Local File Sharing vs. a Hosted Aerial Data Workspace: Which Fits Your Drone Project?

The Challenge of Moving Drone Data

When a drone project wraps up, the real work often begins. Raw images, orthomosaics, point clouds, and map viewer files can quickly add up to gigabytes of data. Sharing those files with a client, a colleague, or a contractor used to mean loading everything onto a hard drive or uploading to a generic cloud storage service. That approach works for small, one-off deliveries. But as projects grow in complexity, the limitations of local file sharing become hard to ignore.

This article compares two approaches to drone project visualization: the familiar method of local file sharing versus a hosted aerial data workspace. The goal is to help you decide which option suits a given project, based on file size, collaboration needs, client expectations, and the level of interactivity your deliverables require.

What Local File Sharing Offers

Local file sharing means transferring raw or processed drone data directly to another person, typically by physical media, a direct transfer over a local network, or a consumer-grade cloud service. The appeal is simplicity. You export a project report, zip the folder, and send a link. The recipient downloads the files and views them on their own machine, often using free or common software.

This approach works well when the recipient is technically comfortable and the data is not unusually large. For a single orthomosaic delivered as a GeoTIFF, or a short video clip, the process is straightforward. There is no learning curve, no subscription, and no dependency on an internet connection after the download finishes.

However, the limitations surface quickly when collaboration enters the picture. If multiple stakeholders need to review the same data, each person must download their own copy. Comments and annotations happen outside the data, often through separate emails or spreadsheets. Version control becomes a headache: someone might work from an older file, or two people might upload conflicting edits. For time series analysis, where you compare flights from different dates, the recipient must manually align the files. The burden of organizing and maintaining the data falls entirely on the people involved.

What a Hosted Aerial Data Workspace Brings

A hosted aerial data workspace is a purpose-built online environment for storing, visualizing, and sharing drone data. Instead of moving files from one desktop to another, you upload your

data once to a platform that manages everything from map viewer rendering to annotation layers. Everyone you invite accesses the same live version. Changes, notes, and new uploads appear in real time, without anyone having to re-download or re-send anything.



This model is especially powerful for projects that demand interactivity. A client can open a map viewer in a browser, pan across an orthomosaic, measure distances, toggle point clouds on and off, and leave annotations directly on the data. No special software is required on their end. The workspace handles the heavy lifting, streaming the data at appropriate resolutions so that even large projects remain responsive.

For repeated work at the same site, a hosted workspace makes time series comparisons trivial. You load two or more flights side by side or overlay them, and the platform aligns them automatically. Changes in vegetation, construction progress, or stockpile volumes become visible at a glance. The same workspace can generate a project report that includes these comparisons, ready for the client.

When Local File Sharing Makes Sense

Local file sharing remains a practical choice in several scenarios. If the project is a one-off delivery to a single person who prefers to work offline, sending a complete file set is efficient. There is no need to maintain an account on a platform, and the recipient has full control over

the data on their own storage. This can be important for clients with strict data security policies that prohibit storing sensitive information on third-party servers.

Another case is when the data is highly specialized. For example, a raw point cloud that will be processed in niche software may be easier to hand over as a file. The recipient can then work with it in their own tools without adapting to a workspace's built-in viewer. Local file sharing also avoids recurring subscription fees, which can matter for a very low-volume operation that does not need a workspace month after month.

Yet even in these cases, the trade-off is that you lose the collaborative features. If the client later asks for a small tweak, you end up exporting, uploading, and sending a new link. The conversation becomes a chain of file transfers rather than a shared view.

When a Hosted Workspace Shines

A hosted aerial data workspace becomes valuable as soon as more than one person needs to interact with the data. If your client wants to review the project with their own stakeholders, a hosted workspace lets each person access the same map viewer, see the same annotations, and leave feedback in context. This cuts down on misunderstandings and speeds up decision-making.

Large files benefit from a hosted approach as well. Uploading a multi-gigabyte orthomosaic once and letting the workspace handle streaming means the client never has to download anything. They simply open a link and view the data at full resolution in their browser. For projects with many flights, the workspace keeps everything organized in one place, with clear version history.

Data hosting also provides a level of professionalism that can set your service apart. Delivering a project report that includes a live map viewer link, annotation tools, and a time series comparison shows that you have invested in how the client experiences the data. It signals that you are not just a pilot but a complete data provider.

Platforms like National Drone Services offer this kind of shared processing, hosting, visualization, and reporting environment for FAA-certified drone pilots. By using such a workspace, pilots can deliver their clients' aerial data through a polished interface without building the technology themselves. The workspace becomes part of the pilot's service offering, not an extra cost they pass along awkwardly.

Making the Choice

Consider three factors when deciding between local file sharing and a hosted workspace: the number of reviewers, the size and interactivity of the data, and the client's technical comfort. A single reviewer with a small static file is well served by local sharing. A team reviewing a large, layered dataset over multiple flights will benefit from a hosted workspace. For clients who are not technical, a hosted workspace removes the friction of downloading and configuring software.

There is no rule that you must pick one approach for every project. Many drone professionals use both, sending simple exports via local file sharing for quick check-ins and using a hosted workspace for final deliveries or complex analyses. The key is to match the delivery method to the project's actual needs, not to default to whichever habit you have fallen into.

As drone project visualization becomes more central to how clients evaluate your work, the tools you use to present that data matter. A workspace that centralizes hosting, annotation, and reporting can make your deliverables more valuable without adding hours of extra work on

your end. Whether you adopt one for every project or reserve it for the most demanding clients, understanding the trade-offs helps you serve your clients better.