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**The AmC calibration source induced background at Daya Bay Experiment**

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The Daya Bay experiment has made the most precise measurement of the neutrino mixing angle theta13 and the first measurement of the effective mass splitting in the electron anti-neutrino disappearance channel based on the measured rate and spectral shape of anti-neutrinos from six nuclear reactors. A thorough understanding of the backgrounds is crucial for the measurement. Among all the backgrounds, one is caused by the AmC calibration source positioned on top of the anti-neutrino detectors, which has a much stronger impact at the far site. Much effort has been made to better evaluate this background and to constrain related systematics, including an in-situ measurement with a much stronger AmC source to directly measure the background spectra and benchmark our simulations. The details of this measurement and the evaluation of the AmC background will be presented in this poster.