

# **3rd NOAA User Workshop on the Global Precipitation Measurement (GPM) Mission**

**April 2 – 4, 2013  
College Park, MD**

**Rob Cifelli (OAR)  
Ralph Ferraro (NESDIS)  
Pingping Xie (NWS)**

**Co-chairs,**

**NOAA's Steering Group on Precipitation Measurement from Space**

# Welcome!

- Opening remarks
  - Thanks for coming!
  - Workshop organizing committee
  - Prof. Antonio Busalacchi, Director, Univ. of Maryland's Earth System Science Interdisciplinary Center (ESSIC)
- Workshop format
  - Keynote speakers – Day 1
  - Working groups (wear “work” clothes!) – Days 2 & 3
    - Imbedded plenary sessions as needed
    - Integration of ideas/concepts during breaks and lunch
    - We plan to wrap up by 12 pm on Thurs
      - Splinter meetings encouraged on specific topics Thurs pm

# Goals and Expectations

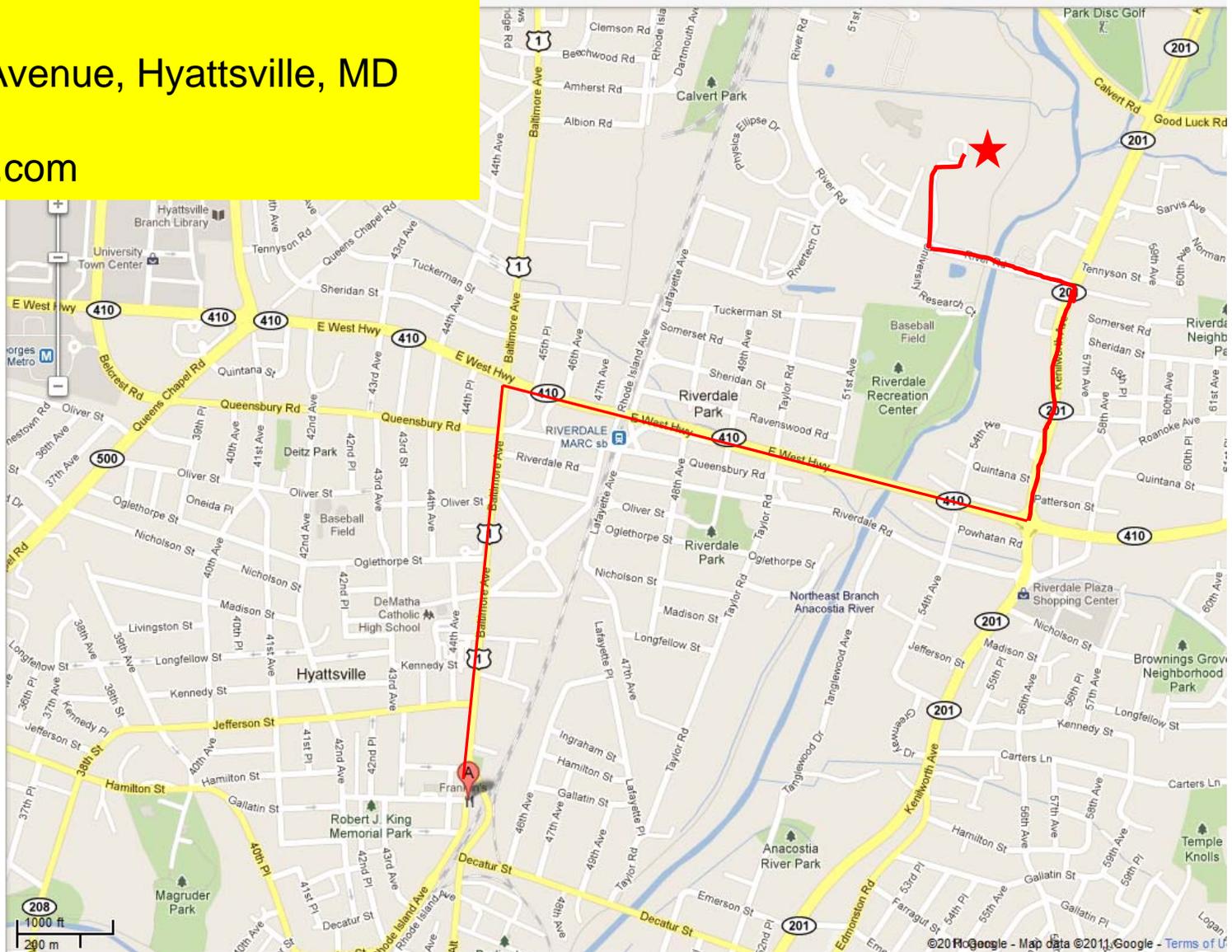
- We need your participation and help!
  - Building off the success of the previous two workshops, help us clearly define NOAA's plans for use of GPM-era data and products
- Remember, NOAA's use of GPM-era data will include components that are beyond the scope of NASA/JAXA GPM mission goals
  - Real-time use
    - e.g., Weather forecasting and warning, NWP assimilation, etc.
  - Additional products beyond precipitation (NOAA Unique Products – NUP)
    - e.g., Imagery, TPW, etc.
  - Synergy with other existing satellite and ground-based programs
    - e.g., GOES, JPSS, Q2, HMT, etc.
- We want to generate a detailed report that includes
  - Defined **achievable**, short and long term tasks to meet NOAA goals

# Logistics

- Loading your presentations
- Restrooms
- Food & Beverages
  - Breakfast, lunch, snacks provided
  - Vending near restrooms
- Wireless
- My office (Room 3023) is available for telecons, etc.
- Break Out rooms for the Working Groups
- Group Photo
  - before coffee
- Group Dinner
  - 6 pm Tuesday – Franklin's in Hyattsville (please sign up)

# Group Dinner (pay on your own) – 6 pm TUES. (right after meeting)

Franklin's  
5121 Baltimore Avenue, Hyattsville, MD  
(301) 927-2740  
franklinsbrewery.com



# Tuesday April 2

04/02/13	Topic	Speaker(s)	Organization
800 - 820 am	Registration/Sign In/Continental Breakfast		
<b>SESSION 1 - OVERVIEW (Chair - Chandra Kondragunta)</b>			
820 - 825	Introductions, Welcome, Logistics, Goals, Format, etc.	R. Ferraro; A. Busalacchi	NESDIS & UMD
825 - 840	2nd Workshop Summary and Progress; NOAA PMM Project Summary	R. Cifelli	OAR
840 - 855	Importance of GPM from NESDIS Perspective	M. Haas	NESDIS
855 - 910	NOAA Keynote Speaker - GPM's Role at the NWS	L. Furgione	NWS
910 - 925	NOAA Keynote Speaker - GPM's Role at Hydrology Program	B. Choy	NWS/OHD
925 - 940	GPM Program Status	G. Skofronick-Jackson	NASA
940 - 955	GPM Ground System Status	E. Stocker	NASA
955 - 1010	GPM Outreach and Applications	D. Kirschbaum	NASA
1010 - 1030	<b>COFFEE BREAK + GROUP PHOTO</b>		
<b>SESSION 2- NOAA GPM Proving Grounds and Testbeds (Chair - Rob Cifelli)</b>			
	Intro: Purpose of session: ongoing NOAA Proving Grounds: Purpose, links to testbeds, and strategies to accomplish		
1030 -1035	R2O/O2R	R. Cifelli	OAR
1035 -1050	GOES-R Proving Ground	S. Goodman (TBC)	NESDIS
1050 -1105	JPSS Proving Ground	I. Guch	NESDIS
1105 - 1125	Hydrometeorology Testbed PSD / HPC	A. White /R. Cifelli / W. Hogsett	OAR / NWS
1125 - 1140	Climate Testbed CPC	M. Halpert/J. Huang	NWS/CPC
1140 - 1200	Discussion, summary and plans for the WG	Group	
1200 - 100 pm	<b>LUNCH</b>		

# Tuesday April 2

## SESSION 3- NOAA GPM Research and Algorithm Development (Chair - Yu Zhang)

100 - 115	IWRSS and data fusion needs (summary from 2012 workshop)	Tim Schneider/D. Kitzmiller	OHD
115 - 130	NOAA Satellite Data Fusion	P. Xie/Kuligowski	NCEP/NESDI
130 - 145	GPM-Radar - Gauge Fusion via MRMS	J. Gourley/B. Rabin	OAR
145 - 200	Data blending via MPE/CMORPH	Y. Zhang/P. Xie	OHD/UTA
200 - 215	New fusion paradigms	V. Chandrasekar	CSU
215 - 230	Discussion - /common testbed/coordination and priorities/data sources	Group	
230 - 250	<b>COFFEE BREAK</b>		

## SESSION 4 - Outreach and Applications Needs and Goals (Chair - Stephen Mango)

Hydrometeorology			
310 - 330	Hydromet, Hurricane, Snow/Alaska, NOHRSC, IWRSS?	Greg Waller/Greg Fall/David Kitzmiller	NWS RFCs/OHD
330 - 350	NHC uses of GPM era data and products	M. Brennan	NWS/NHC
350 - 410	Outreach and Training (COMET)	Brian Motta	

## SESSION 5 - Summary, Working Group Formation and Initial WG Tag Ups

415 - 500	Session Introduction		
500 pm	<b>WORKSHOP ENDS FOR THE DAY</b>		

DEPARTMENT OF COMMERCE

# Wednesday April 3

04/03/13	Topic	Speaker	Organization
<b>SESSION 6 - WORKING GROUPS - PLENARY AND DISCUSSIONS</b>			
800 - 830	Continental Breakfast		
830 - 845	Working Group Plenary		
845 - 1000	Working Groups Meet		
1000 - 1030	<b>COFFEE BREAK</b>		
1030 - 1200	Working Groups Meet		
1200 - 100 pm	<b>LUNCH and engage other working groups</b>		
<b>100 - 130</b>	Working Group Plenary		
100 - 300	WORKING GROUPS MEET		
300 - 315	<b>COFFEE BREAK</b>		
315 - 500	WORKING GROUPS MEET		
500 pm	<b>WORKSHOP ENDS FOR THE DAY</b>		

# Thursday April 4

3rd Day - Apr 4th

04/04/13	Topic	Speaker	Organization
<b>WORKING GROUP SESSION/PLENARY</b>			
800 - 830 am	Continental Breakfast		
830 - 900	WG 1 report		
900 - 930	WG 2 report		
930-1000	WG 3 report		
1000-1130	Working group plenary/Wrap up		
1130-1200	Plans for focus group sessions in the pm		
1200 - 100 pm	<b>LUNCH/Workshop Ends</b>		
<b>Focus Group Meetings (To Be Arranged)</b>			

# Working Groups

- Think in terms of achievable goals
  - What can be done with existing resources?
  - What extra resources are needed?
  - Need “champions” for each action



- But also think out of the box
  - Yes, we want actions that are closely tied to NOAA goals and budgets, but...don't feel locked to this, be innovative



- Cross line office efforts
  - R20 and 02R
- Do things “differently” from in the past
  - Radars, gauges and satellites do mix!



# WG 1 – GPM Proving Ground (WG Chair – R. Ferraro)

## 1. How do we develop a NOAA GPM Proving Ground?

- Leverage existing PG's?
- Single or multiple node?
- Following established NOAA PG ground rules?
- Governance?
- Funding vs. FTE time?

## 2. Who would be the PG producers?

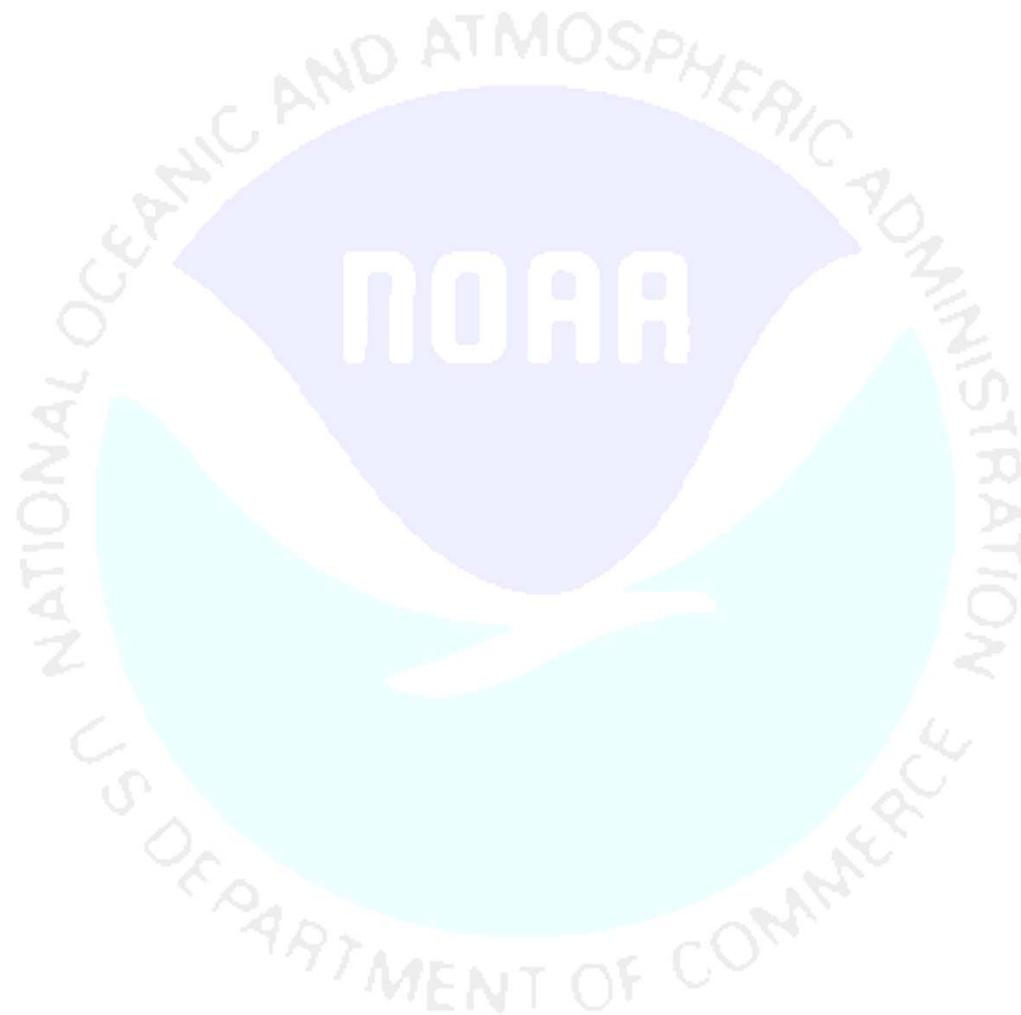
## 3. Who would be the PG consumers?

- NOAA Testbed candidates
- NWSFO's and regions

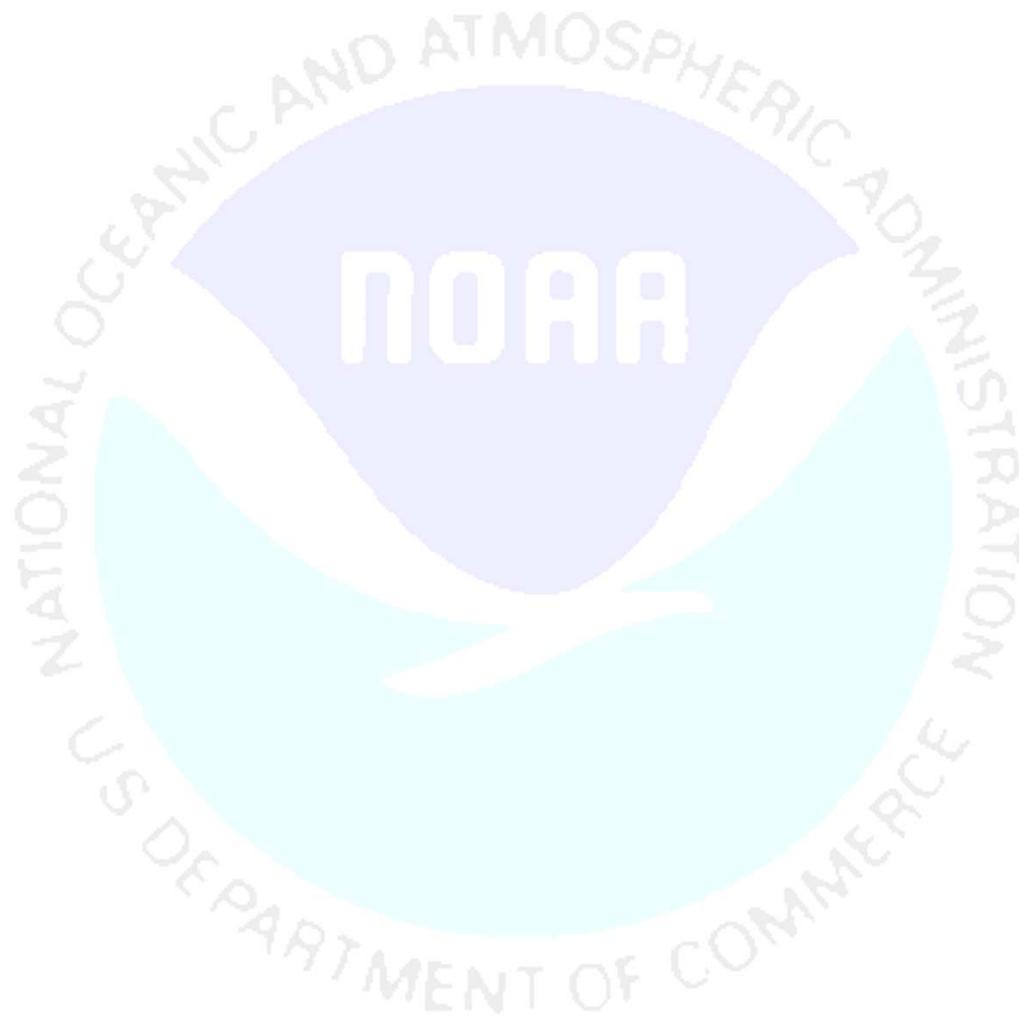
## 4. What needs to be produced and consumed?

- Develop priority list
- Develop achievable milestones

# WG 2 – Research Needs/Algorithm Development (WG Chair – G. Huffman)



# WG 3 – Training and Outreach (WG Chair – K. Carey)



# WG Room Assignments

- WG 1 – Room 4102 (stay in this room)
- WG 2 – Room 4056
- WG 3 – Room 4046



Working Group \_\_\_\_\_

Working Group Lead \_\_\_\_\_

Working Group Scribe \_\_\_\_\_

Working Group Members \_\_\_\_\_

Instructions: Please use the table below as you develop tasks/milestones within your working group. We are aiming to identify both short term (1-3 years) as well as long term (beyond 3 years) actions that can advance the working group goals. Please rank in order of priority as best as you can and try to identify a champion for each task – attaching someone’s name to an action helps ensure that the task does not “slip through the cracks”. Please also think in terms of achievable tasks that are realistic, given everyone’s busy schedules; some tasks can probably be done without any dedicated resources (aside from NOAA FTE hours; those costs do not need to be included in the table). Guidance on potential funding sources will be provided in the plenary sessions. The better you populate this matrix, the easier it will be to write a summary

<b>Task/Milestone</b>	<b>Champion(s)</b>	<b>Steps to accomplish (include who, what, where and when)</b>	<b>Funding Source or Targets</b>	<b>Cost Estimate (\$ K)</b>