

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 457A ISSUED 0400Z 26 NOV 1969

CLASS M FLARES ARE EXPECTED DURING THE NEXT 13 HOURS.

A. THE LATEST ADDITION TO THE NW CENTERS IMPRESSIVE ACTIVITY HISTORY WAS AN IMPORTANCE 2N FLARE WHICH BEGAN ABOUT 25/2223Z. A NEAR COMPLETE SW FADEOUT ACCOMPANIED THE OUTBURST. CHANGES IN SPOT CONFIGURATION THERE HAVE BEEN INSIGNIFICANT. MOST OF THE SUBFLARES RECORDED TODAY HAVE TAKEN PLACE BETWEEN THE MAIN PENUMBRAE OF THESE 2 GROUPS- AN AREA ADJACENT TO A STRONGLY CONTORTED PORTION OF THE REGIONS NEUTRAL LINE. OCCASIONAL FLARES HAVE BEEN OBSERVED FROM THE GREATLY EXTENDED SPOT GROUP CENTERED ABOUT N12W27. THIS SPOTS PRESENT CLASS/ AREA IS E/60 WHILE IN HYDROGEN-ALPHA THE BRIGHTEST PORTION OF PLAGE IS LOCATED AT THE EXTREME EASTERN EDGE.

B. ALTHOUGH THE FREQUENCY OF M AND X FLARES SHOULD CONTINUE TO DECREASE THESE NEXT 3 DAYS THE INTENSITY OF ANY SUCH EVENT SHOULD IT OCCUR WITHIN THE N15W55 REGION WILL NOT NECESSARILY BE DAMPENED. THERE REMAINS A STRONG POSSIBILITY OF A REPEAT PERFORMANCE OF THE NOV 2 LIMB FLARE. THE SMALL MAGNETIC DISTURBANCE PREDICTED FOR THE 25TH HAS FAILED TO MATERIALIZE.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 26 NOV/0400Z ENDING 29 NOV/0400Z.

CLASS M OR GREATER 90/90/90

CLASS X 50/50/50

PROTON EVENTS 30/30/40

D. OTTAWA 10.7 CM FLUXES FOR 25/1700 AND 2000Z WERE 191 AND 188 RESPECTIVELY.

SOLTERWARN

NNNN0420

NNNN0422

NNNN

KMSC

HAUS BOU 260425Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 457A ISSUED 0400Z 26 NOV 1969

CLASS M FLARES ARE EXPECTED DURING THE NEXT 13 HOURS.

A. THE LATEST ADDITION TO THE NW CENTERS IMPRESSIVE ACTIVITY HISTORY WAS AN IMPORTANCE 2N FLARE WHICH BEGAN ABOUT 25/2223Z. A NEAR COMPLETE SW FADEOUT ACCOMPANIED THE OUTBURST. CHANGES IN SPOT CONFIGURATION THERE HAVE BEEN INSIGNIFICANT. MOST OF THE SUBFLARES RECORDED TODAY HAVE TAKEN PLACE BETWEEN THE MAIN PENUMBRAE OF THESE 2 GROUPS-AN AREA ADJACENT TO A STRONGLY CONTORTED PORTION OF THE REGIONS NEUTRAL LINE. OCCASIONAL FLARES HAVE BEEN OBSERVED FROM THE GREATLY EXTENDED SPOT GROUP CENTERED ABOUT N12W27. THIS SPOTS PRESENT CLASS/AREA IS E/60 WHILE IN HYDROGEN-ALPHA THE BRIGHTEST PORTION OF PLAGE IS LOCATED AT THE EXTREME EASTERN EDGE.

B. ALTHOUGH THE FREQUENCY OF M AND X FLARES SHOULD CONTINUE TO DECREASE THESE NEXT 3 DAYS THE INTENSITY OF ANY SUCH EVENT SHOULD IT OCCUR WITHIN THE N15W55 REGION WILL NOT NECESSARILY BE DAMPENED. THERE REMAINS A STRONG POSSIBILITY OF A REPEAT PERFORMANCE OF THE NOV 2 LIMB FLARE. THE SMALL MAGNETIC DISTURBANCE PREDICTED FOR THE 25TH HAS FAILED TO MATERIALIZE.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 26 NOV/0400Z ENDING 29 NOV/0400Z.

CLASS M OR GREATER 90/90/90

CLASS X 50/50/50

PROTON EVENTS 30/30/40

D. OTTAWA 10.7 CM FLUXES FOR 25/1700 AND 2000Z WERE 191 AND 188 RESPECTIVELY.

SOLTERWARN

SPAN

BT

NNNN1719

NNNN1719

NNNN

KMSC

HAUS BOU 261700Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 457B ISSUED 1700Z 26 NOVEMBER 1969

CLASS M FLARES ARE EXPECTED DURING THE NEXT 11 HOURS

A. HIGHLIGHTS FOR THE PERIOD 19-26 NOVEMBER 1969--

FOR THIS PERIOD M AND X FLARE ACTIVITY TOTALS STAND AT 30 AND 10 RESPECTIVELY; EVENTS IN EVERY CASE ORIGINATING WITHIN MCMATH REGION 432. TWO OF THE FLARES INCLUDED IN THIS TABULATION /BOTH OPTICALLY IMPORTANCE 2B AND ENERGETICALLY CLASS X/ DESERVE MENTION FOR THEIR ASSOCIATED X-RAY AND RADIO WAVELENGTH EMISSIONS. THE FIRST OF THESE OCCURRED AT 13/1624Z WITH A GREATER THAN TWO HOUR DURATION WHILE THE SECOND BEGAN ABOUT 24/0906Z AND WAS FOLLOWED TWO HOURS LATER BY A VERY SMALL PARTICLE ENHANCEMENT. PROTON FLUXES DID NOT INCREASE SUFFICIENTLY TO ALLOW DETECTION BY GROUND-BASED INSTRUMENTATION. THIS CENTER WHICH IS CURRENTLY ABOUT TWO DAYS FROM THE WEST LIMB ACTUALLY CONSISTS OF TWO OVERLAPPING SPOT GROUPS RATHER THAN ONE LARGE CENTER AS IMPLIED BY HYDROGEN ALPHA OR RADIO WAVELENGTH OBSERVATIONS. DURING THESE PAST SEVEN DAYS 432 HAS EVOLVED ALONG A SYMMETRIC DEVELOPMENT CURVE WITH TWO WELL DEFINED MAXIMA. THE SECOND AND SLIGHTLY MORE COMPLEX PEAK OCCURRED 23 NOVEMBER WHEN THE COMBINED AREA OF THE TWO GROUPS TOTALED MORE THAN 2340 MILLIONTHS /ABOUT SEVEN TIMES THE SURFACE ~~area~~ OF THE EARTH/ THE PEAK MAGNETIC FIELD STRENGTHS AVERAGED ABOUT 2400 GAUSS AND THE 9.1 CM RADIO MAP WAS IN EXCESS OF ONE MILLION DEGREES KELVIN AT ITS CENTRAL POINT. FOR ALL ITS IMPRESSIVENESS THE RECORD OF ASSOCIATED GEOPHYSICAL EFFECTS EITHER IN THE EARTH'S VICINITY OR ELSEWHERE AS VIEWED BY SPACECRAFT HAS BEEN DISAPPOINTING. ABOUT MIDDAY 24 NOVEMBER A RELATIVELY LARGE BIPOLAR GROUP APPEARED ON THE EAST LIMB NEAR S14. THE MOST RECENT OBSERVATIONS INDICATE THAT ITS ATTENDANT PLAGE IS SMALL AND NOT BRIGHT. ONE OTHER REGION OF INTEREST IS THE SOMEWHAT ELONGATED E/60 GROUP NEAR N12W34 /MCMATH REGION 441/. IT HAS EXHIBITED A PECULIAR EVOLUTION SINCE ITS APPEARANCE ON THE DISK 19 NOVEMBER BUT HAS BEEN THE SEAT OF ONLY SPORADIC SUBFLARES.

B. FORECAST FOR THE PERIOD 27 NOVEMBER-3 DECEMBER 1969--

AS THE NW CENTER CONTINUES TO DECAY THE CHANCES FOR A GEOPHYSICAL EVENT SHOULD IMPROVE. IN FACT IT APPEARS LIKELY THAT A MAJOR LIMB FLARE MAY ONCE AGAIN INITIATE STRONG POLAR CAP ABSORPTION. NO MAGNETIC DISTURBANCE IS EXPECTED.

28-DAY FORECAST FOR 27 NOVEMBER-24 DECEMBER 1969--

SOLAR ACTIVITY WILL REMAIN LOW UNTIL 13 DECEMBER WHEN MCMATH REGION 432 WILL RETURN. HOWEVER THIS REGION IS NOT EXPECTED TO BE AS SYNAMIC AS ITS PAST ROTATION.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 26/1700Z ENDING 29/1700Z.

CLASS M OR GREATER 90/90/90

CLASS X 40/40/40

PROTON EVENTS 30/30/30

D. OTTAWA 10.7 CM FLUX AT 1400Z IS 186. PREDICTED 175/165/150.

E. MAGNETIC A-FREDERICKSBURG FOR 25 NOV WAS 06. FOR 26 NOV ABOUT 10. PREDICTED AP FOR 27-29 NOV 8/8/10.

SOLTERWARN

SPAN

BT