Study on the genetic model of Hot Dry Rock resources on the southeastern coast of mainland China

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As a significant part of geothemal resources, the Hot Dry rock (HDR) resources can be divided into four types, i.e. the high radioactive heat production (HRH) type, the sedimentary basin (SB) type, the modern volcano (MV) type and the intra-plate active tectonic belt (IATB) type. Among these, the HRH type mainly occurs at the southeastern coast of mainland China. Combining the tectonics, regional heat flow, Moho depth, Curie interface depth and neotectonics, we analysed the occurrence background of Hot dry rock on the southeastern coast of mainland China. By thermal-control fracture analysis, we discuss the genetic model of HDR resources, and preliminary established a ternary heat reservoir model for HDR resources on southeastern coast of mainland China. We summarize the HDR resource exploration progress in Zhangzhou, Huizhou and on northern Hainan Island, and our research provides research potential for future HDR resources exploration.