

Estimating Live Fuel Moisture Content from Remote Sensing data

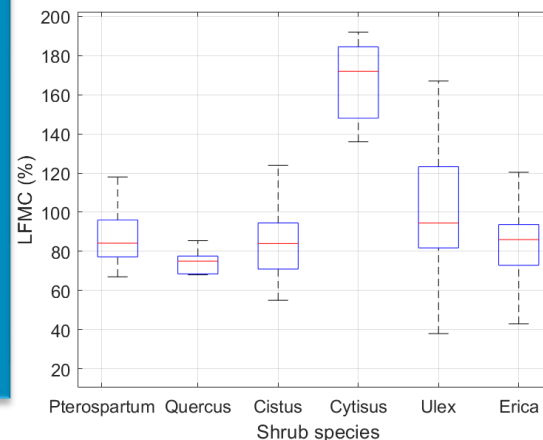
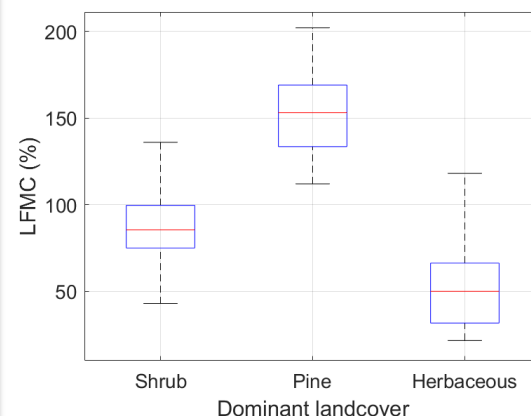
- LFM is an important driver of fire spread
- Estimation at large scale is challenging

Objectives:

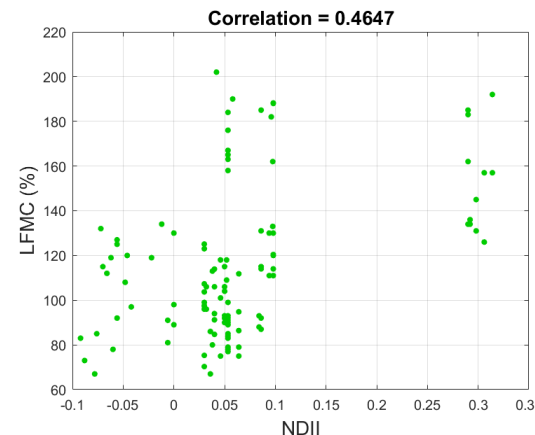
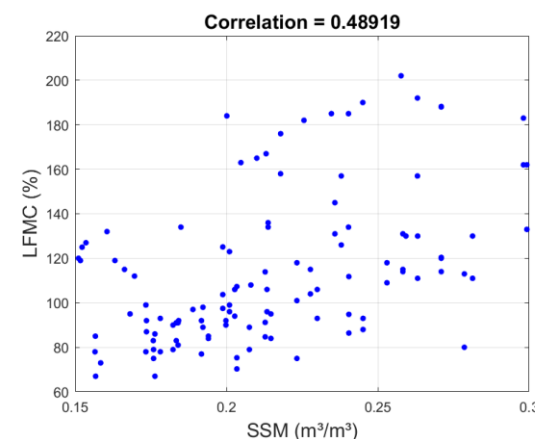
- Understand the drivers of LFM
- Develop a robust model to monitor LFM in Portugal

- Calibration of 405 samples
- Combining **satellite** and **meteorological** data
 - NDVI | MODIS
 - NDII
 - Landcover
 - Drought Code
 - Soil moisture (SSM) 1m depth (ERA5.LAND)
- Estimation of LFM using a multi-variate regression tree

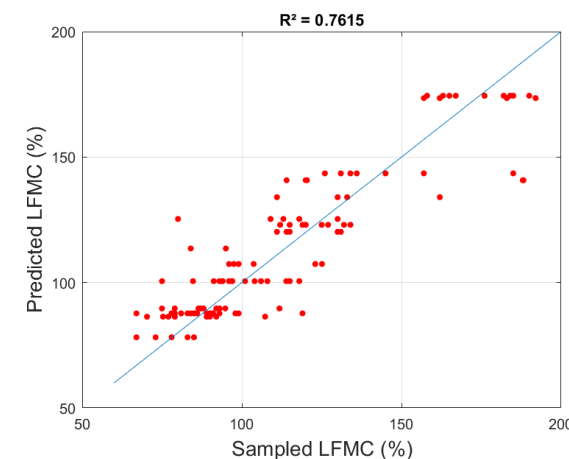
LFMC samples



Estimators



Estimation



Future outcomes

Use LFM to:

- Estimate Rate of Spread
- Predict fire occurrence
- Improve fire simulations