Near-real-time vegetation monitoring and historical database (1981-present) for the Iberian Peninsula and the Balearic Islands

Magí Franquesa, Fergus Reig, Manuel Arretxea, Maria Adell-Michavila, Amar Halifa-Marín, Daniel Vilas, Santiago Beguería, Sergio M. Vicente-Serrano

Supplementary material

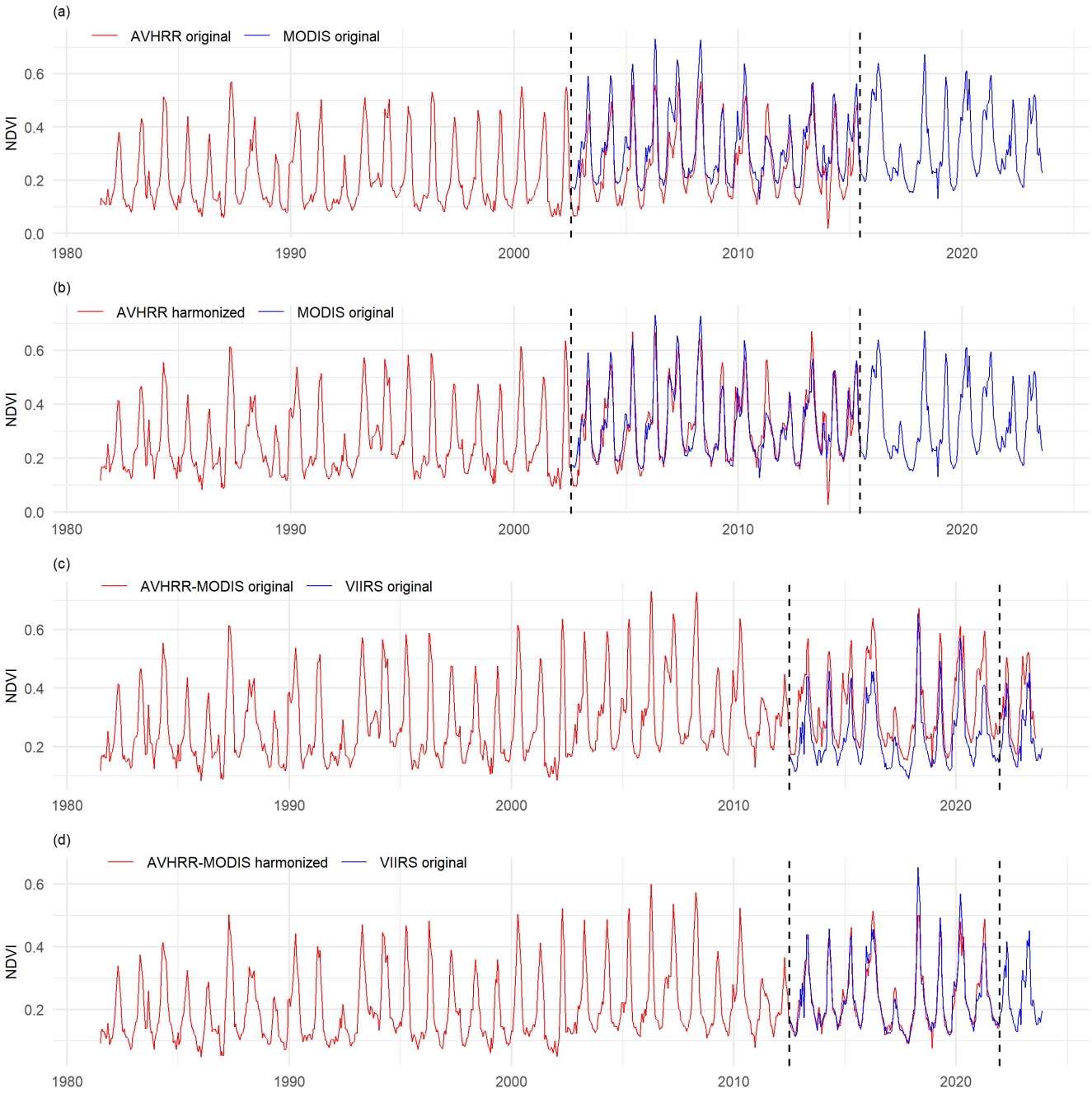

Figure S1. AVHRR Sp_1km_NDVI and MODIS MYD13A2 NDVI data before harmonization (a), harmonized AVHRR-MODIS vs MODIS original data (b), harmonized AVHRR-MODIS vs VIIRS original data (c), and harmonized AVHRR-MODIS-VIIRS vs VIIRS original data (d). Pixel 391-200 (x=4677400, y=348600), d index=0.98.

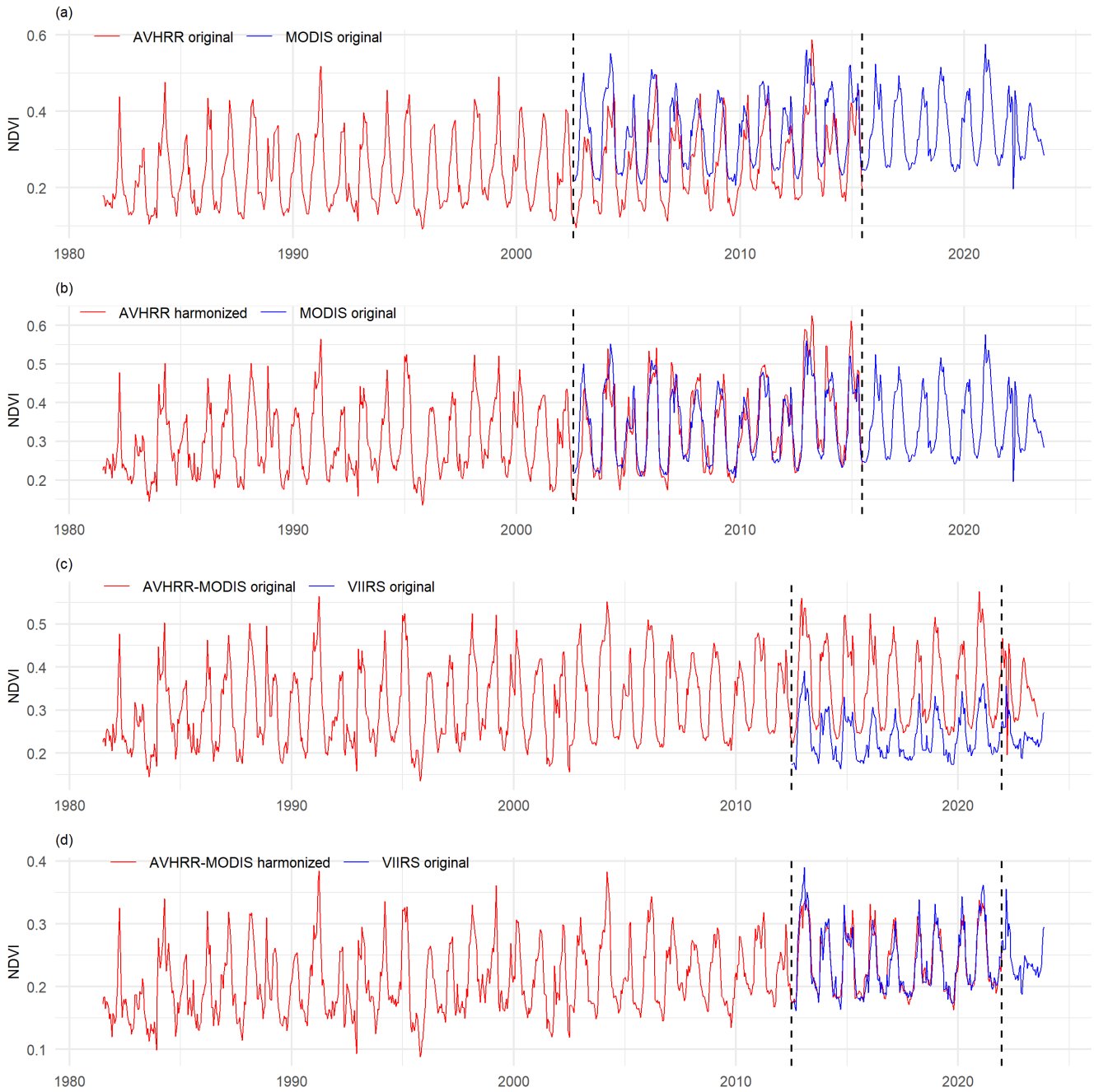

Figure S2. AVHRR Sp_1km_NDVI and MODIS MYD13A2 NDVI data before harmonization (a), harmonized AVHRR-MODIS vs MODIS original data (b), harmonized AVHRR-MODIS vs VIIRS original data (c), and harmonized AVHRR-MODIS-VIIRS vs VIIRS original data(d). Pixel 400-436 (x=4417800, y=358500), d index=0.96.

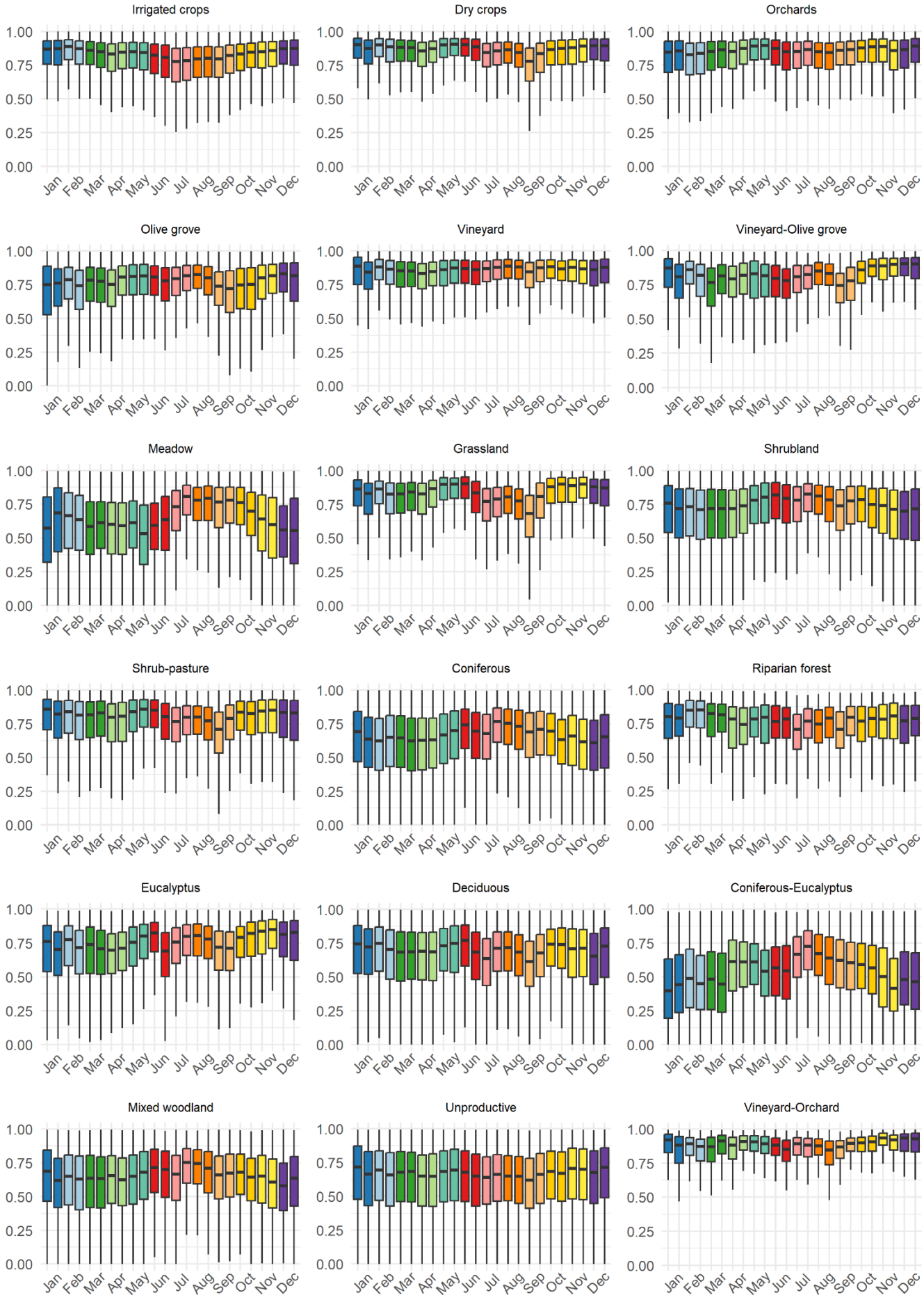

Figure S3. Distribution of Willmott's d index values by land cover and semi-monthly periods between harmonized AVHRR-MODIS-VIIRS vs VIIRS original data.

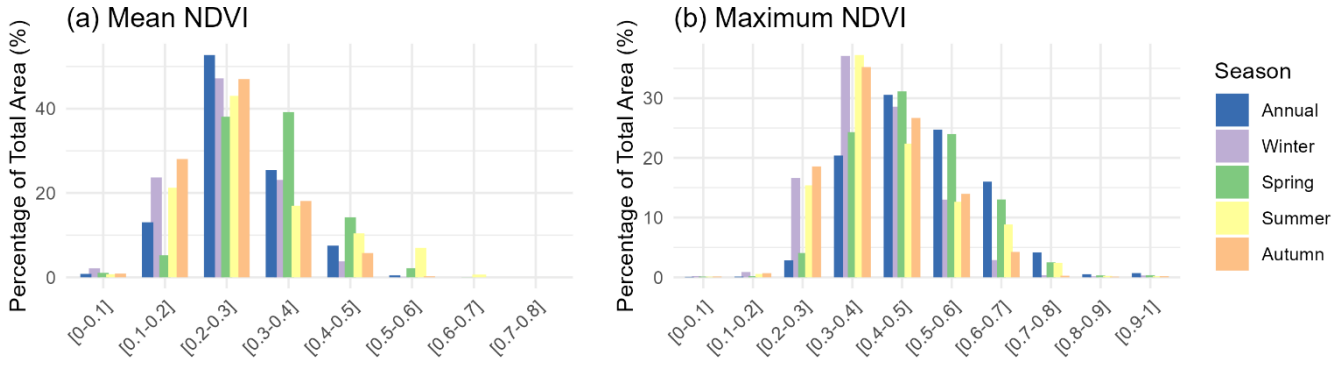

Figure S4. Annual and seasonal distribution of NDVI values across the Iberian Peninsula and Balearic Islands. (a) The mean NDVI distribution presents the average vegetation cover per NDVI interval for each season and annually for the time-series (b) The maximum NDVI distribution highlights the peak vegetation cover within each NDVI interval, also segmented by season and annually. Each bar represents the percentage of the total area falling within specific NDVI ranges, demonstrating seasonal variation in vegetation activity.

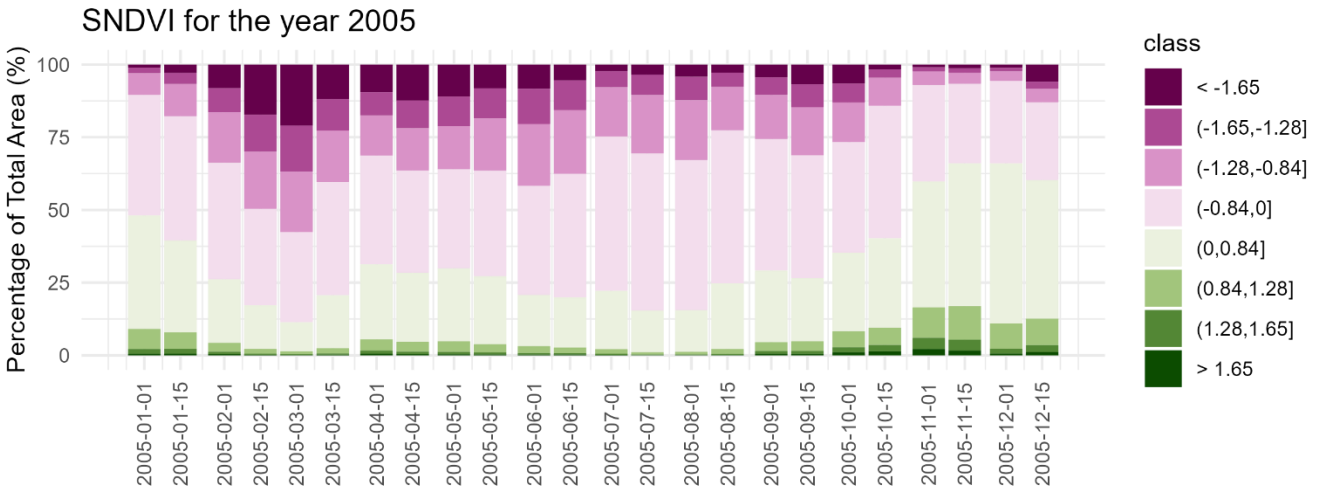

Figure S5. Temporal evolution of vegetation anomalies (SNDVI) for the year 2005 in the Iberian Peninsula and Balearic Islands. The color gradient from purple to dark green marks the range of SNDVI values, with purple representing the lowest (< -1.65) and dark green the highest (> 1.65), capturing vegetation dynamics during the 2005's drought event.