



# GEOTEGRA DE MEXICO SA DE CV

A Flow Assurance Group Corporation Company



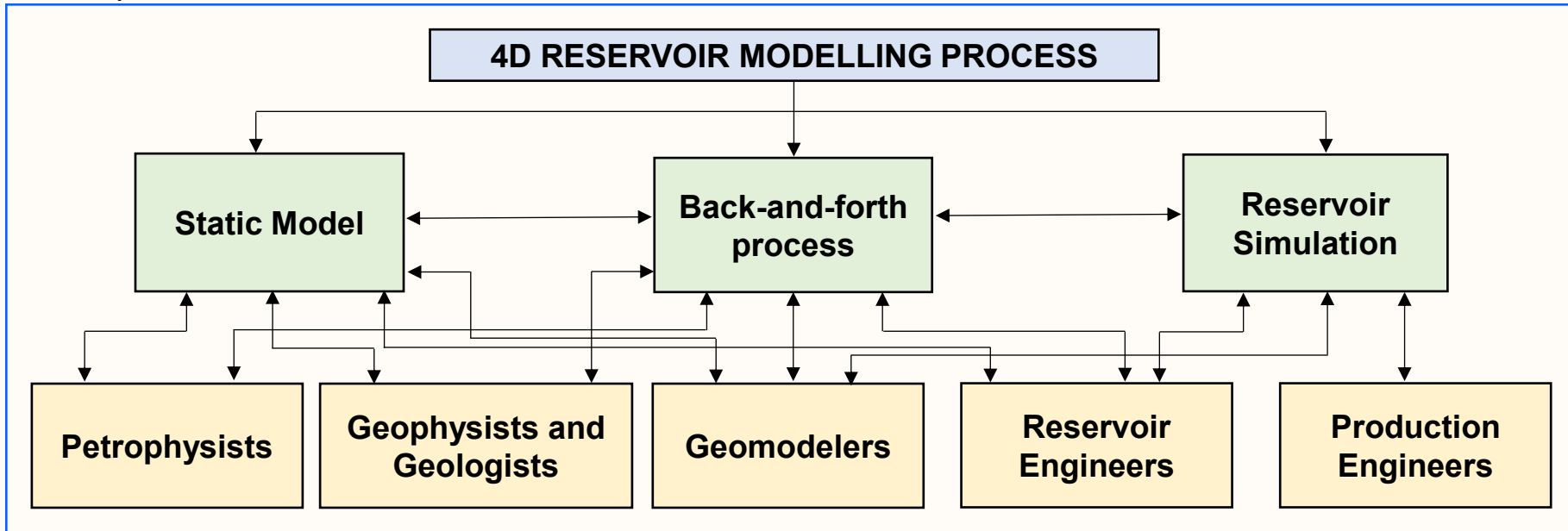
## CORPORATE PRESENTATION

### “Geomodelling 4D”

AN INTEGRATED RESERVOIR STUDY TECHNIQUE: *GEOSCIENCE-SIMULATION*

12 years of Experience in Mexico, Argentina & Venezuela Reservoirs & Fields

Geotegra is Mexican company established in 2014 with legal entity in Mexico and is a **Flow Assurance Group Corporation** Company. Our core business is to provide reservoir studies-services including geophysics, petrophysics, geology, geomodeling and simulation. We have developed a technique-methodology called “Geomodeling 4D” which combines static and dynamic process, workflows & data to condition the static-dynamic model from the beginning, following a back-and-forth process for simulation to guarantee a proper and rapid reservoir history match.





Geotegra's mission is to develop, through a multidisciplinary team, an innovative geomodeling methodology focused on reservoir simulation, providing reliable insights to support strategic decision-making



Geotegra's vision is to deliver specialized services for the study of all types of reservoirs, building strong and successful partnerships with clients and collaborators.



Geotegra is guided by leadership, teamwork, and the delivery of high-quality, advanced technical work with a global corporate perspective. The company maintains a strict ethical code with zero tolerance for corruption and bribery, supported by continuous oversight.

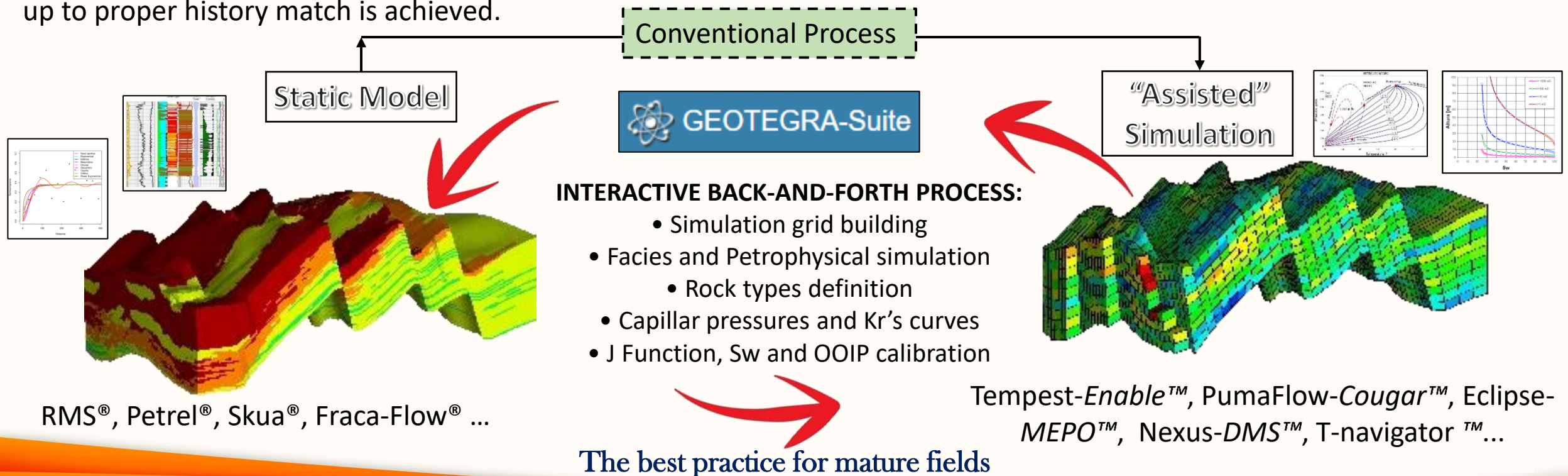


Geotegra has contributed to reservoir studies in more than ten oil fields in Mexico for both public and private sectors. The company also brings international experience with projects for a UK-based organization.

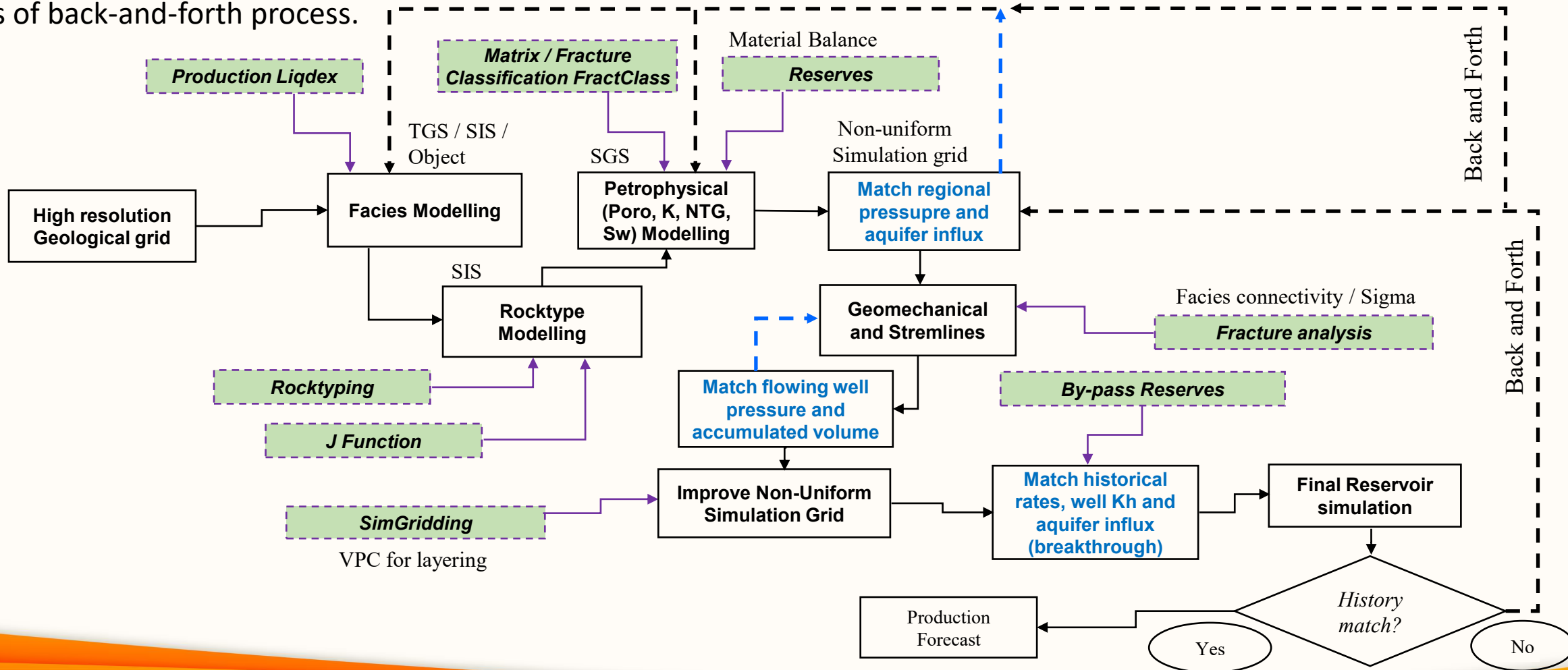


Conventionally, a reservoir characterization study is defined by 2 stages: static and simulation. The history match process is then mainly based on static model local changes and/or simulation modifiers creation up to get a good history match.

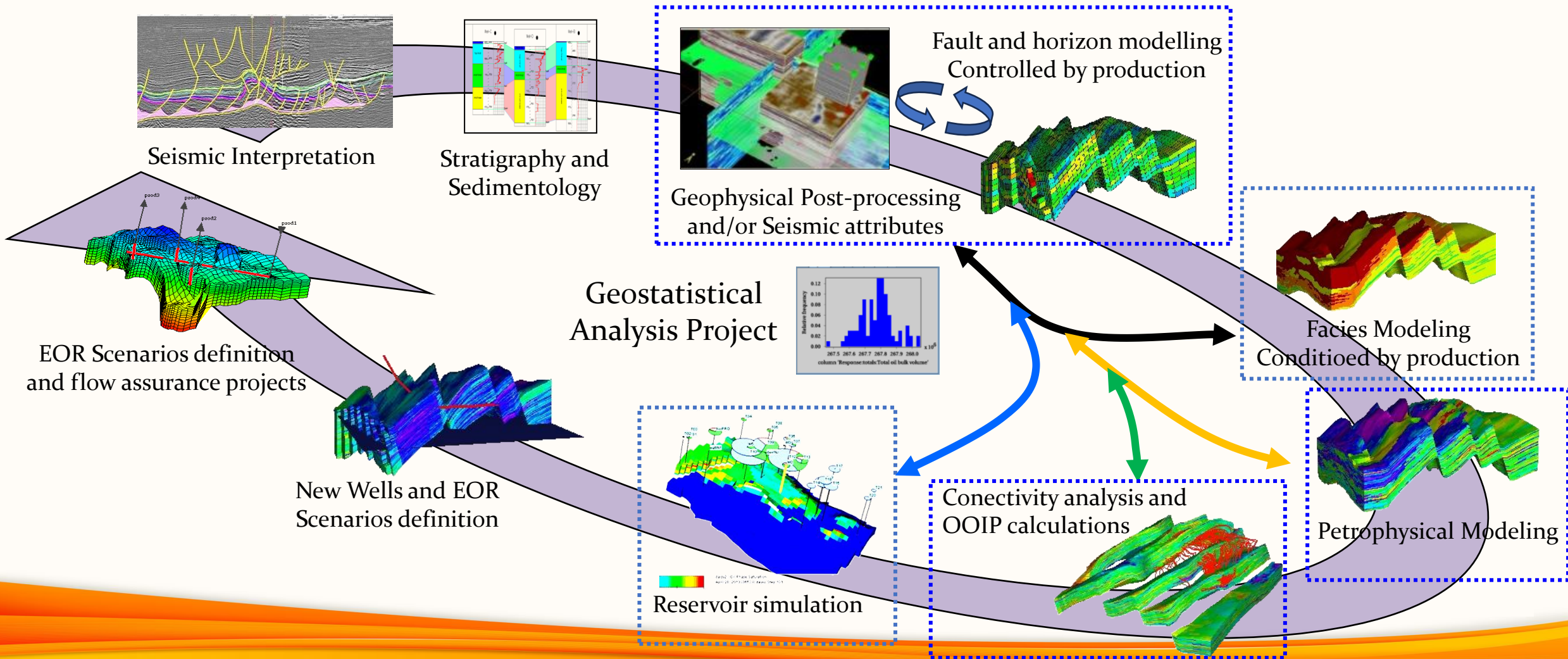
“Geomodelling 4D” offers an interactive back-and-forth process through 8 programming codes prepared for progressive details incorporation to simulation. Under this method, the static model does not need to be “tested” at simulation, since it is built up to proper history match is achieved.



The method Geomodelling 4D is achieved with 8 interactive codes created for combining static and dynamic data in specific stages of back-and-forth process.

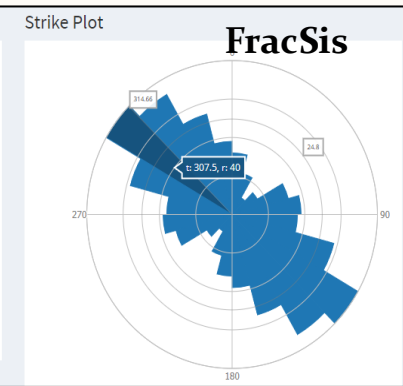
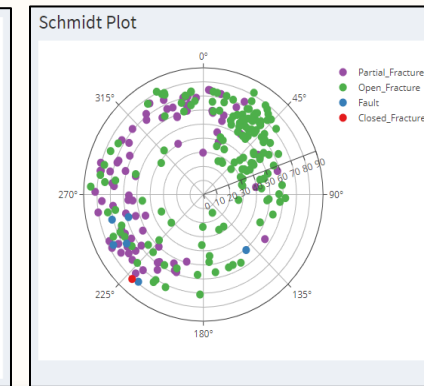
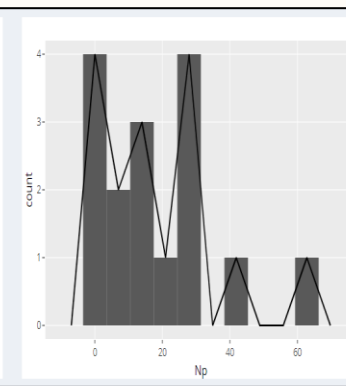
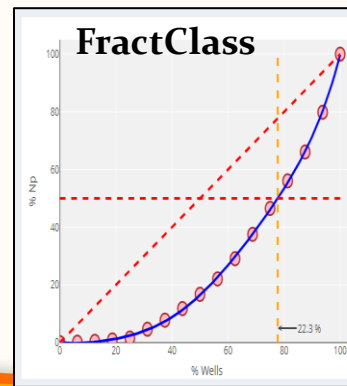
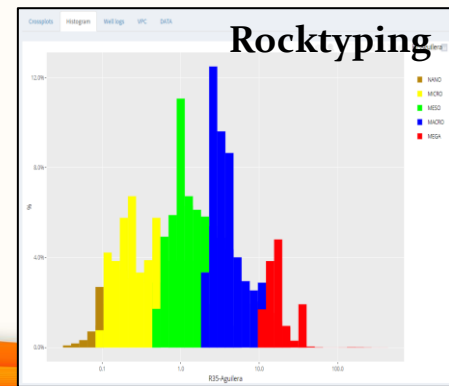
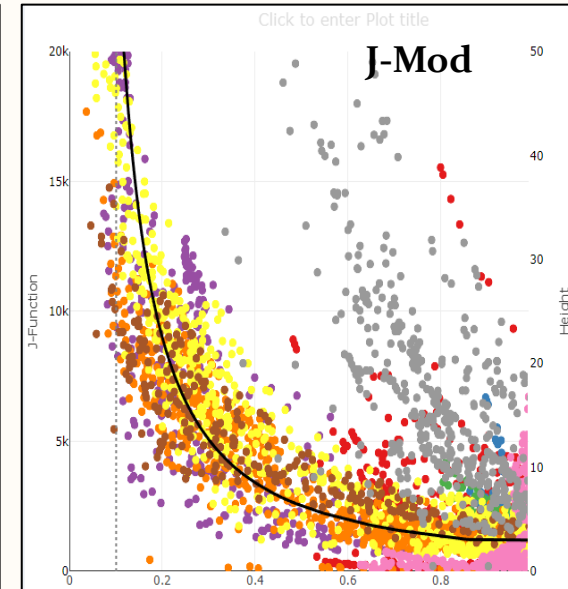
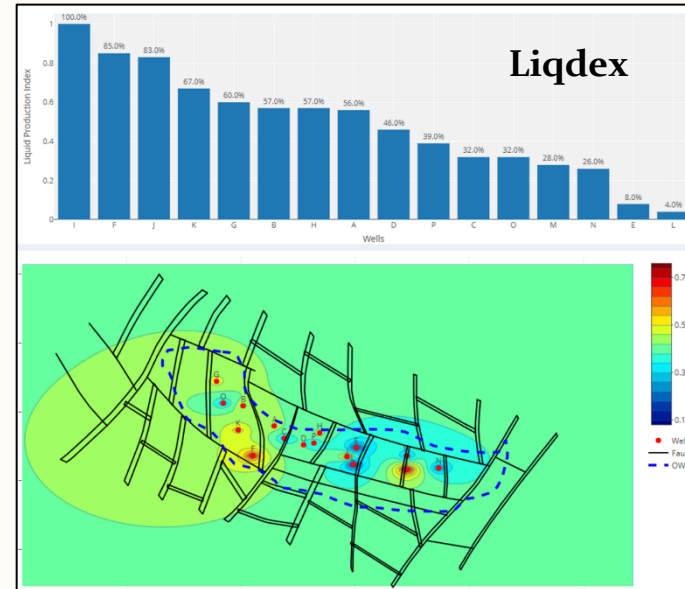
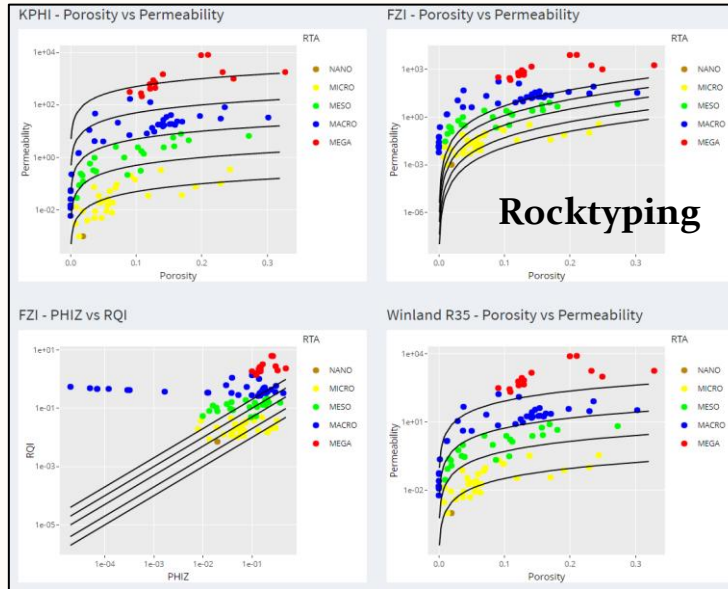


## General methodology for comprehensive reservoir analysis: GEOSCIENCE-SIMULATION



GeoTegra has its Own Methodology Patented & Software Copyrights

Step	Id	App Name
Reservoir Engineering	1	<b>FractClass</b> Matrix/Fractures relation classification for modeling
	2	<b>Liqdex</b> Production-Pressure Productivity maps
Reservoir Simulation	3	<b>SimGridding</b> Lateral transitional cells sizes estimation for grids
	4	<b>FracSis</b> NFR simulation keywords estimation from logs
Petrophysicists	5	<b>Rocktyping</b> Rocktyping log creation & analysis for simulation
	6	<b>J-Mod</b> J-Function analysis and Cp/Kr's curves creation
OOIP & Reserves	7	<b>Reserves</b> OOIP control based on the petrophysic summary
	8	<b>BypassReserves</b> Maximum remaining vol for oil/gas EOR projects



- 12 years experience on services for Pemex: **Geomodeling, High Resolution DFN, J-Function, Reserves certification process support and Reservoir Simulation**. Proven skills on all Pemex softwares RMS<sup>®</sup>, Petrel<sup>®</sup>, Skua<sup>®</sup>, Fraca-Flow<sup>®</sup>, Decision-Space<sup>®</sup>, Eclipse<sup>®</sup>, CMG-Stars<sup>®</sup>, Nexus<sup>®</sup>, Puma-Flow<sup>®</sup>, Tempest<sup>®</sup>, T-Navigator<sup>®</sup>, others.
- Dedicated Results: Static model for secure and rapid history match, DFN on geological and simulation grids, Reservoir model for production forecasts and drilling/production full access monitoring
- Full knowledge on Pemex authorities for both technical (experts committee, coordinators, project leaders) and administrative (contracts designs, procurement and F&A), including recent coordinators and top managers
- High experienced international staff for geophysical data managing including seismic acquisition with Pemex policies, petrophysical evaluation including cores analysis, geomodelling for every Pemex regions needs and reservoir simulation aligns to Pemex exploitation plans.
- Office in Ciudad del Carmen & Mexico Cd. for training courses in all services, lunch-and-learn sessions and presentations/conference rooms facilities.



Marine North

- **S4 Model Akal Cantarell (Calcarenes/Cretaceous/JSK):** Geomodeling, DFN, model transfer to simulation, EOR/DDP studies, reserves certification, well monitoring, etc.
- **Calcarenes / Breccias of Akal – Nohoch – Chac – Sihil – Kutz, Takin Cretaceous, Ixtoc & JSK Sihil:** Geomodeling.
- **KMZ (Calcarenes/Cretaceous), Kayab, Pit, Utsil, Tekel & Ayatsil 2023:** Geomodeling, DFN, model transfer to simulation.

Marine South

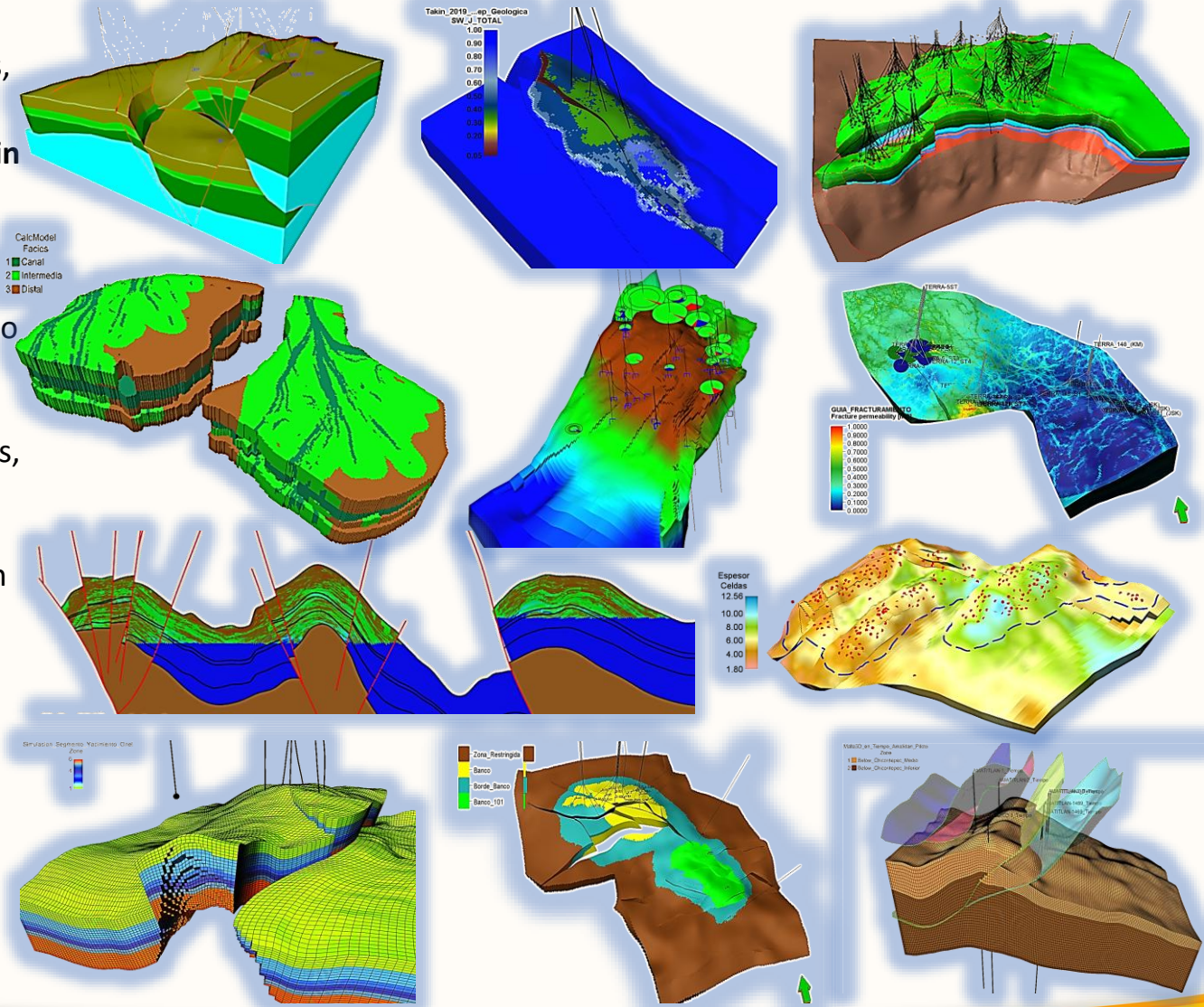
- **Onel (Abkatún Pol Chuc):** Geological modeling, DFN, and transfer to simulation.
- **Abkatún C and H, Homol, Kuil and Chuhuk, Ixtal, Manik, Xanab, Xux and Yaxche (APC and Litoral):** Geomodeling, J-function analysis, DFN, model transfer to simulation, reserves certification, and approval of the Xanab-1DL substructure.

South

- **Pareto (Comalcalco):** Geomodeling, DFN, and numerical simulation (history matching and forecasting).
- **Terra (Samaria Luna):** Geomodeling, DFN, and model transfer to simulation.
- **Macuspana and Jobo Chilapilla:** Geomodeling.

North

- **Amatitlán (ATG Poza Rica):** Geomodeling and slant wells (pilot) in the Chicontepec Golden Lane region.
- **CS-02-03 Round 2.3:** Exploration plan, VCD/drilling



## Contact



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