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?
* 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!!!