

GLOBAL BIODIVERSITY OBSERVATORY:

A novel constellation of small satellites will drive a global decision-support system and social movement empowering people to rapidly reduce biodiversity loss worldwide

OUR VISION AT A GLANCE

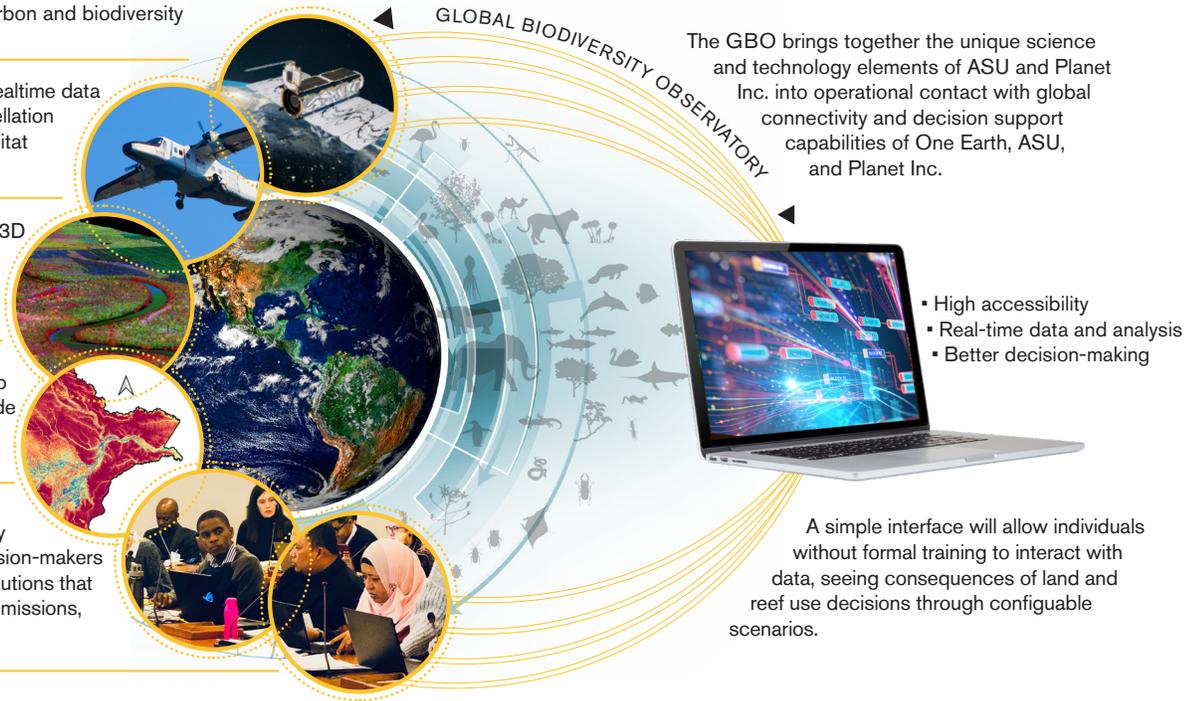
Satellite constellation frequently mapping the world's ecosystems, including their carbon and biodiversity composition, over time.

Airborne laboratory gathering realtime data to calibrate new satellite constellation for carbon, biodiversity and habitat algorithms.

Unleashing ASU's specialized 3D biodiversity mapping for Earth using Planet's satellite capabilities.

Detailed, ground-actionable map continuously produced worldwide and at high spatial resolution.

An international user community comprised of professional decision-makers and the public to accelerate solutions that stem biodiversity loss, carbon emissions, and ecological degradation.



ACCURATE | EXPLAINABLE | USEABLE | ROBUST

Earth's biosphere relies upon a complex web of interdependent organisms, yet we haven't been able to see these organisms and their habitats changing in a way that aids sustainable decision-making about nature and people. Until now.

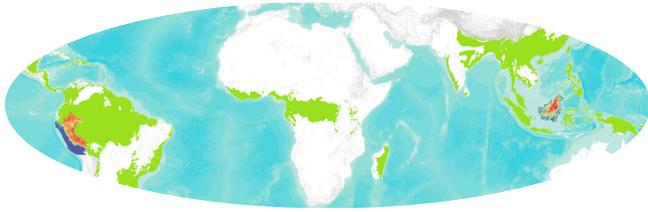
GDCS Innovative Biodiversity Imaging

ASU's Center for Global Discovery and Conservation Science (GDCS) has successfully built high-resolution maps of terrestrial plant biodiversity, coral reef and coastal biodiversity, habitat connectivity and forest biomass. A single ASU aircraft has remotely detected communities of species and their 3D architecture using Laser-guided Imaging Spectroscopy, benefitting countries like Malaysia and Peru, which used detailed maps of Bornean and Amazonian plant communities to identify and protect previously unknown biodiversity.

Creating a Global Biodiversity Observatory for effective Decision-Making

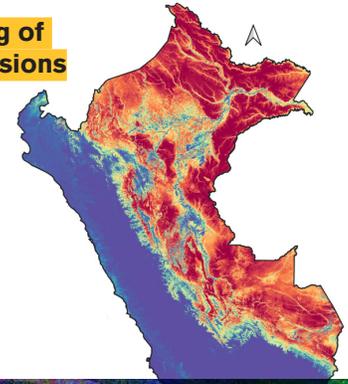
Global access and responsible decision-making require combining GDCS's innovative biodiversity technology and analysis with global carbon mapping, habitat science indicators, and effective decision support capabilities. We are proposing a unique partnership with Planet, a revolutionary aerospace company and One Earth, a leader in powerful, science-driven solutions ranging from decision-support systems to public mobilization. We are ready to take this to a global scale, empowering people and reducing biodiversity loss.

An investment in the GBO partnership will provide valuable resources to undertake pathfinding steps that will be highly impactful and stand as enormous contributions to resource conservation, management and decision-making communities.

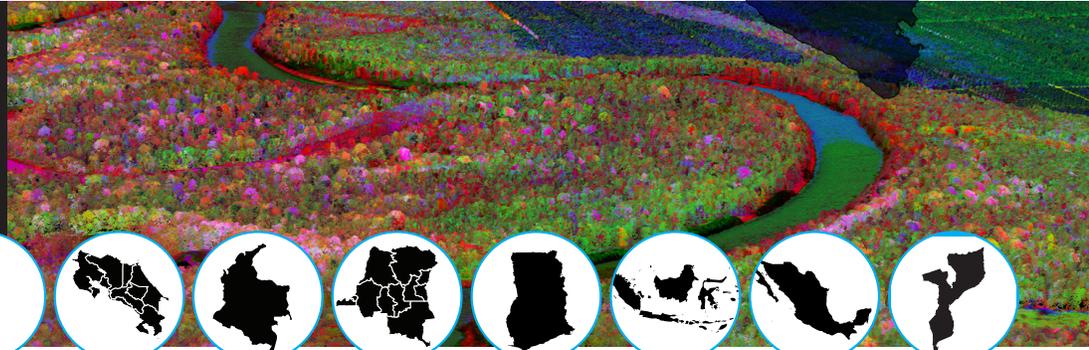


\$1M: Global map of tropical forest carbon stocks using existing Planet Dove satellites, with a public launch and technical advocacy plans provided by One Earth.

\$5M: Global monitoring of forest carbon and emissions over time for all forests using existing Planet Dove satellites, integrated into a public online platform by One Earth/Azavea.



\$10M: All of the above plus a one-time mapping of forest canopy biodiversity in 8 key countries, with policymaker workshops led by One Earth partners, including World Future Council.



Chile

Costa Rica

Colombia

Democratic Republic of the Congo

Ghana

Indonesia

Mexico

Mozambique

STEPPINGSTONES TO GBO's IMPACT

We invite investors to help communities apply terrestrial and marine biodiversity information to decisions about natural capital investments essential for human livelihoods, food productivity, water security, carbon sequestration, and disaster reduction.

\$10M (3 years) Through global satellite monitoring of carbon stocks and emissions the GBO will have the greatest impact on empowering people and reducing biodiversity loss. In addition, eight key countries will be provided highly detailed forest canopy imaging from the GDCS Airborne Observatory, biodiversity analysis, and tools needed for effective decision-making. An easy-to-use, interactive website will allow individuals without formal training to interact with data, seeing the consequences of

land-use decisions through configurable scenarios. The decision-making tools developed through this investment will be later utilized world-wide to stem biodiversity loss.

\$5M (3 years) The GBO will generate and share satellite monitoring of carbon stocks and emissions for global forests onto a public online platform that allows the broader public to view an evolving "map of life". This steppingstone enables development of an integrated online

platform for world-wide monitoring of carbon biomass, enabling biodiversity advocacy through a public tool for global awareness and decision-making.

\$1M (1 year) A one-time global map of tropical forest carbon stocks using existing Planet Dove satellites, with a public launch and technical advocacy plans provided by One Earth. This steppingstone will enable public access a global map of carbon stocks to assist policymakers.

Like a health monitoring system for the planet, the GBO will equip decision makers at all levels of government, businesses, and the general public with information needed to stem biodiversity loss, curb carbon emissions, and avoid ecological degradation.



ASU Center for Global Discovery and Conservation Science (ASU-GDCS)'s multi-million dollar projects in 132 countries have led to new terrestrial and marine protected areas and improved environmental governance at sub-national, national and international levels.

With over 400 satellites, a scientific and engineering team from NASA, Department of Defense, and the broader scientific and technology communities, Planet Inc. has deployed the largest earth imaging constellation to observe the entire earth's landmass and coastal regions daily.

Bringing together over 40 leading scientists and dozens of NGOs and academic institutions, OneEarth has led groundbreaking scientific collaborations and numerous cutting-edge media projects to address the twin crises of climate change and biodiversity loss.