

## 4.3. Subduction zone events

## 4.3.1. Wave heights and Arrival times

As in the case of the distant South American source, the incident tsunami crosses the Kermadec Ridge and refracts into the Northland coastline. Although the South American event shows considerable amplification in Bream Bay this does not occur for the subduction zone event. Wave heights however are considerably larger for the Tonga-Kermadec source. Again, the main factors controlling the wave height are the shoaling along the coastline and selective amplification in some of the bays but the angle of incidence and period of the waves are different in the two cases.