

GUIDELINE FOR THE SYNERGISTIC OPTICAL SENSOR USE FOR STRESS DETECTION IN AGRICULTURE

26.09.2022 I EREKLE CHAKHVASHVILI¹, MIRIAM MACHWITZ², MARIA LUISA BUCHAILLOT³

- 1 Forschungszentrum Jülich, IBG-2
- 2 Luxembourg Institute of Science and Technology (LIST)
- 3 University of Barcelona









Key points of the publication

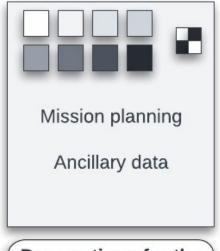
- Disseminate practical, well-structured and easy to read information to wide audience regarding the use of multiple sensors during UAV campaigns
- Target audience: researchers and private sector
- Starting point of the publication is a survey which collected experience from remote sensing experts within SENSECO
- The publication focuses on synergistic sensor use rather than single sensors
- The publication aims to provide user with recommendations and wide array of protocols through citations, as well as lists 'bad examples' of multiple sensor mission planning



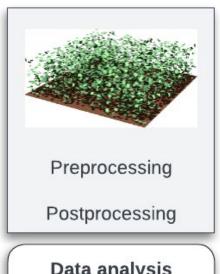
Page 2

Paper structure

Paper consists of three core topics: Preparations for the multiple sensor UAV campagins, Data -pre and post-processing and Bad Examples showcasing the pitfalls of multiple sensor campaign planning



Preparations for the experiment

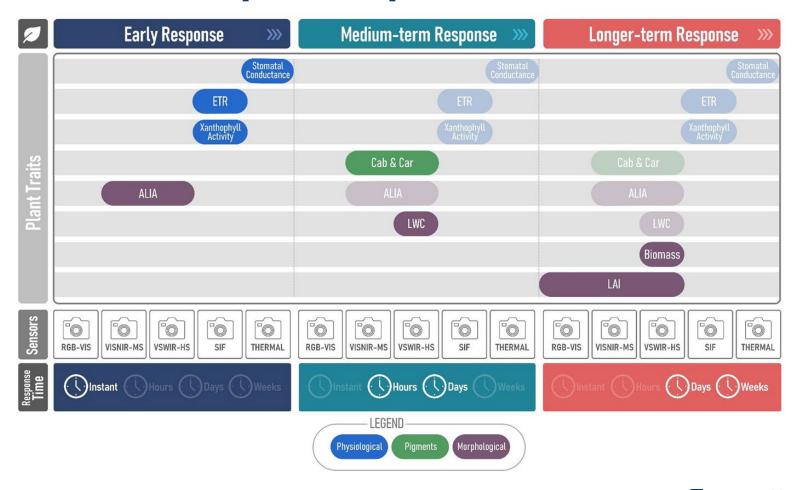


Data analysis



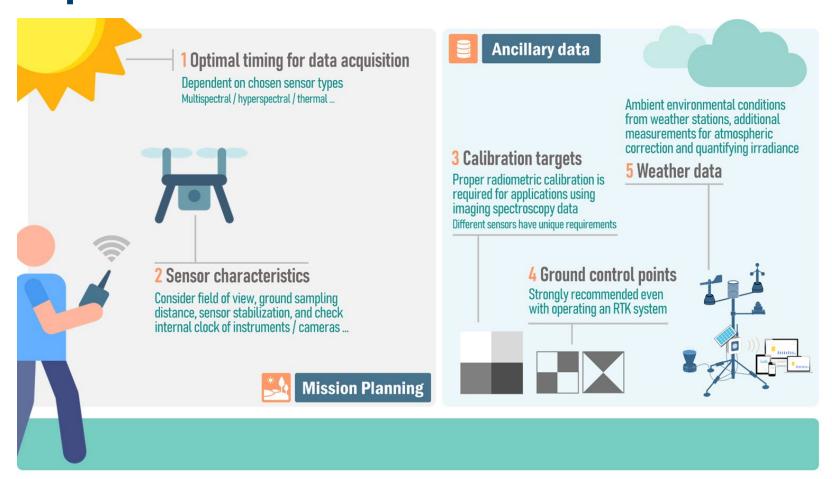


Exemplary figure on which sensors to choose for specific plant trait retrieval





Subsections described in data acquisition chapter





Page 5

Timeline

- → Survey in summer 2022
- → Organisation in chapters (Autumn 2022)
- → regular meetings (Winter 2022/23)
- → Writing workshop in Barcelona and Tel Aviv (Feb 2023, Apr 2023)
- → Finalization, last reviews (May/Jun 2023)
- → Submission: Summer 2023

