



Urban Sky's Microballoons could be an affordable alternative for satellites for aerial imagery | Photo source Urban Sky

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## REUSABLE BALLOONS RIVAL SATELLITES FOR HIGH-QUALITY AERIAL IMAGERY



### The balloons can photograph up to 1,000 square kilometres per hour

**Spotted:** Deployed above commercial airspace and below low-Earth orbit, Urban Sky's Microballoons are a quickly deployed aerial imagery solution that makes high-resolution data capture more affordable for businesses, governments, and farmers. The helium-filled balloons drift horizontally in the stratosphere, using custom-built cameras and other image-gathering devices to create large-scale photos.

The camera rotates depending on the speed of the balloon's travel, and images are stitched together to produce up to 1,000 kilometres of imagery data per hour. Once the entire area has been photographed, a ground team remotely activates the return system, using the weight of the cameras and sensors to turn the balloon inside out and deploy a parachute when at a low enough altitude.

Both the cameras and balloon are reusable, which passes financial savings onto businesses and organisations unable to afford the current cost of satellite imagery. Urban Sky envisions the photography being useful for a considerable range of purposes, including mapping urban changes, monitoring widespread utility assets, and providing rapid reviews of natural disaster zones. Already in use by several private organisations in the western United States, Urban Sky recently announced plans to develop a dedicated forest fire monitoring version for the US Air Force.

With tethered drones capable of providing on-the-spot [internet access](#) and a drone-powered [water sampling](#) device available, aerial solutions to natural disasters are becoming more commonplace.

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## **Takeaway:**

The cost effectiveness of Urban Sky's Microballoons could encourage new methods of management for innovators in a variety of industries. Farmers could check on their land and animals quickly during extreme weather conditions, helping to keep everyone in the area safer. Local and regional governments could better track geographic changes and pass along new information more quickly and easily to the relevant communities. Add to the ease of use, the sustainability of the reusability of the balloons, and users of the system can avoid contributing to the growing volumes of pollution in space.