



## PROFILE

Dr. Koontz is a plant ecologist and geospatial data scientist with expertise in ecosystem resilience and forest dynamics across scales in the western US. He brings a collaborative, open science ethos to develop accessible forest and climate change science we can use to address pressing socioecological challenges. His work combines a firm grounding in ecological theory with cutting edge geospatial analytics to study previously intractable questions using hierarchical modeling, demographic modeling, R, Google Earth Engine, AWS, drones, lidar, and satellite imagery.

## CONTACT

WEBSITE:

[www.vibrantplanet.net](http://www.vibrantplanet.net)

EMAIL:

[mikoontz@vibrantplanet.net](mailto:mikoontz@vibrantplanet.net)

## SELECT PUBLICATIONS

"Cross-scale interaction of host tree size and climatic water deficit governs bark beetle-induced tree mortality." 2021. *Nature Communications*. 12:129. 1-13.

"Local forest structure variability increases resilience to wildfire in dry western U.S. coniferous forests." 2020. *Ecology Letters*. 23:3. 483-494.

"Warming weakens the nighttime barrier to global fire." 2022. *Nature*. 602. 442-448.

"Democratizing macroecology: integrating unoccupied aerial systems with the National Ecological Observatory Network." 2022. *Ecosphere*. 13:8. e4206.

"Giving ecological meaning to satellite-derived fire severity metrics across North American forests." 2019. *Remote Sensing*. 11:14. 1735.

# MIKE KOONTZ

## EXPERIENCE

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### Monitoring and Forecasting Lead – Vibrant Planet

2022 – present  
Incline Village, NV

### Research Scientist – Earth Lab/CIRES, University of Colorado Boulder

2021 – present  
Boulder, CO

### Data Manager and Leadership Team – GLORIA Great Basin

2017 – present  
Great Basin, USA

### Postdoctoral Scholar – Earth Lab/CIRES, University of Colorado Boulder

2019 – 2021  
Boulder, CO

### Graduate Research Fellow – University of California, Davis

2014 – 2018  
Davis, CA

### Graduate Research Fellow – Colorado State University

2013 – 2014  
Fort Collins, CO

### Field Technician – University of California, Merced

2012  
Mountain Research Station, CO

### Field Technician – Research Cooperative of the University of Hawai'i

2009 – 2010  
Hilo, HI

### Field Leader – Hawai'i Volcanoes National Park

2007  
Volcano, HI

### Field Technician – AmeriCorps/Hawai'i Dept of Forestry and Wildlife

2006  
Kahului, HI

## EDUCATION

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### University of California Davis

2014 – 2019  
Ecology (Doctor of Philosophy)

### Colorado State University

2012 – 2014  
Ecology (Master of Science)

### University of Hawaii at Hilo

2007 – 2009  
Biology (Bachelor of Science)