

Soybean Rust Aerobiology Model: 2005

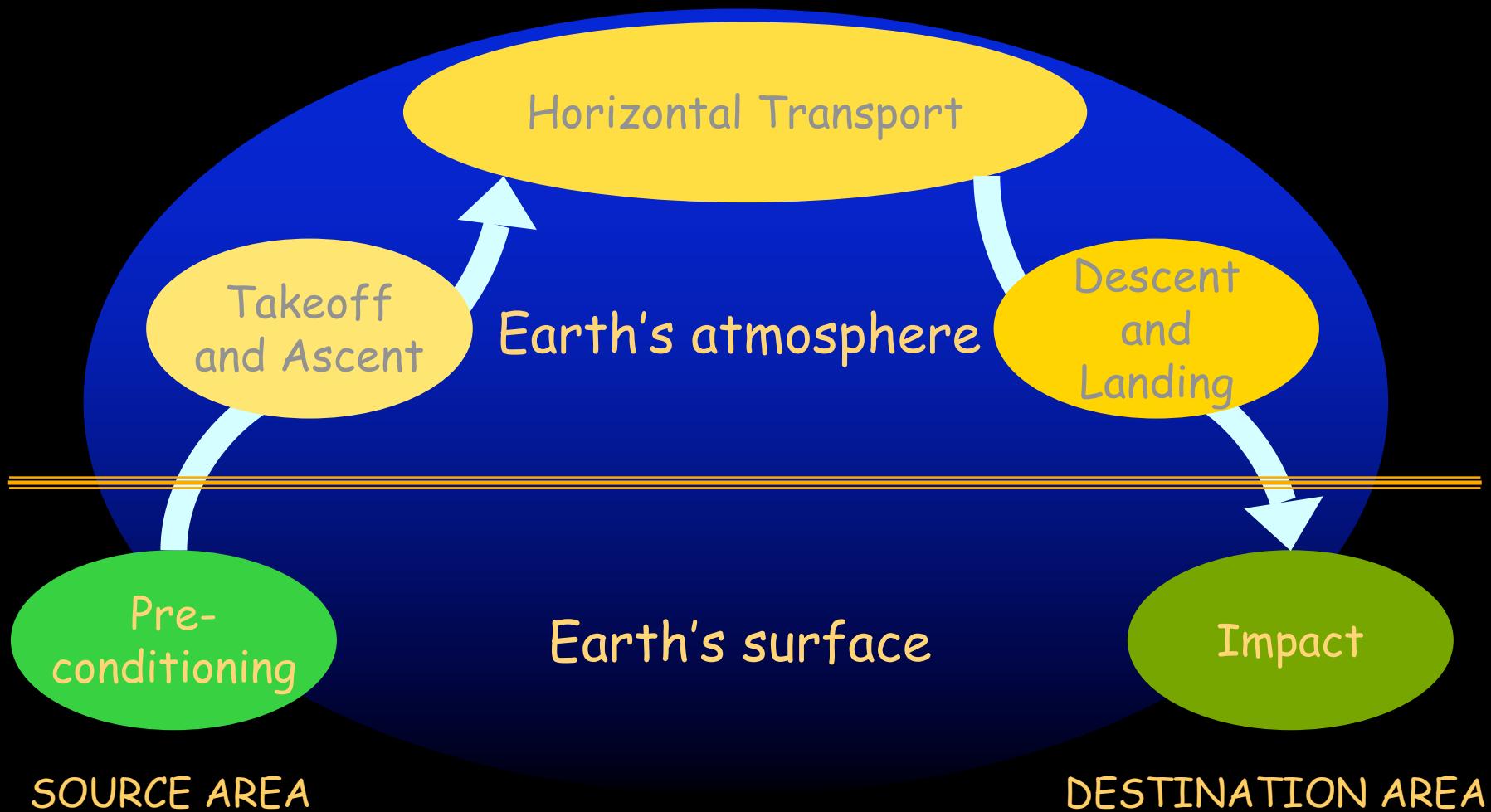
Scott Isard (Penn State)

Joe Russo (ZedX)

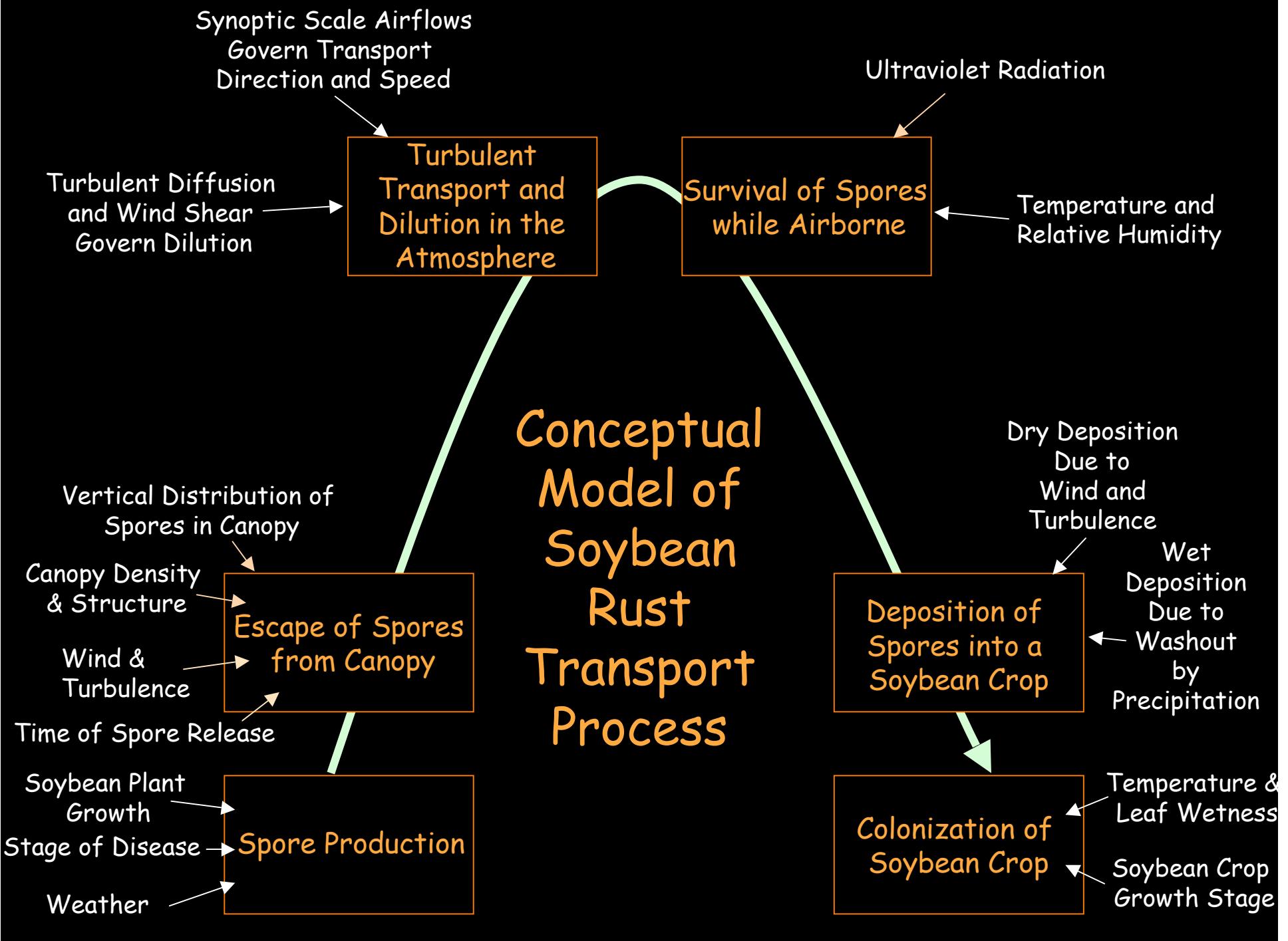
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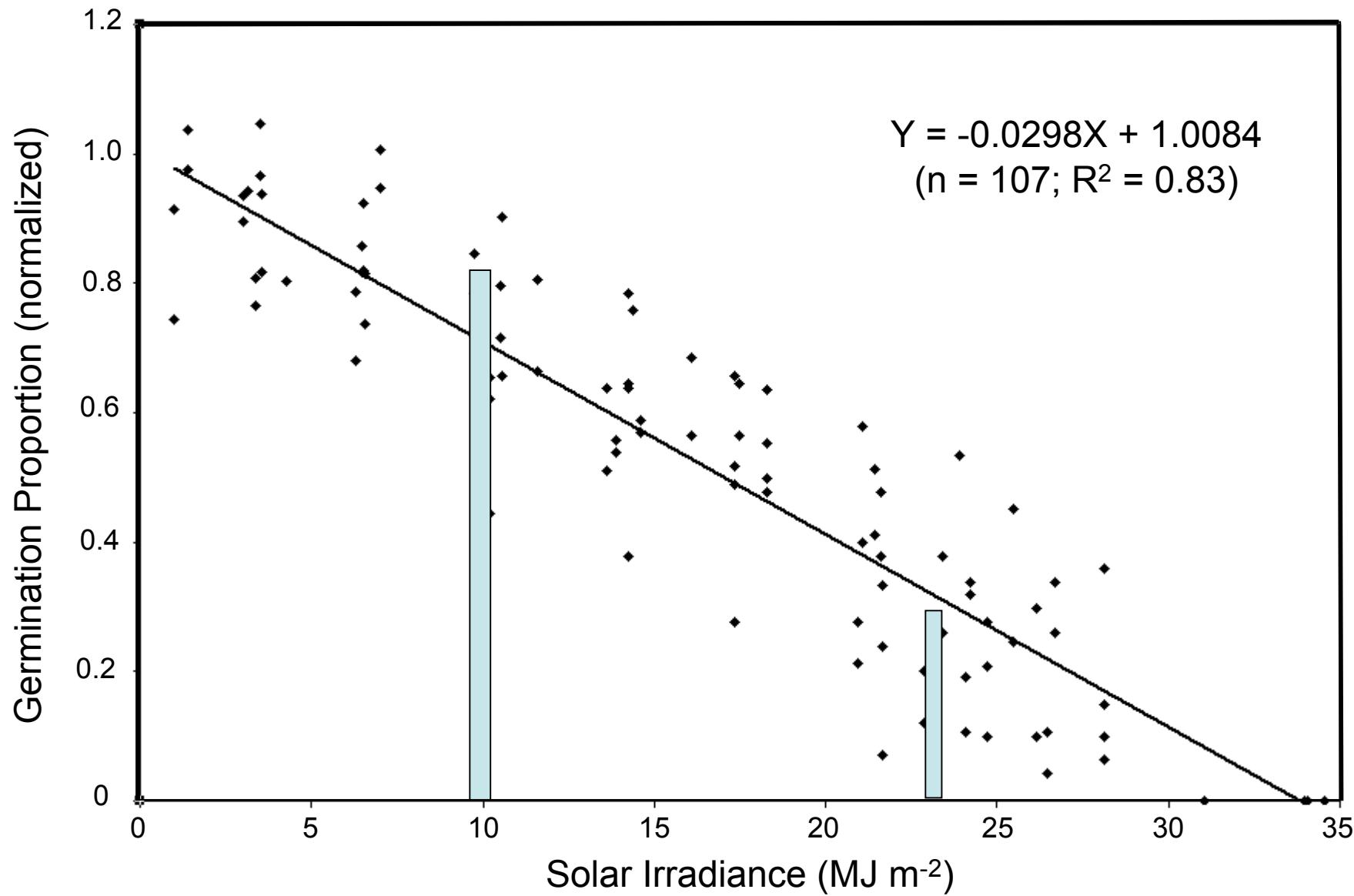
Jeff Grimm (ZedX)

Aerobiota Transport Process Model

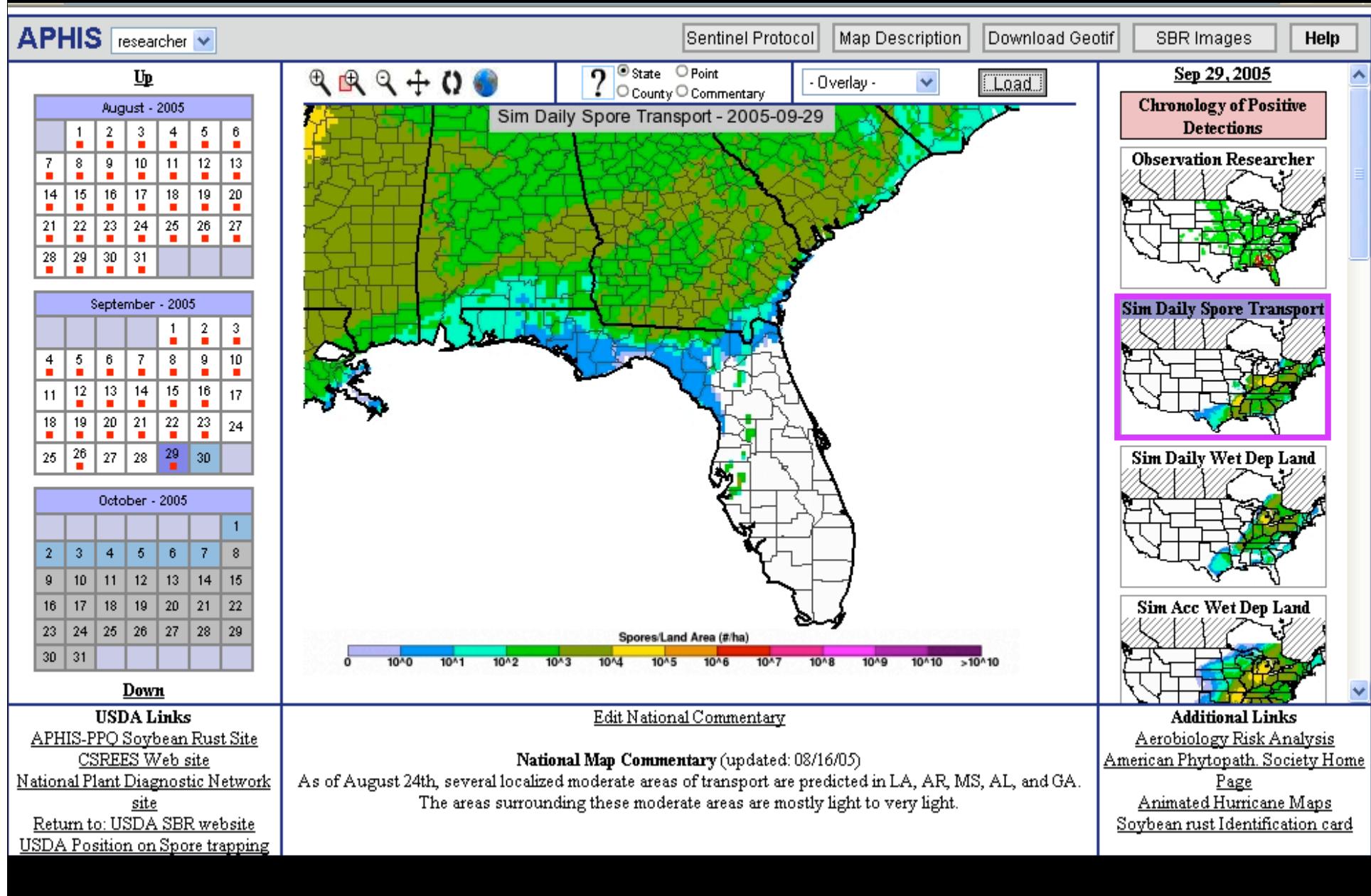


Conceptual Model of Soybean Rust Transport Process

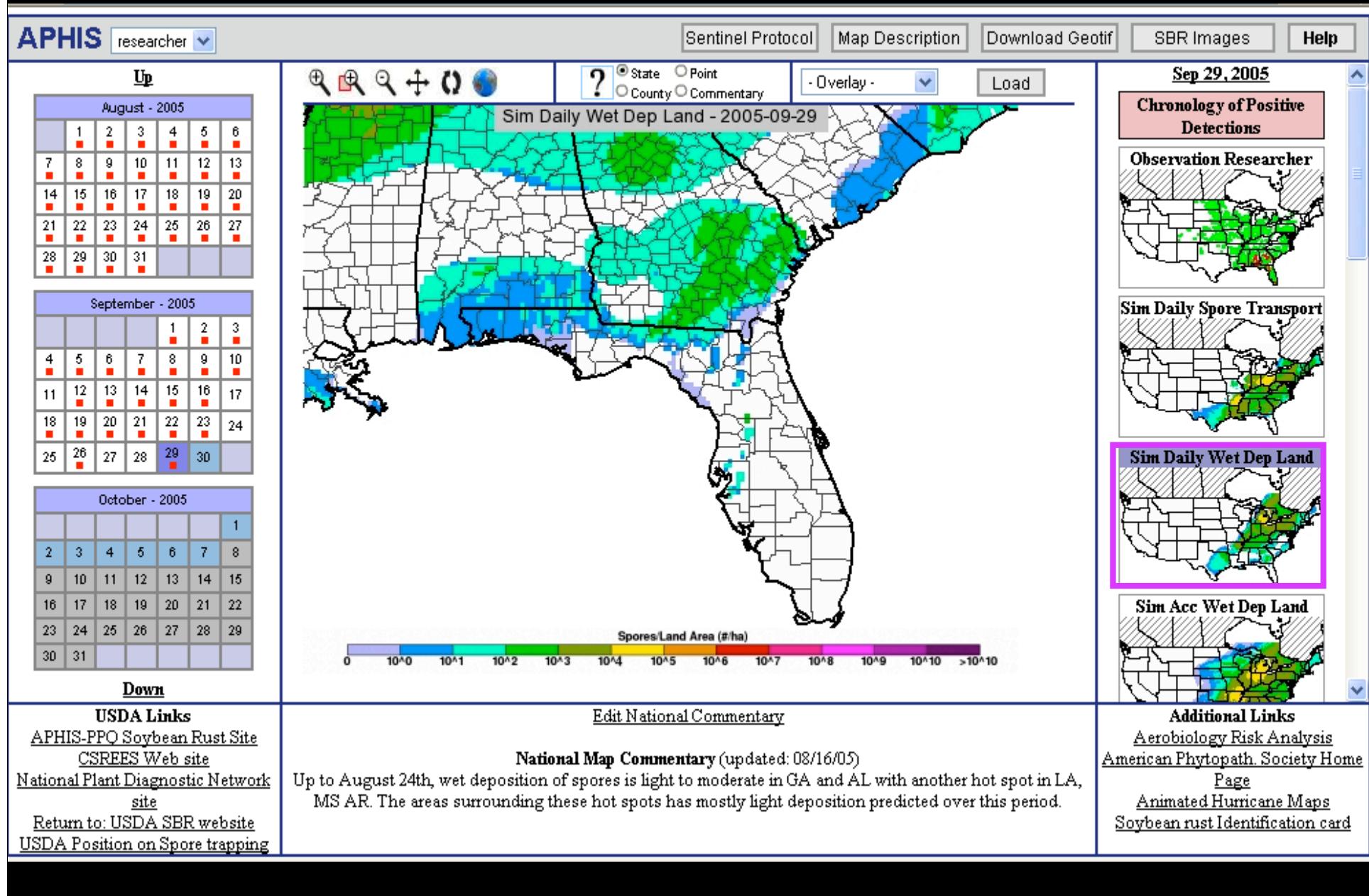




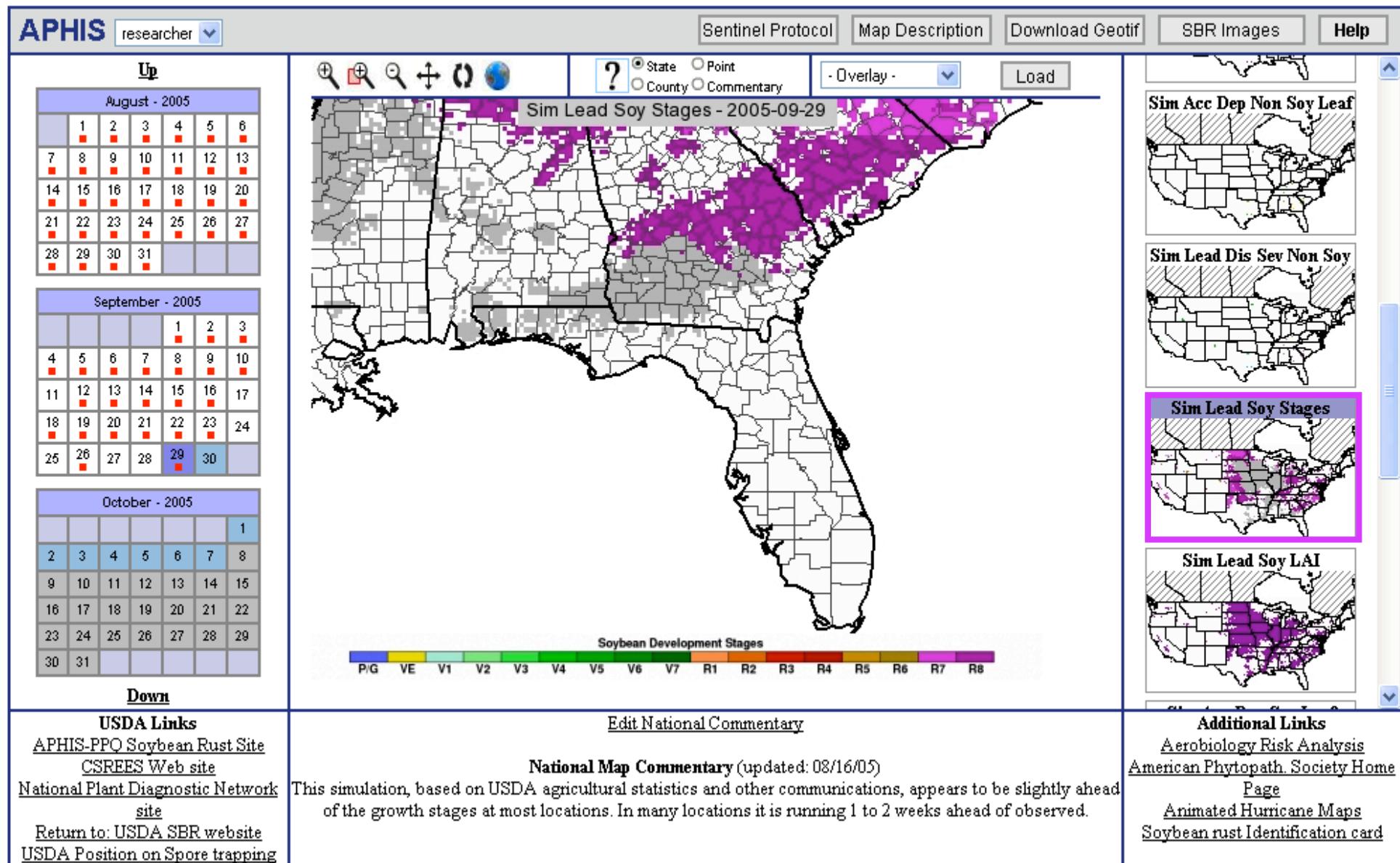
Modeling: Information for Specialists, Researchers, and Administrators



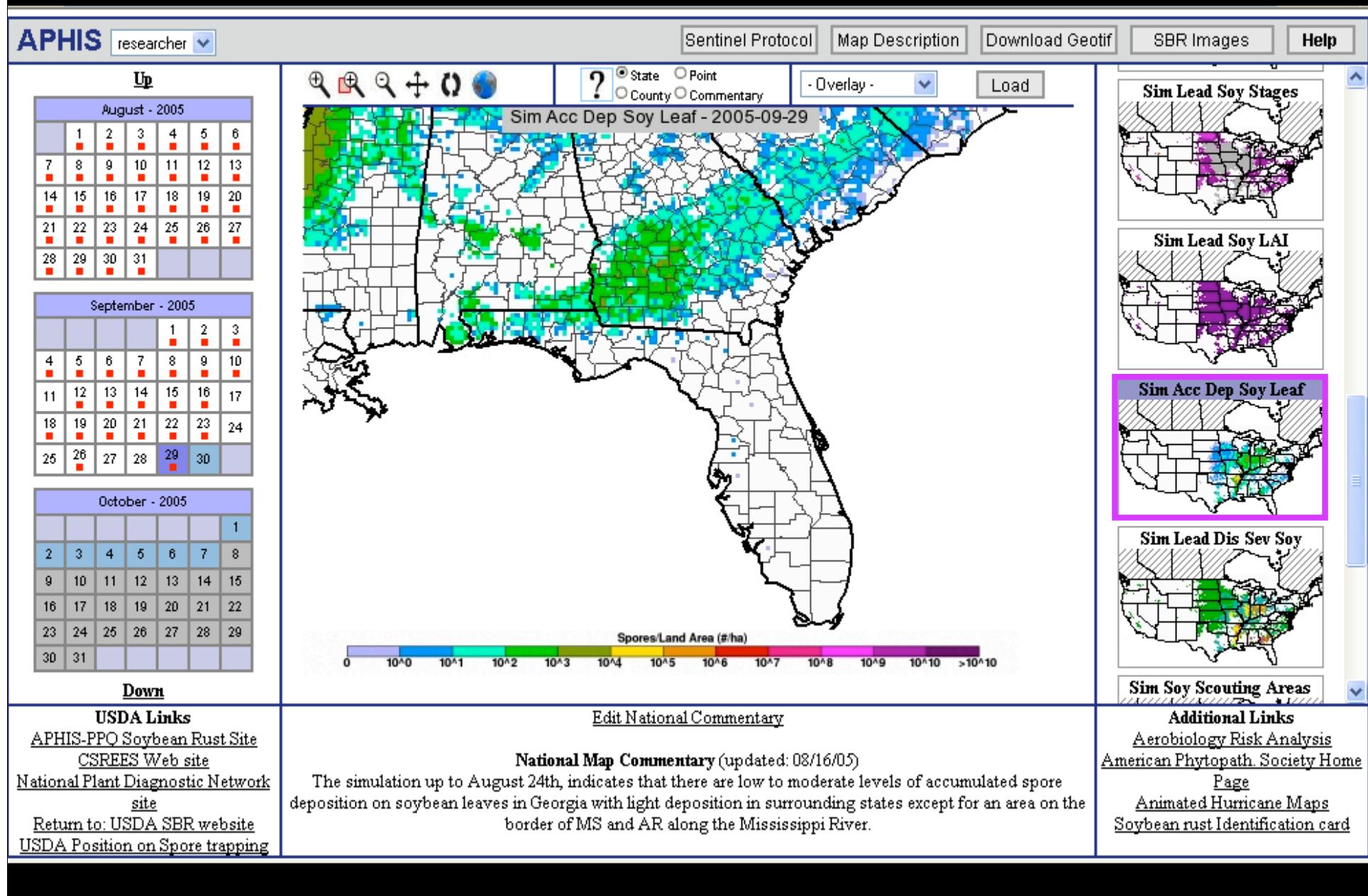
Modeling: Information for Specialists, Researchers, and Administrators



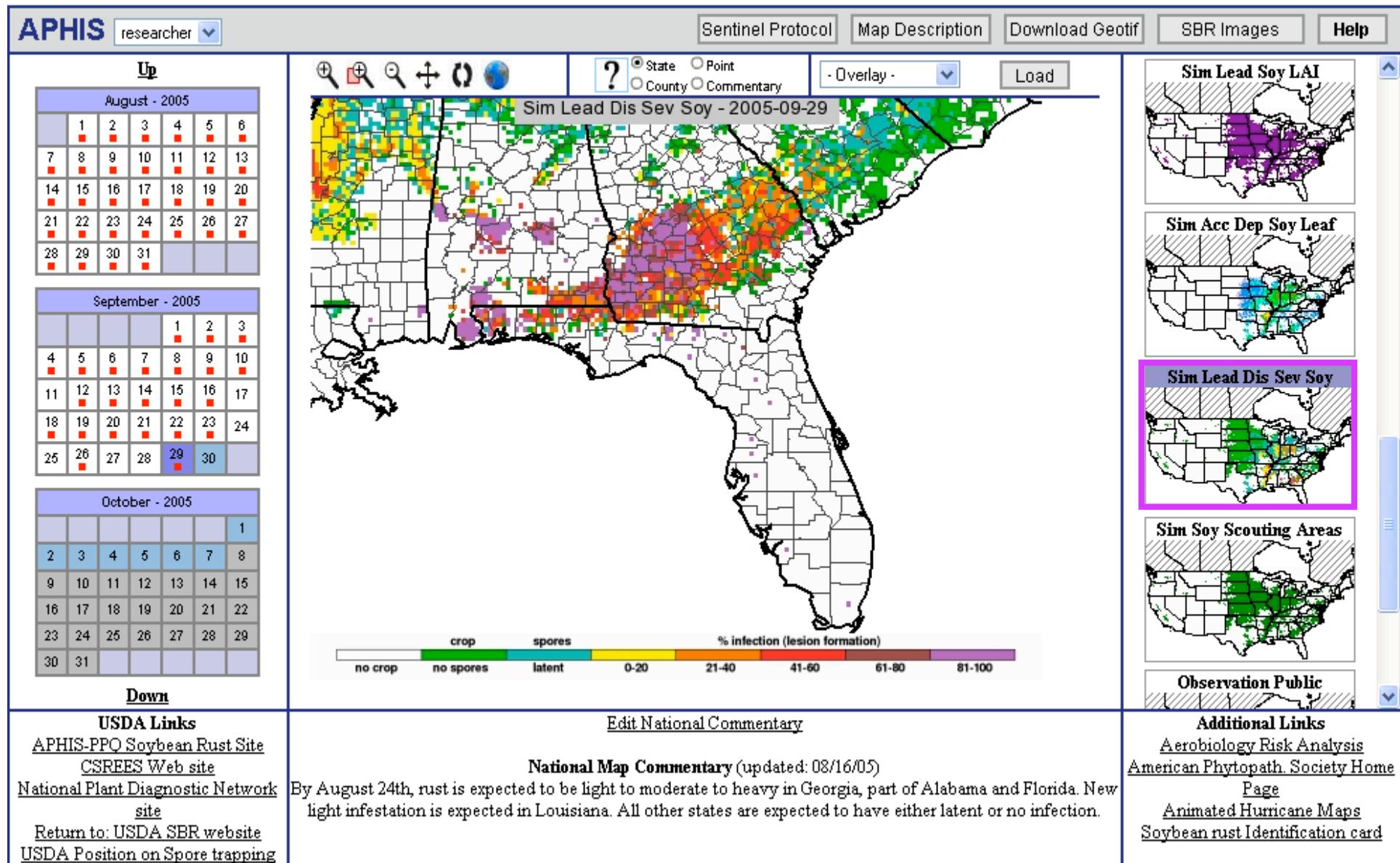
Modeling: Information for Specialists, Researchers, and Administrators



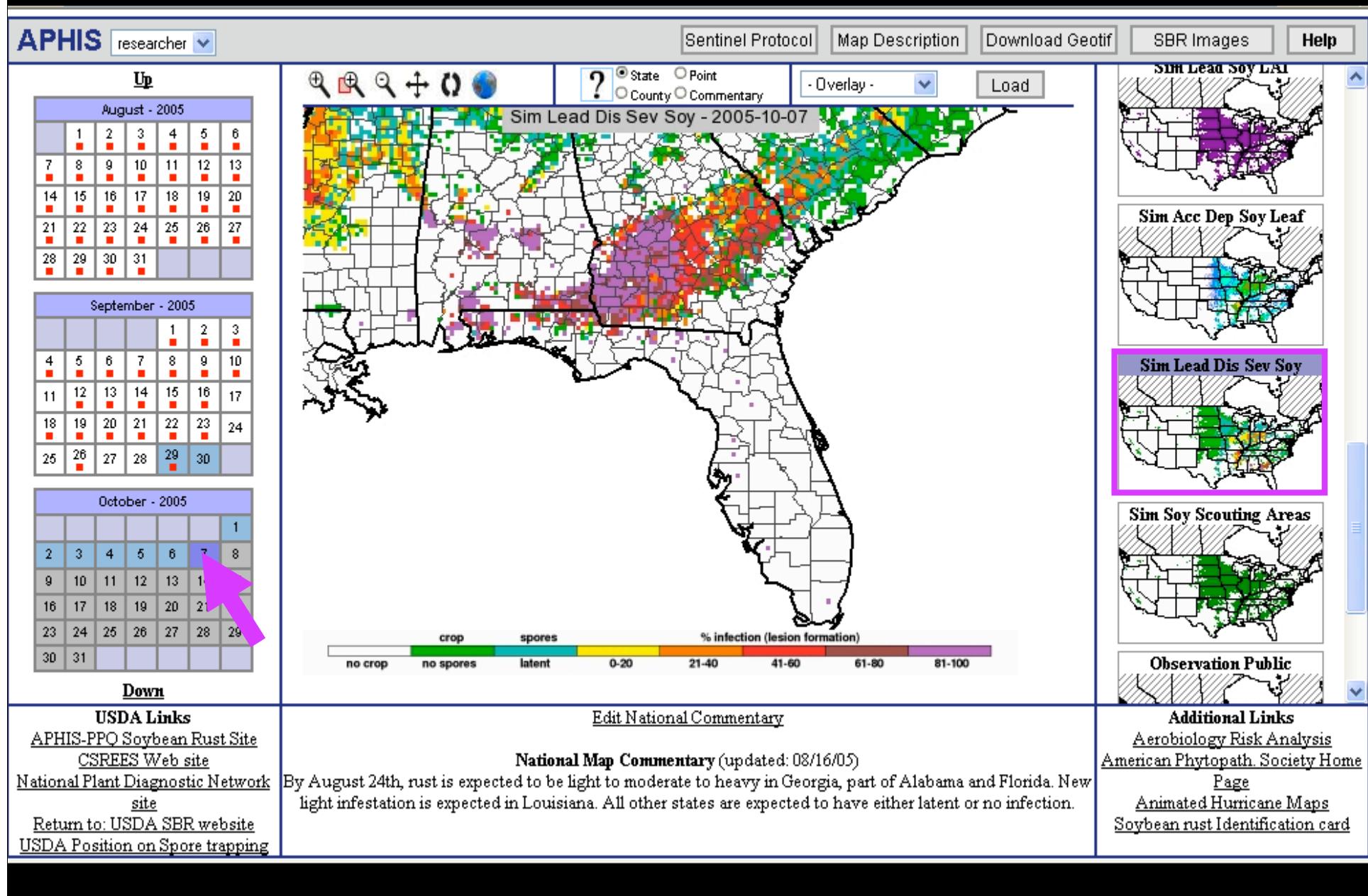
Modeling: Information for Specialists, Researchers, and Administrators



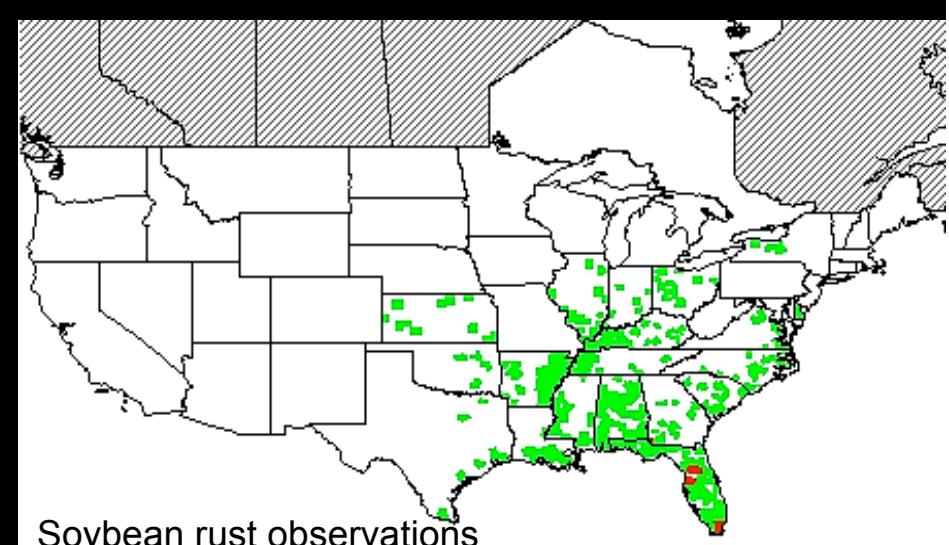
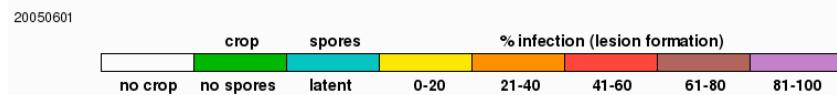
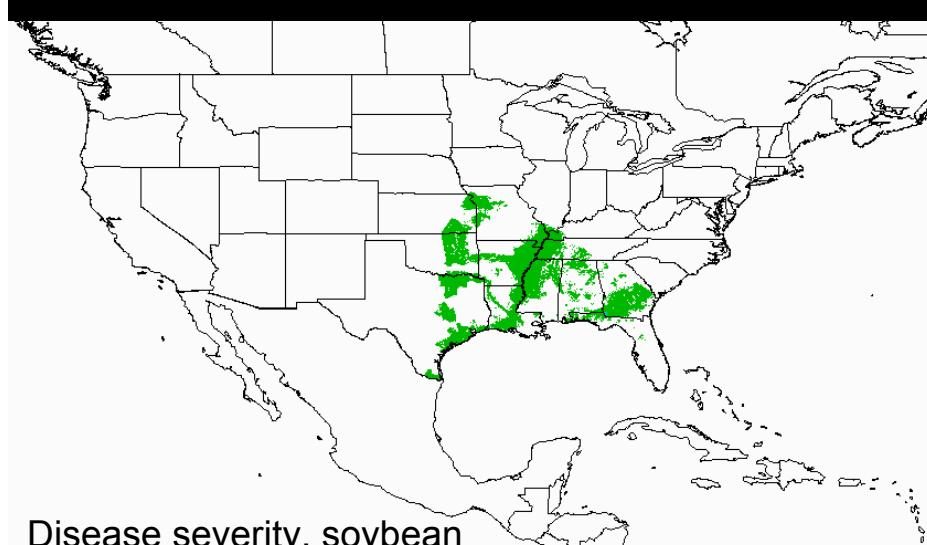
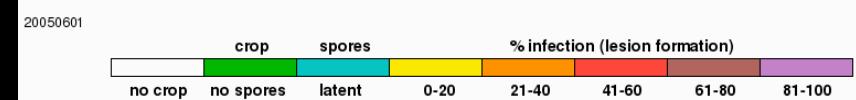
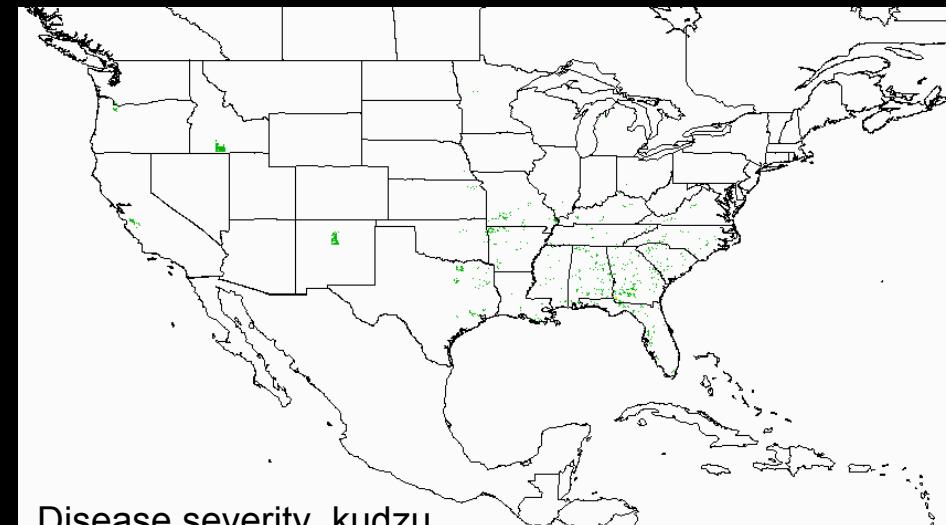
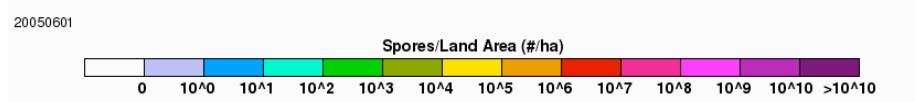
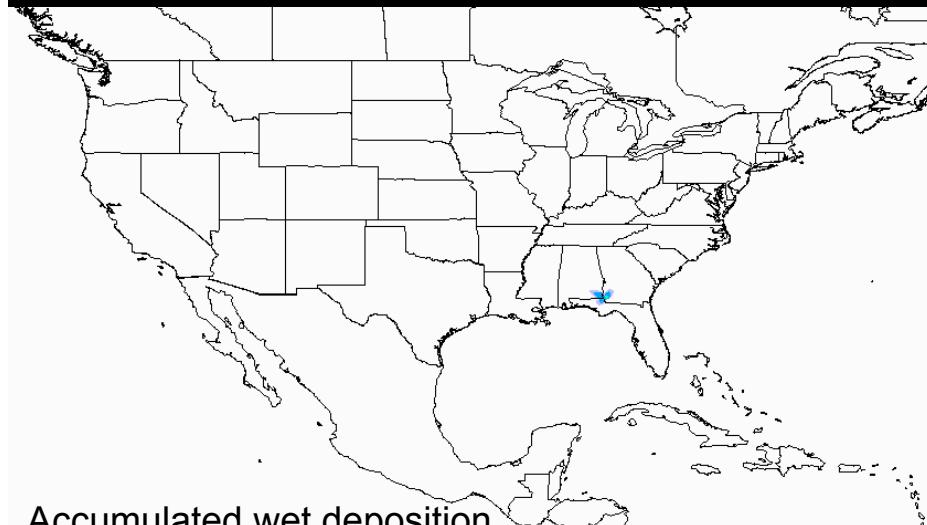
Modeling: Information for Specialists, Researchers, and Administrators



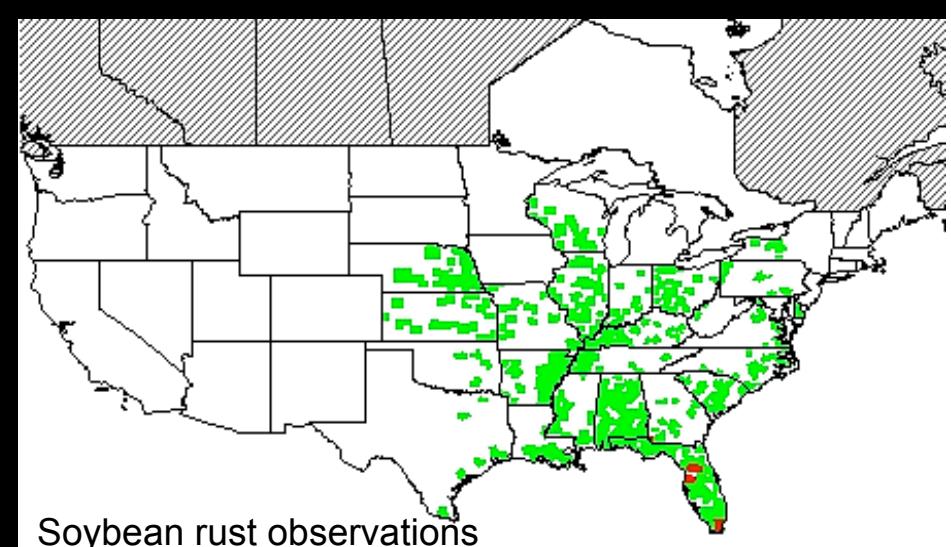
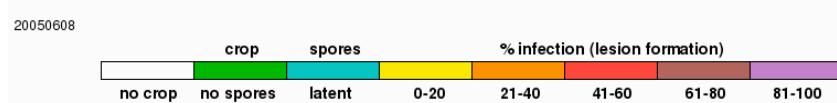
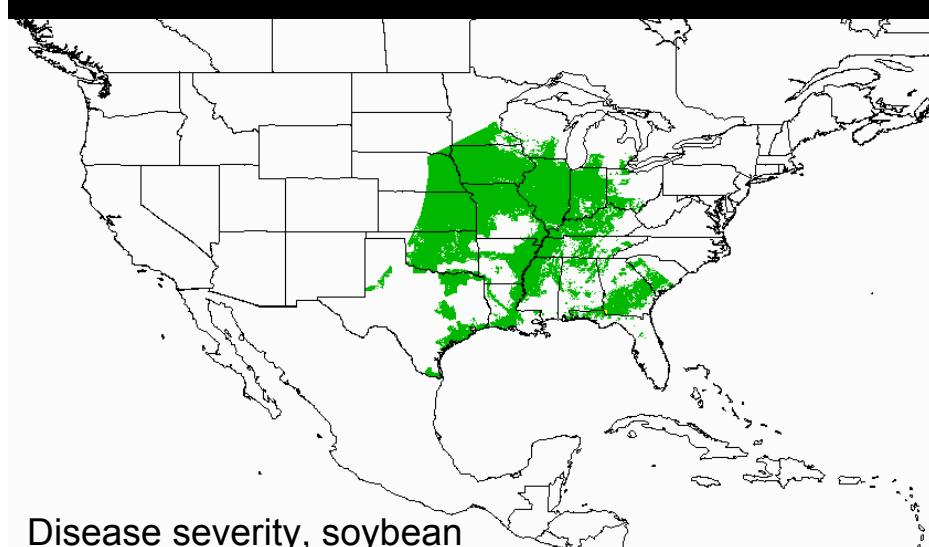
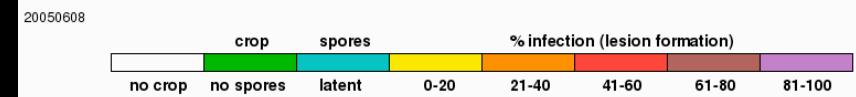
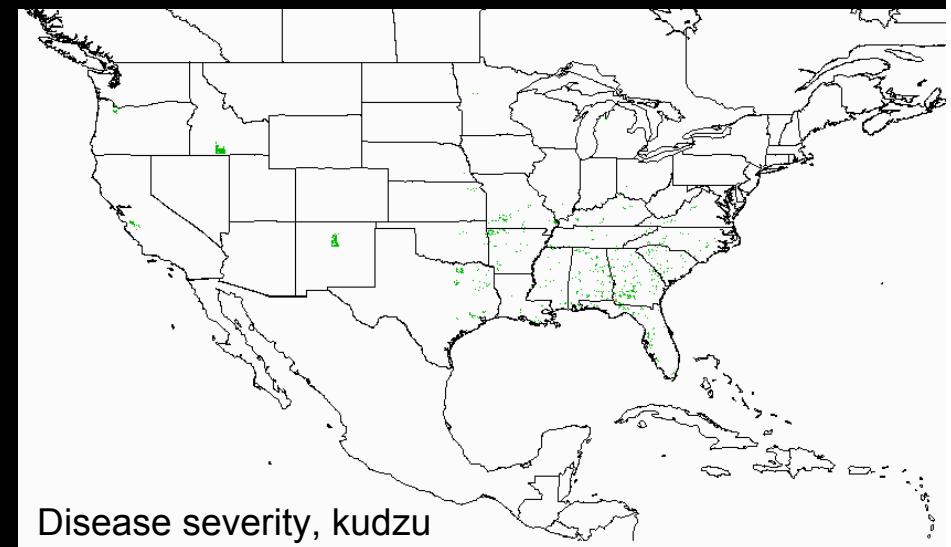
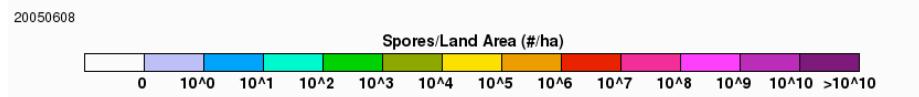
Modeling: Information for Specialists, Researchers, and Administrators



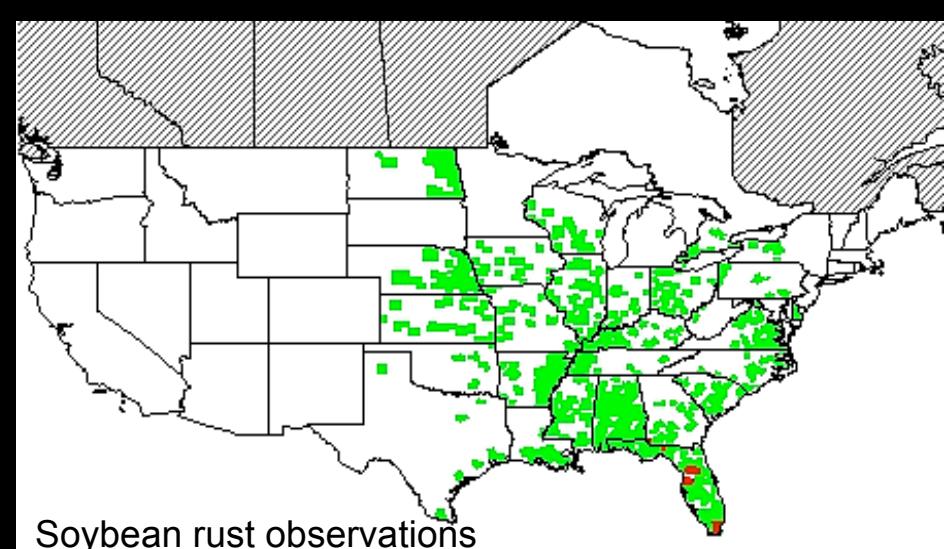
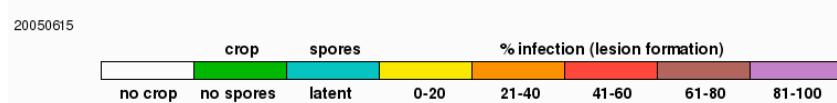
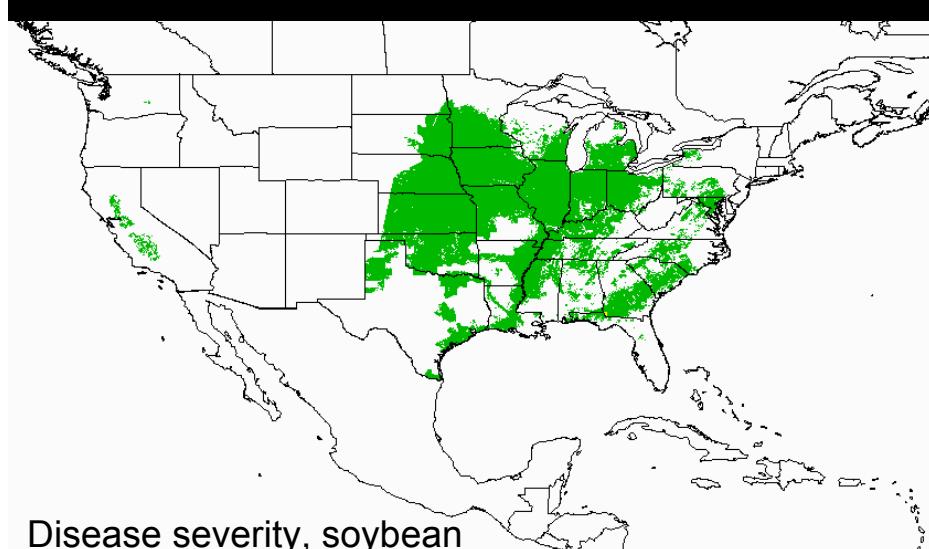
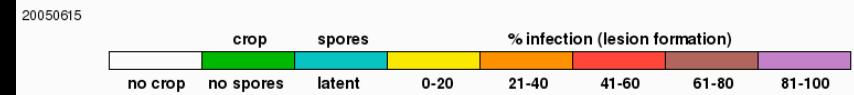
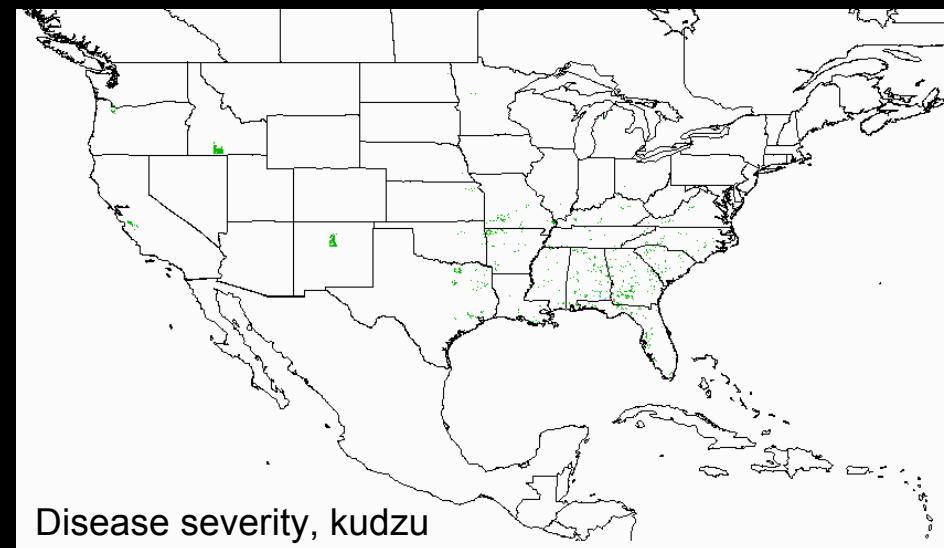
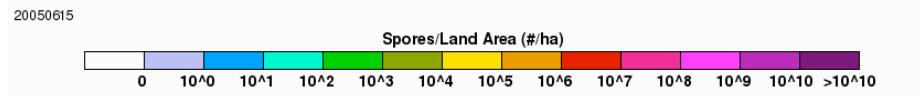
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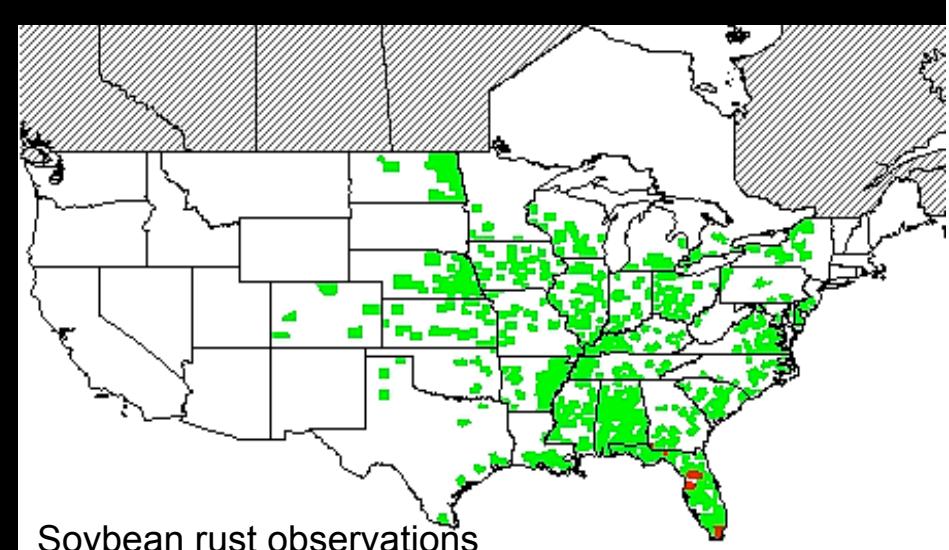
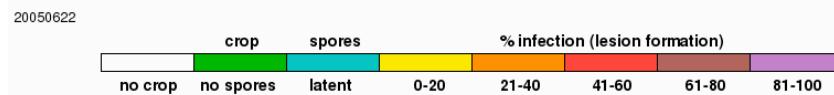
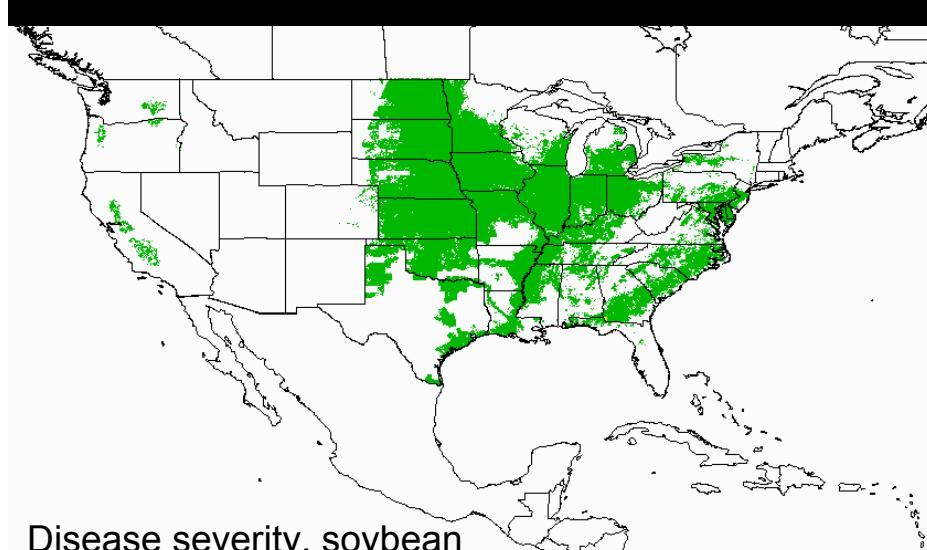
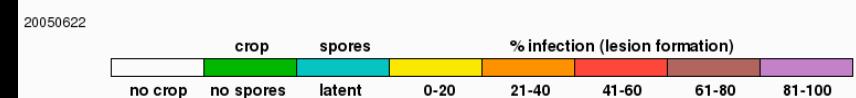
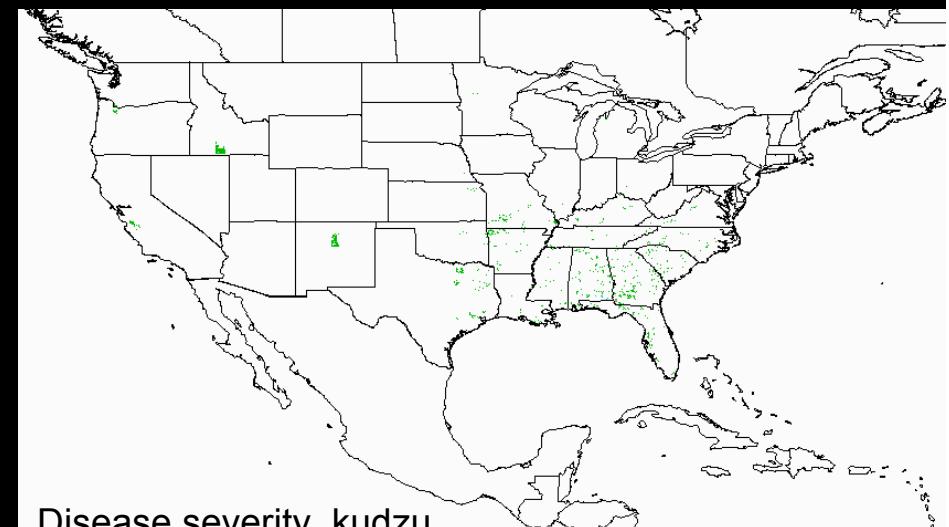
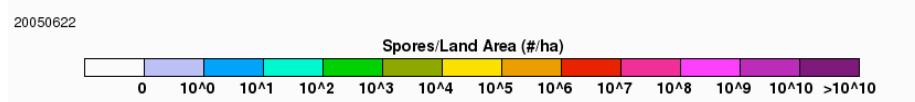
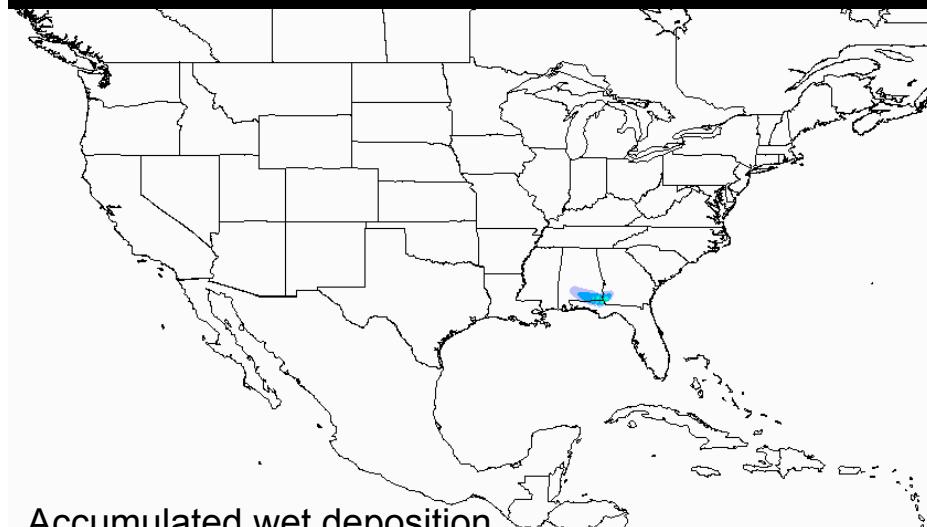
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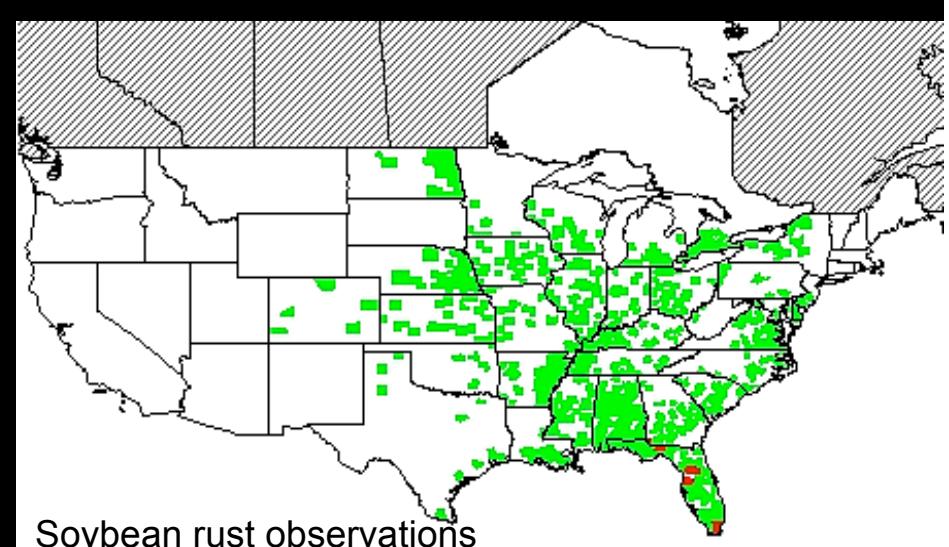
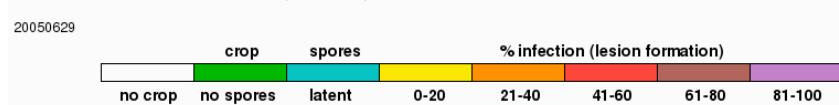
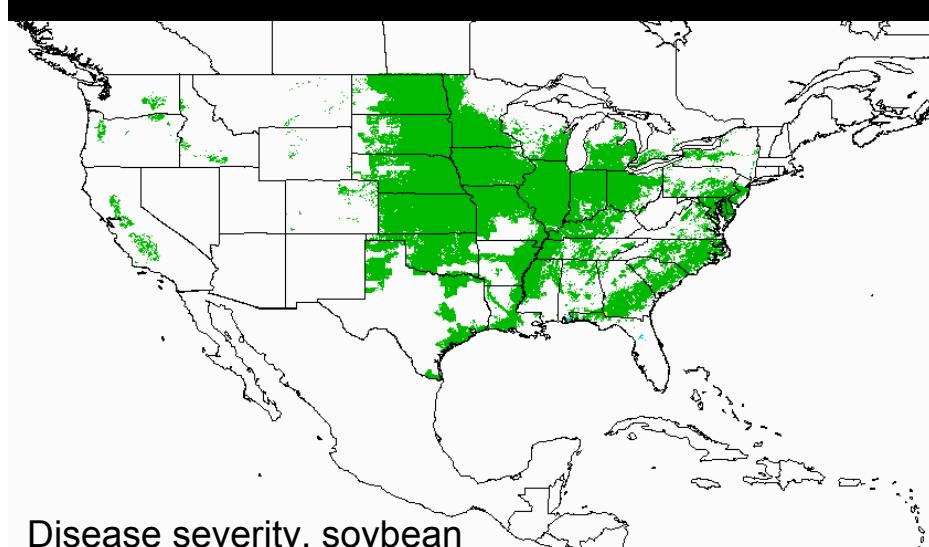
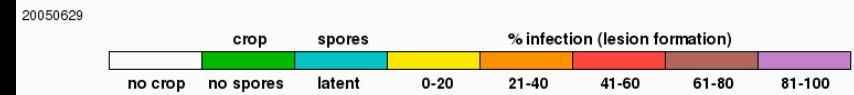
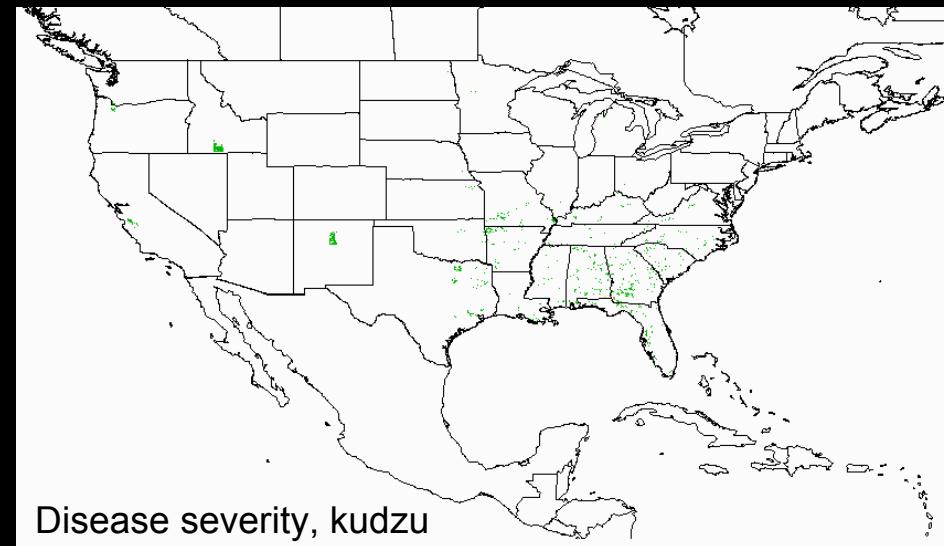
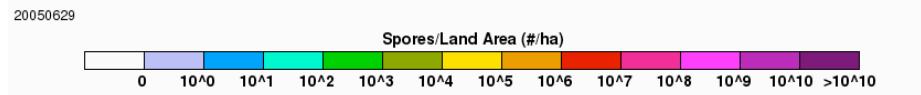
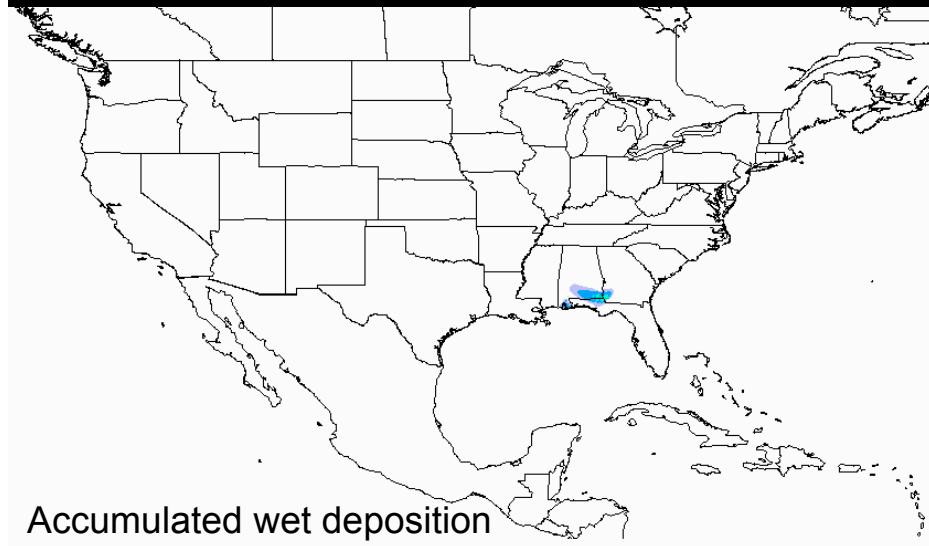
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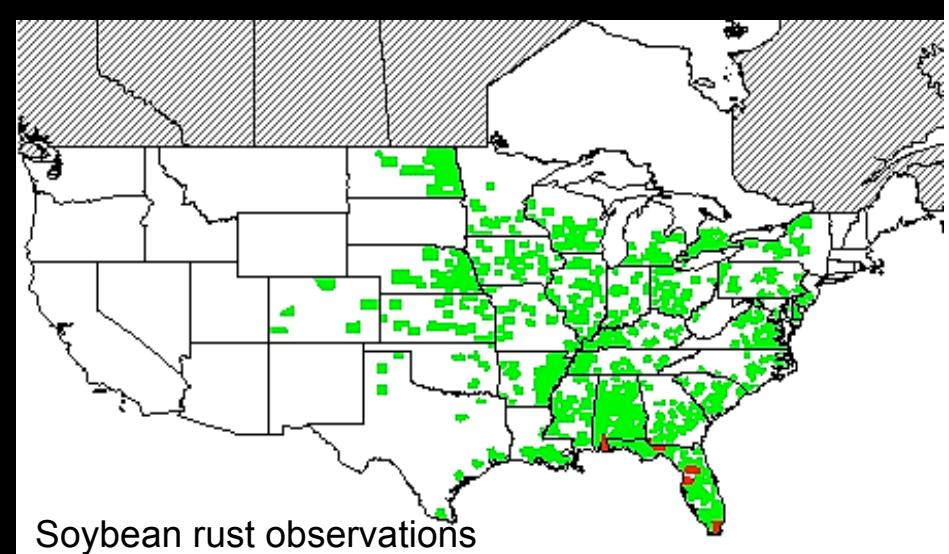
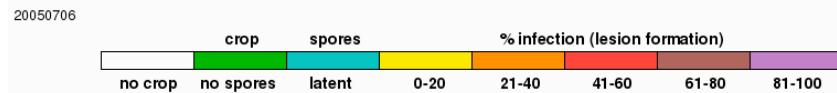
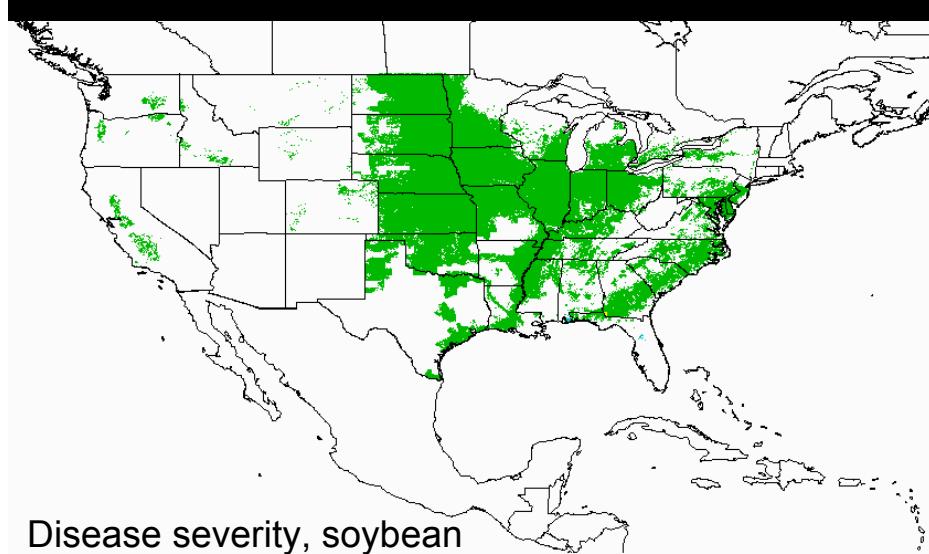
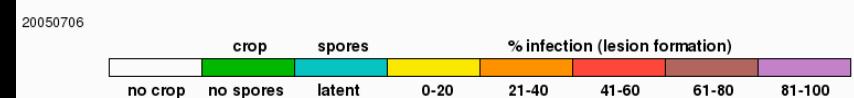
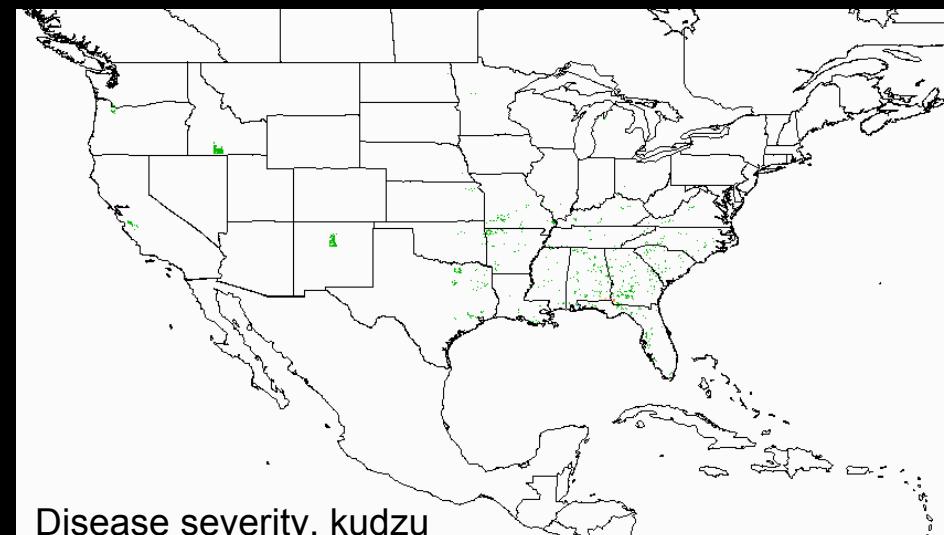
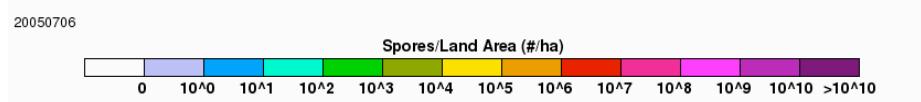
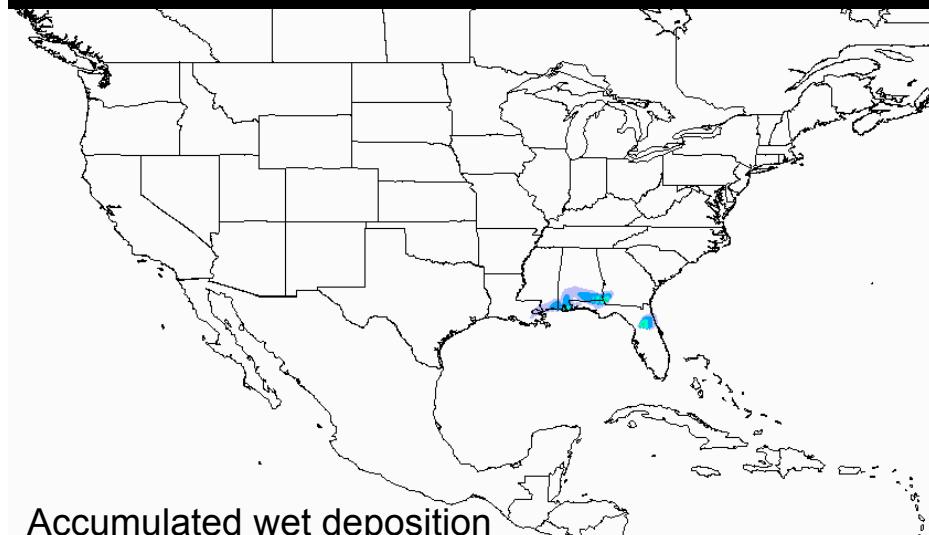
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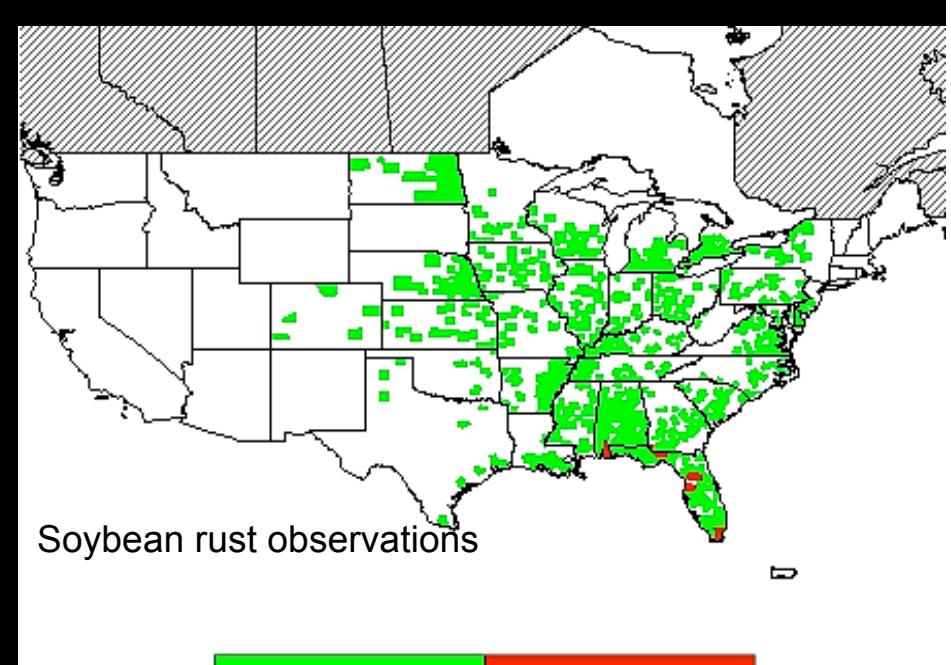
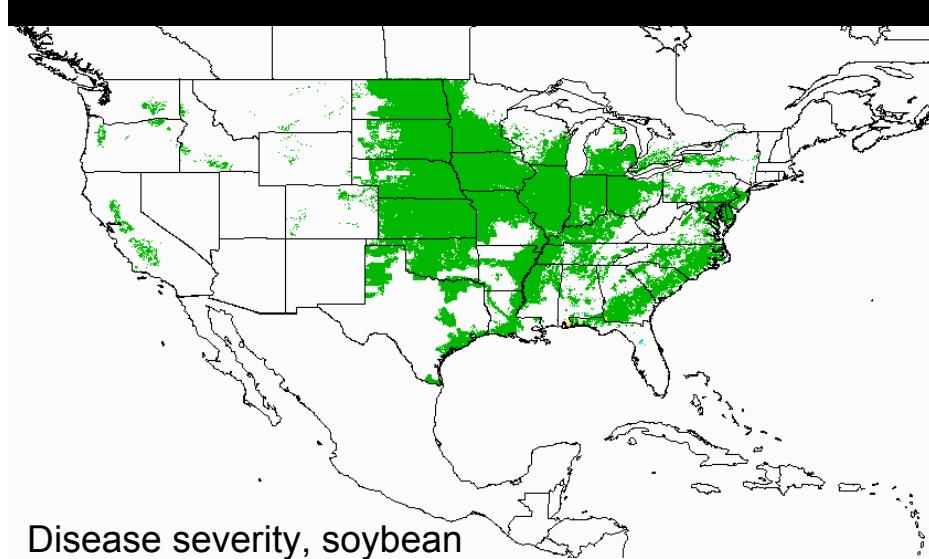
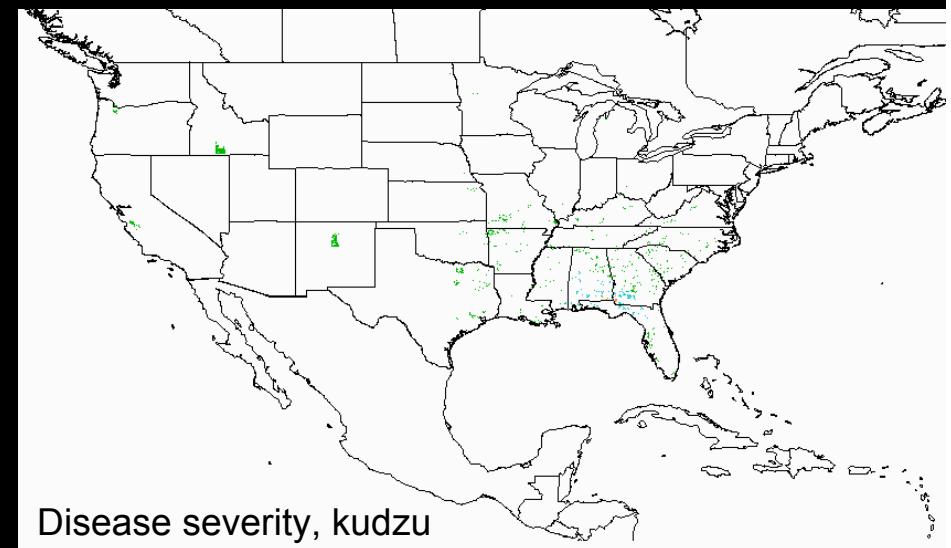
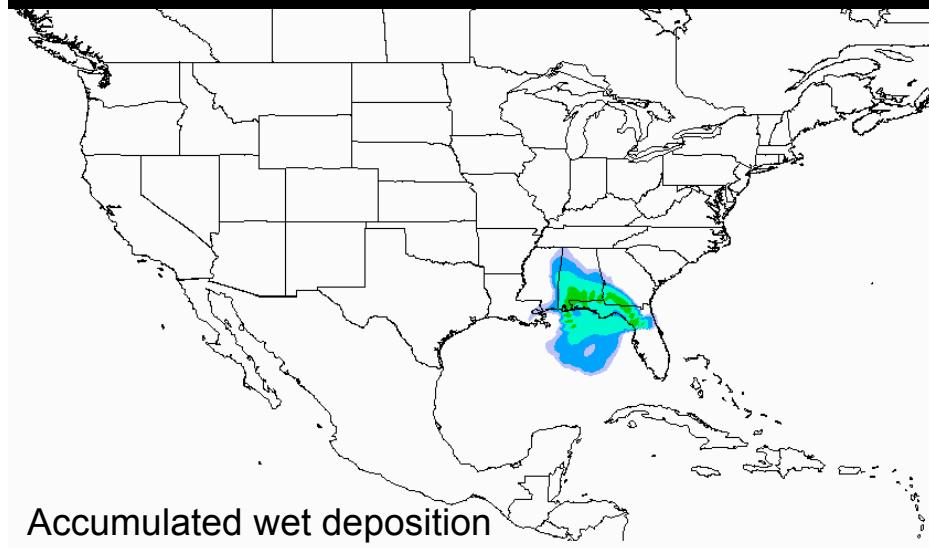
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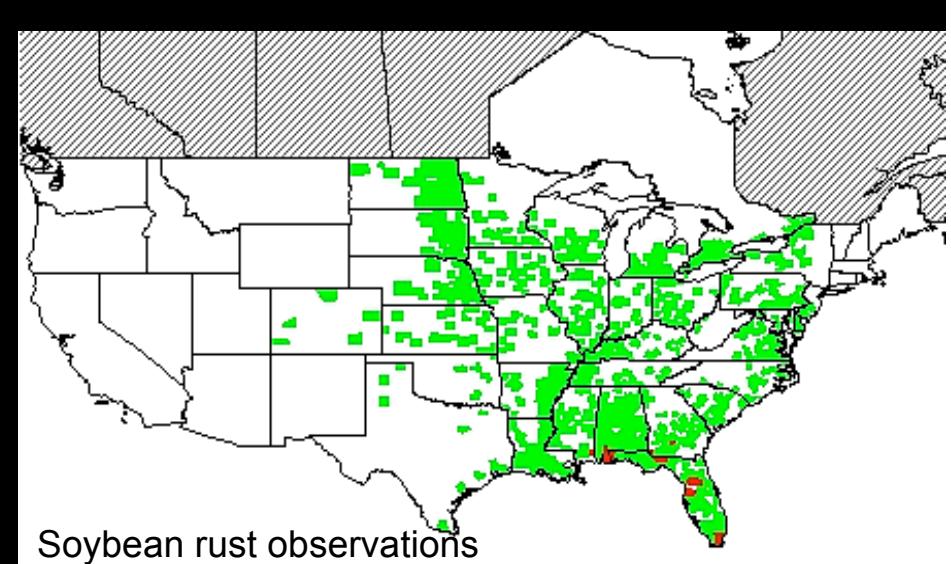
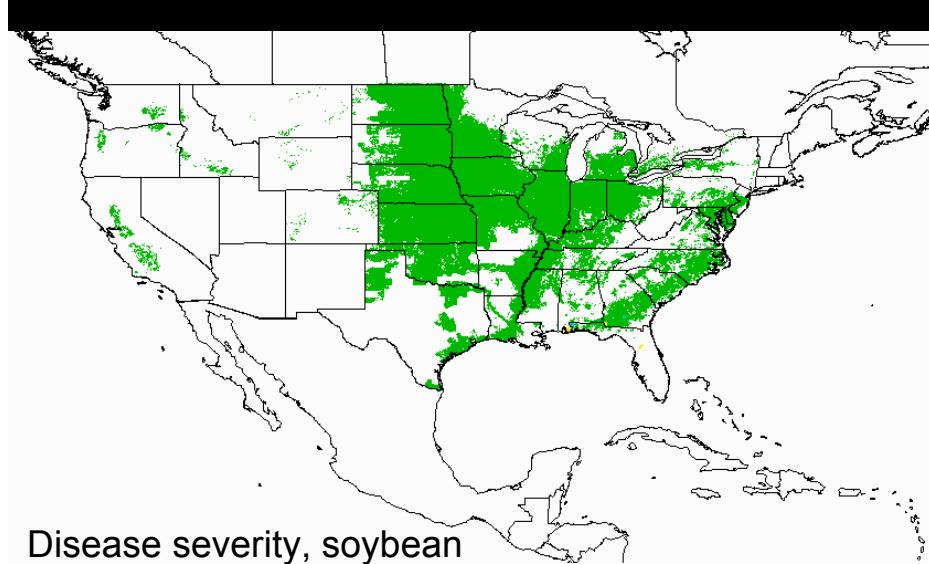
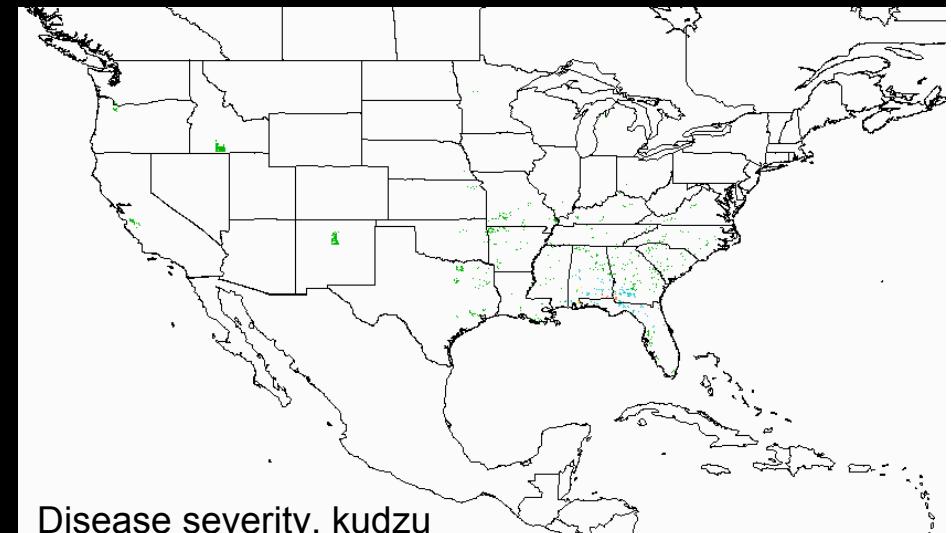
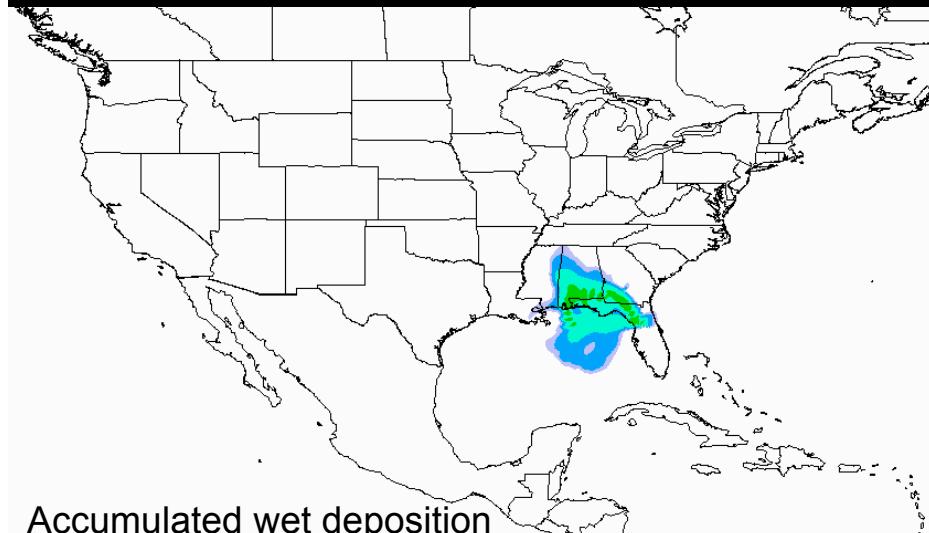
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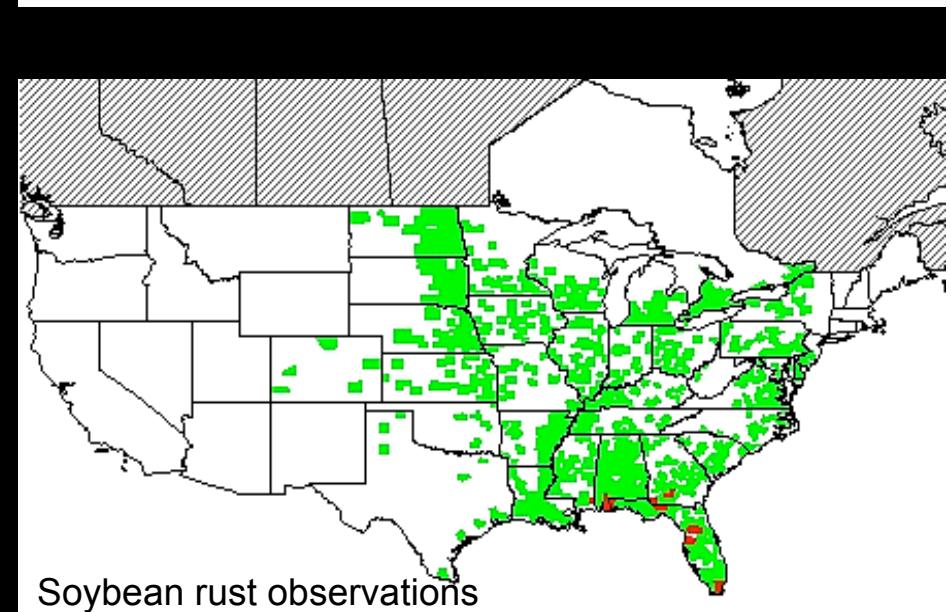
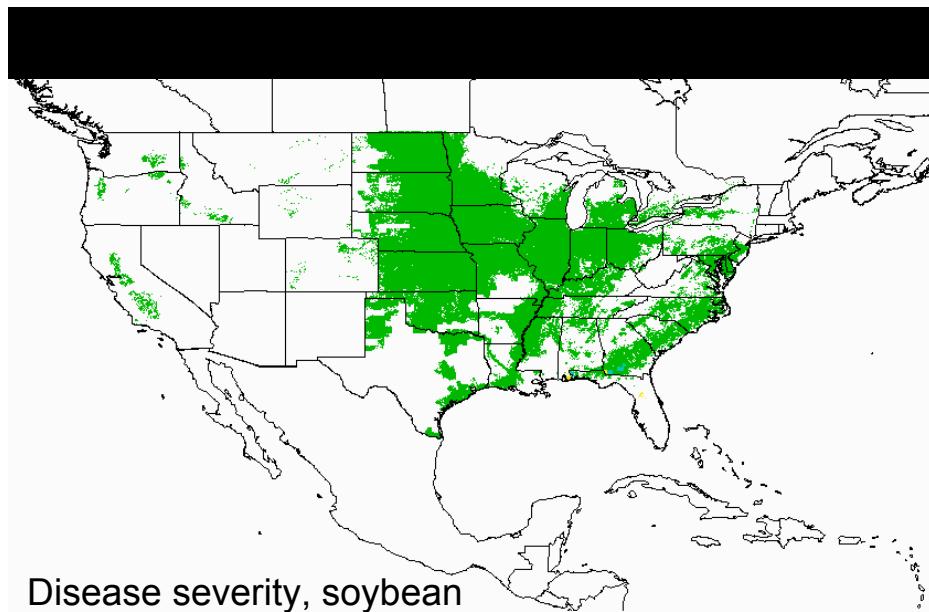
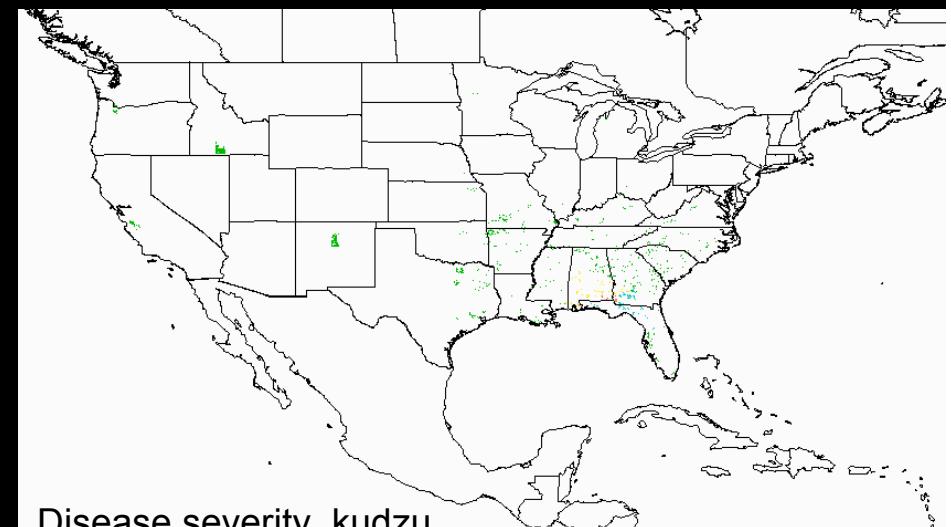
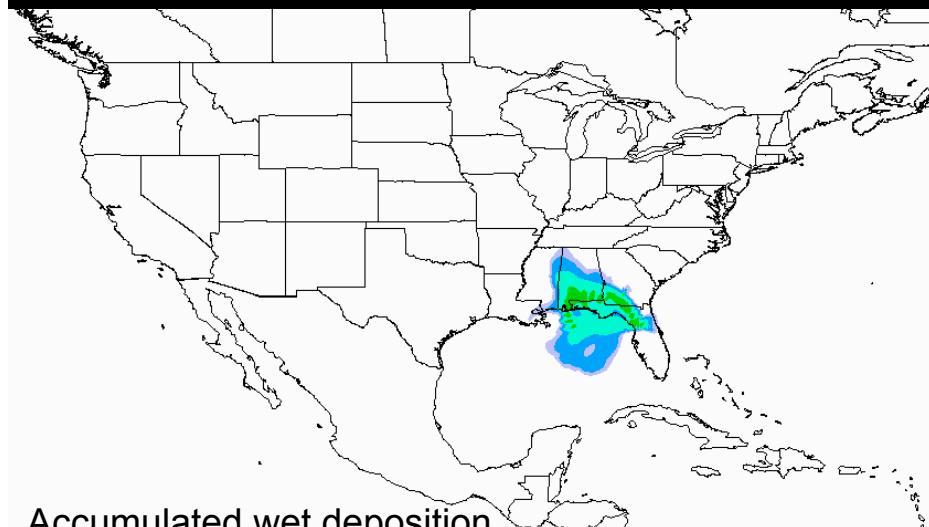
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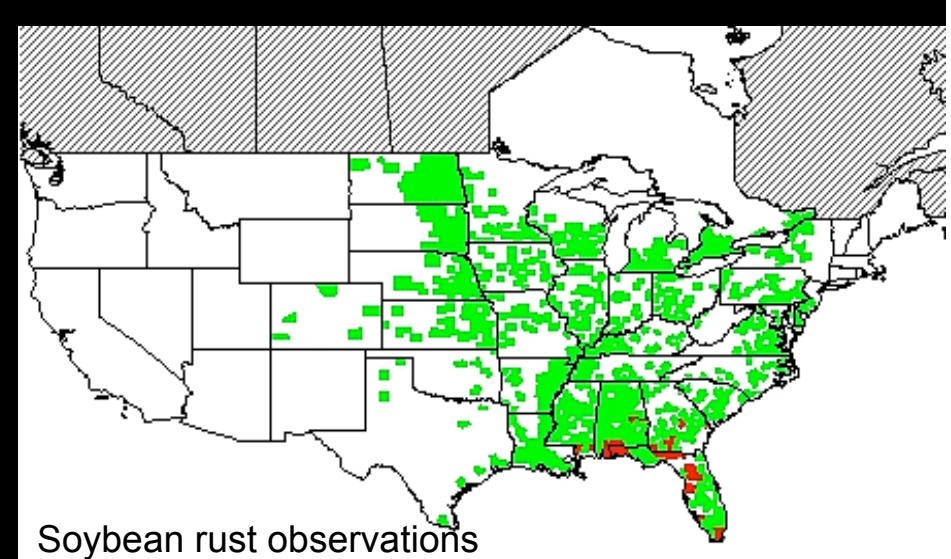
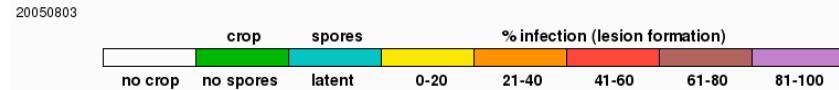
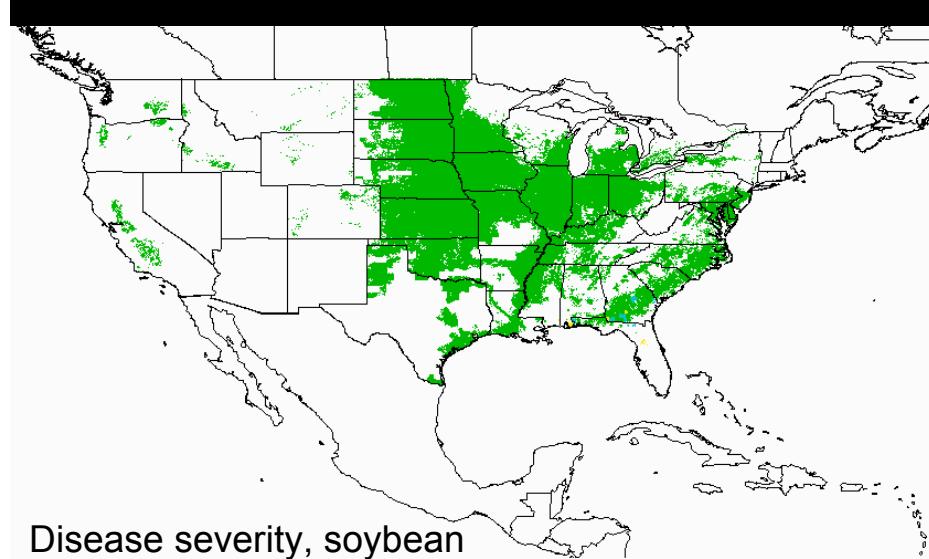
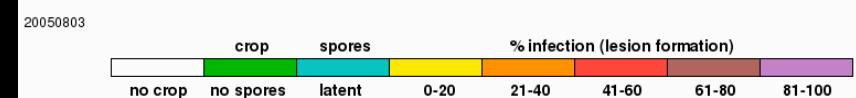
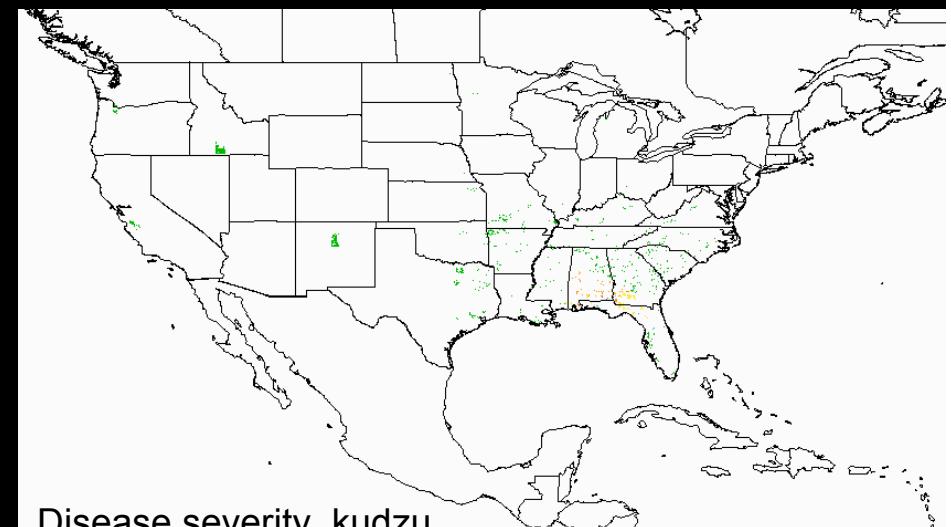
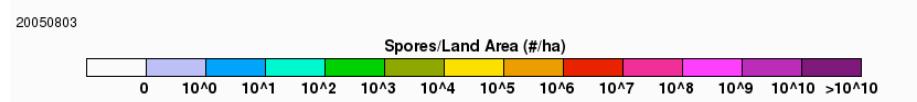
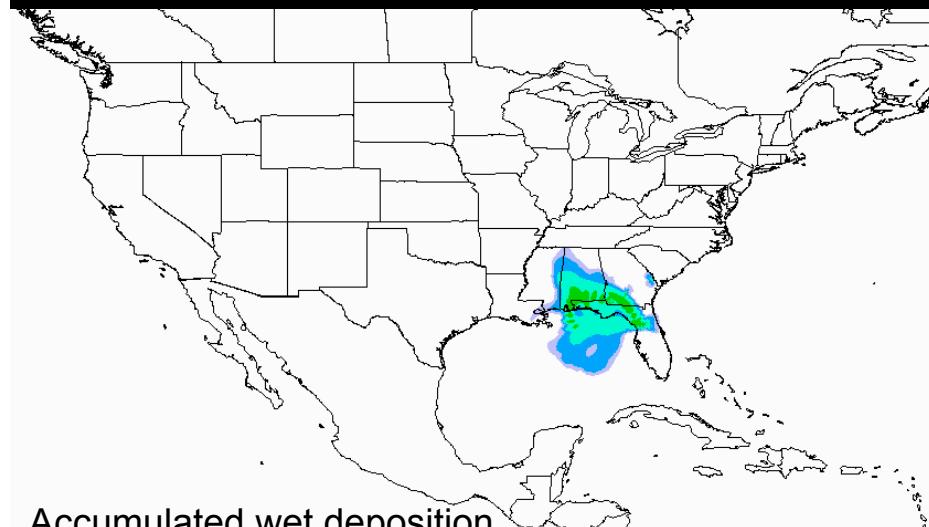
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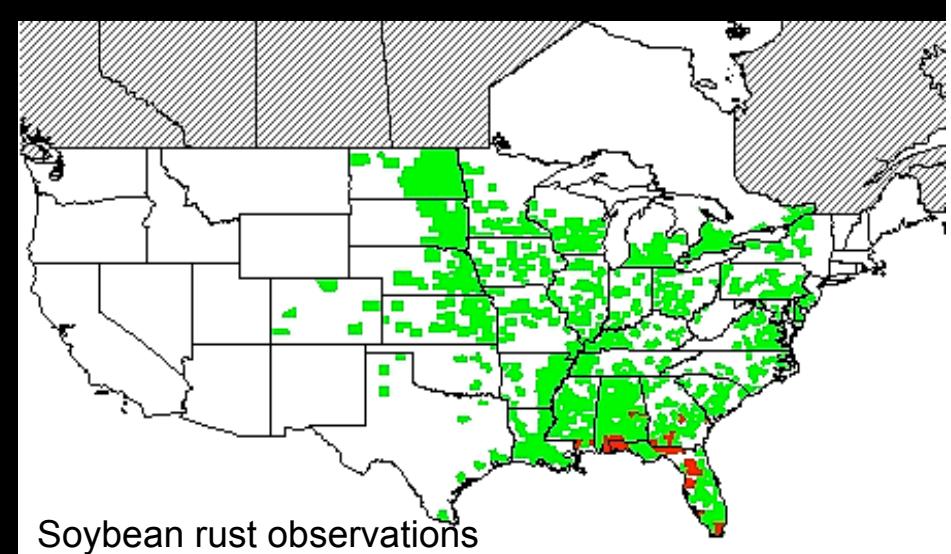
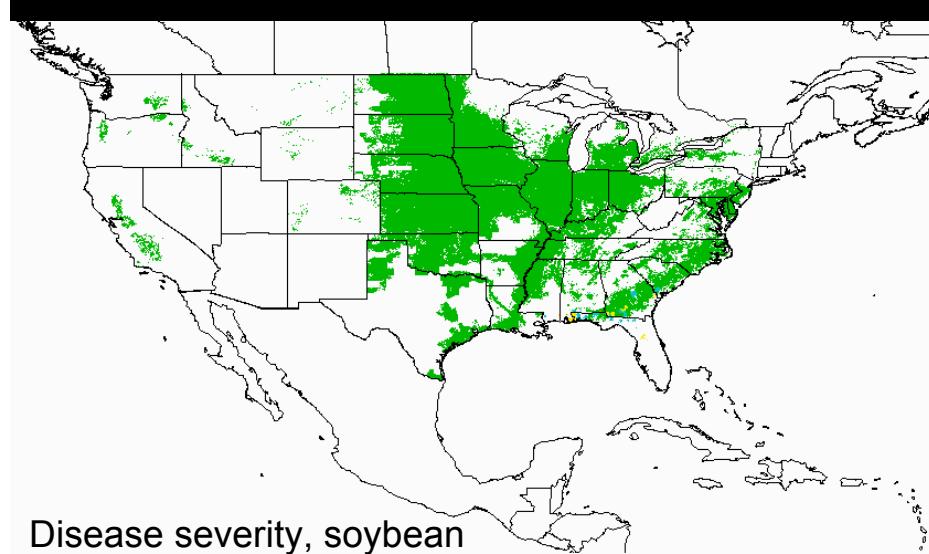
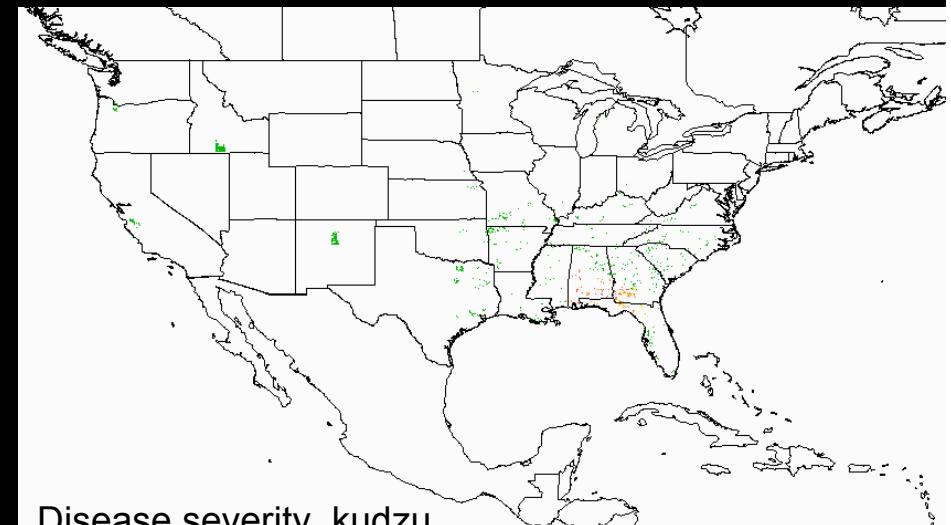
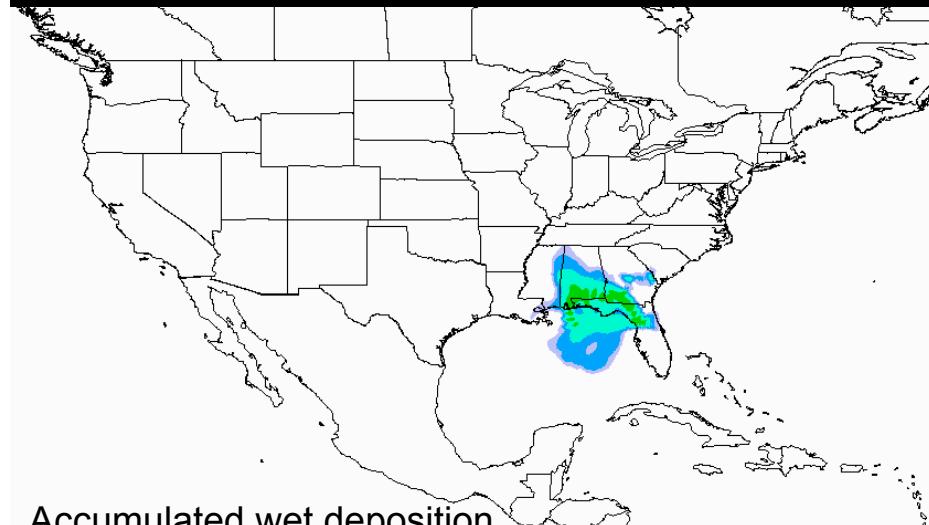
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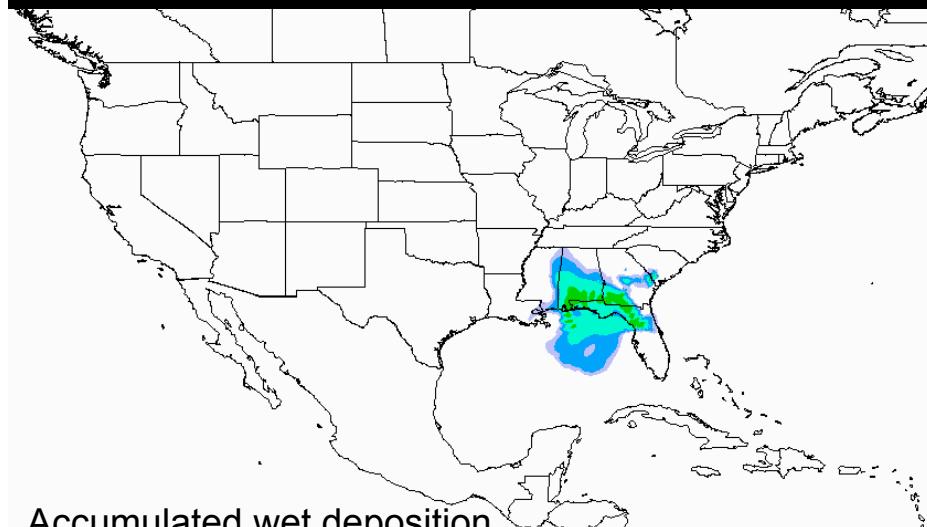
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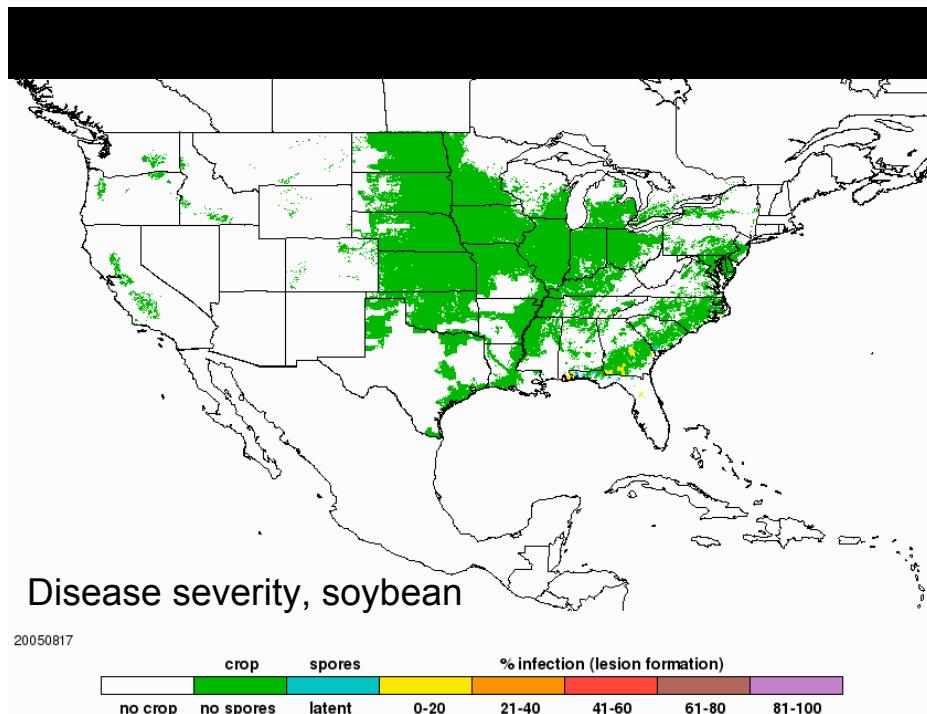
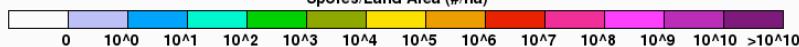


17 August 2005



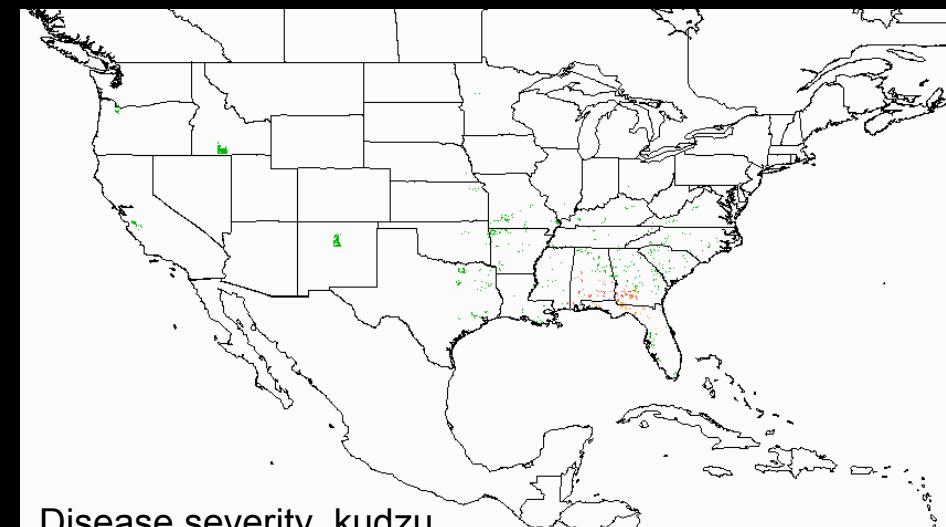
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Spores/Land Area (#/ha)



20050817

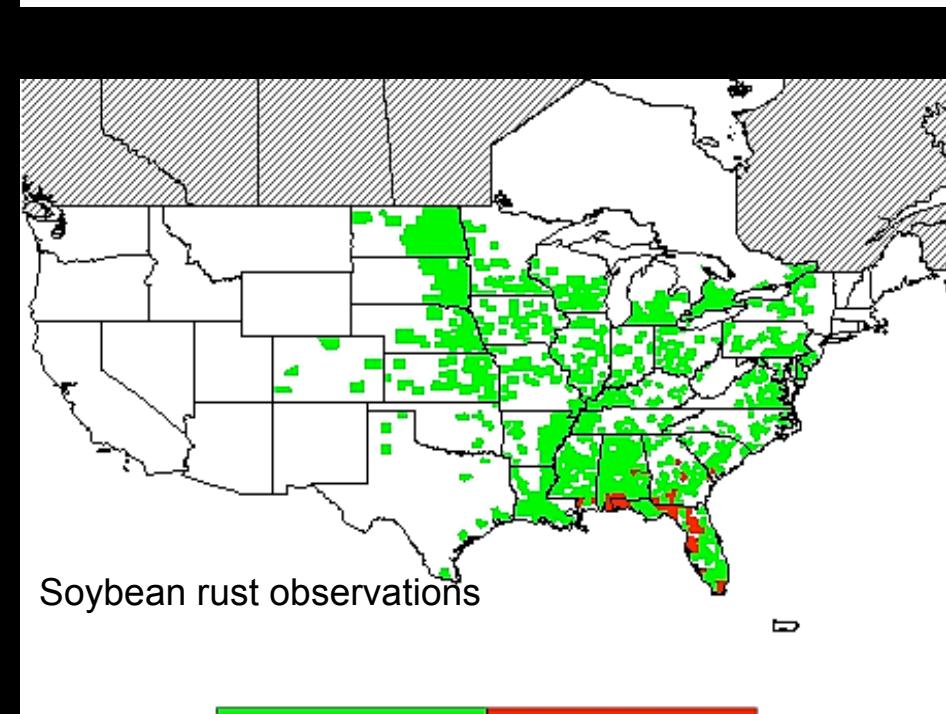
% infection (lesion formation)



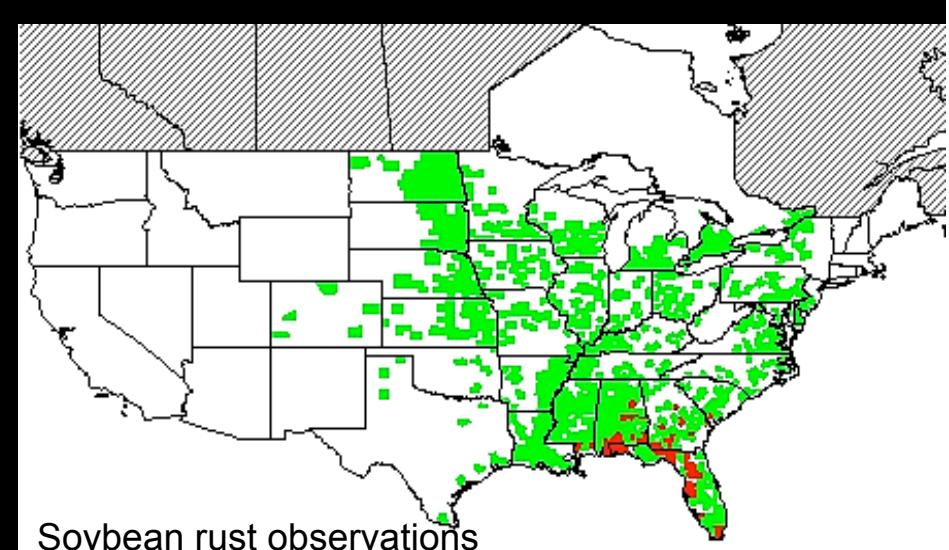
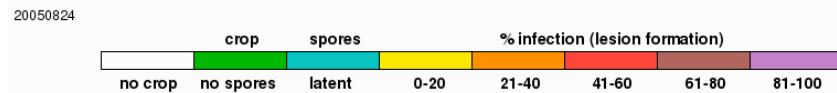
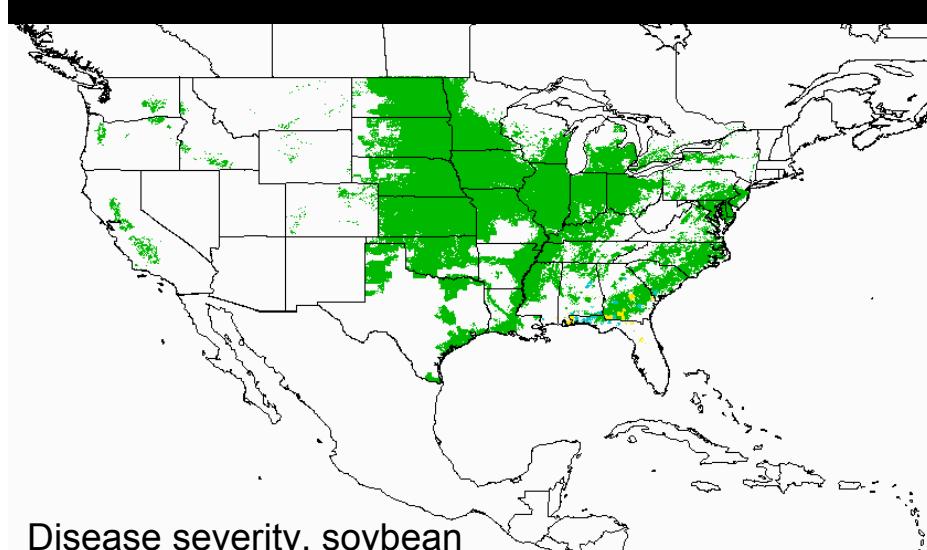
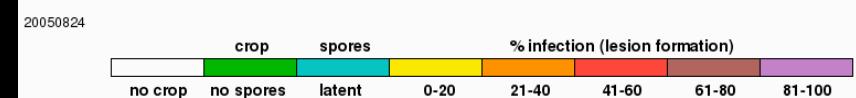
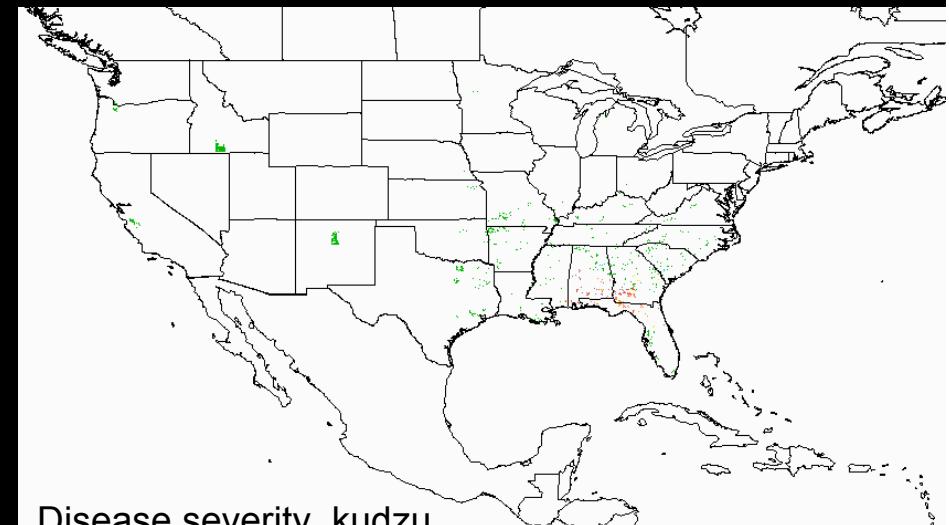
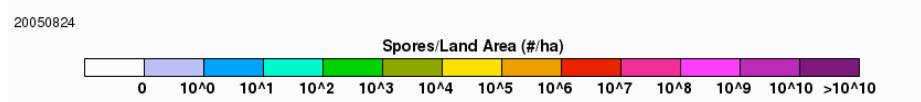
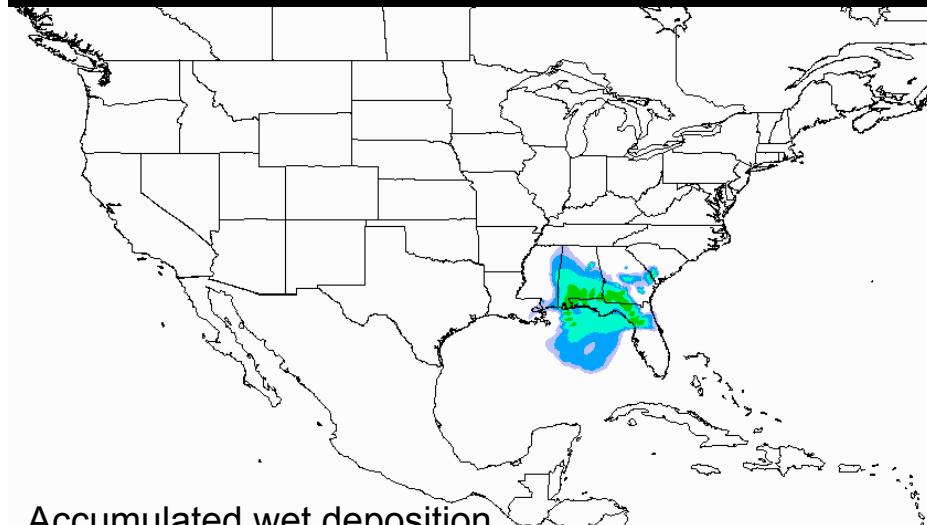
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crop spores

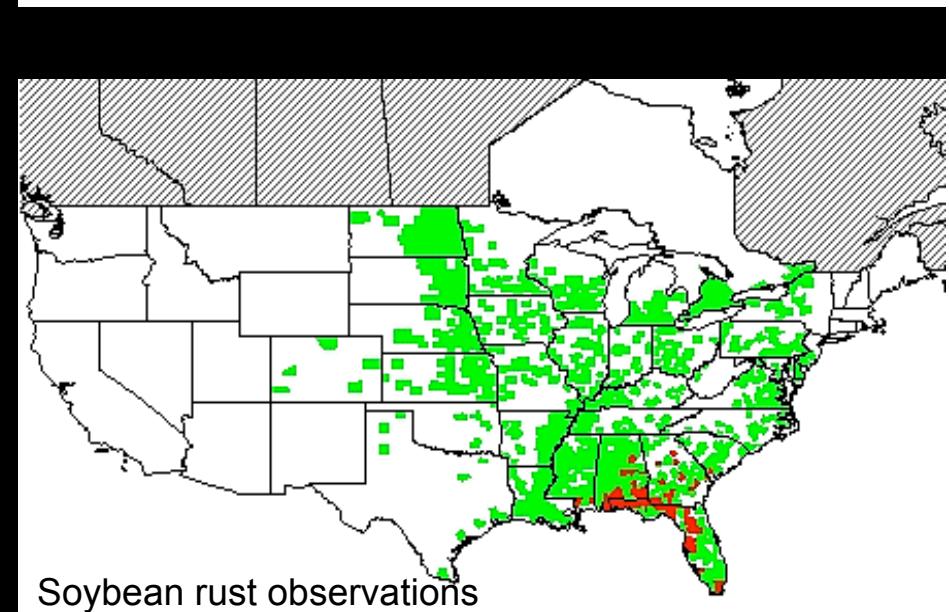
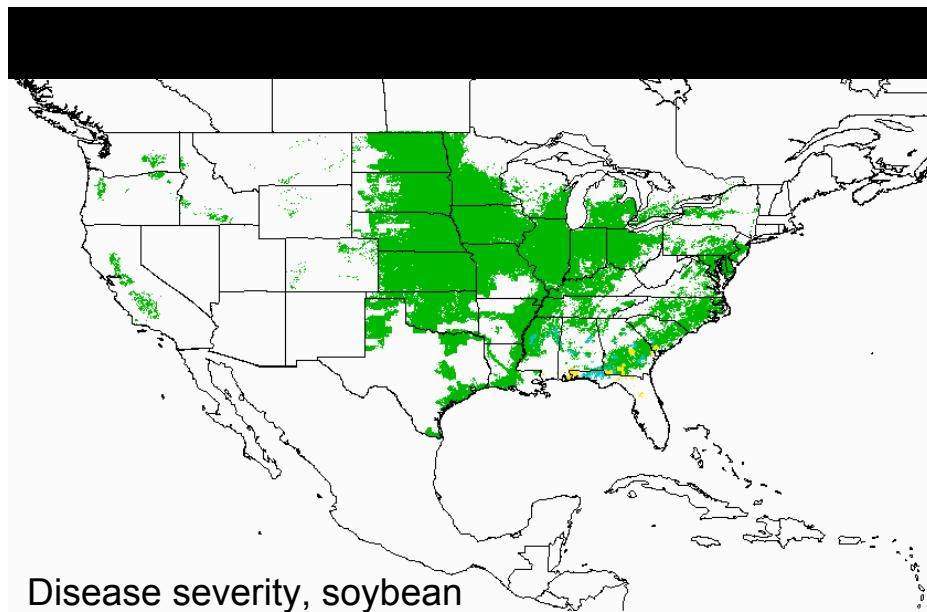
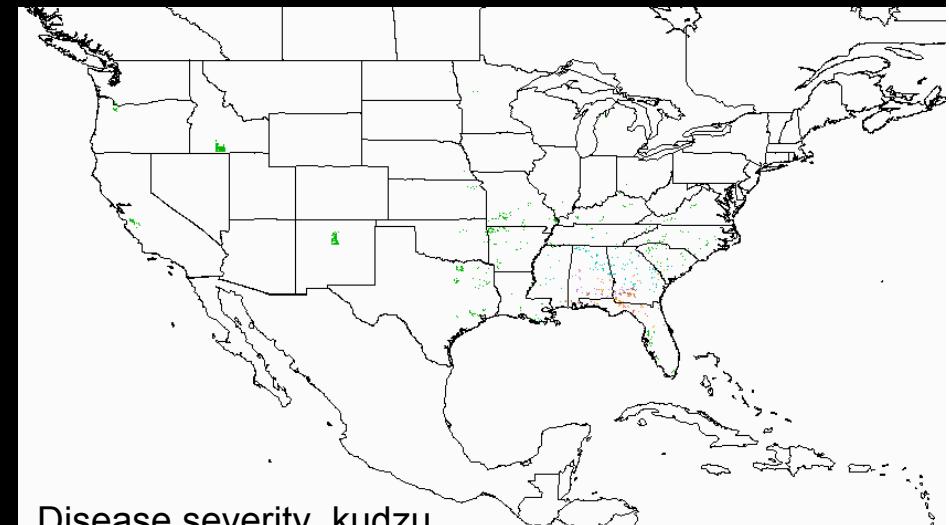
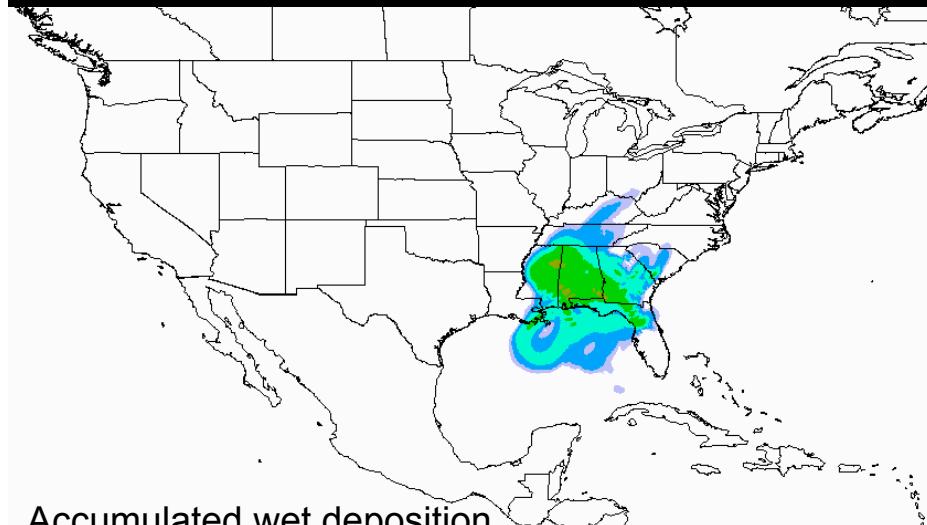
% infection (lesion formation)



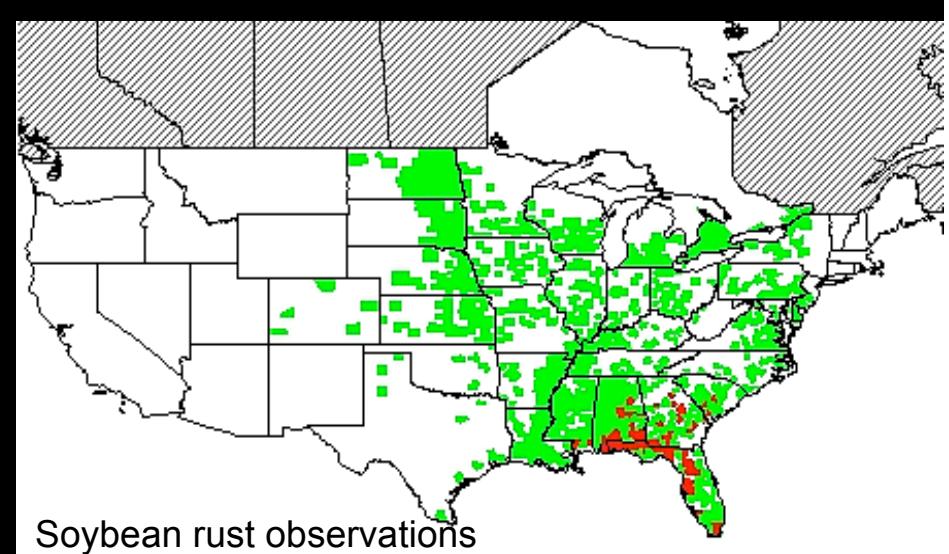
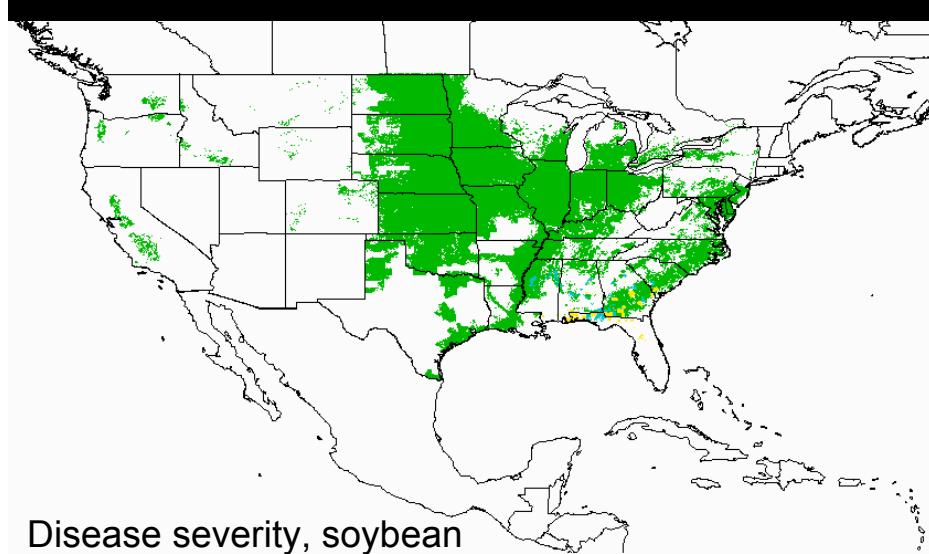
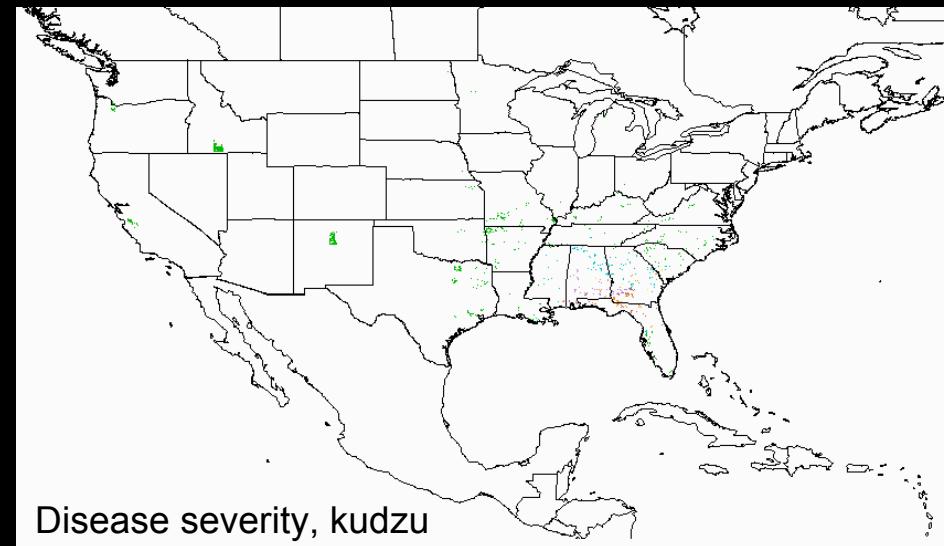
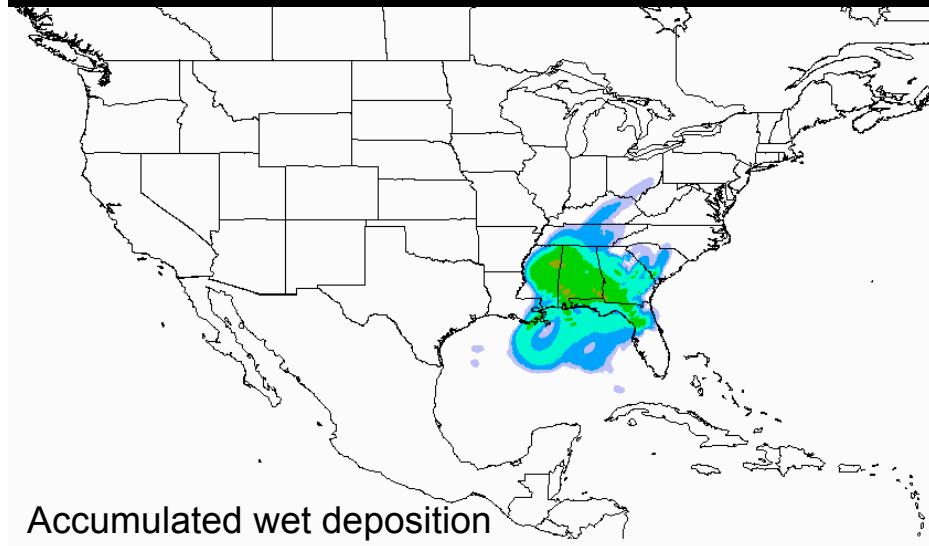
24 August 2005



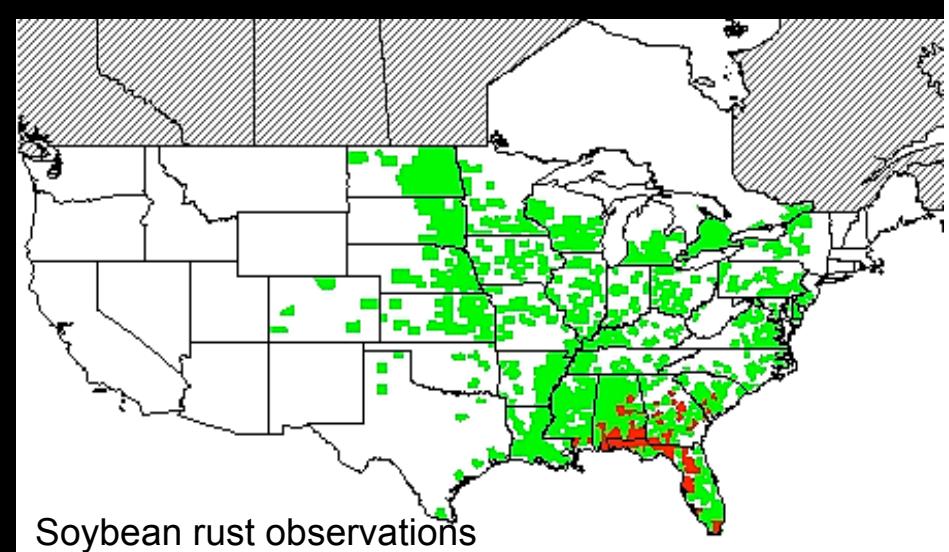
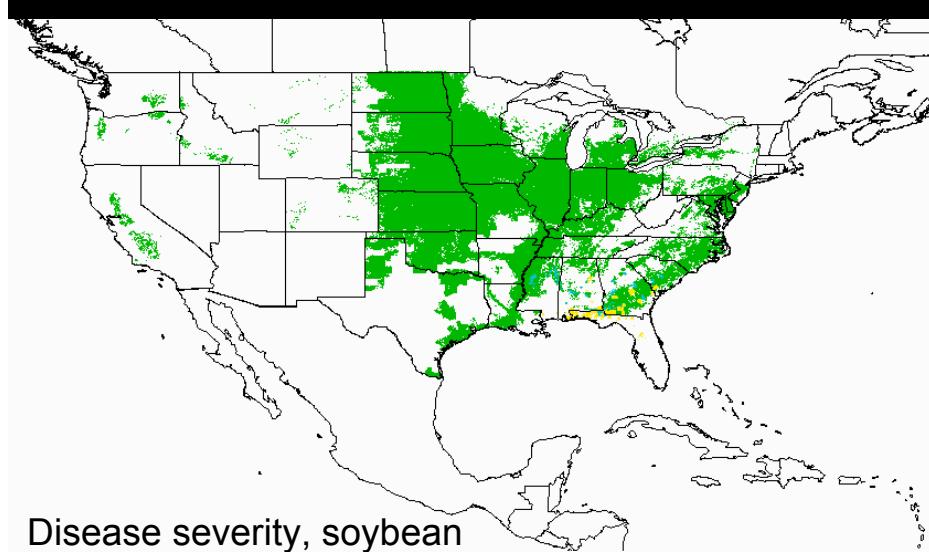
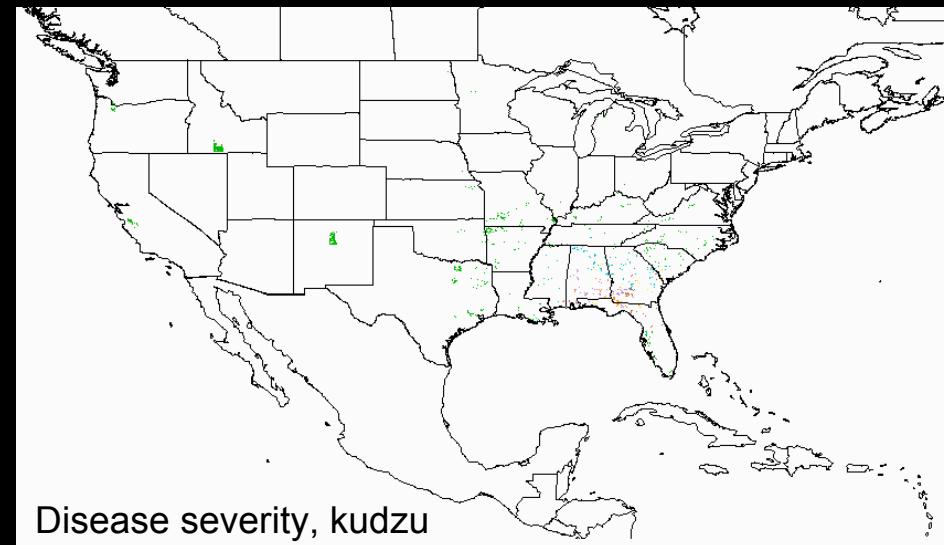
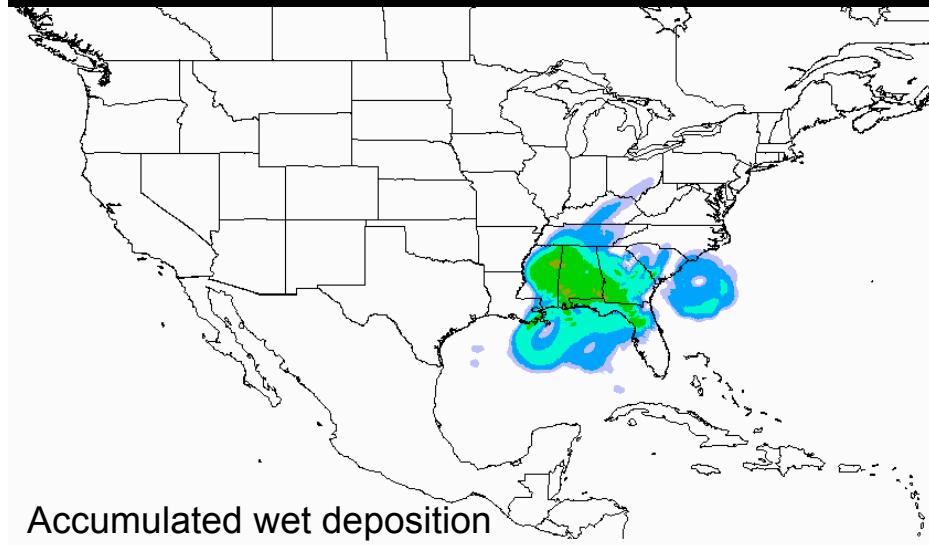
31 August 2005



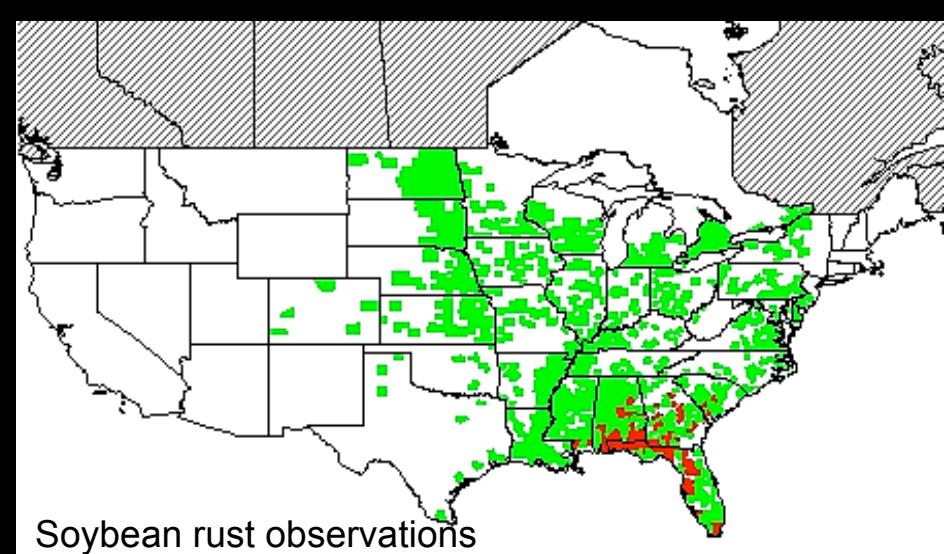
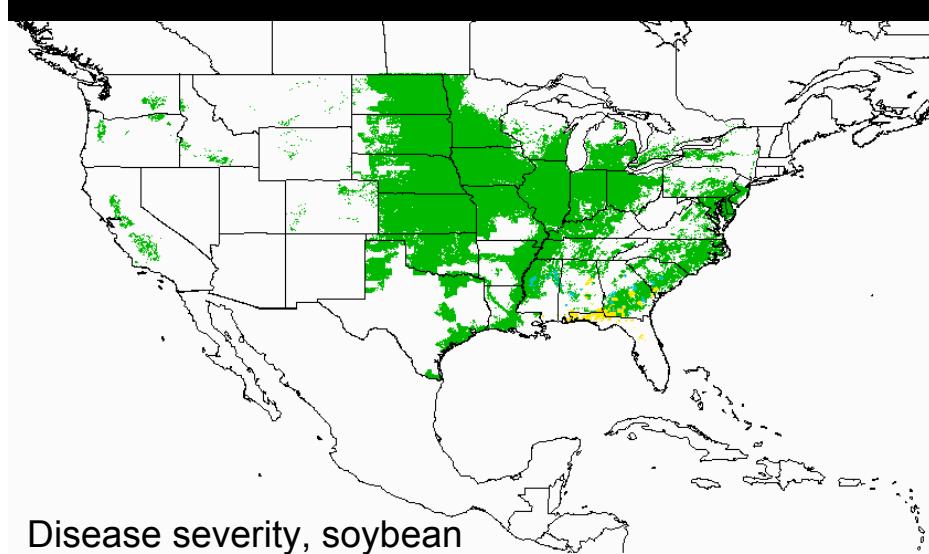
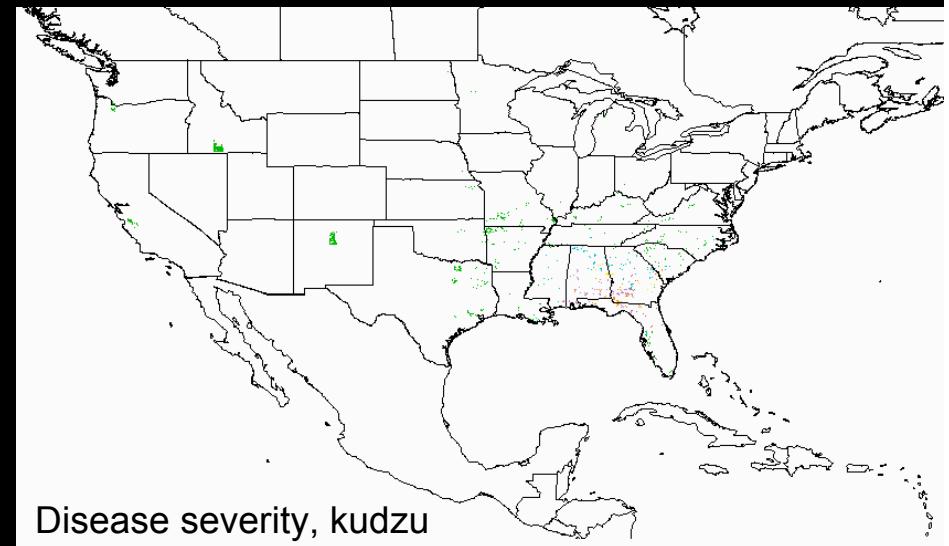
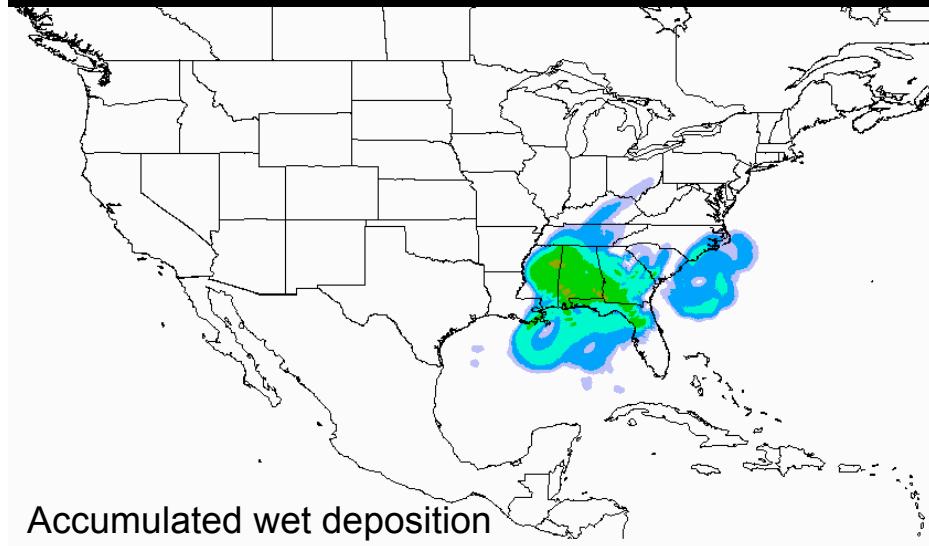
07 September 2005



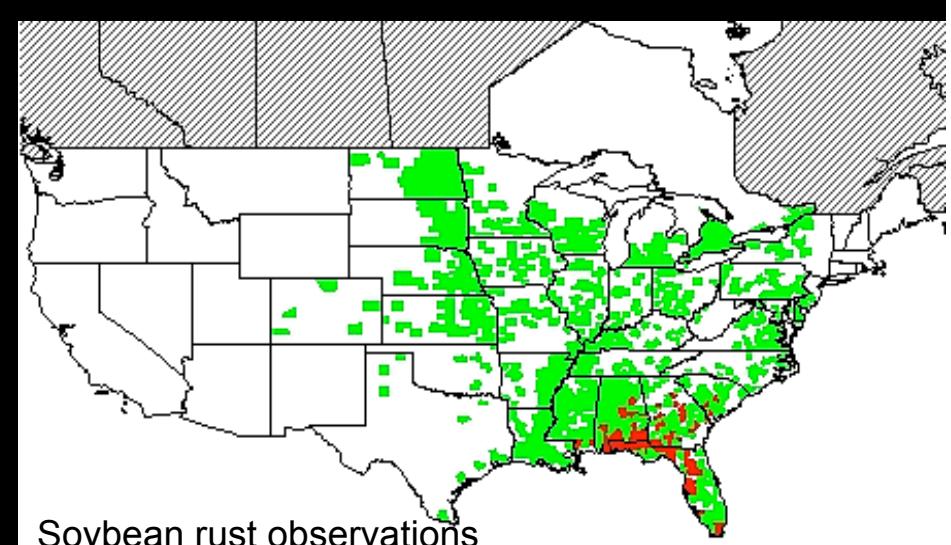
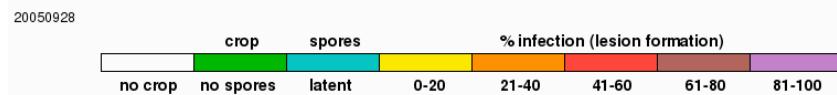
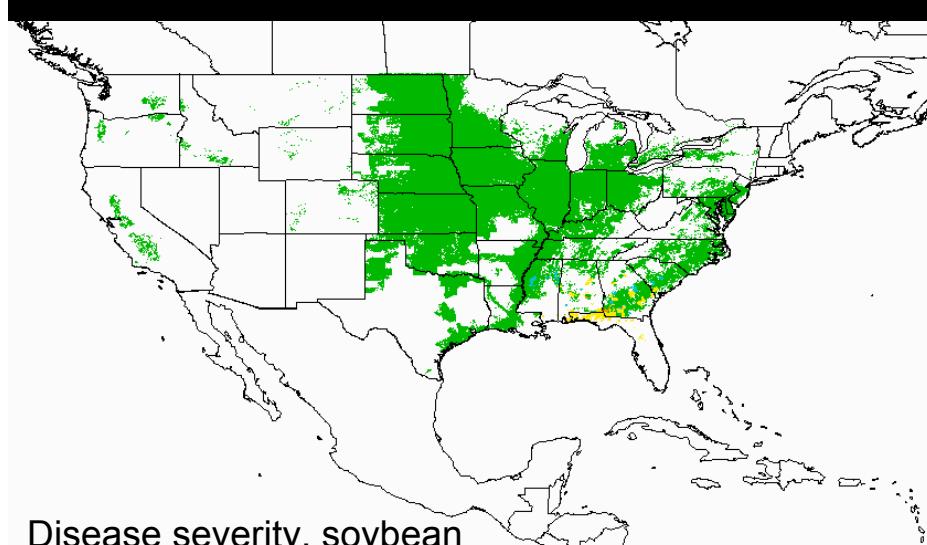
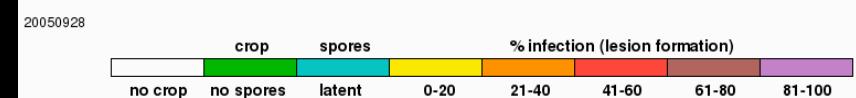
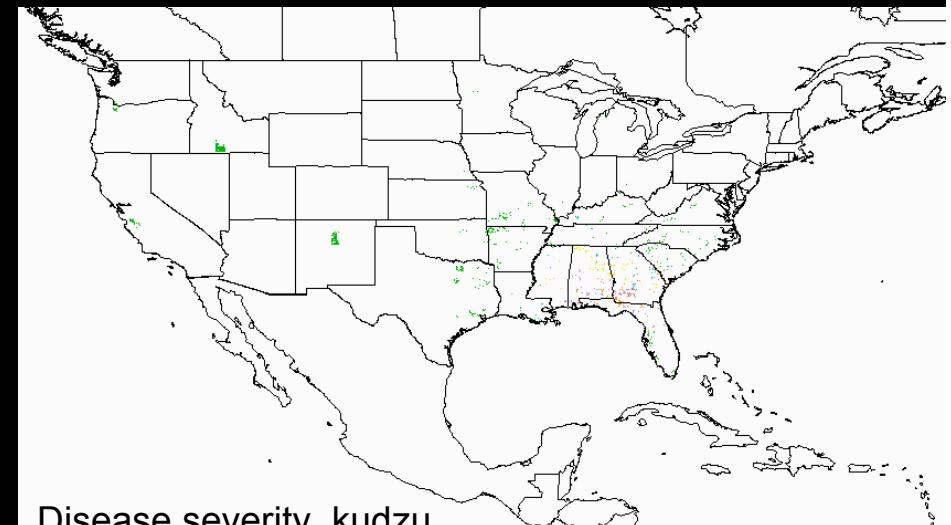
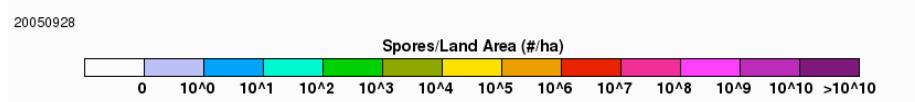
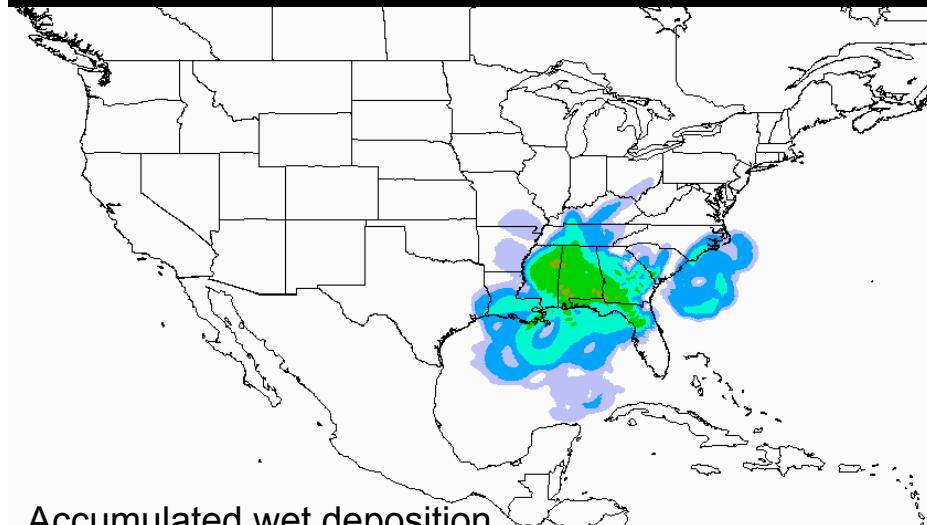
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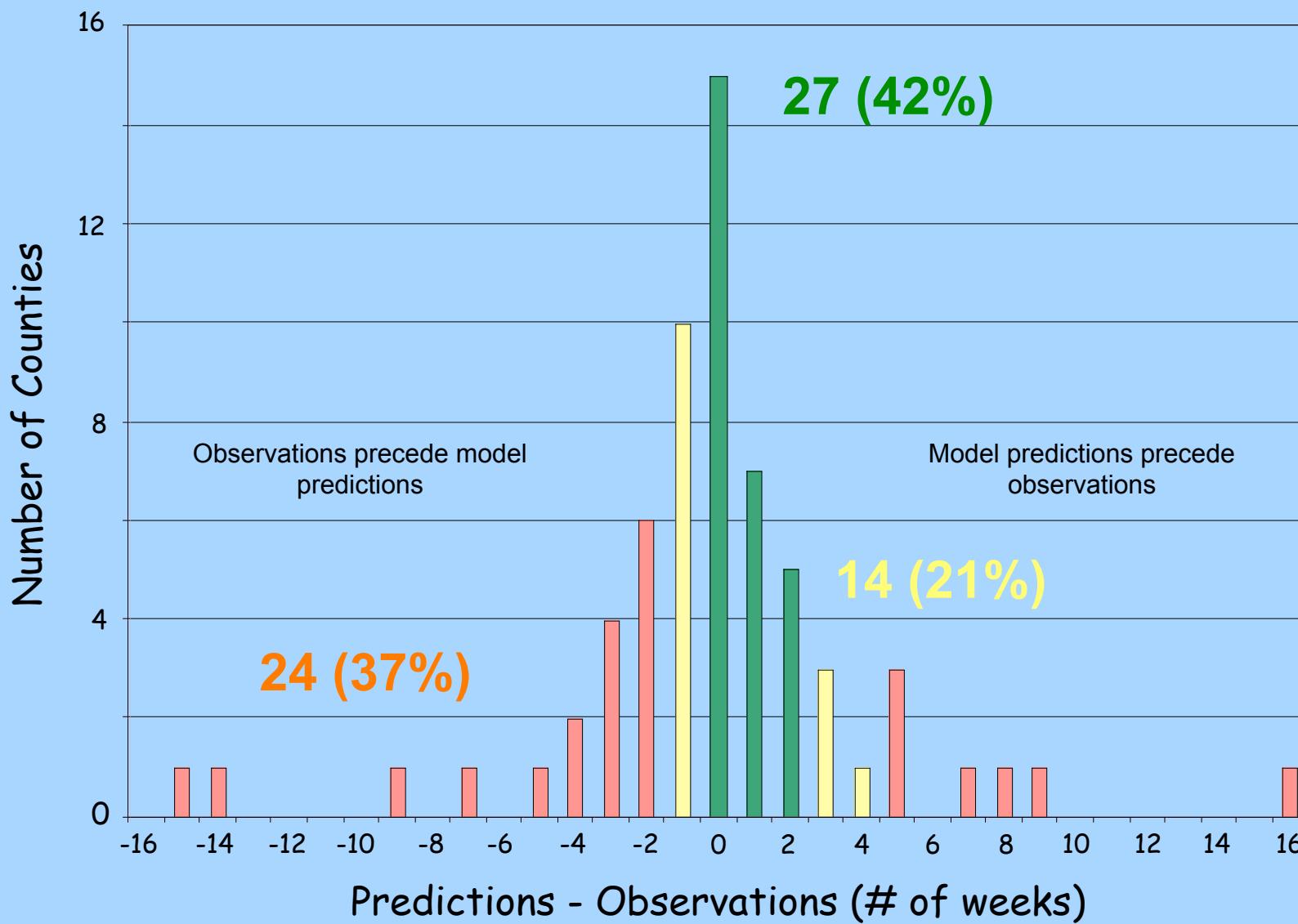
21 September 2005



28 September 2005



Evaluation of Soybean Rust Aerobiology Model Using First Observations of Rust in Soybean & Kudzu Sentinel Plots: 2005



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In 2005, we had to rely on sentinel plots and mobile scouting for reliable information on soybean rust spread. Clearly scouting in the southern states

will be a critical component of the USDA soybean rust response in 2006. We need both sentinel and mobile scouting during late winter and throughout the growing season.

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Isard, S.A., S.H. Gage, P. Comtois, and J. Russo, 2005. Principles of aerobiology applied to soybean rust as an invasive species. BioScience, 55: 851-862.