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Depth of higher associated graded rings

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Let $(A, \mathfrak{m})$ be a Cohen-Macaulay local ring of dimension d and let I be an $\mathfrak{m}$-primary ideal. Let $G(I)$ be the associated graded ring of A with respect to I. By a result of Elias, $\operatorname{depth}(G(I^n))$ is constant for $n \gg 0$. We give techniques to determine when $\operatorname{depth}(G(I^n)) \geq 2$ or 3. We also determine the local cohomology modules of $H^i(G(I^n))$ for $n \gg 0$ and $i = 0, \ldots, d-1$ in the case when $G(I)$ is generalized Cohen-Macaulay.
