

Unit 2: Smiley Basics

Quizzes

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KENAN FELLOWS PROJECT

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PARIPod 2.1: Smiley Basics Quiz

True/False

Indicate whether the sentence or statement is true or false.

- _____ 1. The hand paddle is the best way to control smiley. It has unlimited parameters.
- _____ 2. On the Skymap the sun is marked by a large red circle.
- _____ 3. The true control panel for smiley is the skymap.

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- _____ 4. Local Sidereal Time is a way for Astronomers to keep track of the
 - a. direction of the milky way galaxy
 - b. location of the sun
 - c. time of day
 - d. direction the telescopes need to point
- _____ 5. The two coordinate systems that the target uses are
 - a. latitude/longitude, and Minutes/seconds
 - b. Altitude/Azimuth and Right Ascention/Declination
 - c. North/South and East/West
 - d. Azimuth/Lattitude and Left/Right

Short Answer

- 6. On the Sky Map, how is smiley's current position located?
- 7. What are the three ways you can load the coordinates for a location on the Skymap?

PARIPod 2.1: Smiley Basics Quiz

Answer Section

TRUE/FALSE

1. ANS: F
2. ANS: F
3. ANS: F

MULTIPLE CHOICE

4. ANS: D
5. ANS: B

SHORT ANSWER

6. ANS:
The white crosshair/plusmark
7. ANS:
Clicking on the target directly on the map, entering the coordinates manually, and selecting the target's name from the drop down menu.

PARIpods 2.2 & 2.3 Quiz**Multiple Choice**

Identify the letter of the choice that best completes the statement or answers the question.

- _____ 1. The browser settings must enable..
a. Java and pop-ups. c. pop-ups only.
b. Java only. d. neither.
- _____ 2. Which is the PARI website.
a. www.pari.com c. www.pari.edu
b. www.pari.gov d. www.pari.net
- _____ 3. Which link on PARI's website will take you directly to Smiley's control room log-in?
a. telescopes and instruments. c. programs and activities
b. teachers and students. d. for scientists.
- _____ 4. Where will you enter once you log-in to smiley ?
a. Smiley control room manager c. Smiley observation room
b. Smiley help center d. Smiley waiting room
- _____ 5. To only observe a Smiley session in progress, click.
a. start control session c. observe current session.
b. SGRA main page. d. schedule control session.
- _____ 6. Both the username and password are.
a. case sensitive. c. upper case only.
b. lower case only d. doesn't matter.
- _____ 7. Scheduling a control session uses which time format?
a. AM-PM time c. day light savings.
b. 24 hour time d. greenwich mean time.
- _____ 8. What window pops up once you start a control session?
a. Smiley internet telescope control c. telescope observation center
b. mission control d. Smiley control central
- _____ 9. There is a live feed of what in the top middle of the window?
a. the sky c. Smiley
b. actual control room at PARI d. SGRA control central
- _____ 10. The type of time Astronomers use to keep telescopes aligned.
a. local c. sidereal
b. 24 hr. d. coordinate
- _____ 11. The coordinate box displays the target and _____ coordinates?
a. current coordinate c. sidereal
b. sky d. spectrum
- _____ 12. What is used for manual control of Smiley?
a. coordinate box c. hand paddle
b. sky map d. keystrokes
- _____ 13. What is CCW?
a. clockwise c. coordinate clockwise
b. counter clockwise d. central clockwise.

Name: _____

ID: A

- _____ 14. One of the two coordinate systems is
- a. azimuth and altitude
 - b. azimuth and ascension
 - c. altitude and declination
 - d. altitude and ascension
- _____ 15. Both coordinate systems use degrees, minutes, and _____ as units.
- a. hours
 - b. days
 - c. latitude
 - d. seconds
- _____ 16. What represents Smiley's current position on the sky map?
- a. white crosshair
 - b. white circle
 - c. yellow circle
 - d. blue circle
- _____ 17. What indicates that Smiley is nearing its physical limits?
- a. manual control takes control
 - b. brake limits
 - c. sky map starts blinking
 - d. Smiley live feed starts to blink
- _____ 18. What is the first tab on the large box at the bottom?
- a. weather
 - b. mapping
 - c. spectrum
 - d. sky

PARIpods 2.2 & 2.3 Quiz
Answer Section

MULTIPLE CHOICE

1. ANS: A
2. ANS: C
3. ANS: B
4. ANS: A
5. ANS: C
6. ANS: A
7. ANS: B
8. ANS: A
9. ANS: C
10. ANS: C
11. ANS: A
12. ANS: C
13. ANS: B
14. ANS: A
15. ANS: C
16. ANS: A
17. ANS: B
18. ANS: D

A 14.

 C 15.

 A 1.

 A 16.

 C 2.

 B 17.

 B 3.

 D 18.

 A 4.

 C 5.

 A 6.

 B 7.

 A 8.

 C 9.

 C 10.

 A 11.

 C 12.

 B 13.

PARIPod 2.4: Scanning Basics Quiz**Multiple Choice**

Identify the letter of the choice that best completes the statement or answers the question.

- _____ 1. Spectrum Scan measures
a. intensity over time c. frequency over time
b. intensity over frequency d. time over intensity
- _____ 2. How many types of scans can Smiley conduct?
a. 2 c. 4
b. 3 d. 5
- _____ 3. Determines the rate at which Smiley collects data.
a. IF Gain c. base frequency
b. plot rate d. spectrum scan
- _____ 4. How are graph features accessed?
a. drop down menu. c. right click on graph.
b. scan button. d. under file menu.
- _____ 5. IF stands for?
a. intermediate frequency c. instant frequency
b. inverse frequency d. immediate frequency

Short Answer

6. What are the types of scans available?
7. What does the IF gain measure?
8. What is the base frequency for Neutral Hydrogen?
9. What do each of the three types of scans measure?
10. How do you access and modify graphs?

PARIPod 2.4: Scanning Basics Quiz
Answer Section

MULTIPLE CHOICE

1. ANS: B
2. ANS: C
3. ANS: B
4. ANS: C
5. ANS: A

SHORT ANSWER

6. ANS:
Spectrum, Continuum, and Mapping
7. ANS:
Amplitude or “volume”
8. ANS:
1.42 GHz
9. ANS:
Spectrum measures intensity of a frequency in a certain location. Continuum measures Intensity over time. Mapping maps out the frequency intensities over a wider target range.
10. ANS:
by right clicking the mouse

PARIPod 2.6: Continuum Scan Quiz**Multiple Choice**

Identify the letter of the choice that best completes the statement or answers the question.

- _____ 1. What does a continuum scan compare?
a. intensity over time. c. frequency over time.
b. intensity over frequency. d. frequency over wavelength
- _____ 2. What do the IF Gain do?
a. amplifies the signal. c. prevents IF loss.
b. reduces noise. d. reduces inference.
- _____ 3. What is IF Gain analogous to?
a. tuner. c. balance.
b. volume. d. bass and Treble
- _____ 4. Which is the standard base frequency?
a. 4.8GHz. c. 1.42GHz.
b. 6.7GHz. d. 8.4GHz.
- _____ 5. What is the length of time displayed on the x-axis for a continuum scan?
a. 60 seconds. c. 100 seconds.
b. 90 seconds. d. 30 seconds.
- _____ 6. Which of the following has the lowest intensity on a the continuum scale?
a. 10 c. -5
b. 5 d. 0
- _____ 7. What happens when the scan reaches the end of the x-axis?
a. automatically stops. c. continues scanning.
b. automatically starts a new scan. d. nothing.
- _____ 8. The UT time displays?
a. UT time during the scan. c. current local time.
b. current UT time. d. UT time after the scan.
- _____ 9. Which axis(axis) differs between a spectrum and continuum scan?
a. y-axis. c. y-axis and x-axis.
b. x-axis. d. neither.
- _____ 10. What should you do if there is little variance in your scan's intensity?
a. decrease the IF Gain. c. increase the IF Gain.
b. change the time. d. change the intensity scale.

**PARIPod 2.6: Continuum Scan Quiz
Answer Section**

MULTIPLE CHOICE

1. ANS: A
2. ANS: A
3. ANS: B
4. ANS: C
5. ANS: C
6. ANS: D
7. ANS: C
8. ANS: A
9. ANS: B
10. ANS: C

2.7 Mapping Scan Quiz

True/False

Indicate whether the sentence or statement is true or false.

- _____ 1. A mapping scan is similar to a spectrum scan?
- _____ 2. AZ stands to Azimuth.
- _____ 3. Lowering the sampling rate decreases accuracy during a scan.

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- _____ 4. What are the two new controls?
 - a. azimuth and altitude
 - b. azimuth and plot rate
 - c. altitude and plot rate
 - d. azimuth and IF gain
- _____ 5. During a mapping scan Smiley
 - a. drifts
 - b. tracks
 - c. zig-zags
 - d. stays in place
- _____ 6. What will the scan automatically do when it completes the scanned range?
 - a. continue
 - b. restart
 - c. stop
 - d. reset
- _____ 7. Once you begin your scan, how long do you have wait for data to appear?
 - a. 0 seconds
 - b. 20 seconds
 - c. 2 minutes
 - d. 5 minutes
- _____ 8. The data plots appears as _____ on the graph?
 - a. colored squares
 - b. grayscale squares
 - c. grayscale dots
 - d. colored dots

2.7 Mapping Scan Quiz Answer Section

TRUE/FALSE

1. ANS: T
2. ANS: T
3. ANS: F

MULTIPLE CHOICE

4. ANS: A
5. ANS: C
6. ANS: C
7. ANS: B
8. ANS: B

2.8 Analyzing Smiley Data Quiz

True/False

Indicate whether the sentence or statement is true or false.

- _____ 1. You must be in a control session to analyze your smiley data.
- _____ 2. Plot format shows data points.
- _____ 3. When you save your data as a spectrum scan, you can then go back and analyze the mapping scan.
- _____ 4. You cannot access graphing features unless you are logged into a current session.
- _____ 5. You can copy and paste data either from a current session or from outside a session.
- _____ 6. You can only access your data files for analysis.

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- _____ 7. Saved data is stored and organized by.
 - a. password
 - b. username
 - c. student name
 - d. smiley
- _____ 8. Which scan can you change to either grayscale or colorscale?
 - a. Spectrum
 - b. Continuum
 - c. Mapping
 - d. Excel
- _____ 9. What can be accessed by right clicking in spectrum and continuum analysis?
 - a. file name
 - b. graph features
 - c. excel
 - d. username
- _____ 10. This drop down menu allows the selection of users.
 - a. file type
 - b. file selection
 - c. user selection
 - d. user type

2.8 Analyzing Smiley Data Quiz Answer Section

TRUE/FALSE

1. ANS: F
2. ANS: T
3. ANS: F
4. ANS: F
5. ANS: T
6. ANS: F

MULTIPLE CHOICE

7. ANS: B
8. ANS: D
9. ANS: B
10. ANS: C