

## Past geomagnetic field reconstructions using cosmogenic radio nuclides in the Antarctic ice core

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Geomagnetic excursions provide information on field mechanics and serve as a chronostratigraphic tool. Interpretation of sedimentological paleointensity records is complicated, and volcanic rocks provide only non-continuous records. Another means for reconstructing paleomagnetic intensity is analyzing cosmogenic radio nuclides. In this study, we reconstruct the Blake and the Post-Blake as well as Laschamp Excursions using the cosmogenic radio nuclide  $^{10}\text{Be}$  in the Dome Fuji ice core. It has been reported that the Blake Excursion and the Post-Blake Excursion occurred within the Brunhes Chron, at around 115 ka and 100 ka, respectively. These two excursions occurred in quick succession. The Post-Blake Excursion is relatively poorly studied, only being reconstructed from sediments and volcanic rocks. Results indicate there is a significant peaks in  $^{10}\text{Be}$  flux that is thought to be reflect respectively the Blake and the Post-Blake Excursions. The maximum  $^{10}\text{Be}$  flux during the Post-Blake Excursion is similar to that of the Blake Excursion, suggesting that the geomagnetic dipole field during the Post-Blake Excursion weakened by the same amount as during the Blake Excursion. We also compare the results for the Laschamp Excursion that we also reconstructed from the same ice core to discuss the nature of individual excursions inferred from the cosmogenic radio nuclides data.