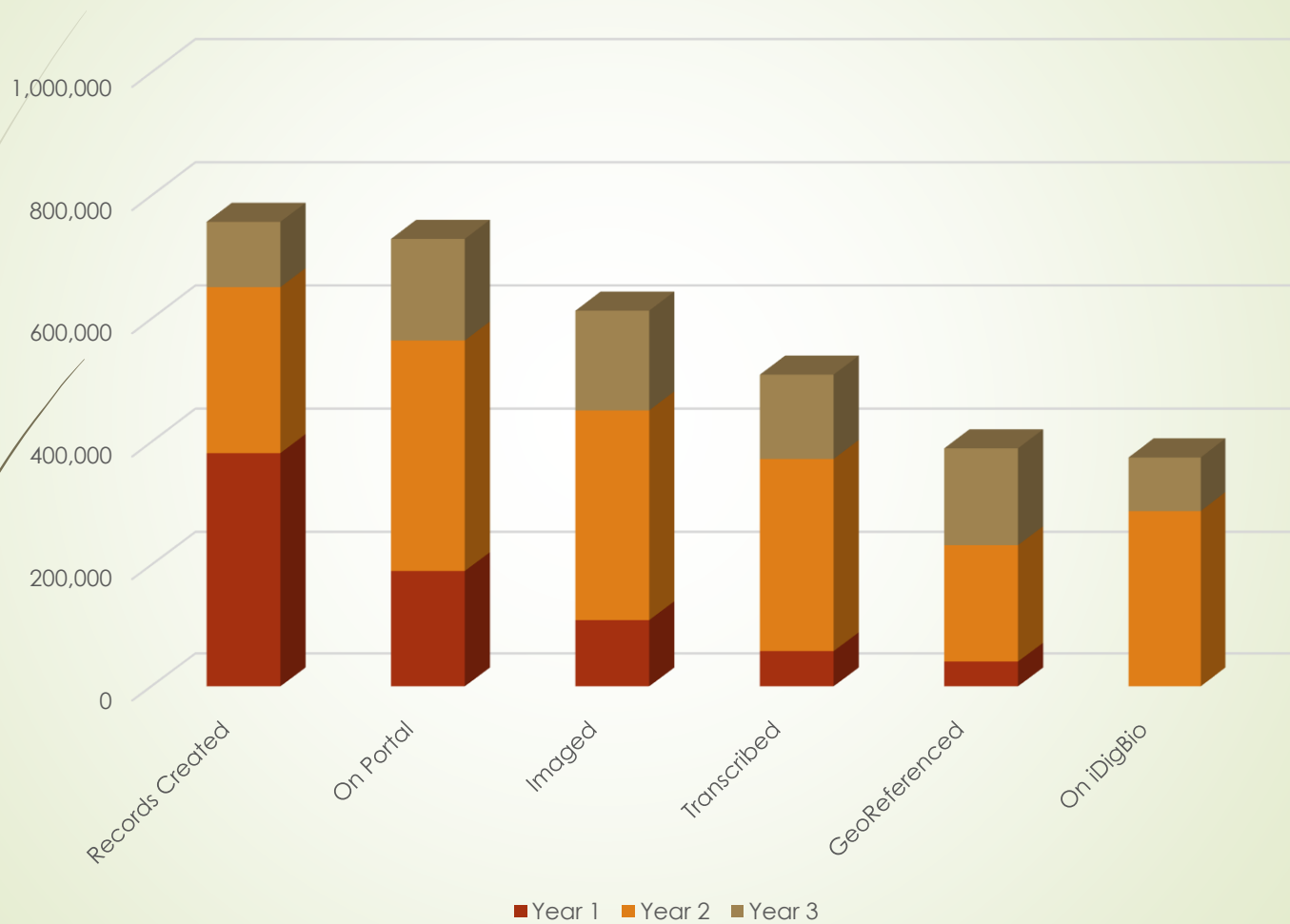


The Macroalgal Herbarium Consortium

Accessing 150 Years of Specimen Data to Understand
Changes in the Marine/Aquatic Environment



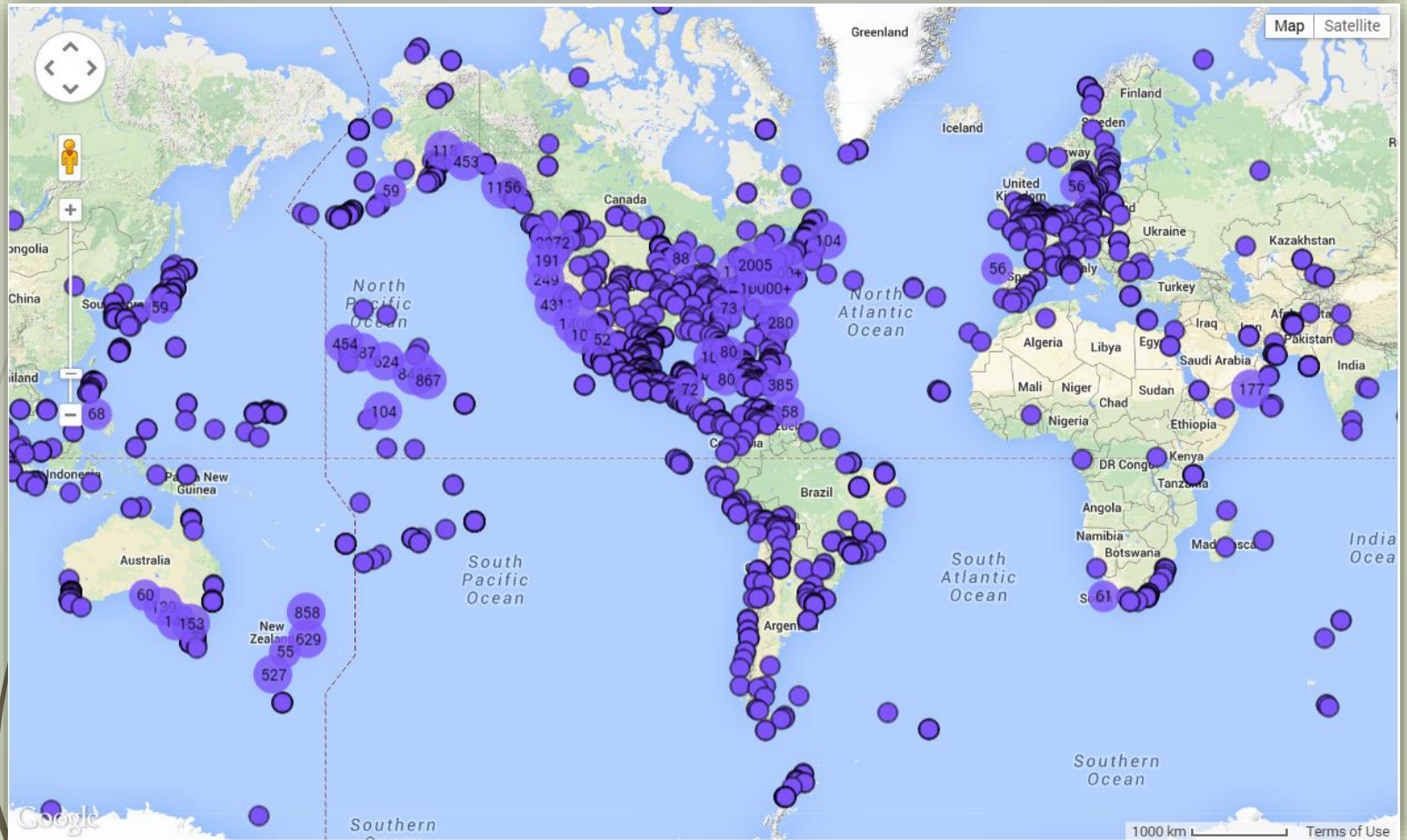
Progress in Digitization Efforts



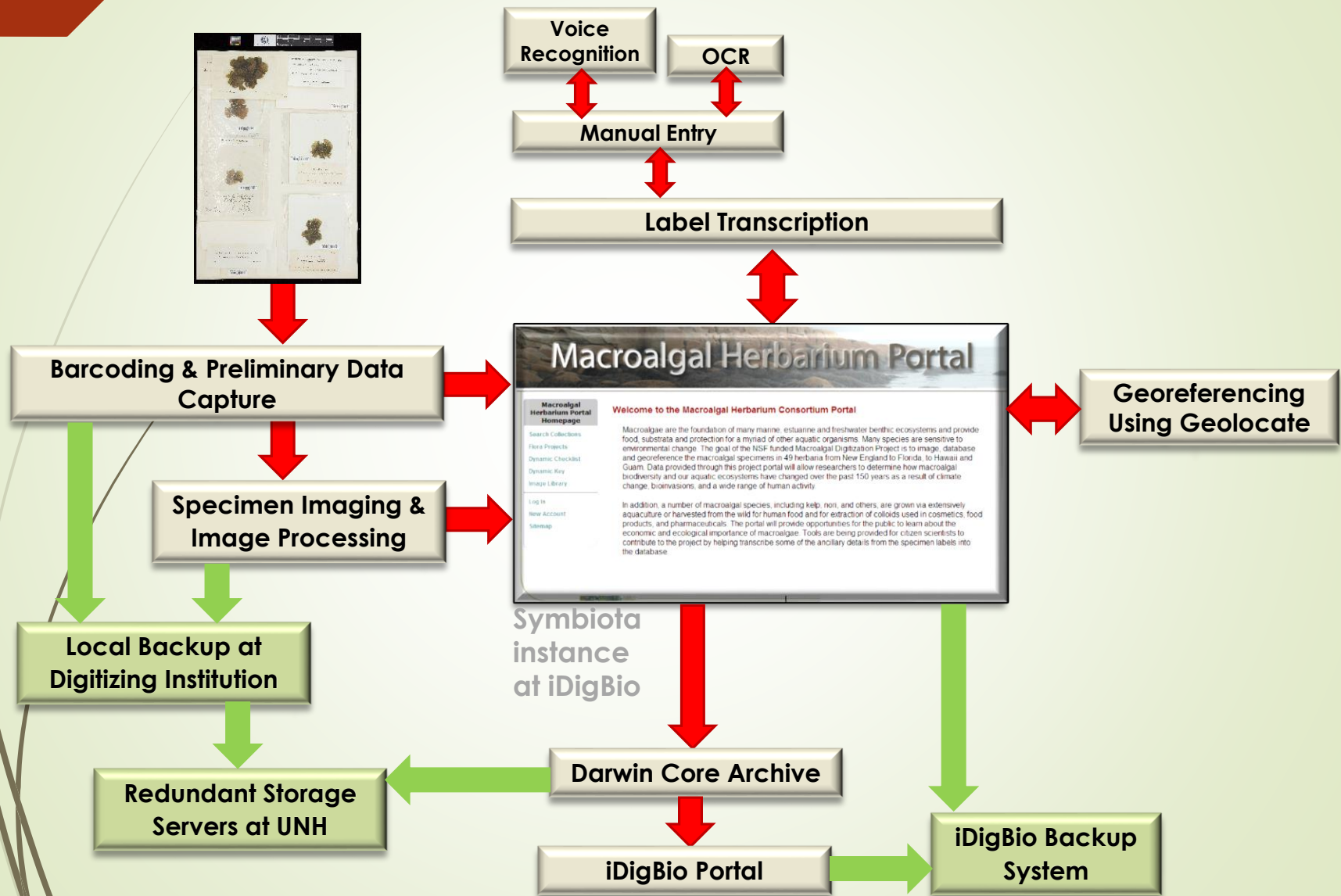
Progress in Digitization Efforts

Digitizing Institution	Start	Collections	Specimens	Percent Complete				
				Records Created	On Portal	Imaged	Transcribed	Geo-referenced
University of New Hampshire	Year 1	10	131,837	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
New York Botanical Garden	Year 1	5	170,130	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
University of North Carolina	Year 1	7	58,027	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
University of Michigan	Year 1	5	95,339	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
University of Washington	Year 1	3	36,098	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
Duke University	Year 1	1	22,014	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
University of Alaska SE	Year 1	1	9,889	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
Bishop Museum	Year 1	1	65,000	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
Field Museum	Year 1	1	48,107	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
Oregon State University	Year 1	1	12,120	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
University of Guam	Year 1	1	13,600	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
University of California - Berkeley	Year 2	9	228,926	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
University of Hawaii	Year 2	1	4,730	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
Harvard University	Year 2	1	150,000	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
Academy of Natural Sciences	Year 3	1	36,595	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
University of Vermont	Year 3	1	3,500	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>	<div style="width: 100%;"></div>
Totals		49	1,085,912	761,693	734,044	624,448	514,476	420,668

Progress in Digitization Efforts

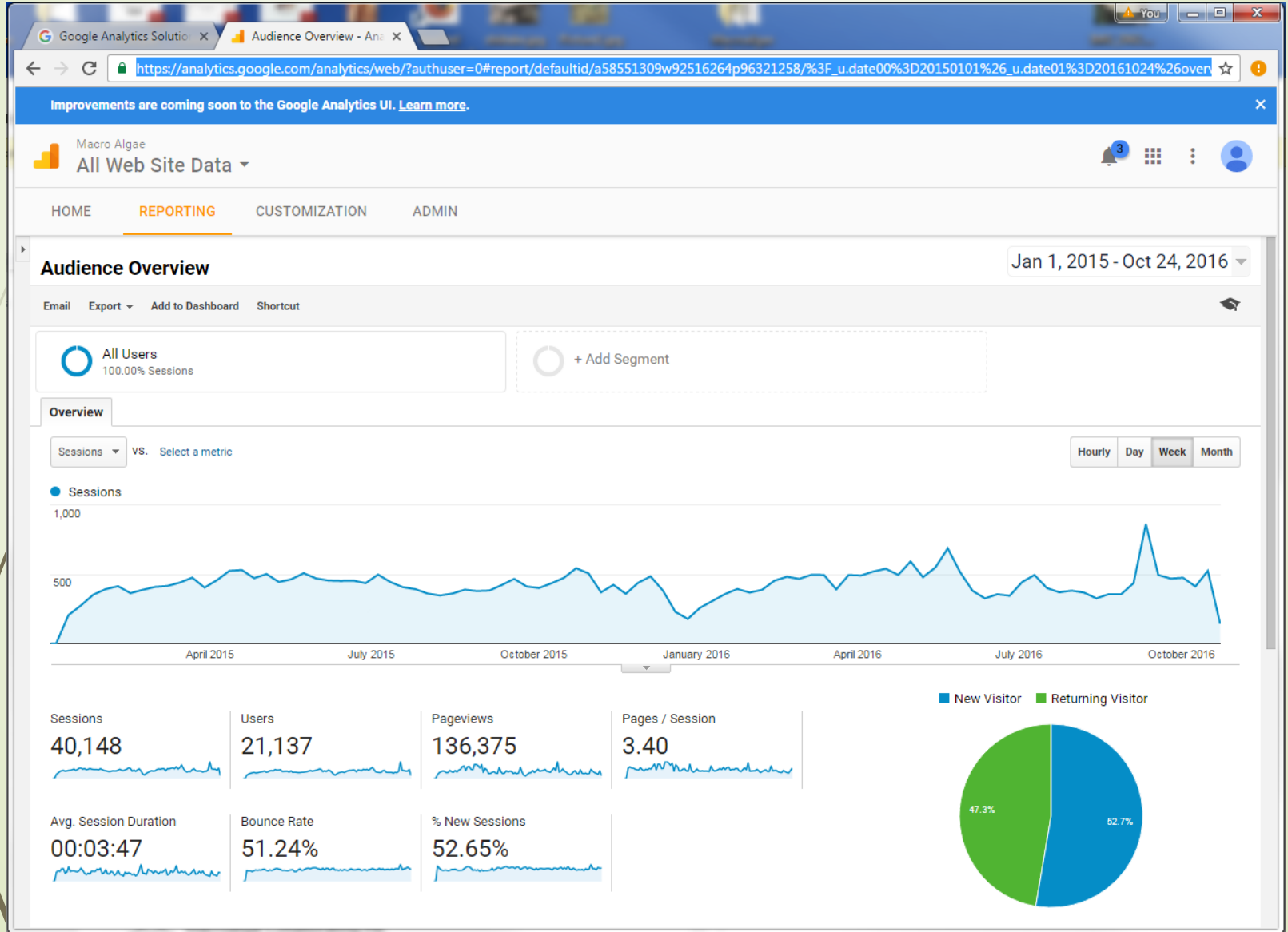


Data Management



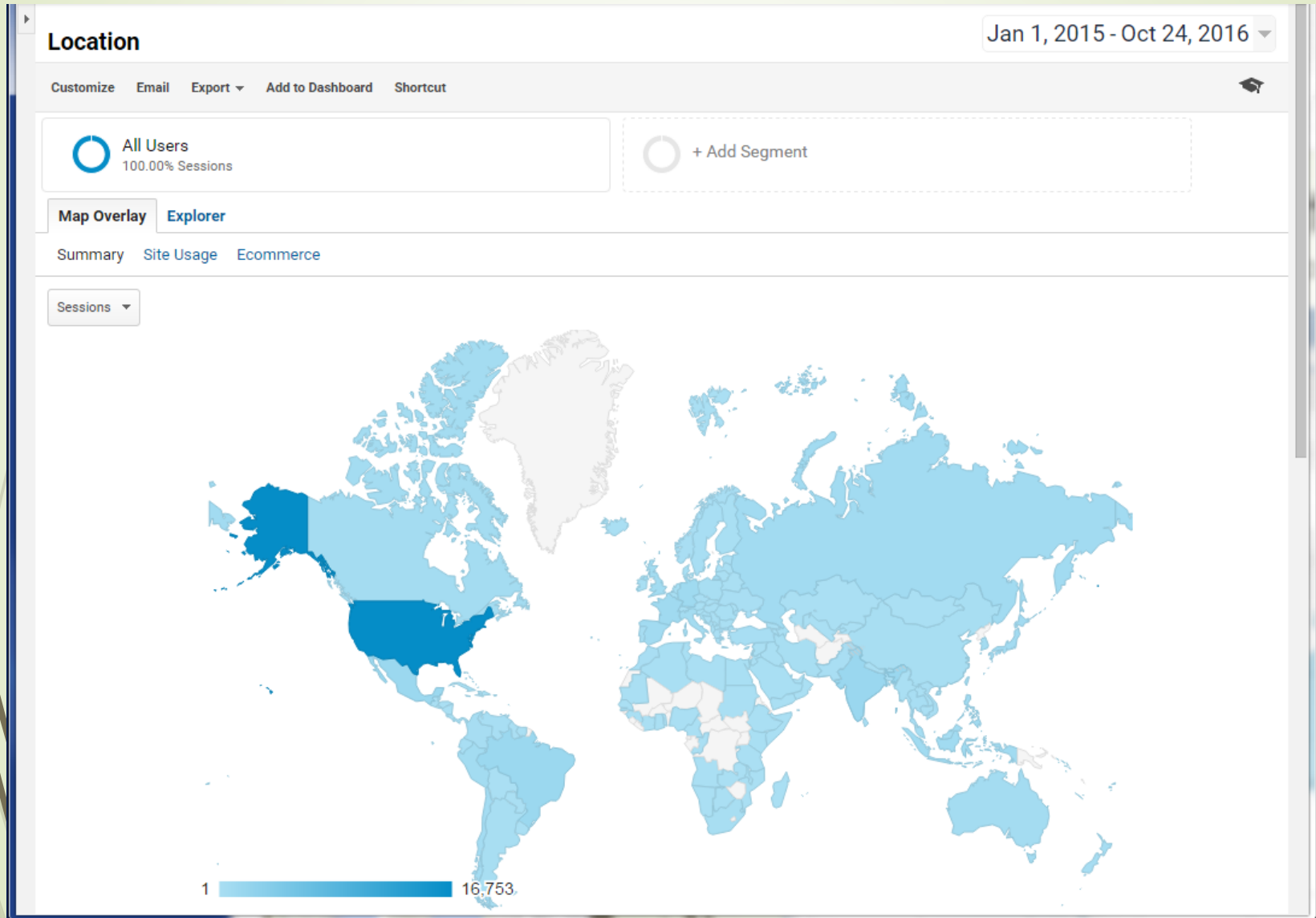
Open Access to Data

➤ Google Analytics for Macroalgae.org



Who is Using the Data?

➤ Google Analytics for Macroalgae.org



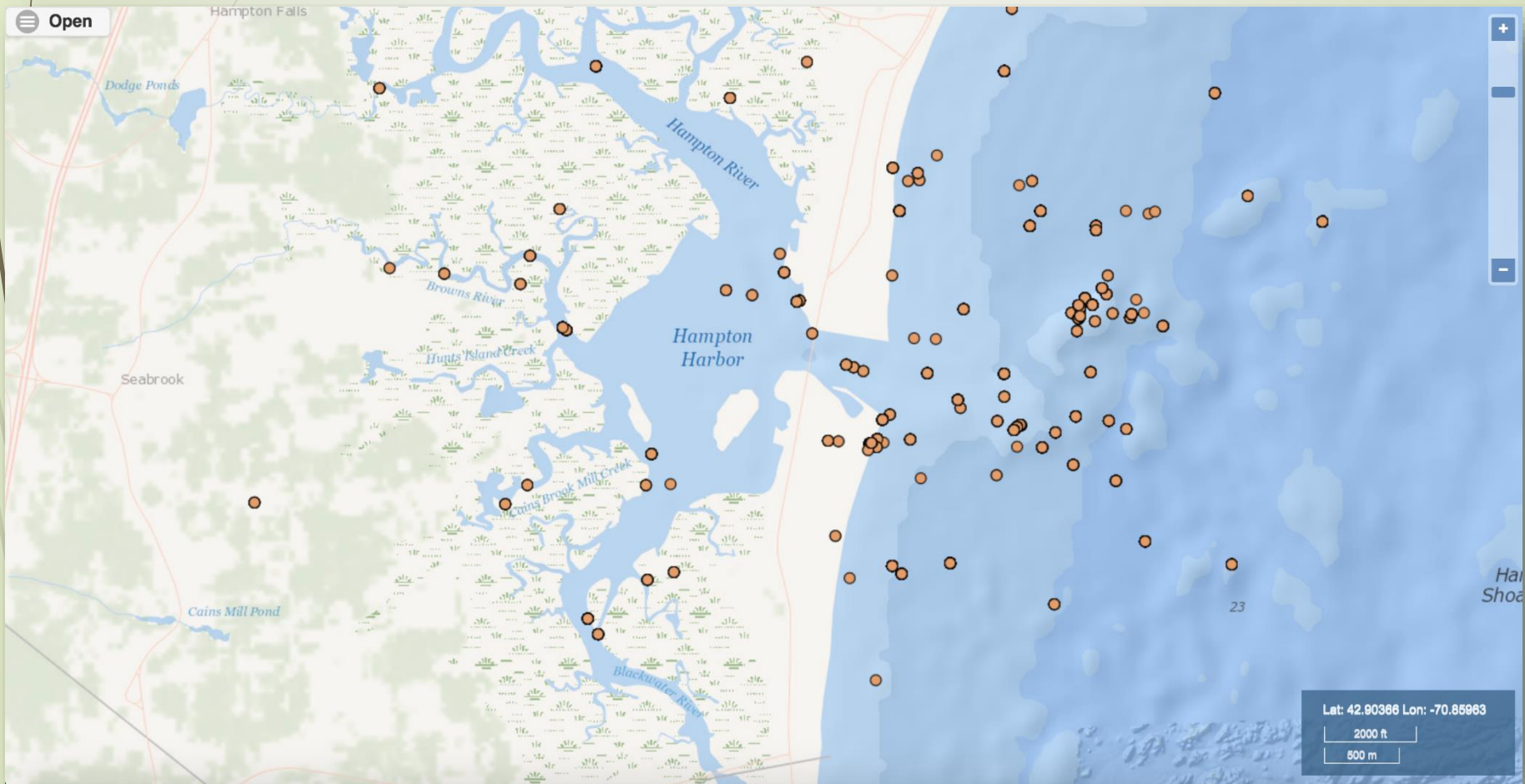


Research Uses of Data

- Education
 - Lab exercises and assignments in aquatic botany courses
 - Field trip preparation (checklists)
- Research
 - Determine when and where a species can be collected
 - Taxonomic studies
 - Biogeographic studies
 - Effects of environmental changes or disturbances on species distribution and community structure
 - Track progression of invasive species and loss/displacement of native species

Research Uses of Data

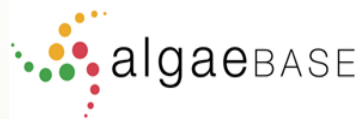
- ▶ Enhancements to the Symbiota Map Search Module



TCN Oversight & Management

- ▶ Training
 - ▶ Online videos and training documents (macroalgae.unh.edu)
 - ▶ Site visits
 - ▶ iDigBio workshops/webinars and online documentation
- ▶ Communication
 - ▶ Primarily eMail (phone / Skype)
 - ▶ In-person meetings of subsets of the TCN at:
 - ▶ SPNHC
 - ▶ Regional, National and International Phycology symposia
 - ▶ iDigBio Workshops
- ▶ Progress Tracking
 - ▶ Periodic progress reports from Digitizing Institutions and Collaborating PI's
 - ▶ Track records/images/transcription/georeferencing on portal

Acknowledgments



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