HFUS3 BOU 162200 FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO SDF NUMBER 290 JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY. ISSUED 2200Z 16 OCT 1984 ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/2100 IA. TO 16/2100Z: ALTHOUGH SOLAR ACTIVITY HAS BEEN VERY LOW, REGION 4586 (NØ5E39) CONTINUES TO SHOW SIGNIFICANT GROWTH. THE SPOT GROUP HAS DOUBLED IN AREA AND SPOT NUMBER SINCE THIS TIME YESTERDAY. THIS REGION PRODUCED A NORMAL INTENSITY OPTICAL SUBFLARE AND ASSOCIATED B9 LEVEL X-RAY EVENT AT APPROXIMATELY 0036UT. IT ALSO PRODUCED A LESS IMPRESSIVE OPTICAL SUBFLARE AT ABOUT 0257UT. THIS SPOT GROUP IS A D-TYPE GROUP, AND IS MAGNETICALLY CLASSIFIED AS A SIMPLE BETA. IB. SOLAR ACTIVITY FORECAST: EVEN THOUGH SOLAR ACTIVITY IS EXPECTED TO REMAIN VERY LOW, ANALYSIS OF DYNAMICS IN REGION 4586 SHOWS THAT THIS REGION STILL HAS THE CAPABILITY OF POSSIBLY PRODUCING A SIGNIFICANT EVENT. IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 15/2100Z TO 16/2100Z: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE WITH ISOLATED PERIODS AT MINOR STORM LEVELS. IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE ACTIVE FOR THE NEXT THREE DAYS WITH SUBTORMING POSSIBLE IN THE NIGHTTIME SECTOR. III. EVENT PROBABILITIES 17 OCT-19 OCT CLASS M 02/02/02 CLASS X 01/01/01 PROTON 01/01/01 PCAF GREEN IV. OTTAWA 10.7 CM FLUX OBSERVED 16 OCT 077 PREDICTED 17 OCT-19 OCT 079/080/081 16 OCT 90 DAY MEAN 080 V. GEOMAGNETIC A INDICES OBSERVED AFR/AP 15 OCT 012/013 ESTIMATED AFR/AP 16 OCT 020/025 PREDICTED AFR/AP 17 OCT-19 OCT 019/025-015/020-019/025 SOLTERWARN BT