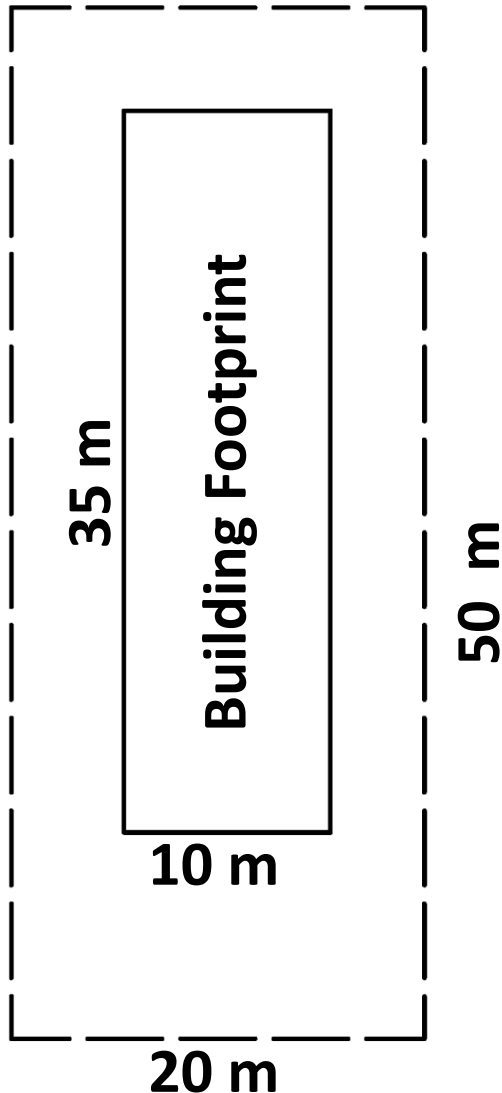


Building data



Building Data

- Length: 35 m
- Width: 10 m
- Height: 3 m
- Footprint: 350 m²
- No. of Storey: G+2

Land area: 1000 m²

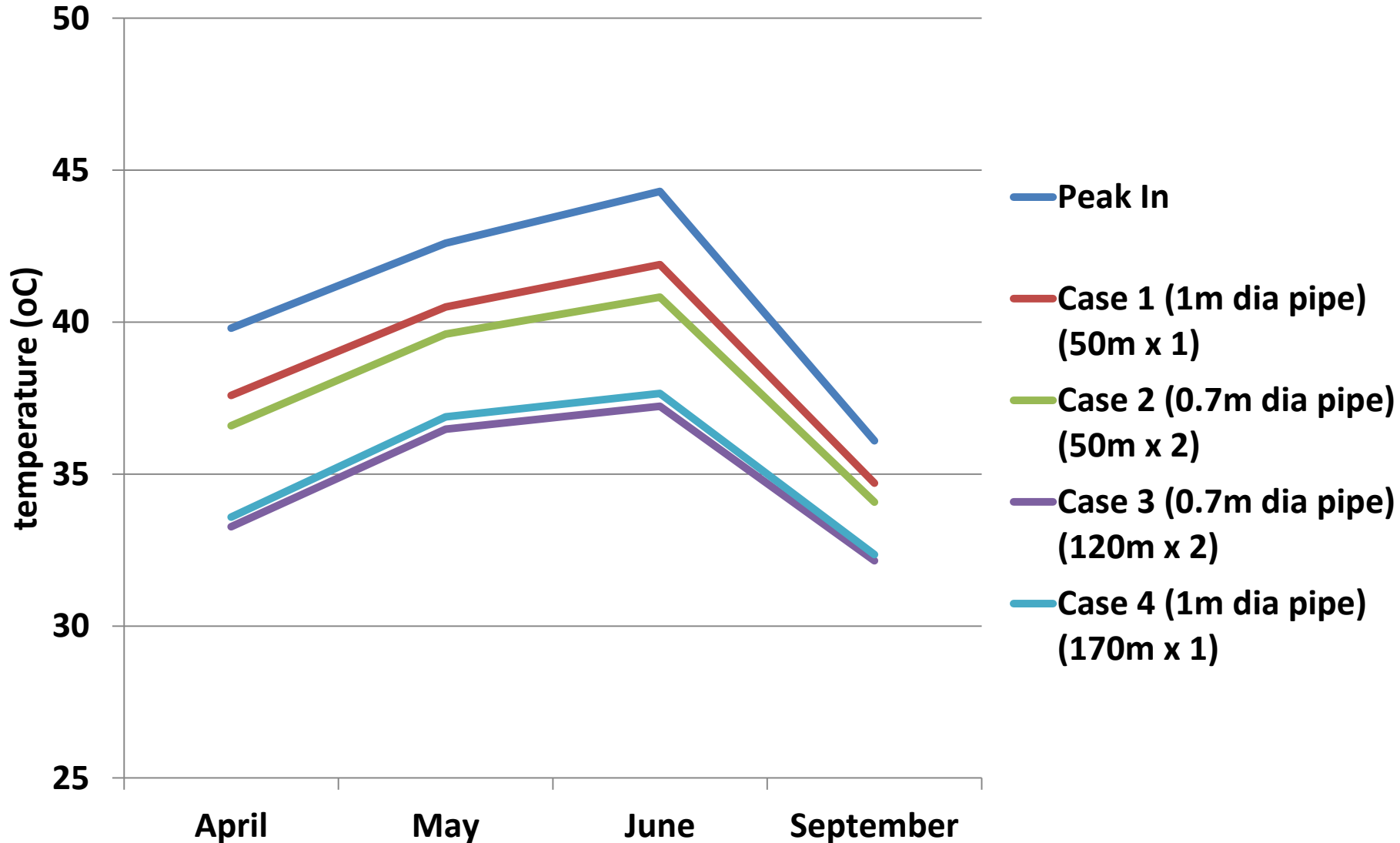
Air change: 6 ach (office)

**Volume flow: 1000 x 700 x 6 =
12600 m³/h**

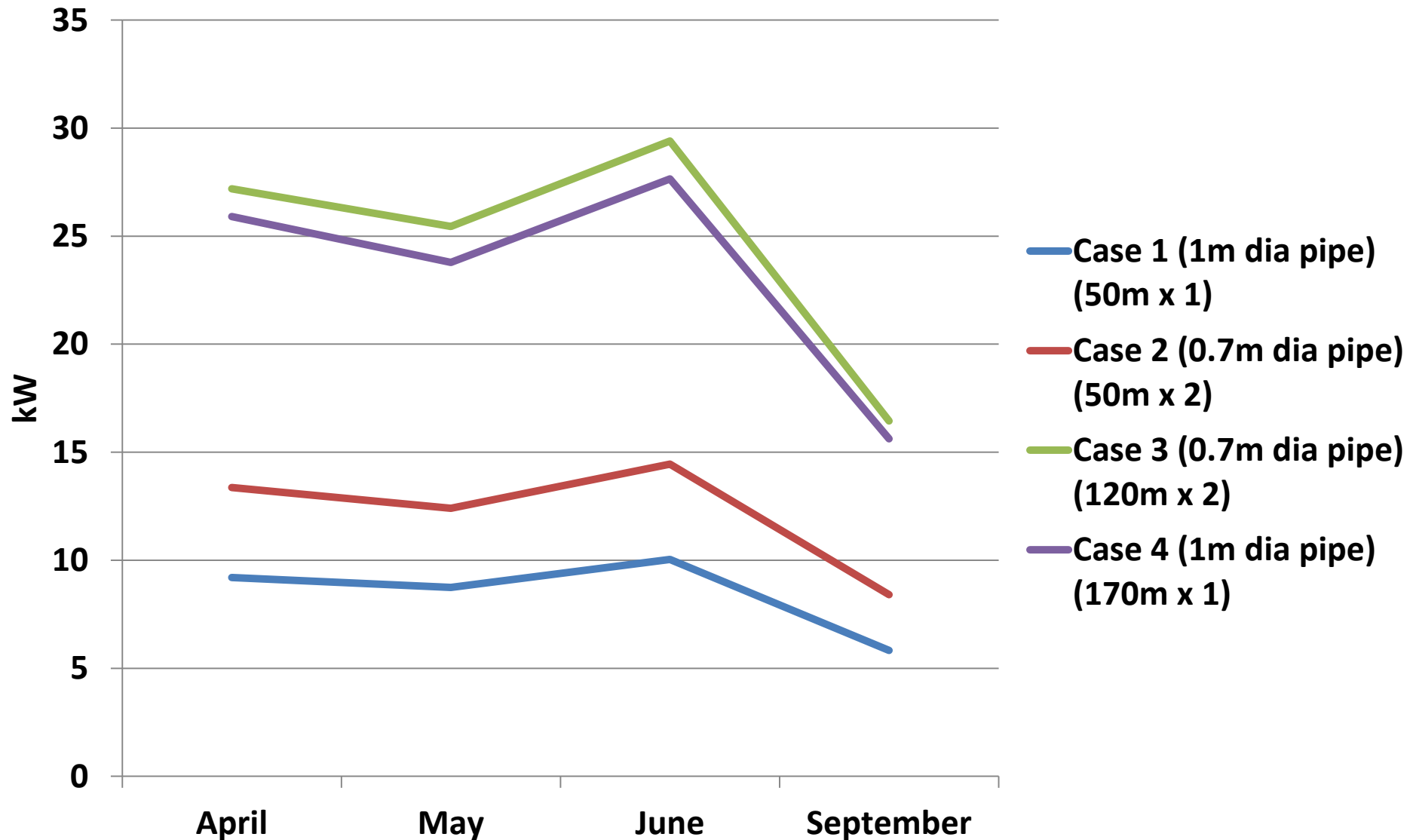
Cases for Analysis

- Case 1
 - Diameter, $\varnothing = 1.1$ m
 - Length, $L = 50$ m
 - Velocity, $V = 4.5$ m/s
- Case 2
 - Diameter, $\varnothing = 0.7$ m
 - Length, $L = 50$ m x 2
 - Velocity, $V = 4.5$ m/s
- Case 3
 - Diameter, $\varnothing = 0.7$ m
 - Length, $L = 120$ m x 2
 - Velocity, $V = 4.8$ m/s

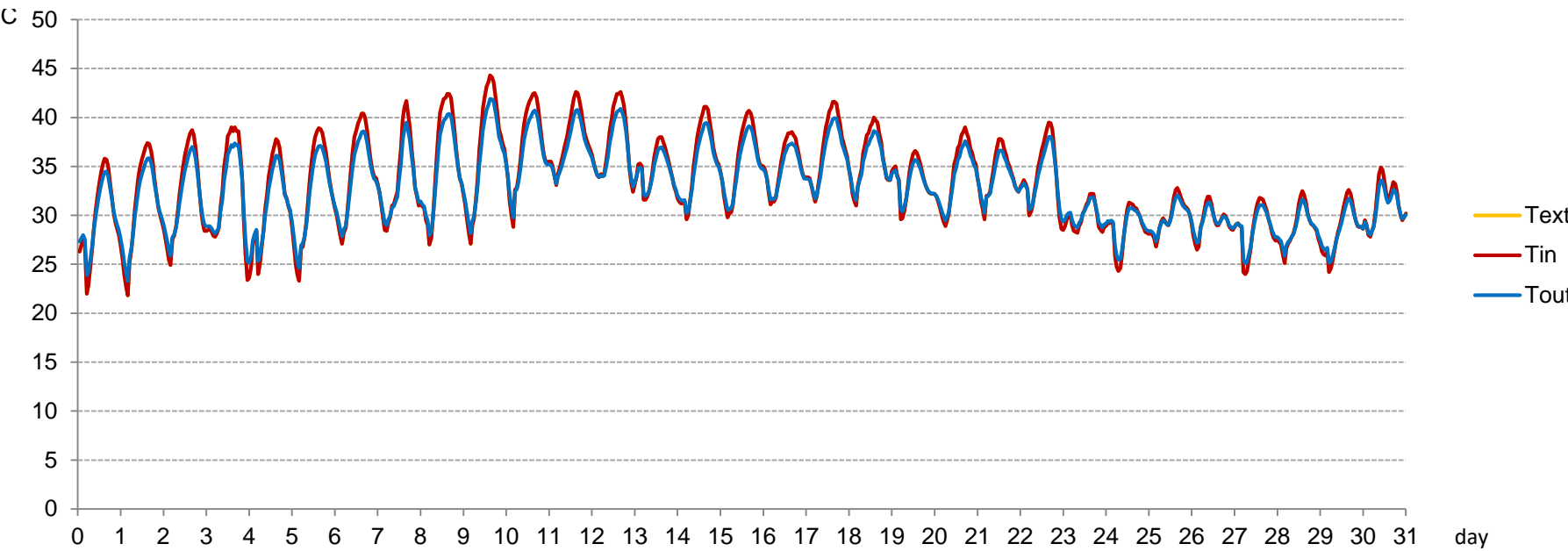
Temperature drop for 4 cases



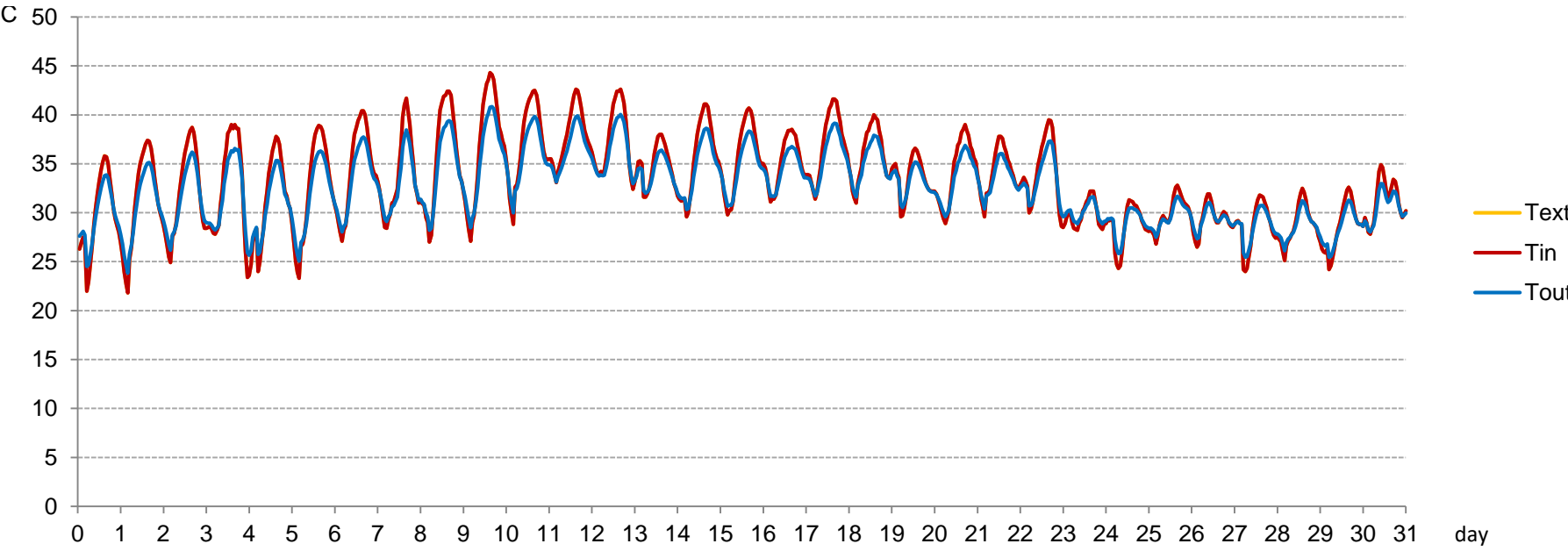
Peak cooling rate for 4 cases



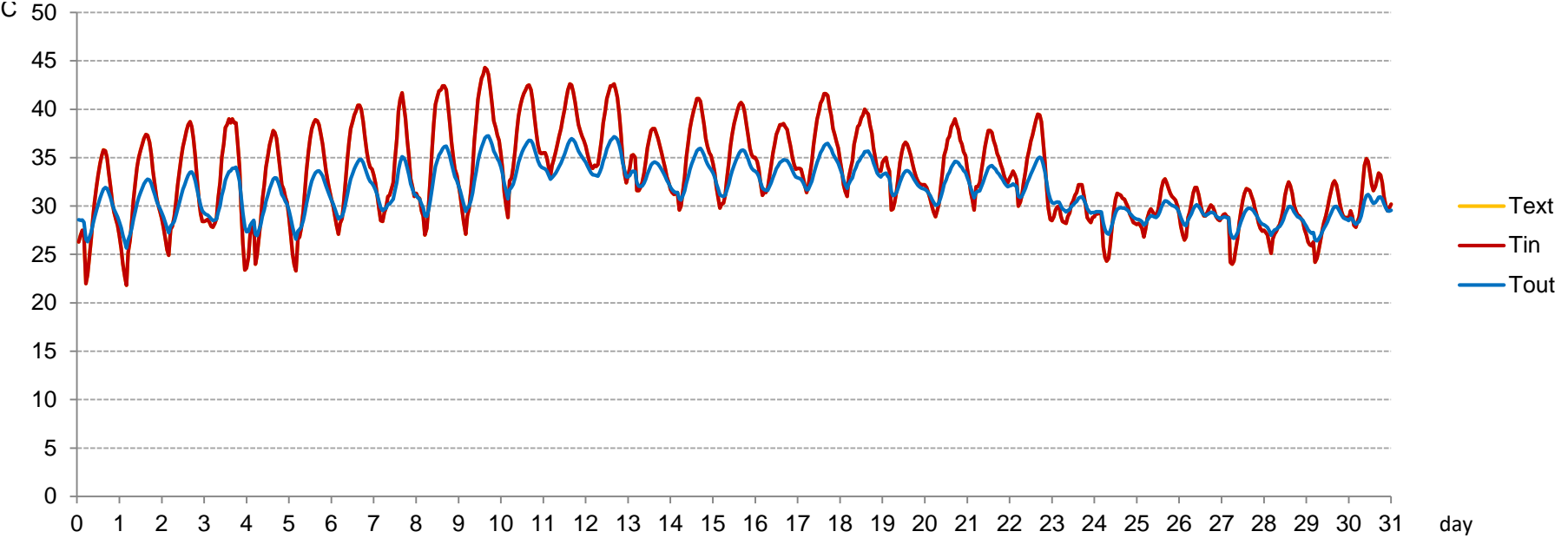
Case I



Case II



Case III



Case IV

