Crustal Deformation along the Nyainquentanglhe Detachment, Southern Tibet
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1. Introduction
The study of crustal deformation and the effect of interactions on the tectonic processes includes understanding the kinematics and dynamics of tectonic plate boundaries. In this study, we focus on the Nyainquentanglhe Detachment, a major fault in the Southern Tibet. The fault plays a crucial role in the tectonic processes of the region. Understanding its deformation can provide insights into the tectonic processes and the dynamics of the tectonic plate boundaries.

2. Method
To measure crustal deformation, we use a combination of geodetic techniques, including GPS, InSAR, and seismic data. These techniques allow us to monitor the deformation of the Earth's surface and understand the kinematics of the tectonic processes. The GPS data provide a high-precision measurement of the horizontal and vertical displacements. The InSAR data provide a continuous monitoring of the surface deformation, while the seismic data help us understand the dynamics of the fault system.

3. Results
The results of the study show a complex deformation pattern along the Nyainquentanglhe Detachment. The deformation is characterized by a combination of strike-slip, normal, and reverse faulting. The strike-slip component is the dominant deformation mode, with a significant right-lateral movement. The normal component is also significant, with subsidence observed in some areas. The reverse component is observed in a few localized areas, indicating the presence of local stress concentrations.

4. Interpretation
The deformation pattern along the Nyainquentanglhe Detachment can be interpreted in terms of the tectonic processes in the region. The right-lateral movement is consistent with the plate boundary kinematics. The subsidence is likely due to the release of stress in the crust, which can be related to the tectonic processes. The reverse component is likely due to the presence of local stress concentrations, which can be related to the tectonic processes in the region.