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- USA

**Education**: MS in Physical Geography PhD candidate in Carbonate Sedimentology

## Research areas:

My PhD research centers on characterizing the quantitative attributes of modern-day landscapes, their historical evolution, and the forces that control this evolution. In doing so, I study the fundamental processes and products of what may eventually become the stratigraphic record, hoping to develop quantitative insights into the processes and products of landform evolution, and hence of the development of the stratigraphic record.

For my PhD I have done an extensive field research in Florida Bay, South Florida. The main purpose of the field study is to explore the dynamic behavior of a complex coastal system. The 'big question' that I attempt to answer is "How do sedimentologic processes build or modify geomorphology?" I analyzed aerial photography and satellite imagery, collected sedimentologic, geochemical and hydrodynamic data and integrated this in a sediment dynamics model.

I also have a big interest in morphometric studies in general and in particular in (carbonate) tidal creek networks. I study the tidal creek systems on Andros' island in the Bahamas and the tidal creek systems in southwest Florida (mainly through remote sensing techniques).

In addition to studying "real' systems, I recreated tidal creeks in the laboratory (St. Anthony Falls Laboratory in Minneapolis) where I did some experimental modeling work on quantifying four dimensional tidal creek network morphometrics.



Tidal creeks from space, from the air and in the lab