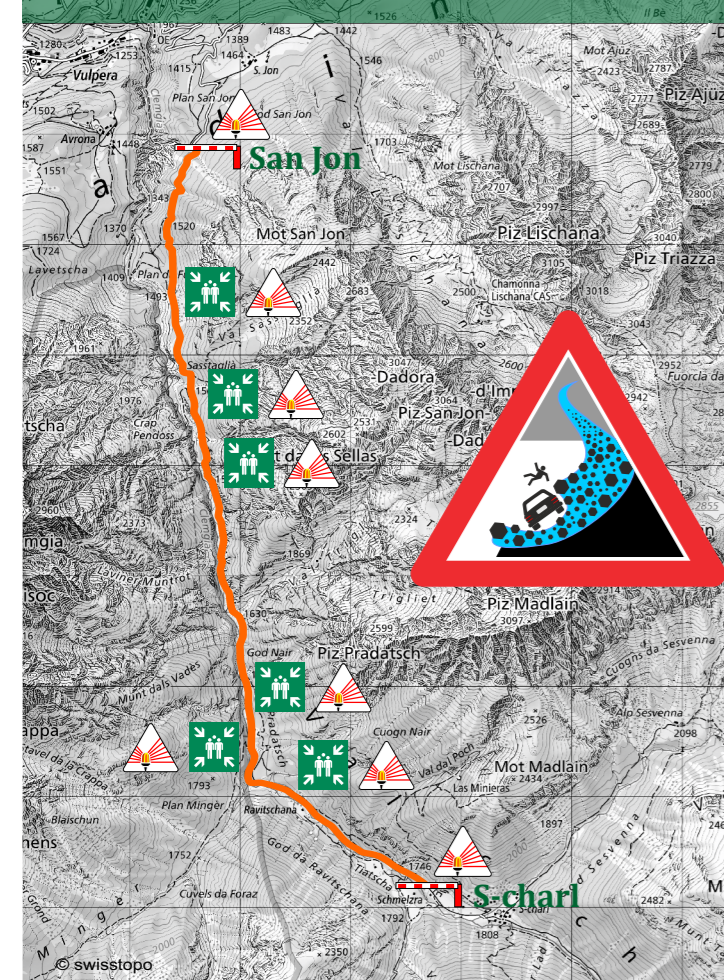


# Early warning system Scuol – S-charl connecting road More safety from life-threatening debris flows



**CUMÜN DA SCUOL**



Amt für Wald und Naturgefahren  
Uffizi da guaud e privels da la natira  
Ufficio foreste e pericoli naturali

## Previous occurrences

Debris flows have always occurred in Val S-charl. Debris flows are a mixture of sand, gravel, boulders, wood and water that move downhill at high speed and can cause major damage.

In 2015, 2017 and 2018, strong thunderstorms hit Val S-charl. They triggered debris flows that buried the road various times in multiple places.

Fortunately, no one was injured or killed on the busy road. However, road users were blocked by the debris flows. Some of them were only evacuated on the next day.



Debris flows  
Val S-charl,  
29 July 2017

## Forecast and warning

The greater the amount of rain that falls in Val S-charl in a given period of time, the higher the risk that the road section between San Jon and S-charl will be buried by debris flows.

On behalf of the municipality of Scuol, Meteo-Swiss is using a special precipitation radar to monitor how thunderstorm activities in Val S-charl develop over several hours.

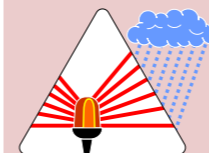
This involves estimating the amount of rain that falls during a certain time period. If the predicted amount exceeds a certain limit, the Scuol municipality's on-call organisation receives a warning text message.

## Measures

Based on the warning, the on-call organisation examines the local danger situation.

If she comes to the conclusion that the thunderstorm activity may lead to life-threatening debris flows that could bury the road, she immediately takes various precautionary measures:

- She closes two barriers.
- She activates warning lights.
- She sends out a text message.



**WHEN THE WARNING LIGHT IS ACTIVE, A STRONG THUNDERSTORM IS EITHER IMMINENT OR UNDERWAY IN VAL S-CHARL.**

## Barriers

The endangered road section is closed via remote-controlled barriers in San Jon and S-charl.

## Warning lights



Warning lights are activated. One is positioned at each of the barriers. Six more are positioned along the section of road between the barriers. They signal the location of so-called «safe waiting areas».

## SMS

All those who have subscribed to the text message info service of the municipality of Scuol will be sent a short info regarding the road closure (see section «Information»).

## Personal responsibility

Strong thunderstorms leading to large debris flows occur in Val S-charl mainly during the beginning of June until the end of October. This is why the «Val S-charl early warning system» is only active during the summer months. This means that only during these months does the on-call organisation close the endangered road section as a precaution, if so indicated.

During the rest of the year, it is the responsibility of road users to assess the risk posed by natural events and to adjust their behaviour accordingly.



**THIS THUNDERSTORM CAN TRIGGER LIFE-THREATENING DEBRIS FLOWS THAT MAY BURY THE ROAD.**

