ASTRONOMY PROJECT
DETECTING AN EXOPLANET

SESSION 1

Aims :

Understanding : What is a transit? When to observe?

Analysis: How? Which star?

Ressources :

Animation transit exoplanet.gif
http://astro.unl.edu/naap/esp/animations/transitSimulator.html :

- Define : normalized flux, eclipse depth, radius (unit ?), semi-major axis (unit ?), eccentricty, noise
- What parameters have an influence of the observation of a transit ?
- Analysis of the graph : (click on « show simulated measurements) : how the points are they obtained ? What are the possible origins of the noise ? How does it influence the observation of the transit ?

http://var2.astro.cz/ETD/predictions.php
http://iris.lam.fr/

- What are the coordinate of the Observatory of Haute-Provence, where is situated the telescope ?
- What are the exoplanets that can be observed at the dates that have been planned ?

Write a text of about 20 lines, accompanied by diagrams, meeting the aims set out above.
Prepare an oral presentation with a support to explain what you did.