

Adobe Aero Geospatial Pre-release Guide (V0.5)

Introduction

The Adobe Aero Geospatial Pre-release is an invitation-only experimental program for creating Geospatial Augmented Reality (AR) experiences.

IMPORTANT:

- Pre-release Geospatial projects are **experimental**, and we **strongly encourage** you to **isolate your work** on them from other Aero projects you work on.
- You can use the **duplicate** and **export** features on the home screen of Aero to back up your work before opening any Aero project in the Aero Geospatial pre-release.
- **Editing** Geospatial Aero projects on mobile is not supported at the current time.
- **Viewing Shared** Geospatial experiences made using the “Share” feature on mobile is possible for anyone on a supported device with the link/QR.

Overview

Aero Geospatial Pre-release, powered by **Google’s Geospatial Creator** enables creators to choose a location covered by [Google Earth 3D Tiles](#) and create AR experiences against a digital location twin in Aero’s desktop application.

When you are ready you can share the experience so it can be viewed persistently at that specific location. More details about which locations will work best will be available shortly.

By leveraging Google’s [Geospatial API](#), anyone with a compatible Android or iOS mobile device will be able to view the experience in AR as you intended - at the correct location and with correct scale and orientation.

Download and install Aero Geospatial Pre-release

Before you install a prerelease build of Aero ensure Aero is not already installed on your machine. If it is, uninstall it.

Builds are available via your pre-release email.

Requirements and best practices for geospatial experiences

Requirements for creators

- Your experience is located at an outdoor and public location.
- Google Street View data must be available where you place your experience.
 - You can check this by going to [Google Maps](#) and dragging the little yellow person icon in the bottom right of the screen onto the map. A map overlay showing locations with Google Street View will become visible.

Requirements for viewers

- Camera and location permissions need to be granted (precise location for Android viewers).
- A compatible device.
 - [Supported Android devices](#)
 - [Supported iOS devices](#)

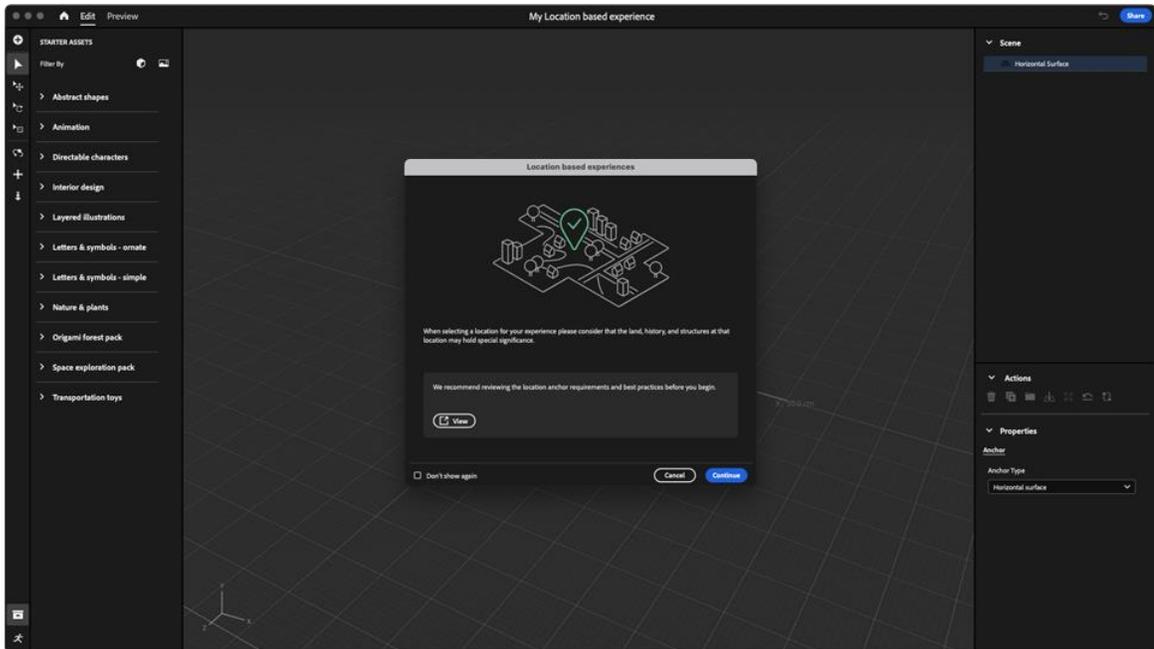
Best practices

- Before you choose a location in Aero make sure there is Google Street View data available for your chosen location. You can do this by going to [Google Maps](#) and dragging the little yellow person icon in the bottom right onto the map. An overlay showing locations with Google Street View will become visible.
- Consider where you place your experience in the world as the land, history, and structures at your location may hold special significance.
- If possible, scout and test your experience at the real-world location before sharing it widely. This is important for a few reasons.
 - The 3D tiles imported into Aero may not represent the most current version of that location. For example, temporary structures may have been added or construction may be ongoing.
 - Observing how your experience looks on a mobile device can inform you on where to best place assets in your experience.
 - It's good to understand the dynamic nature of your location. Is it a safe place to view AR? Does my experience align adequately?
 - You can gather important reference materials like images, video or even 3D scans to help inform the creation of your experience.
- Consider where viewers of your experience may need to stand at the real-world location when viewing your experience.
- Select a location that's on the ground and as close to most of the objects in the scene. This may increase overall accuracy.

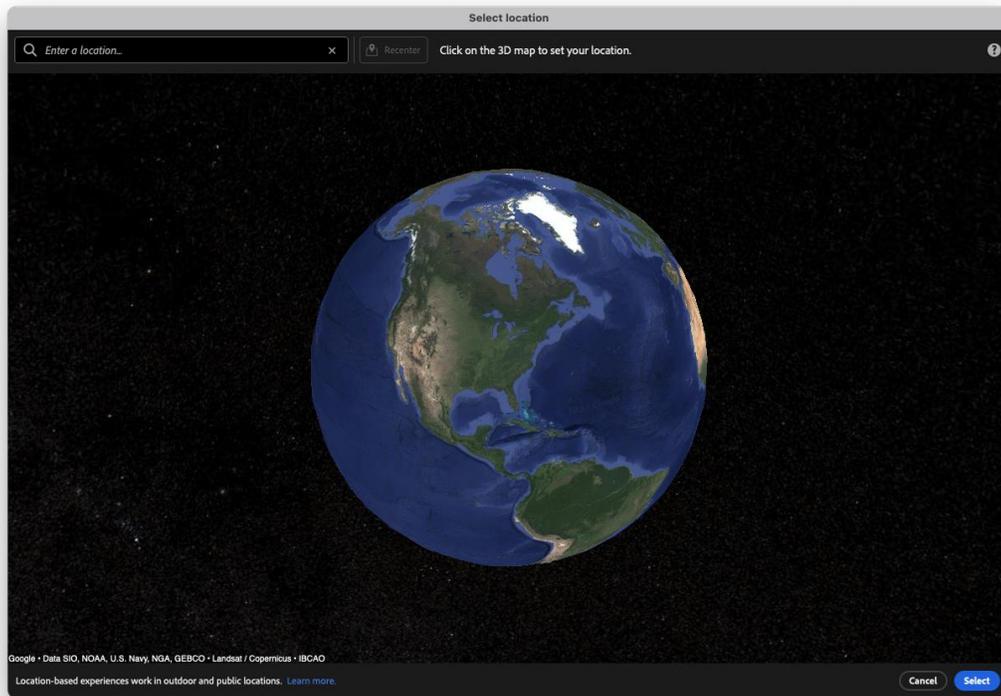
Creating a geospatial experience on desktop

Selecting Location Anchor

1. Open Aero desktop.
2. Create a new project and name it.
3. A location anchored experience is created by default.
If you haven't done so already, review the [requirements and best practices](#).

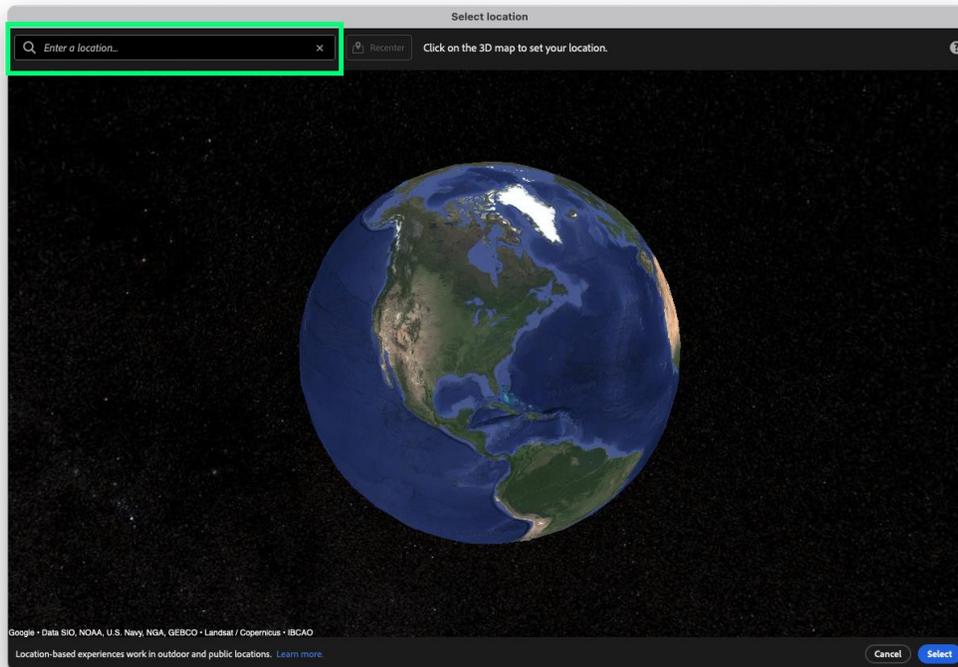


4. Select 'Continue' to open the location selection window.

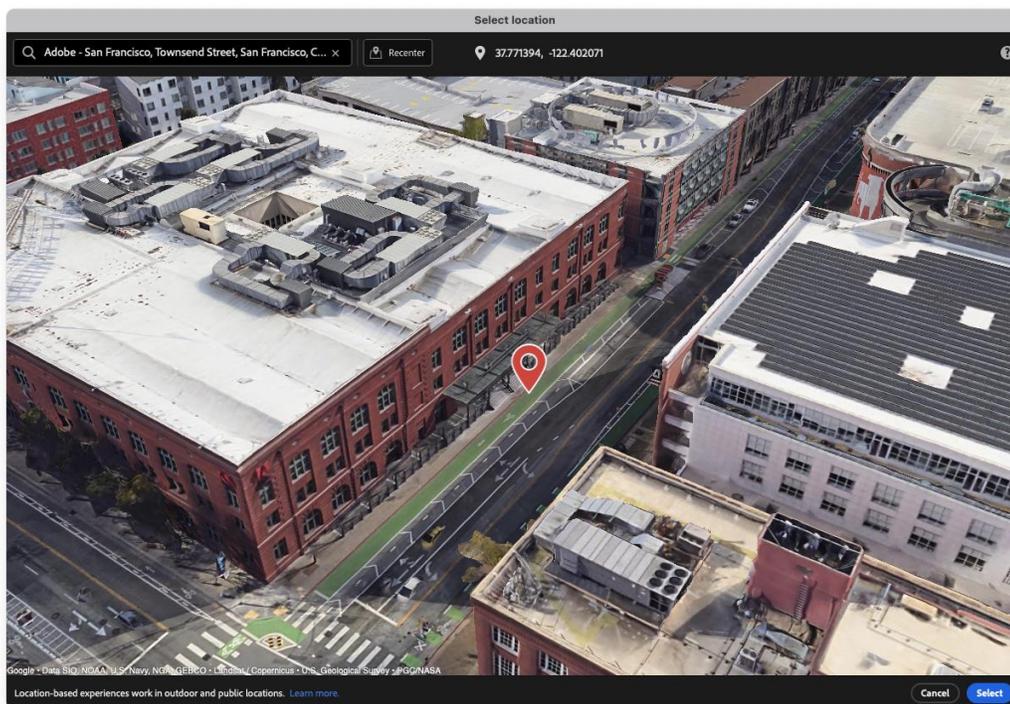


Selecting a location

1. Use the search field in the top right to find a place or navigate to a location using the mouse.
 - Right mouse button or the mouse wheel to zoom in and out.
 - Left mouse button pans the map around.
 - Middle mouse button tilts the map.



2. Double click to place the red location indicator at your chosen location.



3. Double click again if you want to place the location indicator in a new location.

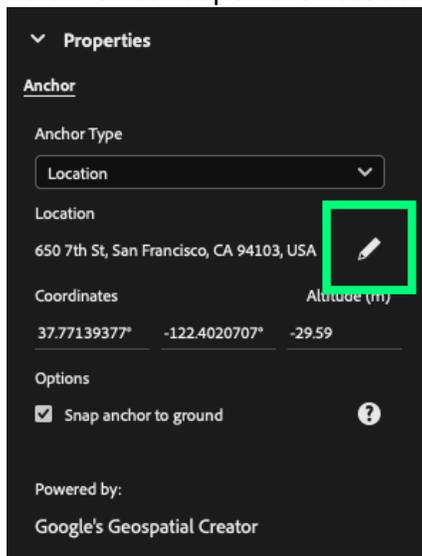
4. If you move away from your location, select the 'Recenter' button at the top to center the location marker in the view.



5. Click the 'Select' button to confirm your location and begin importing 3D tiles into Aero.

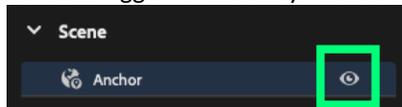
Creating your experience

1. Import assets and then apply triggers and actions to them to add interactivity to your experience. There are several [tutorials](#) available that can help you easily create an interactive AR experience.
2. Test your scene by selecting the Preview tab at the top.
3. Iterate until you are happy with your experience.
4. To choose a different location select the anchor in the scene graph and then select the 'edit' icon to reopen the Location Selection Window.

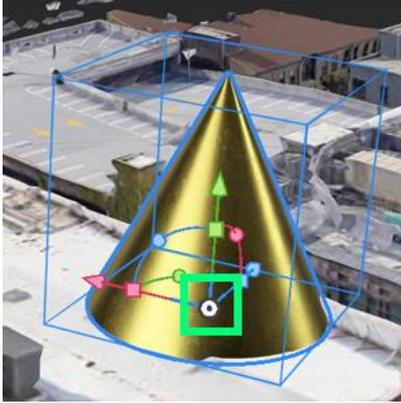


Some helpful tips

- Pressing 'F' on the keyboard to frame the selected asset. This can help you navigate large scenes.
- You can toggle the visibility of the 3D tiles on and off. This can help you focus on just your scene assets.

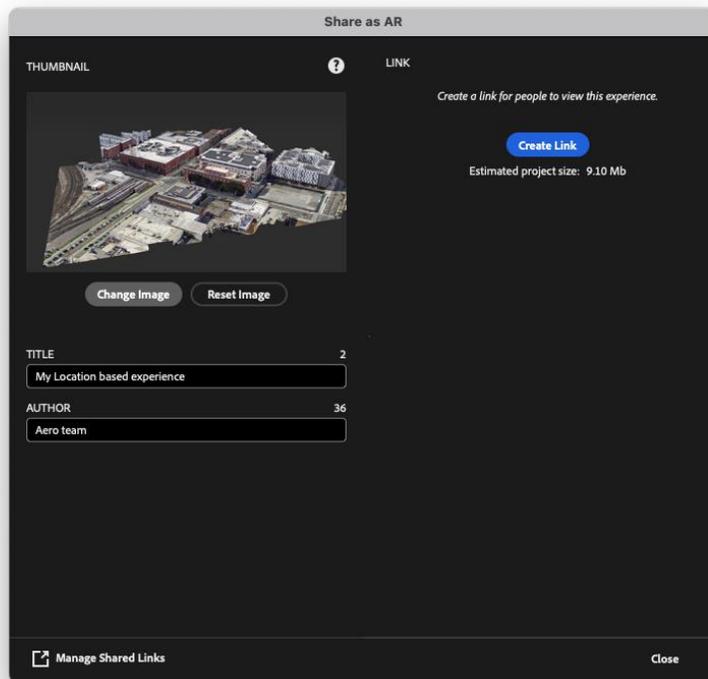


- Quickly snap assets to the terrain by clicking on the white circle of a selected asset's pivot and dragging. This can help align assets to the 3D tiles.



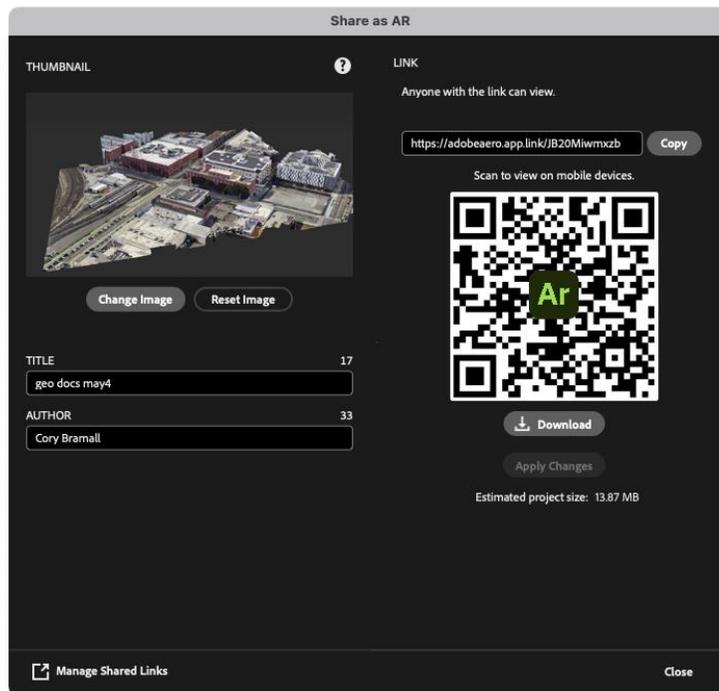
Sharing your experience

1. Select the blue 'Share' button in the top right to open the Share as AR window.



2. Customize thumbnail, title, and author fields as desired.

3. Select 'Create link' to generate the link and the QR code for your experience.



4. Use the generated link to test your experience at the real-world location.
5. Share the link or the QR code with other so they can try the experience at the real-world location with Aero's app-less viewer for iOS or with Aero's Android viewer.

Known Issues

- Some icons may not be easily visible in dark mode.
- Trying to place large assets near the work plane is unpredictable.
- There is currently no in-tool guidance for selecting a location.
- The search field may not handle some unique characters.
- 3D tiles will show up as low-resolution tiles first and then higher resolution 3D tiles will be imported subsequently.
- Default thumbnails appear empty.
- Minor UI cosmetic issues in the Sharing Window.
- If you notice a significant vertical offset of your experience on mobile (above or below the ground), try unselecting 'Snap anchor to ground'. Disabling this option will tell Aero to use an alternate method of anchoring that will work better in some locations.
- On Android and Windows longer audio clips will stop playing before finishing.

Viewing geospatial experiences on mobile

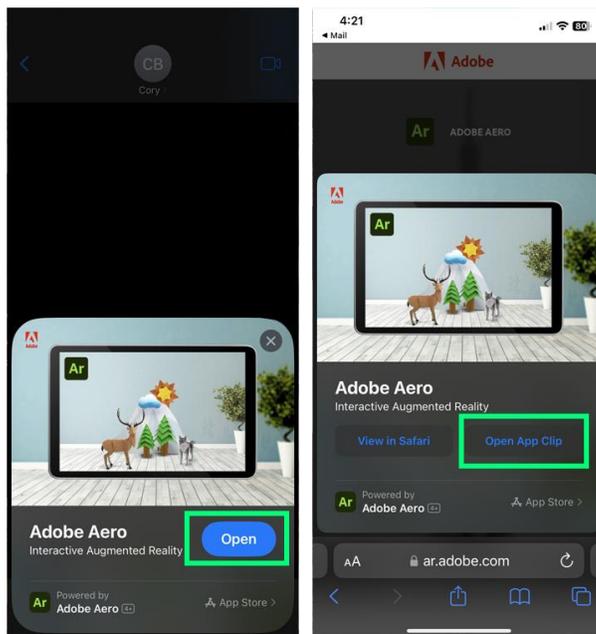
To view geospatial experiences on mobile, you need to be physically at the real-world location where your experience was placed in Aero desktop.

Launching an experience with an iOS device

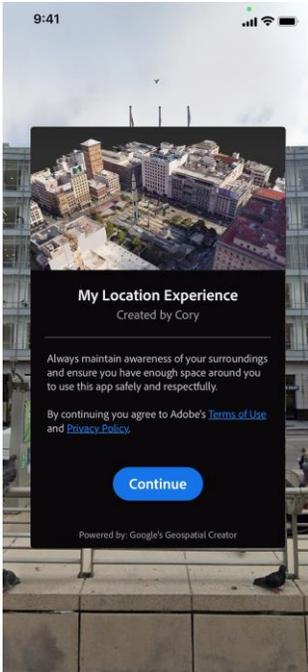
Viewers do not need to log in to the Aero app OR have it installed to view experiences.

1. Click the shared link or scan the generated QR Code with your device's camera app.
2. Click on the 'Open' button on the App Clip Card.

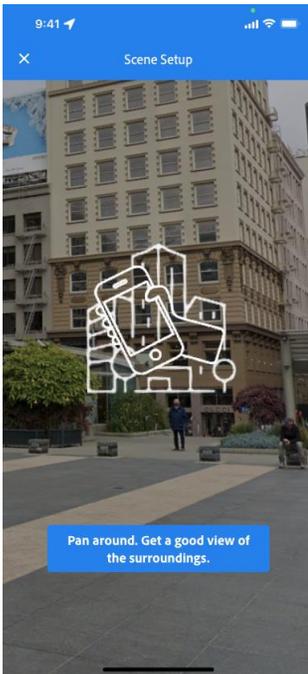
Note: you will see either one of these App Clip Cards depending on where the link is accessed from.



3. Follow the prompts and accept camera and location permissions.



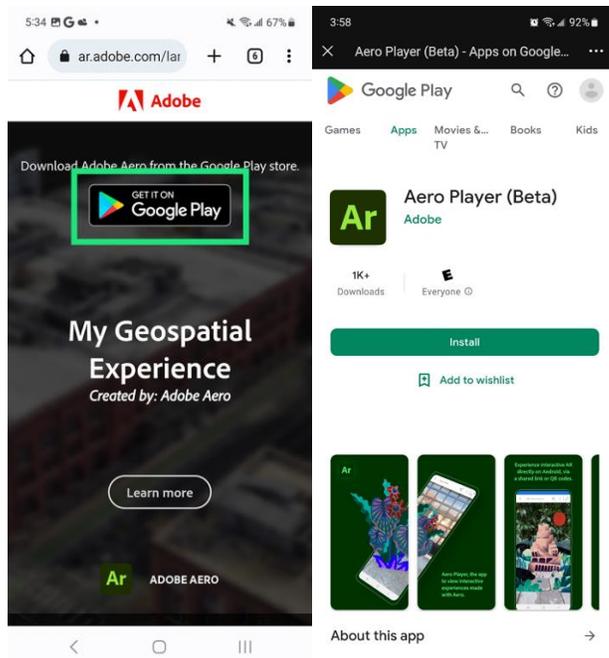
4. Select the 'Continue' button and then slowly pan your phone around the area until you see AR content.



Launching an experience with an Android device (Aero not already installed)

Viewers will need to download the Aero (beta) for Android from the Google Play Store to view AR experiences on supported Android devices. **App-less viewing for supported Android devices is coming soon.**

1. Click the shared link **or** scan the generated QR Code with your device's camera app.
2. Click on the 'Get on Google Play' button on the landing page.



3. Install Aero (beta) onto your device.
 4. Click the shared link **or** scan the generated QR Code again.
 5. Follow the prompts and accept camera and location permissions.
NOTE: Select the 'Precise' location option in the location permissions.
 6. Select the 'Continue' button and then slowly pan your phone around the area until you see AR content.
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FAQs

What if my selected location doesn't have 3D tiles data?

If there is Google Street Map data for your location your location-based experience will still work. A way to add 3D data to build against in Aero is to use a 3D scanning app on a compatible mobile device and scan the real-world area and then import that scan as a .glb into Aero and align it to the flat 3D tiles.

Can I export the 3D tiles from Aero to use in another 3D application?

No. This is not supported.

How can I test my experience if I am not near the location?

Although nothing is better than testing your experience at the intended location, one way to test when not at the location is to duplicate your project and then change the anchor type to be a surface anchor. This will allow you to tap and place the experience anywhere you want. This works best for experiences that don't take up too much space.