

#### **6.4 Salinity Classification of the Study Area**

Classified salt-affected areas in the study area occupy a total area of 495 km<sup>2</sup>. These salt-affected areas are located mostly in the vicinity of Dan Khun Thot, Non Thai, Non Sung, Kham Sagae Saeng, Kham Tha Le Sor, Phi Mai, and Bamnet Norong District of Nakhon Ratchasima Province and in Maung, Jaturat, Ban Khwao, and Ban Luam of Chaiyaphum Province.

When overlaying the salt-affected areas derived from digital classifications on lineaments and drainage, it is notable that most of the salt affected areas are located where the drainages and lineaments occur, especially in the areas where there is a dense lineament pattern as shown in Figure 6.63.

Thus, it can be preliminarily concluded that lineaments have a close relationship to the migration of saline groundwater to the surface and the salinity level of its overlying area. The dissolved salt rises to the surface using increased permeability along fault and fracture planes which are seen as lineaments on satellite images and salt crusts accumulated along these features and causes salinity later on.

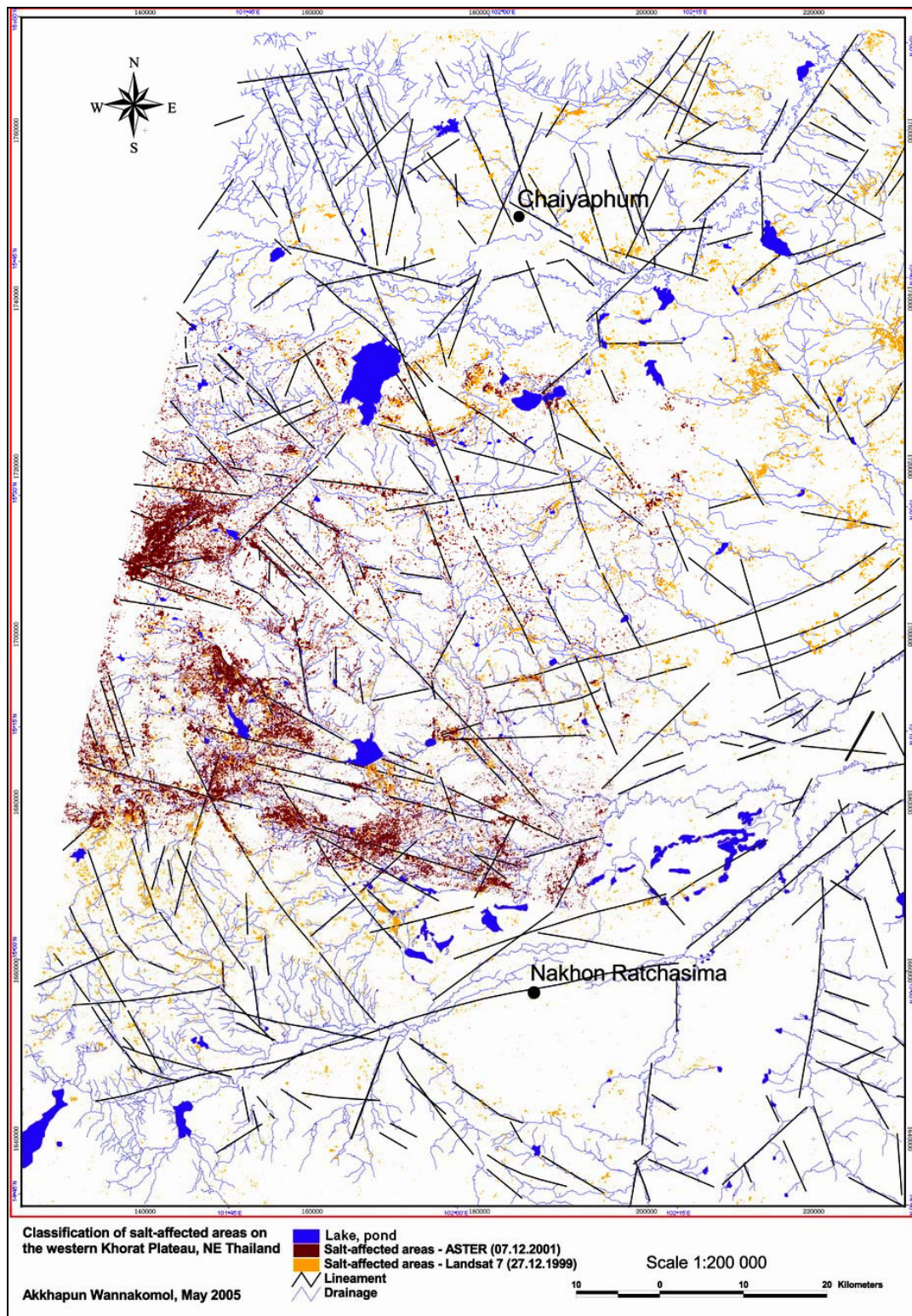


Figure 6.63 Classification showing relationship between salt-affected areas (orange areas) and lineaments (red lines) in the study area. It shows that the salt-affected areas mostly occur along lineaments. (See Enclosure 2 for the full size map).