

Xavier Comas

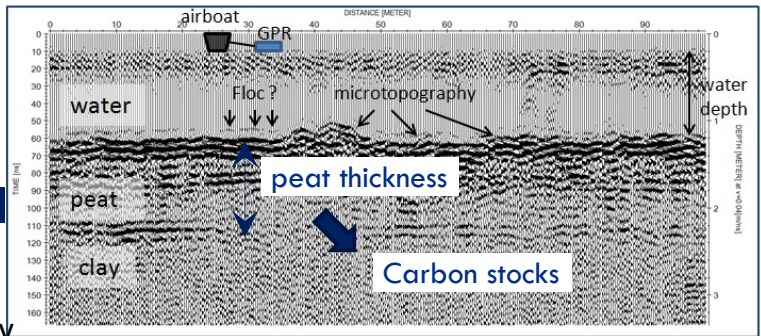


- Position
 - ▣ Associate Professor, Geosciences, FAU
 - ▣ Research affiliate , Carbonate Aquifer Characterization Laboratory (CACL), U.S. Geological Survey
 - ▣ Coordinates the *Environmental Geophysics Lab*
- Environmental Geophysics Lab
 - ▣ *Personnel*: 7 students (4 PhD, 1 MS, and 2 UG students); 1 post-doc ;and 2 research assistants
 - ▣ *Research Interests*: Application of near-surface geophysical methods to: a) peat soils; 2) karst environments; 3) critical zone studies; 4) other (archeological applications and biological studies)
 - ▣ *Methods*: ground penetrating radar (GPR), electrical resistivity imaging (ERI), terrain conductivity, capacitance probes...

Environmental Geophysics Lab

Peatland Geophysics:

- non-invasive geophysical methods to investigate peatland morphology, ecosystem dynamics and biochemical cycles (i.e. carbon).
- Project examples: quantification (refinement) of carbon stocks, spatial and temporal distribution of biogenic gas accumulation in peat soils (i.e. methane and carbon dioxide), modeling of ebullition fluxes and response to sea level rise (i.e. saltwater intrusion).
- Study sites: from tropical to boreal and from local to international, i.e. Maine, Minnesota, Florida (Everglades, Blue Cypress, DWP...), Indonesia, Ecuador, or the UK...



Karst Geophysics:

- Imaging of dissolution features and sinkhole distribution.
- Project examples: porosity determination in limestone sediments, imaging of freshwater-saltwater interface and sea level rise.
- Study sites: from local to international, i.e. Florida (Everglades, Miami-Dade, central Florida), Spain, or Nepal (pending).

