UrtheCast

‘Democratizing the View from Space’

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Co-founder & CTO
UrtheCast’s Vision

Create an open web platform providing near real-time video and imagery from the ISS and data from many other sources

… allowing everyone to see the Earth and how it’s changing from a whole new perspective

… allowing everyone to experience and participate in events unfolding around the planet in a whole new way and share with friends

… allowing everyone to participate in the stewardship of our planet
Let all see the world from this perspective

PHOTO: NASA
A new kind of EO

Social
Ultra HD video
Open sources
Competitively priced
Widespread awareness

Near realtime
Democratized
Crowd sourced
Heightened accessibility
Fosters planet stewardship
# A new EO revenue model

### Earth Observation

The only color, Ultra HD video from space.

### Platform Apps

Inspires innovation and unique content.

### Media

An exclusive source for media outlets.

### Web Ads

Ballooning web traffic.
MRC:  "Theia"
HRC:  "Iris"
Camera: "THEIA"

Fixed nadir viewing

Aperture: 62 mm

Focal Length: 455 mm

Sensor: CCD, pushbroom
8800 pixels

4 Bands: Red Green Blue NIR

Built-in J2K Compression
Camera: “IRIS”

2-axis pointing, tracks a ground target

Aperture: 317.5 mm

Focal Length: 2.54 m

Sensor: CMOS, 14 Mpixel full colour (RGB)

Images captured at 3 fps

Built-in J2K Compression
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<thead>
<tr>
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<tbody>
<tr>
<td>GSD:</td>
<td>sub m</td>
<td>6.2 m</td>
<td>sub m</td>
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<tr>
<td>Image Area:</td>
<td>5.5 x 3.6 km</td>
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<td>5.5 x 3.6 km</td>
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<tr>
<td>Resolution:</td>
<td>full res (cropped)</td>
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<tr>
<td></td>
<td>or full size (down-sampled)</td>
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<tr>
<td>Video Formats:</td>
<td>HD &amp; 4k UHD (H.264)</td>
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<tr>
<td>Frame Rate:</td>
<td>30 fps</td>
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<td>Perspectives:</td>
<td>CameraView &amp;</td>
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<td>OrthoView</td>
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<td>Spectral bands:</td>
<td>RGB</td>
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<tr>
<td>Video length:</td>
<td>up to 90 sec</td>
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</table>
Amazon cloud implementation provides elastic scalability & performance

Best of breed using traditional, open source and COTS solutions

Proprietary tiling system “UrtheTiles”
The Platform
Next-gen user experience

Near realtime
- Near realtime feed of Earth
- Orbit and Map sync
- Change Detection
- Area-of-interest notifications
- Cloud technology

Modern user experience
- Full screen, near realtime feed
- Responsive design, device agnostic
- Intuitive search >> click >> buy
- Mobile-first Enhanced availability
- Reduced costs
- Open source client libraries
- Long tail monetization
• A dynamic, continually updated world map. Data from many sources (space & ground)
• Videos streamed in near realtime from the ISS; feature rich discovery capability
• Users contribute to events and places by uploading videos/images and create “stories”
• A realtime social layer integrated with social media platforms like Facebook and Twitter.
User accounts

Account Settings

Manage your profile and link your account with Facebook and Twitter to easily share images and videos.
San Francisco, CA captured  Yesterday

December 18, 2pm PCT

Miami marina, FL  2 days ago

Miami marina captured while big cruise ship enters port.
Geo-referenced, in near realtime
Social EO
Harnessing Ultra HD Video

3D models & mapping
Forestry
Humanitarian relief
Business intelligence
Media
Citizen science
First light: Venezuela
urthecast.com/firstlight

Hello, world.

It's here: UrtheCast's first release of Earth imagery, from space.