

SEP 21 1964

Day Solar Report: NORTHWESTERN OBSERVATORY

(SP) (2)

"quiescent"
(Haystack)

Spokane, Washington

N. 67° — 18:21 ut.

"micro-surge" — 18:30 ut. — 18:55 ut.

SP (3)

N. 63° — 18:21 ut.

N. 51° — 18:21 ut.

SP (4)

N. 29° — 18:28 ut.

"small-feature"

"faint"
"quiescent"
18:24 ut. — N. 25°

"faint"

S. 16°

18:27 ut.

S. 29°

"quiescents"

(SP) (5)

Date: 18 September, 1964.

Observer: Parmenter

Times: 18:11 ut. — 18:15 ut. — 18:17 ut. — 19:00 ut.

"plotter"

Spectroheliograph — graph — vector — Ha

Sky Condition: Clear, "Rich Blue"

Solar Limb: Excellent!

Apparatus Used: 7" Image "Plotter" — 10" Spectroheliograph — graph — vector — Ha

Remarks:

- (4) N. Polar Spicules tiny, and fairly "smoothed" chromosphere. (2" x 4-5")
- (2) N. 67° "Prom" — N. 63° "Surge" — filled with large, brilliant, features, (3" x 12") — (some displaced)
- (3) N. 63° "Surge" — N. 51° "Prom" — large, bright features, (3" x 12-15") — (some displaced.)
- (4) N. 51° "Prom" — N. 29° "Prom" — large features in "sparse" locations, (3" x 12-15")
- (5) S. Polar Spicules "average", (2" x 10") — segregated —

* Spicule which went into a "micro-surge" state. Beginning at 18:30 ut. and ending at 18:55 ut. attained height of 12,000 mi. (27 sec) while width remained at 2" sec. near max. — at 18:45 ut. it formed all the aspects of the normal "loop prominence" observed in large-scale features. Began from "normal" spicule — ended by complete disappearance into lower chromosphere. Brilliance — 4 times continuum

Dr's
Fior
BillingsSpecial
Note

18 September, 1964.

Special Note:-

I have, upon occasion, observed two distinct types of features which are in keeping with this observance, (18 Sept. '64.) and which I have been noting towards my "classifications" program.

I believe both of these to be "purely magnetic", simply from the shown shapes and pattern-of-growth and change, as they distinctly follow a magnetic-course as we would designate such under "earthly" measures.

One of these shows up as " a loosely-wound coil-spring lying upon it's side. The lower one-half buried in the lower chromosphere, the remaining one-half at spicules-height elevations". The other feature shows up as "a two or three beaded-chain, ascending tall, and detaching along a seemingly prescribed route".

While both of these type make up a very small percentage of the normal upper chromosphere, I believe they are worth considerable study, when come upon, as I feel they might tell us something as to the nature of their own support, as well other things about the "normal" spicule.

Lamont