

PHY241 OBSERVATIONS.

General Notes and Signing up.

- It is important to carry out your observations and the subsequent analysis as soon as possible. Don't forget that you are at the mercy of the weather conditions so you cannot pick and choose the dates you want to observe! Do not wait until the end of the observing period before you start to sign up!
- Each person in your allocated group must observe together at the same time. It's a good idea to get the phone numbers of everyone else in your group.
- You must know in advance what you are going to observe and at what time.
- Sign up as often as all of your group can observe your particular target, even if there are already other people signed up for that night. If you sign up, then you must be available and ready to observe on that night. Penalties will be applied if you fail to turn up when the weather is good and you have signed up.
- Two groups will usually be able to observe on a normal observing night, but this will depend on the selected targets and weather conditions: each group typically takes somewhere between two and four hours to complete their observations.
- Observing will usually be done in signing up order, unless...
 1. someone who signs up first has an object that is best observed later in the night and another group can observe beforehand
 2. someone is doing a time critical observation [at discretion of Paul Kerry / Stuart Littlefair]
 3. the weather makes it impractical to observe some fainter targets: brighter targets may therefore be observable [at discretion of Paul Kerry / Stuart Littlefair]

How do I know if we will observe?

- Look at the sky outside yourself - if it's dry, sunny and clear in the afternoon, there is a good chance observing will be on. There are links to weather sites on the undergraduate astronomy webpages at...
<http://www.shef.ac.uk/physics/teaching/astronomy/links.html>
- Paul Kerry will email groups that will observe by 17:00 if observing is going ahead on that particular night and will also send all relevant details for the observing session. If there is no email, then there is no observing. Please remember to check your email for those nights that you have signed up.
- If you have received an email and are not the first group to observe...
 1. you can telephone the observatory using the contact details below to arrange what time/if to come.
 2. the building is usually locked at 21:30 – in that case, someone will meet you at front entrance to let you in.
 3. if there is no answer after telephoning at least twice (this allows for coffee and toilet breaks!), then we may have already closed and gone home - you can then presume that further observations that night will not go ahead.
 4. you will not be able to access the roof without someone unlocking the door for you and those in the observatory will not be able to hear you knocking - call the observatory phone to make yourself known!

When will we start observing?

The first group will usually meet sometime around twilight and start observing when it's astronomically dark (when the sun is more than 18 degrees below the horizon) although some projects can be started earlier than that depending on observing conditions.

End times of astronomical twilight in UT (Universal Time) (UT is 1 hour behind British Summer Time (BST) which ends Sun 30 Oct 2016) for the observing period are as follows:-

Week	Date	UT	[BST (if applicable)]
2	Mon 03 Oct 2016	19:33	[20:33]
3	Mon 10 Oct 2016	19:16	[20:16]
4	Mon 17 Oct 2016	19:00	[20:00]
5	Mon 24 Oct 2016	18:46	[19:46]
6	Mon 31 Oct 2016	18:33	
7	Mon 07 Nov 2016	18:22	
8	Mon 14 Nov 2016	18:13	
9	Mon 21 Nov 2016	18:05	
10	Mon 28 Nov 2016	18:00	
11	Mon 05 Dec 2016	17:58	

General project notes.

You have to make sure your target is more than 15 degrees away from the moon on the night you want to observe. Skychart/Cartes du Ciel is available on all CiCS managed 7 machines to help you plan your observations.

You should discuss your project with Stuart Littlefair or Paul Kerry. If you are planning to observe open clusters, variable stars, asteroids or CV's, then get in touch with Stuart Littlefair or Paul Kerry for a list of suitable targets.

When choosing a target, remember that something that is well placed in the sky at the start of the observing period may no longer be visible at the end of the observing period. It is generally a good idea to have identified more than one possible target.

The observatory is located on the lower Hicks roof and so the main part of the Hicks building blocks part of the sky from the west to north-west direction for low altitude targets.

Contact Details.

Stuart Littlefair (room E47)	0114 22 24525	s.littlefair@sheffield.ac.uk
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Last updated: 30 Sep 2016