



sPlot 5th ordinary meeting: Updates and call to sPlot 5.0

Gabriella Damasceno, in name of the sPlot Consortium

The sPlot project

The sPlot project

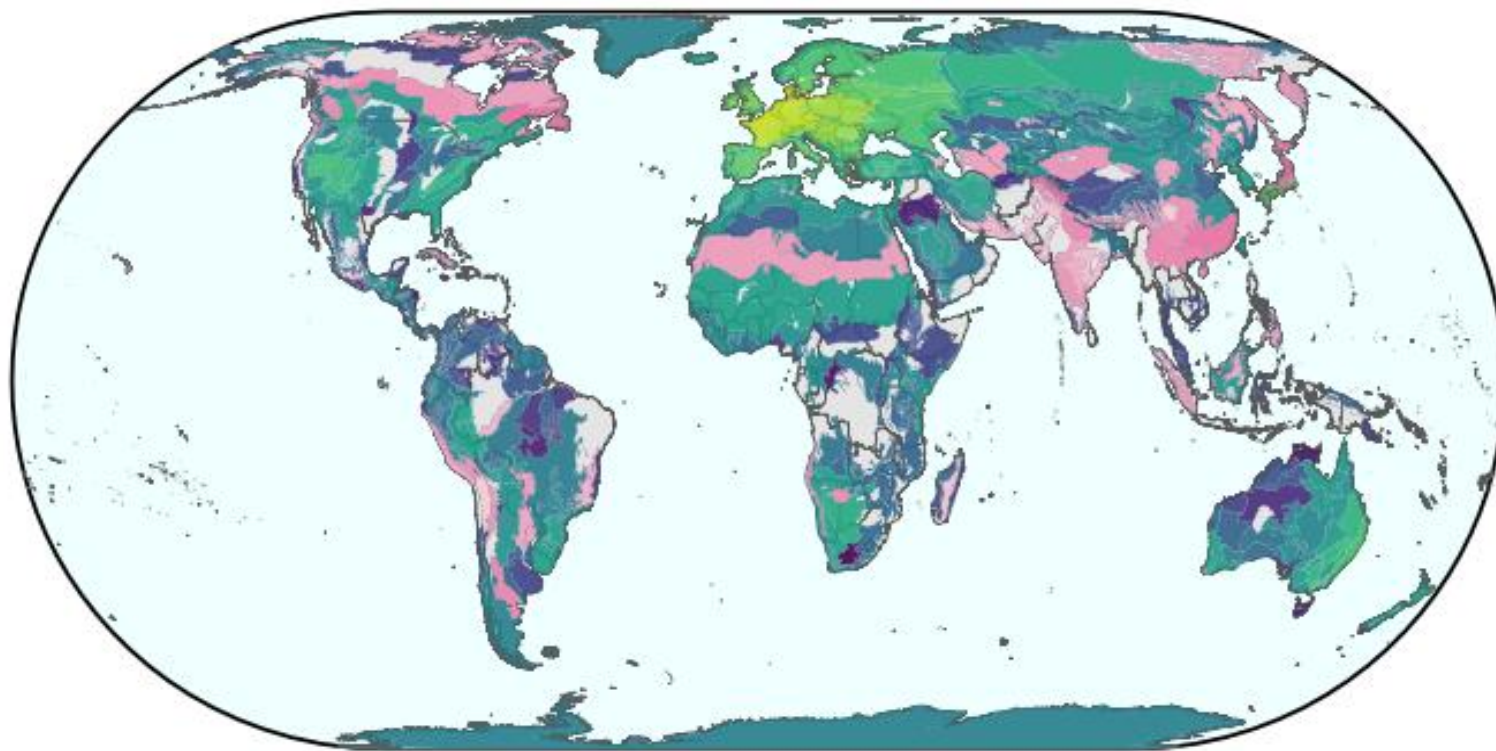
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The sPlot project

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- Used in 71 research projects & 17 publications

The sPlot project

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- Used in 71 research projects & 17 publications
- Global representation:
 - 7 continents
 - 151 countries
 - 514 ecoregions



The sPlot project



sPlot 1.0

659,000 plots
52 databases
62 countries

The sPlot project



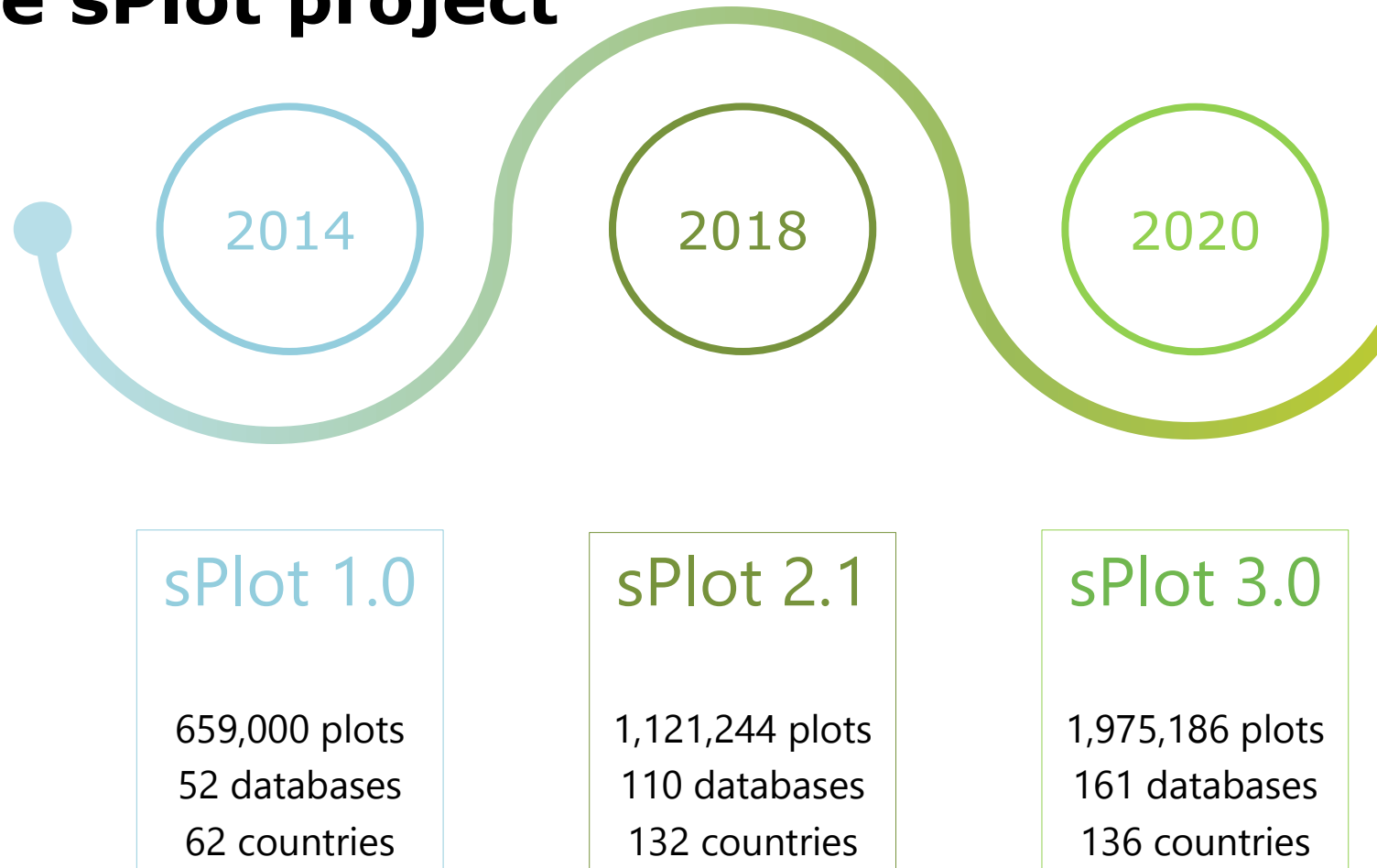
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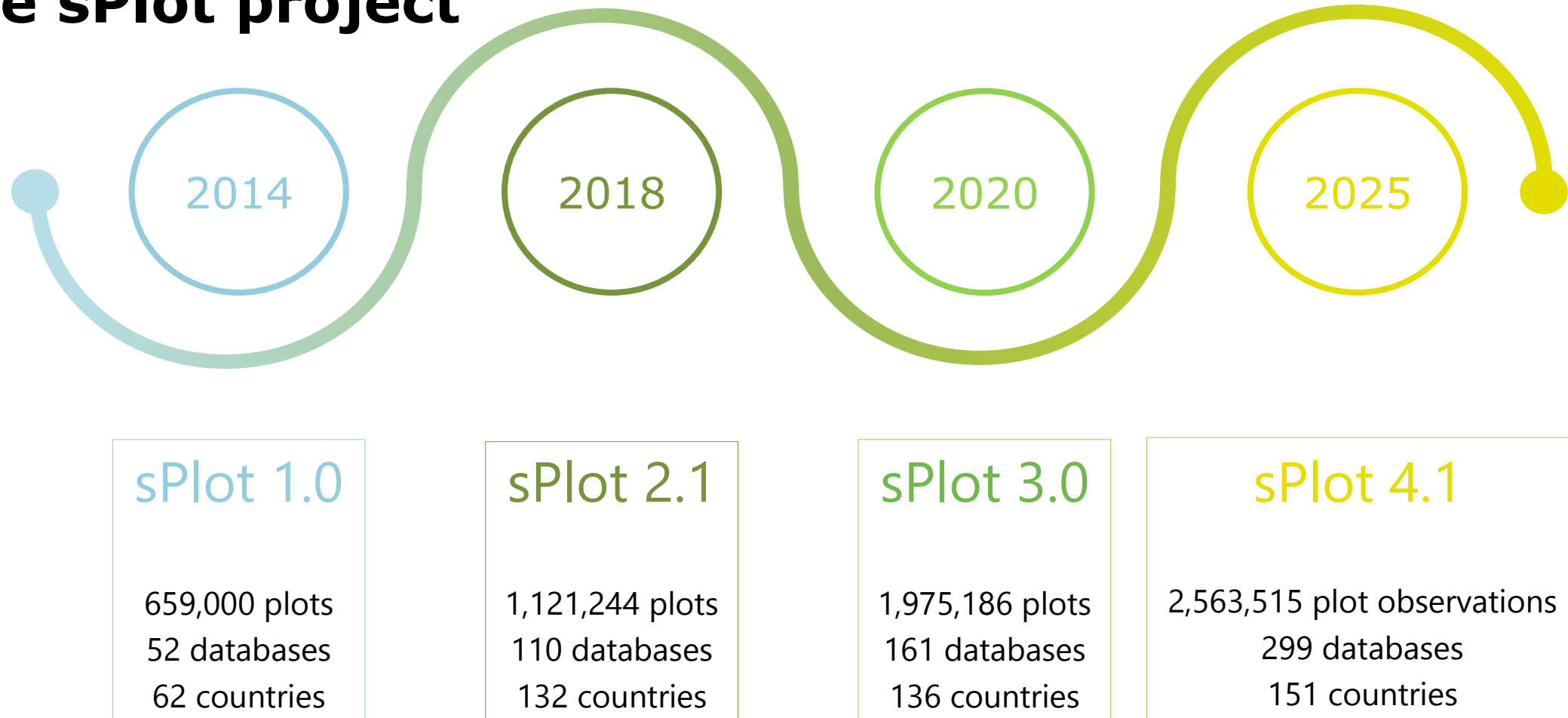
sPlot 2.1

1,121,244 plots
110 databases
132 countries

The sPlot project



The sPlot project



A collaborative database

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- Some numbers:
 - 341 members
 - 299 datasets

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 - 341 members
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- How it works:
 - Data owners retain property
 - Data is accessible to sPlot members upon submission of research proposal
 - Regulated by sPlot Rules and Data Governance

Governance and Data Property
Rules of the sPlot Consortium



a project of  iDiv

Benefits

Benefits

- Authorship of papers in high-impact journals

Global Ecology
and Biogeography

A Journal of
Macroecology

DATA ARTICLE | [Open Access](#) | 

Sabatini et al. (2021)

sPlotOpen – An environmentally balanced, open-access, global dataset of vegetation plots

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- Access to sPlot data – ready to use!

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Research

Laughlin et al. (2024)

New
Phytologist 

Rooting depth and xylem vulnerability are independent woody plant traits jointly selected by aridity, seasonality, and water table depth

Daniel C. Laughlin¹ , Andrew Siefert¹ , Jesse R. Fleri¹ , Shersingh Joseph Tumber-Dávila² , William M. Hammond³ , Francesco Maria Sabatini^{4,5} , Gabriella Damasceno^{6,7} , Isabelle Aubin⁸ , Richard Field⁹ , Mohamed Z. Hatim^{10,11} , Steven Jansen¹² , Jonathan Lenoir¹³ , Frederic Lens^{14,15} , James K. McCarthy¹⁶ , Ülo Niinemets¹⁷ , Oliver L. Phillips¹⁸ , Fabio Attorre¹⁹ , Yves Bergeron²⁰ , Hans Henrik Bruun²¹ , Chaeho Byun²² , Renata Čuštrevska²³ , Jürgen Dengler^{24,25} , Michele De Sanctis¹⁹ , Jiri Dolezal^{26,27} , Borja Jiménez-Alfaro²⁸ , Bruno Hérault^{29,30} , Jürgen Homeier^{31,32} , Jens Kattge^{6,33} , Patrick Meir^{34,35} , Maurizio Mencuccini^{36,37} , Jalil Noroozi³⁸ , Arkadiusz Nowak^{39,40} , Josep Peñuelas^{36,41} , Marco Schmidt⁴² , Željko Škvorc⁴³ , Fahmida Sultana⁴⁴ , Rosina Magaña Ugarte⁴⁵  and Helge Bruelheide^{6,7} 

Benefits

- Authorship of papers in high-impact journals
- Access to sPlot data – ready to use!
- Worldwide network of researchers
- Great opportunities for learning from meaningful collaborations

nature ecology & evolution

Hähn et al. (2024)

Article

<https://doi.org/10.1038/s41559-024-02589-0>

Global decoupling of functional and phylogenetic diversity in plant communities

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Overview of sPlot projects

Since March 2025

New projects

- 12 new approved projects

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 - 3 Effects of biodiversity
 - 4 Biodiversity patterns
 - 3 Drivers of biodiversity
 - 1 Vegetation description and classification
 - 1 Methodological

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 - 3 Effects of biodiversity
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 - 1 Methodological
- 13 opt-in projects
- 1 opt-out project

Opt-out call

- 1 opt-out invitation
 - (#71) The global co-occurrence matrix of vascular plant species and its applications
 - Helge Bruelheide (Germany) and Xin Jing (China)

Warmest
greetings!



Opt-in calls

- 1 opt-out invitation
 - (#71) The global co-occurrence matrix of vascular plant species and its applications
 - Helge Bruelheide (Germany) and Xin Jing (China)
- 4 opt-in invitations
 - Projects #52, #57, #65, #70

Warmest
greetings!



Finished projects

Finished projects

- **#42:** Identifying threatened groundwater dependent ecosystems as local biodiversity hotspots globally via remote sensing

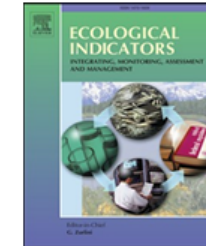
Ecological Indicators 183 (2026) 114669



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Ecological Indicators

journal homepage: www.elsevier.com/locate/ecolind



A global map of groundwater-dependent vegetation in the Mediterranean biome

Léonard El-Hokayem^{a,c,*}, Gabriella Damasceno^{b,c}, Francesco M. Sabatini^d, Helge Bruelheide^{b,c}, Gianmaria Bonari^{e,f}, Ciara Dwyer^g, Fernando Gonçalves^h, Borja Jiménez-Alfaro^{i,j}, Jonathan Millett^k, Josep Peñuelas^{l,m}, Jens-Christian Svenningⁿ, Jan Altman^{o,p}, Han Y.H. Chen^{q,r}, Tetiana Dziuba^s, Mohamed A. El-Sheikh^t, Behlül Güler^u, Daniel Hending^v, Bruno Hérault^w, Mohamed Z. Hatim^{x,y}, Florian Jansen^z, Carsten Meyer^c, Sharif A. Mukul^{aa}, Remigiusz Pielech^{ab}, Flávio Rodrigues^{ac}, Hua-Feng Wang^{ad}, Christopher Conrad^{a,c}

Finished projects

- **#53:** Mapping global trait distributions by combining citizen science data and Earth observation satellites

nature communications



Article

<https://doi.org/10.1038/s41467-026-68996-y>

Crowdsourced biodiversity monitoring fills gaps in global plant trait mapping

Daniel Lusk¹✉, Sophie Wolf², Daria Svidzinska², Carsten F. Dormann³, Jens Kattge^{4,5}, Helge Bruelheide^{4,6}, Francesco Maria Sabatini⁷, Gabriella Damasceno^{4,6}, Álvaro Moreno Martínez⁸, Cyrille Violle⁹, Daniel Hending¹⁰, Georg J. A. Hähn⁷, Solana Tabeni¹¹, Shyam Phartyal¹², Fernando Gonçalves¹³, Holger Kreft¹⁴, Marco Schmidt¹⁵, Han Chen^{16,17}, Behlül Güler¹⁸, Jiri Dolezal^{19,20}, Remigiusz Pielech²¹, Anaclara Guido²², Ciara Dwyer²³, Francesca Napoleone²⁴, Jacob Willie²⁵, André Luís Gasper²⁶, Manuel J. Macía^{27,28}, Milan Chytrý²⁹, Jonathan Lenoir³⁰, Dinesh Thakur¹⁹, Jürgen Dengler³¹, Sebastian Świerszcz³², Jan Altman^{19,33}, Ladislav Mucina^{34,35}, Ashish N. Nerlekar^{36,37}, Kaoru Kakinuma³⁸, Pravin Rawat³⁹, Zvezdana Stančić⁴⁰, Riccardo Testolin⁷, Mohamed Z. Hatim⁴¹, Flávio Rodrigues⁴², Jürgen Homeier⁴³, Marcia C. M. Marques⁴⁴, James K. McCarthy⁴⁵, M. A. El-Sheikh⁴⁶, Kirill Korznikov¹⁹, Kilian Gerberding¹ & Teja Kattenborn¹

Publications to come soon(er than later)

- Project #28, led by Hamada Ali
- Project #49, led by Camille Delavaux
- Project #51, led by Gayana Bexultanova
- Project #52, led by Nan Zhang
- Project #57, led by Marta Carboni

Publication to come late(r than expected)

- sPlot 4.1, led by Gabriella Damasceno
 - Finishing second round of reviews
 - Thanks for the new 400 comments (really!)

sPlot (planned) scientific meeting

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- To be held in Leipzig in January 2027



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 - Discontinued projects
 - **New projects!**



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- **Would like to visit Germany**



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 - **New projects!**
- **Would like to ~~visit Germany~~ lead a high-profile manuscript using sPlot?**



Submit a research proposal for using sPlot data!

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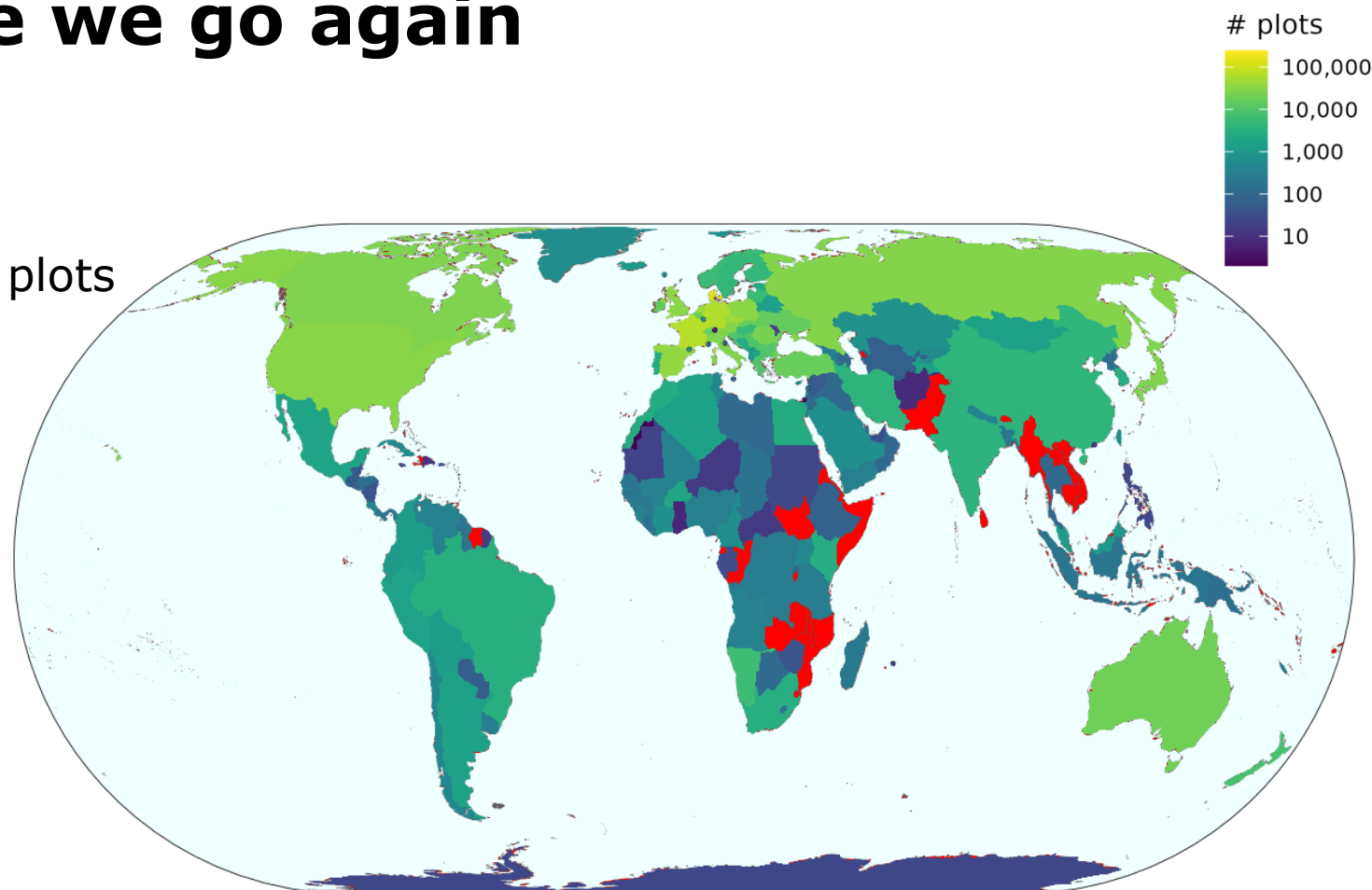
- Time series outside Europe

Call to sPlot 5.0 - here we go again

- Time series outside Europe
 - Same community through time
 - In permanent or semi-permanent plots

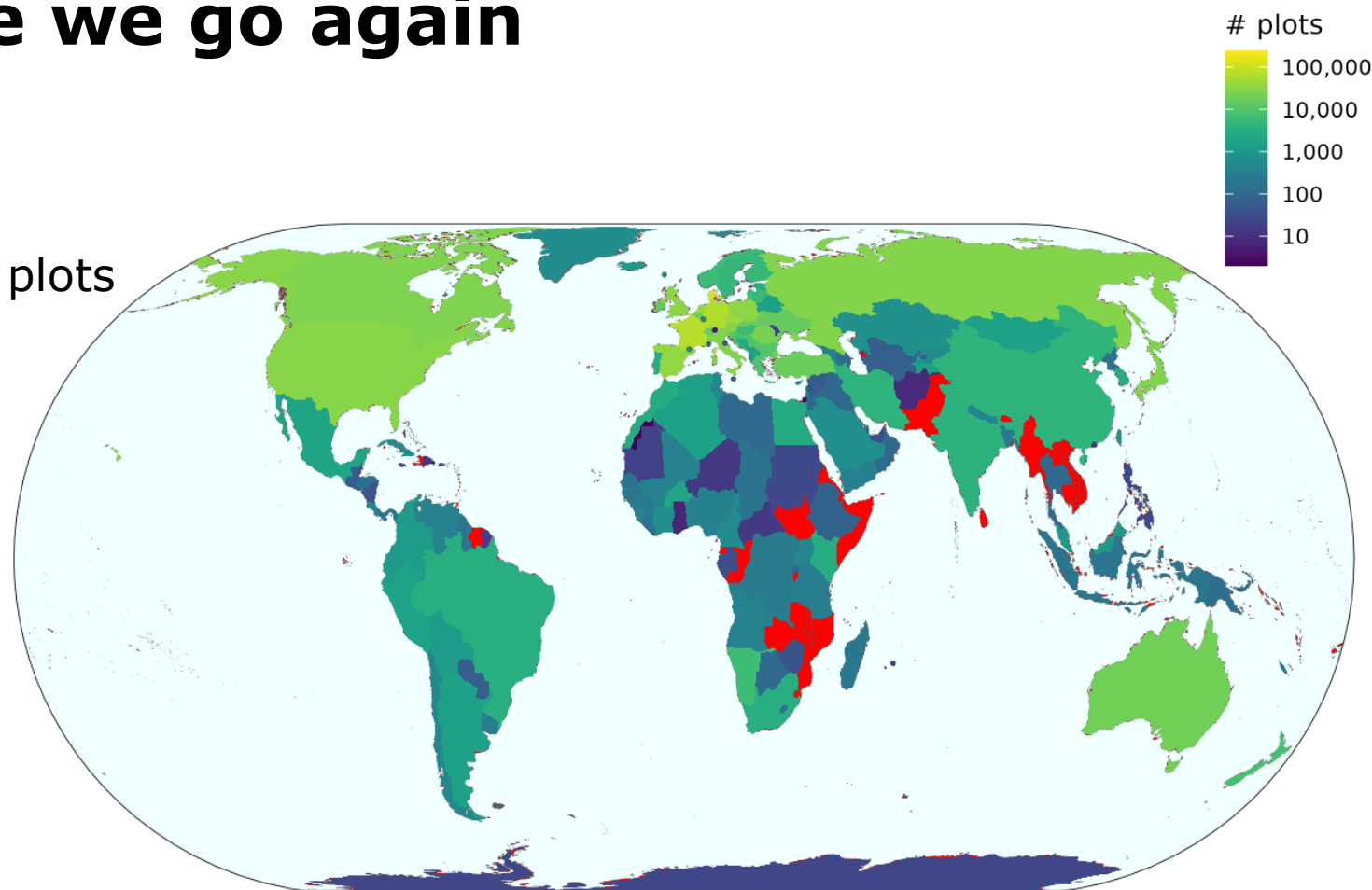
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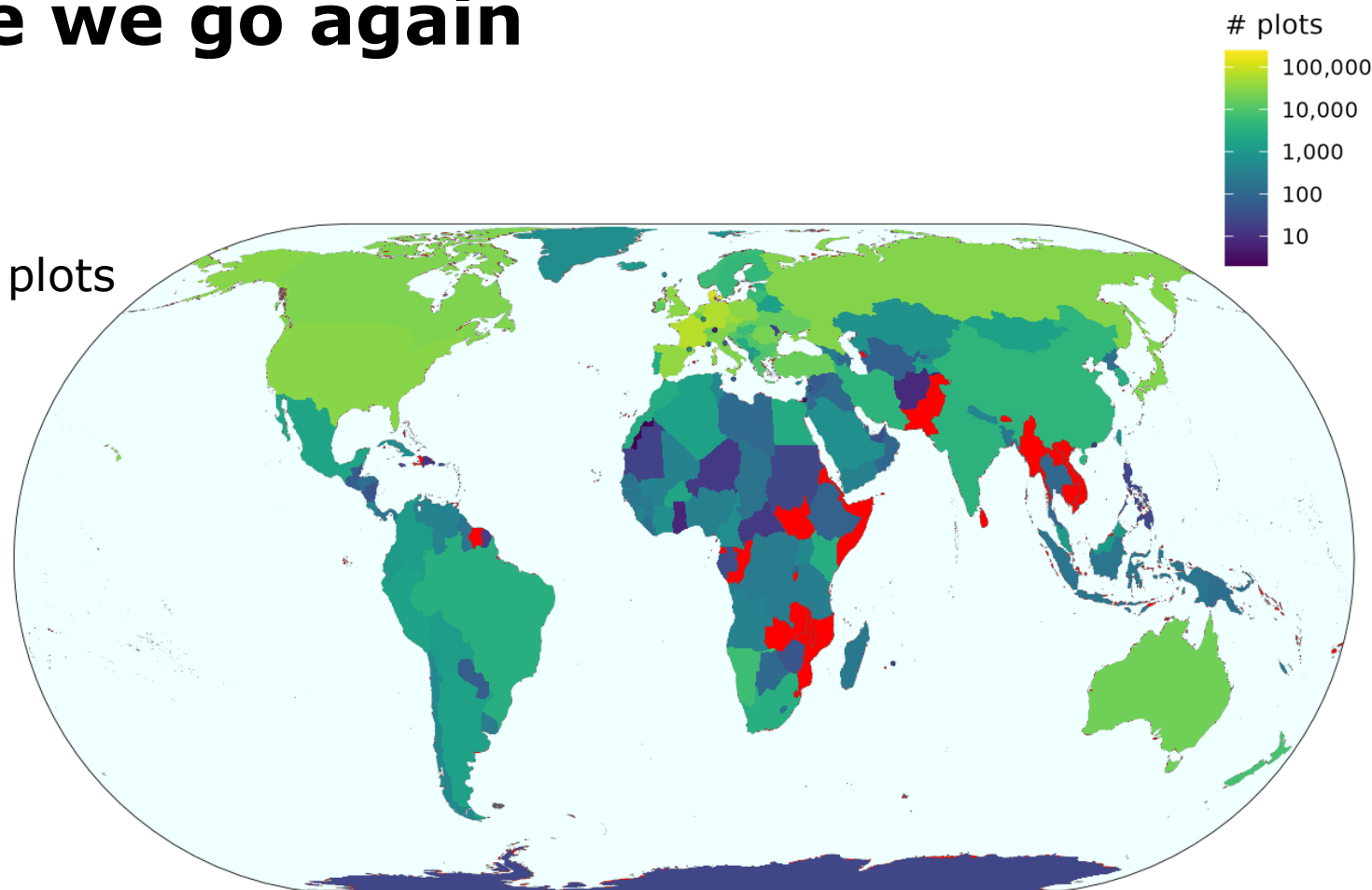
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 - Pakistan, Vietnam



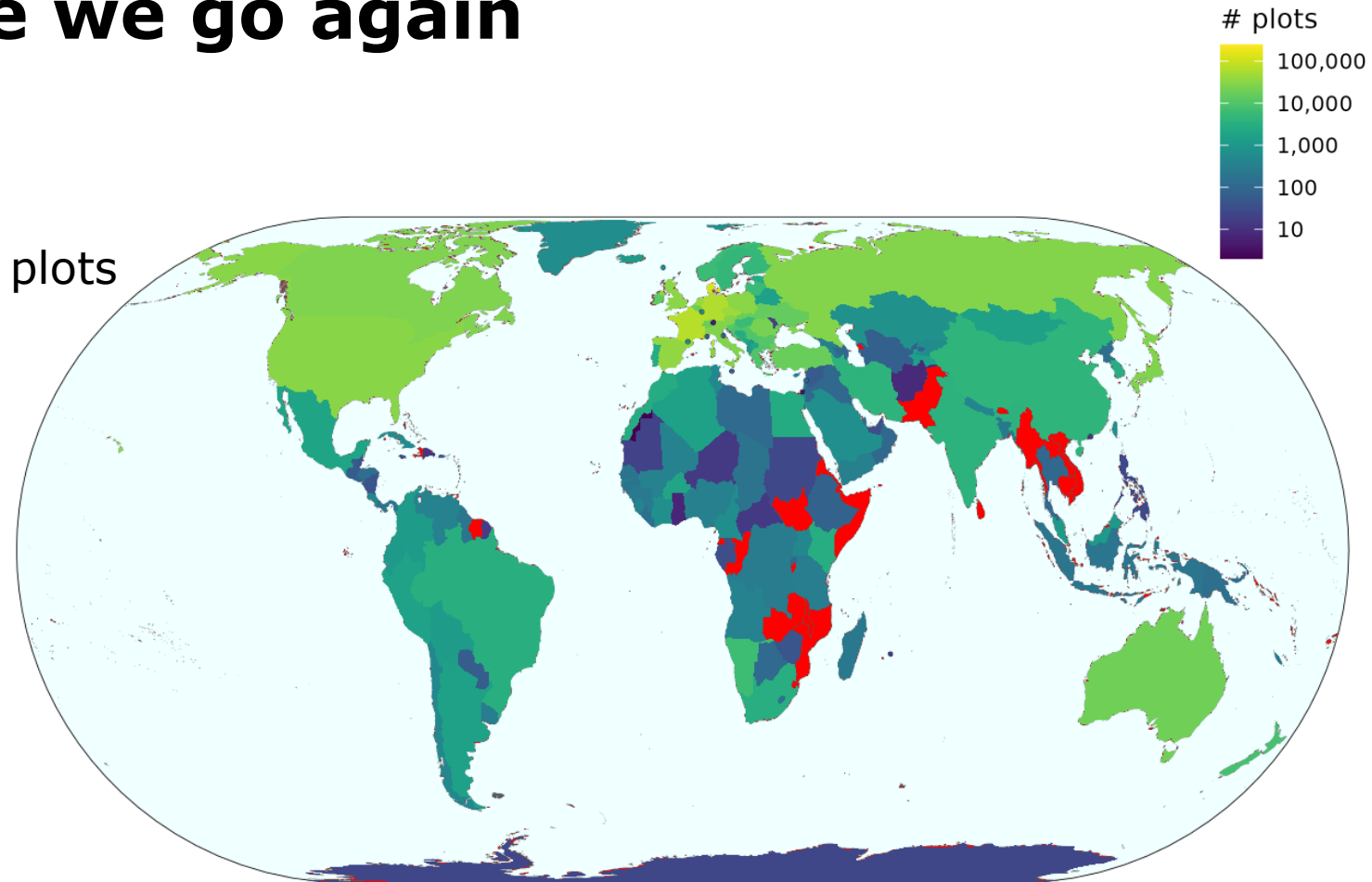
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- Underrepresented areas



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 - Haiti, Suriname
 - Mozambique, Somalia
 - Pakistan, Vietnam
- Underrepresented areas
 - Dominican Republic
 - Togo
 - Philippines



Thank you for your collaboration!



<https://www.idiv.de/research/projects/splot/>



gabriella.damasceno@idiv.de