



Figure 9 Location of gauging stations used for calibration (triangles).

4.4 Baseline Simulations

Daily lake levels are simulated for the period 1960-2002. As shown on Figure 10, annual maximum lake levels vary from 7.5 masl to 10.1 masl, with exception of two drought years 1988 and 1998, in which the Lake only rose to 6.8 and 6.6 masl respectively. Figure 11 compares the simulated Lake levels with the water level at the Mekong/Tonle Sap confluence. During the early flood period, the water levels are lower in the Lake, which is the reason for the flow into the Lake. Correspondingly, during the flow recession, the water level is higher in the Lake, which is reason for the reversed flow that empties the Lake. Small peaks in the Mekong are not reflected in the Lake levels, due to the Lake's large dampening effect. The annual *maximum* water level in the Lake is frequently identical to the maximum level at the Tonle Sap/Mekong confluence, or slightly lower. Figure 12 and Figure 13 show longitudinal profiles of the simulated water level, illustrating the water flow into, respectively out of the lake at different times.

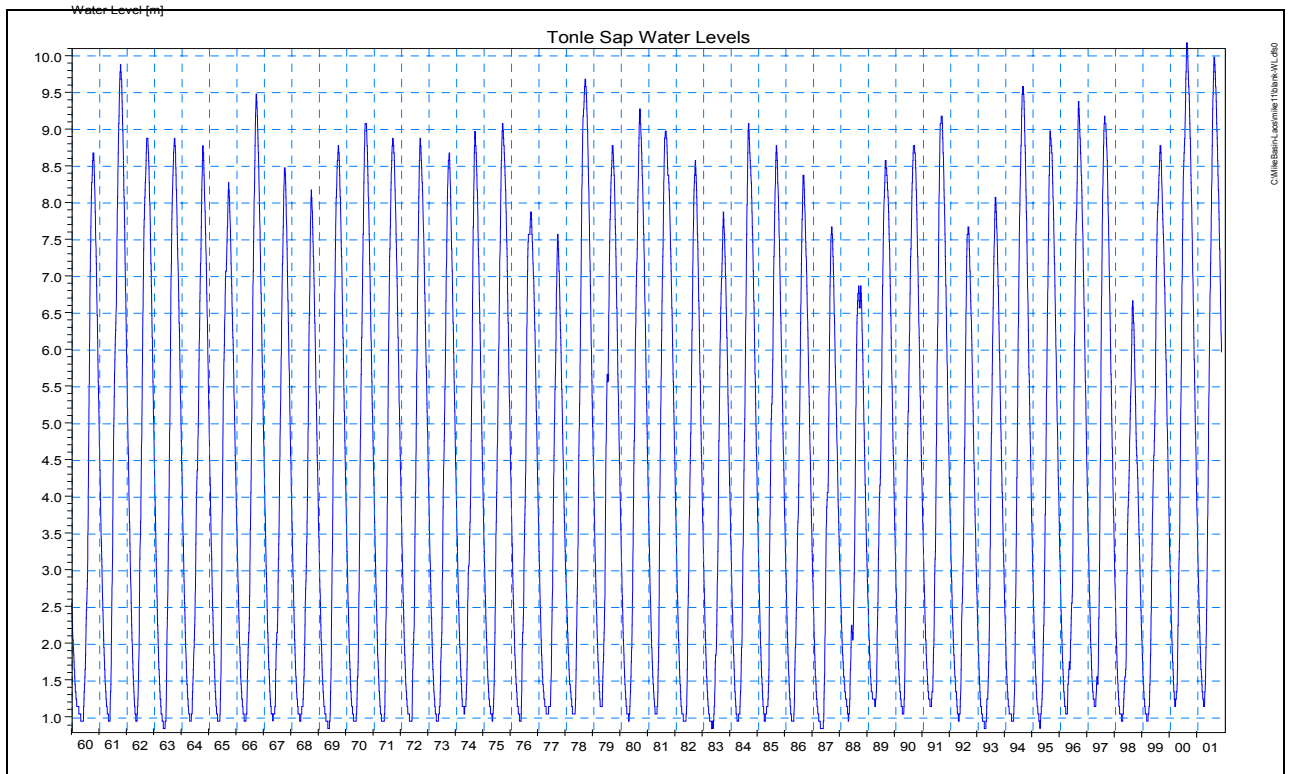


Figure 10 Simulated daily water level in Tonle Sap Lake 1960-2001 (Baseline).

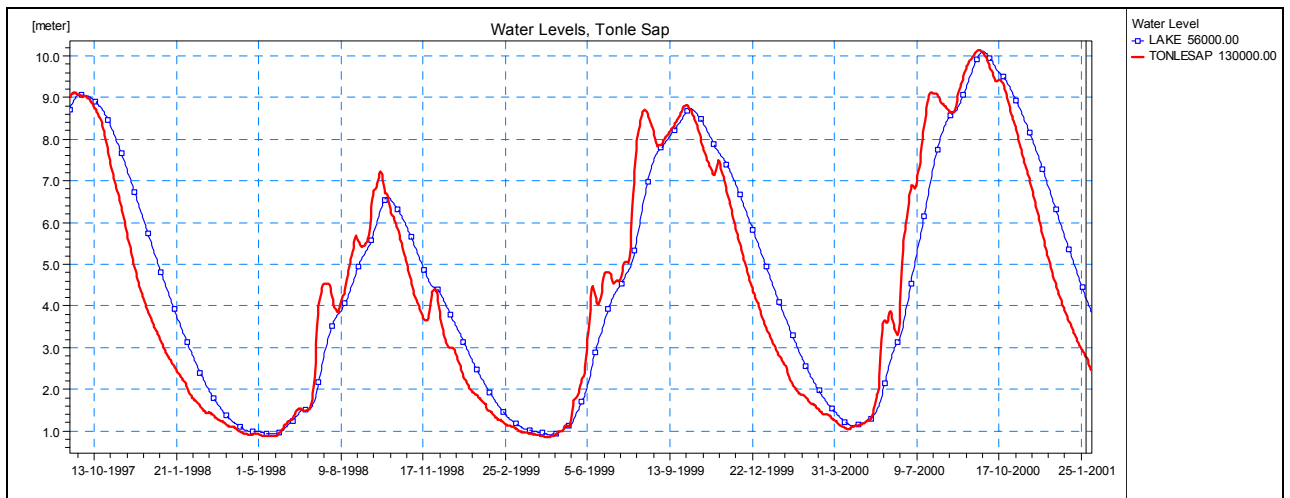


Figure 11 Simulated water level in Tonle Sap Lake (blue with markers) and at Mekong/Tonle Sap confluence at Phnom Penh (bold red). Baseline situation.

