



Supplement of

WorldCereal: a dynamic open-source system for global-scale, seasonal, and reproducible crop and irrigation mapping

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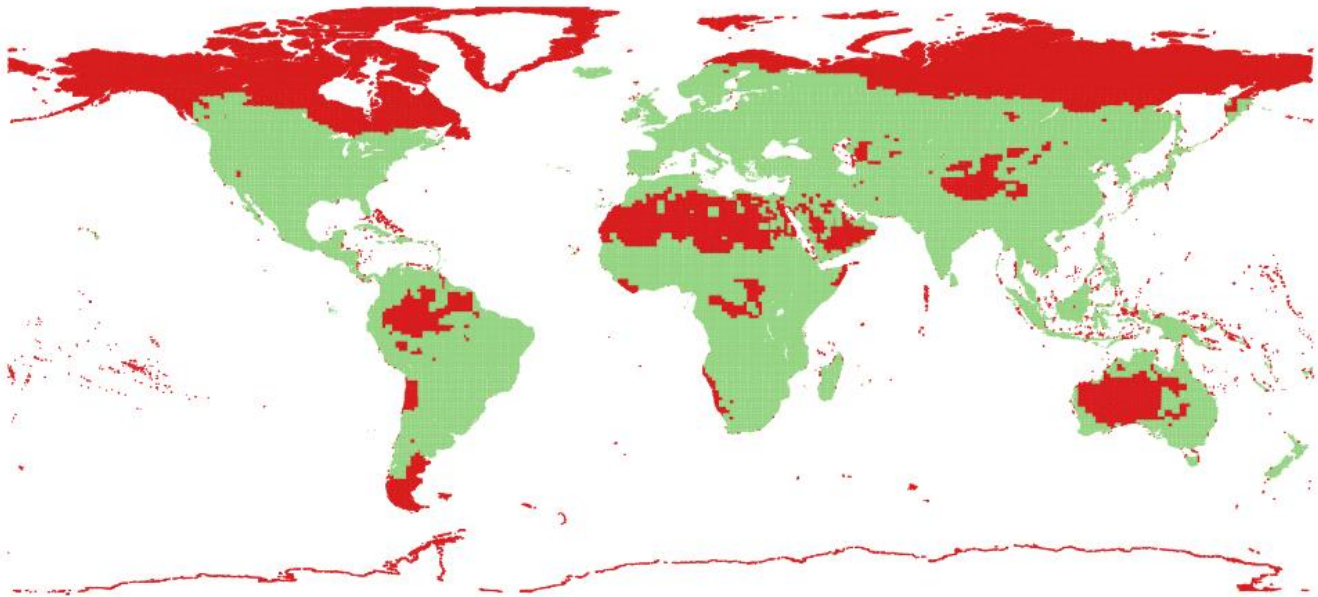


Figure S1: Sentinel-2 files included in the 2021 global WorldCereal processing run (shown in green), vs. the tiles excluded from the global processing run (shown in red).

5 Table S1: Definition of vegetation indices used for training WorldCereal models. In the formula column, Bxx refers to Sentinel-2 reflectance bands.

Abbreviation	Full name	Formula
NDVI	Normalized Difference Vegetation Index	$(B08 - B04) / (B08 + B04)$
EVI	Enhanced Vegetation Index	$2.5 * (B08 - B04) / (B08 + 6.0 * B04 - 7.5 * B02 + 1.0)$
NDWI	Normalized Difference Water Index	$(B08 - B03) / (B08 + B03)$
mNDWI	Modified Normalized Difference Water Index	$(B08 - B12) / (B08 + B12)$
NDMI	Normalized Difference Moisture Index	$(B08 - B11) / (B08 + B11)$
GVMi	Global Vegetation Moisture Index	$((B08 + 0.1) - (B12 + 0.02)) / ((B08 + 0.1) + (B12 + 0.02))$
NDGI	Normalized Difference Greenness Index	$(B03 - B04) / (B03 + B04)$
ANIR	Angle on Near Infrared	See Khanna et al. (2007)*
NDRE85	Normalized Difference Red Edge Index	$(B08 - B05) / (B08 + B05)$
NDRE75	Normalized Difference Red Edge Index	$(B07 - B05) / (B07 + B05)$
RVI	Radar Vegetation Index	$(4 * VH) / (VV + VH) **$

- 10 * Khanna S., Palacios-Orueta A., Whiting M.L., Ustin S.L., Riaño D., Litago J. (2007). Development of angle indexes for soil moisture estimation, dry matter detection and land-cover discrimination. *Remote Sensing of Environment*, 109 (2), 154-165. <https://doi.org/10.1016/j.rse.2006.12.018>.
- ** VH and VV backscatter expressed in linear power units.