Hi – I’m really excited to find your data. Please send me the annual averages for Uganda.

Gosh, all we’ve got is gridded data. If you program, you can identify the grid boxes ...

I’ve used Excel.
Barriers:

- need source of shapefiles
- need code to compute average over the shapefile
- web-server-based system or provide code?
Several groups now discussing this at NASA/Goddard:

• need source of shapefiles
  - at least one set of open-source country and finer political subdivisions
    diva-gis.org and gadm.org
  - standard river basin/sub-basin shapefiles are available
  - developing code to create custom basins from any location on a river
• need code to compute shapefile average
  - pursuing parallel paths in ARCGIS and stand-alone (python) code
  - NCL, Matlab also support this
  - investigating approximate solution with GrADS
  - key for me is knowing exactly what is done along the boundaries
• web server-based system or provide code?
  - many users lack the programming skills to cope with code
  - code support across data sets is a challenge
  - serving a set of shapefiles (say, countries) for a set of datasets is feasible
  - the general “any shapefile for many datasets” is a challenge

We believe there’s strong user demand, but has been neglected until now

Are there other organizations already doing or investigating such area-averages?
• lessons learned?
• interest in sharing?
Key issues:

• interpolation?
  - not needed at large scales
  - how wise at scales approaching the grid size, given the spiky precipitation field?
• gracefully handling missings
• political sensitivity of boundaries
  - gadm.org standard is “who controls the territory?”