

World Conference on Disaster Reduction
18-22 January 2005, Kobe, Japan

Outline of the International Programme on Landslides (IPL) & US Government and USGS Contribution for IPL

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Framework for ICL, IPL, and RCL



International Programme on Landslides (IPL)

The International Programme on Landslides (IPL) is an international initiative of the International Consortium on Landslides (ICL).

IPL aims to conduct **international cooperative research** and **capacity building on landslide risk mitigation**, notably in developing countries.

Protection of cultural and natural heritage will be addressed for the benefit of society and the environment.

The activities of IPL will **contribute to the International Strategy for Disaster Reduction (ISDR)**.

IPL Categories

Each project can fall into one of two categories:

- 1) project proposed by the IPL review committee which covers topics of general interest of ICL (**Coordinating project**);
- 2) project proposed by an ICL member (**Member project**).

Introduction of Project Examples

1) IPL Mapping Projects

- * **C-102:** Assessment of global high risk landslide hotspots (2002-2004)
- * **C-103:** Global landslide observation strategy (2004-)

2) IPL Capacity Building Projects

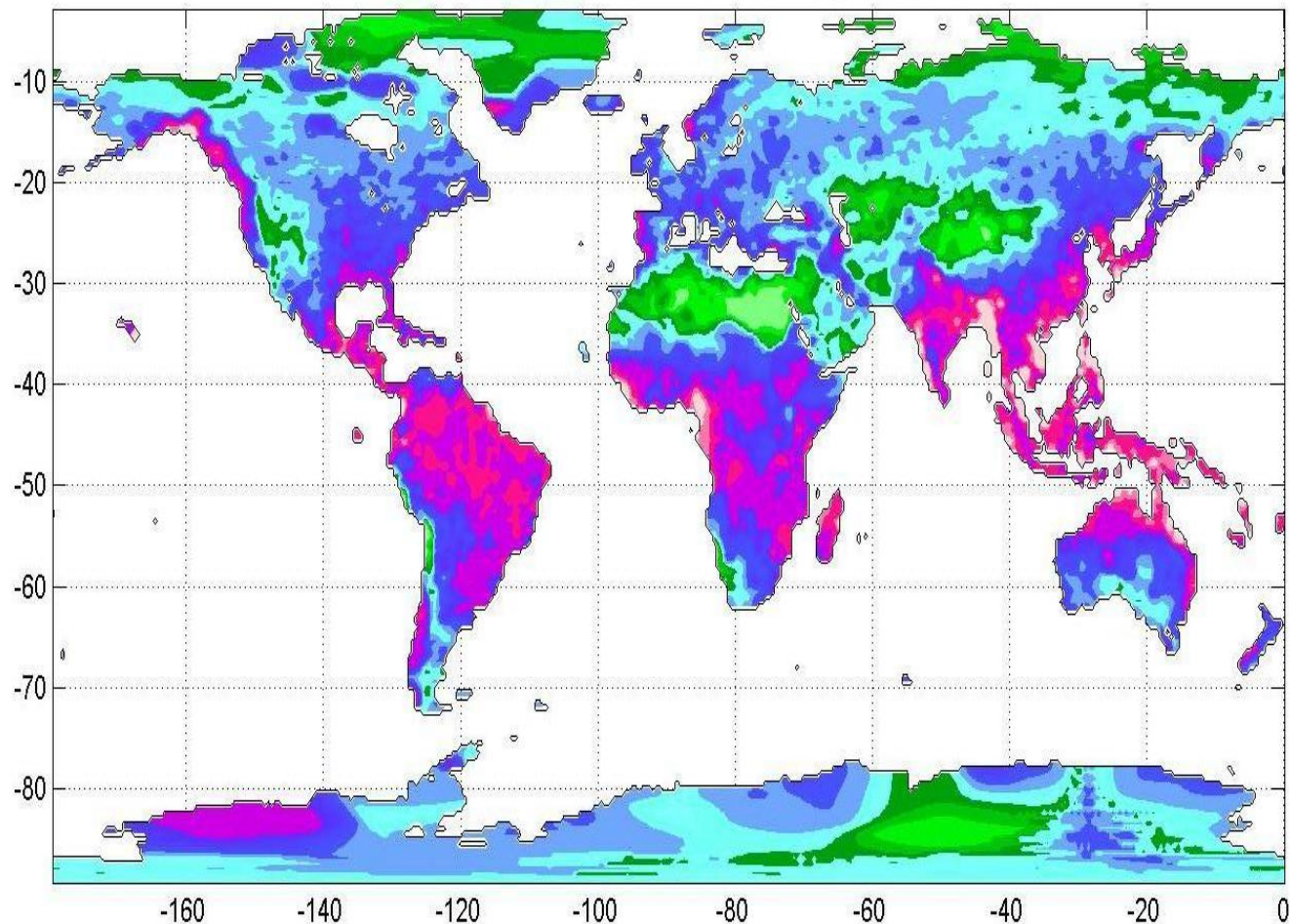
- * **M-106:** A best practice handbook for landslide hazard mitigation
- * **M-117:** ICL summer school in Kyrgyzstan

C-102: Assessment of Global High Risk Landslide Hotspots

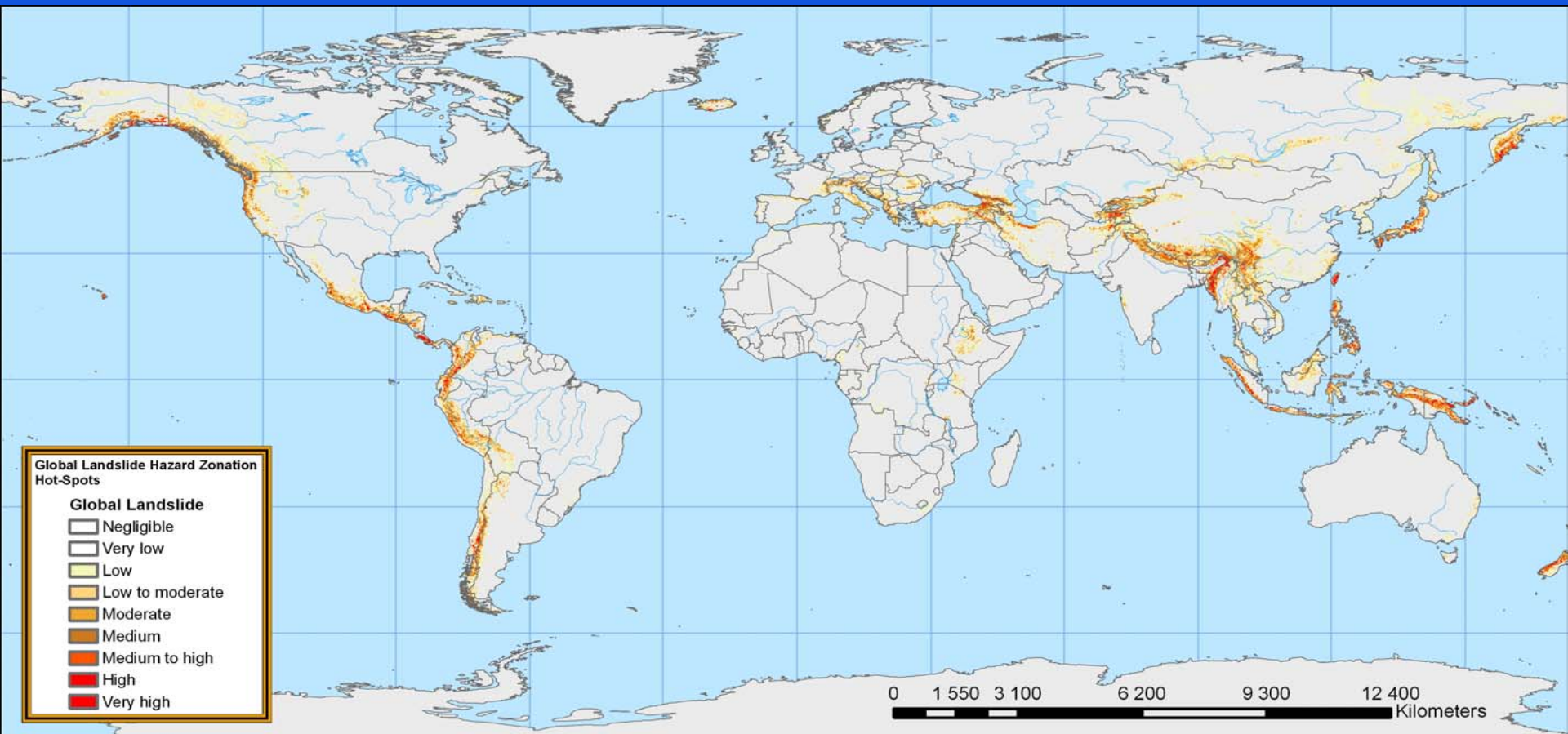
Landslide Triggering Factors

GLOBAL EXPECTED MONTHLY EXTREME PRECIPITATION

Expected monthly extreme values for a 100 year event

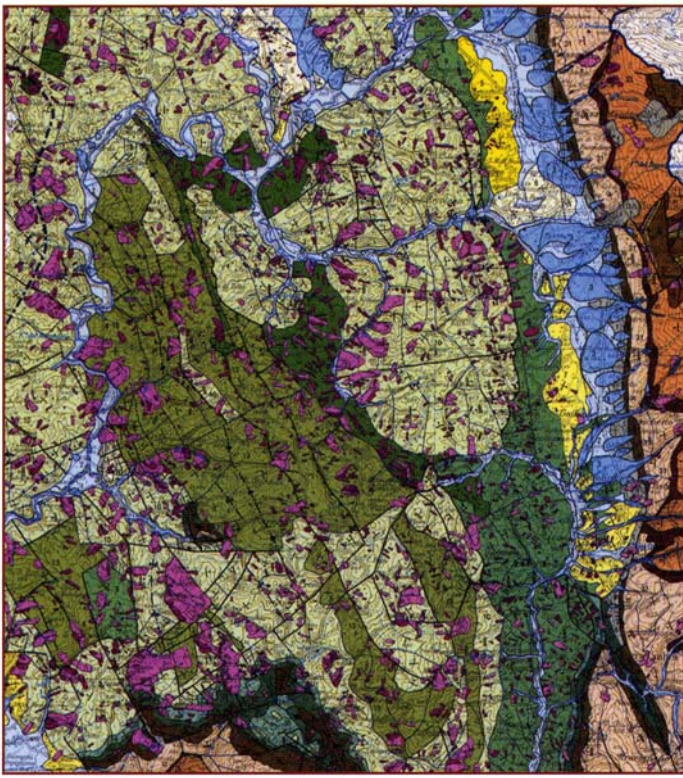
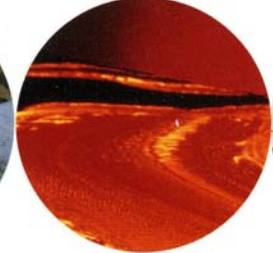


Global Landslide Hotspot Map



C-103: Global landslide observation strategy

For the Monitoring of our Environment from Space and from Earth



GEOHAZARDS
t h e m e
R E P O R T

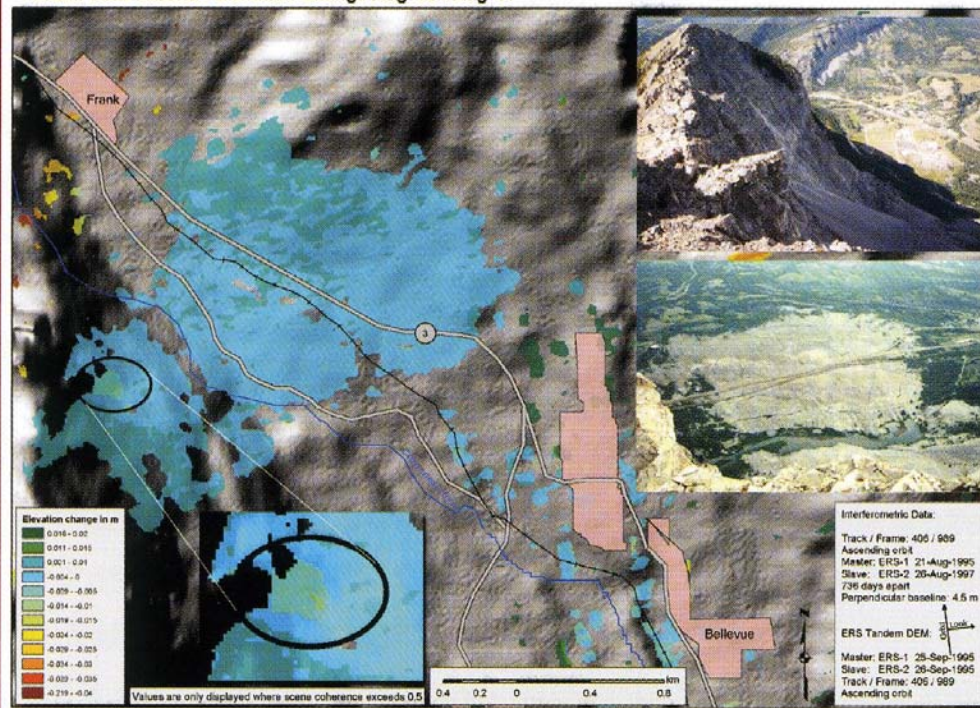
IGOS
Integrated Global Observing Strategy

Detail of the photo-
geological and landslide
inventory map of the upper
Tiber river basin, Italy.

Integrated Global Observing Strategy (IGOS)

Partnership of international organisations concerned with global environmental change issues





Frank Slide, Alberta

April 29, 1903

Failure occurred at 4:30 am when 30 million cubic meters of rock broke free from the east side of Turtle Mountain.

The event buried part of the town of Frank and greater than 2 km of the Canadian Pacific Railway.

Lasting approximately 100 seconds, the Frank Slide is recorded as Canada's worst landslide disaster killing at least 70 people.

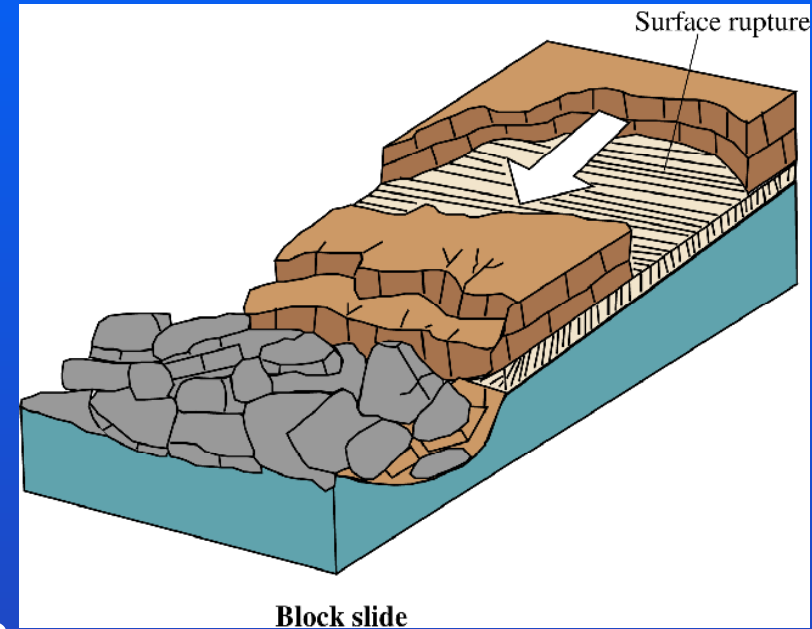
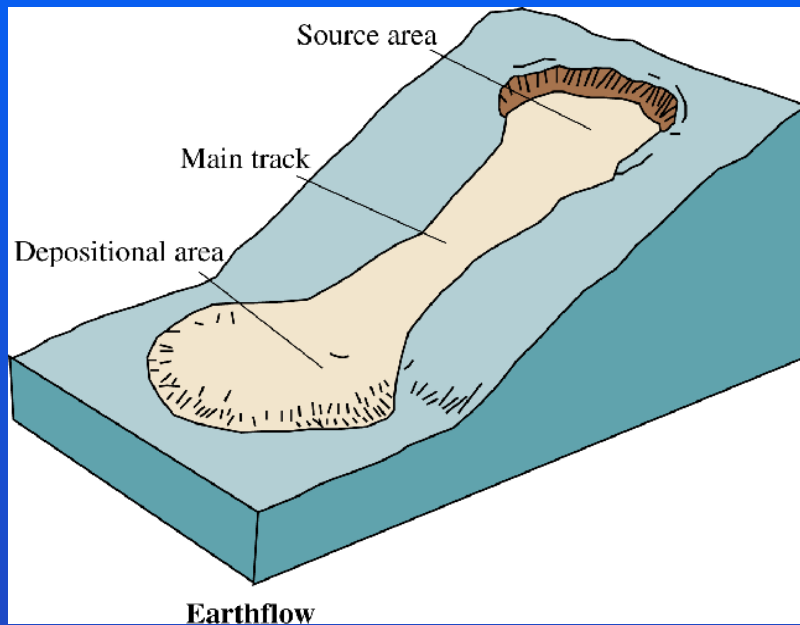
Differential InSAR of Frank Slide, Alberta, shows 3 cm motion prior to 6000 tons rockfall, indicating that this rock slide is still active. InSAR will be used to supplement in-situ and to monitor regional motion of the active slide area.



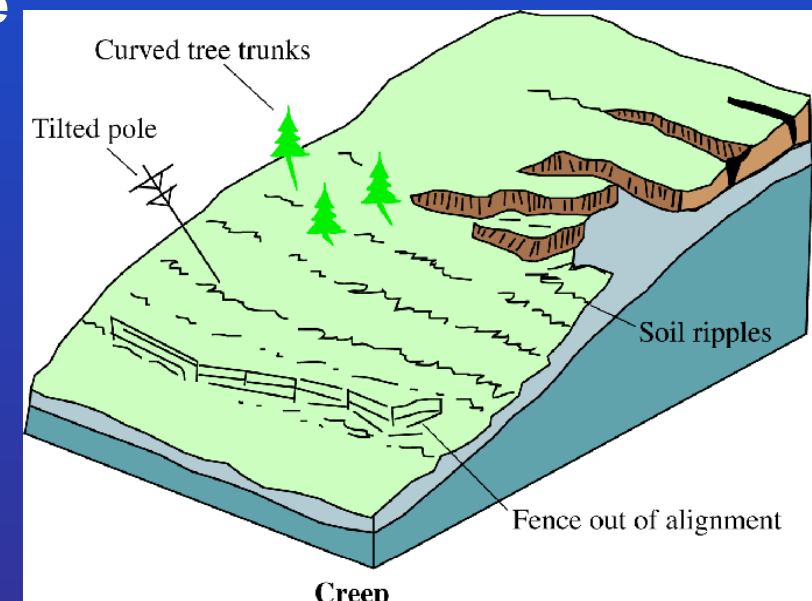
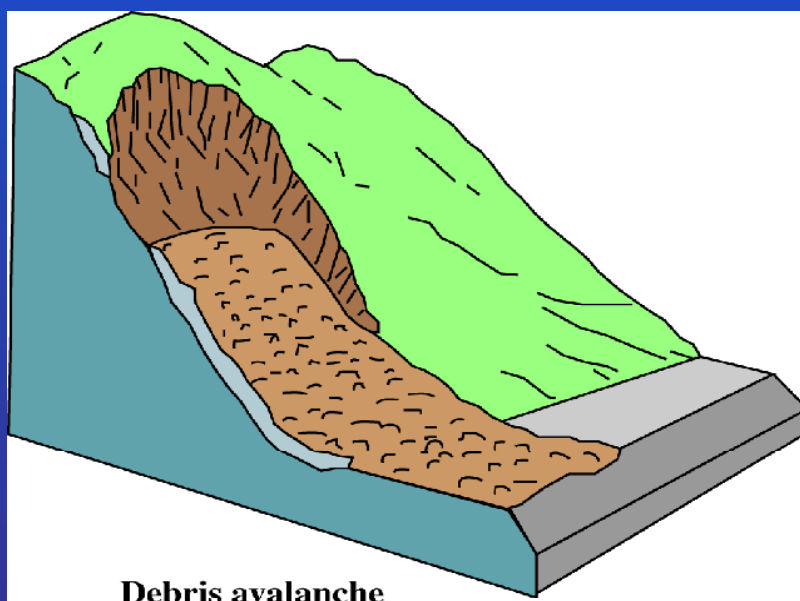
Photograph by
Mike Bovis, 2001

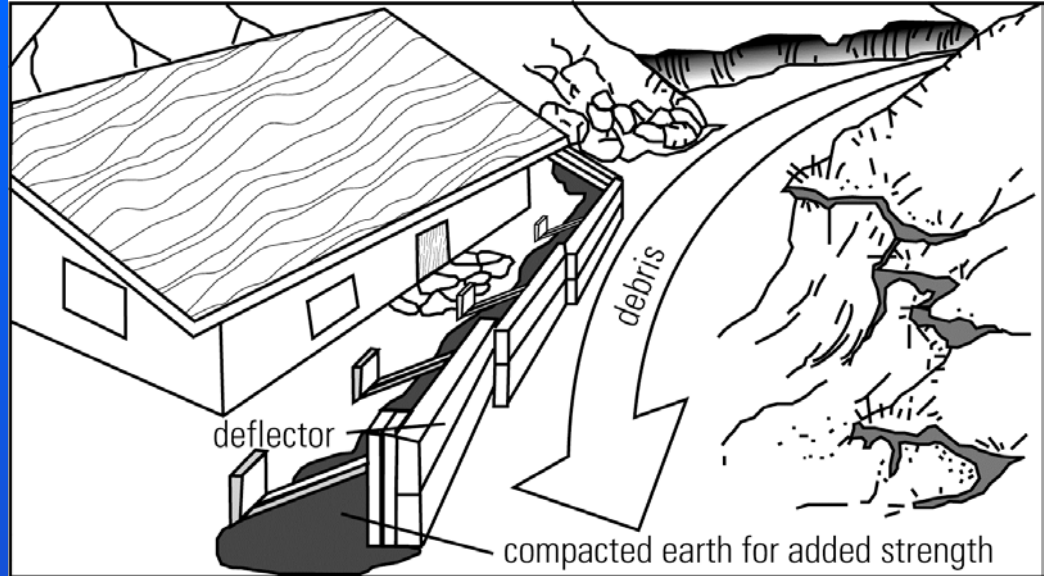
IPL-M106

A best practice handbook for landslide hazard mitigation

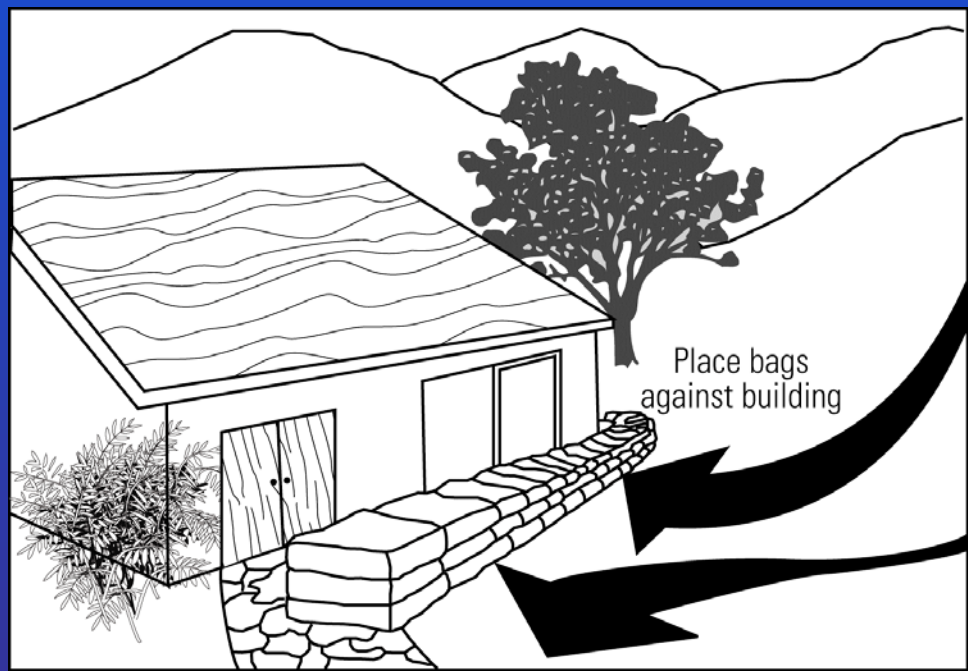
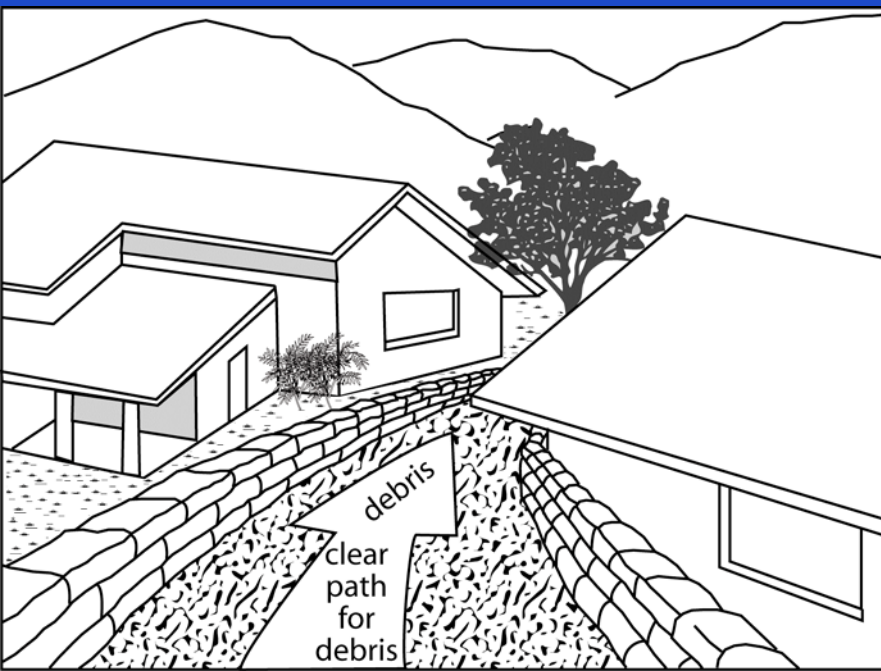


Basic Knowledge

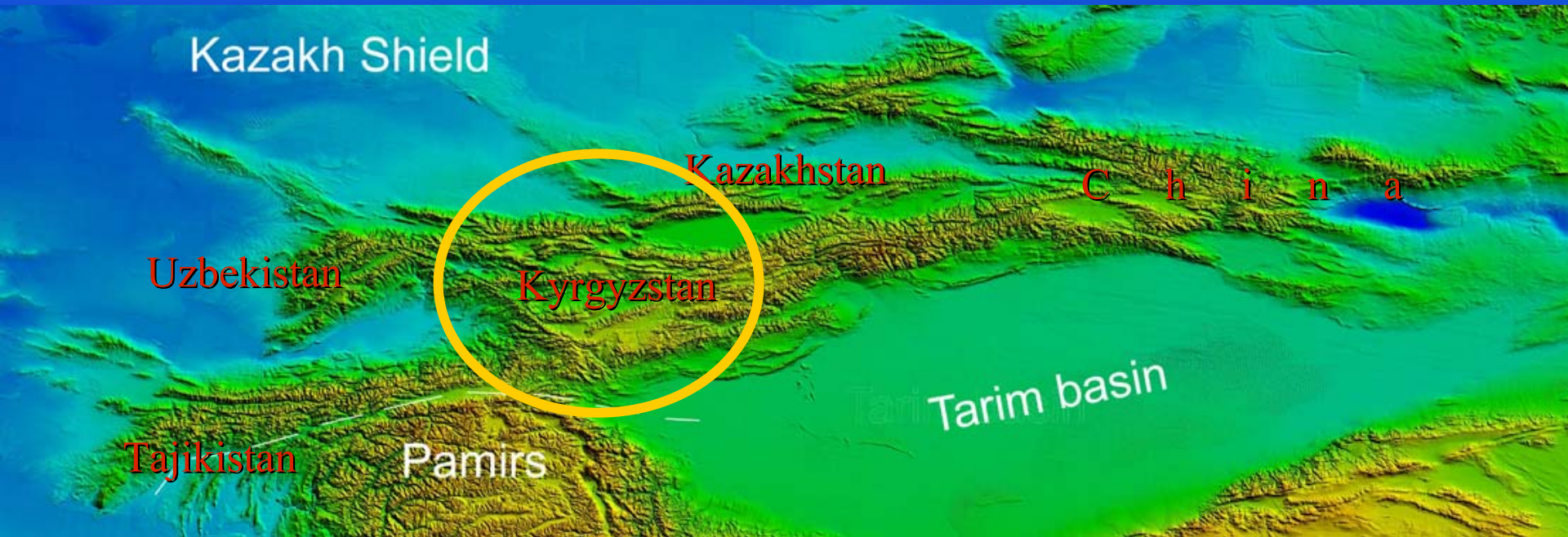


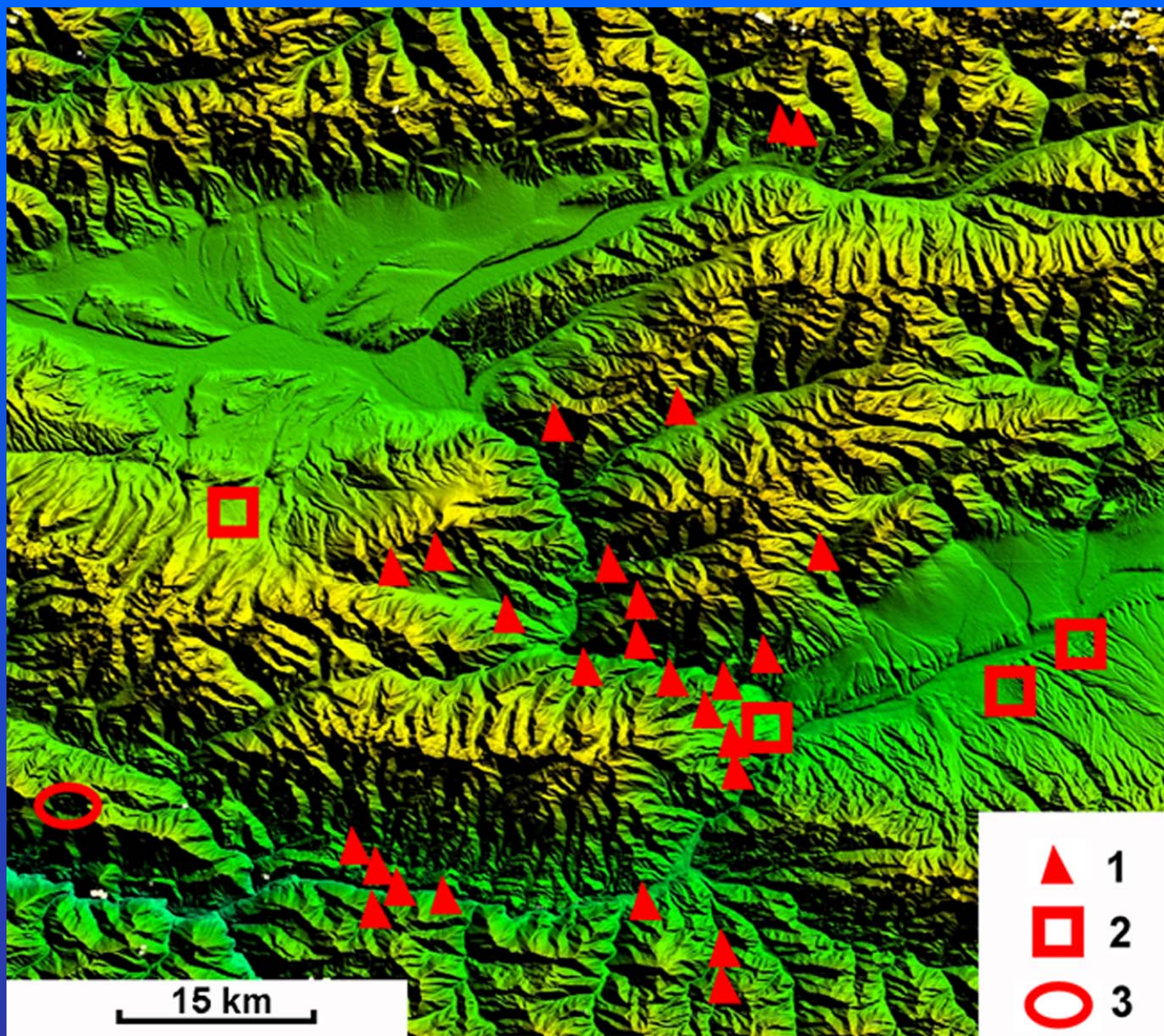


For Landslide Disaster Mitigation



M127: International Summer School on Rockslides in Kyrgyzstan





1 – rockslides and rock avalanches; 2 – largest landslides
3 – caldera-like Kyzylkiol depression



La Conchita Landslide

La Conchita, California-a small seaside community along Highway 101 south of Santa Barbara.

This landslide and debris flow occurred in the spring of 1995. Many people were evacuated because of the slide and the houses nearest the slide were completely destroyed. **Fortunately, no one was killed or injured.**

Photograph by R.L. Schuster, U.S.

Geological Survey.

La Conchita Landslide

10
January
2005

California

15 houses
were
damaged;

19 persons
were killed.

Photograph
by AFP



US Government and USGS Contribution for IPL

- **US Government is one of the supporting organization of the ICL;**
- **USGS is a member of ICL;**
- **I am one of the Vice Presidents of ICL;**
- **Two IPL projects are conducted by USGS:**

IPL-M105: Hurricane-flood-landslide continuum: A forecast system

IPL-M106: A best practice handbook for landslide hazard mitigation

US Government and USGS Contribution for IPL

**In 2005, USGS will host
The First General Assembly Meeting
The Fourth Session of the Board of Representatives of ICL.**

Welcome to Washington!



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Venue: Keck Center of the National Academy of Sciences,
500 5th Street NW, Washington, D.C. 20001, U.S.A.

Date: 12-14 October 2005