Results of the First TOF Mass Measurements at NSCL M. MATOS, A. ESTRADE, M. AMTHOR, D. BAZIN, A. BECERRIL, T. ELLIOT, D. GALAVIZ, A. GADE, G. LORUSSO, J. PEREIRA, M. PORTILLO, A. ROGERS, H. SCHATZ, A. STOLZ, MSU, D. SHAPIRA, ORNL, E. SMITH, OSU, M. WALLACE, LANL — Time-of-Flight mass measurements technique, recently developed at the NSCL, MSU, was used to measure masses of exotic neutron-rich nuclides in the Fe region, important for r-process calculations as well as for calculations of processes occurring in the crust of accreting neutron stars. Results from the experiment will be presented and discussed.