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FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDE NUMBER 193A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 12 JULY 1981

I. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

11/1200Z TO 12/1200Z:

SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS. REGION 3204 (S28E32) PRODUCED AN M1/IN FLARE, WHICH MAXED AT 0318UT, IN ADDITION TO NUMEROUS C-CLASS SUBFLARES. REGIONS 3203 (S08E34), 3200 (N21E13), AND 3210 (N23E24) WERE ALSO ASSOCIATED WITH C-CLASS XRAY EVENTS. REGION 3204 IS THE MOST COMPLEX REGION ON THE VISIBLE DISK WITH COMPACT SPOT STRUCTURE AND A PROBABLE DELTA CONFIGURATION IN ITS LARGE ASYMMETRIC LEADER SPOT. HOWEVER, REGION 3203 IS LARGEST REGION IN WHITE LIGHT AND IS OF BETA GAMMA MAGNETIC CLASSIFICATION. REGION 3210, WHICH IS CLOSELY FOLLOWING REGION 3200, IS STILL SHOWING RAPID GROWTH AND HAS SIGNIFICANT MAGNETIC GRADIENTS. THERE ARE NOW ELEVEN SPOTTED REGIONS ON THE VISIBLE DISK AND SURGING NEAR NORTH 15 ON THE EAST LIMB MAY SIGNAL ANOTHER ACTIVE REGION.

II. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE WITH REGIONS 3204 AND 3203 PROVIDING SIGNIFICANT FLARES. ISOLATED M-CLASS ACTIVITY IS ALSO POSSIBLE FROM REGION 3210.

III. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN MOSTLY UNSETTLED FOR THE PAST 24 HOURS EXCEPT FOR A PERIOD OF ACTIVE TO MINOR STORM LEVELS FROM 03-09UT. THE FIELD IS EXPECTED TO REMAIN UNSETTLED TO OCCASIONALLY ACTIVE FOR THE NEXT 60 HOURS. UNSETTLED TO QUIET CONDITIONS ARE THEN EXPECTED ON THE THIRD DAY.

IV. EVENT PROBABILITIES: 13 - 15 JULY

CLASS M 70/70/70

CLASS X 15/15/15

PROTON 02/05/10

PCAF GREEN

V. OTTAWA 10.7 FLUX

OBSEVED 11 JUL 161

ESTIMATED 12 JUL 170

PREDICTED 13-15 JUL 175/180/180

90 DAY MEAN 11 JUL 181

VI. GEOMAGNETIC A-FINDICES

OBSEVED AFR 10 JUL 04 AP 11 JUL 15

ESTIMATED AFR 11 JUL 16 AFR/AP 12 JUL 19/17

PREDICTED AFR/AP 13-15 JUL 15/18 15/18 10/10

SOLTERWARM

PT

HFUS 3 BOU 122200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 193 B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 12 JULY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 12/1200Z TO 12/2100Z. SOLAR WAS MODERATE DURING THIS PERIOD. REGION 3204 (S28E26) PRODUCED A M1/SB EVENT AT 1210Z, ONLY MINOR RADIO BURSTS WERE RECORDED. REGIONS 3203 (S09E28), 3206 (N12W33), 3209 (N21W46) AND 3211 (N15E60) ALSO HAVE PRODUCED SMALL EVENTS. NEW REGION TODAY 3212 (S10E83) A LARGE H-TYPE SPOT GROUP.

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 AT ACTIVE LEVELS DURING THIS PERIOD. THE FIELD IS EXPECTED TO BE AT OR NEAR ACTIVE LEVELS DURING THE FIRST PORTIONS OF THE FORECAST PERIOD THEN UNSETTLED DURING THE REST OF THE PERIOD.

III. EVENT PROBABILITIES 13 JULY - 15 JULY

CLASS M 70/70/70

CLASS X 15/15/15

PROTON 02/05/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 JULY 164

PREDICTED 13-15 JULY 170/173/175

90-DAY MEAN 12 JULY 180

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 11 JULY 17/13

ESTIMATED AFR/AP 12 JULY 15/17

PREDICTED AFR/AP 13-15 JULY 15/12 - 15/12 - 10/10

SOLTERWARN

BT