1125-20-1160 **Mark C Hunnell*** (hunnellm@wssu.edu). *Generalized Symmetric k-Varieties Corresponding to Finite Order Automorphisms.* Preliminary report.

For a field k, symmetric k-varieties are a generalization of the real reductive symmetric spaces with applications in many areas of mathematics including representation theory, number theory, and geometry. Symmetric varieties are the homogeneous spaces G/H, where G is a reductive algebraic group and H is an open subgroup of the fixed points of an involutorial automorphism, the symmetric k-varieties generalize these spaces to arbitrary fields. We provide some results when H is replaced by the fixed points of an arbitrary finite order automorphism. (Received September 15, 2016)