

HFUS 3 BOU 282200  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 087  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 28 MAR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 27/2100  
TO 28/2100Z: SOLAR ACTIVITY HAS REMAINED LOW. THE LARGEST EVENTS  
OBSERVED DURING THE 24 HOUR PERIOD WERE TWO C1/SN FLARES FROM  
REGION 4128 (S14E17) AT 0752Z AND 1535Z MAXIMUM. THIS REGION  
WAS THE ONLY SPOTTED GROUP TO PRODUCE ANY ACTIVITY. IT HAS  
DISPLAYED EVIDENCE OF SLOW DECAY, BUT DOES RETAIN SOME MINOR  
MAGNETIC COMPLEXITY ALONG WITH AN INTERESTING NEUTRAL LINE  
FILAMENT. REGION 4127 (S16E46) IS THE ONLY OTHER DISK GROUP OF  
ANY SIZE OR COMPLEXITY, BUT THIS AREA HAS BEEN QUIET. NEW  
REGION 4131 (S05E28) EMERGED ON THE DISK TODAY AS A SIMPLE  
B-TYPE GROUP WITH FOUR SMALL SPOTS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN LOW.  
NO SIGNIFICANT REGIONS ARE DUE TO RETURN DURING THE PERIOD.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 27/2100Z TO 28/2100Z:  
THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO MINOR STORM LEVELS  
FOR THE PAST 18 HOURS. THE POSSIBLE SOURCE OF THIS ACTIVITY IS  
A CORONAL HOLE CENTERED AT N20W71 AT 1500Z TODAY. THIS CORONAL  
HOLE DID NOT CREATE A GEOMAGNETIC RESPONSE LAST ROTATION.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS  
EXPECTED TO REMAIN AT ACTIVE TO OCCASIONAL MINOR STORM  
CONDITIONS FOR THE NEXT 48 HOURS DUE TO ANOTHER CORONAL HOLE  
NOW LOCATED AT S05W35. THIS POSITIVE POLARITY HOLE EXTENDS 50  
DEGREES NORTH-SOUTH ACROSS THE SOLAR EQUATOR AND WAS  
RESPONSIBLE FOR SEVERAL DAYS OF ACTIVE TO MINOR STORM  
CONDITIONS LAST ROTATION.

III. EVENT PROBABILITIES 29 MAR-31 MAR  
CLASS M 05/05/05  
CLASS X 01/01/01  
PROTON 01/01/01  
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX  
OBSERVED 28 MAR 105  
PREDICTED 29 MAR-31 MAR 103/100/100  
90 DAY MEAN 28 MAR 130

V. GEOMAGNETIC A INDICES  
OBSERVED AFR/AP 27 MAR 003/006  
ESTIMATED AFR/AP 28 MAR 022/035  
PREDICTED AFR/AP 29 MAR-31 MAR 025/025-025/025-015/020

SOLTERWARN  
BT