SBB – Event Database

Adaptation of Railway Infrastructure to Climate Change
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Systematic recording & analysis of natural hazards along railway lines

- ➢ SBB railway lines frequently are exposed to natural hazards

- ➢ Rockfall, debris flow, landslide, wind ….

- ➢ High level of surveillance & preservation of the slopes along the lines
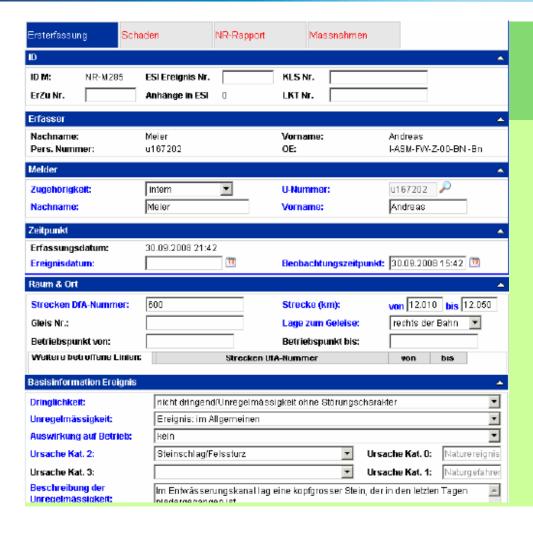
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Data recording using DERI NR

DERI NR - instrument to record and document natural hazards

➢ Central database

➢ Combination with historic data

➢ 2-step recording process:

1. Registration of key data of an event & submission

   to specialist

2. Full documentation by a specialist & evaluation

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**DERI NR
Graphical User IF**

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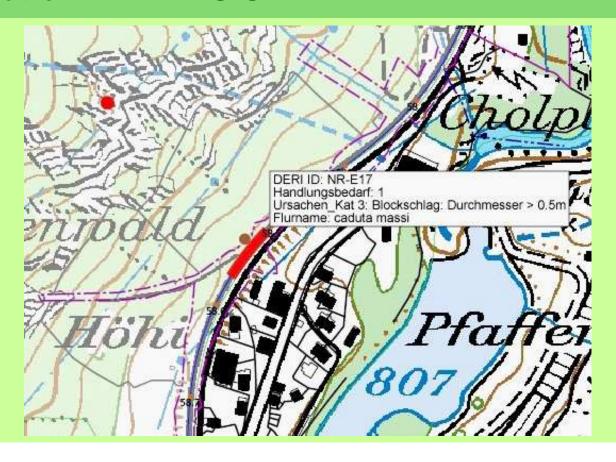
Visualisation in WEB GIS

WEB GIS - Instrument to visualise data from DERI NR
(after evaluation!)

➢ **Queries about ice falls and avalanches at the Gotthard line**

➢ **Natural hazard maps modeled by SILVAPROTECT (Bafu).**

➢ **Comparison with previous recordings in the area**

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Visualization in WEB GIS

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Outlook

- ➢ **Develop into data base for evaluation of risk sites**

- ➢ **Inventory & condition of protective systems**

- ➢ **Risk data, hazard maps & protection targets**

- ➢ **Help to plan the appropriate measures**

- ➢ **Tools for spatial data analysis**