962-03-1015 **Gerald A Edgar** (`edgar@math.ohio-state.edu`), Department of Mathematics, 231 W. 18th Ave., Columbus, OH 43210, and **Chris Miller*** (`miller@math.ohio-state.edu`), Department of Mathematics, 321 W. 18th Ave., Columbus, OH 43210. *Real-closed analytic proper subfields of the reals have Hausdorff dimension zero.* Preliminary report.

The Hausdorff dimension of an analytic (also called Souslin or Suslin in the literature) subring of $\mathbb{R}$ either is equal to 1 or is at most $1/2$. There seems to be no reason to believe that this result is sharp. By combining model theory and geometric measure theory, we deal with a special case: If $K \subsetneq \mathbb{R}$ is analytic and a real-closed field, then the Hausdorff dimension of K is equal to 0. (Received October 01, 2000)

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