

**Managing Waveform Data and Metadata for Seismic Networks**

**8-17 November 2009**

**NRIAG, Giza, Cairo, Egypt**

**L=LECTURE  
C=COMPUTER LAB**

<b>8-Nov-2009</b>	<b>Sunday</b>	<b>DURATION</b>		
	19:00 - 21:00		<b>Registration and Reception</b> <i>those arriving late may pick up their registration materials Monday</i>	Cataract Pyramid Hotel Room - La Villa

9-Nov-2009	Monday	DURATION		Room - SALA DU PALEMAS
	8:30	1:10	<b>Welcome and Introductions</b>	L Dr. Tim Ahern
		0:20	Welcome by NRIAG	L Dr. Salah Mahmoud
		0:10	Introduction of Distinguished Guests	L Salah Mahmoud
		0:10	Introduction of Lecturers	L Tim Ahern
		0:10	Introduction of Participants	L Tim Ahern
		0:20	Welcome by Minister of Education and Scientific Research	L Prof. Dr. Hany Helal
	9:40	0:15	<b>Break</b>	
	9:55	0:15	<b>Logistics</b>	L Dr. Sami Ahemd Fahmy
	10:10	0:15	<b>Overview of NRIAG</b>	L Salah Mahmoud
	10:25	0:15	<b>Overview of NRIAG Seismology</b>	L Dr. Abuo El-Ela Amin Mhmd.
	10:40	0:30	<b>Break</b>	
	11:10	0:20	<b>Overview of Sponsors</b> ORFEUS IRIS	L Reinoud Sleeman L Dr. David Simpson
	11:30	0:40	<b>Data Exchange within the FDSN</b> International Federation of Broadband Seismograph Networks ORFEUS IRIS Data Management System	L Reinoud Sleeman L Reinoud Sleeman L Tim Ahern
	12:10	1:00	<b>Lunch</b>	
	13:10	0:15	<b>Review of Workshop Agenda</b>	L Tim Ahern
	13:25	1:00	<b>Installation of Seismic Stations</b>	L Noel Barstow
	14:25	1:30	<b>Modern Seismometry</b> The design of feedback seismometers	L Prof. Erhard Wielandt
	15:55	0:30	<b>Break</b>	
	16:25	1:00	<b>Digital Filtering Theory</b>	L Dr. Joachim Wassermann
	17:25	1:00	<b>Digital Filtering Lab</b>	C Joachim Wassermann
	18:25		<b>Adjourn</b>	

10-Nov-2009	Tuesday	DURATION		Room - SALA DU PALEMAS
	8:30	0:30	<b>IRIS International Development Seismology</b>	L Prof. Anne Meltzer
	9:00	1:15	<b>Digital Filtering Theory</b>	L Joachim Wassermann
	10:15	0:15	<b>Break</b>	
	10:30	1:15	<b>Digital Filtering Lab</b>	C Joachim Wassermann
	11:45	1:00	<b>Lunch</b>	
	12:45	0:45	<b>Modern Data Acquisition Systems</b> implementation in acquisition systems FIR Filters and downsampling	L Reinoud Sleeman
	13:30	1:00	<b>SEED Metadata and RESP Files</b>	L Mr. Rick Benson
	14:30	1:00	<b>Portable Data Collection Center (PDCC) - Introduction</b> Overview of PDCC Nominal Response Library	L Mr. Rob Casey Mr. Chad Trabant
	15:30	0:15	<b>Break</b>	
	15:45	0:30	<b>Network Reports</b> FDSN GSN & PASSCAL	L Torld VanEck Tim Ahern
	16:15	0:45	<b>Network Reports</b> 3 Network Reports from Participants	L various
	17:00		<b>Adjourn</b>	

11-Nov-2009	Wednesday	DURATION		Room - SALA DU PALEMAS
	8:30	0:30	<b>PDCC</b> Installation	<b>C</b> Rick Benson
	9:00	1:00	<b>Network Reports</b> 4 Network Reports from Participants	
	10:00	0:15	<b>Break</b>	
	10:15	1:30	<b>PDCC</b> Information Templates Single Station Producing SEED metadata for Participant Networks for a single station Cloning Seismic Channels	<b>C</b> Rob Casey
	11:45	1:00	<b>Lunch</b>	
	12:45	1:00	<b>PDCC</b> continuation	<b>C</b> IRIS DMC Staff
	13:45	1:00	<b>Seismometer Calibration-Video Lab</b>	<b>L</b> Erhard Wielandt
	14:45	0:45	<b>Seismometer Calibration Exercise</b> curve fitting gain determination	<b>C</b> Erhard Wielandt
	15:30	0:15	<b>Break</b>	
	15:45	1:00	<b>Seismometer Calibration Continued</b>	<b>C</b> Erhard Wielandt
	16:45	0:15	<b>PDCC</b> Updating Calibration Information using PDCC	<b>C</b> Chad Trabant
	17:00	0:15	<b>PDCC</b> Input of Columnar text into PDCC	<b>C</b> Rob Casey
	17:15	0:30	<b>Network Reports</b> 2 Network Reports from Participants	<b>L</b> various
	17:45		<b>Adjourn</b>	

<b>12-Nov-2009</b>	<b>Thursday</b>	<b>DURATION</b>		<b>Room - SALA DU PALEMAS</b>
	8:30	1:30	<b>PDCC</b> Cloning Stations and Building an Entire Network	<b>C</b> Chad Trabant
	10:00	0:15	<b>Break</b>	
	10:15	1:30	<b>PDCC</b> continuation of network building	<b>C</b> IRIS DMC Staff
	11:45	1:00	<b>Lunch</b>	
	12:45	1:00	<b>Validation Tools</b> verseed jEvalResp	<b>L/C</b> Rick Benson
	13:45	1:00	<b>Quality Assurance</b> PQLX QUACK SAC	<b>L</b> Rick Benson
	14:45	0:30	ORFEUS Quality Assurance	<b>L</b> Reinoud Sleeman
	15:15	0:30	PASSCAL Quality Assurance	Noel Barstow
	15:45	0:30	<b>Break</b>	
	16:15	1:15	<b>Scientific Uses of Modern Seismological Data</b> Global Moment Tensor New Developments in Broadband Data	<b>L</b> Prof. Goran Ekstrom
	17:30	0:45	<b>Network Reports</b> 3 Network Reports from Participants	<b>L</b> various
	18:15		<b>Adjourn</b> <i>Distribute Information regarding tour</i>	
<b>13-Nov-2009</b>	<b>Friday</b>	<b>DURATION</b>		<b>Room Hotel Lobby</b>
	8:30	5:00	<b>Excursion to Pyramids of Giza (meet in hotel lobby at 8:30 with Workshop T-Shirt)</b> Group Photograph	
	13:30		<b>Lunch at hotel</b>	
	16:00	2:00	<b>PDCC</b> Optional Work Producing Network Metadata	<b>C</b> Various
	18:00	0:30	<b>Network Reports</b> 2 Network Reports from Participants	<b>L</b> various
	18:30		<b>Adjourn</b>	

14-Nov-2009	Saturday	DURATION		Room - SALA DU PALEMAS
	8:30	1:30	<b>Conversion of waveforms to miniSEED</b>	C Chad Trabant
	10:00	0:15	<b>Break</b>	
	10:15	0:45	<b>Waveform Data Exchange Real Time Feeds</b> SeedLink Antelope, Earthworm, LISS, and Seisan	L Chad Trabant
	11:00	0:45	<b>SeedLink Server Installation</b>	Chad Trabant
	11:45	1:00	<b>Lunch</b>	
	12:45	1:00	<b>Network Reports</b> 4 Network Reports from Participants	L various
	13:45	0:30	<b>Non-Real Time</b> SEED Request Tools	Tim Ahern
	14:15	1:00	<b>Network Reports</b> 3 Network Reports from Participants	L various
	15:15	0:30	<b>Break</b>	
	15:45	1:00	<b>Scientific Uses of Modern Seismological Data</b> Noise and Quality Control	L Goran Ekstrom
	16:45	1:00	<b>Measuring Noise</b>	C Erhard Wielandt
	17:45		<b>Adjourn</b>	
	20:00		<b>Workshop Dinner and Reception</b>	

<b>15-Nov-2009</b>	<b>Sunday</b>	<b>DURATION</b>		<b>Room - SALA DU PALEMAS</b>
	8:30	1:30	<b>An Introduction to Seismological Communication Processor (Seiscomp-3)</b>	L/C Dr. Joachim Saul
	10:00	0:30	<b>Break</b>	
	10:30	1:15	<b>Seiscomp3 (continued)</b>	L/C Joachim Saul
	11:45	1:00	<b>LUNCH</b>	
	12:45	0:30	<b>Network Reports</b> 2 Network Reports from Participants	L various
	13:15	2:00	<b>Seiscomp3 (continued)</b>	L/C Joachim Saul
	15:15	0:30	<b>Break</b>	
	15:45	2:00	<b>Seiscomp3 (continued)</b>	L/C Joachim Saul
	17:45		<b>ADJOURN</b>	

<b>16-Nov-2009</b>	<b>Monday</b>	<b>DURATION</b>		<b>Room - SALA DU PALEMAS</b>
	8:30	0:30	Bus to NRIAG	
	9:00	3:00	<b>Tour NRIAG with Break at NRIAG</b>	L various
	12:00	0:30	<b>Bus to Hotel</b>	
	12:30	1:00	<b>LUNCH</b>	
	13:30	1:45	<b>Various Additional Work as Desired</b> Additional PDCC Metadata Problems from sheet Real time data transfer Seiscomp-3 Analysis Tools such as SAC or PQLX	C Various
	15:15	0:15	<b>Completion of Workshop Evaluation Forms</b>	
	15:30	0:30	<b>Break</b>	
	16:00	0:45	<b>Network Reports</b> 3 Network Reports from Participants	L various
	16:45	0:30	<b>Questions and Answers</b>	C
	17:15	0:30	<b>Final Remarks</b>	Tim Ahern
	17:45		<b>Adjourn</b>	Everyone
<b>17-Nov-2009</b>	<b>Tuesday</b>	<b>DURATION</b>	<b>Transfer to Airport and Flights Home</b>	