

# Agenda for the GCAM Community Modeling Workshop

November 7 - 9, 2017

Joint Global Change Research Institute - 5825 University Research Court #3500, College Park, MD 20740

Agenda Updated November 1, 2017

## GCAM Community Modeling Workshop

Tuesday, November 7th

### Welcome and Introduction

9:00	9:05	Welcome and Introduction	Moderator: Ghassem Asrar (PNNL/JGCRI)
9:05	9:15	Welcoming remarks	Laurie Locascio (UMD - Vice President for Research)
9:15	9:25	Welcoming remarks	Gary Geernaert (DOE/BER/CESD)
9:25	9:35	Welcoming remarks	Ian Kraucunas (PNNL)

### Collaborative GCAM Research, Recent Development, and Future Work

9:35	9:45	<b>Energy Water Nexus</b> - Overview of current developments and path forward	Moderator: Mohamad Hejazi (PNNL/JGCRI)
9:45	10:10	GCAM Applications: The E-W-L Nexus in LAC & MENA	Fernando Miralles-Wilhelm (UMD/ESSIC/JGCRI)
10:10	10:30	Xanthos: an extensible global hydrology model	Chris Vernon (PNNL/JGCRI)
10:30	10:50	Exploring implications of global groundwater depletion with GCAM	Sean Turner (PNNL/JGCRI)
10:50	11:10	Implications of water constraints for electricity capacity expansion in the US	Lu Liu (PNNL/JGCRI)
11:10	11:25	Break in Presentations: Open Discussion - future research directions	+ Poster Session
11:25	11:35	<b>Earth System Modeling</b> - Overview of current developments and path forward	Moderator: Corinne Hartin (PNNL/JGCRI)
11:35	11:55	Hector enhancements: new energy balance and sea-level rise components and their Bayesian calibration	Ben-Vega Westhoff (UIUC)
11:55	12:15	A computationally efficient approach to generate large ensembles of coherent climate data for GCAM	Corinne Hartin (PNNL/JGCRI)
12:15	12:35	Recent development of degree day feedbacks	Russell Horowitz (PNNL/JGCRI)
12:35	13:35	<b>Working Lunch: Open Discussion</b> - future research directions	+ Poster Session

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13:35	13:45	<b>Land</b> - Overview of current developments and path forward	Moderator: Kate Calvin (PNNL/JGCRI)
13:35	13:55	Agricultural response functions to changes in carbon, temperature, and water	Abigail Synder (PNNL/JGCRI)
13:55	14:15	Downscaling terrestrial products for use in GCAM	Min Chen (PNNL/JGCRI)
14:15	14:35	Development of the new food demand function	Robert Link (PNNL/JGCRI)
14:35	14:55	Exploring approaches to modeling decision-making in the land sector	Kate Calvin (PNNL/JGCRI)
14:55	15:10	Break in Presentations: Open Discussion - Future Research Directions	+ Poster Session
15:10	15:20	<b>Regional Modeling</b> - Overview of current developments and path forward	Moderator: Marshall Wise (PNNL/JGCRI)
15:20	15:40	Exploring harmonization between integrated assessment and capacity expansion models	Stuart Cohen (NREL)
15:40	16:00	Natural Gas Infrastructure Development in the United States	Sauleh Siddiqui (Johns Hopkins)
16:00	16:20	Projecting state-level air pollutant emissions using GCAM-USA	Dan Loughlin (US-EPA)
16:20	16:40	Recent development and applications of GCAM-China: CCS in China's Mitigation Strategy	Jill Horing (PNNL/JGCRI)
16:40	16:50	Closing remarks	Leon Clarke (PNNL/JGCRI/UMD)
16:50	16:50	<b>END OF DAY</b>	--

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## GCAM Community Modeling Workshop

Wednesday, November 8th

### GCAM training

#### Overview of GCAM v4.4

##### Overview I

9:00	9:25	Introduction to GCAM	Leon Clarke (PNNL/JGCRI/UMD)
9:25	9:30	Economy	Stephanie Waldhoff (PNNL/JGCRI)
9:30	10:00	Energy	Page Kyle and Marshall Wise (PNNL/JGCRI)
10:00	10:30	Land	Kate Calvin (PNNL/JGCRI)

10:30 10:45 Break in Presentations: Open Discussion on core GCAM

##### Overview Part II

10:45	10:55	Modeling Policies	Haewon McJeon (PNNL/JGCRI)
10:55	11:00	Trade	Marshall Wise (PNNL/JGCRI)
11:00	11:20	Emissions	Steve Smith (PNNL/JGCRI)
11:20	11:40	Earth System	Corinne Hartin (PNNL/JGCRI)
11:40	11:55	Updates since last release	Kate Calvin (PNNL/JGCRI)

11:55 12:55 **Working Lunch: Open Discussion on latest GCAM release**

##### Overview Part III

12:55	13:10	Community resources - wiki, listserv, github issues, rgcam, gcammaptools	Robert Link (PNNL/JGCRI)
13:10	13:35	GCAM visualization	Ross Maciejewski (ASU)
13:35	13:55	The data system rewrite (DSR)	Ben Bond-Lamberty (PNNL/JGCRI)

13:55 14:10 Break in Presentations: Open Discussion on Future GCAM Capabilities

### GCAM Tutorial

14:10	16:30	GCAM Tutorial - setting up and running GCAM	GCAM Team (Page, Pralit, Haewon)
14:10	16:30	GCAM Tutorial - pyGCAM	Rich Plevin (UC Berkeley)

16:30 16:30 **END OF DAY**

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## GCAM Community Modeling Workshop

Thursday, November 9th

### GCAM Tutorial (cont.)

9:30 15:30 GCAM Hands on Assistance GCAM Team

15:30 15:30 END OF DAY

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