THE ECLIPSE of MARCH 3, 2007

Open : O:/physique/seconde/eclipse/index.htm
A moon eclipse was visible during the night of March 3, 2007.

1- TOTAL LUNAR ECLIPSE

a. What is the condition to observe a total lunar eclipse ?

b. Why can't we observe an eclipse of the moon to each full moon?

c. Is the moon perfectly aligned with the sun and the Earth one time during this eclipse? (see ANIMATION)

2- COLOR OF THE MOON

a. Explain why the moon appears red orange during the totality of the eclipse?

b. To understand better : click on [see more on this link] (home page) and find paragraph 11.What is the physical phenomenon which you studied which allows to explain this color?

3- REFERENCE FRAMES

a. You can observe the rotation of the axis of the Earth shade in the terrestrial reference frame, Why?

4- MEASUREMENTS of distances

a. See instructions then do the measurements of the ratio r = radius of the shade of the Earth /Moon radius

b. Use formulas you can see in « HELP » to find the Moon diameter and the Earth-Moon distance.

c. Using the data provided to evaluate the precision of these two determinations.