

Remote Sensing of Grasslands SATGRASS

Description of Work

To provide a better understanding of grass growth and harvest at a national scale and to help develop farm scale tools for managing grass budgets on farms we are using satellites and drones to measure and monitor, grass growth, grass yield and grass management.

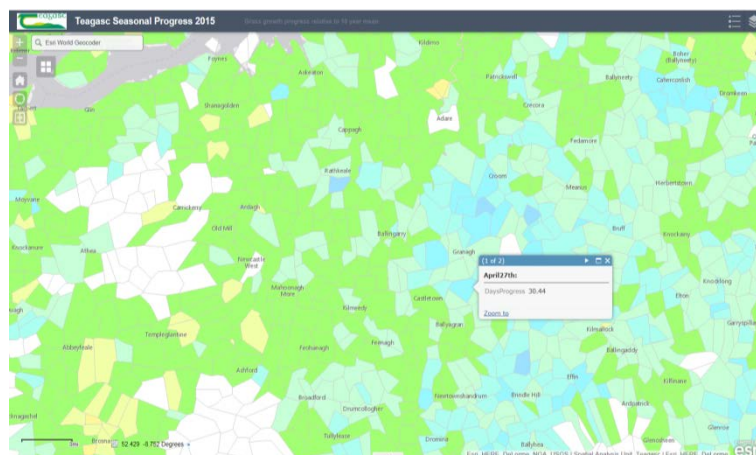
International Context

Remote sensing as a tool in precision agriculture has a 30 year long history in cereals but is largely unused in managed grasslands. Australia has a number of beta level programs for monitoring rangeland paddocks using satellites but nothing exists in Europe. In the last 2 years there have been a number of publications showing interest is developing in managed grasslands as a target for PA from space. We can say we are at the vanguard of both application and tool development in Europe.

We can reliably estimate grass biomass, growth rate and management intensity using machine learning methods on free satellite data.

Opportunities

Remote sensing of grasslands for paddock and herd management in Europe is just beginning to be a very active research area (due to new data sources and policy changes). The potential for Ireland to lead is good and opportunities for collaboration (either in development or testing) will exist



Screen grab of seasonal progression service for farmers highlighting how early or late grass growth is compared to normal.