

Revised July 20, 2006



10th Annual GLOBE Conference

The New Decade for Global Sustainable Development
30 July - 4 August 2006
Phuket, Thailand



Sponsors



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Conference Agenda

Sunday, 30 July 2006

Location: Tamarind Conference Room, Round House

Time	Activity
8:00 – 11:00	Registration Location: Tamarind Conference Room Poster Setup (<i>Note: Setup assistance available all day</i>) Location: Round House
11:00 – 18:00	Excursion or Optional Meeting point: Lobby of the Cape Panwa Hotel
18:00 – 20:00	Reception Location: Lobby and the Round House
20:00	Adjourn

Monday, 31 July 2006

Location: Tamarind Conference Room

Moderator: Dr. Mullica Jaroensutasinee

Time	Activity
9:00 – 9:30	Opening Ceremony Introduction Dr. Pornpun Waitayangkoon, Vice President, Institute for the Promotion of Teaching Science and Technology (IPST), Thailand and Dr. Teresa Kennedy, Director of International/U.S. Partnerships, The GLOBE Program Welcome Remarks Mr. Niran Kalayanamit, Vice Governor of Phuket Province Prof. Dr. Surin Phongsupasamit, President of the Institute for the Promotion of Teaching Science and Technology (IPST), Thailand Opening Speech His Excellency Dr. Pravich Rattanapien, Minister, Ministry of Science and Technology of Thailand
9:30 – 10:15	Director's Remarks Dr. Ed Geary, GLOBE Acting Director
10:15 – 10:45	Refreshments
10:45 – 11:45	The Next Generation GLOBE and IESSP Introductions Dr. Ming-Ying Wei, NASA Dr. Jill Karsten and Ms. Rhonda Spidell, NSF Moderator: Dr. Ed Geary

11:45 – 13:15	Lunch
13:15 – 13:45	Keynote Presentation: Sustainable Development in the New Decade Mr. Surendra Shrestha, Regional Director, United Nations Environment Programme (UNEP) Regional Office for Asia-Pacific (ROAP)
13:45 – 14:15	Keynote Presentation: Royal Development Project to Sustainable Development Dr. Pisoot Vijarnsorn, Advisor of Her Royal Highness Princess Maha Chakri Sirindhorn’s Projects
14:15 – 14:30	GLOBE Regional Development Dr. Teresa Kennedy, Director of International/U.S. Partnerships, The GLOBE Program
14:30 – 14:45	Refreshments
14:45 – 16:30	Regional Breakout Groups Africa—Location: Top of the Reef 1 Asia/Pacific—Location: Tamarind Bay 1 Europe—Location: Dolphin Latin America/Caribbean—Location: Marlin Near East—Location: Top of the Reef 2 North America—Location: Tamarind Bay 2 GLOBE Alumni Meeting—Round House
16:30 – 17:30	Interactive Poster Presentations and Exhibits See conference program for complete listing of poster presentations and exhibitors.
17:30	Adjourn
18:00 – 21:00	Optional Special Event: Dinner at the Halal Food Celebration

Halal Food Celebration: The “Halal Food, Hilal Town” festival will take place from 29 July to 2 August at the Thalang Chanasuk Memorial Field in Tambon Thepkasattri. The event celebrates the peaceful coexistence between Phuket’s Buddhist and Muslim communities. Highlights will include nightly “sound and light” performances. In addition, there will be a presentation of the story of Princess Mahsuri, a semi-legendary princess from Kamala through 31 July. Featured in the show will be Sirintra Yayee, believed to be a seventh-generation descendent of Mahsuri. Other events will include a Quran reading competition, display and sale of Muslim food and many other cultural activities.

The Phuket Provincial Administration Organization (OrBorJor) is sponsoring GLOBE’s participation including transportation, food and entertainment on Monday evening! Please join us for this special event!

The bus will leave the Cape Panwa hotel at 18:00 and return to the hotel at 21:00.

Tuesday, 1 August 2006: GLOBE Implementation

Location: Tamarind Conference Room

Moderator: Dr. Teresa Kennedy

Time	Activity
8:30 – 9:00	Interactive Poster Presentations and Exhibits
9:00 – 9:30	GLOBE Implementation Success Dr. Pornpun Waitayangkoon, Vice President of the Institute for the Promotion of Teaching Science and Technology (IPST), Thailand
9:30 – 10:30	GLOBE Regional Implementation (Panel and Presentations) <u>Regional Representatives</u> Africa: Ms. Margaret Besong (Cameroon) Asia/Pacific: Dr. Shuji Yamashita (Japan) Europe: Mr. Karl Torstein Hetland (Norway) Latin America/Caribbean: Prof. Maria del Carmen Galloni (Argentina) Near East: Ms. Zakeya Ahmed Ali Zada (Bahrain) North America: Mr. Todd Ensign (USA) Moderator: Dr. Teresa Kennedy, Director of International/U.S. Partnerships, The GLOBE Program
10:30 – 11:00	Refreshments
11:00 – 11:30	GLOBE Web Site Redesign Dr. Susan Gallagher, GLOBE Program Office
11:30 – 12:00	GLOBE Mirror Server in Thailand Dr. Sornthep Vannarat, Dr. Krisanadej Jaroensutasinee, GLOBE Thailand and Mr. Mike Leon, GLOBE Program Office
12:00 – 13:30	Lunch
13:30 – 15:30	NSF Integrated Earth System Science Projects: Student Analysis of Data Driving Learning about the Earth (SADDLE) Dr. Kemi Jona, Northwestern University From Local to Extreme Environments (FLEXE) Dr. Bill Carlsen, Penn State University and Eric Simms, Scripps Oceanic Institute Monitoring Seasons Through Global Learning Communities (MSTGLC) Dr. Elena Sparrow, University of Alaska Fairbanks Exploring ecosystems and the atmosphere in the K-12 classroom: A plan to integrate NASA carbon cycle science with GLOBE Ms. Sarah Silverberg, University of New Hampshire Moderator: Dr. Sandra Henderson, GLOBE Director of Education
15:30 – 16:00	Refreshment

16:00 – 17:30	Session 1 Strands A, B, C, D, E Presentations (Parallel Sessions)				
	STRAND 1A: Collaborative Research	STRAND 1B: Sustainability Education in the context of GLOBE	STRAND 1C: GLOBE Assessment and Implementation	STRAND 1D: GLOBE Capacity Building	STRAND 1E: GLOBE Program Office Special Session
	Moderators: Dr. Rebecca Boger	Moderators: Dr. Achara Thammathaworn	Moderators: Dr. Susan Gallagher	Moderators: Dr. Pramuan Siripankaew	Digital Earth Science Education Resources Dr. Ed Geary, Dr. Russanne Low
Location: Tamarind Bay 1	Location: Tamarind Bay 2	Location: Dolphin	Location: Marlin	Location: Sea Horse	
	GLOBE Application Activities for Tsunami Schools in West Peninsula of Thailand Dr. Charlie Navanugraha (Thailand)	The Contribution of Estonian GLOBE Program to Promoting Sustainable Education in the UNECE region Ms. Imbi Henno (Estonia)	Geo-Technologies in the Science Classroom Dr. Georgia Cobbs, Dr. Lisa Blank, Dr. Jeffrey Crews (USA)	Youth and Satellites Keeping an Eye on Planet Earth Ms. Danielle de Staerke (CNES), Mr. Eric Abgrall, Ms. Annie Carrasset, Ms. Sylvie Dubreuilh (France)	
	The Oxbows of Pasak River, Thailand Mr. Chairote Yaiprasert (Thailand)	GLOBE-UK Sustainable Development Protocols - The Challenge! Dr. Andy Tasker (UK)	How the GLOBE Schools in the Czech Republic Use Data in their Communities and Integrate GLOBE into School Curriculum? Ms. Dana Votapkova (Czech Republic)	AIM (Aeronomy of Ice in the Mesosphere) Satellite Mission Partners with GLOBE: Providing Opportunities for Students and Teachers to Study Noctilucent Clouds (NLC's) Dr. Dianne Robinson, Ms. Barbara Maggi (USA)	
	The simple Flood Hazard Mapping Model for Downtown, Chiang Mai Ms. Lucsame Gruneck, Ms. Pavinee Guntiya, Ms. Gridtaporn Raungsuttha, Ms. Karuna Sukeeta, Dr. Krisanadej Jaroensutasinee	An International School Campaign in the International Polar Year 2007-8 Toxic Chemicals in Local Fish Mr. Geir Endregard, Mr. Karl Torstein Hetland (Norway)	Weaving Native Knowledge and Best Teaching Practices in GLOBE Implementation Dr. Elena B. Sparrow (USA)	Use of EarthScope Data in the Classroom Dr. John DeLaughter (USA)	
	Climate Factors Affecting Influenza Cases in Nakhon Si Thammarat Ms. Sirilak Chumkiew, Mr. Watthanapong Daenugern, Mr. Wacharapong Srisang, Dr. Krisanadej Jaroensutasinee and Dr. Mullica Jaroensutasinee	Fostering Student's Enthusiasm and Ability in Environmental Learning Through GLOBE Program in Japan Dr. Toshihiko Higuchi (Japan)	Place Names: Building Worldviews Using Traditional Cultures and GIS Dr. Georgia Cobbs, Dr. Lisa Blank, Dr. Jeffery W. Crews (USA)	Utilizing Local GLOBE Data and Partnerships with GLOBE Scientists to Engage Students in Scientific Inquiry Ms. Marcy M. Seavey (USA)	

	<p>Effects of Tsunami on Marine Invertebrate, Water Qualities, Ecology and Atmosphere by Means of GLOBE Dr. Mullica Jaroensutasinee, Dr. Krisanadej Jaroensutasinee, (Thailand) Dr. Martha Conklin Ms. Sarah May (USA)</p>	<p>GLOBE and Sustainable Development in the Global Context: An Overview by GLOBE Program Cameroon Ms. Margaret Besong (Cameroon)</p>	<p>Integrated Design for Geoscience Education with Upward Bound Students Mr. Todd Ensign (USA)</p>	<p>GLOBE in Alabama – A Partnership for Success Mr. Greg Cox, Ms. Robin Nelson (USA)</p>
	<p>Topography Affecting Key Breeding Sites of <i>Aedes aegypti</i> and <i>Ae. albopictus</i> in Thailand Ms. Warabhorn Preechaporn Dr. Mullica Jaroensutasinee, Dr. Krisanadej Jaroensutasinee (Thailand)</p>	<p>Japan observation activities in the past decade and a view to the future Dr. Tomoyasu Yoshitomi, Dr. Toshihiko Higuchi (Japan)</p>	<p>GLOBE Implementation in France: Year 1 Evaluation Results Ms. Danielle de Staerke (CNES), Mr. Eric Abgrall, Ms. Annie Carrasset, Ms. Sylvie Dubreuilh (France)</p>	<p>Developing Strategic Partnerships through GLCs and the GLOBE Schools Network Dr. Sheila Yule, Mr. Eric Stonebraker, Mr. Matt Hansen (USA)</p>
17:30	Adjourn			
18:30 - 19:30	Optional Evening Sessions (concurrent)			
	<p>GLOBE Help Desk: Partner Administration Pages Ms. Nandini McClurg Location: Sea Horse</p>		<p>Resource Development Workshop Ms. Paula Robinson & Dr. Sheila Yule Location: Tamarind Bay 1</p>	

Wednesday, 2 August 2006: Student Research

Location: Tamarind Conference Room

Moderator: Dr. Sandra Henderson

Time	Activity	
8:30 – 9:00	Interactive Poster Presentations and Exhibits	
9:00 – 9:30	Keynote Presentation: Student Research “Research for Empowerment: Learning Beyond Frontier” Assistant Prof. Suchata Jinachitra, Program Director for Public Well-Being, Thailand Research Fund	
9:30 – 10:30	GLOBE Student Presentations <ul style="list-style-type: none"> • Ms. Ubonlux Jaifu, Mr. Siritwat Punroob, Ms. Sabariya Aree, Ms. Asareza Kaje (Thailand) • Mr. Rei Inazumi, Mr. Yasushi Nisikori, Ms. Yuka Masuda (Japan) • Ms. Shaikha Mohamed BuAli (Bahrain) Moderator: Dr. Sandra Henderson, GLOBE Director of Education	
10:30 – 11:00	Refreshments	
11:00 – 11:40	GLOBE Education Overview Dr. Sandra Henderson, Dr. Susan Gallagher, Dr. Lisa Gardiner, Ms. Becca Hatheway	
11:40 – 12:00	Field Day Introduction and Instructions	
	Site A: Sirinat National Park (~90 persons) Dr. Charlie Navanugraha	Site B: Tangken Bay (~40 persons) Dr. Krisanadej Jaroensutasinee
12:30 – 18:00	Pick up box lunch in Hotel Lobby.	
	Modeling Student Research	
	Site A: Sirinat National Park <u>A1: Swamp Forest:</u> , Dr. Charlie Navanugraha Dr. Rebecca Boger, Dr. Sandra Henderson <u>A2: Mangrove Forest:</u> Dr. Sompong Thammathaworn, Dr. Sheila Yule, Mr. Gary Randolph <u>A3: Beach Forest:</u> Dr. Achara Thammathaworn, Mr. Eric Stonebraker, Dr. Susan Gallagher	Site B: Tangken Bay (Marine Invertebrate study) Dr. Krisanadej Jaroensutasinee Dr. Mullica Jaroensutasinee Dr. Lisa Gardiner Dr. Teresa Kennedy
18:00	Adjourn	

Thursday, 3 August 2006 Sustainable GLOBE

Location: Tamarind Conference Room

Moderator: Ms. Monica Sabio

Time	Activity				
8:30 – 9:00	Interactive Poster Presentations and Exhibits				
9:00 – 9:30	Keynote Presentation: Education for Sustainable Development Mr. Derek Elias, Program Specialist, Education for Sustainable Development, UNESCO Asia and Pacific Regional Bureau for Education, Bangkok, Thailand				
9:30 – 10:30	GLOBE Fundraising (Panel and Presentation) <u>Regional Representatives</u> Africa: Mr. Mark Brettenny (South Africa) Asia/Pacific: Dr. Pramuan Siripankaew (Thailand) Europe: Dr. Andy Tasker (United Kingdom) Latin America/Caribbean: Mr. Henry Saunders (Trinidad and Tobago) Near East: Ms. Sawsan Abu Fakhreddine (Lebanon) North America: Ms. Marcy Seavey (Iowa) Moderator: Ms. Paula Robinson, Executive Administrator, The GLOBE Program				
10:30 – 11:00	Refreshments				
11:00 – 12:30	Regional Breakout Groups Africa—Location: Top of the Reef 1 Asia/Pacific—Location: Tamarind Bay 1 Europe—Location: Dolphin Latin America/Caribbean—Location: Marlin Near East—Location: Top of the Reef 2 North America—Location: Tamarind Bay 2 GLOBE Alumni Meeting—Round House				
12:30 – 14:00	Lunch				
14:00 – 15:30	Session 2 Strands A, B, C, D, E Presentations and Special Sessions (Parallel Sessions)				
	STRAND 2A: Collaborative Research	STRAND 2B: Sustainability Education in the Context of GLOBE	STRAND 2C: GLOBE Assessment and Implementation	STRAND 2D: GLOBE Capacity Building	STRAND 2E: GLOBE Program Office Special Session
	Moderators: Dr. Mullica Jaroensuthasinee Location: Tamarind Bay 1	Moderators: Dr. Achara Thammathaworn Location: Tamarind Bay 2	Moderators: Mr. Eric Stonebraker Location: Dolphin	Moderators: Dr. Krisanadej Jaroensuthasinee Location: Marlin	Elementary GLOBE Ms. Becca Hathaway, Dr. Lisa Gardiner, Dr. Sandra Henderson, Dr. Susan Gallagher, Dr. Elena Sparrow and Ms. Lynne Hehr (USA)

					Location: Top of the Reef
	<p>A New GLOBE Mosquito Protocol Tried Out in Southern Thailand Ms. Siriwan Wongkoon (Thailand)</p>	<p>Students Teach Students how to Collect Data to Assist Scientists to Monitor Climate Change Ms. Suzanne Welch (UK)</p>	<p>Plant Available Water (PAW) Generated from the GAPS Model as an Indicator of a Drought Period in Mangosteen Orchards Ms. Ornanong Boonklong (Thailand)</p>	<p>GLOBE and Art Ms. Aniko Orgovanyi (Hungary)</p>	<p>STRAND 2F: GLOBE Program Office Special Session</p> <p>Digital Earth Science Education Resources Dr. Ed Geary, Dr. Russanne Low</p> <p>Location: Sea Horse</p>
	<p>A New Science Community Collaborations: Madagascar Malaria Project Dr. Rebecca Boger (USA)</p>	<p>Global Climate Change for Education – Exchange Project Cameroon, Estonia, and Germany to Develop Learning Materials Ms. Birgit Rademacher (Germany)</p>	<p>Trends in GLOBE: Japan Observation Activities in the Past Decade and a View to the Future Dr. Tomoyasu Yoshitomi, Dr. Toshihiko Higuchi (Japan)</p>	<p>How Good is Raw Water Quality in Tap Water Production at Maejo University Ms. Supaporn Sangsrichan (Thailand)</p>	
	<p>Budburst Observation of Acasia Harmandiana Gagnep, (MINOSOIDEAE) at Nakhon Ratchasima Province, Thailand Dr. Sompong Thammathaworn (Thailand)</p>	<p>Thailand National Biodiversity Database System Mr. Watcharapong Srisang (Thailand)</p>	<p>Remote Environmental Sensors Based Fiber Optic Ring Resonator Dr. Preecha Yupapin (Thailand)</p>	<p>CALIPSO and GLOBE: A Partnership of scientists, educators and students from France and the United States studying Earth's climate system Dr. Dianne Robinson, Ms. Barbara H. Maggi, Ms. Danielle DeStaerke (USA)</p>	
	<p>Budburst Observation of Cassia fistula L. (CAESALPINOIDEAE) at Nakhon Ratchasima Province, Thailand Dr. Sompong Thammathaworn (Thailand)</p>	<p>Measurement of Natural Radioactivity in Songkhla Beach Sands Dr. Prasong Kessaratikoon (Thailand)</p>	<p>Reclaim Acid Soil of Princess Chulabhorn's College, Trang by Organic Fertilizer Ms. Treechada Tawornmas (Thailand)</p>	<p>Aerosol Properties Monitoring Using an Inexpensive Sun Photometer and Network Analyzer Mr. K. Udomwech (Thailand)</p>	
	<p>Environmental Research of the Sea of Tonoko Ms. Midori Kanazawa (Japan)</p>	<p>Diffusive Air Sampler Constructed from Used Plastic Bottles for No2 Determination Dr. Winai Somboon (Thailand)</p>	<p>The GLOBE JUNIOR Activity plays role in keeping Dara Academy GLOBE members Dr. Ratsamee Danguwong (Thailand)</p>	<p>The Energy Network Mr. Karl Torstein Hetland (Norway)</p>	
	<p>The Bay2Bay Program Dr. Feodor Surkoy (Russia)</p>	<p>Monitoring of Ambient Ozone Concentrations in Khon Kaen Municipality Using Passive Sampling</p>	<p>A Guideline to Develop ESS Curriculum for Thai Schools Dr. Pramuan Siripunkaew</p>	<p>Podcasting to Connect Students and Scientists Mr. Todd Ensign (USA)</p>	

		Technique Mr. T. Doolgindachbaporn (Thailand)	(Thailand)	
15:30 – 16:00	Refreshments			
16:00 – 17:00	Parallel Sessions			
	Student/Teacher Forum Location: Tamarind Bay 1 Moderator: Dr. Sandra Henderson, Dr. Sheila Yule, and GLOBE Alumni Regional Representatives		Country Coordinator Meeting Location: Tamarind Bay 2 Moderator: Dr. Teresa Kennedy	
18:00 – 20:00	Banquet, including Cultural Presentations by Thai and Japanese Students Location: Panwa House Restaurant (on the Beach), Semi-formal Attire or National Dress			
20:00	Adjourn			



Friday, 4 August 2006: GLOBE and Technology

Location: Tamarind Conference Room

Moderator: Mr. Raj Mehta

Time	Activity
8:30 – 9:00	Interactive Poster Presentations and Exhibits
9:00 – 9:30	Inspiring the Next Generation of Citizen Scientists Dr. Elena Sparrow, GLOBE Scientist and Partner, University of Alaska Fairbanks, USA
9:30 – 10:00	Keynote Presentation: World Meteorological Organization (WMO) and GLOBE Dr. Momadou Saho, Chief of Education and Training Fellowships Division, WMO, Switzerland
10:00 – 10:30	The Youth Connection: GLOBE Alumni <u>GLOBE Alumni Regional Representatives</u> Africa: Ms. Adele Bilong (Cameroon) Asia/Pacific: Ms. Watcharee Ruinrun and Ms. Phatcharida Boonkort (Thailand) Europe: Mr. Martin Pentson (Estonia) and Mr. Tomas Tunkl (Czech Republic) Latin America/Caribbean: Mr. Guillermo Grimaux (Argentina) Near East: Ms. Shaikha Mohamed BuAli (Bahrain) North America: Mr. Matt Fenzel (USA) Moderator: Dr. Sheila Yule, GLOBE Learning Communities and Schools Network Coordinator
10:30 – 11:00	Refreshments
11:00 – 12:30	IESSP Breakout Groups Student Analysis of Data Driving Learning about the Earth (SADDLE) Location: Tamarind Bay 1 Dr. Kemi Jona, Northwestern University From Local to Extreme Environments (FLEXE) Location: Tamarind Bay 2 Dr. Bill Carlsen, Penn State University and Eric Simms, Scripps Oceanic Institute Monitoring Seasons Through Global Learning Communities (MSTGLC) Location: Top of the Reef 1 Dr. Elena Sparrow, University of Alaska Fairbanks Exploring ecosystems and the atmosphere in the K-12 classroom: A plan to integrate NASA carbon cycle science with GLOBE Location: Top of the Reef 2 Ms. Sarah Silverberg, University of New Hampshire Moderator: Dr. Sandra Henderson, GLOBE Director of Education
12:30 – 14:00	Lunch

14:00 – 14:30	Conference Summary Reports by GLOBE Regional Representatives Moderators: Dr. Pornpun Waitayangkoon and Dr. Teresa Kennedy, Conference Co-Chairs Mr. Ayman Bin Rajab, GLOBE Student, Bahrain Mrs. Rogeline Brettenny, GLOBE Teacher, South Africa Dr. Krisanadej Jaroensutasinee, GLOBE Scientist, Thailand Mr. Jimmy Mangelsen, GLOBE Partner, Denmark
14:30 – 14:50	Concluding Keynote Dr. Ed Geary, GLOBE Acting Director
14:50 – 15:00	Closing Ceremony Passing of the Annual Conference Torch to Texas, USA Dr. Michael Odell, GLOBE Partner, University of Texas at Tyler
15:00	Adjourn

We hope to see you next year in San Antonio, Texas, USA, for the 11th Annual GLOBE Conference!

GLOBE is an interagency program funded by the National Aeronautics and Space Administration (NASA) and the National Science Foundation (NSF), supported by the U.S. Department of State, and implemented through a cooperative agreement between NASA, the University Corporation for Atmospheric Research (UCAR) in Boulder, Colorado and Colorado State University in Fort Collins, Colorado. GLOBE is a cooperative effort of schools in partnership with colleges and universities, state and local school systems, and non-government organizations. Internationally, GLOBE is a partnership between the United States and over 100 countries that manage and support their unique national and regional program infrastructure and activities.