B25C - Coastal Wetland Carbon and Nitrogen Cycles: Recent Advances in Measurements, Modeling, and Syntheses II Poster

Tuesday, 14 December 2021

17:00 - 19:00

Convention Center - Poster Hall, D-F

Coastal marshes, mangroves, and seagrass sequester significant amounts of “blue carbon” in soils, sediments, and biomass. They have potential as a negative emissions technology. With the increasing policy focus on climate change mitigation, we need to understand and accurately predict wetland carbon processes. Complex interactions of climate, land use, sea level, nitrogen pollution, and human management regulate the strength of the carbon sink and the greenhouse gas balance (including CO2, CH4, and N2O). Our ability to measure and model vertical and lateral exchanges, as well as the soil and sediment processes, at the land-ocean interface is limited. We aim to bring together researchers from various disciplines to discuss coastal carbon and nitrogen pools and fluxes, and their roles in global biogeochemical cycling and climate change mitigation. We also aim to report advances in eddy flux, lateral flux, field experiments, remote sensing, modeling, and synthesis that support coastal wetland carbon accounting.

Type

Poster

Index Terms

Ask a question or comment on this session (not intended for technical support questions).

Have a question or comment? Enter it here.

21 Papers

B25C-1453
The Mangrove Microbiome—Bacterial underpinning of blue carbon storage on the south coast of China
Sean Crowe

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B25C-1454
Variations in Sedimentary Microbial Communities and Biogeochemical Cycles Along Natural Salinity Gradients in Pristine Versus Impacted Tidal Rivers
Aaron Martinez

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CANCELLED

B25C-1455
Mangroves at the Edge: Water and Energy Fluxes in Hot Deserts Tidal Ecosystems of the Arabian Gulf
Augustine Nwokoye

Convention Center - Poster Hall, D-F

CANCELLED

B25C-1456
Carbon dioxide Uptake Fluxes in Coastal Salt Marshes Reveal Ecological Similitudes and Environmental Regimes
Mohammed T. Zaki

Convention Center - Poster Hall, D-F

B25C-1457
Carbon Flux in a Semi-Arid Mangrove Ecosystem in Magdalena Bay, B.C.S Mexico
Josediego Uribe Horta

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B25C-1458
Comparative Vegetation History, Sea Level Change, and Human Impact in Housatonic and Connecticut River Marshes with Linkages to Long Island Sound
Dorothy M Peteet

Convention Center - Poster Hall, D-F

B25C-1459
Continuous, Automated CO_2, CH_4, and N_2O Fluxes from Tidal Salt Marsh Soils: A Snapshot
Margaret Capooci

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B25C-1460
Digital Hemispherical Photography based LAI estimate detects higher underestimation of Radiative Transfer Model extracted LAI in a mangrove forest site, India
Somnath Paramanik

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B25C-1461
Eco-evolutionary responses of *Schoenoplectus americanus* carbon sequestration under global environmental change
Helena S Kleiner

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B25C-1462
Estimation of tidal marsh blue carbon storage using lidar-derived geomorphic tools
Bonnie Turek

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CANCELLED

B25C-1463
Hot Spots and Hot Moments of Wetland Methane Emissions in the San Francisco Bay – Sacramento San Joaquin River Delta: Detection and Prediction with a Data-Driven Model
Gracie Pearsall

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B25C-1464
Investigating CO_2 and CH_4 Fluxes Across a Heterogeneous Restored Tidal Salt Marsh in the South San Francisco Bay, California, Using Eddy Covariance, Chamber, and Porewater Measurements
Julie Shahan

Convention Center - Poster Hall, D-F

B25C-1465
Methane and Carbon Dioxide Fluxes in a Temperate Salt Marsh: Comparisons Between Plot, Ecosystem and Component Measurements
Andrew Hill

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B25C-1466
Methane and Nitrous Oxide Emissions to the Atmosphere are Low from Two Temperate Seagrass Dominated Ecosystems
Alia Al-Haj

Convention Center - Poster Hall, D-F

B25C-1467
Organic Carbon Burial in Mangrove-Salt Marsh Ecotones of Apalachicola Bay, Florida: the Role of Reactive Iron
Prakhin Assavapanuvat

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B25C-1468
Present-day organic carbon accumulation rates in the Louisiana coastal wetlands
Jose Silvestre

Convention Center - Poster Hall, D-F

B25C-1469
Quantifying Potential Coastal Carbon Sinks of Louisiana's Habitats
Bingqing Liu

Convention Center - Poster Hall, D-F

B25C-1470
Representing coastal wetland vegetation responses to salinity in Earth system models
Sophia LaFond-Hudson

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B25C-1471
Response of organic matter to short-term failure of monsoon: An insight into the carbon and nitrogen cycle in a hypersaline lagoon.
Santrupta Samantaray

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B25C-1472
Seagrass Blue Carbon Mapping using Open Sentinel-2 Data and Cloud Computing in support of the Nationally Determined Contributions of The Bahamas
Alina Blume

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B25C-1473
Spatial and Vertical Patterns of Soil Organic Matter in the Salt Marshes of the Venice Lagoon (Italy)
Alice Puppin

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Category: Biogeochemistry (terrestrial and marine)

Section: Biogeosciences

Neighborhoods: 3. Earth Covering

Type: Poster

Cross-Listed: H - Hydrology

Cross-Listed: GH - GeoHealth

Cross-Listed: GC - Global Environmental Change

Cross-Listed: A - Atmospheric Sciences