Measuring Forest Height and Biomass from Space

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20 %

Of global Carbon emissions come from deforestation
Greater than emissions from every car, truck and plane on the planet combined
Every 2 seconds

An area the size of a football field is cleared
• How do we measure forest carbon storage and emissions?

• Carbon = 50% forest biomass
• Harvesting
  • Destructive ✓
  • Inefficient ✓
Forestry Plots

- Inefficient ✅
Remote Sensing

Traditionally:

- Map by forest type
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- Multiply by average biomass value

Remote Sensing

- Map by tree type
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Nasa
LiDAR
Light Detection And Ranging
ICESAT/GLAS: 1st LiDAR in Space

Ice Cloud and Land Elevation Satellite/ Geoscience Laser Altimeter System
InSAR:
Interferometric Synthetic Aperture Radar
Shuttle Radar Topography Mission: 1\textsuperscript{st} InSAR in Space
New Technology: EcoSAR