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Cohomological local connectedness of decomposition spaces.

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Let $f: X \rightarrow Y$ be a map between locally compact metrizable spaces and $\mathcal{H}^k(f)$ the associated k -dimensional cohomology sheaf. The authors use the Leray-Grothendieck spectral sequence to show that if the sheaves $\mathcal{H}^k(f)$ are locally constant and X is cohomologically locally connected, then Y is cohomologically locally connected. Results on homotopical local connectedness [G. Smale, same journal **8** (1957), 604–610; [MR0087106 \(19,302f\)](#)] can be recovered using a local version of the Hurewicz theorem.

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