2^{ND} GPM APPLICATIONS WORKSHOP AGENDA JUNE 9- 10^{TH} , 2015

College Park Marriott Hotel & Conference Center 3501 University Blvd. East, Hyattsville, MD 20783

http://events.signup4.com/gpm2015

Tuesday, June 9th

| Time | Description | Speaker(s) | | | |
|---------------------------------------|---|------------------------------------|--|--|--|
| 7:30-8:30 | Registration | | | | |
| Introductions and Overview | | | | | |
| 8:30-8:45 | Greetings and Workshop Purpose | Lawrence Friedl, NASA HQ | | | |
| 8:45 – 8:55 | Introduction to CPM | Ramesh Kakar, GPM Program | | | |
| 0.43 - 0.33 | Introduction to GPM | Scientist | | | |
| 8:55 - 9:15 | GPM Mission Overview | Gail Skofronick-Jackson, NASA GSFC | | | |
| 9:15 - 9:30 | Remarks from JAXA | Kinji Furukawa, Acting Project | | | |
| 9.13 - 9.30 | | Manager of GPM/DPR, JAXA | | | |
| 9:30-10:00 | TRMM and GPM Data Products | George Huffman, Deputy Project | | | |
| 9.30-10.00 | 1 KWIWI and OI WI Data I Toddets | Scientist, NASA GSFC | | | |
| 10:00-10:20 | Discussion and Q&A | All speakers | | | |
| 10:20-10:40 | Break | | | | |
| Science Advancements: TRMM to GPM Era | | | | | |
| 10:40-11:00 | Achievements in Precipitation | Dave Randel, Colorado State | | | |
| 10.40-11.00 | Characteristics Science | Dave Rander, Colorado State | | | |
| | Big Picture improvements of GPM: | | | | |
| 11:00-11:20 | Over-land improvements, where do | Joe Turk, JPL | | | |
| | we compare with other sensors? | | | | |
| 11:20-11:40 | GPM Applications and GSMaP | Misako Kachi, JAXA EORC | | | |
| 11:40-12:00 | Multi-mission synergistic activities: A | Christa Peters-Lidard, NASA GSFC | | | |
| 11.40-12.00 | new era of integrated missions | Christa i eters-Lidard, NASA OSI C | | | |
| 12:00-1:15 | Lunch Break | | | | |
| 12:20-1:15 | Brownbag "Meet the Developer" | Led by George Huffman and Owen | | | |
| 12.20-1.13 | Discussion | Kelley | | | |
| | Panel Plenary: Weather F | orecasting | | | |
| 1:15-1:20 | Introduction to Panel Plenary | Dalia Kirschbaum, GSFC | | | |
| 1:20-1:50 | Keynote | Ben Ruston, Naval Research Lab | | | |
| 1:50-2:50 | | Kevin Garrett, JCSDA | | | |
| | | Brad Zavodsky, SPoRT Team, | | | |
| | Weather Forecasting | NASA MSFC | | | |
| | | Yasushi Suzuki, Japan Weather | | | |
| | | Association | | | |

| Panel Plenary: Weather Communication | | | | | |
|--------------------------------------|-----------------------------|--|--|--|--|
| 2:50-3:50 | Weather Communication Panel | Todd Hutchinson, The Weather Company Marshall Shepherd, University of Georgia, (presenting remotely) Jason Samenow, Capital Weather Gang | | | |
| 3:50-4:00 | | Break | | | |
| 4:00-6:00 | Poster Session | | | | |

Wednesday, June 10th

| Time | Description | Speaker(s) | | | |
|---|--|---|--|--|--|
| 8:00-8:30 | Registration | | | | |
| 8:30-8:35 | Introduction and review of previous day | John Haynes and Dalia Kirschbaum | | | |
| Panel Plenary: Water Resources, Food Security and Agriculture | | | | | |
| 8:35-9:05 | Keynote | Gary Eilerts, USAID | | | |
| 9:05-10:20 | Food Security, Agriculture and Water Resources | Wade Crow, <i>USDA/FAS</i> Amy McNally, <i>NASA GSFC</i> Curt Reynolds, <i>FAS</i> | | | |
| 10:20-10:35 | Break and move to b | oreakout sessions | | | |
| 10:35-12:00 | Breakout Sessions WebEx capabilities will not be available during this session. Meather Forecasting (Room Potomac Ballroom): Moderator – PingPing Xie, NOAA Mater Resources, Agriculture and Food Security (Room 0105): Moderator – Brad Doorn/John Bolten, NASA HQ Hydrology and Disaster Response (Room 0101): Moderator – David Green, NASA HQ Public Health and Ecological Forecasting (Room 1311): Moderators – John Haynes, NASA HQ | | | | |
| 12:00-1:00 | Lunch | | | | |
| | Panel Plenary: Public Health and Eco | | | | |
| 1:00-1:30 | Keynote | Ben Zaitchik, Johns Hopkins University | | | |
| 1:30-2:45 | Panel Plenary | Molly Macauley, Resources for the Future Antar Jutla, West Virginia University John Haynes, NASA HQ | | | |
| 2:45-3:00 | Break | | | | |
| Panel Plenary: Disasters | | | | | |

| 3:00-3:30 | Keynote | Frederic Zanetta, IFRC | |
|-----------|--|---|--|
| 3:30-4:45 | Disasters Panel Plenary | Sezin Tokar, OFDA/USAID Chris Chiesa, PDC James Kurz, MiCRO | |
| 4:45-5:00 | Presentation from Breakout Sessions | Breakout session leads | |
| 5:00-5:30 | Summary, Discussion, Feedback and Wrap-up: Actions, Future Workshops | John Haynes, Dalia Kirschbaum | |

To join the meeting via WebEx:

| To join th | he online | meeting | (Now from | mobile | devices!) |
|------------|-----------|---------|-----------|--------|-----------|

- 1. Go to https://nasa.webex.com/nasa/j.php?MTID=mfa8fdb9f19ab21787167407bd8cfb1b8
- 2. If requested, enter your name and email address.
- 3. If a password is required, enter the meeting password: @June9th
- 4. Click "Join".

June 9th:

Meeting Number: 992 890 511 Meeting Password: @June9th

Call-in number: 1-844-467-6272 Participant Passcode: 290569#

June 10th:

To join the online meeting (Now from mobile devices!)

1. Go to https://nasa.webex.com/nasa/j.php?MTID=mf3df90969b002e5f06f8f708c9f39359

- 2. If requested, enter your name and email address.
- 3. If a password is required, enter the meeting password: @June9th
- 4. Click "Join".

Meeting Number: 998 482 225 Meeting Password: @June10th

Call-in number: 1-844-467-6272 Participant Passcode: 290569#

For assistance:

- 1. Go to https://nasa.webex.com/nasa/mc
- 2. On the left navigation bar, click "Support".

Panel Speaker Bios

Ben Ruston, Naval Research Lab

Dr. Ruston is a researcher within the data assimilation section of the marine meteorology division at the Naval Research Laboratory in Monterey, California. His specialties include satellite meteorology, remote sensing from infrared and microwave sensors, and data assimilation for numerical weather prediction. He remains interested in improved use of satellite data over land surfaces and actively participates in the International TOVS and Radio Occultation Working Groups (ITWG and IROWG), and is the technical liaison for the JCSDA at NRL.

Kevin Garrett, JCSDA

Kevin Garrett is the contractor task lead for data assimilation representing NOAA/NESDIS/STAR in the Joint Center for Satellite Data Assimilation. His focus is on the implementation and optimization of passive microwave satellite sensor data assimilation, including GPM GMI, into the NOAA operational Numerical Weather Prediction models. Kevin also provides support and guidance for parallel data assimilation efforts including active sensors, infrared sensors, and cloudy radiance assimilation. Prior to supporting JCSDA, Kevin worked on the development of passive microwave physical retrieval algorithms for NESDIS operational sounding and precipitation products.

Brad Zavodsky, SPoRT Team, NASA MSFC

Mr. Zavodsky is a research meteorologist at NASA's Marshall Space Flight Center, where he is the Co-Lead of the Short-term Prediction Research and Transition (SPoRT) Project. He has more than 10 years of expertise in transitioning NASA satellite data and capabilities to operational forecasters at the National Weather Service, including the transition of snowfall rates derived from passive microwave. Mr. Zavodsky is the GPM Early Adopter lead for SPoRT.

Yasushi Suzuki, Japan Weather Association

Dr. Suzuki is the chief engineer for the Japan Weather Association. Established in 1950 as the first private weather forecasting company in Japan, Japan Weather Association (JWA) has been bringing timely weather information to all of Japan.

Todd Hutchinson, The Weather Company

Mr. Hutchinson is the Director of Numerical Weather Prediction at the Weather Science Institute, a division of the Weather Company. He obtained his masters degree in meteorology from the University of Oklahoma in 1995.

Marshall Shepherd, University of Georgia

Dr. Shepherd is a Full Professor of Atmospheric Sciences and Geography at the University of Georgia, and Director of its Atmospheric Sciences Program. He was the 2013 President of American Meteorological Society (AMS), the largest and oldest professional science society in

the atmospheric and related sciences. Dr. Shepherd received the Presidential Early Career Award in 2004. He also received a Media Achievement Award from the Association of American Geographers in 2014. Dr. Shepherd currently hosts The Weather Channel TV show "Weather Geeks".

Jason Samenow, Capital Weather Gang

Mr. Samenow is a weather editor and the chief meteorologist for the Washington Post's "Capital Weather Gang" blog. He founded CapitalWeather.com in early 2004, the first professional weather blog on the Internet which was absorbed by the Post in 2008. From 2001 – 2010 he worked as a climate scientist for the U.S. Environmental Protection Agency. Jason is a past chairman of the D.C. Chapter of the American Meteorological Society and a Weather and Society Integrated Studies Fellow.

Gary Eilerts, USAID

Dr. Gary Eilerts oversees management and implementation of U.S. Agency for International Development's (USAID) Famine Early Warning Systems Network (FEWS NET), collaborating with international and national partners to provide on-the-ground information regarding food security issues in many areas of the world. He has led development of new FEWS NET program expertise in identifying climate change impacts in food insecure countries and in building new tools for monitoring the impacts of markets and trade on food security. Previously, he worked with FEWS NET as a regional representative based in southern Africa.

Wade Crow, USDA

Dr. Wade Crow is a research physical scientist at the U.S. Department of Agriculture - Agricultural Research Service (USDA-ARS) Hydrology and Remote Sensing Laboratory. His research focuses on the development of land data assimilation systems to ingest remote sensing and retrievals. He also focuses on land surface water and energy balance modeling and scale and scalability issues in land surface modeling and remote sensing. He is a member of NASA's Soil Moisture Active Passive (SMAP) science team.

Amy McNally, NASA GSFC

Dr. Amy McNally is currently lead researcher on a jointly funded NASA and USAID project for Characterizing, Monitoring and Projecting Regional Water Availability for the Famine Early Warning Systems Network (FEWS NET). She completed her Ph.D in Geography from University of California Santa Barbara and M.S. in Water Resources Policy and Management from Oregon State University.

Curt Reynolds, USDA/FAS

Dr. Reynolds is a Senior Global Crop Analyst for the Foreign Agricultural Service at the U.S. Department of Agriculture. His focus area is in Sub-Saharan Africa and Mexico.

Ben Zaitchik, Johns Hopkins University

Dr. Zaitchik is an Assistant Professor in the Earth and Planetary Sciences Department at Johns Hopkins University. His research is directed at understanding, managing, and coping with climatic and hydrologic variability. Understanding variability requires examination of the natural processes that drive climate and surface change. Managing variability relates to our ability to control anthropogenic influences on climate and hydrology at the local, regional, and global scales. Coping with variability includes improved forecast systems and methods of risk assessment. In each of these areas of research he employs a combination of observation-both in situ and remotely sensed-and numerical modeling techniques.

Molly Macauley, Resources for the Future

Dr. Macauley is Vice President for Research and Senior Fellow at Resources for the Future. Her research interests include space economics and policy, the economics of new technologies for research and understanding of the interactions between people and natural resources, the use of economic incentives in environmental regulation, climate and earth science, and recycling and solid waste management. She serves on numerous special committees of the National Academy of Sciences and federal agencies.

Antar Jutla, West Virginia University

Dr. Jutla is an Assistant Professor in the Department of Civil and Environmental Engineering at West Virginia University. His research interests include quantification of large scale hydroclimatological controls on outbreaks of water-related diseases (e.g., cholera) and prediction using satellite remote sensing, as well as the impact of future climatic variability on outbreak of water-related diseases and application of remote sensing in detecting large scale geophysical controls and subsequent prediction of most of the water-related diseases (such as Rift Valley Fever, Schistosomiasis, Malaria, Dengue). He also looks at the impact of climate variability on regional precipitation in developing countries and scale issues and remote sensing of hydrological processes.

John Haynes, NASA HQ

Mr. Haynes serves as the Program Manager for Health Application and for Air Quality Application in the Applied Sciences Program of the NASA Earth Science Division/Science Mission Directorate. He manages programs in the physical sciences such as meteorology, geography, remote sensing, and oceanography relating to Weather Applications, Health and Air Quality Applications, and the Gulf of Mexico Initiative at Stennis Space Center (SSC).

Frederic Zanetta, IFRC

Mr. Zanetta is Disaster Information Senior Officer at the International Federation of Red Cross and Red Crescent Societies (IFRC). He supports and maintains the Red Cross intranet on Disaster Management Information and is responsible for statistical analysis on Red Cross Red Crescent response to disasters. He is also the global GIS focal point for IFRC which he

introduced to the organization in the aftermath of the 2004 tsunami. Previously, he was the administrator of the International Diploma in Humanitarian Assistance and worked for several NGOs.

Sezin Tokar, OFDA/USAID

Ms. Tokar is a senior hydrometerological hazard advisor in the Office of U.S. Foreign Disaster Assistance for the U.S. Agency for International Development. Her work includes closely monitoring extreme weather events in partnership with the National Oceanic and Atmospheric Administration, and to synthesize and package critical meteorological information to help give decision-makers a better handle on what to expect and to permit USAID to more quickly mobilize its disaster assistance resources to help those hit by floods, hurricanes, tsunamis and droughts.

Chris Chiesa, PDC

Mr. Chiesa is the Deputy Executive Director for the Pacific Disaster Center (PDC). He is responsible for PDC operations and program development, as well as client services. Since joining PDC in 2002, he has led the establishment and development of enterprise geospatial data services, the Center's GIS-based "Global Hazards and Vulnerabilities Atlas," and the PDC-hosted "Global Hazards Information Network," a geospatial information sharing service. During the past decade, Chris has been actively involved in disaster management activities throughout the Asia-Pacific region, directing programs in Thailand, Vietnam, Indonesia and the Philippines. He is an active member of APEC's Emergency Preparedness Working Group and Chairs the Pacific Risk Management Ohana (PRiMO) Navigators Council. He has previously served as PDC's Chief Information Officer and Director of the Data and Information Resources Division.

James Kurz, MiCRO

Mr. Kurz is a Senior Technical Advisor/Head of Strategy and Operations for Mercy Corps' Micro-insurance Catastrophe Risk Organization (MiCRO), a licensed re-insurance company focused on connecting the world's most vulnerable people to international financial markets. The program offers low-income households an affordable way to insure themselves against unexpected losses from natural disasters.