Compressing (in) the Wild

Continual Fine-tuning of Autoencoders for Camera Trap Image Compression

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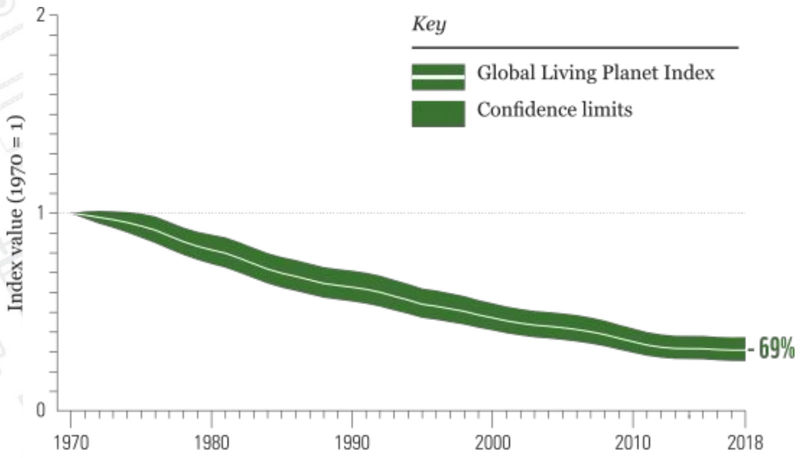
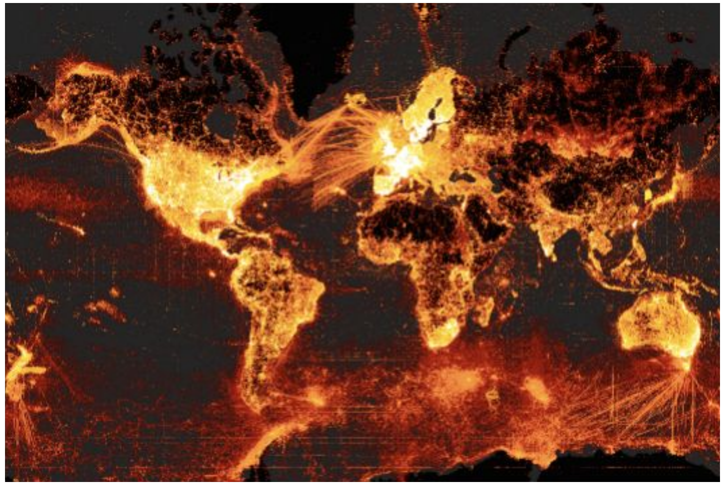
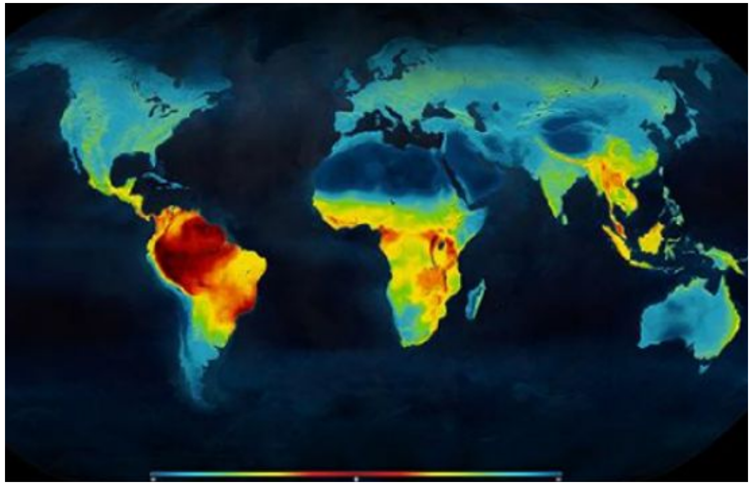
Biodiversity Monitoring



WWF Living Planet Report 2022



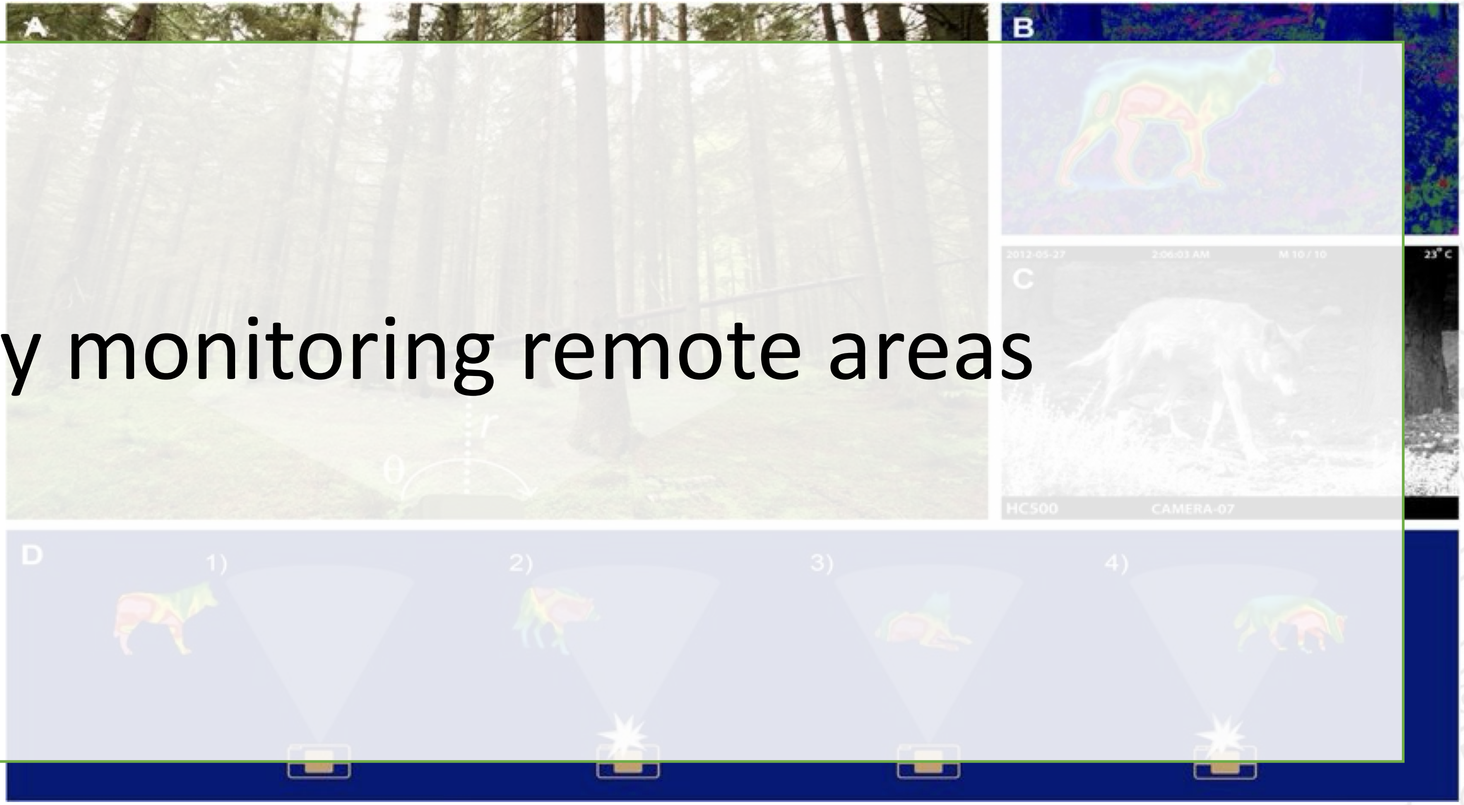
GBIF Records



True Biodiversity

Camera Traps

- Allows continuously monitoring remote areas
- Low bandwidth



Exploiting Temporal Redundancy

Pre-Training

Parameter-Efficient Fine-Tuning

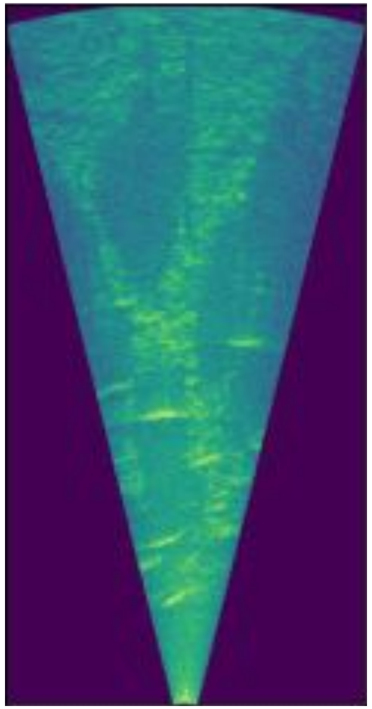
Transmit Embeddings & Weights

Apply Weight Update & Reconstruct

Results

Outlook

Deployment onto
power-efficient Hardware



Other types of static
cameras

Acknowledgements

Justin Kay

CONSERVATION X LABS

IBM

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NATURAL STATE