## **GIS Datasets**

Dataset Code	Category	Dataset Title	Citation	Layers	Years
alosLandUse	Biodiversity	Forest vs. Non forest	Shimada et al., 2014	7	2007-2017
anthromes	Land	Anthropogenic Biomes	Ellis & Ramankutty, 2008	5	2001-2005
aquaculturePotential	Ocean	Global Potential for Marine Aquaculture	Gentry et al., 2017	10	2020
aqueductFloodHazard	Aqueduct	Aqueduct Flood Hazard	Hofste et al., 2019	9	2020
aqueductWaterStress	Aqueduct	Aqueduct Water Stress Projections	Luck et al., 2015	1	2015
aridity	Land	Aridity	Trabucco & Zomer, 2019	1	1970-2000
berkeleyPrecip	Land	Annual Precipitation	Hijmans et al., 2005	18	1960-1990
biodiversityHotspots	Biodiversity	Biodiversity Hotspots	Hoffman et al., 2016	1	2016
copernicusLandCover	Land	Global Land Cover	Buchhorn et al., 2020	1	2015
coralBleaching	Ocean	Frequency of Future Coral Reef Bleaching Events	Donner, 2009	2	2030-2050
cropAllocation	Land	Crop Allocation to food, feed and non- food	Cassidy et al., 2013	6	2003-08
cropHarvest	Agriculture	Crop Land Area and Production	IFPRI & IIASA, 2016	8	2005
cropHarvestArea	Agriculture	Global Agro-ecological Zones - GAEZ 2015 - Harvest Area	Frolking et al., 2020	78	2015
croplandAndPastures	Land	Cropland and Pasture Area	Ramankutty et al., 2008	2	2000
cropNutrientBalance	Land	Crop Nutrient Balance	West et al., 2012	2	2000
cropProduction	Agriculture	Global Agro-ecological Zones - GAEZ 2015 - Crop Production	Frolking et al., 2020	78	2015
cropTrends	Agriculture	Maize, Rice, Soybean, and Wheat Yield Trends	Ray et al., 2012	4	2008
cropYield	Agriculture	Global Agro-ecological Zones - GAEZ 2015 - Crop Yield	Frolking et al., 2020	78	2015
dem	DEM	Digital Elevation Model	de Ferranti, 2014	1	2014
developmentPotentialIndex	Infrastructure	Development Potential Index	Oakleaf et al., 2019	13	2016
electrification	Infrastructure	Predicted Low-Voltage Infrastructure	Arderne et al., 2020	1	2020
extremePrecipitation	Land	Projected Change in Extreme Precipitation Days	Gassert et al., 2021	333	1985- 2015, 2065-2095
floodEconomicLoss	Natural Hazards	Global Flood Proportional Economic Loss Risk Deciles	Dilley et al., 2005	1	2000
flopros	Natural Hazards	FLOPROS – Flood Protection Standards	Scussolini et al., 2016	1	2016
forestBiomass	Biodiversity	Global Forest Biomass	Kindermann et al., 2008	22	2008
forestRestorationOpportunity	Land	Forest Landscape Restoration	Potapov et al., 2020	1	2011
gdhy	Agriculture	Global dataset of historical yields	Løvholt et al., 2020	350	1981-2015
GDPperCapita	Economy	GDP per Capita	Kummu et al., 2018	3	2015
globalCriticalHabitat	UNEP WCMC	Global Critical Habitat screening layer	UNEP-WCMC, 2017	1	2017
globalTsunamiHazard	Natural Hazards	Global Tsunami Hazard	Gillbert et al., 2018	7	2017
griddedLivestock	FAO	Gridded Livestock Density	Davies et al., 2018	21	2000
griddedSpecies	Biodiversity	Gridded Species Distribution	Rodó et al., 2021	207	2015
harmonizedWorldSoil	Soil and Geology	Harmonized World Soil Database	FAO/IIASA/ISRIC/ISSCAS /JRC, 2012	1	2012



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heatDays	Land	Projected Change in Extreme Heat Days	Gassert et al., 2021	18	2015-2095
humanFootprint	SEDAC	Human Footprint, 2018 Release (2009)	Venter et al., 2016	1	2009
humanImpactOceans	Ocean	Human Impacts on Oceans	Stock et al., 2018	8	2018
humanModification	SEDAC	Global Human Modification of Terrestrial Systems, v1 (2016)	Kennedy et al., 2019	1	2016
hydeAnthromes	Land	HYDE Historical Anthropogenic Biomes	Goldewijk et al., 2017	54	2006
hydrosheds	Hydrology	HydroSHEDS	Lehner et al., 2008	7	2006
ihme	IHME	IHME Global Burden of Disease	IHME, 2020	33	2000-2010
isric	Soil and Geology	ISRIC - World Soil Information	Batjes, 2009	8	1986-2016
malariaAtlas	Accessibility	Accessibility To Cities	Weiss et al., 2015	6	2015-2020
mangroveBiomass	Land	Aboveground Live Woody Biomass Density	Baccini et al., 2019	1	2012
mangroves	Ocean	Mangrove Forests	Bunting et al., 2018	1	2016
mapSpam	Agriculture	MapSPAM	Yu et al., 2010	1062	2010
maxTempChange	Land	Projected Change in Annual Average Maximum Temperature	Gassert et al., 2021	18	2015-2095
multiHazard	SEDAC	Global Multihazard Frequency and Distribution	Dilley et al., 2005	1	2000
nighttimeLights	Land	Nighttime Lights (Annual, Stable Lights)	Elvidge et al., 1997	3	2013
ocean Acidification	Ocean	Projected Ocean Acidification	Van Hooidonk et al., 2014	90	2009-2098
oceanDepth	GEBCO	Ocean Depth	GEBCO, 2022	1	2020
octocorals	UNEP WCMC	Global Distributions of Habitat Suitability for Cold-Water Octocorals	Yesson et al., 2012	7	2012
ohi	Ocean	Ocean Health Index	Halpern et al., 2019	17	2008
populationDensity	Population	Population Density	CIESIN, 2018	1	2020
potentialET	Land	Potential Evapotranspiration	Trabucco & Zomer, 2019	1	2000
potentialVegetation	Land	Potential Natural Vegetation	Mueller et al., 2012	21	2019
saltMarshes	Land	Saltmarshes	Mcowen et al., 2017	2	2015-2016
terrestrialEcoregions	Land	Terrestrial Ecoregions	TNC, 2019	1	2019
tsunamiEvents	Natural Hazards	Tsunami Event Historical Database	NGDC/WDS, 2017	1	2018
urban Expansion Probability	SEDAC	Global Grid of Probabilities of Urban Expansion to 2030, v1	Seto et al., 2016	1	2000-2030
urbanFootprint	Urban Footprint	Global Urban Footprint	Esch et al., 2014	1	2016
urbanHeatIsland	SEDAC	Global Urban Heat Island (UHI) Data Set, v1	CIESIN, 2016	1	2013
usgsMining	Soil and Geology	Major mineral deposits of the world	Schulz & Briskey, 2005	1	2005
vegetationHealth	Land	Vegetation Health Index	NOAA STAR, 2018	8	2013-2020
waterUse	Water Resources	Water Use	Huang et al., 2018	10	2010-2018
wetlandsAndWaterbodies	Land	Wetlands and Waterbodies	Lehner & Döll, 2004	1	2004
aqueductGlobalMaps	Aqueduct	Aqueduct Global Maps 3.0	Ward et al., 2020	12	2019

