

Day Solar Report:

NORTHWESTERN OBSERVATORY

Spokane, Washington

R.N.

"Surge"

began - 20:50 ut.
max. - 20:56 ut.
ended - clouded out
(about ended)
Ha/width - 5A

N. 41°

N. 28°

"Semi-Active"
(Arch-type)

- N. 36° - 20:12 ut.

20:08 ut. N. 12°
"quiescents" N. 8°

"B. faculae"
+
"plage"

"quiescents"
20:09 ut. - S. 25°

"faint" (?)
- 3.42° - 20:16 ut.

Date: 3 August, 1965.

Observer: Parmenter

Times: 20:00 ut. — 20:05 ut. — 20:07 ut. — 20:47 ut.
"Plotter" / Spectroheliograph > (Ha) /

Sky Condition: large opening - (overcast again coming on)

Solar Limb: observed through clearings among "wispy" cloud-strata.

Apparatus Used: 1" Image "Plotter" — 10" aperture tower Spectroheliograph > (Ha)

Remarks * See attached "notation" letter. (Dr. Billings)

Dr. Billings;

I was fortunate in observing the "birth" and "growth" of the N.28/E.90 "Surge" shown on the solar-map-----both with spectrohelioscope and 'graph,, used visually at H-alpha.

It's commencement was from a "conglomeration" of spicules-clumps that suddenly became bright, and were attracted to each other----into a single and fast-growth feature, in some six minutes. During this growth I paid particular attention to the action of all spicules-fields, to both sides of the C.A. It was most interesting to note that all of the individual spicules of greater elevations had their tops form "fish-hooks"----and that these hooks were curved away from the C.A.----this, on both sides(N.&S.) of the activity.

As growth continued, and the surge took on some aspects of a minor "eruptive" prominence, the fish-hooked fields simply disappeared----when, had I come upon this at this time, I would have listed as D.V.D., (devoid). However, having caught this at the beginning, the whole made considerable sense. For some reason these first clumps had attraction to each other, but, as the growth continued, the other spicules tried to avoid this area. Whether one could lay this to magnetic-effects, or bring forth the "shock-wave" theories for C.A.----all this in question. At least the mechanical-effects observed, and may fit in somewhere when we know more about the spicule.

Will write a letter a bit later regarding the measures you have made from the single spicules-print(#1). I have more on this-----.

BCP