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The iron abundance of the Magellanic Bridge

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ABSTRACT
High-resolution Hubble Space Telescope ultraviolet spectra for five B-type stars in the Magellanic Bridge and in the Large (LMC) and Small (SMC) Magellanic Clouds have been analysed to estimate their iron abundances. Those for the Clouds are lower than estimates obtained from late-type stars or the optical lines in B-type stars by approximately 0.5 dex. This may be due to systematic errors possibly arising from non-local thermodynamic equilibrium (non-LTE) effects or from errors in the atomic data, as similar low Fe abundances have previously been reported from the analysis of the ultraviolet spectra of Galactic early-type stars. The iron abundances from the Bridge samples are lower than those obtained for the Clouds by approximately 1–1.5 dex, indicating that the Bridge has lower iron content than the Clouds.