

HFUS 1800-191400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 019A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 19 JANUARY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

18/1200UT TO 19/1200UT:

SOLAR ACTIVITY HAS BEEN MIMICKING SOLAR MINIMUM FOR THE PAST FOUR DAYS. NO X-RAY ACTIVITY COULD BE DETECTED BY EVEN SENSITIVE SATELLITE DETECTORS FOR THE FIRST 18 OF THE PAST 24 HOURS. THE ONLY DISTINCT EVENT WAS CLASS C2 FROM A LARGE BUT FAINT FLARE IN REGION 2902 (S20E73). THIS IS A RETURN OF A REGION WHICH PRODUCED CLASS M EVENTS LAST MONTH. ANOTHER MINOR REGION WITH A SINGLE SUNSPOT HAS RETURNED AT EAST LIMB NEAR N10. MINOR GROWTH HAS BEEN REPORTED IN THREE OF THE SMALL REGIONS ON THE DISK.

IB. SOLAR ACTIVITY FORECAST:

AN INCREASE IN FREQUENCY OF SMALL FLARES IS EXPECTED AS ADDITIONAL REGIONS APPEAR AT EAST LIMB.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN EXTREMELY QUIET FOR THE PAST 24 HOURS. QUIET CONDITIONS ARE EXPECTED FOR ANOTHER 36 HOURS. A CORONAL TRANSIENT ON 16-17 JAN ADJACENT TO A GROWING CORONAL HOLE IS THE EXPECTED SOURCE OF UNSETTLED TO ACTIVE CONDITIONS THE REMAINDER OF THIS FORECAST PERIOD.

III. EVENT PROBABILITIES: 20-22 JANUARY

CLASS M 05/20/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 18 JAN 166

ESTIMATED 19 JAN 170

PREDICTED 20-22 JAN 173/175/175

90 DAY MEAN 19 JAN 209

V. GEOMAGNETIC INDICES

OBSERVED AFR 17 JAN 06 AFR 18 JAN 05

ESTIMATED AFR 18 JAN 04 AFR/AP 19 JAN 03/05

PREDICTED AFR/AP 20-22 JAN 07/08 15/12 12/10

SOLTERWARN

BT

HFUS 3 BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 019B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200UT 19 JAN 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

19/1200UT TO 19/2200UT:

SOLAR ACTIVITY HAS BEEN VERY LOW DURING THE PERIOD.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO CONTINUE LOW.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN ESSENTIALLY QUIET. THE FIELD IS EXPECTED TO BE GENERALLY QUIET THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 20-22 JANUARY 1981

CLASS M 05/20/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 19 JAN 171

PREDICTED 20-22 JAN 173/175/175

90 DAY MEAN 19 JAN 209

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 18 JAN 02/05

ESTIMATED AFR/AP 19 JAN 04/05

PREDICTED AFR/AP 20-22 JAN 07/08 15/12 12/10

SOLTERWARN

BT