

CICS-MD Science Meeting

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8-1 Satellites, Biodiversity, and Blue Carbon, Oh My! Science to Support Climate Change Mitigation and Adaptation, Coastal Resilience, and Habitat Conservation

Coastal ecosystems, including mangroves, seagrasses, salt marsh, oyster and coral reefs, and beaches and dunes, provide many benefits to coastal communities. Many of these benefits can help reduce the impacts of climate change on coastal communities, particularly carbon sequestration and storage benefits (climate mitigation) and storm and erosion protection (climate adaptation), making coastal communities more resilient in the face of climate change. Better understanding the benefits these ecosystems provide, and better valuing their services, will help inform coastal policies by providing key information about trade-offs to support better coastal decision making in order to develop more resilient coastal communities. In this presentation I will present an overview of my scientific and policy research aimed at improving coastal resilience to climate change focused on the following topics: coastal blue carbon, natural and hybrid infrastructure, and biodiversity and ecosystem services.