

Abstract Submitted
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SOLPS-ITER study of the relative roles of fueling and plasma transport on setting the density pedestal in high SOL opacity H-modes on Alcator C-Mod¹

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The formation of the density pedestal is found to be unaffected by high scrape-off layer neutral opacity in experiments performed on Alcator C-Mod, in H-mode regimes approaching ITER-like edge opacities[1]. To assess the roles of fueling vs transport, we use the SOLPS-ITER code to compute neutral density profiles for a high current (1.3MA) and reduced current (1.0MA) discharge. Simulated n_e and T_e profiles are matched to upstream empirical data by varying radial transport coefficient profiles, revealing

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