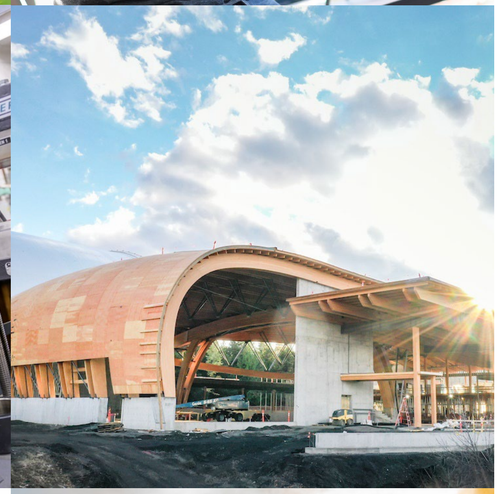
BACK TO THE FUTURE
University of Idaho Forestry






FORESTRY DEGREES

Associate of Science

- Forest Operations and Technology
- Forest Nursery Management and Technology
- Wildland Fuel and Fire Technology

Bachelor of Science

- Forestry – Silviculture, Operations, Nursery Emphases
- Forests and Sustainable Products
- Ecology and Ecosystem Science
- Fire Ecology and Management

Graduate Degrees

- In-person – Doctoral, Masters
- On-line – MNR, ENVS

PREPARING THE NEXT GENERATION

CURRICULUM & SKILLS DEVELOPMENT

PREPARING THE NEXT GENERATION

DEMONSTRATION & APPLICATION

Forest Innovations Institute

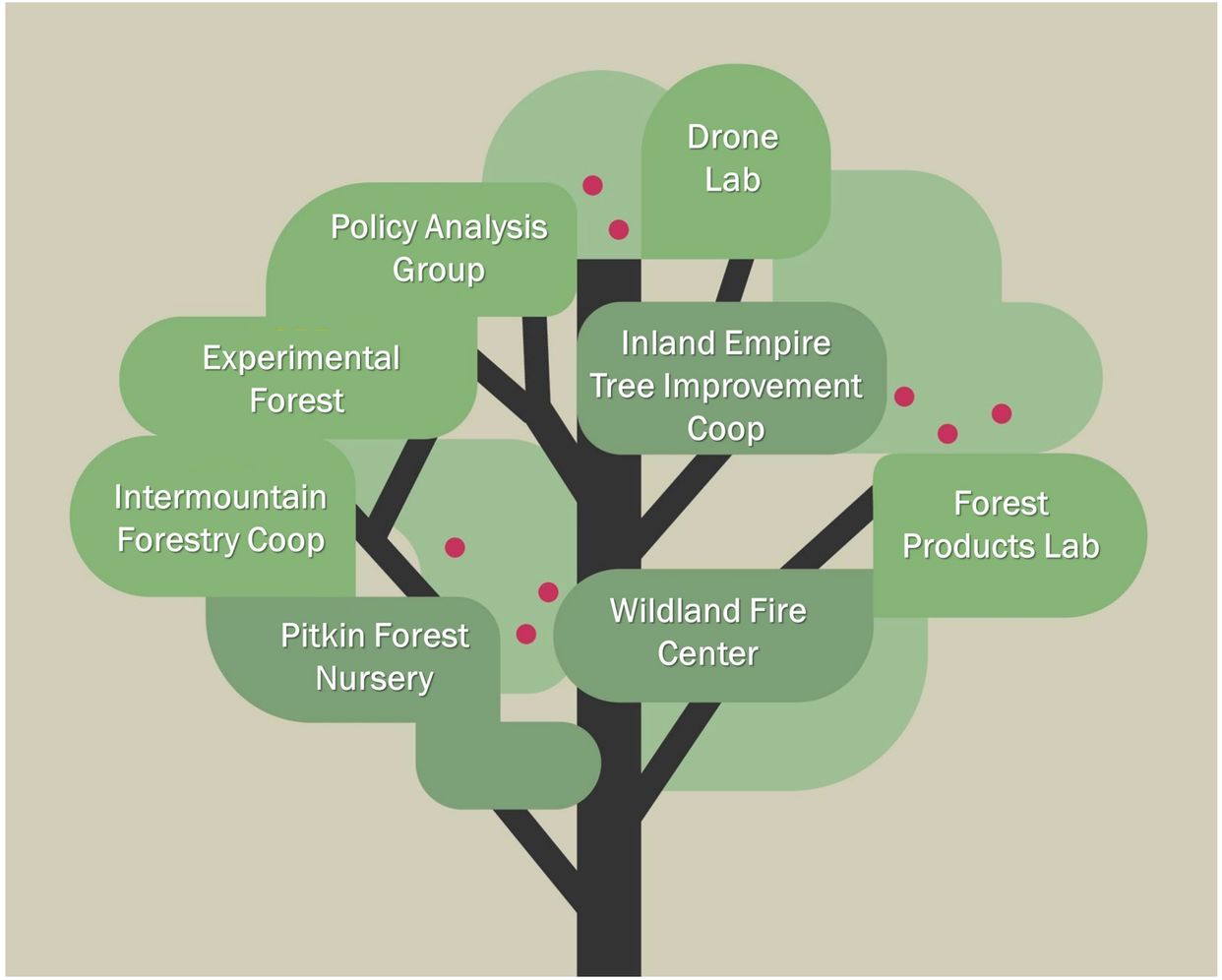
Fixed-rate contracting

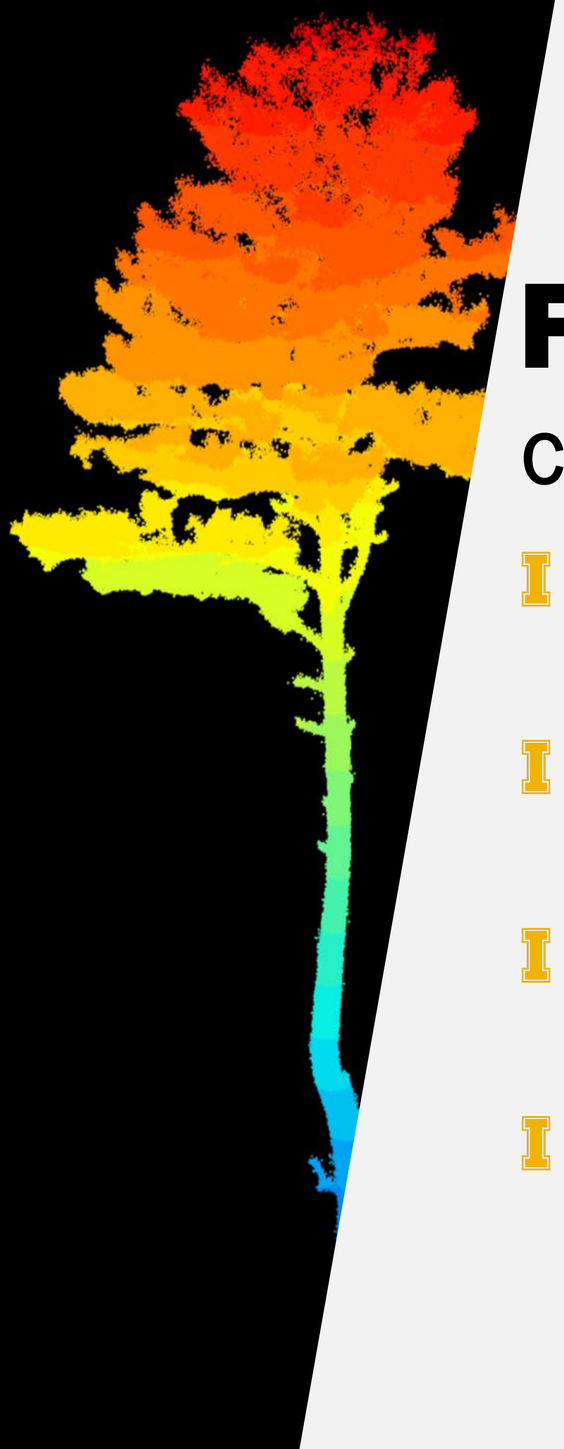
Coordinated and individual projects

Shared and proprietary R&D

Discounted membership for existing coops

Not intended for commercial services

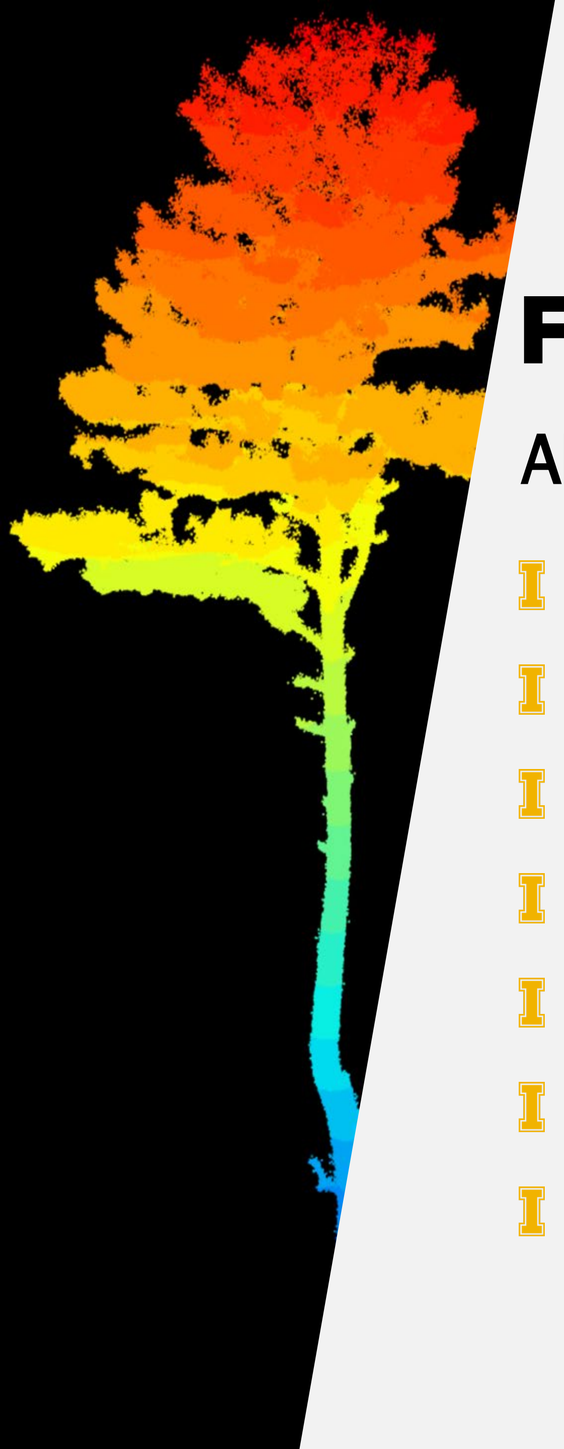




FOREST INNOVATIONS INSTITUTE

CORE MISSION

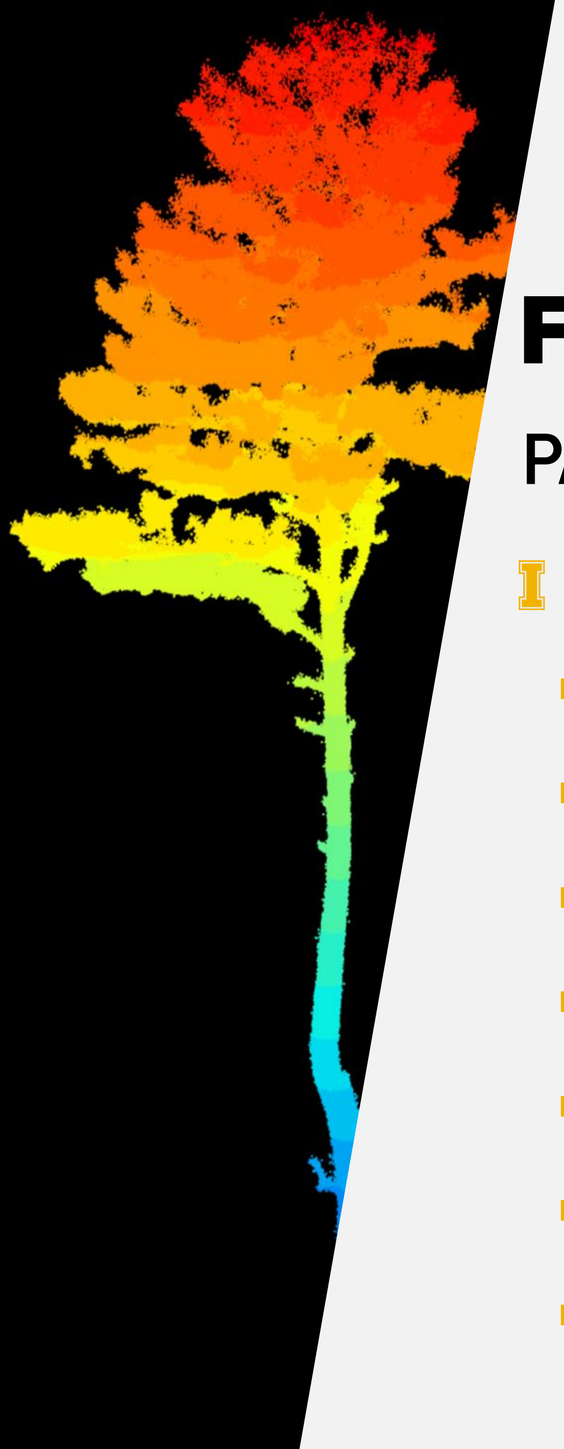
- Advance contemporary and emerging technologies and information systems
- Crosscutting research: digital transformation, networking, robotics, automation, remote sensing, AI
- Partner with University faculty and students for interdisciplinary training and research – workforce development
- Engage industry specialists, businesses, Native American Tribes, nonprofits, universities, and public land management agencies



FOREST INNOVATIONS INSTITUTE AFFILIATES

AFFILIATES PROGRAM – OPEN TO ANYONE

- **Applied Research**: Share practical, applied research & education
- **Membership**: No membership requirements (Agency, Industry, Consultant)
- **Cost**: Low cost of membership, from single users to large agencies
- **Education**: Equal access to training modules & workshops
- **Design**: Equal access to data design, best practices, and applied analytics
- **Demonstration**: Access to applied demonstrations
- **Content Experts**: One day of staff time per year for memberships $3,000/yr +



FOREST INNOVATIONS INSTITUTE AFFILIATES

PARTICIPATION ASSESSMENTS *(DRAFT)*

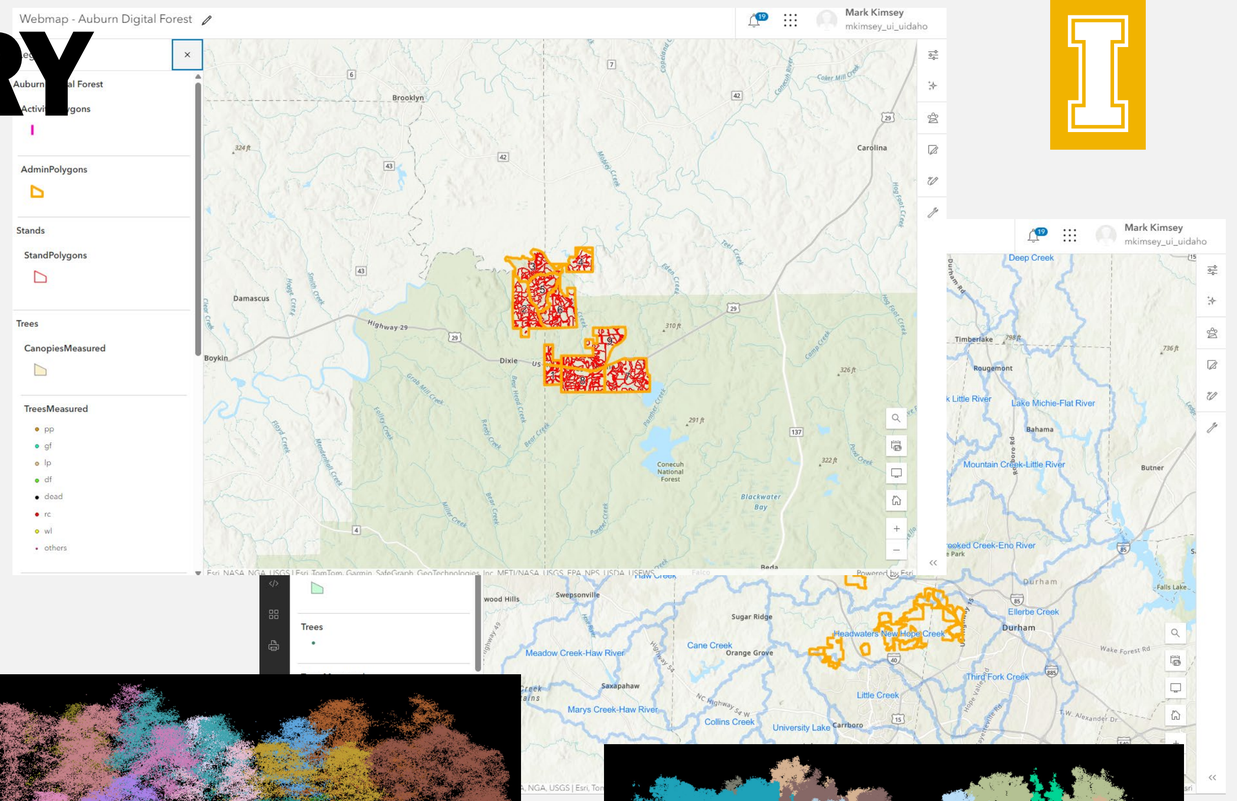
- Simple Assessment Structure Based on Business Segment Size
  - 1 $1,000 / 2 Yrs
  - 2 – 4 $1,000 / Yr
  - 5 – 10 $3,000 / Yr
  - 11 – 20 $5,000 / Yr
  - 21 – 50 $7,000 / Yr
  - 50 + $9,000 / Yr
  - * Large Agency > 1,000 TBD

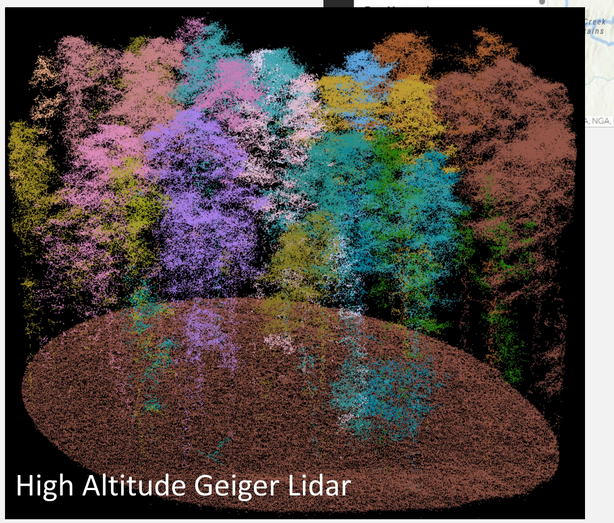
FII – DIGITAL FORESTRY

DEVELOP A COORDINATED INNOVATION NETWORK TO LINK RESEARCH FORESTS NATIONWIDE

PAUL SMITHS COLLEGE, AUBURN, DUKE, UC BERKELEY, OREGON STATE
…OTHERS

- Drive digital forest innovation
- Broad geographic networking
- Diverse forested communities for testing
- Deploy a common data model to all partners and develop common analytics
- Develop Next Generation Research and Management Personnel
- Leverage Research and Resources for Competitive Grant Funding
- Build International Relationships

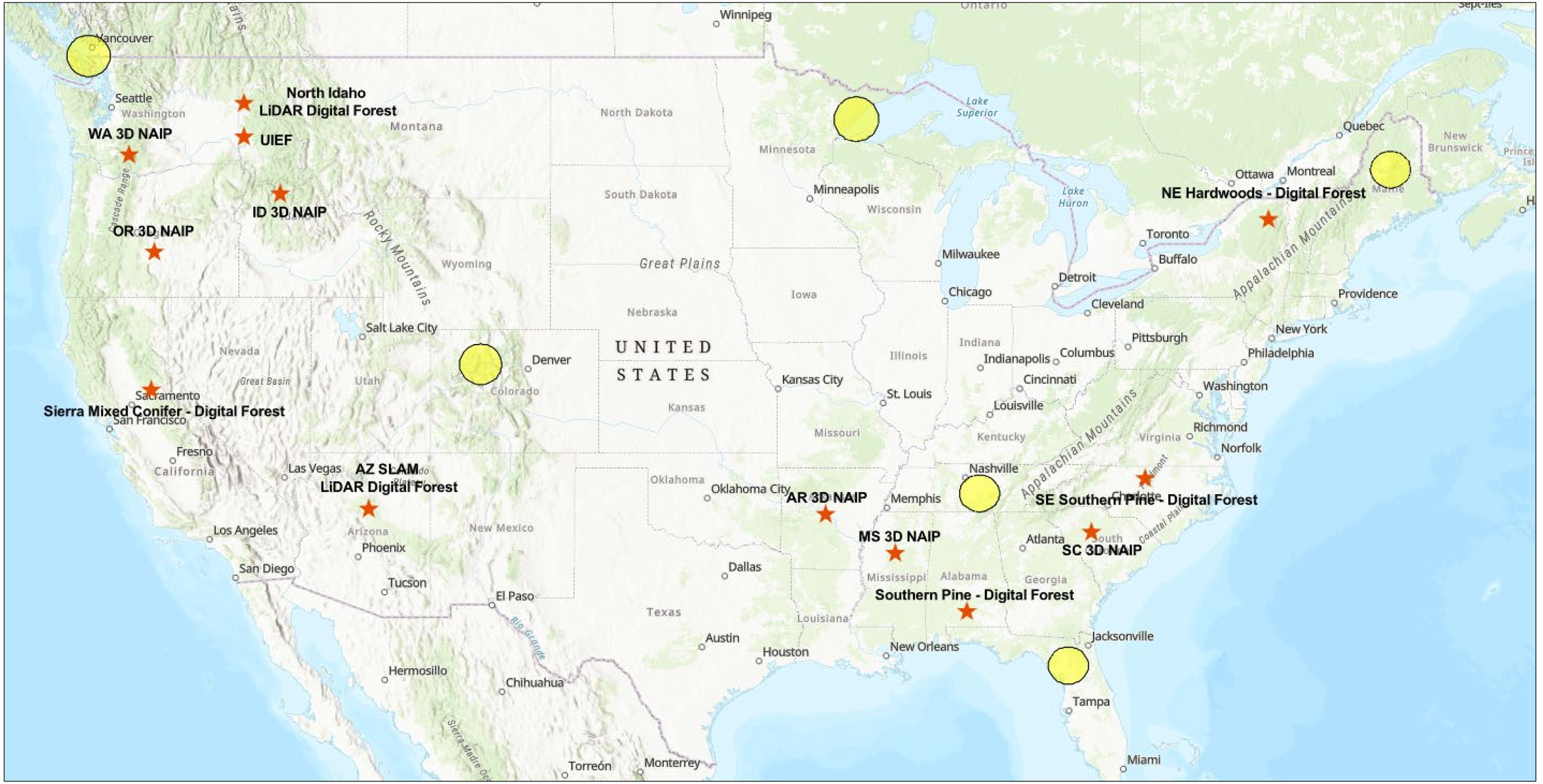


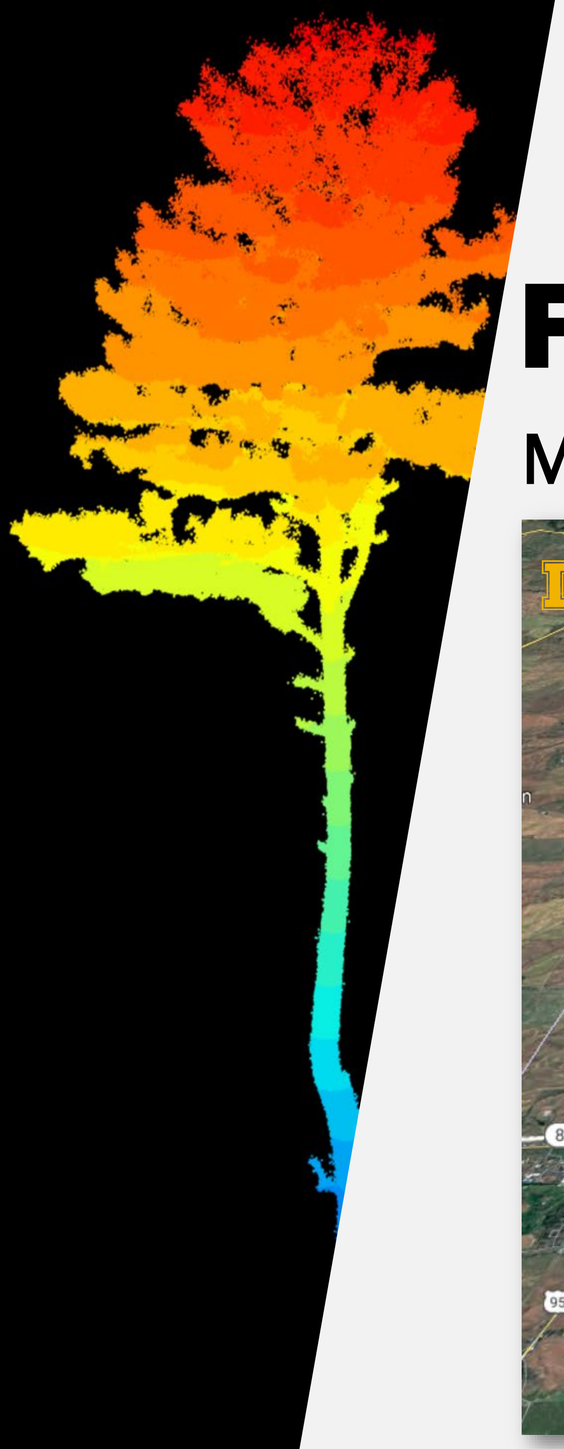


NIBIO
UNIVERSITY of TASMANIA
INTERPINE INNOVATION
Forestry Corporation
MIT LINCOLN LABORATORY
3DEO

FII – DIGITAL FORESTRY

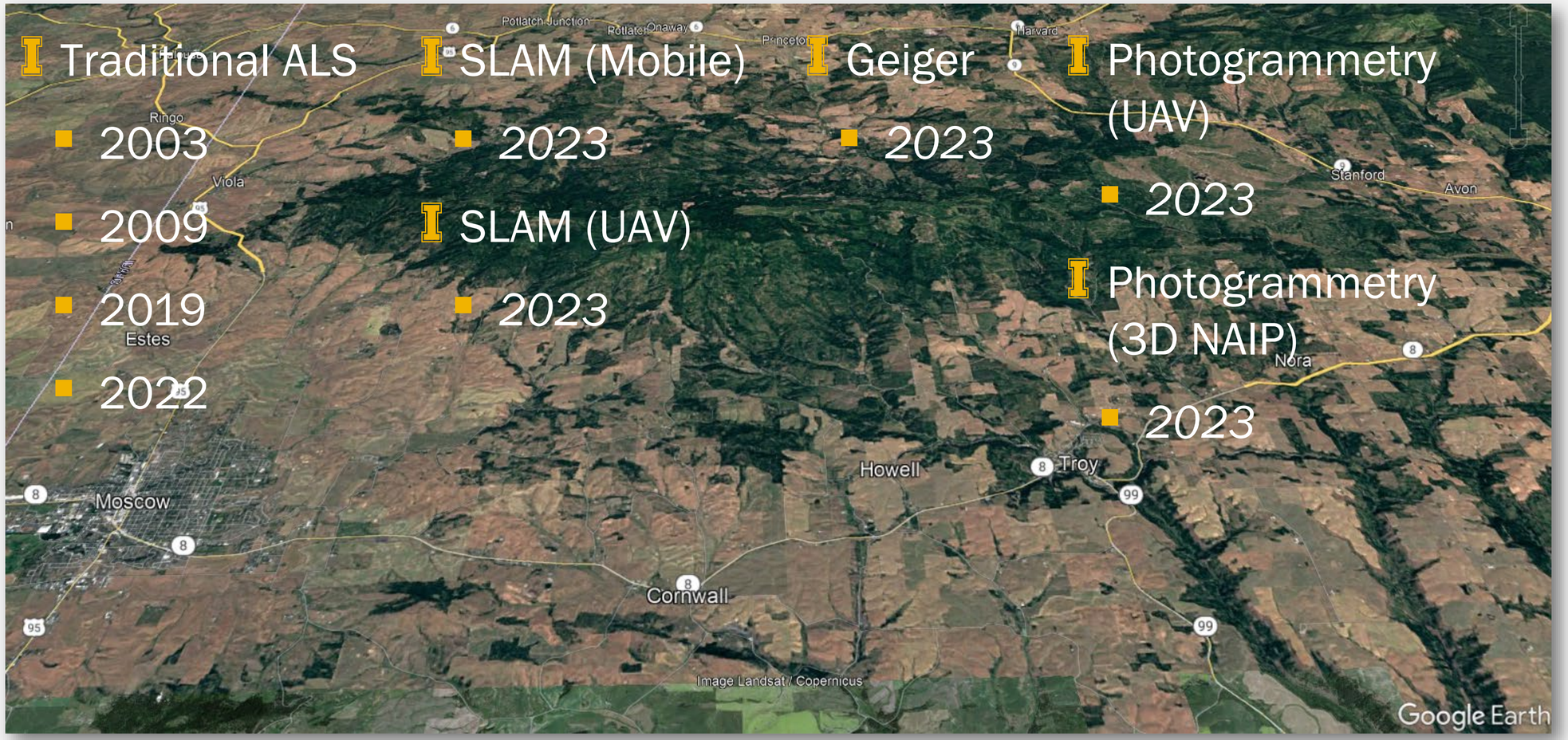
REGIONAL & NATIONAL IN SCOPE & COLLABORATION

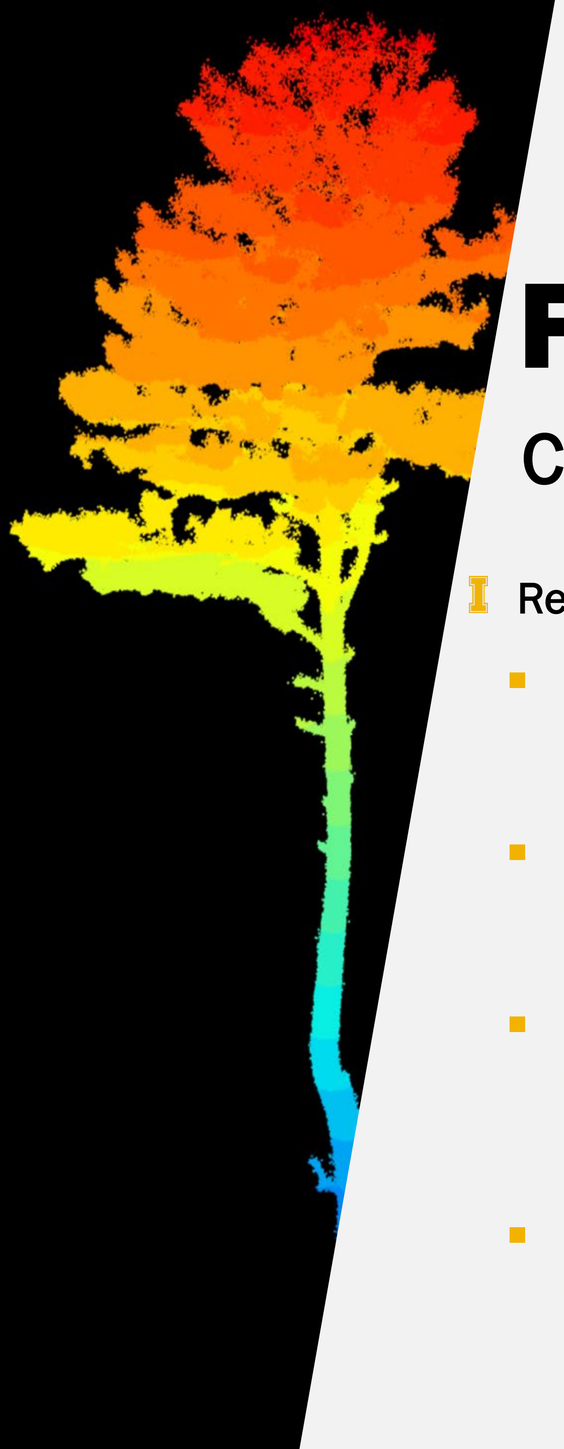




FII - DIGITAL FORESTRY

MOSCOW MOUNTAIN DIGITAL FORESTRY LABORATORY





FII - DIGITAL FORESTRY

CURRENT STAFFING & WORKFORCE DEVELOPMENT

Research Scientists

- Dr. Edward Flathers
  - Remote sensing, data org, process automation
- Dr. Heather Greaves
  - Remote sensing, veg and surface mapping
- Dr. Jaslam Poolakkal
  - Advanced statistics modeling, scalable and interactive applications
- Dr. Aaron Sparks
  - Remote sensing, inventory & disturbance characterization

Graduate Students

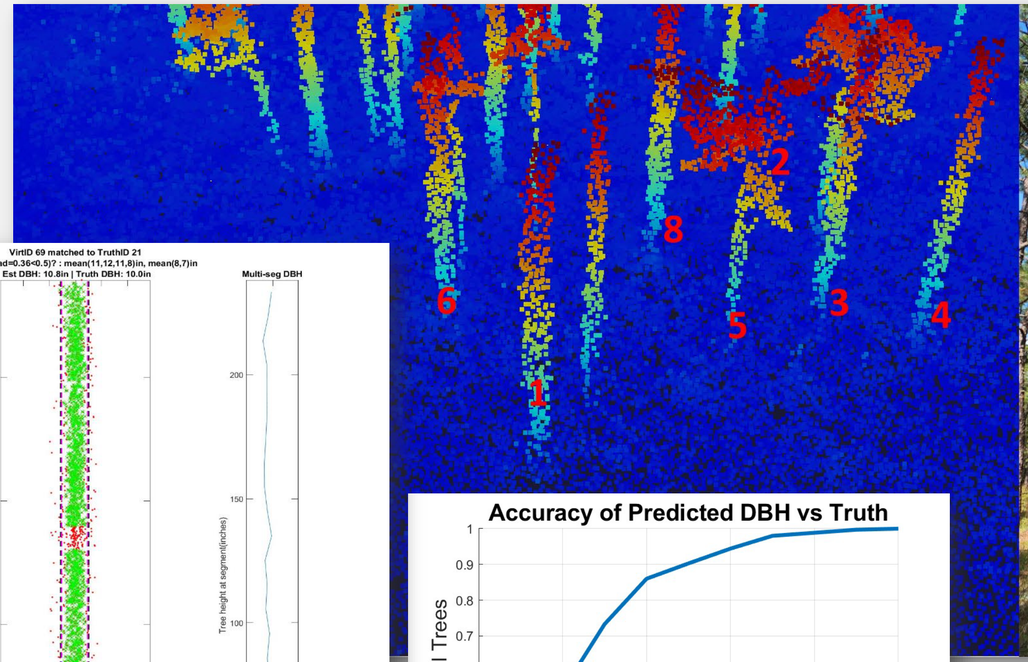
- Noel Daugherty (MS)
  - Remote sensing & biometrics
- Steevensen Alcius (Fulbright PhD)
  - Remote sensing & biometrics
- Haley Anderson (PhD)
  - Forest health modeling

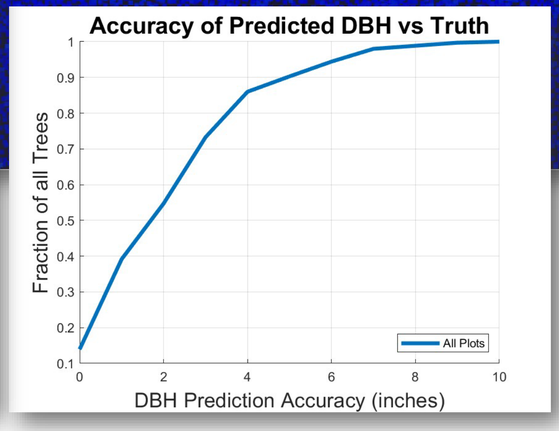
Undergraduate Students

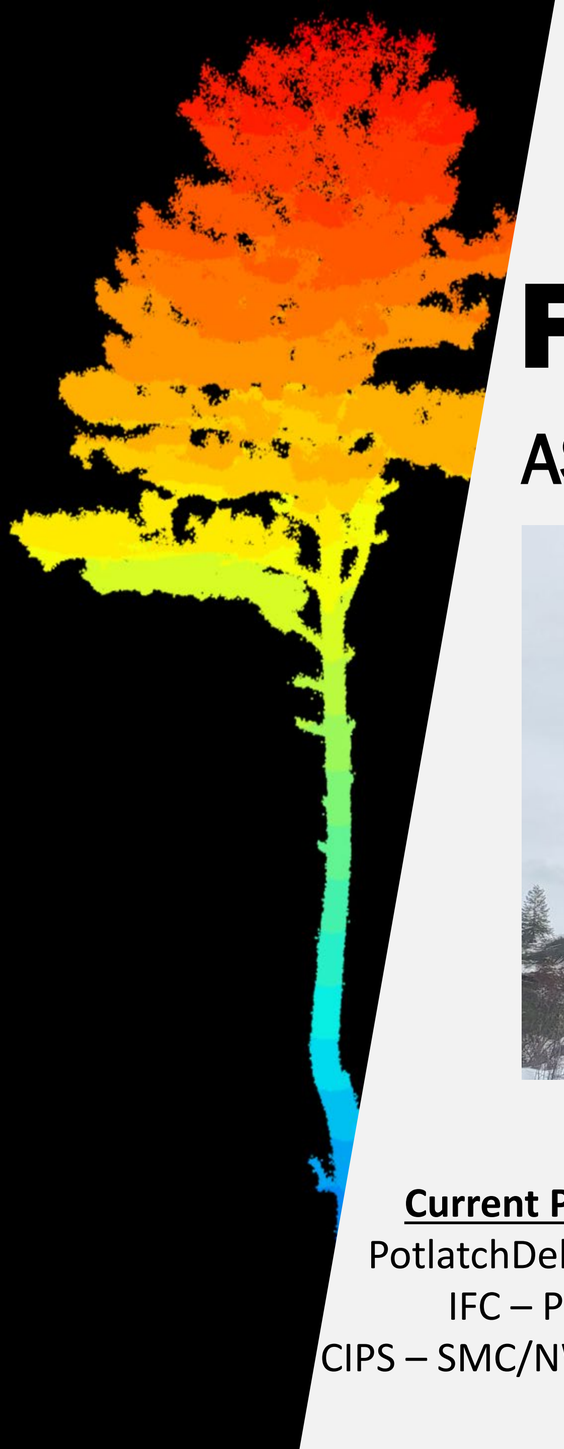
- Christian Marzan (BS Forestry)
- James Shook (BS Forestry)
- Spencer Lake (BS Forestry)
- Miah Dannahower (BS Forestry)
- Riley Robenstein (BS Wildlife)
- Mia Wanstrom (BS Wildlife)
- Bidhi Paudel (BS Comp. Sci.)
- Robbie Reinhardt (BS Comp. Sci.)

FII - DIGITAL FORESTRY

MEASURING STEM DIAMETER W/GEIGER LIDAR - MS

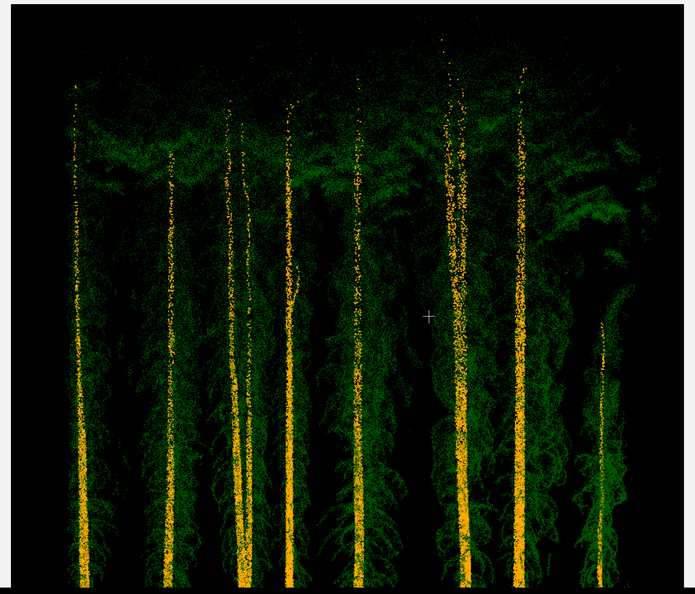


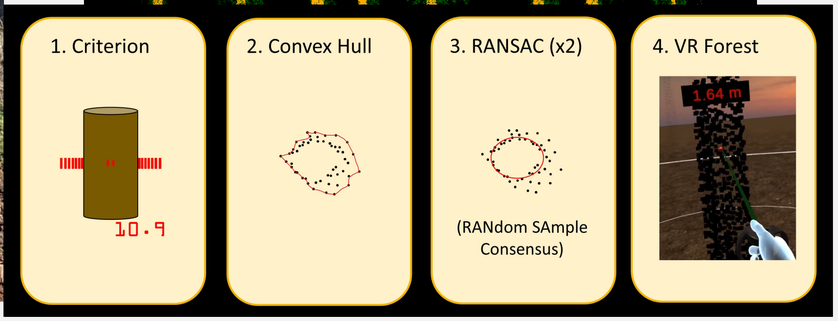




FII - DIGITAL FORESTRY

ASSESSING SILVICULTURE EFFECTS ON TAPER W/SLAM





Current Projects

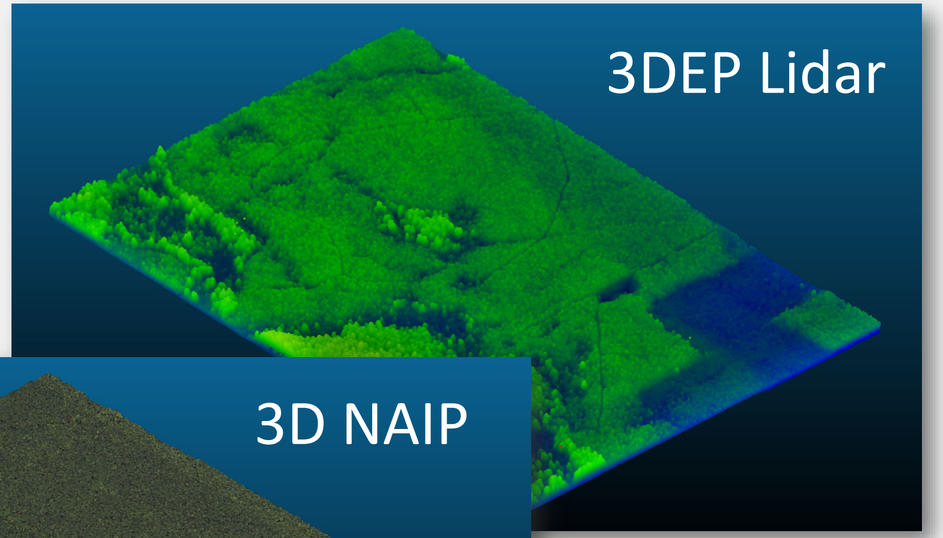
PotlatchDeltic - MOE

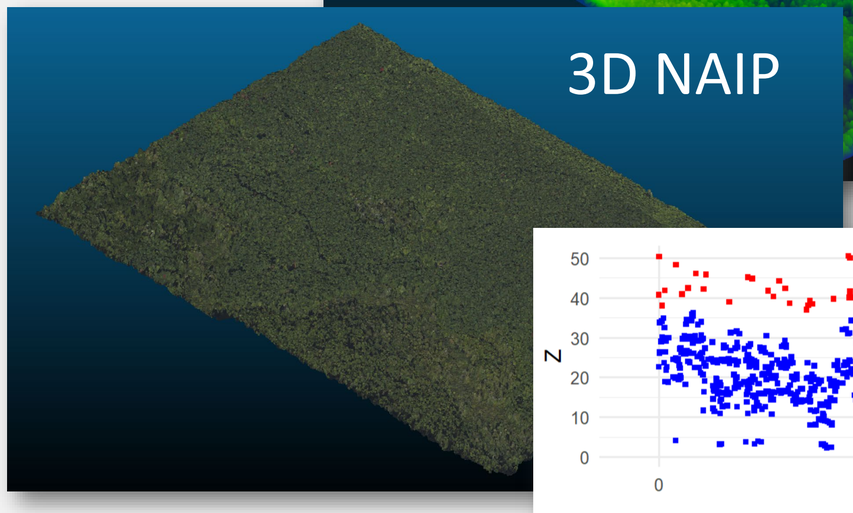
IFC – PPDM

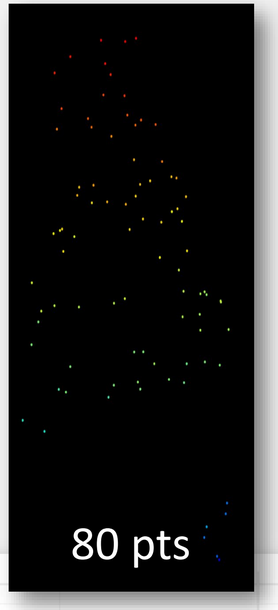
CIPS – SMC/NWTIC/VMRC

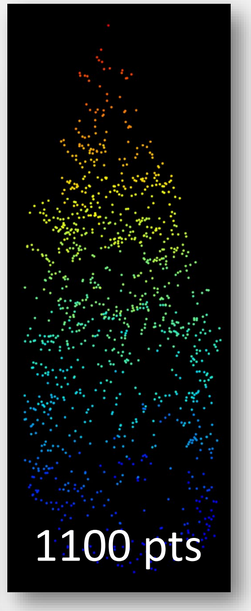
FII - DIGITAL FORESTRY

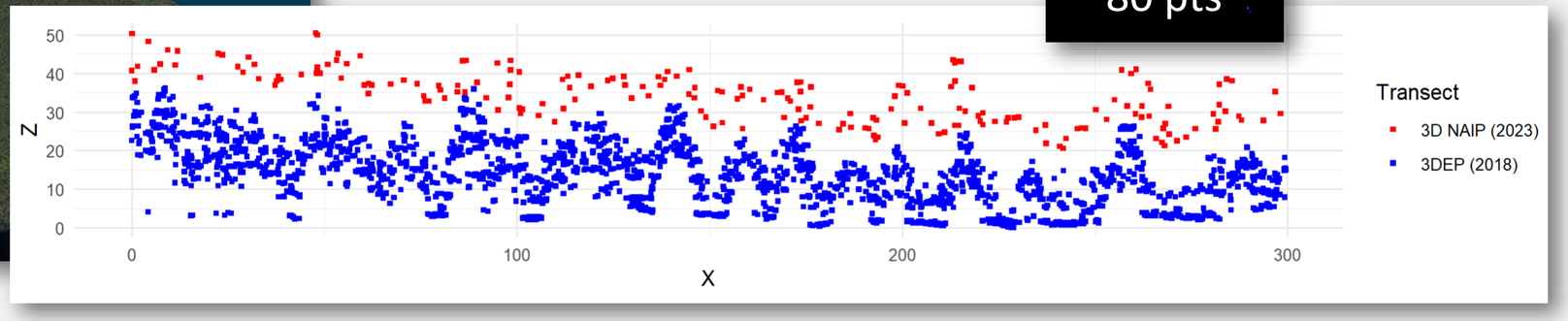
MAPPING SITE PRODUCTIVITY W/3D NAIP + 3DEP LIDAR





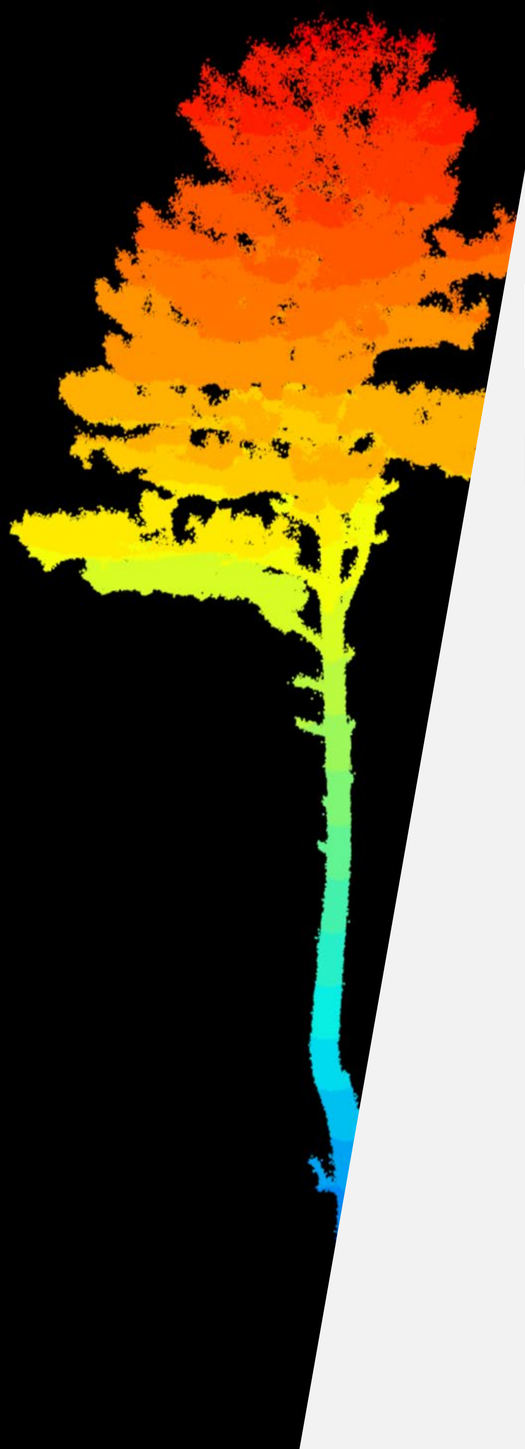






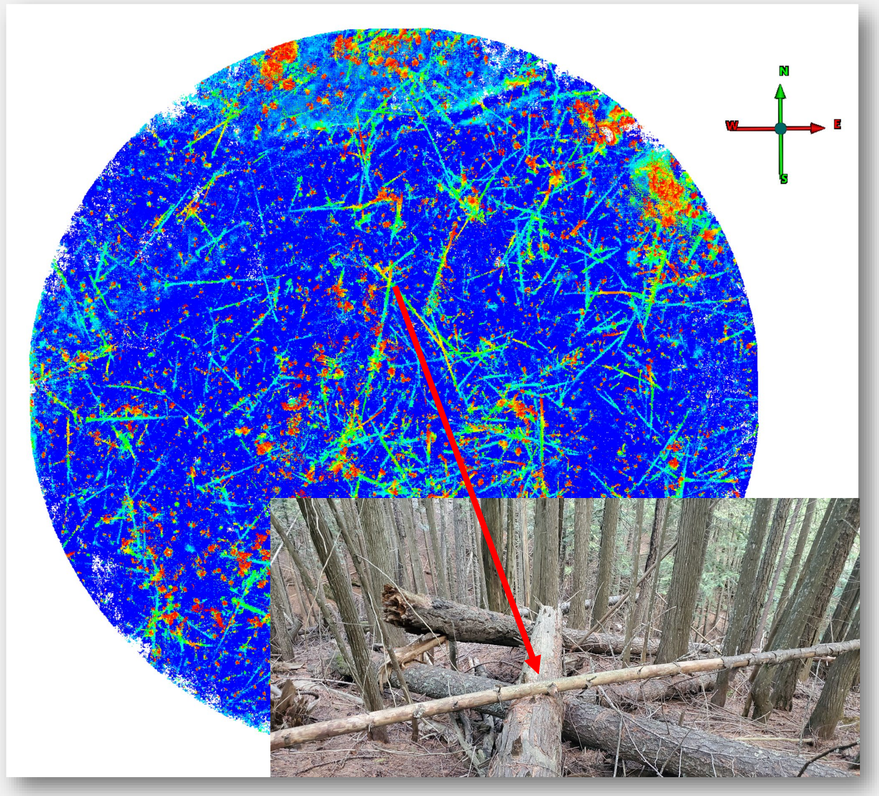
FBRI Forest Biometrics Research Institute

NRCS Natural Resources Conservation Service



FII – DIGITAL FORESTRY

FUEL/BIOMASS MODELING W/GIEGER LIDAR - FUTURE



MIT LINCOLN LABORATORY

3D EO

FlamMap FARSITE MTT

Rocky Mountain Research Station

NETWORKING FOR THE NEXT GENERATION OF RS INFORMED G&Y MODELS

Leveraging CAFS, IDF, FII, Mensurationist Societies, GMUG, OLI

SPECIES IDENTIFICATION & MAPPING

Leverage Free & Evolving Technology

NAIP, Geiger

APP DEVELOPMENT & DEPLOYMENT

Turn Research into Application

Web Apps, AGOL, GitHub

FIRE & FUELS MODELING & MAPPING

Geiger LiDAR for Estimating Landscape Fuel Loading

University of Idaho
College of Natural Resources

Dennis Becker
drbecker@uidaho.edu