2.7 Mapping Scan

PARIPod: 2.7 Mapping Scan
The PARIPod is **4:44** min in length.

P **Presentation Slide 2.7**

Student Guide: P.11

Q ***Quiz 2.7***

Starting Point

1. A mapping scan is basically several ***spectrum snapshots*** put together over a source to form a larger map. This is like taking many small photos of an object put together to make a larger one.

2. Set Smiley to target an object.

3. Go to the Mapping Scan tab at the bottom.

4. Use default parameters unless the lab or your instructor tells you otherwise.

5. The scan controls and parameters of a mapping scan are the same as the other scans except there are now two new controls, AZ (Azimuth) and Altitude (ALT). These two controls help guide the speed thus the ***sampling rate*** while Smiley zigzags around its target area.

6. A lower rate ***increases*** the accuracy of the scan and a higher rate ***decreases*** .

7. The scanning range controls the size of the target range. The larger the range, the larger the grid, or map. The X-axis is the Azimuth while the Y axis is the Altitude.

8. ***Delta*** shows the current scan positioning.

9. To start your mapping scan, click Begin Scan, Smiley will begin taking data. There will be a 20 second delay before data begins being plotted on the graph, which allows smiley to position itself towards the target. Plots on your graph appear as square grayscale patches. This creates a mosaic map, which is a composite image of the target. Analyze or rescan data according to variations in your map. Depending on the variation in your graph, you may want to rescan with a higher IF gain.

10. The Scan will ***automatically*** stop once it has scanned the set map area or you can hit Stop Scan to stop the data collection.

11. Useful Scan data file should be ***saved***.

12. Once scanned, refer to Analyzing Smiley Data (PARIPod 2.8)

Proceed to 2.8