WOVOdat workshop on:

## How to Optimize the Use of Volcano Monitoring Database

Earth Observatory of Singapore, 31 October - 4 November 2016

## **PROGRAM**

DATE	TOPICS	REMARKS
Mon, 31 Oct	Technical updates & team preparation: (Meeting Room N2-01b-30) RVO: new database system installed in laptop; data input practice PHIVOLCS & CVGHM: setup system for demo & tutorial on SEI2WOV, SWARM, and VALVE CVGHM & PHIVOLCS: WOVOdat localhost: current functions and what need to update  Group discussion (Meeting Room N2-01b-30): Group discussion (split into 3 groups), preparing for Thursday presentation: Case example of crisis response that has been done in the past, by using historical data and real time monitoring.  - How important were monitoring data in the decision?  - Current concerns in regard to supports (archiving, processing, online access, etc.) for monitoring data availability?  - What can be improved for preparing the next crisis?	Group homework: Case example of crisis response using historical data & monitoring data
Tue, 1 Nov	(Seminar room N2-01b-28, open session to volcano group)  9:30 - 10:15 Opening/welcome WOVOdat current development and status (Fidel Costa)  10:15 - 10:45 Coffee break  10:45 - 11:30 PHIVOLCS: monitoring database & LAVA 11:30 - 12:15 CVGHM: monitoring database  12:15 - 13:45 Lunch break  13:45 - 14:30 CVGHM: MAGMA 14:30 - 15:15 CVGHM: Merapi Volcano Observatory 15:15 - 16:00 RVO: monitoring system & monitoring data in RVO  16:00 - 16:15 Coffee break	Topic: Current status on Volcano Monitoring Database: -From instruments to data storing/ archiving -From data to report  (Workshop participants & volcano group are invited to have coffee break and lunch buffet, near the













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Tue, 1	16:15 - 17:00 1 <sup>st</sup> brainstorming (Meeting Room N2-01a-12):	Topic:
Nov	"Common framework & perspective:	Volcano
	How to optimize the use of Volcano Monitoring Database"	Unrest
	- What is volcano unrest?	
	- Evolving unrest	
	- Defining and Detecting symptoms of unrest	
	- Volcanic Unrest Index	
	16:15 - 17:00 Technical group (Meeting Room N2-01b-30):	
347	(11 (1 B NO 041 20)	<del></del>
Wed,	(Meeting Room N2-01b-30)	Tutorial and
2 Nov	9:30 - 10:45 PHIVOLCS: Tutorial and practice "data processing automation" SEI2WOV, SWARM2WOV, etc.	Practice
	10:45 - 11:15 Coffee break	
	Technical group:	
	11:15 - 12:15 2nd session Tutorial and practice "data processing automation"	
	SEI2WOV, SWARM2WOV, etc.	
	Non-technical group:	
	11:15 - 12:15 free	
	12:15 - 13:30 Lunch break	
	(Seminar Room N2-01b-28)	
	13:30 - 14:15 WOVOdat new visualization tools (Tutorial and practice)	
	14:15 - 15:00 WOVOdat data search tools	
	(Tutorial and practice)	
	15:00 - 15:30 Coffee break	
	<u>Technical group: (Meeting Room N2-01b-30)</u>	
	15:30 - 17:00 Optimizing: input data, data processing automation,	
	visualization, data search, etc.	
	Non-technical group: (Meeting Room N2-01a-12)	
	15:30 - 17:00 2nd brainstorming	
	"Data improve understanding & lead to better decision"	
	⇒ Data flow for the future reference ⇒ Data Virtualization	
	⇒ Data Virtualization  ⇒ Data search engines	
	<ul><li>⇒ Data search engines</li><li>⇒ User interface, applications and decision process</li></ul>	
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Thu, 3	(Seminar room N2-01b-28, open session to volcano group)	Lessons
Nov	9:30 - 10:30 "What to expect, when we are expecting? "	learned
	⇒ Case example of "Classic unrests", eruption styles	
	(Chris Newhall)	
	10:30 - 11:00 Case example of crisis response using historical data & real	
	time monitoring data	
	Hendra	
	11:00 - 11:15 Coffee break	
	11:15 - end Group presentation (continue): Case example of crisis response	
	using historical data & real time monitoring data	
	12:00 - 13:45 Lunch break	
	(Meeting Room N2-01a-12)	
	13:45 - 15:00 Event tree analysis (Chris Newhall)	
	13.43 - 13.00 Event tree anatysis (Chris Newhatt)	
	15:00 - 15:30 Coffee break	
	75.55 75.55 65,jee 57eak	Evening:
	(Meeting Room N2-01a-12)	Dinner (detail
	15:30 - 17:00 3rd brainstorming	will be inform
	⇒ Forecasting eruption	later)
	⇒ Event tree analysis	,
	⇒ Evidence-based decision	
	Data improve understanding & lead to better decision	
Fri, 4	9:30 - 11:00 (Meeting Room N2-01a-12)	Wrap up
Nov	Discussion on "What to do next":	
	<ul> <li>What is the efficient and effective way to manage data</li> </ul>	
	- The challenge of improving connectivity between data and behavior:	
	by capturing and analyzing data, we can find patterns that will	
	ultimately impact our future decisions.	
	<ul> <li>How WOVOdat can be useful and implemented in the decision making</li> </ul>	
	during crisis response	
	<u>Technical group: (Meeting Room N2-01b-30)</u>	
	RVO: data input <i>(continue)</i>	
	CVGHM - PHIVOLCS - RVO: Optimizing: input data, data processing	
	automation, visualization, data search, etc. (continue)	
	11:00 16:00 (frog time)	
	11:00 - 16:00 (free time)	
	16:00 - 17:00 EOS Friday seminar (Seminar room N2-01b-28)	
	TITLE: "Scaling laws of dike intrusions and dike-induced seismicity"	
	by Dr. Luigi Passarelli (GFZ-Potsdam)	











