

VITA

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Research interests:

Stratiform and cumulus cloud parameterization in general circulation models, hydrologic cycle feedbacks on climate, comparative dynamics of planetary atmospheres.

Education:

University of California, Los Angeles (9/73-10/78): M.S. (3/75), Ph.D. (12/78) in Planetary & Space Physics
Cornell University (9/69-5/73): B.S. (5/73) in Engineering Science (concentration in Engineering Physics)
with Distinction

Professional experience:

Physical Scientist, NASA/Goddard Institute for Space Studies (4/85-)
Coordinator, Columbia University Graduate Program in Atmospheric and Planetary Science (8/84- present)
Manager, Planetary Group, Sigma Data Services, NASA/GISS (11/80-4/85)
National Research Council RRA, NASA/GISS (11/78-11/80)
Graduate Research Assistant, UCLA, Department of Earth and Space Sciences (9/73-6/76, 9/76-10/78)
Consultant, Climate Group, GTE Information Systems, NASA/GISS (9/76-5/77)
Scientific Programmer/Analyst, Climate Group, GTE Information Systems, NASA/GISS (6/76-9/76)

Other professional activities:

Writing Panel, American Meteorological Society Statement on Climate Change (2007)
Science Team Member, CloudSat/CALIPSO (2007-)
Science Team Member, NASA Aqua AMSR-E (2003-2007)
Reviewer, NAS/NRC Report "Understanding Climate Change Feedbacks"
Principal Investigator, Global Aerosol Climatology Project (1998-2002)
Drafting Panel, FIRE-IV: CRYSTAL Research Plan (1998-1999)
Associate Editor (1996-2004), Editor (2004-), Journal of Climate.
Co-Chair, DOE ASR Program (2009-)
Science Team Executive Committee, DOE ARM Program (1996-2000; 2002-2005); SGP Site Advisory Committee (1995-1998); Cloud Modeling Working Group Steering Committee (2000-2009)
Principal Investigator, First ISCCP Regional Experiment III (1995-1998)
Science Team Member, NASA TRMM/GPM (1991-1997, 1998-2001, 2003-)
NASA/GSFC Director's Discretionary Fund Review Panel (1991-1993)
Cassini/Huygens Atmospheric Working Group (1991-)
Team Member, Cassini Saturn Orbiter Imaging Science Subsystem (1990-)
Principal Investigator, Atmospheric Radiation Measurement Program (1993-)
Science Steering Group, GEWEX Water Vapor Project (1990)
Co-Investigator/Interdisciplinary, Earth Observing System (1989-1999)
Science Advisory Group, NASA Lidar Atmospheric Sensing Experiment (1988-1997)
Organizer, GISS/Columbia University Summer Institute on Planets and Climate (1983, 1985, 1987)
Pioneer Venus Dynamics and Structure Working Group (1979-80)
Co-Investigator, Pioneer Venus Orbiter Cloud Photopolarimeter Experiment (1978- 1992)

Teaching experience:

Invited Lecturer, Goddard Earth Science and Technology Summer Program (2003-2004)
Invited Lecturer (1995), NATO ASI, Remote Sensing of Energy and Water Cycles, Plon, Germany
Invited Lecturer, NCAR Summer School on Clouds and Climate (1993)
Invited Lecturer, Intl. Research Inst. for Climate Prediction, Applications and Training Pilot Project (1993)
Invited Lecturer (1991), NATO ASI, Energy and Water Cycles in the Climate System, Glücksburg, Germany
Adjunct Professor, Department of Applied Physics, Columbia University (1995-)
Lecturer (1983-89), Adjunct Assistant Professor (1989-92), Adjunct Associate Professor (1992-), Adjunct Professor (1997- 2011), Columbia University, Department of Earth and Environmental Sciences
Adjunct Associate Professor, Barnard College, Department of Environmental Science (1993-1999)
Adjunct Assistant Professor, Queensborough Community College, CUNY, Department of Physics (1982-85)
Lecturer, GISS/Columbia University Summer Institute on Planets and Climate (1980-85)

Ph.D. dissertations supervised:

Rong Fu (1991) - Deep convection and its relation to the large-scale circulation in the tropical Pacific
Aiguo Dai (1995) - Global precipitation variability and its relationship with other climate changes (with Inez Fung)
Bing Ye (1999) - Cumulus anvil cloud properties, large-scale conditions, and climate change
Michael Bauer (2005) - Observed and simulated humidity variations
Junye (Jonathan) Chen (2005) – Understanding the observed tropical and midlatitude radiative energy budget in the context of long-term climate variations (with Barbara Carlson)
Kirstie Stramler (2006) – The influence of synoptic atmospheric motions on the Arctic energy budget

Postdoctoral associate collaborators: Ron Miller, Samantha Smith, Michael Jensen, Surabi Menon, Ulyana Dyudina, Catherine Naud, Yonghua Chen, Joanna Futyan, Jingbo Wu, Daehyun Kim, Jimmy Booth

Professional society memberships:

American Meteorological Society (1987-)
Division for Planetary Sciences, American Astronomical Society (1981-)
American Geophysical Union (1978-)

Awards:

NASA GISS Peer Award (1986)
NASA Certificate of Distinguished Performance (1987, 1988, 1989, 1990, 1992, 1994, 1995, 1998, 2007, 2008, 2009)
NASA GISS Best Publication Award (1989, 1990, 1993, 1994, 1997, 2000, 2002, 2003, 2006, 2007, 2009)
Citation for Excellence in Reviewing, *Icarus* (1992, 1998)
Outstanding Teacher Award, Columbia U. Dept. of Earth and Environmental Sciences (1994, 2001, 2006)
NASA Group Achievement Award, Cassini Imaging Science Subsystem (1998)
NASA GSFC Earth Sciences Directorate Special Act Award (2004, 2005, 2006)
Elected Fellow, American Meteorological Society (2007)
NASA Exceptional Scientific Achievement Medal (2008)
NASA Group Achievement Awards, Cassini Saturn and Cross-Discipline Target Working Teams (2009)

Personal:

Born 2/21/52, New York, New York, United States citizen; married, one child

PUBLICATIONS
(refereed papers are numbered)

Statistics (ISI Web of Science): 5,684 citations; h-index 39

1. Belton, M.J.S., G.R. Smith, G. Schubert and A.D. Del Genio, 1976: Cloud patterns, waves and convection in the Venus atmosphere. *J. Atmos. Sci.*, 33, 1394-1417.
 2. Del Genio, A.D., J.M. Straus and G. Schubert, 1978: Effects of wave-induced diffusion on thermospheric acoustic-gravity waves. *Geophys. Res. Letters*, 5, 265-267.
 3. Del Genio, A.D., G. Schubert and J.M. Straus, 1979: Characteristics of acoustic-gravity waves in a diffusively separated atmosphere. *J. Geophys. Res.*, 84, 1865-1879.
 4. Del Genio, A.D., G. Schubert and J.M. Straus, 1979: Gravity wave propagation in a diffusively separated atmosphere with height-dependent collision frequencies. *J. Geophys. Res.*, 84, 4371-4378.
 5. Del Genio, A.D., G. Schubert and J.M. Straus, 1979: Acoustic-gravity waves in the thermosphere of Venus. *Icarus*, 39, 401-417.
 6. Travis, L.D., D.L. Coffeen, A.D. Del Genio, J.E. Hansen, K. Kawabata, A.A. Lacis, W.A. Lane, S.S. Limaye, W.B. Rossow and P.H. Stone, 1979: Cloud images from the Pioneer Venus orbiter. *Science*, 205, 74-76.
 7. Rossow, W.B., A.D. Del Genio, S.S. Limaye, L.D. Travis and P.H. Stone, 1980: Cloud morphology and motions from Pioneer Venus images. *J. Geophys. Res.*, 85, 8107-8128.
 8. Schubert, G., C. Covey, A. Del Genio, L.S. Elson, G. Keating, A. Seiff, R.E. Young, J. Apt, C.C. Counselman III, A.J. Kliore, S.S. Limaye, H.E. Revercomb, L.A. Sromovsky, V.E. Suomi, F. Taylor, R. Woo and U. von Zahn, 1980: Structure and circulation of the Venus atmosphere. *J. Geophys. Res.*, 85, 8007-8025.
 9. Del Genio, A.D., and W.B. Rossow, 1982: Temporal variability of UV cloud features in the Venus stratosphere. *Icarus*, 51, 391-415.
- Del Genio, A.D., 1984: Earth's changing climate: How will it affect viticulture? *Eastern Grape Grower and Winery News*, 33-34.
- Raschke, E., A.D. Del Genio, J.F. Louis and W. Schubert, 1985: Validation of boundary layer cloud models and general circulation. In Report of the JSC/CAS Workshop on Modelling of Cloud Topped Boundary Layer, WMO/ICSU, Geneva, July 1985, 21-24.
- Del Genio, A.D., and M. Allison, 1985: Diagnostic analysis of synoptic-scale meridional motions on Jupiter. *Bull. Amer. Astron. Soc.*, 17, 710-711.
10. Del Genio, A.D., and R.J. Suozzo, 1987: A comparative study of rapidly and slowly rotating dynamical regimes in a terrestrial general circulation model. *J. Atmos. Sci.*, 44, 973-986.
 11. Del Genio, A.D., and M.-S. Yao, 1987: Properties of deep convective clouds in the ISCCP Pilot Data Set. In *Preprints, 17th Conf. on Hurricanes and Tropical Meteorology*, Miami, Amer. Meteor. Soc., 133-136.
 12. Del Genio, A.D., and M.-S. Yao, 1988: Sensitivity of a global climate model to the specification of convective updraft and downdraft mass fluxes. *J. Atmos. Sci.*, 45, 2641-2668.

12. Yao, M.-S., and A.D. Del Genio, 1989: Effects of cumulus entrainment and multiple cloud types on a January global climate model simulation. *J. Climate*, 2, 850-863.
- Hansen, J., D. Rind, A. Del Genio, A. Lacis, S. Lebedeff, M. Prather, R. Ruedy and T. Karl, 1989: Regional greenhouse climate effects. In Coping With Climate Change, Proceedings, Second North American Conference on Preparing for Climate Change: A Cooperative Approach, Climate Institute, Washington, D.C., 68-81.
- Del Genio, A.D., 1989: Moist convection in the atmospheres of Uranus and Neptune. *Bull. Amer. Astron. Soc.*, 21, 917-918.
13. Del Genio, A.D., and W.B. Rossow, 1990: Planetary-scale waves and the cyclic nature of cloud top dynamics on Venus. *J. Atmos. Sci.*, 47, 293-318.
14. Del Genio, A.D., and K.B. McGrattan, 1990: Moist convection and the vertical structure and water abundance of Jupiter's atmosphere. *Icarus*, 84, 29-53.
- Del Genio, A.D., and M.-S. Yao, 1990: Predicting cloud water variations in the GISS GCM. In Preprints. Conference on Cloud Physics, San Francisco, Amer. Meteor. Soc., 497-504.
15. Cess, R.D., G.L. Potter, J.P. Blanchet, G.J. Boer, A.D. Del Genio, M. Deque, V. Dymnikov, V. Galin, W.L. Gates, S.J. Ghan, J.T. Kiehl, A.A. Lacis, H. LeTreut, Z.-X. Li, X.-Z. Liang, B.J. McAvaney, V.P. Meleshko, J.F.B. Mitchell, J.-J. Morcrette, D.A. Randall, L. Rikus, E. Roeckner, J.F. Royer, U. Schlese, D.A. Sheinin, A. Slingo, A.P. Sokolov, K.E. Taylor, W.M. Washington, R.T. Wetherald, I. Yagai, and M.-H. Zhang, 1990: Intercomparison and interpretation of climate feedback processes in 19 atmospheric general circulation models. *J. Geophys. Res.*, 95, 16,601-16,615.
16. Rossow, W.B., A.D. Del Genio and T.P. Eichler, 1990: Cloud-tracked winds from Pioneer Venus OCPP images. *J. Atmos. Sci.*, 47, 2053-2084.
17. Fu, R., A.D. Del Genio and W.B. Rossow, 1990: Behavior of deep convective clouds in the tropical Pacific deduced from ISCCP radiances. *J. Climate*, 3, 1129-1152.
18. Del Genio, A.D., A.A. Lacis and R.A. Ruedy, 1991: Simulations of the effect of a warmer climate on atmospheric humidity. *Nature*, 351, 382-385.
19. Cess, R.D., G.L. Potter, M.-H. Zhang, J.-P. Blanchet, S. Chalita, R. Colman, D. Dazlich, A.D. Del Genio, V. Dymnikov, V. Galin, D. Jerrett, E. Keup, A.A. Lacis, H. Le Treut, X.-Z. Liang, J.-F. Mahfouf, B.J. McAvaney, V.P. Meleshko, J.F.B. Mitchell, J.-J. Morcrette, P.M. Norris, D.A. Randall, L. Rikus, E. Roeckner, J.-F. Royer, U. Schlese, D.A. Sheinen, J.M. Slingo, A.P. Sokolov, K.E. Taylor, W.M. Washington, R.T. Wetherald and I. Yagai, 1991: Interpretation of snow-climate feedback as produced by 17 general circulation models. *Science*, 253, 888-892.
- Rossow, W.B., A.D. Del Genio, A.A. Lacis and D. Rind, 1992: Studies of convection and cloud parameterizations in the GISS climate GCM. Proceedings, ECMWF Workshop on Clouds, Radiative Transfer, and the Hydrological Cycle.
20. Barnett, T.P., A.D. Del Genio and R. Ruedy, 1992: Unforced decadal fluctuations in a coupled model of the atmosphere and ocean mixed layer. *J. Geophys. Res.*, 97, 7341-7354.
21. Randall, D.A., R.D. Cess, J.P. Blanchet, G.J. Boer, D.A. Dazlich, A.D. Del Genio, M. Deque, V. Dymnikov, V. Galin, S.J. Ghan, A.A. Lacis, H. Le Treut, Z.-X. Li, X.-Z. Liang, B.J. McAvaney, V.P. Meleshko,

- J.F.B. Mitchell, J.-J. Morcrette, G.L. Potter, L. Rikus, E. Roeckner, J.F. Royer, U. Schlese, D.A. Sheinin, J. Slingo, A.P. Sokolov, K.E. Taylor, W.M. Washington, R.T. Wetherald, I. Yagai and M.-H. Zhang, 1992: Intercomparison and interpretation of surface energy fluxes in atmospheric general circulation models. *J. Geophys. Res.*, 97, 3711-3724.
22. Fu, R., A.D. Del Genio, W.B. Rossow and W.T. Liu, 1992: Cirrus cloud thermostat for tropical sea surface temperatures tested using satellite data. *Nature*, 358, 394-397.
- Del Genio, A.D., M.-S. Yao and C.E. Wendell, 1993: GCM feedback sensitivity to interactive cloud water budget parameterization. In Preprints, Fourth Symposium on Global Change Studies, Anaheim, Amer. Meteor. Soc., 176-181.
23. Del Genio, A.D., W. Zhou and T.P. Eichler, 1993: Equatorial superrotation in a slowly rotating GCM: Implications for Titan and Venus. *Icarus*, 101, 1-17.
24. Fu, R., W.T. Liu, A.D. Del Genio and W.B. Rossow, 1993: Reply to "A thermostat in the tropics?" by V. Ramanathan and W. Collins. *Nature*, 361, 412.
- Del Genio, A.D., 1993: Simulations of precipitation variability in the GISS GCM. In Global Observations, Analyses and Simulation of Precipitation, WGNE/GEWEX Workshop Report, WCRP-78 (WMO/TD-No. 544), 125-129.
- Del Genio, A.D., 1993: Convective and large-scale cloud processes in global climate models. Energy and Water Cycles in the Climate System, Proceedings of NATO Advanced Study Institute, Glücksburg, Germany, Springer-Verlag, 95-121.
25. Cess, R.D., M.-H. Zhang, G.L. Potter, H.W. Barker, R.A. Colman, D.A. Dazlich, A.D. Del Genio, M. Esch, J.R. Fraser, V. Galin, W.L. Gates, J.J. Hack, W. Ingram, J.T. Kiehl, A.A. Lacis, H. Le Treut, Z.-X. Li, X.-Z. Liang, J.-F. Mahfouf, B.J. McAvaney, V.P. Meleshko, J.-J. Morcrette, D.A. Randall, E. Roeckner, J.-F. Royer, A.P. Sokolov, P.V. Sporyshev, K.E. Taylor, W.-C. Wang and R.T. Wetherald, 1993: Uncertainties in carbon dioxide radiative forcing in atmospheric general circulation models. *Science*, 262, 1252-1255.
- Peteet, D., R. Alley, G. Bond, J. Chappelaz, C. Clapperton, A. Del Genio and L. Keigwin, 1993: Global Younger Dryas? *Eos, Trans. Amer. Geophys. Union*, 74, 587-589.
- Del Genio, Anthony D., 1993: Accuracy requirements. Proceedings, Workshop on Long-Term Monitoring of Global Climate Forcings and Feedbacks (J. Hansen, W. Rossow and I. Fung, eds.), New York, NASA CP-3234, 13-19.
- Del Genio, A.D., and M.-S. Yao, 1993: Efficient cumulus parameterization for long-term climate studies: The GISS scheme. In The Representation of Cumulus Convection in Numerical Models (K.A. Emanuel and D.J. Raymond, eds.), Amer. Meteor. Soc. Monograph No. 46, 181-184.
26. Allison, M., A.D. Del Genio and W. Zhou, 1994: Zero potential vorticity envelopes for the zonal-mean velocity of the Venus/Titan atmospheres. *J. Atmos. Sci.*, 51, 694-702.
27. Fu, R., A.D. Del Genio and W.B. Rossow, 1994: Influence of ocean surface conditions on atmospheric vertical thermodynamic structure and deep convection. *J. Climate*, 7, 1092-1108.
28. Miller, R.L., and A.D. Del Genio, 1994: Tropical cloud feedbacks and decadal variability of climate. *J. Climate*, 7, 1388-1402.

29. Randall, D.A., R.D. Cess, J.P. Blanchet, S. Chalita, R. Colman, D.A. Dazlich, A.D. Del Genio, E. Keup, A. Lacis, H. LeTreut, X.-Z. Liang, B.J. McAvaney, J.F. Mahfouf, V.P. Meleshko, J.-J. Morcrette, P.M. Norris, G.L. Potter, L. Rikus, E. Roeckner, J.F. Royer, U. Schlese, D.A. Sheinin, A.P. Sokolov, K.E. Taylor, R.T. Wetherald, I. Yagai and M.-H. Zhang, 1994: Analysis of snow feedbacks in 14 general circulation models. *J. Geophys. Res.*, **99**, 20,757-20,772.
30. Del Genio, A.D., W. Kovari and M.-S. Yao, 1994: Climatic implications of the seasonal variation of upper troposphere water vapor. *Geophys. Res. Letters*, **21**, 2701-2704.
31. Allison, M., A.D. Del Genio and W. Zhou, 1995: Richardson number constraints for the Jupiter and outer planet wind regime. *Geophys. Res. Letters*, **22**, 2957-2960.
32. Hansen, J., W. Rossow, B. Carlson, A. Lacis, L. Travis, A. Del Genio, I. Fung, B. Cairns, M. Mishchenko and M. Sato, 1995: Low-cost long-term monitoring of global climate forcings and feedbacks. *Climatic Change*, **31**, 247-271.
33. Del Genio, A.D., M.-S. Yao, W. Kovari and K.K.-W. Lo, 1996: A prognostic cloud water parameterization for global climate models. *J. Climate*, **9**, 270-304.
- Del Genio, A.D., 1996: GCM implications for mechanisms determining cloud and water vapor feedbacks. In *Climate Sensitivity to Radiative Perturbations: Physical Mechanisms and Validation*, Proceedings of NATO Advanced Research Workshop, Paris, France, Springer-Verlag, 107-125.
34. Del Genio, A.D., and W. Zhou, 1996: Simulations of superrotation on slowly rotating planets: Sensitivity to rotation and initial condition. *Icarus*, **120**, 332-343.
- Del Genio, A.D., 1996: Observational requirements for modeling of global and regional climate change. In *Radiation and Water in the Climate System: Remote Measurements*, Springer- Verlag, 31-57.
- Del Genio, A.D., 1996: TRMM: The Tropical Rainfall Measuring Mission. In *Radiation and Water in the Climate System: Remote Measurements*, Springer-Verlag, 549-567.
35. Cess, R.D., M.H. Zhang, W.J. Ingram, G.L. Potter, V. Alekseev, H.W. Barker, E. Cohen-Solal, R.A. Colman, D.A. Dazlich, A.D. Del Genio, M.R. Dix, V. Dymnikov, M. Esch, L.D. Fowler, J.R. Fraser, V. Galin, W.L. Gates, J.J. Hack, J.T. Kiehl, H. LeTreut, K.K.-W. Lo, B.J. McAvaney, V.P. Meleshko, J.-J. Morcrette, D.A. Randall, E. Roeckner, J.-F. Royer, M.E. Schlesinger, P.V. Sporyshev, B. Timbal, E.M. Volodin, K.E. Taylor, W. Wang and R.T. Wetherald, 1996: Cloud feedback in atmospheric general circulation models: An update. *J. Geophys. Res.*, **101**, 12791-12794.
36. Stubenrauch, C.J., A.D. Del Genio and W.B. Rossow, 1997: Cloud vertical structure inside a GCM grid and its effect on the radiation budget. *J. Climate*, **10**, 273-287.
37. Dai, A., A.D. Del Genio and I.Y. Fung, 1997: Clouds, precipitation and temperature range. *Nature* (Scientific Correspondence), **386**, 665-666.
38. Cess, R.D., M.H. Zhang, G.L. Potter, V. Alekseev, H.W. Barker, S. Bony, R.A. Colman, D.A. Dazlich, A.D. Del Genio, M. Deque, M.R. Dix, V. Dymnikov, M. Esch, L.D. Fowler, J.R. Fraser, V. Galin, W.L. Gates, J.J. Hack, W.J. Ingram, J.T. Kiehl, Y. Kim, H. LeTreut, X.-Z. Liang, B.J. McAvaney, V.P. Meleshko, J.-J. Morcrette, D.A. Randall, E. Roeckner, J.-F. Royer, M.E. Schlesinger, P.V. Sporyshev, E.M. Volodin, K.E. Taylor, W. Wang, W.C. Wang and R.T. Wetherald, 1997: Comparison of the seasonal change in cloud-radiative forcing from atmospheric general circulation models and satellite observations. *J. Geophys. Res.*, **102**, 16593-16603.

- Del Genio, A.D., 1997: Atmosphere. Encyclopedia of Planetary Sciences (J.H. Shirley and R.W. Fairbridge, eds.), Chapman and Hall, London, 51-54.
39. Dai, A., I.Y. Fung and A.D. Del Genio, 1997: Surface observed global land precipitation variations during 1900-1988. J. Climate, 10, 2943-2962.
40. Peteet, D., A. Del Genio and K.K.-W. Lo, 1997: Sensitivity of Northern Hemisphere air temperatures and snow expansion to North Pacific sea surface temperatures in the Goddard Institute for Space Studies general circulation model. J. Geophys. Res., 102, 23781-23791.
- Gierasch, P.J., R.M. Goody, R.E. Young, D. Crisp, C. Edwards, R. Kahn, D. Rider, A. Del Genio, R. Greeley, A. Hou, C.B. Leovy, D. McCleese and M. Newman, 1997: The general circulation of the Venus atmosphere: An assessment. Venus II: Geology, Geophysics, Atmosphere, and Solar Wind Environment (S.W. Bougher, D.M. Hunten and R.J. Phillips, Eds.), U. of Arizona Press, 459-500.
41. Ye, B., A.D. Del Genio and K.K.-W. Lo, 1998: CAPE variations in the current climate and in a climate change. J. Climate, 11, 1997-2015.
42. Tselioudis, G., A.D. Del Genio, W. Kovari Jr. and M.-S. Yao, 1998: Temperature dependence of low cloud optical thickness in the GISS GCM: Contributing mechanisms and climate implications. J. Climate, 11, 3268-3281.
43. Yao, M.-S., and A.D. Del Genio, 1999: Effects of cloud parameterization on climate changes in the GISS GCM. J. Climate, 12, 761-779.
- Del Genio, A.D., 2000: GCM simulations of cirrus clouds and cloud feedbacks. Proceedings, Workshop on Cloud Processes and Cloud Feedbacks in Large-Scale Models, ECMWF (WCRP-110, WMO/TD-No. 993), 52-61.
44. Del Genio, A.D., and A.B. Wolf, 2000: The temperature dependence of the liquid water path of low clouds in the Southern Great Plains. J. Climate, 13, 3465-3486.
45. Smith, S.A., and A.D. Del Genio, 2001: Analysis of aircraft, radiosonde and radar observations in cirrus clouds observed during FIRE II: The interactions between environmental structure, turbulence and cloud microphysical properties. J. Atmos. Sci., 58, 451-461.
- Del Genio, A.D., 2001: The role of remote sensing displays in Earth climate and planetary atmospheric research. In Interpreting Remote Sensing Imagery: Human Factors (R.R. Hoffman and A.B. Markman, Eds.), CRC Press/Lewis Publishing, 207-233.
- Del Genio, A.D., 2001: GCM simulations of cirrus for climate studies. In Cirrus (D.K. Lynch, Ed.), Oxford University Press, 310-326.
- Lynch, D.K., K. Sassen, A. Del Genio, A. Heymsfield, P. Minnis, M. Platt, M. Quante, U. Schumann and H. Sundqvist, 2001: Cirrus: The future. In Cirrus (D.K. Lynch, Ed.), Oxford University Press, 449-455.
46. Chen, J., B.E. Carlson and A.D. Del Genio, 2002: Evidence for strengthening of the tropical general circulation in the 1990s. Science, 295, 838-841.
47. Wielicki, B.A., A.D. Del Genio, T. Wong, J. Chen, B.E. Carlson, R.P. Allan, F. Robertson, H. Jacobowitz, A. Slingo, D.A. Randall, J.T. Kiehl, B.J. Soden, C.T. Gordon, A.J. Miller, S.-K. Yang, and J. Susskind, 2002: Changes in tropical clouds and radiation (response to K.E. Trenberth). Science (Online), 296, 2095a.

48. Bauer, M., A.D. Del Genio and J. Lanzante, 2002: Observed and simulated temperature-humidity relationships: Sensitivity to sampling and analysis. *J. Climate*, 15, 203-215.
49. Menon, S., A.D. Del Genio, D. Koch and G. Tselioudis, 2002: GCM simulations of the aerosol indirect effect: Sensitivity to cloud parameterization and aerosol burden. *J. Atmos. Sci.*, 59, 692-713.
50. Smith, S.A., and A.D. Del Genio, 2002: A simple model of cirrus horizontal inhomogeneity and cloud fraction. *Quart. J. Roy. Meteor. Soc.*, 128, 149-171.
51. Xie, S., R.T. Cederwall, K.-M. Xu, P. Bechtold, D.G. Cripe, A.D. Del Genio, S.J. Ghan, D. Gregory, J.J. Hack, S.F. Iacobellis, S.A. Klein, S.K. Krueger, U. Lohmann, J.C. Petch, D.A. Randall, L.D. Rotstayn, R.C.J. Somerville, Y.C. Sud, K. von Salzen, G.K. Walker, A. Wolf, J.J. Yio, G. Zhang and M. Zhang, 2002: Intercomparison and evaluation of cumulus parameterizations under summertime midlatitude continental conditions. *Quart. J. Roy. Meteor. Soc.*, 128, 1095-1136.
- Del Genio, A.D., 2002: The dust settles on water vapor feedback. *Science (Perspectives)*, 296, 665-666.
52. Yao, M.-S., and A.D. Del Genio, 2002: Effects of cloud parameterization on the simulation of climate changes in the GISS GCM. Part II: Sea surface temperature and cloud feedbacks. *J. Climate*, 15, 2491-2503.
53. Del Genio, A.D., and W. Kovari, 2002: Climatic properties of tropical precipitating convection under varying environmental conditions. *J. Climate*, 15, 2597-2615.
54. Porco, C.C., R.A. West, A. McEwen, A.D. Del Genio, A.P. Ingersoll, P. Thomas, S. Squyres, L. Dones, C.D. Murray, T.V. Johnson, J.A. Burns, A. Brahic, G. Neukum, J. Veverka, J.M. Barbara, T. Denk, M. Evans, J.J. Ferrier, P. Geissler, P. Helfenstein, T. Roatsch, H. Throop, M. Tiscareno, and A. Vasavada, 2003: Cassini imaging science at Jupiter. *Science*, 299, 1541-1547.
55. Jensen, M.P., and A.D. Del Genio, 2003: Radiative and microphysical properties of convective systems in the Tropical West Pacific. *J. Appl. Meteor.*, 42, 1234-1254.
56. Menon, S., J.-L. Brenguier, O. Boucher, P. Davison, A.D. Del Genio, J. Feichter, S. Ghan, S. Guibert, X. Liu, U. Lohmann, H. Pawlowska, J.E. Penner, J. Quaas, D.L. Roberts, L. Schüller, and J. Snider, 2003: Evaluating aerosol/cloud/radiation process parameterizations with single column models and Second Aerosol Characterization Experiment (ACE-2) cloudy column observations. *J. Geophys. Res.*, 108, D24, 4762, doi:10.1029/2003JD003902.
57. Koch, D., J. Park and A. Del Genio, 2003: Clouds and sulfate are anti-correlated: A new diagnostic for global sulfur models. *J. Geophys. Res.*, 108, D24, 4781, doi:10.1029/2003JD003621.
58. Li, L., A. Ingersoll, A.R. Vasavada, C.C. Porco, A.D. Del Genio and S.P. Ewald, 2004: Life cycles of spots on Jupiter from Cassini images. *Icarus*, 172, 9-23.
59. Dyudina, U., A.D. Del Genio, A.P. Ingersoll, C. Porco, R.A. West, A.R. Vasavada and J. Barbara, 2004: Lightning on Jupiter observed in the H_a line by the Cassini imaging science subsystem. *Icarus*, 172, 24-36.
60. Porco, C.C., et al., 2004: Cassini imaging science: Instrument characteristics and capabilities and anticipated scientific investigations at Saturn. *Space Sci. Rev.*, 115, 363-497.

61. Del Genio, A.D., W. Kovari, M.-S. Yao and J. Jonas, 2005: Cumulus microphysics and climate sensitivity. *J. Clim.*, **18**, 2376-2387.
62. Del Genio, A.D., A.B. Wolf and M.-S. Yao, 2005: Evaluation of regional cloud feedbacks using Single Column Models. *J. Geophys. Res.*, **110**, D15S13, doi:10.1029/2004JD005011.
- Zhang, M.-H., S. Klein, D. Randall, R. Cederwall, and A. Del Genio, 2005: Introduction to special section on Toward Reducing Cloud-Climate Feedback Uncertainties in Atmospheric General Circulation Models. *J. Geophys. Res.*, **110**, D15S01, doi:10.1029/2005JD005923.
63. Zhang, M.H., W.Y. Lin, S.A. Klein, J.T. Bacmeister, S. Bony, R.T. Cederwall, A.D. Del Genio, J.J. Hack, N.G. Loeb, U. Lohmann, P. Minnis, I. Musat, R. Pincus, P. Stier, M.J. Suarez, M.J. Webb, J.B. Wu, S.C. Xie, M.-S. Yao, and J.H. Zhang, 2004: Comparing clouds and their seasonal variation in 10 atmospheric general circulation models with satellite measurements. *J. Geophys. Res.*, **110**, D15S02, doi:10.1029/2004JD005021.
64. Xie, S.-C., M. Zhang, M. Branson, R.T. Cederwall, A.D. Del Genio, Z.A. Eitzen, S.J. Ghan, S.F. Iacobellis, M. Khairoutdinov, S.A. Klein, S.K. Krueger, W. Lin, U. Lohmann, D.A. Randall, R.C.J. Somerville, Y.C. Sud, G.K. Walker, A. Wolf, X. Wu, K.-M. Xu, J.J. Yio, G.J. Zhang, and J. Zhang, 2004: Simulations of midlatitude frontal clouds by SCMs and CRMs during the ARM March 2000 Cloud IOP. *J. Geophys. Res.*, **110**, D15S03, doi:10.1029/2004JD005119.
65. Xu, K.-M., M. Zhang, Z.A. Eitzen, S.J. Ghan, S.A. Klein, X. Wu, M. Branson, A.D. Del Genio, S.F. Iacobellis, M. Khairoutdinov, W. Lin, U. Lohmann, D.A. Randall, R.C.J. Somerville, Y.C. Sud, G.K. Walker, A. Wolf, S. Xie, J.J. Yio and J. Zhang, 2004: Modeling springtime shallow frontal clouds with cloud-resolving and single-column models. *J. Geophys. Res.*, **110**, D15S04, doi:10.1029/2004JD005153.
66. Porco, C.C., E. Baker, J. Barbara, K. Beurle, A. Brahic, J.A. Burns, S. Charnoz, N. Cooper, D.D. Dawson, A.D. Del Genio, T. Denk, L. Dones, U. Dyudina, M.W. Evans, B. Giese, K. Grazier, P. Helfenstein, A.P. Ingersoll, R.A. Jacobson, T.V. Johnson, A. McEwen, C.D. Murray, G. Neukum, W.M. Owen, J. Perry, T. Roatsch, J. Spitale, S. Squyres, P. Thomas, M. Tiscareno, E. Turtle, A.R. Vasavada, J. Veverka, R. Wagner and R. West, 2005: Cassini imaging science: Initial results on Saturn's atmosphere. *Science*, **307**, 1243-1247.
67. Porco, C.C., E. Baker, J. Barbara, K. Beurle, A. Brahic, J.A. Burns, S. Charnoz, N. Cooper, D.D. Dawson, A.D. Del Genio, T. Denk, L. Dones, U. Dyudina, M.W. Evans, B. Giese, K. Grazier, P. Helfenstein, A.P. Ingersoll, R.A. Jacobson, T.V. Johnson, A. McEwen, C.D. Murray, G. Neukum, W.M. Owen, J. Perry, T. Roatsch, J. Spitale, S. Squyres, P. Thomas, M. Tiscareno, E. Turtle, A.R. Vasavada, J. Veverka, R. Wagner and R. West, 2005: Cassini imaging science: Initial results on Saturn's rings and small satellites. *Science*, **307**, 1226-1236.
68. Porco, C.C., E. Baker, J. Barbara, K. Beurle, A. Brahic, J.A. Burns, S. Charnoz, N. Cooper, D.D. Dawson, A.D. Del Genio, T. Denk, L. Dones, U. Dyudina, M.W. Evans, B. Giese, K. Grazier, P. Helfenstein, A.P. Ingersoll, R.A. Jacobson, T.V. Johnson, A. McEwen, C.D. Murray, G. Neukum, W.M. Owen, J. Perry, T. Roatsch, J. Spitale, S. Squyres, P. Thomas, M. Tiscareno, E. Turtle, A.R. Vasavada, J. Veverka, R. Wagner and R. West, 2005: Cassini imaging science: Initial results on Phoebe and Iapetus. *Science*, **307**, 1237-1242.
69. Porco, C.C., E. Baker, J. Barbara, K. Beurle, A. Brahic, J.A. Burns, S. Charnoz, N. Cooper, D.D. Dawson, A.D. Del Genio, T. Denk, L. Dones, U. Dyudina, M.W. Evans, S. Fussner, B. Giese, K. Grazier, P. Helfenstein, A.P. Ingersoll, R.A. Jacobson, T.V. Johnson, A. McEwen, C.D. Murray, G. Neukum, W.M.

- Owen, J. Perry, T. Roatsch, J. Spitale, S. Squyres, P. Thomas, M. Tiscareno, E. Turtle, A.R. Vasavada, J. Veverka, R. Wagner and R. West, 2005: Cassini imaging science at Titan. *Nature*, **434**, 159-168.
70. Hansen, J., L. Nazarenko, R. Ruedy, Mki. Sato, J. Willis, A. Del Genio, D. Koch, A. Lacis, K. Lo, S. Menon, T. Novakov, J. Perlitz, G. Russell, G.A. Schmidt, and N. Tausnev 2005. Earth's energy imbalance: Confirmation and implications. *Science*, doi:10.1126/science.1110252.
71. Hansen, J., M. Sato, R. Ruedy, L. Nazarenko, A. Lacis, G.A. Schmidt, G. Russell, I. Aleinov, M. Bauer, S. Bauer, N. Bell, B. Cairns, V. Canuto, M. Chandler, Y. Cheng, A. Del Genio, G. Faluvegi, E. Fleming, A. Friend, T. Hall, C. Jackman, M. Kelley, N. Kiang, D. Koch, J. Lean, J. Lerner, K. Lo, S. Menon, R. Miller, P. Minnis, T. Novakov, V. Oinas, Ja. Perlitz, Ju. Perlitz, D. Rind, A. Romanou, D. Shindell, P. Stone, S. Sun, N. Tausnev, D. Thresher, B. Wielicki, T. Wong, M. Yao, and S. Zhang, 2005: Efficacy of climate forcings. *J. Geophys. Res.*, **110**, D18104, doi:10.1029/2005JD005776.
72. Li, J.-L., D.E. Waliser, J.H. Jiang, D.L. Wu, W. Read, J.W. Waters, A.M. Tompkins, L.J. Donner, J.-D. Chern, W.-K. Tao, R. Atlas, Y. Gu, K.N. Liou, A. Del Genio, M. Khairoutdinov, and A. Gettelman, 2005: Comparisons of EOS MLS cloud ice measurements with ECMWF analyses and GCM simulations: Initial results. *Geophys. Res. Letters*, **32**, L18710, doi:10.1029/2005GL023788.
73. Schmidt, G. A., R. Ruedy, J.E. Hansen, I. Aleinov, N. Bell, M. Bauer, S. Bauer, B. Cairns, Y. Cheng, A. DelGenio, G. Faluvegi, A.D. Friend, T.M. Hall, Y. Hu, M. Kelley, N. Kiang, D. Koch, A.A. Lacis, J. Lerner, K.K. Lo, R.L. Miller, L. Nazarenko, V. Oinas, J. Perlitz, J. Perlitz, D. Rind, A. Romanou, G.L. Russell, M. Sato, D.T. Shindell, P.H. Stone, S. Sun, N. Tausnev, D. Thresher, and M.-S. Yao, 2006: Present day atmospheric simulations using GISS ModelE: Comparison to in-situ, satellite and reanalysis data. *J. Clim.*, **19**, 153-192.
74. Bauer, M., and A.D. Del Genio, 2006: Composite analysis of winter cyclones in a GCM: Influence on climatological humidity. *J. Clim.*, **19**, 1652-1672.
75. Jensen, M.P., and A.D. Del Genio, 2006: Factors limiting convective cloud top height at the ARM Nauru island climate research facility. *J. Clim.*, **19**, 2105-2117.
76. Lin, J.-L., G.N. Kiladis, B.E. Mapes, K.M. Weickmann, K.R. Sperber, W. Lin, M.C. Wheeler, S.D. Schubert, A. Del Genio, L.J. Donner, S. Emori, J.-F. Gueremy, F. Hourdin, P.J. Rasch, E. Roeckner and J.F. Scinocca, 2006: Tropical intraseasonal variability in 14 IPCC AR4 climate models. Part I: Convective signals. *J. Clim.*, **19**, 2665-2690.
77. Porco, C.C., P. Helfenstein, P. Thomas, A.P. Ingersoll, J. Wisdom, R. West, G. Neukum, T. Denk, R. Wagner, T. Roatsch, S. Kieffer, E. Turtle, A. McEwen, T.V. Johnson, J. Rathbun, J. Veverka, D. Wilson, J. Perry, J. Spitale, A. Brahic, J.A. Burns, A.D. Del Genio, L. Dones, C.D. Murray, and S. Squyres, 2006: Cassini images the active south pole of Enceladus. *Science*, **311**, 1393-1401.
78. Li, L., A.P. Ingersoll, A.R. Vasavada, A.A. Simon-Miller, A.D. Del Genio, S.P. Ewald, C.C. Porco, and R.A. West, 2006: Vertical wind shear on Jupiter from Cassini images. *J. Geophys. Res.*, **111**, E04004.
79. Vasavada, A.R., S. M. Hörst, M. R. Kennedy, A. P. Ingersoll, C. C. Porco, A. D. Del Genio, and R. A. West, 2006: Cassini imaging of Saturn: Southern Hemisphere winds and vortices. *Journal of Geophysical Research*, **111**, E05004, doi:10.1029/2005JE002563.
80. Salyk, C., A.P. Ingersoll, J. Lorre, A.R. Vasavada, S. Ewald, and A.D. Del Genio, 2006: Interaction between eddies and mean flow in Jupiter's atmosphere: Analysis of Cassini imaging data. *Icarus*, **185**, 430-442.

81. Naud, C.M., A.D. Del Genio, and M. Bauer 2006: Observational constraints on cloud thermodynamic phase in midlatitude storms. *J. Climate*, **19**, 5273-5288.
82. Chen, Y., A.D. Del Genio and J. Chen, 2007: The tropical atmospheric El Niño signal in satellite precipitation data and a global climate model. *J. Climate*, **20**, 3580-3601.
83. Del Genio, A.D., J.M. Barbara, J. Ferrier, A.P. Ingersoll, R.A. West, A.R. Vasavada, J. Spitale, and C.C. Porco, 2007: Saturn eddy momentum fluxes and convection: First estimates from Cassini images. *Icarus*, **189**, 479-492.
84. Dyudina, U.A., A.P. Ingersoll, S.P. Ewald, C.C. Porco, G. Fischer, W. Kurth, M. Desch, A. Del Genio, J. Barbara, and J. Ferrier, 2007: Lightning storms on Saturn observed by Cassini ISS and RPWS during 2004-2006. *Icarus*, **190**, 545-555.
85. Del Genio, A.D., M.-S. Yao, and J. Jonas, 2007: Will moist convection be stronger in a warmer climate? *Geophys. Res. Letters*, **34**, L16703, doi:10.1029/2007GL030525.
86. Futyan, J.M., and A.D. Del Genio, 2007: Relationships between lightning and properties of convective cloud clusters. *Geophys. Res. Letters*, **34**, L15705, doi:10.1029/2007GL030227.
87. Hansen, J., Mki. Sato, R. Ruedy, P. Kharecha, A. Lacis, R.L. Miller, L. Nazarenko, K. Lo, G.A. Schmidt, G. Russell, I. Aleinov, S. Bauer, E. Baum, B. Cairns, V. Canuto, M. Chandler, Y. Cheng, A. Cohen, A. Del Genio, G. Faluvegi, E. Fleming, A. Friend, T. Hall, C. Jackman, J. Jonas, M. Kelley, N.Y. Kiang, D. Koch, G. Labow, J. Lerner, S. Menon, T. Novakov, V. Oinas, Ja. Perlwitz, Ju. Perlwitz, D. Rind, A. Romanou, R. Schmunk, D. Shindell, P. Stone, S. Sun, D. Streets, N. Tausnev, D. Thresher, N. Unger, M. Yao, and S. Zhang 2007. Dangerous human-made interference with climate: A GISS modelE study. *Atmos. Chem. Phys.*, **7**, 2287-2312.
88. Hansen, J., Mki. Sato, R. Ruedy, P. Kharecha, A. Lacis, R.L. Miller, L. Nazarenko, K. Lo, G.A. Schmidt, G. Russell, I. Aleinov, S. Bauer, E. Baum, B. Cairns, V. Canuto, M. Chandler, Y. Cheng, A. Cohen, A. Del Genio, G. Faluvegi, E. Fleming, A. Friend, T. Hall, C. Jackman, J. Jonas, M. Kelley, N.Y. Kiang, D. Koch, G. Labow, J. Lerner, S. Menon, T. Novakov, V. Oinas, Ja. Perlwitz, Ju. Perlwitz, D. Rind, A. Romanou, R. Schmunk, D. Shindell, P. Stone, S. Sun, D. Streets, N. Tausnev, D. Thresher, N. Unger, M. Yao, and S. Zhang 2007. Climate simulations for 1880-2003 with GISS modelE. *Climate Dyn.*, **29**, 661-696.
89. Futyan, J.M., and A.D. Del Genio, 2007: Deep convective system evolution over Africa and the tropical Atlantic. *J. Climate*, **20**, 5041-5060.
90. Menon, S., and A. Del Genio, 2007: Evaluating the impacts of carbonaceous aerosols on clouds and climate. In *Human-Induced Climate Change* (M. Schlesinger, Ed.), Cambridge University Press, pp. 34-48.
91. Dyudina, U.A., A.P. Ingersoll, S.P. Ewald, A.R. Vasavada, R.A. West, A. Del Genio, J. Barbara, C.C. Porco, R. Achterberg, F.M. Flasar, A.A. Simon-Miller, and L.N. Fletcher, 2008: Dynamics of Saturn's south polar vortex. *Science*, **319**, 1801.
92. Naud, C.M., A. Del Genio, G.G. Mace, S. Benson, E.E. Clothiaux, and P. Kollias, 2008: Impact of dynamics and atmospheric state on cloud vertical overlap. *J. Climate*, **21**, 1758-1770.
93. Chen, J., A.D. Del Genio, B.E. Carlson, and M.G. Bosilovich, 2008: The spatiotemporal structure of 20th century climate variations in observations and reanalyses. Part I: Long-term trend. *J. Climate*, **21**, 2611-2633.

94. Chen, J., A.D. Del Genio, B.E. Carlson, and M.G. Bosilovich, 2008: The spatiotemporal structure of 20th century climate variations in observations and reanalyses. Part II: Pacific pan-decadal variability. *J. Climate*, 21, 2634-2650.
95. Menon, S., A.D. Del Genio, Y. Kaufman, R. Bennartz, D. Koch, N. Loeb, and D. Orlikowski, 2008: Analyzing signatures of aerosol-cloud interactions from satellite retrievals and the GISS GCM to constrain the aerosol indirect effect. *J. Geophys. Res.*, 113, D14S22, doi:10.1029/2007JD009442.
96. Chen, Y., and A.D. Del Genio, 2009: Evaluation of tropical cloud regimes in observations and a general circulation model. *Climate Dyn.*, 32, 355-369.
97. Klein, S.A., R.B. McCoy, H. Morrison, A.S. Ackerman, A. Avramov, G. de Boer, M. Chen, J.N.S. Cole, A.D. Del Genio, M. Falk, M.J. Foster, A. Fridlind, J.-C. Golaz, T. Hashino, J.Y. Harrington, C. Hoose, M.F. Khairoutdinov, V.E. Larson, X. Liu, Y. Luo, G.M. McFarquhar, S. Menon, R.A.J. Neggers, S. Park, M.R. Poellot, J.M. Schmidt, I. Sednev, B.J. Shipway, M.D. Shupe, D.A. Spangenberg, Y.C. Sud, D.D. Turner, D.E. Veron, K. von Salzen, G.K. Walker, Z. Wang, A.B. Wolf, S. Xie, K.-M. Xu, F. Yang, and G. Zhang, 2009: Intercomparison of model simulations of mixed-phase clouds observed during the ARM mixed-phase Arctic cloud experiment. Part I: Single layer cloud. *Q.J.R. Meteorol. Soc.*, 135, 979-1002.
98. Morrison, H., R.B. McCoy, S.A. Klein, S. Xie, Y. Luo, A. Avramov, M. Chen, J.N.S. Cole, M. Falk, M.J. Foster, A.D. Del Genio, J.Y. Harrington, C. Hoose, M.F. Khairoutdinov, V.E. Larson, X. Liu, G.M. McFarquhar, M.R. Poellot, K. von Salzen, B.J. Shipway, M.D. Shupe, Y.C. Sud, D.D. Turner, D.E. Veron, G.K. Walker, Z. Wang, A.B. Wolf, K.-M. Xu, F. Yang, and G. Zhang, 2009: Intercomparison of model simulations of mixed-phase clouds observed during the ARM mixed-phase Arctic cloud experiment, Part II: Multi-layered cloud. *Q.J.R. Meteorol. Soc.*, 135, 1003-1019.
99. Koch, D., S. Menon, A. Del Genio, R. Ruedy, I. Alienov, and G. Schmidt, 2009: Distinguishing aerosol impacts on climate over the past century. *J. Climate*, 22, 2659-2677.
100. Turtle, E.P., J.E. Perry, A.S. McEwen, A.D. Del Genio, J. Barbara, R.A. West, S. Fussner, D.D. Dawson, and C. C. Porco, 2009: Cassini imaging of Titan's high-latitude lakes, clouds, and south-polar surface changes. *Geophys. Res. Letters*, 36, L02204, doi:10.1029/2008GL036186.
101. Waliser, D.E., J.-L.F. Li, C.P. Woods, R.T. Austin, J. Bacmeister, J. Chern, A. Del Genio, J.H. Jiang, Z. Kuang, H. Meng, P. Minnis, S. Platnick, W.B. Rossow, G.L. Stephens, S. Sun-Mack, W. Tao, A.M. Tompkins, D.G. Vane, C. Walker, and D. Wu, 2009: Cloud ice: A climate model challenge with signs and expectations of progress. *J. Geophys. Res.*, 114, D00A21, doi:10.1029/2008JD010015.
102. Dyudina, U., A.P. Ingersoll, S.P. Ewald, A.R. Vasavada, R.A. West, K.H. Baines, T.W. Momary, A.D. Del Genio, J.M. Barbara, C.C. Porco, R.K. Achterberg, F.M. Flasar, A.A. Simon-Miller, and L.N. Fletcher, 2009: Saturn's south polar vortex compared to other large vortices in the solar system. *Icarus*, 202, 240-248.
103. Wu, J., A.D. Del Genio, M.-S. Yao, and A.B. Wolf, 2009: WRF model and GISS SCM simulations of convective updraft properties during the TWP-ICE experiment. *J. Geophys. Res.*, 114, D04206, doi:10.1029/2008JD010851.
104. Del Genio, A.D., R.K. Achterberg, K.H. Baines, F.M. Flasar, P.L. Read, A. Sánchez-Lavega, and A.P. Showman, 2009: Saturn atmospheric structure and dynamics. *Saturn From Cassini-Huygens* (M. Dougherty, L. Esposito, T. Krimigis, Eds.), Springer-Verlag, pp. 113-159, doi:10.1007/978-1-4020-9217-6_6.

105. Naud, C.M., A.D. Del Genio, M. Haeffelin, Y. Morille, V. Noel, J.-C. Dupont, D.D. Turner, C. Lo, and J. Comstock, 2010: Thermodynamic phase profiles of optically thin midlatitude clouds and their relation to temperature. *J. Geophys. Res.*, **115**, D11202, doi:10.1029/2009JD012889.
106. Del Genio, A.D., and J. Wu, 2010: The role of entrainment in the diurnal cycle of continental convection. *J. Climate*, **23**, 2722-2738.
107. Naud, C.M., A.D. Del Genio, M. Bauer, and W. Kovari, 2010: Cloud vertical distribution across warm and cold fronts in CloudSat-CALIPSO data and a general circulation model. *J. Climate*, **23**, 3397-3415.
108. Koch, D., and A.D. Del Genio, 2010: Black carbon semi-direct effects on cloud cover: review and synthesis, *Atmos. Chem. Phys.*, **10**, 7685-7696.
109. Kennedy, A.D., X. Dong, B. Xi, P. Minnis, A.D. Del Genio, A.B. Wolf and M.M. Khaiyer, 2010: Evaluation of the GISS Single Column Model simulated clouds using combined surface and satellite observations. *J. Climate*, **23**, 5175-5192.
110. Li, L., B. Conrath , P. Gierasch , R. Achterberg , C. Nixon , A. Simon-Miller , F. Flasar , D. Banfield , K. Baines , R. West , A. Ingersoll , C.C. Porco , A. Vasavada , A. Del Genio , A. Mamoutkine , M. Segura , G. Bjoraker , G. Orton , L. Fletcher , P. Irwin , and P. Read, 2010: Saturn's emitted power. *J. Geophys. Res.*, **115**, E11002, doi:10.1029/2010JE003631.
111. Stramler, K.L., A.D. Del Genio, and W.B. Rossow, 2011: Synoptically driven Arctic winter states. *J. Climate*, **24**, 1747-1762.
112. Turtle, E.P., A.D. Del Genio, J.M. Barbara, J.E. Perry, E.L. Schaller, A.S. McEwen, R.A. West and T.L. Ray, 2011: Seasonal changes in Titan's meteorology. *Geophys. Res. Letters*, **38**, L03203, doi:10.1029/2010GL046266.
113. Turtle, E.P., J.E. Perry, A.G. Hayes, R.D. Lorenz, J.W., Barnes, A.S. McEwen, R.A. West, A.D. Del Genio, J.M. Barbara, J.I. Lunine, E.L. Schaller, T.L. Ray, R.M.C. Lopes and E.R. Stofan, 2011: Rapid and extensive surface changes near Titan's equator: Evidence of April showers. *Science*, **331**, 1414-1417.
- Del Genio, A.D., 2011: Will a warmer world be stormier? *Earthzine*, <http://www.earthzine.org/2011/04/12/will-a-warmer-world-be-stormier/>.
114. Teixeira, J., S. Cardoso, M. Bonazzola, J. Cole, A. Del Genio, C. DeMott, C. Franklin, C. Hannay, C. Jakob, Y. Jiao, J. Karlsson, H. Kitagawa, M. Köhler, A. Kuwano-Yoshida, C. LeDrian, A. Lock, M.J. Miller, P. Marquet, J. Martins, C.R. Mechoso, E.V. Meijgaard, I. Meinke, P.M.A. Miranda, D. Mironov, R. Neggers, H.L. Pan, D.A. Randall, P.J. Rasch, B. Rockel, W.B. Rossow, B. Ritter, A.P. Siebesma, P. Soares, F.J. Turk, P.A. Vaillancourt, A. Von Engeln, and M. Zhao, 2011: Tropical and sub-tropical cloud transitions in weather and climate prediction models: the GCSS/WGNE Pacific Cross-section intercomparison (GPCI). *J. Climate*, **24**, 5223-5256.
115. Koch, D., S. Bauer, A. Del Genio, G. Faluvegi, J.R. McConnell, S. Menon, R.L. Miller, D. Rind, R. Ruedy, G.A. Schmidt, and D. Shindell, 2011: Coupled aerosol-chemistry-climate twentieth century transient model investigation: Trends in short-lived species and climate responses. *J. Climate*, **24**, 2693-2714.
116. Li, L., X. Jiang , A. Ingersoll, A. Del Genio , C. Porco , R. West , A. Vasavada , S. Ewald , B. Conrath , P. Gierasch , A. Simon-Miller , C. Nixon , R. Achterberg , G. Orton , L. Fletcher and K. Baines, 2011: Equatorial winds on Saturn and the stratospheric oscillation. *Nature Geoscience*, **4**, 750-752.

117. Del Genio, A.D., 2012: Representing the sensitivity of convective cloud systems to tropospheric humidity in general circulation models. Surv. Geophys., doi:10.1007/s10712-011-9148-9.
118. Del Genio, A.D., Y. Chen, D. Kim and M.-S. Yao, 2012: The MJO transition from shallow to deep convection in CloudSat/CALIPSO data and GISS GCM simulations. J. Climate, in press, doi:10.1175/JCLI-D-11-00384.1.
119. Kim, D., A.H. Sobel, A. Del Genio, Y. Chen, S.J. Camargo, M.-S. Yao, M. Kelley and L. Nazarenko, 2012: The Madden-Julian Oscillation and tropical cyclones simulated in the NASA GISS general circulation model. J. Climate, in press.
120. Del Genio, A.D., J. Wu, and Y. Chen, 2012: Characteristics of mesoscale organization in WRF simulations of convection during TWP-ICE. J. Climate, in revision.
121. Jiang, J., H. Su, C. Zhai, V. Perun, A. Del Genio, L. Nazarenko, L. Donner, L. Horowitz, C. Seman, J. Cole, A. Gettelman, M. Ringer, L. Rotstayn, S. Jeffrey, T. Wu, F. Brient, J.-L. Dufresne, H. Kawai, T. Koshiro, W. Masahiro, T. L'Ecuyer, W. Read, J. Waters, B. Tian, J. Teixeira and G. Stephens, 2011: Evaluation of cloud and water vapor simulations in IPCC AR5 climate models using NASA "A-Train" satellite observations. Submitted to J. Geophysical Research.
122. Del Genio, A.D., and J.M. Barbara, 2012: Constraints on Saturn's tropospheric general circulation from Cassini ISS images. Submitted to Icarus.