

HFUS 1 BOU 061300 GDF

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 037A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 06 FEB 1983.

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 05/1200Z TO 06/1200Z: SOLAR ACTIVITY HAS BEEN LOW, WITH THE EXCEPTION OF AN M1/1B FLARE AT 1331Z FROM REGION 4077(S17W50). THIS REGION CONTINUES WITH A COMPACT AND COMPLEX GROUP CONTAINING A MAGNETIC DELTA CONFIGURATION. A DECLINE IN SPOT AREA AND INTENSITY IS REPORTED, PERHAPS ACCOUNTING FOR THE DECLINE IN FLARE ACTIVITY. OPTICAL OBSERVATIONS HAVE BEEN LIMITED, PREVENTING THOROUGH ANALYSIS OF STRUCTURES AND EVOLUTIONS. REGION 4079(S18W04) IS THE ONLY OTHER SIGNIFICANT REGION NOW VISIBLE. ITS CLASS D SPOT GROUP IS STABLE AND OF SIMPLE STRUCTURE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW WITH AN ISOLATED CLASS M FLARE SOMETIME IN THE NEXT TWO DAYS. REGION 4077 RETAINS POTENTIAL FOR PROTON EMISSION SHOULD IT PRODUCE A LARGE EVENT. NO SIGNIFICANT REGIONS ARE EXPECTED TO RETURN TO EAST LIMB IN THIS PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC STORM CONTINUED AT MAJOR STORM LEVEL FOR MOST OF THE PERIOD. ACTIVITY IS EXPECTED TO DROP TO MINOR STORM INTENSITY IN THE NEXT SIX HOURS AND DECLINE TO ONLY SLIGHTLY ACTIVE WITHIN 24 HOURS. ACTIVITY IS NOT EXPECTED TO INCREASE AGAIN UNTIL MIDDAY ON 09 FEBRUARY WHEN A SHORT-LIVED MINOR STORM IS EXPECTED AS A CONSEQUENCE OF FILAMENT ACTIVITY AND CORONAL RESTRUCTURING THAT OCCURRED EARLY ON 04 FEB.

III. EVENT PROBABILITIES 07 FEB-09 FEB

CLASS M 70/70/50

CLASS X 10/10/05

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 05 FEB 159

ESTIMATED 06 FEB 155

PREDICTED 07 FEB-09 FEB 150/145/135

90 DAY MEAN 05 FEB 171

V. GEOMAGNETIC A INDICES

OBSERVED AFR 04 FEB 046 AP 05 FEB 127

ESTIMATED AFR 05 FEB 075 AFR/AP 06 FEB 037/030

PREDICTED AFR/AP 07 FEB-09 FEB 015/025-010/015-030/025

SOLTERWARN

BT

HFUS 3 BOU 062200 COR
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 037B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 06 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 06/1200Z TO 06/2100Z: SOLAR ACTIVITY HAS BEEN LOW, WITH OPTICAL SUB FLARES THE ONLY ACTIVITY FOR THIS PERIOD. REGIONS 4077 (S16W55) AND 4079 (S17W11) REMAIN THE DOMINANT REGIONS ON THE DISK. REGION 4077 IS SLOWLY DECAYING BUT CONTINUES TO MAINTAIN THE DELTA MAGNETIC CONFIGURATION. AN ACTIVE DARK FILAMENT HAS BEEN SEEN IN ASSOCIATION WITH THIS REGION. REGION 4079 SHOWS SOME RESTRUCTURING ON THE NORTH SIDE. AN ARCH FILAMENT HAS BEEN SEEN IN THE REGION. ALL OTHER REGIONS REMAIN STABLE. NO NEW REGIONS HAVE BEEN NUMBERED THIS PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE GENERALLY LOW WITH ISOLATED M CLASS FLARES IN THE NEXT TWO DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT MAJOR STORM LEVELS, SUBSIDING IN THE LAST TWO PERIODS. THE FIELD SHOULD STAY AT ACTIVE LEVELS FOR THE FIRST TWO DAYS OF THE FORECAST PERIOD AND THEN INCREASE TO MINOR STORM LEVELS DUE TO A DISAPPEARING FILAMENT.

III. EVENT PROBABILITIES 07 FEB-09 FEB

CLASS M 70/70/50

CLASS X 10/10/05

PROTON 10/10/05

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 06 FEB 157

PREDICTED 07 FEB-09 FEB 150/145/135

90 DAY MEAN 06 FEB 171

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 05 FEB 084/127

ESTIMATED AFR/AP 06 FEB 050/040

PREDICTED AFR/AP 07 FEB-09 FEB 020/025-015/015-030/025

SOLTERWARN

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