

Liming Li

Department of Physics

University of Houston, Houston, TX 77204

Email: lli7@central.uh.edu Tel: 713-743-3283

EDUCATION

- 2001-2006 Division of Geological and Planetary Sciences, Caltech
Ph. D. in Planetary Sciences. Supervisor: Dr. Andrew P. Ingersoll
- 1998–2001 Department of Geophysics, Peking University, Beijing, China
M.S. in Meteorology. Supervisor: Dr. Shikuo Liu
- 1994-1998 Department of Atmospheric Sciences, Nanjing University, Nanjing, China
B.S. with honor in Atmospheric Science

PROFESSIONAL EXPERIENCE

- 2007-2008 Research Associate, Department of Astronomy, Cornell University
Advisors: Dr. Conrath Barney, Dr. Peter Gierasch, and Dr. Don Banfield
- 2009-2012 Research Assistant Professor, Department of Earth and Atmospheric Sciences,
University of Houston
- 2012- 2017 Assistant Professor, Department of Physics, University of Houston
- 2017- 2022 Associate Professor, Department of Physics, University of Houston
- 2022-present Professor, Department of Physics, University of Houston
Adjunct Professor, Department of Earth and Atmospheric Sciences, UH

ACADEMIC AWARDS AND HONORS

- Selected by NASA to be a participating scientist for three instruments (CIRS, ISS, and VIM) on **Cassini**
- Selected to be a science team member of the Microwave Radiometer on **Juno** (2015-)
- NASA Jet Propulsion Laboratory (JPL) Summer Faculty Research Program (2015)
- University of Houston 50-in-5 scholar (2018)
- NASA Group Achievement Award (Cassini CIRS, Solstice Mission) (2018)
- NASA Group Achievement Award (Cassini CIRS, Grand Finale Orbits) (2018)
- Outstanding Reviewer Award for the journal *Icarus* (2019, 2020)
- Selected as **Scialog Fellow** (2020)

PUBLICATIONS IN PEER-REVIEW JOURNALS

(The asteroid "*" indicates papers led by my students. Full texts of published papers are available at <http://ps.phys.uh.edu/publications.html>)

55. *Guan, L., **L. Li**, X Jiang, X. Wang, M. I. Richardson, A. D. Toigo, G. Martinez, and A. Sanchez-Lavega. The Distinct Energy Budgets of Mars and Earth, *Nature Geoscience*, submitted, 2024.
54. *Wang, X., **L. Li**, X. Jiang, P. M. Fry, L. Guan, S. Perez-Hoyos, A. Sanchez-Lavega, A. A. Simon, L. N. Fletcher, Spatiotemporal Variability of Zonal Winds in Saturn's Upper Troposphere, *JGR: Planets*, submitted, 2024.
53. *Guan, L., X. Wang, X. Jiang, **L. Li**, and A. Sanchez-Lavega. Impacts of El Niño-Southern Oscillation on Earth's Radiant Energy Budget, *JGR: Atmospheres*, submitted, 2024.
52. Li, C., M. Allison, S. Atreya, A. Bhattacharya, L. N. Fletcher, E. Galanti, T. Guillot, A. Ingersoll, Y. Kaspi, **L. Li**, J. Lunine, G. Orton, F. Oyafuso, P. Steffes, M. H. Wong, Z. Zhang,

- S. Levin, S. Bolton, Jupiter's tropospheric temperature and composition revealed by the Juno Microwave Radiometer. *Nature Astronomy*, in revision, 2024.
51. Karandana Gamalathge, T. D., N. Tai, X. Jiang, X. Wang, **L. Li**, and Y. Yung, Impacts of California Wildfires on CO₂ and Other Trace Gases, *Geophysical Research Letters*, in revision, 2024.
 50. *Wang, X., **L. Li**, X. Jiang, P. M. Fry, R. A. West, C. A. Nixon, L. Guan, T. D. Karandana, R. Albright, J. E. Colwell, T. Guillot, M. D. Hofstadter, M. E. Kenyon, A. Mallama, S. Perez-Hoyos, A. Sanchez-Lavega, A. A. Simon, D. D. Wenkert, X. Zhang. Cassini Spacecraft Reveals Global Energy Imbalance of Saturn, *Nature Communications*, in press (press alert), 2024.
 49. Li, C., Allison, M., Atreya, S., Brueshaber, S., Fletcher, L.N., Guillot, T., **Li, L.**, Lunine, J., Miguel, Y., Orton, G. and Steffes, P., Super-adiabatic temperature gradient at Jupiter's equatorial zone and implications for the water abundance. *Icarus* 414, 116028, 2024.
 48. Albright, R., T. Karandana Gamalathge, X. Wang, X. Jiang, **L. Li**, Impact of El Nino Southern Oscillation on CO₂ and Solar-Induced Fluorescence over the Indo-Pacific Region. *Earth & Space Sciences*, doi:10.1029/2023EA003126, 2023.
 47. **Li, L.**, Guan, S., Luu, C., Heng, K., Fry, P.M., Creecy, E.C., Wang, X., Albright, R.J., Jiang, X. and West, R.A., Nixon, C. R., Kenyon, M. E., Hendrix, A., Dyudina, U., The bolometric Bond albedo of Enceladus. *Icarus* 115429, 2023.
 46. *Creecy, E., **Li, L.**, Jiang, X., Smith, M. D., Kleinboehl, A., Kass, D. M., and Martinez, G. Mars' Emitted Energy and Seasonal Energy Imbalance. *PNAS*, doi: 10.1073/pnas.2121084119, 2022. [The study was reported by the media including Universities Space Research Association \(USRA\), "Discover" magazine, and "Weird" magazine \(e.g., <https://newsroom.usra.edu/new-study-reveals-solar-heat-to-be-the-likely-cause-of-dust-storms-on-mars/>\).](#)
 45. Ingersoll, A. P., S. Atreya, S. J. Bolton, S. Brueshaber, L. N. Fletcher, E. Galanti, K. Kaspi, S. M. Levin, C. Li, **L. Li**, J. I. Lunine, G. S. Orton, H. Waite, Jupiter's overturning circulation: Breaking waves take the place of solid boundaries, *Geophysical Research Letters*, doi.org/10.1029/2021GL095756, 2021.
 44. Duer, K., Gavriel, N., Galanti, E., Kaspi, Y., Fletcher, L. N., Bolton, S. J., Grassi, D., Guillot, T., Ingersoll, A. P., Levin, S. M., Li, C., **Li, L.**, Lunine, J. I., Orton, G. S., Oyafuso, F. A., Waite, H., Evidence for multiple Ferrel cells on Jupiter, *Geophysical Research Letters*, doi.org/10.1029/2021GL095651, 2021.
[Reported by NASA media briefing on October 28, 2021 \(see <https://www.nasa.gov/press-release/nasa-to-host-briefing-to-reveal-new-findings-from-jupiter-s-atmosphere> and <https://www.facebook.com/NASAJPL/videos/jupiters-3d-atmosphere-revealed-by-nasas-juno-spacecraft-media-briefing/472145084048889/>\).](#)
 43. Creecy, E, **Li, L.**, X. Jiang, R. West, C. Nixon, P. Fry, and M. Kenyon, Titan's Global Radiant Energy Budget During the Cassini Epoch (2004-2017), *Geophysical Research Letters*, doi.org/10.1029/2021GL095356, 2021.
 42. **Li, L.**, A. *Studwell, T. E. Dowling, M. E. Bradley, E. C. *Creecy, R. J. *Albright, X. Jiang, Unsymmetrical expansion of bright clouds from Saturn's 2010 Great White Storm, *Icarus*, doi.org/10.1016/j.icarus.2021.114650, 2021.
 41. Fletcher, L. N., F. A. Oyafuso, M. Allison, A. Ingersoll, **L. Li**, Y. Kaspi, E. Galanti, M.H. Wong, G.S. Orton, K. Duer, Z. Zhang, C. Li, T. Guillot, S.M. Levin, S. Bolton, Jupiter's Temperate Belt/Zone Contrasts Revealed at Depth by Juno Microwave Observations, *Journal of Geophysical Research-Planets*, doi.org/10.1029/2021JE006858, 2021.
 40. Heng, K. and **L. Li**, Jupiter as an exoplanet: insight from Cassini phase curves. *The Astrophysical Journal Letter*, 909, doi:10.3847/2041-8213/abe872, 2021.

39. Zhang, Z., V. Adumitroaie, M. Allison, J. Arballo, S. Atreya, G. Bjoraker, S. Bolton, S. Brown, L. N. Fletcher, T. Guillot, S. Gulkis, A. Hodges, A. Ingersoll, M. Janssen, S. Levin, C. Li, L. Li, J. Lunine, S. Misra, G. Orton, F. Oyafuso, P. Steffes, M. H. Wong, 2020. Residual study: Testing Jupiter atmosphere models against Juno MWR observations. *Earth and Space Science*, 7, doi:10.1029/2020EA001229, 2020.
38. Li, C., A. Ingersoll, S. Bolton, S. Levin, M. Janssen, S. Atreya, J. Lunine, P. Steffes, S. Brown, T. Guillot, M. Allison, J. Arballo, A. Bellotti, V. Adumitroaie, S. Gulkis, A. Hodges, **L. Li**, S. Misra, G. Orton, F. Oyafuso, D. Santos-Costa, H. Waite, Z. Zhang, The water abundance in Jupiter's equatorial zone, *Nature Astronomy*, doi:10.1038/s41550-020-1009-3, 2020. [This study was reported by the media including NASA, Cosmos Magazine, and Tech Explorist \(e.g., https://www.jpl.nasa.gov/news/news.php?feature=7599\).](https://www.jpl.nasa.gov/news/news.php?feature=7599)
37. *Creedy E., **L. Li**, X. Jiang, C. Nixon, R. West, M. Kenyon, Seasonal Variations of Titan's Brightness, *Geophysical Research Letters*, doi.org/10.1029/2019GL084833, 2019. [This study was reported by the media including Fox news, sciencedaily, and phys.org \(e.g., https://www.foxnews.com/science/saturns-moon-titan-insights-into-life-on-earth\).](https://www.foxnews.com/science/saturns-moon-titan-insights-into-life-on-earth)
36. **Li, L.**, X. Jiang, R. A. West, P. J. Gierasch, S. Perez-Hoyos, A. Sanchez-Lavega, L. N. Fletcher, J. J. Fortney, B. Knowles, C. C. Porco, K. H. Baines, P. M. Fry, A. Mallama, R. K. Achterberg, A. A. Simon, C. A. Nixon, G. S. Orton, U. A. Dyudina, S. P. Ewald, Less Absorbed Solar Energy And More Internal Heat For Jupiter, *Nature Communications*, doi:10.1038/s41467-018-06107-2, 2018. [Please see the short news on "Planetary News" \(e.g., https://www.lpi.usra.edu/planetary_news/2018/10/15/jupiter-is-hotter-and-much-more-reflective-than-we-thought/\).](https://www.lpi.usra.edu/planetary_news/2018/10/15/jupiter-is-hotter-and-much-more-reflective-than-we-thought/)
35. *Studwell, A., **L. Li**, X. Jiang, K. Baines, P. Fry, T. Momary, L. Sromovsky, Saturn's zonal winds probed by the Cassini VIMS 5-micron images. *Geophysical Research Letters* 45, doi:10.1029/2018GL078139, 2018 (Invited paper to a special issue on *GRL* for the Cassini Grand-Finale mission).
34. Brown, S., M. Janssen, V. Adumitroaie, S. Atreya, S. Bolton, S. Gulkis, A. Ingersoll, S. Levin, C. Li, **L. Li**, J. Lunine, S. Misra, G. Orton, P. Steffes, F. Tabataba-Vakili, Prevalent lightning sferics at 600 megahertz near Jupiter's poles, *Nature* 568, 87-90, 2018. [This study was reported by the media including Science News, Phys.org, Scientific American, and Science Alert \(e.g., https://www.sciencealert.com/jupiter-lightning-whistlers-radio-emissions-detected-megahertz-range-juno\).](https://www.sciencealert.com/jupiter-lightning-whistlers-radio-emissions-detected-megahertz-range-juno)
33. *Kao, A., X. Jiang, **L. Li**, J. H. *Trammell, G. J. Zhang, H. Su, and Y. L. Yung, A Comparative Study of Atmospheric Moisture Recycling Rate Between Observations and Models, *Journal of Climate* 31, 2389-2398, 2018.
32. Fletcher, L. N., S. Guerlet, G. Orton, R. Cosentino, T. Fouchet, P. Irwin, **L. Li**, N. Gorius, F. M. Flasar, R. Morales-Juberias, Disruption of Saturn's Quasi-Periodic Equatorial Oscillation by the Great Northern Storm, *Nature Astronomy* 1, 765-770, doi:10.1038/s41550-017-0271-5, November 2017. [This study was covered by a News and Views on Nature \(http://rdcu.be/x2qL\).](http://rdcu.be/x2qL)
31. Janssen, M. A., J.E. Oswald, S.T. Brown, S. Gulkis, S.M. Levin, S.J. Bolton, M.D. Allison, S.K. Atreya, D.Gautier, A.P. Ingersoll, J.I. Lunine, G.S. Orton, T.C. Owen, P.G. Steffes, V. Adumitroaie, A. Bellotti, L.A. Jewell, C. Li, **L. Li**, S. Misra, F.A. Oyafuso, D. Santos-Costa, E. Sarkissian, R. Williamson, J.K. Arballo, A. Kitiyakara, A. Ulloa-Severino, J.C. Chen, F.W. Maiwald, A.S. Sahakian, P.J. Pingree, K.A. Lee, A.S. Mazer, R. Redick, R.E. Hodges, R.C. Hughes, G. Bedrosian, D.E. Dawson, W.A. Hatch, D.S. Russell, N.F. Chamberlain, M.S. Zawadski, B. Khayatian, B.R. Franklin, H.A. Conley, J.G. Kempenaar, M.S. Loo, E.T. Sunada, V. Vorperion, and C.C. Wang, MWR: Microwave radiometer for the Juno mission to Jupiter, *Space Science Reviews*, 1-47, <https://doi.org/10.1007/s11214-017-0349-5>, November 2017.

30. *Corbett, A., X. Jiang, X. Xiong, A. *Kao, and **L. Li**, Modulation of mid-tropospheric methane by El Nino. *Earth & Space Science* 4, doi:10.1002/2017EA000281, September 2017.
29. *Kao, A., X. Jiang, L. Li, H. Su, and Y. Yung, Precipitation, circulation, and cloud variability over the past two decades. *Earth & Space Science* 4, doi:10.1002/2017EA000319, September 2017.
28. Ingersoll, A.P., V. Adumitroaie, M. D. Allison, S. Atreya, A. A. Bellotti, S. J. Bolton, S.T. Brown, S. Gulkis, M. A. Janssen, S.M. Levin, C. Li, **L. Li**, J. I. Lunine, G. S. Orton, F. A. Oyafuso, P. G. Steffes, 2017. Implications of the ammonia distribution on Jupiter from 1 to 100 bars as measured by the Juno microwave radiometer. *Geophys. Res. Lett.* 44, doi:10.1002/2017GL074277, August 2017.
27. Jiang, X., A. *Kao, A. *Corbett, E. Olsen, T. Pagano, A. Zhai, S. Newman, **L. Li**, Y. Yung, Influence of Droughts on Mid-tropospheric CO₂, *Remote Sensing*, doi:10.3390/rs9080852, August 2017.
26. *Pan, Y., **L. Li**, X. Jiang, G. Li, W. Zhang, A. P. Ingersoll. Earth's varying global atmospheric energy cycle in response to climate change, *Nature Communications* 8, doi:10.1038/ncomms14367, January 2017. [This study was reported by the media including ScienceDaily, AccuWeather, Science Magazine, Environmental News Network, and so on \(e.g., https://www.sciencedaily.com/releases/2017/01/170124111330.htm\).](https://www.sciencedaily.com/releases/2017/01/170124111330.htm) [It was also reported by NASA Astrobiology Magazine \(https://astrobiology.nasa.gov/news/what-the-energy-cycles-of-other-planets-can-tell-us-about-climate-change-on-earth/\).](https://astrobiology.nasa.gov/news/what-the-energy-cycles-of-other-planets-can-tell-us-about-climate-change-on-earth/)
25. Bering, E. A., L. S. Pinsky, **L. Li**, D. Jackson, J. Chen, H. Reed, M. Moldwin, J. Kasper, J. P. Sheehan, J. Forbes, T. Heine, A. Case, M. Stevens, MarsCAT: Mars Array of ionospheric Research Satellites using the CubeSat Ambipolar Thruster, *54th AIAA Aerospace Sciences Meeting, AIAA SciTech Forum*, <http://dx.doi.org/10.2514/6.2016-1466>, 2016.
24. *Trammell, H. J., **L. Li**, Jiang, X., *Pan, Y., Smith, M.A., Bering, E.A., Hörst, S.M., Vasavada, A.R., Ingersoll, A.P., Janssen, M.A. and West, R.A., 2016. Vortices in Saturn's Northern Hemisphere (2008–2015) observed by Cassini ISS. *Journal of Geophysical Research: Planets* 121, 1814-1826, 2016.
23. Sanchez-Lavega, A., E. García-Melendo, S. Perez-Hoyos, R. Hueso, M. H. Wong, A. Simon, J. F. Sanz-Requena, A. Antuñano, N. Barrado-Izagirre, I. Garate-Lopez, J. F. Rojas, T. del Rio Gaztelurrutia, J. M. Gómez-Forrellad, I. de Pater, **L. Li** and PVOL contributors, An Enduring Rapidly Moving Storm As a Guide to Saturn's Equatorial Jet Complex Structure, *Nature Communications* 7, doi:10.1038/ncomms13262, 2016. [The study was reported by the media including ScienceDaily, CAHA, Science Newslines, Pinterest, and so on \(e.g., http://www.sciencenewslines.com/summary/2016111113270090.html\).](http://www.sciencenewslines.com/summary/2016111113270090.html)
22. Dyudina, U., X. Zhang, **L. Li**, R. A. West, P. Kopparla, Y. L. Yung, A. P. Ingersoll, L. Dones, Reflected Light Curves, Spherical and Bond Albedos of Jupiter- and Saturn-like Exoplanets, *Ap. J.*, 618, 973-986, 2016.
21. *Trammell, J. H., X. Jiang, **L. Li**, A. *Kao, G. J. Zhang, E. Chang, and Y. L. Yung, Temporal and spatial variability of precipitation from observation and model, *Journal of Climate* 29, 2543-2555, 2016.
20. *Trammell, J. H., X. Jiang, **L. Li**, M. Liang, M. Li, J. Zhou, E. Fetzer, and Y. L. Yung, Investigation of Precipitation Variations over Wet and Dry Areas from Observation and Model, *Advances in Meteorology*, Art. No. 981092, 2015.
19. **Li, L**, X. Jiang, H. J. *Trammell, Y. *Pan, J. *Hernandez, B. J. Conrath, P. J. Gierasch, R. K. Achterberg, C. A. Nixon, F. M. Flasar, S. Perez-Hoyos, R. A. West, K. H. Baines, and B. Knowles, Saturn's giant storm and global radiant energy, *Geophys. Res. Lett.*, 42, doi:10.1002/2015GL063763, 2015.
18. Simon, A. A., **Li, L**, Reuter, D. C, Small-scale waves on Jupiter: A reanalysis of New Horizons,

- Voyager, and Galileo data, *Geophys. Res. Lett.*, 42, doi:10.1002/2015GL063433, 2015.
17. Li, L., Dimming Titan revealed by the Cassini observations. *Scientific Reports*, doi:10.1038/srep08239, 2015.
 16. *Trammell, H. J., L. Li, X. Jiang, M. Smith, S. Horst, and A. Vasavada, The global vortex analysis of Jupiter and Saturn based on Cassini Imaging Science Subsystem. *Icarus* 242, doi:10.1016/j.icarus.2014.07.019, 2014.
 15. Li, L., R. K. Achterberg, B. J. Conrath, P. J. Gierasch, C. A., Nixon, F. M., Flasar, A. R. Vasavada, A. D. Del Genio, R. A., West, Strong Temporal Variability Over One Saturnian Year: From Voyager to Cassini. *Scientific Reports*, doi:10.1038/srep02410, 2013.
 14. Li, L., K. H. Baines, M. A. Smith, R. A. West, S. Pérez-Hoyos, H. J. *Trammell, A. Simon-Miller, B. Conrath, P. J. Gierasch, G. S. Orton, C. A. Nixon, G. Filacchione, P. M. Fry, and T. W. Momary, Emitted power of Jupiter based on Cassini CIRS and VIMS observations. *J. Geophys. Res.*, doi:10.1029/2012JE004191, 2012.
 13. Li, L., X. Jiang, M. T. Chahine, J. *Wang, Y. L. Yung, Atmospheric energetics in El Nino and La Nina years. *Journal of the Atmospheric Sciences*, 68, 3072-3078, 2011d.
 12. Li, L., X. Jiang, M. T. Chahine, E. T. Olsen, E. Fetzer, L. Chen, Y. L. Yung, Recycling rate of atmospheric moisture over the past two decades. *Environmental Research Letters* 6, doi:10.1088/1748-9326/6/3/034017, 2011c. [Please refer to the insight news on the ERL web \(http://environmentalresearchweb.org/cws/article/news/47247\)](http://environmentalresearchweb.org/cws/article/news/47247).
 11. Li, L., X. Jiang, A. P. Ingersoll, A. D. Del Genio, C. C. Porco, R. A. West, A. R. Vasavada, S. P. Ewald, B. J. Conrath, P. J. Gierasch, A. A. Simon-Miller, C. A. Nixon, R. K. Achterberg, G. S. Orton, L. N. Fletcher, K. H. Baines, Equatorial winds on Saturn and the stratospheric oscillation. *Nature Geoscience*, doi:10.1038/ngeo1292, 2011b. [Please refer to the insight news \(http://www.nsm.uh.edu/news-events/stories/2011/1104_liJiang.php\)](http://www.nsm.uh.edu/news-events/stories/2011/1104_liJiang.php).
 10. Li, L., C. A. Nixon, R. Achterberg, M. A. Smith, N. J. P. Gorius, X. Jiang, B. Conrath, P. Gierasch, A. A. Simon-Miller, F. M. Flasar, A. P. Ingersoll, K. Baines, R. A. West, A. R. Vasavada, S. P. Ewald, The Global Energy Balance of Titan, *Geophys. Res. Lett.* 38, Art. No. L23201, 2011a. [Please refer to the highlights on the American Geophysical Union \(http://onlinelibrary.wiley.com/doi/10.1029/2012EO070017/abstract\)](http://onlinelibrary.wiley.com/doi/10.1029/2012EO070017/abstract). The paper was also selected to be the cover page of the journal of *GRL*.
 9. Li, L., B. Conrath, P. Gierasch, R. Achterberg, C. A. Nixon, A. A. Simon-Miller, F. M. Flasar, D. Banfield, K. H. Baines, R. A. West, A. R. Vasavada, A. Mamoutkine, M. Segura, G. Bjoraker, G. S. Orton, L. N. Fletcher, P. Irwin, P. Read, Emitted power of Saturn, *J. Geophys. Res.*, 115, E11002, doi:10.1029/2010JE003631, 2010. [Please refer to the NASA feature story titled "Saturn is on a cosmic dimmer switch" on NASA website \(http://www.nasa.gov/mission_pages/cassini/whycassini/dimmer-switch.html\)](http://www.nasa.gov/mission_pages/cassini/whycassini/dimmer-switch.html).
 8. Li, L., P. J. Gierasch, R. K. Achterberg, B. J. Conrath, F. M. Flasar, A. R. Vasavada, A. P. Ingersoll, D. Banfield, A. A. Simon-Miller, L. N. Fletcher, Strong jet and a new thermal wave in Saturn's equatorial stratosphere. *Geophys. Res. Lett.* 35(23), Art. No. L23208, 2008.
 7. Li L., A. P. Ingersoll, X. Jiang, D. Feldman, and Y. L. Yung, Lorenz energy cycle of the global atmosphere based on reanalysis datasets. *Geophys. Res. Lett.* 34(16), L16813, 2007.
 6. Li L., A. P. Ingersoll, A. R. Vasavada, A. A. Simon-Miller, R. K. Achterberg, S. P. Ewald, U. A. Dyudina, C. C. Porco, R. A. West, and F. M. Flasar, Waves in Jupiter's atmosphere observed by the Cassini ISS and CIRS instruments, *Icarus* 185, 416-419, 2006c.
 5. Li L., A. P. Ingersoll and X. L. Huang, Interaction of moist convection with zonal jets on Jupiter and Saturn, *Icarus* 180, 113-123, 2006b.
 4. 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, Vertical wind shear on Jupiter from Cassini images, *J. Geophys. Res.* 111, Art. No. E04004, 2006a.

3. Li L., A. P. Ingersoll, A. R. Vasavada, C. C. Porco, A. D. Del Genio and S. P. Ewald, Life cycles of spots on Jupiter from Cassini images, *Icarus* 172, 9-23, 2004.
2. Li L., F. Huang, D. Chi, S. Liu, Thermal effects of the Tibetan Plateau on Rossby waves, *Advances in Atmospheric Science* 19, 901-913, 2002.
1. Li L., D. Huang, F. Qiao, S. Liu, The diabatic waves in barotropic model, *Journal of tropical meteorology* 6, 1-12, 2000.

WHITE PAPER to Planetary Science and Astrobiology Decadal Survey 2023-2032

(National Academies of Sciences, Engineering, and Medicine)

1. Li, L., West, R. A., Kenyon, M. E., Nixon, C. A., Fry, P. M., Wenkert, D., Hofstadter, M. D., Jiang, X., Creecy, E. C., Sanchez-Lavega, A., Baines, K. H., Mallama, A., Hu, R., Achterberg, R. K., Aslam, S., Banfield, D., Dyudina, U., Fortney, J. J., Ingersoll, A. P., Kleinböhl, A., Fletcher, L., Limaye, S., Marley, M. S., Smith, M. D., Soderlund, K. M., Spilker, L. J., Young, C. L. Radiant Energy Budgets and Internal Heat of Planets and Moons, *Bulletin of American Astronomical Society (BAAS)*, 53, doi:10.3847/25c2cfcb.0d20e989, 2021a (see http://ps.phys.uh.edu/Li_BAAS_2021.pdf).
2. Guillot, T., J. Fortney, E. Rauscher, M. Marley, V. Parmentier, M. Line, H. Wakeford, Y. Kaspi, R. Helled, M. Ikoma, H. Knutson, K. Menou, D. Valencia, D. Durante, S. Ida, S. Bolton, C. Li, K. Stevenson, J. Bean, N. Cowan, M. Hofstadter, R. Hueso, J. Leconte, L. Li, C. Mordasini, O. Mousis, N. Nettelmann, K. Soderlund, and M. Wong. Keys of a Mission to Uranus or Neptune, the Closest Ice Giants, *Bulletin of American Astronomical Society (BAAS)*, 53, doi:10.3847/25c2cfcb.a267c514, 2021 (see http://ps.phys.uh.edu/Guillot_BAAS_2021.pdf).

WHITE PAPER to Community Input on Priorities for Long-term Monitoring Programs with James Webb Space Telescope (JWST) and Hubble Space Telescope (HST)

1. Es-sayeh, M., S. Rodriguez, C. A. Nixon, L. Li, R. Hueso, A. Chatain and E. Moisan, Long Time Baseline Science Opportunities with HST and JWST: Saturn's Moon Titan.
2. Simon, A., E. Dahl, L. Li, M. Roman, L. Fletcher, I. de Pater, N. Molter, M.H. Wong, T. Fouchet, A. Sánchez-Lavega, R. Hueso, G. Orton, L. Sromovksy, T. Stallard, P. Irwin, M. E. Moutamid, Long-Term Monitoring of the Outer Planets with JWST.