

## POSTER SESSIONS

### FLOATING ICE

- M. O. Jeffries, A. Danielson, K. Morris and R. Krouse: Depositional environment of the snowcover on West Antarctic pack ice floes
- C. S. Roesler, S. G. Warren, V. I. Morgan, R. E. Brandt, I. D. Goodwin and I. Allison: Green icebergs formed by freezing of organic-rich seawater to the base of Antarctic ice shelves
- S. Harangozo: Interannual temperature-sea ice-circulation relationships on the west coast of the Antarctic Peninsula
- U. Nixdorf and H. Miller: Seismological and geodetic investigations in a tension fault area of the Ekström Ice Shelf, Antarctica
- I. M. Belkin and S. S. Jacobs: South Pacific iceberg distributions
- D. L. Morse and E. D. Waddington: Recent survey of McMurdo Ice Shelf brine infiltration zone
- A. J. Gow and J. W. Govoni: An 80-year record of retreat of the Koettlitz Ice Tongue, McMurdo Sound, Antarctica
- R. A. Bindshadler, M. A. Fahnestock, T. A. Scambos and P. Skvarca: Surface velocity field of northern Larsen Ice Shelf, Antarctica
- N. Blindow: The central part of the Filchner–Ronne Ice Shelf, Antarctica: internal structures revealed by 40 MHz monopulse RES
- M. Jonas, K. Grosfeld and F. Thyssen: Numerical flow simulation at local parts of Filchner–Ronne Ice Shelf, Antarctica
- M. Frezzotti and M. C. G. Mabin: Twentieth century behaviour of the Drygalski Ice Tongue, Ross Sea, Antarctica
- A. Jenkins, K. W. Nicholls, J. C. Moore and E. W. Wolff: A possible mechanism for the desalination of marine ice beneath ice shelves
- S. Uratsuka, F. Nishio, S. Fujita and S. Mae: Changing ice properties near ice shelf derived from radio echo sounding data
- S. P. O'Farrell: Performance of a dynamic sea ice model in a coupled ocean-atmosphere climate model.

### GLACIAL GEOLOGY

- M. L. Prentice, H. W. Borns, Jr., J. Kleman, J. Orifice, and A. P. Stroeven: Evidence from Shapeless Mountain, the Olympus Range and the Balham-McKelvey-Bull corridor concerning Sirius, Peleus and alpine glacial episodes
- A. P. Stroeven, M. L. Prentice and H. W. Borns, Jr: Mt. Fleming Sirius till: implications for the Neogene glacial history of Antarctica
- S. Anandakrishnan, R. B. Alley, S. T. Rooney, D. D. Blankenship and C. R. Bentley: Recent rifting beneath the West Antarctic ice sheet
- V. M. Haynes: Alpine valley heads in the Antarctic Peninsula and their significance for paleoglaciological and paleoclimatic investigations
- F. van der Wateren, A. L. L. M. Verbers, H. C. Höfle, C. H. Smith and B. P. Luyendik: Glaciation and deglaciation of the uplifted margins of the Cenozoic West Antarctic rift system, Ross Sea, Antarctica
- A. L. L. M. Verbers and V. Damm: Model for the Late Cenozoic glacial history of the area between the David and Mawson Glaciers, Victoria Land, Antarctica
- G. W. Paltridge: Polar ice caps and continental drift

### ICE CORES

- K. Goto-Azuma and N. Azuma: Chemical characteristics of snow and ice around Asuka Station, East Queen Maud Land, Antarctica
- E. Isaksson: First glaciological and ice chemistry results from a future deep drilling site in Dronning Maud Land, Antarctica
- V. Ya. Lipenkov, T. Uchida, N. Barkov, P. Duval and T. Hondoh: Air bubbles and air-hydrate crystals in the Vostok ice cores
- N. Azuma, K. Matuda, H. Hara, H. Yamaguti, K. Goto-Azuma and M. Nakawo: Photometric analysis of a 100 m ice core from Asuka Camp, East Antarctica
- E. W. Wolff and E. D. Suttie: A profile of heavy metal concentrations in Antarctic firn through the last 70 years
- H. Shoji, K. Osada and C. C. Langway, Jr: Physical property studies of the Byrd surface camp, Antarctic ice core
- E. D. Waddington and D. L. Morse: Spatial variations of local climate at Taylor Dome: Implications for paleoclimate from ice cores

- D.L. Morse and E.D. Waddington: Radio-echo sounding survey of Taylor Dome
- K. Osada: Seasonal variations of major ionic concentration levels in snow drift obtained from east Queen Maud Land, East Antarctica
- A.J. Gow: Post-drilling recrystallization of the Byrd Station deep ice cores and its relevance to current and future deep core drilling on polar ice sheets
- K. Satow and O. Watanabe: Distribution of  $^{18}\text{O}$  of surface snow layers and some vertical profiles of  $^{18}\text{O}$  in firn cores in Enderby Land east Queen Maud Land, Antarctica
- D. Wagenbach, W. Graf, A. Minikin, U. Trefzer, J. Kipfstuhl and H. Oerter: Reconnaissance of chemical and isotopic firn properties on top of Berkner Island, Antarctica
- Y. Fujii, O. Watanabe, K. Kamiyana, H. Motoyama, H. Shoji, K. Satoh, K. Osada, F. Nishio, M. Nakawo and K. Azuma: Ionic deposits in ice cores and snow pits from coast to summit dome of east Queen Maud Land, Antarctica
- E.C. Pasteur and R. Mulvaney: MSA measurements in snow samples and ice cores from the Weddell Sea area
- R. Mulvaney and E.W. Wolff: Spatial distributions of major ions in recent Antarctic snow
- P. Ciais, J. Jouzel, J.-R. Petit, V. Ya. Lipenkov and J.W.C. White: Holocene temperature variations inferred from Antarctic ice cores
- G. Piccardi, E. Barbolani, R. Udisti and V. Maggi:  $\text{H}_2\text{O}_2$  concentration and density profiles in two shallow firn core (Terra Nova Bay, northern Victoria Land, Antarctica)
- V. Maggi, B. Stenni, F. Serra, A. Longinelli and M. Frezzotti: Snow accumulation in northern Victoria Land: preliminary data from shallow cores
- G. Piccardi, E. Barbolani and R. Udisti: Vertical distribution of principal and trace components in firn at Terra Nova Bay (Antarctica)
- J.M. Barnola, P. Martinerie, J. Schwander, V. Lipenkov, D. Etheridge and D. Raynaud: The firn-ice transition: comparison of closed porosity and total gas content from 3 different ice cores
- H. Craig and N. Thonnard: Recent studies of Antarctic ice
- C. Barbante, G. Capodaglio and G. Scarponi: Lead content in recent snow of Victoria Land (East Antarctica)

#### ICE PROPERTIES

- T. Kameda, H. Shoji, K. Kawada, O. Watanabe and H.B. Clausen: An empirical relation between overburden pressure and firn density
- T. Kameda and R. Naruse: Volumes and configurations of air bubbles in the firn/ice transition layer
- T. Uchida, T. Hondoh, S. Mae, P. Duval, and V. Ya. Lipenkov: Effects of temperature and pressure on the transformation rate from air bubbles to air-hydrate crystals in ice sheets
- S. Shabtaie and C.R. Bentley: Electrical resistivity measurements on Ice Stream B
- C. Liu, C.R. Bentley and N.E. Lord:  $\epsilon$  axes from radar depolarization experiments at UpB in 1991–92, Antarctica
- C.J. van der Veen and I.M. Whillans: Development of fabric in ice

#### ICE STREAMS, DYNAMICS AND MODELLING

- R. Lestringant: A 3-D finite element study of the entrance of a glacier into an ice-shelf
- R. Lestringant: The no-slip / free-slip steady transition problem: a finite element study
- A.N. Novick, C.R. Bentley and N. Lord: Ice thickness, bed topography and basal reflectance coefficients from radar sounding, Upstream B, West Antarctica
- T.S. Clarke and C.R. Bentley: The paleo-stress field of Ice Stream B from buried crevasses using high-resolution ground radar
- R. Dietrich, D. Fritzsche and W.D. Hermichen: A sketch on ice sheet dynamics near the Schirmacher Oasis, Dronning Maud Land, based on a multidisciplinary data fund
- C.L. Hulbe and I.M. Whillans: Strain rate evaluation on Ice Stream B, Antarctica, using differential GPS positioning
- R. Dietrich, W. Korth, W. Adler and G. Noack: Geodetic glaciological investigations near the Schirmacher Oasis, Dronning Maud Land
- J. Calvet, J.M. Casas, R. Pallas, F. Sabat, P. Santanach and J.M. Vilaplana: Fold formation in ice-cap lobes: example of the Hurd Glacier, Livingstone Island (Antarctica)
- T.A. Scambos, K.A. Echelmeyer, M.A. Fahnestock and R.A. Bindschadler: The development of enhanced flow at the margins of ice streams
- R.A. Bindschadler, M.A. Fahnestock, T.A. Scambos and D.D. Blankenship: The identification of “sticky spots” on Ice Streams D and E, West Antarctica
- M.J. Hambrey and J.A. Dowdeswell: Stable flow of the Lambert Glacier–Amery Ice Shelf system, Antarctica: structural evidence from Landsat imagery
- H. Declair and F. Pattyn: Modelling the glacier behaviour in an ablation island of the East Antarctic ice sheet
- R.E. Bell and D.D. Blankenship: Focusing on geothermal flux by sedimentary basins beneath the ice streams of the interior Ross Embayment

**MASS BALANCE**

- G. Delisle: Blue ice fields and global change in East Antarctica
- U. C. Herzfeld, C. S. Lingle and L. Lec: Recent changes in the position of the grounding line of Lambert Glacier, East Antarctica, from kriging of satellite radar altimeter data
- P. Holmlund and E. Isaksson: Establishing spatial distribution of snow accumulation using snow radar
- B. R. Weertman, and C. F. Raymond: Detection of spatial variations of accumulation rate using radio echo sounding
- C. F. Raymond, B. R. Weertman, R. Mulvaney, D. A. Peel and L. Thompson: Geometry, motion and mass balance on Dyer Plateau, Antarctic Peninsula
- J. Calvet, J. Corbera and G. Furdada: Ice cap fluctuations on Livingstone Island from 1956 to 1991, from aerial photographs and satellite images
- J. Calvet, J. Corbera and F. Granada: Relationship between the texture parameters and the different fluctuations of the ice shoreline in the glacier basin of Moon Bay Livingstone Island from 1956 to 1991, from satellite images
- R. Bintanja, W. Knap, M. Cadee and J. Oerlemans: Sensitivity of the ice cap of King George Island to climate change: measurements and modelling
- R. Bintanja and M. van de Broeke: Local climate, circulation and surface energy balance of an Antarctic blue ice area
- G. Orombelli, C. Baroni, M. Frezzotti, R. Lozj, M. Meneghel, G. Smiraglia, I. Tabacco and L. Vittuari: Dynamics of small local glaciers at Terra Nova Bay (Victoria Land, Antarctic)
- I. D. Goodwin, M. Higham and I. Allison: Accumulation variability in eastern Kemp Land, Antarctica
- I. Allison and I. Goodwin: The grounding zone of the Amery Ice Shelf
- C. L. Hulbe and I. M. Whillans: A method for determining ice thickness change at remote locations using GPS
- M. C. Smith, S. D. Mobbs, T. J. Pedley, S. E. Dover and J. C. King: Wind transport of snow over Antarctica
- A. Bateman, I. Moore, J. C. King, S. D. Mobbs, P. S. Anderson and E. M. Morris: Blowing snow around an Antarctic building: observations and model validation
- D. A. Peel, R. Mulvaney, C. F. Raymond and L. G. Thompson: Trends in snow accumulation rate in the past century in the Antarctic Peninsula region
- D. W. S. Limbert: The reconstruction of snow accumulation rates using synoptic surface meteorological reports
- T. J. Chinn: Glacier disequilibrium in the Convoy Range
- J. C. Simões and N. Dani: Mass balance and glaciochemistry of the King George Island (South Shetlands) ice cover

**REMOTE SENSING**

- J.-G. Winther: Spectral bidirectional reflectance of snow and glacier ice as measured in Dronning Maud Land, Antarctica
- P. Skvarca: Change and surface features of the Larsen Ice Shelf derived from the Landsat and Kosmos mosaics
- I. Sherjal and M. Fily: Temporal variations of microwave brightness temperatures over Antarctica
- D. Yi and C. R. Bentley: Analysis of satellite radar altimeter return waveforms over the East Antarctic ice sheet
- M. Higham, M. Reynolds, A. Brocklesby and I. Allison: Digital recording for the ANARE 100 MHz ice radar: system description and results
- D. Fritzsche: Subglacial topography and ice thickness in the surroundings of the Schirmacher Oasis, Dronning Maud Land
- O. Watanabe, Y. Fujii, K. Kamiyama, F. Nishio, K. Sato, Y. Ageta, A. Furukawa, M. Nakawo and S. Takahashi: Folio series as the glaciological and climatological studies of Japanese Antarctic glaciological research in east Queen Maud Land
- T. A. Scambos: Improving AVHRR spatial resolution through data cumulation for mapping ice features in the high-latitude Antarctic
- J. Sievers, C. S. M. Doake, J. Ihde, D. R. Mantripp, V. S. Posdecv, B. Ritter, H. W. Schenke, F. Thyssen and D. G. Vaughan: Validating and improving elevation data of Filchner–Ronne–Schelfeis, Antarctica, with results from ERS-1
- A. P. R. Cooper and C. S. M. Doake: Shape-from-shading studies of remotely sensed images: the surface morphology of Rutford Ice Stream, Antarctica
- J. L. Bamber: A digital elevation model of the Antarctic ice sheet derived from ERS-1 altimeter data and comparison with terrestrial measurements
- D. R. Mantripp, J. L. Bamber and J. K. Ridley: A study of radar altimeter return signal variability over Filchner–Ronne Ice Shelf, Antarctica
- J. L. Bamber and C. R. Bentley: A comparison of satellite altimetry and ice thickness measurements of the Ross Ice Shelf, Antarctica
- J. G. Ferrigno, J. L. Mullins, J. A. Stapleton, R. A. Bindschadler, T. A. Scambos, L. B. Bellissime, J. A. Powell and A. V. Acosta: Landsat TM image maps of the Shirase and Siple Coast ice streams, West Antarctica
- K. Heidland and H. W. Schenke: A height reference base of Filchner–Ronne Ice Shelf by ERS-1 radar altimetry