Lab #10

Citizen Science: Radio Meteor Zoo

Introduction

In today's lab, we are working on another Citizen Science project, this time hunting for data about meteors in the Earth's atmosphere.

Part 1 (Science)

Visit http://radiometeorzoo.org and click on the "About" tab. Read through the description of the project and answer the associated questions below.

1) Describe two reasons why radio observations of meteors have an advantage over optical observations.

2) Define "meteoroid", "meteor" and "meteorite".

3) Explain what causes a meteor shower, and explain what the radiant of a meteor shower is.

4) Briefly explain how radio transmitters and receivers can be used to detect meteors.

5) Briefly describe three different kinds of signals that appear in the data that are not meteors.

6) Explain why the project needs the help of human observers to find signals from meteors instead of just relying on a computer algorithm.

Part 2 (Finding Meteors)
Now on the top menubar, click on "Classify", then work through
the short tutorial to see how to mark meteors for the project.
After you have looked at a few screens, you may wish to return
to the "About" page and click on the "FAQ" link to see a
description of the variety of different kind of signals you may
see and what causes them.

Classify at least 36 examples (spend at least 60 seconds per
data set), and have your TA initial your lab assignment here
when you are finished (take turns controlling the mouse and
keyboard within your group). You can check the total number of
data sets you have studied by clicking on the circular icon in
the upper right corner of the page to the right of your
username. This takes you to the home screen for Zooniverse
projects you have completed, with an indication of how many
samples you have studied for each project, including "Radio
Meteor Zoo."

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