

**AAPG Annual Meeting
March 10-13, 2002
Houston, Texas**

Andrei V. Belopolsky¹, André W. Droxler² (1) BP America Inc, Houston, TX (2) Rice University, Houston, TX

Controls on the Oligo-Miocene Isolated Carbonate Platform Evolution in the Indian Ocean and South-East Asia

Isolated carbonate platforms flourished in the Far East during the Oligocene and Miocene. Many trapped hydrocarbons and represent important regional exploration plays. These platforms formed in various settings and their development, although controlled by local factors, was influenced by similar carbonate-producing fauna and affected by eustatic sea-level fluctuations. The large isolated platform of the Maldives (equatorial Indian Ocean) evolved since the late early Oligocene in a stable tectonic setting. The platform became exposed at the very beginning of the late Oligocene. An overall backstepping and partial drowning in the late Oligocene and early Miocene was followed by aggradation in the outskirts of the carbonate system during the latest early Miocene and earliest middle Miocene. Bi-directional middle Miocene progradations are interpreted as a result of high frequency/high amplitude sea-level fluctuations. In the earliest late Miocene, the prograding complexes were flooded and the carbonate margins backstepped and aggraded in response to a significant sea-level transgression.

Several smaller isolated platforms in the Far East were studied and their evolution was compared with the Maldives. Malampaya and Camago buildups, offshore Palawan (Philippines) aggraded and backstepped during the late Oligocene and early Miocene, and drowned during the late early Miocene. The Yadana platform in Andaman Sea, offshore Myanmar, aggraded during the late Oligocene and early Miocene and drowned in the earliest (?) middle Miocene. The Segitiga Platform in the East Natuna Sea, Indonesia, originated in the early Middle Miocene, prograded and coalesced in the middle-late Miocene, and backstepped in the late Miocene and early Pliocene.