Sensitivity study for the $^{12}$C($\alpha$, $\gamma$) $^{16}$O astrophysical reaction rate

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Fig. 4. The s-process path through the isotopes of tin. The neutron number increases by units of one on a slow time scale until negative beta activity occurs and the path moves to the isobar of higher Z. This path can be determined from empirical evidence on the beta stability of nuclei. Note that the path bypasses the p-process and the r-process nuclei. The r-process nuclei are the end products of an isobaric beta-decay chain as shown at the far right from neutron-rich progenitors produced in an intense neutron flux. The p-process nuclei are produced by subjecting a small fraction of s and r-process nuclei to an intense proton or photon flux.
overall solar system abundances
solar system - s process (model)

from Arnould et al. 2007, Physics Reports, 450, p. 97
solar system - r process

from Arnould et al. 2007, Physics Reports, 450, p. 97
CS 22892-052 ([Fe/H] = -3.1, Sneden et al. 2003)

translated solar r-pattern (Arlandini et al. 1999)

from Qian & Wasserburg 2007, Physics Reports, 442, p. 237
from Arnould et al. 2007, Physics Reports, 450, p. 97