

HFUS 1100 211400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 052A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 21 FEBRUARY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
20/1200UT TO 21/1200UT:

SOLAR ACTIVITY HAS DECREASED TO A LOW LEVEL SINCE YESTERDAY'S
X2 EVENT, WITH ONLY C-CLASS SUBFLARES OBSERVED. THE ACTIVITY HAS
BEEN RESTRICTED TO REGIONS 2941 (N20W67), 2951 (N10W01) AND THE
SOUTHEAST LIMB (S16). REGION 2941, THE PRIME PRODUCER OF MOST OF
THE PAST ACTIVITY, HAS WEAKENED MAGNETICALLY WHILE SHOWING SLOW
WHITE LIGHT DECAY. REGION 2951'S RAPID GROWTH HAS SLOWED SOMEWHAT,
BUT NOW HAS THE POTENTIAL FOR MODERATE FLARE ACTIVITY WITH A BETA-
GAMMA DELTA MAGNETIC CONFIGURATION. REGION 2953 (S17E63) IS AN IN-
TERESTING REGION MAGNETICALLY WITH REVERSED POLARITY SPOTS, A DELTA,
AND CONSIDERABLE SPOT RESTRUCTURING, BUT LITTLE FLARE ACTIVITY.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD RETURN TO THE MODERATE LEVEL WITH M-
CLASS EVENTS POSSIBLE FROM REGIONS 2941, 2951 AND 2953. THE NEW RE-
GION COMING OVER THE SE LIMB WILL BECOME VISIBLE LATE TODAY AND
SHOULD MAKE UP FOR ANY DECREASE IN FLARE POTENTIAL FROM REGION 2941.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD REMAINS BASICALLY UNSETTLED DESPITE THE
PRESENTS OF SUCH FORECAST INDICATORS AS RECENT FLARE ACTIVITY AND
FAVORABLY LOCATED CORONAL HOLES. UNSETTLED TO ACTIVE CONDITIONS ARE
EXPECTED THROUGH THE NEXT 24 HOURS WITH ACTIVITY INCREASING NEAR
THE END OF THE PERIOD AND INTO THE 23RD OF FEB AS A RESULT OF A
DISAPPEARING FILAMENT AND CORONAL HOLE.

III. EVENT PROBABILITIES: 22 FEBRUARY - 24 FEBRUARY

CLASS M 70/70/70

CLASS X 10/10/05

PROTON 10/10/05

PCAR YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 20 FEB 193

ESTIMATED 21 FEB 194

PREDICTED 22-24 FEB 194/194/194

90 DAY MEAN 20 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR 19 FEB 06 AP 20 FEB 10

ESTIMATED AFR 20 FEB 08 AFR/AP 21 FEB 10/15

PREDICTED AFR/AP 22-24 FEB 12/15 15/15 10/10

SOLTERWARN

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HFUS 3 BOU 212200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 052B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200UT 21 FEBRUARY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
21/1200UT TO 21/2200UT:

SOLAR ACTIVITY HAS CONTINUED AT A LOW LEVEL. REGION 2947 (N12W58)
PRODUCED TWO EVENTS A C8/IB AT 1706UT AND A C4/IB AT 1905UT.
REGION 2951 (N12W07) ALSO HAD TWO EVENTS A SN AT 1700UT AND A
C9/IB AT 2005UT. REGION 2951 NO LONGER HAS A DELTA, HOWEVER THE
REGION STILL APPEARS CAPABLE OF PRODUCING A LARGE EVENT.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE DURING THE FORECAST
PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN SLIGHTLY UNSETTLED

III. EVENT PROBABILITIES: 22-24 FEB

CLASS M 70/70/70

CLASS X 10/10/05

PROTON 10/10/05

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 21 FEB 188

PREDICTED 22-24 FEB 194/194/194

90 DAY MEAN 21 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 FEB 09/10

ESTIMATED AFR/AP 21 FEB 10/09

PREDICTED AFR/AP 22-24 FEB 12/15 15/15 10/10

SOLTERWARN

BT