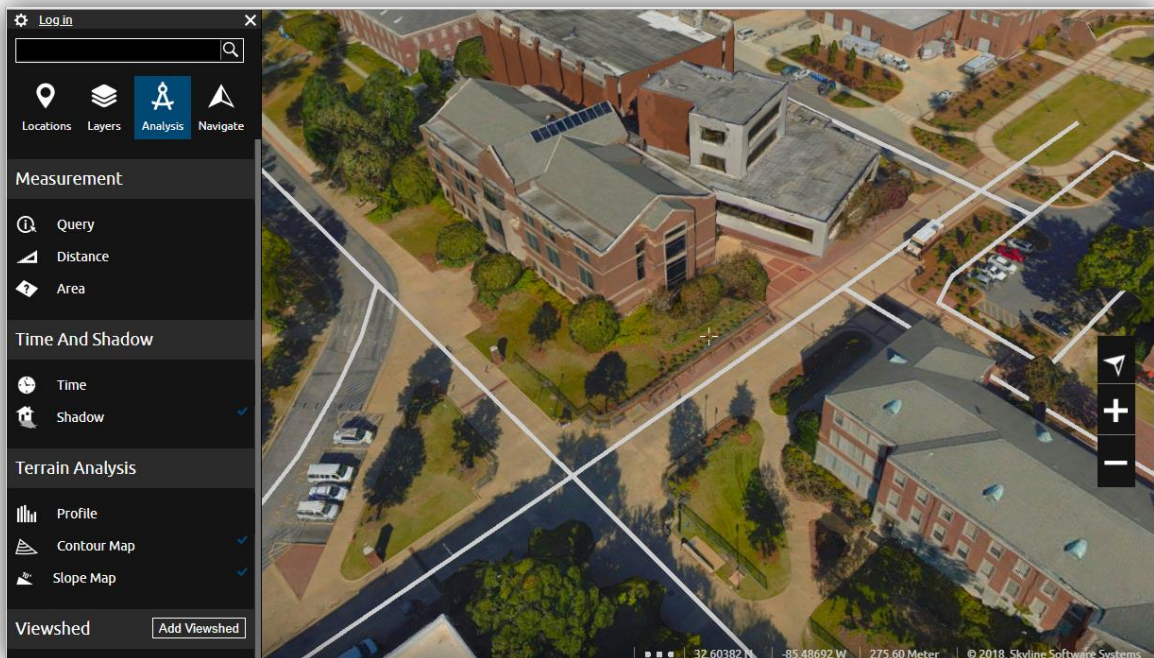# RELEASE NOTES FOR TERRAEXPLORER FOR WEB 7.1.1

About TerraExplorer for Web

TerraExplorer for Web (TE4W) is a lightweight 3D GIS viewer that seamlessly accesses online data from Skyline's SkylineGlobe Server, enabling you to view high-resolution, stunningly realistic SkylineGlobe 3D content in a web browser, without any plug-ins. This latest addition to Skyline's TerraExplorer product line serves as a perfect complement to Skyline's powerful 3D GIS desktop and mobile applications, offering a simple, no-download, no installation solution for online viewing of terrain, 3D city layers, feature layers, KML files, and raster layers. Based on the HTML5/WebGL standard, TerraExplorer for Web supports multiple platforms and browsers.

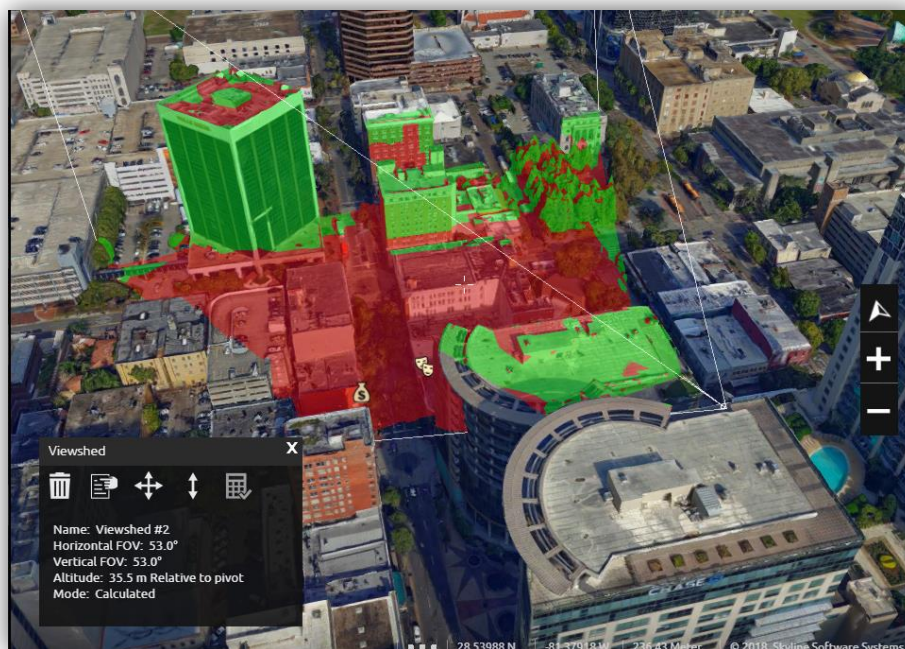# What's New in Release 7.1.1

Main Bug Fixes

This release improves overall stability and performance, and fixes bugs in all the following:

- Several bug fixes related to the Viewshed tool
- Reading and positioning of B3DM (3D tiles) layers with different vertical datum settings
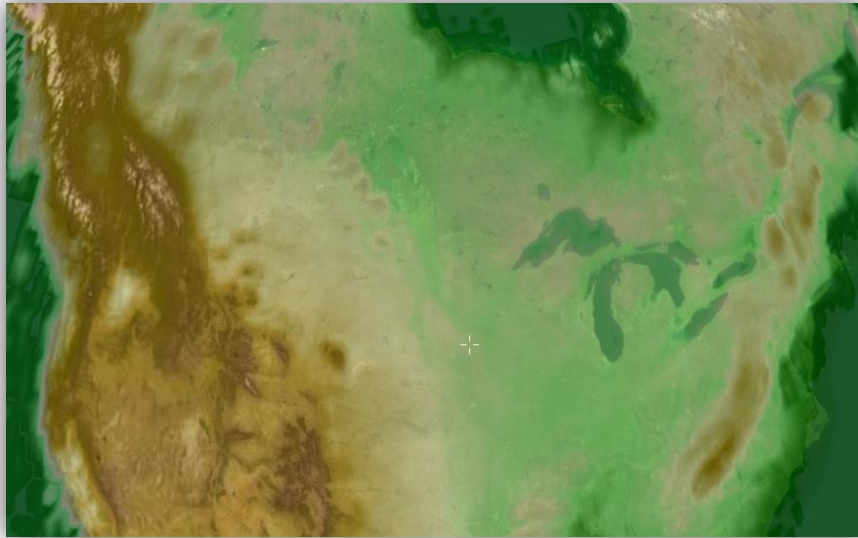
What's New in Release 7.1

Viewshed Tool

The 3D viewshed tool calculates and clearly marks what areas on the terrain and 3D models are visible from a selected point in the 3D World, and what areas are hidden. To calculate an accurate viewshed, TE4W pre-loads the terrain and 3D models in the area of interest and performs the viewshed calculation on this best-quality dataset. TE4W also features a Preview mode that displays a quick, approximated analysis of the viewshed, without pre-loading any additional data. This improves workflow by enabling parameters to be adjusted and the viewshed repositioned as necessary before calculation of a high quality viewshed.
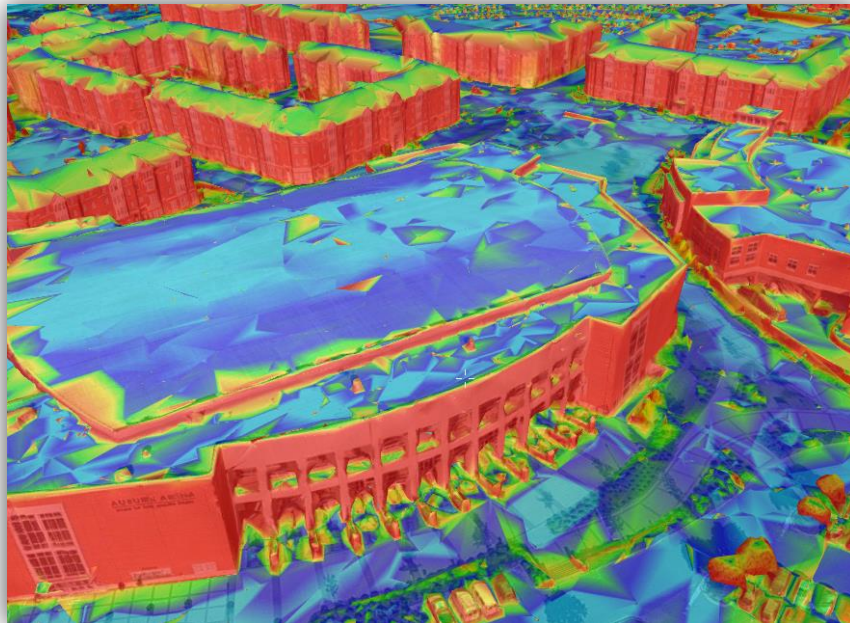
Contour Map

The new Contour Map tool creates a topographic map on the entire terrain that portrays differences in terrain elevation by connecting points of equal elevation with contour lines or by coloring terrain according to varying altitudes.

Slope Map

The new Slope Map tool applies semi-transparent palette colors to entire 3D World according to slope degree. Slope map colors are rendered on terrain textures as well as on 3D models.

Area Tool Improvements

The Area tool can measure area of any horizontal surface on terrain or a 3DML layer.

Support for 3D Mesh Layers' Ground Surface

3D models created by Skyline's PhotoMesh include a ground surface that is significant when drawing ground level feature layers (e.g., roads and parcels) in a complex 3D mesh environment. This ground surface information is now embedded in 3D tiles loaded into TE4W, thus supporting the following:

- Adjustment of all Relative to Terrain layers to the 3D model ground surface

- Drawing of ground level feature layers on the 3D model ground surface

Improved Implementation of Relative to Terrain

New mechanism for calculating altitude of feature layers with Relative to Terrain altitude mode individually positions each and every feature point in a defined altitude above the terrain surface.

- Waypoint altitude dynamically adjusted to the terrain model when zooming in or out of the terrain

Significantly Increased Support for Feature Layer Styling

TerraExplorer for Web 7.1 provides enhanced support for feature layer styling performed in TerraExplorer Pro. In addition, TE4W performs a more advanced evaluation and conversion of language expressions or

keywords in TerraExplorer Pro script classifications that were assigned to a feature layer before publishing from TEP:

- Supports "Extend to Ground" property – Extends the edges of the polygon vertically to the ground (to create a partition such as a wall).

- Supports classification-based tooltips for feature layers.

- Supports Line to Ground Length/Color properties – Adds a line from the layer's pivot point either to the ground or to a custom length towards the ground.

Feature Layer Attribute Table

The Attribute Table enables you to search the layer attribute database files, and easily modify attribute information for the layer's features.

Improved Elevation Layer Support

TerraExplorer for Web 7.1 now supports elevation layers with clip polygon and null value.

GUI and Usability

TE4W's GUI redesign make it easier to find the command or tool you require:

- **Layer "toolbox"** – Includes a set of actions that depend on the layer being opened, e.g. for feature

layer, the following commands are displayed: "Select", "Attributes Table", "Properties", "Refresh", "Delete".

- **Layer property sheet** – Basic layer and feature properties can be modified from the layer's property sheet.

- **Integration of MGRS coordinate system in application UI** – The "Show MGRS coordinates" checkbox has been added to the Settings menu to enable display of Military Grid Reference System (MGRS) system coordinates in status bar, as well as in query results. The search box also supports searches according to MGRS coordinates.

- **Refresh button** – New refresh button added to 3DML and imagery layers enables you to easily get the latest layer updates.

Support for Internet Explorer 11

TE4W 7.1 supports Internet Explorer 11 with some known limitations.

API

TE4W 7.1 offers additional API objects for loading different layers into a project, creating analysis objects, and accessing viewshed objects.

SOFTWARE AND HARDWARE REQUIREMENTS

Operating System	Windows / Linux / MacOS / Android / iOS
System Memory	2GB of RAM (4 GB or more recommended)
Processor	Dual-Core (4 or 8 cores recommended)
Browser	Chrome, Firefox, Safari, Opera, Edge, IE11
Operating System	Windows / Linux / MacOS / Android / iOS
System Memory	2GB of RAM (4 GB or more recommended)