

van der Kamp &
Hayashi

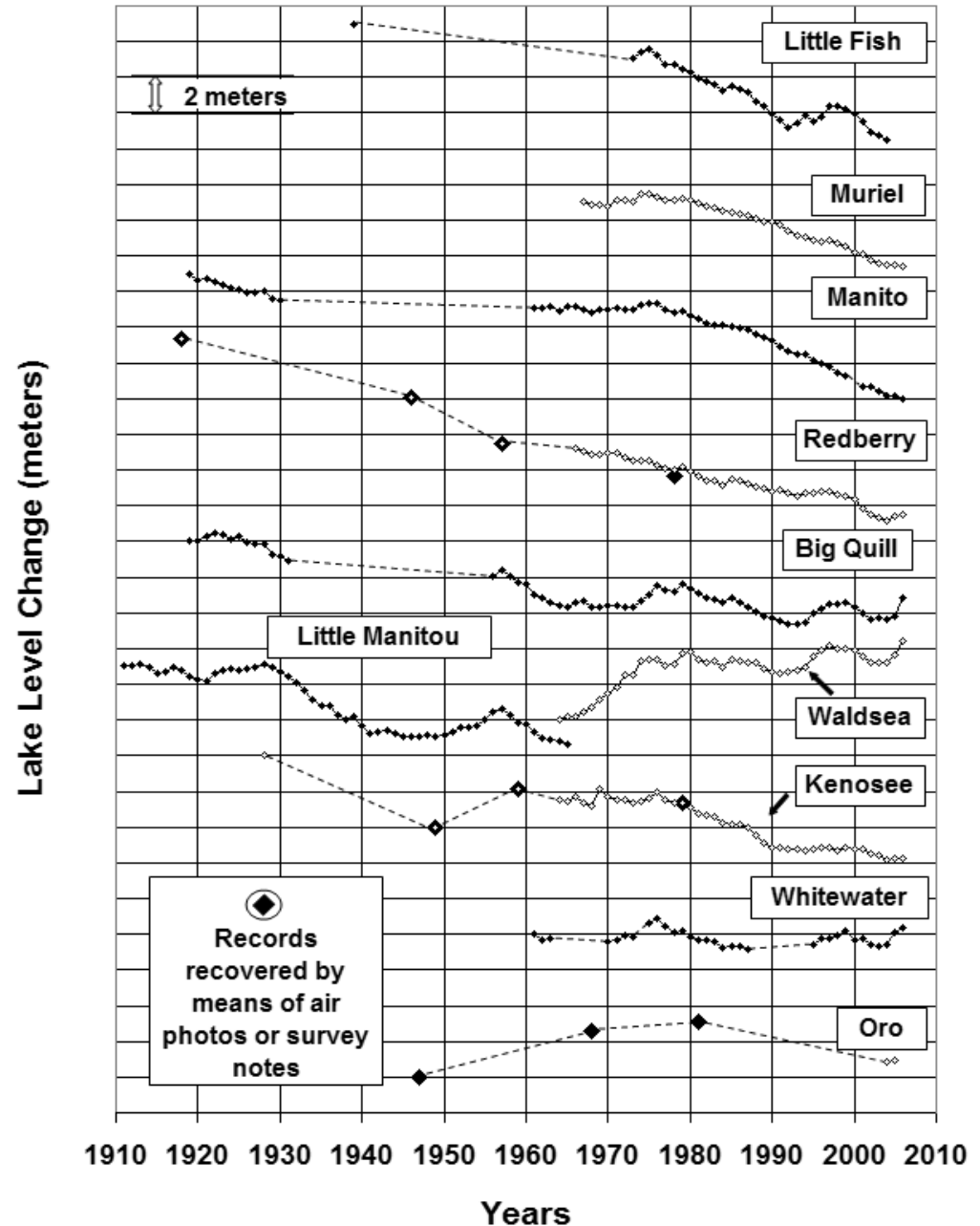
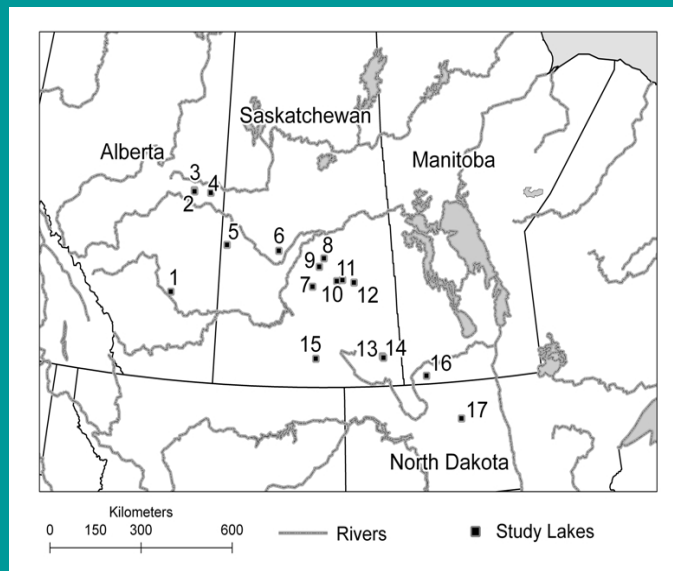
Characterizing
drought:



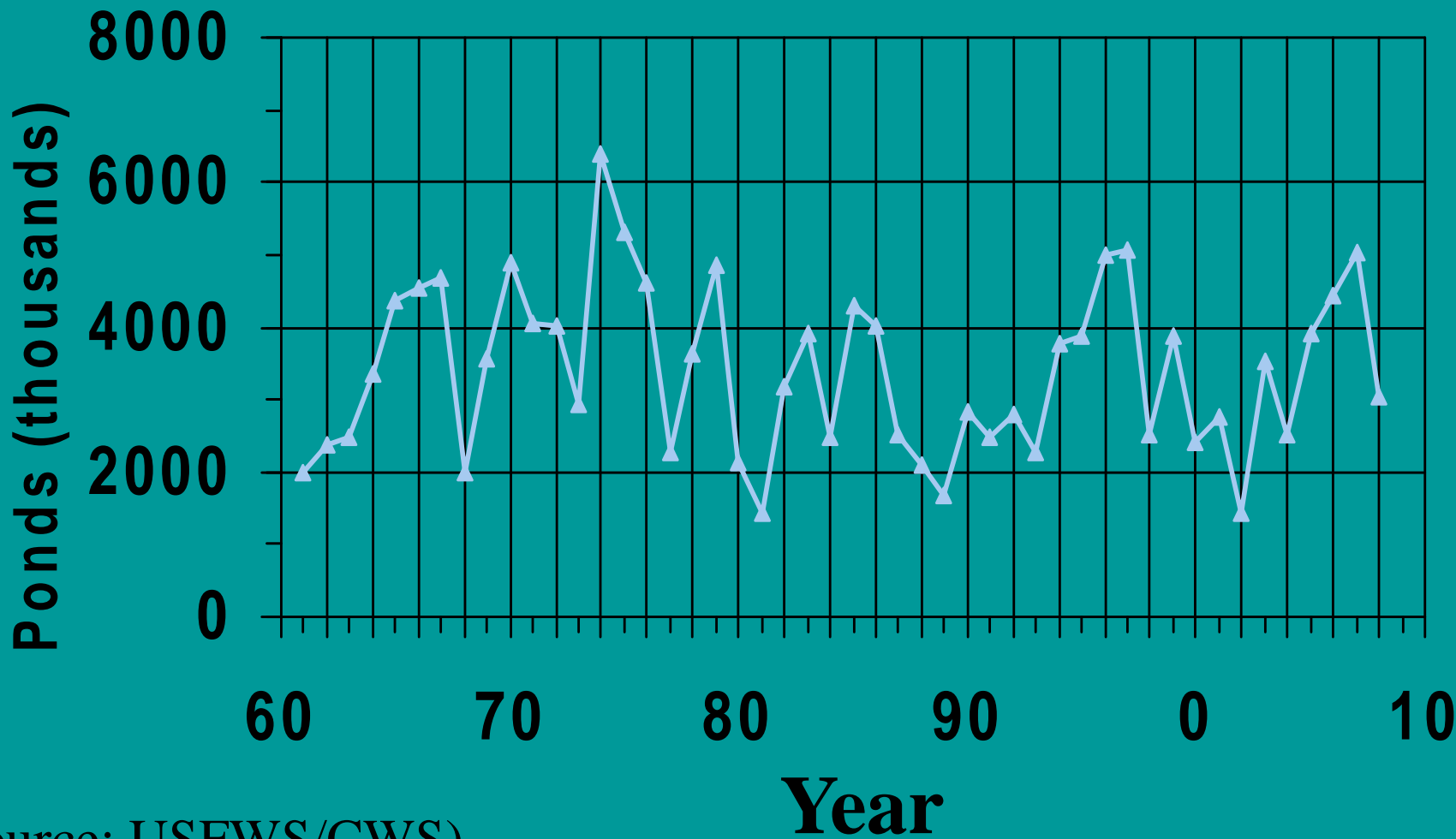
- **water levels in wetlands and lakes** – manual measurements (with Bob Clark, Malcolm Conly and others)
- **groundwater levels** – water level records for shallow provincial observation wells (with Dave Sauchyn, U of Regina).
- **soil moisture** – regional: geological weighing lysimeters
(with Lee Barbour, U of Saskatchewan)

Lake level changes in closed-basin prairie lakes, 1910-2006:

- drought slightly increases on-going downward water-level trend.
- drought temporarily lowers water levels in through-flow lakes e.g. Jackfish Lake SK (data not shown)

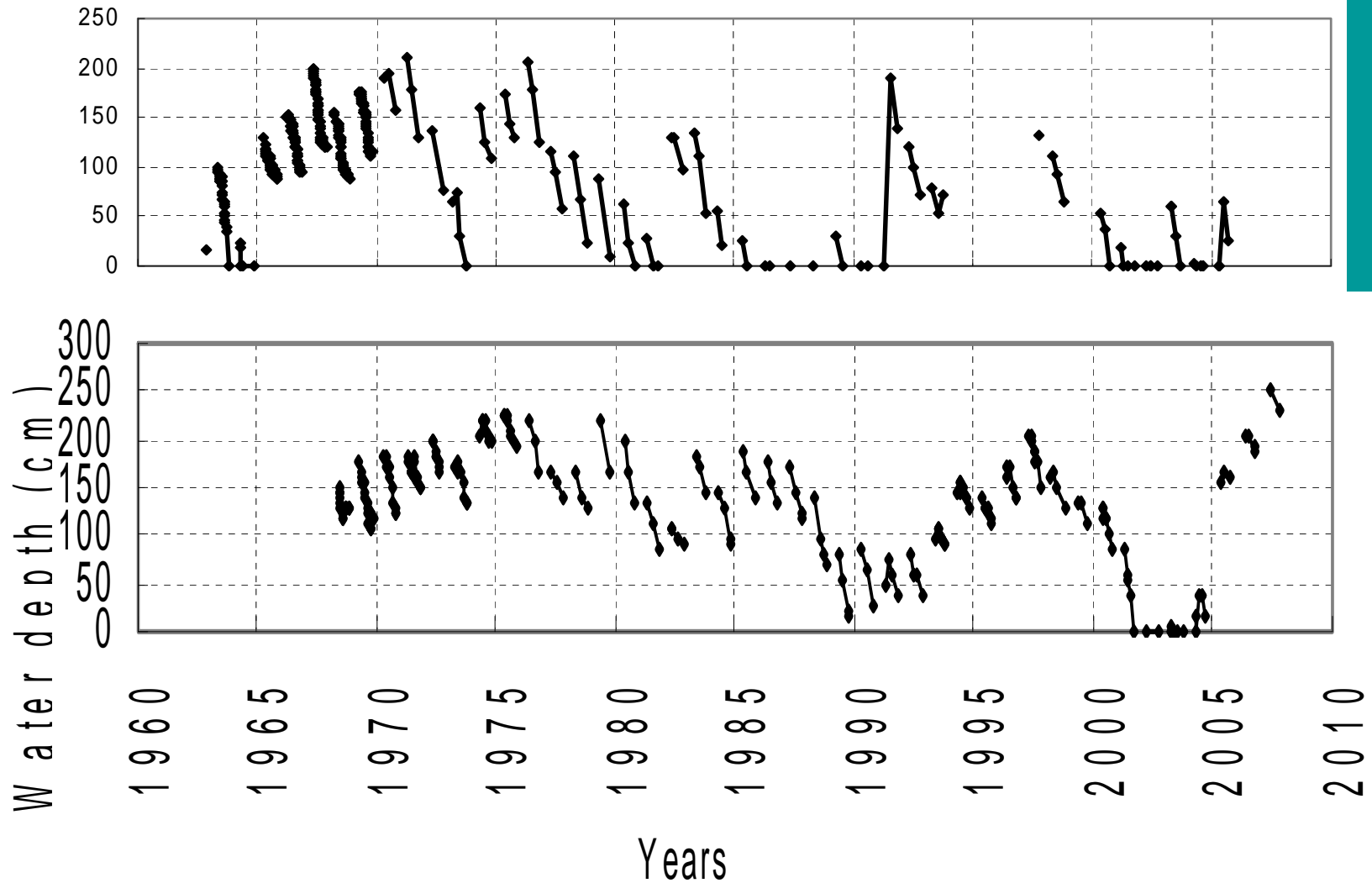


Number of wetland ponds in the Canadian prairie region - spring pond counts 1961-2008 (thousands)

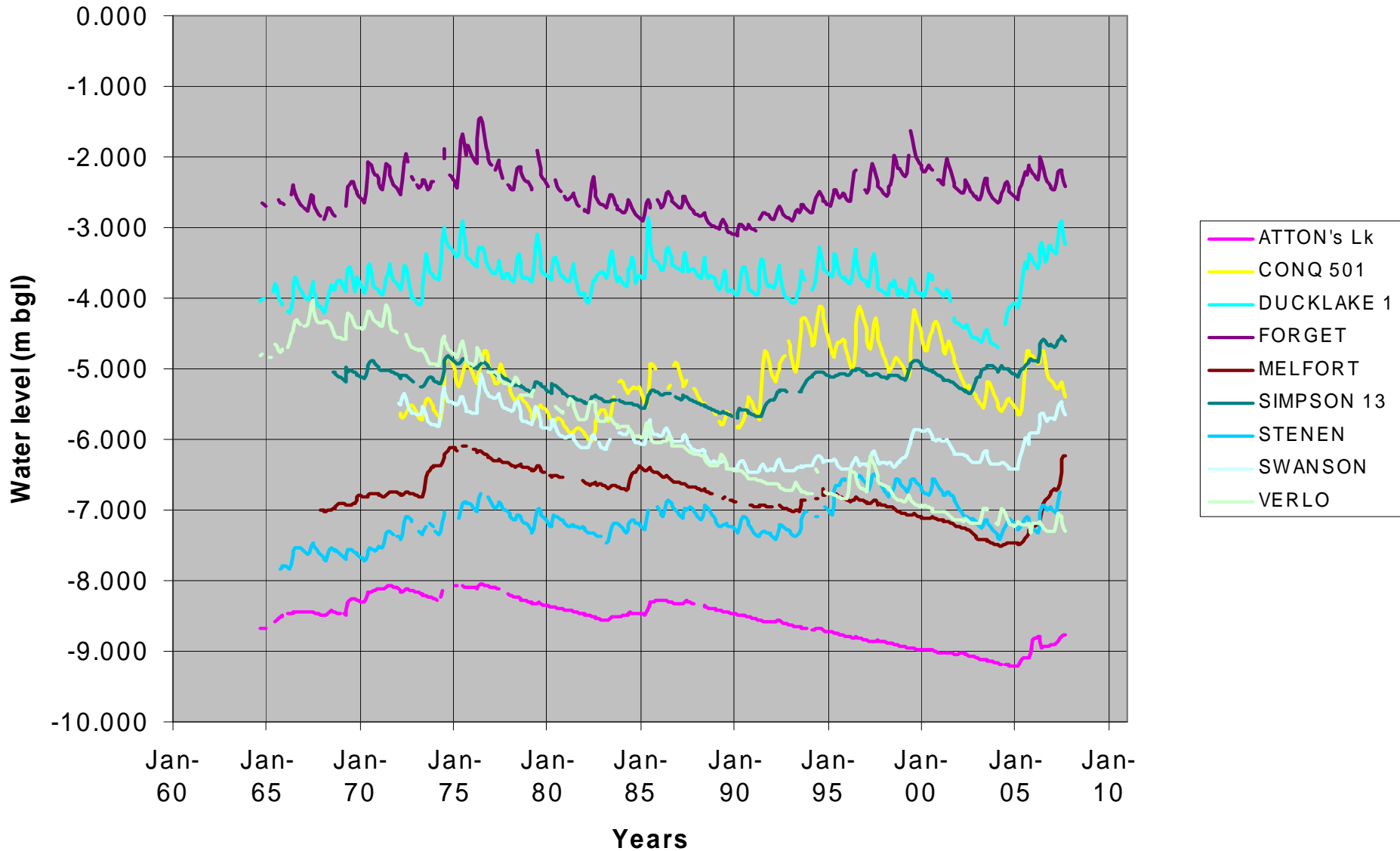


(Source: USFWS/CWS)

Pond depths records for Wetland # 20 near Swift Current SK and wetland # 25 in the St Denis NWA, near Saskatoon SK

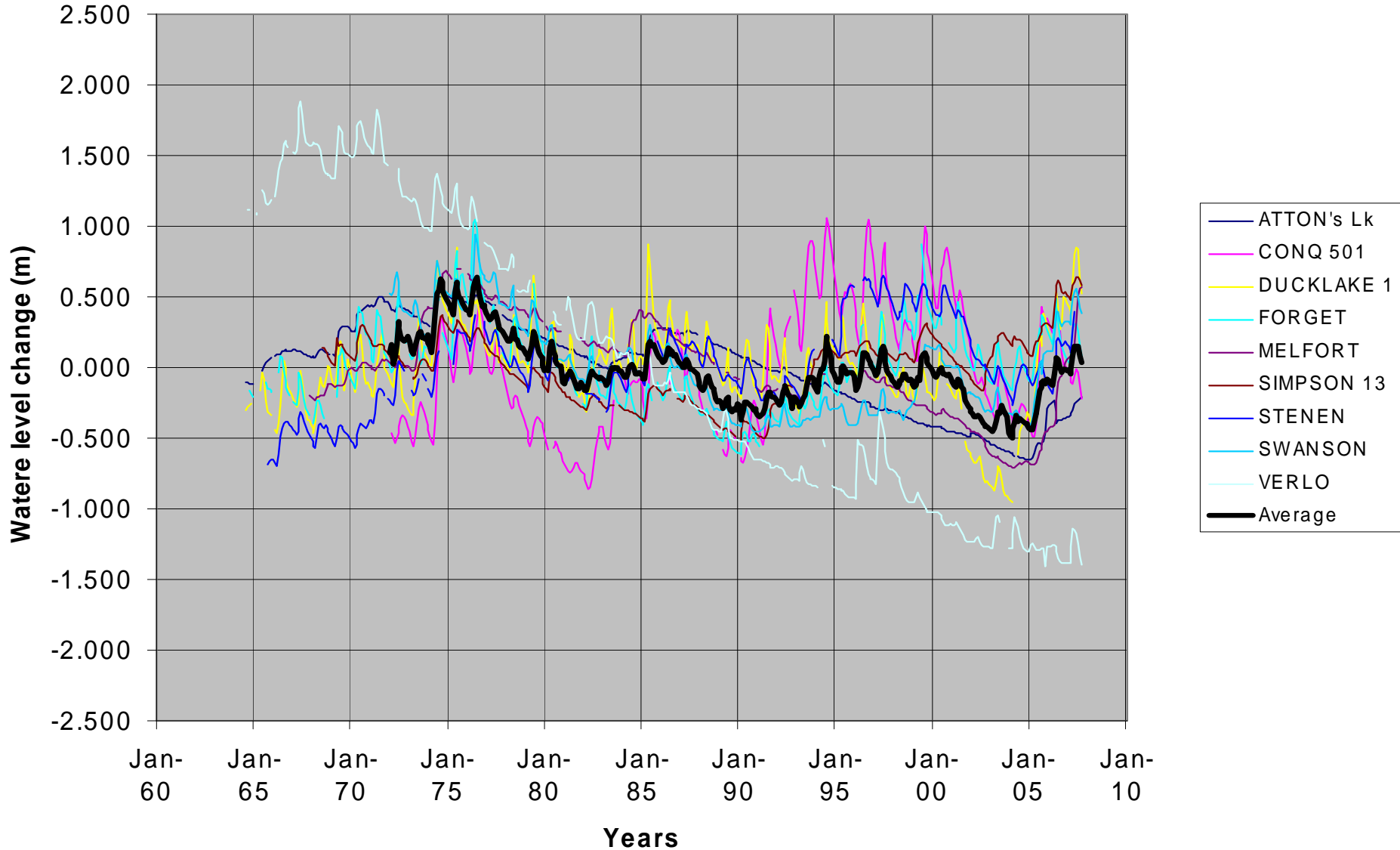


Shallow observation wells in SK – water level records 1964-2007: water table depths below ground level (m)



Shallow observation wells in SK – water level changes 1964-2007

Water-table drawdown during the 2001-2003 drought averaged about 0.5 m, corresponding to ~ 150 mm groundwater storage depletion



Shallow observation wells in AB – water level records 1965-2006: water table depths below ground level (m)

