1126-13-223   **Ela Celikbas** and **Christina Eubanks-Turner** (`swiegand@math.unl.edu`), Lincoln, NE 68502, and **Sylvia M Wiegand*** (`swiegand1@unl.edu`), Department of Mathematics, 203 Avery Hall, University of Nebraska Lincoln, Lincoln, NE 68588-0139. *Prime ideals in mixed polynomial-power series rings.* Preliminary report.

We give a general description of the partially ordered sets that occur as Spec B, for some homomorphic image B of a three-dimensional mixed polynomial-power series ring over a field or over a one-dimensional Noetherian integral domain. More precisely, $B = R[y][\![x]\!]/Q$, $R[\![x]\!][y]/Q$ or $k[\![x]\!][z,y]/Q$, where R is a one-dimensional Noetherian integral domain, k is a field, x, y and z are indeterminates, and Q is a height-one prime ideal of the appropriate ring such that $x \notin Q$. We describe the partially ordered set $U := \operatorname{Spec} B$. If the field k, respectively the ring R, is countable, then $\operatorname{Spec}(k[\![x]\!][z,y]/Q)$, respectively $\operatorname{Spec}(R[y][\![x]\!]/Q)$, are characterized. (Received January 15, 2017)

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