HydroATLAS:
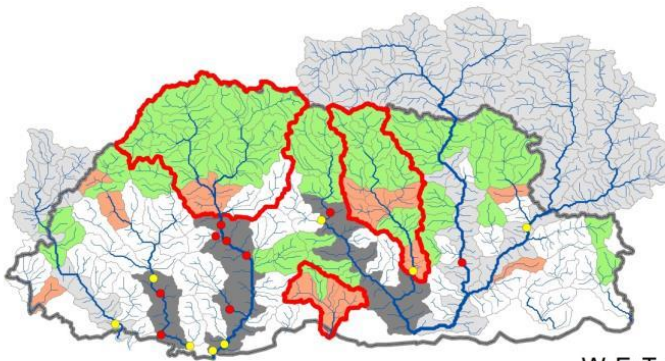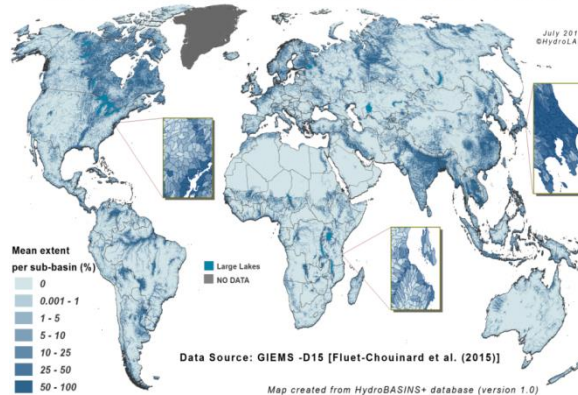# A global database of
river and catchment attributes
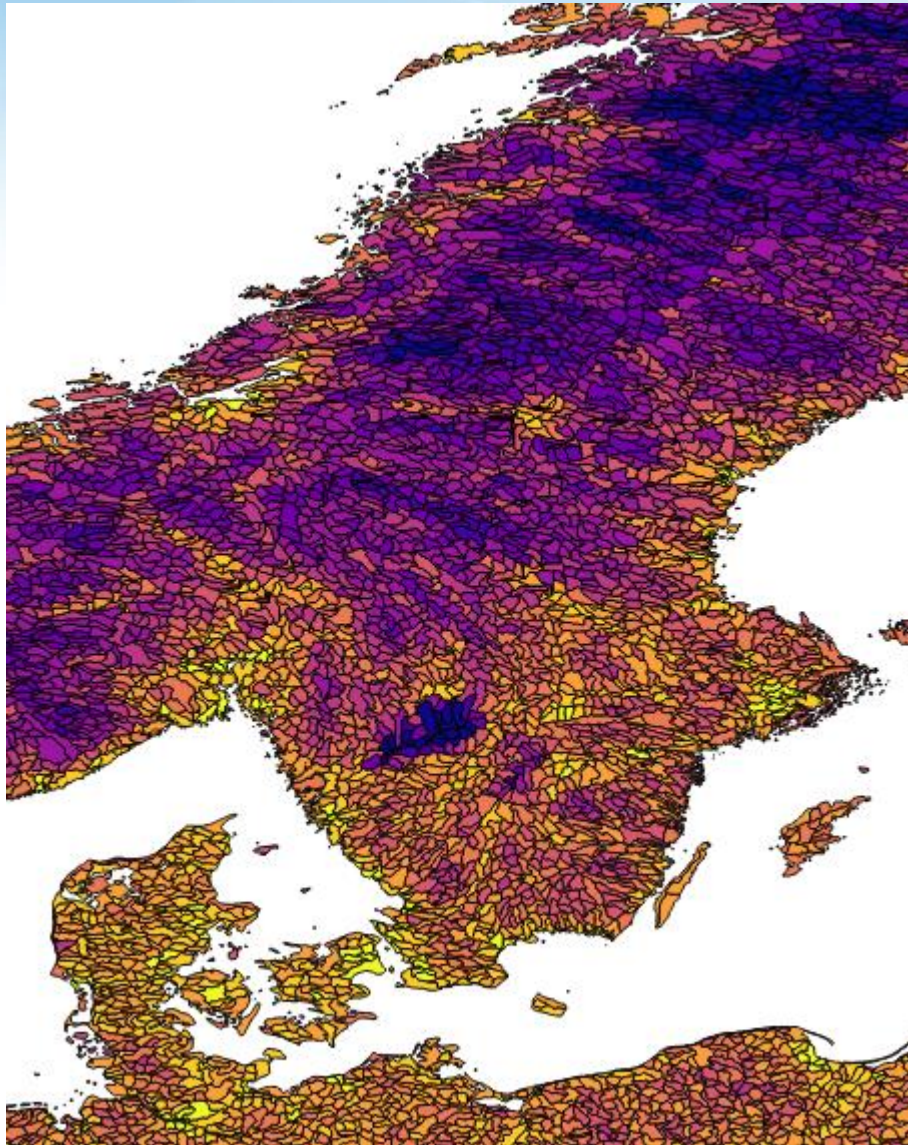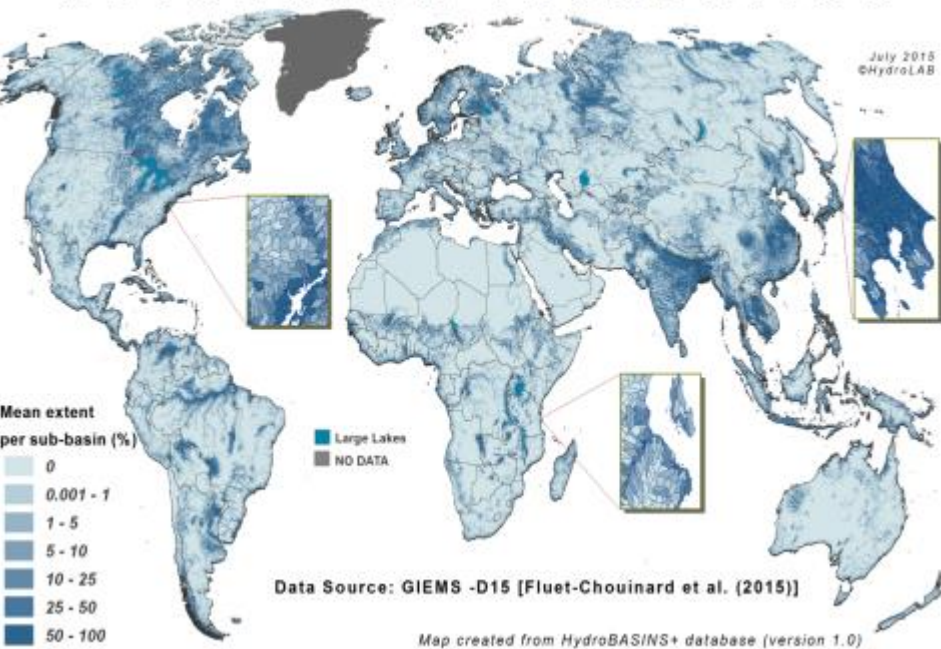

Simon Linke

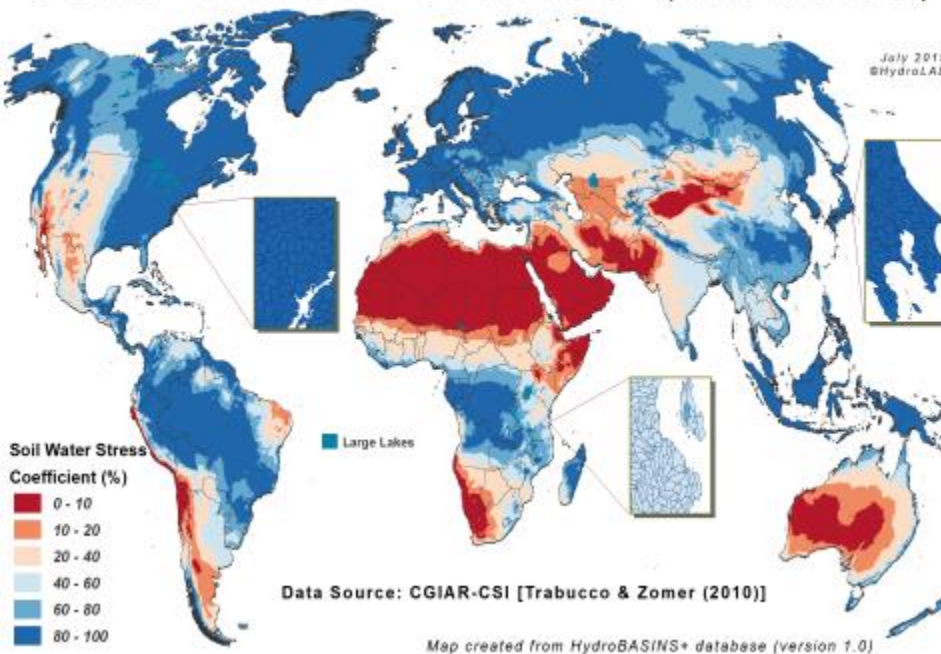Bernhard Lehner

A global eco-hydrological database

- Environmental descriptors for subcatchments and river segments

- Attached to **every** unit (1 million subcatchments, 8 million segments)

- At the moment ~40 variables classes, 250 variables

- Freely available in a few months

WETSEASON INUNDATION

Mean extent per sub-basin (%)
- 0
- 0.001 - 1
- 1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 100

Large Lakes
NO DATA

July 2015
©HydroLAB

Data Source: GIEMS -D15 [Fluet-Chouinard et al. (2015)]

Map created from HydroBASINS+ database (version 1.0)

SOIL WATER STRESS (ANNUAL)

Soil Water Stress Coefficient (%)
- 0 - 10
- 10 - 20
- 20 - 40
- 40 - 60
- 60 - 80
- 80 - 100

Large Lakes

July 2015
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Data Source: CGIAR-CSI [Trabucco & Zomer (2010)]

Map created from HydroBASINS+ database (version 1.0)

Example attribute classes in HydroATLAS:

- **Hydrology** (discharge, runoff, wetland inundation, groundwater table depth)
- **Climate** (Temperature, precipitation, evapotranspitation, snow, aridity)
- **Physiography** (Elevation, slope, landform)
- **Land cover** (Ecoregions, forest types, natural vegetation, wetland classes, habitat types)
- **Soils/geology** (%clay, silt, sand, organic carbon, geology classes)
- **Land use** & **human influence** (Forestry, cropland, irrigation, pasture, population, human footprint)

Discussion points

- Included variables
- Usefulness of data format (shapes/tables)
- Legacy/governance
- Funding mechanisms