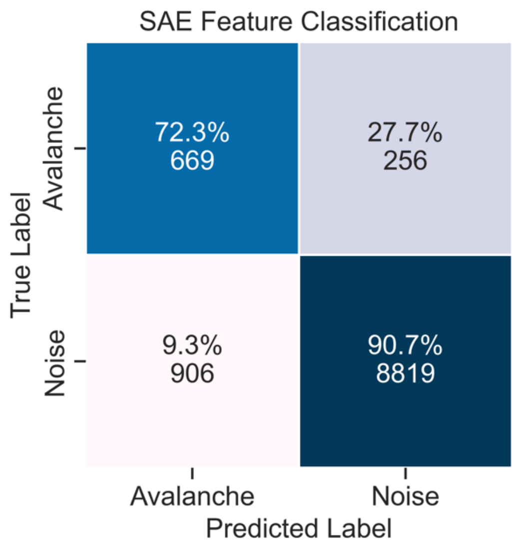
The paper is dealing with snow avalanche detection using autoencoded seismic data. It uses one study side in Davos and events were picked and the performance tested. The article is well written and of interest for publication. However, the following should be adressed.

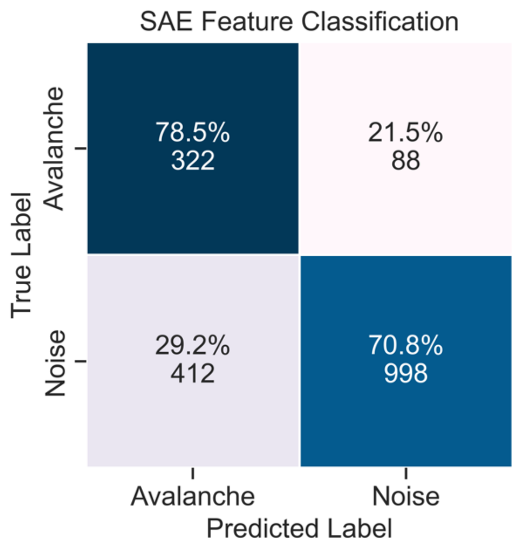
Discuss the effects of various avalanche types in relation to models and autoencoders. Explain how the findings can be applied to other study sites and what the specific considerations are in this context. That could be also highlighted in the comparison with the former studies.

The effect of different avalanche types on the performance indeed is not analysed in this study, since no information on avalanche type or size was available. The primary goal of this study was to develop a model for all occurring avalanches regardless of their type or size. Therefore, we carefully selected the train and test set to include both wet as well as dry avalanches. A closer examination of different avalanche types will certainly be the subject of future studies with more information available and larger avalanche catalogues. Nevertheless, to explore the impact of different avalanche types on the detection performance, we divided the test set into mid-winter dry-snow conditions, 6th of Feb to 15th of April, and late-winter wet-snow conditions, 15th of Apr to 17th of May. In the following figure, we plotted the results in the form of confusion matrices for the spectral autoencoder feature classification in both periods. The results show that wet-snow avalanches were detected slightly better than dry-snow avalanches at the Davos test site for this test set. However, the model appears to produce more false alarms in the late winter season, which might be due to rising environmental noise, the reduction of the snow cover and its attenuation and the rise of a nearby stream.
As the treatment of different avalanche types was not in the scope of this study, we will not include this test in the final version.

6th of February to 15th of April



15th of April to 17th of May



Since the models have not been tested with data from other sites, their transferability to different locations remains speculative. Seismic signals generated by avalanches exhibit common patterns, as demonstrated by earlier studies conducted in various countries such as Switzerland (Suriñach et al., 2001; van Herwijnen et al., 2011), Norway (Vilajosana et al., 2007), France (Lacroix et al., 2012), and Japan (Pérez-Guillén et al., 2019). However, the generation of seismic energy depends not only on the characteristics of the source (such as avalanche size and type) but also on site-specific factors (such as seismic site effects due to topography and geological characteristics) and the source-receiver distance, which affects the geometrical and anelastic attenuation of the waves (based on the sensor configuration relative to the avalanche path and terrain characteristics). Therefore, proper validation of the model performance using input data from different locations is necessary to assess their transferability to other test sites. We expect variation in the performance arising from different configurations in the study site setup, sensor location and configuration as well as in the characteristics of the terrain and the avalanches. Nonetheless, we see the importance of developing models that can be used in different locations and will certainly consider it in future studies.
Also, we will state this in the revised manuscript.

The conclusions and the further use should be more clear.
Please, avoid repetitions throughout the article.

Thank you very much, we will consider these suggestions in the final and revised manuscript.

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