1096-VJ-2389 **Emma Norbrothen*** (emnorbrothen@plymouth.edu). *On Classifying the Double Cosets* $H_k \backslash G_k / H_k$ *of* $\mathrm{SL}(2,k)$.

A symmetric space is defined as the homogenous space G/H, where G is a reductive group and H is the fixed point group of an involution. The generalization to arbitrary fields is called a symmetric k-variety, which is similarly defined as the G_k/H_k, where G_k and H_k are the k-points of G and H, and k is not necessarily algebraically closed. The action of H_k on G_k/H_k can be seen as the double cosets $H_k \backslash G_k / H_k$. We are classifying this action for $G = \mathrm{SL}(2,k)$, with an emphasis on the finite and p-adic fields. (Received September 17, 2013)