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Mark Holland and **Matthew Nicol*** (nicol@math.uh.edu), University of Houston, Houston, TX 77204-3008, and **Andrew Torok**. *Whitney regularity for solutions to the coboundary equation on Cantor sets.*

We prove Whitney regularity results for the solutions of the coboundary equation over dynamically defined Cantor sets satisfying a natural geometric regularity condition, in particular thick Cantor sets. To do this we prove an analogue of Journé's well-known result in the context of Cantor sets satisfying geometric regularity conditions. (Received July 30, 2007)