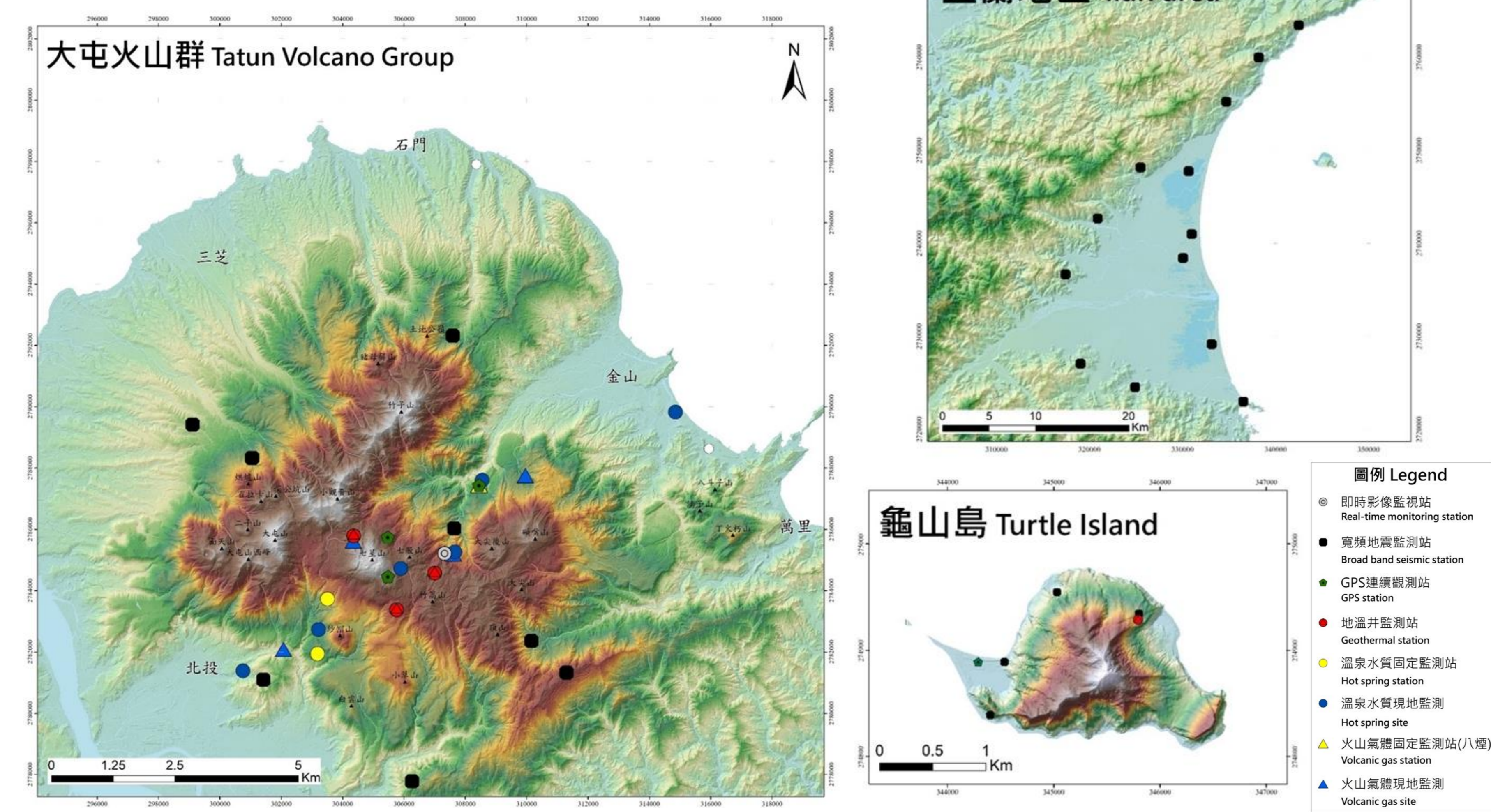


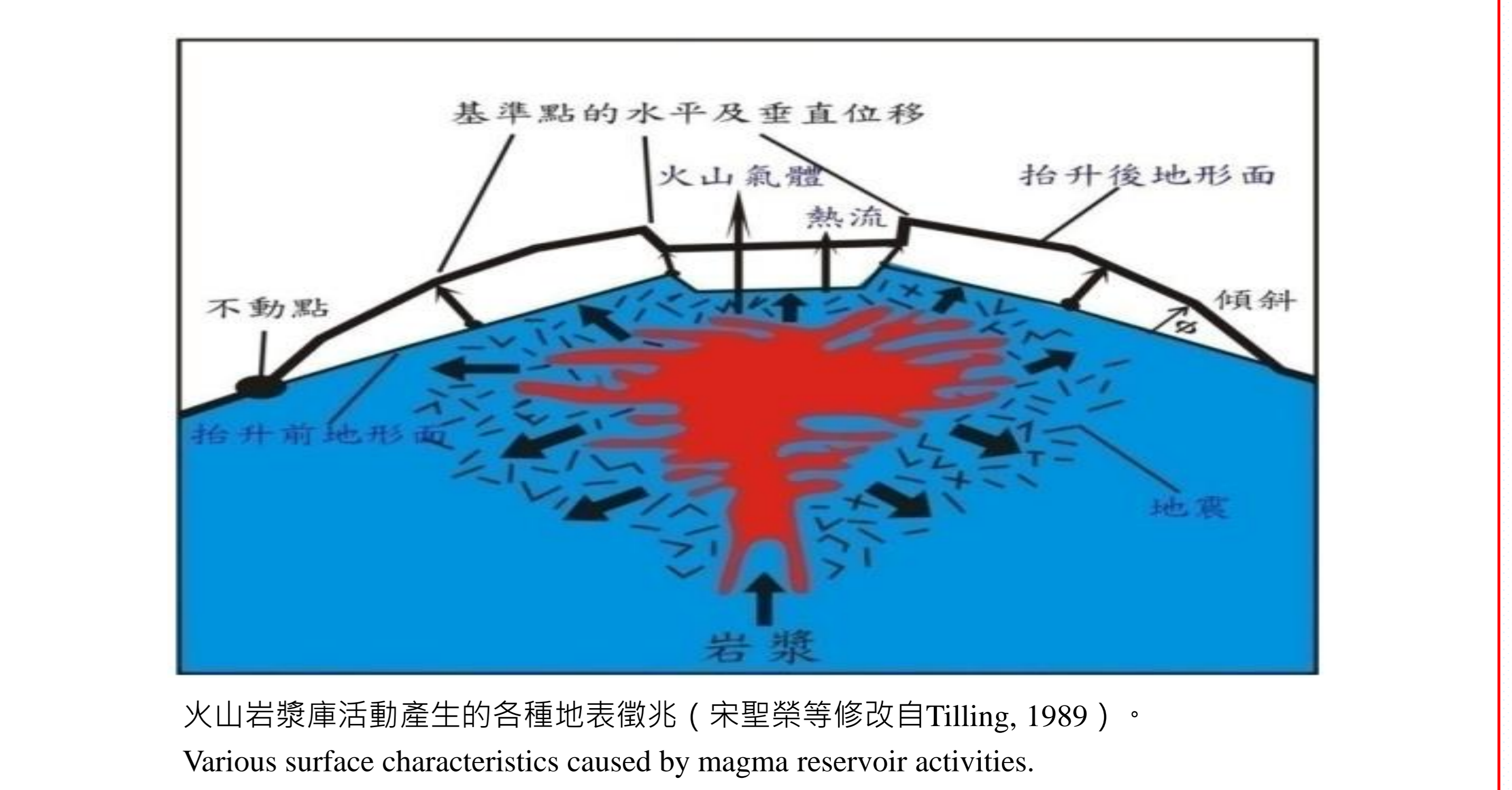
本計畫投入臺灣北部火山活動徵兆監測工作，以瞭解臺灣北部大屯火山群及龜山島火山岩漿庫或熱液活動，作為火山災害潛勢評估及火山防救災政策制定依據。內容包括火山微震、地球化學、地表變形監測、大地自然電位觀測及地球物理探測等。綜合109年各項監測資料，與往年相較，大屯火山區與龜山島之火山活動仍處於穩定狀態。此外，109年完成之龜山島火山災害潛勢圖資，可供各機關火山災害防救計畫後續運用。2019年大屯火山群震事件對應士林測站的自然電位功率譜變化，顯示群震前自然電位功率譜強度有下降趨勢，可能反映地下流體系統的改變。當流體湧時，抬升壓力使應力往淺層集中，低電阻率構造往上發展，造成自然電位功率譜強度下降，此觀測成果有助於發展地下熱液或岩漿庫的監測系統。

The project aims to operate the monitoring networks toward active volcanoes in northern Taiwan for better evaluating possible volcanic hazards. Seismic and geochemical monitoring, ground deformation measurement, real-time image monitoring, self-potential observation and aero-magnetic survey have been applied as routinely monitoring methods within these volcanoes. In summary, the Tatan Volcano Group and the Turtle Island are in a stable state at present. Besides, the volcanic hazard maps of Turtle Island proposed in 2020 will be utilized in hazard mitigation plans for authorities needs. Furthermore, changes in the self-potential data and seismicity may correspond to the movements of underground fluids so we may develop a monitoring system toward hydrothermal fluids or magma chambers in the future.

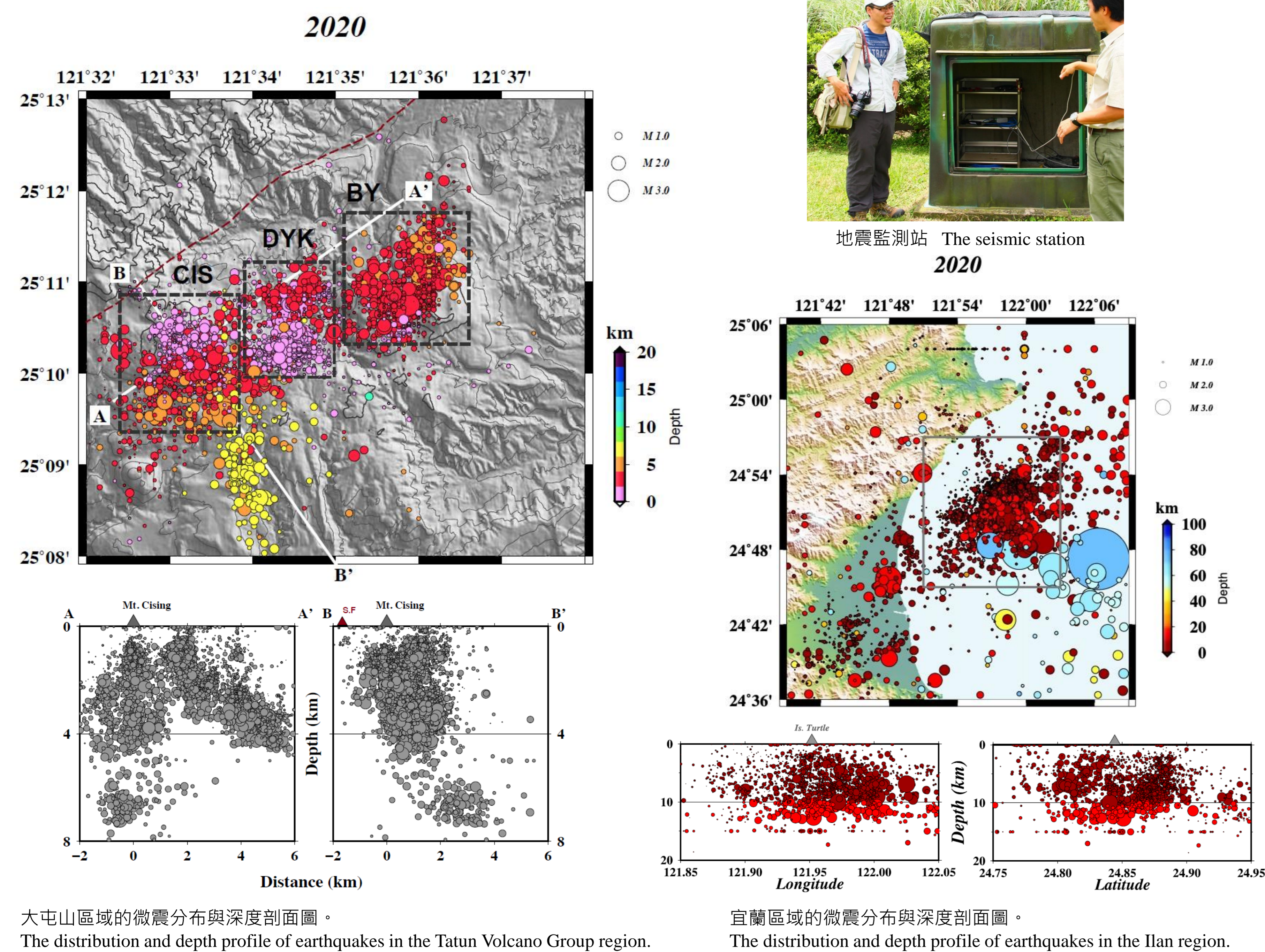
火山監測站 Volcano Monitoring Stations



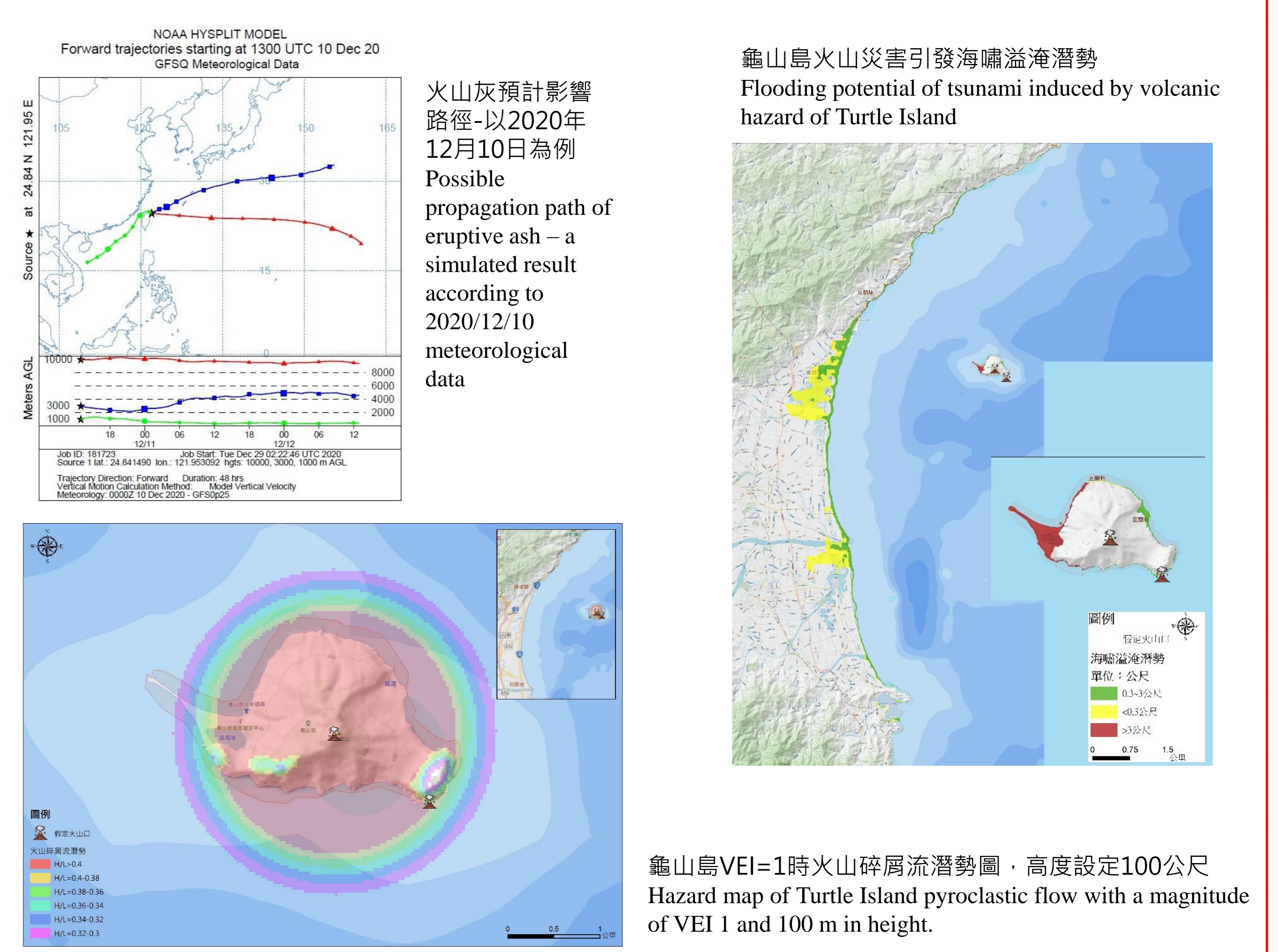
火山監測方法 Volcanic Monitoring Methods



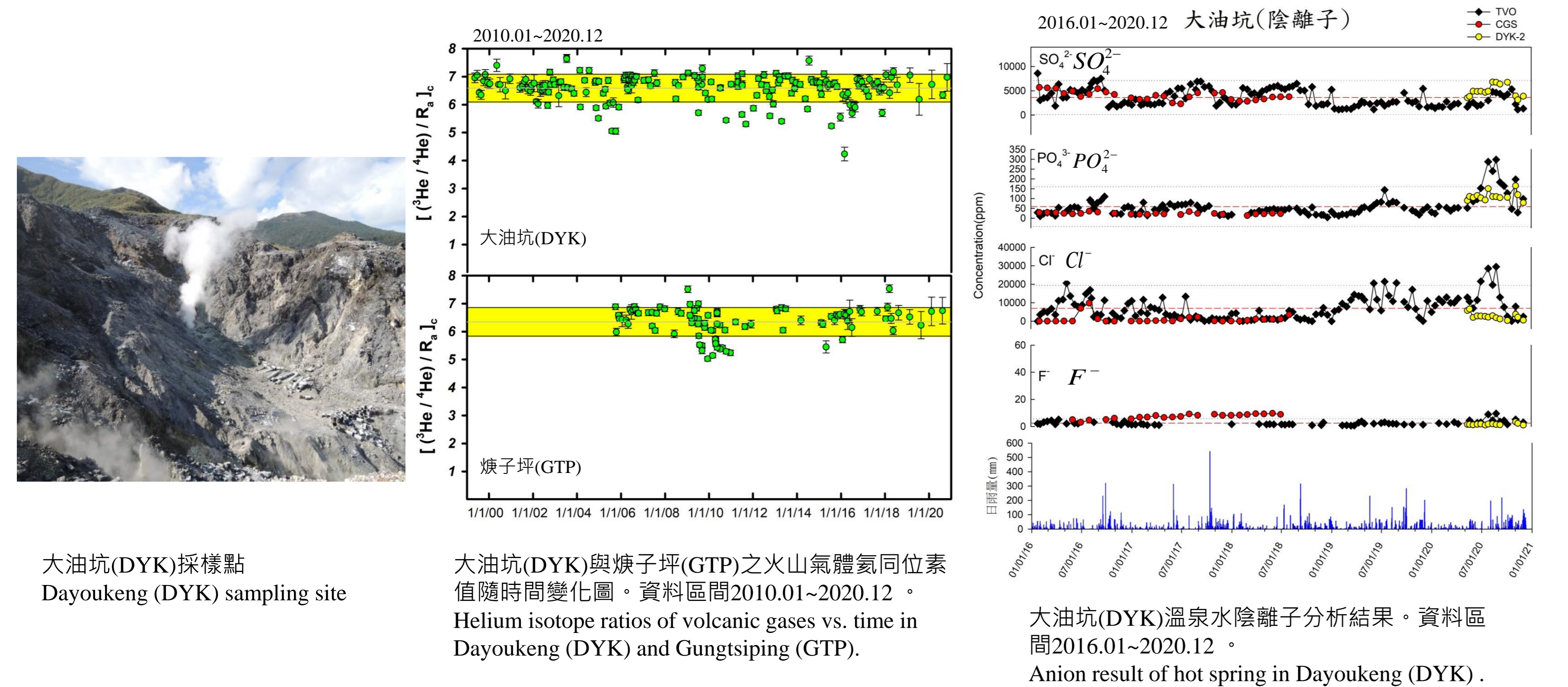
微震監測 Monitoring of Seismic Activities



火山災害潛勢調查 Volcanic Hazard Potential Investigation



地球化學監測 Monitoring of Geochemical characteristics



大地自然電位觀測 Self-potential continuous observation

