

SMS Hot Keys and Helpful Tips

(Updated November 11, 2025)

1. General

- Right-click on “Project” in the upper left of the Project Explorer and select “Open Project Folder” to open a File Explorer window in the SMS project directory.
- To back up or transfer a project, go to Main Menu ► File ► Save As Package. This saves all project information to a single ZIP file.
- Ctrl + D → Open Display Options
- Ctrl + T → Open Toolbox

2. Select Features

- Ctrl + A → Select All
- Ctrl + Shift → Draw a polygon to select multiple features
- Universal Select Tool → Select nodes, vertices, and arcs (hold Shift for multiple selection)

3. Multiselect Options

- Shift + Left Click → Toggle selected items (add/remove)
- Alt + Left Click → Add newly selected items to selection
- Ctrl + Left Click and drag → Draw arrow; all features intersected are selected
- Click and drag a box → Select all features within box
- Invert Selection → Right-click and choose “Invert Selection”

4. Arc Drawing / Editing

- Hold H or V while digitizing to lock horizontal/vertical direction
- Backspace → Remove previous click while digitizing
- Esc → Cancel digitizing
- Hold D and drag → Move an arc (works with Observation Coverage arcs for plots)

5. Plotting Features

- Right-click a Monitoring Line or Point → Open SRH-2D solution plots
- Select multiple Monitoring Lines or Points → Open SRH-2D solution plots
- Right-click a Simulation ► Tools ► View Simulation Plots

6. Structures

- Right-click on a 3D Structure ▶ 3D Structure Summary
- Right-click on Simulation ▶ Tools ▶ View Structures Map

7. Views

- Shift + P → Plan View; Shift + O → Oblique View; Shift + S → Side View; Shift + F → Front View
- Shift + Z → Return to previous view
- F → Frame Display
- Hold Ctrl and click Plan View icon → Return to plan view after rotation
- To save and restore views: Right-click in Project Explorer ▶ New Display Theme ▶ Type = “View.” Position view as desired, then right-click Display Theme ▶ Update with Current Display.

8. SRH-2D Simulations

- Using WSEL Dataset as Initial Condition: In Model Control ▶ General ▶ Initial Conditions, select “Water Surface Elevation Dataset.” Interpolate datasets between meshes via Right-click ▶ Interpolate To.
- Run Multiple Simulations: Right-click SRH-2D Simulations ▶ Save Multiple Simulations and Run. Enable under Edit ▶ Preferences ▶ Project Explorer if command option is missing.
- Sensitivity Testing: Right-click a Simulation ▶ Tools ▶ Advanced Simulations ▶ Use Parameters ▶ Run Type: Scenarios. Define variable ranges and number of runs.
- Calibration: Right-click Simulation ▶ Tools ▶ Advanced Simulations ▶ Use Parameters ▶ Run Type: Calibration. Define target WSELs and tolerance at Monitoring point(s); SMS will use PEST to optimize parameters.
- Changing Timesteps: In Simulation Control ▶ Advanced, enable “Use Initial and Secondary Timestep.” Set secondary timestep and activation time for startup stability.
- Termination Criteria: In Simulation Control ▶ Advanced, enable “Use Termination Criteria.” Set Net_Q/Inlet_Q ratio for automatic termination (e.g., <0.01).

9. Custom Results / Display Settings

- Contour Settings: Right-click in Project Explorer ▶ New Display Theme ▶ Type = Contour. Set name, dataset, color range, etc. Right-click Display Theme ▶ Update with Current Display. Optionally set Properties ▶ Load this theme when objects... to auto-load by keyword.
- Vectors On/Off: Create Display Themes (Geometry Type). “Vectors On” → turn on under 2D Mesh Display; “Vectors Off” → disable vectors.
- Template Theme: Download a template theme file from the [2D Hydraulic Modeling Resources page](#) under SMS Quick References.