

UN Biodiveristy Lab 2.0 - Data List

2021-02-17

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Table 1: UN Biodiversity Lab Data List

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Administrative Areas	Contiguous Zone (24 NM)	Published	Yes	No	Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200 NM), version 11.
Administrative Areas	Continuous Marine/Land Administrative Boundaries	In Development	Yes	No	FAO Data - Map - Global Country Boundaries 2012.; Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200 NM), version 10. Available online at http://www.marineregions.org/ . https://doi.org/10.14284/312
Administrative Areas	Exclusive Economic Zone (EEZ)	Published	Yes	No	Flanders Marine Institute (2018). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200 NM), version 10.
Administrative Areas	Territorial Seas (12 NM)	Published	Yes	No	Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200 NM), version 11.
Biodiversity	Biodiversity Intactness Index	Published	Yes	No	Tim Newbold; Lawrence N Hudson; Andrew P Arnell; Sara Contu et al. (2016). Dataset: Global map of the Biodiversity Intactness Index, from Newbold et al. (2016) Science. Natural History Museum Data Portal (data.nhm.ac.uk). https://doi.org/10.5519/0009936
Biodiversity	Forest Integrity Project: Forest Canopy Height (2019)	Published	Yes	No	Hansen, M.C., Potapov, P.V., Goetz, S.J., Turubanova, S., Tyukavina, A., Krylov, A., Kommareddy, A., Egorov, A., 2016. Mapping tree height distributions in Sub-Saharan Africa using Landsat 7 and 8 data. Remote Sensing of Environment, Landsat 8 Science Results 185, 221–232.

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Biodiversity	Forest Landscape Integrity Index	Published	Yes	No	Grantham, H.S., Duncan, A., Evans, T.D. et al. Anthropogenic modification of forests means only 40% of remaining forests have high ecosystem integrity. <i>Nat Commun</i> 11, 5978 (2020). https://doi.org/10.1038/s41467-020-19493-3
Biodiversity	Forest Structural Condition Index (FSCI)	Published	Yes	No	Hansen, A., Barnett, K., Jantz, P., Phillips, L., Goetz, S.J., Hansen, M., Venter, O., Watson, J.E.M., Burns, P., Atkinson, S., Rodríguez-Buritica, S., Ervin, J., Virnig, A., Supples, C., Camargo, R.D., 2019. Global humid tropics forest structural condition and forest structural integrity maps. <i>Sci Data</i> 6, 1–12.
Biodiversity	Forest Structural Integrity Index (FSII)	Published	Yes	No	Hansen, A., Barnett, K., Jantz, P. et al. Global humid tropics forest structural condition and forest structural integrity maps. <i>Sci Data</i> 6, 232 (2019). https://doi.org/10.1038/s41597-019-0214-3
Biodiversity	Global Forest Watch: Forest Biodiversity Intactness	In Development	NA	No	Dataset: UNEP-WCMC and Natural History Museum. “Biodiversity Intactness.” Accessed from Global Forest Watch on 27/11/2020. www.globalforestwatch.org Paper: Hill, S. L. et al. (2019). Measuring forest biodiversity status and changes globally. <i>Frontiers in Forests and Global Change</i> , 2, 70.
Biodiversity	Key Biodiversity Areas (Public)	Published	No	No	BirdLife International, 2020. World Database of Key Biodiversity Areas. Developed by the KBA Partnership.
Biodiversity	Marine Wilderness	Published	Yes	No	Jones, K. R., Klein, C. J., Halpern, B. S., Venter, O., Grantham, H., Kuempel, C. D., . . . Watson, J. E. (2018). The Location and Protection Status of Earth’s Diminishing Marine Wilderness. <i>Current Biology</i> , 28(15). doi:10.1016/j.cub.2018.06.010

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Biodiversity	NatureMap - Areas of global significance for biodiversity conservation and carbon storage.	Published	No	No	Jung, M., et al. (2020). Areas of global importance for terrestrial biodiversity, carbon, and water. BioRxiv. biorxiv.org/content/10.1101/2020.04.16.021444v1
Biodiversity	NatureMap - Areas of global significance for biodiversity conservation and water provision	Published	No	No	Jung, M., et al. (2020). Areas of global importance for terrestrial biodiversity, carbon, and water. BioRxiv. biorxiv.org/content/10.1101/2020.04.16.021444v1
Biodiversity	NatureMap - Areas of global significance for biodiversity conservation, carbon storage and water provision	Published	No	No	Jung, M., et al. (2020). Areas of global importance for terrestrial biodiversity, carbon, and water. BioRxiv. biorxiv.org/content/10.1101/2020.04.16.021444v1
Biodiversity	NatureMap - Forest Biodiversity Intactness Index	Published	No	No	TBD
Biodiversity	NatureMap - Rarity-Weighted Richness	Published	No	No	TBD
Biodiversity	NatureMap - Species Richness	Published	No	No	TBD

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Biodiversity	NatureMap - Threatened Species Richness	Published	No	No	<p>Brooks, T. M. et al. (2019). Measuring Terrestrial Area of Habitat (AOH) and Its Utility for the IUCN Red List. <i>Trends in Ecology & Evolution</i> 34:977–986. doi.org/10.1016/j.tree.2019.06.009BGCI (2019). IUCN Red List of Threatened Species (2019) Version 2019.2. www.iucnredlist.org ThreatSearch online database. bgci.org/threat_search</p> <p>Enquist, B.J. et al. (In prep.). Botanical big data shows that plant diversity in the New World is driven by climatic-linked differences in evolutionary rates and biotic exclusion.</p> <p>Jung, M., et al.(2020). A global map of terrestrial habitat types. <i>Sci. Data</i> 7, 256. www.nature.com/articles/s41597-020-00599-8.</p> <p>Maitner, B.S. et al. (2017). The BIEN R package: A tool to access the Botanical Information and Ecology Network (BIEN) database. <i>Methods in Ecology and Evolution</i>; 9:373–379. doi/10.1111/2041-210X.12861</p> <p>Roll, U. et al. (2017), The global distribution of tetrapods reveals a need for targeted reptile conservation, <i>Nature Ecology & Evolution</i>, 1: 1677–1682, doi.org/10.1038/s41559-017-0332-2</p>
Biodiversity	Terrestrial Biomes (Ecoregions2017)	Published	Yes	No	<p>Dinerstein, Eric et al. “An Ecoregion-Based Approach to Protecting Half the Terrestrial Realm.” <i>Bioscience</i> vol. 67,6 (2017): 534-545. doi:10.1093/biosci/bix014</p>

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Biodiversity	World Ecosystems	Published	Yes	No	Sayre, R., Karagulle, D., Frye, C., Boucher, T., Wolff, N.H., Breyer, S., Wright, D., Martin, M., Butler, K., Van Graafeiland, K., Touval, J., Sotomayor, L., McGowan, J., Game, E.T., Possingham, H., 2020. An assessment of the representation of ecosystems in global protected areas using new maps of World Climate Regions and World Ecosystems. <i>Global Ecology and Conservation</i> 21, e00860. https://doi.org/10.1016/j.gecco.2019.e00860
Biodiversity, Habitats and Biomes	Global Forest Watch: Forest Biodiversity Importance	In Development	NA	No	Hill, S. L. et al. 2019. Measuring forest biodiversity status and changes globally. <i>Frontiers in Forests and Global Change</i> , 2, 70. IUCN, BirdLife International, and UNEP-WCMC (2016). "Biodiversity importance". Accessed from Global Forest Watch on 27/11/2020. www.globalforestwatch.org .
Climate & Carbon	Aboveground Biomass Carbon Density 2010	Published	Yes	No	Spawn, S.A., and H.K. Gibbs. 2020. Global Aboveground and Belowground Biomass Carbon Density Maps for the Year 2010. ORNL DAAC, Oak Ridge, Tennessee, USA. https://doi.org/10.3334/ORNLDAAC/1763
Climate & Carbon	Belowground Biomass Carbon Density 2010	Published	Yes	No	Spawn, S.A., and H.K. Gibbs. 2020. Global Aboveground and Belowground Biomass Carbon Density Maps for the Year 2010. ORNL DAAC, Oak Ridge, Tennessee, USA. https://doi.org/10.3334/ORNLDAAC/1763
Climate & Carbon	Change in Aboveground Woody Carbon Density 2003-2014	Published	No - need to confirm if re-projection restricts sharing	No	Baccini, A., W. Walker, L. Carvalho, M. Farina, D. Sulla-Menashe, R.A. Houghton. 2017. Tropical forests are a net carbon source based on aboveground measurements of gain and loss. <i>Science</i> 2017 Vol. 358, Issue 6360, pp. 230-234 DOI:10.1126/science.aam5962.
Climate & Carbon	Global Mangrove Soil Carbon	Published	Yes	No	Sanderman J, Hengl T, Fiske G, Solvik K, Adame MF, Benson L, et al. A global map of mangrove forest soil carbon at 30 m spatial resolution. <i>Environ Res Lett.</i> 2018;13: 055002. doi:10.1088/1748-9326/aabe1c

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Climate & Carbon	Global Patterns in Marine Sediment Carbon Stocks	Published	Yes	No	Atwood TB, Witt A, Mayorga J, Hammill E, Sala E. (2020). Global patterns in marine sediment carbon stocks. <i>Frontiers in Marine Science</i> . Paper DOI: https://doi.org/10.3389/fmars.2020.00165 . Data DOI: https://doi.org/10.6084/m9.figshare.9941816.v1
Climate & Carbon	GLOSISS - Global Soil Organic Carbon	Published	Yes	No	FAO GSP and ITPS, 2019. Global Soil Organic Carbon Map (GSOC map)
Climate & Carbon	Increase in SOC on Croplands After 20 Years	Published	Yes	No	Zomer, R.J., Bossio, D.A., Sommer, R., Verchot, L.V., 2017. Global Sequestration Potential of Increased Organic Carbon in Cropland Soils. <i>Scientific Reports</i> 7, 15554. https://doi.org/10.1038/s41598-017-15794-8
Climate & Carbon	MODIS NDVI 2000 - 2020	Published	Yes	No	Didan, K. (2015). MOD13Q1 MODIS/Terra Vegetation Indices 16-Day L3 Global 250m SIN Grid V006 [Data set]. NASA EOSDIS Land Processes DAAC. Accessed 2020-12-07 from https://doi.org/10.5067/MODIS/MOD13Q1.006
Climate & Carbon	NatureMap - Live Biomass Carbon Density	Published	No	No	García-Rangel, S. et al. (In prep) Global distribution of natural carbon stocks potentially vulnerable to land use changes
Climate & Carbon	NatureMap - Vulnerable Soil Organic Carbon Density	Published	No	No	García-Rangel, S. et al. (In prep) Global distribution of natural carbon stocks potentially vulnerable to land use changes.
Ecosystem Services	Aqueduct Global Database Current - Baseline Water Stress	Published	Yes	No	Gassert, F., M. Landis, M. Luck, P. Reig, and T. Shiao. 2014. "Aqueduct Global Maps 2.1." Working Paper. Washington, DC: World Resources Institute. Available online at http://www.wri.org/publication/aqueduct-metadata-global .
Ecosystem Services	Global Wetlands: Tropical and Subtropical Wetlands Distribution	Published	Yes	No	Gumbricht et al. (2017) An expert system model for mapping tropical wetlands and peatlands reveals South America as the largest contributor. <i>Global Change Biology</i> . DOI: 10.1111/gcb.13689

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Ecosystem Services	Global Wind Atlas: Power Density	Published	Yes	No	[Data/information/map obtained from the] “Global Wind Atlas 3.0, a free, web-based application developed, owned and operated by the Technical University of Denmark (DTU). The Global Wind Atlas 3.0 is released in partnership with the World Bank Group, utilizing data provided by Vortex, using funding provided by the Energy Sector Management Assistance Program (ESMAP). For additional information: https://globalwindatlas.info ”
Ecosystem Services	MODIS Enhanced Vegetation Index (EVI) 2000-2019	Published	Yes	No	Didan, K. (2015). MOD13Q1 MODIS/Terra Vegetation Indices 16-Day L3 Global 250m SIN Grid V006 [Data set]. NASA EOSDIS Land Processes DAAC. Accessed 2020-02-10 from https://doi.org/10.5067/MODIS/MOD13Q1.006
Ecosystem Services	MODIS Gross Primary Production (GPP)	Published	Yes	No	Running, S., Mu, Q., Zhao, M. (2015). MOD17A2H MODIS/Terra Gross Primary Productivity 8-Day L4 Global 500m SIN Grid V006 [Data set]. NASA EOSDIS Land Processes DAAC. Accessed 2021-01-22 from https://doi.org/10.5067/MODIS/MOD17A2H.006
Ecosystem Services	MODIS Net Primary Production (NPP)	Published	Yes	No	Running, S., Zhao, M. (2019). <i>MOD17A3HGF MODIS/Terra Net Primary Production Gap-Filled Yearly L4 Global 500 m SIN Grid V006</i> [Data set]. NASA EOSDIS Land Processes DAAC. Accessed 2021-01-25 from https://doi.org/10.5067/MODIS/MOD17A3HGF.006
Ecosystem Services	NatureMap - Potential Clean Water Provision	Published	No	No	Mulligan, M. (2013) WaterWorld: a self-parameterising, physically based model for application in data-poor but problem-rich environments globally. <i>Hydrology research</i> 44, 5; 748-769.
Ecosystem Services	NatureMap - Realised Clean water provision	Published	No	No	TBD
Habitats and Biomes	ALOS Global Digital Surface Model	Published	Yes	No	Japan Aerospace Exploration Agency (JAXA). ALOS World 3D - 30m (AW3D30).

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Habitats and Biomes	Forest Connectivity	Published	Yes	No	Jantz, P., et al. In Prep. Forest Spatial Morphology Database 1.0. Hansen, M.C., et al. 2013. High-Resolution Global Maps of 21st-Century Forest Cover Change. <i>Science</i> 342, 850–853. DOI: 10.1126/science.1244693. Potapov, P., et al., 2017. The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000 to 2013. <i>Science Advances</i> 3, e1600821. 10.1126/sciadv.1600821.
Habitats and Biomes	Forest Fragmentation - 2000	Published	Yes	No	Jantz, P., et al. In Prep. Forest Spatial Morphology Database 1.0. Hansen, M.C., et al. 2013. High-Resolution Global Maps of 21st-Century Forest Cover Change. <i>Science</i> 342, 850–853. DOI: 10.1126/science.1244693. Potapov, P., et al., 2017. The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000 to 2013. <i>Science Advances</i> 3, e1600821. 10.1126/sciadv.1600821.
Habitats and Biomes	Forest Fragmentation - 2012	Published	Yes	No	Jantz, P., et al. In Prep. Forest Spatial Morphology Database 1.0. Hansen, M.C., et al. 2013. High-Resolution Global Maps of 21st-Century Forest Cover Change. <i>Science</i> 342, 850–853. DOI: 10.1126/science.1244693. Potapov, P., et al., 2017. The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000 to 2013. <i>Science Advances</i> 3, e1600821. 10.1126/sciadv.1600821.
Habitats and Biomes	Global Forest Cover	Published	Yes	No	Hansen, M. C., P. V. Potapov, R. Moore, M. Hancher, S. A. Turubanova, A. Tyukavina, D. Thau, S. V. Stehman, S. J. Goetz, T. R. Loveland, A. Kommareddy, A. Egorov, L. Chini, C. O. Justice, and J. R. G. Townshend. 2013. “High-Resolution Global Maps of 21st-Century Forest Cover Change.” <i>Science</i> 342 (15 November): 850–53.

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Habitats and Biomes	Intact Forest Landscapes (IFLs)	Published	Yes	No	Potapov, P., Hansen, M. C., Laestadius L., Turubanova S., Yaroshenko A., Thies C., Smith W., Zhuravleva I., Komarova A., Minnemeyer S., Esipova E. 2016. "The last frontiers of wilderness: Tracking loss of intact forest landscapes from 2000 to 2013" <i>Science Advances</i> , 2017; 3:e1600821
Habitats and Biomes	NatureMap - Global Habitats	Published	No	No	Jung, M., Dahal, P.R., Butchart, S.H.M., Donald, P.F., De Lamo, X., Lesiv, M., Kapos, V., Rondinini, C., Visconti, P., (2020). A global map of terrestrial habitat types. <i>Sci. Data</i> 7, 256. https://www.nature.com/articles/s41597-020-00599-8
Habitats and Biomes, Administrative Areas	Global Islands Explorer	In Development	Yes	No	USGS/ESRI/WCMC/Island Conservation. (2018). Global Islands Explorer. Retrieved from https://rmgsc.cr.usgs.gov/gie/gie.shtml .
Human Impact	Crop Suitability 2011-2100	Published	Yes	No	Zabel F., Putzenlechner B., Mauser W. (2014): Global agricultural land resources – a high resolution suitability evaluation and its perspectives until 2100 under climate change conditions. Online available: PLOS ONE. DOI: 10.1371/journal.pone.0107522
Human Impact	Crop Suitability Change 1981-2100	Published	Yes	No	Zabel F., Putzenlechner B., Mauser W. (2014): Global agricultural land resources – a high resolution suitability evaluation and its perspectives until 2100 under climate change conditions. Online available: PLOS ONE. DOI: 10.1371/journal.pone.0107522
Human Impact	DMSP-OLS/VIIRS harmonized global nighttime light dataset 1992 to 2018	Published	Yes	No	Li, X., Zhou, Y., Zhao, M., Zhao, X., 2020. A harmonized global nighttime light dataset 1992–2018. <i>Scientific Data</i> 7, 168. https://doi.org/10.1038/s41597-020-0510-y
Human Impact	Global Georeferenced Database of Dams (GOODD) - Catchments	Published	Yes	No	Mulligan, M., van Soesbergen, A. & Sáenz, L. GOODD, a global dataset of more than 38,000 georeferenced dams. <i>Sci Data</i> 7, 31 (2020). https://doi.org/10.1038/s41597-020-0362-5

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Human Impact	Global Georeferenced Database of Dams (GOODD) - Dams	Published	Yes	No	van Soesbergen, Arnout; Mulligan, Mark; Sáenz, Leonardo (2020): GOODD global dam dataset. figshare. Dataset. https://doi.org/10.6084/m9.figshare.9747686.v1
Human Impact	Global Map of Irrigated Areas (GMIA)	Published	Yes	No	Stefan Siebert, Verena Henrich, Karen Frenken and Jacob Burke (2013). Global Map of Irrigation Areas version 5. Rheinische Friedrich-Wilhelms-University, Bonn, Germany / Food and Agriculture Organization of the United Nations, Rome, Italy. Siebert, S., Döll, P., Hoogeveen, J., Faures, J.-M., Frenken, K., Feick, S. (2005): Development and validation of the global map of irrigation areas. <i>Hydrology and Earth System Sciences</i> , 9, 535-547. Döll, P., & Siebert, S. (2000). A digital global map of irrigated areas. <i>Icid Journal</i> , 49(2), 55-66.
Human Impact	Human Footprint Difference 1993,2009 v1	Published	Yes	No	Venter, O. et al., 2016. Sixteen years of change in the global terrestrial human footprint and implications for biodiversity conservation. <i>Nature Communications</i> , 7, pp.1–11. Venter, O. et al. 2016. Global terrestrial Human Footprint maps for 1993 and 2009. <i>Scientific data</i> , 3(1), 1-10.
Human Impact	Human Footprint Difference 2000,2013 v2	Published	Yes	No	Williams, B.A., et al. 2020. Change in Terrestrial Human Footprint Drives Continued Loss of Intact Ecosystems. <i>One Earth</i> 3, 371–382. https://doi.org/10.1016/j.oneear.2020.08.009
Human Impact	Human Modification Index	Published	No	No	Theobald, D. M., Kennedy, C., Chen, B., Oakleaf, J., Baruch-Mordo, S., and Kiesecker, J. 2020. Earth transformed: detailed mapping of global human modification from 1990 to 2017, <i>Earth Syst. Sci. Data.</i> , https://doi.org/10.5194/essd-2019-252 .
Human Impact	NatureMap - Human Impact on Forests	Published	No	No	Lesiv, M., Schepaschenko, D., Buchhorn, M., See, L., Duerauer, M., Georgieva, I., ... Blyshchyk, I. (2020). Methodology for generating a global forest management layer. Zenodo.

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Human Impact	NatureMap - Human Pressures	Published	No	No	UNEP-WCMC (2020). Human pressures on biodiversity, water and carbon. Cambridge, UK.
Human Impact	VIIRS Nightlights 2014-2020	Published	Yes	No	Stephen Mills, Stephanie Weiss, and Calvin Liang "VIIRS day/night band (DNB) stray light characterization and correction", Proc. SPIE 8866, Earth Observing Systems XVIII, 88661P (23 September 2013); https://doi.org/10.1117/12.2023107
Human Impact	World Atlas of Desertification - Convergence of Evidence	Published	No	No	Cherlet, M., Hutchinson, C., Reynolds, J., Hill, J., Sommer, S., von Maltitz, G. (Eds.), World Atlas of Desertification, Publication Office of the European Union, Luxembourg, 2018. doi:10.2760/06292
Land Cover	Dynamic World	In Development	No	No	NatGeo
Land Cover	ESA CCI Land Cover 1993-2018	Published	No	No	European Space Agency Climate Change Initiative, Land Cover project. 2017. 300m Annual Global Land Cover Time Series from 1992 to 2015. Retrieved from http://maps.elie.ucl.ac.be/CCI/viewer/ .
Land Cover	ESA CCI Land Cover 2015	Published	No	No	European Space Agency Climate Change Initiative, Land Cover project. 2017. 300m Annual Global Land Cover Time Series from 1992 to 2015. Retrieved from http://maps.elie.ucl.ac.be/CCI/viewer/ .
Land Cover	ESA CGLS Land Cover 2015-2019 (100m)	Published	Yes	No	Buchhorn, M. ; Lesiv, M. ; Tsendbazar, N. - E. ; Herold, M. ; Bertels, L. ; Smets, B. Copernicus Global Land Cover Layers—Collection 2. Remote Sensing 2020, 12Volume 108, 1044. doi:10.3390/rs12061044

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Land Cover	Global Ecological Coastal Units (ECUs)	In Development	NA	No	Sayre, R., S. Noble, S. Hamann, R. Smith, D. Wright, S. Breyer, K. Butler, K. Van Graafeiland, C. Frye, D. Karagulle, D. Hopkins, D. Stephens, K. Kelly, Z. basher, D. Burton, J. Cress, K. Atkins, D. van Sistine, B. Friesen, B. Allee, T. Allen, P. Aniello, I Asaad, M. Costello, K. Goodin, P. Harris, M. Kavanaugh, H. Lillis, E. Manca, F. Muller-Karger, B. Nyberg, R. Parsons, J. Saarinen, J. Steiner, and A. Reed. 2018. A new 30 meter resolution global shoreline vector and associated global islands database for the development of standardized global ecological coastal units. <i>Journal of Operational Oceanography – A Special Blue Planet Edition</i> . DOI:10.1080/1755876X.2018.1529714.
Marine	Allen Coral Atlas	In Development	No	No	Allen Coral Atlas (2020). Imagery, maps and monitoring of the worlds tropical coral reefs. <i>Zendodo</i> . DOI: doi.org/10.5281/zenodo.3833242 Lyons et al (2020) Mapping the world’s coral reefs using a global multiscale earth observation framework. <i>Remote Sensing in Ecology and Evolution</i> . DOI:10.1002/rse2.157
Marine	Cumulative Ocean Impact - 2013_1	Published	Yes	No	Halpern, B. S. et al. Spatial and temporal changes in cumulative human impacts on the world’s ocean. <i>Nat. Commun.</i> 6:7615 doi: 10.1038/ncomms8615 (2015).
Marine	Global Distribution of Cold-Water Corals	Published	No	No	Freiwald A, Rogers A, Hall-Spencer J, Guinotte JM, Davies AJ, Yesson C, Martin CS, Weatherdon LV (2017). Global distribution of cold-water corals (version 5.0). Fifth update to the dataset in Freiwald et al. (2004) by UNEP-WCMC, in collaboration with Andre Freiwald and John Guinotte. Cambridge (UK): UN Environment World Conservation Monitoring Centre. URL: http://data.unep-wcmc.org/datasets/3

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Marine	Global Distribution of Saltmarshes	Published	No	No	Mcowen C, Weatherdon LV, Bochove J, Sullivan E, Blyth S, Zockler C, Stanwell-Smith D, Kingston N, Martin CS, Spalding M, Fletcher S (2017). A global map of saltmarshes. Biodiversity Data Journal 5: e11764. Paper DOI: https://doi.org/10.3897/BDJ.5.e11764 ; Data URL: http://data.unep-wcmc.org/datasets/43 (v.6)
Marine	Global Distribution of Seagrasses	Published	No	No	UNEP-WCMC, Short FT (2020). Global distribution of seagrasses (version 7.0). Seventh update to the data layer used in Green and Short (2003). Cambridge (UK): UN Environment World Conservation Monitoring Centre. URL: http://data.unep-wcmc.org/datasets/7
Marine	Global Distribution of Warm-Water Coral Reefs	Published	No	No	UNEP-WCMC, WorldFish Centre, WRI, TNC (2018). Global distribution of warm-water coral reefs, compiled from multiple sources including the Millennium Coral Reef Mapping Project. Version 4.0. Includes contributions from IMaRS-USF and IRD (2005), IMaRS-USF (2005) and Spalding et al. (2001). Cambridge (UK): UN Environment World Conservation Monitoring Centre. URL: http://data.unep-wcmc.org/datasets/1
Marine	Global Ecological Marine Units (EMUs) - prototype	In Development	NA	No	To be confirmed. https://livingatlas.arcgis.com/emu/?lat=-79.33473133174152&lng=-69.37363509076536&zoom=6
Marine	Global Fishing Watch: Total Fishing Hours 2016	Published	NA	No	Kroodsma, D. A., Mayorga, J., Hochberg, T., Miller, N. A., Boerder, K., Ferretti, F., ... & Woods, P. (2018). Tracking the global footprint of fisheries. <i>Science</i> , 359(6378), 904-908.
Marine	Global Intertidal Change	Published	Yes	No	Murray N. J., Phinn S. R., DeWitt M., Ferrari R., Johnston R., Lyons M. B., Clinton N., Thau D. & Fuller R. A. (2019) The global distribution and trajectory of tidal flats. <i>Nature</i> . 565:222-225. http://dx.doi.org/10.1038/s41586-018-0805-8

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Marine	Global Surface Water - Maximum Water Extent 1984-2018	Published	No	No	Jean-Francois Pekel, Andrew Cottam, Noel Gorelick, Alan S. Belward, High-resolution mapping of global surface water and its long-term changes. <i>Nature</i> 540, 418-422 (2016). doi:10.1038/nature20584
Marine	Global Surface Water - Occurrence 1984-2018	Published	No	No	Jean-Francois Pekel, Andrew Cottam, Noel Gorelick, Alan S. Belward, High-resolution mapping of global surface water and its long-term changes. <i>Nature</i> 540, 418-422 (2016). (doi:10.1038/nature20584)
Marine	Global Surface Water - Occurrence Change Intensity 1984-2018	Published	No	No	Jean-Francois Pekel, Andrew Cottam, Noel Gorelick, Alan S. Belward, High-resolution mapping of global surface water and its long-term changes. <i>Nature</i> 540, 418-422 (2016). (doi:10.1038/nature20584)
Marine	Global Surface Water - Recurrence 1984-2018	Published	No	No	Jean-Francois Pekel, Andrew Cottam, Noel Gorelick, Alan S. Belward, High-resolution mapping of global surface water and its long-term changes. <i>Nature</i> 540, 418-422 (2016). (doi:10.1038/nature20584)
Marine	Global Surface Water - Seasonality 2014-2018	Published	No	No	Jean-Francois Pekel, Andrew Cottam, Noel Gorelick, Alan S. Belward, High-resolution mapping of global surface water and its long-term changes. <i>Nature</i> 540, 418-422 (2016). (doi:10.1038/nature20584)
Marine	Global Surface Water - Transitions 2000-2018 (SDG 6.6.1 Indicator)	Published	No	No	Jean-Francois Pekel, Andrew Cottam, Noel Gorelick, Alan S. Belward, High-resolution mapping of global surface water and its long-term changes. <i>Nature</i> 540, 418-422 (2016). (doi:10.1038/nature20584)
Marine	Marine Ecoregions of the World (MEOW)	Published	Yes	No	Spalding MD, Fox HE, Allen GR, Davidson N, Ferdaña ZA, Finlayson M, Halpern BS, Jorge MA, Lombana A, Lourie SA, Martin KD, McManus E, Molnar J, Recchia CA, Robertson J (2007). Marine Ecoregions of the World: a bioregionalization of coast and shelf areas. <i>BioScience</i> 57: 573-583. doi: 10.1641/B570707.

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Marine	Marine Pollution Index	Published	Yes	No	Halpern, B. S. et al. Spatial and temporal changes in cumulative human impacts on the world's ocean. <i>Nat. Commun.</i> 6:7615 doi: 10.1038/ncomms8615 (2015).
Marine	Pelagic Provinces of the world (PPOW)	Published	No	No	Spalding, M. D., Agostini, V. N., Rice, J., & Grant, S. M. (2012). Pelagic provinces of the world: a biogeographic classification of the world's surface pelagic waters. <i>Ocean & Coastal Management</i> , 60, 19-30.
Natural Hazards	MODIS Active Fires - All Fires	Published	Yes	No	NASA Near Real-Time and MCD14DL MODIS Active Fire Detections (WMS format). Data set. Available online [https://earthdata.nasa.gov/active-fire-data]
Protected and Conserved Areas	Marine Protected Areas	Published	No	No	UNEP-WCMC, 2020. The World Database on Protected Areas (WDPA) [On-line]. Available at: www.protectedplanet.net .
Protected and Conserved Areas	Protected Area Connectivity (ProtConn)	Published	Yes	No	Saura, S., Bertzky, B., Bastin, L., Battistella, L., Mandrici, A., Dubois, G., 2018. Protected area connectivity: Shortfalls in global targets and country-level priorities. <i>Biological Conservation</i> 219, 53–67. https://doi.org/10.1016/j.biocon.2017.12.020
Protected and Conserved Areas	Protected Areas Management Effectiveness (PAME)	In Development	No	No	Hockings, M., Stolton, S., Leverington, F., Dudley, N. and Courrau, J. (2006). <i>Evaluating Effectiveness: A framework for assessing management effectiveness of protected areas</i> . 2nd edition. IUCN, Gland, Switzerland and Cambridge, UK. xiv + 105 pp. Geldmann, J., Coad, L., Barnes, M., Craigie, I.D., Hockings, M., Knights, K., Leverington, F., Cuadros, I.C., Zamora, C., Woodley, S. and Burgess, N.D., 2015. Changes in protected area management effectiveness over time: A global analysis. <i>Biological Conservation</i> , 191, pp.692-699. Leverington, F., Costa, K.L., Pavese, H., Lisle, A. and Hockings, M., 2010. A global analysis of protected area management effectiveness. <i>Environmental management</i> , 46(5), pp.685-698.

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Protected and Conserved Areas	Protected Planet@: World Database on Other Effective Area-based Conservation Measures (WD-OECM)	In Development	No	No	NA
Protected and Conserved Areas	Terrestrial Protected Areas	Published	No	No	UNEP-WCMC, 2020. The World Database on Protected Areas (WDPA) [On-line]. Available at: www.protectedplanet.net .
Protected and Conserved Areas	UNESCO Biosphere Reserves	Published	NA	No	UNEP-WCMC, 2020. The World Database on Protected Areas (WDPA) [On-line]. Available at: www.protectedplanet.net .
Protected and Conserved Areas	UNESCO World Heritage Sites	Published	NA	No	UNESCO World Heritage Centre, (2020). World Heritage List. Retrieved from https://whc.unesco.org/en/list/ .
Protected and Conserved Areas	World Database on Protected Areas	Published	No	No	UNEP-WCMC and IUCN (2020), Protected Planet: The World Database on Protected Areas (WDPA) [On-line], [insert month/year of the version used], Cambridge, UK: UNEP-WCMC and IUCN Available at: www.protectedplanet.net .
Restoration	NatureMap - Areas of global significance for restoration	Published	No	No	Jung, M., et al. (2020). Areas of global importance for terrestrial biodiversity, carbon, and water. <i>BioRxiv</i> . biorxiv.org/content/10.1101/2020.04.16.021444v1
Socio-Economic	Accessibility to Cities (2015)	Published	Yes	No	D.J. Weiss, A. Nelson, H.S. Gibson, W. Temperley, S. Peedell, A. Lieber, M. Hancher, E. Poyart, S. Belchior, N. Fullman, B. Mappin, U. Dalrymple, J. Rozier, T.C.D. Lucas, R.E. Howes, L.S. Tusting, S.Y. Kang, E. Cameron, D. Bisanzio, K.E. Battle, S. Bhatt, and P.W. Gething. A global map of travel time to cities to assess inequalities in accessibility in 2015. (2018). <i>Nature</i> . doi:10.1038/nature25181.

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Socio-Economic	Global Grid of Probabilities of Urban Expansion to 2030	Published	Yes	No	Seto, K., B. Güneralp, and L.R. Hutya. 2016. Global Grid of Probabilities of Urban Expansion to 2030. Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC). https://doi.org/10.7927/H4Z899CG . Accessed November 25, 2020.
Socio-Economic	Global Solar Atlas: Yearly Average Potential Photovoltaic Electricity Production	Published	Yes	No	ESMAP. 2020. Global Photovoltaic Power Potential by Country. Washington, DC: World Bank. https://globalsolaratlas.info Global Solar Atlas 2.0 : Technical Report (English). Energy Sector Management Assistance Program Washington, D.C. : World Bank Group. http://documents.worldbank.org/curated/en/529431592Solar-Atlas-2-0-Technical-Report
Socio-Economic	Global subnational infant mortality rates (2015)	Published	Yes	No	Center for International Earth Science Information Network - CIESIN - Columbia University. 2005. Poverty Mapping Project: Global Subnational Infant Mortality Rates. Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC). http://dx.doi.org/10.7927/H4PZ56R2 .
Socio-Economic	Gridded Livestock of the World 3 (GLW3)	Published	Yes	No	Gilbert M, G Nicolas et al. (2018) Global Distribution Data for Cattle, Buffaloes, Horses, Sheep, Goats, Pigs, Chickens and Ducks in 2010. Nature Scientific data, 5:180227. doi: 10.1038/sdata.2018.227 https://doi.org/10.1038/sdata.2018.227

Table 1: UN Biodiversity Lab Data List (*continued*)

Category	Data Name	Status	Download?	Time Series?	Citation(s)
Socio-Economic	WorldPop: Estimated Residential Population 2000-2020	Published	Yes	No	Americas population data: Alessandro Sorichetta, Graeme M. Hornby, Forrest R. Stevens, Andrea E. Gaughan, Catherine Linard, Andrew J. Tatem, 2015, High-resolution gridded population datasets for Latin America and the Caribbean in 2010, 2015, and 2020, Scientific Data, doi:10.1038/sdata.2015.45 Africa population count data: Linard, C., Gilbert, M., Snow, R.W., Noor, A.M. and Tatem, A.J., 2012, Population distribution, settlement patterns and accessibility across Africa in 2010, PLoS ONE, 7(2): e31743. Asia population count data: Gaughan AE, Stevens FR, Linard C, Jia P and Tatem AJ, 2013, High resolution population distribution maps for Southeast Asia in 2010 and 2015, PLoS ONE, 8(2): e55882.

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