Croydon Astronomical Society – Messier Marathon in mid March 2013



- 1. Be aware that a Messier Marathon is a major observational effort, and will much more likely be a success if it is well prepared. So take enough time for preparation. Sunset is at 18:05 so be at the observatory ideally by 17:30 at the latest, or earlier if you are bringing your own telescope for the Marathon.
- 2. If possible, get as much experience as you can in advance in locating, in particular, the most critical objects: M74, M77, M1 and M33 in the evening and M30 as well as M55, M75, M72, and M73 in the morning. Also, try to get familiar with your equipment, the night sky, and as many Messier objects as possible in advance this will probably increase your final score in the Marathon significantly.
- 3. March can still be chilly so be sure to bring warm clothing. During the night there is a two to three hour break where you can get a little rest, but please be aware that if more than the expected number of people attend then we are likely to continue from one object to the next to accommodate everyone (the idea of rest gap only applies if just a few people are involved).
- 4. Be sure you bring plenty of food and beverage; we do have a kettle but water can be in short supply (tap water in bottles is ideal). There is no toilet, we rely on darkness and the area being remote.
- 5. Depending on the number of people there, once the 'race' (marathon) has started it will be awkward to accommodate people who turn up later. Naturally they will want to see the objects they've missed but this is like interrupting the race and will slow it down, even preventing some objects being seen. A decision could be made that we continue from one object to the next and we don't go back for any reason. Those turning up later will just have to tag on from the current object, Remember, keep your admiration of the object in reserve; on this occasion it is more important to quickly identify it and then move on. It is a race; the objects can be admired at leisure on other nights.
- 6. Again, depending on the number of people there, viewing from the 14-inch will be at a premium and it needs to be well managed. There will be a nominated person to 'orchestrate' the viewing to ensure fairness etc. That person will need to make decisions, and specifically:
 - operate the 14" Goto, including centralising some objects
 - which next Messier object to see;
 - keep people moving but ensure fairness;
 - when to move on to the next object;
 - to call out "last call for Mnn" for those who have taken a minute or two as a break or made room for others;
 - deputy to maintain a log of objects seen, and useful to also note the time;
 - decide which eyepiece to use (probably just a single one, low power 30 to 40mm, wide angle);
 - etc.
- 7. Be prepared with a red light, some good charts, a check list (attached separately and/or use a simple 10 by 11 grid). Also have a planisphere handy and perhaps one of the constellation guides. The Sky & Telescope Messier chart (also attached) may be your best guide and perhaps all you need.

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We would recommend you have a pair of binoculars handy - 10x50 is a good choice - to see a wider view of locating stars. This may be of value for locating some objects which may be difficult because: (i) the long optics of your main instrument (e.g. for M33); (ii) help to find objects faster if your finder is not exactly superb; (iii) to enable you to look from another place if just this one tree or house is in the way to see this or that object.

- 9. Get your equipment up and checked timely enough so that you are ready for observing when the brightest stars just get visible. Be sure that you have plenty of time to get everything prepared it will be a shame to miss some objects in the evening just because of bad timing.
- 10. The most critical objects in the evening are M74, M77 and M1. You have only a short time to glimpse these, they will be close to the horizon and the Moon, and in addition they are faint and/or diffuse, so try them as soon as possible. If you lose one of them don't try too long, as the others might also get lost, and there are others, like M33, which are also urgent. Remember, all object are of equal importance as at the end of the night it's just the total number that counts.
- 11. Be aware that the virtual horizon (below which objects are unlikely to be seen) varies from one location to another, and on the night it will be particular to Kenley. It will be modified by sunset and sunrise, the moon and the north due to light pollution from London. It is unlikely we will see anything in the region below the pole star, so circumpolar objects should not be considered as such.
- 12. Clouds do not just get blown by the wind, they also grow and shrink. In addition it has often been noted at Kenley that clouds can appear as if from nowhere, and disappear, right above you and covering a large area. Given a particular set of conditions, where there is a close threshold, small changes in temperature, humidity and pressure can make moisture condense and evaporate. This can not be predicted and so will not be seen in any forecast.
- 13. Take care not to overlook an object; carefully follow your checklist. Once set, the object is lost for the night.

Sunset: (this day)	18:05	Sunrise: (next day)	06:11	
	Hours of darkness:		12:07	
Moonrise 15th March:	07:27	Moonset:	22:38	this day
Moonrise 16th March:	07:58	Moonset:	23:40	this day
At least 9 Messier objects will not be visible.				