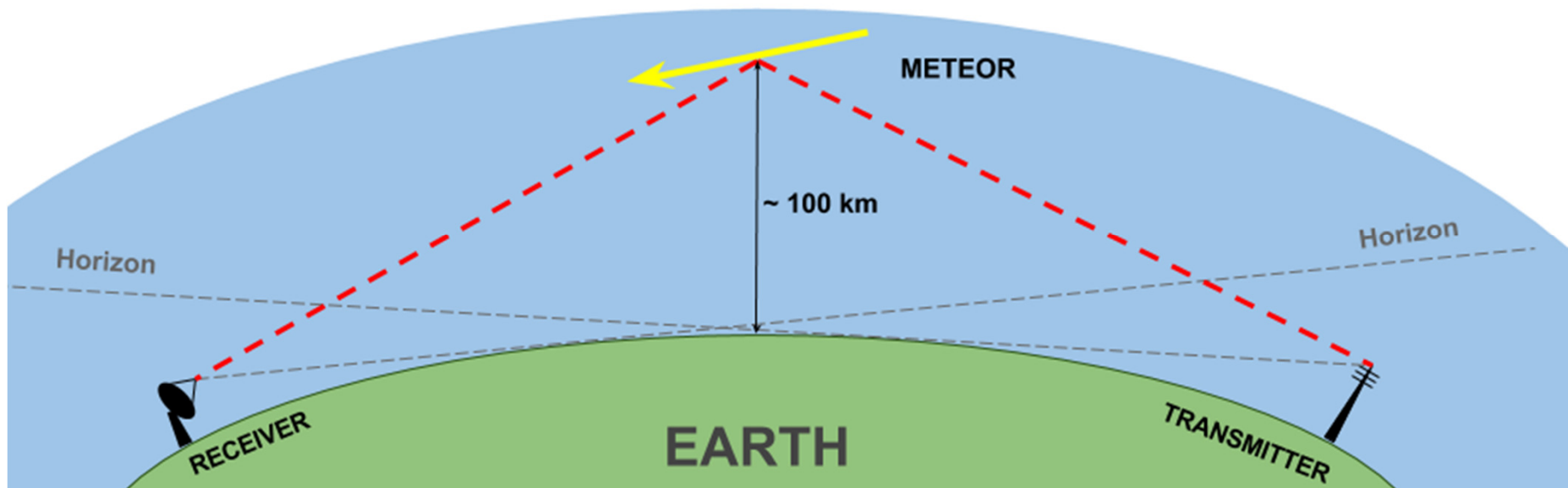
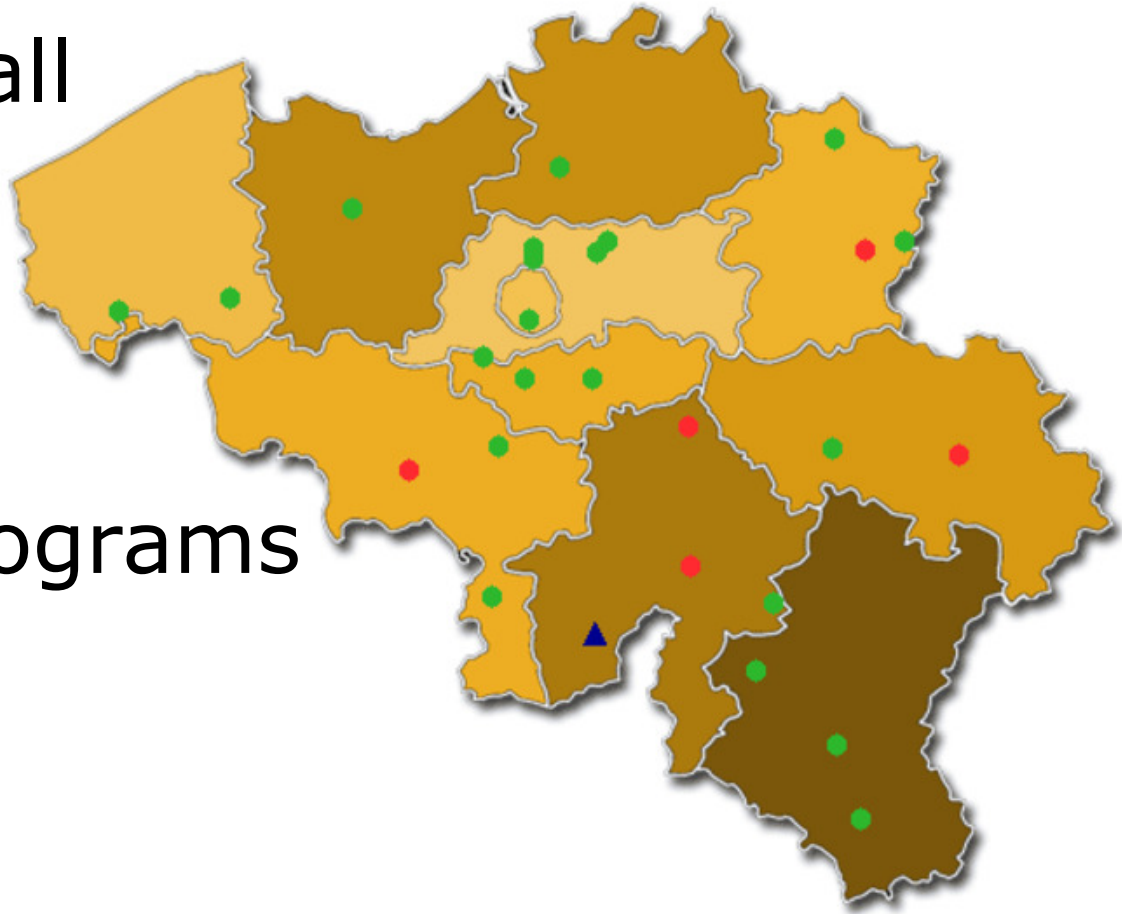


Observing meteors using radio techniques



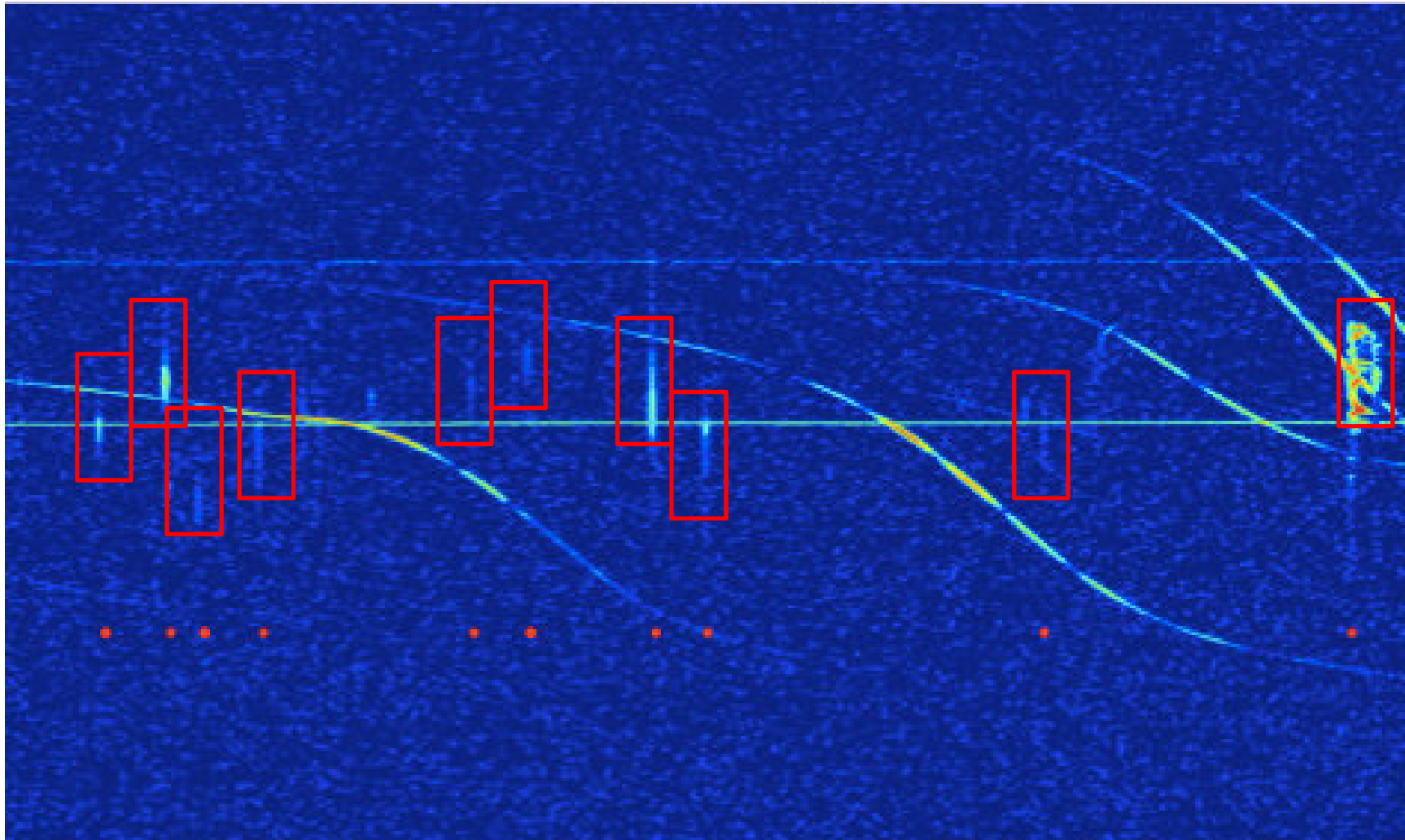
BRAMS network

- ~30 stations all over Belgium
- ~8000 spectrograms per day

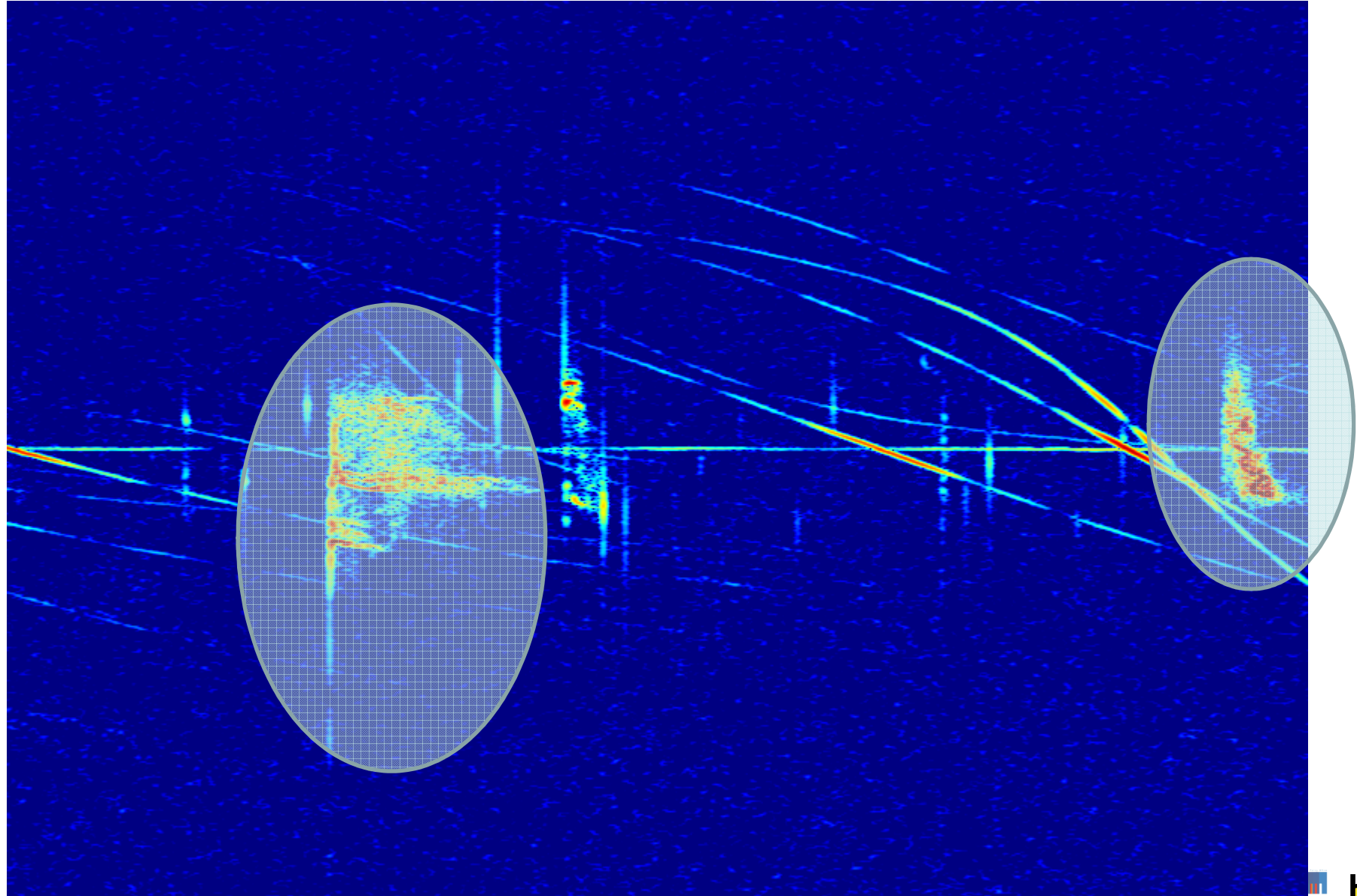


Automatic detection algorithms

RAD_BEDOUR_20111007_0420_BEUCCL_SYS001:16384-14746



Automatic detection algorithms



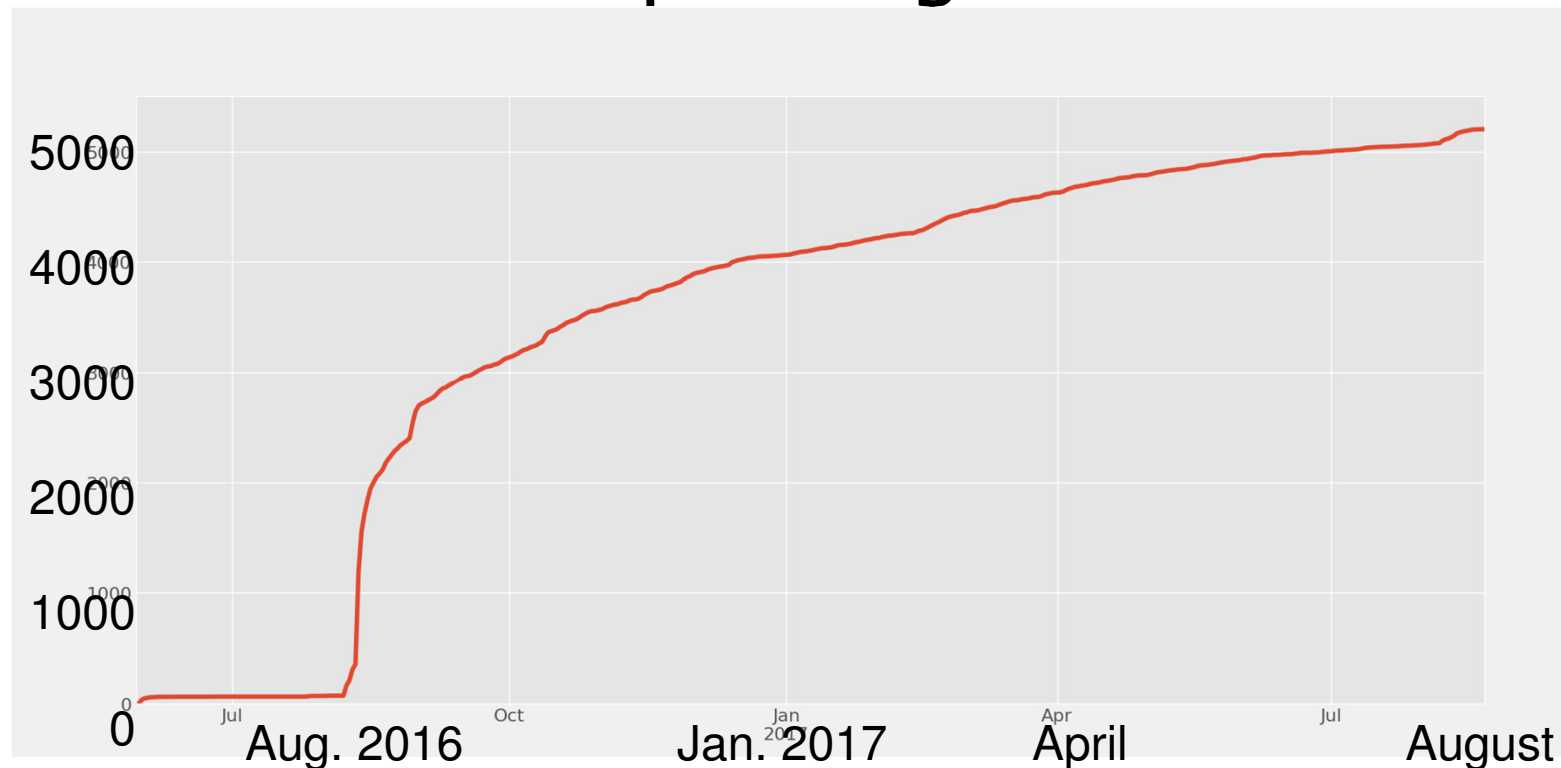
<https://www.radiometeorzoo.org>



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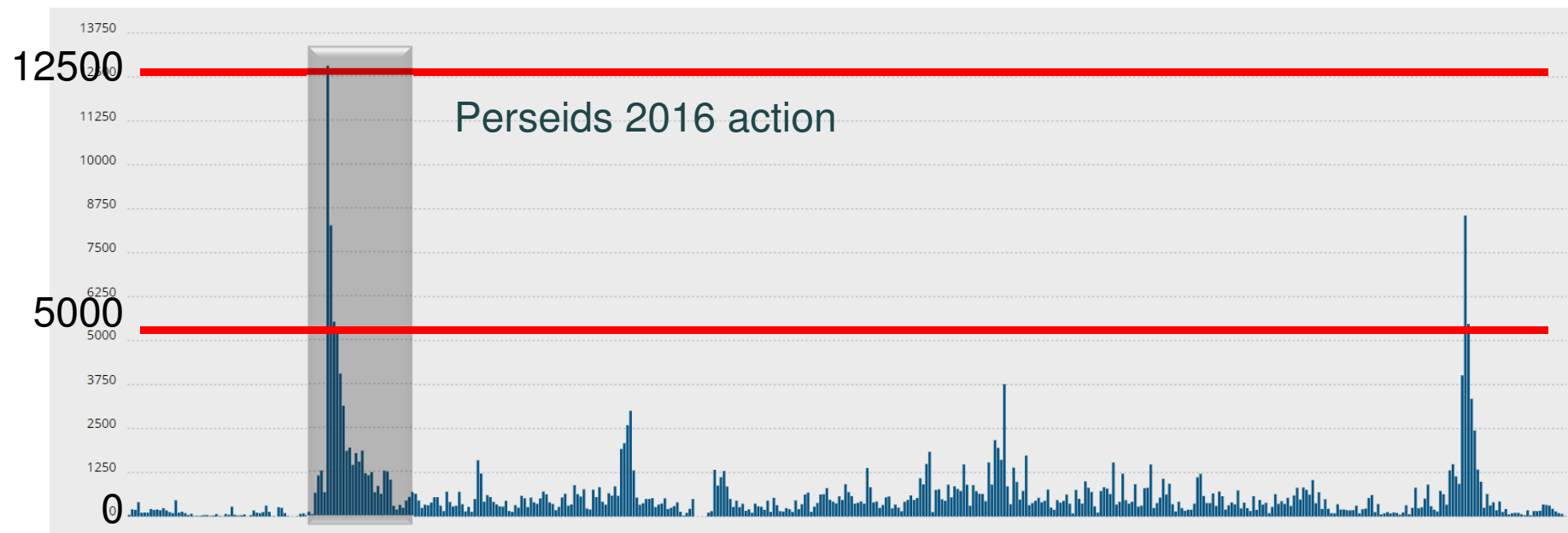
Results

- More than 5000 registered volunteers classified meteors in almost 30.000 spectrograms



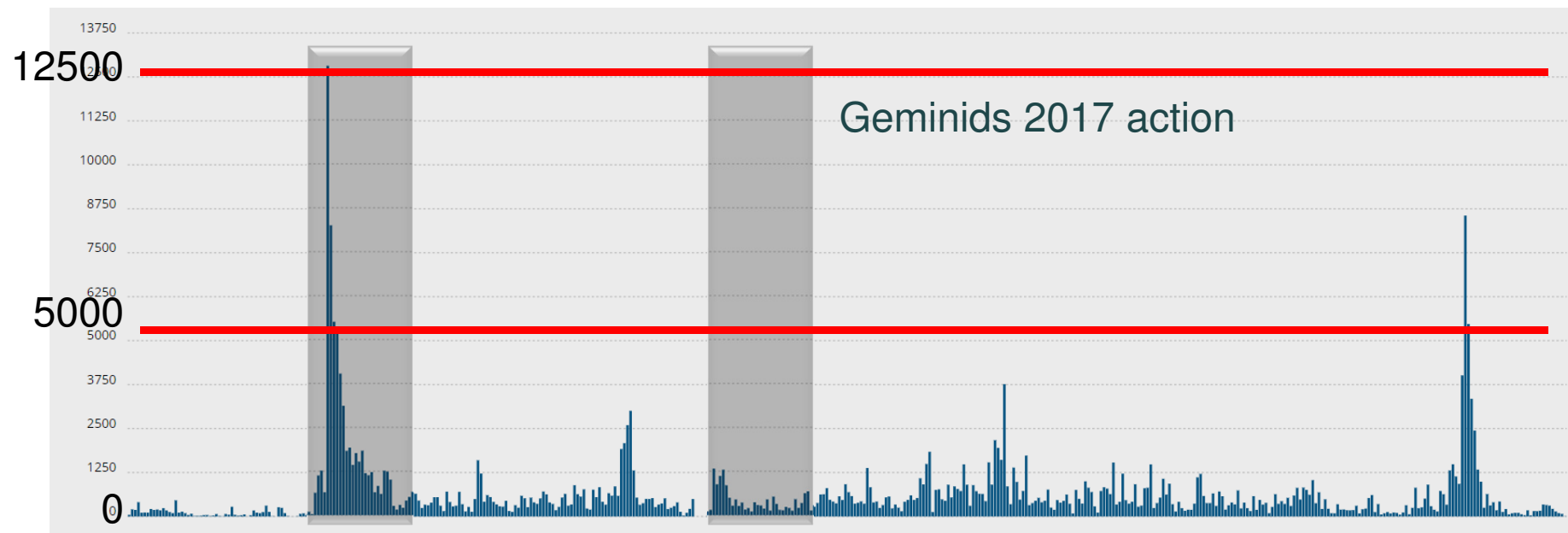
Results

- At the day of the launch on 12 August 2016, more than 12.500 spectrograms were processed



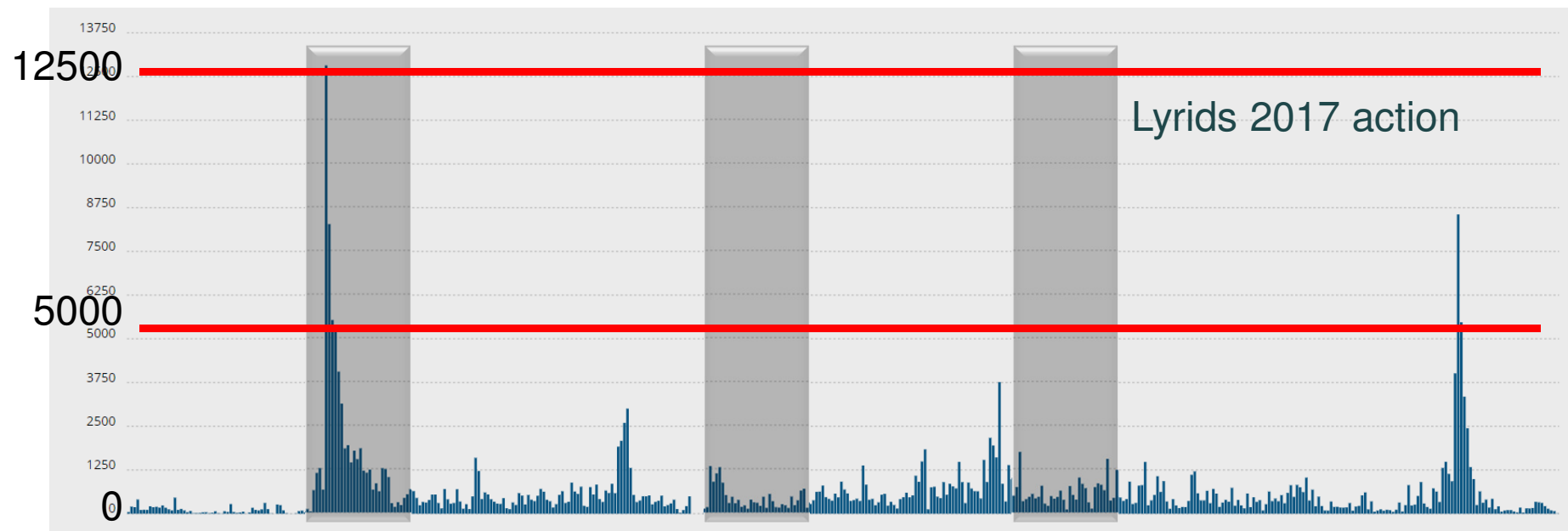
Results

- Volunteers classified spectrograms coming from 5 receiving stations for the Geminids 2017 action



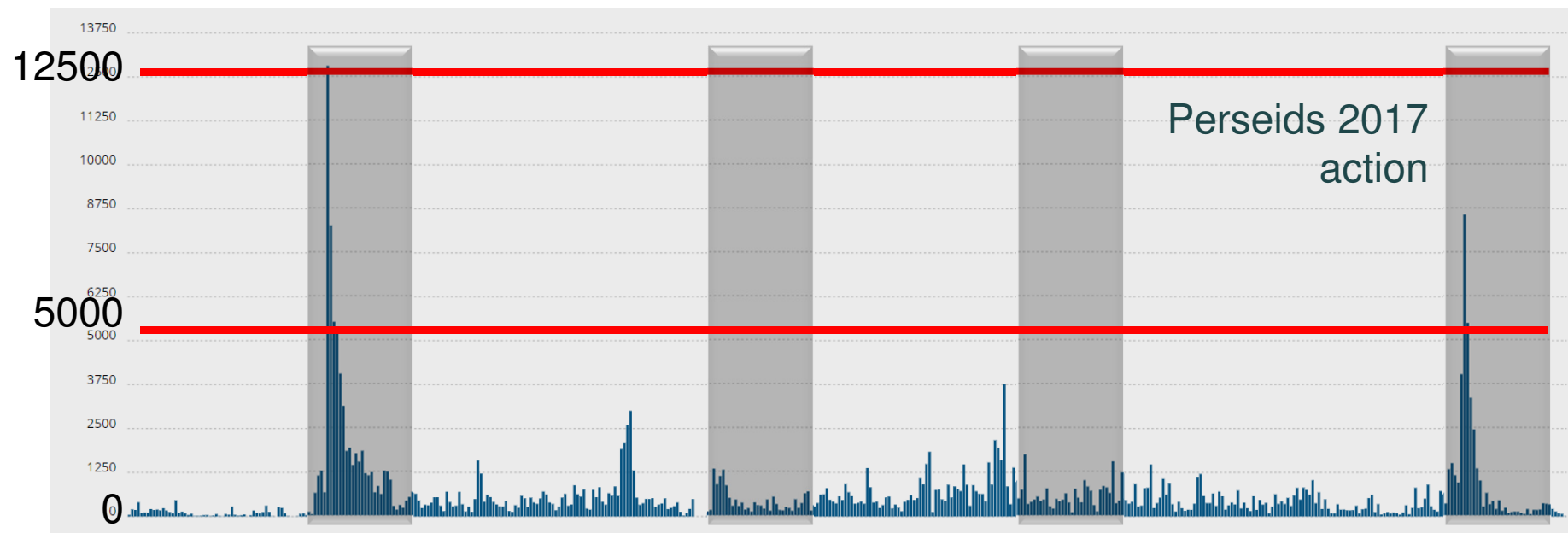
Results

- For the Lyrids 2017 action, only one station has been processed



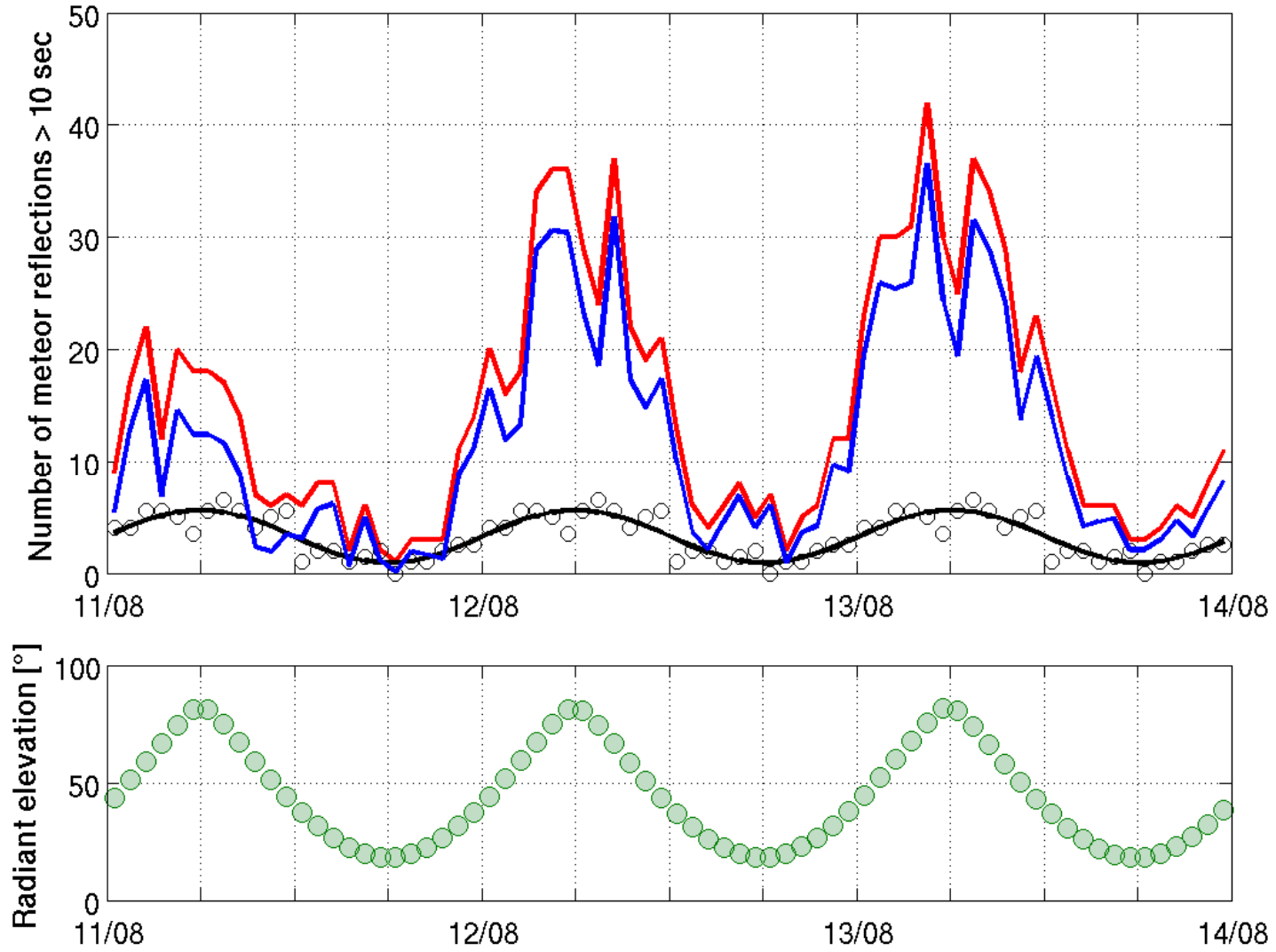
Results

- For the Perseids 2017, more than 10.000 spectrograms were processed in two days



Results

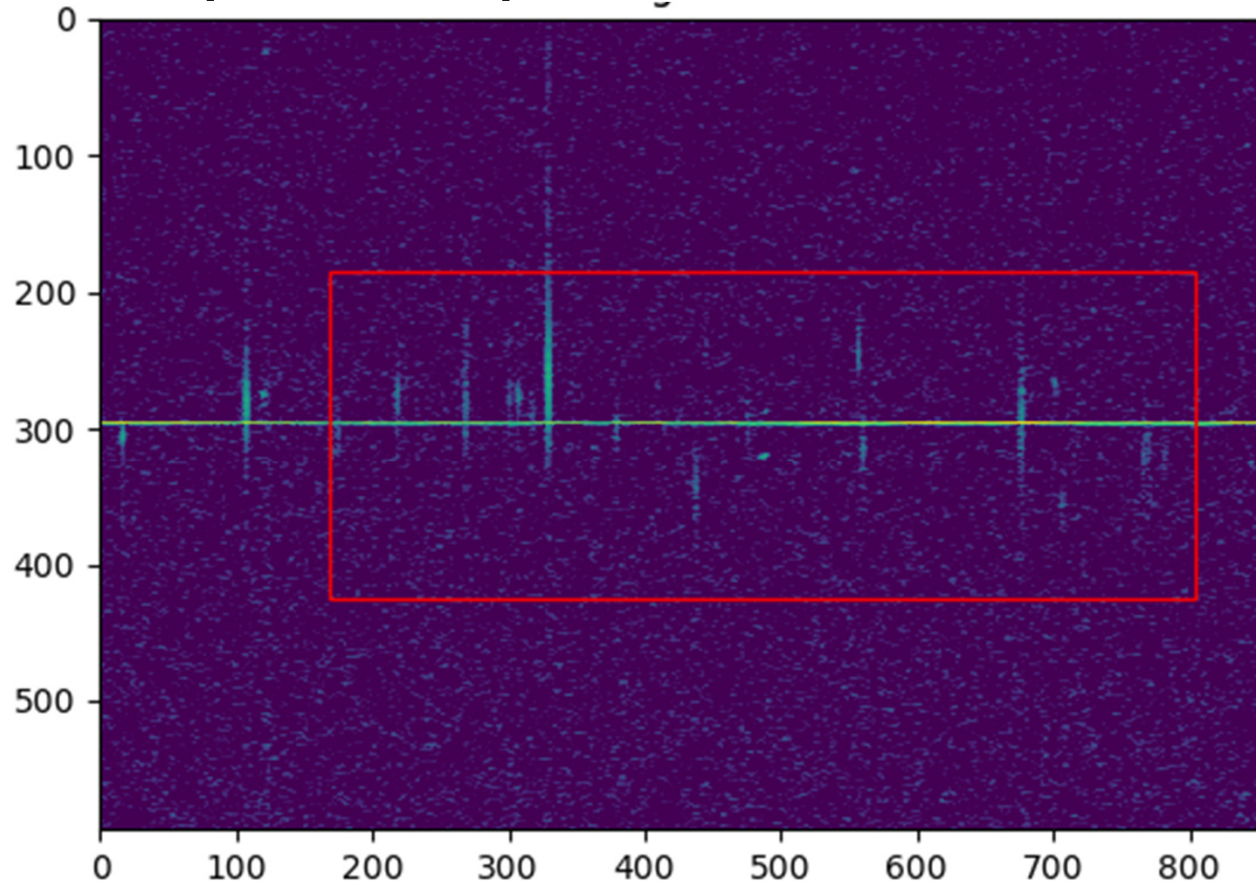
Perseids 2017, BEHUMA receiving station



Future plans

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- Data quality: automatic removal of mistakes/errors/...



Future plans

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- Data quality: automatic removal of mistakes/errors/...
- Observability function
- Use RMZ as the ground truth for the automatic detection algorithms



Call for action

- Thanks to the Radio Meteor Zoo, BRAMS can for the first time analyze several showers per year
- There are two laptops in the poster room where you can try the Radio Meteor Zoo yourself

Acknowledgements



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- Special thanks to:
 - The Zooniverse team,
 - All citizen scientists, and
 - Last but not least: the BRAMS station hosts



Thank you for your attention!

<https://www.radiometeorzoo.org>

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