

Supplementary Materials for Manuscript: Assessing a Prototype Database for Comprehensive Global Aquatic Land Cover Mapping

Table S1. GDAL commands used in the map generation.

GDAL commands	Application
gdalwarp	Image reprojection and resampling.
gdalbuildvrt	Integrating the input datasets by building a VRT (Virtual Dataset).
gdal_translate	Converting the VRT into the raster format.
gdal_calc.py	Image reclassification; image masking.

Table S2. Count-based confusion matrix for the integrated Level-1 map.

Level-1	Reference		Total	User's accuracy (%)
	Aquatic	Non-Aquatic		
Map	Aquatic	1855	4493	58.7
	Non-Aquatic	21870	22221	98.4
	Total	23725	26714	
Producer's accuracy (%)	88.3	92.2		91.7

Table S3. Count-based confusion matrix for the Level-2 persistence of water map.

Persistence of water	Reference			Total	User's accuracy (%)
	Permanently flooded	Temporarily flooded	Waterlogged		
Map	Permanently flooded	47	34	223	63.7
	Temporarily flooded	123	49	299	41.1
	Waterlogged	38	19	76	25.0
	Total	208	102	598	
Producer's accuracy (%)	49.3	59.1	18.6		47.5

Table S4. Count-based confusion matrix for the Level-2 presence of vegetation map.

Presence of vegetation	Reference		Total	User's accuracy (%)
	Non-Vegetated	Vegetated		
Map	Non-Vegetated	146	294	50.3
	Vegetated	255	304	83.9
	Total	401	598	
Producer's accuracy (%)	75.1	63.6		67.4

Table S5. Count-based confusion matrix for the Level-2 artificiality of cover map.

Artificiality of cover		Reference		Total	User's accuracy (%)
		Artificial	Natural		
Map	Artificial	15	41	56	26.8
	Natural	27	515	542	95.0
	Total	42	556	598	
Producer's accuracy (%)		35.7	92.6		88.6

Table S6. Count-based confusion matrix for the Level-3 maps.

Level-3		Reference			Total	User's accuracy (%)
		Water body	Shrubs and herbaceous cover	Trees		
Map	Integrated life form					
	Water body	108	79	21	208	51.9
	Shrubs and herbaceous cover	29	136	51	216	63.0
	Trees	5	43	11	59	18.6
	Total	142	258	83	483	
	Producer's accuracy (%)	76.1	52.7	13.3		52.8
	CGLS life form					
	Water body	100	51	13	164	61.0
	Shrubs and herbaceous cover	32	166	51	249	66.7
	Trees	10	41	19	70	27.1
	Total	142	258	83	483	
	Producer's accuracy (%)	70.4	64.3	22.9		59.0