

# Surface Temperature as the climate change indicator – Application for the wetlands Ecosystem

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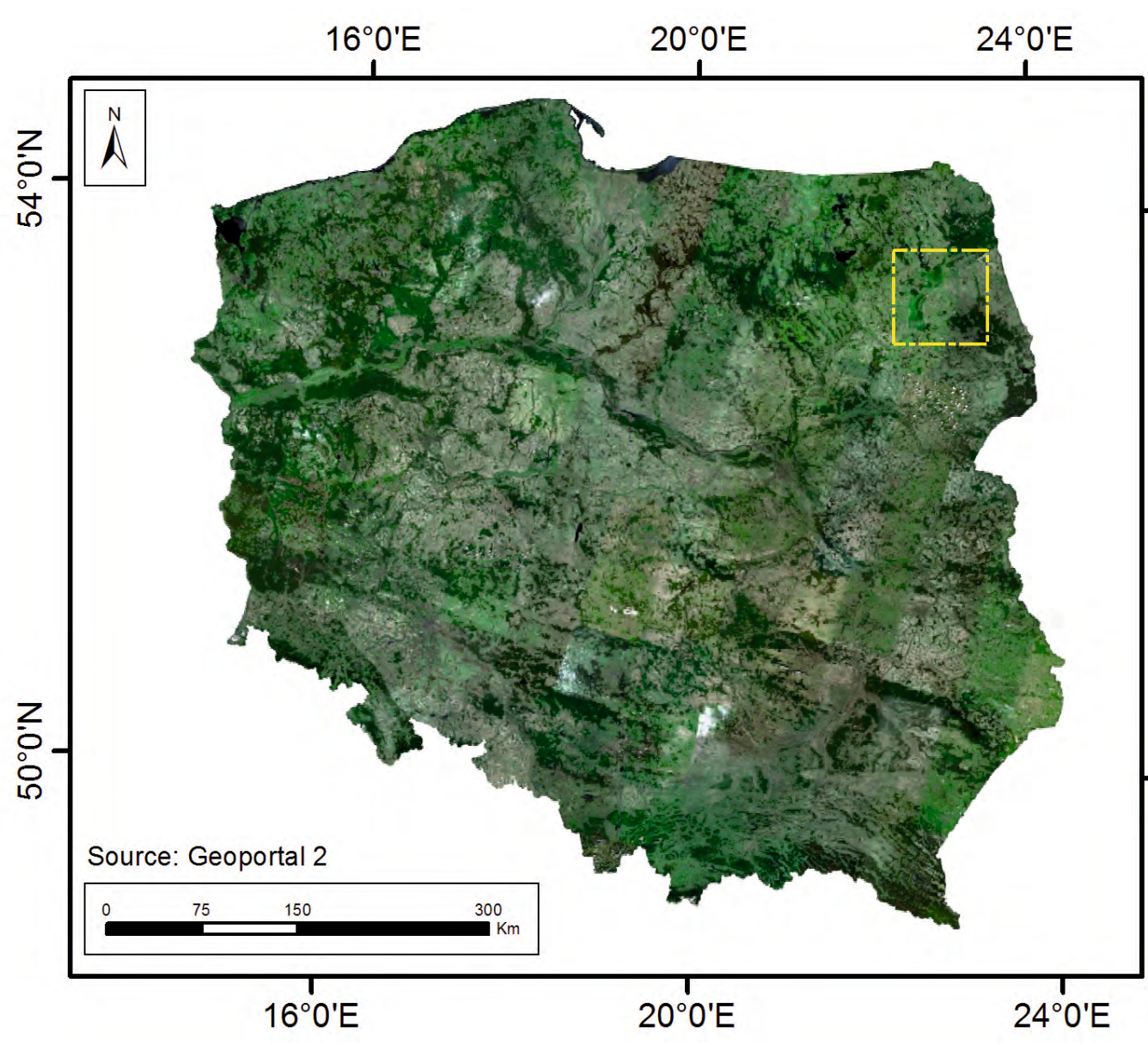
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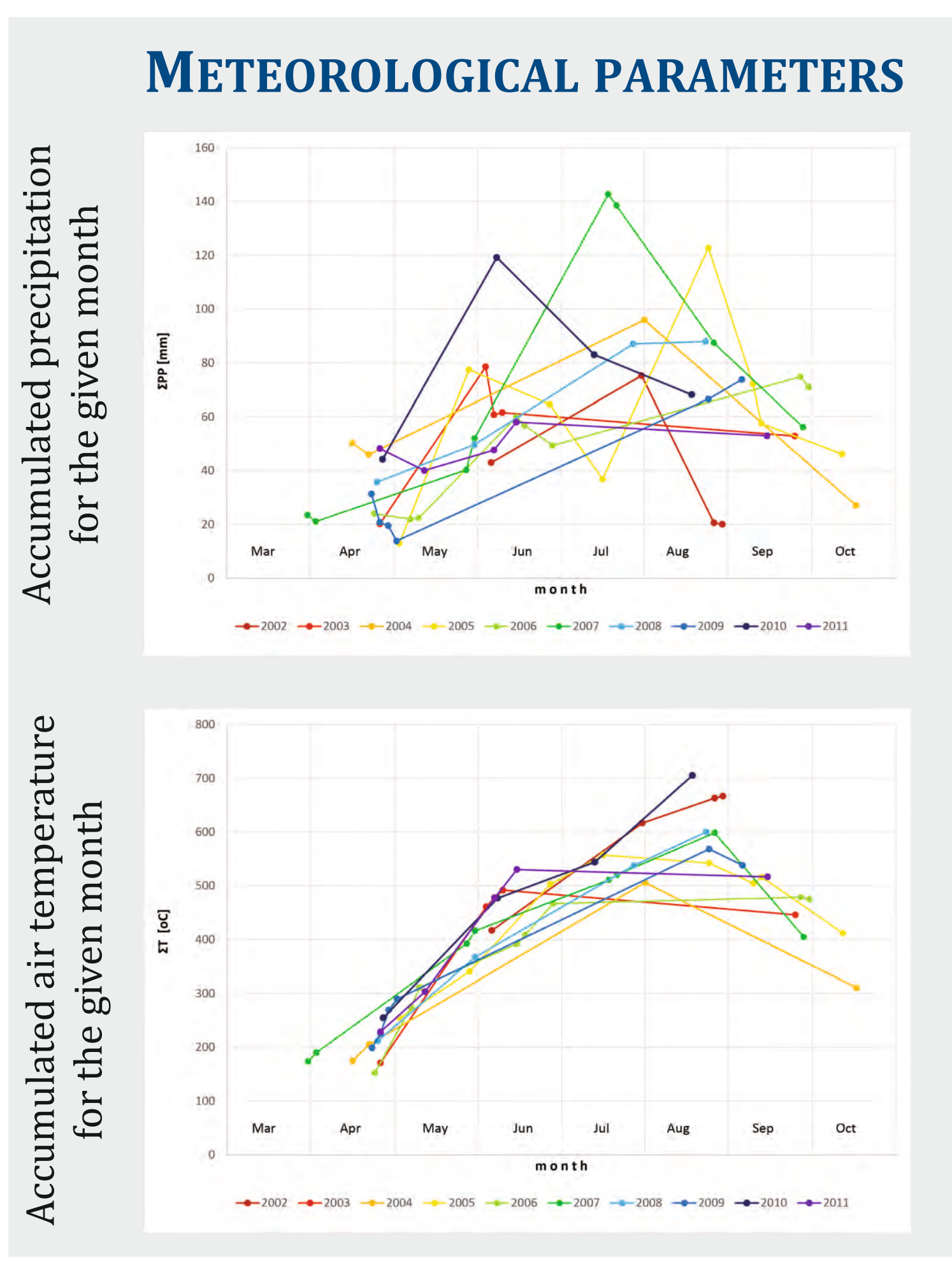
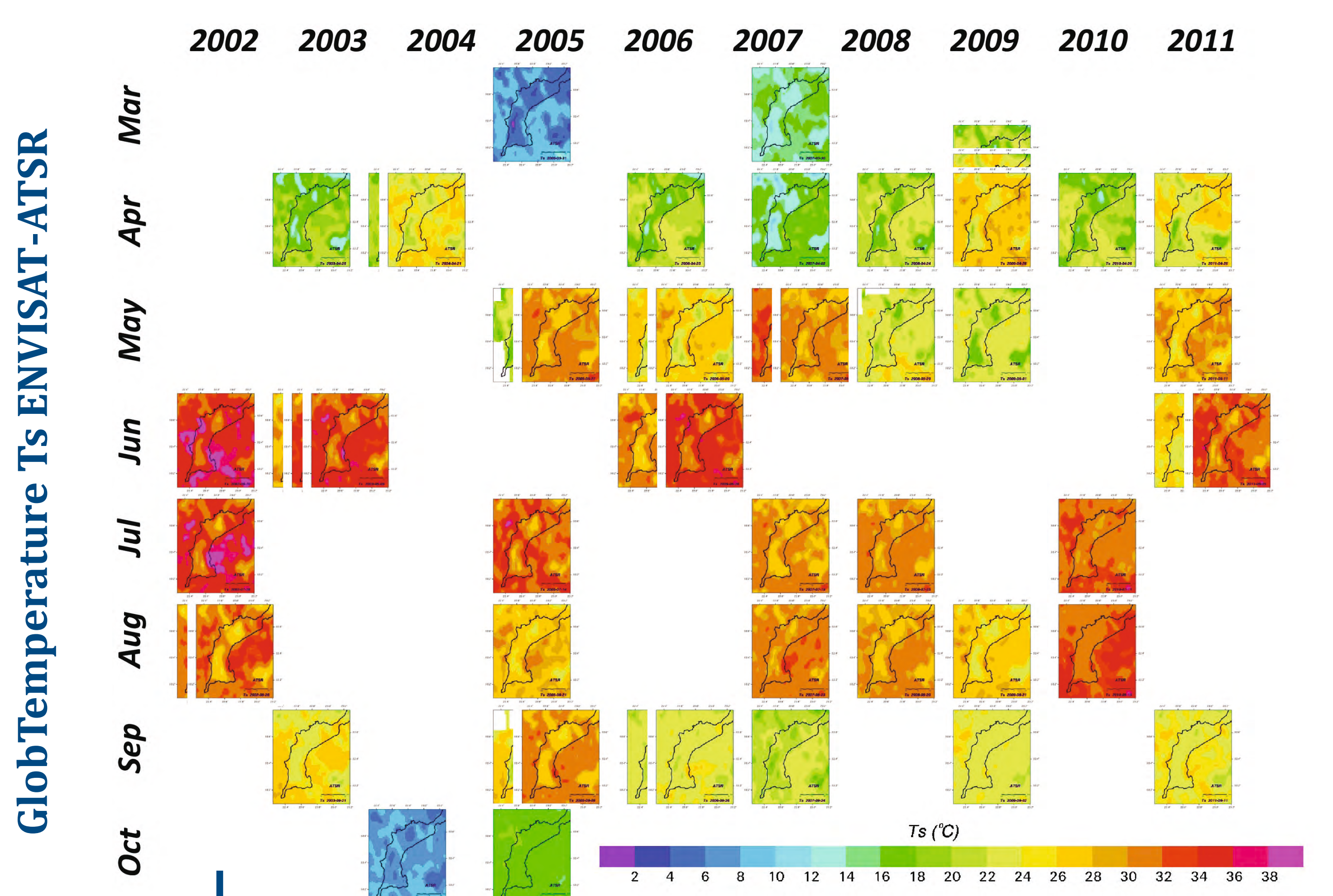
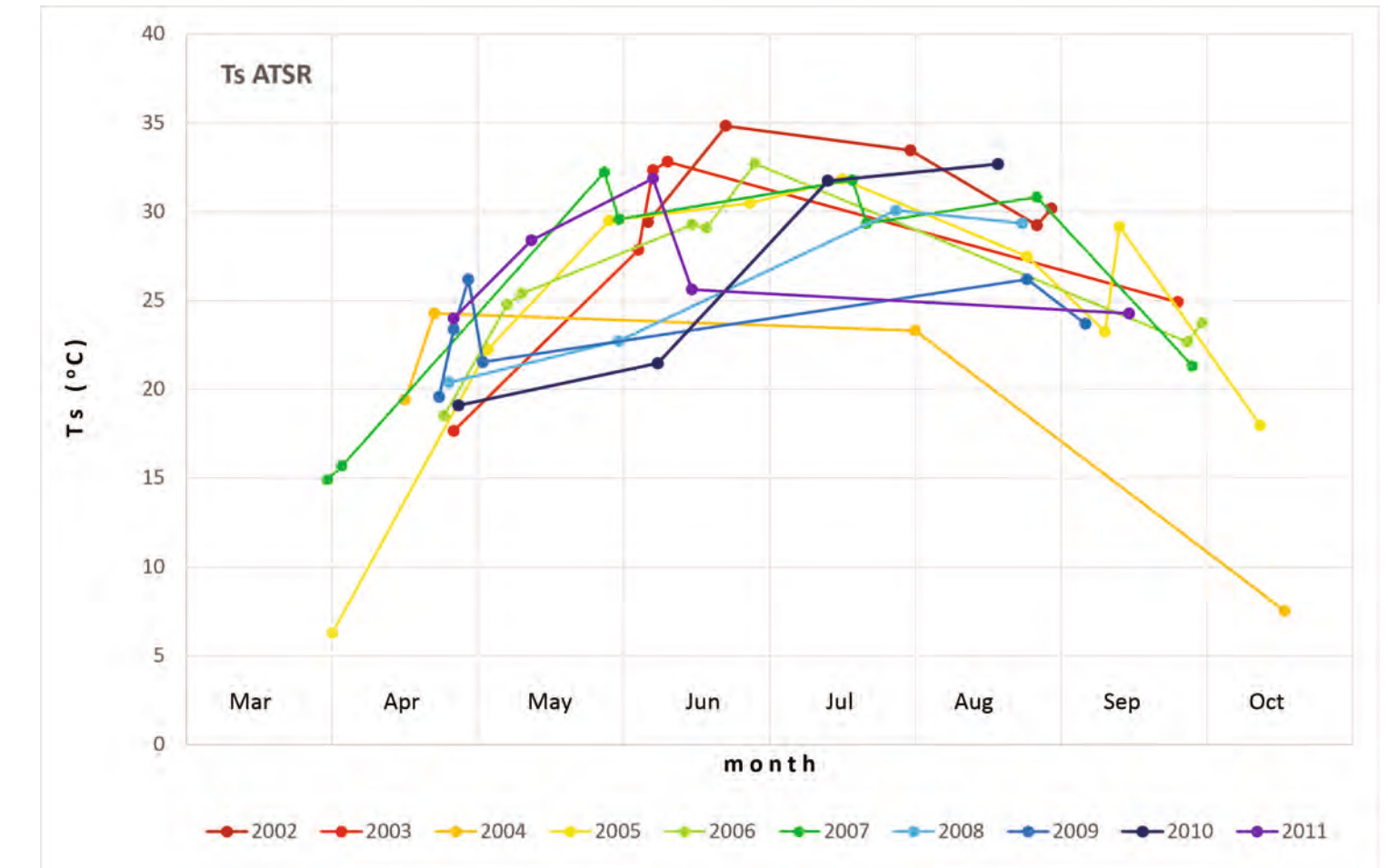
**ABSTRACT** The Research presents distribution of surface temperature for wetlands from calibrated temperature of ATSR from ESA GLOB Temperature Project.

The surface temperature was averaged for the whole area of Biebrza wetlands (Biebrza National Park) to find the worse and best wetlands conditions and to find if the climate changes during the time of 2002-2011 could be noticed. It was also found the differences in surface temperature for each month and year for different wetlands vegetation. The surface temperature may be used to calculate heat fluxes and calculate the water balance.

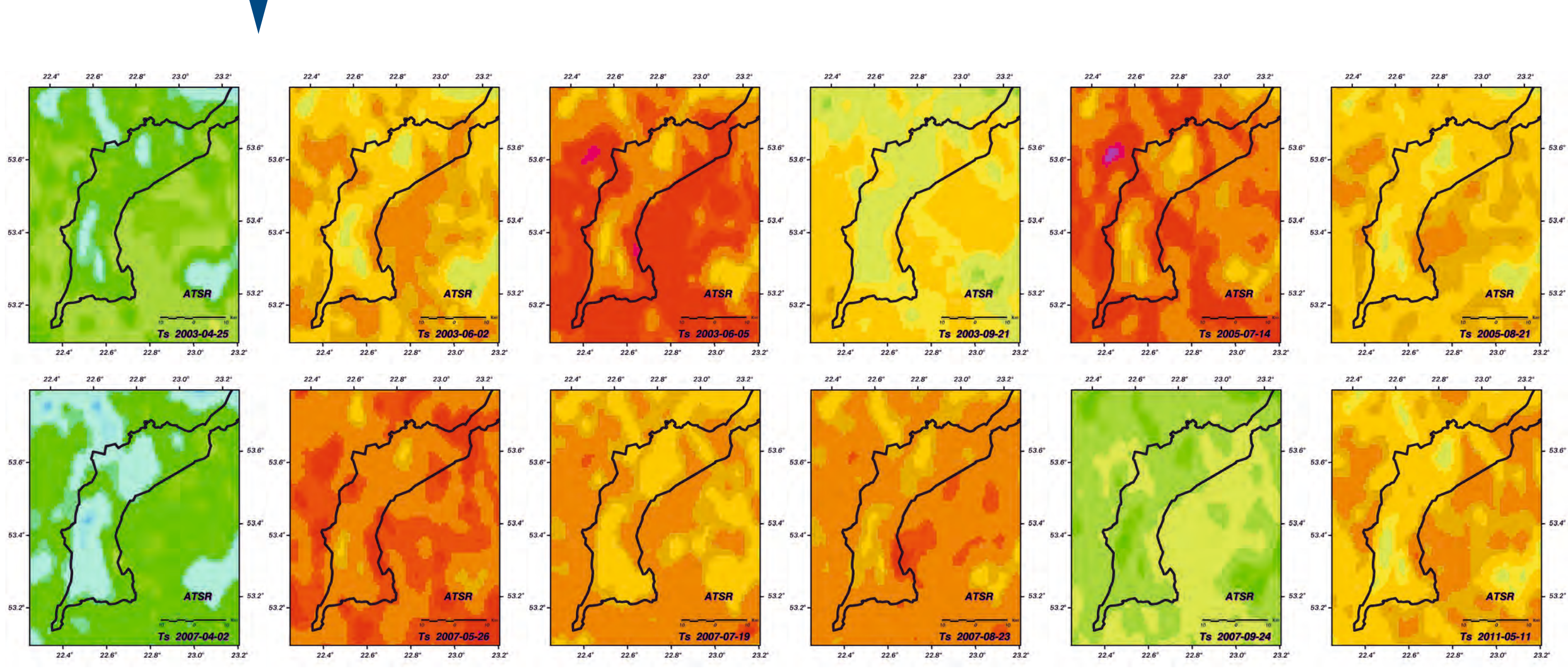
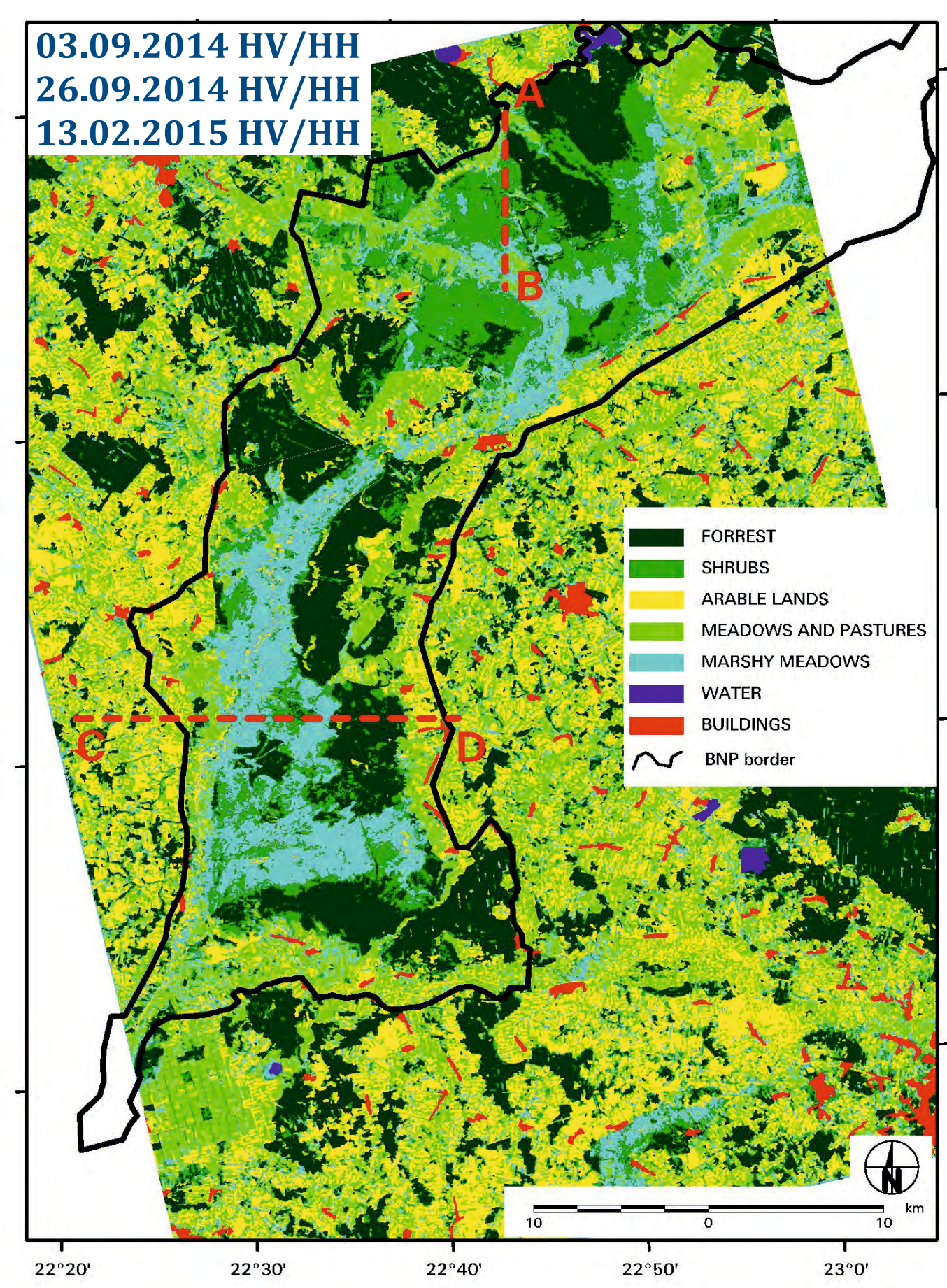
Air temperature and precipitation has been presented as accumulated values for the months of ATSR acquisitions.



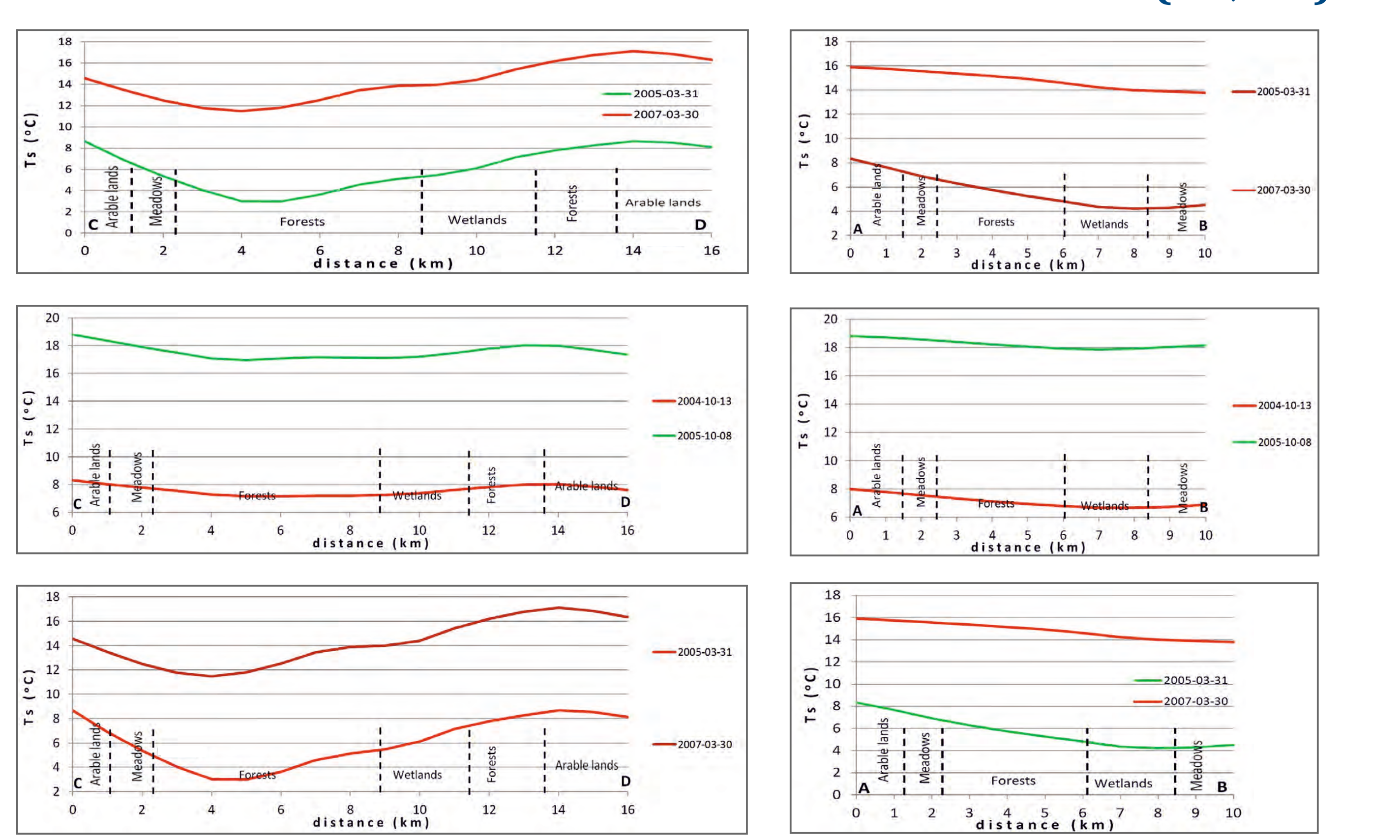
Averaged surface temperature (Ts ATSR)



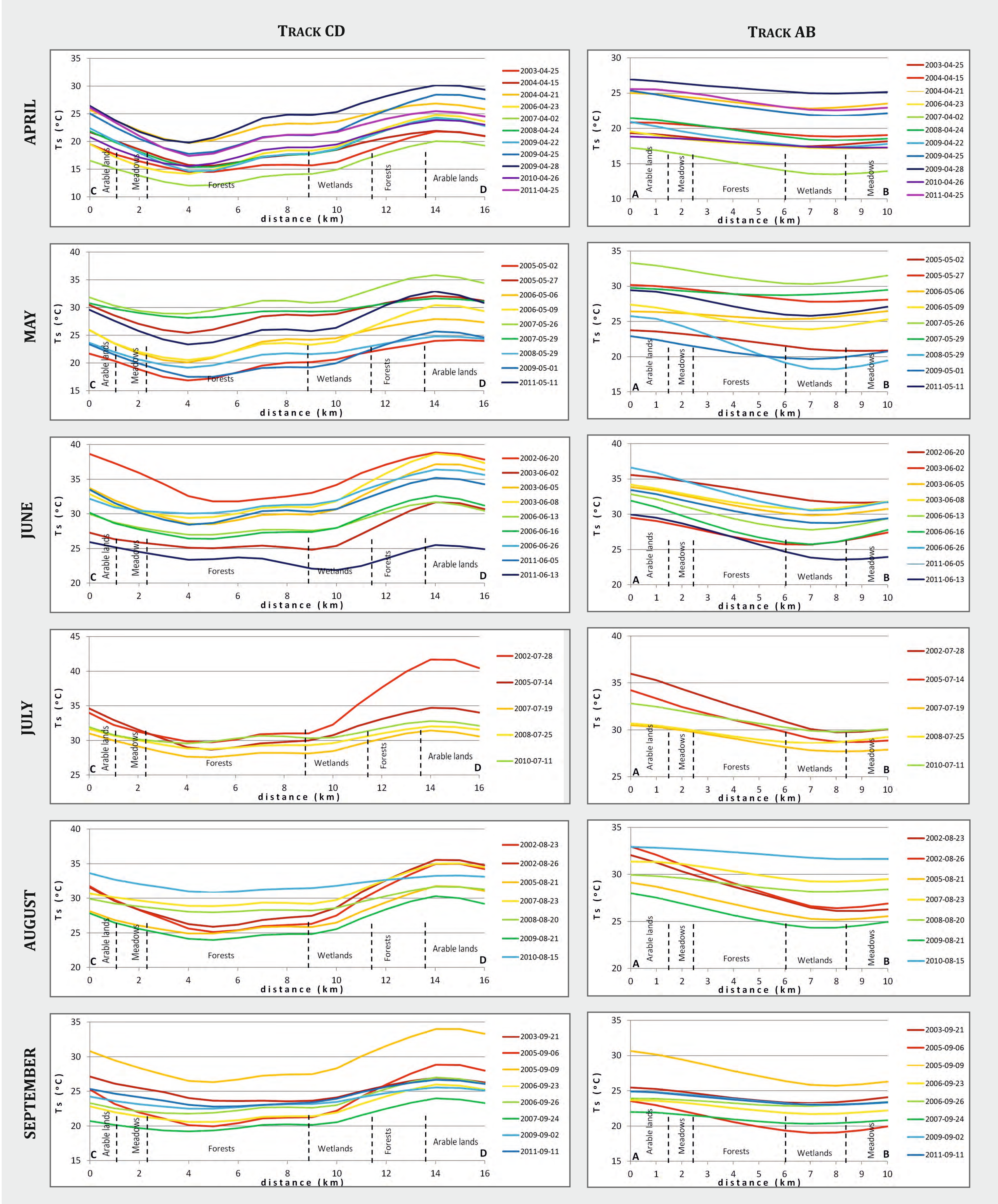
CLASSIFICATION BASED ON ALOS2



SURFACE TEMPERATURE FOR ECOSYSTEMS ALONG THE TRACKS (CD, AB)



SURFACE TEMPERATURE FOR DIFFERENT WEATLAND VEGETATION THROUGH TRACKS



APPLICATION OF SURFACE TEMPERATURE Ts FOR HEAT FLUXES - IMPORTANT IN WATER BALANCE

