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11 September 1960

MONTHLY CLIMAX NEWSLETTER

AUGUST 1960

August was a good month observing-wise with quite a bit of coronal sky. Much of the clear-sky time was on class III and IV skies, but late in the month we began to have some class II.

The coronagraph was in full operation throughout the month. Following is a tabulation of the programs and results: v

Green Survey: Twenty-five complete surveys and two partial. Of these, sixteen were shot at 1600 UT for comparison with Pic du Midi also. Two additional special surveys were shot at 1600 when the regular survey was shot earlier. Six surveys were shot additionally at 2400 UT for comparison with Norikura.

Red Survey: Twenty-three complete and one partial survey, and one "APR" survey shot on a cirrus sky.

Paschen Series: Seven attempts - one was good, ~~xxx~~ three showed nothing, and three were no good.

Iron Series: Ten attempts - two were good, two showed nothing, two were no good, four were partial.

8542 Spicules: Nineteen attempts - four were good, fifteen were no good.

H_α & D₃ Spicules: Six attempts - three were good, two were partial, one was no good.

H and H_ε: Four attempts - four were good.

Dick White's: Seven attempts - Four were good, one was partial, two were no good.

4686-5411 : Three attempts - three were good. One of (active region) these showed bright 5694, 4686, and continuum. No 5411 was seen by visual inspection of the film.

NEWSLETTER (CONTINUED)

A few comments on the coronagraph results for August: The Flare Patrol (Photo-heliograph?) was out of operation from 8 August on. This meant that many of the special programs were attempted with "one eye gone". The Paschen program particularly suffered from this, and also the active region program would have had the activity been high. The Paschen, Iron Series, and 8542 programs need more critical effort by the observers to perfect the techniques involved. All are in the infra-red region where it is not quite as easy to set up. Dick White's program often suffers from coronameter problems (notably not enough clear sky to finish) since the two must be run simultaneously.

As noted above, the Flare Patrol was not in operation after 8 August. It was partially taken down at that time to permit redesign and rebuilding of the eyepiece, shutter system, and alternator. We hope that this will give us an excellent system - free of frequent breakdowns - in the future. Some testing and discussion of just how we want to run the instrument in the future did take place before the shut-down. The 70mm film seems to yield useful results even when the seeing is rather poor.

In connection with the seeing question, we have followed a Sac Peak suggestion to operate with the dome doors all open. This has taken the roll of being a test only so far, but the results seem to be hopeful of some improvement. It is the impression of all of us here at Climax that by operating with many doors open the seeing does improve by one or possibly two units on the one-to-ten seeing scale. A worthwhile test would seem to be to use the questar for a subjective seeing test in both domes and outside the domes - perhaps even at some far distant location (a few miles). The questar could be moved rapidly and easily from place to place.

The big dome was in operation nearly the whole month. Work was done on the oil leak by the machine shop people (Gene and Dale), and it now appears that the leak has been licked - at least it is not leaking at the present time. On the Coronameter itself the following observations were made: Six extended surveys (all good for Dick White's program also); four regular surveys; and three partial surveys (a partial survey is obtained when the clouds move in before completion of the whole survey - it is virtually worthless).

NEWSLETTER (CONTINUED)

Work continued during August on the observations of Jupiter. In all, nine evenings of good observations coinciding with solar activity 36 hours earlier have been obtained. Two evenings were particularly good - having followed rather heavy outbreaks of solar activity, and having Jim Warwick's "source" making limb passage during the observations. The results so far are negative; at least nothing in the way of emission in H_{α} can be seen by visual inspection of the film.

The Weather Bureau ice nuclei counter was operated at an accelerated pace during August - two observations consisting of five readings each were taken daily. This will continue until 10 September when the rate of observing will be cut back.

The annual "All HAO Championship Softball Game" was held at Climax on 28 August. The Observers retained possession of the Pennant with another come-from-behind victory. The final score was 9-6.

Keith Watson