

YANSHAN MOVEMENT AS THE CONSEQUENCE OF A PACIFIC EVENT

1Zhang H.R., 2Deng J.F. and 3Dong S.W.¹Environmental Protection and Resource Conservation Committee of NPC²Beijing University of Earth Sciences³China Academy of Geological Sciences

Yanshan movement between Middle and Upper Jurassic has great impact on eastern part of China. Unlike orogeny in other places of the world, its main consequence is the block-faulting of previously stable platform and subsequent igneous activities along the faults, and folding was developed mainly in soft sedimentary cover near the sutures of the faults. The faults with extraordinarily large initial vertical displacement (up to 10 kilometers) were originated by instantaneous compressive stress, which followed by pulling apart of the blocks. It is difficult to find answer for the Yanshan Movement within the frame of the traditional theories of geosyncline and plate tectonics. The only rational deduction seems to be a pacific event. The imaginary event is evidenced by the cusp of the APWP (Apparent Polar Wandering Path) of North and South China Blocks between Middle and Upper Jurassic. It is also evidenced by a number of geological events along Pacific Rim in this geological moment, by the attenuation of Yanshan Movement and analogous movements from the coastline toward the continent, by the occurrence of large number of terrenes in Circum-Pacific Region. Coincidentally, the oldest part of Pacific Ocean floor, the Jurassic Quiet Zone has the same age as Yanshan Movement and can not be interpreted by any other theories. It may be the only remaining scar of that great hidden event that originated the Pacific Ocean and Circum-Pacific Rim.