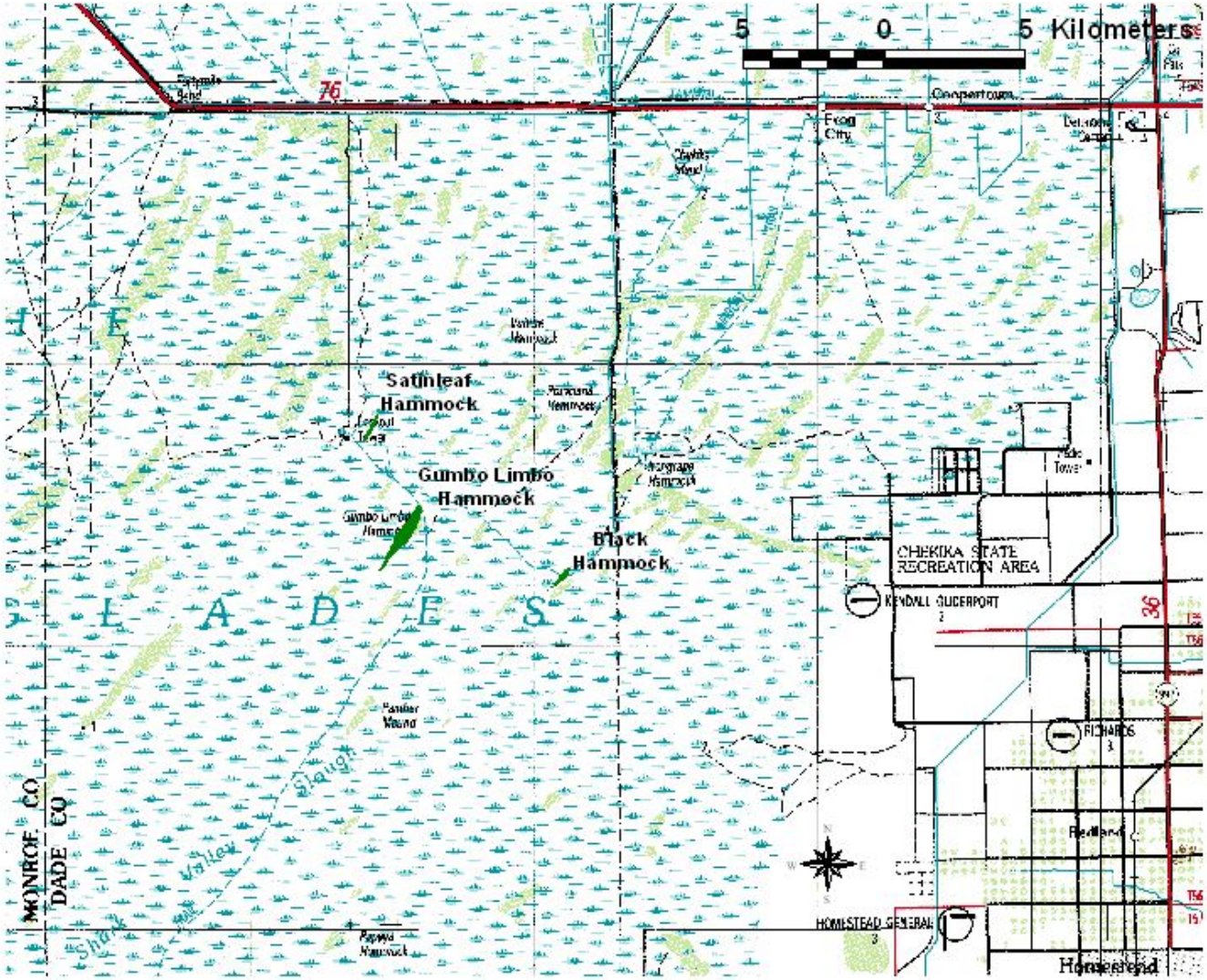


Figure 1-1. Location of the three tree island study sites.

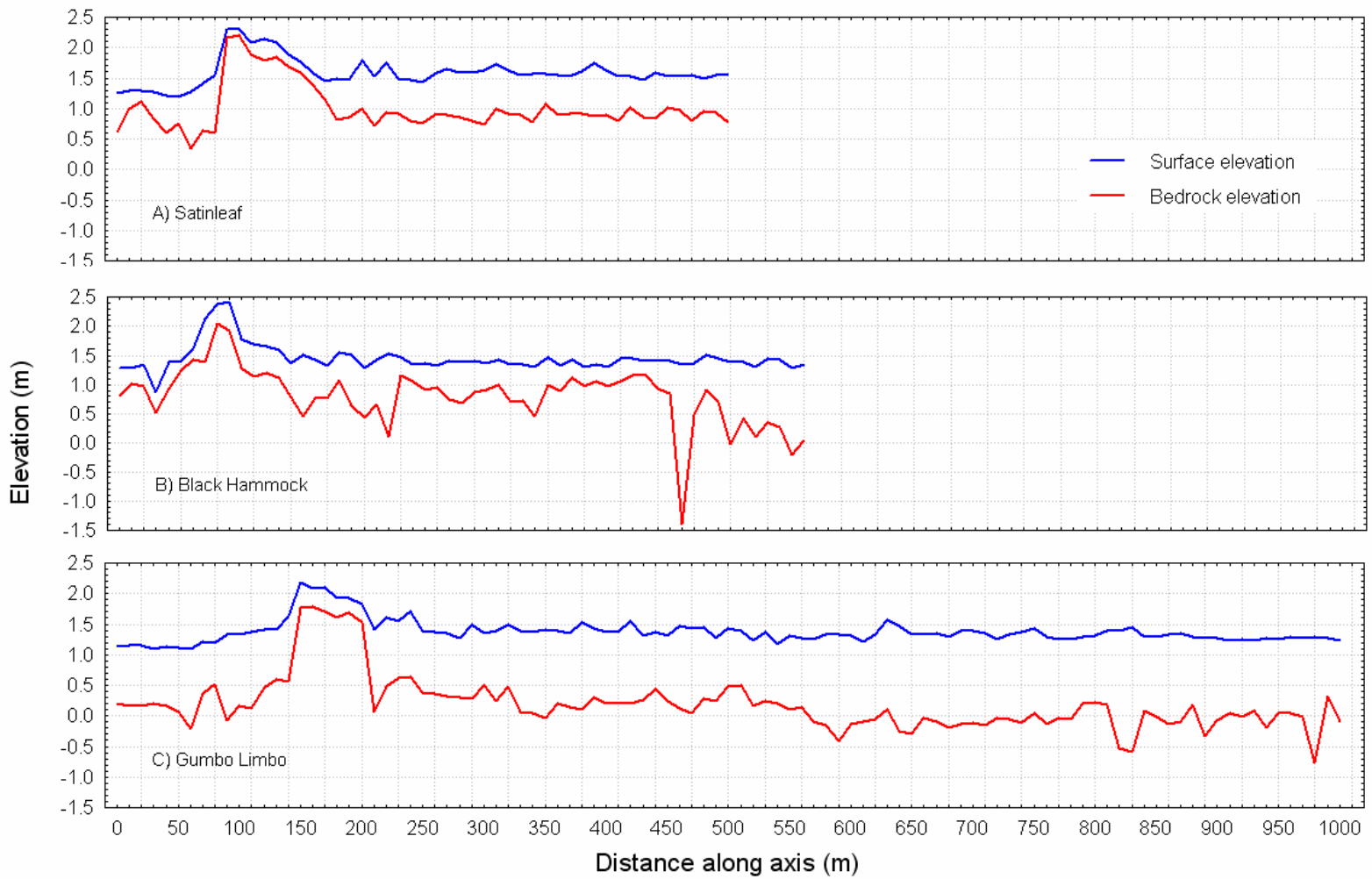


Figure 1-2. Surface and bedrock elevations along the central axes of Satinleaf (A), Black Hammock (B), and Gumbo Limbo (C) tree islands, in Shark Slough.

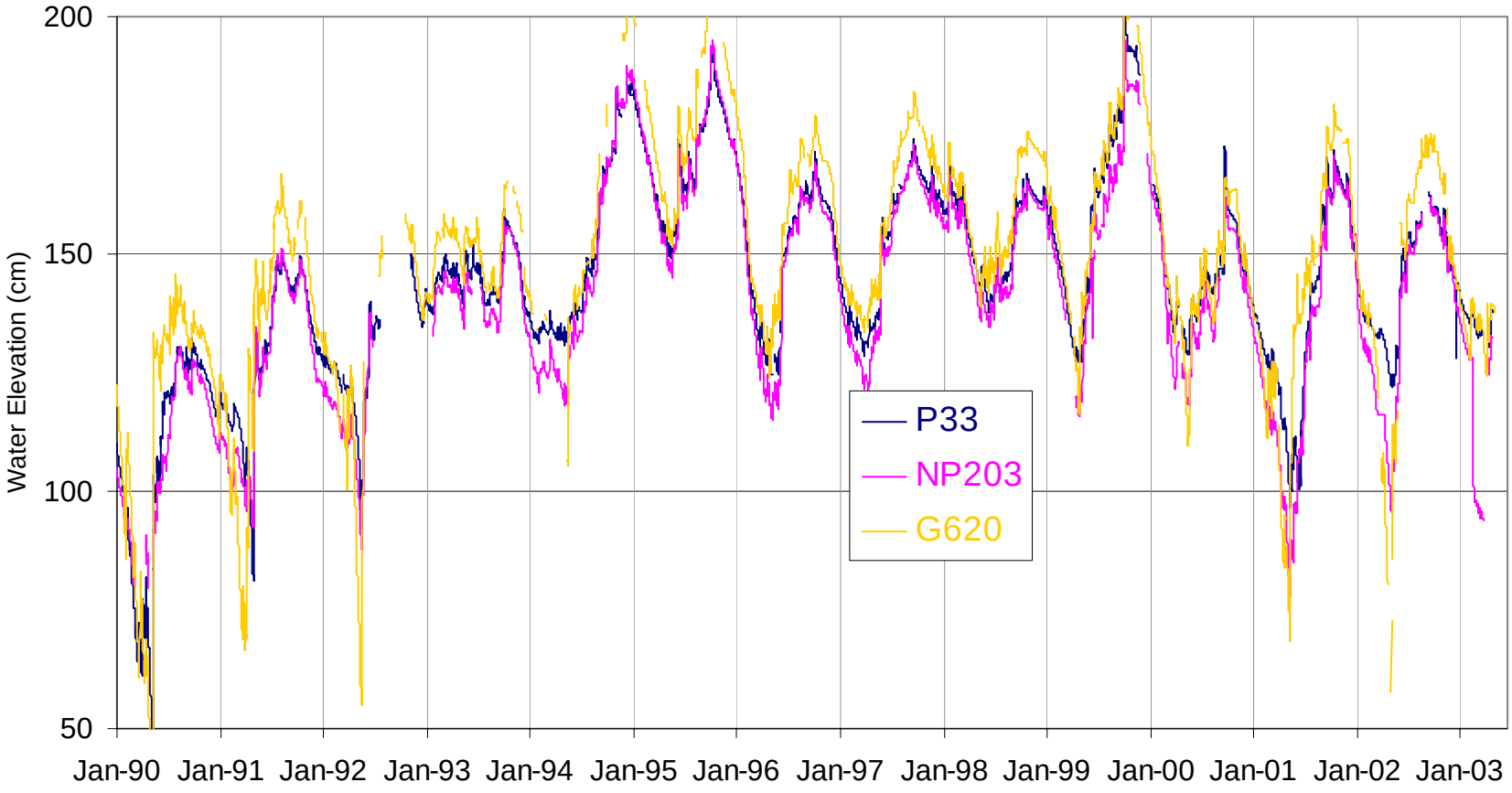


Figure 1-3. 14 year hydrograph of ENP (USGS) park stage recorders beginning January 1990 through June 2003. Data are water elevation in cm amsl (NGVD88).

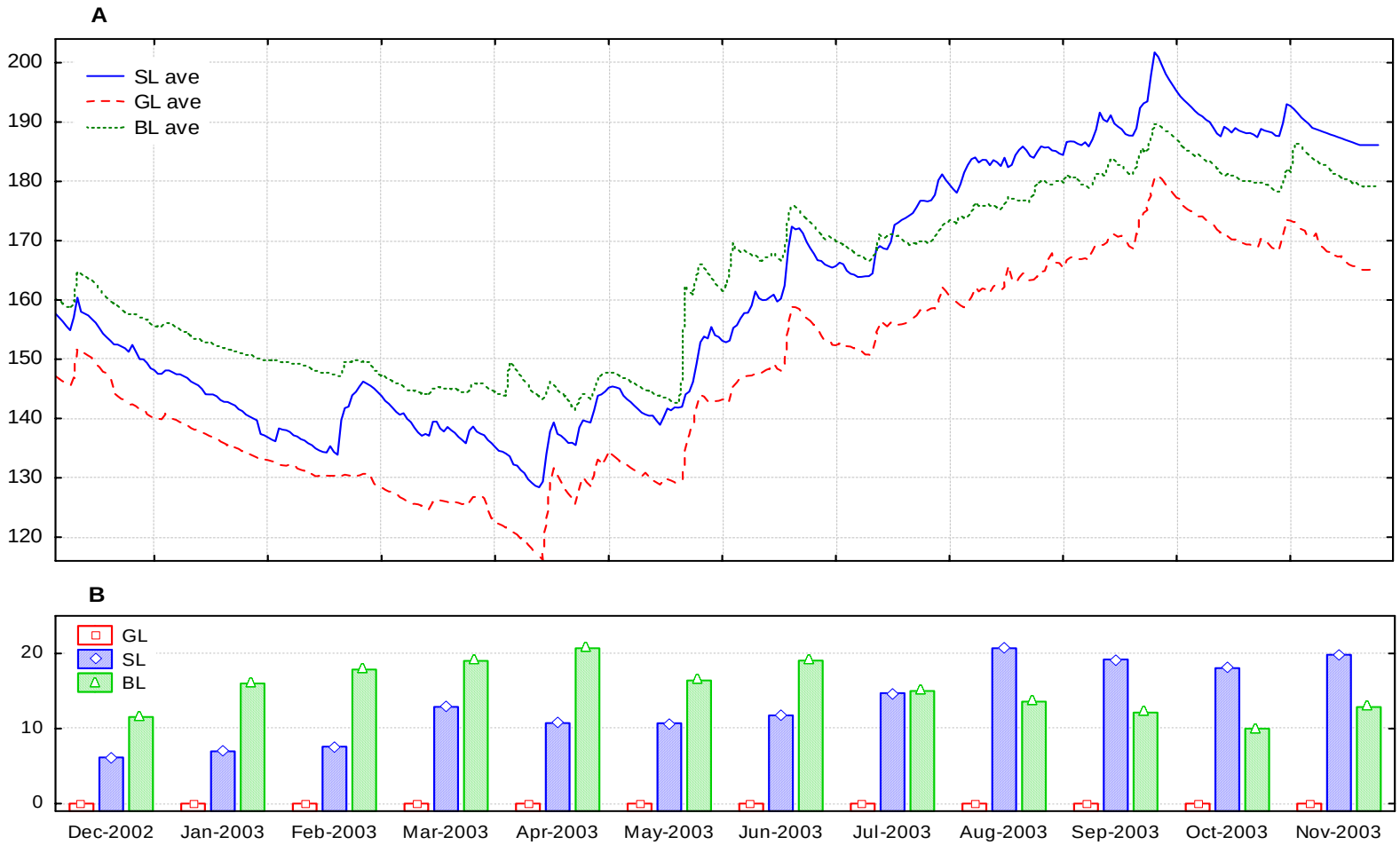


Figure 1-4. (A) Daily average water elevation (cm) in three tree islands. (B) Monthly difference in stage among tree islands (GL set to 1.0 cm).

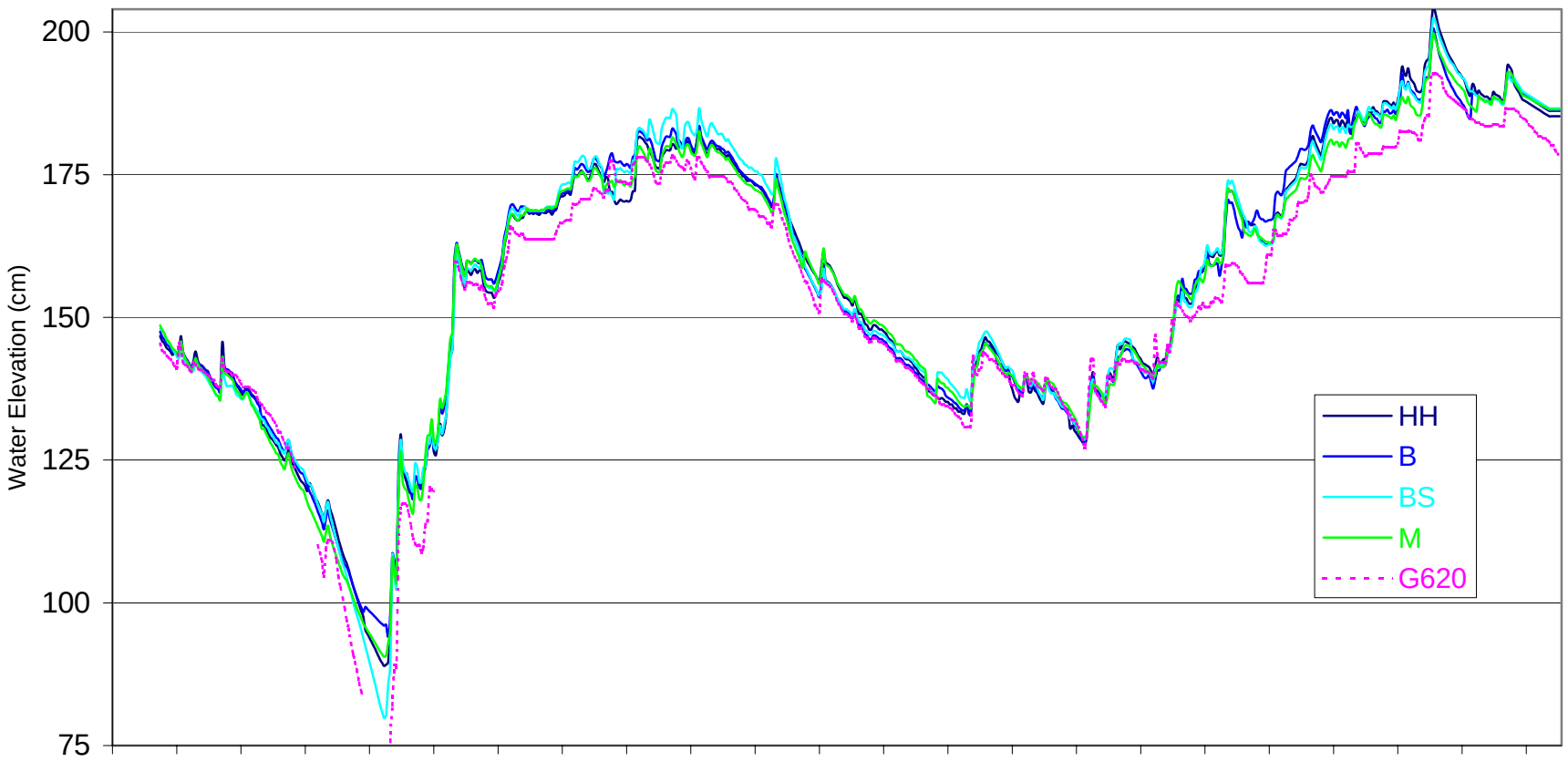


Figure 1-5. Hydrograph for Satinleaf tree island wells (HH, B, BS, and M) and USGS well G620 beginning January 2002 through November 2003. Data are water elevation in cm amsl.

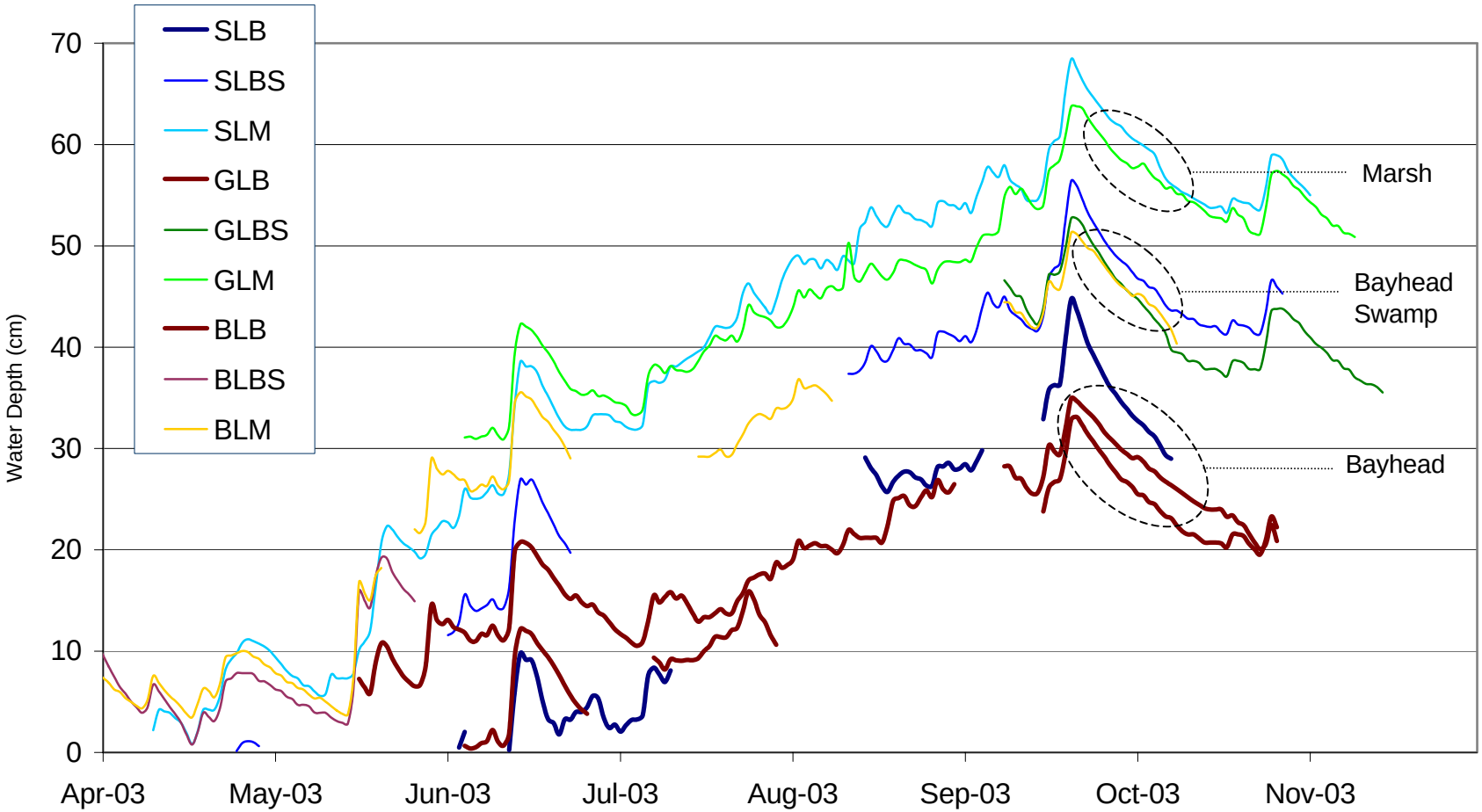


Figure 1-6. Tree island site water depths for each tree island in each site. Water depths are based on site water elevation compared to site average soil elevation; negative values indicate the water table is below the soil surface.

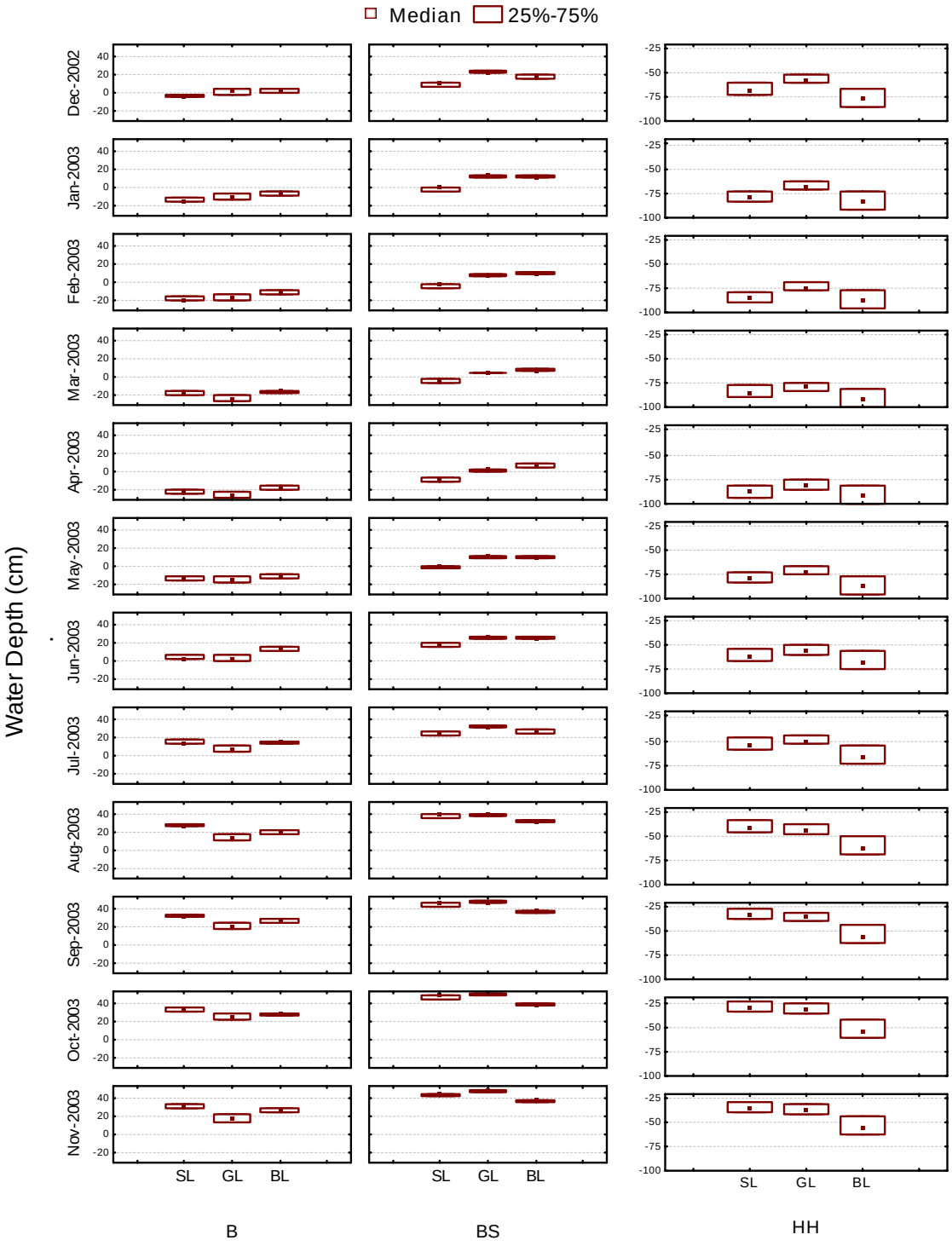
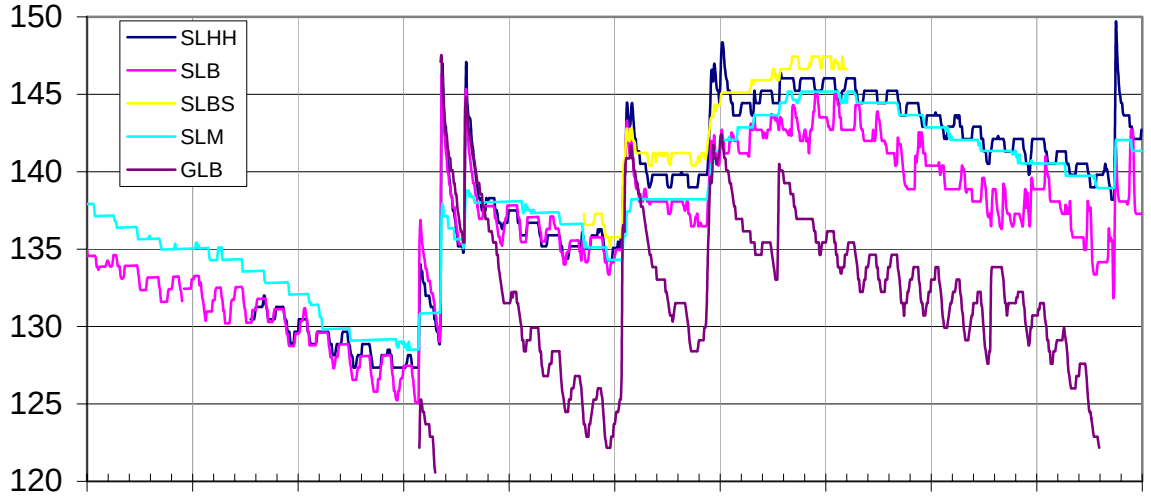


Figure 1-7. Box plot of median and 75-25% percentile for monthly average water depths for 2003. Periods plotted by site (x-categ) by month (y-categ), and grouped by tree island. Note independent scale for the HH sites.

A



B

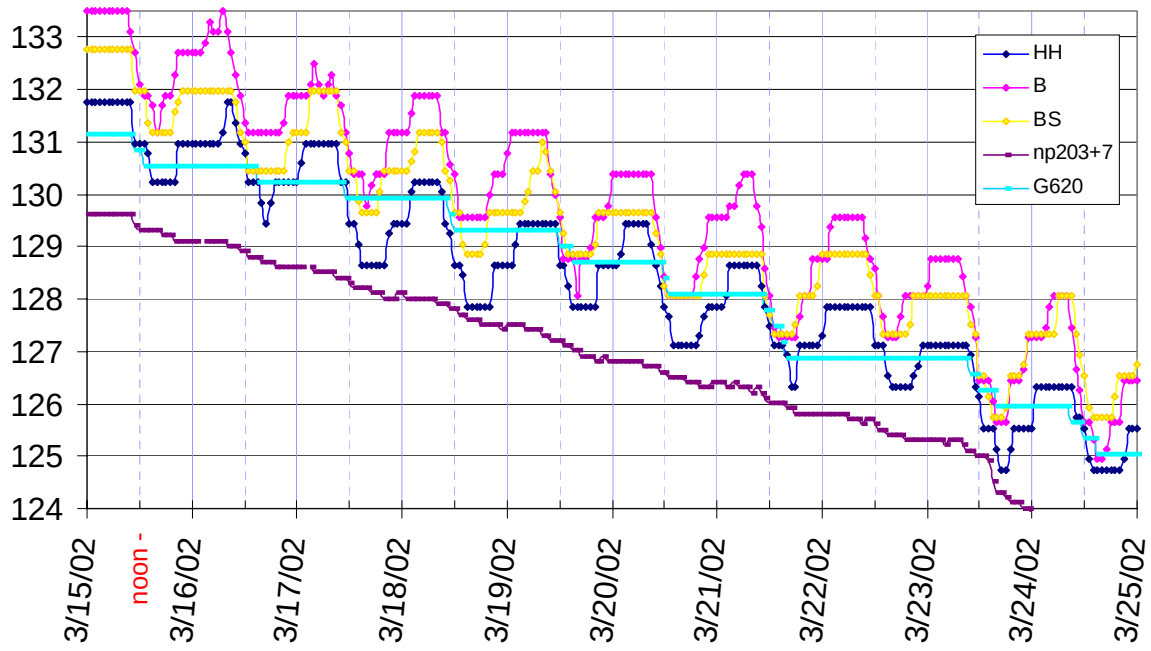
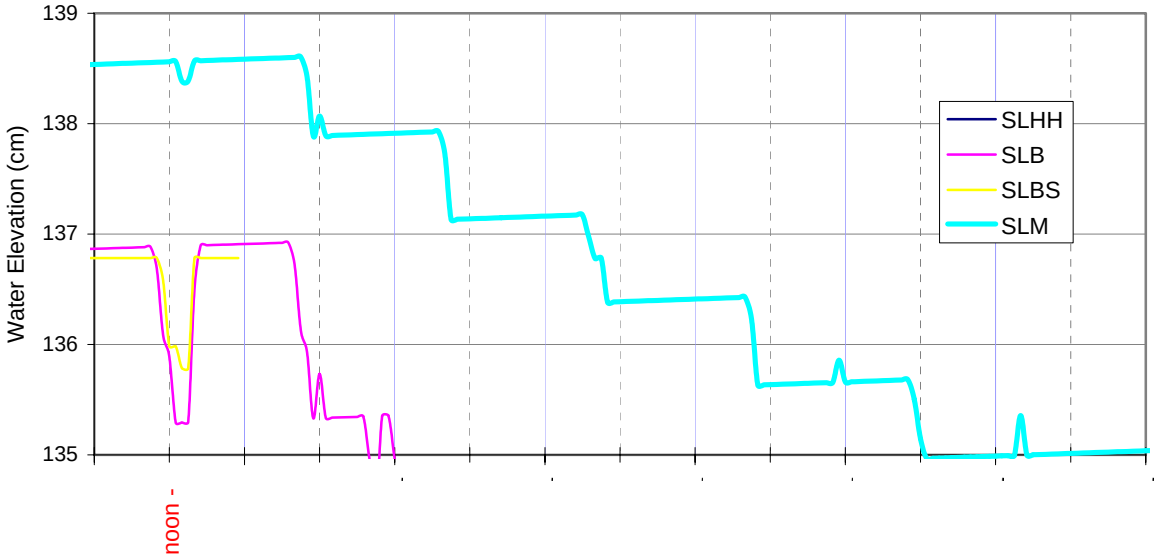


Figure 1-8. Hydrographs of (A) SL and GL sites exhibiting diurnal fluctuation during two dry season months, April-May 2003, and (B) the diurnal fluctuation pattern in SL sites during March 2002.

A



B

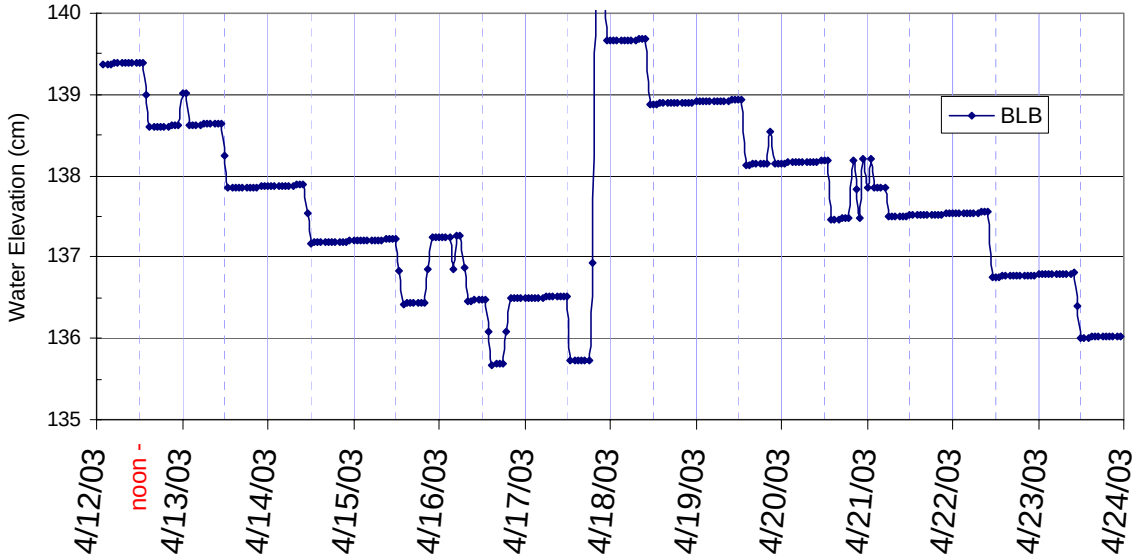
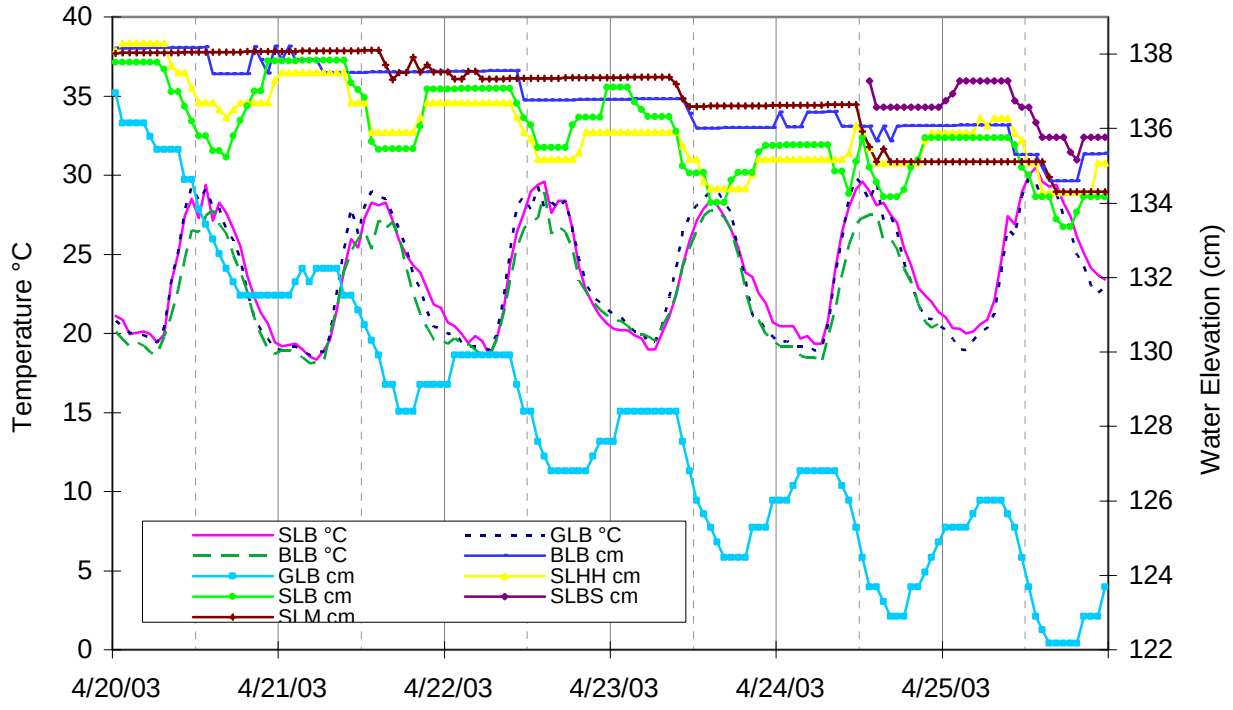


Figure 1-9. Hydrographs of (A) the SL M site exhibiting a diurnal fluctuation pattern in late March and early April 2003, and (B) the BL B site exhibiting a diurnal fluctuation pattern during April 2003.

A



B

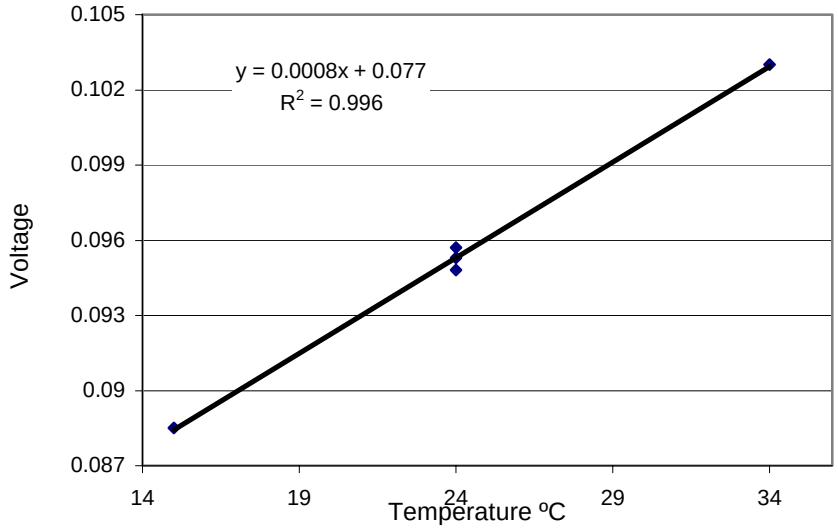


Figure 1-10. (A) Double Y-axis line plot of temperature (°C) and water elevation (cm amsl) in tree island sites exhibiting diurnal recovery patterns during April 2003. (B) Regression plot of temperature (°C) versus output voltage, sensor calibration for temperature sensitivity.