1024-13-117 **W. Hassler**, **R. Karr**, **L. Klingler** and **R. Wiegand***, Department of Mathematics, University of Nebraska, Lincoln, NE 68588-0130. *Monoids of modules over one-dimensional local rings.* Preliminary report.

Let $(R, \mathfrak{m})$ be a one-dimensional Noetherian local ring, and let $\mathcal{C}$ be a class of finitely generated R-modules closed under isomorphism and under finite direct sums. We let $\mathsf{V}(\mathcal{C})$ denote the monoid of isomorphism classes of modules in $\mathcal{C}$, with direct sum as the monoid operation. Let $\mathcal{F}(R)$ denote the class of modules M such that M_P is R_P-free for each prime ideal $P \neq \mathfrak{m}$. (Note that if R has no non-zero nilpotent elements then $\mathcal{F}(R) = R$-mod, the class of *all* finitely generated modules.) We give a complete set of invariants for the monoid $\mathsf{V}(\mathcal{F}(R))$ and discuss some open questions concerning the monoids $\mathsf{V}(R\text{-mod})$ and $\mathsf{V}(\mathfrak{M}(R))$, where $\mathfrak{M}(R)$ denotes the class of maximal Cohen-Macaulay R-modules. (Received January 04, 2007)