

*[GRL]*

Supporting Information for

Evaluating the glacial-deglacial carbon respiration and ventilation change hypothesis as a mechanism for changing atmospheric CO2

**Lowell D. Stott1, Jun Shao1, Jimin Yu2, and Kathleen M. Harazin2**

**1Department of Earth Sciences, University of Southern California, 3651 Trousdale Pkwy, Los Angeles, CA 90089**

**2Research School of Earth Sciences, The Australian National University, Canberra, ACT 2601, Australia**

**Contents of this file**

Figures S1 to S2

**Introduction**

The supplemental figures referred to in the manuscript.

A close up of a logo

Description automatically generated

Supplemental Figure S1. GLODAP transect of d13CDIC (upper panel) 14C (middle panel) through the Pacific. The location and depth of the MD98-2181 site is marked with a red X.

A close up of a map

Description automatically generated

Supplemental Figure S2. Upper panel planktic 14C (red) and benthic 14C (green) with the Mar20 14C record (blue). The quivers represent the combined age (horizonal) and radiometric (vertical) uncertainties (1σ). Lower panel shows MD98-2181 benthic ε14C (green) and the values from the LOVECLIM simulation of Menviel et al. (2018) (black). The shaded intervals mark the increases during the H1 and YD.