LandTech has recently developed a new revolutionary geostatistical interpretation methodology based on Kohonen neural networks and Passive Seismic Tomography (PST) data attributes. This is used to derive lithological information of a region where a Passive Seismic Tomography survey has been conducted.

These attributes are Vp, Vs, Poisson v, other elastic parameters and the attenuation quality factor Qp. The use of unsupervised artificial Kohonen neural networks and Self Organizing Maps (SOM) algorithms in passive seismic data analysis prove to be a useful tool for delineating the structural and lithologic properties of the subsurface.
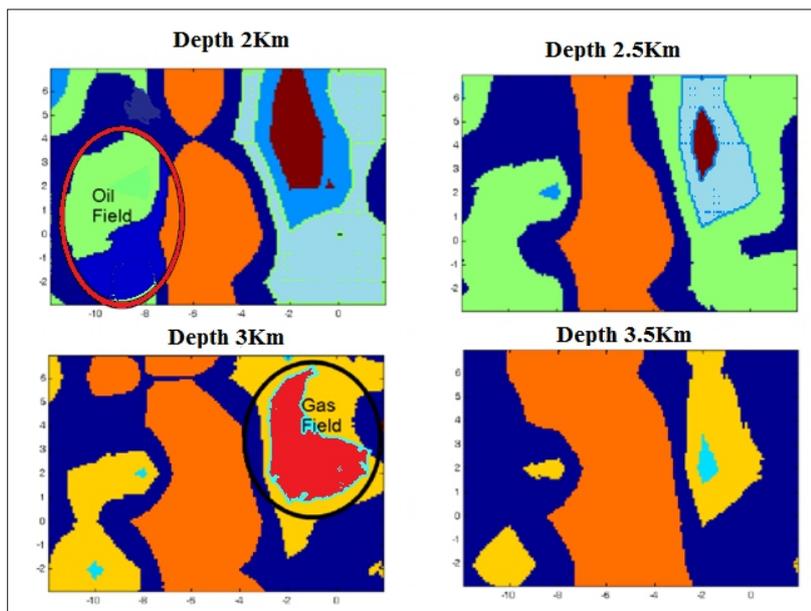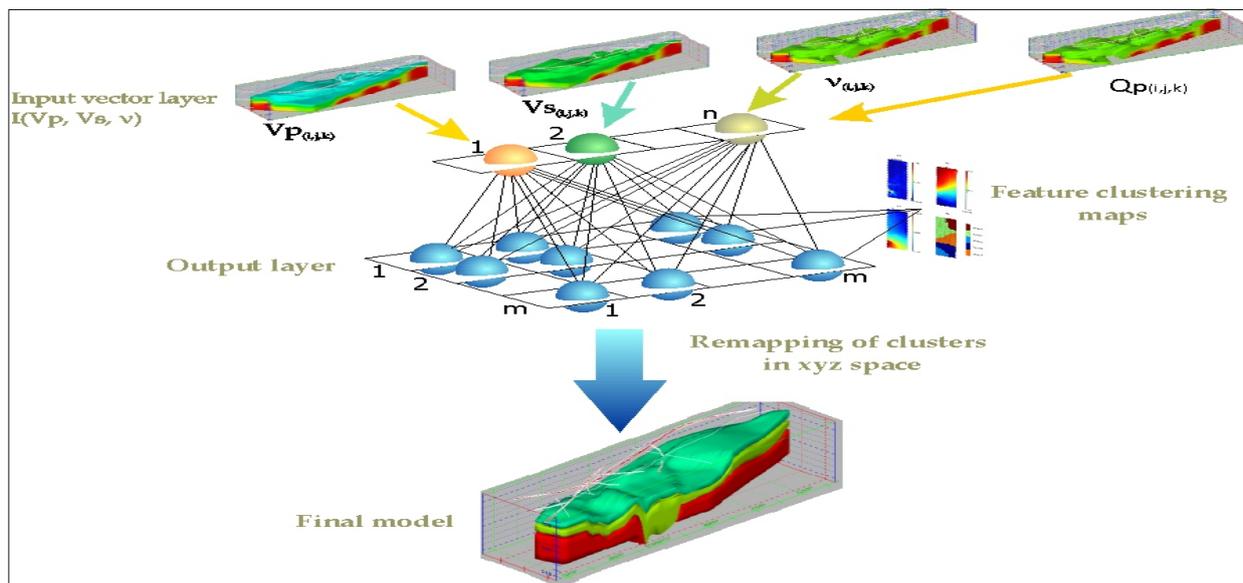
An example from an oil and gas field in SE Albania where PASOM technique pinpointed the two producing zones.