



Near real-time irrigated area mapping

Despite the immense pressure of irrigation on the local freshwater resources, only few water managers have a precise understanding of where irrigation is taking place within their catchments during the growing season.

eLEAF's irrigated area mapping service distinguishes between irrigated and rainfed cropland and offers water managers an accurate and high-resolution view that is regularly updated, mitigating the need for inefficient field visits.

Most available irrigation maps are dated and solely indicate the irrigated area based on historical observations. These maps fail to depict the current situation on the ground, which is a critical flaw since the area of irrigated cropland might vary regularly due to various factors such as climate, local policies, and farming practices.

In order to identify which areas are irrigated, we rely on high quality biophysical indicators such as the incremental evapotranspiration, soil moisture, and crop water productivity.

The data allows water managers to monitor the change in irrigated area over time and equips them with the necessary insights to review or adjust their management during the growing season for:

- Early detection of change: unauthorized water withdrawals for irrigation, expansion of irrigation, and abandonment of irrigated areas;
- Assessing the impact of drought on irrigation practices;
- Evaluating the effectiveness of policies and measures to improve water use efficiency.

