

GEST DIGEST

VOLUME 5, ISSUE 5

JULY/AUGUST, 2002

Excellence

GEST VISITING SCIENTIST SEMINAR SERIES

You are invited to attend the inaugural seminar in our "GEST Visiting Scientist Seminar Series." These seminars will be scheduled for the third Tuesday of each month from September through May. The speakers will usually be our Goddard Visiting Fellows, most of whom are your GEST colleagues. It is hoped that these prestigious lectures will attract an audience from Goddard, UMBC and the local academic/research community. For this reason the seminars are expected to be suitable for the general, educated community and cover topics of significant interest in the Earth and information sciences. The inaugural seminar will begin at 3:30 in the afternoon in the conference room on the 7th floor of the UMBC library. All subsequent seminars will be held from 4:00 to 5:00 pm in the afternoon, either in the 7th floor of the UMBC Library or in the Skylight Room of the new University Commons building. A reception will follow each seminar.

I hope that you will be able to join us for these seminars. You will find the speakers to be quite interesting and the associated discussion to be stimulating. I am quite excited about this series and hope that you will be interested enough to participate.

Bob Curran

CONGRATULATIONS

Congratulations to Dr. Robert Schiffer, Chief Scientist, GEST Center, on receiving the highest honor that NASA confers, the NASA Distinguished Service Medal.

Dr. Arthur Johnson, Provost, UMBC extended congratulations to Dr. Schiffer and noted the award as, "a tremendous distinction of which we at UMBC are very proud."

MORE KUDOS

GEST received kudos from UMBC's Provost, Dr. Arthur Johnson for significant endeavors in publication, academic outreach, the seminar series, visiting research programs and graduate fellows. Congratulations and appreciations are extended to the, "faculty and staff for the success of this past year. Your work brings ongoing and distinguished recognition to UMBC."

We at GEST also congratulate Dr. Redgie Lancaster for receiving this year's Code 912 Award for Outstanding Performance in Engineering.

We are very proud of all our GEST employees.

GEST Visiting Scientists

Seminar Series

Sept. 17, 2002 - 3:30 pm - 6:00 pm
AOK Library 767/Lobby

Oct. 15, 2002 - 4:00 pm - 6:00 pm
The Commons - Skylight Room

Nov. 19, 2002 - 4:00 pm - 6:00 pm
The Commons - Skylight Room

Dec. 17, 2002 - 4:00 pm - 6:00 pm
The Commons - Skylight Room

Jan. 21, 2003 - 4:00 pm - 6:00 pm
AOK Library 767/Lobby

Feb. 18, 2003 - 4:00 pm - 6:00 pm
AOK Library 767/Lobby

Mar. 18, 2003 - 4:00 pm - 6:00 pm
AOK Library 767/Lobby

Apr. 15, 2003 - 4:00 pm - 6:00 pm
The Commons - Skylight Room

May 20, 2003 - 4:00 pm - 6:00 pm
AOK Library 767/Lobby

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UPCOMING CONFERENCES & SEMINARS

NSF has issued an important notice on new proposal preparation requirements.

The GPG specifies that PIs must address both merit review criteria in separate statements within the one page Project Summary. Broader impacts from the proposed project must be addressed in the Project description and described in the narrative. The FastLane system informs PIs of the new proposal preparation requirements.

Effective October 1, 2002, NSF will return without review proposals that do not separately address both merit review criteria with the Project Summary.

For the complete notice please read:

<http://www.nsf.gov/pubsys/ods/getpub.cfm?odskey=od127>

National Science Foundation
Regional Grants Conference
Charleston, South Carolina.

October 15-16, 2002

(Optional Fast-Lane Workshops

October 14, 2002)

Proudly Hosted by the College of Charleston

REGISTER AT:

<http://www.nsf.gov/bfa/cpo/policy/regionals.htm>

<http://www.nsf.gov/bfa/cpo/policy/regionals.htm>

or

<http://www.orga.cofc.edu/nsf/>

<http://www.orga.cofc.edu/nsf/>

This conference is designed for faculty and research personnel in the sciences (including social, behavioral, and economic sciences), mathematics, engineering, and technology disciplines and for sponsored programs administrators. Approximately 25 NSF program officers and administrators will be present to discuss programs within specific directorates and disciplines, cross-disciplinary and special interest programs, proposal preparation, the merit review process, grant award and administration, agency appropriations, and special interest topics.

Optional pre-conference hands-on Fast-Lane workshops (one geared for faculty and research personnel and the other for sponsored programs staff) are planned for Monday, October 14, 2002, on the College of Charleston campus. (FastLane workshop space is limited; early registration is strongly suggested.)

Fall - AGU Meeting

**Moscone Center
San Francisco, California
December 6-10, 2002
(Friday through Tuesday)**

Pre-registration Deadline: November 5, 2002

To take advantage of pre-registration [rates](#), the registration form with payment must be received by November 5, 2002. After this date, registrations must include a \$50 late fee. Registrations will be accepted at the AGU office only until November 15, 2002. After this date, individuals must register [on-site](#).

OTHER OPPORTUNITIES & ANNOUNCEMENTS

The Challenger Center for Space Science Education

October 21-25, 2002

Theme - Earth and Earth Science

The Challenger Center for Space Science Education, in partnership with the District of Columbia Public Schools, is organizing its 3rd annual "Journey through the Universe" Week in DC, from October 21-25, 2002. This year's disciplinary theme is Earth and Earth Science. For this program, a cadre of 50-60 scientists and engineers is being assembled that will visit over 7,000 sixth grade students in the DC public schools.

AGU is highly supportive of such efforts to introduce the Earth and space sciences to school children and their teachers, particularly in those communities that have limited school resources. We also encourage programs that reach out to communities that are underrepresented in the sciences. AGU is motivated by its recognition of the growing need for a more scientifically literate society - one that can make better informed policy (and personal) decisions - and the understanding that a public which understands science's role in daily life is more supportive of continued public funding of scientific research. Further, the declining numbers of students entering scientific and technical careers indicates that our efforts to recruit need to be expanded. Hearing about the exciting research in our fields and meeting with scientists in person are important strategies for educating the public about and interesting students in scientific careers.

NEWLY WED

Dr. Chiaoqiao Sun was united in marriage to Machiel van der Stelt (Photo below) on August 10, 2002 at Mrs. K's Toll House in Silver Spring, Maryland. They were joined by family and friends.



GEST EMPLOYMENT OPPORTUNITIES

Research Associate

Subject to funding approval, the Goddard Earth Sciences and Technology Center (GEST) will make a research faculty appointment at the Research Associate level. GEST is a Cooperative Agreement between the University of Maryland, Baltimore County (UMBC) and the NASA Goddard Space Flight Center (GSFC) to collaborate in research programs in the Earth, Information, and Instrumentation sciences. GEST is a Consortium whose members include UMBC, Hampton University, Howard University, and Caelum Research Corporation. Positions will generally be located either at GSFC or at the offices of one of the consortium members. All candidates must have degrees in an appropriate physical discipline and a demonstrated research record in accordance with the specific qualifications listed for the following position.

GEST 916-37-173 - Stratosphere-Troposphere Exchange

A Research Associate position is available for up to three years. Research will focus on development of diagnostics for stratosphere-troposphere exchange that may be applied sensibly to both global atmospheric data sets and to output from global atmospheric models. Process studies and statistics derived for seasonal, annual and longer time scales will be used to investigate questions concerning i) ozone trends in the lower stratosphere and upper troposphere, and ii) the importance of stratosphere-troposphere exchange to climate change.

Requirements:

Ph.D. in atmospheric dynamics or a related field, experience in dealing with large data sets from various sources (e.g., TOMS and UARS satellites, GSFC DAO meteorological analyses, global atmospheric models), and excellent IDL and FORTRAN programming skills. Experience with high resolution mesoscale models such as MM5 or forecast models such as the RUC-2 or Eta is desirable.

Note:

Applicants should identify the position by number on a cover letter which includes home address visa status, if any, and submit it together with a complete curriculum vitae, including the names, addresses, and telephone numbers of three references, to L. Anthea Brooks, GEST Center, Code 900.1, Goddard Space Flight Center, Greenbelt, MD 20771. Email applications will not be accepted. Applications are requested prior to October 31, 2002, although the position remains open until filled.

Research Associate

Subject to funding approval, the Goddard Earth Sciences and Technology Center (GEST) will make research faculty appointments at the Research Associate level. GEST is a Cooperative Agreement between the University of Maryland, Baltimore County (UMBC) and the NASA Goddard Space Flight Center (GSFC) to collaborate in research programs in the Earth, Information, and Instrumentation sciences. GEST is a Consortium whose members include UMBC, Hampton University, Howard University, and Caelum Research Corporation. Positions will generally be located either at GSFC or at the offices of one of the consortium members. All candidates must have degrees in an appropriate physical discipline and a demonstrated research record in accordance with the specific qualifications listed for each of the following positions.

GEST 971-00-002 - Seasonal-to-Interannual Prediction Project

NASA's Seasonal-to-Interannual Prediction Project (NSIPP) at GSFC is seeking several Research Associates to collaborate on developing a state-of-the-art assimilation and prediction system for short term climate using coupled ocean-atmosphere-land surface general circulation models. NSIPP conducts routine experimental seasonal predictions, undertakes predictability studies and analyses focused on short-term climate anomalies, and develops model and assimilation systems to make best use of satellite observations for the enhancement of seasonal prediction skill. The successful candidates will work

with a dynamic group of scientists from GSFC and GEST, and will have access to state-of-the-art computational facilities at GSFC. All four positions are renewable for up to three years.

A - NSIPP Atmospheric Modeling and Diagnostics

Recent Ph.D. needed to work in NSIPP's atmospheric modeling group. One focus of the research will be improvement of the simulation of the diurnal cycle in atmospheric/land general circulation models (AGCMs), with an emphasis on the warm season climate of the continental United States and Mexico. In addition, the successful candidate will be expected to work on the assessment and improvement of NSIPP's forecasting capability. Both topics will require comprehensive diagnostic analyses of AGCM simulations and forecasts, as well as planning and executing numerical experiments. These studies will be conducted in collaboration with other US climate modeling groups.

Requirements:

Ph.D. in meteorology or related discipline; experience analyzing and running AGCMs; experience using appropriate *in situ* and satellite observations and assimilated data; familiarity with AGCM physical parameterizations, particularly convective parameterizations; and the ability to work with a focused team in a mission-oriented environment.

B - NSIPP and LDEO Air-Sea CO₂ Exchange

NSIPP seeks a scientist to participate in a collaborative effort between GSFC and Lamont Doherty Earth Observatory to study variability of the air-sea exchange of carbon dioxide. Variability of the exchanges associated with ENSO events and decadal changes in the Pacific Ocean's climate are of particular interest. The successful candidate will work with *in situ*, satellite and model-generated data and will conduct integrations using NSIPP's existing ocean general circulation model.

Requirements:

Ph.D. in oceanography or a related discipline along with strong FORTRAN programming experience.

C - NSIPP Ocean and Coupled Models

Participate in NSIPP ocean model investigations using a state of the art quasi-isopycnal ocean model and a coupled ocean-atmosphere general circulation model for experimental ENSO predictions. Scientist will collaborate in studies of oceanic mechanisms that are key to ENSO variability, tropical/subtropical exchanges, and will undertake model sensitivity studies to elucidate the essential physics and parameter regimes critical to realistic simulations on seasonal-to-interannual timescales.

Requirements:

Ph.D. in physical oceanography or a closely related discipline and experience with large-scale ocean GCMs. Experience with parallel computing environments an advantage.

D - NSIPP Ocean Data Assimilation

Participate in NSIPP ocean data assimilation investigations using a state of the art quasi-isopycnal ocean model and a coupled ocean-atmosphere general circulation model for experimental forecasts. The scientist will participate in a collaboration with other US groups undertaking ocean data assimilation for seasonal forecasts and will be expected to contribute to the improvement of forecast and observational error covariances. These covariances are used in the assimilation and evaluation of the impacts of different observations and assimilation methodologies implemented at NSIPP.

Requirements:

Ph.D. in physical oceanography, applied mathematics, or a closely related discipline and experience with large-scale ocean GCMs and assimilation methodologies. Experience with parallel computing environments an advantage.

Submit application packet including position number, home address, visa status, complete vitae and three references (complete contact information) to L. Anthea Brooks, GEST Center, Code 900.1, Goddard Space Flight Center, Greenbelt, MD 20771. Email applications will not be accepted. Applications are requested prior to October 31, 2002, although the position remains open until filled.

GEST EMPLOYMENT OPPORTUNITIES (CONTINUED)

Research Associate or Assistant Research Scientist Requirements:

Subject to funding approval, the Goddard Earth Sciences and Technology Center (GEST) will make a research faculty appointment at the Research Associate or Assistant Research Scientist level. GEST is a Cooperative Agreement between the University of Maryland, Baltimore County (UMBC) and the NASA Goddard Space Flight Center (GSFC) to collaborate in research programs in the Earth, Information, and Instrumentation sciences. GEST is a Consortium whose members include UMBC, Hampton University, Howard University, and Caelum Research Corporation. Positions will generally be located either at GSFC or at the offices of one of the consortium members. All candidates must have degrees in an appropriate physical discipline and a demonstrated research record in accordance with the specific qualifications listed for the following position.

GEST 975-34-167 - Space-Based Sensing of Ocean Salinity and Soil Moisture

A Research Associate or Assistant Research Scientist is sought to collaborate on the development of retrieval algorithms for a future sensor in space for microwave remote sensing of ocean salinity and possibly soil moisture. The research involves both passive (radiometer) and active (radar scatterometer) techniques at a frequency near L-band (1.4 GHz). The research will focus on retrieval algorithms for a new proposed instrument. Among the potential issues are the physics of the surface (the effect of roughness on emission); propagation and attenuation in the atmosphere and ionosphere; and instrument issues (e.g. associated with the antenna pattern and pointing). Data has been collected with aircraft instruments and new instruments are under development. Candidate may also participate in new instrument design. Opportunities for GSFC collaboration include the Microwave Sensors Branch, the Oceans and Ice Branch, the Hydrological Sciences Branch and the Microwave Instrument Technology Branch.

Ph.D. in science or engineering with background in passive and/or active microwave remote sensing; familiarity with remote sensing of ocean salinity and soil moisture; a background in oceanography, electrical engineering or physics; familiarity with modern computing languages including IDL and the UNIX operating system; and familiarity with signal processing or electromagnetics.

Note:

Applicants should identify the position by number on a cover letter which includes home address and visa status, if any, and submit it together with a complete curriculum vitae, including the names, addresses, and telephone numbers of three references, to L. Anathe Brooks, GEST Center, Code 900.1, Goddard Space Flight Center, Greenbelt, MD 20771. Email applications will not be accepted. Applications are requested prior to October 31, 2002, although the position remains open until filled.

QUIZ: Name something that everyone has

Answer: A Birthday

Happy Birthday to all those who celebrated birthdays in

July & August

TRAVEL INFORMATION - WHERE TO GET VACCINATIONS

Where to get Vaccinations

International Travel Clinic

UP TO DATE PRE-TRIP ADVICE
ALL TRAVEL IMMUNIZATIONS
PRESCRIPTIONS FOR MALARIA PILLS AND OTHER
MEDICATIONS AS NEEDED

HOURS: BY APPOINTMENT 9 A.M.—4 P.M. MONDAY
THROUGH FRIDAY
(301) 314-8184

University Health Center
University of Maryland, College Park
College Park, Maryland 20742
(301) 314-8184

Are you:

- Traveling off the beaten path?
- Going mountain climbing or trekking?
- Spending spring break in Cancun?
- Thinking about a safari?
- Visiting family in India, Africa, or China?
- Going on a business trip to Moscow?
- Studying abroad in Mexico?
- Backpacking around the world?
- Attending a conference in Cairo?
- Relaxing in Bali?

International Travel Clinic

- Is open to all university students, faculty and staff. Non university clients are charged a visit fee.
- There are charges for immunizations. The total cost will depend what an individual needs.

Please schedule appointments 4–6 weeks in advance of your trip if possible. For people going on longer, more involved trips, 8–12 weeks in advance would be advisable. Please bring records of prior immunizations with you to your appointment if possible.

Services

- Instruction in how to manage food and water when traveling.
- Up to date information on political situations.
- Information on preventing malaria and other insect transmitted diseases.
- All immunizations.
- Clients will be provided with a "yellow book"—an international certificate of vaccinations.
- Water filter kits and AIDS kits available.
- Oral rehydration salt packets available in the International Travel Clinic and pharmacy.
- Information on all aspects of travel - altitude, animals, clothes, children, etc.

International Travel Clinic Staff

Judith G. Perry, M.D.
Director, International Travel Clinic
(301) 314-8118
jperry@health.umd.edu

Patricia Whittles, R.N.
Travel Clinic Nurse
(301) 314-8120

<http://www.inform.umd.edu/UHC/Library/travelclinic.html>

Also check out the CDC Health Information website at: <http://www.cdc.gov/travel/tropsam.htm>

NEW ARRIVALS IN THE GEST FAMILY



**ACTUAL PHOTO:
MATTHEW DAVID LARY**

Dr. David Lary and his wife gave birth to their second child on July 12th. Little Matthew David weighted in at 7lbs., 7.2 oz.



Photo of the Lary's daughter, Maria-Anna.



Dr. Peter Norris and his wife also have a new addition, baby Chloe, born early Tuesday morning, August 20th, 9 lb, 2 oz. Everyone is doing well, and Mom is recovering well, from a very smooth operation. Dad is thankful, and drinking more coffee.

CONGRATULATIONS TO THE PROUD PARENTS

GEST WEBSITE

Please don't forget to check out our (GEST) website at: <http://gest.umbc.edu>.

Information you will find:

- Faculty Resources - including The Faculty Guidebook
- Sponsors Resources— including the Sponsors Handbook
- Student Opportunities
- Employment Opportunities
- Research Groups
- Science Highlights
- Events
- Newsletter & Media
- Information about GEST
- Directory





WELCOME TO ALL OUR NEW GEST FACULTY AND STAFF

NEW FACULTY MEMBERS

GEST would like to welcome the following new faculty Members.

Dr. Bill Chameides	Code 940
Dr. Joe Eastman	Code 974
Dr. Ron Errico	Code 910
Dr. Xianowen Li	Code 920
Dr. Ken Minschwaner	Code 900
Dr. Igor Veselovskii	Code 912
Dr. Yujie Wang	Code 923
Dr. Yihua Wu	Code 974
Dr. Boris Yurchak	Code 900



ADMINISTRATIVE CHANGES (NEW STAFF)

We have a new face at our UMBC GEST Office. Camilla Hyman, Administrative Assistant II, joined our family on July 1st. She can be reached at 410-455-8899, e-mail: hyman1@umbc.edu. Camilla can assist you payroll issues, ordering office equipment and inventory control. In the absence of Nancy Flowers, she also assists with travel and expense statements.

Nancy Flowers' new phone number is **410-455-8812**.



REMINDERS

GEST INFORMAL FACULTY MEETING

Our next Informal Faculty Meeting is scheduled for October 11th at 10:30 a.m., Bldg. 28 Atrium.

Travel

Please don't forget to complete a Request for Travel form each time you travel. This includes trips that are being funded by outside sources. This is to ensure that as a UMBC employee you are covered for liability insurance should you have an accident on the trip. Having prior travel approval also ensures smoother processing should the need arise to claim Workman's Compensation (another area of protection for you should an accident occur while you're traveling).

Time Sheets

These forms are available electronically by contacting Nancy Flowers at flowers@umbc.edu. At the end of each calendar month you should print out the completed form, sign it, and bring the form to the GEST Office in Building 28, Room W223, or PROMPT MAIL it to the same address, Code 900.1. These forms will be used to track your leave, and ensure that your pay is correct. It is therefore, essential that these be turned in by the fifth working day of the subsequent month.

Expense Reimbursements

The traveler may copy an expense statement to claim reimbursement and forward the completed copy, along with a **blank signed** expense statement to the UMBC GEST office. Contact Nancy Flowers at the UMBC GEST office (410 455-8899) to verify if signed forms are on hand. If travel was for an extended period, i.e., more than 7 days, more than one blank, signed expense statement should be submitted with the original receipts. Blank expense statements may be acquired from the GEST office at Goddard or the UMBC GEST office.

All Travel Requests, Time Sheets and Expense Reimbursements are to be submitted to Nancy Flowers at: flowers@umbc.edu.

OTHER IMPORTANT DATES

5TH of each month

Monthly time sheets due into GEST Office

Jan. W2 received at home by Jan 31

Feb. GEST Annual Report input due to Faculty Group Spokesperson

Mar. UMBC Faculty Annual Report (FAR) due

Apr. Deadline for filing Federal and State tax returns April 15th.

May GEST Quarterly Faculty Meeting May 21st.

June UMBC Fiscal year closes June 30th. All expense forms due in by early June

July GEST Annual Research Program Plan distributed (ARPP)

Aug. No health insurance taken out of pay one cycle

Sept. Consulting Report due to Nancy
Labor Day Holiday September 2, 2002
GEST Faculty Quarterly Meeting Schedule -
Sept. 19, 2002 - UMBC
NASA Fiscal Year ends Sept. 30

Oct. Faculty Meeting Open enrollment for Health Plans - October 1- November 1st.
Columbus Day Holiday - October 14, 2002

Nov. Veterans Holiday - November 11, 2002
Thanksgiving - November 27, 2002

Dec. All non-US citizens must file new Citizenship Status Form and W4

Christmas

GEST Faculty Quarterly Meeting Schedule
Dec. 18, 2002 UMBC

Moving expenses this year taxed final pay-check of year

REMINDERS (CONTINUED)

GEST Website

March 18, 2003 1:00 pm – 3:00 pm
AOK Library 768

Please don't forget to check out our (GEST) website at: <http://gest.umbc.edu>.

April 15, 2003 4:00 pm – 6:00 pm
The Commons – Room 327

GEST Faculty Quarterly Meetings

May 20, 2003 1:00 pm – 3:00 pm
AOK Library 768

September 19, 2002

December 18, 2002

February 19, 2003

May 21, 2003

Personal Leave Days

Please take your personal leave days prior to December 31, 2002. If not taken, you will lose them.

GEST Council Meetings

September 17, 2002 1:00 pm – 3:00 pm
AOK Library 768

October 15, 2002 4:00 pm – 6:00 pm
The Commons – Room 327

November 19, 2002 4:00 pm – 6:00 pm
The Commons – Room 327

December 17, 2002 4:00 pm – 6:00 pm
The Commons – Room 327

January 21, 2003 1:00 pm – 3:00 pm
AOK Library 768

February 18, 2003 1:00 pm – 3:00 pm
AOK Library 768

Publications

Assaf Anyamba

Anyamba, A., Tucker, C. J. and Mahoney, R. El Niño to La Niña: Vegetation response patterns over East and Southern Africa during 1997-2000 period. *Journal of Climate* (In Press).

Anyamba, A. Justice, C. O, Compton, C. J. and Mahoney, R. Seasonal to Interannual variability of vegetation and fires at SAFARI 2000 sites inferred from AVHRR time series data. *Journal of Geophysical Research Atmospheres* (In revision) (NASA Tech Reports, Conference Proceedings, Books, Chapters, Magazines, etc).

S. Los, C. J. Tucker, A. Anyamba, L. Bounoua, M. Cherlet, J. Collatz, L. Giglio, F. G. Hall and J. Kendall, (2002) *The Biosphere: A Global Perspective*, In A. K. Skidmore (Editor) *Environmental Modeling with GIS and Remote Sensing*, Taylor & Francis, pp. 71-96. (Published).

Anyamba, A., Tucker, C. J. Applications of visible and infrared remote sensing to drought monitoring using coarse-resolution polar orbiting satellite data (Book Chapter: To be submitted to Oxford University Press).

PUBLICATIONS & SEMINARS

Contributed to Global Environmental Outlook: GEO 3 Past, Present and Future Perspectives, (2002) United Nations Environmental Program (UNEP), Earthscan Publications Ltd.

Contributed to Imagery to Overview Article: Birmingham, K and Cooney, S. (2002) Ebola: small, but real progress. *Nature Medicine*, 8 (4): 313.

Tom Eck

Paper accepted for publication in *Journal of Geophysical Research - Atmospheres* (SAFARI special issue) titled: 'Variability of biomass burning aerosol optical characteristics in southern Africa during the SAFARI 2000 dry season campaign and a comparison of single scattering albedo estimates from radiometric measurements' by T.F. Eck, B.N. Holben, D.E. Ward, M.M. Mukelabai, O. Dubovik, A. Smirnov, J.S. Schafer, N.C. Hsu, S.J. Piketh, A. Queface, J. Le Roux, R.J. Swap and I. Slutsker.

'Analysis of the performance characteristics of the five-channel Microtops II Sun photometer for measuring aerosol optical thickness and precipitable water vapor', Ichoku, Charles; Levy, Robert; Kaufman, Yoram J.; Remer, Lorraine A.; Li, Rong-Rong; Martins, Vanderlei J.; Holben, Brent N.; Abuhassan, Nader; Slutsker, Ilya; Eck, Thomas F.; Pietras, Christophe, *Journal of Geophysical Research - Atmospheres*, 10.1029/2001JD001302 12 July 2002.

Ruei-Fong Lin

Lin, R.-F., D. O'C. Starr, P. J. DeMott, R. Cotton, K. Sassen, E. Jensen, B. Karcher, and X. Liu, 2002, Cirrus parcel model comparison project. Phase 1: The critical components to simulate cirrus initiation explicitly. *Journal of the Atmospheric Sciences*, 59, 2305-2329.

Judit Pap

Total solar and spectral irradiance variations from solar cycles 21 to 23; J.M. Pap, <. Turmon, L. Floyd, C. Frohlich, and Ch. Wehrli, *Adv. Space Res. Vol. 29, No. 12, p 1923-1932, 2002.*

International solar cycle studies (ISCS), "Solar Energy Flux Study: from the Interior to the outer layer, Working Group 1 Report, J. Pap and C. Frohlich, *Adv. Space Res., Vol 29, No. 10, p 1571-1582, 2002.*

A discussion of recent evidence for solar irradiance variability and climate, J. Pap, C. Frohlich, J. Kuhn, S. Sofia. R. Ulrich, *Adv Space Res. Vol 29, No. 10, p 1417-1426, 2002.*

Comparison of image-processing methods to extract solar features, L. Gyori, T. Baranyi, M. Turmon, J.Pap, *Proc. SOHO 11 Symposium, From Solar Min to Max: Half a solar cycle with SOHO, ESA-SP-508, June 2002, p. 203-208.*

Miodrag Rancic

Rancic, M. and H. Zhang, 2002: A framework for globalization of regional atmospheric models. "Preprint from 15th Conference on Numerical Weather Prediction", August 12-16, San Antonio, TX, pp 133-134.

PUBLICATIONS & SEMINARS

Seminars

Rolf Reichle

Reichle, R., J. P. Walker, R. D. Koster, and P. R. Houser: "Extended vs. Ensemble Kalman Filtering for Land Data Assimilation", *Journal of Hydrometeorology*, in press, 2002.

Chung-Lin Shie

Tao, W.-K., J. Simpson, D. Baker, S. Braun, M.-D. Chou, B. Ferrier, D. Johnson, A. Khain, S. Lang, B. Lynn, **C.-L. Shie**, D. Starr, C.-H. Sui, Y. Wang and P. Wetzel, Microphysics, radiation and surface processes in a non-hydrostatic model, *Meteorology and Atmospheric Physics* (in press), 2002.

Tao, W.-K., **C.-L. Shie**, D. Johnson, R. Johnson, S. Braun, J. Simpson, and P. E. Ciesielski, Convective systems over the South China Sea: Cloud-resolving model simulations (submitted to *J. Atmos. Sci.*), July 2002.

Kevin Yeh

Yeh, K.-S., M. Fox-Rabinovitz, and S.-J. Lin: A Variable-Resolution Finite-Volume General Circulation Model; The 2002 Workshop on the Solutions of Partial Differential Equations on the Sphere, The Fields Institute, University of Toronto, Toronto, Canada, August 12-15, 2002.

Xiwu Zhan

"Method and progress of validating AMSR_E land products using data assimilation" to NASA's AMSR_E Science and Validation Team meeting. August 8-9, Santa Rosa, CA.

Tom Eck

Second LBA International Scientific Conference in Manaus, Brazil on July 8, 2002 titled 'Inter-annual variability of biomass burning aerosol optical depth in southern Amazonia, and the effects of these aerosols on the diurnal cycle of solar flux reduction.'

Susan Hobban/Daniel Laughlin

The LEARNERS initiative hosted a one day workshop to generate ideas for better disseminate NASA funded educational resources on August 1, at UMBC's South Campus Technology Center. Eleven NASA insiders from Ames, Goddard, Langley and Headquarters spent the day with fifteen outsiders. Non-NASA attendees came from the US and Canada and represented a variety of entities including educational institutions, an online gaming company, NSTA and the Department of Education. Brainstorming sessions generated 238 suggests and ideas for improving dissemination.

Jonathan Gottschalk

MODIS Vegetation Workshop in Missoula, Montana from July 15-18, 2002 - The latest land products from MODIS and how our land surface hydrology team can make use of them.

Gail Jackson

Poster Presentation: Hydrometeor Profile Retrievals using TRMM Field Campaign Radar and Wide-band Radiometer Observations, presented at the International TRMM Science Conference July 22-26, 2002.

Miodrag Rancic

Rancic, M., and H. Zhang, 2002: Numerical modeling in Earth sciences: A globalization approach. Presented on "The 6th World Multiconference on Systematics, Cybernetics and Informatics", July 14-18, Orlando, FL.

Susan Sakimoto

Invited Talk: August 15, 2002. National Museum of Natural History, Martian Flows and Shields: Using recent image and topography data with terrestrial experience to explain their emplacement.

Mars Volcanism: Some recent results to the PA Space Grant via Videoconference for their Summer Program for High School Women in Science, July 26, 2002.

Chung-Lin Shie

Shie, C.-L., W.-K. Tao, D. Johnson, J. Simpson, S. Braun, J.-J. Wang, R. Johnson, and P. E. Ciesielski, Convective systems during the South China Sea monsoon onset and post-onset simulated by a cloud resolving model using SCSMEX data, *The International TRMM Science Conference*, 22-26 July 2002, Honolulu, Hawaii, 2002.

Song Yang

1st GPM cloud-radiation and modeling workshop (Jul 20-21, Hawaii) - Latent heating retrieval and validation.

1st international TRMM conference (Jul 22-26, Hawaii).

Yang, S., Williams S. Olson, Eric A. Smith and Christian Kummerow, Evaluation of Improvements to the TRMM Microwave Rain Algorithm.

Olson, W., S. Yang, and C. Kummerow, Latent heating from the TRMM microwave imager.

Workshop on Remote Sensing and Modeling (Aug. 19-21, Beijing) Yang, S., Precipitation from satellite passive microwave measurements and its application.

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The Institute of Atmospheric Physics (Aug 23, Beijing), Yang, S., The Global Precipitation Measurement (GPM).

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