Monitoring Phenology of Low Floodplain Vegetation

Why would you monitor floodplains? This is a question you don’t have to ask a Dutchman. The Dutch have been living in their delta for centuries and are champions when it comes to flood water levels. Hydraulically rough vegetation types can lead to higher flood water levels during peak discharges, so that’s a good reason to monitor, but to measure the ecological value is another one.

On Wednesday 13 July, Wimala van Iersel from the University of Utrecht presented the findings of her study, showing the performance of multi-temporal, high-resolution Unmanned Aerial Vehicles (UAV) imagery for analysing temporal height profiles of grassland and herbaceous vegetation in river floodplains.

Six surveys were carried out over a period of 12 months, consisting of 27 field plots (vegetation heights of grasslands, herbaceous and reed plants) and the capture of UAV imagery (primary data: NIR and RGB photographs, derived data: NDVI and DSM). The results revealed the high potential of using UAV imagery for increasing grassland and herbaceous vegetation classification accuracy.

The presentation by Van Iersel and her colleagues Straatsma, Addink, and Middelkoop was lively and humorous. The study is accessible here.