(a) $L=1$ km

(b) $L=10$ km
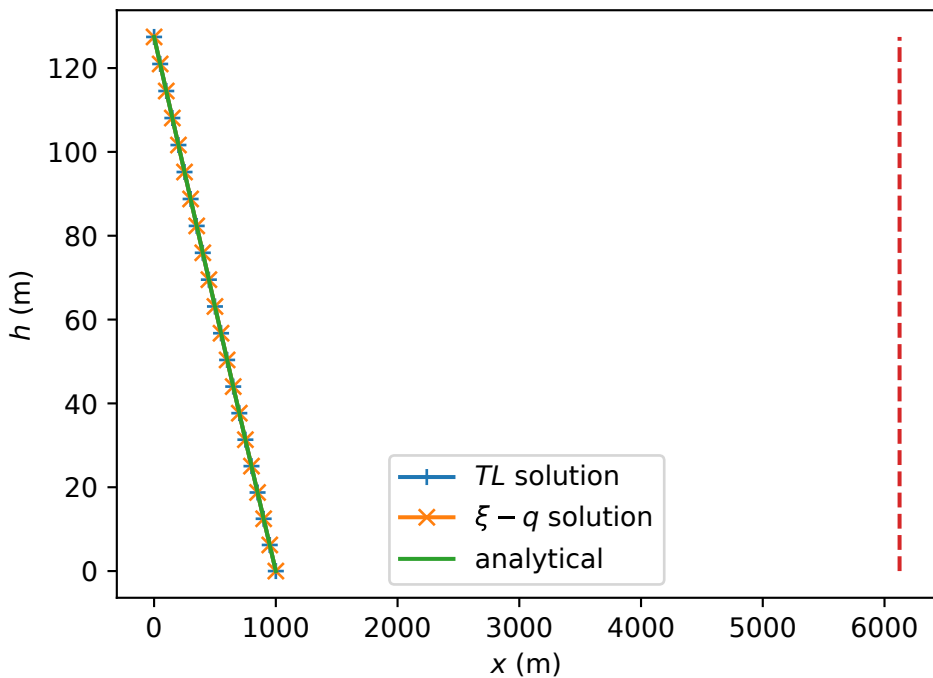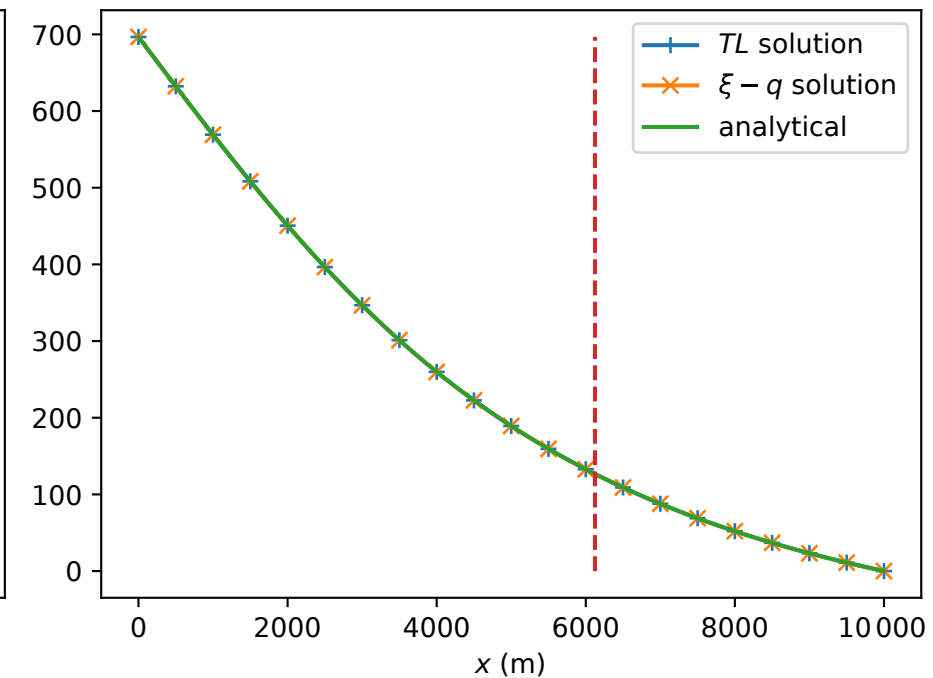
(c) $L=100$ km