Section 11 Website data uploading & sharing

General summary: Our website Spartan-network.org allows us to share all of the QA/QC processed data. This includes ambient humidity and temperature, hourly $PM_{2.5}$ data, major anions (e.g. ammonium sulfate & nitrate) and $PM_{2.5}$/AOD ratios suitable for GEOS-Chem validations. Other variables may be added to be shared on the website in the future.

Website was created by Jason Hopper (Jason.t.hopper@gmail.com). Server is a laptop located in DUPS storage room.

Uploading website data

1. Go to Spartan-network.org
2. Log in (username: Spartan, password: $p@RtaN)
3. Click on Data tab in upper right corner
4. Click on Data Upload in lower right corner
5. Select site. *Make sure you have selected correct site!*
6. Select file (of the form PM25_[start date]_[end date]_[site name/code]). Do not change defaults for datetime pattern or Delimeter.
7. Wait for a few minutes a uploading data takes time (perhaps 30s per kilobyte?)

SPARTAN

HOME DATA ADMIN

An Emerging Global PM$_{2.5}$ Network

SITES

Atlanta, USA
Bandung, Indonesia
Beijing, China
Buenos Aires, Arg...
Dhaka, Bangladesh

SPARTAN

Ground based observations have insufficient coverage at the global scale to allow assessment of long-term human exposure to fine particulate matter (PM2.5). Thus, we are developing SPARTAN (Surface PARTiculate mAtter Network), a network of ground based measurements of fine particle concentrations to evaluate and enhance satellite remote sensing estimates that can be applied in health effects research and risk assessment. The network includes a global federation of ground level monitors of hourly PM2.5, primarily in highly populated regions in close proximity to existing ground based sun photometers that measure aerosol optical depth. Data is publically available.

SITES

Atlanta, USA
Bandung, Indonesia
Beijing, China
Buenos Aires, Arg...
Dhaka, Bangladesh
Halifax, Canada
Ilorin, Nigeria
Kanpur, India
Mammoth Cave NP, USA
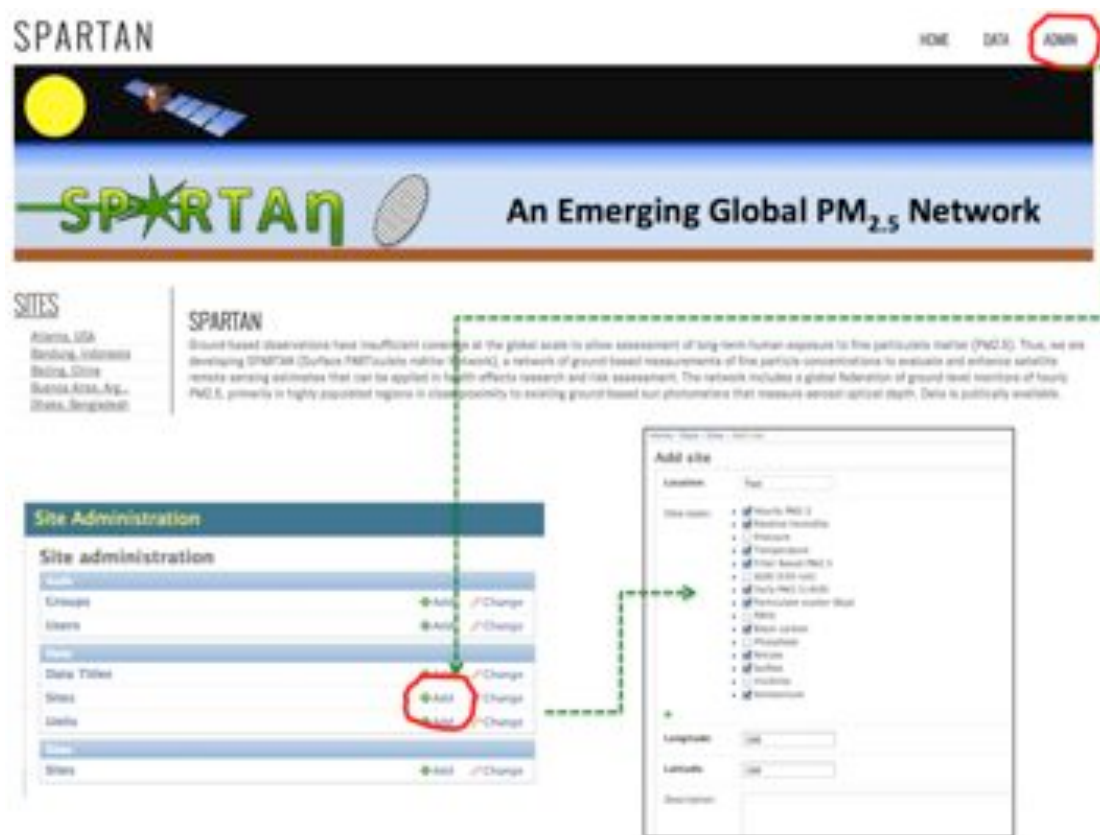Manila, Philippines
Rehovot, Israel

QUICK LINKS

The Data

Plotting data

1. Go to Spartan-network.org
2. Click on Data tab in upper right corner
3. Click on Plot Data in lower right corner
4. Select site and date range
5. Plots of data will be displayed.
6. To download data, click "Download Data" in lower right corner of plots

Adding a site

1. Go to Spartan-network.org
2. Log in (username: Spartan, password: $p@RtaN)
3. Click on Admin tab in upper right corner
4. Go to Sites => +Add
5. Choose variables
    a. Hourly PM2.5
    b. RH
    c. Temp
    d. Filter PM2.5
    e. Daily PM2.5/AOD (eta)
    f. Particulate scatter (550nm)
    g. BC
    h. Nitrate
    i. Sulfate
    j. Ammonium
6. Enter Lat/long coordinates (decimal form)
7. Add description (follow format of other sites)
8. Enter principal investigator (PI) name and email
9. Add photo (representative of site, with SPARTAN instruments visible)

Adding units,

We should have all the units necessary. For greek letters and other symbols, we use the following unicode:

Superscript 3 (^{3}): \u00B3
Mu (μ): \u03BC
Degrees (°): \u00B0
Superscript minus one ($^{-1}$): \u207B\u00B9
Subscript 2.5 ($_{2.5}$): \u2082.\u2085

Data titles,

Go to Data. Under Data Titles choose => "+Add".

The following entries appear: Title, Latex, TitleLatex, Dbname, Units, Order, and Headliner
1. **Title** is title of internal database itself
2. **Latex & TitleLatex:** Title (using Unicode) displayed above plotted graphs
3. **DbName:** Name in "uploaded" data file. Must be exactly matching
4. **Units:** Choose appropriate units
5. **Order:** Choose order displayed in collection of graphs
6. **Headliner:** Don't change this one