

ADVANCING GLOBAL OFFSHORE CCS

Proposing a CSLF Task Force: International Initiative for CCS Subsea (iCCS_c)

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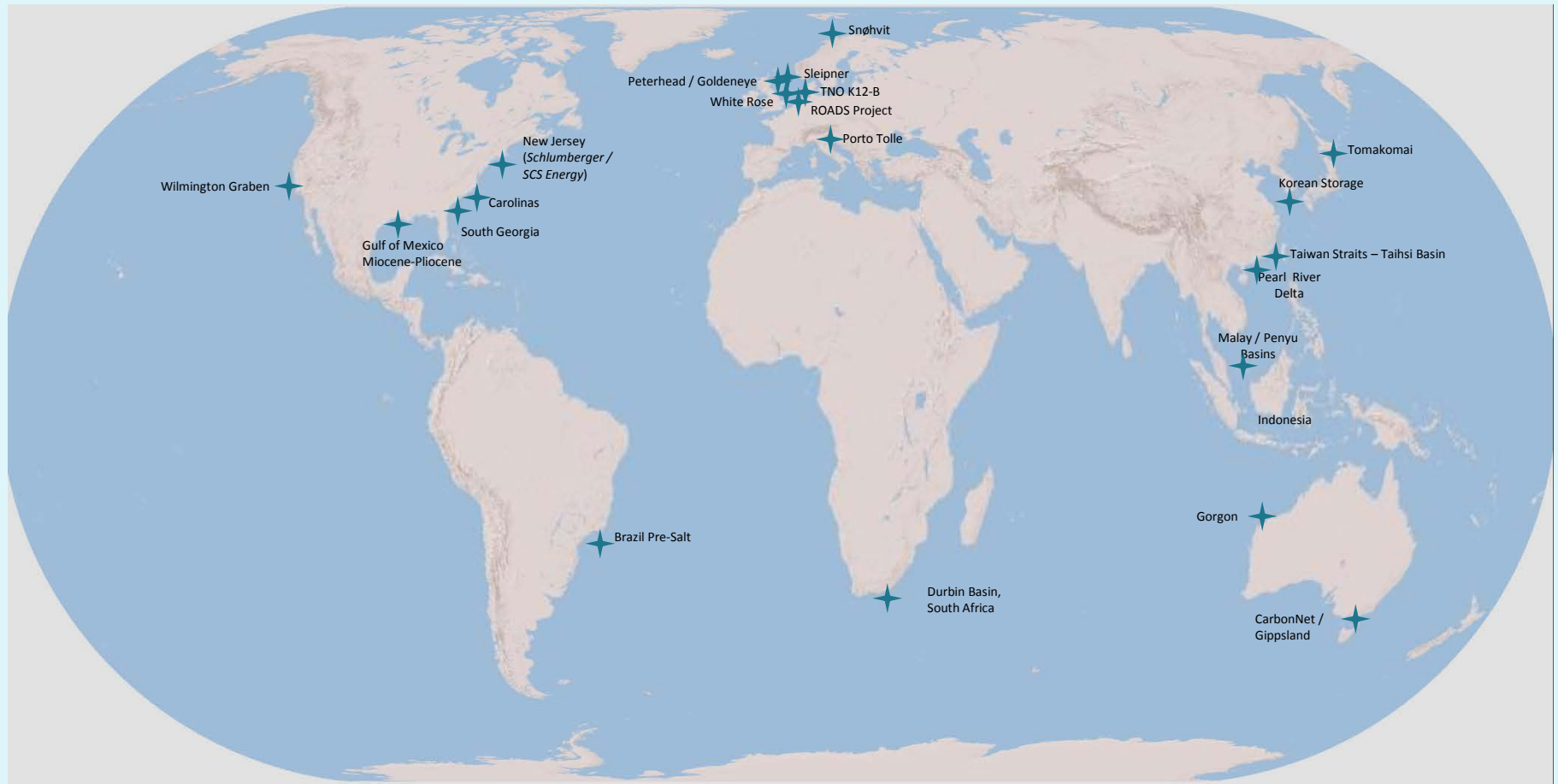
Proposal – A Task Force

- Assess Barriers & Technology Needs
 - Would Serve Many Nations
 - Share (Synergize) Technology Strengths
 - Share Experience(s)

- Success Criteria
 - Accelerate Deployment of Offshore Field Test(s)

Studies of Offshore GS Resources*

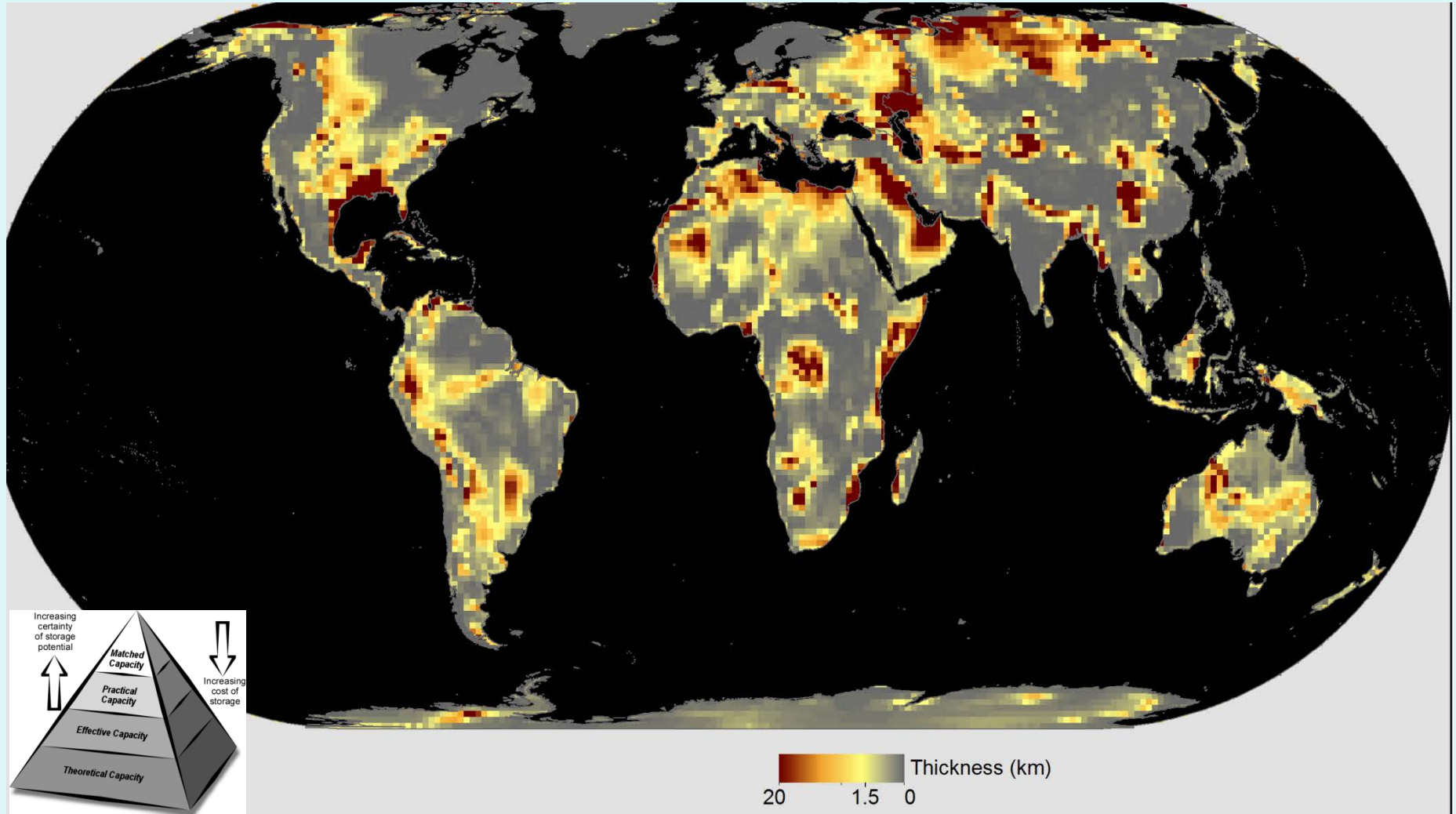
(Not an Exhaustive List)



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*Only Porous Media Studies –
excludes coal-bed and basalts

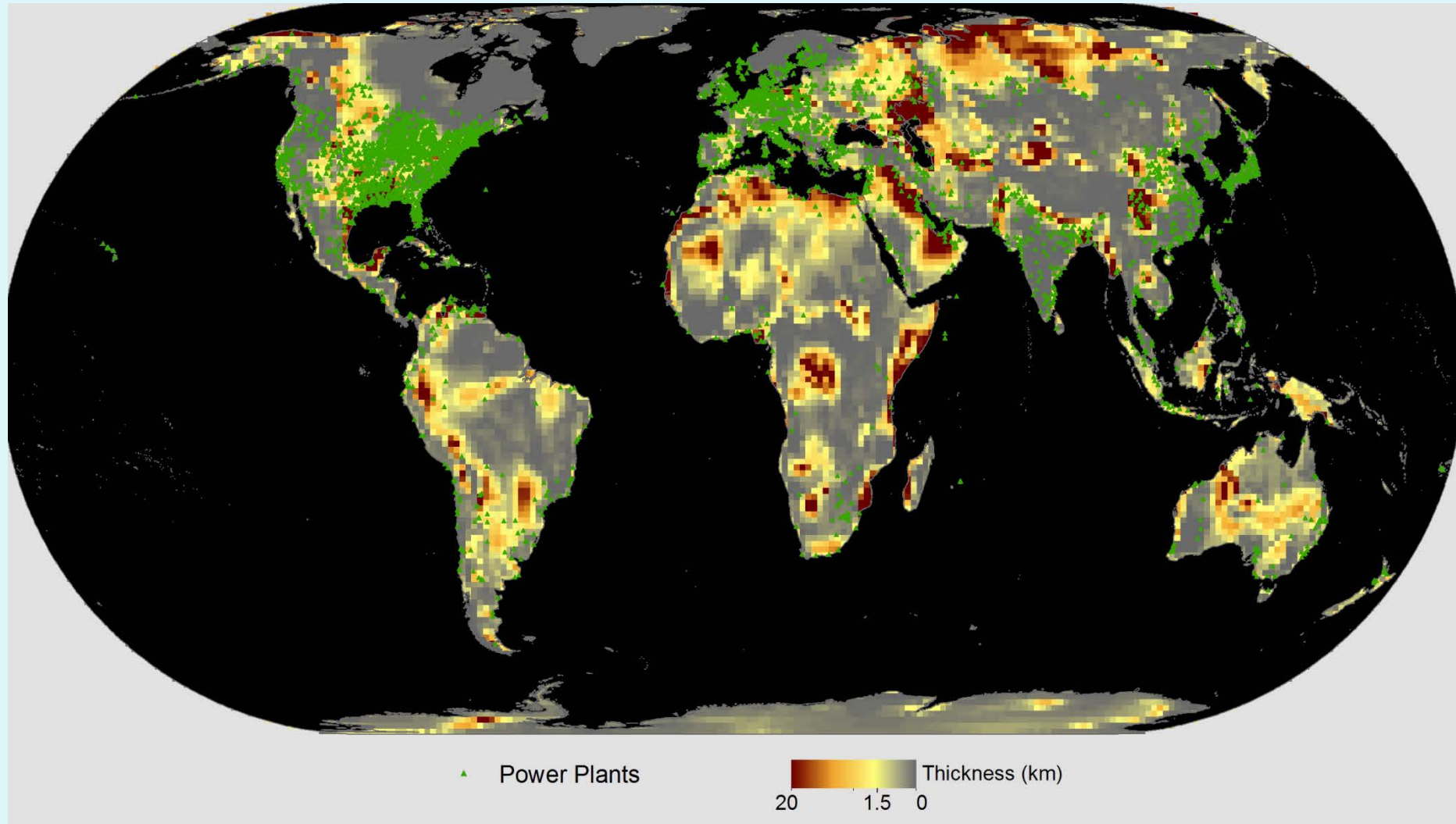
Onshore Potential Prospective Sedimentary Thickness



Bachu et al., 2007
CSLF, 2007

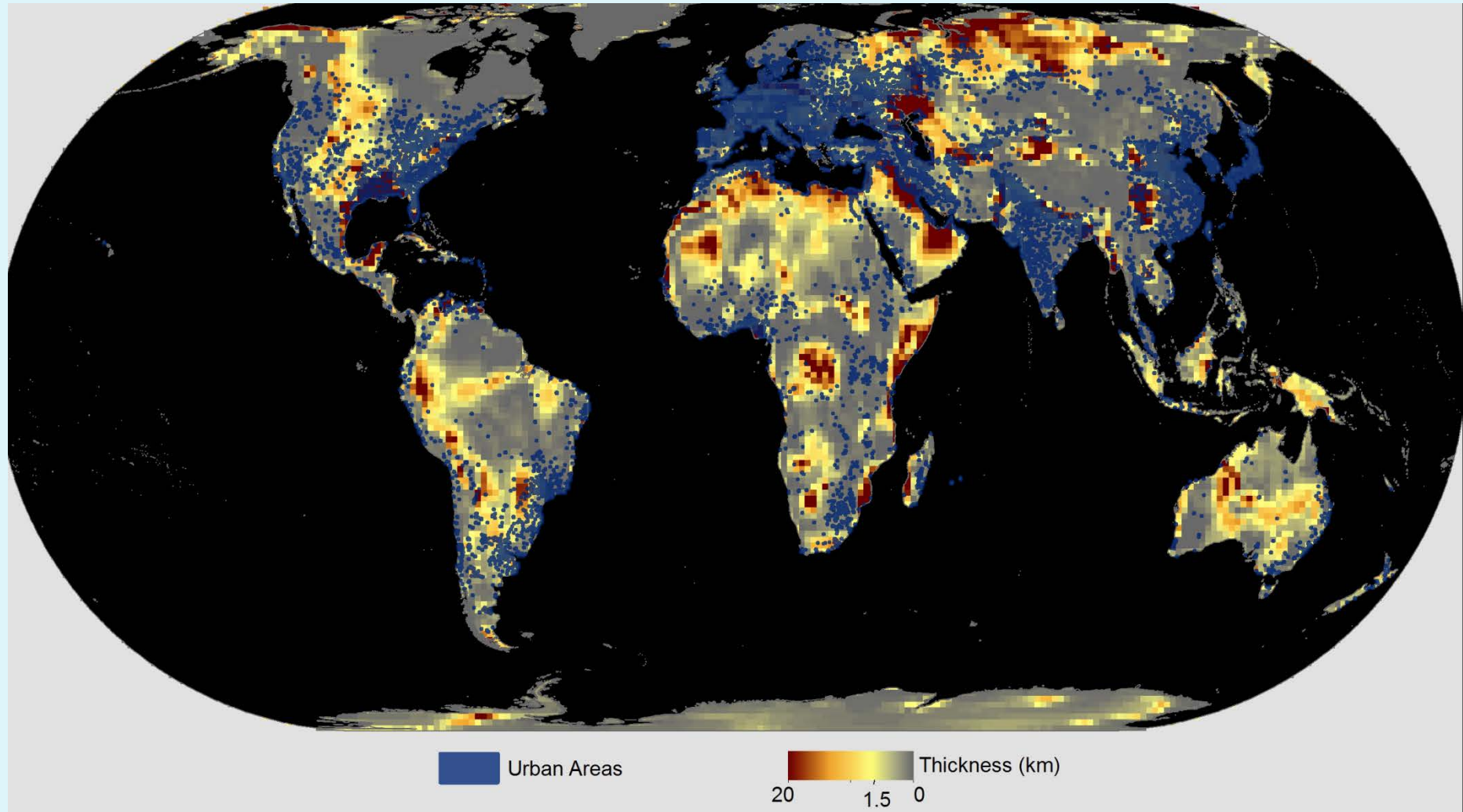
Exxon Production Research Company, W.M.P.A.A.o.P.G.F., 1985
Laske and Masters, 1997
Schneider, et al., 2003

Onshore Potential Relative to CO2 Sources



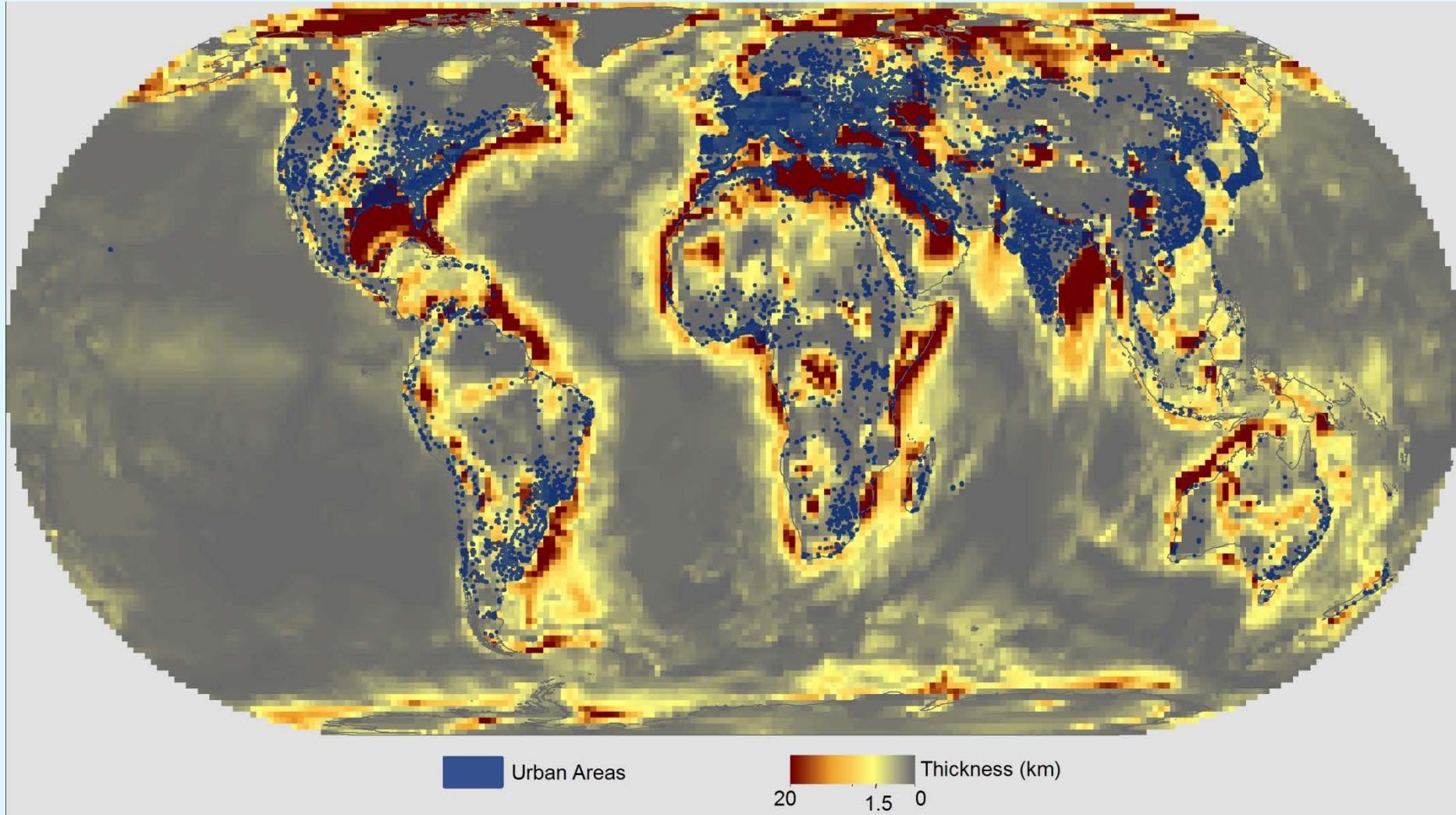
Exxon Production Research Company, W.M.P.A.A.o.P.G.F., 1985
Laske and Masters, 1997
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Onshore Potential Relative to Population Centers



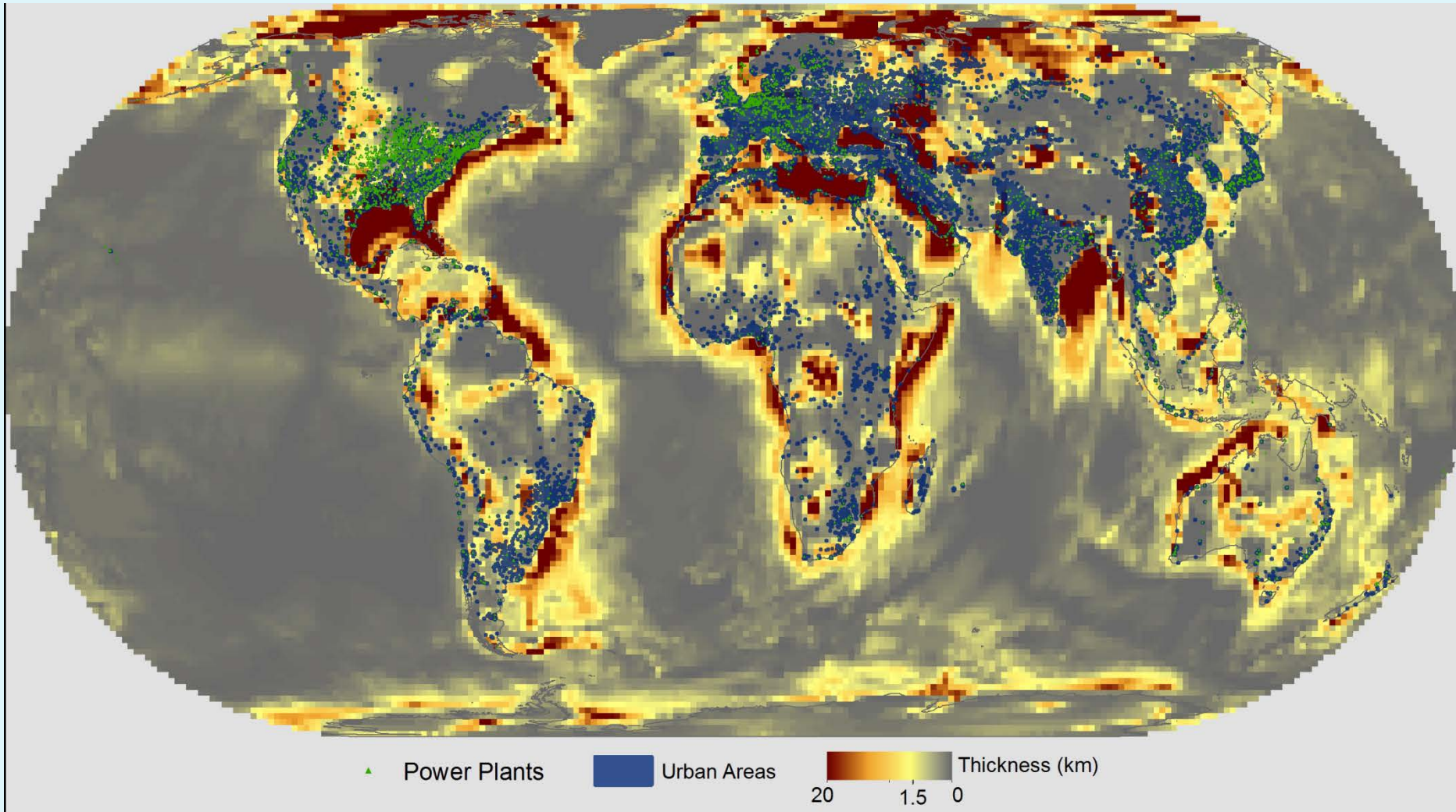
Exxon Production Research Company, W.M.P.A.A.o.P.G.F., 1985
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Offshore Potential Relative to Population Centers



Exxon Production Research Company, W.M.P.A.A.o.P.G.F., 1985
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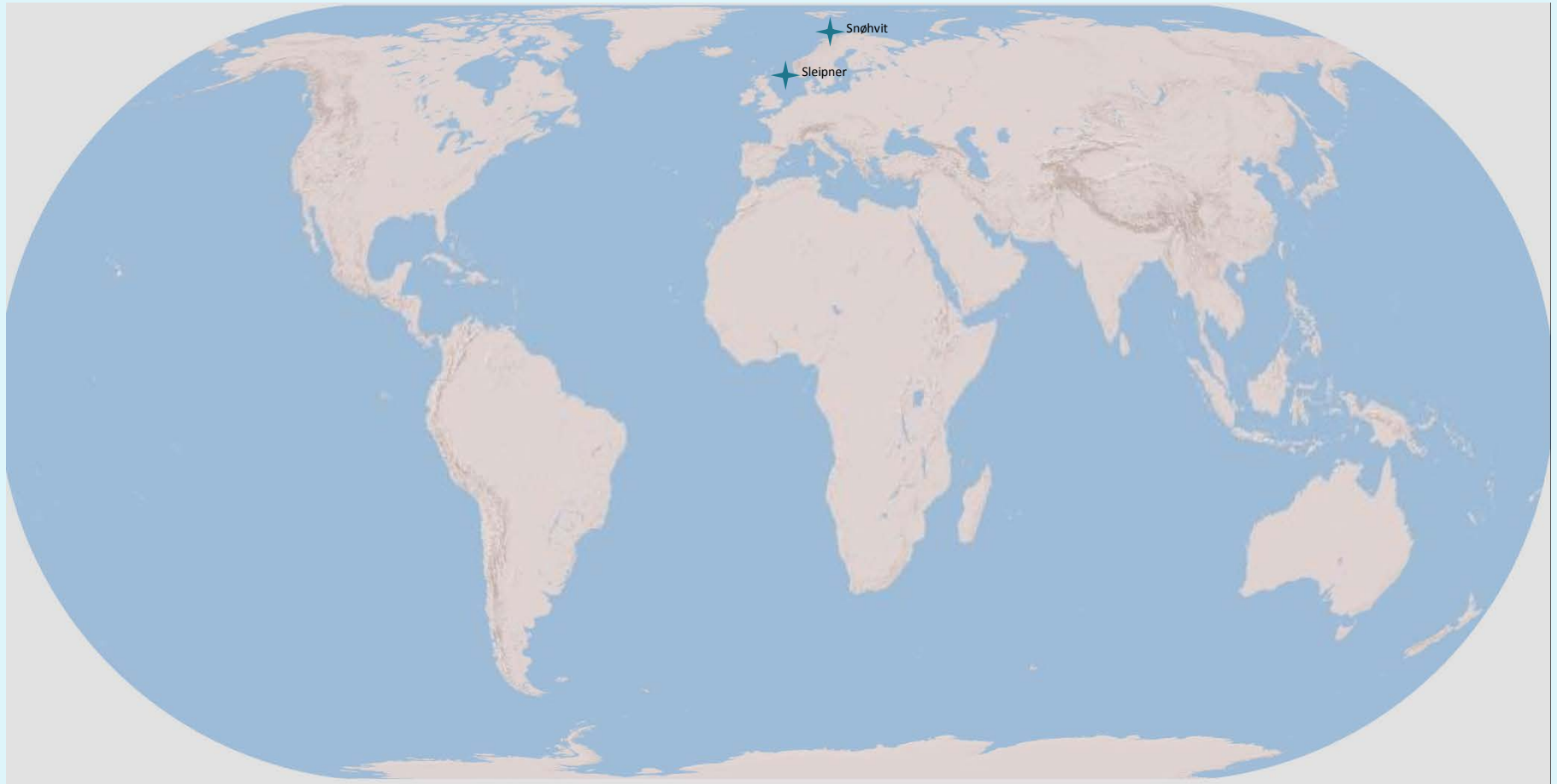
Offshore Potential Relative to Population Centers & CO2 Sources



Exxon Production Research Company, W.M.P.A.A.o.P.G.F., 1985
Laske and Masters, 1997
Schneider, et al., 2003

Offshore Injection To Date*

There seem to be barriers to actually *doing*...



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*Brazil Pre-Salt and Gorgon
injection soon?

Proposal – A Task Force

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- **Success Criteria**
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Scope

Policy

- Assess Cost Issues
- Strategic Deployment Optimization
 - (Techno-Economic Modeling)
- Offshore Up-scaling Policy Issues
- Economic Drivers – What is Business Case?

Technical

- Offshore Geologic Characterization Issues
 - Advantages & Disadvantages
- Offshore Monitoring Issues
- Viability of Offshore EOR
- Collaboration Opportunities with Existing/Emerging Projects?

Technical & Policy

- Assess Global Expertise Centers (e.g., Research / Academic)
- CO2 Transport Challenges (Ship vs. Pipeline)
 - International Trade
- Recommend Next Steps

REFERENCES

Bachu, S., D. Bonijoly, J. Bradshaw, R. Burruss, S. Holloway, N.P. Christensen and O.M. Maathiasen, 2007. CO2 storage capacity estimation: Methodology and gaps. International Journal of Greenhouse Gas Control, v. 1, no. 4, p. 430-443.

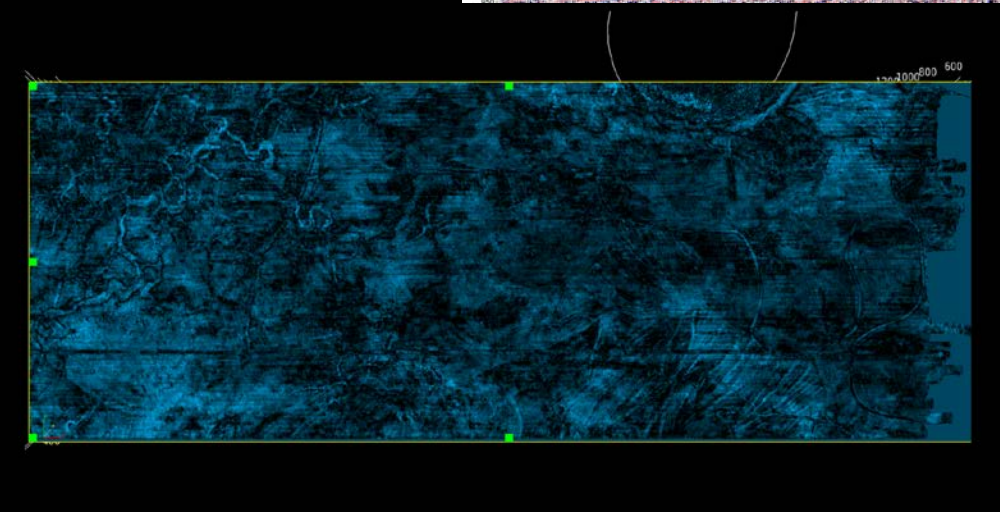
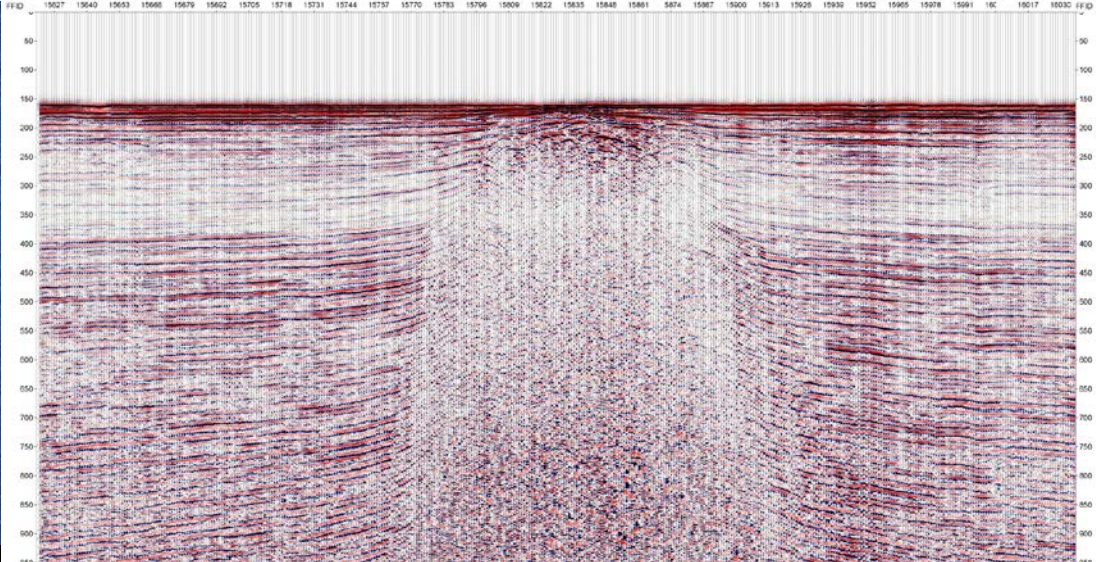
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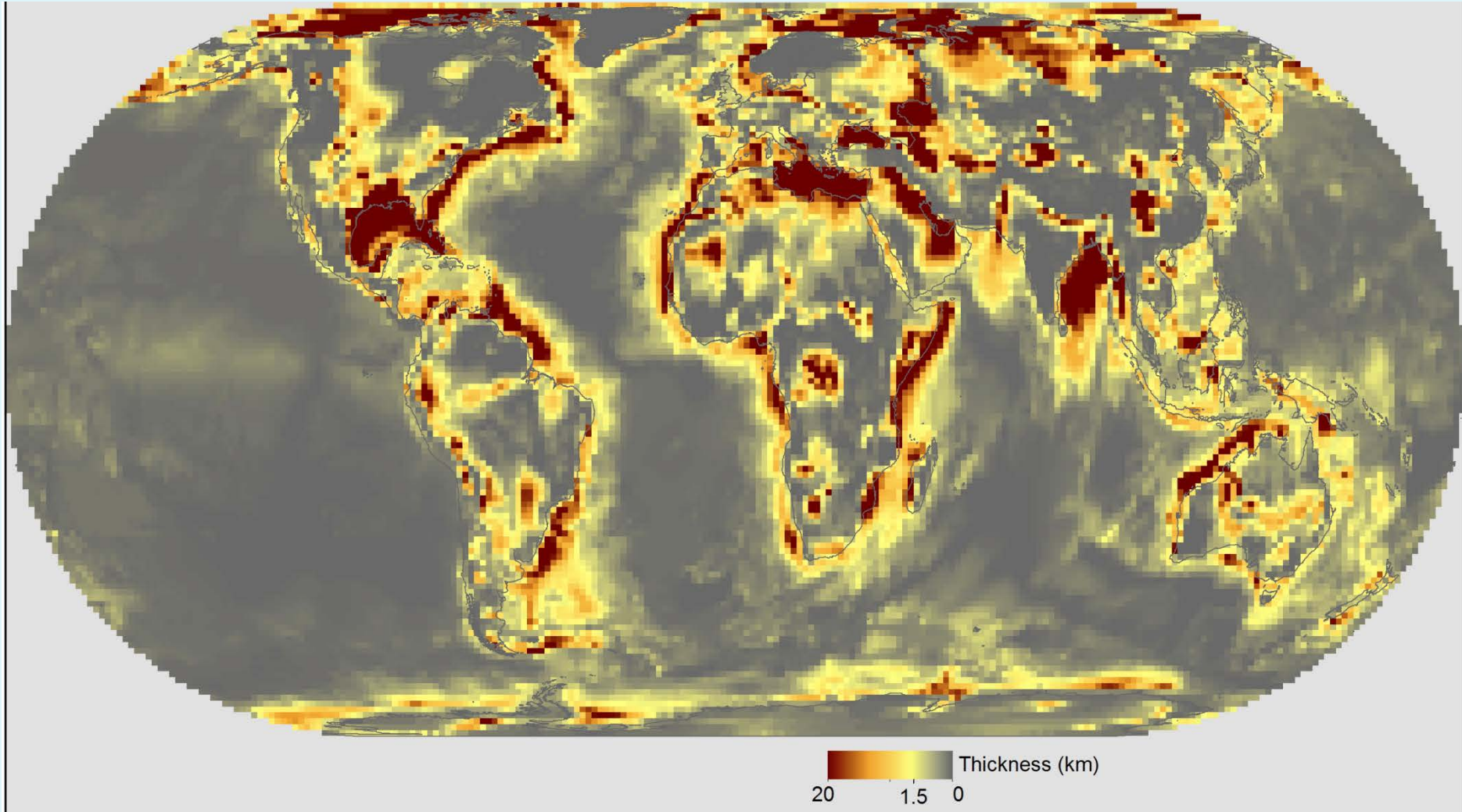
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Gulf of Mexico Hi-Resolution 3D-Seismic Data Acquisition: 21 - 29 October, 2013

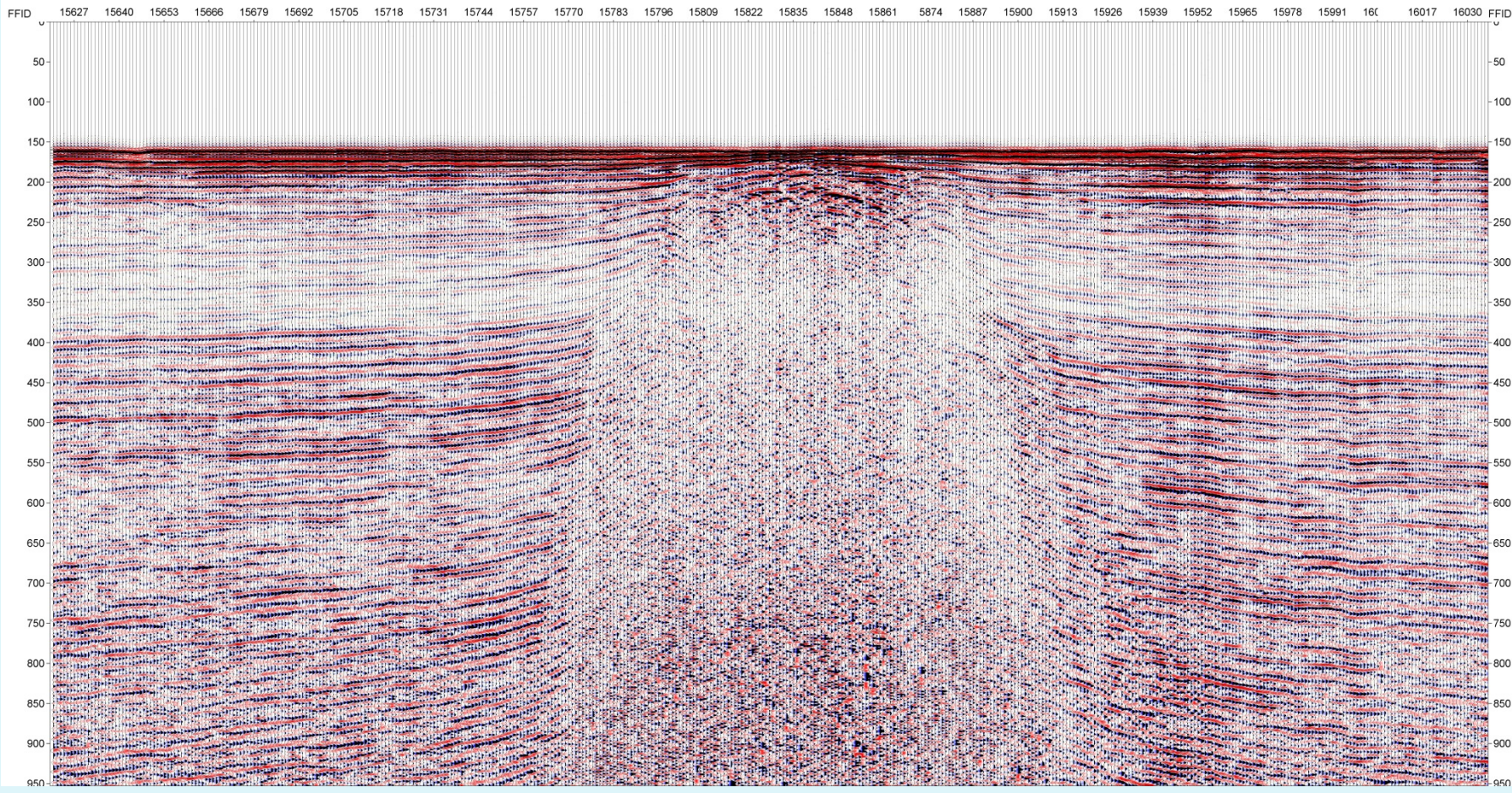


Global Offshore Potential is Great We Must Take Advantage of it

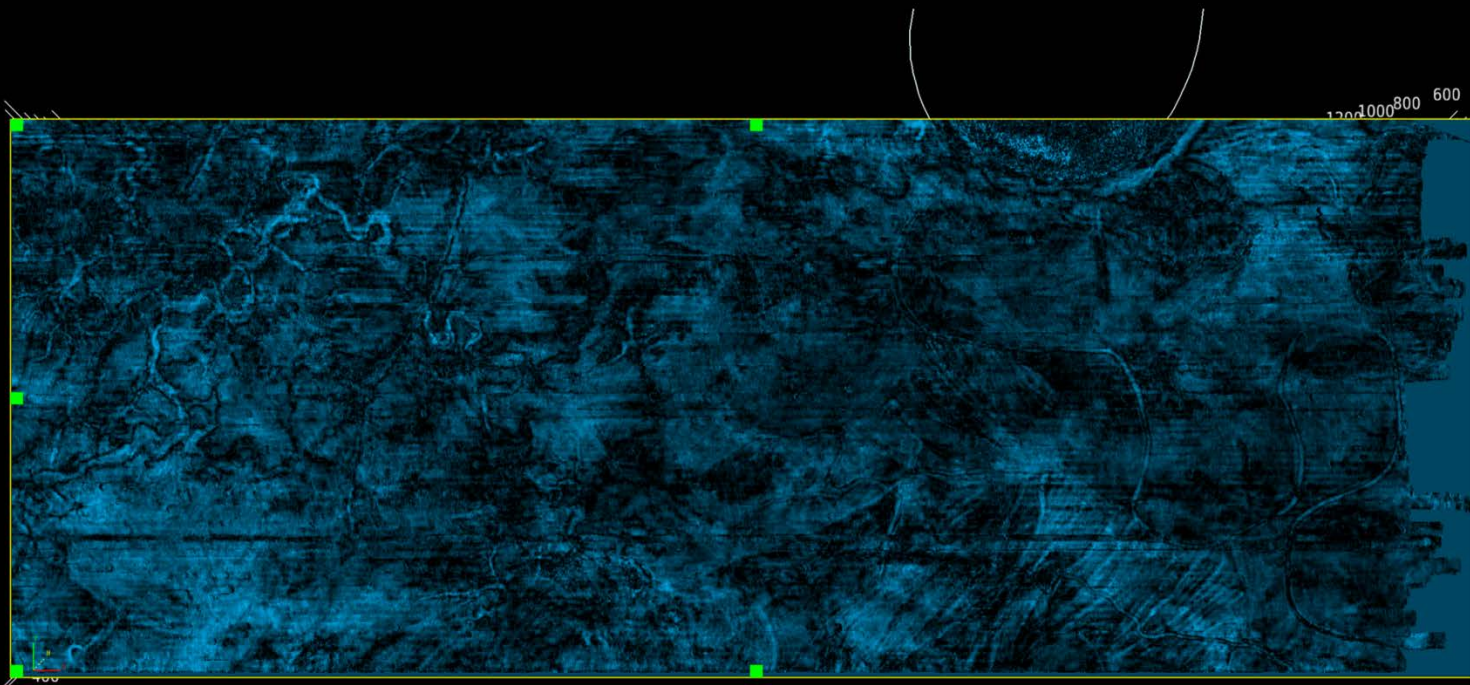


Exxon Production Research Company, W.M.P.A.A.o.P.G.F., 1985
Laske and Masters, 1997
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Gulf of Mexico Hi-Resolution 3D-Seismic Data Field Record – 27 October, 2013



Gulf of Mexico Hi-Resolution 3D-Seismic Data Processed Volume – July, 2012



“There seem to be barriers to actually *doing...*”

We take a lesson from the collaborative model that was successful in getting the Frio pilot kick-started and from the model that DOE used in the Partnerships program.

The Frio Pilot Project’s Collaborators included:

DOE NETL

DOE LBNL

DOE LLNL

Australian CO2CRC (CSIRO)

Alberta Research Council (Canada)

University of Texas at Austin, Bureau of Economic Geology

U.S. Geological Survey

Texas American Resources

Schlumberger

Praxair

Core Laboratories