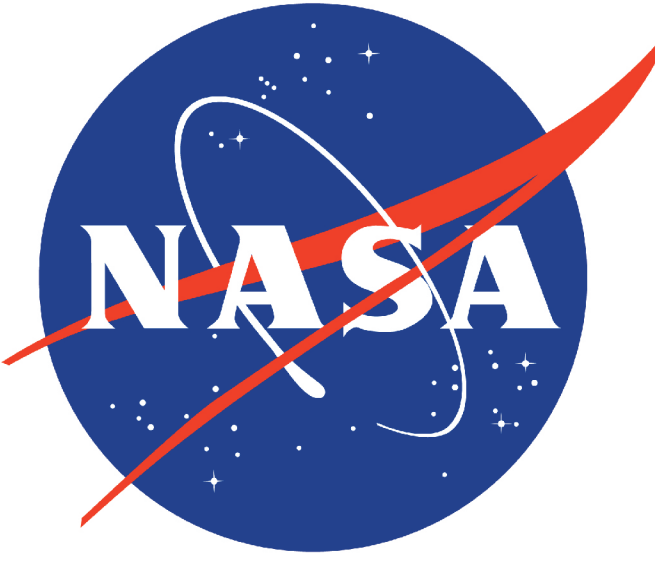




THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL



Our fragmented rivers—mapping human-made river obstructions around the globe

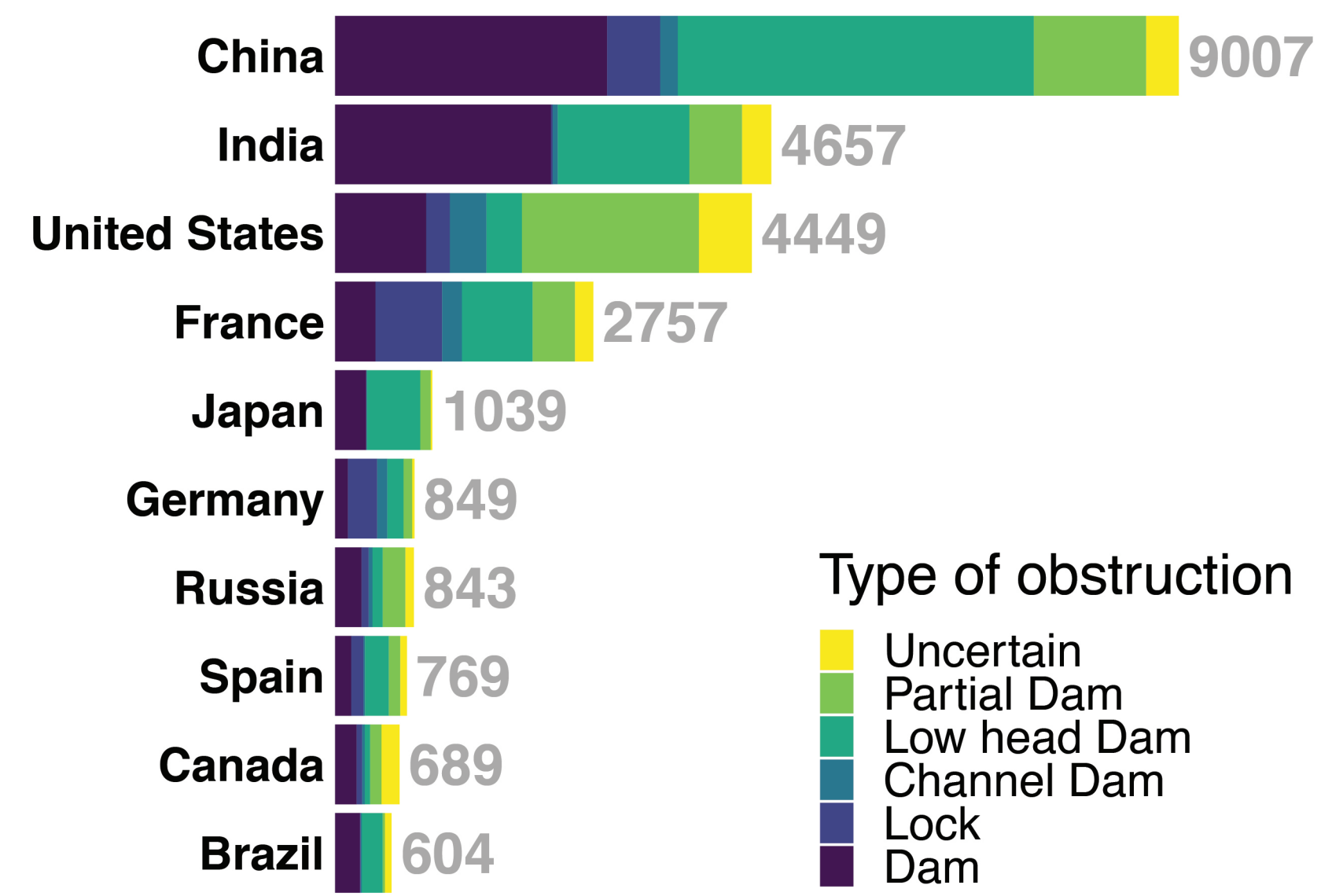
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Ted Langhorst¹, Eric Lawton³, Katie A. McQuillan⁴, Sayali Pawar², Matthew Ross⁵ and Aaron Whittlemore⁶, Tamlin M. Pavelsky¹

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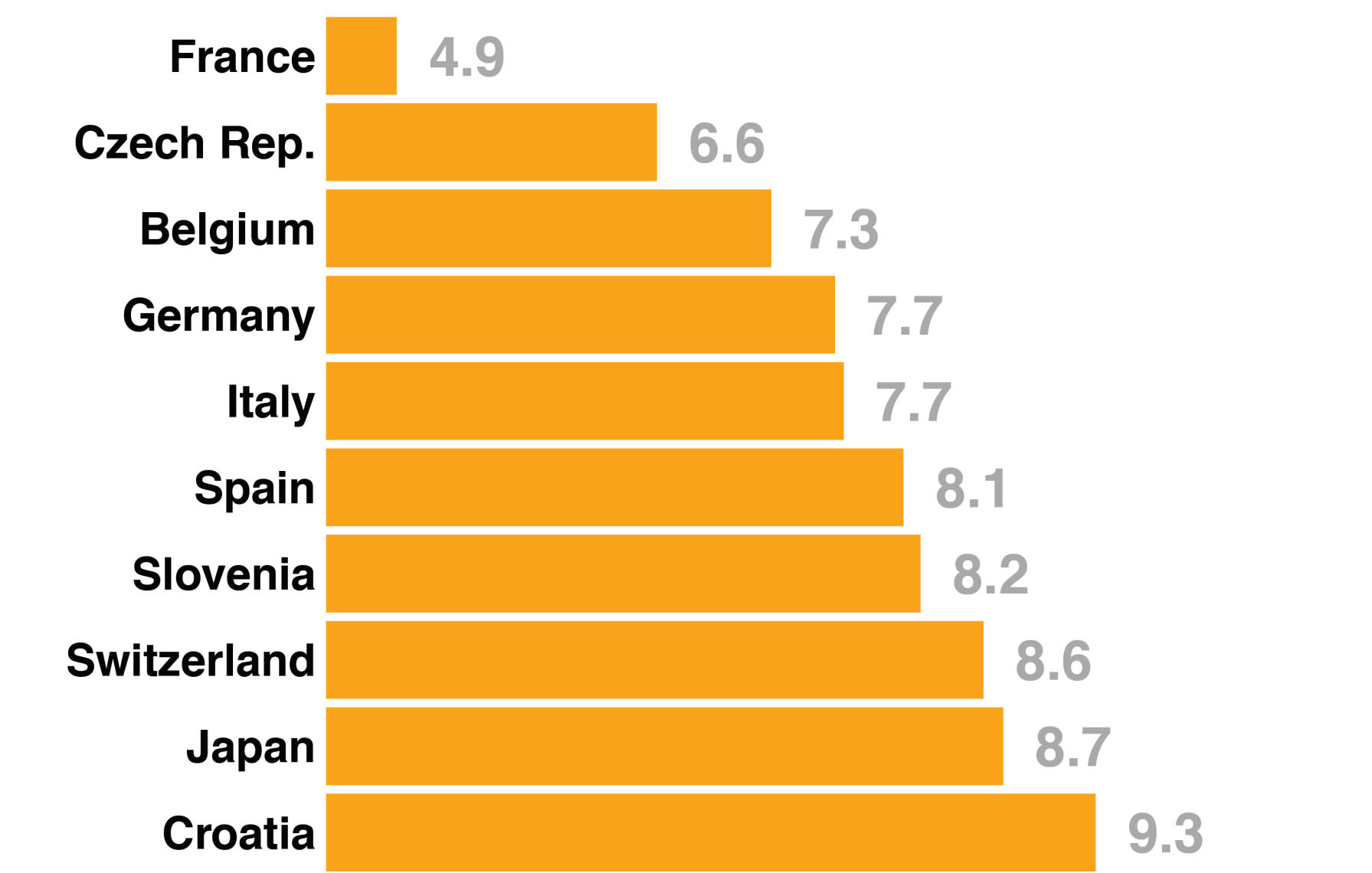


Countries with the most river obstructions (top 10)



Countries with the densest river obstructions (top 10)

Numbers showing mean distance between obstructions (km)



Takeaway

The Global River Obstruction Database contains
>35,000 river obstructions for all rivers with
width > 30m (total length: ~2.1 million km).

Methods

Obstructions were manually identified
based on high resolution Google Map sat-
ellite images then classified into 7 cate-
gories according to their ability to disrupt
flow (two partial dam categories were
merged for visualization purpose. For de-
tailed methods please visit our project's
GitHub page at <https://globalhydrology.github.io/GROD/>.

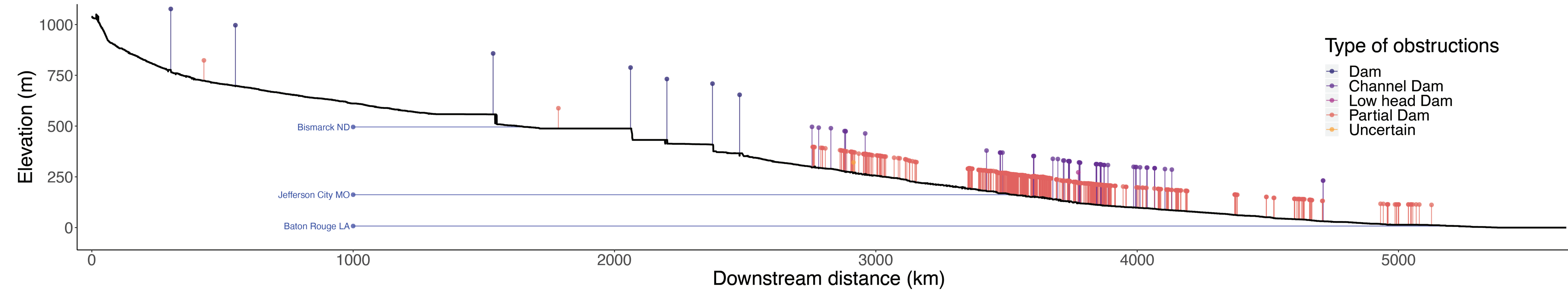


Fundings

SWOT Project Office at the NASA/Caltech
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• Dam • Channel Dam • Partial Dam
• Lock • Low head Dam • Uncertain

Mississippi River



Danube River

