

SPG and APG Vadodara chapter organises a talk on “ES- 360 Imaging System -An Insight into the Interpretation Realm”

SPG and APG Vadodara chapter jointly organized a technical talk on “The Earth Study 360 Imaging System - An Insight into the Interpretation Realm” by Dr. Raanan Dafni, Emerson-Paradigm on 24th January, 2020, at the Conference Hall of Gaveshana Bhawan, WON Basin, Vadodara. Dr. Dafni has been working in Emerson-Paradigm for the past 10 years, as an R&D Project Manager of the seismic imaging core group.



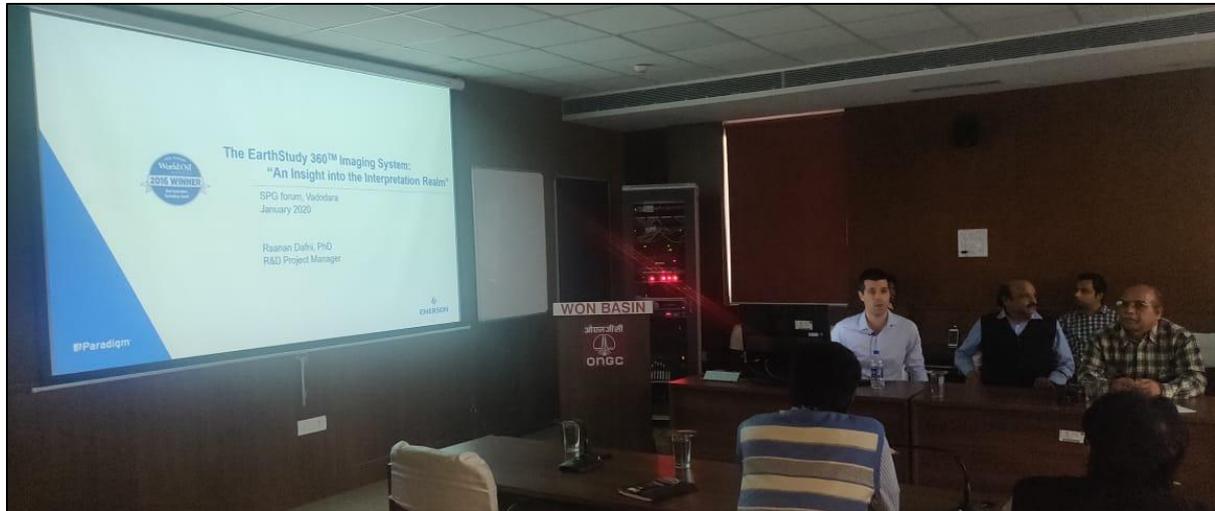
Dr. Dafni highlighted various aspects of their proprietary software ES360 Imaging System, which utilizes full azimuth angle domain analysis, to obtain accurate subsurface velocity models, structural attributes, medium properties and reservoir characteristics. He showcased various case studies, including an ES360 imaging study from Padra field, Gujarat.



EarthStudy 360 enables to use all recorded seismic data in a continuous fashion directly in the subsurface local angle domain (LAD). This results in two complementary, full-azimuth, 3D angle gather systems: Directional and reflection.

Directional angle decomposition implements both specular and diffraction imaging with real 3D isotropic/ anisotropic geological models, leading to simultaneous emphasis on both continuous structural surfaces and discontinuous objects such as small faults and small-scale fractures. Structural attributes at each subsurface point, such as dip, azimuth and continuity, can be reliably derived directly from the directional angle gathers.

Reflection angle gathers provide “true amplitude” reflectivities that substantially increase the information needed to extract residual moveouts (RMO) and amplitude variations. The full-azimuth, angle domain RMO enables accurate velocity model determination (isotropy/anisotropy tomography). Full-azimuth, angle domain amplitude variations result in better reservoir characterization, with high-resolution elastic properties and high-resolution fracture determinations.



The technical talk was attended by ED-Basin Manager Sh. H. Madhavan (SPG & APG Patron, Vadodara), ED-HOI CEWELL, Sh. P. P. Deo, GGM-HGS Sh. Rajesh Madan, President SPG Vadodara, GGM-Block Manager Dr. A. K. Singh, Vice President APG Vadodara, and a huge gathering of SPG and APG members.

Dr. Dafni was felicitated by Sh. H. Madhavan, Sh. Rajesh Madan and Dr. A. K. Singh, for an interactive and well-appreciated technical talk.



The technical programme was compared nicely by Sh. Vipul Chawla, Jt. Secretary. President SPG Shri Rajesh Madan, Vice President APG Dr. A. K. Singh, Treasurer SPG Shri Rajesh Upadhyay and Secretary APG Shri Bhupendra Tauk were instrumental in making the event successful. The vote of thanks was proposed by Mr. Sanjay Kumar, Secretary, SPG, Vadodara Chapter.