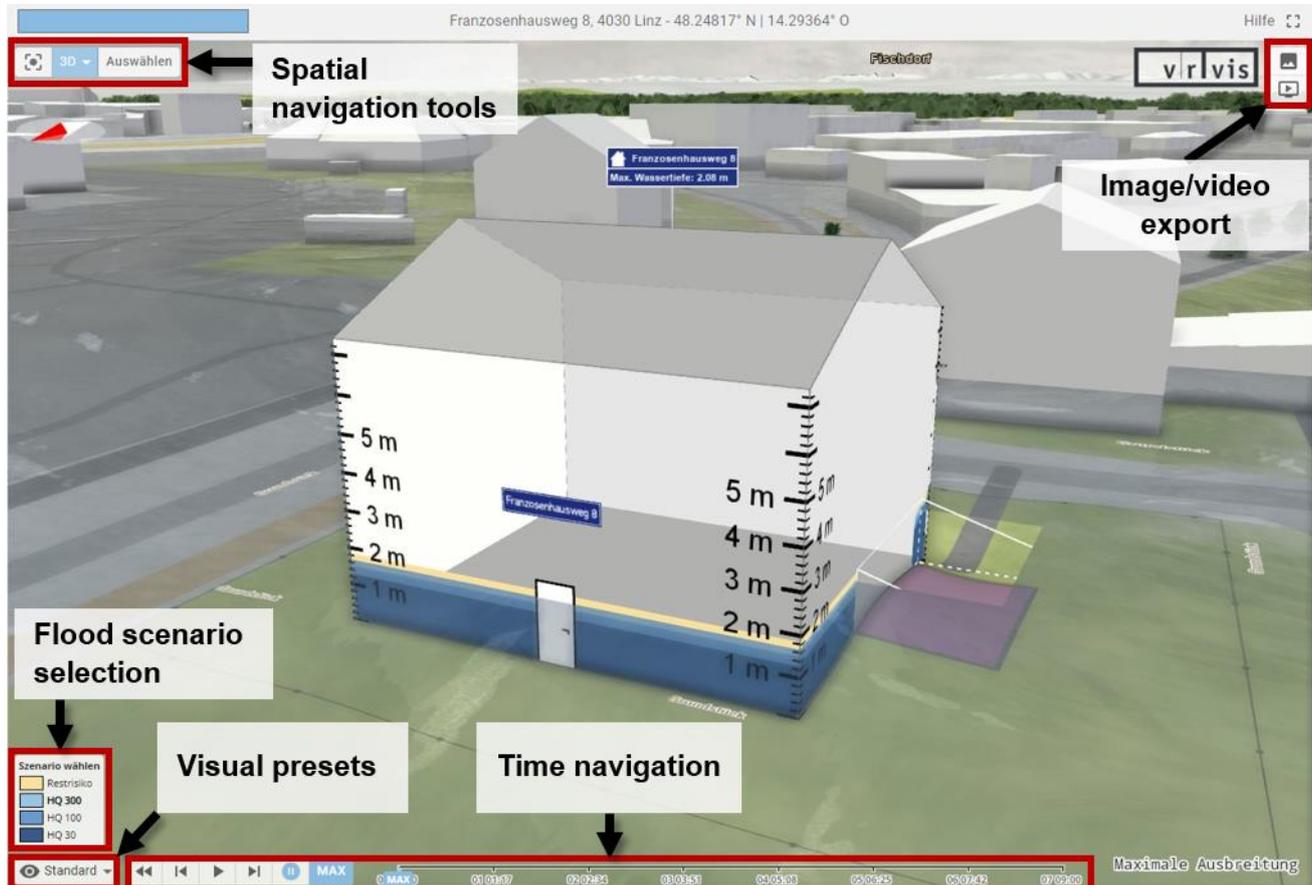


HORA 3D – Quick Start Guide

User Interface Overview

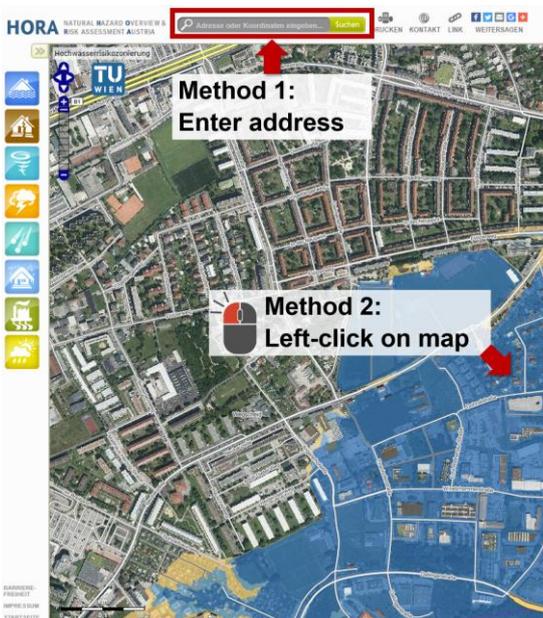


- **Spatial navigation tools**
Reset perspective, switch between 3D and 2D view, selection of a different building or focus point in the vicinity
- **Image-/video export**
Export of high quality images and videos
- **Flood scenario selection**
Switch between four different flood scenarios (default setting: 300-year flood)
- **Visual presets**
Selection of alternative visualizations that provide information on road accessibility, flow velocities of the water, inflow volumes at the premise border, possible protection measures
- **Time navigation**
Time step selection, water animation, “MAX” button for the visualization of the water with maximum water depths and flow velocities (default setting)

Entering the Application

HORA 3D can be accessed in two steps via the website hora.gv.at:

Step 1:

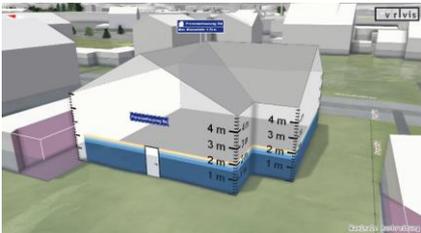


Step 2:



Empty premises or premises with buildings can be selected. The selection defines the **focus object**, which is at the center of the 3D visualization.

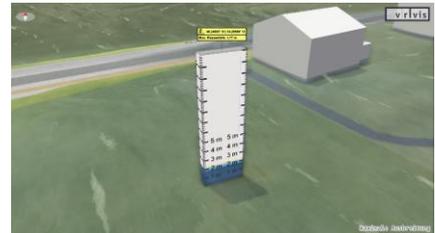
There are three types of focus objects:



Existing building



Fictive template building on buildable premise



Water gauge on non-buildable premise

Spatial Navigation

The following buttons can be used for spatial navigation:



1. Reset view to focus object
2. Switch between 3D and 2D view

Selection of a different building or focus point in the vicinity

The navigation through the scene can be done either with a computer mouse or using gestures on touch devices. There are two selectable spatial navigation modes:

3D

- **Zoom:** Use the mouse wheel (or use the two-finger zoom on touch devices)
- **Rotate:** Click and drag the left mouse button (or use the one-finger interaction on touch devices)
- **Pan:** Click and drag the right mouse button or the mouse wheel (or the two-finger pan on touch devices)

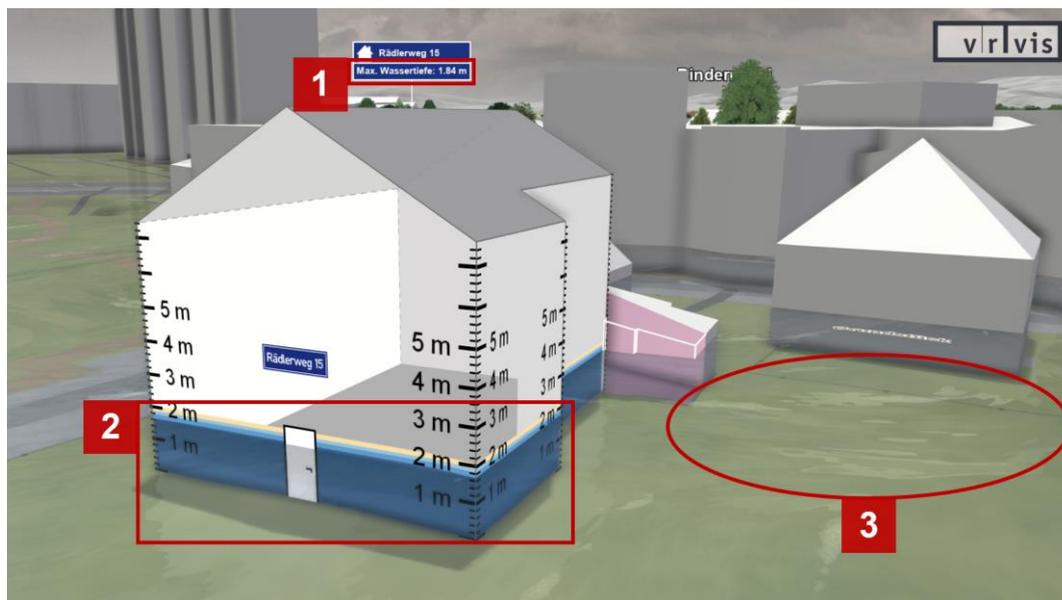
2D

- **Zoom:** Use the mouse wheel (or use the two-finger zoom on touch devices) – the zoom is directed towards the mouse position
- **Pan:** Click and drag the left mouse button (or use the one-finger interaction on touch devices)

View-Dependent Visualization

The visualization changes automatically with the current perspective on the focus object. An overview of the different views with explanation of important elements follows:

Side view (Close-up view)

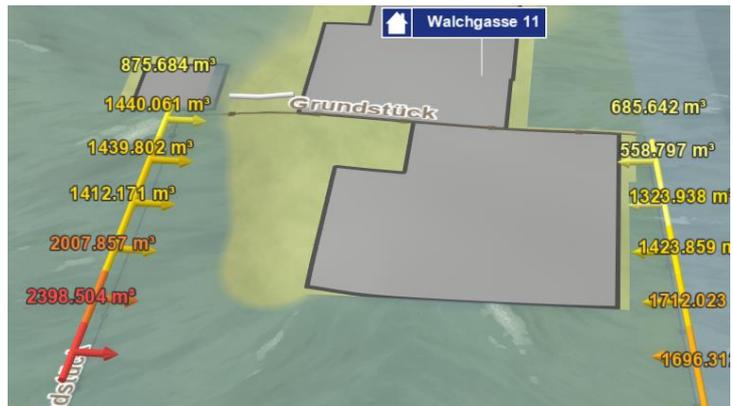


1. The label shows the **maximum water depth** along the building footprint for the selected flood scenario (default setting: 300-year flood).
2. The colored areas on the building facade show the flood lines for **four flood scenarios** from the [HORA 3.0](#) modeling with height scales in meters.
3. Animated waves on the water surface show **flow velocities** and **flow directions** of the selected flood scenario.

2. **Aerial Images:** Like the default preset, but uses aerial images for the display of the terrain surface.



3. **Premise Inflows:** Shows where on the premise border how much water enters the premise.



4. **Premise Sandbags:** Shows a sandbag barrier along the premise border which would be necessary to protect the premise from being flooded.



5. **Premise Walls:** Shows a wall along the premise border which would be necessary to protect the premise from being flooded.



6. **Roads:** Shows which roads cannot be used in case of flooding.



7. **Velocity Arrows:** Shows the flow velocities of the water using colored arrows.



Note: Visual presets that include calculations along the premise border are available only for buildable premises whose perimeter is 800 m or less.

Time Navigation

The elements of the time navigation bar can be used to navigate through the selected flood scenario in time:



1. Selection of a certain time step by clicking in the timeline or by moving the time slider (see red rectangle)
2. Go to beginning of scenario
3. One time step backward
4. Play scenario
5. One time step forward
6. Animate flow velocities of water
7. Switch between maximum water expansion and water expansion of selected time step

Note: Time steps with a time interval of three hours are available.