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Self-conformal sets with positive Hausdorff measure

We investigate the Hausdorff measure and content on a class of quasi self-similar sets that include self-conformal sets. We show that any Hausdorff measurable subset of such sets has comparable Hausdorff measure and Hausdorff content. In particular, we show that graph-directed and sub self-conformal sets with positive Hausdorff measure are Ahlfors regular, irrespective of separation conditions. We use this to resolve a self-conformal extension of the dimension drop conjecture for self-conformal subsets of the line with positive Hausdorff measure by showing that its Hausdorff dimension falls below the expected value if and only if there are exact overlaps.