

NNNN

KMSC

HAUS BOU 300400Z

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 642 -ISSUED 0400 " 30 MAY 1970

CLASS C FLARES ARE EXPECTED AND CLASS M FLARES ARE PROBABLE DURING THE NEXT 13 HOURS.

A. SOLAR ACTIVITY HAS BEEN AT A LOW LEVEL DURING THE PAST 11 HOURS. THE REGION S07W29 HAS PRODUCED NEARLY ALL THE ACTIVITY. DURING THE PAST 8 HOURS, HOWEVER, THIS REGION HAS STABILIZED AND HAS NOT PRODUCED ANY ENERGETIC FLARES. THE REMAINING REGIONS ON THE DISK ARE ALL QUIET AND STABLE. THE GEOMAGNETIC FIELD IS QUIET.

B. THE REGION S07W29 WILL CONTINUE ITS ACTIVITY AND CAN BE EXPECTED TO PRODUCE AN OCCASIONAL CLASS M EVENT DURING THE NEXT 13 HOURS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 30 MAY/0400Z ENDING 02 JUNE/0400Z

CLASS M OR GREATER 60/60/60

CLASS X 05/05/05

PROTON EVENTS 05/05/05

D. OTTAWA 10.7 CM FLUX FOR 29/1700Z WAS 154.

SOLTERWARN

SPAN

BT

VNNNN1708

NNNN

KMSC

HAUS BOU 301700Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 642B ISSUED 1700Z 30 MAY 1970

CLASS M FLARES ARE ANTICIPATED DURING THE NEXT 11 HOURS.

A. SOLAR ACTIVITY DURING THE PAST 13 HOURS HAS CONSISTED MAINLY OF RELATIVELY NON-ENERGETIC FLARES FROM THE REGION AT S07W39. THIS REGION HAS SHOWN SIGNIFICANT GROWTH IN THE LEADER, WITH SOME SIMPLIFICATION OF THE MID-SECTION; SPECTROGRAPHIC ANALYSIS AT 30/1325Z HERE IN BOULDER INDICATED THE PRESENCE OF MAGNETIC DELTA CONFIGURATIONS IN THE FOLLOWER AND MID-SECTION PENUMBRAE OF THIS REGION. A THIRD DELTA CONFIGURATION ALSO MAY EXIST IN THE LEADER PENUMBRA. ABSORPTION FEATURES HAVE BEEN OBSERVED IN THE CENTER OF THIS REGION. THE REGION AT N18W28 HAS SHOWN DRAMATIC GROWTH DURING THE PAST 24 HOURS; THE SPOT GROUP OF THIS REGION IS NOW CLASSIFIED AS A SMALL D-TYPE. IMBEDDED FILAMENTS BEHIND THE LEADER AND BRIGHT PLAGE HAVE APPEARED IN THIS REGION, THOUGH LITTLE FLARE ACTIVITY HAS BEEN OBSERVED SO FAR. THE REGION AT N10E07 PRESENTLY CONTAINS HOT, COMPACT PLAGE. OTHER REGIONS ON THE DISK HAVE SHOWN LITTLE SIGNIFICANT CHANGE. A PROTON EVENT HAS BEEN OBSERVED BY THE ATS-1 SATELLITE. THIS EVENT BEGAN VERY SLOWLY AT ABOUT 30/0500Z; PRESENT COUNTING RATES ARE APPROXIMATELY 300 PARTICLES/CM2/SEC ON THE 5-21 MEV CHANNEL (BACKGROUND LEVEL IS 2.37 PARTICLES/CM2/SEC) AND APPROXIMATELY 8 PARTICLES/CM2/SEC ON THE 21-70 MEV CHANNEL (BACKGROUND LEVEL IS 0.50 PARTICLES/CM2/SEC). THIS EVENT DOES NOT YET APPEAR TO HAVE REACHED ITS MAXIMUM. THE GEOMAGNETIC FIELD HAS SHOWN OCCASIONAL PERIODS OF DISTURBANCE DURING THE PAST 13 HOURS.

B. SOLAR ACTIVITY PRESENTLY APPEARS TO BE INCREASING. THE REGIONS AT S07W39 AND AT N18W28 BOTH SEEM CAPABLE OF PRODUCING CLASS M FLARES DURING THE NEXT 24 HOURS. THE PROTON EVENT OBSERVED BY ATS-1 IS EXPECTED TO CONTINUE. THE GEOMAGNETIC FIELD IS EXPECTED TO SHOW OCCASIONAL PERIODS OF DISTURBANCE.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 30 MAY/1700Z ENDING 02 JUNE/1700Z.

CLASS M OR GREATER 85/85/85

CLASS X 12/12/12

PROTON EVENTS 15/15/10

D. OTTAWA 10.7 CM FLUX FOR 30/1400Z WAS 160.

PREDICTED 10.7 CM FLUX FOR 31 MAY-02 JUNE IS 160/162/160.

E. MAGNETIC A-FREDERICKSBURG FOR 29 MAY WAS 18. FOR 30 MAY ABOUT 12.

PREDICTED AP FOR 31 MAY-02 JUNE, 16/16/13.

SOLTERWARN

SPAN

BT