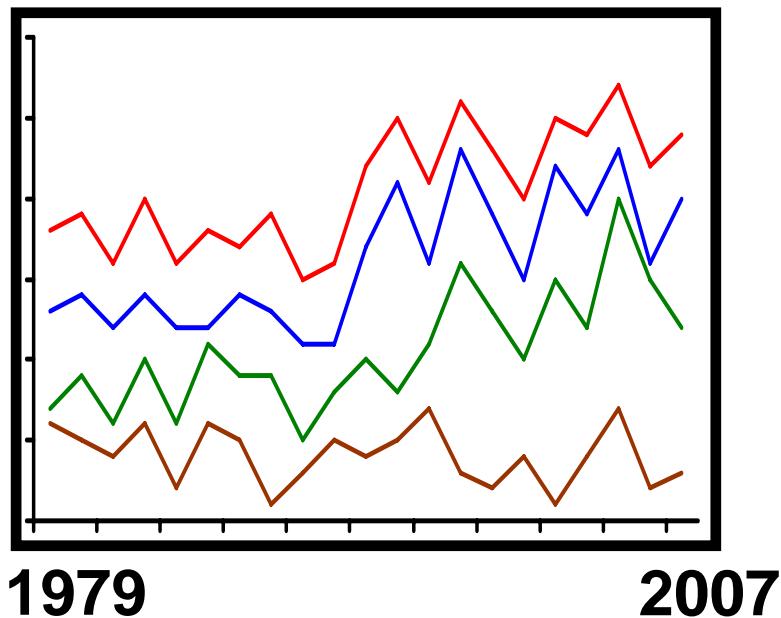


Müggelsee



Study site

- ~30 yr physical, chemical, and planktological time series
- from Müggelsee (mostly weekly intervals)



Müggelsee (Berlin, Germany):

Area: 7.3 km²

Max depth: 8 m; mean 4.9 m

polymictic

hypereutrophic

Müggelsee



Study site



**Data at high temporal resolution....
-- 5 minutes --**



Müggelsee



Data at high temporal resolution (5 Minutes)



Near surface measurements (ca. 0.5 m water depth):

1995 - till today at 5 minutes intervals (year round)

- Water temperature
- pH
- Oxygen
- Conductivity
- Light measurements in 0.80 m and 1.30 m water depth.

Depth profile measurements (0-5 m, at intervals of 0.5 m):

2002 - till today at 5 minute intervals; during growing season

- Water temperature
- pH
- Oxygen
- Conductivity
- Fluorescence

Müggelsee



Data at high temporal resolution (5 Minutes)

Müggelsee station



Some suggestions for research topics to be addressed within GLEON:

1. How variability at small temporal scale of any variable translates into variability at larger temporal scales
2. How variability in water temperature and light conditions translates into variability in oxygen and fluorescence
3. Changes in water temperature, pH, oxygen, etc. during day time versus night time
4. Day / night amplitudes of water temperature, oxygen, pH in the context of global warming.
5. Propagating effects in time and water depth of extreme weather events such as storms, heat waves on the measured variables.
6. Changes in the length of short (days) versus long (weeks) thermal stratification events during summer and subsequent effects on nutrients and biota

Rita Adrian; GLEON 6