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GREETINGS FOR THE NEW YEAR

In this second edition of the CBTH Newsletter, we will bring you up to date on our completed activities from the start of the CBTH project on September 1, 2005, and provide you with an overview of our planned activities in 2006. We hope over the past four months you have become acquainted with the GIS and website since we have expanded the GIS database and will be adding more data on the website. If you have any questions about using these online resources, please let us know.

If you are not a member and are interested in participating in the CBTH consortium, we encourage you to take a minute to review our website (www.ig.utexas.edu/research/projects/cbth) where you can also download our project proposal. Please feel free to contact us at cbth@ig.utexas.edu

ADDITIONS TO THE CBTH RESEARCH TEAM

Thanks to the funding support of our sponsors, the CBTH research team is growing.

Janet Everett, (UTIG Senior Administrative Associate), is joining our project as an administrative associate. Jan will be helping us improve the functionality and user friendliness of the CBTH website along with helping us with graphic designs and data compilation. You've seen her work on the website as the new banner. Contact information for Jan can be viewed at www.ig.utexas.edu/people/staff/janet/

Joey Breeland, (UTIG Undergraduate Research Assistant), is an undergraduate at UT. He has been working on the organization and compilation of the literature references for the CBTH website. These will be available in a fully searchable Endnote format. Joey is scouring both the web and traditional hard copies of library books, journals and theses to provide you with a synthesis of all key materials for the area of northern South America. Joey's goal is to have an initial reference list in May with the next newsletter. To learn more about Joey, visit his website at www.ig.utexas.edu/people/students/joey/

Margaret Kroehler, (UTIG Graduate Student), is a first year graduate student at UT who is working on an MS degree on the deepwater area of Venezuela in the South Caribbean deformed belt and the Venezuelan basin. Margaret graduated with honors as a geology major at William and Mary University in Virginia. For an area with such a large onland hydrocarbon potential, the Venezuelan deepwater area is poorly studied so Margaret's study aims to remedy this. In her project that will be completed by May, 2007, she will combine several offshore seismic data sets to produce the first regionally integrated sequence stratigraphic and structural study of the area. She will also make use of the existing DSDP wells in the area which can be tied to these seismic data. For more about Margaret, visit her website at www.ig.utexas.edu/people/students/margaret/

We still hope to add one UT post-doctoral researcher over the remainder of the first year. Since we are part of The University of Texas, some of the most significant research "products" that you are supporting with your annual payments are trained geoscientists at levels ranging from undergraduate through post-doctoral. Please let us know if you would like to support any of our personnel as summer interns or permanent employees at your company.

MEET OUR SPONSORS

Welcome to three new sponsors of the CBTH consortium! This brings our total number of sponsors to nine.

Petrobras. Petrobras is one of the key players now in the Caribbean and Gulf of Mexico regional exploration and brings in much deepwater experience, skill and resources based on their past and ongoing exploration of the tremendous hydrocarbon reserves of the Brazilian shelf and deepwater margin. They are currently exploring the Colombian offshore area along with several onshore blocks in Venezuela.



PDVSA. PDVSA is the national company of Venezuela and therefore controls the majority of data from Venezuela and its offshore area. In addition to their membership, we are discussing with them the possibility of obtaining additional data for us to work on. Paul Mann was also part of a UT-Jackson School of Geosciences delegation which toured PDVSA facilities in Maracaibo and Puerto la Cruz in November, 2005, in order to assess the training needs of the company.



Shell. Shell has maintained a longterm research and exploration interest in Venezuela with a particular interests in the Maracaibo basin and the deepwater offshore areas.



MEET OUR COMPANY CONTACTS

The following people have volunteered to serve as our main contacts for CBTH. All data generated by CBTH is provided to the sponsoring companies through these individuals. Please let us know if your company representative changes over the three-year course of this study. In order to avoid any confusion, in the case that the contact was to change during the course of the study, we send an invoice with all data shipments. The contact signs and returns the invoice to us by fax or mail. That way, we have documentation of the person who receives the data and the date it's received at your company. The contact person also acts to disseminate our products to other people in their respective companies along with representing the company at our annual meetings. We greatly appreciate the extra efforts of the contacts for the project!

BHP Billiton Petroleum, Inc.



Karen Tindale
karen.tindale@bhpbilliton.com
Houston, Texas

British Gas T&T Limited



Andrew Sharp
andrew.sharp@bg-group.com
Port-of-Spain, Trinidad

British Petroleum Trinidad and Tobago



Tim Bevan
bevanTG@bp.com
Port-of-Spain, Trinidad

Exxon Mobil Exploration Company



Pinar Yilmaz
pinar.o.yilmaz@exxonmobil.com
Houston, Texas

Newfield Exploration



Craig Davis
cdavis@newfld.com
Houston, Texas

Repsol



repsolypf.com

Dewi Jones
djonesj@repsolypf.com
The Woodlands, Texas

Petrobras



Fausto Machado
faustomachado@petrobras.com.br
Rio de Janeiro, Brazil

PDVSA



Luisa Alcalá
alcalal@pdvsa.com
Caracas, Venezuela

Shell



Daniel Truempy
daniel.truempy@shell.com
Houston, Texas

CBTH SOFTWARE SUPPORT

Landmark Graphics (software support)

Connie Johnson
cmjohnson@lgc.com



Landmark Graphics is kindly providing our interpretative software. We have just completed our second three-year software agreement.

IVS3D (software support)

Bill McKernan
bmckernan@ivs3d.com



We are also using an exciting visualization package called Fledermaus from IVS3D. We are using the software to create interactive flyovers that combine topography, bathymetry, surface geology and seismic reflection profiles. We have one sample flyover from the Maracaibo basin posted at the website and plan to release a flyover for the Trinidad area in the upcoming January data release.

CHANGES TO CBTH DATA

Beginning with the September 1, 2006 release, we will be releasing only ArcMap 9.0 versions of the data. This data will be available in shapefile format which will enable the users to read the data in any version of ArcGIS or a compatible GIS reader. The data in the GIS will be linked directly to our password-protected website where the data can be viewed and downloaded. We feel that having the data linked directly to our website will give users updated information and enable us to correct any bugs or errors in a faster, more efficient manner. In this way, users will be able to decide what information they'd like downloaded on their computer. We expect the GIS compilation for the 2006 release not to exceed 400 megabytes. Everyone's computers will notice a difference as the first release was 1.29 gigabytes because it included ArcView 3.2 versions and HTML data.

WEBSITE ADDITIONS

In an effort to keep our GIS users informed about any problems that may be encountered due to version incompatibilities or errors in the release, we've created an update and information section on our website. If you are having a GIS-related problem, please visit the

CBTH GIS Updates and Information page to refer to the tips we have placed there. If this doesn't help, send us an email and we will work to resolve the problem: <http://www.ig.utexas.edu/research/projects/cbth/SponsorsOnly/VenmarHtml/GIS/GISdownload.htm>

GIS UPDATES AVAILABLE

It came to our attention as we were beginning to compile data for the next release, that there are problems in the shapefile links for ArcMap 9.0 geodatabases. The main contact person for each company was alerted in October 2005 that we had updated that information with shapefiles that are available on our website at: http://www.ig.utexas.edu/research/projects/cbth/SponsorsOnly/VenmarHtml/GIS/Update_18Oct2005

You will have to make one adjustment to your ArcMap document in order for the links to work properly.

1. Open your map document.
2. Go to File.
3. Open Map Properties.
4. In the space beside "Hyperlink base:" type <http://www.ig.utexas.edu/research/projects/cbth/SponsorsOnly/VenmarHtml/>
5. Press OK.
6. Open the shapefile Properties in the TOC.
7. Click on the Display tab.
8. In the section titled Hyperlinks, check the box beside Support Hyperlinks using field.
9. In the drop-down box, select Hotlink.
10. Below the box, select URL.
11. Press OK.
12. The hyperlink tool (the lightning bolt) is now activated.
13. Click on the tool and the hyperlinked features in the shapefile will be highlighted blue.
14. Select the desired feature and the HTML document will open in your default browser.

15. You will have to enter your username and password to view the data.

PROGRESS AND UPCOMING INFORMATION

2006 promises to be a busy and productive year for CBTH activities. Results to be presented in the spring of 2006 will include several presentations at the AAPG annual meeting (April 9-12, in Houston) and two graduate students (David Soto and Emilio Garciacaro) who will complete their MS theses by May 20, 2006. All of this information will be made available to the sponsors as pdfs and in hard copy.

NEW DATA RELEASE

Listed below are the new data that will be added to the sponsor webpages on January 11, 2006. We have also added Fledermaus flyover animations of northern offshore Trinidad and the northeastern offshore Venezuela area.

Movies

Available for download at <http://www.ig.utexas.edu/research/projects/cbth/SponsorsOnly/movies.htm>. (Includes instructions for using the IVS3D viewer.)

- Fledermaus flyover animation of northern offshore Trinidad and northeastern offshore Venezuela..

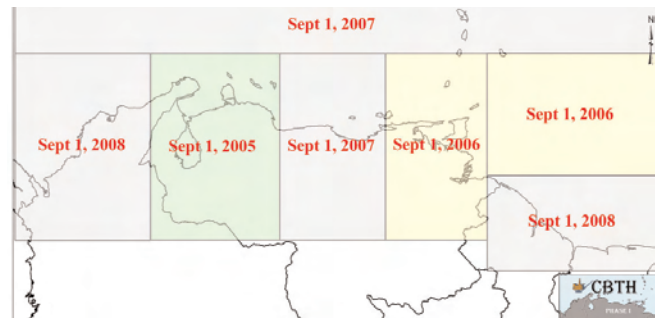
Posters

Available for download at <http://www.ig.utexas.edu/research/projects/cbth/SponsorsOnly/POSTERS/AGU/agu.htm>

- G. Christeson *et al.*—*BOLIVAR Project: A New Model for Grenada and Tobago Basin Evolution.*
- E. Garciacaro *et al.*—*Anatomy of an actively evolving foreland basin inferred from BOLIVAR project 2D seismic lines and merged 3D seismic volumes, Columbus basin, eastern offshore Trinidad.*
- M. Hanzlik *et al.*—*Late Quaternary seismic stratigraphy and structure of the western insular shelf margin of Puerto Rico.*

Due to sponsor interest, we have changed the order of data release. Our first release in September, 2005, was in western Venezuela to match the lease sales in that

region. Due to the interest of our sponsors working in Trinidad, we will release the Trinidad data on 1 September, 2006.



In the figure, the blocks in yellow will be released 1 September, 2006. We will also be updating the 2005 block (shows green in the figure) with new information. Central Venezuela and offshore data will be released September 2007. The Suriname and Colombia blocks will be released September 2008.

PAST MEETINGS

SEG annual meeting Houston, November 6-11, 2005: Dr. Alejandro Escalona presented visualization movies of the Caribbean region at the Jackson of School of Geosciences booth.

Repsol 1-day workshop, November 23, 2005. A one-day workshop on the Trinidad region was held by Dr. Paul Mann, Dr. Alejandro Escalona and David Soto at the Repsol facilities in the Woodlands, Texas to discuss the geology of northern Trinidad.

AGU Annual Fall Meeting San Francisco, December 5-9, 2005: Graduate students Hugo Castellanos, Emilio Garciacaro, Martin Hanzlik, and UTIG Research Scientist Gail Christeson attended the American Geophysical Union Fall 2005 meeting in San Francisco, California, where they presented posters. The poster sessions allowed them to summarize the results of their research work at The University of Texas at Austin, to share these results with the broader scientific community, and to greatly expand their academic peer network.

UPCOMING MEETINGS

Integrated Ocean Drilling Program (IODP): March 30-April 1, 2006; Austin, Texas.

Application Deadline: January 30, 2006

From March 30 to April 1, 2006, we will be convening for an IODP workshop of the Caribbean region in Austin, Texas held by UTIG. The topic of the workshop is “Tectonics, Circulation and Climate in the Caribbean Gateway” (convenors; Paul Mann, Larry Peterson, University of Miami, and Andre Droxler, Rice University).

Since the Cretaceous, the Caribbean Sea has been a critical gateway between major ocean basins in both east-to-west (the Atlantic to Pacific connection) and north-to south (the North Atlantic to South Atlantic connection—including the Gulf Stream and Caribbean and Loop Currents) directions. As its complex tectonic history becomes better constrained, we can now begin to more critically evaluate the Caribbean’s crucial role as an inter-seaway “valve” that controlled paleoceanography and paleoclimate on a regional and global scale.

This workshop will discuss and plan potential scientific ocean drilling expeditions in the Caribbean Sea. The principal goals of this workshop are to formulate key scientific questions, evaluate existing geologic and geophysical data, use these data to identify and prioritize drilling sites, discuss drilling platform options, and to begin coordinating subsequent geophysical surveys, proposals, and multi-proxy analyses.

Workshop applications are open. Researchers from diverse geoscientific specialties, including chemical and physical oceanography, paleoclimatology, paleomagnetic studies, sedimentology, stratigraphy, structure/tectonics, and thermochronology are sought; international and student/post-doc applicants are also encouraged to apply. Limited travel support will be provided by JOI/USSSP for U.S.-based scientists. We welcome participation from industry scientists with knowledge or interest in the paleogeography and deep-water areas of the Caribbean Sea.

Interested parties should direct questions and applications (an email with contact information and a brief statement of interest) to Paul Mann (paulm@ig.utexas.edu, tel: 512-471-0452) by January 30, 2006. The number of participants will be limited to optimize workshop goals. Applicants will be notified by February 15, 2006.

American Association of Petroleum Geologists (AAPG) Annual Meeting, April 9-12, 2006; Houston, Texas

We will give a series of presentations and posters that will summarize our work during last fall and this

spring. We will also be showing visualization movies from the Caribbean region using Fledermaus (www.ivs3d.com) at the Jackson School of Geosciences booth.

CBTH presentations at Annual AAPG meeting, Houston, TX (April 9-12, 2006).

- D. Soto *et al.*—*Structural and Stratigraphic Evidence for the Offshore Extension of the Central Range Fault Zone of Trinidad into the Eastern Offshore Region* – Poster Session – Regional E&P of the Americas – Wednesday, 12 April, 8:30am - 12:00pm in Exhibition Hall C
- A. Escalona *et al.*—*Multiphase Tectonic Evolution of Northwestern Venezuela and Its Offshore Area: Implications for the Distribution of Source and Reservoir Rocks*. Oral Presentation – Regional E&P of the Americas – Monday, 10 April, 3:40pm in Room 317
- P. Mann *et al.*—*Neogene Tectonic Phases of Central and Southern Trinidad Based on Brittle Tectonic Analysis of Faults Exposed in Coastal Cliffs and Rock Quarries*. Poster Session – Regional E&P of the Americas – Wednesday, 12 April, 8:30am to 12:00pm in Exhibition Hall C
- H. Castellanos *et al.*—*Tectonic and stratigraphic controls on the Orinoco heavy oil belt, eastern Venezuela foreland basin*. Poster Session – Regional E&P of the Americas – Wednesday, 12 April, 8:30am to 12:00pm in Exhibition Hall C
- A. Escalona and P. Mann—*Oil and Gas Prospects in the Venezuelan Offshore Area Identified Using a Regional Grid of 2D Seismic Lines*. Poster Session – Regional E&P of the Americas – Wednesday, 12 April, 8:30am to 12:00pm in Exhibition Hall C

Other Related Abstracts

- P. Mann *et al.*—(BOLIVAR study) *Plumbing the Depths of the Caribbean-South American Arc-Continent Collisional Zone Using Long Seismic Reflection and Refraction Transects*. Poster Session—Regional E&P of the Americas – Wednesday, 12 April, 8:30am to 12:00pm in Exhibition Hall C.
- N. Chaderton *et al.*—(UT PhD study) *Seismic Stratigraphy and Structure of The Crest of The Barbados Prism and Adjacent Tobago Basin*. Poster Session – Regional E&P of the Americas –

Wednesday, 12 April, 8:30am to 12:00pm in Exhibition Hall C.

- H. Castellanos *et al.*—(UT PhD study) *Sequence Stratigraphy and Structure of the Miocene Guantao and Pliocene Minghuazhen Formations, Zhao Dong Field, Bohai Bay, Eastern China*. Poster Session – Selected Academic Research Topics – Monday, 10 April, 8:30am to 12:00pm in Exhibition Hall C
- P. Mann *et al.*—(UTIG giant oil field compilation) *Tectonic Setting of 31 Giant Oil and Gas Fields Discovered from 2000-2005: Implications for Future Discovery Trends*. Oral Presentation – Recent Discoveries and Play Openers – Monday, 10 April, 8:45am in Room 312

Northern South America Shortcourse, April 13-14, 2006, Houston, Texas.

Immediately following the AAPG meeting, we plan to hold a Northern South America short course April 13-14, 2006, in Houston. Please let us know if you will be interested in sending representatives to this short course. We have found that the short course is the most time efficient way for us to communicate a large amount of stratigraphic and structural information in a short period of time. Please contact Paul Mann (pmann@ig.utexas.edu) or Alejandro Escalona (escalona@ig.utexas.edu) for more information. For course content, go to: www.ig.utexas.edu/research/projects/cbth/links.htm

Gulf of Mexico-Caribbean Shortcourse, September 11-13, 2006, Houston, Texas.

September 11-13, 2006, UTIG researchers (W. Galloway, P. Mann and A. Escalona) will be teaching a Gulf of Mexico-Caribbean shortcourse at the AAPG fall training course in Houston. We will be sending more information about this shortcourse in early 2006.

We look forward to seeing you at AAPG and the short courses! If you have new hires or transfers with the group, these courses provide a quick way to get them “up to speed”. Keep an eye on our website for updates and more information for these upcoming events: www.ig.utexas.edu/research/projects/cbth/links.htm

AAPG BULLETIN SPECIAL ISSUE

An AAPG Special Bulletin focusing on the Maracaibo basin is scheduled to be released in April 2006. 3D

Anatomy of a supergiant: Maracaibo Basin, Venezuela is a compilation of nine papers co-edited by Paul Mann and Alejandro Escalona. The contents are:

1. *Regional geologic and tectonic setting of the Maracaibo supergiant Basin, western Venezuela*, P. Mann, A. Escalona, and M. V. Castillo
2. *Tectonic controls of the right-lateral Burro Negro tear fault on Paleogene structure and stratigraphy, northeastern Maracaibo Basin*, A. Escalona and P. Mann
3. *Deep structure of the Mérida Andes and Sierra de Perijá mountain fronts, Maracaibo Basin*, L. Duerto, A. Escalona and P. Mann
4. *Cretaceous to Recent Structural and Stratigraphic Development in South Lake Maracaibo, Venezuela, Inferred from Well and 3D Seismic Data*, M. V. Castillo and P. Mann
5. *Deeply Buried, Early Cretaceous Paleokarst Terrain, Southern Maracaibo Basin, Venezuela*, M. V. Castillo and P. Mann
6. *Sequence stratigraphic analysis of Eocene clastic foreland basin deposits in central Lake Maracaibo using high-resolution well correlation and 3-D seismic data*, A. Escalona and P. Mann
7. *Early and middle Miocene depositional history of the Maracaibo Basin, western Venezuela*, J. Guzman and W. Fisher
8. *An overview of the petroleum system of Maracaibo Basin*, A. Escalona and P. Mann
9. *Petrophysical and seismic properties of lower Eocene clastic rocks in the central Maracaibo Basin*, A. Escalona

DM2 YEAR-END MEETING

The year-end meeting for DM2 took place Friday, December 2. The six DM2 sponsors received an atlas entitled *Deep-Marine Depositional Margins Atlas of Eastern Offshore Trinidad* in hardcopy and on disk. The DM2 consortium has now officially ended and has divided into two different consortia. Lesli Wood will continue with the Quantitative Clastics Laboratory Consortium which emphasizes the use of mega-merged 3D seismic data sets for study of seismic geo-

morphology and reservoir characterization of continental margins. Paul Mann will continue with the CBTH Consortium designed to compile all of the desired information for petroleum exploration in the northern South America and southern Caribbean regions. Both projects will continue to work interactively and Paul and Lesli will share responsibilities in advising UT students in both projects.

REMINDER FOR SEPTEMBER 2006

We want to make everyone aware that on 1 September, 2006, passwords will be changing for each company. To ensure that your access is uninterrupted, please send your 2006 payments so they will be received no later than 1 September, 2006.

CONTACT INFORMATION

Paul Mann

Phone: 512-471-0452
Email: paulm@ig.utexas.edu

Alejandro Escalona

Phone: 512-471-0308
Email: escalona@ig.utexas.edu

General Information

Email: cbth@ig.utexas.edu