1046-13-1308   **Evan Houston*** (`eghousto@uncc.edu`), Dept. of Mathematics and Statistics, UNC Charlotte, Charlotte, NC 28223, and **Abdeslam Mimouni** (`amimouni@kfupm.edu.sa`), Dept of Mathematical Sciences, P.O. Box 5046, King Fahd University of Petroleum & Minerals, Khahran, 31261, Saudi Arabia. *On the t-spectrum of a Noetherian domain.* Preliminary report.

We study the t-spectrum of a Noetherian domain. (For a Noetherian domain a prime ideal is a t-ideal $\Leftrightarrow$ it is divisorial $\Leftrightarrow$ it is an associated prime of a principal ideal.) We prove that there are Noetherian domains of arbitrary t-dimension (including ∞) and that every finite poset with minimum element occurs as a saturated subset of the t-spectrum of a Noetherian domain. A corollary of this latter result is that any finite amount of non-catenary behavior can occur in the t-spectrum of a Noetherian domain. Pullbacks play a vital role in our constructions. (Received September 15, 2008)