From: Dean Atkinson
To: Martin Zwick
Subject: Re: environmental data
Date: Thursday, April 02, 2015 11:44:41 AM

We do an aerosol optical property measurement (for air quality/climate change applications). It is aerosol extinction (of the ambient aerosol) as a function of time in California (or Houston) over the course of a few weeks.

Dean

On Thu, Apr 2, 2015 at 9:48 AM, Martin Zwick <zwick@pdx.edu> wrote:

> Dean,
>
> Can you tell me just a *little* more about what these field campaigns are, so students who might be interested might have a better idea of what your data is about.
>
> -Martin
>
> **From:** Dean Atkinson [mailto:atkinsdb@pdx.edu]
> **Sent:** Thursday, April 02, 2015 8:21 AM
> **To:** zwick@pdx.edu
> **Subject:** Re: environmental data
>
> Marty,
>
> I saw Alan's message and wanted to let you know that we have data (lots) from a couple of field campaigns that we participated in. If your students wanted to take a crack at it, that would be fine with me. (I could also put them on to sources that described the conditions - but it might be fun to see what they come up with if they start without any context.)
>
> Dean
>
> On Wed, Apr 1, 2015 at 2:59 PM, Alan Yeakley <yeakley@pdx.edu> wrote:
>
> Hi all,
>
> Please see the below from Marty Zwick, and contact him directly if this is of interest.

Sounds like a very good offer to me!

Alan

---------- Forwarded message ----------
From: **Martin Zwick** <zwick@pdx.edu>
Date: Mon, Mar 30, 2015 at 6:30 PM
Subject: environmental data
To: Alan Yeakley <yeakleya@pdx.edu>

Alan,

As you probably know, I teach my Data Mining with Information Theory (DMIT) class this quarter, where students bring data that we analyze with my information theory methodology (and the Occam software that we've developed here in SySc). Occasionally, students take the course without any data of their own, and ask me if I have data that they could analyze. At the moment, if anyone asks me this, I mention that I have data from Andrew Fountain on glaciers and that I also have in principle access to the hydrological data that Michael Fienen of the Wisconsin USGS is working on (he's indicated an interest/willingness to collaborate). I've also referred one student who is interested in forest fires to Rob Scheller in case Rob might have some data.

I just wanted to ask you if there are other people in SoE/ESM who have or might have data that DMIT students could possibly use for their projects if they don't have data of their own. The kind of data that I can analyze is 'rectangular' spreadsheet data, where columns are variables, either continuous valued or discrete (nominal), and where rows are 'cases', typically members of some population or time (or even space) points. The number of rows, i.e., the sample size, should be in the 100s ideally, or certainly greater than 50. Values of N in the 1000s or more are, of course, even better. My methods can handle up to a few 100s of variables. They make sense if one has at least 4 or 5 variables. The approach is exploratory, i.e., aimed at discovering relations that are unknown, i.e., not hypothesized in advance. (People can use Occam to do confirmatory tests of theory-based hypotheses, but that isn't the point – or the advantage -- of the software.)

Please let me know if you know of SoE people who have data and aren't totally satisfied with the methods they're using to analyze this data. (If a person is totally satisfied in the analytics techniques they currently use, obviously they wouldn't be interested in trying a new method.) It would be nice to be able to add more names of possible data sources, if anyone comes to me looking for data for a project.

And, of course, I'd love to have more SoE students taking DMIT (and the theory course, DMM), so please mention this course to any students you think might be interested.

-Marty

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