Carlos S. López Carrillo

Contact Information

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Current Appointment

Research Physicist.

Geophysical Research Center, New Mexico Tech¹.

Education

1994–2001 PhD in Physics at New Mexico Tech¹, Socorro, New Mexico, USA.

Spring 2000 NCAR/ATD Workshop: "Airborne Doppler Radar Data Analysis". Bolder CO., 13-16 March.

Summer 1996 NATO Advanced Study: "The physics and parameterization of moist convection". Kloster Seeon, Bavaria, Germany.

1987–1989 Curricula from the program of Master of Science degree in Physics. Autonomous Meritorious University of Puebla, Puebla, Mexico.

1982–1987 Bachelor of Science Degree in Physics. Autonomous University of Nuevo Leon, Nuevo Leon, Mexico.

Employment

- **2001–2003** Postdoctoral Research Physicist. Geophysical Research Center, New Mexico Tech¹.
- 1994–2001 Research Assistant, New Mexico Tech.¹
- 1990–1993 Auxiliary Teacher, Technological and Higher Studies Institute of Monterrey.

Publications

Journal Papers

- Carlos López-Carrillo and D. J. Raymond, 2002: Moisture tendency equations in a tropical atmosphere. Journal of the Atmospheric Sciences, submitted.
- D. J. Raymond, Graciela Raga, Chris Bretherton, John Molinari, Carlos López-Carrillo, Zeljka Fuchs, 2002: Convective Forcing in the Intertropical Convergence Zone of the East Pacific Journal of the Atmospheric Sciences, accepted.
- D. J. Raymond, Carlos López-Carrillo, and Lucio López Cavazos, 1998: Case-studies of developing east Pacific easterly waves. Quart. J. Roy. Meteor. Soc., 124, 2005-2034.

Conference Papers

- C. López-Carrillo, David J. Raymond, 2002: Mesoscale Convective Mass Fluxes in the Eastern Pacific. In 2002 American Geophysical Union Fall Meeting., 300
- 2. C. López-Carrillo, David J. Raymond, and Z. Fuchs, 2002: Development of New Convective Cells in the East Pacific. In 24th Conference on Hurricanes and Tropical Meteorology., 525–526
- C. López-Carrillo and David J. Raymond, 2000: Gross Moist Stability in Tropical Systems. In 24th Conference on Hurricanes and Tropical Meteorology., 220–221
- David J. Raymond and Carlos López Carrillo, 2000: Cloud-Radiation Interactions and Convective Forcing. In 24th Conference on Hurricanes and Tropical Meteorology., 508-509
- Carlos López Carrillo, 2000: Moisture Interchange Between Clouds and Environment in a Tropical Atmosphere. In 24th Conference on Hurricanes and Tropical Meteorology., 510–511

- C. López-Carrillo and David Raymond, 1999: Observational study of tropospheric moisture and deep convection during TOGA COARE. In 23rd Conference on Hurricanes and Tropical Meteorology., 159–160
- 7. David Raymond and C. López-Carrillo, 1998: Does Ekman Pumping Work in Tropical Cyclones? In 78th AMS Annual Meeting.
- 8. C. López-Carrillo and David Raymond, 1997: Kinematical Characteristics in Developing Easterly Waves. In 22rd Conference on Hurricanes and Tropical Meteorology., 551-552

Field Experiments

EPIC Eastern Pacific Investigation Of Climate (Sep 1 – Oct 12, 2001.) Research scientist on board the NOAA-WP3-43 on missions:

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sep 16, 2001 – ITCZ
sep 20, 2001 – ITCZ
sep 21, 2001 – RECONN Tropical Storm Juliette"
sep 28, 2001 – ITCZ(aborted due to engine problem)
Oct 3, 2001 – ITCZ
Oct 5, 2001 – ITCZ
Oct 6, 2001 – ITCZ/Intercomparison
Oct 7, 2001 – ITCZ
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During this experiment I was mainly concerned with the collection and analysis of Radar Data.

Special Skills

- Formal training in numerical analysis and data processing, inverse theory, non-linear programming.
- Computer programming particularly in C and MatLab.
- Familiarity with Unix, Linux and Windows environments.
- Fluency in Spanish.

Awards

Scholarship National Council of Science and Technology of Mexico. Mexico, Mexico.

Scholarship State Council of Science and Technology of Puebla. Puebla, Puebla, Mexico.

Memberships

AMS – American Meteorological Society

SMF – Mexican Society of Physics

 $\Sigma\Pi\Sigma$ – Physics Honor Society

¹New Mexico Institute of Mining and Technology