1067-Z1-1568 **Jody Sorensen\***, Department of Mathematics, Augsburg College, 2211 Riverside Ave, Minneapolis, MN 55454. *The Real Story of Edward Lorenz.* 

Mathematical lore describes how, in using a computer to model the weather, Edward Lorenz discovered sensitive dependence on initial conditions, one of the hallmarks of chaos. This behavior is often referred to as the butterfly effect. This then led to the Lorenz system of differential equations and its strange attractor. The truth, as always, is a little more complicated. In this talk we will clarify the truth behind the legend of the origins of chaos. (Received September 21, 2010)