

British Antarctic Survey publications 2001

Publications are listed by programme

Q3 programmes

Signals in Antarctica of Past Global Changes

Refereed research papers 2001 listed in ISI database

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BRAÜNLICH M.##, ABALLAIN O.##, MARIK T.##, JÖCKEL P.##, BRENNINKMEIJER C.A.M.##, CHAPPELLAZ J.##, BARNOLA J.-M.##, **MULVANEY R.** & STURGES W.T.++ 2001. Changes in the global atmospheric methane budget over the last decades inferred from ¹³C and D isotopic analysis of Antarctic firn air. *Journal of Geophysical Research*, **106**, No. D17, 20,465-20,481.

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HODGSON D.A., **NOON P.E.**, VYVEMAN W.##, BRYANT C.L.***, GORE D.B.##, APPLEBY P.++, GILMOUR M.++, VERLEYEN E.##, SABBE K.##, JONES V.J.++, **ELLIS-EVANS J.C.** & WOOD P.B.++ 2001. Were parts of the Larsemann Hills ice-free through the Last Glacial Maximum? *Antarctic Science*, **13**, No. 4, 440-454.

ISAKSSON E.##, POHJOLA V.##, JAUHIANEN T.## and 12 others including **R. MULVANEY**. 2001. A new ice-core record from Lomonosovfonna, Svalbard: viewing the 1920-97 data in relation to present climate and environmental conditions. *Journal of Glaciology*, **47**, No. 157, 335-345.

JONES A.E., WELLER R.##, **ANDERSON P.S.**, JACOBI H.-W.##, **WOLFF E.W.**, SCHREMS O.## & MILLER H.## 2001. Measurements of NO_x emissions from the Antarctic snowpack. *Geophysical Research Letters*, **28**, No. 8, 1499-1502.
N.B. This paper jointly authored with Antarctic Climate Processes and also appears in their section of this list.

Ó COFAIGH C.++, DOWDESWELL J.A.++ & **PUDSEY C.J.** 2001. Late Quaternary iceberg rafting along the Antarctic Peninsula continental rise and in the Weddell and Scotia Seas. *Quaternary Research*, **56**, No. 3, 308-321.

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snow samples by inductively coupled plasma sector field mass spectrometry. *Analytica Chimica Acta*, **450**, No. 1-2, 193-205.

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STURGES W.T.++, McINTYRE H.P.++, PENKETT S.A.++, CHAPPELLAZ J.##, BARNOLA J.-M.##, **MULVANEY R.**, ATLAS E.## & STROUD V.## 2001. Methyl bromide, other brominated methanes, and methyl iodide in polar firn air. *Journal of Geophysical Research*, **106**, No. D2, 1595-1606.

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Global Interactions of the Antarctic Ice Sheet

Refereed research papers 2001 listed in ISI database

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PALLÀS R.##, SMELLIE J.L., CASAS J.M.## & CALVET J.## 2001. Using tephrochronology to date temperate ice: correlation between ice tephras on Livingston Island and eruptive units on Deception Island volcano (South Shetland Islands, Antarctica). *Holocene*, **11**, No. 2, 149-160.

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RAYMOND C.F., ECHELMAYER K.A., WHILLANS I.M. & DOAKE C.S.M. 2001. Ice stream shear margins. (In Alley, R.B. & Bindschadler, R.A., eds. The West Antarctic ice sheet: behavior and environment. *Antarctic research series*, vol. 77. Washington, D.C., American Geophysical Union, 137-155.)

VAUGHAN D.G., SMITH A.M., CORR H.F.J., JENKINS A. and 6 others. 2001. A review of Pine Island Glacier, West Antarctica: hypotheses of instability vs. observations of change. (In Alley, R.B. & Bindschadler, R.A., eds. The West Antarctic ice sheet: behavior and environment. *Antarctic research series*, vol. 77. Washington, D.C., American Geophysical Union, 237-256.)

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VAUGHAN D.G. 2001. A day in the life of a glaciologist. (In Burne, D. *Blue Peter Earth watch*. London, Dorling Kindersley, 16-17.)

Unrefereed papers

MORRIS E.M. 2001. Review of *Physics of ice* by V.F. Petrenko and R.W. Whitworth. Oxford University Press, 1999. *Antarctic Science*, **13**, No. 3, 350-351.

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ACKLEY S.F.##, GEIGER C.A.##, **KING J.C.**, HUNKE E.C.## & COMISO J.## 2001. The Ronne polynya of 1997/98: observations of air-ice-ocean interaction. *Annals of Glaciology*, **33**, 425-429.

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LACHLAN-COPE T.A., **CONNOLLEY W.M.** & **TURNER J.** 2001. The role of the non-axisymmetric Antarctic orography in forcing the observed pattern of variability of the Antarctic climate. *Geophysical Research Letters*, **28**, No. 21, 4111-4114.

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MIAO J.##, KUNZI K.##, HEYGSTER G.##, **LACHLAN-COPE T.A.** & **TURNER J.** 2001. Atmospheric water vapor over Antarctica derived from Special Sensor Microwave/Temperature 2 data. *Journal of Geophysical Research*, **106**, No. D10, 10,187-10,203.

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Unrefereed papers

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LACHLAN-COPE T., TURNER J. & CONNOLLEY W. 2001. The effect of axi-symmetric forcing on the variability of the Antarctic climate. (*In: Preprint volume, 12th Symposium on Global Change and Climate Variations, Albuquerque, New Mexico, 14-18 January 2001*, 74-75.)

LEMKE P., MARTIN T., KERN S., HEYGSTER G., JOHNSEN K.-P., TOUDAL L., SALDO R., TURNER J., HARANGOZO S.A., LEONARD S., CONNOLLEY W.M., SCHUSTER S., CRESSWELL D., MARSHALL G.J., LACHLAN-COPE T.A., KING J.C., POHLMANN H., STENZEL O., & HARDER M. 2001. *SEA LION: Sea ice in the Antarctic linked with ocean - atmosphere forcing. Final Report for EU Contract ENV - 4-CT97-0415 (DG 12 ESCY)*. Kiel, University of Kiel.

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Meteorology and Oceanography, San Diego, May 2001. Preprints. Boston, American Meteorological Society, 21-24.)

RENFREW I.A., MOORE G.W.K., GUEST P.S. & BUMKE K. 2001. A comparison of surface-layer and surface turbulent-flux observations over the Labrador Sea with ECMWF analyses and NCEP reanalyses. (*In: Sixth Conference on Polar Meteorology and Oceanography, San Diego, May 2001. Preprints.* Boston, American Meteorological Society, 174-177.)

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TURNER J. & PENDLEBURY S. 2001. The International Antarctic Weather Forecasting Handbook. (*In: Sixth Conference on Polar Meteorology and Oceanography, San Diego, May 2001. Preprints.* Boston, American Meteorological Society, 329-330.)

Magnetic Reconnection, Substorms and their Consequences

Refereed research papers 2001 listed in ISI database

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= overseas collaborators

ABEL G.A., COATES A.J.++, RYMER A.M.++, LINDER D.R.++, THOMSEN M.F.##, YOUNG D.T.## & DOUGHERTY M.K.++ 2001. Cassini Plasma Spectrometer observations of bidirectional lobe electrons during the Earth flyby, August 18, 1999. *Journal of Geophysical Research*, **106**, No. 12, 30,199-30,208.

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- COLEMAN I.J., CHISHAM G., PINNOCK M. & FREEMAN M.P.** 2001. An ionospheric convection signature of antiparallel reconnection. *Journal of Geophysical Research*, **106**, No. A12, 28,995-29,007.
- HORNE R.B. & FREEMAN M.P.** 2001. A new code for electrostatic simulation by numerical integration of the Vlasov and Ampère equations using MacCormack's method. *Journal of Computational Physics*, **171**, 182-200.
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- PHAN T.D.##, **FREEMAN M.P.**, KISTLER L.M.## and 17 others. 2001. Evidence for an extended reconnection line at the dayside magnetopause. *Earth, Planets and Space*, **53**, No. 6, 619-625.
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- RYMER A.M.++, COATES A.J.++, **ABEL G.A.**, LINDER D.R.++, SVENES K.##, NARHEIM B.##, THOMSEN M.F.## & YOUNG D.T.## 2001. Cassini Plasma Spectrometer electron spectrometer measurements during the Earth swing-by on August 18, 1999. *Journal of Geophysical Research*, **106**, No. A12, 30,177-30,198.
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Geospace Atmosphere Transfer Functions

Refereed research papers 2001 listed in ISI database

** = NERC employees who are not BAS staff

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Antarctica in the Dynamic Global Plate System

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