Figure 1: ArcGIS 9 and above (<https://www.esri.com/en-us/arcgis/products/arcgis-online/overview>) can read the ESRI file geodatabase (GDB file) and was used to create this map. Additionally the R statistical language (<https://www.r-project.org/>) using the R rgdal library (<https://cran.r-project.org/web/packages/rgdal/index.html>) and also be used to read this data. R and the Raster library can be downloaded and installed at no cost.

Figures 2 – 7: NCAR Command Language (NCL) was used render these figures (<https://www.ncl.ucar.edu/get_started.shtml>). NCLD code can be downloaded from the NCAR website (<https://www.ncl.ucar.edu/Download/>) at no cost.

Fig\_1.zip: This file contains the ESRI file geodatabase files for the base land use used in these simulations.

Figs\_2-3.zip: Contains a base folder with WRF output using the base landuse and a sens folder with output using the green infrastructure land use. These folders contain NetCDF files with hourly data for each of the three months used in developing the figures. The files are named wrfout\_d01\_2011-XX. Where XX is the month of the simulation, e.g. 06 for June. The variable names, projection, and units are all defined in the global fields of the NetCDF file.

Figures 4 - 5: The data used to create these figures are too large, 120 GB total, to archive on science hub. These data have been archived on EPA’s ASM archival system and can be made available upon request.

Fig\_6.zip: Contains a base folder with CMAQ output using the base landuse and a sens folder with output using the green infrastructure land use. These folders contain NetCDF files with hourly data for each of the three months and each O3 metric used in developing the figures. The files are named CCTM\_ACONC.2011XX.O3.hourly.total.O3 Metric.nc. Where XX is the month of the simulation, e.g. 06 for June and O3 Metric is the mean, 8-hour daily max, or 1-hour daily max. The variable names, projection, and units are all defined in the global fields of the NetCDF file.

Fig\_7.zip: Contains a base folder with CMAQ and WRF with the PX land surface scheme output using the base landuse and a sens folder with output using the green infrastructure land use. These folders contain NetCDF files with hourly data for each of the three months used in developing the figures. The WRF files are named wrfout\_d01\_2011-XX. Where XX is the month of the simulation, e.g. 06 for June. The CMAQ files are named with the abbreviated month and the ozone data contained in the file, e.g. hourly mean, 1 hour max, etc. The variable names, projection, and units are all defined in the global fields of the NetCDF file.

Archive metadata

The modeled data in these archives are in the NetCDF format (<https://www.unidata.ucar.edu/software/netcdf/>). NetCDF (Network Common Data Form) is a set of software libraries and machine-independent data formats that support the creation, access, and sharing of array-oriented scientific data. It is also a community standard for sharing scientific data. The Unidata Program Center supports and maintains netCDF programming interfaces for [C](https://www.unidata.ucar.edu/software/netcdf/docs/), [C++](https://www.unidata.ucar.edu/software/netcdf/docs/), [Java](https://www.unidata.ucar.edu/software/thredds/current/netcdf-java/), and [Fortran](https://www.unidata.ucar.edu/software/netcdf/docs-fortran/). Programming interfaces are also available for Python, IDL, MATLAB, R, Ruby, and Perl.

Data in netCDF format is:

* **Self-Describing.** A netCDF file includes information about the data it contains.
* **Portable.** A netCDF file can be accessed by computers with different ways of storing integers, characters, and floating-point numbers.
* **Scalable.** Small subsets of large datasets in various formats may be accessed efficiently through netCDF interfaces, even from remote servers.
* **Appendable.** Data may be appended to a properly structured netCDF file without copying the dataset or redefining its structure.
* **Sharable.** One writer and multiple readers may simultaneously access the same netCDF file.
* **Archivable.** Access to all earlier forms of netCDF data will be supported by current and future versions of the software.