



## Agenda

### Sunday, 25 July 2004

15:00	Registration and Poster/Exhibit Set-Up
18:00	Opening Reception at the Millennium Hotel
20:00	Adjourn

### Monday, 26 July 2004

8:00	Registration	
9:00	Welcome and opening plenary <i>Ballroom</i>	Richard Anthes, President, UCAR  Craig Blurton, Director, The GLOBE Program
9:45	Findings from the GLOBE Evaluations: A Synthesis	William Penuel, SRI
10:30	Break	
10:45	GLOBE Town Hall Meeting: <i>GLOBE in the Next 10 Years</i>	Moderated by Craig Blurton
12:00	Lunch, observations and exhibits	

## Monday, 26 July, Continued

13:30	Introduction to GLOBE Science	Margaret LeMone, GLOBE Chief Scientist
13:45	Science Presentations: <ul style="list-style-type: none"> <li>The GLOBE ONE Field Program (<i>John McLaughlin</i>)</li> <li>Integrating GLOBE Measurements with Basic GAPS to Understand Earth System Science (<i>Elissa Levine, Jessica Robin, S. Riha and J. Melkonian</i>)</li> </ul>	
14:15	Break Refreshments sponsored by Vernier Software and Technology	
14:45	Hands-on Science Workshops ( <i>Concurrent Sessions</i> ) <ul style="list-style-type: none"> <li>A. GLOBE Hydrology Measurements with Vernier Probeware (<i>Sponsored by Vernier Software and Technology</i>)</li> <li>B. Basic GAPS Part One: A Hands-on Protocol Workshop for the Student Modeling Tool for Earth System Science Simulation (<i>Elissa Levine, Jessica Robin</i>)</li> <li>C. Operation RubyThroat: The Hummingbird Project: Part One (<i>Bill Hilton, Jr.</i>)</li> <li>D. GLOBE Measurements using Carolina Biological Supply equipment (<i>Sponsored by Carolina Biological</i>)</li> </ul>	
16:45	Introduction to GLOBE Education <i>Pavilion</i>	Sandra Henderson, GLOBE Chief Educator
17:00	Plenary Summary of the Day	Ed Geary GLOBE Coordinator of Sustainability
17:30	Adjourn	

## Tuesday, 27 July 2004

8:45	Opening and announcements ( <i>Ballroom</i> )	GLOBE Staff
9:00	Presentations on Science and Regional Collaboration: <ul style="list-style-type: none"> <li>Soil Moisture Investigation Update (<i>Jim Washburne, T. Ferre, B. Nijssen, M.P.L. Whitaker</i>)</li> <li>Progress on Aerosols, Water Vapor, and UV-A Protocols (<i>David Brooks</i>)</li> <li>GLOBE Takes the A-Train: NASA's CloudSat, CALIPSO, AIM and Aura Satellite Missions (<i>Dianne Robinson, Debra Krumm</i>)</li> <li>GLOBE Special Protocols: Observing Ruby-Throat Hummingbirds (<i>Bill Hilton, Jr.</i>)</li> <li>The Whitewater to Blue Water collaboration with GLOBE (<i>Henry Saunders, Trinidad</i>)</li> </ul>	

## Tuesday, 27 July 2004, Continued

10:30	Introduction to Regional Collaboration Groups	Teresa Kennedy, Director, International/U.S. Partnerships and Outreach
10:45	Break	
11:15	Regional Collaboration Group Discussions	Facilitated by GLOBE Staff
12:00	Lunch Presentation on the 2003 GLOBE Learning Expedition in Sibenik, Croatia	Diana Garasic, GLOBE Country Coordinator, Croatia
13:30	<p>Partner, Science and Education Presentations (<i>Concurrent Sessions</i>):</p> <p>A. GLOBE Science and Data</p> <ul style="list-style-type: none"> <li>• GLOBE Sun Photometer Measurements of Aerosol Optical Thickness (AOT) Agree Remarkably Well with Those by the Terra and Aqua Satellites (<i>Forrest M. Mims, III and David Brooks, U.S.</i>)</li> <li>• Using GLOBE and Other Observations to Validate Meteorological Models (<i>Chris Hiemstra and Roger Pielke, U.S.</i>)</li> <li>• Data Quality Report for the GLOBE Atmosphere and Climate Data (<i>Debra Krumm, Kelly Dean, Ian Wittmeyer and Graeme Stephens, U.S.</i>)</li> <li>• Water Quality and Land Use: An Integrated Study of the Lipanoi River System, Samui Island (<i>Krisanadej Jaroensutasinee, M. Jaroensutasinee, and other, Thailand</i>)</li> <li>• The Delaware Water Gap Project: Using GLOBE to Understand Land Use and Land Cover Change (<i>Elissa Levine, Jessica Robin and E. Brown-de Colston, U.S.</i>)</li> </ul> <p>B. GLOBE Networks and Communities</p> <ul style="list-style-type: none"> <li>• Building Local Area Networks and Affiliates (<i>Jim Washburne and Jacquie Kahn, U.S.</i>)</li> <li>• GLOBE Learning Community in Puerto Rico (<i>Ricardo Camacho Zapata, Puerto Rico, U.S.</i>)</li> <li>• GLOBE and “Royal Developments Regarding Environment” (<i>Charlie Navanugraha, Thailand</i>)</li> <li>• GLOBE Aerosol Research Collaboration in Central Texas (<i>Julie Westerlund, Brandy Bagnall, Jill Schuemate and Carole Henry, U.S.</i>)</li> <li>• GLOBE and Indigenous Knowledge (<i>Usa Klinhom, Thailand</i>)</li> </ul>	

## Tuesday, 27 July 2004, Continued

15:00	Break
15:15	<p>Partner, Science and Education Presentations (<i>Concurrent Sessions</i>):</p> <p>A. GLOBE Partner Activities</p> <ul style="list-style-type: none"> <li>• Current GLOBE Activity at Suranaree University of Technology (<i>Sompong Thammathaworn, Thailand</i>)</li> <li>• GIS in Denmark (<i>Flemming Sigh, Denmark</i>)</li> <li>• The GLOBE Program in Ecuador (<i>Yolanda Lopez, Ecuador</i>)</li> <li>• Sustaining GLOBE Activities in Developing Nations (<i>Kwasi Owusu-Afriyie, Ghana</i>)</li> <li>• GLOBE and "Young Soil Doctor" Project (<i>Chaiwat Sittbush, Thailand</i>)</li> </ul> <p>B. GLOBE and Science Studies</p> <ul style="list-style-type: none"> <li>• GLOBE and Kirdkiao Observatory's Projects (<i>Thagoon Kirdkiao, Thailand</i>)</li> <li>• The Relation Between Algae and Pollution (<i>Samir Hassan, Egypt</i>)</li> <li>• Alaskans Represent the U.S. in the GLOBE Arctic POP Project (<i>Elena Sparrow, U.S.</i>)</li> <li>• Overview of the Arctic POP Project, 2001-2004 (<i>Karl Torstein Hetland, Norway</i>)</li> <li>• An eye on the future (<i>Rund Awwad, Jordan</i>)</li> <li>• Lewis and Clark Rediscovery and Wild Fire Analysis using GIS Data (<i>Robert Kearney, U.S.</i>)</li> </ul> <p>C. GLOBE Education: Training</p> <ul style="list-style-type: none"> <li>• GLOBE Sustainable Development Protocols and Training (<i>Lisa Ambler, UK</i>)</li> <li>• The U.S. Training Model (<i>Sandra Henderson, U.S.</i>)</li> <li>• The UK Training Model (<i>Suzanne Welch, UK</i>)</li> <li>• GLOBE Teachers' Training in India (<i>R. Mehta, India</i>)</li> <li>• GLOBE in Alabama: A State-Wide Training Model (<i>Greg Cox, U.S.</i>)</li> </ul>
17:00	Adjourn
17:30 to 18:30	<p>Optional workshops (<i>Concurrent Sessions</i>)</p> <p>A. Partner Administration Pages Workshop</p> <p>B. Looking at Data Toolkit Workshop</p>

**Wednesday, 28 July 2004**

8:45	Opening and Announcements <i>Ballroom</i>	GLOBE Staff
9:00	NASA Update and GLOBE on the international Scene	Paula Coble
10:00	Science Presentations <ul style="list-style-type: none"> <li>• Laboratory Studies for Improving Ozone System Measurement Capability (<i>Margaret Pippin, L. Bush, T. Cohen, J. Fishman and I. Ladd, U.S.</i>)</li> <li>• A Comparison of Satellite-Based Cloud Observations to GLOBE Cloud Observations Using the MODIS Cloud Product (<i>Graeme Stephens and Matt Rogers, U.S.</i>)</li> <li>• The GLOBE Contrail Protocol: Initial Analysis of Results (<i>Lin Chambers and David Duda, U.S.</i>)</li> </ul>	
10:45	Break	
11:00	<ul style="list-style-type: none"> <li>• Monitoring Biodiversity of Select Restoration Sites in New Zealand (<i>Russ Congalton, J. Bishop and M. Larsen Becker, U.S.</i>)</li> <li>• Soil Temperature (<i>Alison Sponberg, U.S.</i>)</li> <li>• Engaging K-12 Students in Science: Validating Satellite Imagery with GLOBE Observations (<i>Kevin Czaikowski, T. Ault, T. Benko, A. Sponberg, J. Struble, M. Templin, J. Kane, U.S.</i>)</li> <li>• Inspiring Blind Students to Learn Earth Science with GLOBE (<i>Elissa Levine, U.S.</i>)</li> </ul>	
12:00	Plenary session: GLOBE Survey	Teresa Kennedy William Penuel
12:30	Box Lunches	
13:00	Departure for Cal-Wood Mini-Field Study (or Free Time)	
20:00	Return from Cal-Wood Mini-Field Study	

**Thursday, 29 July 2004**

8:45	Opening and Announcements	GLOBE Staff
9:00	<p>Science Presentations (<i>Ballroom</i>)</p> <ul style="list-style-type: none"> <li>• The New GLOBE Fire Fuel Protocol: Description and Uses (<i>Bob Keane and Duncan Lutes, U.S.</i>)</li> <li>• GLOBE Plant Phenology (<i>Elena Sparrow, U.S.</i>)</li> <li>• GLOBE Hydrology (<i>Martha Conklin, U.S.</i>)</li> </ul>	
10:00	Break	
10:30	<p>Partner, Science and Education Presentations (<i>Concurrent Sessions</i>):</p> <p>A. GLOBE Partners</p> <ul style="list-style-type: none"> <li>• Idaho GLOBE—Implementing the Science Standards Through Preservice Teacher Education (<i>Mike Odell, U.S.</i>)</li> <li>• PT3 (U.S. Dept. of Ed.) Funds GLOBE, Science Education, and Technology Activities (<i>Burnette Hamil, Taha Mzoughi and Anastasia Elder, U.S.</i>)</li> <li>• The GLOBE Program and Art (<i>Aniko Orgovany, Hungary</i>)</li> <li>• Fundraising for GLOBE (<i>Andy Tasker, UK</i>)</li> <li>• GLOBE Funding in Benin (<i>Alidjennatou Aliou Emmanuel, Benin</i>)</li> </ul> <p>B. GLOBE Education</p> <ul style="list-style-type: none"> <li>• Integration of GLOBE in Thematic Studies and in the Curriculum (<i>Elena Sparrow, U.S.</i>)</li> <li>• National Curriculum, Educational Practice and GLOBE Activities in Estonian Schools (<i>Imbi Henno, Estonia</i>)</li> <li>• Challenges for Using GLOBE for Student Inquiry in Thailand (<i>Jariya Suchareekul, Thailand</i>)</li> <li>• Student Learning Opportunities in GLOBE: Towards a Theoretical Framework (<i>John Lockley, New Zealand</i>)</li> <li>• Primarily GLOBE: Using Elementary Readers to Enhance Science Literacy (<i>Becca Hatheway, K. Meymaris and S. Henderson</i>)</li> <li>• GLOBE in the classroom discussion (<i>Sharon Sikora</i>)</li> </ul>	
12:00	<p>Lunch</p> <p>Keynote Talk: NSTA efforts to engage an international community of science educators</p>	<p>Anne Tweed, 2004-2005 President, National Science Teachers' Association</p>

### Thursday, 29 July 2004, Continued

13:30	Hands-On Science Workshops ( <i>Concurrent Sessions</i> )	
	A. Operation RubyThroat: The Hummingbird Project: Part Two ( <i>Bill Hilton, Jr.</i> )	
	B. Basic GAPS Part Two: A Hands-on Protocol Workshop for the Student Modeling Tool for Earth System Science Simulation ( <i>Elissa Levine, Jessica Robin</i> )	
15:00	Regional Collaboration Group Discussions	Facilitated by GLOBE Staff
15:30	Break	
16:00	Closing Plenary ( <i>in the ballroom</i> )	
	<ul style="list-style-type: none"> <li>• Reports from the Regional Collaboration Groups</li> <li>• Feedback and priorities from the GLOBE Town Hall</li> </ul>	
17:30	Adjourn	
18:00	Reception at NCAR Mesa Lab Exhibits	
19:30	Annual Conference Banquet at the Mesa Lab Tree Plaza	

### Friday, 30 July 2004

9:00	<i>Concurrent Sessions:</i> A. Help Sessions 9:00 Partner Administration Pages Workshop 9:45 Looking at Data Toolkit Workshop 10:30 Additional Web site assistance.  B. Science PI GLOBE ONE Meeting  C. GLOBE Advisory Board Meeting	
12:00	Help Sessions Adjourn	
14:00	GLOBE Advisory Board Meeting Adjourns	
17:00	Science PI Meeting Adjourns	