

HFUS 1 BOU 121300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SFC NUMBER 1324

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 12 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
11/1200UT TO 12/1200UT:

SOLAR ACTIVITY HAS BEEN MODERATE THIS PERIOD. A SINGLE M CLASS  
EVENT WAS REPORTED. AN M2/1B FROM REGION 3099 (N10W10) REACHED  
MAXIMUM AT 11/1600Z. REGION 3099 HAS ALSO BEEN RESPONSIBLE FOR  
MOST OF THE LOW LEVEL OPTICAL AND C CLASS XRAY ACTIVITY, WITH  
SMALL CONTRIBUTIONS FROM REGION 3106 (N11E61). REGION 3099  
APPEARS TO HAVE DECLINED SOMEWHAT IN W.L. MAGNETIC GRADIENTS  
MAY BE RELAXING ALSO. THE REGION IS BELIEVED TO BE IN DECLINE.  
REGION 3106 APPEARS STABLE IN RECENT HOURS, BUT HAS PRESENTED  
ITSELF AS A LARGE F CLASS GROUP IN W.L. WITH COMPLEX MAGNETIC  
STRUCTURE AND A PROBABLE DELTA. THIS GROUP IS NOW THE MOST LIKELY  
SOURCE OF LARGE EVENTS ON THE DISK. REGION 3099 IS ALSO FULLY  
CAPABLE OF LARGE EVENTS DURING THE EARLY PART OF ITS DECLINE.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD BE MODERATE TO HIGH DUE TO ACTIVITY  
EXPECTED FROM REGIONS 3099 AND 3106.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS DECLINED FROM ACTIVE TO NEAR QUIET  
LEVELS WITHIN THE PERIOD. IT MAY REMAIN AT LOW UNSETTLED LEVELS  
FOR A BRIEF PERIOD MATCHING A BRIEF LULL IN EARLIER SOLAR  
ACTIVITY. THE SATELLITE ALTITUDE PROTON EVENT ENDED NEAR  
12/1200Z WITH PARTICLES GREATER THAN 10 MEV DROPPING TO  
9/CM2/SEC/STER.

III. EVENT PROBABILITIES: 13-15 MAY

CLASS M 90/90/90

CLASS X 35/35/35

PROTON 25/25/25

PCAF YELLOW.

IV. OTTAWA 10.7 FLUX

OBSERVED 11 MAY 222

ESTIMATED 12 MAY 225

PREDICTED 13-15 MAY 230/235/235

90 DAY MEAN 11 MAY 214

V. GEOMAGNETIC A INDICES

OBSERVED AFR 10 MAY 25 AP 11 MAY 49

ESTIMATED AFR 11 MAY 31 AFR/AP 12 MAY 12/15

PREDICTED AFR/AP 13-15 MAY 12/12 16/20 18/20

SOLTERWAPN

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HEUIS 3 BOU 122200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO  
SDF NUMBER 132R

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200 UT 12 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 12/1200 UT  
TO 12/2200 UT: SOLAR ACTIVITY WAS LOW WITH ONLY SMALL CLASS C  
X-RAY EVENTS REPORTED IN THE PAST 10 HOURS. REGION 3099 (N10W17)  
REMAINS COMPLEX AND STILL CONTAINS A DELTA CONFIGURATION BUT HAS  
NOT BEEN FLARE ACTIVE. REGION 3106 (N12E59) HAS PRODUCED ONLY  
SURFLARES BUT IS ALSO COMPLEX AND CONTAINS A DELTA CONFIGURATION.  
A SMALL REGION 3100 (S05W19) PRODUCED A C2/1M FLARE AT 2019 UT.  
TWO SMALL REGIONS WERE NUMBERED 3110 (S28E08) AND 3111  
(N04E54).

IR. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE  
MODERATE TO HIGH WITH LARGE FLARES POSSIBLE FROM REGIONS 3099  
AND 3106.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN UNSETTLED AND IS EXPECTED TO REMAIN UNSETTLED DURING THE  
FORECAST PERIOD.

III. EVENT PROBABILITIES 13 MAY - 15 MAY

CLASS M	90/90/90
CLASS X	35/35/35
PROTON	25/25/25
PCAF	YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED	12 MAY 219
PREDICTED	13-15 MAY 225/230/230
90-DAY MEAN	12 MAY 214

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP	11 MAY 33/49
ESTIMATED AFR/AP	12 MAY 09/15
PREDICTED AFR/AP	13-15 MAY 12/12 - 16/20 - 18/20

SOLTERWARN

BT