

Chung-Hsiung Sui

隋中興

PUBLICATION LIST

1. Sui, C.-H., X. Li, K.-M. Lau, W.-K. Tao, M.-D. Chou, and M.-J. Yang, 2006: Convective-radiative-mixing processes in the tropical ocean-atmosphere. *The Monograph for the 50-yr Anniversary of Dept. of Atmospheric Sciences, National Taiwan University*, submitted, May 2006
2. Sui, C.-H., and X. Li, 2006: A New Partition Method to Estimate Convective and Stratiform Rainfall in the Tropical Deep Convective Regime, *J. Geophys. Res.* (Submitted).
3. Kim, J.-H., C.-H. Ho, H.-S. Kim, **C.-H. Sui**, and S.-K. Park, 2006: Systematic Variation of Summertime Tropical Cyclone Activity in the Western North Pacific in Relation to the Madden-Julian Oscillation, *J. Climate* (submitted)
4. Sui, C.-H., X. Li, M.-J. Yang, 2006: On the Definition of Precipitation Efficiency, *J. Atmos. Sci.* (in press)
5. Sui, C.-H., P.-H. Chung, and T. Li, 2006: Interannual and interdecadal variability of the summertime western north Pacific subtropical High, *Geophys. Res. Lett.* (in press).
6. Park, M.-S., Y.-S. Choi, C.-H. Ho, C.-H. Sui, S.-K. Park, M.-H. Ahn, 2007: Regional Cloud Characteristics over the Tropical Northwestern Pacific as Revealed by TRMM PR and TMI, *J. of Geophys. Res.*, 112, D05209, doi: 10.1029/2006JD007437
7. Lin, W., C.-H. Sui, C. Bueh, C. Wu, A. Wang, S. Fan, S. Fong, 2007: A Numerical Comparison Study of Cloud Microphysical Parameterization Schemes about a Moderate Snowfall Event in North China, *Meteorology and Atmospheric Physics*, **91**, DOI 10.1007/s00703-006-0189-4
8. Lin, W. S., C.-H. Sui, L. M. Yang, X. M. Wang, R. R. Deng, S. J. Fan, C. S. Wu, A. Y. Wang, and S. K. Fong, 2006: A numerical study of the influence of urban expansion on monthly climate in dry autumn over the Pearl River Delta, China. *Theor. Appl. Climatol.* 000, 1–10 (2006) DOI 10.1007/s00704-006-0244-6.
9. Li, M.-H., C.-P. Tung, C.-H. Sui, and F.-H. Yang, 2006: Estimating Seasonal Basin Rainfall with Tabu Search, *Terrestrial, Atmospheric and Oceanic Sciences*, **17**, 295-316.
10. Kim, J.-H., C.-H. Ho, **C.-H. Sui**, and S.-K. Park, 2005: Dipole Structure of Interannual Variations in Summertime Tropical Cyclone Activity over East Asia. *J. Climate*. Vol. **18**, No. 24, pp. 5344–5356. doi: 10.1175/JCLI3601.1
11. **Sui, C.-H.**, X. Li, M.-J. Yang, and H.-L. Huang, 2005: Estimation of Oceanic Precipitation Efficiency in Cloud Models. *J. Atmos. Sci.* **62**, 4358-4370.
12. Choi, Y.-S., C.-H. Ho, and **C.-H. Sui**, 2005: Different optical properties of high cloud in GMS and MODIS observations, *Geophys. Res. Lett.*, **32**, L23823, doi:10.1029/2005GL024616.
13. Kim, J.-H., C.-H. Ho, **C.-H. Sui**, 2005: Record-breaking Typhoon Landfalls on

- Japan. *Geophysical Research Letter*, **32**, L14713, doi:10.1029/2005GL022494.
14. Ho, C.-H., J.-H. Kim, H.-S. Kim, **C.-H. Sui**, and D.-Y. Gong, 2005: Possible influence of the Antarctic Oscillation on tropical cyclone activity in the western North Pacific. *J. Geophys. Res.* **110**, D19104, doi: 10.1029/2005JD005766.
15. **Sui, C.-H.**, and Li, X., 2005: A Tendency of Cloud Ratio Associated with the Development of Tropical Water and Ice Clouds. *Terrestrial Atmospheric and Oceanic Sciences*, **16**, 419-434.
16. Hwang, C.-W., M.-F. Peng, J. Ning and J. Luo, **C.-H. Sui**, 2005: Lake level variations in China from TOPEX/Poseidon altimetry: data quality assessment and links to precipitation and ENSO. *Geophysical Journal International*, **161**, 1-11. doi: 10.1111/j.1365-246X.2005.02518.x
17. Li, X., **C.-H. Sui**, K.-M. Lau, and W.-K. Tao, 2005: Tropical convective responses to microphysical and radiative processes: a sensitivity study with a 2-D cloud resolving model. *Meteorology and Atmospheric Physics*, **90**, 245-259, doi: 10.1007/s.00703-004-0088-5
18. Ho, C.-H., J.-J. Baik, J.-H. Kim, and D.-Y. Gong , and **C.-H. Sui**, 2004: Interdecadal Changes in Summertime Typhoon Tracks. *J. Climate*, **17**(9), 1767-1776.
19. Lin, I.-I., W. T. Liu, C.-C. Wu, J. C. H. Chiang, **C.-H. Sui**, 2003: Satellite observations of modulation of surface winds by typhoon-induced upper ocean cooling. *Geophys. Res. Lett.* 30, number 3, 1131, doi:10.1029/2002GL015674.
20. He, Haiyan, **C.-H. Sui**, M. Jian, and Z. Wen, 2003: The evolution of tropospheric temperature field and its relationship with the onset of Asian summer monsoon. *J. Meteor. Soc. Japan*. **81**, No. 5, 1201-1223.
21. **Sui, C.-H.**, X. Li, M. M. Rienecker, K.-M. Lau, I. Laszlo, R. T. Pinker , 2003: The impacts of daily surface forcing in the upper ocean over tropical Pacific: A numerical study. *J. Climate*. **16**, No. 4, 756-766.
22. Tao, W.-K., S. Simpson, D. Baker, S. Braun, M.-D. Chou, B. Ferrier, D. Johnson, A., Khain, S. Lang, B. Lynn, C.-L. Shie, **C.-H. Sui**, Y. Wang, and P. Wetzel, 2003: Microphysics, radiation and surface processes in the Goddard Cumulus Ensemble model. *Meteorology and Atmospheric Physics*, **82**, 97-137.
23. Shie, C.-L., W.-K. Tao, J. Simpson, and **C.-H. Sui**, 2003: Quasi-equilibrium states in the tropics simulated by a cloud-resolving model. Part I: Specific features and budget analysis. *J. Climate*, **16**, 817-833.
24. **Sui, C.-H.**, C.-Y. Huang, Y.-B. Tsai, C.-S. Chen, P.-L. Lin, S.-L. Shieh, M.-H. Li, Y.-A. Liou, T.-C. C. Wang, R.-S. Wu, G.-R. Liu, Y.-H. Chu, 2002: Typhoon Nari and Taipei Flood - A pilot meteorology-hydrology study. *EOS, Trans, Amer. Geophys. Union*, 83, Number 24, 11 June 2002, 265-270.
25. Li, X., **C.-H. Sui**, and K.-M. Lau, 2002: Dominant cloud microphysical processes in a tropical oceanic convective system: A 2-D cloud resolving modeling study. *Mon. Wea. Rev.*, **130**, 2481-2491.
26. Li, X., **C.-H. Sui**, and K.-M. Lau, 2002: Precipitation efficiency in the tropical deep convective regime: A 2-D cloud resolving modeling study. *J. Meteor. Soc.*

Japan. **80**, 205-212.

27. Johnson, D., W.-K. Tao, J. Simpson, **C.-H. Sui**, 2002: A study of the response of deep tropical clouds to mesoscale processes: Part I: Modeling strategies and simulations of TOGA-COARE convective systems. *J. Atm. Sci.* **59**, 3492-3518.
28. Ho, C.-H., M.-D. Chou, **C.-H. Sui**, 2002: Comparison of Different Earth Radiation Budget Experiment Data Sets over Tropical Oceans. *Int. J. Climatol.* **22**, 263–270.
29. Li, X., **C.-H. Sui**, and K.-M. Lau, 2002: Interaction between tropical convection and its embedding environment: an energetics analysis of a 2-D cloud resolving simulation. *J. Atmos. Sci.* **59**, 1712-1722.
30. Peng, L., **C.-H. Sui**, K.-M. Lau, and W.-K. Tao, 2001: Genesis and Evolution of Super Cloud Clusters in a Two-Dimensional Cumulus Resolving Model. *J. Atmos. Sci.* **58**, 877-895.
31. Li, X., **C.-H. Sui**, K.-M. Lau, and D. Adamec, 2000: Effects of precipitation on ocean mixed layer temperature and salinity as simulated in a 2-D coupled ocean-cloud resolving atmosphere model, *J. Meteor. Soc. Japan.* **78**, 647-659.
32. Li, X., **C.-H. Sui**, K.-M. Lau, and M.-D. Chou, 1999: Large-scale forcing and cloud-radiation interaction in the tropical deep convective regime. *J. Atmos. Sci.* **56**, 3028-3042.
33. Vega, A. J., R. V. Rohli, **C.-H. Sui**, 1999: Climatic relationships to Chesapeake Bay salinity during Southern Oscillation extremes. *Physical Geography*, **20**, 6, 468-490.
34. Tao, W.-K., J. Simpson, **C.-H. Sui**, C.-L. Shie, B. Zhou, K.-M. Lau, and M. Moncrieff, 1999: Equilibrium states simulated by Cloud resolving models. *J. Atmos. Sci.* **56**, 3128-3139.
35. **Sui, C.-H.**, X. Li, and K.-M. Lau, 1998: Selective absorption of solar radiation and upper ocean temperature in the equatorial western Pacific. *J. Geophys. Res.* **103**, C5, 10,313-10,321.
36. **Sui, C.-H.**, X. Li, and K.-M. Lau, 1998: Radiative-convective processes in simulated diurnal variations of tropical oceanic convection. *J. Atmos. Sci.* **55**, 2345-2357.
37. Vega, A. J., **C.-H. Sui**, and K.-M. Lau, 1998: Interannual to interdecadal variations of the regionalized surface climate of the United States and relationships to generalized flow. *Physical Geography*. **19**, 4, 271-291.
38. Lee, H.-K., P.-S. Chu, **C.-H. Sui**, and K.-M. Lau, 1998: On the annual cycle of latent heat fluxes over the equatorial Pacific using TAO buoy observations. *J. Meteor. Soc. Japan*, **76**, 909-923, 1998.
39. Lau, K.-M., and **C.-H Sui**, 1997: Mechanisms of short-term sea surface temperature regulation: observations during TOGA COARE. *J. Climate*, **10**, 465-472.
40. **Sui, C.-H.**, X. Li, K.-M. Lau, and D. Adamec, 1997: Multi-scale air-sea interaction during TOGA COARE. *Mon. Wea. Rev.* **125**, 448-462.
41. **Sui, C.-H.**, K.-M. Lau, Y. Takayabu, and D. Short, 1997: Diurnal variations in

- tropical oceanic cumulus convection during TOGA COARE. *J. Atmos. Sci.* **54**, 637-655.
42. Li, Xiaofan, **C.-H. Sui**, D. Adamec, and K.-M. Lau, 1997: Impacts of Precipitation in the Upper Ocean in the Western Pacific Warm Pool during TOGA COARE" *J. Geophys. Res.*.. **103**, C3, 5347-5359.
43. Takayabu, Y. N., K.-M. Lau, and **C.-H. Sui**, 1996: Observation of a quasi-2-day wave during TOGA COARE. *Mon. Wea. Rev.* **124**, 1892-1913.
44. Tao, W.-K., S. Long, J. Simpson, **C.-H. Sui**, B. Ferrier and M.-D. Chou, 1996: Cloud-radiation mechanisms associated with a tropical and a mid-latitude squall line. *J. Atmos. Sci.*, **53**, 2624-2651.
45. **Sui, C.-H.**, K.-M. Lau, W.-K. Tao and J. Simpson, 1994: The tropical water and energy cycles in a cumulus ensemble model. Part 1: Equilibrium climate. *J. Atmos. Sci.* **51**, 711-728, 1994.
46. Lau, K.-M., **C.-H. Sui**, M.-D. Chou and W.-K. Tao, 1994: Cirrus cloud thermostat effect for tropical sea surface temperature-fact or fiction. *Geophysical Research Letter* , **21**, 1157-1160, 1994.
47. Lau, K.-M., **C.-H. Sui** and W.-K. Tao, 1993: A preliminary study of the tropical water cycle using the Goddard Cumulus Ensemble model. *Bull. Amer. Meteor. Soc.* **74**, 1313-1321.
48. Tao, W.-K., J. Samson, **C.-H. Sui**, S. Lang, J. Scala, B. Ferrier, M. D. Chou and K. Pickering, 1993: Heating, moisture and water budgets in the convective and stratiform regions of tropical and mid-latitude squall lines: their sensitivity to longwave radiation. *J. Atmos. Sci.* **50**, 673-690.
49. **Sui, C.-H.** and K.-M. Lau, 1992: Multi-scale phenomena in the tropical atmosphere over the western Pacific. *Mon Wea. Rev.* **120**, 407-430.
50. **Sui, C.-H.** and K.-M. Lau and A. K. Betts, 1991: An equilibrium model for the coupled ocean-atmosphere boundary layer in the tropics. *J. Geophys. Res.* **96**, 3151-3163.
51. Lau, K.-M., T. Nakazawa and **C.-H. Sui**, 1991: Observations of cloud cluster hierarchy over the tropical western Pacific. *J. Geophys. Res.* **96**, 3197-3208.
52. **Sui, C.-H.** and K.-M. Lau, 1989: Origin of low frequency (intraseasonal) oscillations in the tropical atmosphere. Part II: Effect of an improved treatment of moist processes. *J. Atmos. Sci.* , **46**, 37-56.
53. Lau, K.-M., L. Peng, **C.-H. Sui** and T. Nakazawa, 1989: Dynamics of Super cloud clusters, westerly wind bursts, 30-60 day oscillations and ENSO: an unified view. *J. Meteor. Soc. Japan*, **67**, 205-219.
54. **Sui, C.-H.**, M. D. Cheng, X. Wu, and M. Yanai, 1989: Cumulus ensemble effects on the large-scale vorticity and momentum fields in the tropical atmosphere. Part II: Parameterization. *J. Atmos. Sci.*, **46**, 1609-1629.
55. **Sui, C.-H.**, and M. Yanai, 1986: Cumulus ensemble effects on the large-scale vorticity and momentum fields in the tropical atmosphere. Part I: Observational evidence. *J. Atmos. Sci.*, **43**, 1618-1642.
56. Yanai, M., **C.-H. Sui** and J.-H. Chu, 1982: Effects of cumulus convection on the

- vorticity field in the tropics. Part II: Interpretation. *J. Meteor. Soc. Japan*, **60**, 411-424.
57. Chu, J. H., M. Yanai, and **C.-H. Sui**, 1981: Effects of cumulus convection on the vorticity field in the tropics. Part I: The large-scale budget. *J. Meteor. Soc. Japan*, **59**, 535-546.