



CROWTHER LAB

A woman with long brown hair, wearing a dark blue t-shirt with a yellow logo and the word 'FRAB' partially visible, is smiling and looking to her right. She is holding a white Frisbee with a green ball balanced on top. In the background, a man in a dark blue t-shirt and khaki shorts is walking away. The setting is an outdoor paved area with greenery and a blue railing in the background.

The game: FRIZBALL









Embrace the challenge:

More likely to succeed

Enjoy the process

The background of the image shows two industrial smokestacks on the left, emitting thick white and grey smoke that fills the sky. The sky is filled with large, billowing clouds. Overlaid on the image is a yellow circle containing the text '61%' and a yellow rectangular box containing the text 'OF THE WORLD RECOGNIZES CLIMATE CHANGE'. To the right of the box are decorative elements: a series of white diagonal lines, a yellow diagonal line, and two yellow circles of different sizes.

61%

OF THE WORLD
RECOGNIZES
CLIMATE CHANGE



Total burden:
~300 Gt

Annual Emissions

~10 Gt

Emissions

0 Gt

Emissions

0 Gt

Emissions

0 Gt

Emissions

0 Gt

Emissions

0 Gt

Emissions

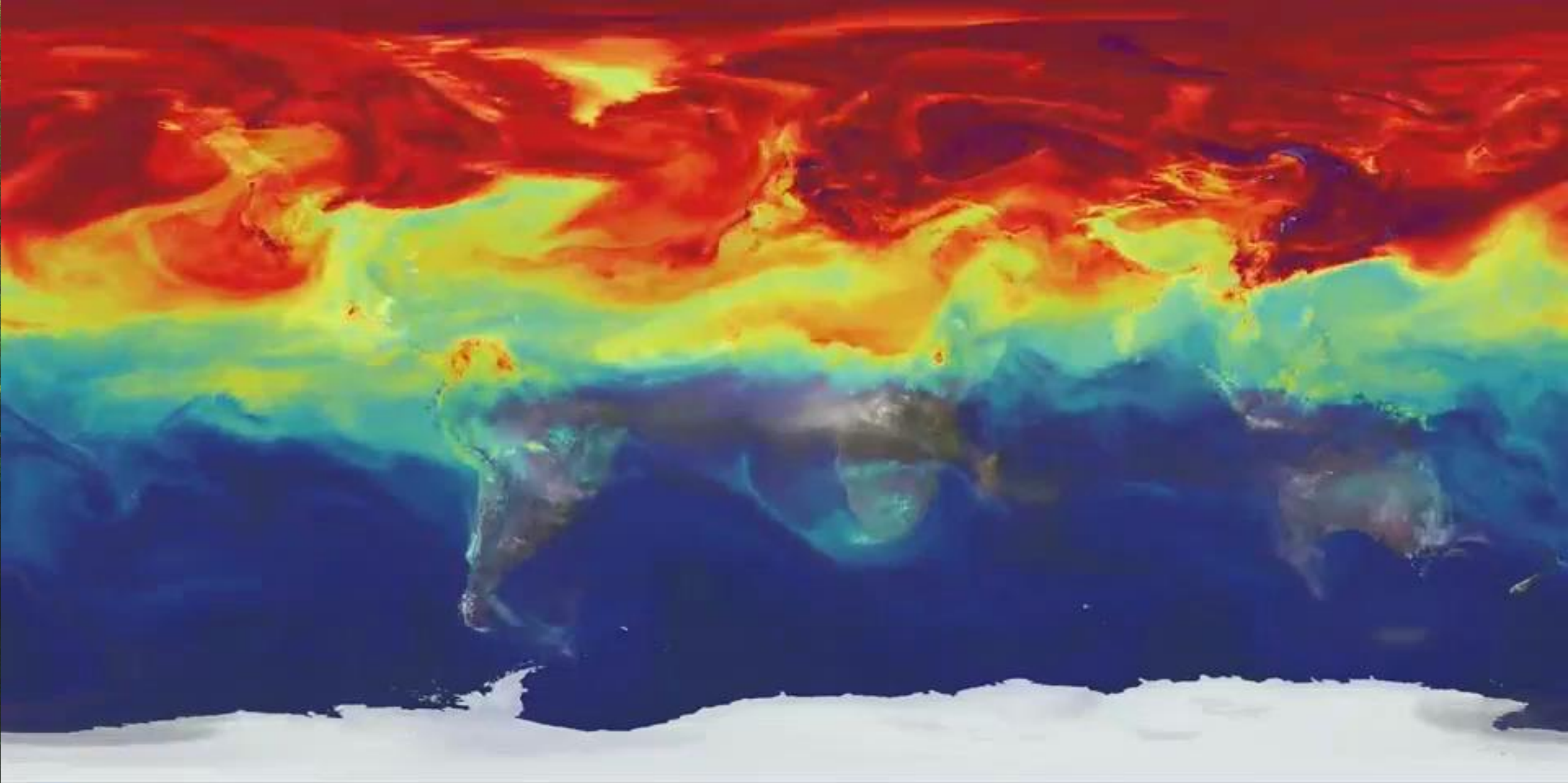
0 Gt

Emissions

0 Gt

Emissions

0 Gt



2006 / 04 / 30

Global Modeling and Assimilation Office

Carbon Monoxide Column Abundance [1.0×10^{18} molec cm^{-2}]



Carbon Dioxide Column Concentration [ppmv]



Solutions:

Refrigeration management: 24Gt

Stop meat consumption: 18Gt

...

...

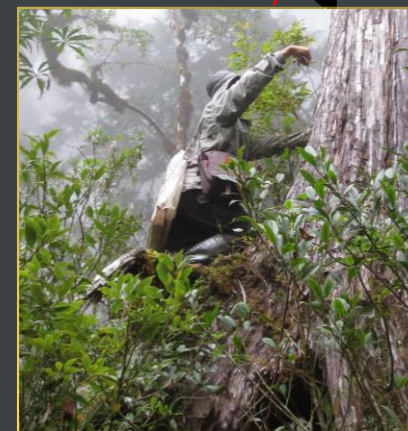
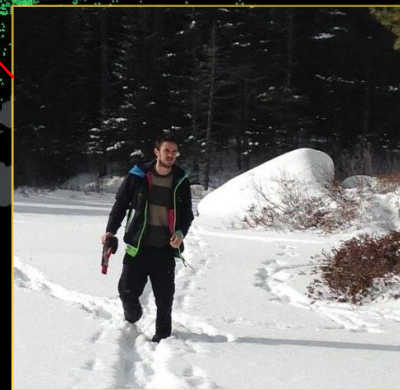
Global Restoration: ???



PREVIOUS ESTIMATE

400 BILLION TREES

1.2 M GLOBAL FOREST PLOTS



~3 trillion trees on Earth

Tree Cover

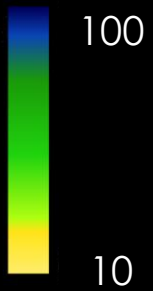


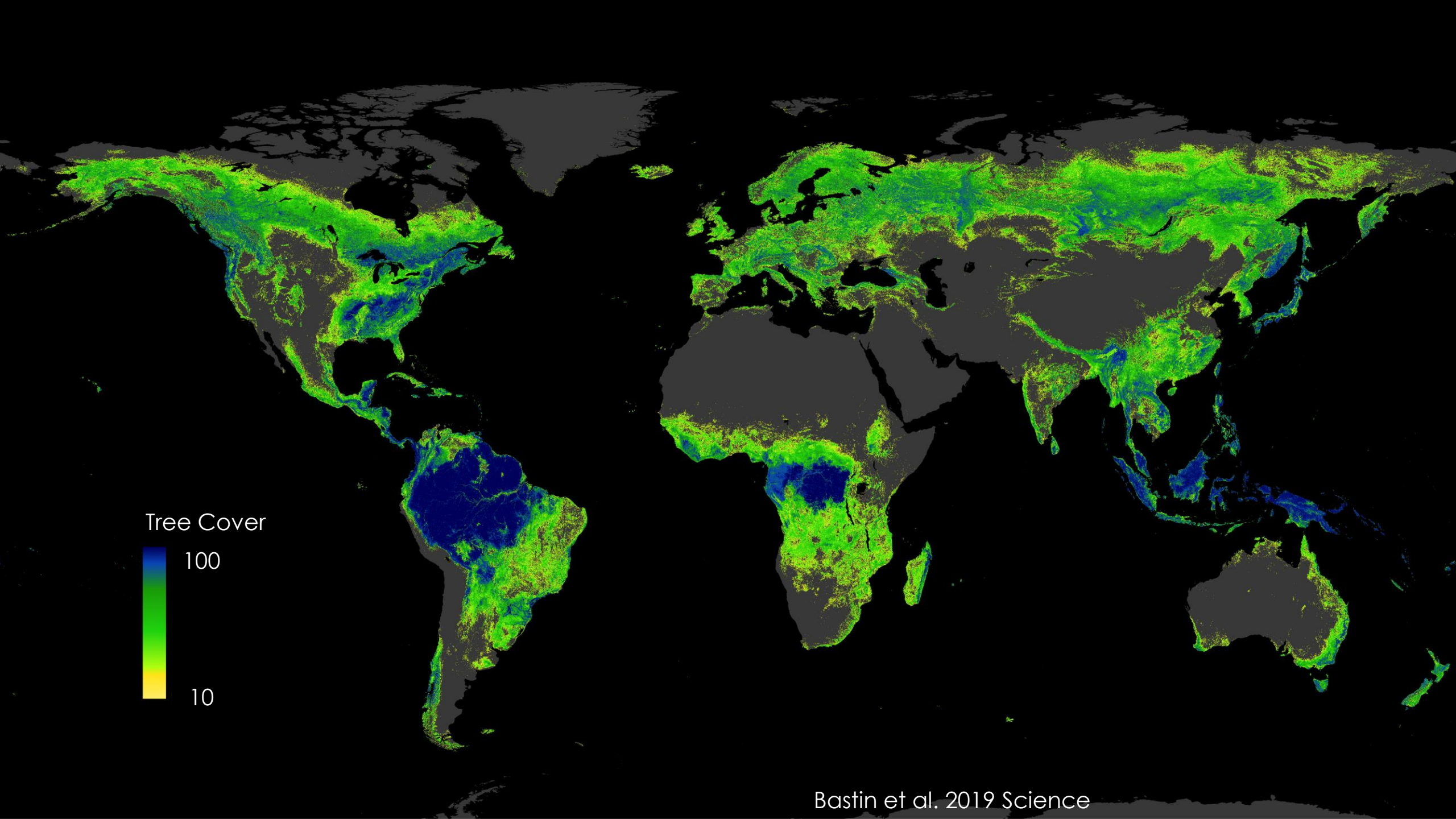
100

10

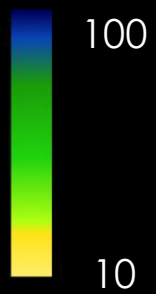
~3 trillion trees on Earth store ~450Gt Carbon

Tree Cover





Tree Cover



Restoration potential ~205 GT carbon

That is so stupid. We can't just plant trees. We need emissions cuts!

No! We need to conserve existing forests

But we also need natural grasslands and savannahs.

You are absolutely correct!

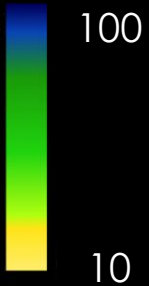
You are absolutely correct!

You are absolutely correct!

We need both

We need both

Tree Cover





SOIL

COLLECTION

Restoration potential could add 1500 Gt carbon

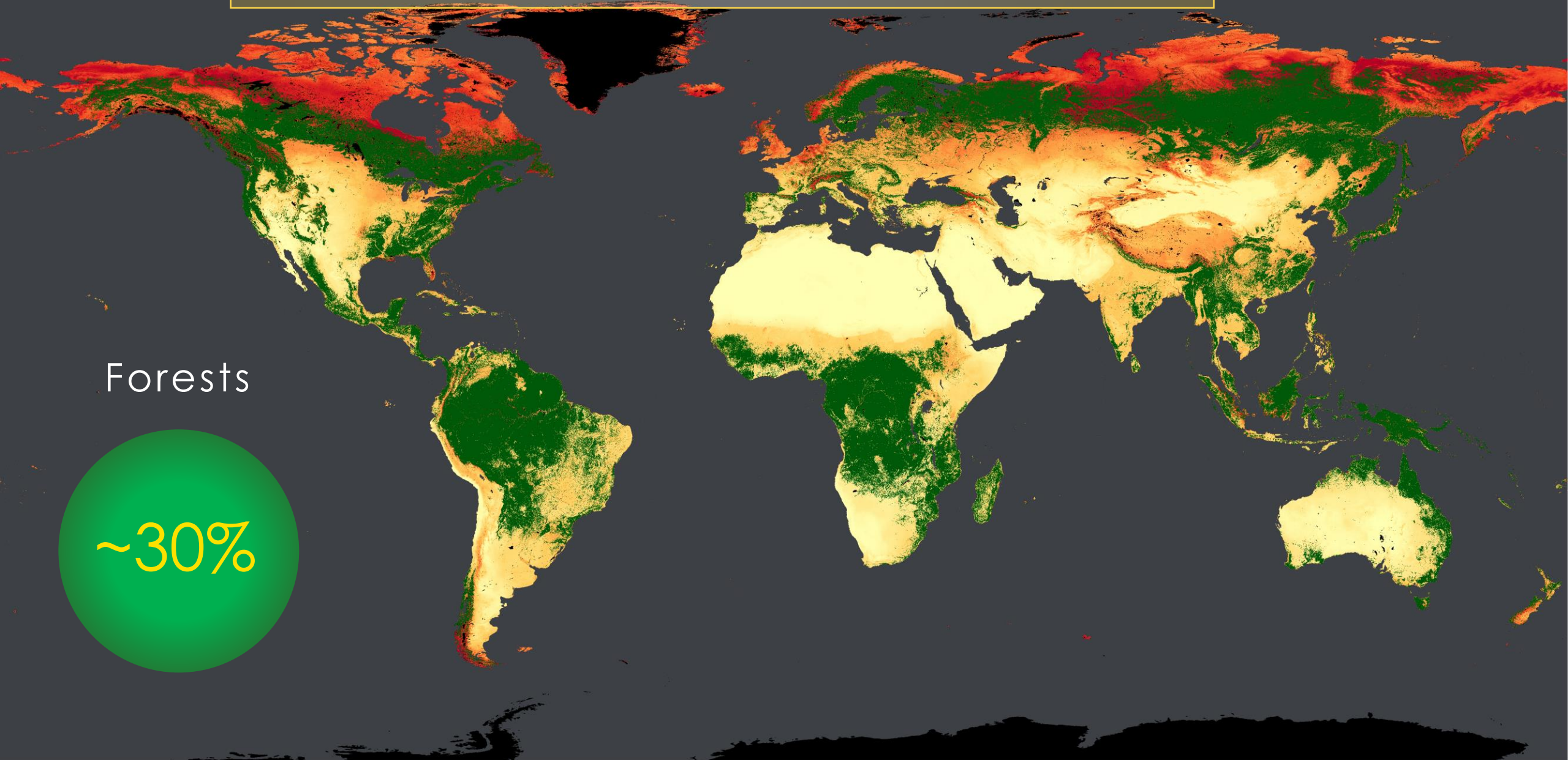
Soil Carbon (g kg^{-1})



Restoration potential > 116Gt soil carbon

Forests

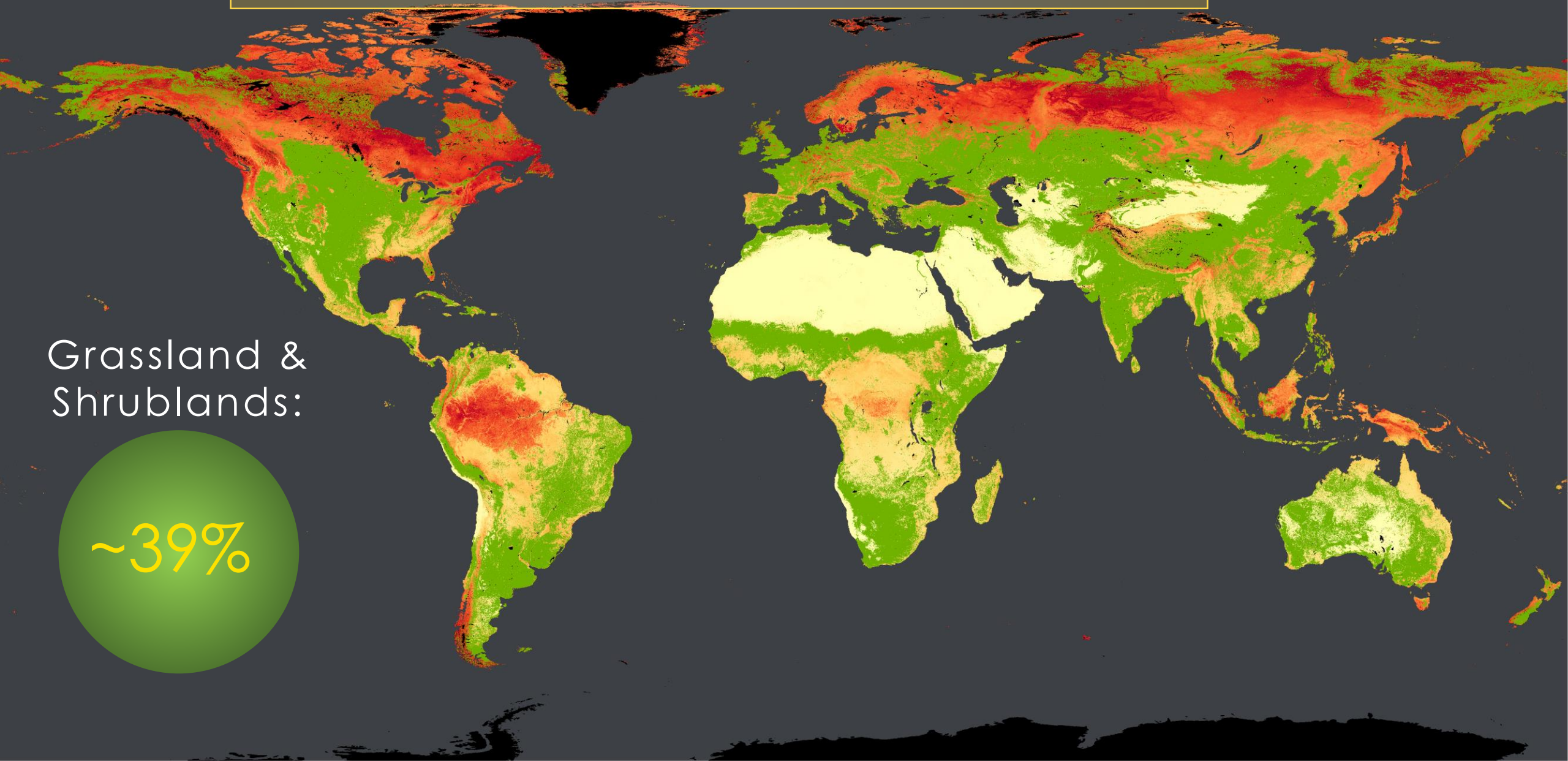
~30%



Restoration potential > 116Gt soil carbon

Grassland &
Shrublands:

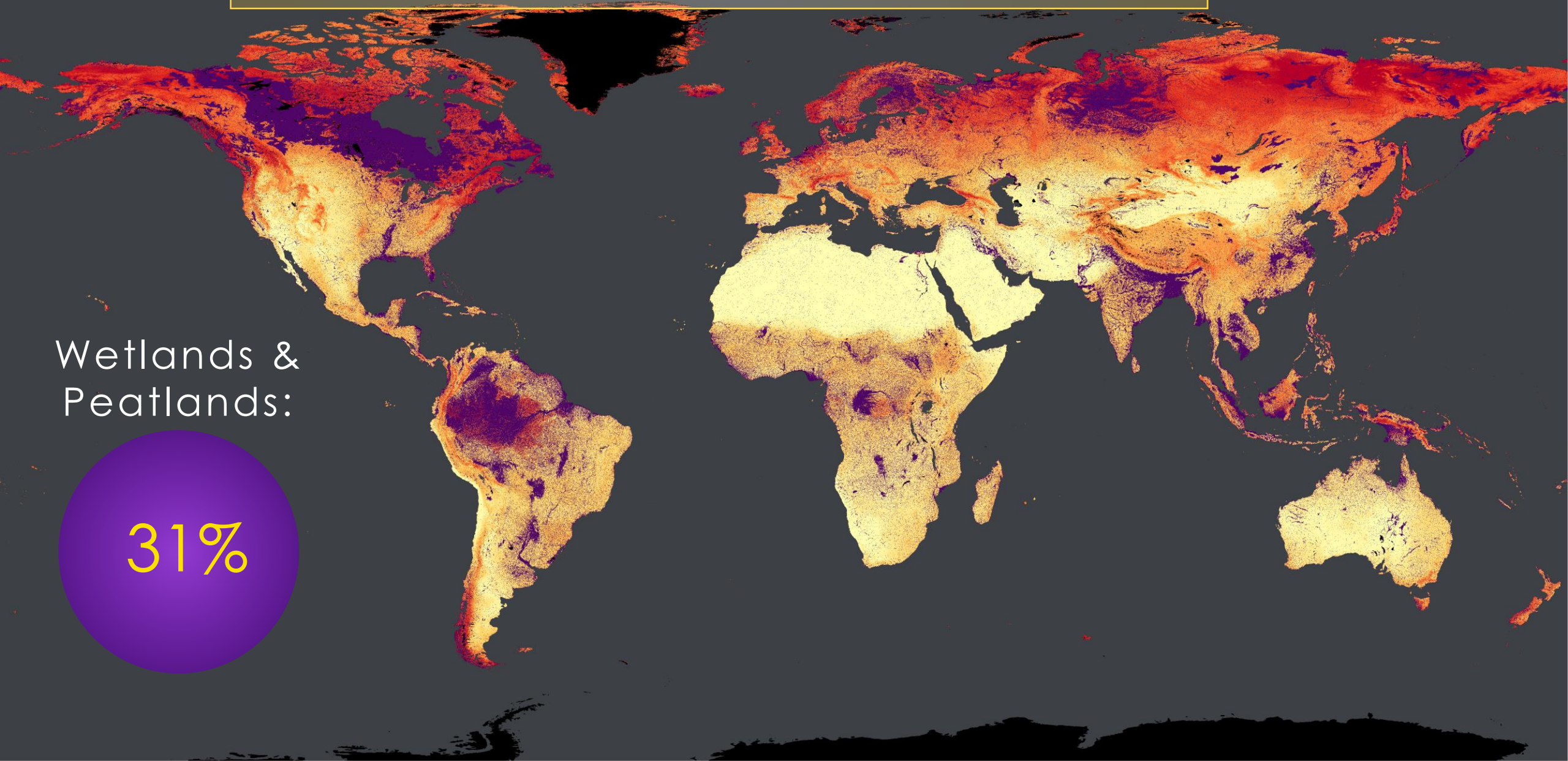
~39%



Restoration potential > 116Gt soil carbon

Wetlands &
Peatlands:

31%





Total burden:
~300 Gt

Annual Emissions

~10 Gt

Emissions

0 Gt

Emissions

0 Gt

Emissions

0 Gt

Emissions

0 Gt

Emissions

0 Gt

Emissions

0 Gt

Emissions

0 Gt

Emissions

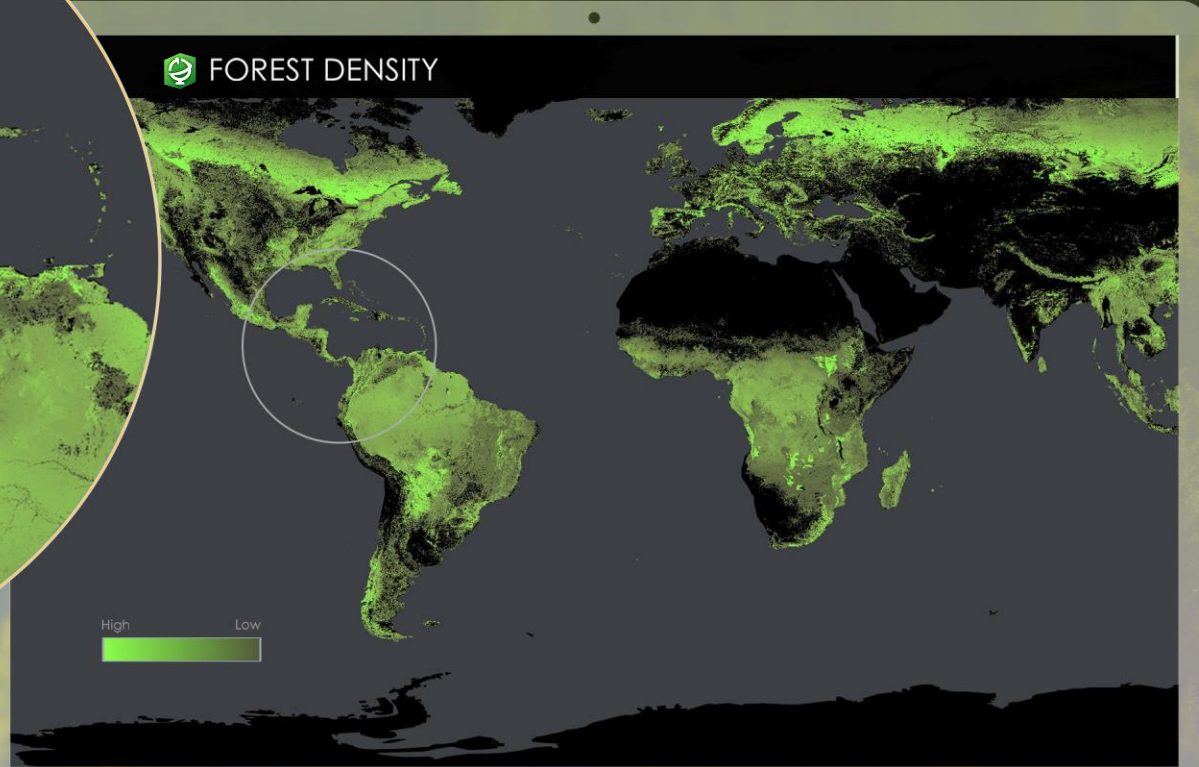
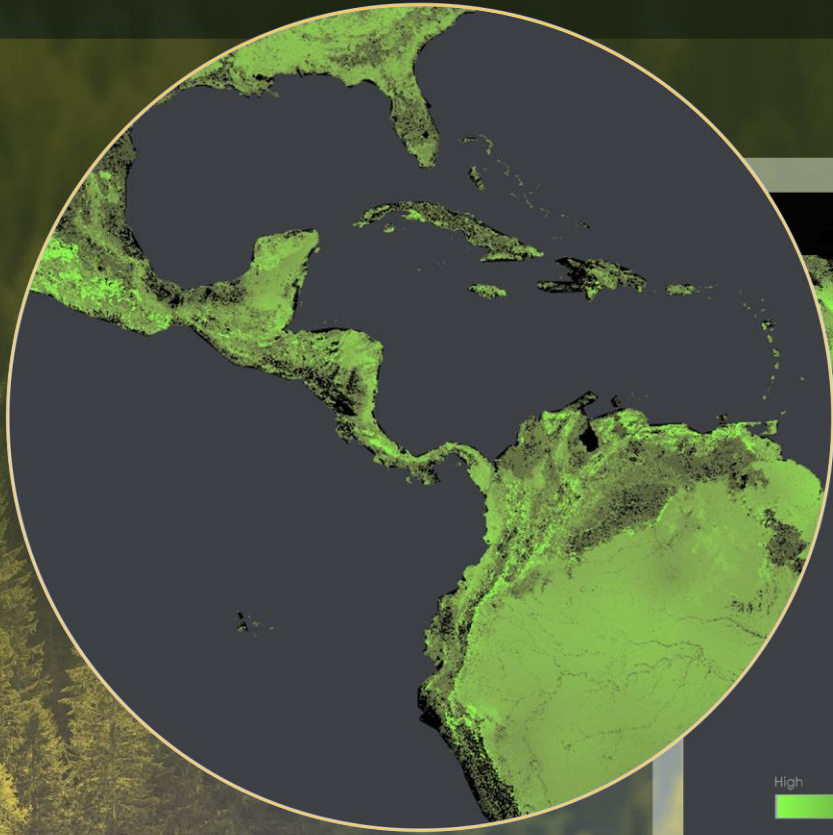
0 Gt



ONLY

30%

SURVIVE



CROWTHER LAB

Global Restoration \$300 BILLION





Hare Krishna
Food for All

Recycling And Compost Point

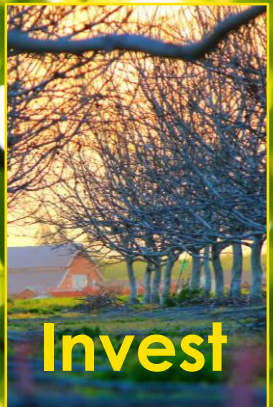




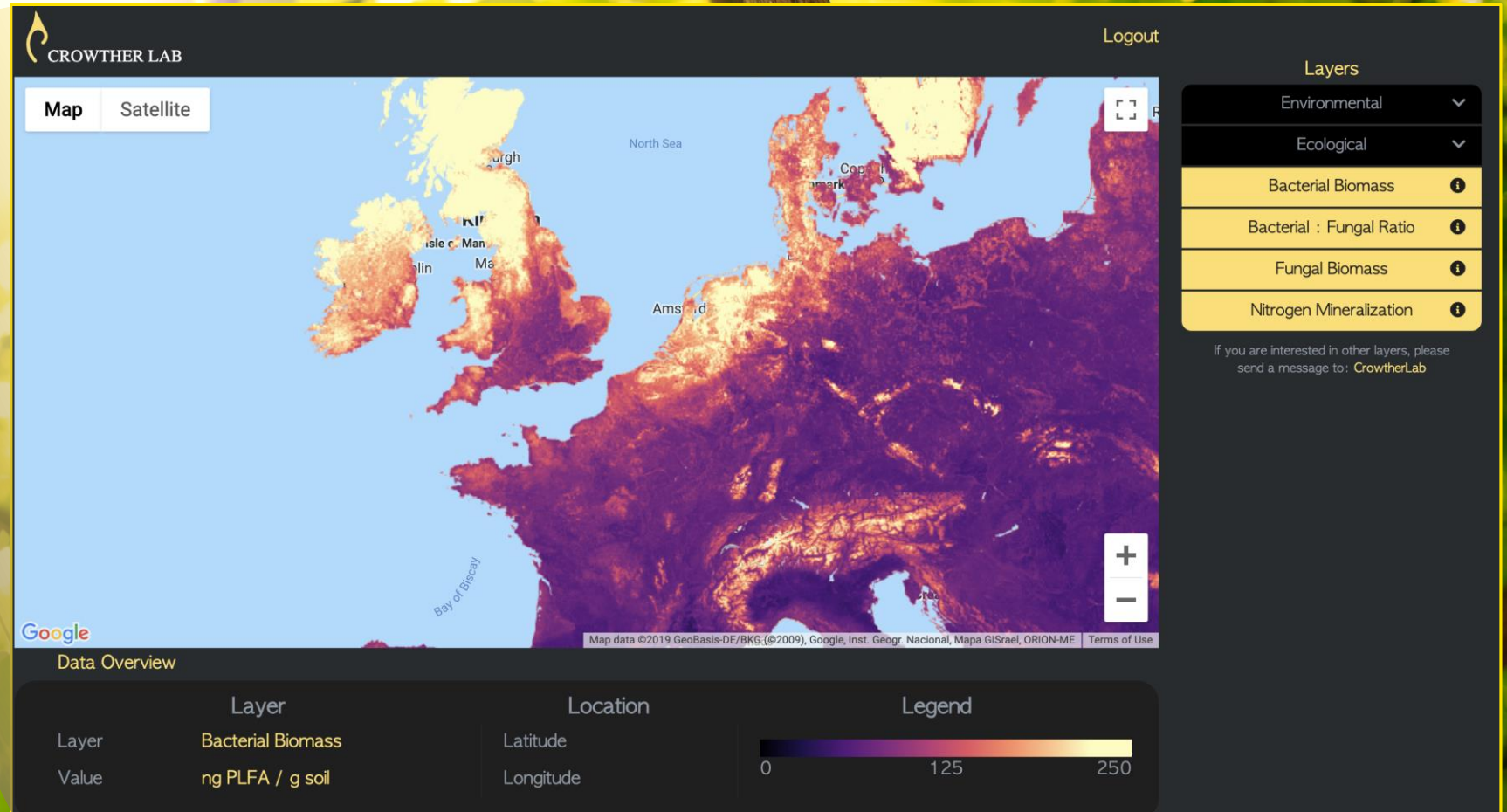
Plant



Donate



Invest

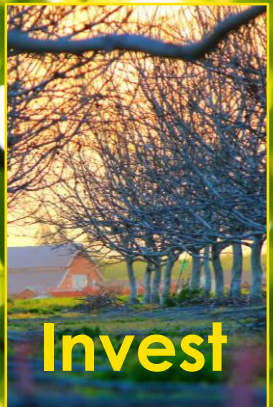




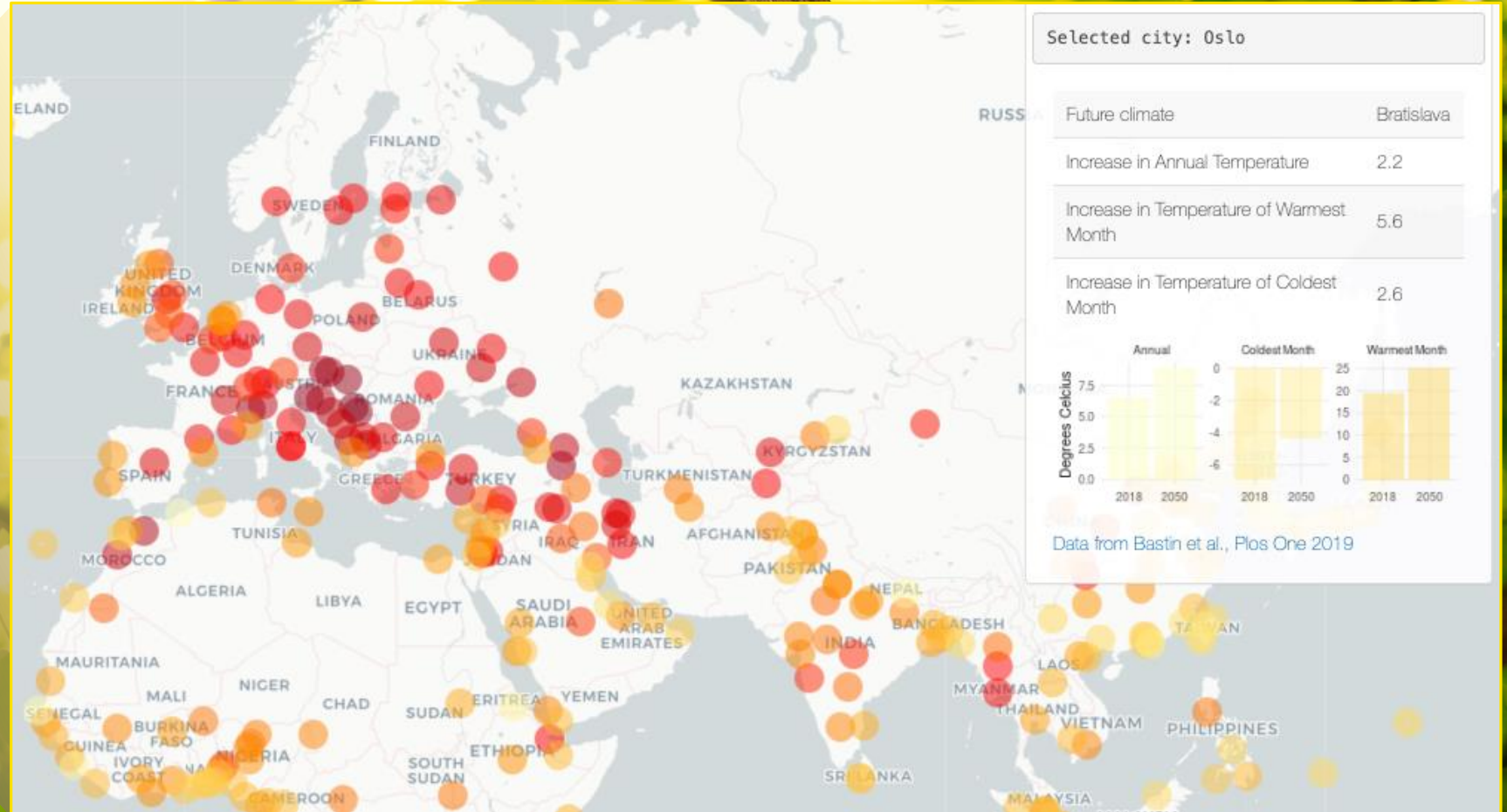
Plant



Donate



Invest

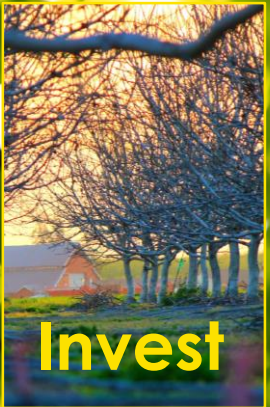




Plant



Donate



Invest

Define Model

Dimensions

Drivers

Scenarios

Hierarchies

Manual Tables

Manual Views

Cubes

Email Alerts

Edit Manual Data

Publish Changes

Process Model

Process Cube

Dimension Data

Manual Data

Manual Views

Log Tables

History Tables

CadDo+

CADDO_PROFITABILITY

Log Out

Dimensions CADDO_PROFITABILITY

Start typing to filter

Edit

Dimension Name	Dimension Prefix	Child Dimension	Global Dimension
Category	CAT	PRO	<input type="checkbox"/>
Channel	CHN	CUS	<input type="checkbox"/>
Customer	CUS	INV	<input type="checkbox"/>
Invoice_Header	INV	LIT	<input type="checkbox"/>
Line_Item	LIT	NA	<input type="checkbox"/>
National	NAT	NA	<input checked="" type="checkbox"/>
Product	PRD	LIT	<input type="checkbox"/>

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It sounds great.
But it is just
naive. We will
never restore
the entire globe

Embrace the challenge

More likely to succeed

Enjoy the process



ETH zürich

dwb ecology



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