

Environmental *Change* Institute



Planetary stewardship: looking after our home

Tom Harwood



Feed the world

1700 1800 1900 2000



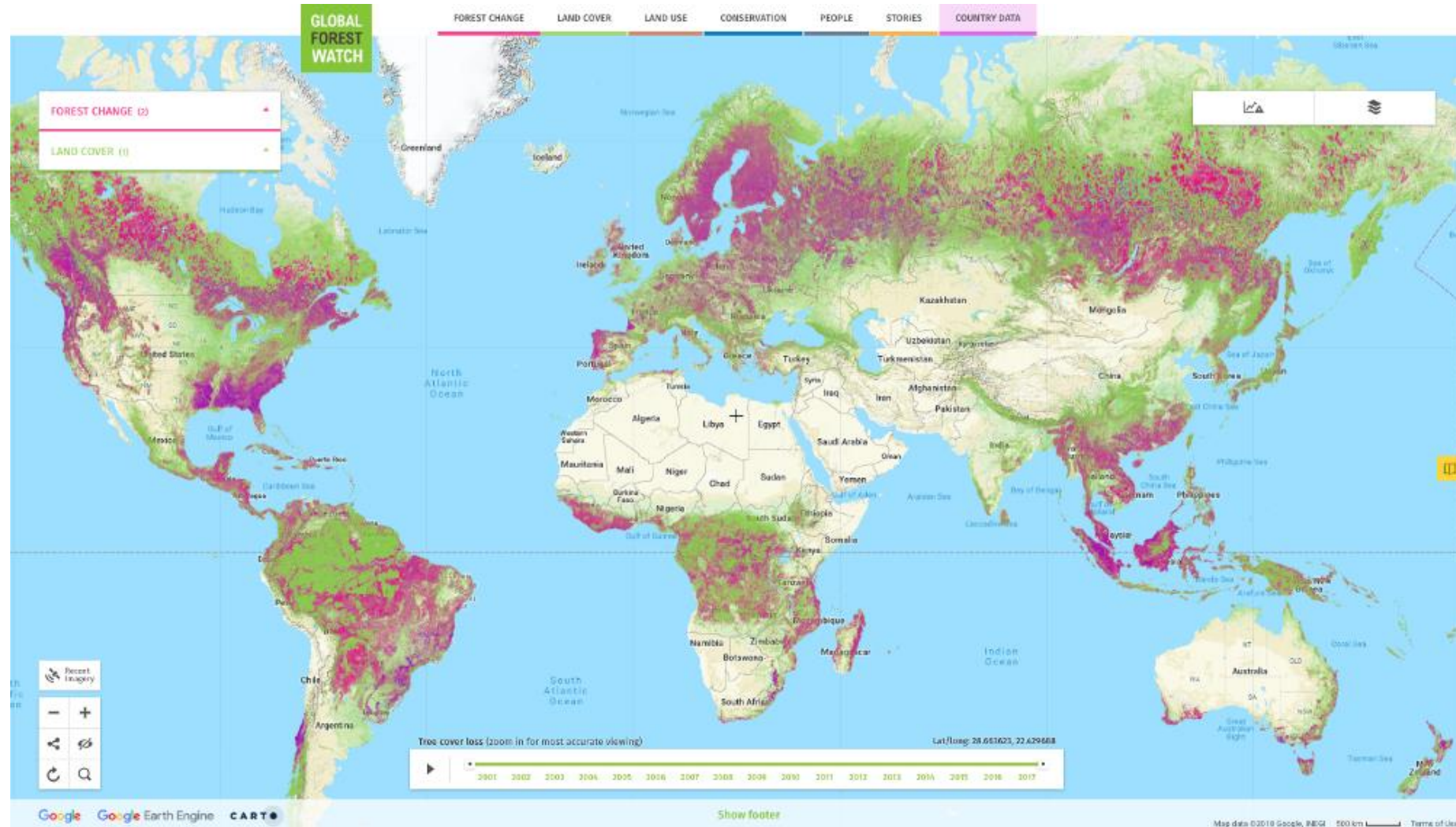
percent of land used for growing crops



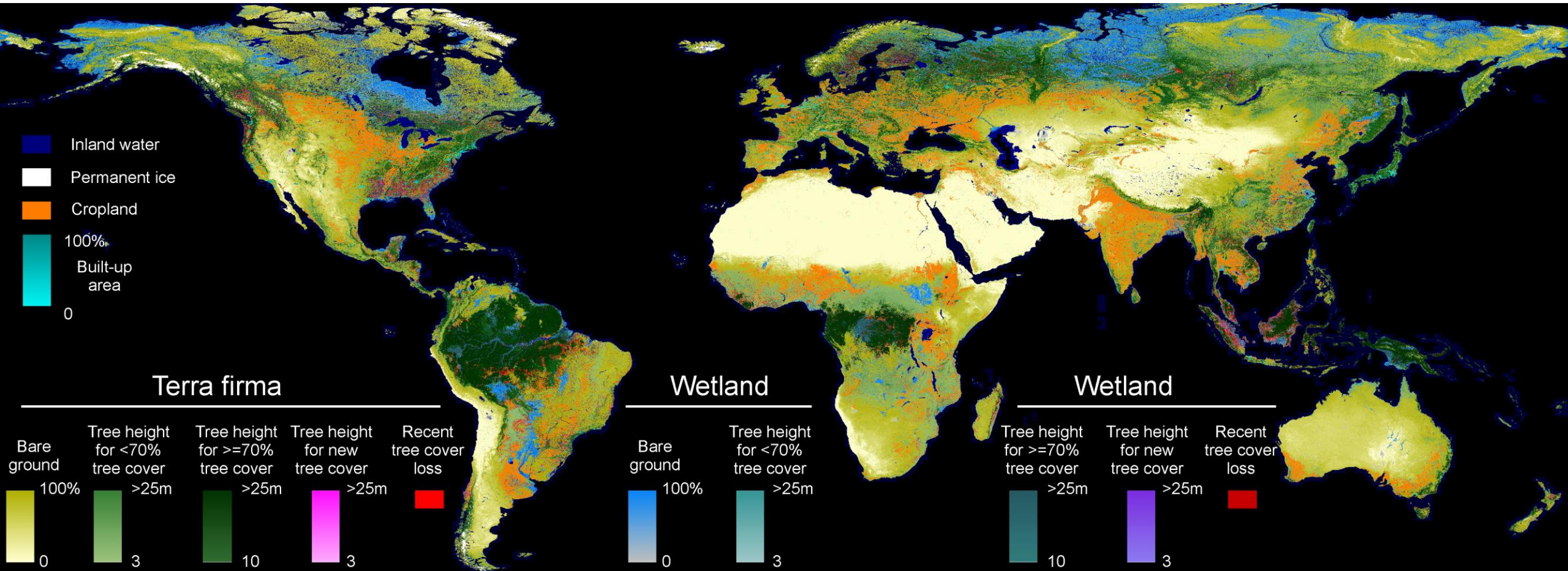
Power the world



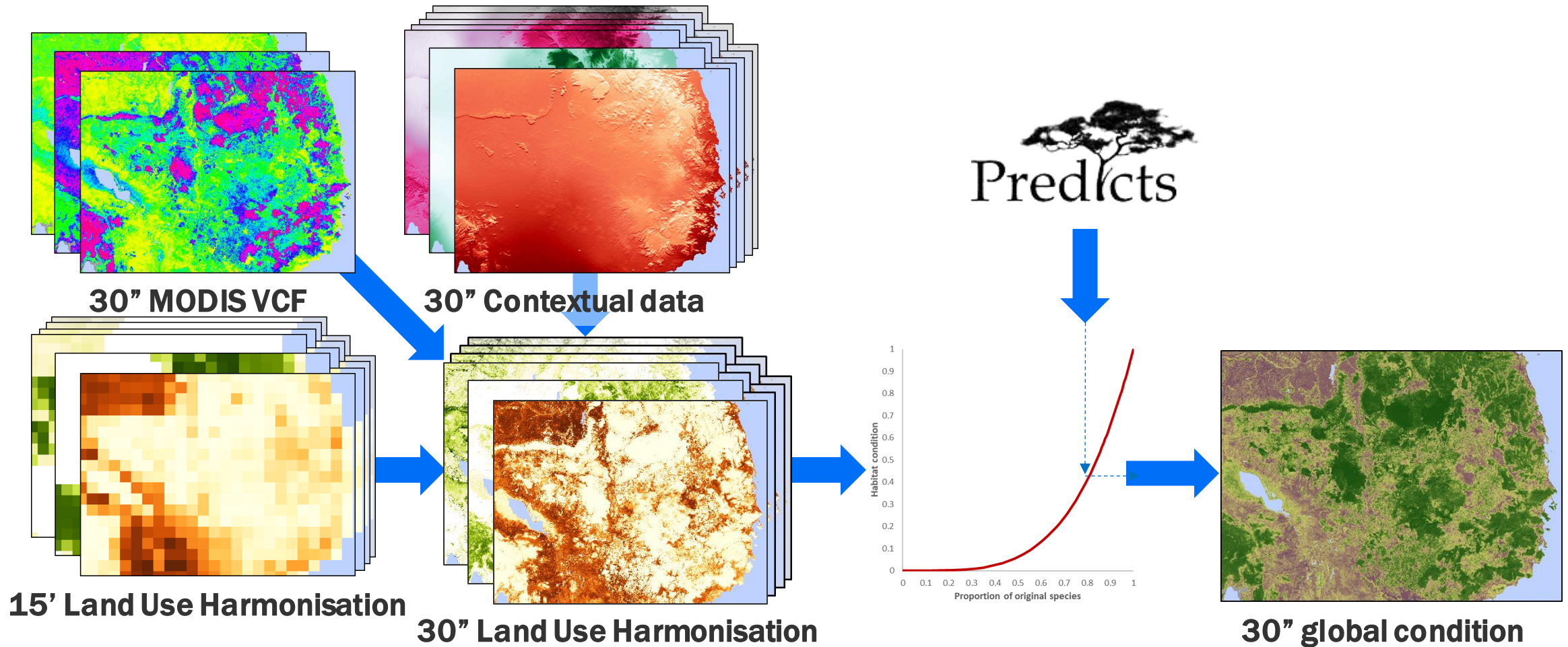
What can we measure from space?



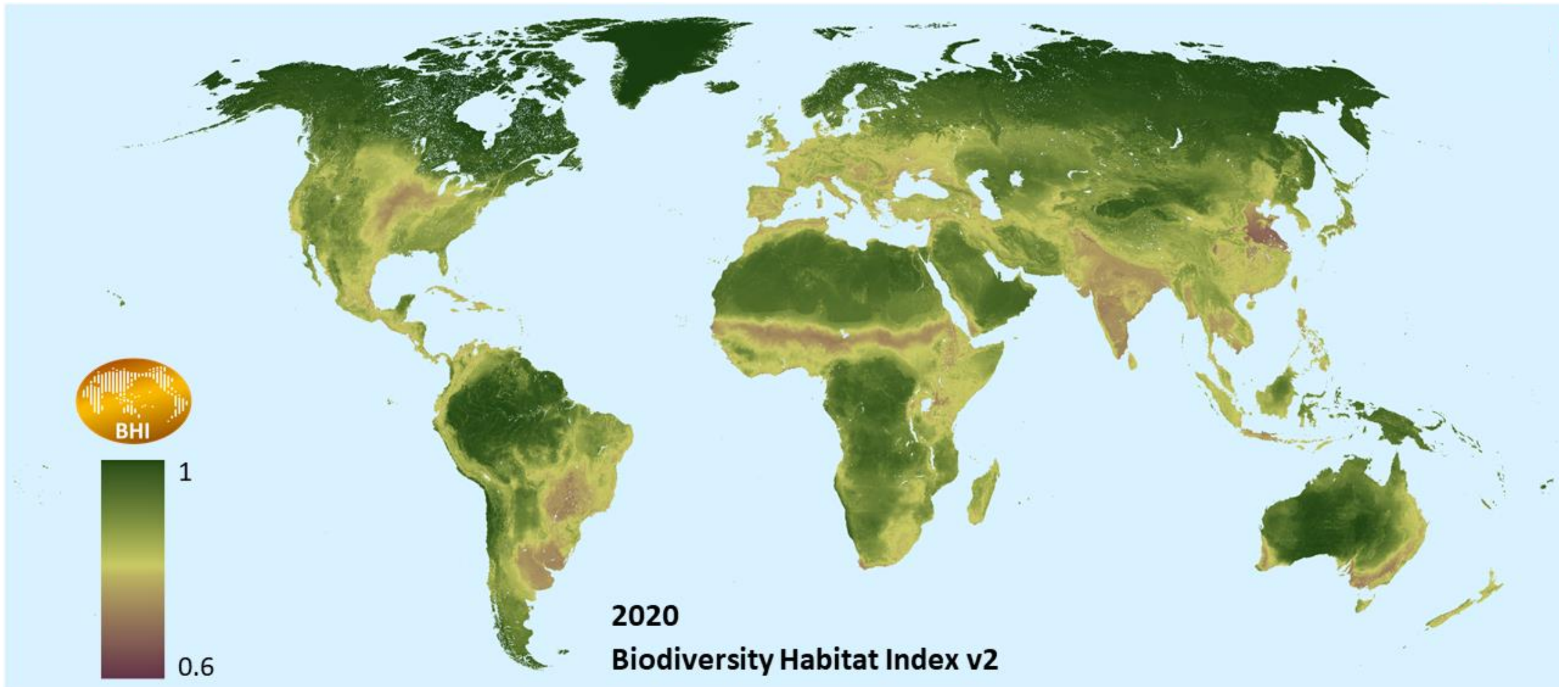
Global Land Analysis & Discovery



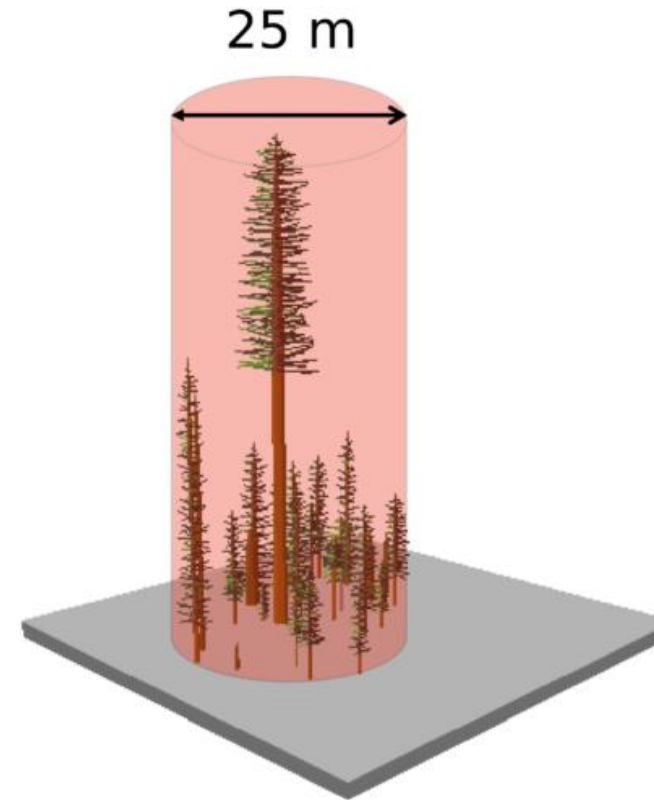
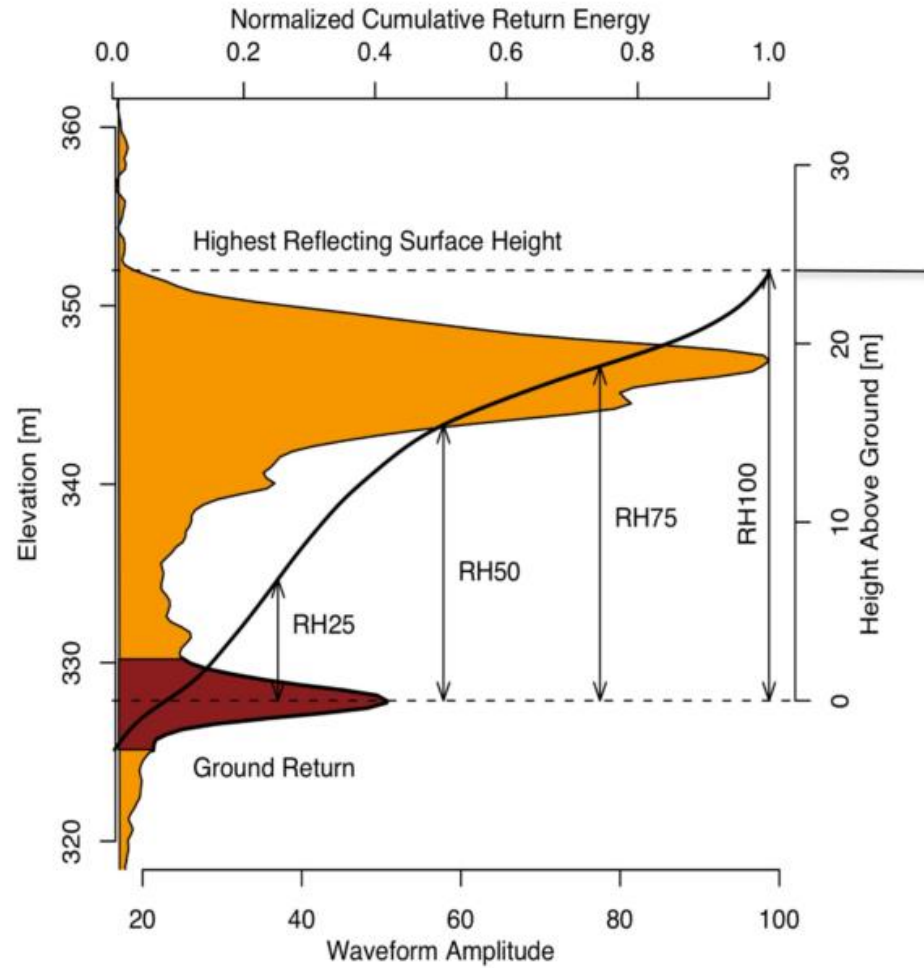
Downscaled land use to habitat condition



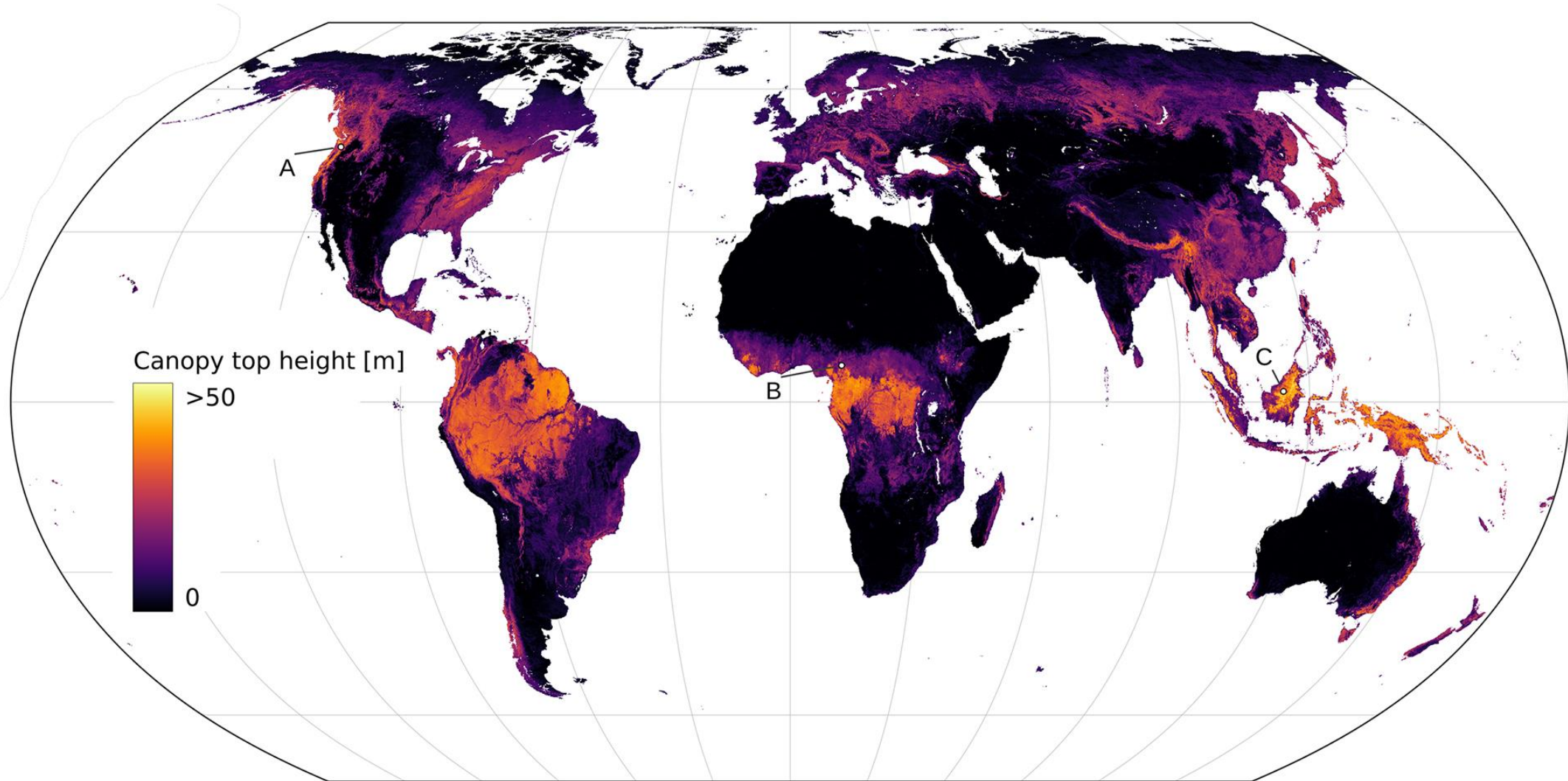
Biodiversity Habitat Index



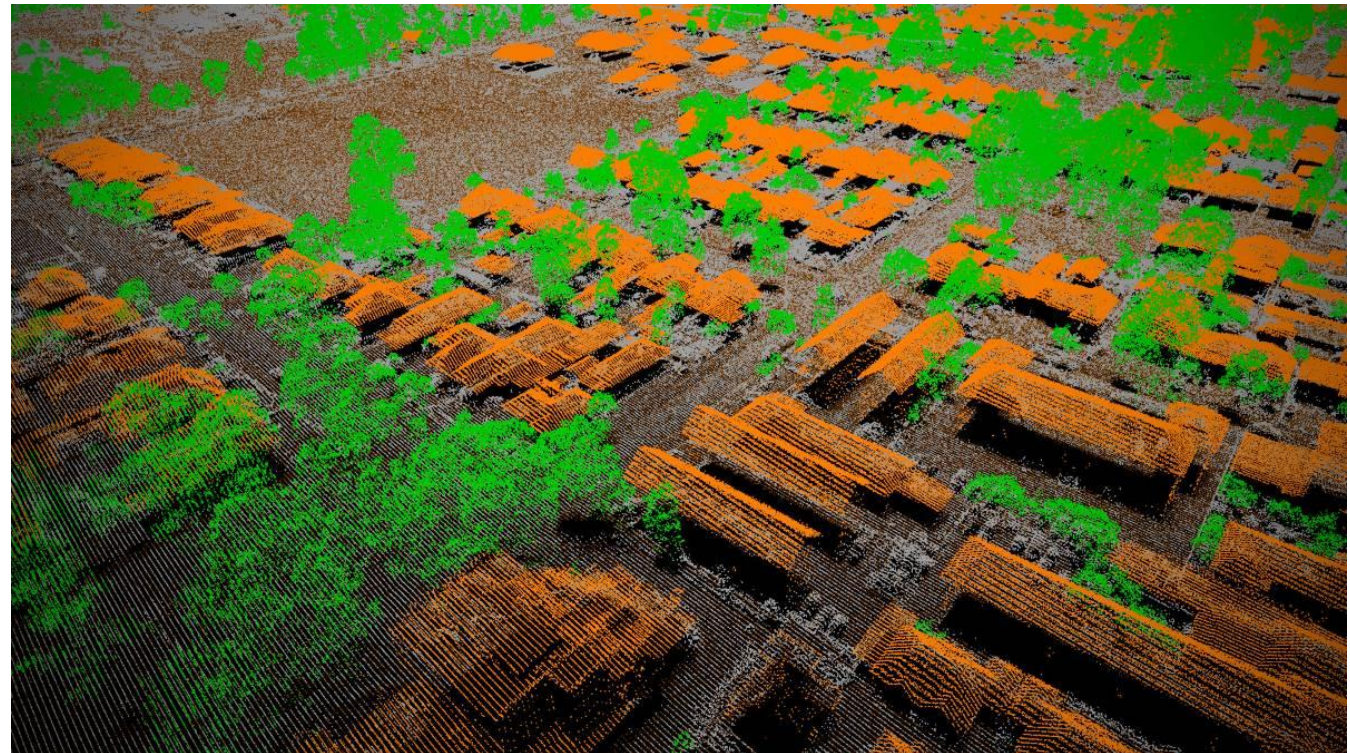
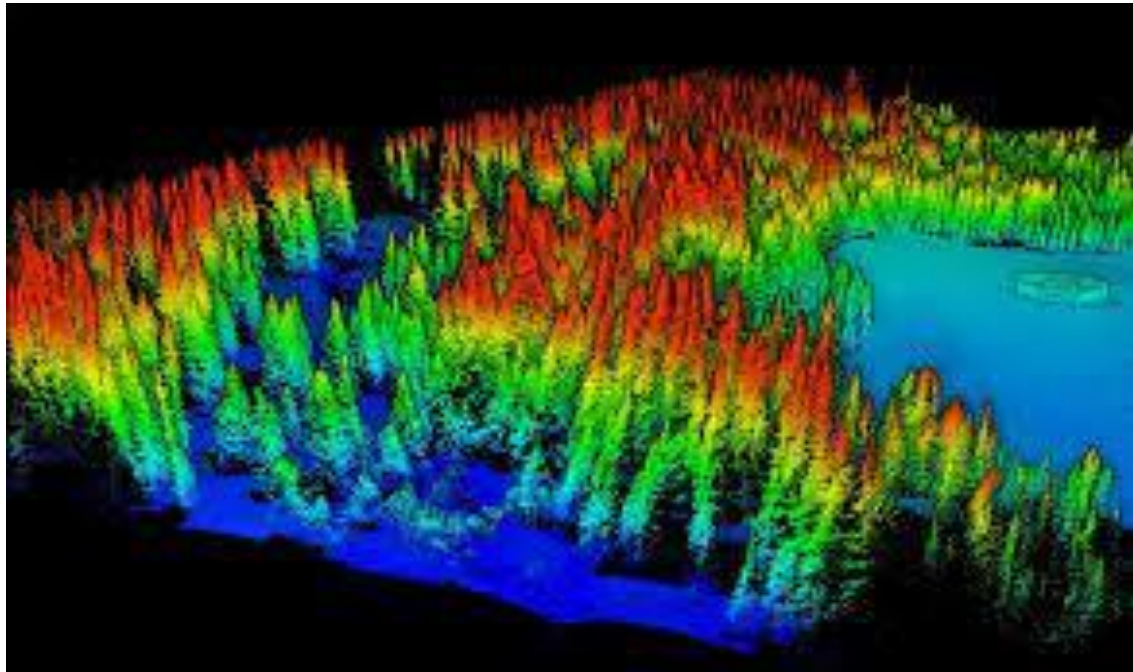
GEDI



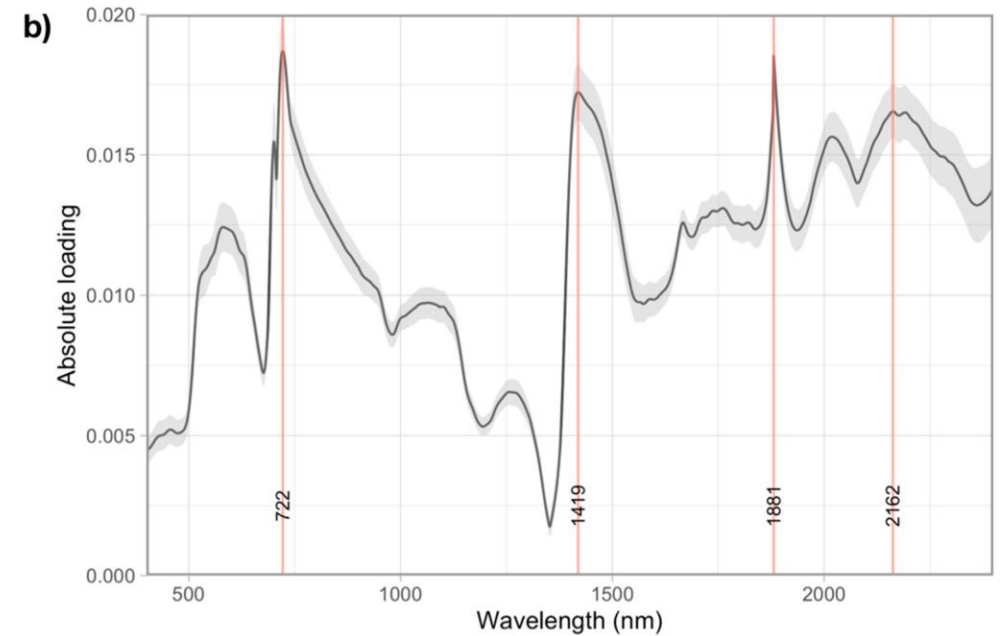
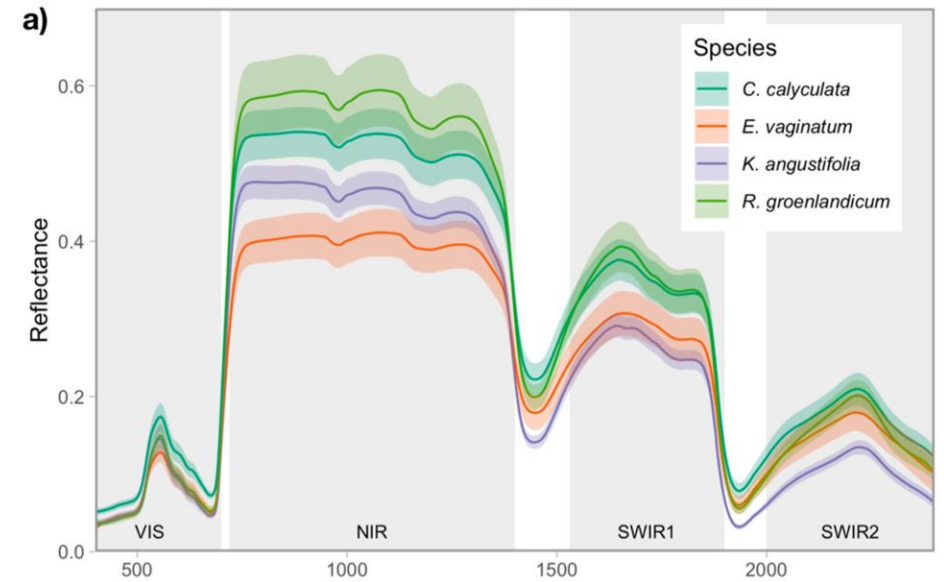
GEDI + Sentinel

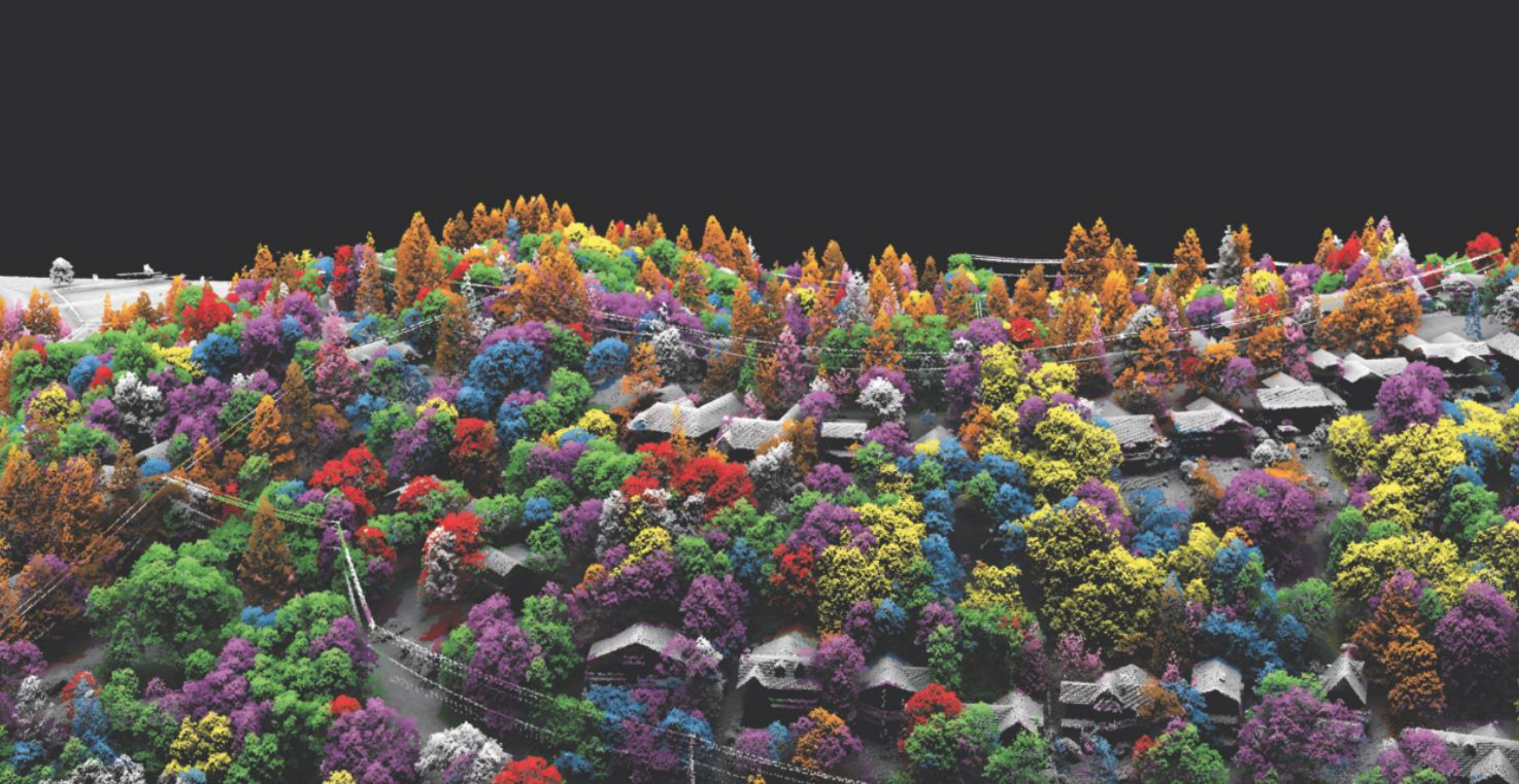


Point cloud lidar



Hyperspectral imaging

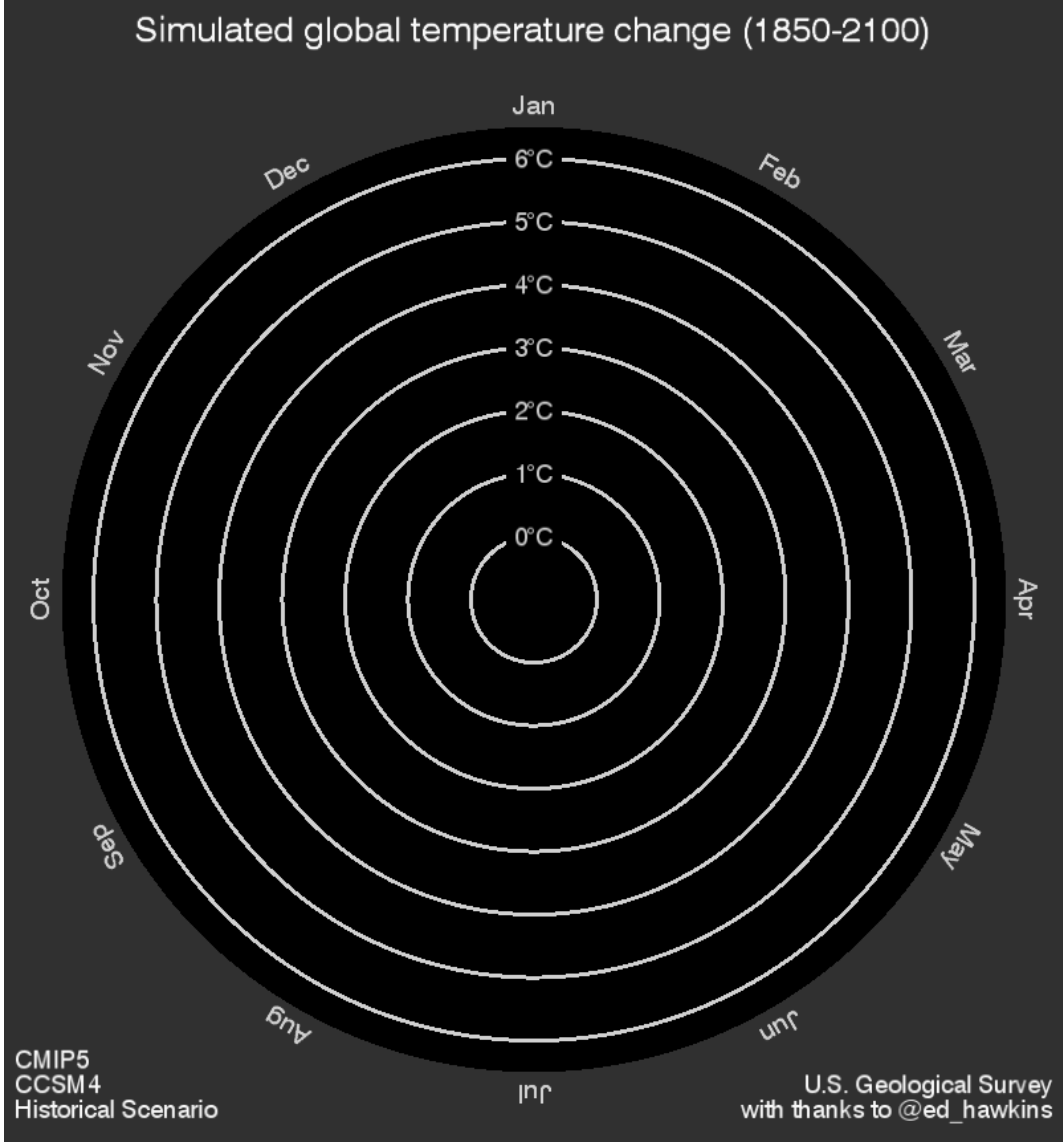
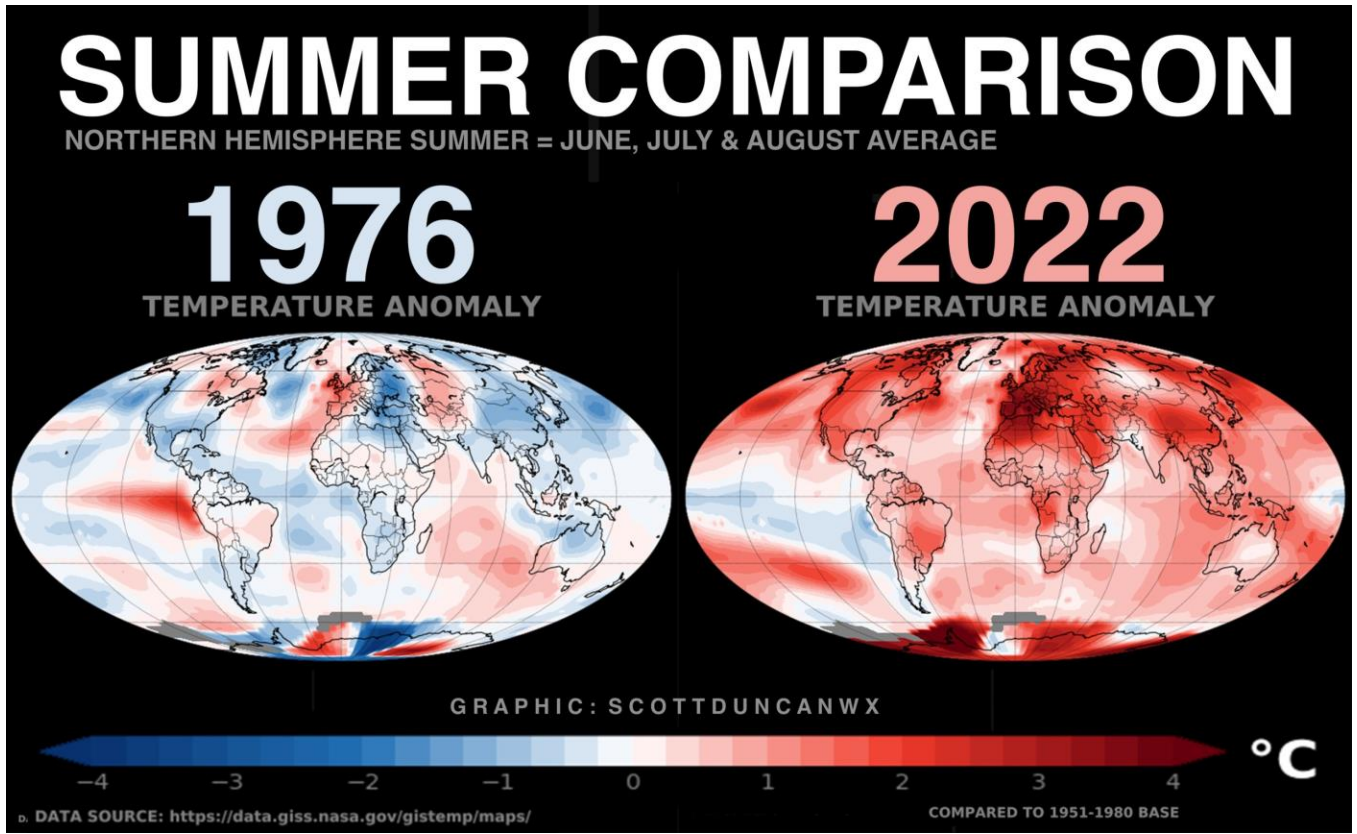




Autonomous robots



It's getting hot out there



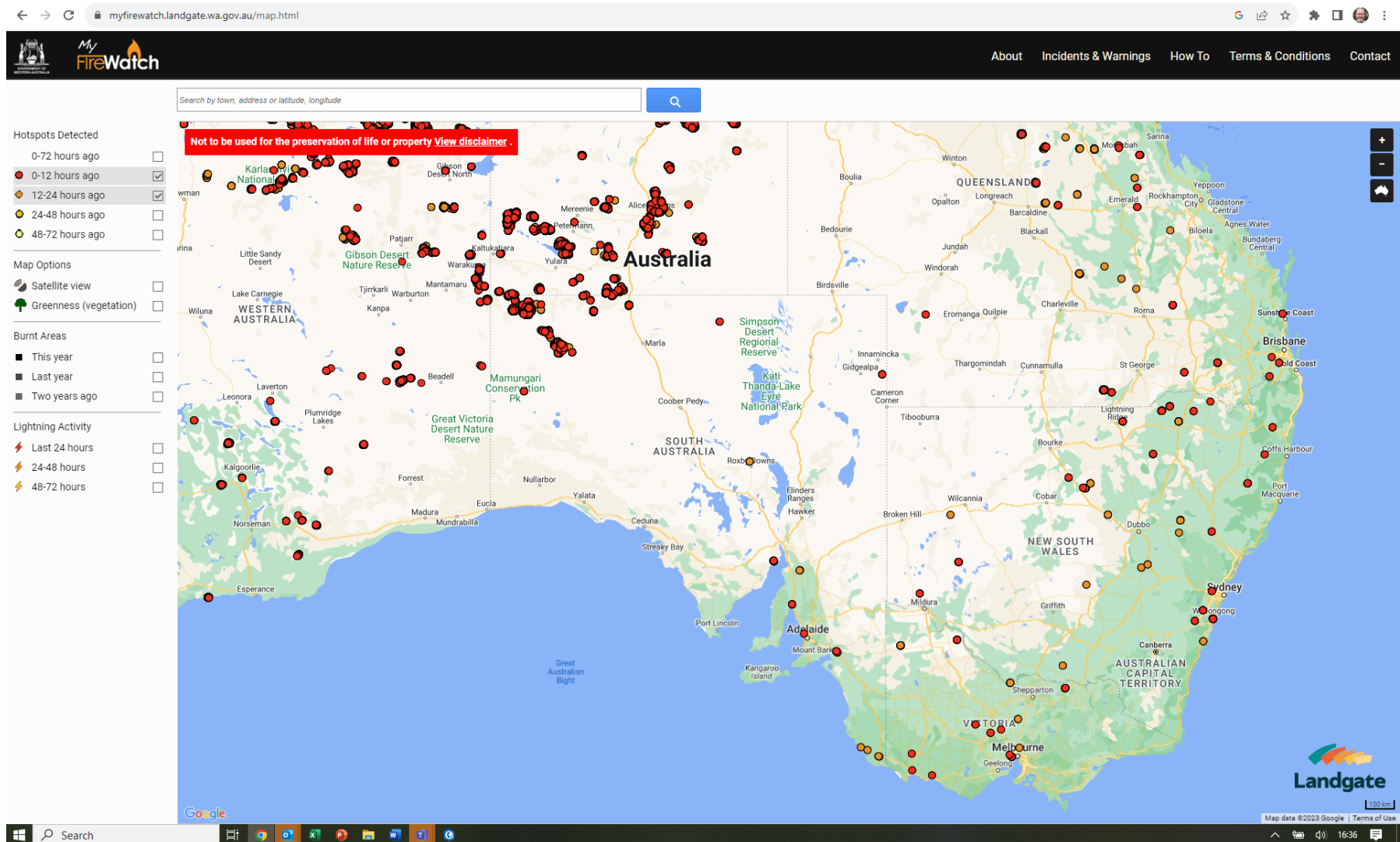
Permafrost



Arctic ice



Fire monitoring



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Thank you