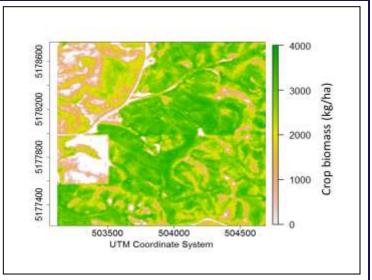


# IDAHOVIEW REMOTE SENSING ACTIVITIES 2014 - 2015



#### **IMPROVING REMOTE SENSING PRODUCTS**

- The ability to accurately monitor crop biomass is of great importance for growers throughout the State of Idaho and beyond.
- IdahoView conducted a study to assess the suitability of a low-cost, autonomously operating terrestrial laser scanner (ATLS) to i) monitor crop growth dynamics, and ii) calibrate satellite imagery for estimating crop biomass.
- Findings from the study suggest that physically based biomass estimates derived from ATLS data and ATLS-calibrated satellite data constitute important progress in an attempt to obtain reliable crop biomass estimates for both agricultural decision-making and research applications.



Satellite-based crop biomass estimates calibrated with autonomously operating terrestrial laser scanner (ATLS) data captured the variability in wheat biomass throughout a commercial farm field near Moscow, Idaho.

## **PROVIDING REMOTE SENSING EDUCATION**



K-12 students and instructors engaged in field work during a remote sensing class

One of the overarching objectives of IdahoView is to increase interest in science, technology, engineering and mathematics (STEM) fields by students of all ages through the use of remote sensing technology.

To reach this goal during 2014-2015, IdahoView:

- Offered a "Drones for Forestry" workshop in Coeur D'Alene, Idaho, serving 37 professionals
- Provided remote sensing education to more than 270 K-12 students
- Developed and pilot-tested an innovative remote sensing lesson plan

IdahoView is a member of the AmericaView Consortium, a nationally coordinated network of academic, agency, non-profit, and industry partners and cooperators that share the vision of promoting and supporting the use of remote sensing data and technology within each state.



AmericaView Website:

www.AmericaView.org

Roberta Lenczowski, Executive Director: roberta.lenczowski@sbcglobal.net

Debbie Deagen, Program Manager: debbie.deagen@montana.edu

> Russell Congalton, Board Chair: russ.congalton@unh.edu

## **BENEFITS TO IDAHO**

**Improve Natural Resources Management** IdahoView research promotes the development of novel tools and techniques that allow translating remotely sensed data into information that is meaningful for decision makers in natural resources and beyond.

#### **Engage Students in STEM**

It is vital to Idaho's economy to educate a qualified workforce in science, technology, education, and mathematics (STEM) professions. Industries that require STEM expertise are expected to increase in Idaho and across the nation, yet there appears to be a decreasing student interest in STEM fields. Handson remote sensing education is very effective for promoting STEM interest and learning.



Participants in the "Drones for Forestry" workshop held on Feb 27, 2015, in Coeur D'Alene, Idaho

# **IDAHOVIEW VIEW CONSORTIUM MEMBERSHIP**









#### **IdahoView partners:**

- Promote the development of novel tools and techniques that allow translating remotely sensed data into information that is meaningful to decisions makers
- Use remote sensing as a means to promote STEM interest and learning
- Seek to expand involvement to incorporate all higher education institutions in Idaho and any other interested parties
- Advance the availability and timely distribution of data by maintaining links to archives of publicly available satellite imagery for Idaho

**IdahoView Principal Investigator:** 

Dr. Jan U.H. Eitel University of Idaho (208) 596-9277 jeitel@uidaho.edu



