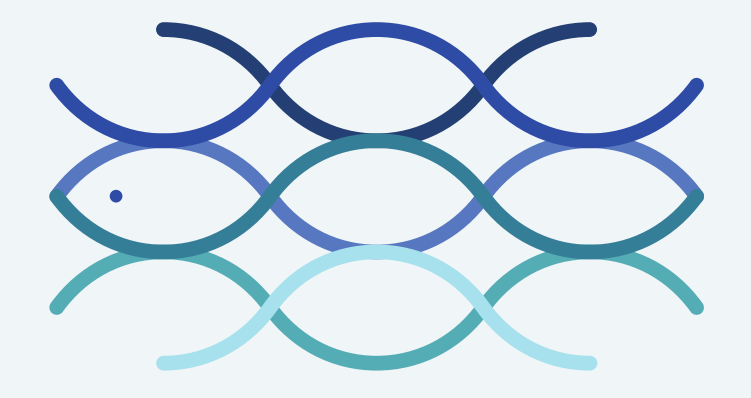


# Water plants

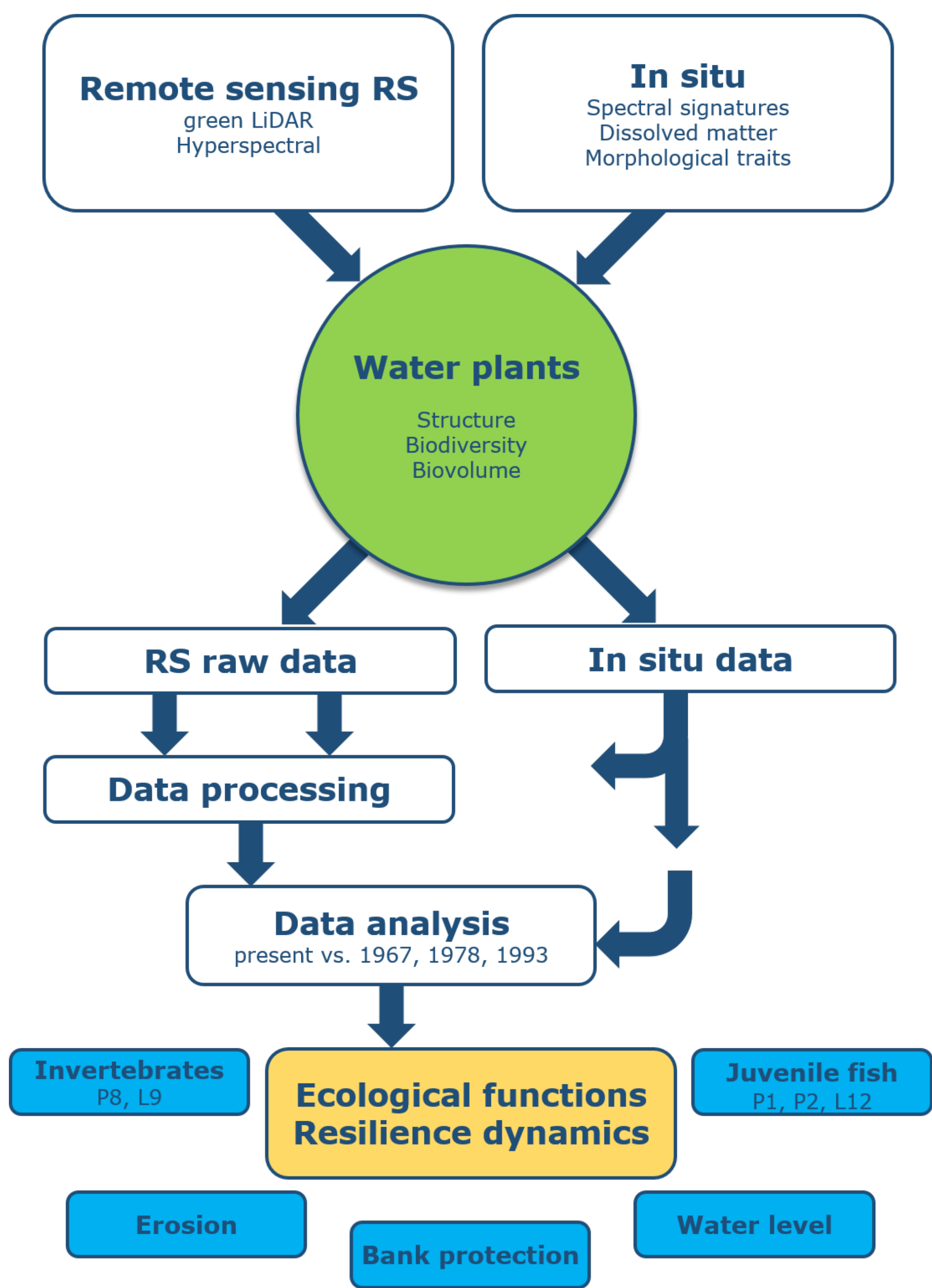
## L11: Resilience of submerged macrophytes in the littoral zone of Lake Constance



SeeWandel

Leben im Bodensee –  
gestern, heute und morgen

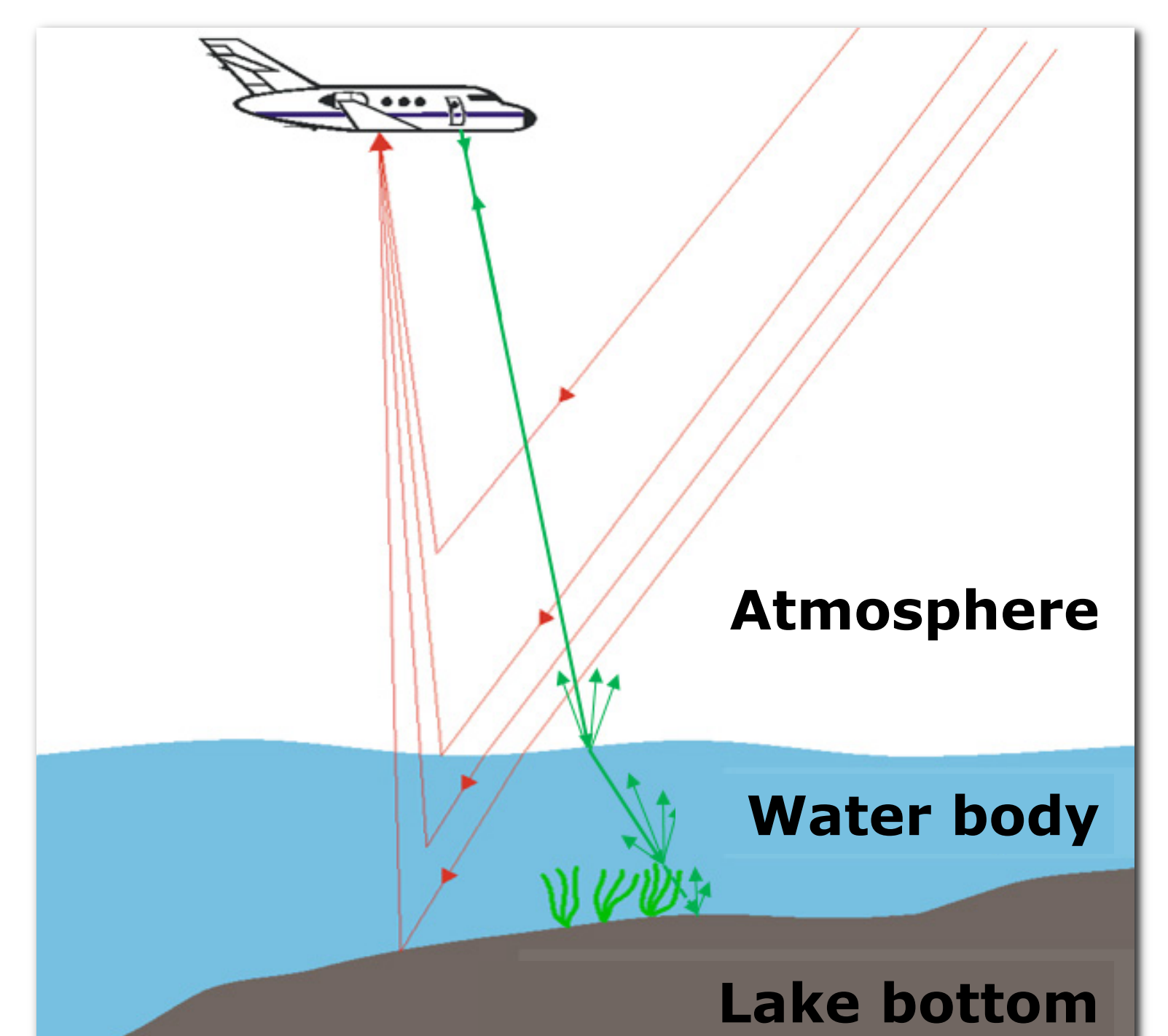
### Project description



- **Bioindication** Water plants are useful indicators for nutrient contamination.
- **Habitat structures** Water plants are an important refugium for fish and invertebrates providing food, shelter and nursery ground.
- **Resilience** Water plant ecosystems and their resistance to disturbance is our field of research.

### Project objectives

- Development of remote sensing methods to map water plants automatically by integrating hyperspectral, green LiDAR and ecological data
- Spatiotemporal dynamics of water plant structures and diversity (comparative data from 1967, 1978 and 1993)
- Analysis of resilience and impact on ecological functions, e.g. habitat quality for juvenile fish and invertebrates (sub-projects P1, P2, P8, L9 and L12)



### Project staff

- Prof. Dr. Klaus Schmieder, *project leader*
- Dipl.-LaÖk Gunnar Franke, *PhD student*
- Dr. Peter Gege, *project partner DLR*
- Holger Bischooping, *project partner BGC*



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