

corner of Huangling anticline, at the southern end of Jiuwanxi fault zone, 19km west from Sandouping.

The nappe structure is marked by obduction of the Cambrian brecciated limestone and dolomite over the Silurian sandy shale and Holocene slumped slope bed. The whole structure involves the nappe, the base and the sliding plane. The undulating sliding plane strikes N80--90° E and dips 10--60° to the south. The derivative structures within the nappe show a S--N obduction of the nappe.

In genetic relation, the Yangjialing nappe is part of the Tianyangping overthrust fault belt (nappe structure belt). It has undergone a long duration of development since the Tertiary. The last strong activity of the nappe structure took place about 2400yrs B.P., according to <sup>14</sup>C dating. The occurrence and activity of such a structure will surely affect the stability of the Yangtze Gorges Project.

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旅游天地

## 四川安县龙泉砾宫

龙泉砾宫位于四川绵阳市北西40km处安县县城附近,是发育于上侏罗统莲花口组的内陆湖相砾岩—含砂砾岩—砂岩—泥岩韵律沉积底部砾岩中的旅游洞穴。它与江油的窦圉山、李白纪念馆为毗邻,被人们誉为川西北的一颗地下明珠,巴蜀新发现的又一奇观。自1987年5月1日正式开放以来,已接待游人20余万人次,日接待量可达1000人次。洞内有大小“月城”等十余处景观,可步入“月城”,可耳听“通天暗河”的流水琴鸣。目前,已测得主洞长度1171.5m,高6~40m,宽2~30m,现部分开辟旅游。

龙泉砾宫以其砾岩型溶洞著称,是川西北红层钙质砾岩岩溶洞穴的一典型,以其厅堂宽大而得名。该洞主要沿北西(215°~234°∠86°)方向的一组裂隙发育,形成高大的厅堂(高约40m,半径50m)和深窄的“小峡谷”或深潭。在溶洞内黑龙潭处可见地下暗河,其平水期与丰水期差值约1.7~1.8m。依洞口而入,可见有“月池”辉映、“神龟之态”,时而步入“月城”,时而直捣“通天”暗河;洞内厅堂、廊道,曲径、幽谷,石柱、石笋、溶池、暗河,穿洞、天窗,石芽、晶花,悬吊岩、垮塌体等溶蚀形态应有尽有。尤为壮观的是月城处,为圆形穹窿状大厅,厅高40余米,分上下两层,上部沿厅壁呈一圆形走廊,底部为宽阔平地并堆有垮塌体。洞内各段均垮塌严重,洞底迭宕起伏、蜿蜒曲折,常堆满垮塌岩块。洞中常见有地下渗流缓慢滴下,形成千姿百态的碳酸盐岩次生化学堆积物。

(罗东平)