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7 April 1961

CLIMAX NEWSLETTER

MARCH 1961

Cloudy winter weather caught up with us in March, and our coronal sky time amounted to only 9% of our total daylight time.

The coronagraph observations were pretty slim:

Green Survey: 4 good and 4 partial (good meaning complete).

Red Survey: 4 complete and one partial.

Iron Series: 1 good and 1 partial.

7772-4-5 Spicules: 4 good sets.

Fine Grain Green and Red: 1 complete set (this program consists of observing the 5303 and 6374 ~~lines~~ lines just like the routine survey, but on fine grain film. It is to be run every 4 months or so for Don Billings).

Activity was up again the later half of the month, and in fact is still up as this is written. Unfortunately, the clouds prevented our observing very much of the activity even with the Flare Patrol. We had no chances on disk flares or limb events, but did hear reports of such goings-on from Sac. Peak.

Testing and improvement continue on the Flare Patrol. During the month a bent piece of lucite was used to carry light from the F.P. to the coronagraph and tests were run to determine a more correct temperature setting and polaroid settings. These were photographic tests with the exposures being of the order of $\frac{1}{2}$ hour in length. A slightly different temperature setting and a more accurate front polaroid setting were the outcome. The back polaroid tests were not finished. This seemed to effect an improvement in image quality that was rather pronounced. Before the tests could be completed, however, the filter and lens flip mechanism were removed and taken to Boulder where Lee Lacey did a very notable job of rebuilding the polaroid and filter (red) mounts. The polaroids are now readily adjustable by moving an arm attached to each polaroid, and the lens, filter and polaroid mounts have all been blackened on the back and inside and whitened on the front. The suppressor plate arrived and was mounted by Lee just behind the back polaroid. A complete optical realignment of the system has been carried out in the

last few days, and the 5E film has arrived from Kodak. The lucite tests will be repeated as soon as the sky permits, and temperature and polaroid settings will be determined from them. Our hopes are high that the end of this trail is near. Many thanks to Lee for his very rapid and very excellent rebuilding job.

The K-Coronameter is still out of operation because of the big dome door modification, but Charlie and Dave have begun to check over the electronics of the instrument in order to have it in good shape when the dome is ready.

At the end of March we cranked up the Venus Aurora instrument with the thought in mind of getting a few spectra before time ran out (the bottom two doors in the big dome are working - which is enough to observe Venus). Unfortunately, the first clear night showed that Venus was already too close to the sun for us to obtain any observations. As Gordon said "It looks like the boat has left, and we are not on it".

Bob James spent the first two weeks of the month at Sac Peak, and his trip was very worthwhile. He has a much better understanding of their operation now, and he also brought back a number of pointers that we might apply at Climax. We hope to give all the Climax staff a chance to visit at Sac Peak over a period of time, and we would like the Sac Peak people to come to Climax for extended stays if they can work it in.

Frank, the new maintenance man, is working out very well, and is taking quite a bit of the maintenance load off of the rest of us. His major drawback seems to be that he is too old to play softball.

The new data reduction scheme is going better all the time. We are becoming more proficient at it, and Don Billings is making suggestions to improve the quality. The only study made of our readings versus the microdensitometer readings showed ours to be on the high side by a fairly consistent amount. Changes have been made in the slit to try and make our data more consistent with the Boulder readings in order to avoid a discontinuity in data.

Spring is here, and I am happy to report that Fireball Richey will again be on the mound for the two-time champion Climaxers. This year we would like to meet you on one of those soft green oxygen-laden fields in Boulder, and steak would be fine.

Keith