

## 7. Publications by CMDL Staff, 2000-2001

- Bakwin, P.S., Carbon cycle, in *Plant Sciences*, vol. 1, edited by R. Robinson, pp. 122-126, Macmillan Reference USA, NY, 2001.
- Barnes, J.E., and D.J. Hofmann, Variability in the stratospheric background aerosol over Mauna Loa Observatory, *Geophys. Res. Lett.*, *28(15)*, 2895-2898, 2001.
- Battle, M., M.L. Bender, P.P. Tans, J.W.C. White, J.T. Ellis, T. Conway, and R.J. Francey, Global carbon sinks and their variability inferred from atmospheric O<sub>2</sub> and δ<sup>13</sup>C, *Science*, *287*, 2467-2470, 2000.
- Bell, G.D., M.S. Halpert, R.C. Schnell, R.W. Higgins, J. Lawrimore, V.E. Kousky, R. Tinker, W. Thiaw, M. Chelliah, and A. Artusa, Climate Assessment for 1999, *Bull. Am. Meteorol. Soc.*, *81(6)*, pp. S1- S50, 2000.
- Berger, B.W., K.J. Davis, C. Yi, P.S. Bakwin, and C.L. Zhao, Long-term carbon dioxide fluxes from a very tall tower in a northern forest: Flux measurement methodology, *J. Atmos. Oceanic Technol.*, *18*, 529-542, 2001.
- Bergin, M.H., S.E. Schwartz, R.N. Halthore, J.A. Ogren, and D.L. Hlavka, Comparison of aerosol optical depth inferred from surface measurements with that determined by sun photometry for cloud-free conditions at a continental U.S. site, *J. Geophys. Res.*, *105*, 6807-6816, 2000.
- Bousquet, P., P. Peylin, P. Ciais, C. LeQuéré, P. Friedlingstein, and P. Tans, Regional changes in carbon dioxide fluxes of land and oceans since 1980, *Science*, *290*, 1342-1346, 2000.
- Bowling, D.R., P.P. Tans, and R.K. Monson, Partitioning net ecosystem carbon exchange with isotopic fluxes of CO<sub>2</sub>, *Global Change Biol.*, *7*, 127-145, 2001.
- Bruhwyler, L.P., P. Tans, and M. Ramonet, A time-dependent assimilation and source retrieval technique for atmospheric tracers, in *Inverse Methods in Global Biogeochemical Cycles*, edited by P. Kasibhatla, M. Heimann, P. Rayner, N. Mahowald, R.G. Prinn, and D.E. Hartley, *Geophys. Monogr.* *114*, pp. 265-277, Am. Geophys. Union, Washington, DC, 2000.
- Butler, J.H., Methyl bromide: An introduction to its use, its impacts, and its future, *IGAC Activities Newsl.*, *19*, p. 8, Int. Global Atmos. Chem. Proj., Cambridge, MA, 2000.
- Carrico, C.M., M.J. Rood, J.A. Ogren, C. Neusub, A. Wiedensohler, and J. Heintzenberg, Aerosol optical properties at Sagres, Portugal, during ACE-2, *Tellus*, *52B*, 694-715, 2000.
- Chan, L.Y., C.Y. Chan, H.Y. Liu, S. Christopher, S.J. Oltmans, and J.M. Harris, A case study on the biomass burning in Southeast Asia and enhancement of tropospheric ozone over Hong Kong, *Geophys. Res. Lett.*, *27(10)*, 1479-1482, 2000.
- Chan, C.Y., L.Y. Chan, Y.G. Zheng, J.M. Harris, S.J. Oltmans, and S. Christopher, Effects of 1997 Indonesian forest fires on tropospheric ozone enhancement, radiative forcing, and temperature change over the Hong Kong region, *J. Geophys. Res.*, *106(D14)*, 14,875-14,885, 2001.
- Chung, Y.S., and P.P. Tans, Monitoring greenhouse gases at Tae-Ahn Peninsula, Korea, *J. Korean Meteorol. Soc.*, *36*, 25-34, 2000.
- Cohen, R.C., K.K. Perkins, L.C. Koch, R.M. Stimpfle, P.O. Wennberg, T.F. Hanisco, E.J. Lanzendorf, G.P. Bonne, P.B. Voss, R.J. Salawitch, L.A. Del Negro, J.C. Wilson, C.T. McElroy, and T.P. Bui, Quantitative constraints on the atmospheric chemistry of nitrogen oxides: An analysis along chemical coordinates, *J. Geophys. Res.*, *105(D19)*, 24,283-24,304, 2000.
- Cooper, O.R., J.L. Moody, D.D. Parrish, M. Trainer, T.B. Ryerson, J.S. Holloway, G. Hübler, F.C. Fehsenfeld, S.J. Oltmans, and M.J. Evans, Trace gas signatures of the airstreams within North Atlantic cyclones: Case studies from the North Atlantic Regional Experiment (NARE '97) aircraft intensive, *J. Geophys. Res.*, *106(D6)*, 5437-5456, 2001.
- Crawford, J.H., D.D. Davis, G. Chen, M. Buhr, S. Oltmans, R. Weller, L. Mauldin, F. Eisele, R. Shetter, B. Lefter, R. Arimoto, and A. Hogan, Evidence for photochemical production of ozone at the South Pole surface, *Geophys. Res. Lett.*, *28(19)*, 3641-3644, 2001.
- Delene, D.J., and T. Deshler, Calibration of a photometric cloud condensation nucleus counter designed for deployment on a balloon package, *J. Atmos. Oceanic Technol.*, *17*, 459-467, 2000.
- Dlugokencky, E.J., B.P. Walter, K.A. Masarie, P.M. Lang, and E.S. Kasischke, Measurements of an anomalous global methane increase during 1998, *J. Geophys. Res.*, *28(3)*, 499-502, 2001.
- Dutton, E.G., and B.A. Bodhaine, Solar irradiance anomalies caused by clear-sky transmission variations above Mauna Loa: 1958-99, *J. Clim.*, *14*, 3255-3265, 2001.
- Dutton, E.G., J.J. Michalsky, T. Stoffel, B.W. Forgan, J. Hickey, D.W. Nelson, T.L. Alberta, and I. Reda, Measurement of broadband diffuse solar irradiance using current commercial instrumentation with a correction for thermal offset errors, *J. Atmos. Oceanic Technol.*, *18*, 297-314, 2001.
- Elkins, J.W., F.L. Moore, and E.S. Kline, Next generation airborne gas chromatograph for NASA airborne platforms, *Proc., Earth Science Technol. Conf. 2001*, College Park, MD, August 28-30, 2001 [CD ROM NP-2001-8-338-GSFC], pp. 356-363, NASA Earth Sci. Technol. Off., 2001.
- Eluzkiewicz, J., R.S. Hemler, J.D. Mahlman, L. Bruhwiler, and L.L. Takacs, Sensitivity of age-of-air calculations to the choice of advection scheme, *J. Atmos. Sci.*, *57(19)*, 3185-3201, 2000.
- Fahey, D.W., R.S. Gao, K.S. Carslaw, J. Kettleborough, P.J. Popp, M.J. Northway, J.C. Holecek, S.C. Ciciora, R.J. McLaughlin, T.L. Thompson, R.H. Winker, D.B. Baumgardner, B. Gandrud, P.O. Wennberg, S. Dhaniyala, K. McKinney, T. Peter, R.J. Salawitch, T.P. Bui, J.W. Elkins, C.R. Webster, E.L. Atlas, H. Jost, J.C. Wilson, R.L. Herman, A. Kleinböhl, and M. von König, The detection of large HNO<sub>3</sub>-containing particles in the winter Arctic stratosphere, *Science*, *291*, 1026-1031, 2001.
- Folkens, I., S.J. Oltmans, and A.M. Thompson, Tropical convective outflow and near surface equivalent potential temperatures, *Geophys. Res. Lett.*, *27(16)*, 2549-2552, 2000.
- Fujiwara, M., F. Hasebe, M. Shiotani, N. Nishi, H. Vömel, and S.J. Oltmans, Water vapor control at the tropopause by equatorial Kelvin waves observed over the Galápagos, *Geophys. Res. Lett.*, *28(16)*, 3143-3146, 2001.
- Gao, R.S., E.C. Richard, P.J. Popp, G.C. Toon, D.F. Hurst, P.A. Newman, J.C. Holecek, M.J. Northway, D.W. Fahey, M.Y.

- Danilin, B. Sen, K. Aikin, P.A. Romashkin, J.W. Elkins, C.R. Webster, S.M. Schauffler, J.B. Greenblatt, C.T. McElroy, L.R. Lait, T.P. Bui, and D. Baumgardner, Observational evidence for the role of denitrification in Arctic stratospheric ozone loss, *Geophys. Res. Lett.*, 28(15), 2879-2882, 2001.
- Gloor, M., P. Bakwin, D. Hurst, L. Lock, R. Draxler, and P. Tans, What is the concentration footprint of a tall tower?, *J. Geophys. Res.*, 106(D16), 17,831-17,840, 2001.
- Harris, J.M., E.J. Dlugokencky, S.J. Oltmans, P.P. Tans, T.J. Conway, P.C. Novelli, K.W. Thoning, and J.D.W. Kahl, An interpretation of trace gas correlations during Barrow, Alaska, winter dark periods, 1986-1997, *J. Geophys. Res.*, 105(D13), 17,267-17,278, 2000.
- Harris, J.M., S.J. Oltmans, P.P. Tans, R.D. Evans, and D.L. Quincy, A new method for describing long-term changes in total ozone, *Geophys. Res. Lett.*, 28(24), 4535-4538, 2001.
- Haszpra, L., Z. Barcza, P.S. Bakwin, B.W. Berger, K.J. Davis, and T. Weidinger, Measuring system for the long-term monitoring of biosphere/atmosphere exchange of carbon dioxide, *J. Geophys. Res.*, 106(D3), 3057-3069, 2001.
- Houweling, S., F. Dentener, J. Lelieveld, B. Walter, and E. Dlugokencky, The modeling of tropospheric methane: How well can point measurements be reproduced by a global model?, *J. Geophys. Res.*, 105(D7), 8981-9002, 2000.
- Hurst, D.F., G.S. Dutton, P.A. Romashkin, J.W. Elkins, R.L. Herman, E.J. Moyer, D.C. Scott, R.D. May, C.R. Webster, J. Greco, M. Loewenstein, and J.R. Podolske, Comparison of in situ N<sub>2</sub>O and CH<sub>4</sub> measurements in the upper troposphere and lower stratosphere during STRAT and POLARIS, *J. Geophys. Res.*, 105(D15), 19,811-19,822, 2000.
- Kim, J., S.-N. Oh, H.-M. Cho, M.-K. Park, K.-R. Kim, and J.W. Elkins, Background monitoring and long-range transport of atmospheric CFC-11 and CFC-12 at Kosan, Korea, *Environ. Monitor. Assess.*, 70, 47-56, 2001.
- King, D.B., J.H. Butler, S.A. Montzka, S.A. Yvon-Lewis, and J.W. Elkins, Implications of methyl bromide supersaturations in the temperate North Atlantic Ocean, *J. Geophys. Res.*, 105(D15), 19,763-19,769, 2000.
- Koloutsou-Vakakis, S., C.M. Carrico, P. Kus, M.J. Rood, Z. Li, R. Shrestha, J.A. Ogren, J.C. Chow, and J.G. Watson, Aerosol properties at a midlatitude Northern Hemisphere continental site, *J. Geophys. Res.*, 106(D3), 3019-3032, 2001.
- Kuck, L.R., T. Smith Jr., B.B. Balsley, D. Helmig, T.J. Conway, P.P. Tans, K. Davis, M.L. Jensen, J.A. Bognar, R.V. Arrieta, R. Rodrigues, and J.W. Birks, Measurements of landscape-scale fluxes of carbon dioxide in the Peruvian Amazon by vertical profiling through the atmospheric boundary layer, *J. Geophys. Res.* 105, 22,137-22,146, 2000.
- Lawrimore, J., M.S. Halpert, G.D. Bell, M.J. Menne, B. Lyon, R.C. Schnell, K.L. Gleason, D.R. Easterling, W. Thiaw, W.J. Wright, R.R. Heim Jr., D.A. Robinson, and L. Alexander, Climate Assessment for 2000, *Bull. Am. Meteorol. Soc.*, 82(6), S1-S55, 2001.
- Lee, A.M., H.K. Roscoe, and S. Oltmans, Model and measurements show Antarctic ozone loss follows edge of polar night, *Geophys. Res. Lett.*, 27(22), 3845-3848, 2000.
- Lefohn, A.S., S.J. Oltmans, T. Dann, and H.B. Singh, Present-day variability of background ozone in the lower troposphere, *J. Geophys. Res.*, 106(D9), 9945-9958, 2001.
- Lelieveld, J., P.J. Crutzen, V. Ramanathan, M.O. Andreae, C.A.M. Brenninkmeijer, T. Campos, G.R. Cass, R.R. Dickerson, H. Fischer, J.A. de Gouw, A. Hansel, A. Jefferson, D. Kley, A.T.J. de Laat, S. Lal, M.G. Lawrence, J.M. Lobert, O.L. Mayol-Bracero, A.P. Mitra, T. Novakov, S.J. Oltmans, K.A. Prather, T. Reiner, H. Rodhe, H.A. Scheeren, D. Sikka, and J. Williams, The Indian Ocean Experiment: Widespread air pollution from South and Southeast Asia, *Science*, 291, 1031-1036, 2001.
- Masarie, K.A., R.L. Langenfelds, C.E. Allison, T.J. Conway, E.J. Dlugokencky, R.J. Francey, P.C. Novelli, L.P. Steele, P.P. Tans, B. Vaughn, and J.W.C. White, NOAA/CSIRO flask air intercomparison experiment: A strategy for directly assessing consistency among atmospheric measurements made by independent laboratories, *J. Geophys. Res.*, 106(D17), 20,445-20,464, 2001.
- McKenzie, R.L., P.V. Johnston, D. Smale, B.A. Bodhaine, and S. Madronich, Altitude effects on UV spectral irradiance deduced from measurements at Lauder, New Zealand, and at Mauna Loa Observatory, Hawaii, *J. Geophys. Res.*, 106, 22,845-22,860, 2001.
- Miloshevich, L.M., H. Vömel, A. Paukkunen, A.J. Heymsfield, and S.J. Oltmans, Characterization and correction of relative humidity measurements from Vaisala RS80-A radiosondes at cold temperatures, *J. Atmos. Oceanic Technol.*, 18, 135-156, 2001.
- Montzka, S.A., C.M. Spivakovsky, J.H. Butler, J.W. Elkins, L.T. Lock, and D.J. Mondeel, New observational constraints for atmospheric hydroxyl on global and hemispheric scales, *Science*, 288, 500-503, 2000.
- Nagurnyi, A.P., N.A. Zaitseva, G.V. Alekseev, E.Y. Medvedchenko, A. Shumbera, J.D. Kahl, and R. Schnell, Archive of radiosonde data obtained at the ice drifting station North Pole (in Russian), *Meteorol. Hydrol.*, 6, 55-62, 2001.
- Nelson, D.W., The NOAA Climate Monitoring and Diagnostics Laboratory Solar Radiation Facility, *NOAA Tech. Memo. OAR CMDL-15*, 36 pp., NOAA Clim. Monit. and Diag. Lab., Boulder, CO, 2000.
- Neuman, J.A., R.S. Gao, D.W. Fahey, J.C. Holecek, B.A. Ridley, J.G. Walega, F.E. Grahek, E.C. Richard, C.T. McElroy, T.L. Thompson, J.W. Elkins, F.L. Moore, and E.A. Ray, In situ measurements of HNO<sub>3</sub>, NO<sub>y</sub>, NO, and O<sub>3</sub> in the lower stratosphere and upper troposphere, *Atmos. Environ.*, 35, 5789-5797, 2001.
- Newchurch, M.J., L. Bishop, D. Cunnold, L.E. Flynn, S. Godin, S.H. Frith, L. Hood, A.J. Miller, S. Oltmans, W. Randel, G. Reinsel, R. Stolarski, R. Wang, E.-S. Yang, and J.M. Zawodny, Upper-stratospheric ozone trends 1979-1998, *J. Geophys. Res.*, 105(D11), 14,625-14,636, 2000.
- Newman, P.A., J.C. Wilson, M.N. Ross, C.A. Brock, P.J. Sheridan, M.R. Schoeberl, L.R. Lait, T.P. Bui, M. Loewenstein, and J.R. Podolske, Chance encounter with a stratospheric kerosene rocket plume from Russia over California, *Geophys. Res. Lett.*, 28(6), 959-962, 2001.
- Oltmans, S.J., H. Vömel, D.J. Hofmann, K.H. Rosenlof, and D. Kley, The increase in stratospheric water vapor from balloonborne, frostpoint hygrometer measurements at Washington, D.C., and Boulder, Colorado, *Geophys. Res. Lett.*, 27(21), 3453-3456, 2000.
- Oltmans, S.J., B.J. Johnson, J.M. Harris, H. Vömel, A.M. Thompson, K. Koshy, P. Simon, R.J. Bendura, J.A. Logan, F. Hasebe, M. Shiotani, V.W.J.H. Kirchhoff, M. Maata, G. Sami, A. Samad, J. Tabuadravu, H. Enriques, M. Agama, J. Cornejo, and F. Paredes, Ozone in the Pacific tropical troposphere from

- ozonesonde observations, *J. Geophys. Res.*, *106(D23)*, 32,503-32,525, 2001.
- Peppler, R.A., C.P. Bahrman, J.C. Barnard, J.R. Campbell, M.-D. Cheng, R.A. Ferrare, R.N. Halthore, L.A. Heilman, D.L. Hlavka, N.S. Laulainen, C.-J. Lin, J.A. Ogren, M.R. Poellot, L.A. Remer, K. Sassen, J.D. Spinhirne, M.E. Splitt, and D.D. Turner, ARM Southern Great Plains site observations of the smoke pall associated with the 1998 Central American fires, *Bull. Am. Meteorol. Soc.*, *18(11)*, 2563-2591, 2000.
- Philipona, R., E.G. Dutton, T. Stoffel, J. Michalsky, I. Reda, A. Stifter, P. Wendling, N. Wood, S.A. Clough, E.J. Mlawer, G. Anderson, H.E. Revercomb, and T.R. Shippert, Atmospheric longwave irradiance uncertainty: Pyrgometers compared to an absolute sky-scanning radiometer, atmospheric emitted radiance interferometer, and radiative transfer model calculations, *J. Geophys. Res.*, *106(D22)*, 28,129-28,141, 2001.
- Polissar, A.V., P.K. Hopke, and J.M. Harris, Source regions for atmospheric aerosol measured at Barrow, Alaska, *Environ. Sci. Technol.*, *36(21)*, 4214-4226, 2001.
- Popp, P.J., M.J. Northway, J.C. Holecek, R.S. Gao, D.W. Fahey, J.W. Elkins, D.F. Hurst, P.A. Romashkin, G.C. Toon, B. Sen, S.M. Schauffler, R.J. Salawitch, C.R. Webster, R.L. Herman, H. Jost, T.P. Bui, P.A. Newman, and L.R. Lait, Severe and extensive denitrification in the 1999-2000 Arctic winter stratosphere, *Geophys. Res. Lett.*, *28(15)*, 2875-2878, 2001.
- Portman, R.W., S. Solomon, R.W. Sanders, J.S. Daniel, and E.G. Dutton, Cloud modulation of zenith-sky oxygen photon path lengths over Boulder, Colorado: Measurements versus model, *J. Geophys. Res.*, *106*, 1139-1155, 2001.
- Quinn, P.K., T.S. Bates, T.L. Miller, D.J. Coffmann, J.E. Johnson, J.M. Harris, J.A. Ogren, G. Forbes, T.L. Anderson, D.S. Covert, and M.J. Rood, Surface submicron aerosol chemical composition: What fraction is not sulfate?, *J. Geophys. Res.*, *105(D5)*, 6785-6805, 2000.
- Ramanathan, V., P.J. Crutzen, J. Lelieveld, A.P. Mitra, D. Althausen, J. Anderson, M.O. Andreae, W. Cantrell, G.R. Cass, C.E. Chung, A.D. Clarke, J.A. Coakley, W.D. Collins, W.C. Conant, F. Dulac, J. Heintzenberg, A.J. Heymsfield, B. Holben, S. Howell, J. Hudson, A. Jayaraman, J.T. Kiehl, T.N. Krishnamurti, D. Lubin, G. McFarquhar, T. Novakov, J.A. Ogren, I.A. Podgorny, K. Prather, K. Priestly, J.M. Prospero, P.K. Quinn, K. Rajeev, P. Rasch, S. Rupert, R. Sadourny, S.K. Satheesh, G.E. Shaw, P. Sheridan, and F.P.J. Valero, Indian Ocean Experiment: An integrated analysis of the climate forcing and effects of the great Indo-Asian haze, *J. Geophys. Res.*, *106(D22)*, 28,371-28,398, 2001.
- Randel, W.J., F. Wu, A. Gettelman, J.M. Russell III, J.M. Zawodny, and S.J. Oltmans, Seasonal variation of water vapor in the lower stratosphere observed in Halogen Occultation Experiment data, *J. Geophys. Res.*, *106(D13)*, 14,313-14,325, 2001.
- Richard, E.C., K.C. Aikin, A.E. Andrews, B.C. Daube Jr., C. Gerbig, S.C. Wofsy, P.A. Romashkin, D.F. Hurst, E.A. Ray, F.L. Moore, J.W. Elkins, T. Deshler, and G.C. Toon, Severe chemical ozone loss inside the Antarctic polar vortex during winter 1999-2000 inferred from in situ airborne measurements, *Geophys. Res. Lett.*, *28(11)*, 2197-2200, 2001.
- Romashkin, P.A., D.F. Hurst, J.W. Elkins, G.S. Dutton, D.W. Fahey, R.E. Dunn, F.L. Moore, R.C. Myers, and B.D. Hall, In situ measurements of long-lived trace gases in the lower stratosphere by gas chromatography, *J. Atmos. Oceanic Technol.*, *18*, 1195-1204, 2001.
- Rosenlof, K.H., S.J. Oltmans, D. Kley, J.M. Russell III, E.-W. Chiou, W.P. Chu, D.G. Johnson, K.K. Kelly, H.A. Michelsen, G.E. Nedoluha, E.E. Remsberg, G.C. Toon, and M.P. McCormick, Stratospheric water vapor increases over the past half-century, *Geophys. Res. Lett.*, *28(7)*, 1195-1198, 2001.
- Ryan, S., Estimating volcanic CO<sub>2</sub> emission rates from atmospheric measurements on the slope of Mauna Loa, *Chem. Geol.*, *177*, 201-211, 2001.
- Ryan, S.C., A.L. Dick, and L.P. Steele, Ecosystem CO<sub>2</sub> exchange near Cape Grim Tasmania, in *Baseline Atmospheric Program Australia 1997-98*, edited by N.W. Tindale, N. Derek, and R.J. Francey, pp. 8-19, Bureau of Meteorol. and CSIRO Atmos. Res., Melbourne, Australia, 2001.
- Schnell, R.C., Global atmospheric environment change monitoring in the 21st century, *Proc. Conf. on Direction for Atmospheric Environmental Research Toward the 21st Century*, Seoul, Korea, June 2000, pp. 85-95, Natl. Inst. of Environ. Res., Incheon, Korea, 2000.
- Schnell, R.C., D.B. King, and R.M. Rosson (Eds.), *Climate Monitoring and Diagnostics Laboratory Summary Report No. 25 1998-1999*, 154 pp., NOAA Oceanic and Atmos. Res., Boulder, CO, 2001.
- Sheridan, P.J., D.J. Delene, and J.A. Ogren, Four years of continuous surface aerosol measurements from the Department of Energy's Atmospheric Radiation Measurement Program Southern Great Plains Cloud and Radiation Testbed site, *J. Geophys. Res.*, *106(D18)*, 20,735-20,747, 2001.
- Spivakovsky, C.M., J.A. Logan, S.A. Montzka, Y.J. Balkanski, M. Foreman-Fowler, D.B.A. Jones, L.W. Horowitz, A.C. Fusco, C.A.M. Brenninkmeijer, M.J. Prather, S.C. Wofsy, and M.B. McElroy, Three-dimensional climatological distribution of tropospheric OH: Update and evaluation, *J. Geophys. Res.*, *105(D7)*, 8931-8980, 2000.
- Stephens, B.B., S.C. Wofsy, R.F. Keeling, P.P. Tans, and M.J. Potosnak, The CO<sub>2</sub> budget and rectification airborne study: Strategies for measuring rectifiers and regional fluxes, in *Inverse Methods in Global Biogeochemical Cycles*, edited by P. Kasibhatla, M. Heimann, P. Rayner, N. Mahowald, R.G. Prinn, and D.E. Hartley, *Geophys. Monogr. 114*, pp. 311-324, Am. Geophys. Union, Washington, DC, 2000.
- Stone, R.S., Climate monitoring at Barrow, Alaska, and South Pole: An overview of U.S. studies of polar surface radiation balance and aerosols, *Proc. 8th Workshop Italian Research on Antarctic Atmosphere*, Bologna, Italy, Oct. 20-22, 1999, edited by M. Colacino and G. Giovanelli, pp. 83-98, Italian Phys. Soc., Bologna, Italy, 2000.
- Stone, R.S., Factors that determine when the seasonal snowmelt occurs in Northern Alaska, *Proc. Second Wadati Conference on Global Change and the Polar Climate*, Tsukuba, Japan, March 7-9, 2001, pp. 87-90, 2001.
- Sukhorukov, F.V., V.M. Gavshin, I.N. Malikova, S.I. Kovalev, Y.I. Malikov, and P.A. Romashkin, Cesium-137 in the environment of the Altay Region (Russia), *Water Air Soil Pollut.*, *118*, 395-406, 2000.
- Thompson, A.M., B.G. Doddridge, J.C. Witte, R.D. Hudson, W.T. Luke, J.E. Johnson, B.J. Johnson, S.J. Oltmans, and R. Weller, A tropical Atlantic paradox: Shipboard and satellite views of a tropospheric ozone maximum and wave-one in

- January-February 1999, *Geophys. Res. Lett.*, 27(20), 3317-3320, 2000.
- Vömel, H., D. Toohey, T. Deshler, and C. Kröger, Sunset observations of ClO in the Arctic polar vortex and implications for ozone loss, *Geophys. Res. Lett.*, 28, 4183-4186, 2001.
- Voss, P.B., R.M. Stimpfle, R.C. Cohen, T.F. Hanisco, G.P. Bonne, K.K. Perkins, E.J. Lanzendorf, J.G. Anderson, R.J. Salawitch, C.R. Webster, D.C. Scott, R.D. May, P.O. Wennberg, P.A. Newman, L.R. Lait, J.W. Elkins, and T.P. Bui, Inorganic chlorine partitioning in the summer lower stratosphere, modeled and measured [ClONO<sub>2</sub>]/[HCl] during POLARIS, *J. Geophys. Res.*, 106, 1713-1732, 2001.
- Weatherhead, E.C., G.C. Reinsel, G.C. Tiao, C.H. Jackman, L. Bishop, S.M. Hollandsworth-Frith, J. DeLuisi, T. Keller, S.J. Oltmans, E.L. Fleming, D.J. Wuebbles, J.B. Kerr, A.J. Miller, J. Herman, R. McPeters, R.M. Nagatani, and J.E. Frederick, Detecting the recovery of total column ozone, *J. Geophys. Res.*, 105(D17), 22,201-22,210, 2000.
- Wisthaler, A., A. Hansel, M. Schwartzmann, C. Scheiring, W. Lindinger, and E.E. Ferguson, Relaxation of vibrationally excited HCN<sup>+</sup> and DCN<sup>+</sup> ions in collisions with He, *J. Chem. Phys.*, 112, 731-735, 2000.
- Yi, C., K.J. Davis, P.S. Bakwin, B.W. Berger, and L.C. Marr, Influence of advection on measurements of the net ecosystem-atmosphere exchange of CO<sub>2</sub> from a very tall tower, *J. Geophys. Res.*, 105(D8), 9991-9999, 2000.