

KMSC
PP KGFF
DE BOU 050430Z
THIS MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SDF NUMBER 436A ISSUED 0400Z 05 NOV 1969
APPROXIMATELY ONE CLASS M FLARE EVERY 12 HOURS IS EXPECTED DURING
THE NEXT 36-HOUR PERIOD.

A. TWO CLASS M EVENTS HAVE BEEN RECORDED SINCE THE LAST MESSAGE.
ONE OCCURRED WITHIN THE H-TYPE SPOT NEAR N23E70 AT 04/1437Z; THE
SECOND FLARE BEGAN ABOUT 04/1555Z IN THE UNUSUALLY BRIGHT HYDROGEN
PLAGE ASSOCIATED WITH A SMALL GROUP NOW NEAR N08E70. IN ADDITION
TO THE ABOVE ACTIVITY THE N08E70 REGION WAS THE SCENE OF AN
IMPORTANCE 2 BSD/BSL. THE SB FLARE BEGAN AT 2116Z WITH THE DISK/
LIMB EVENT FOLLOWING ABOUT 8 MINUTES LATER. THE PLAGE THERE
REMAINED QUITE BRIGHT UNTIL ABOUT 2300Z. SPOT GROWTH HAS BEEN
MINIMAL THESE PAST 24 HOURS WITHIN BOTH OF THE REGIONS DISCUSSED
ABOVE. STATUS OF 02/1200Z PCA: ATS-1 AS OF 05/0400Z STILL INDICATES
COUNTING RATES WELL ABOVE BACKGROUND ON BOTH ITS 3-20 AND 20-70 MEV
CHANNELS. SUNSET ABSORPTION VALUES FOR THULE AND THE ALASKAN
RIOMETER NETWORK ARE ONLY SLIGHTLY ABOVE QUIET-DAY VALUES.

B. THE SMALL GROUP NEAR N23E70 IS ASSUMED TO BE DECAYING. ON THE
OTHER HAND EITHER THE N08E70 OR N13E46 CLUSTER IS VERY LIKELY TO
CONTINUE TO DEVELOP. CLASS M FLARES ARE EXPECTED FROM ONE OR BOTH
OF THE E70 GROUPS DURING THE NEXT 2 DAYS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR
PERIODS BEGINNING 05/0400Z ENDING 08/0400Z.

CLASS M OR GREATER 50/55/30

CLASS X 10/10/05

PROTON EVENTS 5/5/2

D. OTTAWA 10.7 CM FLUXES FOR 04/1700 AND 2000Z WERE 132 AND 130
RESPECTIVELY.

SOLTERWARN

BT

DE BOU 031700Z
HERE IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO
SDF NUMBER 436B ISSUED 1700Z 05 NOVEMBER 1969

CLASS M FLARES ARE EXPECTED DURING THE NEXT 11 HOURS

A. HIGHLIGHTS FOR THE PERIOD 29 OCTOBER-04 NOVEMBER 1969--
THE IMPRESSIVE REGION /MCMATH 385/ COMPLETED ITS DISK PASSAGE
ON 01 NOVEMBER WITHOUT PRODUCING THE LONG ANTICIPATED GEO-
PHYSICAL EVENT. AT 02/0943Z AND AFTER APPROXIMATELY ONE
DAY'S ROTATION BEHIND THE LIMB A MAJOR FLARE /IMPORTANCE
UNKNOWN/ ERUPTED WITHIN THIS CENTER PRODUCING IMPORTANCE
TWO LOOPS A LARGE 10CM RADIO NOISE BURST AND AN X-RAY
EVENT RECORDED BY THE NRL SOLRAD 9 SATELLITE AS THE MOST
ENERGETIC OF THE YEAR. DETECTORS ON THE ATS-1 GEOSTATIONARY
SATELLITE NOTED THE ONSET OF PROTONS IN THE 20 TO 70 MEV
RANGE AT 02/1045Z; THE 5 TO 21 MEV CHANNEL RESPONDED ABOUT
15 MINUTES LATER. MAXIMUM FLUXES WERE RECORDED AT 02/2140Z
/600 FLUX UNITS/ AND 03/0530Z /1900 FLUX UNITS/ IN THE HIGH
AND LOW ENERGY CHANNELS RESPECTIVELY. ON THE GROUND RIOMETER
ABSORPTIONS SET NEW RECORDS FOR THE SOLAR CYCLE. AT SUNSET
/02/1645Z/ THULE REGISTERED 11 DB FT. CHURCHILL /1645Z/ ABOUT
15 AND BARTER ISLAND /1645Z/ 13 DB AS TWILIGHT BEGAN THERE.
THE PCA'S DURATION WAS ABOUT TWO AND A HALF DAYS WITH NO
MAGNETIC DISTURBANCE FOLLOWING. BY 05/0000Z ALL GROUND-
BASED SENSORS HAD RETURNED TO NEARLY QUIET-DAY TRACES WHILE
ATS-1 LAGGED BEHIND. THE DECAY ON THE LATTER HAS BEEN VERY
GRADUAL DURING THE PAST 40 HOURS AND IS CURRENTLY SIGNIFICANTLY
ABOVE BACKGROUND. TWO REGIONS ROTATED INTO VIEW ON 03
NOVEMBER AND WERE HERALDED BY STRONG YELLOW LINE CORONA AND
PRODUCED A SERIES OF CLASS M FLARES. THESE TWO GROUPS ARE
CURRENTLY GENERATING AN UNUSUALLY LARGE NUMBER OF FLARES WITH
SIGNIFICANT X-RAY PRODUCTION. ALL OTHER REGIONS ON THE DISK
WERE INACTIVE. THE GEOMAGNETIC FIELD HAS BEEN QUIET.

B. FORECAST FOR THE PERIOD 06-12 NOVEMBER 1969--
CLASS M ACTIVITY IS EXPECTED TO CONTINUE THROUGHOUT THE PERIOD
FROM THE N08E63 AND N23E62 REGIONS. IT IS UNLIKELY HOWEVER
THAT AN ACTIVE CENTER COMPARABLE TO MCMATH REGION 385 WILL EVOLVE.
28-DAY FORECAST FOR 06 NOVEMBER-03 DECEMBER 1969--

SOLAR ACTIVITY WILL BE FURTHER ENHANCED STARTING ON 15 NOVEMBER
AS MCMATH REGION 385 ROTATES ONTO THE EAST LIMB HOWEVER NO LARGE
PROTON EVENTS OF THE PREVIOUS MAGNITUDE ARE EXPECTED.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24
HOUR PERIODS BEGINNING 05/1700Z ENDING 08/1700Z.

CLASS M OR GREATER 80/80/80

CLASS X 30/35/40

PROTON EVENTS 20/25/30

D. OTTAWA 10.7 CM FLUX AT 1400Z WAS 132. PREDICTED 140/150/160.

E. MAGNETIC A-FREDERICKSBURG FOR 04 NOV WAS 05. FOR 05 NOV ABOUT

05. PREDICTED AP FOR 06-08 NOV 10/10/10.

F. KP ESTIMATED FOR 1200-1500Z WAS 2. KP FORECAST FOR NEXT 24
HOURS PER KP 15.3; 2/2/2/2/2/2/2.

SOLTERWARN

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