Program

SEISMOLOGY@SCHOOL
COURSE PROGRAM

Hes-so Valais-Wallis
Aula François- Xavier Bagnoud
Sion, 20-24 October 2014

MONDAY – October 20, 2014

8.15: Registration

8.45: Welcome and Introduction
François Seppey, Director of the Hes-so Valais
Jean-Marie Cleusix, Director of Education in Wallis
Stefan Wiemer, Director of the SED

Session 1: Introduction in Seismology and Geodynamics

9.30: Earthquakes and waves
Prof. Stefan Wiemer, Director of the SED

10.30: Coffee Break

11.00: Evolution of plates tectonic and Seismology
Prof. Jean-Pierre Burg, ETH Zürich, Switzerland

12.00: How Earthquakes occur?
Prof. Jean-Pierre Burg, ETH Zürich, Switzerland

13.00: Lunch break

Session 2: Bringing seismology into the classroom

14.00: Seismology@School : Data, picking waves, earthquake localization, tectonic
Dr. Stefano Solarino, INGV, Italy

15.00: Hands-on activities for the classroom (Gr. A part I: seismic instruments)
Dr. Joseph Moerschell, Hes-so, Switzerland

15.00: Hands-on activities for the classroom (Gr. B part II: modeling earthquake, using data modeling)
Dr. Jean-Luc Berenguer, CIV Valbonne, France

16.30: Coffee Break

17.00: Hands-on activities for the classroom (Gr. B part I: seismic instruments)
Dr. Joseph Moerschell, Hes-so, Switzerland

17.00: Hands-on activities for the classroom (Gr. A part II: modeling earthquake, using data modeling)
Dr. Jean-Luc Berenguer, CIV Valbonne, France

18.30: *Dinner*

20.00: "Teachers project" and Web-platform

TUESDAY- October 21, 2014

Session 3: Observation, measurements and natural hazard

9.00: Geodynamics and seismology- Alpine structure
Prof. Stefan Schmid, ETH Z, Switzerland

10.30: From site effects to induced phenomena: liquefaction and triggered landslides
Prof. Donat Fäh, ETH Zürich, Switzerland

11:30: Coffee Break

12.00: Seismic risk in Alpine structure
Dr. Stefano Solarino, INGV, Italy

13:00: Lunch break

Session 4: Bringing seismology into the classroom

14.00: Hands-on activities for the classroom (part III: modeling earthquake, seismic signal processing)
Dr. Paul Denton, British Geological Survey, UK

16.00: Coffee Break

16.30: Teachers project.

Open public Conference:

Aula François- Xavier Bagnoud

17.00: François Seppey

17.30: Jean-Marie Cleusix

18.00: Geothermy and risk
Prof. Domenico Giardini, ETH Z, Switzerland

19.30: Aperitif

20.00: Social Dinner

WEDNESDAY October 22, 2014

Session 5: Seismic Risk Mitigation

8.30: Defeating Earthquakes: How to build?
Prof. Bozidar Stojadinovic, ETH Zürich, Switzerland

9.30: Earthquake Early Warning Systems: Challenges and Benefits
Dr. Gilles Hillel Wust-Bloch, TAV, Israel

10.30: Coffee Break

11.00: Expected Earthquakes and Seismic Risk Mitigation in Palestine
Prof. Jalal Al Dabbeek, UPDRR, Palestine

12.00: Community Earthquake preparedness and response for a Kibbutz (Sde Eliahu)
Dr. Gilles Hillel Wust-Bloch, TAV, Israel

13.00: Lunch break

Session 6: Bringing seismology into the classroom

14.00: Seismology@School : The European experience, now and future
Dr. Paul Denton, British Geological Survey, UK

15.00: Simulator (feeling an earthquake) (Gr. A)
Dr. Anne Sauron, Hes-so, Switzerland

15.00: Experiments, posters, made by teachers and/or students (Gr. B)

16.00: Coffee Break

17.00: Simulator (feeling an earthquake) (Gr. B)
Dr. Anne Sauron, Hes-so, Switzerland

17.00: Experiments, posters, made by teachers and/or students (Gr. A)

18.30: *Dinner*

20.00: "Teachers project" and Web-platform

THURSDAY *October 23, 2014*

Session 7: Seismic Risk Assessment

9.00: Probabilistic Seismic Hazard and assessment and 2013 European Seismic Hazard Model
Dr. Jochen Woessner, ETH Zürich, Switzerland

10.00: Extreme consequences of earthquakes:
Dr. Arnaud Mignan, ETH Zürich, Switzerland

11.00: Coffee Break

12.00: Earthquake risk in building codes and beyond
Dr. Blaise Duvernay, BAFU, Switzerland

13.00: Lunch break

Session 8: Teachers' projects

14.00: Presentation teachers' projects

16.00: Coffee Break

17.30: ***Visit cave of vine in Wallis***

20. 00: Dinner

FRIDAY *October 24, 2014*

Session 9: Field trip

9.00: Field trip departure:

This fieldtrip aims to discuss the structure of the Alps in the area of Sion (Valais, Suisse).
Special emphasis will be placed on brittle structures such as faults. Several faults can be observed or postulated in the area.
Their history can be long and complex. Some are probably in relation to deposition of sediments during the Mesozoic or Cenozoic others are related to the Alps formation. Some sets could be very young in the Alpine kinematics and are compatible with the present day stress regime.
Consequences of the 1946 Sierre earthquake will be examined.
If weather conditions are good enough, a visit to the "Six des Eaux Froides" rock falls and to the nearby Tseuzier dam site is planned.
Prof. Jean-Luc Epard, University of Lausanne, Switzerland

17: Return

18.00: Seismology@school network, 'staying in touch'
Dr. Paul Denton, British Geological Survey, UK

18.30: Evaluation session and closure

19.00 Dinner


Seismo at School