

Appendix S2: Non-exhaustive list, of international initiatives of the scientific community aiming for sharing ecological data. These initiatives are also supported by intergovernmental climatic and ecological negotiations, such as IPCC (<http://www.ipcc.ch/>) and IPBES (<http://www.ipbes.net/>).

Initiative	Description
BioDBCore	BioDBCore (http://biodbcore.org/) is a community-defined, uniform, generic description of the 'core attributes of biological databases'
BioSharing	BioSharing (http://biosharing.org/) map the landscape of community developed standards in the life sciences, broadly covering biological, natural and biomedical sciences.
BOLD	The Barcode of Life Data Systems (http://www.barcodinglife.org) is a global online data management system for DNA barcodes (COI gene, ITS) with references to voucher specimens (geo-referenced) and phylogenetic analyses.
EMP	Earth Microbiome project (http://www.earthmicrobiome.org/) is a massively multidisciplinary effort to analyze microbial communities across the globe.
DataONE	Data Observation Network for Earth (http://www.dataone.org) is an initiative supported by the U.S. National Science Foundation to ensure the preservation, access, use and reuse of multi-scale, multi-discipline, and multi-national science data via three primary cyberinfrastructure elements.
DRYAD	DataDryad.org is a curated general-purpose repository that makes the data underlying scientific publications freely reusable.
GBIF	Global Biodiversity Information Facility (http://www.gbif.org) promotes and facilitates the mobilization, access, discovery and use of information about the occurrence of organisms across time and over the planet.
GPDD	The Global Population Dynamics Database (http://www3.imperial.ac.uk/cpb/databases/gpdd) hosts animal and plant population data, organized in time series.
GSC	Genomic Standards Consortium (http://gensc.org/) aim to bring

	together the genomics community to improve contextual data quality for genomic sequence data
TRY	The Plant Trait Database (http://www.try-db.org/TryWeb/Home.php) is a collaborative functional trait database with 3 million trait records for about 69000 plant species. The trait values are standardized, quality checked and made available for scientific projects upon request.