

Solar StormWatch Lab Report

Objective: In your own words, explain the purpose of this lab.

1. **SPOT Training:** Define the following terms and sketch an example.

- What is a comet?
- What is a particle strike?
- What is an optical effect?

2. Watch the screen cast and view the flickr gallery. Sketch 2 or 3 examples.

3. **Complete 3 SPOTS.** For each SPOT record the following data:

Speed: 1) 2) 3)

Would it hit Earth?: 1) 2) 3)

Comment on the challenges of working with the images. Why are some solar storms harder to see than others? (hint: think about properties of matter)

4. **What's That Training**

- What is the objective of this module?
- Why are scientists interested in space dust?

5. **Complete 3 What's That modules.** Summarize your observations.

- What did you find?

Ms. Heberling Earth Science

Name: _____ Block: _____

- What are the challenges in spotting them? Where some features tougher to find?
- Were you unsure of any of your observations? If so, how did you decide?
- Are you surprised by how subjective these observations are? How does this fit into your idea of what scientists do?

6. Incoming Real-Time Data: These images are not yet processed for easier analysis—they are challenging!!

- Briefly discuss your observations on what these images look like. Were you able to visualize the solar storms?

7. Trace It Module: complete the training and view the flickr gallery.

- What are j-maps and how are they helpful?
- Where does the trace-it data come from?

8. Complete one Trace It Module. Record your observations below. Include discussion of any challenges in analyzing the j-maps.

9. Conclusion: Read several entries on the Solar StormWatch blog. Write ~1 page discussing the goals of the project, results/benefits that have already been recorded, and discuss how YOU personally contributed. You may also include your thoughts on this project: What did you learn? Did you enjoy it? Do you plan to contribute further?

Extra Credit: Complete Track Training and submit observations for 2 Track It Back modules.

Don't forget to staple the My StormWatch progress report to your lab handout!! You will not receive full credit without it!!!