

# Managing Waveform Data and Metadata for Seismic Networks

Bangkok, Thailand  
08-13 January 2012  
Hosted by  
Thai Meteorological  
Department



**WAVEFORM  
MANAGEMENT**  
Bangkok, Thailand • January 8-13, 2012

The poster features a central image of a golden pagoda in Bangkok, Thailand, surrounded by a circular arrangement of flags from various countries including the United States, Germany, India, and others. The text at the bottom of the poster reads: "Managing Waveform Data & Related Metadata for Seismic Networks".

Managing Waveform Data & Related Metadata for Seismic Networks

FDSN Australian Government Geoscience Australia IRIS NSF Thai Meteorological Department

**Managing Waveform Data and Metadata for Seismic Networks**  
**8 - 13 January 2012**  
**Bangkok Thailand**

L=LECTURE  
C=COMPUTER LAB

8-Jan-2012	Sunday	DURATION	Hotel Windsor Suites, Bangkok		Ploy Room 11th Floor - Windsor Suites Hotel
	19:00	3:00	Attendees arrive during daytime <b>Registration and Reception</b> software installation (virtual box, OBSPY, etc)	L	Ms. Phanumat Lewcharoenthrap
9-Jan-2012	Monday	1:00	Welcome		
	8:00	1:00	<b>Registration as needed</b>		Ms. Phanumat Lewcharoenthrap
	9:00	0:10	Welcome and Introductory Remarks	L	Dr. Tim Ahern - IRIS
	9:10	0:20	Thai Meteorological Department	L	TMD Director-General
	9:30	0:20	Logistics	L	Ms. Phanumat Lewcharoenthrap
			<b>Overview of Sponsors</b>		
	9:50	0:15	Geosciences Australia	L	Ms Yue Li
	10:05	0:15	IRIS	L	Tim Ahern
	10:20	0:30	<b>Break</b>		
	10:50	0:15	<b>Data Exchange within the FDSN</b> International Federation of Broadband Seismograph Networks	L	Tim Ahern
	11:05	0:15	ORFEUS	L	Reinoud Sleeman
	11:20	0:15	IRIS Data Management System	L	Tim Ahern
	11:35	0:15	<b>Review of Workshop Agenda</b>	L	Tim Ahern
	11:50	1:10	<b>Lunch</b>		
	13:00	1:00	<b>Installation of Seismic Stations</b>	L	Dr. Peter Davis
	14:00	2:00	<b>Modern Seismometry and Digital Filtering Theory</b> Poles and Zeroes	L	Dr. Joachim Wasserman
	16:00	0:30	<b>Digital Filtering Lab</b>	C	Joachim Wassermann
	16:30		<b>Board Buses to TMD Hosted Dinner</b>		
	18:00	3:30	<b>Welcome Dinner and Cultural Event</b>		Hosted by TMD

10-Jan-2012	Tuesday	DURATION		Ploy Room	11th Floor
	8:00	1:00	<b>Digital Filtering Lab Continuation</b>	C	Joachim Wassermann
	9:00	1:30	<b>Application OBSPy Seismometer Deconvolution/simulation/filtering</b>	C	Joachim Wassermann
	10:30	0:30	<b>Break</b>		
	11:00	0:45	<b>Modern Data Acquisition Systems</b> implementation in acquisition systems FIR Filters and downsampling	L	Reinoud Sleeman
	11:45	0:20	<b>Structure of SEED</b>	L	Reinoud Sleeman
	12:05	1:00	<b>Lunch</b>		
	13:05	0:30	<b>SEED Metadata and RESP Files</b>	L	Mr. Rick Benson
	13:35	0:30	<b>Network Reports</b> FDSN GSN, PASSCAL, USArray	L	Tim Ahern Tim Ahern
	14:05	0:45	<b>PDCC</b> Installation		Benson & Ahern
	14:50	0:45	<b>Network Reports</b> 3 Network Reports from Participants (3/3)	L	various
	15:35	0:30	<b>Break</b>		
	16:05	1:00	<b>Portable Data Collection Center (PDCC) - Introduction</b> Overview of PDCC Nominal Response Library	L	Ahern Ahern
	17:05	1:00	<b>PDCC</b> Single Station - SEED Perspective Producing SEED metadata for Participant Networks for a single station For similar stations with similar Seismic Channels		Benson
	18:05		<b>Adjourn</b>		

11-Jan-2012	Wednesday	DURATION		Ploy Room	11th Floor
	8:00	1:00	<b>PDCC</b> Building Network Metadata		Benson
	9:00	1:00	<b>Network Reports</b> 4 Network Reports from Participants (4/7)		
	10:00	0:30	<b>Break</b>		
	10:30	1:30	<b>PDCC</b> Participants Build their own network Metadata	<b>C</b>	Participants
	12:00	0:30	<b>PDCC</b> Updating Calibration Information using PDCC	<b>C</b>	Benson
	12:30	1:00	<b>Lunch</b>		
	13:30	1:30	<b>PDCC</b> Participants Build their own network Metadata	<b>C</b>	Participants
	15:00	0:45	<b>Network Reports</b> 3 Network Reports from Participants (3/10)	<b>L</b>	various
	15:45	0:30	<b>Break</b>		
	16:15	1:00	<b>Validation Tools</b> verseed jEvalResp	<b>L</b>	Benson
	17:15	1:00	Introduction to PQLX	<b>L</b>	Templeton
	18:15		<b>Adjourn</b>		

12-Jan-2012	Thursday	DURATION		Ploy Room	11th Floor
	8:00	1:00	4 Network Reports (4/14)	L	Various
	9:00	0:20	<b>Quality Assurance</b> PQLX as QA Tool	L	Dr. Mary Templeton
	9:20	0:20	QUACK / MUSTANG	L	Templeton
	9:40	0:30	ORFEUS Operations and Quality Assurance	L	Reinoud Sleeman
	10:10	0:30	IRIS/IDA Quality Assurance	L	Pete Davis
	10:40	0:20	<b>Break</b>		
	11:00	0:30	USArray Quality Assurance	L	Templeton
	11:30	0:30	<b>Network Reports</b> 2 Network Reports (2/16)	L	Various
	12:00	1:00	<b>Lunch</b>		
	13:00	1:15	<b>Scientific Uses of Modern Seismological Data</b> The many uses of continuous broadband data	L	Dr. Goran Ekstrom
	14:15	0:45	<b>Network Reports</b> 3 Network Reports from Participants (3/19)	L	various
	15:00	0:30	<b>Break</b>		
	15:30	0:45	Accessing Real Time Data SeedLink Seisgram2K	C	Benson/Ahern
	16:15	1:15	Seiscomp-3 ArcLink and real time data sharing	L	Sleeman
	17:30	1:00	Measuring Noise	C	Peter Davis
	18:30		Meeting Adjourns		
	19:00		Farewell Dinner and Presentation of Certificates		Hosted by IRIS and GA
	<b>Evening Assignment</b>		<b>Completion of Workshop Evaluation Forms</b>		

13-Jan-2012	Friday	DURATION		Ploy Room	11th Floor
	8:00	1:00	PQLX		Templeton
	9:00	1:00	Network Reports 4 Network Reports (4/23)		
	10:00	1:00	Scientific Uses of Modern Seismological Data Moment tensors and the Global CMT Project	L	Goran Ekstrom
	11:00	1:00	IRIS/FDSN Web Services	L	Ahern
	12:00	1:00	<b>Lunch and Group Photograph</b>		
	13:00	0:40	IRIS Products	L	Ahern
	13:40	0:10	Wrapup	L	Ahern
	13:40	0:30	Leave for tour of TMD		
	14:10	2:30	Tour of TMD		
	16:40	0:30	TRAVEL BACK TO HOTEL		
	17:10		<b>Adjourn (end of Metadata Workshop)</b>		
<b>14-Jan-2012</b>	<b>SATURDAY</b>		<b>IRIS International Seismology Development Advanced Studies Workshop Begins</b>		