Team Structure in Climate Change Research

2nd Progress Report

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Project Description

- Explore team collaborations on a global research effort to understand climate change
- Extract key relationships from citation Network
- Identify relevant influence metrics
- Use metrics to identify key players
- Identify network relationships among key players



Steps to Date

- Extract, clean, and format IPCC data
- Convert to UCINET/Pajek Format
- Analyze Network (fragmentation, clustering)
- Use network information to guide team structure search
- Websearch on most connected authors
- Contacted IPCC members



Data Source: IPCC Report 2001

- Intergovernmental Panel on Climate Change (3rd Assessment)
 - Collection of important papers from around the world
 - Representative of valid views (peer review)
 - 3 Volumes

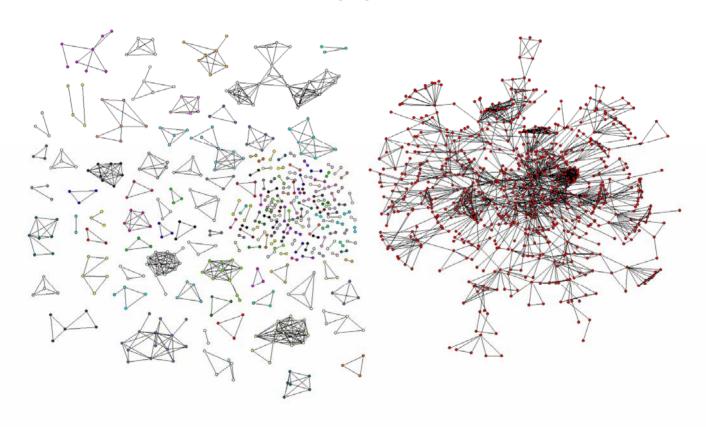
Images removed for copyright reasons. Images of 3 volumes of Climate Change, 2001.

	Chapters	Reference Papers	Authors
Scientific Basis	14	4650	
Impacts, Adaptation and Vulnerability	19	6841	18024
Mitigation	10	2846	
		14337	

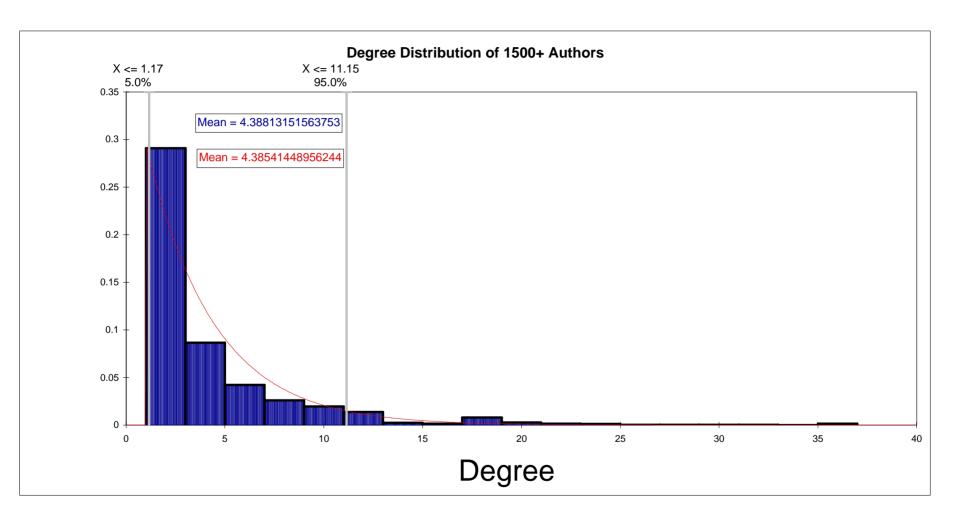


Data Source: IPCC Report 2001

- But, Analysis reveals only 1,560 connected authors
 - Listed on more than one paper

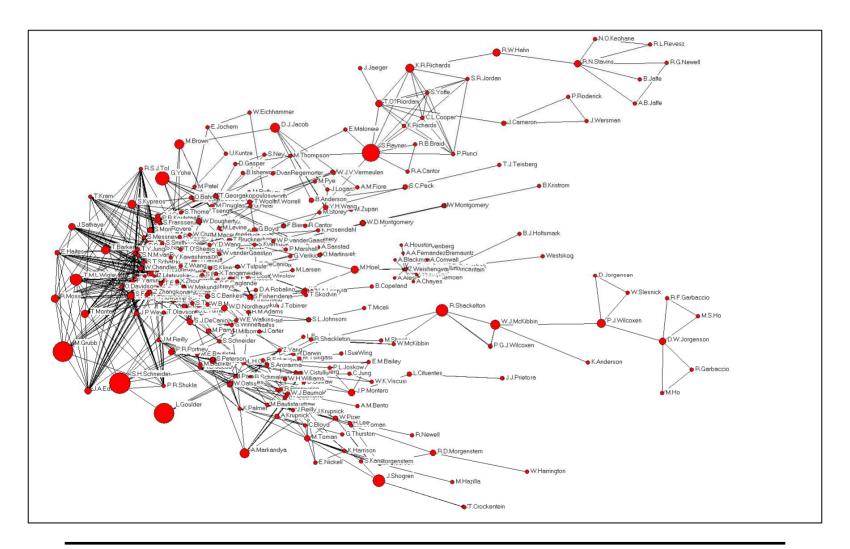


Degree Distribution Graph



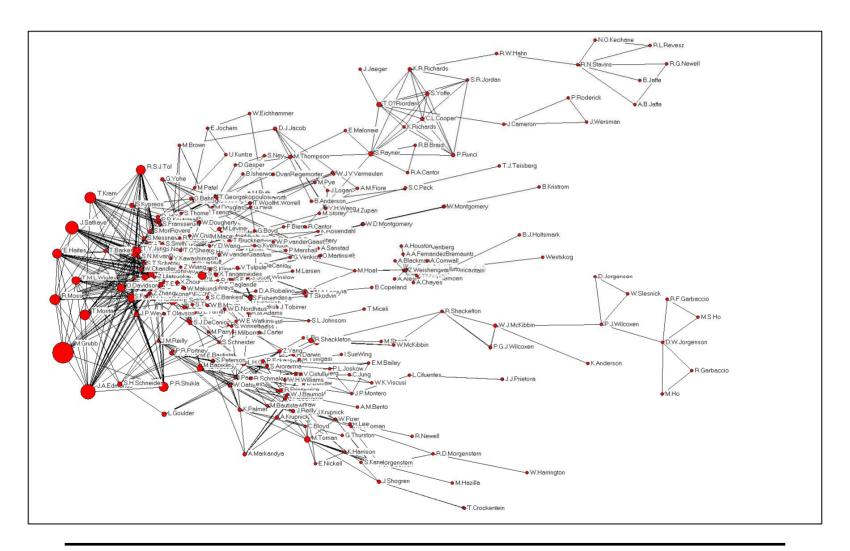


Network Diagram - Fragmentation



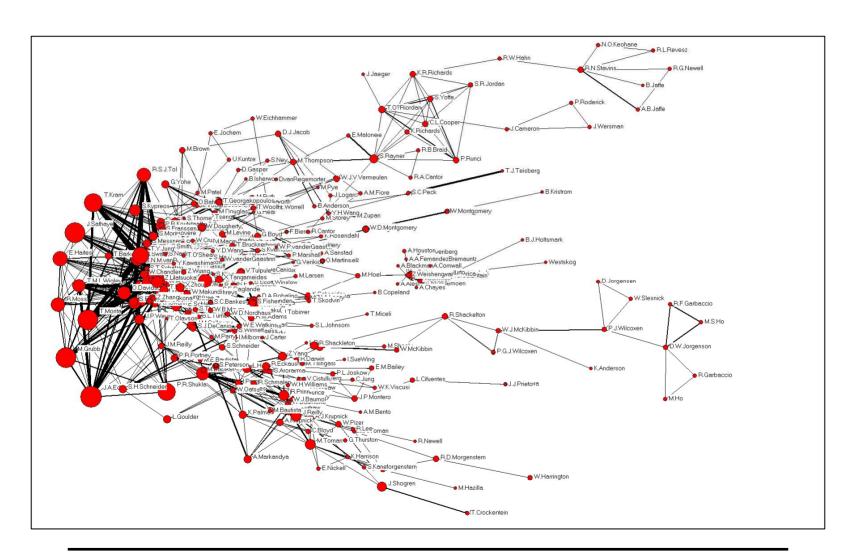


Network Diagram - Leverage





Network Diagram – Degree and Ties





Network Diagram – Michael Grubb

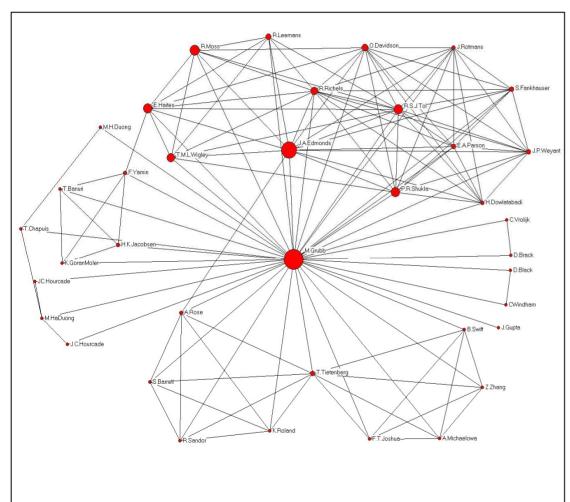


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Professor Michael Grubb

- Imperial College London
- IPCC Lead Author
- Editor in Chief Climate Policy Journal
- Editorial Board Energy Policy
- Royal Institute of International Affairs



Future Work

- Team Economics (Incentives)
- Team Definition (co-authors, citations, funding?)
- Team Characteristics (according to study field)
- Suggest Rationale for Structure
- Is the IPCC Truly Representative?
- Do Chapter Authors/Reviewers have too much Power?

