

## Drilling the Dual active faults system in Haiti.

**The Haiti-DRILL Magellan Plus workshop** dedicated to the project was held in Rueil-Malmaison (France) on October 26-28 2016, and hosted by IFPEN.

The workshop gathered 36 experts from various countries of the Caribbean region, the Americas and Europe. The program, supported by the ECORD/ICDP Magellan Plus Workshop Series was aimed at setting out a proposal dedicated to drill and document the left-lateral dual N. Caribbean transform boundary in Haiti. The objectives of IODP and ICDP's scientific issues, as well as regional constraints and needs in Haiti were presented extensively in order to frame the discussions. Because the active setting of the faults presents a remarkable offshore-onshore continuity, one of the objectives was to agree on the relevance of an ADP proposal with a proper definition of the objectives, sites locations, sites surveys and scientific interactions. Scientific and technical presentations were performed, aiming at precisising the regional/local geological and structural controls, and a synthesis of fluids sampling, for the best refining of the target locations.

If seismic studies are numerous offshore, they are difficult to operate onland, due to high reliefs and impossibility to use dynamite in Haiti. Propositions were then raised to use adequate techniques such as Weight Drop tool to obtain better 3D images of the active fault across the selected sites and the Azuei Lake. The best technical way to conduct seismic survey in Haiti was largely discussed and it was recommended to link with projects dedicated to the surface fault trace characterization. One of the main objective of the project being to compare regular surface observations (description, fluid sampling, seismicity indicators and measurements) and their variations at depth in a specific segment close to Port-Au-Prince, it was strongly suggest to refine the monitoring attempts and the tools proposed to be used in the well cross-cutting the EPG Fault.

*The Haiti-Drill participants (two different sessions)*



The necessity to combine the ICDP and the IODP Haiti-DRILL projects was then encouraged. Questions were raised concerning the way to match reviews of the two panels, and a full agreement was acquired on the location of the on IODP and ICDP sites (with one alternate site in the ICDP project). Therefore, it was decided to complement the project by submitting proposals, 1) including ROV and coring in addition to the program already planned in December 2015, for offshore targets and 2) a combination with coordinated lake-to-land geological, coring and new seismic surveys, with those already on their way.



*Working session on the last day.*

The best integration of scientific objectives onshore and offshore together with the selection of the drilling platform and tools was debated.

Finally a solid scheme of leading team and task forces was discussed.



*N. Ellouz-Zimmermann (IFPEN) and M. Pubellier (INSU-ENS)*

The Haiti-Drill Workshop took place from 9h on the 26th of October to 16 H on the 28th of October, at Rueil-Malmaison in suburb Paris (France). Thirty six participants joined the workshop. Three others had to cancel due to flight connection problems or teaching commitments. Students are mentioned in blue.

Daniel	ARITZEGUI	UNIVERSITY OF GENEVA	Switzerland
Jean-Robert	ALTIDOR	BUREAU OF MINES OF ENERGY	Haiti
Axelle	BARONI	IFPEN	France
Anne	BATTANI	IFPEN	France
Christian	BECK	University Savoie-Mont-Blanc	France
Dominique	BOISSON	University of Haiti	Haiti
Jordane	CORBEAU	UPMC	France
Marie-Hélène	CORMIER	Un. Of Rhodes Island	USA
José-Luis	CUEVAS-OJEDA	National Seismological Research Center	Cuba
Marc	DE BATIST	Ghent University	Belgium
Florence	DELPRAT-JANNAUD	IFPEN	France
Jérôme	DYMENT	IPGP	France
Nadine	ELLOUZ-ZIMMERMANN	IFPEN	France
Nathalie	FEUILLET	IPGP (unable to attend)	France
Andreina	GARCIA	IPGP	Venezuela
Jean	GEFFRARD	SODEPA	Haiti
José-Luis	GRANJA BRUNA	Computense University of Madrid	Spain
Xavier	GUICHET	IFPEN	France
Manuel	ITURRALDE VINENT	Sociedad Cubana de Geologia	Cuba
Marie-José	JURADO	ICTJA	Spain
Frauke	KLINGELHOEFER	IFREMER	France
Mickaele	LE RAVALEC	IFPEN	France
Sylvie	LEROY	UPMC	France
Jean-Marc	LOMBARD	IFPEN	France
Cecilia	MC HUGH	University of New-York - Queens College (unable to attend)	USA
Bernard	MERCIER de LEPINAY	Géoazur	France
Pauline	MICHEL	IFPEN	France
Roberte	MOMPLAISIR	UNIVERSITY OF HAITI	Haiti
Guy	NICOLAS	IFPEN	France
Catherine	PIERRE	CNRS	France
Jeffrey	POORT	UPMC	France
Manuel	PUBELLIER	ENS	France
Claudio	ROSENBERG	UPMC	France
François	ROURE	IFPEN	France
Julien	SCHMITZ	IFPEN	France
Alexandre	SCHNUBNEL	ENS (unable to attend)	France
Christine	SOUQUE	IFPEN	France
Ales	SPICAK	Czech Academy of Sciences	Czech Republic
Richard	WESSELS	IFPEN	France/Netherland