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Systematic Search for Waiting Points in Nova Explosions ALEXANDER BENNETT, University of Chicago, 5801 South Ellis Avenue, Chicago, IL 60637, USA, MICHAEL SMITH, RAPHAEL HIX, Physics Division, Oak Ridge National Lab, Oak Ridge, TN 37831, USA, TOMOMI SUNAYAMA, Yale University, New Haven, CT 06520, USA — To better understand the element synthesis and energy generation occurring in novae, we have executed a systematic search for waiting point nuclei. We used the waiting point finder tool within the Computational Infrastructure for Nuclear Astrophysics (CINA), an online suite of nuclear astrophysics codes that sets up, executes, and create visualizations of explosion simulations, to run a series of over five hundred post-processing nova simulations of different models, spatial zones, and time windows. We compiled a database of waiting points complete with a variety of search queries and a visualization tool to graphically aid in understanding nova explosions. We will report on our analysis of this waiting point dataset for trends across mass regions, zones, and time windows, and our searches for waiting points common to a variety of simulations.

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