## **1** Supplementary Material for:

## 2 Reduced Carbon Cycle Resilience across the

## **3** Palaeocene-Eocene Thermal Maximum

## 4 David I. Armstrong M<sup>c</sup>Kay<sup>\*1,2</sup> & Timothy M. Lenton<sup>3</sup>

<sup>5</sup> <sup>1</sup>Ocean and Earth Science, University of Southampton, National Oceanography Centre

6 Southampton, Southampton, SO14 3ZY, UK

<sup>2</sup> Stockholm Resilience Centre, Stockholm University, Kräftriket 2B, SE-10691 Stockholm, Sweden
(current address)

<sup>9</sup> <sup>3</sup>Earth System Science group, College of Life and Environmental Sciences, University of Exeter,

10 Exeter, EX4 4QE, UK

11 <u>\*david.armstrongmckay@su.se</u>



Figure S1: Sensitivity analysis of EWS rolling window metrics of benthic  $\delta^{18}$ O (left) and  $\delta^{13}$ C (right) in the run-up to the PETM. 'Default' results (black) are compared with non-interpolated (blue), 25 % rolling window (red), and 75 % rolling window (green) results.



Figure S2: Sensitivity analysis of EWS rolling window metrics of benthic  $\delta^{18}$ O (left) and  $\delta^{13}$ C (right) across the PETM and ETM2. 'Default' results (black) are compared with non-interpolated (blue), 25 % rolling window (red), and 75 % rolling window (green) results.