THE ROYAL ASTRONOMICAL SOCIETY OF CANADA 252 College Street, Toronto 2-B, Ontario

## STANDING COMMITTEE ON OBSERVATIONAL ACTIVITIES

## LUNAR SECTION

## Bulletin No. 2

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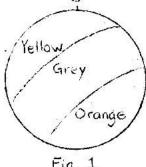
There have been replies to our first Bulletin from seven Centres: Montreal, Quebec, Ottawa, Hamilton, Halifax, Kingston and Niagara Falls. All of these Centres have appointed Lunar contacts. Some do not have active Lunar observing groups but have expressed interest in starting a Lunar programme. For these Centres, it has been decided to prepare a series of "Information Bulletins". These will provide the basic data necessary for planning a worthwhile programme. The provisional list of titles is as follows:

- 1. Lunar Sketching.
- 2. The Sun's Selenographic Colongitude.
- 3. Lunar Charts and Maps.
- 4. What to Observe on the Moon.
- 5. Books on the Moon.
- 6. The Recording of Observations.

Centres wishing to receive these special Bulletins should notify the National Co-ordinator through their Lunar contact. Any suggestions you may have for similar or alternative material will be welcome, and we shall do our best to answer any specific enquiries you might have regarding Lunar observing.

Our first reported observation comes from the Ottawa Centre. Mr. W. M. Cameron has forwarded a summary of Mr. David Fisher's observations of the August lunar eclipse. Mr. Fisher observed from Ottawa through variable cloudiness using a pair of firmly mounted 10 X 50 binoculars. He timed the ingress of the umbra at 20hr. 36m.25 and the egress at 23hr. 4lm.0, and also timed contacts of the umbra with some of the larger craters. Due to weather conditions and limited optical aid, Mr. Fisher concentrated on colour estimates. Figure 1 shows the moon's appearance at 21hr. 38m. as the umbra (orange) was crossing the lunar surface. The yellow area represents the brighter penumbra. Between 21hr. 45m. and 22hr. 08m, colourations remained fairly stable. Figure 2 shows the appearance at mid eclipse (22hr. 08m.). The overlapping areas on the east and west limbs were reported as a mixture of the two neighbouring colours.

Such colour effects are usually regarded as originating in variable refraction in the earth's atmosphere, but there may be other causes, not fully understood, some of which could have a lunar origin. These possibilities were fully discussed at the November meeting of the Ottawa Observer's Group. Any comments or theories from other Centres would make interesting material for a later lunar Bulletin.



rig 1

Dirty Yellow green
Dork
Blue
Orange

Fig. 2

Other observational reports come from the Montreal and Toronto Centres. These two groups are collaborating on a catalogue of lunar domes. It is hoped that this will culminate in a list giving rectangular co-ordinates and brief descriptions of each of these puzzling lunar objects. The aims of the National Observing Committee would be furthered by the participation of other Centres in this project - especially those with active and experienced lunar observers. Duplication of effort is no barrier here since confirmatory observations are of value. Descriptive data or sketches of well-known examples and reports of any suspected dome-like object are equally valuable. Further reports of this project will be made in later Bulletins.

We hope that from these small beginnings we can extend our efforts to cover more of the many interesting fields of amateur lunar research. This will depend on the response of Centres willing to pool their results with their fellow R.A.S.C. members from Halifax to Vancouver.

Raymond R. Thompson, Lunar Section.