

Practice meets science

International advanced training course on “Snow and Avalanches”

11 – 15 February 2019 in Davos

Program

The course begins on Monday at 8:15 h

Monday, 11 February 2019

Avalanches in Switzerland and history of SLF *Jürg Schweizer*

Snow physics *Henning Löwe*

Avalanche formation *Alec van Herwijnen*

Coffee break

Exercise: Avalanche formation and snowpack interpretation *Stephan Harvey
Alec van Herwijnen*

Lunch break

Best practice in avalanche forecasting *Kurt Winkler*

Opportunities and limitations of avalanche forecasts *Christine Pielmeier*

Introduction to exercise and data interpretation *Kurt Winkler*

Coffee break

Exercise: Assessment of avalanche danger *Kurt Winkler, Instructors*

Summary of the day; outlook field day *Stephan Harvey*

Ice breaker

Tuesday, 12 February 2019

Snow profile observation and stability tests *Benjamin Reuter*

Introduction field day / current situation *Stephan Harvey*

Field day: Snow profile observation and stability tests *Instructors*

Lunch in the field

Coffee break in the hotel

Snow profile and stability evaluation *Instructors*

Presentation of results and evaluation by each group *Stephan Harvey*

Snow profile interpretation *Jürg Schweizer*

Science event at SLF

Wednesday, 13 February 2019

Avalanche history Davos *Stefan Margreth*

Avalanche dynamics *Perry Bartelt*

Avalanche hazard mapping *Stefan Margreth*

Coffee break

Human factors in decision making *Hans Peter Hartmann
Stephan Harvey*

Lunch break

Wet- and glide-snow avalanches *Jürg Schweizer*

Separate programs for module 1 and 2

Module 1	Module 2
Snow mechanics <i>Henning Löwe</i>	Temporary protection measures <i>Lukas Stoffel</i>
Snowpack stability: Layering and variability <i>Alec van Herwijnen</i>	Artificial avalanche release <i>Lukas Stoffel</i>
Coffee break	
Measuring snow properties (PST, SMP) <i>Benjamin Reuter</i>	Avalanche detection <i>Alec van Herwijnen</i>
Assessment of avalanche hazard in the backcountry <i>Stephan Harvey</i>	Exercise: Road closure, yes or no? Case study <i>Lukas Stoffel</i>
Summary of the day <i>Stephan Harvey</i>	Summary of the day <i>Lukas Stoffel</i>

Thursday, 14 February 2019

Separate programs for module 1 and 2

Module 1	Module 2
Introduction field day <i>Stephan Harvey</i>	Permanent protection measures <i>Stefan Margreth</i>
Field day: New methods for field measurements <i>Instructors</i>	Experience of a local avalanche service <i>Jon Andri Bisaz</i>
Coffee break in the Hotel	
Snow profile and stability evaluation, discussion and reflection of the field day <i>Instructors</i>	Field day: Avalanche mitigation
Principles of snow cover models <i>Sascha Bellaire</i>	Visit Jakobshorn patrollers, Davos Frauenkirch and Klosters <i>Lukas Stoffel Stefan Margreth</i>
Operational avalanche forecasting <i>Christine Pielmeier</i>	
Social Event: Visit local brewery and dinner in Monstein	

Friday, 15 February 2019

Separate programs for module 1 and 2

Module 1	Module 2
Snow stability evaluation and interpretation of measurements from previous field day <i>Alec van Herwijnen</i>	RAMMS: Rapid mass movements simulations <i>Yves Bühler</i>
Summary of the key facts: "The big picture" <i>Stephan Harvey</i>	Practical use of avalanche modeling <i>Lukas Stoffel</i>
	Applying recent model developments in practice <i>Yves Bühler</i> <i>Lukas Stoffel</i>
Coffee break	
Synthesis of course: Final discussion <i>Christine Pielmeier</i> <i>Stephan Harvey</i>	Synthesis of course: Final discussion <i>Yves Bühler</i> <i>Lukas Stoffel</i>
Answers to open questions	<i>Jürg Schweizer</i>
Presentation of synthesis in each group or module	<i>Christine Pielmeier</i> <i>Yves Bühler</i>
Closing remarks	<i>Stephan Harvey</i>
Lunch buffet	
RAMMS workshop (optional)	<i>Yves Bühler, Lukas Stoffel, Marc Christen</i>