WebCAT Workshop
Exploring Applications, Opportunities and Challenges
to Using webcams for Environmental Monitoring
November 14-15, 2018 | Charleston, SC

**Purpose:** Understand and document the current uses of webcam data, as well as challenges and best practices associated with utilizing camera data for environmental monitoring.

**Location:** All meetings are open and located in the Emerald Salon One room at the Charleston Marriott (170 Lockwood Boulevard, Charleston, SC 29403).

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**WEDNESDAY, NOVEMBER 14, 2018**

<table>
<thead>
<tr>
<th>TIME</th>
<th>ACTIVITY</th>
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<tbody>
<tr>
<td>7:30 - 8:00 AM</td>
<td>Registration and Coffee (Provided)</td>
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8:00 - 8:45 AM  **Welcome and Opening**

*Outcome:* Participants will understand why webcam data are useful to coastal environmental monitoring, what to expect from workshop, and why their participation is important.

*Speakers:* Debra Hernandez, SECOORA
            Chrissa Waite and Bethney Ward (Facilitators)

8:45 - 9:15 AM  **WebCAT Overview**

*Outcome:* Participants will be informed of the funding, time range, and geography of the WebCAT project. In addition, Axiom Data Science will discuss experiences related to data management and how they set up the WebCAT tool for viewing webcam footage.

*Speakers:* Greg Dusek, NOAA National Ocean Service
            Dave Foster, Axiom Data Science

9:15 - 12:00 PM **Current Applications**

*Outcome:* Participants will receive an overview from experts in the field on the current inventory of current coastal environmental monitoring (operational and research) use cases for webcam footage.

- Coastal Morphology - Katherine Brodie, U.S. Army Engineer Research & Development Center
- Hydrodynamics/Rip Currents - Greg Dusek, NOAA National Ocean Service
● Hydrodynamics/Human Use - Ben Freeston, Surfline
● Operational Weather Forecasting - Steve Rowley, Science Operations Officer at National Weather Service Charleston
● Ecological - Dwayne Porter, University of South Carolina Arnold School of Public Health
● Challenges - Mark Willis, Surfline

12:00 - 12:45 PM  Lunch (Provided)
Location: Blue Topaz Room

12:45 - 1:30 PM  Panel on Webcam Setup
Outcome: Participants will understand how to establish a webcam site for their specific use case.
   ● Host acquisition
   ● Placement
   ● Installation

Panelists:
   ● Katherine Brodie, U.S. Army Engineer Research & Development Center
   ● Meg Palmsten, U.S. Naval Research Laboratory
   ● Dennis Murphy, Surfline

1:30 - 1:45 PM  Set Stage for Breakouts Session by Use Type
   ● Beach Morphology/Hydrodynamics
   ● Human Use
   ● Weather
   ● Ecological

1:45 - 2:00 PM  Coffee Break (Provided)

2:00 - 3:30 PM  Data Management Breakout
Outcome: For each use case, participants will discuss data storage and management practices needed to get the most out of the data.

3:30 - 4:30 PM  Report Out from Data Management Breakout

4:30 - 5:00 PM  Set Stage for Day 2

5:00 PM  Adjourn

5:30 - 7:00 PM  Social
Location: Blue Topaz Room (Light appetizers provided. Cash bar.)
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<td>8:00 - 8:15 AM</td>
<td>Welcome and Opening&lt;br&gt;&lt;span style=&quot;font-style: italic;&quot;&gt;Outcome:&lt;/span&gt; Participants will recap what was covered on Day 1 and understand what to expect for Day 2.</td>
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<td>8:15 - 9:15 AM</td>
<td>Data Analysis Breakout&lt;br&gt;&lt;span style=&quot;font-style: italic;&quot;&gt;Outcome:&lt;/span&gt; For each use case, participants will discuss tools and techniques for analysis.</td>
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<td>9:15 - 10:15 AM</td>
<td>Report Out on Data Analysis Breakout</td>
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<tr>
<td>10:15 - 10:30 AM</td>
<td>Coffee Break (Provided)</td>
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<td>10:30 - 11:30 AM</td>
<td>Commonalities &amp; Best Practices&lt;br&gt;&lt;span style=&quot;font-style: italic;&quot;&gt;Outcome:&lt;/span&gt; Based on small group discussion, participants will identify commonalities and best practices associated with applying webcam data across use cases.</td>
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<tr>
<td>11:30 - 12:30 PM</td>
<td>Lunch (Provided)&lt;br&gt;Location: Yellow Topaz Room</td>
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<td>12:30 PM - 1:30 PM</td>
<td>Needs and Gaps&lt;br&gt;&lt;span style=&quot;font-style: italic;&quot;&gt;Outcomes:&lt;/span&gt; Participants will share gaps that prevent the application of webcam data or needs to improve webcam data use for environmental monitoring applications.</td>
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<td>1:30 - 2:30 PM</td>
<td>Next Steps for WebCAT Network&lt;br&gt;&lt;span style=&quot;font-style: italic;&quot;&gt;Outcomes:&lt;/span&gt; Participants will explore additional uses for webcam data, including expanding the network and sharing data.</td>
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