

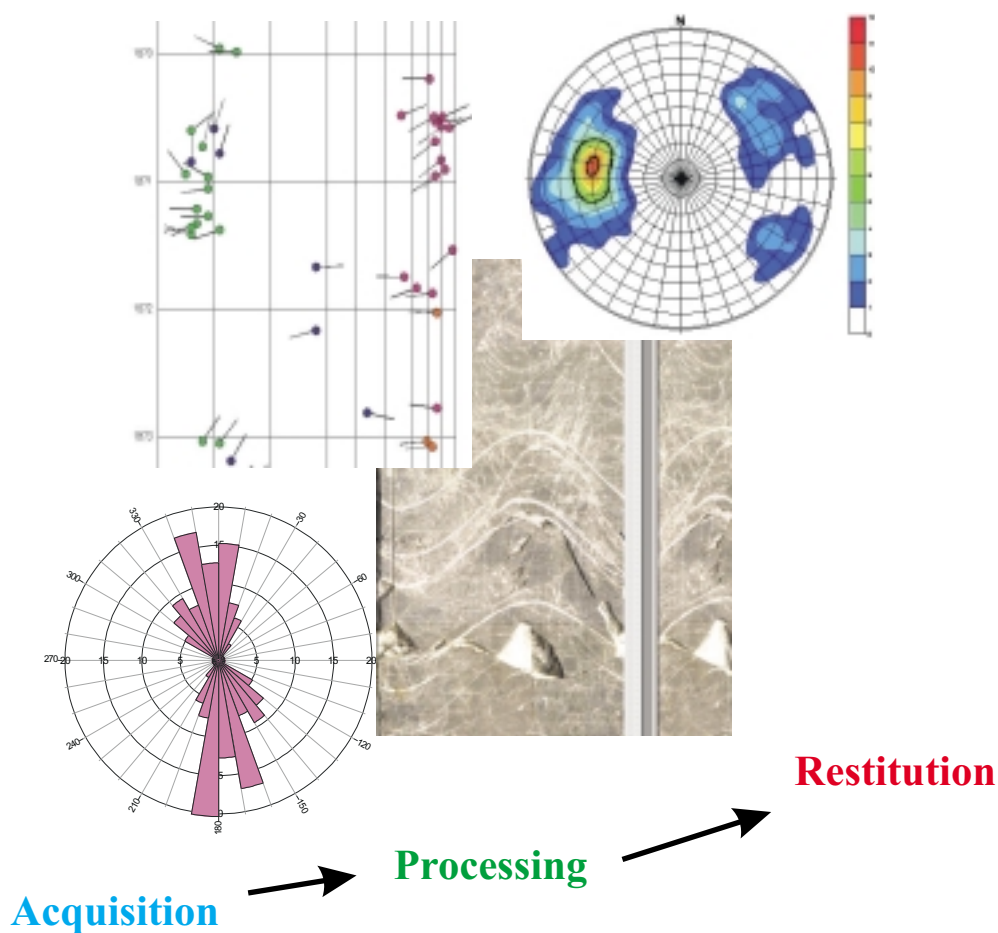
CORE INTERPRETATION ASSISTANCE

Proposes the

3D STRUCTURAL ANALYZER

A system for geometrical and geological analysis of drill-cores

Using the three-dimensional digitization technology



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and
The Key
Alliance Partner



Corias AS3D : State-of-the-art technology A step forward in structural core analysis

The data recording is made by using the AS3D, CORIAS equipment which allows, by three-dimensional digitization, a direct acquisition of planar and linear structures on drill cores. The orientation of the structures is first calculated in relation to a reference scribe line, then reoriented in the real geographic position.

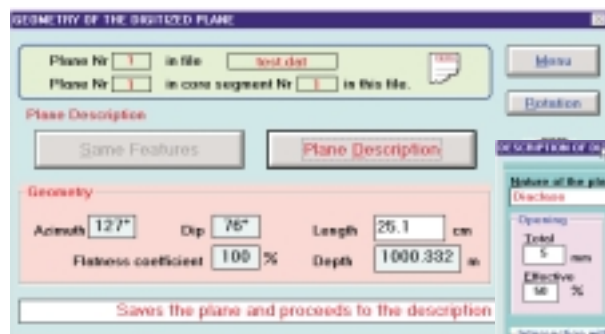
- * With an oriented core, the geographic orientation of the structures is calculated immediately;
- * With a non-oriented core, the reorientation is done using statistic investigations and logging data,
- * Without such information, sedimentary and tectonic informations from various sources (seismic, tectonic stylolite, borehole ovalisation ...) can also used to determine the real position of the core reference scribe line.



PORTABLE AND FAST:

Direct operation on the drilling site or in the core library.
Up to 40m of cores studied per day.

SPECIFIC: software designed by and for geologists. Customized menus, available in French or English.



Geometric characteristics of geological planes obtained instantaneously

SIMPLE: Interactive acquisition of geometric and descriptive characteristics of geological structures.



Management module of the descriptive characteristics

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Nr	AzD	DpD	L	Depth	Nat	Qual	Open	Effic	F1	1% F2	2% Movt		
2	110	4	10	3091.717	T0			2	A	100				Real
3	4	167	76	12.6	2958.525	TD			0.2	0.04	M	100		
4	5	2	9	10	2958.532	S1			0.1		R	100		
5	8	315	2	10	2958.716	S1			0.1		R	100		
6	7	263	5	10.1	2958.742	SL								
7	6	785	6	10.1	2958.809	SL								
8	10	127	89	2.1	2958.871	T1			0.2	0.2				
9	9	314	88	2.5	2958.88	T1			0.2	0.2				
10	11	119	95	1.7	2958.912	T1			0.2	0.2				
11	13	271	83	10.5	2958.995	TD			0.2	0.06	M	100		
12	12	94	79	1	2958.975	T1			0.2	0.2				
13	14	194	78	15.9	2958.119	TE			0.4		C	100		
14	16	309	59	2.1	2958.123	T1			0.2	0.2				
15	15	200	76	15.7	2958.156	TE			0.4		C	100		

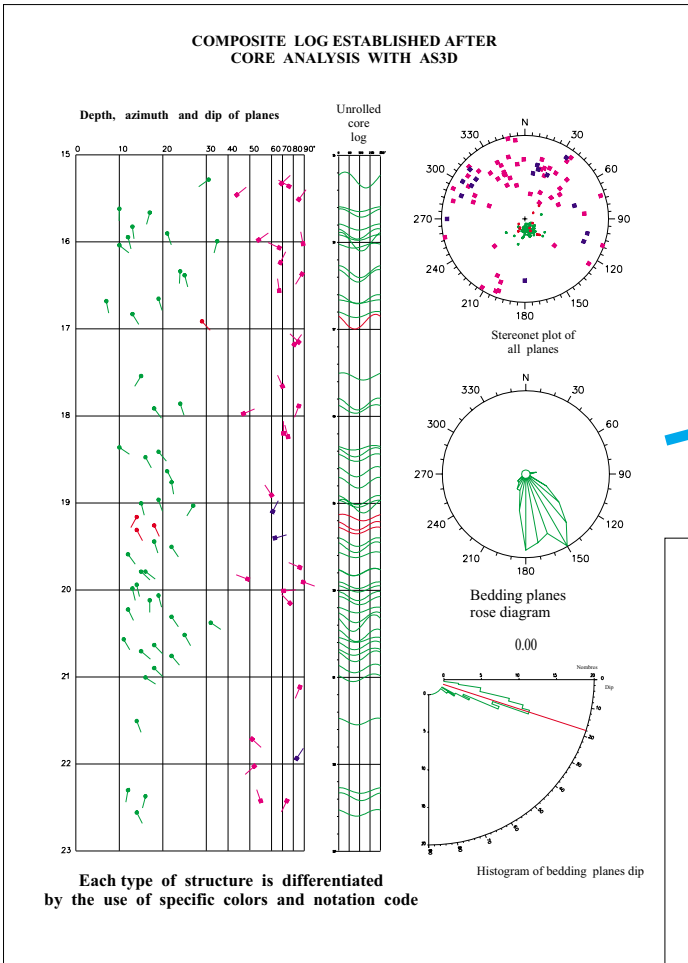
Immediate storage in the reliable integrated database

HIGH-PERFORMANCE: Permanent quality control of data acquisition.

Results obtained in very short time

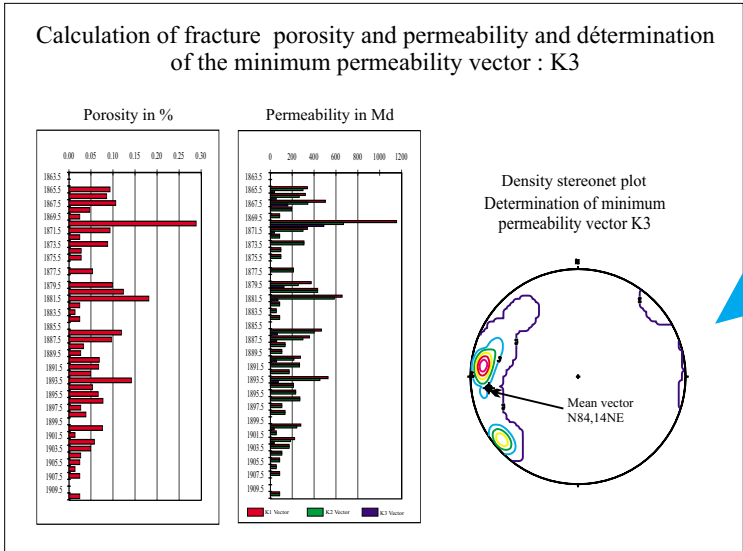
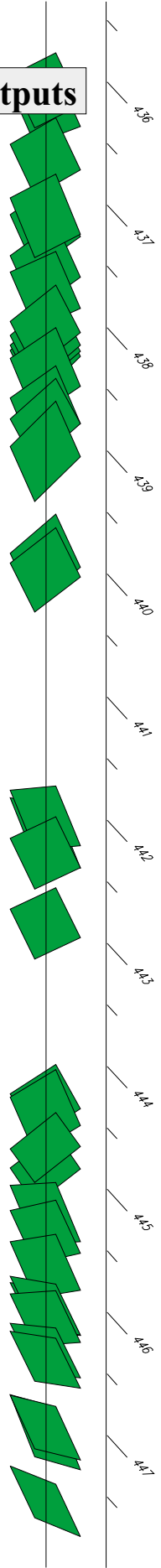
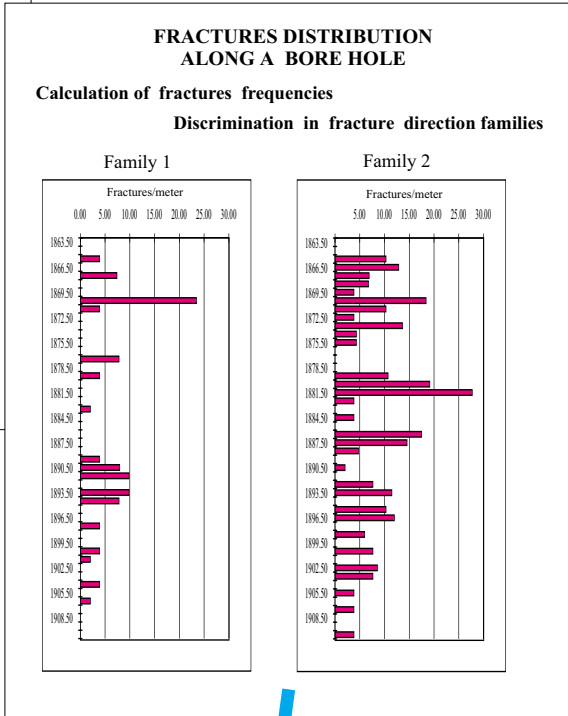
Large range of analysis depending on the project

The fullest data to produce the most accurate models

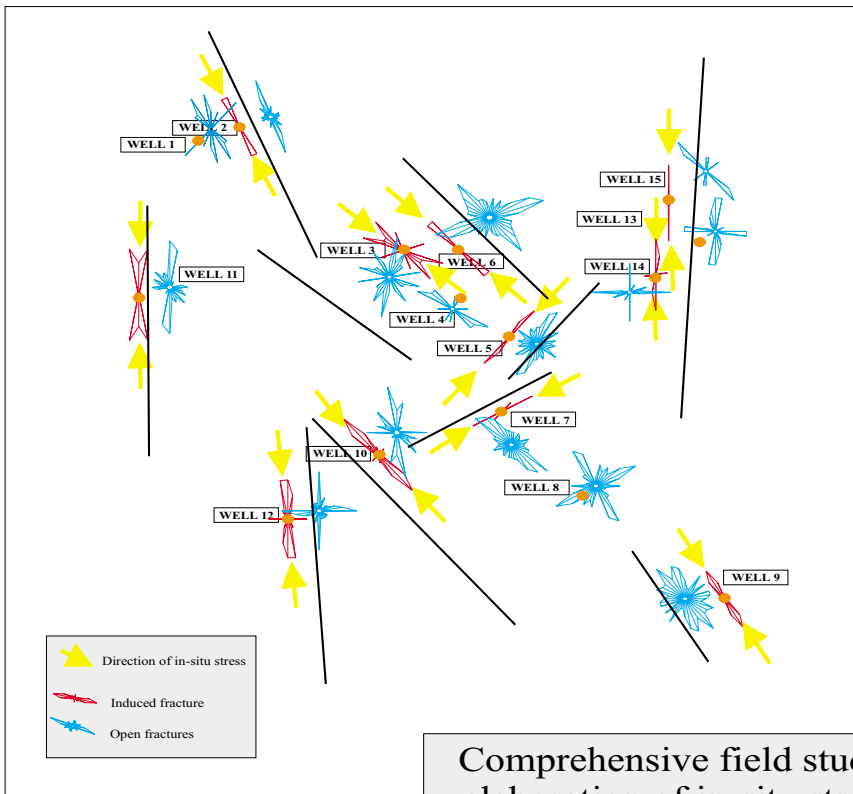


Customized graphical outputs

From 2D figures to 3D diagrams



From fracture orientation through frequency and porosity and permeability to well optimization



Comprehensive field studies with elaboration of in-situ stress maps

Corias has large experience and knowledge of structural core logging to characterise features on a microstructural scale and larger-scale.

- Potential benefits such as:**
- * development of overall fracture model in the reservoir simulator
 - * determination of near well bore effects
 - * understanding of influence of stress in fluid movements

By the way, CORIAS offers You:

Fractures analysis

Corias geologists are specialized in fracture analysis. From data collecting to drawing the results, they take care of all information regarding the structural analysis of the cores.

Civil Engineering

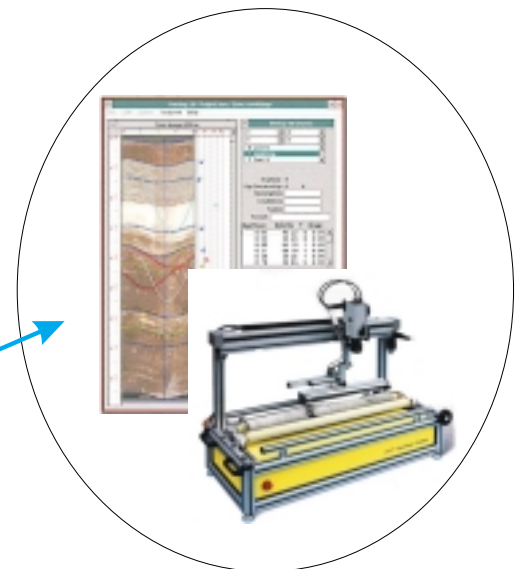
Corias has developed specific data treatment in order to perform a complete bloc fracturing and stability in fractured rock medium.

Core Scan system

In complement to the core analysis with AS3D equipment, Corias has also a new Core Scan video system to use for pictures storage or for structural analysis with integrated software.

Reorientation

Corias has long experience in analysis of oriented cores and propose an on site reorientation with immediate structural analysis and report.



Corias is working worldwide with many major companies:

Europe: Tota-Elf-Fina, BP-Amoco, BEB, Veba, Coparex, Conoco...Gasprom, Jaslo
 Middle East: ADCO, ADNOC, ADMA, KOC, Total,

Complete list of recent references are available on our web site: www.corias.com