

## Auxiliary Material for

# A multiyear, global gridded fossil fuel CO<sub>2</sub> emissions data product: evaluation and analysis of results

S. Asefi-Najafabady<sup>1</sup>, P. J. Rayner<sup>3</sup>, K. R. Gurney<sup>1,2</sup>, A. McRobert<sup>3</sup>, Y. Song<sup>1</sup>, K. Coltin<sup>1</sup>,  
J. Huang, C. Elvidge<sup>4</sup>, K. Baugh<sup>4</sup>

1. School of Life Sciences, Arizona State University, Tempe, AZ 85287

2. Global Institute of Sustainability, Arizona State University, Tempe, AZ 85287

3. School of Earth Sciences, University of Melbourne, 3010, Vic, Australia

4. National Geophysical Data Center (NGDC), National Oceanic and Atmospheric  
Administration (NOAA), 325 Broadway, Boulder CO 80305, USA.

*Journal of Geophysical Research - Atmosphere*  
2013

### **Introduction:**

This text contains:

**1.** Techniques developed to estimate power plant emissions and uncertainties used  
as prior input to FFDAS.v2.

**2.** Supporting materials for Section 3.4 of the manuscript (analysis and figure  
demonstrating that observed patterns of FFDAS CO<sub>2</sub> emissions anomalies closely follow  
patterns of nighttime lights anomalies).