

トルコの雪崩について Avalanches in Turkey

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Present report briefly outlines specific issue of snow avalanches in the Turkish republic (with some earthquake and glacier related references) and describes Japan avalanche delegation visit to Turkey, 18-25 March 2009, to Ankara and Eastern Anatolia (Pontus Mts. and Palandoken range) for acquaintance with problems of this avalanche prone area (Fig. 1) and meeting Turkish researchers and decision-makers, engaged into hazard mitigation in the republic, for discussion related to possible technical cooperation between Japanese and Turkish Governments.

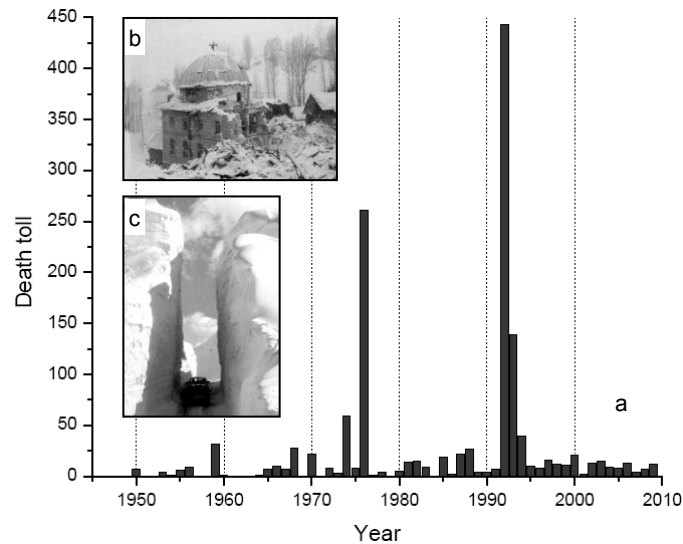


Fig. 1. (a) Number of people killed by snow avalanches in Turkey, for 1945/46-2008/09 (data were kindly provided by Ö. M. Yavaş, ÇAGEM, Ankara). In total for the period (63 winter seasons) – 1389 people were killed in snow avalanches (about 22 people a year in average); (b) Mosque destroyed by an avalanche; (c) 18-meters thick avalanche debris at the southern part of eastern Anatolia, there largest avalanches in Turkey take place occasionally, near to Iraq-Iran border (archive photos are courtesy of ÇAGEM).

The trip was organized by the Avalanche Research-Development, Reconnaissance & Prevention Branch (or ÇAGEM – in Turkish) belonging to the General Directorate of Disaster Affairs (GDDA), Ankara, Turkey. The objectives of this visit were (1) discuss the potential of a possible technical/scientific cooperation project between Japanese and Turkish governments; (2) ensure field trips to view avalanche conditions and construction practices and challenges in a region of the Eastern Anatolia (Fig. 2,3) comparable

to Japanese heavy snow mountain regions and to the Caucasus; (3) meet with organizations responsible for avalanche and natural hazard research and assessment; and (4) exchange technical information with major avalanche research organization in Turkey (ÇAGEM).

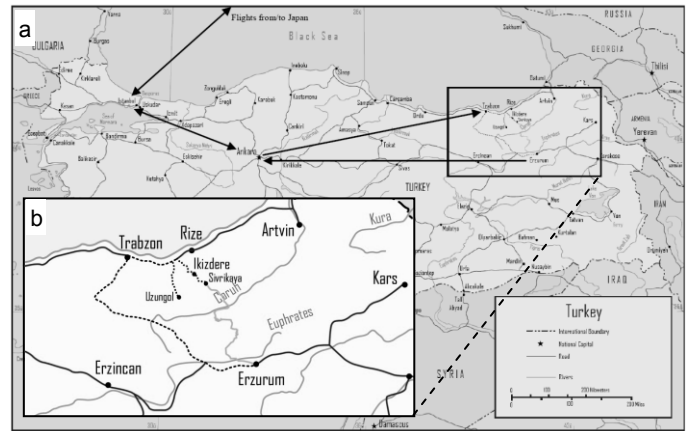


Fig. 2. (a) Map of Turkey showing main locations visited by delegation. (b) Field section of the visit – Black Sea region (Trabzon and Rize provinces) and inner part of Eastern Anatolia (Erzurum province), Turkey; dashed line indicates route covered by land transport.



Fig. 3. (a) An avalanche track in front of the road D925 going to Ovit pass, not far from the Sivrikaya settlement, Rize province, Turkey. Road is placed at an altitude ~30 m higher than the bottom of the valley; even though the rock wall next to the road can be reached by an avalanche - some trees over it have lots of broken branches; (b) Avalanche tunnel, Sivrikaya settlement.

Attention: Full detailed version of this work has recently been released as a Report (1). The intention of presenting this work at the Joint Conference of JSSI&JSSE'09 is to attract attention and facilitate discussions on issues of snow avalanches and glaciers in the Turkish Republic and potential of its collaborative study.

References: 1) Podolskiy, E.A. (2009): Japan avalanche delegation visit to the Turkish Republic, 18-25 March 2009. Special Report, Graduate School of Environmental Studies, Nagoya University, Japan, 79 p. [Unpublished; released 16 June 2009]. Available On-line: <http://www.snow-mechanics.com>

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