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Risk and Opportunities of Open-Source Intelligence (OSINT)

Team

Prof. Andrew Reddie
Goldman School of Public Policy

Pranav Meraga
Aero Eng, ‘27

Mark Basta
Poli Sci, Public Policy ‘25

Conor Devlin
Political Economy, Chinese, ‘25

Aarush Panda
Mech Eng, ‘27

Valerie Mondragon
Astrophysics, Poli Sci, ‘28

Rishma Khandelwal
Neuroscience, Data Science ‘28

Nicolette Tombu
Applied Math, ‘27

Table of Contents

- **Introduction** - **What** is the problem we're trying to solve? **Why** does it matter?
- **Literature Review** - **Key Claims** we're trying to make, in the form of 3 literature 'baskets'
  - **Basket 1:** Risks and Opportunities of Satellite Imagery
  - **Basket 2:** Private-Public Partnerships (PPPs)
  - **Basket 3:** Emerging Technologies in the Satellite Sector
- **Argument** - **What** are the benefits of our solution? **What** are the drawbacks?
- **Conclusion** - **What** are the next steps?

Existing Challenges

01 No Global Standard for Resolution Limits

02 Unequal Market Dynamics

03 Economic and Geopolitical Shifts

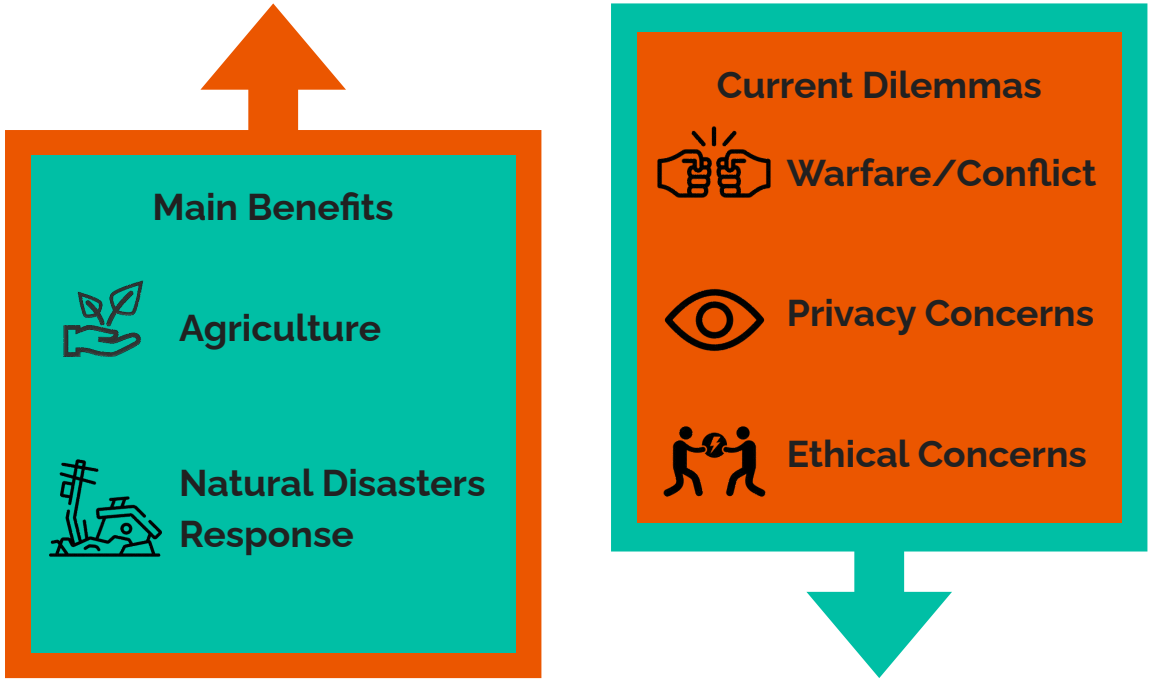
Project Objective

01 Private Concerns

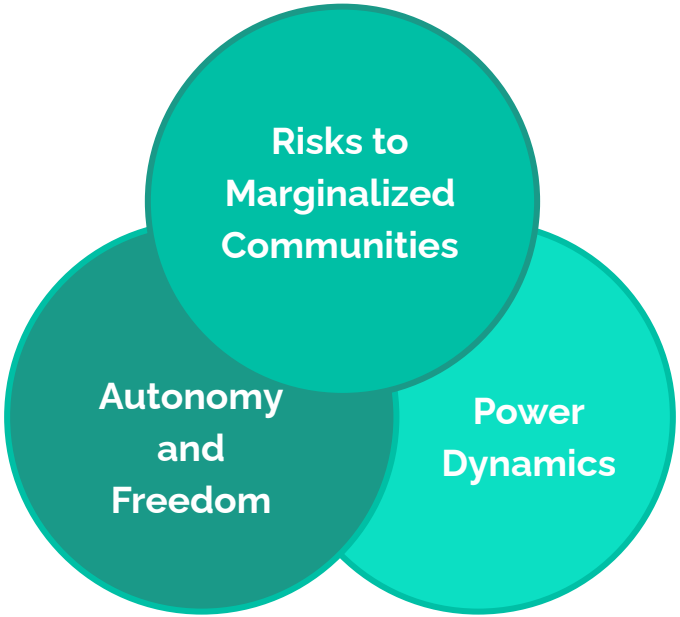
02 Ethical Challenges

03 Emerging Technologies

Risks and Opportunities



Ethical Dilemmas and Privacy Concerns



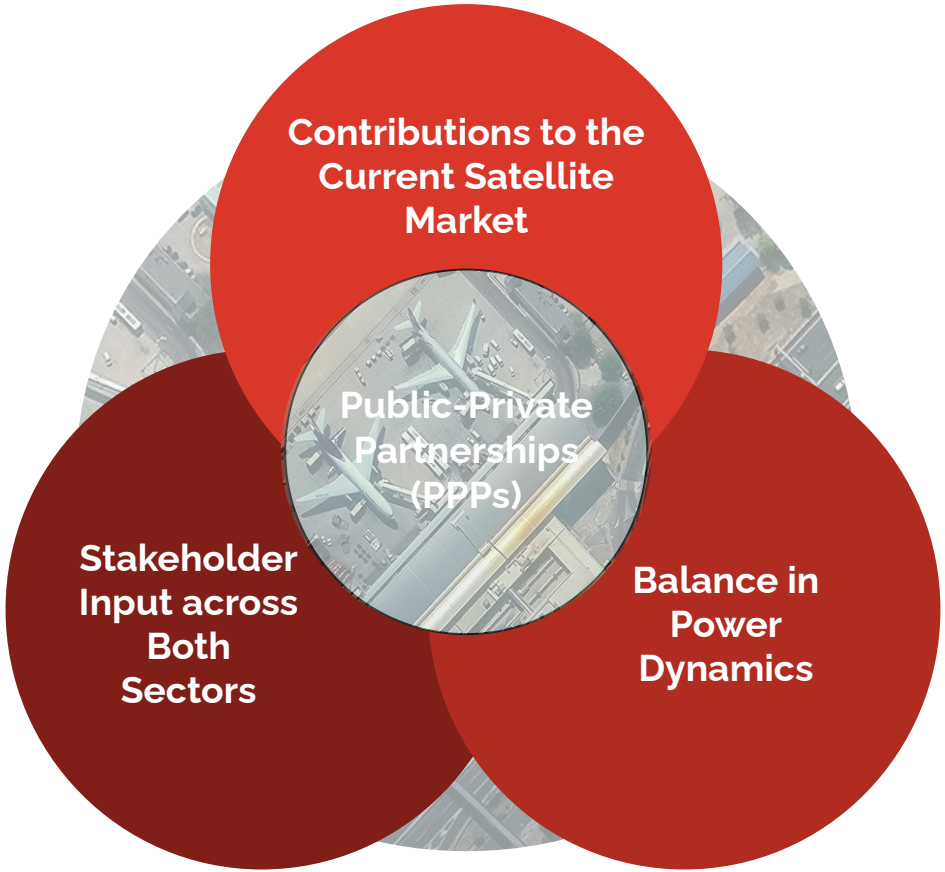
Benefits and Future Considerations

Benefits

- Evidence of war crimes
- Contracts with governments and organizations (Planet and NATO)
- Campaigning for end of war efforts

Future Considerations

- Peaceful collaboration with vulnerable communities
- Careful regulation of data usage


Contributions to the Current Satellite Market
Public-Private Partnerships (PPPs)
Stakeholder Input across Both Sectors
Balance in Power Dynamics

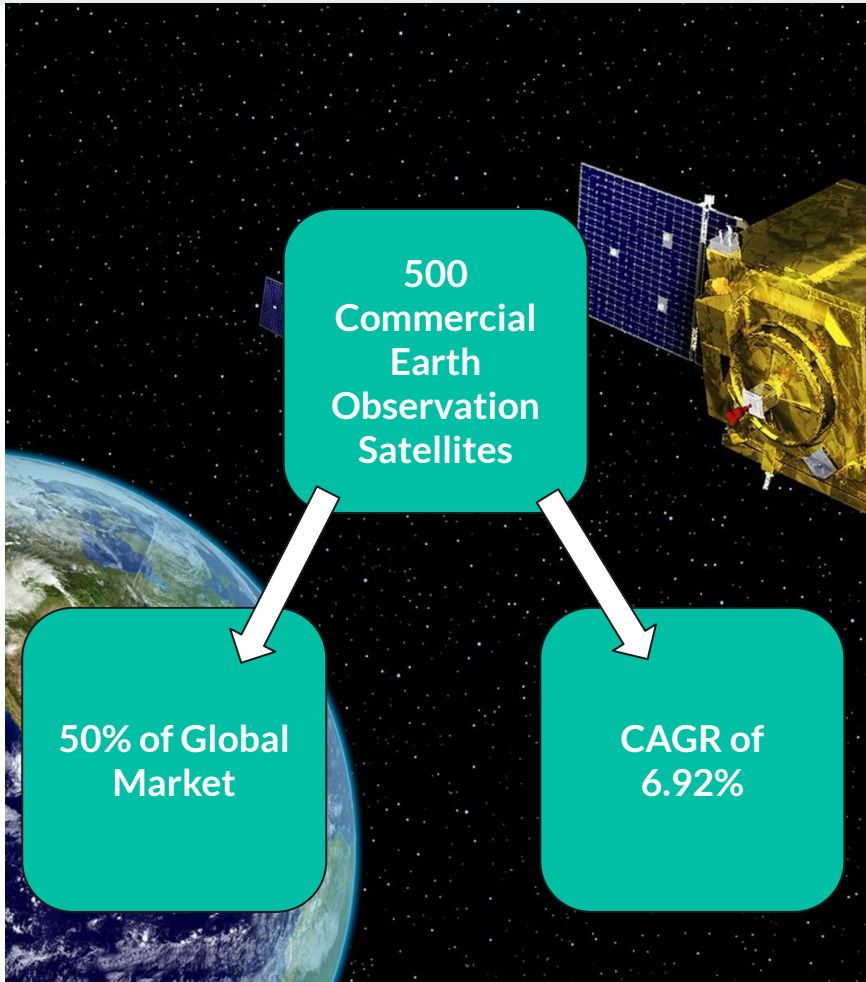
Satellite Market

Key Drivers

1. Advancements in SmallSat Technology
2. Cheaper Launch Costs
3. Demand for data and imaging

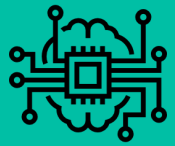
Barriers

1. Regulatory Restrictions
2. High Upfront Costs
3. Market Saturation



Emerging Technologies and Potential Risks

Artificial Intelligence

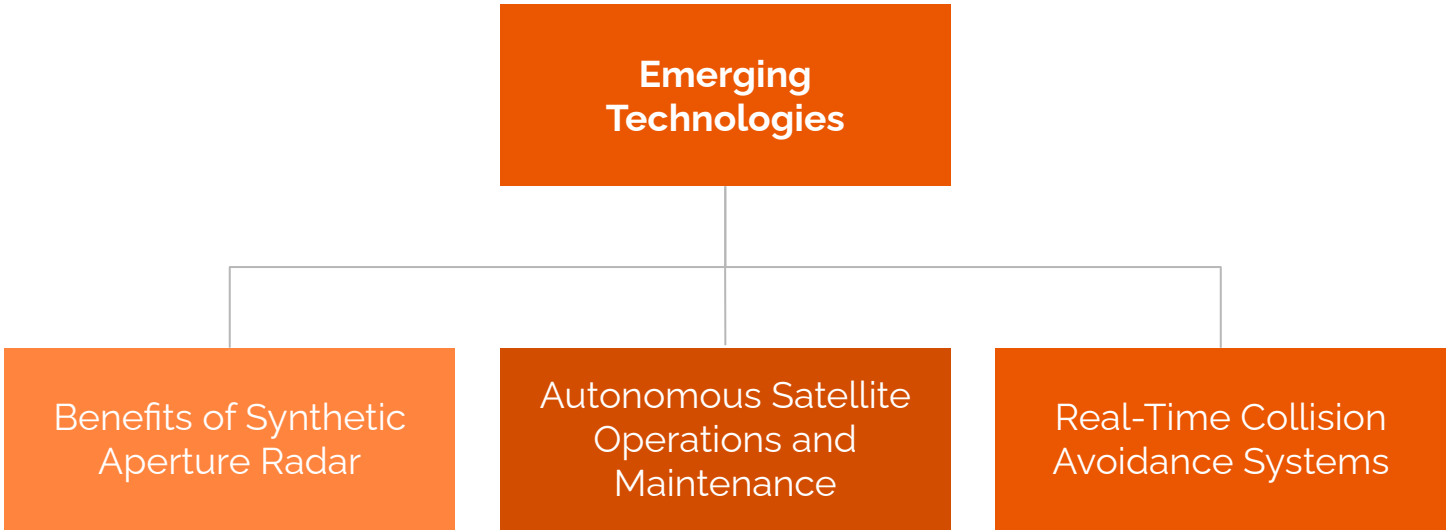


Synthetic Aperture Radar

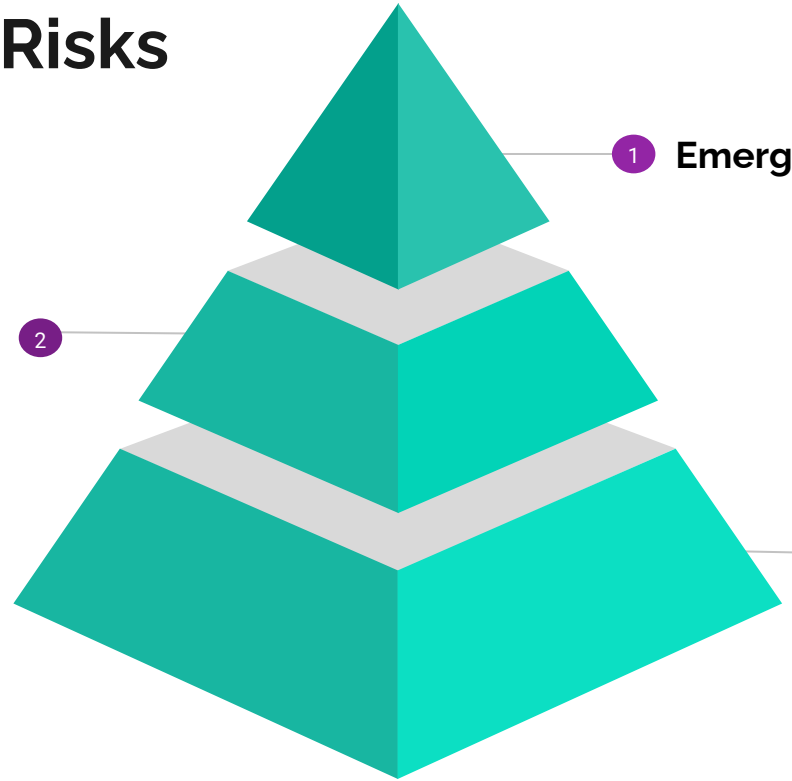
Risks regulating Satellite imagery reconnaissance

In-Space Operations and Servicing(ISOS)

SAR, Artificial Intelligence, and Satellite Traffic



Associated Risks



1 **Emerging Technologies**

Regulating Imagery Reconnaissance

2 Legal Ambiguities

Issues with compliance

Lack of Clarity in AI Biases and Censorship

3 Algorithmic Bias in Imagery Analysis

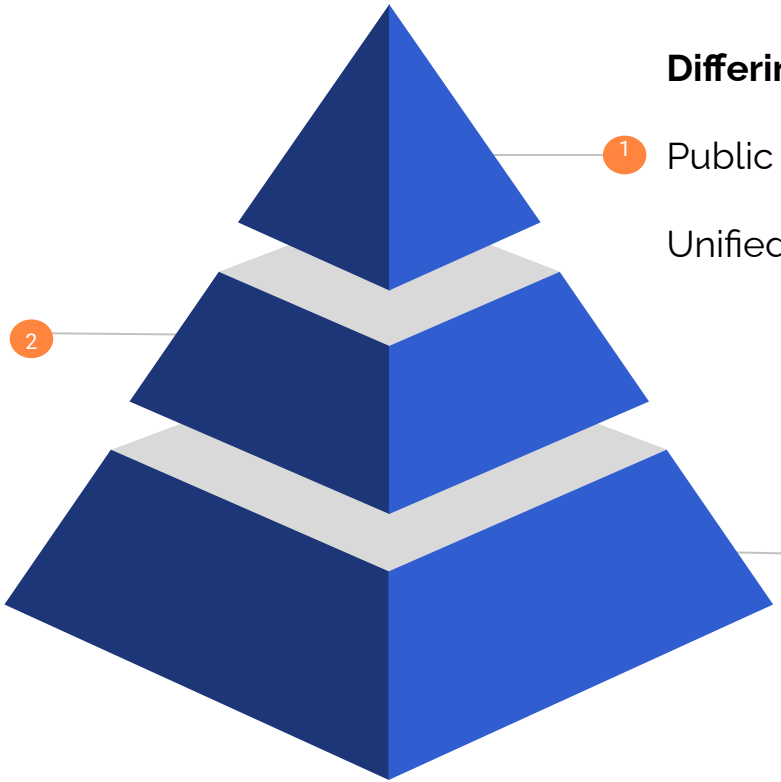
Selective Censorship

Lack of Ethical AI Rules

Market Complexities

Prevent Powerhouse PPPs

Equitable Representation for Stakeholders



Differing State Regulations

Public v.s. Private Entities

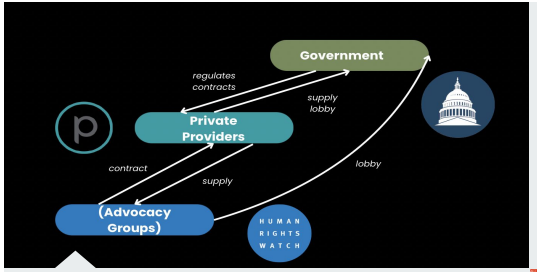
Unified Resolution Limits

Enforcement

Clear Incentives for Compliance

Future Collaborations

Gaps



Varied State Regulations

How can we include all countries despite their varying degrees of regulation on the private sector?

Market Complexity

How can we accommodate domestic markets that involve market actors from different sectors?

Enforcement

How can our solution be enforceable yet attractive enough for market actors to comply with it?

Recommendations for Gaps

Market Complexity

- Sector-Specific Regulations
- Phase-Based Approaches

Differences in State Regulations

- Multilateral Oversight Committees
- Sector Specifications

Enforcement

- Transparency and Global Participation
- Clear Incentives for Compliance

Costs and Benefits

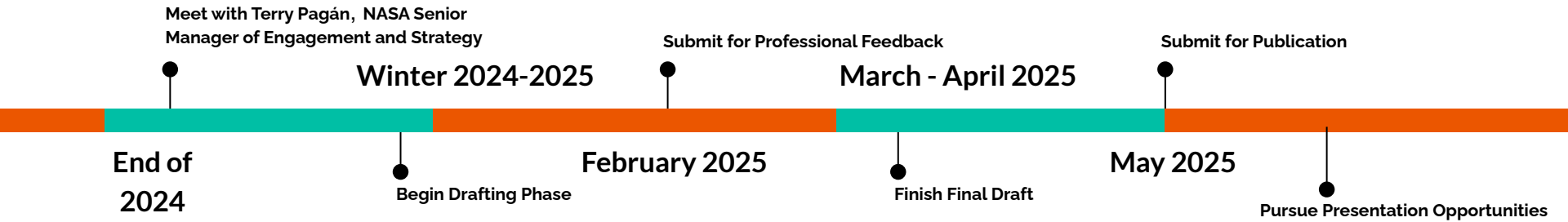
Costs

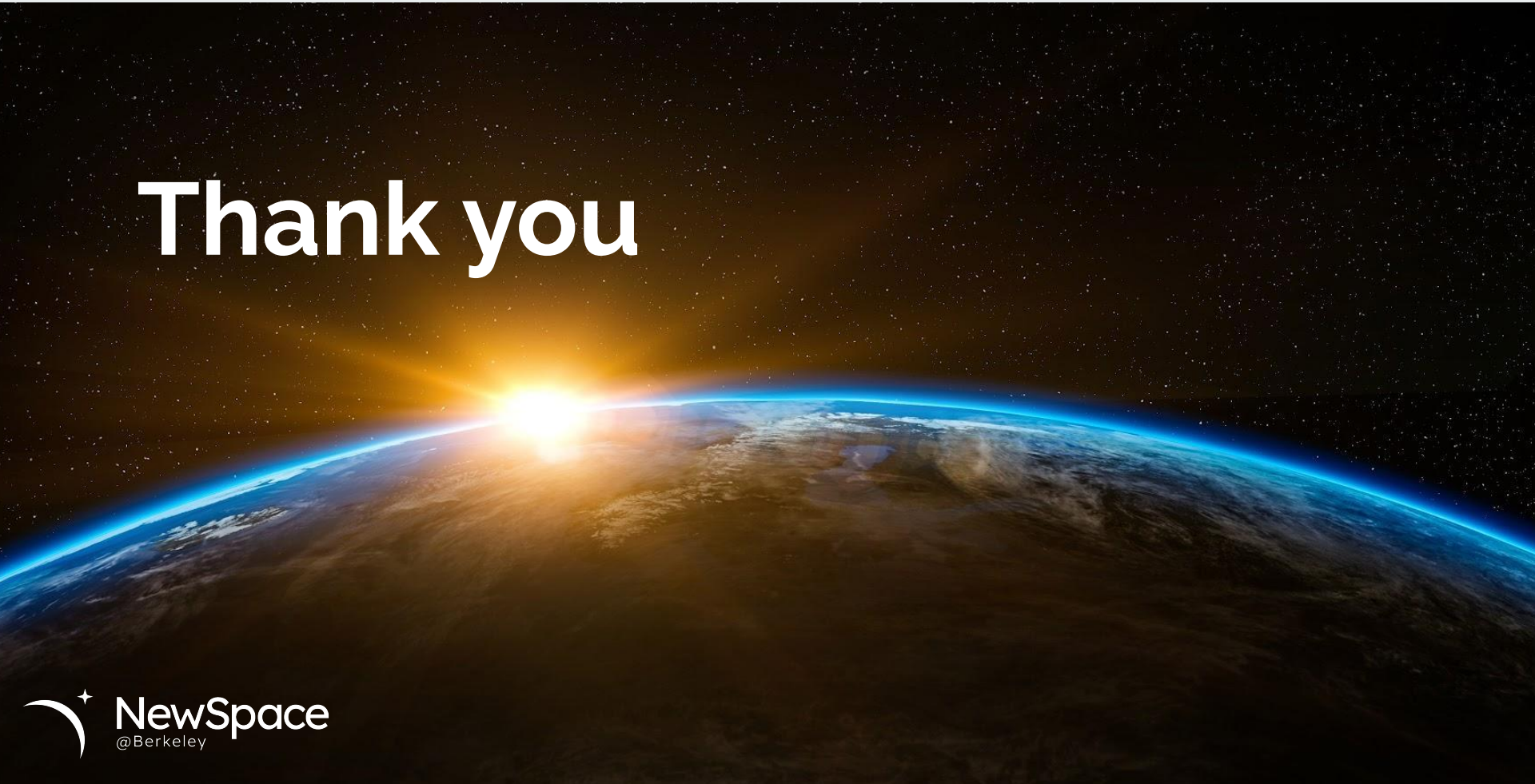
- Privacy concerns
- Risks to marginalized communities
- International conflicts
- Potentially hostile actors

Benefits

- Evidence of war crimes
- Collaboration with governments, organizations, marginalized communities
- Easily accessible information
- Improved research capabilities
- Market expansion

Next Steps


Meet with Terry Pagán, NASA Senior Manager of Engagement and Strategy
End of 2024
Winter 2024-2025
Begin Drafting Phase
Submit for Professional Feedback
February 2025
March - April 2025
Finish Final Draft
Submit for Publication
May 2025
Pursue Presentation Opportunities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