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Hints for using the WinterCZ app and the CCP method in the ITINERIS CZ VRE for winter CO₂ Fluxes calculations

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ABSTRACT

This report provides a synthesis regarding the procedures used to calculate winter CO₂ fluxes by using as dataset the measurements acquired by the sensors array installed at Ny Ålesund, Svalbard (“CZO@Bayelva”) in the framework of the PRA Winter-CZ Project. The report contains the details regarding the software application developed to automatically download and merge data for a specific period and process the data with specific CO₂ fluxes calculations that considers a mean value of snow density and the diffusivity of the CO₂ in the snow. Furthermore, details on the CCP method implemented in the ITINERIS CZ VRE are provided in this report.

Keywords: Critical Zone; ITINERIS CZ VRE; Winter CO₂ Fluxes

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