A huge E-W extending tectonic-magmatic belt, the Gangdese belt, which concentrates almost 80% igneous rocks and most of them are developed into Paleogene volcanic rocks. In terms of development and structural features, there are a few differences between the volcanic rock series in eastern part, central part and western part of Gangdese belt. A systematic study has been conducted, which established the systematic stratigraphic sequence of volcanic rocks in the eastern part and the western part while few works has been done in the central part based on the previous results.

Besides the analysis of precious study results, this paper has focused on the Paleogene volcanic rocks from Konglong to Dingrenle in the central part of Gangdese belt and studied on different respects such as lithologic association and stratigraphic formation, intensity and features of volcanic activity, cycle and rhythm of volcanic eruption, geochemistry and magmatic evolution, periods of volcanic activity. The study has identified the volcanic rocks as Linzizong Group, dividing Dianzhong Formation, Nianbo Formation and Pana Formation from the bottom to the top, building up the stratigraphic sequence of the central part of Gangdese belt in Paleogene. And the rock types are lavas, pyroclastic lavas, pyroclastic rocks, sedimentary pyroclastic rocks and subvolcanic rocks. The volcanic rock series are unconformably underlied by Late Cretaceous and Permian in the bottom, and have parallel unconformity relationship with Oligocene in the top which provide references for the division and comparison of volcanic rocks and for the magmatic evolution in the whole Gangdese belt. The volcanic rock series have been divided into 3 eruption cycles and 13 eruption rhythms, in which the annual fluctuation cycle is the most intensive volcanic activity with the best eruption rhythms and the most frequent volcanic activities. Each volcanic eruption rhythm has effusion and eruption predominantly with the weakening intensity of volcanic eruption from the early eruption cycle to late eruption cycle, from eruption phase mainly in Dianzhong cycle in the early stage to effusion phase in Pana cycle in the late stage. The geochemical features indicate the evolving trend from neutral-basic rocks in the early stage to neutral-acidic rocks in the late stage of Linzizong Group in the central part of Gangdese, and each volcanic eruption cycle is characterized by the evolving trend from acidic magma to neutral-basic magma. In this paper, zircon SHRIMP U-Pb age of 69.97±0.72Ma has been achieved in andesitic crystal tuff which can be the oldest in Linzizong volcanic sequence. We believe that the volcanic activities in the central part of Gangdese are older than those from Linzhou basin in the east and Shiquanhe in the west; the Indo-Eurasia collision, which did not occur synchronously, has a few differences in Gangdese belt: the collision time in the central part is earlier than that in the eastern and western parts of Gangdese.

**Keywords:** volcanic strata; volcanic activity; magmatic evolution; Paleogene; Central part of Gangdese