1044-54-116 William S. Mahavier* (wsm@emory.edu), Department of Mathematics and CS, Emory University, Atlanta, GA 30322, and W. T. Ingram. Inverse limits with upper semi-continuous functions.

If X_1, X_2, X_3, \ldots is a sequence of compact Hausdorff spaces and $\mathbf{f} = f_1, f_2, f_3, \ldots$ where for each positive integer i, f_i is an upper semi-continuous function from X_{i+1} into 2^{X_i} , the inverse limit of \mathbf{f} is the subset of $\prod_{i>0} X_i$ consisting of all points x_1, x_2, x_3, \ldots such that for each $i, x_i \in f_i(x_{i+i})$. We will discuss this new type of inverse limit, give some examples, and discuss the contents of a book being written by Tom Ingram and myself that includes generalizations to partially ordered sets. (Received August 26, 2008)