

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 BOB 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; 2/2/2/2/2/2/2/2.

SOLTERWARN

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