

Deadtrees.earth

Jonathan Schmid¹

¹University of Freiburg, Faculty of Environment and Natural Resources

November 10, 2025

Abstract

Your abstract.

1 About deadtrees.earth

deadtrees.earth is an open-access, community-driven platform providing a global database of high-resolution (sub-10 cm) aerial orthophotos for tree mortality research. As of July 2025, the database includes 2,694 orthophotos collected by 136 institutions from 89 countries, covering over 1,000,000 ha of forest. More than 54,000 manually-delineated polygons are available, with 58,219 ha fully labeled for standing deadwood, supporting the development and benchmarking of AI models for global tree mortality mapping. [MVJM⁺26]

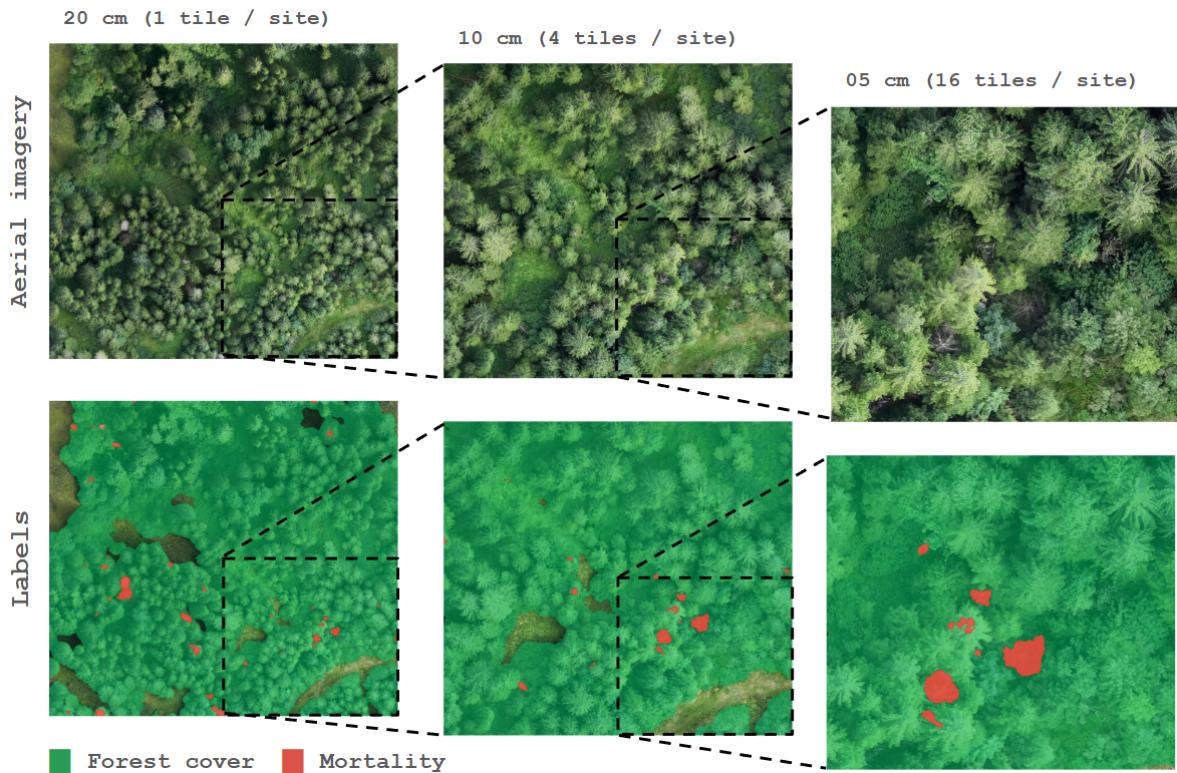


Figure 1: This is a figure on a benchmark dataset which is being created right now.

References

- [MVJM⁺26] Clemens Mosig, Janusch Vajna-Jehle, Miguel D. Mahecha, Yan Cheng, Henrik Hartmann, David Montero, Samuli Juntila, Stéphanie Horion, Mirela Beloiu Schwenke, Michael J. Koontz, Khairul Nizam Abdul Maulud, Stephen Adu-Bredu, Djamil Al-Halbouni, Muhammad Ali, Matthew Allen, Jan Altman, Lot Amorós, Claudia Angiolini, Rasmus Astrup, Hassan Awada, Caterina Barrasso, Harm Bartholomeus, Pieter S.A. Beck, Aurora Bozzini, Joshua Braun-Wimmer, Benjamin Brede, Fabio Marcelo Breunig, Stefano Brugnaro, Allan Buras, Vicente Burchard-Levine, Jesús Julio Camarero, Anna Candotti, Luka Capuder, Erik Carrieri, Mauro Centritto, Gherardo Chirici, Myriam Cloutier, Dhemerson Conciani, KC Cushman, James W. Dalling, Phuong D. Dao, Jan Dempewolf, Martin Denter, Marcel Dogotari, Ricardo Díaz-Delgado, Simon Ecke, Jana Eichel, Anette Eltner, André Fabbri, Maximilian Fabi, Fabian Fassnacht, Matheus Pinheiro Ferreira, Fabian Jörg Fischer, Julian Frey, Annett Frick, Jose Fuentes, Selina Ganz, Matteo Garbarino, Milton García, Matthias Gassilloud, Antonio Gazol, Guillermo Gea-Izquierdo, Kilian Gerberding, Marziye Ghasemi, Francesca Giannetti, Jeffrey Gillan, Roy Gonzalez, Carl Gosper, Terry Greene, Konrad Greinwald, Stuart Grieve, André Große-Stoltenberg, Jesus Aguirre Gutierrez, Anna Göritz, Peter Hajek, David Hedding, Jan Hempel, Stien Heremans, Melvin Hernández, Marco Heurich, Eija Honkavaara, Bernhard Höfle, Robert Jackisch, Tommaso Jucker, Jesse M. Kalwij, Sebastian Kepfer-Rojas, Pratima Khatri-Chhetri, Till Kleinebecker, Hans-Joachim Klemmt, Tomáš Klouček, Niko Koivumäki, Nagesh Kolagani, Jan Komárek, Kirill Korznikov, Bartłomiej Kraszewski, Stefan Kruse, Robert Krüger, Helga Kuechly, Ivan H.Y. Kwong, Etienne Laliberté, Liam Langan, Hooman Latifi, Claudia Leal-Medina, Jan R.K. Lehmann, Linyuan Li, Emily Lines, Maciej Lisiewicz, Javier Lopatin, Arko Lucieer, Antonia Ludwig, Marvin Ludwig, Päivi Lyytikäinen-Saarenmaa, Qin Ma, Nicolas Mansuy, José Manuel Peña, Giovanni Marino, Michael Maroscheck, M.Pilar Martín, Darío Martín-Benito, Pavan Matham, Sabrina Mazzoni, Fabio Meloni, Annette Menzel, Hanna Meyer, Mojdeh Miraki, Gerardo Moreno, Daniel Moreno-Fernández, Helene C. Muller-Landau, Mirko Mälische, Jakobus Möhring, Jana Müllerova, Setti Sridhara Naidu, Davide Nardi, Paul Neumeier, Mi-hai Daniel Nita, Roope Näsi, Lars Oppgenoorth, Sagynbek Orunbaev, Melanie Palmer, Thomas Paul, Mattis Pfenning, Alastair Potts, Gudala Laxmi Prasanna, Suzanne Prober, Stefano Puliti, Antonio J. Pérez-Luque, Oscar Pérez-Priego, Chris Reudenbach, Jesús Revuelto, Gonzalo Rivas-Torres, Philippe Roberge, Pier Paolo Roggero, Christian Rossi, Nadine Katrin Ruehr, Paloma Ruiz-Benito, Christian Mestre Runge, Gabriele Giuseppe Antonio Satta, Bruno Scanu, Michael Scherer-Lorenzen, Felix Schiefer, Christopher Schiller, Jacob Schladebach, Marie-Therese Schmehl, Jonathan Schmid, Tristan Alexander Schmidt, Selina Schwarz, Rupert Seidl, Thomas Seifert, Ana Seifert Barba, Elham Shafeian, Aurélie Shapiro, Leopoldo de Simone, Hormoz Sohrabi, Salim Soltani, Laura Sotomayor, Ben Sparrow, Benjamin S.C. Steer, Matt Stenson, Benjamin Stöckigt, Yanjun Su, Juha Suomalainen, Elisa Tamudo, Mauro J. Tognetti Barbieri, Enrico Tomelleri, Michele Torresani, Katerina Trepekli, Saif Ullah, Sami Ullah, Josefina Umlauf, Nicolás Vargas-Ramírez, Can Vatandaslar, Vladimir Visacki, Michele Volpi, Vicente Vásquez, Christine Wallis, Ben Weinstein, Hannah Weiser, Serge Wich, Tagle Casapia Ximena, Pablo J. Zarco-Tejada, Katherine Zdunic, Katarzyna Zielewska-Büttner, Raquel Alves de Oliveira, Liz van Wagendonk, Vincent von Dosky, and Teja Kattenborn. deadtrees.earth — an open-access and interactive database for centimeter-scale aerial imagery to uncover global tree mortality dynamics. *Remote Sensing of Environment*, 332:115027, 2026.