



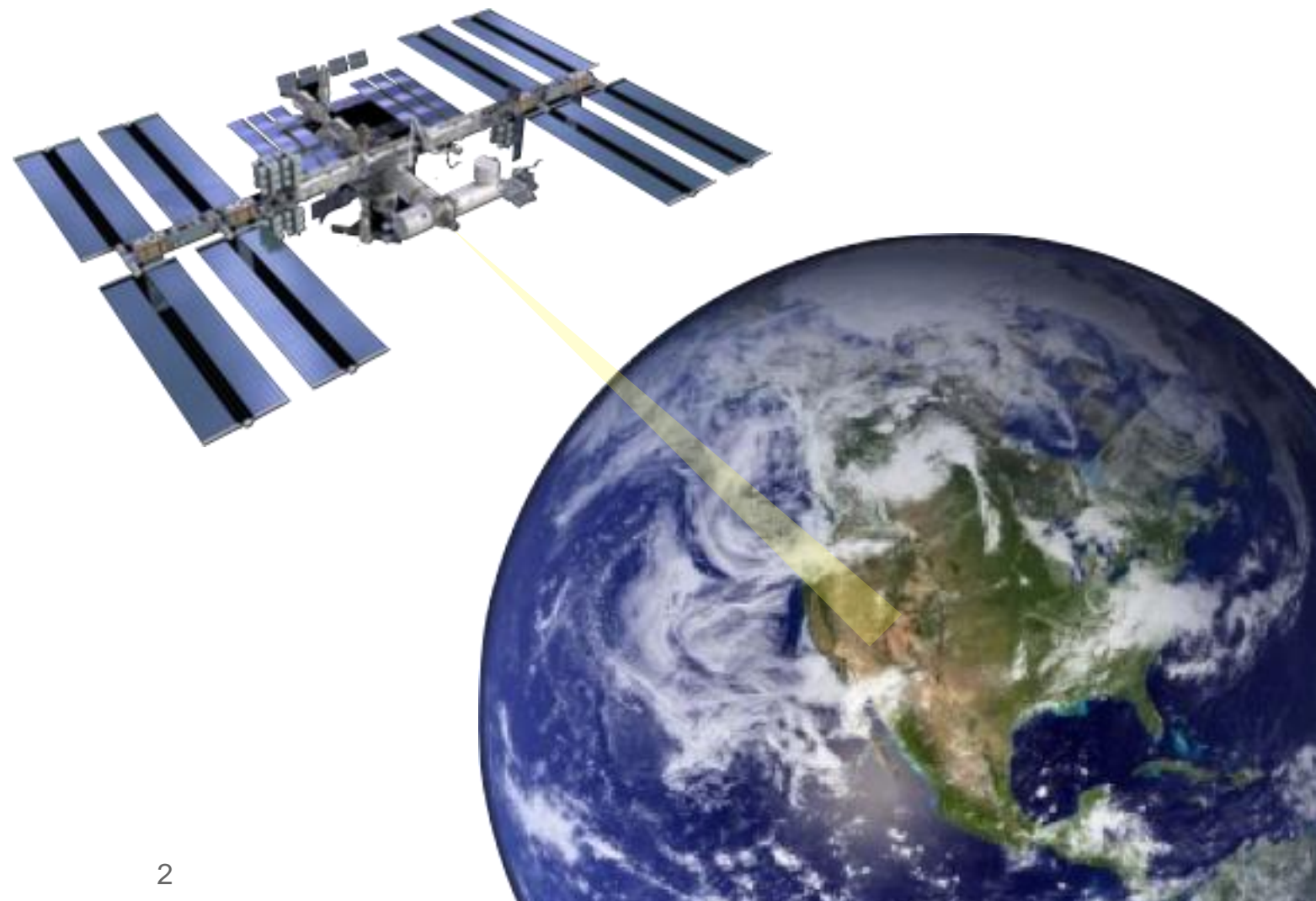
# URTHECAST

THE EARTH VIDEO CAMERA

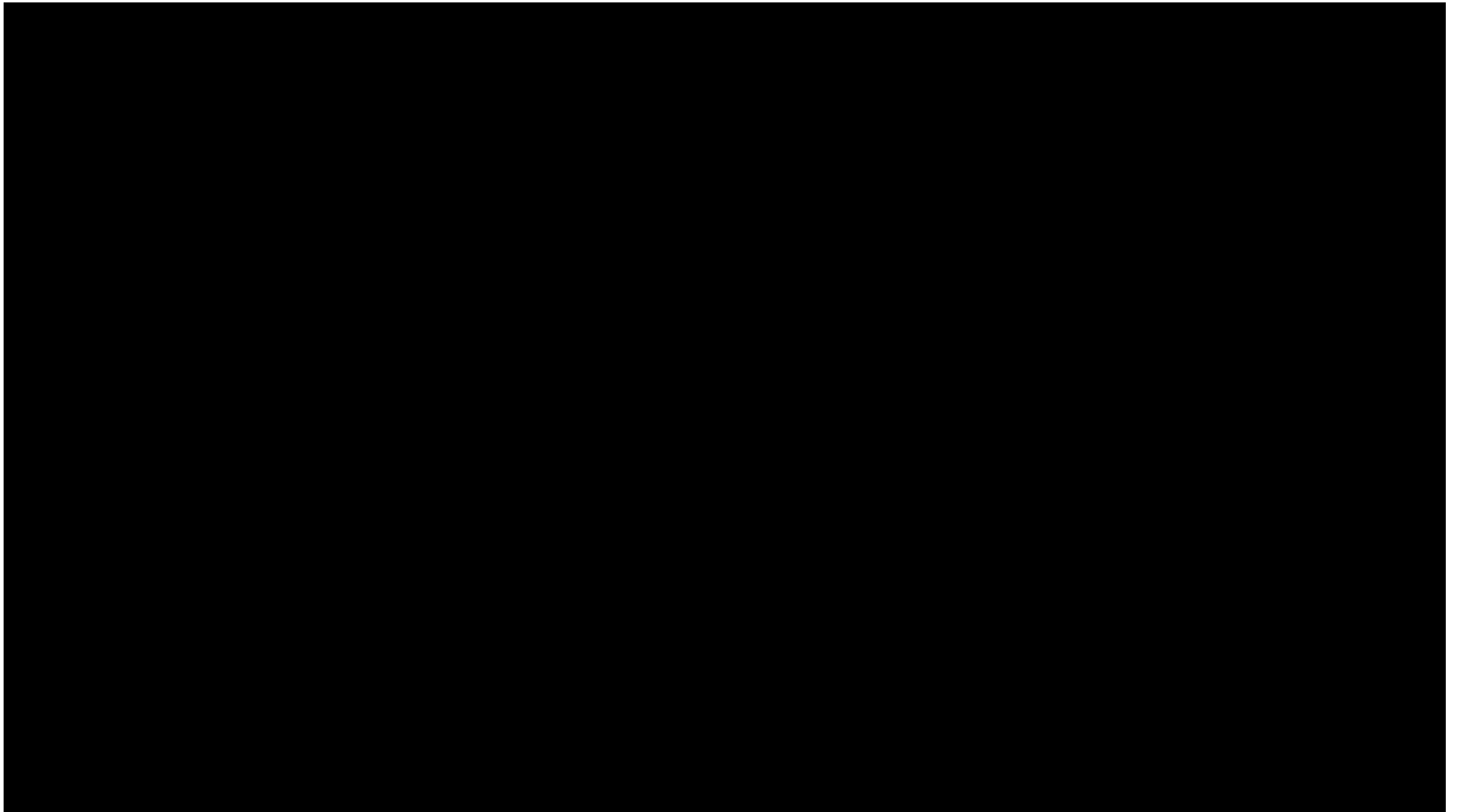


CANADA • RUSSIA • UNITED KINGDOM • UNITED STATES

Building / Launching / Operating first ever high definition, streaming video platform of planet Earth from space on the International Space Station (ISS).



Please visit the Urthecast website for an overview video clip of this project;  
<http://urthecast.com/> : “ Urthecast: A brief overview”





## Overview

Exclusive agreements with RSC Energia and Roscosmos to install UrtheCast camera on the ISS

- Russian module
- Energia to provide pre-launch, launch, installation, and downlink
- UrtheCast to provide cameras, ground station solution, and data
- Launch scheduled for late fall of 2012
- Cameras being built by RAL
- Data handling hardware built by SEA in Bristol
- Technical Management provided by MacDonald Dettwiler and Associates in Canada





URTHECAST

THE EARTH VIDEO CAMERA

## HOW IT WORKS

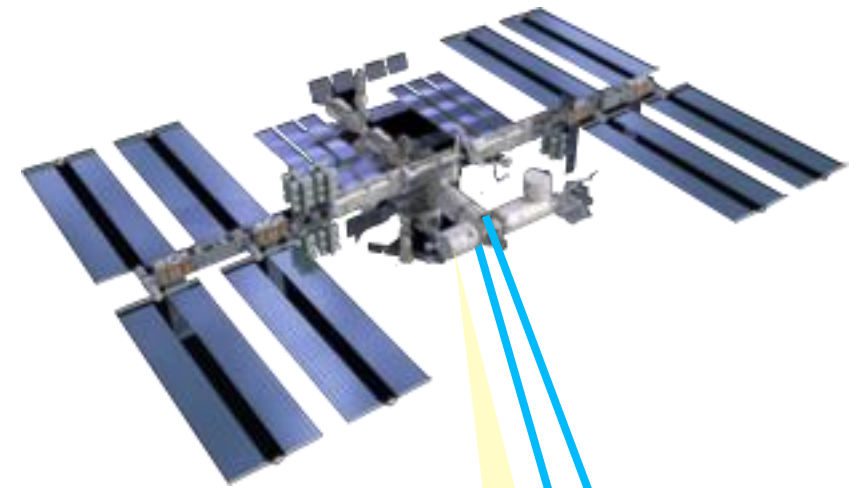
Cameras →

Compression Unit →

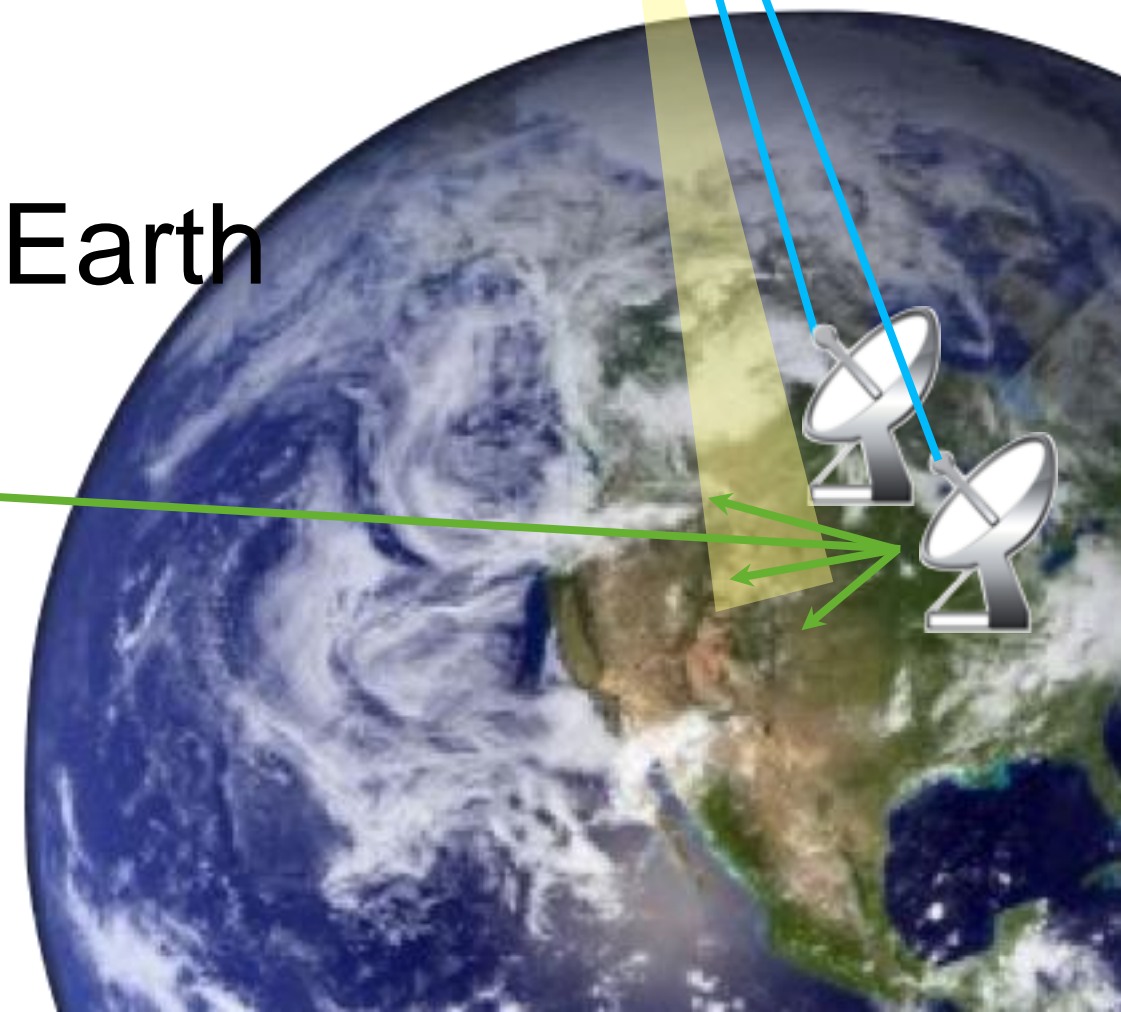
On-board Computer → Downlink →

Ground Stations → Processing →

Cloud Storage → Web Platform



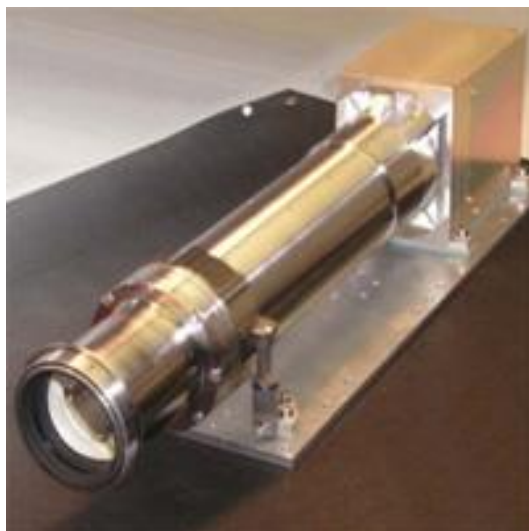
Google Earth



# The Cameras

## Medium Res Camera

- RALCAM3 – existing design
- Build-to-print solution for the ISS
- Fixed nadir viewing
- Push-broom imaging
- 47 km swath at 5.4 meter GSD
- RGB channels + NIR



## High Res Camera

- Custom built
- On a point-able platform.
- 1.1 meter GSD
- 3,048 x 4,560 pixel detector
- 5 km x 3.4 km field of view
- 3.25 fps video and still shot mode.
- RGB Bayer filter



Please visit the Urthecast website for an overview video clip of this project;  
<http://urthecast.com/> : “Urthecast 3D Animation”







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## WEB PLATFORM

### Geo Reference Map of Earth



Dynamic, interactive, multi-source, and frequently refreshed data

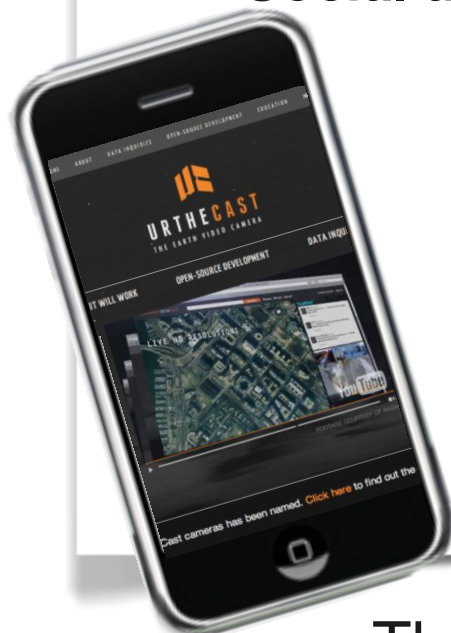
### Open Platform for Developers



Ability to create applications for education, gaming, advertising, environmental, current events, etc.

Pioneered by Apple and Facebook

### Social and Mobile Media Site



Users able to create, upload, share, and interact with their own and others' content anywhere, anytime

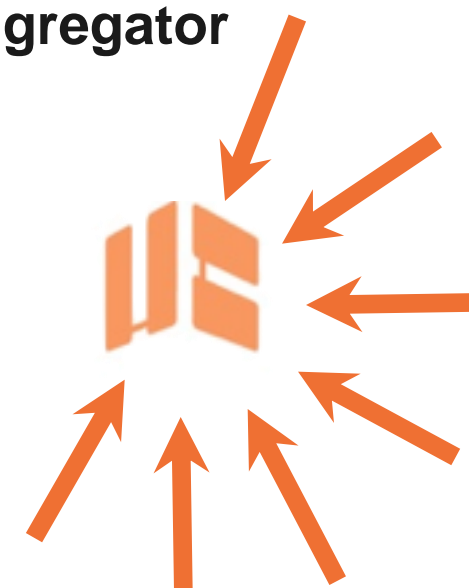


flickr

YouTube

### Content Aggregator

Collects, sorts, compiles, and geo-references news, media, and other content from the web



The **global** repository of real-time, **user-driven**, geo-tagged **media content**.



## BUSINESS MODEL

### Earth Observation Data Sales

Scenario - A city pays for a comprehensive annual urban change map

Customers - Remote sensing, Governments

*UrtheCast will be the only true video from space*

### Web Advertisements

Scenario - Starbucks pays to have logo on all their locations in the video stream

Customers - Starbucks, McDonalds, Coca-Cola



*UrtheCast will have tremendous web traffic*

### Earth Video Sales

Scenario - A news group pays for exclusive footage of a natural disaster unfolding

Customers - CNN, BBC, Fox, Al Jazeera



*UrtheCast will be the exclusive source*

### Application Platform Sales

Scenario - Social gaming and commercial apps

Customers - Apple, Blackberry Android via UrtheCast open Application Program Interface



*UrtheCast will have truly unique content*



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THE EARTH VIDEO CAMERA