Program of the 17th Symposium on Polar Meteorology and Glaciology, held at National Institute of Polar Research, Tokyo, July 13–14, 1994

I. Atmospheric and sedimentational environments-1(Kazuo OSADA)

1. Concentration changes of dicarboxylic acids and water soluble organic carbon in the Arctic aerosols during a polar sunrise. Kimitaka KAWAMURA, Hideki KASUKABE and L. A. BARRIE.
2. Concentration changes of MSA and major ions in the Arctic aerosols during polar sunrise. Keisuke SUZUKI, Kimitaka KAWAMURA, Hideki KASUKABE, Ayako YANASE and L. A. BARRIE.
3. Distribution of chemical elements between atmosphere and snow in East Queen Maud Land, Antarctica. Satoru KANAMORI, Nobuko KANAMORI, Okitsugu WATANABE and Hideaki MOTOYAMA.
4. Climatic impact on volcanic events and acidification revealed in ice cores from Site-J, Greenland. Yoshiyuki FUJII, Kokichi KAMIYAMA, Takao KAMEDA and Okitsugu WATANABE.

II. Ocean and water circulation (Hiroshi KANZAWA)

5. The subarctic ocean circulation as driven by the cooling of the sea surface temperature. Kunio RIKIISHI and Takahiko NAKASHIMA.
6. Modeling of oceanic carbon cycles. Yasuhiro YAMANAKA and Eiichi TAJIKA
7. Variation of pCO_2 in the Greenland Sea. Shuhji AOKI, Hajime ITO, Shuki USHIO, Shinji MORIMOTO and Nobuo ONO.
8. Turbulent flux measurements under first-year ice in the northeast water polnya area in Greenland Sea. Kunio SHIRASAWA, Masaaki AOTA and Tohru TAKATSUKA.

(Yasuhiro YAMANAKA)

9. Modelling the Quaternary climate change and ice sheet. Ayako ABE-OUCHI.
10. A comparison of water vapor circulation between the Arctic and Antarctic regions. Koji YAMAZAKI.
11. Energy budget of the atmosphere in sea ice zone. Itaru OKADA and Takashi YAMANOUCHI.

III. Poster presentation-I

12. Development of coupled ice-ocean general circulation model. Hiroyasu HASUMI and Yasuhiro YAMANAKA.
13. On the Measurement of Okhotsk Sea Ice by a patrol ship "SOYA". Shotaro UTO, Kenkichi TAMURA and Haruhito SHIMODA.
14. Iceberg size distribution—Related to ice sheet mass balance—. Fumihiko NISHIO.
15. Significances of variations of concentration and d13C of atmospheric CO_2 in the last glacial to interglacial. Kikuo KATO.
16. Network Satellite Image Archive Using HTTP (Hyper-text Transfer Protocol) System. Tokio KIKUCHI.
17. Evaluation of sea ice concentration calculation algorithm for SSM/I. Kohei CHO, Toshibumi SAKATA, Haruhisa SHIMODA and Nobuo SASAKI.
18. Wind power systems for automatic weather station. Shuhei TAKAHASHI, Hiroyuki ENOMOTO, Takao KAMEDA, Kinji HYAKUTAKE, Akihiro MAKINO and Okitsugu WATANABE.
19. Meteorological observations by unmamed station along the Dome F route. Hiroyuki ENOMOTO, Hideo WARASHINA and Hideaki MOTOYAMA.
20. Spectral albedo and transmittance of snow containing inpurities. Teruo AOKI, Tadao AOKI, Masashi FUKABORI and Hajime IIDA.
21. Characteristics of evaporation in Spitsbergen in a snowmelt season. Yukari TAKEUCHI, Yuji KODAMA and Hironori NAKABAYASHI.
22. On the discharge, temperature and specific electric conductivity of Bayelva river in Spitsbergen. Yuji KODAMA, Yukari TAKEUCHI, Hironori NAKABAYASI and Okitsugu WATANABE.
23. Snowfall observations at Ny-Ålesund in February–March, 1994. Makoto WADA and Michael KRIEWS.
24. Radiation budget at Ny-Ålesund, svalbard. Takashi YAMANOUCHI.

25. Removal process of solutes from solution and ice in freezing aqueou solution. Norimichi TAKENAKA, Tohru DAIMON, Hiroshi BANDOW and Yasuaki MAEDA.
26. Planned observations of circulation of ozone and its related minor constituents the polar stratosphere: With emphasis on ADEOS/ILAS observation. Hiroshi KANZAWA, Yutaka KONDO and Yasuhiro SASANO.
27. A plan for sampling stratospheric and upper tropospheric air using a big balloon. Shuhji AOKI, Takashi YAMANOUCHI, Hideyuki HONDA, Nobuyuki YAJIMA and Takakiyo NAKAZAWA.
28. Artifical satellite observations in the future at Syowa Station, Antarctica. Hideo WARASHINA and Hiroyuki ENOMOTO.
29. Stratospheric whole air sampling over Antarctica, problems and countermeasures. Hideyuki HONDA, Nobuyuki YAJIMA, Takashi YAMANOUCHI, Shuhji AOKI, Shinji MORIMOTO and Takakiyo NAKAZAWA.
30. Chemical composition of snow sampled by "Antarctic Walk Expedition", West Antarctica. Kazuo OSADA, Katsuji MATSUNAGA, Kenji YOSHIKAWA and Yasunobu IWASAKA.
31. A 60 year chemistry record of an ice core from Snofjellafonna, Spitsbergen. Kumiko GOTO-Azuma, Shiro KOHSHIMA, Takao KAMEDA, Shuhei TAKAHASHI, Okitsugu WATANABE and Jon Ove HAGEN.

IV. Atmosphere (Kunimoto IWAI)

32. Planetary-and synoptic-scale variations of ozone and their relationship to dynamical field. Masato SHIOTANI, Chikanobu IKEDA and Isamu HIROTA.
33. Air borne experiment for gas and aerosol contents over Syowa Station, in 1991. Masahiko HAYASHI, Shigeru TANAKA and Yasunobu IWASAKA
34. Observation of trace gases at Syowa Station (rapid report). Ippei NAGAO, Seiji KOGA, Hiroshi TANAKA and Shuhji AOKI.
35. Ground based measurements of stratospheric NO_2 and O_3 over Syowa Station, Antarctica. Makoto KOIKE, Yutaka KONDO, Hideaki NAKAJIMA, Kenta TSUKUI, Shuhji AOKI, Takashi YAMANOUCHI and Ippei NAGAO.

(Ippei NAGAO)

36. Spectroscopic measurement of HCl and HF at Eureka Station, Arctic. Yukio MAKINO, Hans FAST, Koji KONDO, Yoshinobu NIKAIDO and Shigeru CHUBACHI.
37. Lidar measurements in Arctic I, long term trend in aerosols. Yasunobu IWASAKA, Takashi SHIBATA, Motoo FUJIWARA, Hiroshi ADACHI, Tetsuro OJIO and Tetsu SAKAI.
38. Variations of carbon isotope ratio of atmospheric CO_2 in the western Pacific region. Shinji MORIMOTO, Takakiyo NAKAZAWA, Shuhji AOKI and Masayuki TANAKA.

V. Atmospheric and sedimentational environments-2 (Kumiko GOTO-AZUMA)

39. Behavior of chemical substances in the surface snow in Dome F area. Kazuki NAKAMURA, Yutaka AGETA, Masayoshi NAKAWO and Kumiko GOTO-AZUMA.
40. Reconstruction of the atmospheric CO_2, CH_4 and N_2O concentration during the last 250 years deduced from H15 ice core. Toshinobu MACHIDA, Takakiyo NAKAZAWA, Masayuki TANAKA, Yoshiyuki FUJII, Shuhji AOKI and Okitsugu WATANABE.
41. Correlation between variation of chemical component and climatic change in Site-J, Greenland. Makoto IGARASHI, Yoshiyuki FUJII, Kokichi KAMIYAMA, Okitsugu WATANABE and Keisuke SUZUKI.

Invited Lecture (Okitsugu WATANABE)

42. Russian Research Activities in Polar Regions. Igor ZOTIKOV

VI. Remote sensing (Shuji FUJITA)

43. Studies on ice sheet by SAR images. Fumihiko NISHIO, Okitsugu WATANABE, Teruo FURUKAWA, Akira TAKAHASHI and Kohei CHO.
44. Ice echo sounding on the agassiz ice cap with high resolution. Takeshi SUITZ and Hideo MAENO.

45. Wide range analysis of sea ice image. Ken-ichiro MURAMOTO, Makoto TAKIGAWA, Kohki MATSUURA, Tatsuo ENDOH and Nobuo ONO.
46. Snow microwave remote sensing of Antarctica: comparison between measurements and modeling. Sylviane SURDYK

VII. Snow and Ice (Renji NARUSE)

47. Observation of snow accumulation rate and surface velocity along S16～Dome F travace routes, Antarctica. Hideaki MOTOYAMA, Hiroyuki ENOMOTO, Morihiro MIYAHARA, Kokichi KAMIYAMA and Teruo FURUKAWA.
48. Bottom melting of polar ice sheet and polar ice caps. Igor ZOTIKOV
49. Trans formation of the deposited snow to clear ice and application to Antarctic snow layer. Katutosi TUSIMA, Masatake KUBO and Naoya KOBAYASHI.
50. Analysis of impurity content in ice-core by measurement of high-freguency electric conductivity. Ken SUGIYAMA, Shuji FUJITA, Shigeru SUEOKA, Takeo HONDOH and Shinji MAE.

(Katutosi TUSIMA)

51. Flow line modeling of the ice sheet in east dronning maud land and enderby land. Frank PATTYN, and Hugo DECLEIR.
52. Experiments on the formation of isolated air bubbles in snow densification. Norikazu MAENO, Seigo ISHII and Hideki NARITA.
53. Refractive index measurements of air-hydrate crystals in Vostok ice cores. Tsutomu UCHIDA, Wataru SHIMADA, Takeo HONDOH, Shinji MAE, Paul DUVAL and Volodya Ya. LIPENKOV.

Poster Presentation-II

54. An estimation of warming rate (°C/day) by warm air advection over Syowa. Toshinori TAKAO and Yoshihiro KAMATA.
55. Interannual variability of planetary waves in the Southern Hemisphere during autumn. Hiromatsu AOKI, Masato SHIOTANI and Isamu HIROTA.
56. Long-term trends of atmospheric concentrations of trace halocarbons in the Southern Hemisphere. Yoshihiro MAKIDE and Takeshi TOMINAGA.
57. On the estimation of precipitation rate at each altitude by a new analytical method for the meteorological radar echo (4). Masahiko HATANAKA, Hiroshi TAKEYA, Akira NISHITSUJI, Makoto WADA.
58. Characterization of Antarctic aerosol particles using laser microprobe mass spectrometry (LAMMS). Tadashi KIKUCHI, Keiichirou HARA, Masahiko HAYASHI and Yoshiyuki FUJII.
59. Snow particle size distribution function at Syowa Station evaluated from VTR image (2). Yutaka YOSHIDA, Masahiko HATANAKA, Naoko TAKAHASHI, Hiroshi TAKEYA and Makoto WADA.
60. Chemical composition in the aerosols collected on board the RIV SHIRASE. Hideaki MOURI, Ippei NAGAO, Hiroshi TANAKA, Seizi KOGA and Kikuo OKADA.
61. Regional ozone soundings in Antarctica 1993. Okimasa SUGITA, Toshinori TAKAO and Jinji KOIKE.
62. The variation of total ozone in the polar night period at Syowa Station, Antarctica. Shigeru CHUBACHI.
63. Examples of fog particles observed at Syowa Station, Antarctica. Kunimoto IWAI.
64. Year-to-year variations of the horizontal structures of ozone amount in the Northern Hemisphere. Masahiro WAKASHIMA and Kohji KAWAHIRA.
65. Evaluation of the rodiative effect of valcanic aerosol on the polar stratosphere. Kiyotaka SHIBATA.
66. Lidar measurements in Arctic II, PSCs observed at Ny-Ålesund. Takashi SHIBATA, Yasunobu IWASAKA, Masahiko HAYASHI, Tetsu SAKAI, Hiroshi ADACHI, Tetsuro OJIO, Motoo FUJIWARA and Kouichi SHIROISHI.
67. Lidar measurements in Arctic III, Aerosols and polar vortex. Hiroshi ADACHI, Takashi SHIBATA, Yasunobu IWASAKA, Masahiko HAYASHI, Tetsuro OJIO, Tetsu SAKAI, Motoo FUJIWARA, Hideharu NAKANE and Kouji KONDO.
68. Lidar measurements in Arctic IV, Comparison; Spizbergen and Alaska. Motoo FUJIWARA, Takashi SHIBATA, Yasunobu IWASAKA, Masahiko HAYASHI, Tetsuro OJIO, Kouji KONDO and Hideharu NAKANE.

69. Stratospheric HCl, HF and N_2O in Antarctica observed with solar infrared absorptionmethod. Isao MURATA, Kazuyuki KITA, Naomoto IWAGAMI and Toshihiro OGAWA.
70. Effective emissivity of clouds from radiometersonde measurements at Syowa Station, Antarctica. Akira YAMAMOTO
71. Ozone topics in the Russia Federation. Hiromichi MAKITA.
72. On the relationship between distribution of OLR in the Antarctic region and the variation of the polar jet. Naohiko HIRASAWA and Takashi YAMANOUCHI.
73. The UV-B observation with Brewer spectrophotometer at Syowa Station. Keizou SAKURAI and Okimasa SUGITA.
74. Analysis of weather and cloud by surface synoptic data at Syowa. Toshinori TAKAO and Jinji KOIKE.

Poster Presentation-III

75. A comparison of measured data of inclination of wall panels and leveling on the roof of Generator Hot at Asuka Camp. Hiroki OTSUKA, Toshio HANNUKI, Masashi SANO and Masaru AYUKAWA.
76. Laboratory tests on sublimation of an ice dome structure and it's reinforcenent and repaires. Shinya KIMIZUKA, Toshio HANNUKI, Kenji ISHIZAWA and Hiroki OTSUKA.
77. Dating of G15 core, East Antarctica. Hideki NARITA, Yoshiyuki FUJII, Kaoru IZUMI and Hitosi SHOJI.
78. Mechanical tests of the GRIP Greenland summit ice core II. Atsushi MIYAMOTO, Kunio KAWADA, Hitoshi SHOJI and Henric B. CLAUSEN.
79. Chemical analysis of ice core in Asgardfonna, Spitsbergen. Makoto IGARASHI, Yoshiyuki FUJII, Kokichi KAMIYAMA and Okitsugu WATANABE.
80. Ice core analysis by natural radioactive nuclide, Pb-210. Toshitaka SUZUKI, Kokichi KAMIYAMA, Yoshiyuki FUJII and Okitsugu WATANABE.
81. Vertical distributions of fattly acids in a Greenland ice core. Kimitaka KAWAMURA, Ikuko SUZUKI, Yoshiyuki FUJII and Okitsugu WATANABE.
82. Transition metal concentrations in an ice core sample from Mizuho Station Antarctica. Tadashi SHIMAMURA, Masato IWASHITA, Yu-ichi TAKAKU, Isoko AKABANE, Shin-ichi YAMAZAKI and Akito TSUMURA.
83. Cosmic and volcanic materials in Mizuho ice core. Takaaki FUKUOKA, Yoshinori MIYANO, Kunihiko ENDO, Mika KOHNO, Yuji TAZAWA and Yoshiyuki FUJII.
84. Sulfur and chlorine content in ice core—Estimation of sulfur and chlorine yields by volcanic eruptions. Mika KOHNO, Takaaki FUKUOKA, Yoshinori MIYANO, Yoshiyuki FUJII and Minoru KUSAKABE.
85. Measurement on the complex permictivity of low-loss dielectric particles—Preliminary experiment considering snow. Shuji FUJITA, Takeshi MATSUOKA, Shigenori MORISHIMA and Shinji MAE.
86. Depositional regime of the Antarctic ice sheet from the distribution of snow surface features. Teruo FURUKAWA, Kokichi KAMIYAMA, Hideo MAENO and Hideaki MOTOYAMA.
87. Transformation processes from snow to ice in polar ice sheet. Takao KAMEDA, Rennji NARUSE and Hitoshi SHOJI.
88. 110 m core drilling and casing operation at Dome Fuji, Antarctica (JARE-34). Hideaki MOTOYAMA, Morihiro MIYAHARA and Hiroyuki ENOMOTO.
89. Polarization charactices of radar echo from interal layer of ice sheet. Hideo MAENO, Shuji FUJITA.
90. Dielectric loss of ice Ih at microwave freguencies with cavity resonator method. Takeshi MATSUOKA, Shuji FUJITA, Shigenori MORISHIMA and Shinji MAE.
91. Studies on the concentrations of carbon dioxide in environmental air in Japanese several location area and the chemical species analyses of anions and cations in the snow samples obtained from the Japan alps. Yasuyuki FUTATSUGI, Bunbunoshin TIMIYASU, Yoshimasa NIHEI, Okitsugu WATANABE, Kokichi KAMIYAMA, Hiroyasu MAEJIMA, Kazuma MAENO and Naoki HAGIWARA.
92. Chemical information on snow samples obtained by simple method for measurement. Kokichi KAMIYAMA
93. Temporal variations of chemical constituents in air and snow obtained at Alaska. Katsuji MATSUNAGA, Kazuo OSADA, Yasunobu IWASAKA, Yasuhiro MURAI, Ikuko MORI, Satoru KANAMORI and Nobuko KANAMORI.