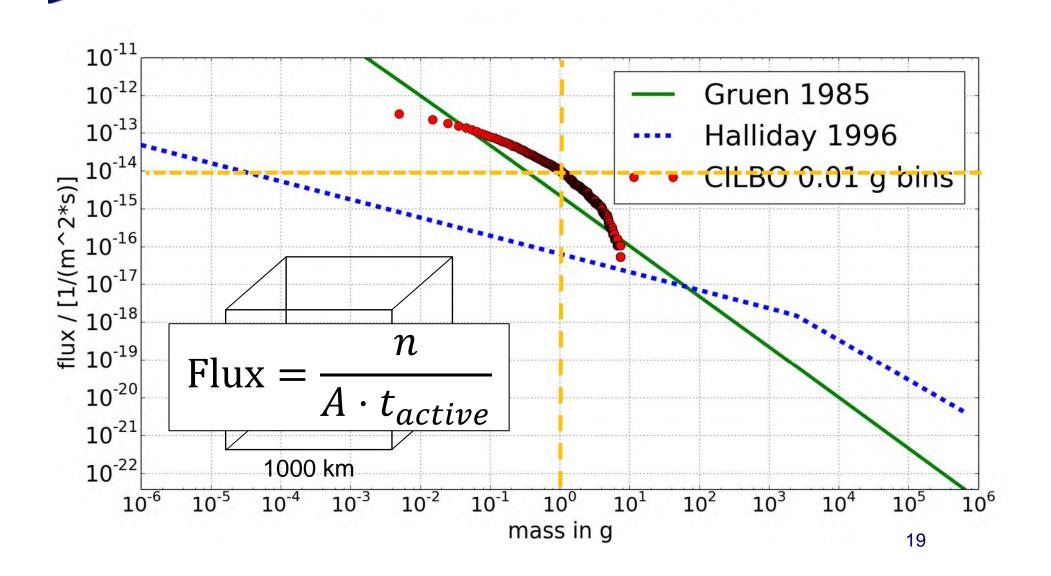


Mass distribution





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Conclusion

- Possible East/West dependency of the meteor count
- The calculated masses were in the expected size category
- The computed flux fits the Grün Model surprisingly well

Future Work

- Uncover more Systematic Errors
- Adjust Mass Model using Radar to Video Observations
- Determine the Discrepency of In Situ Model to actual Video Computations

Thank you all for your attention!

2013/12/07 04:12:11.53 2013/12/07 04:12:12.73