Enzo-P Weak Scaling on Blue Waters: Time Alphabet Soup Test (with tracer particles): 161110 10<sup>2</sup> 10<sup>1</sup> 10<sup>0</sup> Time (s) 10<sup>-1</sup> 10<sup>-2</sup> refresh time stopping compute 10<sup>-3</sup> adapt time refresh sync total adapt sync 10-4 10<sup>2</sup>  $10^{\overline{0}}$ 10<sup>3</sup>  $10^{4}$ 10<sup>5</sup> 10<sup>1</sup> 10<sup>6</sup> Processes (FP cores)