Denne informasjonen fylles ut og sendes til geofaredagen@iv.ntnu.no

Send inn 1 abstract per prosjekt selv om dere er flere i gruppen. Ønsker du å holde muntlig presentasjon, kan du gjøre det individuelt – eller som gruppe. Både studenter, universiteter og næringsliv kan delta.

Presentasjon/Poster kan leveres på norsk eller engelsk.

Du blir kontaktet etter at avgjørelse om muntlige presentasjoner og antall postere et tatt.
Vi er svært takknemlige for bidrag!

Mitt innlegg, jeg foretrekker: (rediger etter hvilken presentasjonsform du foretrekker)

- Kun poster (A2 plakat henges opp)

Kontaktperson:

Fornavn og etternavn: Gaute Moe Fløan
E-post: gautemf@student.geo.uio.no
Studieretning/Fagfelt: Geofarer og geomekanikk
Universitet/Bedrift: UIO

Hvis flere medforfattere:

Jana Decker
Sindre Stø Hobber
Lucas Lima Raiol
Daan Stalenburg

Nøkkelord: (minst 5 nøkkelord, eks: geofarer, skred, erosjon, flom, ras)

1. Geohazards
2. Landslides
3. Førde
4. Infrastructure
5. Mitigations

Skriv sammendrag (Abstract) med minimum 200 ord, og maks 1 A4 side (2500 tegn, inkludert mellomrom) her:

Sammendrag / Abstract

Førde is located in the municipality of Sunnfjord, in western Norway, with circa 10 000 inhabitants. Førde is at the end of the Førdefjord and is surrounded by steep mountains. The combination of steep slopes and the wet climate of western Norway makes Førde very prone to geohazards, mainly in the form of landslide hazards. Therefore, NVE stressed the importance of analyzing the danger of geohazards in Førde. An external report was published which presents results of geohazard mapping in Førde. The report states that debris/slush flows and snow avalanches pose the greatest danger to the existing buildings. The results of the report show

respectively that seven, seventy-six and three buildings are located within annual nominal probability of 1/100, 1/1000 and 1/5000 hazards zones.

In this study the area was analysed as well, to obtain a complementary critical analysis of the hazard areas which also includes potential hazard regarding infrastructure. A map is created based on NVE and FBK data, to give an overview of the danger zones in Førde. Next, an analysis was carried out to obtain the amount of buildings and infrastructure within the different hazard zones and to evaluate the consequences. This analysis shows respectively: 5, 26 and 112 residential buildings; 0, 4 and 12 commercial buildings; and 2, 13 and 25 roads are located within annual nominal probability of 1/100, 1/1000 and 1/5000 hazards zones respectively. This investigation shows that mainly the residential buildings and roads are within the danger zones. Moreover, NVE's report suggests debris flows are most hazardous in this area. Therefore, considering mitigation measures in city planning is necessary. Besides avoiding to build in hazard zones, measures such as draining potential unstable hillslopes and constructing dams to protect roads and buildings are suggested. Moreover, for this area it is vital to protect roads to keep the city accessible. On top of that, advancing early warning systems is of high importance.