

The background features a dark blue gradient with a starry field. Overlaid on this are several white circular and semi-circular patterns, some with arrows indicating direction. A prominent feature is a large circular scale on the left side, with numerical markings from 140 to 260 in increments of 10. The text is centered on the right side of the image.

**CITIZEN SCIENCE POTENTIAL
IN A GLOBAL COSMIC-RAY PROJECT:
HANDS-ON EXERCISES WITH CREDO / DARK UNIVERSE**

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POLISH ACADEMY OF SCIENCES



AGH University of Science and Technology
Paweł Jagoda



PK University of Technology
Mateusz Sułek
Sławomir Stuglik



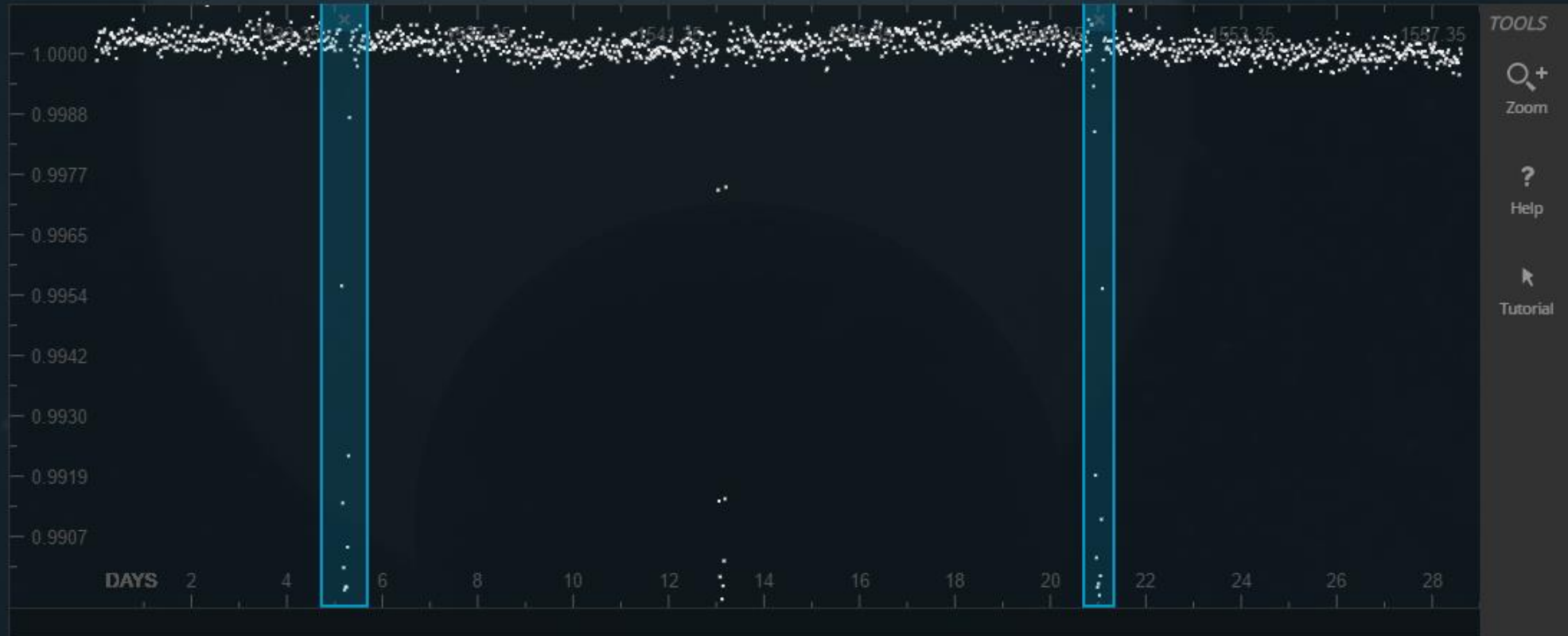
Ready to discover new worlds?

Start Classifying



Do you see a transit?

If so, highlight it on the light curve below!

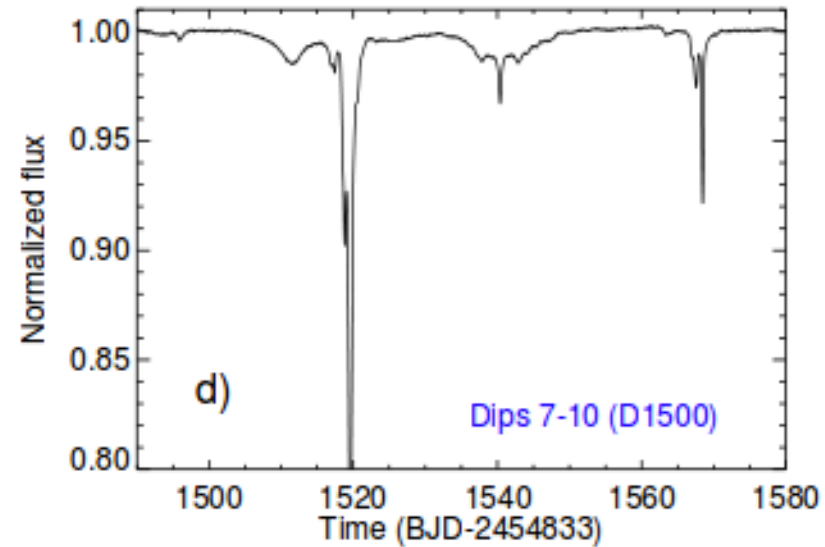
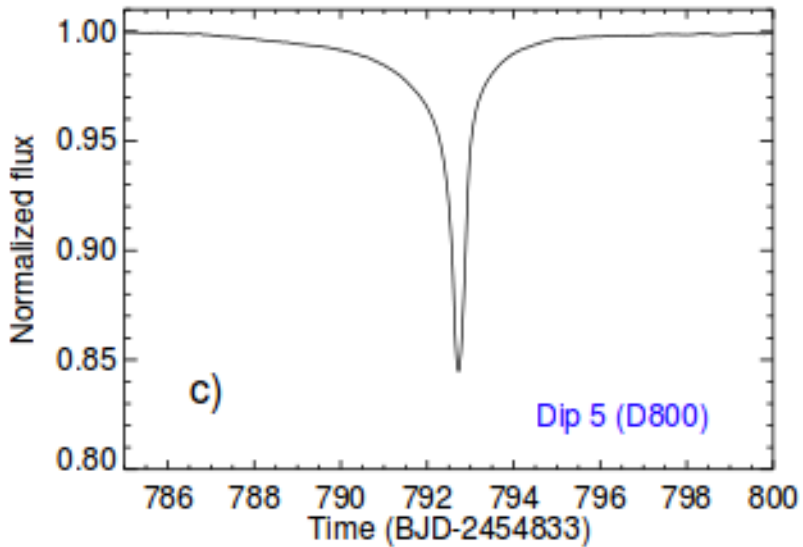
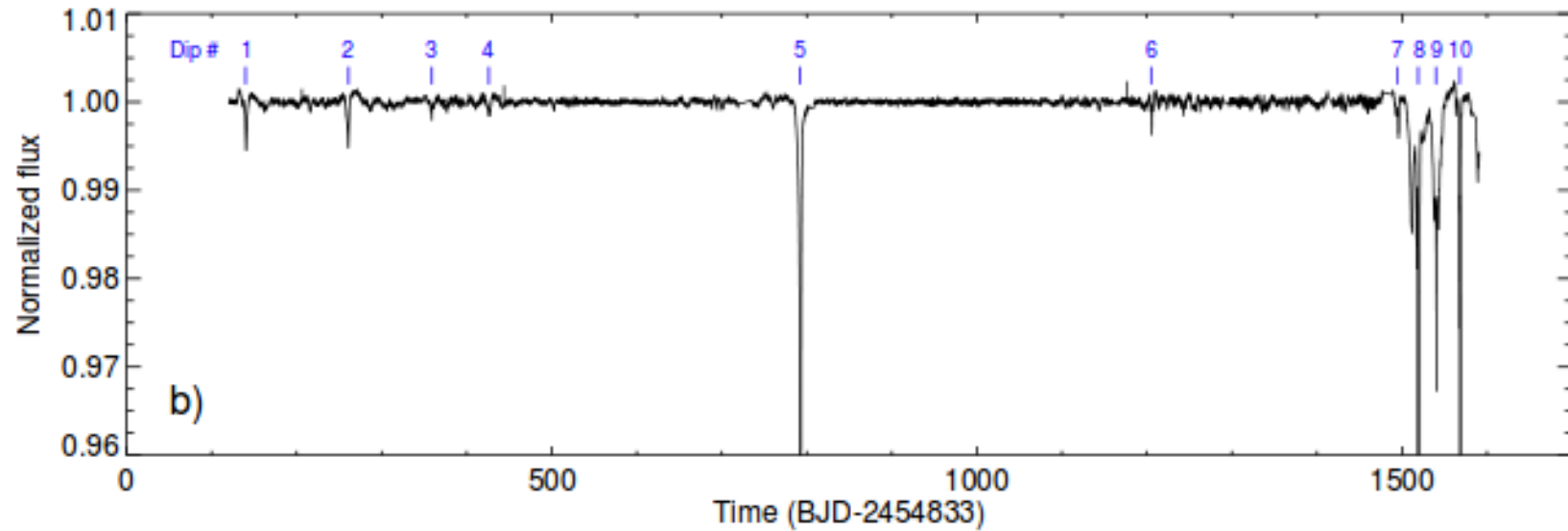


Star Information

Magnitude **N/A** Type **K-Dwarf** Temp **6076** Radius **0.966**

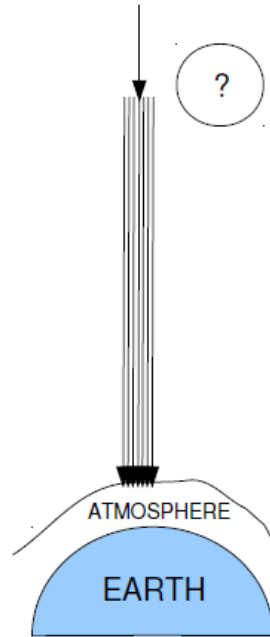
Finished

Planet Hunters: impossible light curves?



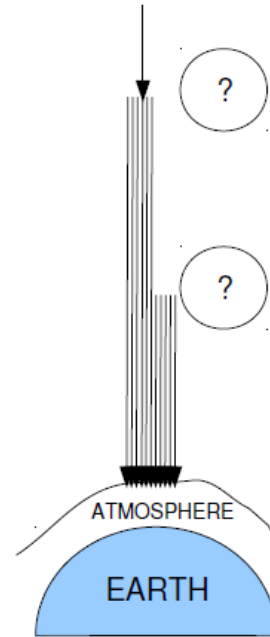
Classes of super-preshowers

A: γ_{UHE}
(e.g. 10^{20}eV)



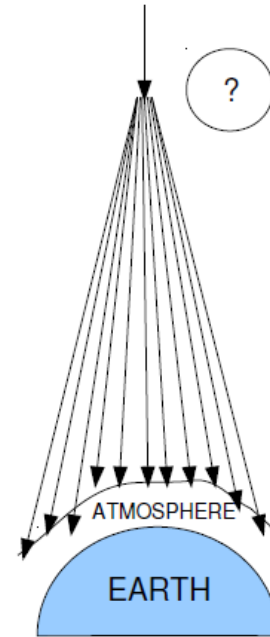
Δx : small
 Δt : small

B: γ_{UHE}
(e.g. 10^{20}eV)



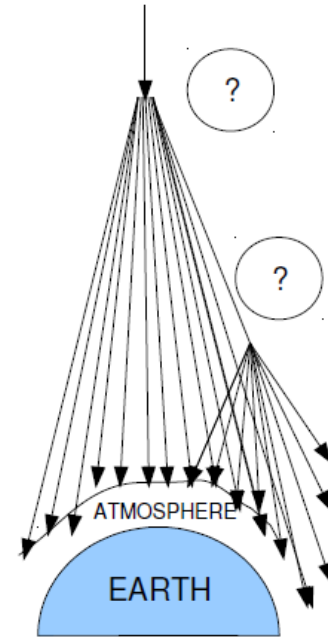
Δx : small
 Δt : large

C: γ_{UHE}
(e.g. 10^{20}eV)

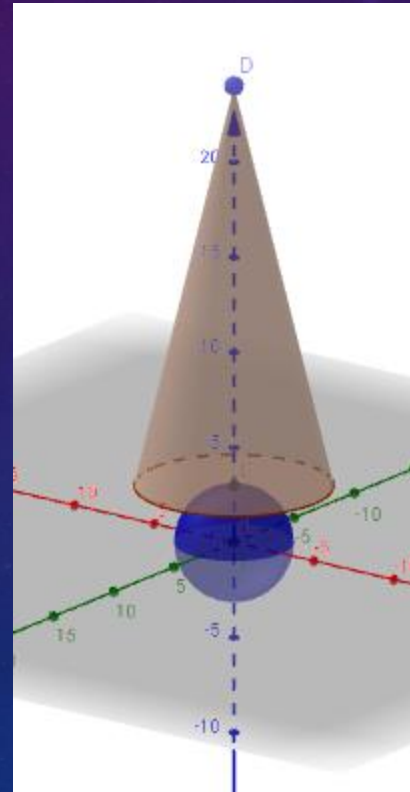
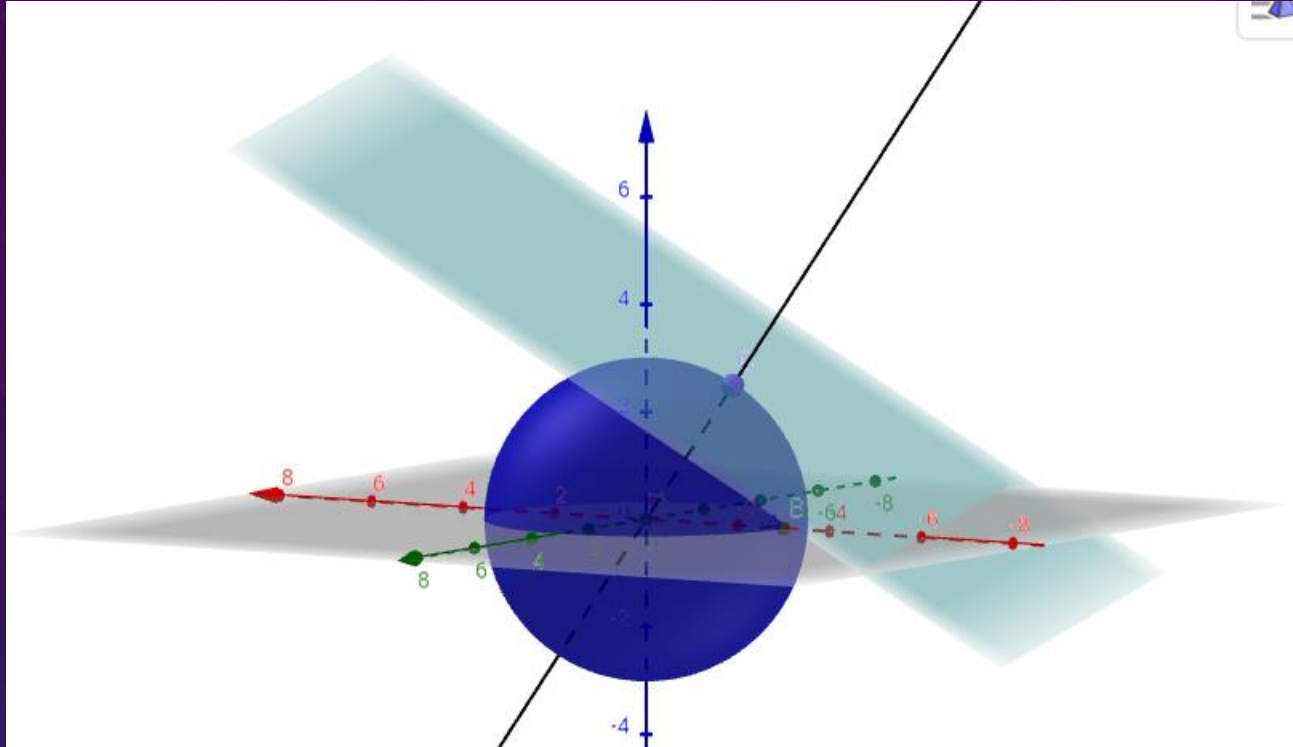


Δx : large
 Δt : small

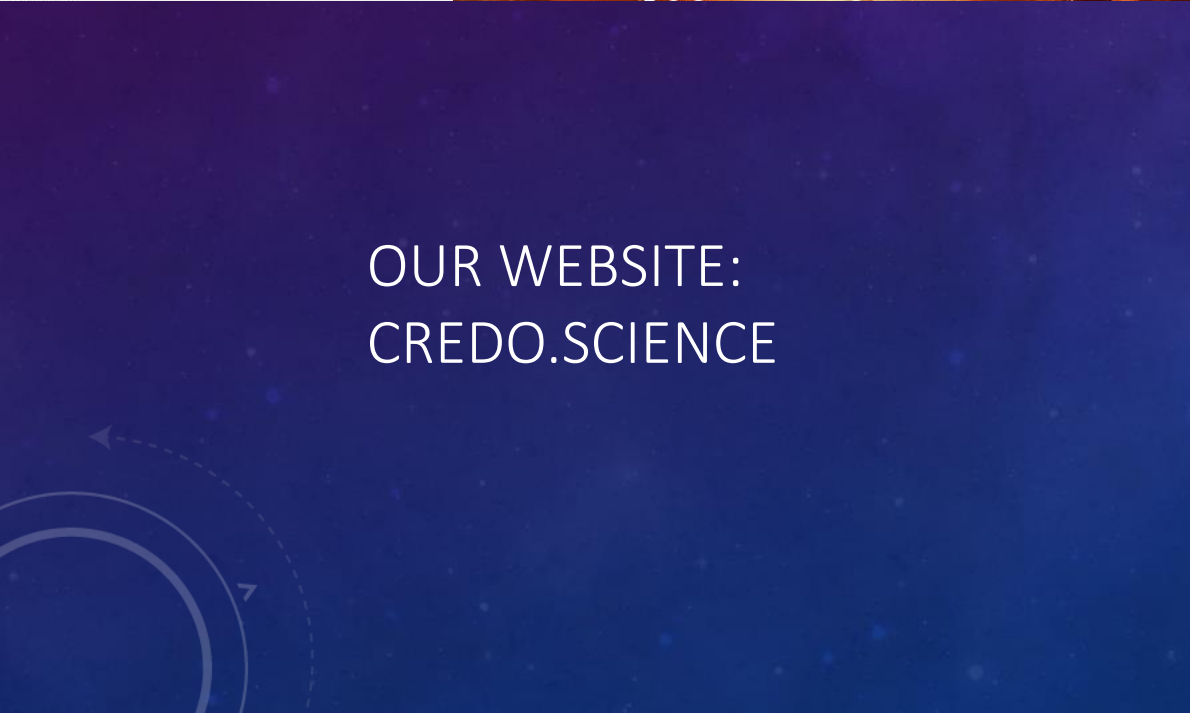
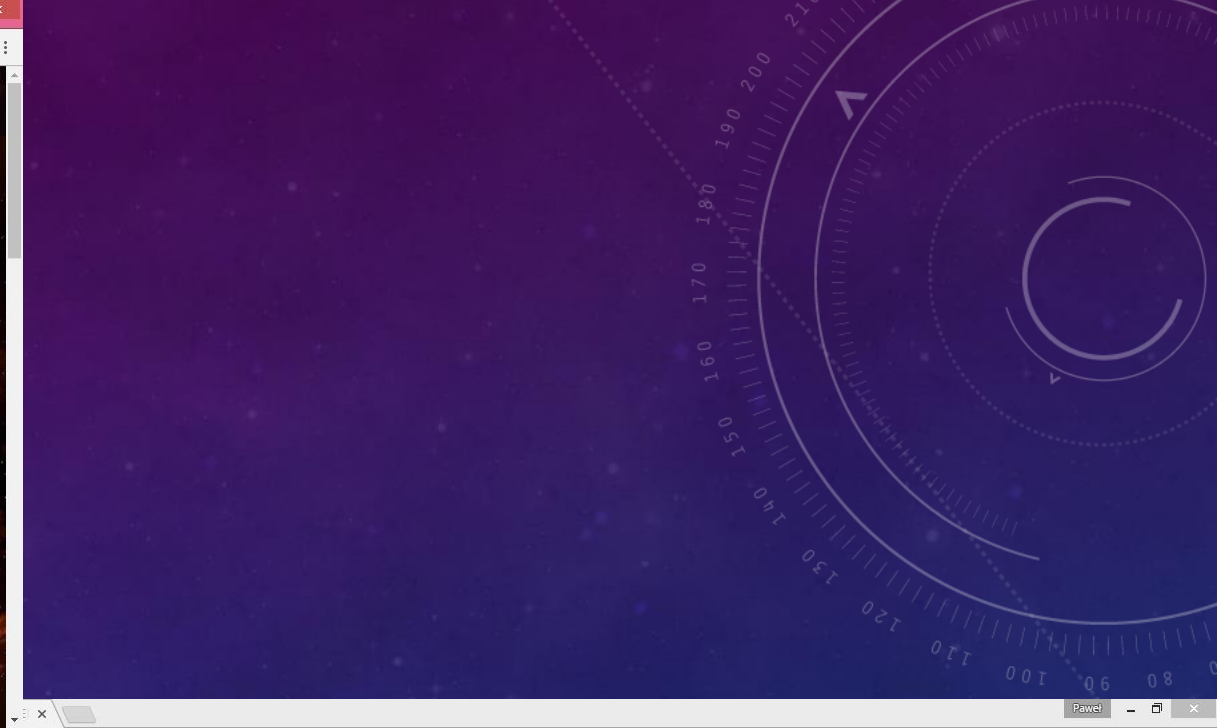
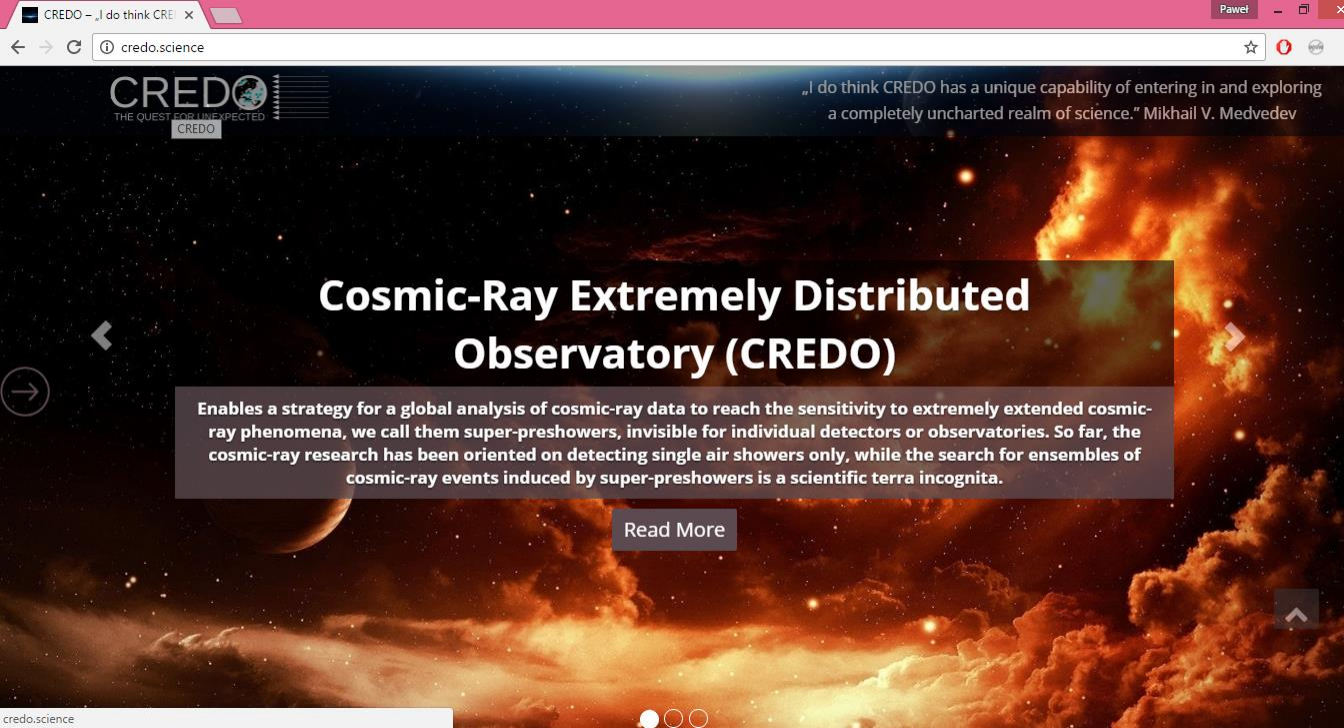
D: γ_{UHE}
(e.g. 10^{20}eV)



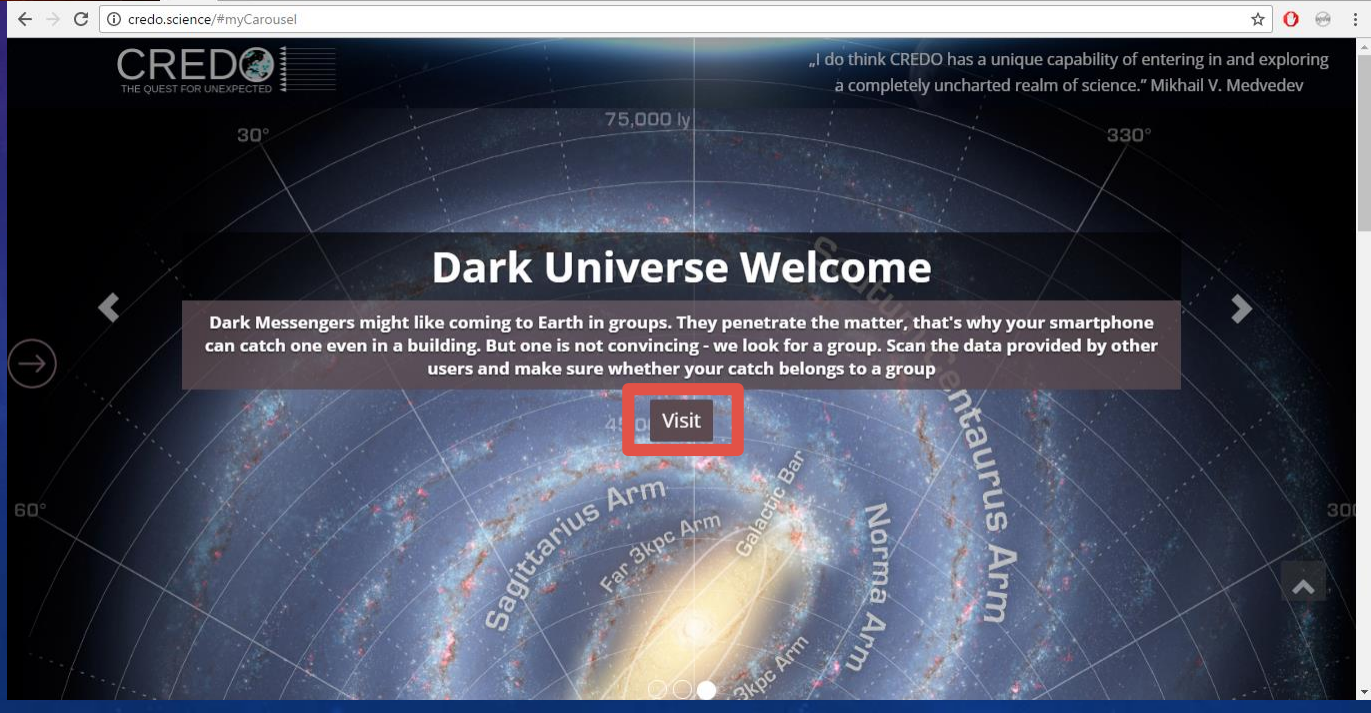
Δx : large
 Δt : large

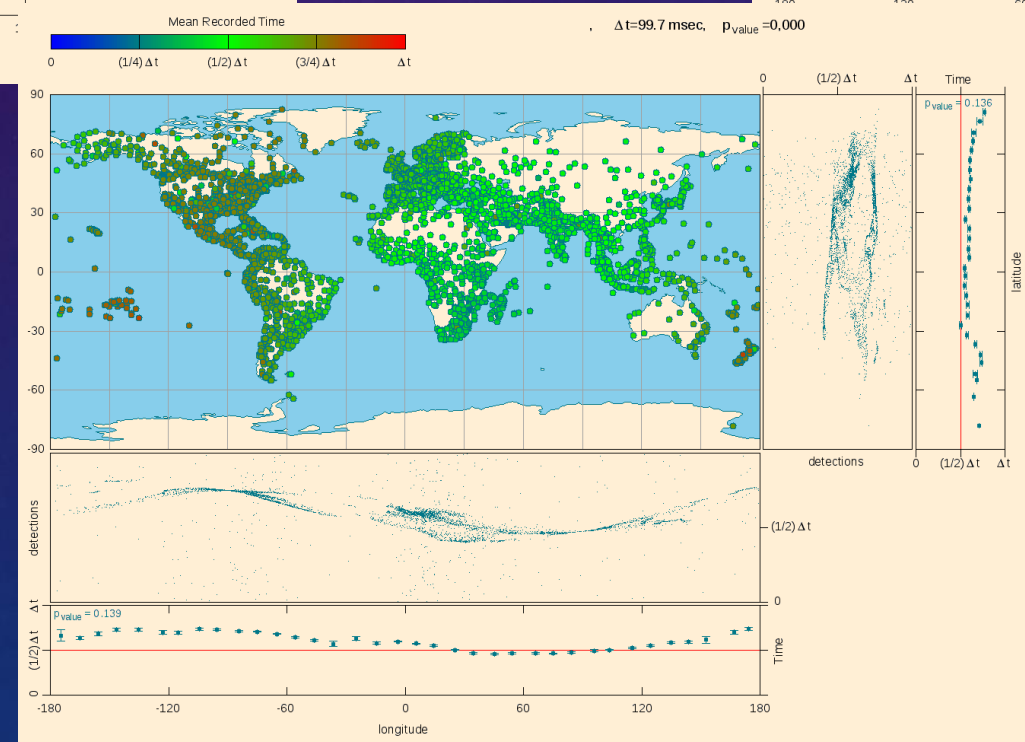
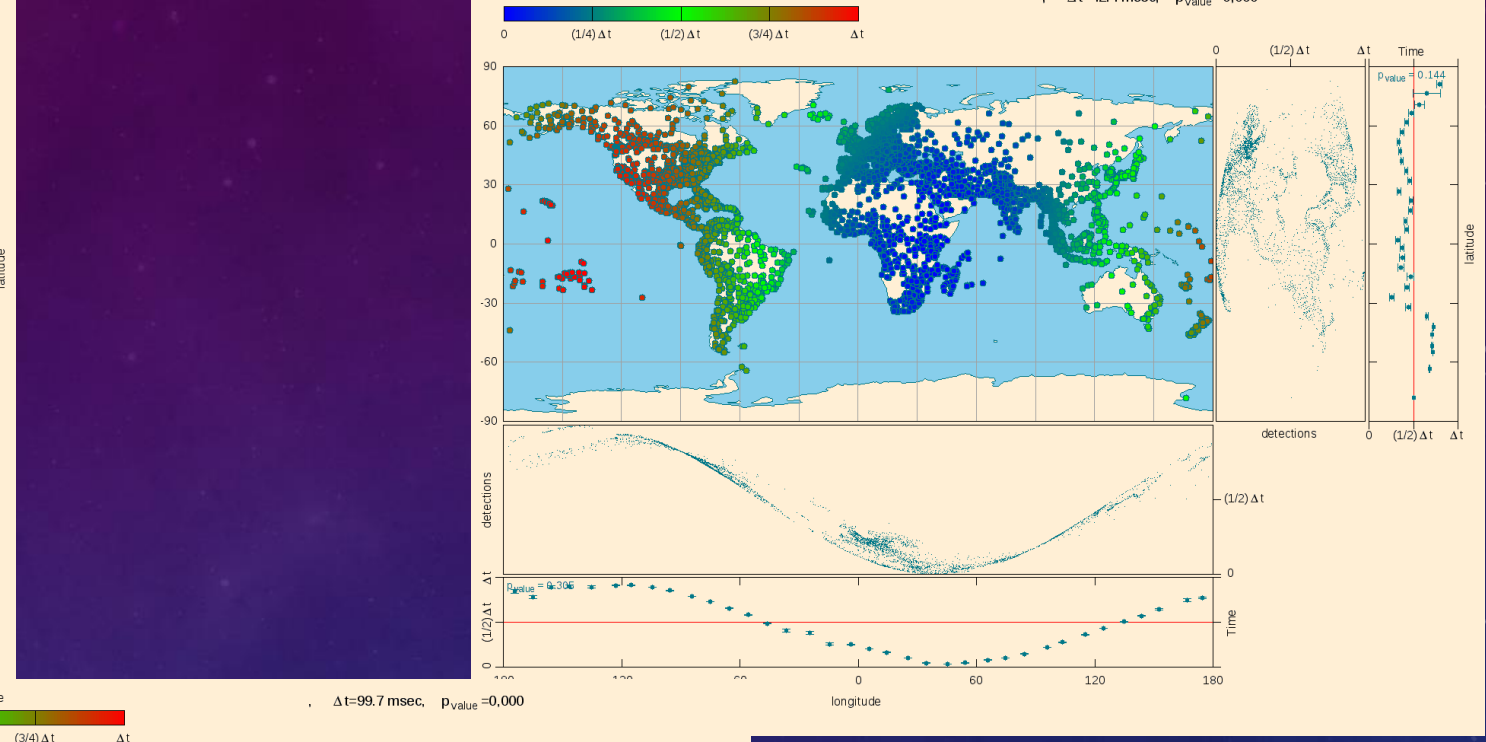
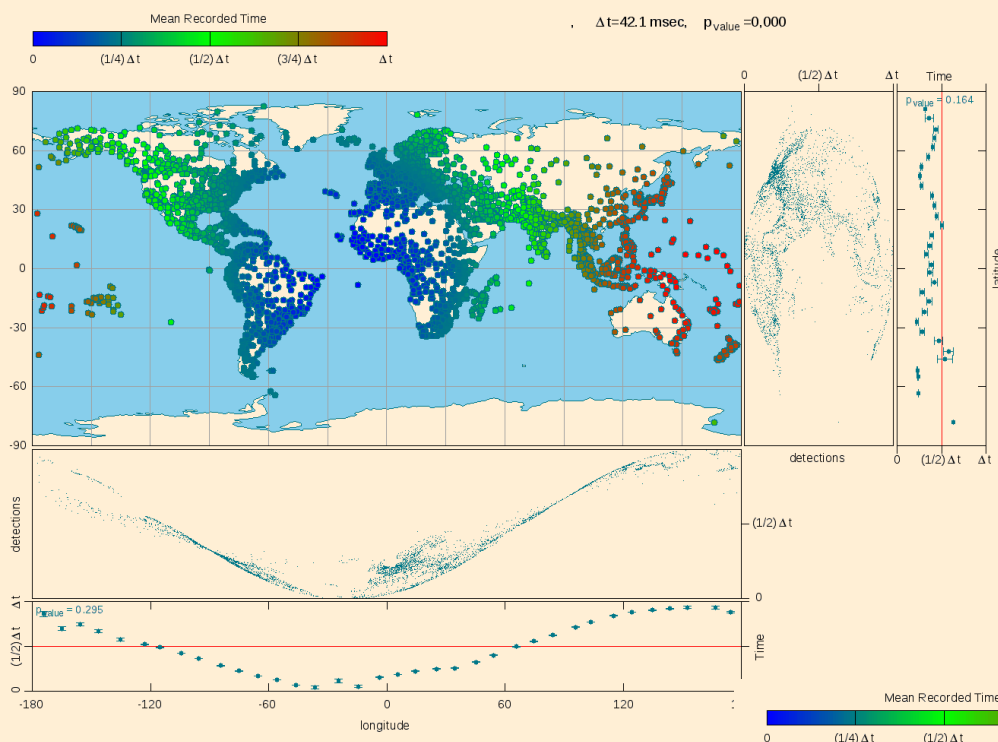


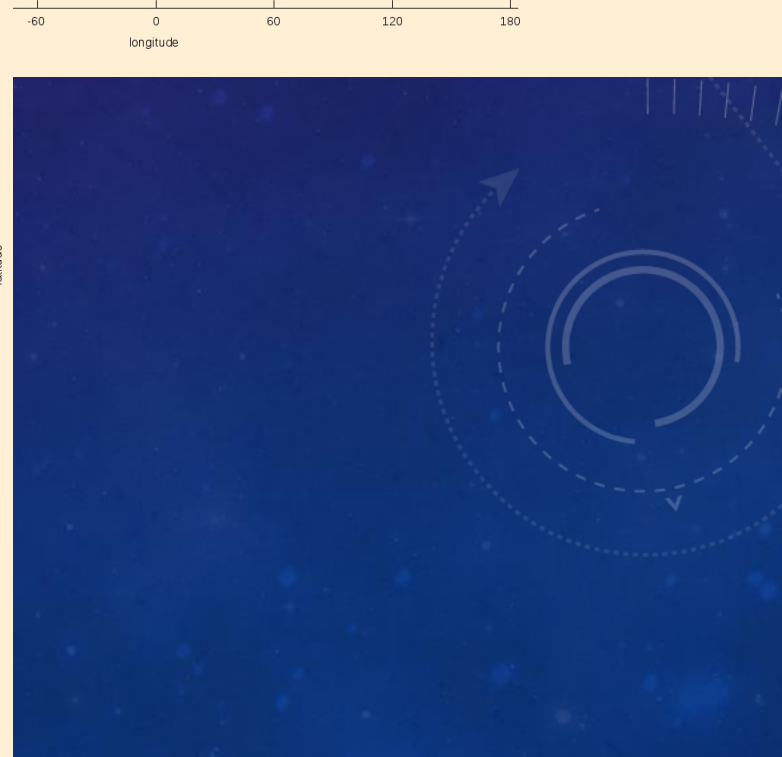
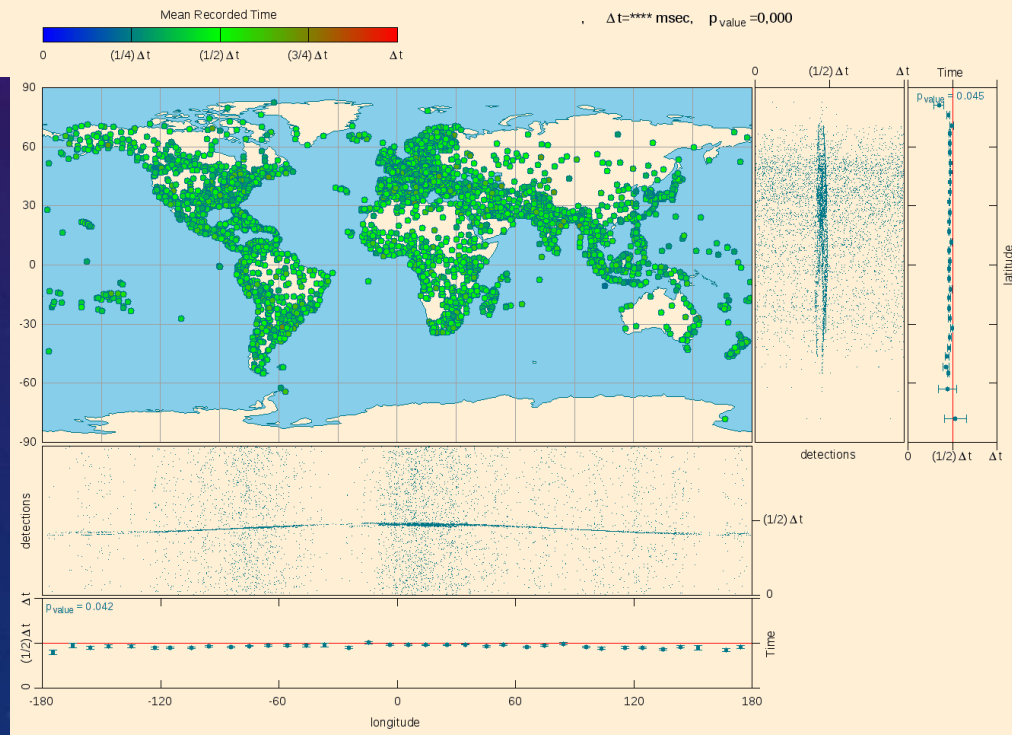
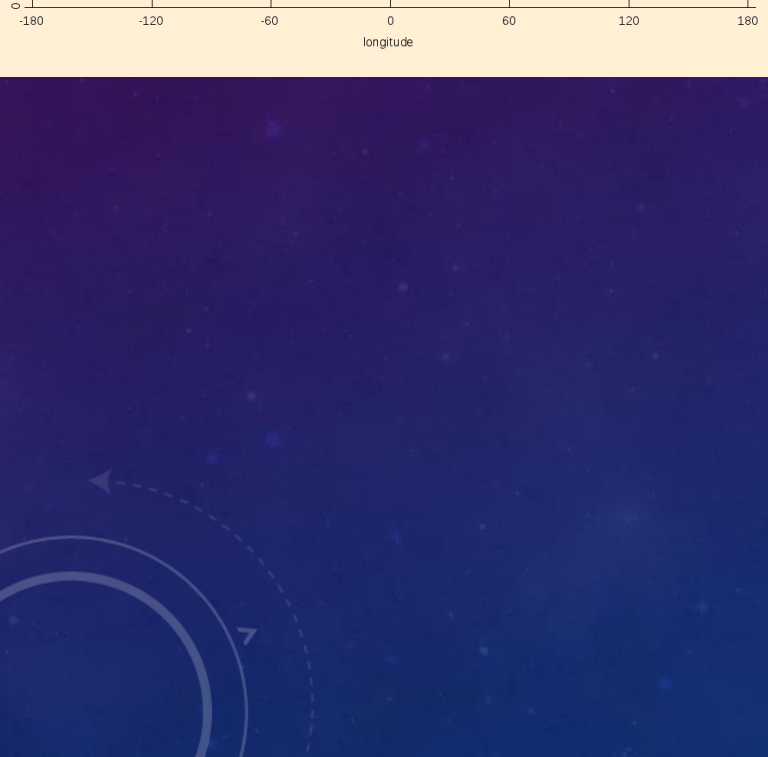
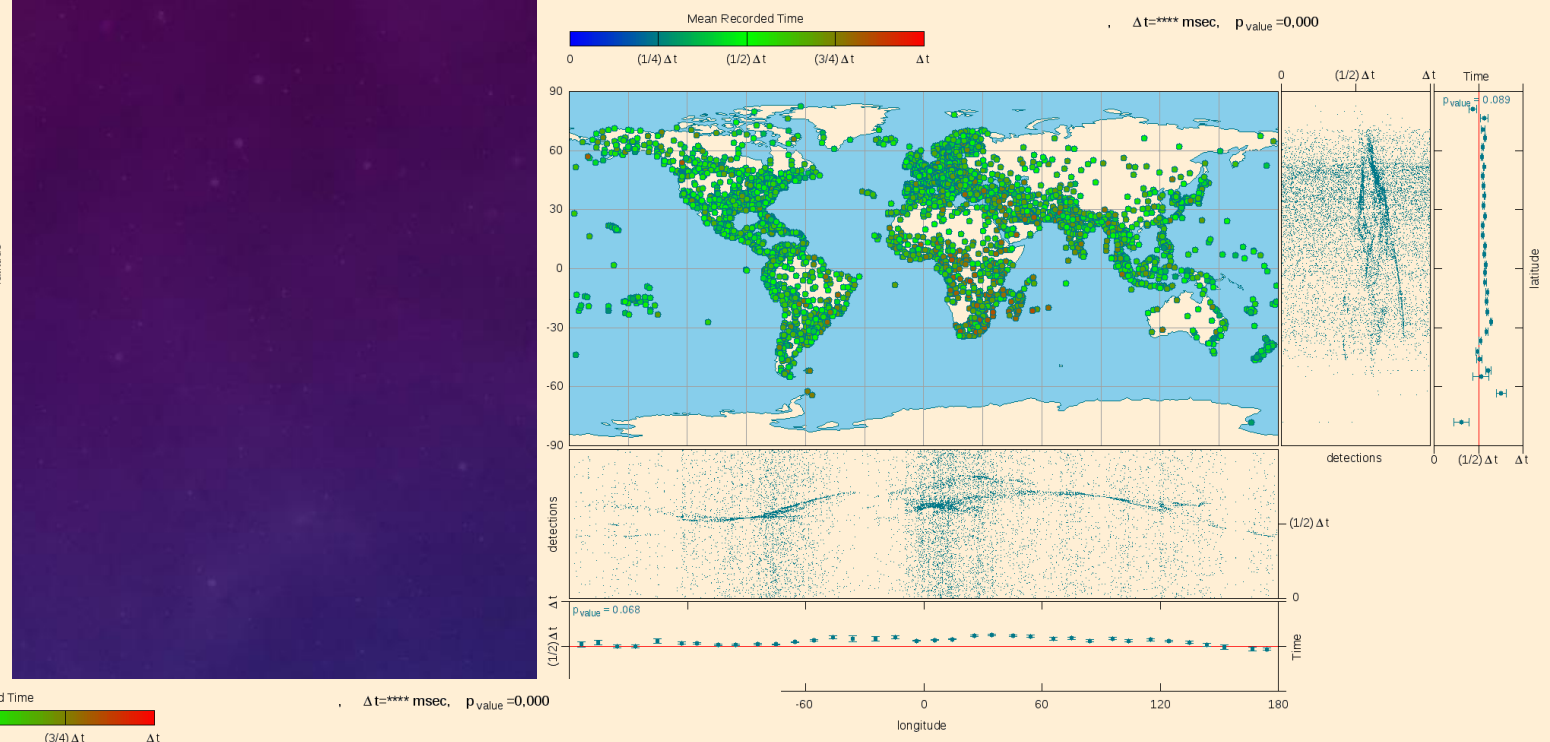
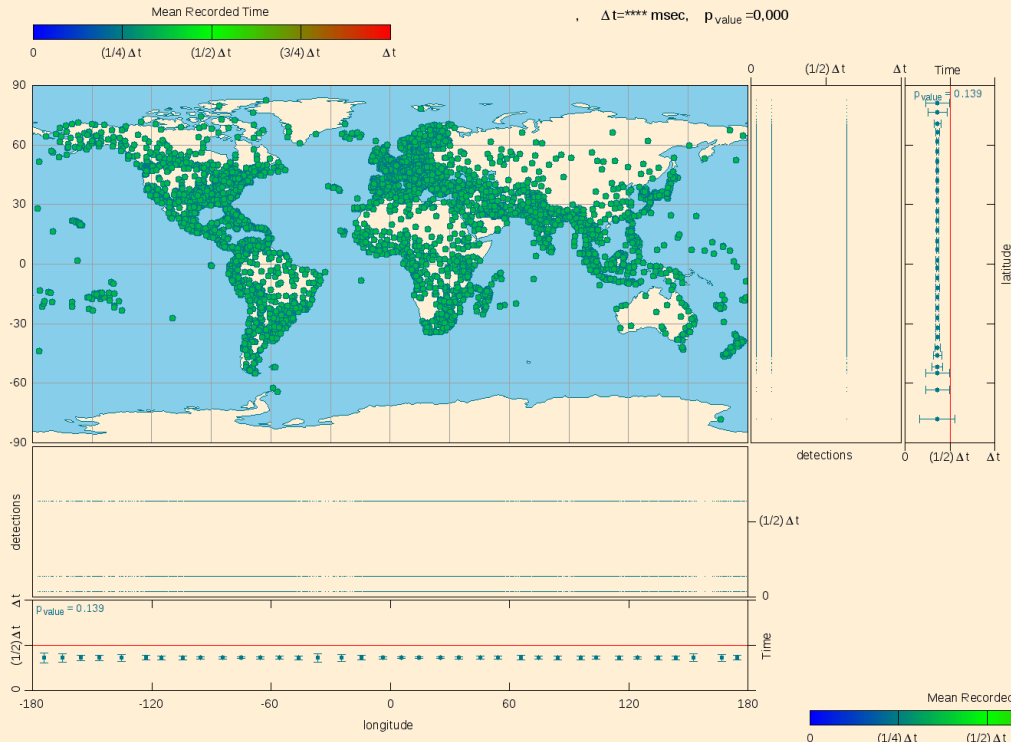
GEOMETRY OF OUR SIMULATION



OUR WEBSITE:
CREDO.SCIENCE









THANK YOU FOR YOUR ATTENTION!

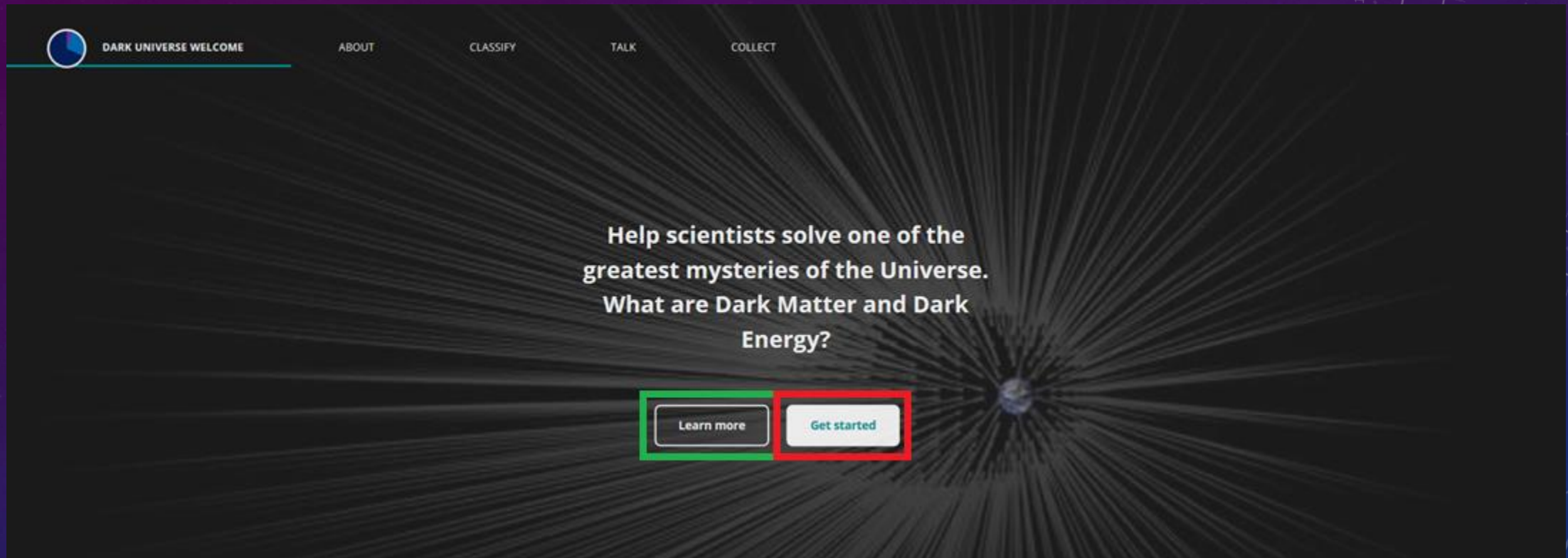
To get up to date information visit our website

credo.science

If you wish to contact us then email us at:

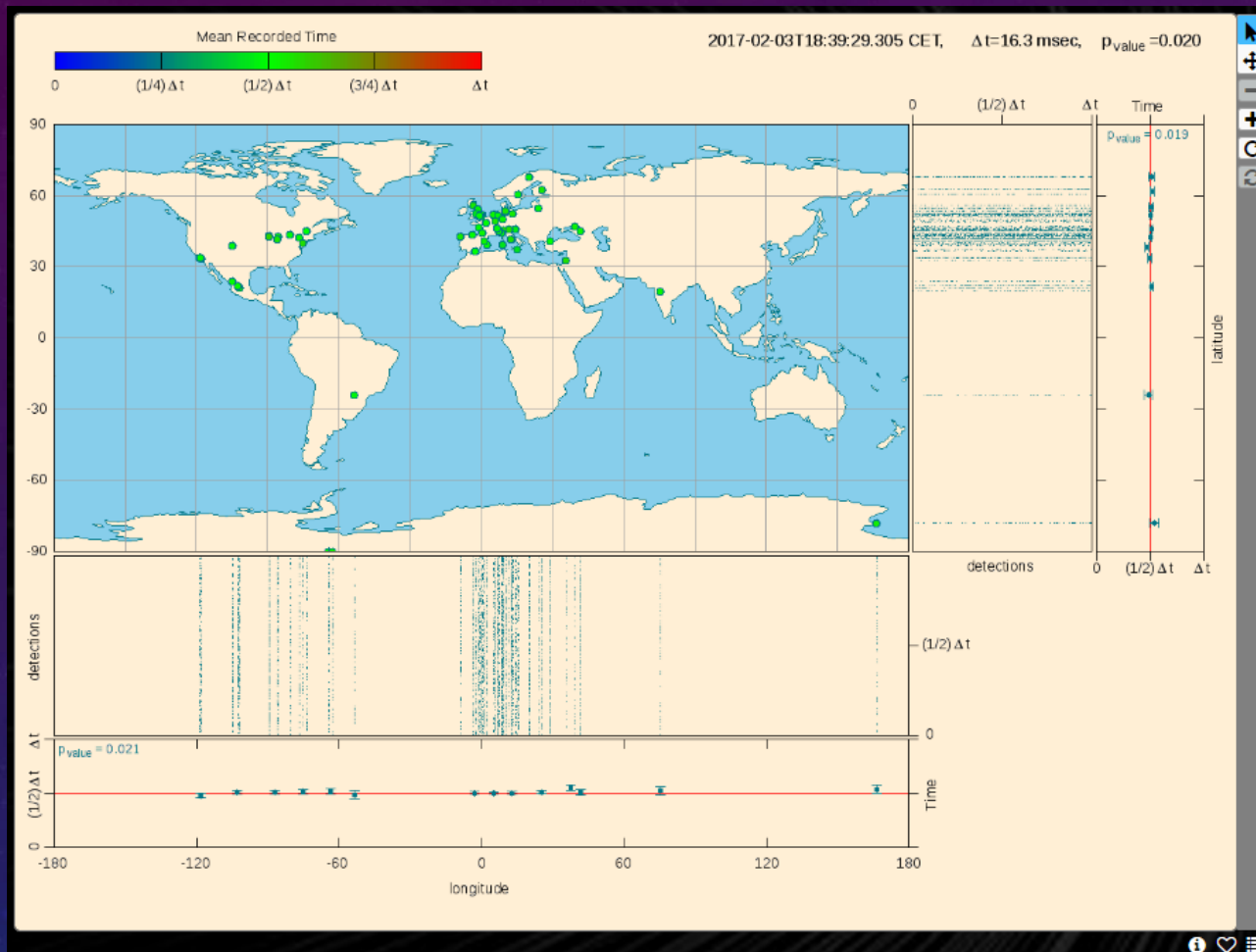
projektCREDO@gmail.com

DARK UNIVERSE WELCOME



For live experience visit:

www.zooniverse.org/projects/credo/dark-universe-welcome



Can you see a trend on any of these graphs?

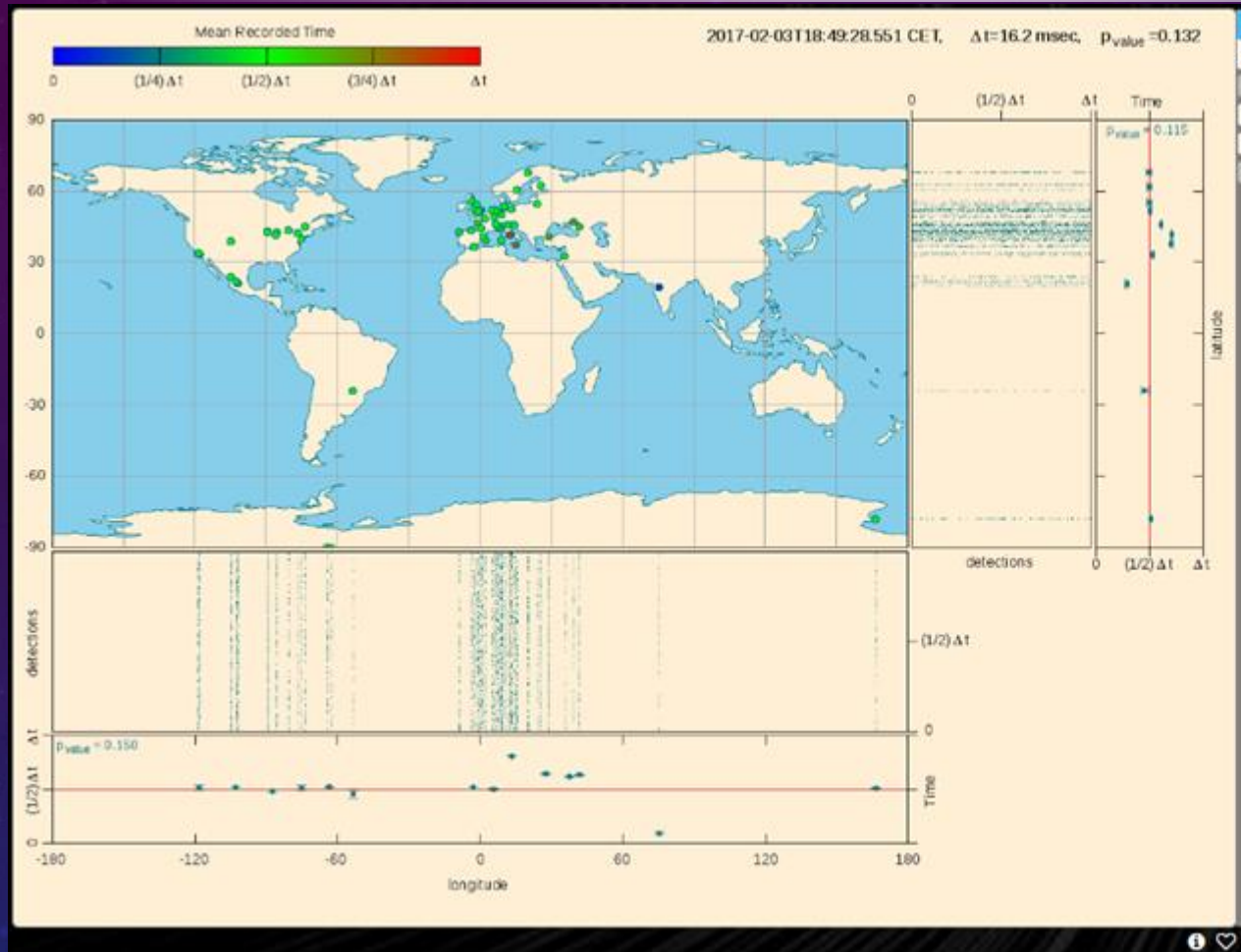
- I can see a trend on both graphs
- I can see a trend on one graph
- There isn't a trend on either graph
- Both graphs are a complete mess

Need some help with this task?

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Done

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Can you see a trend on any of these graphs?

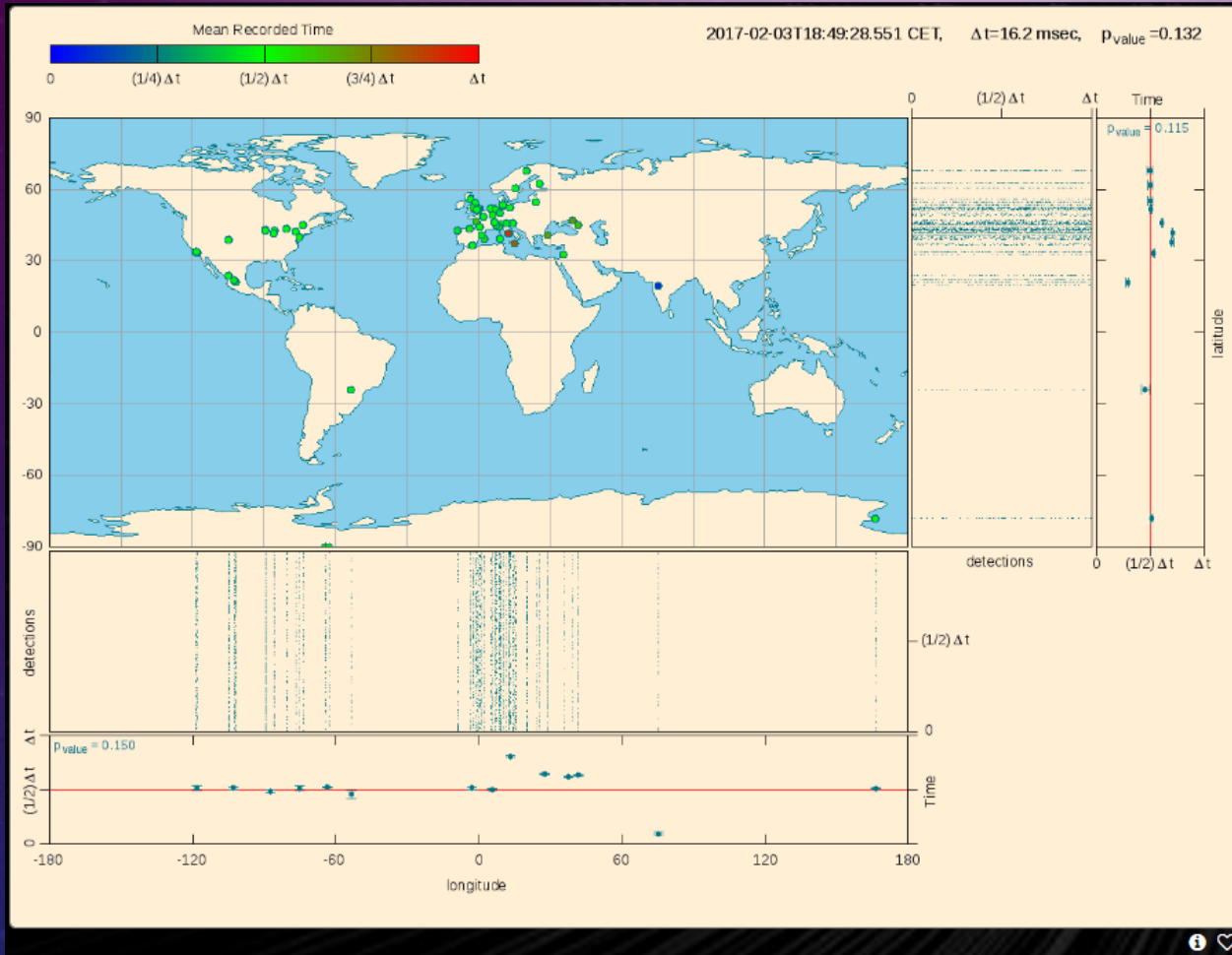
- I can see a trend on both graphs
- I can see a trend on one graph
- There isn't a trend on either graph
- Both graphs are a complete mess

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First, what can you see on the longitude (bottom) graph (choose all that apply)...?

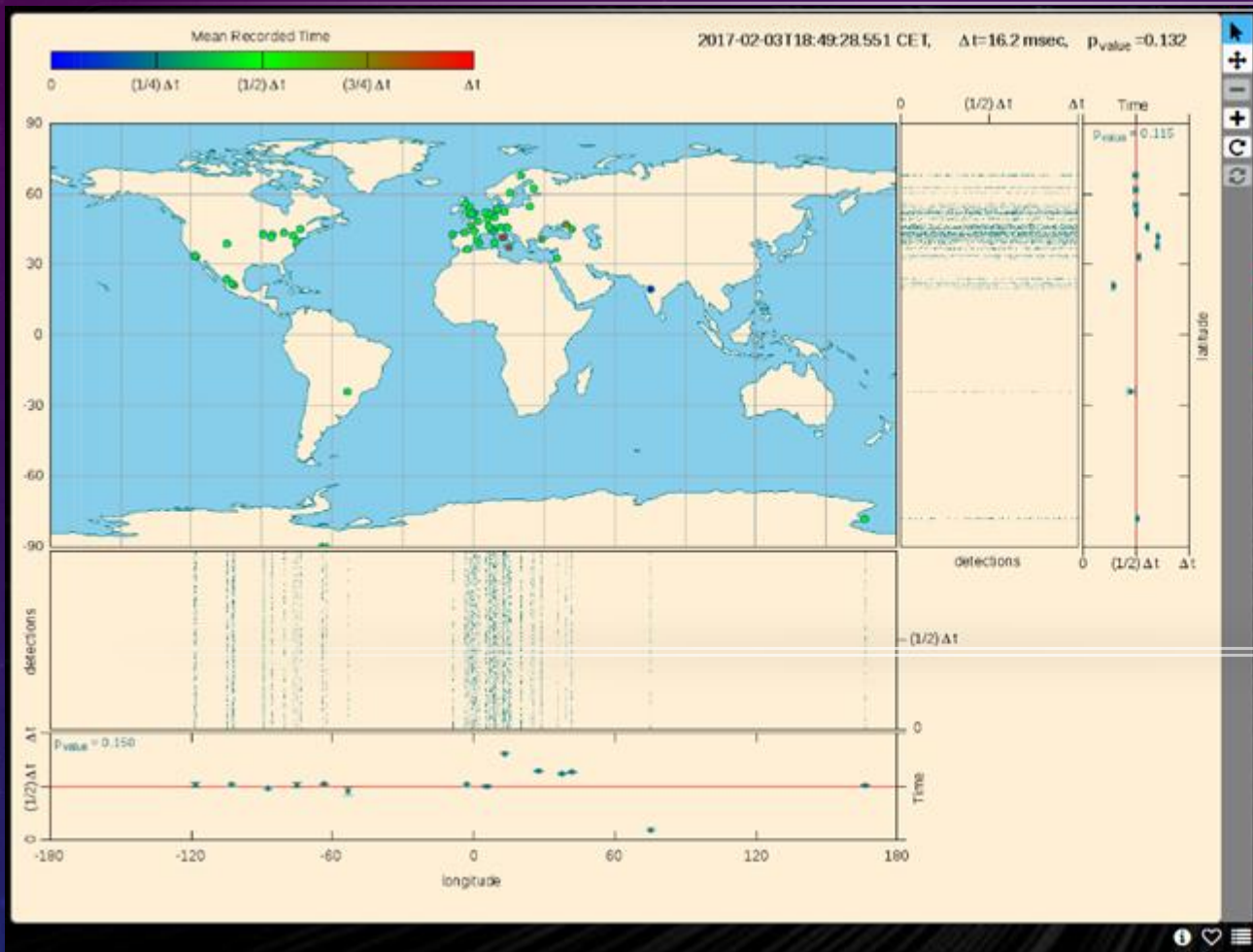
- A positive trend all the way across the graph
- A negative trend all the way across the graph
- A positive trend across some of the graph
- A negative trend across some of the graph
- No trends at all

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First, what can you see on the longitude (bottom) graph (choose all that apply)...?

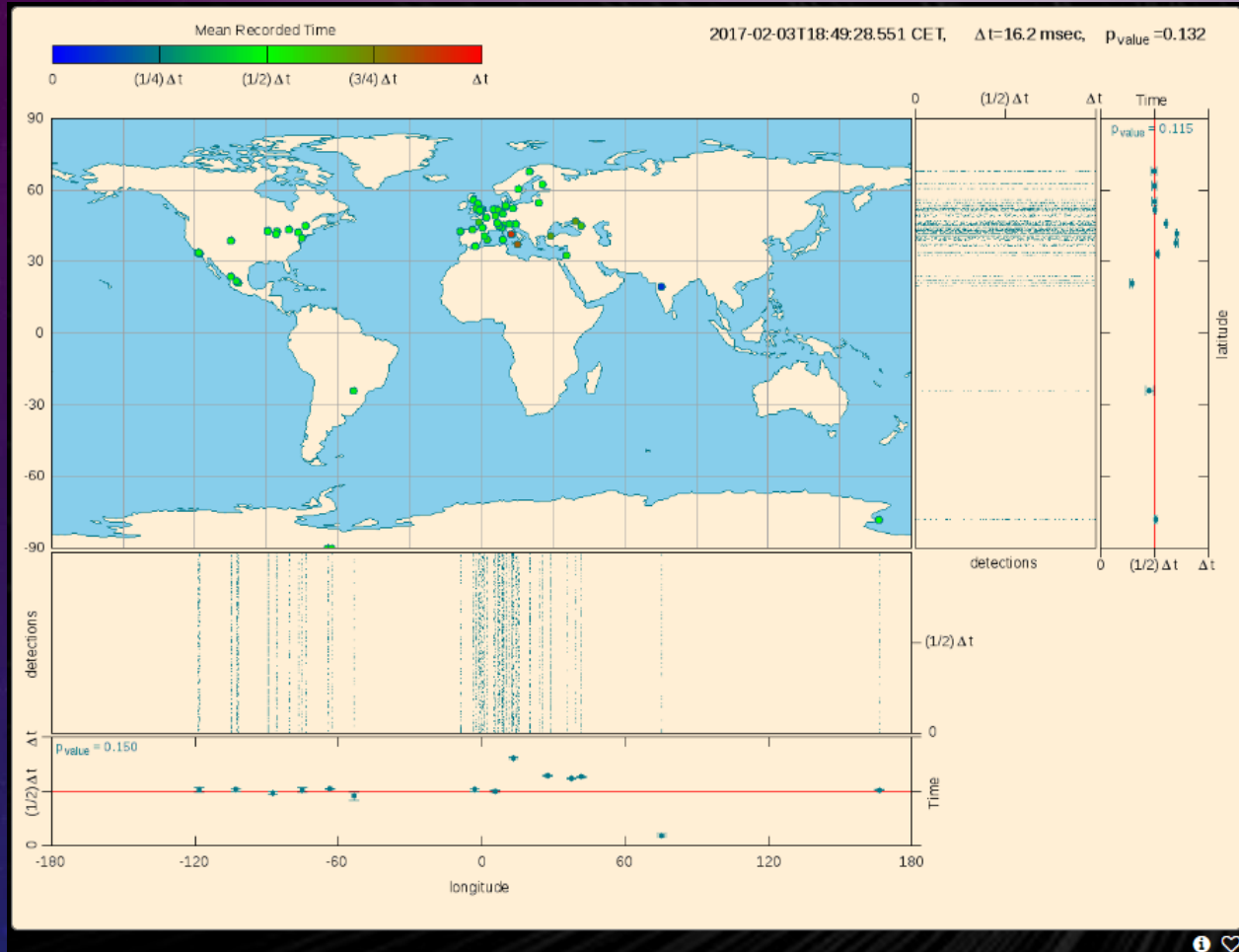
- A positive trend all the way across the graph
- A negative trend all the way across the graph
- A positive trend across some of the graph
- A negative trend across some of the graph
- No trends at all

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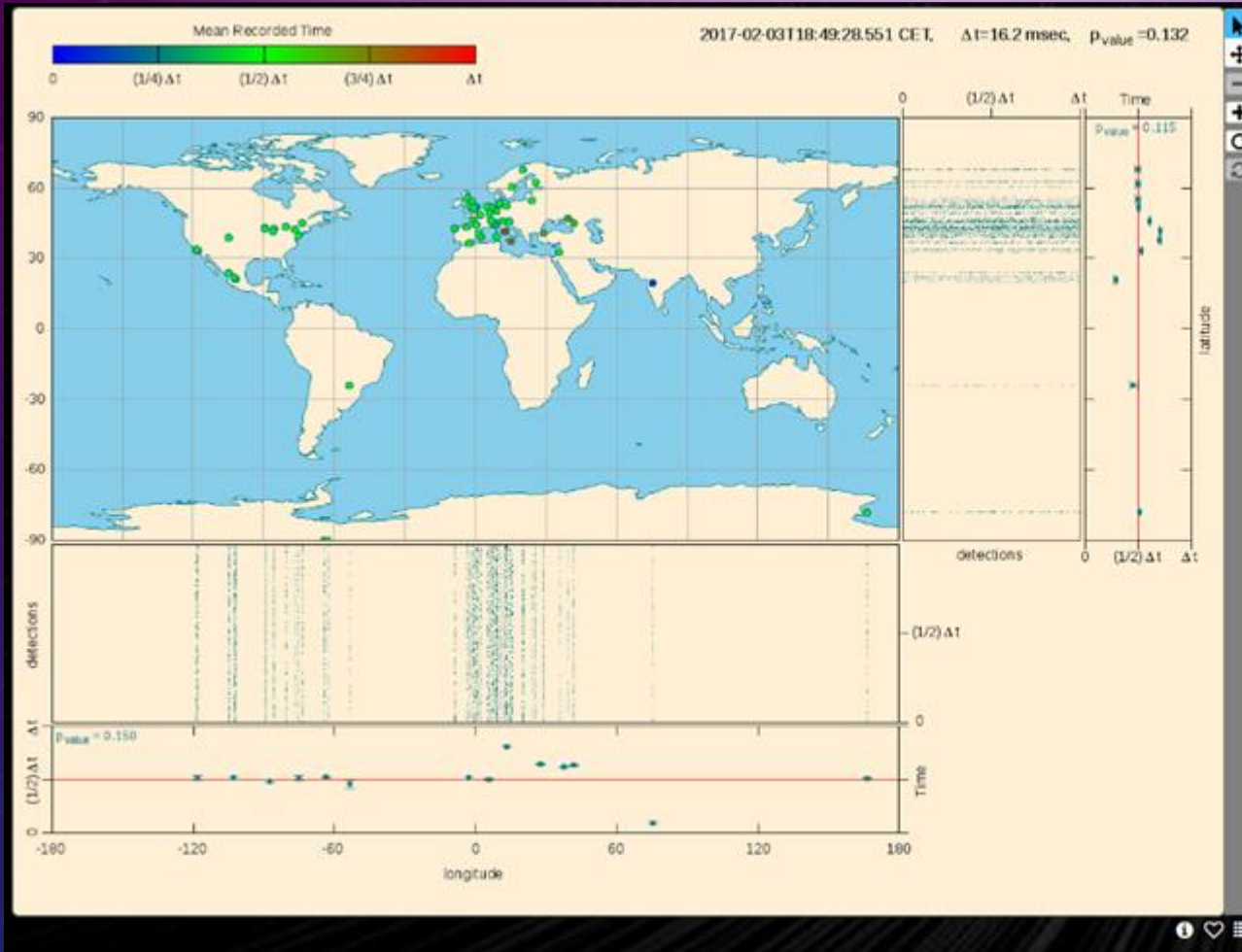
...and now on the latitude (right) graph (choose all that apply)?

- A positive trend all the way up the graph
- A negative trend all the way up the graph
- A positive trend up some of the graph
- A negative trend up some of the graph
- No trends at all

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...and now on the latitude (right) graph (choose all that apply)?

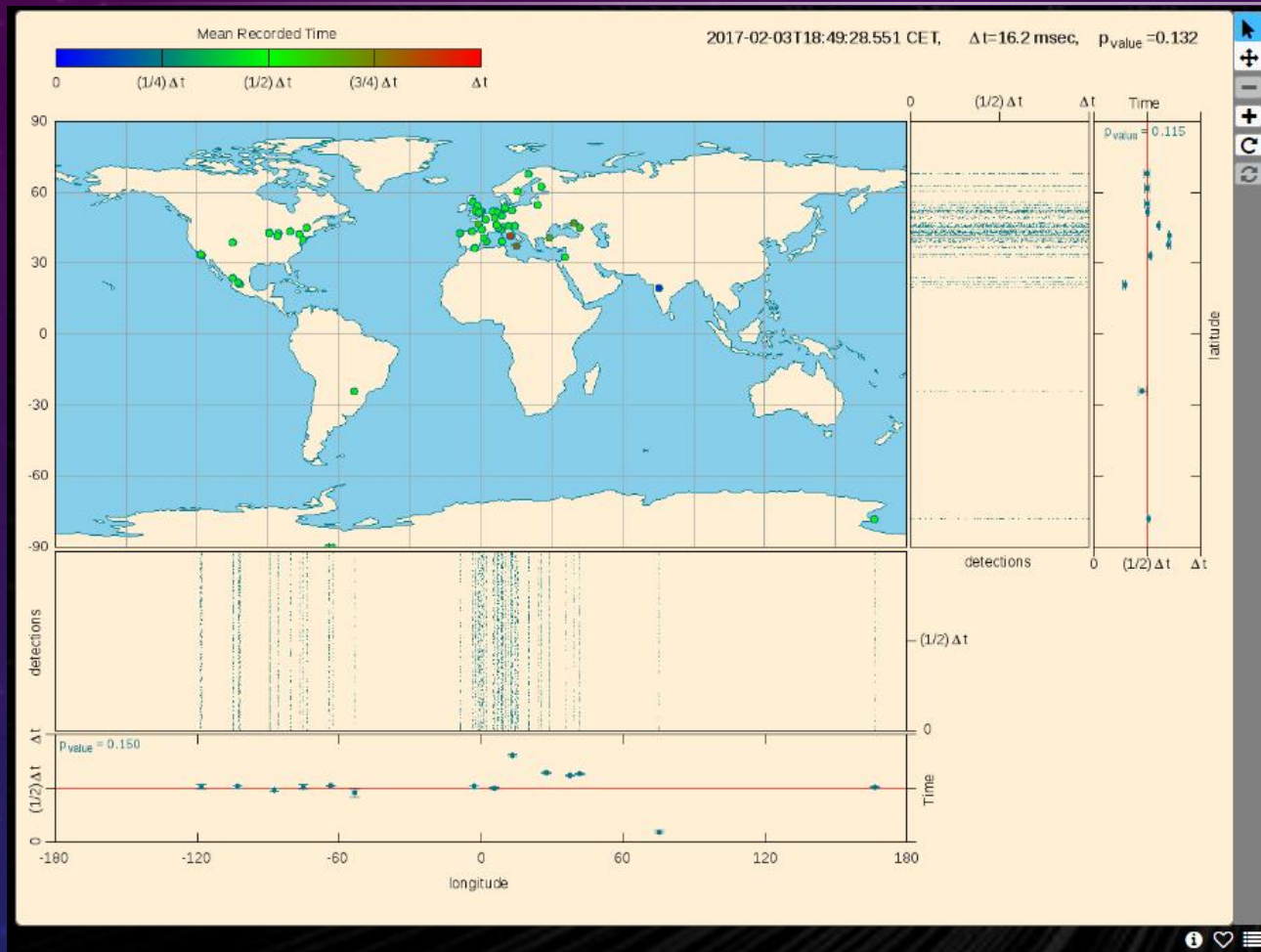
- A positive trend all the way up the graph
- A negative trend all the way up the graph
- A positive trend up some of the graph
- A negative trend up some of the graph
- No trends at all

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Would you like to draw the trend(s) you can see?

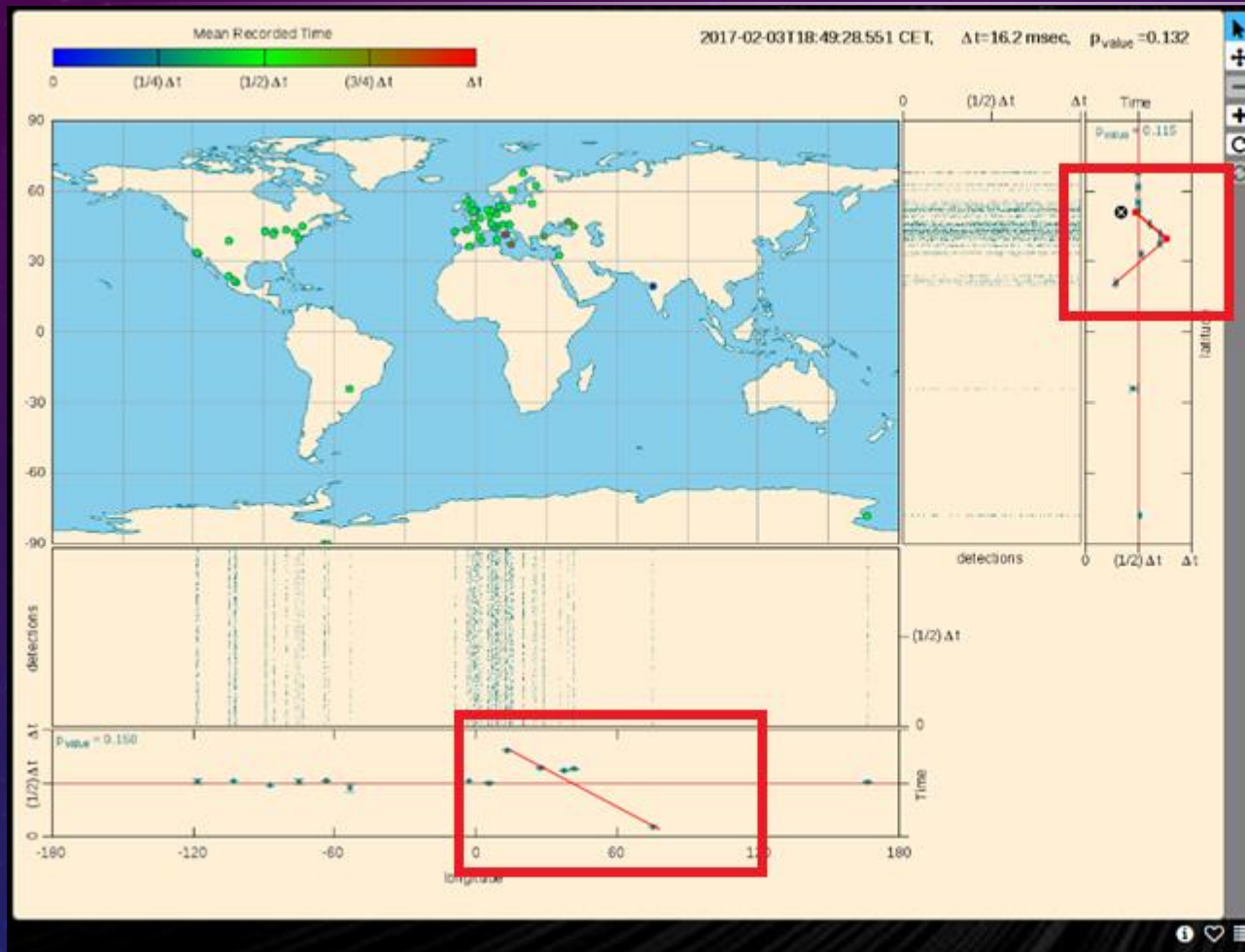
Line 0 drawn

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Would you like to draw the trend(s) you can see?

Line

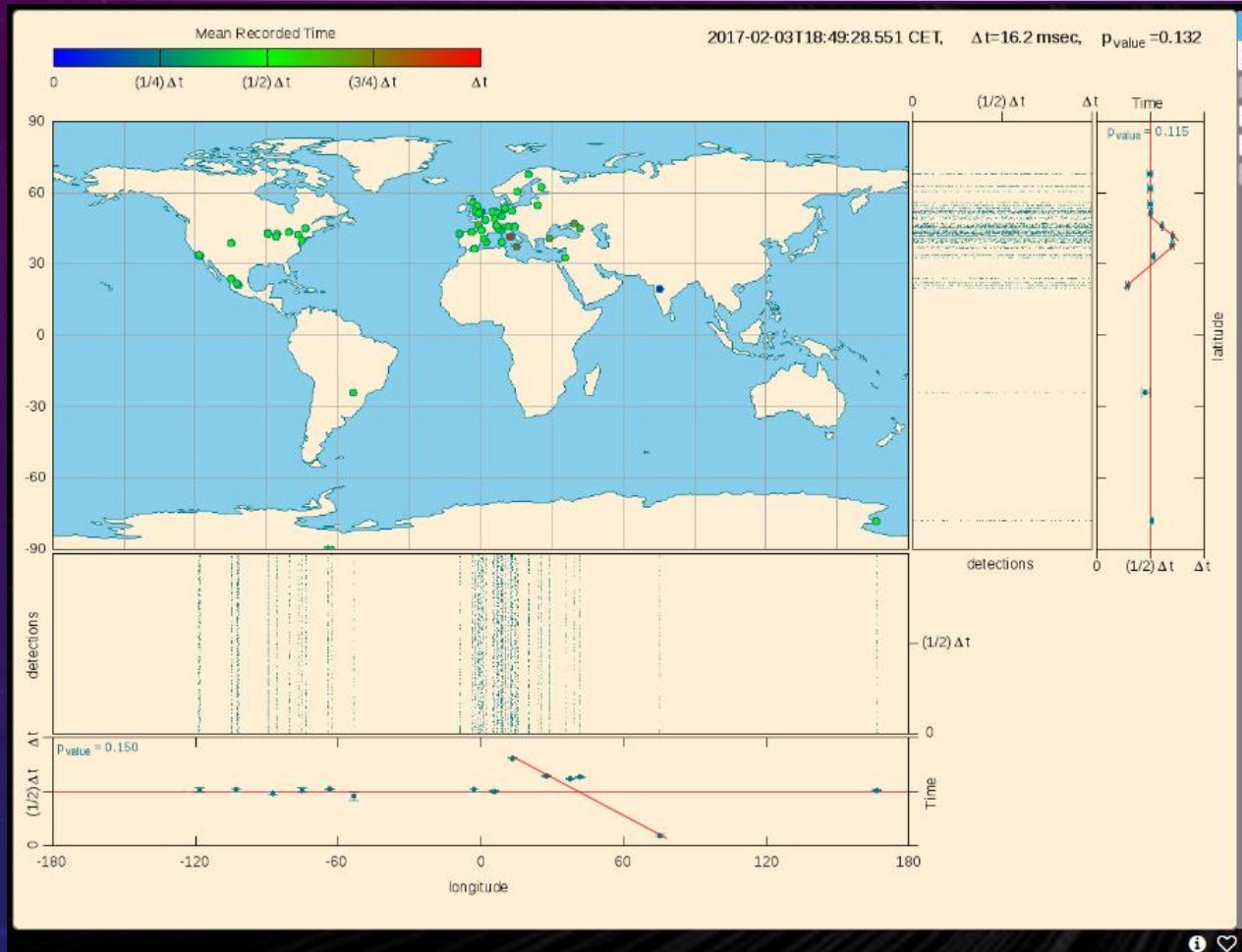
3 drawn

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Thanks!

Your classification:

Can you see a trend on any of these graphs?

I can see a trend on both graphs

More

First, what can you see on the longitude (bottom) graph (choose all that apply)...?

A negative trend across some of the graph

More

...and now on the latitude (right) graph (choose all that apply)?

A positive trend up some of the graph

More

A negative trend up some of the graph

Would you like to draw the trend(s) you can see?

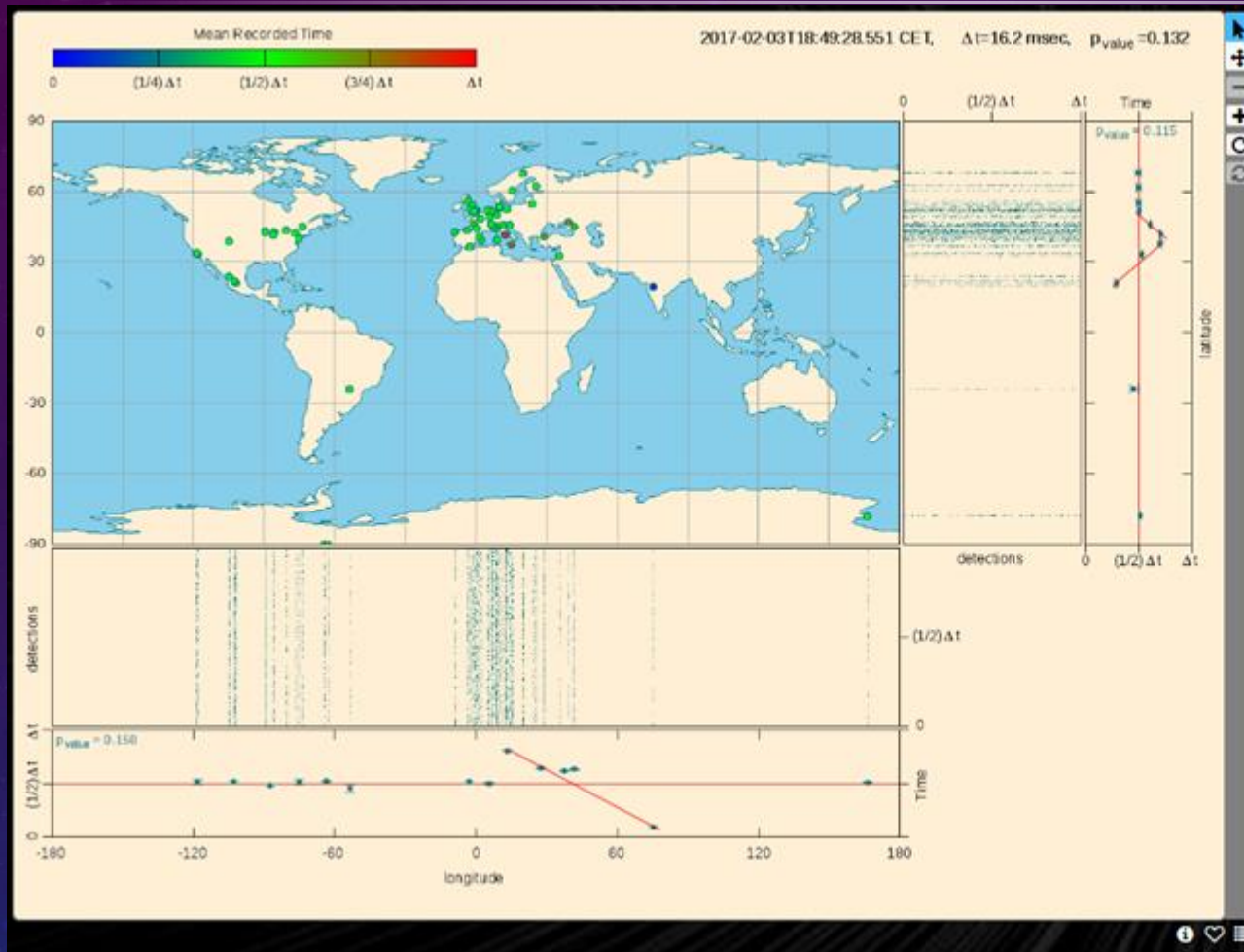
Line (3 lines marked)

More

Talk

Next





Thanks!

Your classification:

Can you see a trend on any of these graphs?

I can see a trend on both graphs

More

First, what can you see on the longitude (bottom) graph (choose all that apply)...?

A negative trend across some of the graph

More

...and now on the latitude (right) graph (choose all that apply)?

A positive trend up some of the graph

More

A negative trend up some of the graph

Would you like to draw the trend(s) you can see?

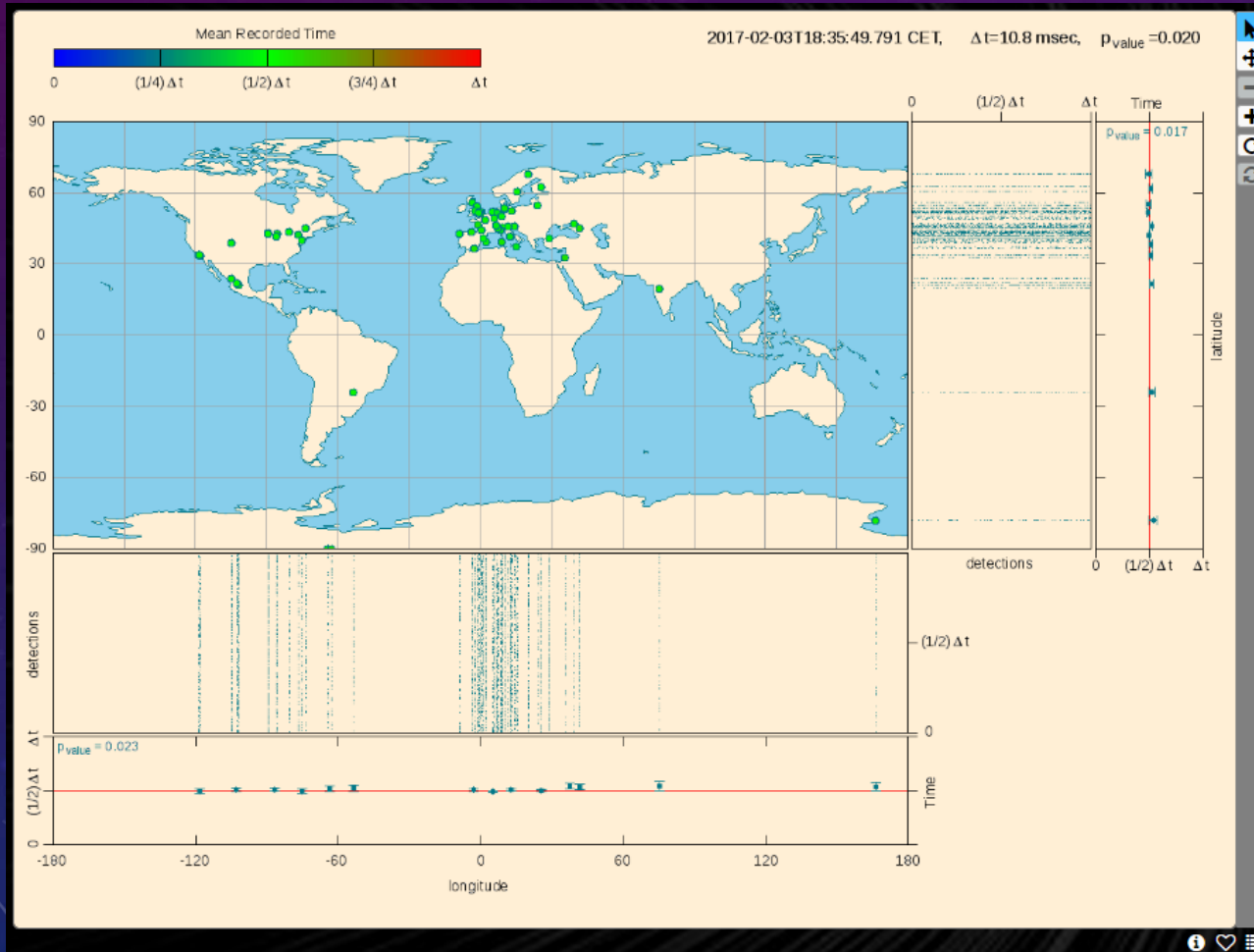
Line (3 lines marked)

More

Talk

Next

FUN STARTS ALL OVER AGAIN!



Can you see a trend on any of these graphs?

- I can see a trend on both graphs
- I can see a trend on one graph
- There isn't a trend on either graph
- Both graphs are a complete mess

Need some help with this task?

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