

SCAR WORKSHOP ON ENERGETICS AND DYNAMICS OF THE MIDDLE
AND THE UPPER ATMOSPHERE AT HIGH SOUTHERN LATITUDES

PROGRAM

Opening Session

Chairman: R. A. HELLIWELL (USA)

- 0.1. Energetics and dynamics of the southern high-latitude atmosphere: Theme and variations. M. J. RYCROFT (USA). (Invited).
- 0.2. The polar caps as a frontier in magnetospheric research. S.-I. AKASOFU (USA). (Invited).

First Session

Chairman: J. A. GLEDHILL (South Africa)

- 1.1. MAP scientific activities at Syowa Station in Antarctica. H. FUKUNISHI (Japan). (Invited).
- 1.2. Registration of VLF sferics and the von-Neumayer station. H. VOLLAND, G. PRÖLSS and J. SCHAFER (FRG).
- 1.3. Preliminary results of project ISSAC, Part 1: Ionosphere. R. HAGGARD, G. P. EVANS, and J. A. GLEDHILL (South Africa).
- 1.4. Preliminary results of project ISSAC, Part 2: Airglow and discussion. J. A. GLEDHILL, and R. HAGGARD (South Africa).
- 1.5. Auroral infrasonic wave observation in mid-latitudes. Y. SUZUKI and S. TSUTSUMI (Japan).
- 1.6. Correlation between polar upper atmospheric temperature and solar wind parameter. G. W. PRÖLSS (FGR).
- 1.7. Control of particle precipitation by energy transfer from solar wind. J. BREMER and H. GERNANDT (DDR).

Second Session

Chairman: H. VOLLAND (FRG)

- 2.1. Summary of USSR scientific activities in Antarctica. A. N. ZAITZEV (USSR). (Invited).
- 2.2. Some recent results of upper atmospheric research at Halley, Antarctica. M. J. RYCROFT (UK).
- 2.3. Controlled experiment on wave-particle interaction from Siple Station. R. A. HELLIWELL, T. F. BELL, D. L. CARPENTER, U. S. INAN and J. P. KATSUFRAKIS (USA).
- 2.4. Recent studies of whistler-induced precipitation effects. D. L. CARPENTER, U. S. INAN and H. S. CHANG (USA).
- 2.5. Opportunities for VLF research in the Antarctic. R. A. HELLIWELL, T. F. BELL, D. L. CARPENTER, U. S. INAN and J. P. KATSUFRAKIS (USA).
- 2.6. Periodic emissions observed at Syowa Station in Antarctica and Andoya in Norway. H. YAMAGISHI, H. FUKUNISHI, T. KOJIMA, T. YOSHINO (Japan) and J. HOLTET (Norway).
- 2.7. Survey of VLF-Omega transmissions received during summer at Antarctic Peninsula. P. KAUFMANN, L. RIZZO PIAZZA and N. M. PAES LEME (Brazil).
- 2.8. Initial results from Soviet unmanned magnetometer network in Antarctica. V. O. PAPITASHVILI and A. N. ZAITZEV (USSR).
- 2.9. On the origin of electric fields in the plasmasphere. J. P. S. RASH, H. J. HANSEN and M. W. J. SCOURFIELD (South Africa).
- 2.10. Auroral pulsations-Television image and VLF hiss correlation. M. W. J. SCOURFIELD, D. D. DUTHIE and J. P. S. RASH (South Africa).
- 2.11. Preliminary report on the 25th JARE rocket experiment at Syowa Station, Antarctica. T. NAGATA, T. HIRASAWA, M. EJIRI, T. ONO and H. MIYAOKA (Japan).

Third Session

Chairman: M. J. RYCROFT

- 3.1. Recent studies of southern cusp regions. T. J. ROSENBERG (USA). (Invited).
- 3.2. Polar cusp dynamics. R. H. EATHER (USA).
- 3.3. Dynamics of the dayside cusp aurora in relation to local, global, and interplanetary magnetic field variations. A. EGELAND and P. E. SANDHOLT (Norway).
- 3.4. Naturally occurring emissions at frequencies below 10 kHz in the polar cusp region. J. HOLTET and A. EGELAND (Norway).
- 3.5. Pc 3 magnetic pulsations simultaneously observed at South Pole and Syowa Station. L. J. LANZEROTTI (USA), H. FUKUNISHI and Y. TONEGAWA (Japan).
- 3.6. Observations of O⁺ in the southern polar cap. J. J. BERTHELIER (France) and V. GLADYSHEV (USSR).

Fourth Session

Chairman: L. J. LANZEROTTI (USA)

- 4.1. Upper atmosphere data at South Pole and Siple for the coordinated data analysis periods in December 1981 and June 1982. L. J. LANZEROTTI (USA).
- 4.2. Upper atmosphere data at Syowa Station for the coordinated data analysis periods in December 1981 and June 1982. H. FUKUNISHI (Japan).
- 4.3. Airglow and ionospheric data at Sanae, Antarctica for the coordinated data analysis periods in December 1981 and June 1982. I. S. DORE and R. HAGGARD (South Africa).
- 4.4. Comparison between southern and northern data for the coordinated data analysis periods in December 1981 and June 1982. (Free discussions).

Fifth Session

Chairman: R. A. HELLIWELL

- 5.1. Antarctic observations as an essential part of the global geospace study. M. J. RYCROFT (UK). (Invited).
- 5.2. United States future plan in upper atmosphere research. B. FOGLE (USA). (Invited).
- 5.3. Future plan of Japanese Antarctic Research for upper atmosphere physics. T. NAGATA (Japan). (Invited).
- 5.4. USSR future plan in upper atmosphere research. A. N. ZAITZEV (USSR). (Invited).
- 5.5. France future plan in upper atmosphere research. G. M. PILLET (France). (Invited).
- 5.6. FRG future plan in upper atmosphere research. H. VOLLAND (FRG). (Invited).
- 5.7. South Africa future plan in upper atmosphere research. J. A. GLEDHILL (South Africa). (Invited).
- 5.8. Chile future plan in upper atmosphere research. J. R. BANNISTER (Chile). (Invited).
- 5.9. DDR future plan in upper atmosphere research. H. Gernandt (DDR). (Invited).
- 5.10. Norway future plan in upper atmosphere research. A. EGELAND (Norway). (Invited).
- 5.11. Brazil future plan in upper atmosphere research. P. KAUFMANN (Brazil). (Invited).

Fifth Session (Continued)

Chairman: L. J. LANZEROTTI (USA)

Planning of future joint research activities:

- 1) Ground-based observations
- 2) Balloon observations
- 3) Rocket observations
- 4) Satellite observations
- 5) Coordinated data analysis