From: Max Nielsen-Pincus
To: "Martin Zwick"
Subject: RE: environmental data
Date: Wednesday, April 01, 2015 4:28:51 PM

Hi Marty –

I have lots of data that fit your criteria that could be of use to one of your students. In particular I have a number of datasets that from social surveys that contain multiple variables on attitudes, behaviors, beliefs, values, demographics, etc. related to natural resource management, where individual cases (rows) are survey respondents (typically landowners, but some other populations too). Another dataset I have that could be interesting is output from simulations of a social-ecological systems model. Variables include data like area in different land covers, area burned wildfire, number of housing units, number of housing units threatened by wildfire, area in different land use zones, area treated by different management activities, etc. The model is temporal and spatial, so the data can be aggregated up to landscape level data at the end of the run (1 row per simulation), or disaggregated into different rows for each years (50 rows per simulation), or disaggregated by space (~86,000 spatial units), or disaggregated by both space and time (up to about ~2.5 billion lines; too much to deal with!).

I'd be happy to contribute any of the datasets to a student in need. Who knows what they would find. Let me know any of this sounds at all useful. Thanks,

Max

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From: Alan Yeakley [mailto:yeakley@pdx.edu]
Sent: Wednesday, April 01, 2015 3:00 PM
To: SOE-Affiliated-Group; SOE-Faculty-Group; Martin Zwick; Wayne Wakeland
Subject: Fwd: environmental data

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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