CHAPTER VI

CONCLUSION

Based upon Landsat TM5, JERS SAR, and aerial photographic data interpretation together with field and TL / ESR age dating results, conclusion can be drawn for the Three - Pagoda Fault (TPF) as follows.

- 1) TPF is the NW-trending fault which is about 222 km long and extends from east central Myanmar to western and central Thailand.
- 2) TPF can be divided based upon geometry and geology into 5 segments, namely Sangkla Buri, Kanchanaburi, Thong Pha Phum, Mae Nam Noi, and Khwae Noi Segments. All segments align in the NW-WNW directions.
- 3) Mae Nam Noi and Song Kalai segments of TPF seems to be younger than the Thong Pha Phum and Kwae Noi segments.
- 4) Lineaments belonging to the TPF are grouped into 4 sets based on their orientations via NW, NE-, N- and E- trending lineaments. Among these the NW- trending lineaments are the most distinct and more continuous than the others.
- 5) Morphotectonic evidences including triangular facets, fault scarps, beheaded streams, offset streams, parallel ridges, shutter ridges, pressure ridges and sag ponds, are discovered along the TPF, particularly where bed rocks connect with the roughly NW-trending Cenozoic basins.
- 6) Tectonic morphology elucidates that the TPF has the oblique strikeslip movement with more horizontal slip than vertical slip. Both left and right lateral senses of movements are recognized for almost all fault segments, however the right-lateral movements seem younger than that the left ones, such a result corresponds very well with 1983 earthquake data.
- 7) The chronological events for the TPF movements based upon age dating results, include 5 major events ranging from 1575 to 22 Ka. The results indicates that paleoseismicity occurred within Quaternary and mostly along the main TPF.
- 8) Structural synthesis indicates that the maximum stress axis of the TPF that of the N-S direction and causes right-lateral movement along the main TPF and development of isolated basins bounded by N-trending normal faults.

9) The TPF is regarded active as advocated additionally by evidences from epicentral and hot spring distribution, heat flow data, and focal mechanism.

