

Abstract Submitted  
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**Nuclear Data Compilation for Beta Decay Isotope** SUSAN OLMSTED<sup>1</sup>, East Tennessee State University, JOHN KELLEY<sup>2</sup>, North Carolina State University, GRACE SHEU<sup>3</sup>, Duke University — The Triangle Universities Nuclear Laboratory nuclear data group works with the Nuclear Structure and Decay Data network to compile and evaluate data for use in nuclear physics research and applied technologies. Teams of data evaluators search through the literature and examine the experimental values for various nuclear structure parameters. The present activity focused on reviewing all available literature to determine the most accurate half-life values for beta unstable isotopes in the  $A=3-20$  range. This analysis will eventually be folded into the ENSDF (Evaluated Nuclear Structure Data File). By surveying an accumulated compilation of reference articles, we gathered all of the experimental half-life values for the beta decay nuclides. We then used the Visual Averaging Library, a data evaluation software package, to find half-life values using several different averaging techniques. Ultimately, we found recommended half-life values for most of the mentioned beta decay isotopes, and updated web pages on the TUNL webpage to reflect these evaluations. To summarize, we compiled and evaluated literature reports on experimentally determined half-lives. Our findings have been used to update information given on the TUNL Nuclear Data Evaluation group website.

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