

Introduction to Pre-Stack Depth Migration

By Sam Gray

For land data in geologically complex areas such as the Canadian Foothills, prestack depth migration (PSDM) has matured over the past several years. A current state-of-the-art imaging flow consists of methods for (1) estimating near-surface velocities, (2) migrating the data, and (3) estimating deeper velocities. I present the current CGGVeritas versions of these technologies, and I describe emerging technologies that will eventually supplement, or possibly even supersede, elements of today's imaging flow.