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摘要：

义敦岛弧是喜马拉雅巨型造山带中的一个复合造山带,它经历了印支期洋壳俯冲造山、燕山期弧-陆碰撞和历史。可能由于洋壳板片俯冲角度不同,义敦晚三叠世古岛弧带(206～237 Ma)南北两段具有不同的发育历史,北具张性弧特征,发育扩张环境流体聚敛成矿系统,形成VMS型Zn-Pb-Cu矿床和浅成低温热液型Ag-Au-Hg矿床;南段中育钙碱性弧火山岩-玢岩-斑岩杂岩系和挤压环境岩浆-流体成矿系统,形成斑岩型-夕卡岩型铜多金属矿床。在三用中,早期大陆板片俯冲形成同碰撞花岗岩带(约200 Ma),晚期造山后伸展作用,形成A型花岗岩带(75～138 Ma),强烈剪切和推覆,在甘孜-理塘蛇绿混杂带发育挤压剪切环境流体聚敛成矿系统,形成剪切带型金矿。伴随造山后环境岩浆-流体聚敛成矿系统,主要形成夕卡岩型锡矿和构造破碎带热浪脉型银多金属矿床。印度-亚洲大陆碰撞滑作用,并控制碱性花岗岩和花岗斑岩的发育(50～30 Ma),伴随斑岩型金矿的形成。

关键词：岛弧 造山带 岩浆活动 成矿系统 义敦

Tectonic Evolution and Mineralization Systems of the Yidun Arc Orogen in Sanjiang Re

Fulltext

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Abstract:

As a composite erogenic belt of the Himalaya giant orogenic zone, Yidun arc, Sanjiang regio
i.e. : Jinsha River, Nujiang River and Lancang River), experienced an evolution history including
orogeny of oceanic crust, Yanshanian arc-continental collision orogeny and Himalayan intra-contin
shearing. Probably due to different subduction dipping degrees, the Yidun old arc belt of late Tr
different development history in its northern and southern segments. Changtai arc in the northern
intra-arc rift with expanding nature and developed a fluid convergent ore-foming system in an ext
formed. VMS-type Zn-Pb-Cu deposits and epithermal Ag-Au-Hg deposits. Zhongdian arc of the southern
basin, but had extensive calc-alkaline complex distribution of arc volcanics-porphyry-porphyrite,
type Cu-polymetalic deposits. During the arc-continental Collisional process of Triassic-Jurassic
plate subduction led to formation of syn-collisional granites(200 Ma). Whereas,late post-orogenic
intrusion of A-type granites (75~138 Ma), which was accompanied by development of convergent magma
under an extensional regime and formation of skarn-type tin deposits and fault-controlled hydroth
deposits. Strong lithospherical shearing and thrusting resulted from Yangtz continental plate sub
a convergent fluid system under a compressional-shearing environment and formation shearing-type
Litang ophiolitic melange zone. The effect of the Indian-Asian continental collision on the Yidun
manifested in intra-continental strike-sliding process and alkaline grainte and porphyry intrusio
brought us porphyry Au deposits.

Keywords:island arc orogenic belt magmatic activity ore-forming systerm Yidun