

**The NASA-GODAN Local Farming Challenge for expanding Geo-Innovations solutions
for Sustainable agriculture: Outcomes**

Ajit Maru, Suchith Anand, André Laperrière, Ruthie Musker
GODAN



NASA-GODAN Local Farming Challenge

The NASA-GODAN Local Farming Challenge was launched at this Forum last year (2017).



The Challenge was to develop an innovative solution to reduce waste and achieve ZERO HUNGER

By bringing together teams of students and researchers to find solutions for local farming in growing cities, using open agriculture and nutrition data.

Teams had to use use:

- some aspect of the **OpenCitySmart** Design and
- NASA's open source virtual globe technology, **WebWorldWind** as a source of open data.

Outcomes of the Challenge

- Several Project linking Agricultural and Geo Domains participated in the Challenge
- The Winner was AgroSphere developed by a team of High School Students and Undergraduate NASA interns.

AgroSphere

AgroSphere is an educational web application that visualizes the effects of Climate Change on Agriculture using a large collection of global agricultural and Climate Data.

- Enables visualization of various types of agriculture (1961-2014) and climate data (1989-2014) simultaneously from hundreds of countries across the globe
- Explore Geo-Comparison of Agricultural Data
- Search for current weather data for any city around the globe

Winner 2017 - Agrosphere



The image shows the landing page for Agrosphere, a project associated with NASA. The background is a dark blue space-themed image with a bright light source on the horizon. The NASA logo is centered above the main title. The navigation menu is at the top right, and three call-to-action buttons are centered below the title.

AgroSphere

INTRODUCTION DOCUMENTATION TIMELINE TEAM OUTREACH



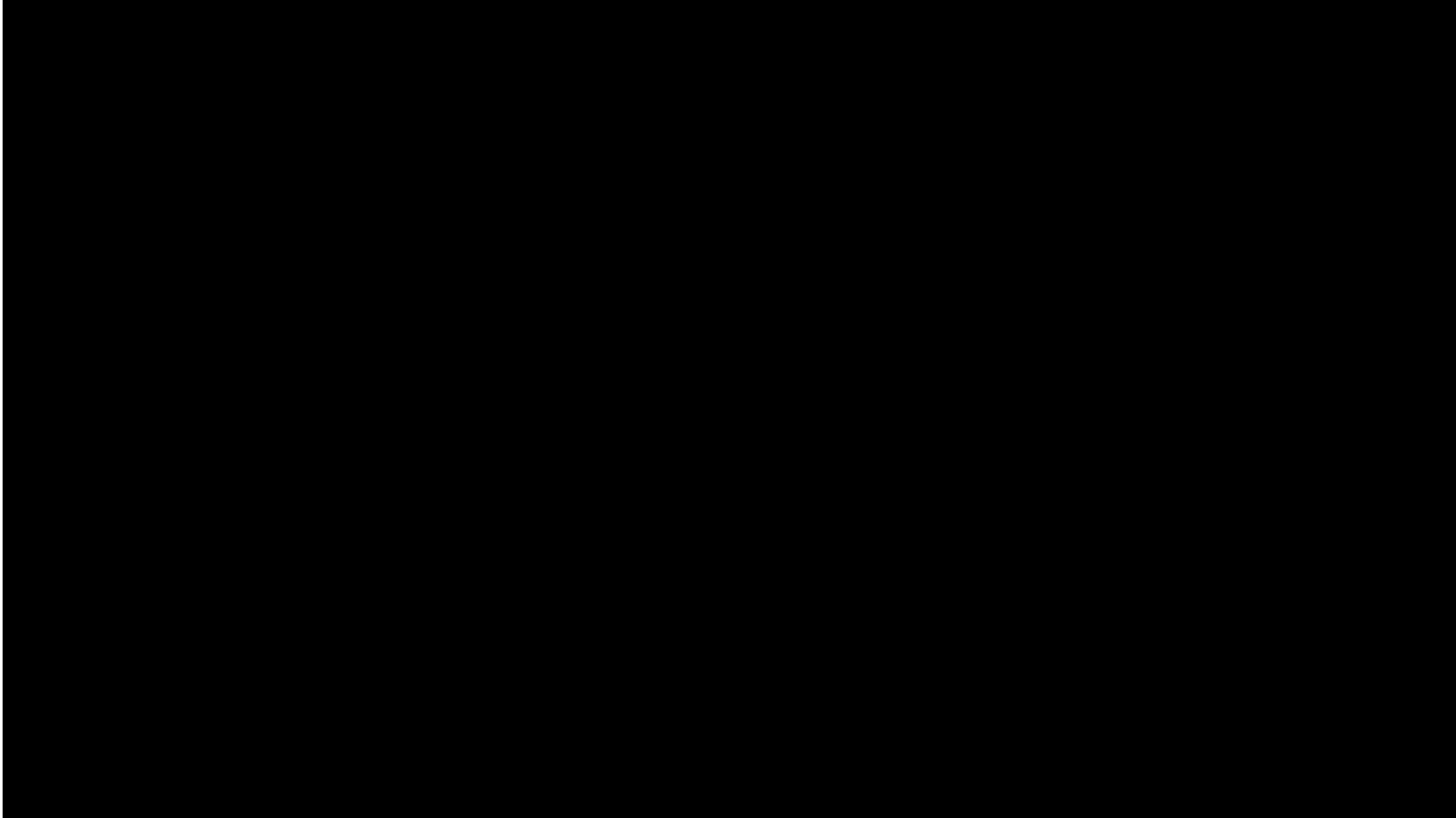
AGROSPHERE

[START APPLICATION](#)

[SOURCE CODE](#)

[TELL ME MORE](#)

AGROSPHERE



<https://worldwind.arc.nasa.gov/agrosphere/about.html>

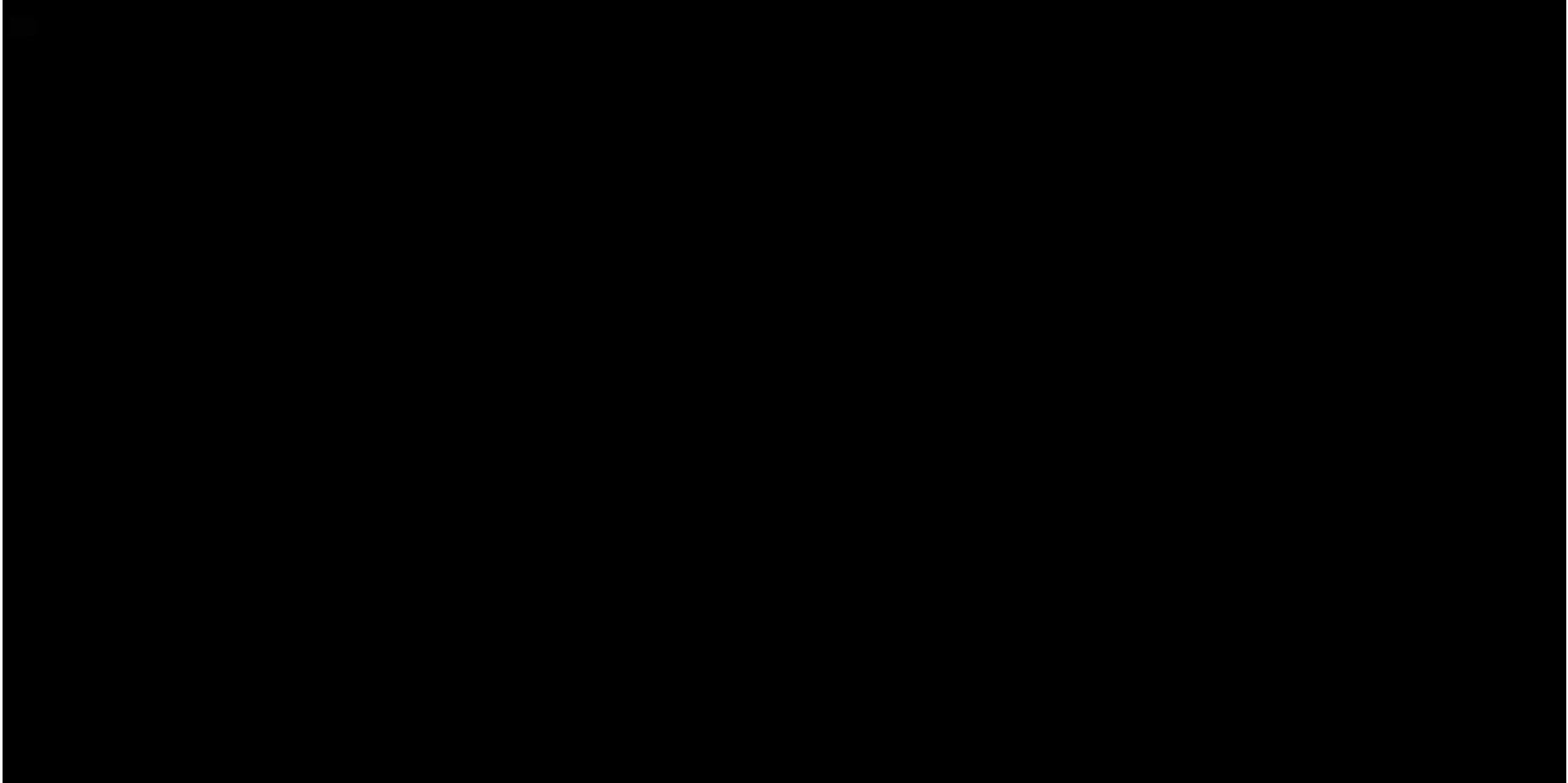
Lessons Learnt

- This challenge was a step towards enabling “Mass Innovation” in agriculture related applications using openly available technologies and data.
- It enabled building partnership between Universities, schools, teachers, GODAN and NASA
- The Final Award Ceremony at Helsinki bring together all finalists enabled further sharing of ideas, skills and knowledge

World Weather 4D

- The World Weather 4D was another Interesting Entry
- This entry was an interactive web-browser of the World's satellite-based climate and other time-aware weather data.

World Weather 4D



Available at: <https://www.youtube.com/watch?v=WMYI1UcgFr4>

The Award Ceremony

Available at:

<https://livestream.com/Coup4/nasa-europa-challenge-2017/videos/162117612>

(About 4hrs and Six Minutes Long)



Thank You

The Contributions of Patrick Hogan and Maria Brovelli are acknowledged
to the NASA-GODAN Local Farming Challenge



[amaru_in\(at\)yahoo.com](mailto:amaru_in@yahoo.com)

<http://www.godan.org>