

NNNN0530

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KMSC

HAUS BOU 120529Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 535A ISSUED 0400Z 12 FEB 1970

NO MORE THAN TWO M FLARES ARE EXPECTED FROM THE LARGE NW REGION DURING THE NEXT 13 HOURS.

A. SINCE THE 1700Z WEEKLY SUMMARY MESSAGE YESTERDAY, COMPUTER DECODED DATA HAVE INDICATED MCMATH REGION #568 IN THE NW QUADRANT PRODUCED M FLARES AT THE FOLLOWING TIMES ON THE 11TH: 1120(NO OPTICAL), 1335(SN), 1457(SN), AND 1903(NO OPTICAL); A SMALL 2B (PROBABLY AN X EVENT) BEGAN 11/2111UT NEAR N19W14. THIS FLARE ACTUALLY WAS FIRST OBSERVED AS AN ENHANCEMENT APPROXIMATELY AN HOUR EARLIER - THE 2111Z MARKS THE BEGINNING OF ITS FLASH PHASE. AS HAS BEEN CHARACTERISTIC OF 568'S ACTIVITY, CM AND METER WAVELENGTH BURSTS WERE EITHER SMALL OR NONEXISTENT WHILE SOFT AND HARD X-RAY EMISSIONS WERE INTENSE. WITH RESPECT TO THIS EVENT SLOW HF FADEOUTS HAVE BEEN REPORTED ON 5, 10, AND 15 MHZ FROM ANCHORAGE, ALASKA. THEIR VLF PATHS WHICH INCLUDE THE 19 AND 20 KHZ WWV FORT COLLINS SIGNAL, AN OMEGA POLAR PATH, AND NWC INDICATED PHASE ADVANCES OF 36, ABOUT 50, 36, AND 360 DEGREES RESPECTIVELY. ALL SHOWED SLIGHT AMPLITUDE INCREASES. OPTICALLY THE REGION EXTENDS ALMOST 15 DEGREES IN LONGITUDE AND ITS AREA IS GREATER THAN 1000 MILLIONTHS. ALMOST BY DEFINITION 568 IS A DELTA SOMEWHERE IN THE FOLLOWING SEGMENT ALTHOUGH NO ACTUAL MT. WILSON MAGNETOGRAMS HAVE BEEN RECEIVED BY THIS FORECAST CENTER. GEOPHYSICALLY THE SUM TOTAL OF ACTIVITY THESE PAST 3 DAYS HAS YET TO PRODUCE EITHER A SIGNIFICANT RISE IN SATELLITE PROTON COUNTING RATES OR A MEASUREABLE EFFECT ON THE GEOMAGNETIC FIELD.

B. ABOUT THREE M FLARES PER DAY COUPLED AT MOST WITH ONE X EVENT ARE EXPECTED FROM THE N19W19 CENTER. THE D/220 GROUP NEAR S13E03 WITH ITS ARCH-TYPE FILAMENTS WILL VERY LIKELY BE THE SCENE OF CLASS C ACTIVITY DURING THE NEXT 24-HOUR PERIOD.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 12 FEB/0400Z ENDING 15 FEB/0400Z.

CLASS M OR GREATER 100/100/100

CLASS X 100/70/70

PROTON EVENTS 20/30/30

D. OTTAWA 10.7 CM FLUXES FOR 11/1700 AND 2000Z WERE 193 AND 195 RESPECTIVELY.

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HAUS BOU 121710Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 535B ISSUED 1700Z 12 FEBRUARY 1970

CLASS X FLARES ARE EXPECTED DURING THE NEXT 11 HOURS

A. SOLAR ACTIVITY REMAINS AT A HIGH LEVEL WITH THE LATEST CLASS X FLARE AN OPTICAL IMPORTANCE 1B AT 12/0007Z AT N19W18.

THIS FLARE PRODUCED AN IMPORTANCE 3 SWF, BUT MINIMAL RADIO BURST PRODUCTION. THE 11/2111Z OPTICAL IMPORTANCE 2B FLARE

MENTIONED IN SDF 535A HAS BEEN CLASSIFIED AS AN X EVENT.

CLASS M EVENTS WERE OBSERVED FROM THIS REGION AT 12/0305Z

/IMP SN/, 12/0411Z /IMP SN/, 12/0500Z /IMP 1B/, AND 12/0740Z

/IMP 1N/. IT IS NOW APPARENT THAT THIS ACTIVE REGION AT

N19W25 IS DECREASING IN INTENSITY BOTH IN WHITE LIGHT AND

H-ALPHA. THE REGION IS CURRENTLY AN E-TYPE/900 AND CONSISTS

OF THREE BROKEN DISTINCT SPOT AREAS WITH FIELD STRENGTHS

WEAKER THAN 24 HOURS AGO. IN H-ALPHA, THE PLAGE AREA IS

CONSIDERABLY SMALLER, LESS BRIGHT, AND MORE SCATTERED THAN

24 HOURS AGO. THE BIPOLAR D-TYPE/340 REGION AT S13W04 HAS

STABILIZED ITS WHITE LIGHT GROWTH AND HAS PRODUCED VERY FEW

CLASS C FLARES. A LARGE H-TYPE/420 SPOT GROUP IS LOCATED AT

S20E81 WITH BRIGHT PLAGE TO THE EAST. BSL ACTIVITY BEHIND

THIS REGION INDICATES THAT A TRAILER SPOT WILL ROTATE OVER

THE EL. THE GEOMAGNETIC FIELD IS QUIET.

B. CLASS X FLARES ARE STILL EXPECTED FROM THE N19W25 REGION

WITH DECREASING PROBABILITIES AS IT DECAYS. ATTENTION WILL

BE SHIFTING TO THE NEW SE LIMB REGION WHERE CLASS M ACTIVITY

SHOULD BE INCREASING.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24

HOUR PERIODS BEGINNING 12/1700Z ENDING 15/1700Z.

CLASS M OR GREATER 100/100/100

CLASS X 80/70/60

PROTON EVENTS 30/20/20

D. OTTAWA 10.7 CM FLUX AT 1400Z WAS 211. PREDICTED 220/228/235.

E. MAGNETIC A-FREDERICKSBURG FOR 11 FEB WAS 02. FOR 12 FEB

ABOUT 02. PREDICTED AP FOR 13-15 FEB 05/08/08.

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