HIGH-ENERGY DEUTERON MEASUREMENT WITH THE CAPRICE98 EXPERIMENT

E. Vannuccini for the WiZard/CAPRICE collaboration

INFN Section and Physics Department, University of Florence, Italy. vannucci@fi.infn.it

The CAPRICE98 experiment was flown on 28-29 May 1998 from Fort Sumner, New Mexico, USA. The detector configuration included the NMSUWiZard/CAPRICE magnetic spectrometer equipped with a gas RICH detector, a silicon-tungsten calorimeter and a time-of-flight system. By combining the RICH and the spectrometer information it was possible to separate $^2\mathrm{H}$ from $^1\mathrm{H}$ in the rigidity range from 30 to 40 GV. We describe the method of analysis and we report results on the $^2\mathrm{H}$ abundance.