

HFUS 1 001 15 1330

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 135A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1200LT 15 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
14/1200LT TO 15/1200LT:

SOLAR ACTIVITY HAS BEEN LOW THE PAST 24 HOURS. HOWEVER, THE
OVERALL POTENTIAL FOR ENERGETIC ACTIVITY REMAINS HIGH. GROWTH
AND DEVELOPMENT IN REGIONS 3106 (N12E23) AND 3112 (N13E33) CON-
TINUES. THE LACK OF RECENT ACTIVITY FROM THESE REGIONS WHILE
APPARENTLY INCREASING IN STRESS WOULD SUGGEST THAT FLARE ACTIVITY
IS BECOMING MORE LIKELY. REGION 3099 (N10W49) IS LESS A THREAT
AS IT IS DECLINING AND SIMPLIFYING.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD BE MODERATE TO HIGH. ACTIVITY FROM REGIONS
3106 AND 3112 SHOULD BE FORTHCOMING.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD IS AT MINOR TO MAJOR STORM LEVELS. DISTURBED
CONDITIONS ARE EXPECTED TO GRADUALLY SUBSIDE OVER THE NEXT
THREE DAYS.

III. EVENT PROBABILITIES: 16 MAY - 18 MAY

CLASS M 95/95/95

CLASS X 35/35/35

PROTON 10/15/20

SCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 14 MAY 228

ESTIMATED 15 MAY 228

PREDICTED 16-18 MAY 230/231/233

90 DAY MEAN 14 MAY 214

V. GEOMAGNETIC A INDICES

OBSERVED AFR 13 MAY 10 AP 14 MAY 19

ESTIMATED AFR 14 MAY 12 AFR/AP 15 MAY 40/50

PREDICTED AFR/AP 16-18 MAY 25/25 20/30 20/30

SOLTERWARN

BT

HFHS 3 20U 152200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 135P
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200UT- 15 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
15/1200UT TO 15/2200UT:

SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 10 HOURS. C-CLASS
SURFLARES HAVE BEEN OBSERVED IN REGIONS 3106 (N12E16) AND 3102
(N11W35). REGION 3099 (N15E28) NO LONGER HAS A DELTA MAG-
NETIC CONFIGURATION. NEW REGION 3114 (S26E14), A C-TYPE GROUP,
EMERGED RAPIDLY TODAY.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH BASED PRINCIPAL-
LY ON FLARE POTENTIAL CONTAINED IN REGION 3106.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE LEVELS FOR THE PAST 10
HOURS, DECLINING FROM STORM LEVELS EXPERIENCED EARLIER IN THE
DAY. A MINOR PROTON ENHANCEMENT AT SATELLITE ALTITUDES THAT
BEGAN NEAR 0300UT CROSSED EVENT THRESHOLDS OF 10 PARTICLES/CM²/SEC
AT ENERGIES GREATER THAN 10 MEV AT APPROXIMATELY 0600UT. PROTON
LEVELS HAVE FLUCTUATED NEAR THRESHOLD VALUES SINCE THAT TIME
WITH THE MAXIMUM BEING 19 FLUX UNITS AT 0810UT. THE PARTICLE
INFLUX IS EXPECTED TO DECLINE SLOWLY OVER THE NEXT 12 HOURS.
THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN AT ACTIVE LEVELS
THROUGHOUT THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 16 MAY - 18 MAY

CLASS M 95/95/95

CLASS X 35/35/35

PROTON 10/15/20

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 15 MAY 214

PREDICTED 16-18 MAY 210/205/200

90 DAY MEAN 15 MAY 215

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 14 MAY 16/19

ESTIMATED AFR/AP 15 MAY 35/50

PREDICTED AFR/AP 16-18 MAY 25/25 20/30 20/30

SOLTERWARN

BT