

## **SEASONAL AND ANNUAL VARIABILITY OF SVALBARD CLOUD COVER**

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This study is focused on the seasonal and interannual variability of total cloudiness in the Svalbard and a comparative analysis of data obtained from three meteorological stations with the ERA5 reanalysis data. The results show that the amount of total cloud cover increases in summer, but the reanalysis data do not agree with the observations. Reanalysis overestimates the results compare to observations for cloudy sky conditions and the inconsistency decreases in summer. For clear sky cases it is an underestimation of reanalysis for all seasons except summer. A comparison of interannual cloud cover values also show inconsistency between the observation and reanalysis. The overestimation of cloudy sky conditions and the underestimation of clear sky cases are revealed for reanalysis. Analysis of spatial variability showed that the amount of total cloud cover decreases in the area of western and central Spitsbergen. The latitudinal dependence of the amount of total cloudiness was not revealed.