

HFUS 1 BOU 15 1400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 046A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 1200UT 15 FEB 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

14/1200UT TO 15/1200UT:

SOLAR ACTIVITY HAS BEEN LOW. NO "M" CLASS ACTIVITY HAS OCCURRED SINCE 13 FEB. NONE OF THE VISIBLE REGIONS HAVE SHOWN ANY SIGNIFICANT CHANGES ALTHOUGH LIMB PROXIMITY IS NOW BEING REFLECTED IN THE MEASUREMENTS OF 2930 (N11W57). REGION 2941 (N18E17) IS THE SECOND MOST INTERESTING FEATURE ON THE DISK AND ITS CONTINUED GROWTH SHOULD RESULT IN THE PRODUCTION OF MORE FREQUENT FLARE ACTIVITY. REGION 2942 (S20E19) IS ALSO GROWING BUT LIKE 2941, ITS MAGNETIC STRUCTURE IS RELATIVELY SIMPLE AND WILL REQUIRE ADDITIONAL DEVELOPMENT BEFORE POSING A REAL THREAT.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD REMAIN LOW BUT AN ISOLATED M EVENT IS POSSIBLE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET AND NO MAJOR CHANGES ARE EXPECTED.

III. EVENT PROBABILITIES: 16 - 18 FEB

CLASS M 40/40/40

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 14 FEB 205

ESTIMATED 15 FEB 206

PREDICTED 16-18 FEB 206/202/202

90 DAY MEAN 14 FEB 198

V. GEOMAGNETIC A INDICES

OBSERVED AFR 13 FEB 09 AP 14 FEB 05

ESTIMATED AFR 14 FEB 06 AFR/AP 15 FEB 05

PREDICTED AFR/AP 16-18 FEB 08/08 08/08 07/07

SOLTERWARN

BT

HFUS 3 BOU 152200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 046B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200UT 15 FEBRUARY 1981

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

SOLAR ACTIVITY HAS BEEN MODERATE. AN M1 X-RAY EVENT WHICH
REACHED MAXIMUM AT 1905UT WAS ASSOCIATED WITH BRIGHT POINTS,
A LARGE FLARE SPRAY OUT TO .25 RADII FROM REGION 2930 (N13W62),
AND MINOR TYPE II AND TYPE IV (4 MINUTES DURATION) RADIO BURSTS.
LATER, AN EXTREMELY IMPULSIVE M1.1/1F FLARE WAS OBSERVED IN
REGION 2945 (N13E32). THE EVENT BEGAN 2110, MAXED AT 2113, AND
ENDED AT 2115UT. TWO NEW REGIONS APPEARED ON THE DISK AND WERE
NUMBERED 2946 (N18E03), A C TYPE GROUP LEADING 2941 (N18E10),
AND 2947 (N10E20), AN A TYPE SPOT.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW ALTHOUGH ISOLATED M
EVENTS ARE POSSIBLE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO ACTIVE FOR THE PAST
FEW HOURS. THE FIELD IS EXPECTED TO REMAIN MOSTLY UNSETTLED
TODAY AND TOMORROW BUT INCREASING TO ACTIVE LEVELS ON THE FOLLOW-
ING TWO DAYS IN RESPONSE TO A LARGE SOUTHERN CORONAL HOLE AND
TODAYS FLARE SPRAY WITH DEKAMETER RADIO EVENTS.

III. EVENT PROBABILITIES: 16 - 18 FEBRUARY

CLASS M 40/40/40

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 15 FEB 199

PREDICTED 16-18 FEB 195/192/190

90 DAY MEAN 15 FEB 198

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 14 FEB 05/05

ESTIMATED AFR/AP 15 FEB 07/07

PREDICTED AFR/AP 16-18 FEB 08/08 15/18 19/23

SOLTERWARN

BT