



**INTERNATIONAL TSUNAMI INFORMATION CENTER (ITIC)  
ITIC TRAINING PROGRAMME - INTERNATIONAL (ITP-INTL)**

**END-TO-END TSUNAMI EARLY WARNING SYSTEMS  
AND THE PACIFIC TSUNAMI WARNING CENTER (PTWC) ENHANCED PRODUCTS**

**Training Workshop on Strengthening Tsunami Warning and Emergency Response and the  
development of Standard Operating Procedures**

**Advanced Tsunami Operations Advanced Topics, Tsunami Warning Decision Support Tools**

**9 August 2019**

This session will provide advanced training on tsunami warning center operations. Topics include real-time earthquake source characterization, tsunami travel time and wave amplitude forecasting, and tsunami warning decision support tools.

Session	Start Time	End Time	Topic	Speaker
			<b>DAY 5, FRIDAY, 9 AUGUST 2019</b>	
			<b>NTWC Competencies, Real-Time Earthquake Source Characterization; Tsunami Forecasting</b>	
<b>1.1</b>	9:00	9:15	NTWC Competencies (draft approved at ICG/PTWS-XXVIII, 2019)	Kong
<b>1.2</b>	9:15	9:45	PTWC and NWPTAC operations and products - General Q & A	Weinstein, Kong
<b>1.3</b>	9:45	10:30	PTWC and TWC Operations: Real-time Earthquake Detection and Fast Source Characterization - Sparse networks, Magnitudes, W-Phase Centroid Moment Tensors – Techniques, Use, Limitations, Challenges	Weinstein
	10:30	10:45	COFFEE / TEA BREAK	
<b>1.4</b>	10:45	11:55	PTWC and TWC Operations: Travel Time and Wave Forecasting - Techniques, Use, Limitations, Challenges, Sensitivity Studies (Location, Depth, Magnitude)	Weinstein
<b>2.1</b>	11:55	12:15	Tsunami Warning Decision Support Tools - Overview, including Websites (URLs), Earthquake Monitoring (CISN), Sea Level Monitoring (Tide Tool), Tsunami Travel Times (TTT), Tsunami Coastal Assessment Tool (TsuCAT)	Kong, Weinstein
	12:15	13:30	LUNCH	
			<b>Tsunami Warning Decision Support Tools - Training and/or Installation (<i>Internet needed</i>)</b>	
<b>2.1</b>	13:30	15:30	Demonstration / Installation, as requested, such as Sea Level Monitoring (Tide Tool), Tsunami Travel Times(TTT), Tsunami Coastal Assessment Tool (TsuCAT)	Kong, Weinstein