



Interactive Earth Data Globe Installation

Project Overview

This project proposes the creation of an immersive, interactive installation that transforms complex global environmental data into a powerful spatial experience. At the centre of the installation is a large, suspended globe of the Earth, visualising dynamic datasets as living, animated layers across the planet's surface. Visitors interact with the globe through a simple tablet interface mounted on a sculptural plinth, allowing them to explore different perspectives on our changing world.

The installation is designed for a darkened gallery or museum space, where the glowing globe becomes a focal point. By combining physical presence with digital visualisation, the project invites visitors to step beyond screens and encounter planetary-scale information in an intuitive, emotional, and memorable way.



Visitor Experience

Visitors approach a softly illuminated globe floating in space, immediately conveying scale and fragility. Using the tablet, they can switch between different thematic modes, each revealing a different story about the Earth.

These modes may include:

- Deforestation and land use change
- Global wind and ocean current systems
- Weather patterns and extreme events
- Global warming and temperature anomalies
- Ice melt and polar change
- Coral reef bleaching and ocean health

Each mode overlays carefully designed visual layers onto the globe, using colour, motion, and intensity to communicate change over time. The interaction is

intentionally simple, allowing visitors of all ages and backgrounds to engage without instruction or technical knowledge.

The experience is contemplative rather than gamified, encouraging curiosity, reflection, and conversation. Multiple visitors can observe the globe together, making it a shared experience rather than a solitary one.





Use Case and Context

The installation is well suited to:

- Science and natural history museums
- Climate and sustainability exhibitions
- Cultural institutions exploring humanity's relationship with the planet
- Educational centres and universities
- Public engagement spaces focused on environmental awareness

It can function as a standalone centrepiece or as part of a larger exhibition on climate, ecology, or global systems. The modular nature of the content allows the

installation to evolve over time, supporting temporary exhibitions, seasonal themes, or locally relevant datasets.



Why This Project Is Important

Environmental data is often abstract, fragmented, or difficult to grasp when presented as charts, maps, or numbers. This project addresses that challenge by giving data physical presence and spatial meaning.

By visualising global processes directly on a three-dimensional Earth, the installation helps visitors:

- Understand scale and interconnectedness
- See relationships between regions and systems

- Grasp change over time rather than isolated moments
- Connect emotionally with complex scientific information

The project bridges science, design, and storytelling. It does not seek to overwhelm with information, but to create clarity and empathy. In an era defined by climate change and environmental uncertainty, helping people see the planet as a single, interconnected system is both timely and necessary.

Educational and Cultural Impact

The installation supports both informal learning and deeper inquiry. It encourages questions rather than prescribing answers, making it suitable for diverse audiences, from school groups to researchers to casual visitors.

Key impacts include:

- Increased climate and environmental literacy
- Improved public understanding of global systems
- Strong visual memory retention compared to traditional displays
- A shared, social experience that prompts discussion

By situating data within a physical, human-scale encounter, the installation turns information into insight and awareness into engagement.

Hardware Overview

- Globe:
 - Option A: LED sphere: [link](#)
 - Option B: Projectors: [link](#)
- Tablet plinth options: [link](#)
- Tablet: [link](#)
- Other:
 - WiFi router for network connection between tablet and globe
 - Sound system

- PC

Conclusion

The Interactive Earth Data Globe is a compelling, future-facing installation that reimagines how we experience and understand our planet. It combines scientific integrity with strong visual design and intuitive interaction, creating an experience that is both educational and emotionally resonant.

This project offers institutions a powerful tool for public engagement, one that makes the invisible visible and transforms global data into a shared human experience.