

GLOBE Train-The-Trainer Workshop

(Tentative Schedule)

December 17th – 23rd, 2017

Burapha University, Chon Buri, Thailand

Date & Time	Detail	
December 17th, 2017		
09.00 – 17.00	Preparing Workshop (<i>Facilitators only</i>)	
14.00 – 16.00	Registration <i>(Register GLOBE ID @ GLOBE website and download GLOBE Data Entry Application)</i> Location: To be announced Facilitators: Ms.Yupaporn Laplai	
13.00 – 17.00	Pre-workshop Drone Mapping for GLOBE, a Demonstration <i>(Only for Participants, Maximum 30 persons)</i> Location: TBA Facilitators: Dr.Krisanadej Jaroensutasinee and Dr. Mullica Jaroensutasinee	
18.30 – 21.00	Reception <i>(Welcome all participants)</i> Location: TBA <i>(Note: Semi-formal Attire or National Dress)</i>	
GLOBE Basic Protocols		
December 18th, 2017		
07.00 – 08.00	Breakfast at TBA	
08.00 – 08.15	Transportation to Workshop	
08.00 – 08.30	Registration Location: TBA	
08.45 – 09.15	Opening Ceremony Welcome address TBA Introduction Dr. Pornpun Waitayangkoon, President, Institute for the Promotion of Teaching Science and Technology (IPST), Thailand Opening speech Assoc. Prof. Dr. Tatchai Sumitra, Chairman of IPST Governing Board Location: TBA	
09.15 – 09.25	Group Photo	
09.25 – 10.25	Overview of Earth as a System, a new perspective for GLOBE communities Dr. Dixon M. Butler, National Aeronautics and Space Administration (NASA)	
10.25 – 10.45	Refreshment (Cocktail Social Time)	
10.45 – 12.00	Soil Moisture Active Passive (SMAP) GLOBE program Dr. Dixon M. Butler, National Aeronautics and Space Administration (NASA)	
12.00 – 12.45	Lunch	
12.45 – 13.00	Transportation to Site (TBA)	
Ecosystem I – Soil and Biosphere (Team Teaching/Training)		
13.00 – 17.30 ~ Included refreshment	Orange Group – Soil (Pedosphere) <ul style="list-style-type: none"> • Soil Characterization, Soil 	Green Group – Biosphere <ul style="list-style-type: none"> • GPS App, When and Where? • Google Earth/Map

Date & Time	Detail	
	moisture, Soil temperature <ul style="list-style-type: none"> • Field work • Lab work • Data Entry • Implementation and Research Location: TBA Facilitators: Dr.Charlie Navanugraha (Master), Dr.Rungrote Nilthong (Lead), Ms.Samornsri Kanphai (Lead), Dr.Napaporn Phankamolsil (Assistant)	<ul style="list-style-type: none"> • MUC guide App • Manual mapping • Phenology • Data Entry • Implementation and Research Location: TBA Facilitators: Dr.Elena Sparrow (Master), Ms.Thanapun Chalee (Assistant), Dr.Watcharee Ruairuen (Assistant), Dr.Wichuda Klaweck (Assistant)
17.30 – 18.00	Transportation	
18.00 – 19.00	Dinner	
19.00 – 19.15	Transportation	
December 19th, 2017		
7.00 – 8.00	Breakfast	
8.00 – 8.30	Transportation	
8.30 – 8.45	Q&A – Location: TBA (Dr.Charlie, Dr.Krisanadej, Dr.Mullica, Dr.Elena)	
8.45 – 10.15	Orange Group – Soil (Pedosphere) <ul style="list-style-type: none"> • Soil Characterization, Soil moisture, Soil temperature • Field work • Lab work • Data Entry • Implementation and Research Location: TBA Facilitators: Dr.Charlie Navanugraha (Master), Dr.Rungrote Nilthong (Lead), Ms.Samornsri Kanphai (Lead), Dr.Napaporn Phankamolsil (Assistant)	Green Group – Biosphere <ul style="list-style-type: none"> • GPS App, When and Where? Google Earth/Map • MUC guide App • Manual mapping • Phenology • Data Entry • Implementation and Research Location: TBA Facilitators: Dr.Elena Sparrow (Master), Ms.Thanapun Chalee (Assistant), Dr.Watcharee Ruairuen (Assistant), Dr.Wichuda Klaweck (Assistant)
10.15 – 10.30	Refreshment	
10.30 – 12.00	Orange Group – Biosphere <ul style="list-style-type: none"> • GPS App, When and Where? Google Earth/Map • MUC guide App • Manual mapping • Phenology • Data Entry • Implementation and Research Location: TBA	Green Group – Soil (Pedosphere) <ul style="list-style-type: none"> • Soil Characterization, Soil moisture, Soil temperature • Field work • Lab work • Data Entry • Implementation and Research Location: TBA

Date & Time	Detail	
	Facilitators: Dr.Elena Sparrow (Master), Ms.Thanapun Chalee (Assistant), Dr.Watcharee Ruairuen (Assistant), Dr.Wichuda Klaweck (Assistant)	Facilitators: Dr.Charlie Navanugraha (Master), Dr.Rungrote Nilthong (Lead), Ms.Samornsri Kanphai (Lead), Dr.Napaporn Phankamolsil (Assistant)
12.00 – 12.15	Transportation	
12.15 – 12.45	Lunch	
12.45 – 13.00	Transportation	
13.00 – 17.30 ~ Included refreshment	Orange Group – Biosphere <ul style="list-style-type: none"> • GPS App, When and Where? Google Earth/Map • MUC guide App • Manual mapping • Phenology • Data Entry • Implementation and Research Location: TBA Facilitators: Dr.Elena Sparrow (Master), Ms.Thanapun Chalee (Assistant), Dr.Watcharee Ruairuen (Assistant), Dr.Wichuda Klaweck (Assistant)	Green Group – Soil (Pedosphere) <ul style="list-style-type: none"> • Soil Characterization, Soil moisture, Soil temperature • Field work • Lab work • Data Entry • Implementation and Research Location: TBA Facilitators: Dr.Charlie Navanugraha (Master), Dr.Rungrote Nilthong (Lead), Ms.Samornsri Kanphai (Lead), Dr.Napaporn Phankamolsil (Assistant)
17.30 – 18.00	Data Entry Location: TBA Facilitators: Dr.Krisanadej Jaroensutasinee	
18.00 – 18.30	Transportation	
18.30 – 19.30	Dinner	
December 20th, 2017		
7.00 – 8.00	Breakfast	
8.00 – 8.30	Transportation	
8.30 – 8.45	Q&A – Location: TBA (Dr.Charlie, Ms.Samornsri and Dr.Rungrote)	
Ecosystem II – Atmosphere/Hydrosphere (Team Teaching/Training)		
8.45 – 12.00 ~ Included refreshment	Orange Group – Hydrosphere <ul style="list-style-type: none"> • Site Description • Hydrology protocols/Macro invertebrate/Mosquito • Field work • Data Entry • Implementation and Research 	Green Group – Atmosphere <ul style="list-style-type: none"> • Introduction to Atmosphere • Site Definition • Basic Atmosphere Protocols • Max, Min, and Current temperature/Precipitation/Cloud type and cover • Field Work • Data Entry • Implementation and Research

Date & Time	Detail	
	Location: TBA Facilitators: Dr.Mullica Jaroensutasinee (Master), Mrs.Yupaporn Laplai (Master), Dr. Thanya Panritdam (Assistant)	Location: TBA Facilitators: Dr.Krisanadej Jaroensutasinee (Master), Ms.Suwinai (Master), Dr.Pay-Liam Lin (Lead), Ms.Bussarasiri Thana (Assistant), Mr.Nitat Limpongsai (Assistant)
12.00 – 12.15	Transportation	
12.15 – 12.45	Lunch	
12.45 – 13.00	Transportation	
13.00 – 15.30	Orange Group – Hydrosphere (cont.)	Green Group – Atmosphere (cont.)
15.30 – 15.45	Refreshment – Location: TBA	
	Ecosystem II – Atmosphere/Hydrosphere (Team Teaching/Training)	
15.45 – 17.30	Orange Group – Atmosphere <ul style="list-style-type: none"> • Introduction to Atmosphere • Site Definition • Basic Atmosphere Protocols • Max, Min, and Current temperature/Precipitation/Cloud type and cover • Field Work • Data Entry • Implementation and Research Location: TBA Facilitators: Dr.Krisanadej Jaroensutasinee (Master), Ms.Suwinai Mongkonthan (Master), Dr.Pay-Liam Lin (Lead), Ms.Bussarasiri Thana (Assistant), Mr.Nitat Limpongsai (Assistant)	Green Group – Hydrosphere <ul style="list-style-type: none"> • Site Description • Hydrology protocols/Macro invertebrate/Mosquito • Field work • Data Entry • Implementation and Research Location: TBA Facilitators: Dr.Mullica Jaroensutasinee (Master), Mrs.Yupaporn Laplai (Master), Dr.Thanya Panritdam (Assistant)
17.30 – 18.00	Data Entry Location: TBA Facilitators: Ms.Suwinai Mongkonthan	
18.00 – 18.15	Transportation	
18.15 – 19.00	Dinner	
December 21st, 2017		
7.00 – 8.00	Breakfast	
8.00 – 8.30	Transportation	
8.30 – 8.45	Q&A – Location: TBA (Dr.Krisanadej, Ms.Suwinai and Dr. Pay-Liam Lin)	
8.45 – 12.00 ~ Included refreshment	Orange Group – Atmosphere (cont.)	Green Group – Hydrosphere (cont.)
12.00 – 12.15	Transportation	

Date & Time	Detail	
12.15 – 12.45	Lunch	
12.45 – 13.00	Transportation	
13.00 – 15.30	Orange Group – Atmosphere (cont.)	Green Group – Hydrosphere (cont.)
15.30 – 15.45	Refreshment	
15.45 – 17.00	Orange Group – Atmosphere (cont.)	Green Group – Hydrosphere (cont.)
17.00 – 17.30	Data Entry Location: TBA Facilitators: Mrs. Yupaporn Laplai	
17.30 – 17.45	Transportation	
17.45 – 18.30	Free Time	
18.30 – 19.00	Transportation	
19.00 – 21.00	Certification ceremony and banquet <ul style="list-style-type: none"> • <i>Dinner talk “” TBA</i> (19.30 – 20.00) Location: TBA <i>(Note: Semi-formal Attire or National Dress)</i>	
21.00 – 21.30	Transportation	

Date & Time	Detail	
GLOBE Advanced Protocols		
December 22nd, 2017		
7.00 – 8.00	Breakfast	
8.00 – 8.30	Transportation	
8.30 – 10.30	<p>Orange Group – Atmosphere</p> <ul style="list-style-type: none"> • Water Vapor Protocol • Aerosols Protocol • Surface Ozone Protocol <p>Location: TBA Facilitators: Dr.Krisanadej Jaroensutasinee (Master), Ms.Suwinai Mongkonthan (Master), Dr.Pay-Liam Lin (Lead), Ms.Bussarasiri Thana (Assistant), Mr.Nitat Limpongsai (Assistant)</p>	<p>Green Group – Soil (Pedosphere)</p> <ul style="list-style-type: none"> • Soil Particle Size Distribution Protocol • Soil Particle Density Protocol • Soil pH Protocol • Soil Fertility Protocol <p>Location: TBA Facilitators: Dr.Charlie Navanugraha (Master), Dr.Rungrote Nilthong (Lead), Ms.Samornsri Kanphai (Lead), Dr.Napaporn Phankamolsil (Assistant)</p>
10.30 – 10.45	Refreshment –	
10.45 – 12.30	<p>Orange Group – Soil (Pedosphere)</p> <ul style="list-style-type: none"> • Soil Particle Size Distribution Protocol • Soil Particle Density Protocol • Soil pH Protocol • Soil Fertility Protocol <p>Location: TBA Facilitators: Dr.Charlie Navanugraha (Master), Dr.Rungrote Nilthong (Lead), Ms.Samornsri Kanphai (Lead), Dr.Napaporn Phankamolsil (Assistant)</p>	<p>Green Group – Atmosphere</p> <ul style="list-style-type: none"> • Water Vapor Protocol • Aerosols Protocol • Surface Ozone Protocol <p>Location: TBA Facilitators: Dr.Krisanadej Jaroensutasinee (Master), Ms.Suwinai Mongkonthan (Master), Dr.Pay-Liam Lin (Lead), Ms.Bussarasiri Thana (Assistant), Mr.Nitat Limpongsai (Assistant)</p>
12.30 – 12.45	Transportation	
12.45 – 13.15	Lunch	
13.15 – 13.30	Transportation	
13.30 – 17.30 ~ Included refreshment	<p>Orange Group – Biosphere</p> <ul style="list-style-type: none"> • MultiSpec • Change Detection • Drone Mapping <p>Location: TBA Facilitators: Dr.Elena Sparrow (Master), Ms.Thanapun Chalee (Assistant), Dr.Watcharee Ruairuen (Assistant), Dr.Wichuda Klaweck (Assistant)</p>	<p>Green Group – Soil (Pedosphere) (cont.)</p>

Date & Time	Detail	
17.30 – 18.00	Data Entry Location: TBA Facilitators: Ms. Samornsri Kanphai	
18.00 – 18.15	Transportation	
18.15 – 19.00	Dinner	
December 23rd, 2017		
7.00 – 7.30	Breakfast	
7.30 – 8.00	Transportation	
8.00 – 8.15	Q&A – Location: TBA (Dr.Mullica and Mrs. Yupaporn)	
8.15 – 10.00	Orange Group – Soil (Pedosphere) (cont.)	Green Group – Biosphere <ul style="list-style-type: none"> • MultiSpec • Change Detection • Drone Mapping Location: TBA Facilitators: Dr.Elena Sparrow (Master), Ms.Thanapun Chalee (Assistant), Dr.Watcharee Ruairuen (Assistant), Dr.Wichuda Klaweck (Assistant)
10.00 – 10.15	Refreshment	
10.15 – 12.00	Orange Group – Soil (Pedosphere) (cont.)	Green Group – Biosphere (cont.)
12.00 – 12.15	Transportation	
12.15 – 13.00	Lunch	
13.00 – 13.15	Transportation	
13.15 – 15.00	Data Entry Location: TBA Facilitators: Dr.Mullica Jaroensutasinee	
15.00 – 15.15	Refreshment	
15.15 – 16.15	<ul style="list-style-type: none"> • Implementation and Research on Earth System Science • Workshop Evaluation and Certification Ceremony (Advanced Protocol) Location: TBA Facilitators: Dr.Mullica Jaroensutasinee and Trainer Team	
16.15	Workshop closes	