1053-13-367      **Roger A Wiegand** (`rwiegand@math.unl.edu`), Dept. of Mathematics, University of Nebraska Lincoln, Lincoln, NE 68502, and **Sylvia M Wiegand\*** (`swiegand@math.unl.edu`), Dept. of Math., University of Nebraska Lincoln, Lincoln, NE 68502. *Prime ideals in power series rings.*

We discuss the structure of the set of prime ideals in certain two-dimensional domains of power series. In particular we complete a characterization, partially given earlier by the second author with Heinzer and Rotthaus, of the partially ordered set of R[[y]], where R is a one-dimensional Noetherian domain and y is an indeterminate over R. We also describe some spectra that arise for birational extensions of such rings. The latter is work from the Ph.D. thesis of Eubanks-Turner with the second author, which was completed with the help of Luckas and Saydam. (Received September 11, 2009)