**Data sets used in the analysis presented in the manuscript** “Potential Local to Regional Scale Impacts from Wildfire Re-emission of Hypothetical Radiological Contamination Incidents”

The datasets used for the analysis presented in this manuscript were provided by researchers in EPA/ORD. The data supporting each of the Figures in the manuscript were provided in a file specific for that Figure, so there is one file for each Figure. Each file is in comma-separated value (csv) format and contains observation data used to generate that Figure. Some of the files contain a header (more details below) and some are an array of data matching the grid(s) shown in the Figure.

**Figure 1** is a stylistic representation of hypothetical incidents and does not have underlying quantitative data.

**Figure 2**

(Figure2\_panel1.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=100 and NROW=100

(Figure2\_panel2.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

(Figure2\_panel3.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

**Figure 3**

(Figure3.csv):

Column 1: scenario

Column 2: compound

Column 3: distance from fire (km)

Column 4: impact (Bq/m3)

**Figure 4**

(Figure4\_panel1.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=100 and NROW=100

(Figure4\_panel2.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=100 and NROW=100

(Figure2\_panel3.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

(Figure2\_panel4.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

(Figure2\_panel5.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

(Figure2\_panel6.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

**Figure 5**

(Figure4\_panel1.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=100 and NROW=100

(Figure4\_panel2.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=100 and NROW=100

(Figure4\_panel3.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=100 and NROW=100

(Figure2\_panel4.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

(Figure2\_panel5.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

(Figure2\_panel6.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

**Figure 6**

(Figure2\_panel1.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

(Figure2\_panel2.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

**Figure S1**

(FigureS1\_top\_panel.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=281 and NROW=299

(FigureS1\_bottom\_panel.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

**Figure S2**

(FigureS2\_panel1.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=50 and NROW=50

(FigureS2\_panel2.csv):

Column 1: latitude

Column 2: longitude

Column 3: bias (m/s)

(FigureS2\_panel3.csv):

Column 1: month

Column 2: wind displacement (km)

(FigureS2\_panel4.csv):

Column 1: latitude

Column 2: longitude

Column 3: bias (km)

**Figure S3**

(FigureS3\_panel1.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=50 and NROW=50

(FigureS3\_panel2.csv):

Column 1: latitude

Column 2: longitude

Column 3: bias (m/s)

(FigureS3\_panel3.csv):

Column 1: month

Column 2: wind displacement (km)

(FigureS3\_panel4.csv):

Column 1: latitude

Column 2: longitude

Column 3: bias (km)

**FigureS4**

(FigureS4.csv):

Column 1: hour of the day

Column 2: observed (m)

Column 3: predicted (m)

**Figure S5**

(FigureS5\_panel1.csv):

Column 1: distance downwind (km)

Column 2: deposition (Bq/m2)

(FigureS5\_panel2.csv):

Column 1: distance downwind (km)

Column 2: deposition (Bq/m2)

(FigureS5\_panel3.csv):

Column 1: distance downwind (km)

Column 2: deposition (Bq/m2)

(FigureS5\_panel4.csv):

Column 1: distance downwind (km)

Column 2: deposition (Bq/m2)

**Figure S6**

(FigureS6\_panel1.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=100 and NROW=100

(FigureS6\_panel2.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=100 and NROW=100

(FigureS6\_panel3.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

(FigureS6\_panel4.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=100 and NROW=100

(FigureS6\_panel5.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=225 and NROW=325

(FigureS6\_panel6.csv): Array of data provided for each grid cell that is NROWxNCOL where NCOL=100 and NROW=100