



## **Constructing a comprehensive cosmogenic chronology for the last British-Irish Ice Sheet - The BRITICE-CHRONO contribution.**

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The British-Irish Ice Sheet (BIIS) has been the subject of investigation for over 100 years yielding a large volume of legacy data. This includes >250 in-situ cosmogenic exposure ages, the vast majority of which are  $^{10}\text{Be}$  ages. These legacy dates were calculated using a variety of production rates for  $^{10}\text{Be}$  in quartz which were scaled to the appropriate locations using one or more of the available scaling schemes. Recent work has revised the  $^{10}\text{Be}$  production rate for the British Isles which requires that these dates are recalculated. In addition, there have been numerous advances in the preparation and measurement of cosmogenic nuclides using AMS. Given this it is likely that a re-assessment of the legacy data is required to have confidence in the accuracy and precision of the subsequent ages. These complimentary tasks form a core aim of the BRITICE-CHRONO project. In addition to assessing the legacy data set the BRITICE-CHRONO project will provide >150 new in-situ exposure ages from around the British Isles which can be combined with the screened legacy data to provide a database of ages which will provide important constraints on the evolution of the BIIS. By taking an integrated and holistic approach to data reduction, assessment and analysis we aim to create one of the most robust and complete cosmogenic chronologies of any former ice sheet. Here we present some preliminary examples of how this approach affects published exposure ages and impacts on our interpretation of these as well as outlining the future sample sites.