

Dverview



Schweizerischer Erdbebendienst Service Sismologique Suisse Servizio Sismico Svizzero Swiss Seismological Service



Rapid Impact Assessments – Issue date: 27.06.2024, 10:14 CET

Earthquake near Sanetschpass (VS)

Magnitude 2.9 [MLhc]

The Swiss Seismological Service at the ETH Zurich has detected an earthquake in canton St. Gallen, approx. 10 km south east of Weisstannen. This earthquake is not likely to have been felt. Damage is not expected from an earthquake of this magnitude. Aftershocks are expected to occur in the coming days and weeks; these may be felt or cause (further) damage. Though highly unlikely, the occurrence of a similar or larger quake in the next few days or weeks cannot be ruled out.

The estimated effects are described in intensities. The intensity describes the strength of

an earthquake based on the extent of the effect and the subjective perception of a person.

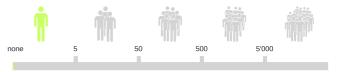
Danger level 09:58 Local time 27.06.2024 Date Hypocentral depth [km] 27.8 Magnitude [MLhc] 2.9 Assessment automatic Swiss coordinates 2'749'188 / 1'197'058 Additional data Link

Estimated effects

Schaffhausen Friedrichshafer St. Gall Zürich Delé Besançor Rappers St. Anton Luzern leuchâtel Ber Altdor Chur uol Vational Interlaker Bu Lausanne St. Morit Sic Bel Annec Aosta п III IV VI VII VIII IX Inter largely slightly heavily scarce structiv

Number of fatalities in Switzerland

The number of fatalities is very likely to fall within the coloured range



Number of people in Switzerland seeking protection

The number of people seeking protection is very likely to fall within the coloured range.



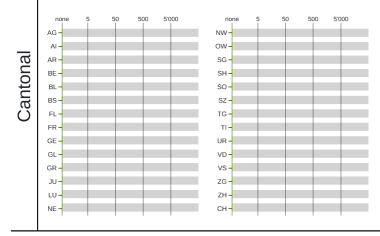
Costs of building damage in Switzerland

The costs of slight to destructive building damage are very likely to fall within the coloured range

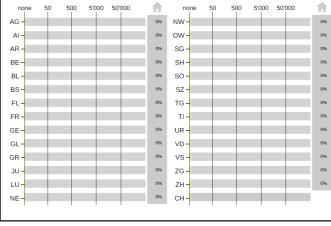


Number of injured people

The number of injured people per canton and in the Principality of Liechtenstein is very likely to fall within the coloured range.



The extent of moderate to destructive damage to buildings per canton and in the Principality of Liechtenstein is very likely to fall within the coloured range. The percentage corresponds to the average proportion of damaged buildings per canton.



All information is provided without warranty and is subject to change



Extent of building damage

Federal Office for the Environment FOEN

Federal Office for Civil Protection FOCP



What should you do after an earthquake? See http://www.seismo.ethz.ch/en/earthquakes/what-to-do More information is available at http://www.seismo.ethz.ch/en/home



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Explanations

The values given here regarding the anticipated consequences of an earthquake are automatically generated based on assumptions derived from the earthquake risk model of Switzerland (ERM-CH23) and do not reflect the actual situation. Consequently, the modelled values may vary considerably from the observed ones. Therefore, all information is provided without warranty and is subject to change.

The earthquake risk model of Switzerland was developed by the Swiss Seismological Service (SED) at ETH Zurich in collaboration with the Federal Office for the Environment (FOEN) and the Federal Office for Civil Protection (FOCP).

Overview	'MLhc' and 'Mw' are types of magnitude and describe the energy released during an earthquake and its strength respectively. The overview is a summary of key information about an earthquake and comprises standardised text elements that have been combined automatically.		Danger levels 1 to 5 were jointly defined by the federal agencies with responsibility for natural hazards. Danger level 1: no or minor danger Danger level 2: moderate danger Danger level 3: considerable danger Danger level 4: severe danger Danger level 5: extreme danger More information about danger levels is available here: https://www.natural- hazards.ch/home/dealing-with-natural-hazards/explanation-of-the-danger-levels.html This table summarises the most important earthquake parameters. Clicking on the link in the last row will take you to a page with more information about the earthquake in question on the website of the Swiss Seismological Service at ETH Zurich: www.seismo.ethz.ch
National	based on various data, including the peak ground accelerations and ground velocities recorded at the seismic stations, local site conditions, and empirical instrumental intensity models. The expected number of people seeking prof Estimated number of moderately to heavil Estimated occupancy of these buildings (i Estimated proportion of buildings that are The estimated costs of building damage end values: Estimated number of slightly, moderately The value of these buildings Estimated proportional loss of building val The estimated costs of building damage do n Movable building contents (chattels)		destroyed buildings egardless of the time of day or year) heavily damaged or destroyed buildings ake into account the following values: age to infrastructure (e.g. bridges, roads) secondary effects of an earthquake (e.g. landslides, rockslides, fire) ection in the short and longer term is derived from the following values: y damaged or destroyed buildings egardless of the time of day or year). no longer habitable due to damage ompass both structural and non-structural damage, and they are derived from the following and heavily damaged or destroyed buildings ue due to the damage caused <u>of</u> take into account the following values: e earthquake (e.g. landslides, rockslides, fire) construction work intinuity
Cantonal	 The estimated number of persons suffering minor to severe injuries is derived from the following values: Estimated number of moderately to heavily damaged or destroyed buildings Estimated occupancy of these buildings (regardless of the time of day or year) Estimated ratio of people injured in moderately to heavily damaged or destroyed buildings The estimated number of injured people does <u>not</u> take into account the following values: Injuries resulting from damage to infrastructure (e.g. bridges, roads) Injuries resulting from the secondary effects of the earthquake (e.g. landslides, rockslides, fire) 		 Damage to buildings falls within one of grades of damage (abbreviated to «DG»): Damage grade 1: Negligible to slight damage Damage grade 2: Moderate damage Damage grade 3: Substantial to heavy damage Damage grade 4: Very heavy damage Damage grade 5: Destruction The estimated damage to buildings takes into account all buildings at damage grade 2 or above. The damage to a building depends heavily on its construction and the nature of the local subsoil.

