

[Informatics in Social-Environmental Systems](#) [1]

Submitted by Lindsay.Barbieri on Sat, 2016-10-22 18:53 Friday, January 13, 2017 - 11:00

Event: [Winter Meeting 2017](#) [2]

Session Type: [Breakout](#) [3]

Room Location: [Linden Oak](#) [4]

Expertise Level: [Beginner](#) [5]

Abstract/Agenda:

Integrative research frameworks that couple disciplinary-specific, diversely sourced datasets are key for addressing complex social-environmental issues such as human well-being, climate change, and sustainable development. Working in these complex systems often requires integrating data from a variety of both earth science and social science disciplines. Too often these interdisciplinary collaborations fail to account for the informatics challenges that face researchers attempting to combine their findings.

A major obstacle for social-environmental initiatives is integrating data that are produced by, managed by, and curated for different communities of users. This requires not only innovative methods of collaboration, but also technical infrastructures that enable data interoperability, provide consistent semantic encoding, ensure long-term access and preservation, and establish shared data governance and management protocols.

Many ESIP members understand that accounting for these types of activities is a critical component of successful long-term research cooperation. In this session we will identify key informatics challenges within social-environmental research and initiatives, and seek to draw on ESIP expertise in order to better understand how informatics aspects of social-environmental initiatives can be improved. Results from this session can help to develop a framework that incorporates informatics as a key element for achieving a truly systems and transdisciplinary perspective of social-environmental issues.

Goals of the session: (1) scope the S-E landscape: hear from people working on a variety of collaborative social-environmental systems initiatives (2) identify and synthesize key informatics challenges within S-E initiatives (3) develop or improve on a framework that incorporates informatics in S-E initiatives by drawing on ESIP knowledge and expertise (4) plan goals for S-E Informatics work after session, and situate ESIP within those goals (publication, workshops/testbed, ESIP future and collaboration with clusters, etc.)

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Teaser: framing informatics in social-environmental research

Accepted:

Keywords: [Informatics](#) [13]

[social-environmental systems](#) [14]

[complex systems](#) [15]

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Links

- [1] <https://commons.esipfed.org/node/9504>
- [2] <https://commons.esipfed.org/2017WinterMeeting>
- [3] <https://commons.esipfed.org/session-type/breakout>
- [4] <https://commons.esipfed.org/taxonomy/term/2611>
- [5] <https://commons.esipfed.org/taxonomy/term/260>
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- [14] <https://commons.esipfed.org/taxonomy/term/2456>
- [15] <https://commons.esipfed.org/taxonomy/term/2457>