On étale effective descent morphisms in M-Ord

Abstract: Following the results given in [1] for **Preord** and in [2] for **Cat**, we characterize the effective étale-descent morphisms in M-**Ord**, the category of M-ordered sets for a given monoid M. Furthermore we show that every effective global-descent morphism is an effective étale-descent morphism (while the converse is false) and we generalize it to a more general context of relational algebras.

[1] G. Janelidze and M. Sobral, Finite preorders and topological descent II: étale descent, *J. Pure Appl. Algebra* **174** (2002), 303-309.

[2] M. Sobral, Descent for Discrete (Co)fibrations, *Appl. Categ. Structures* **12** (2004), 527-535.