

7. Cumulative degree days summary results for Hanford Reach Fall

Chinook Salmon under long-term average temperatures for the Columbia River

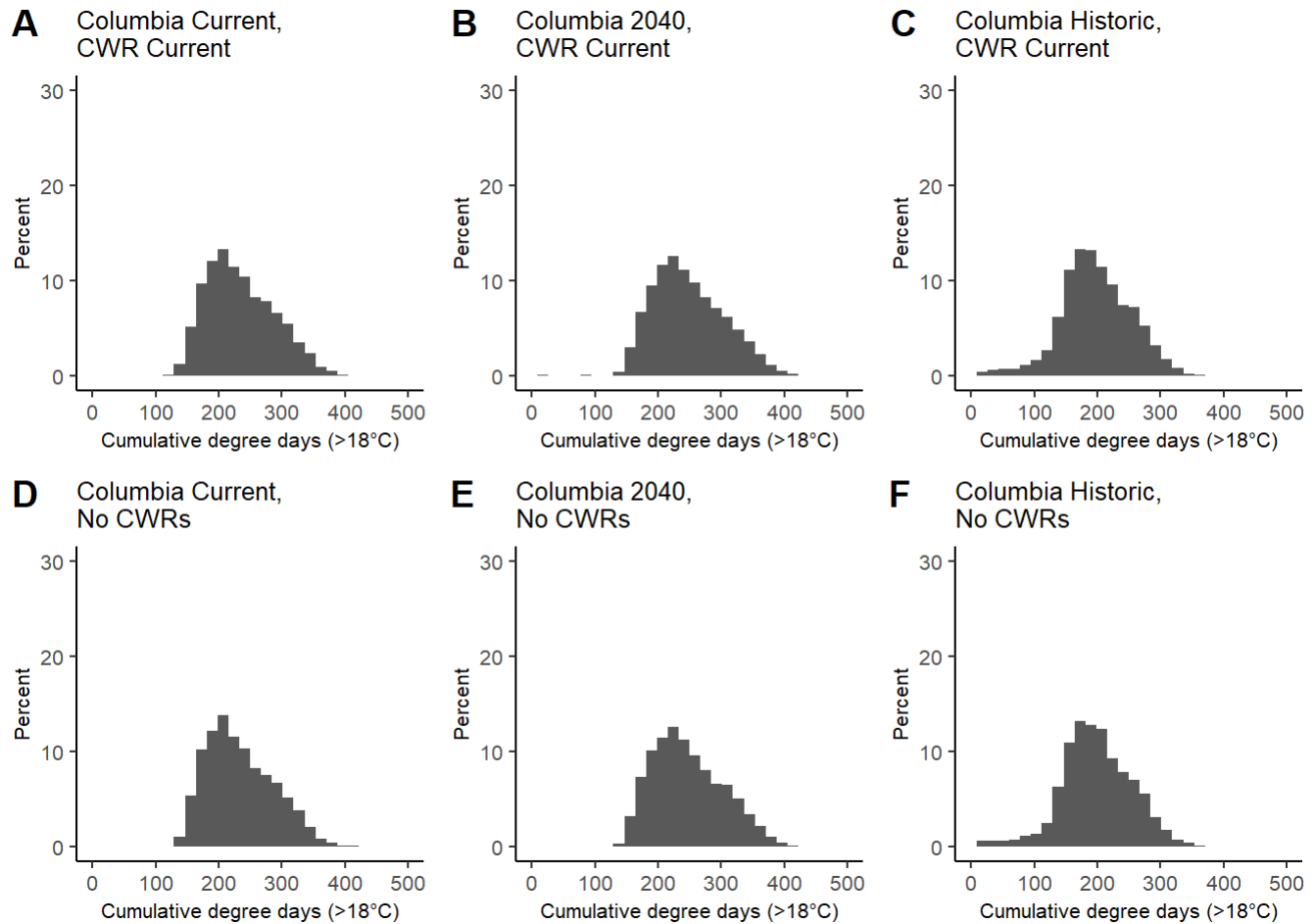


Fig. 7.1 Histograms of modeled Hanford Reach fall Chinook accumulated degrees day over 18°C from Bonneville to the Hanford Reach confluence in the Columbia River.

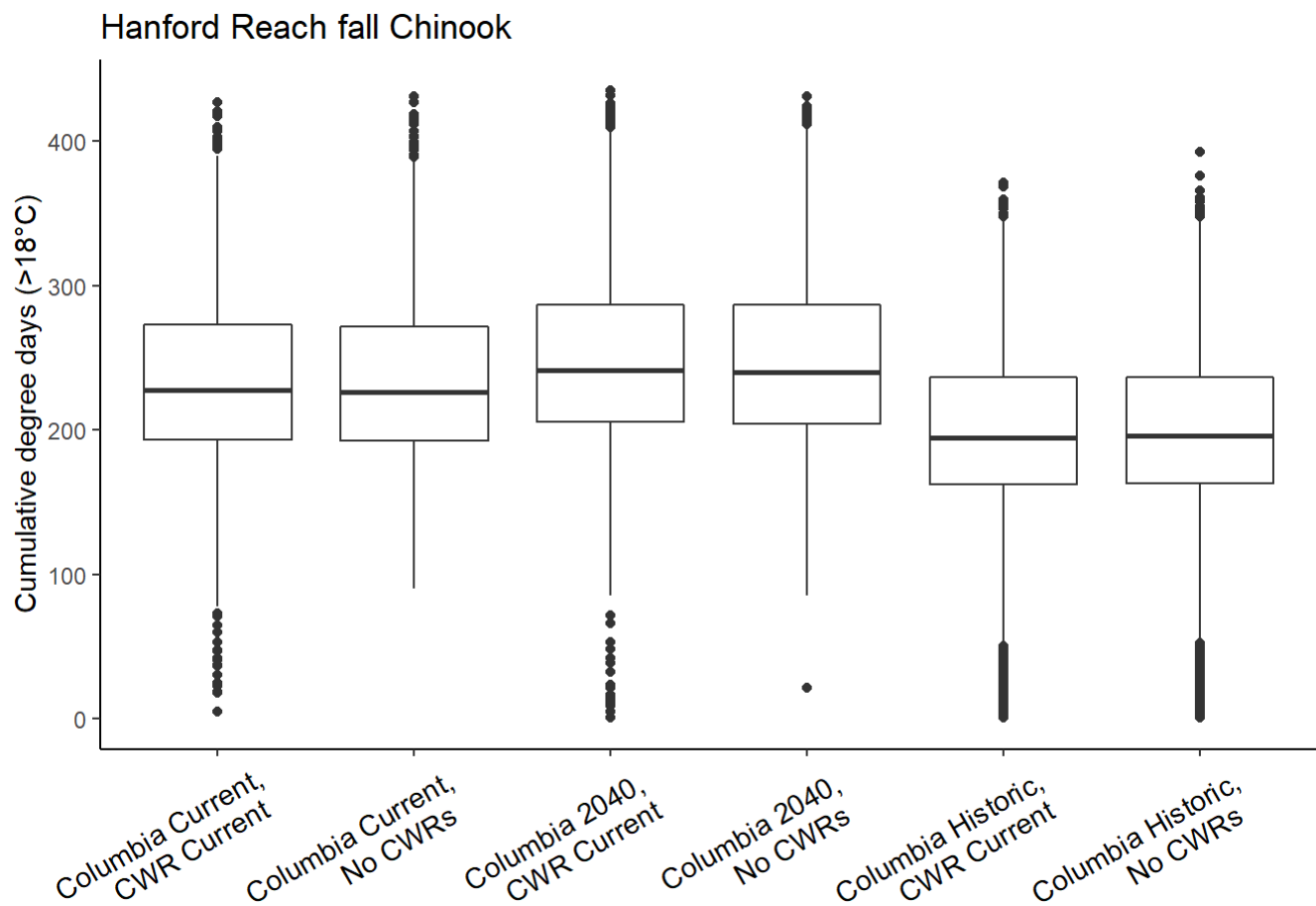


Fig. 7.2 Boxplots of modeled Hanford Reach fall Chinook accumulated degrees day over 18°C from Bonneville to the Hanford Reach confluence in the Columbia River.

Table 7.1 Cumulative degree days (>18°C) used across different HexSim thermalscapes summarized for Hanford Reach fall Chinook.

| Scenario | Minimum | 25% quantile | Median | 75% quantile | Maximum |
|--------------------------------|---------|--------------|--------|--------------|---------|
| Columbia 2040, CWR Current | 1 | 205 | 241 | 287 | 435 |
| Columbia Historic, CWR Current | 1 | 162 | 194 | 236 | 371 |
| Columbia Current, CWR Current | 5 | 193 | 227 | 273 | 427 |
| Columbia 2040, No CWRs | 21 | 204 | 240 | 287 | 431 |
| Columbia Historic, No CWRs | 1 | 163 | 196 | 236 | 393 |
| Columbia Current, No CWRs | 90 | 193 | 226 | 271 | 431 |

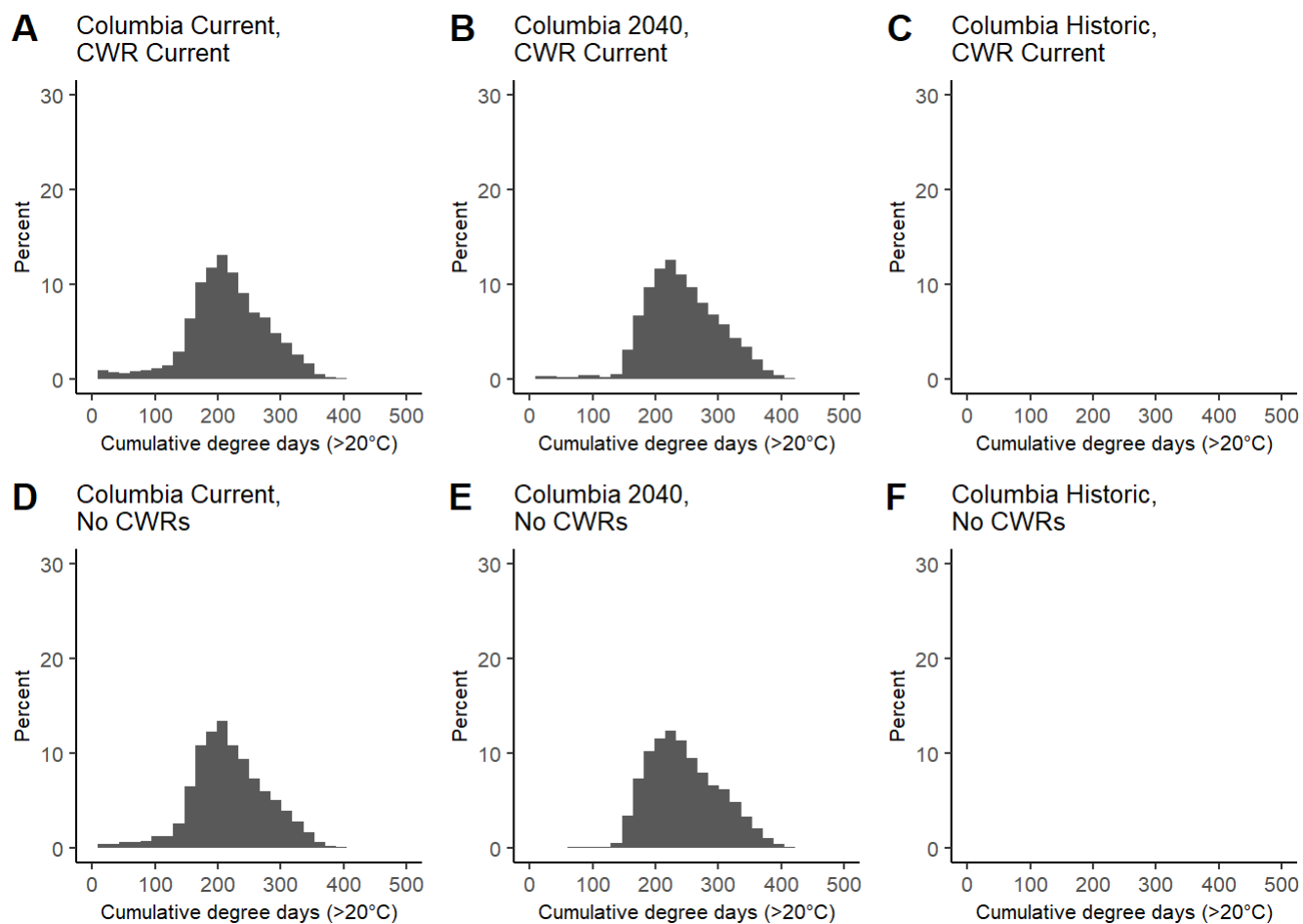


Fig. 7.3 Histograms of modeled Hanford Reach fall Chinook accumulated degrees day over 20°C from Bonneville to the Hanford Reach confluence in the Columbia River.

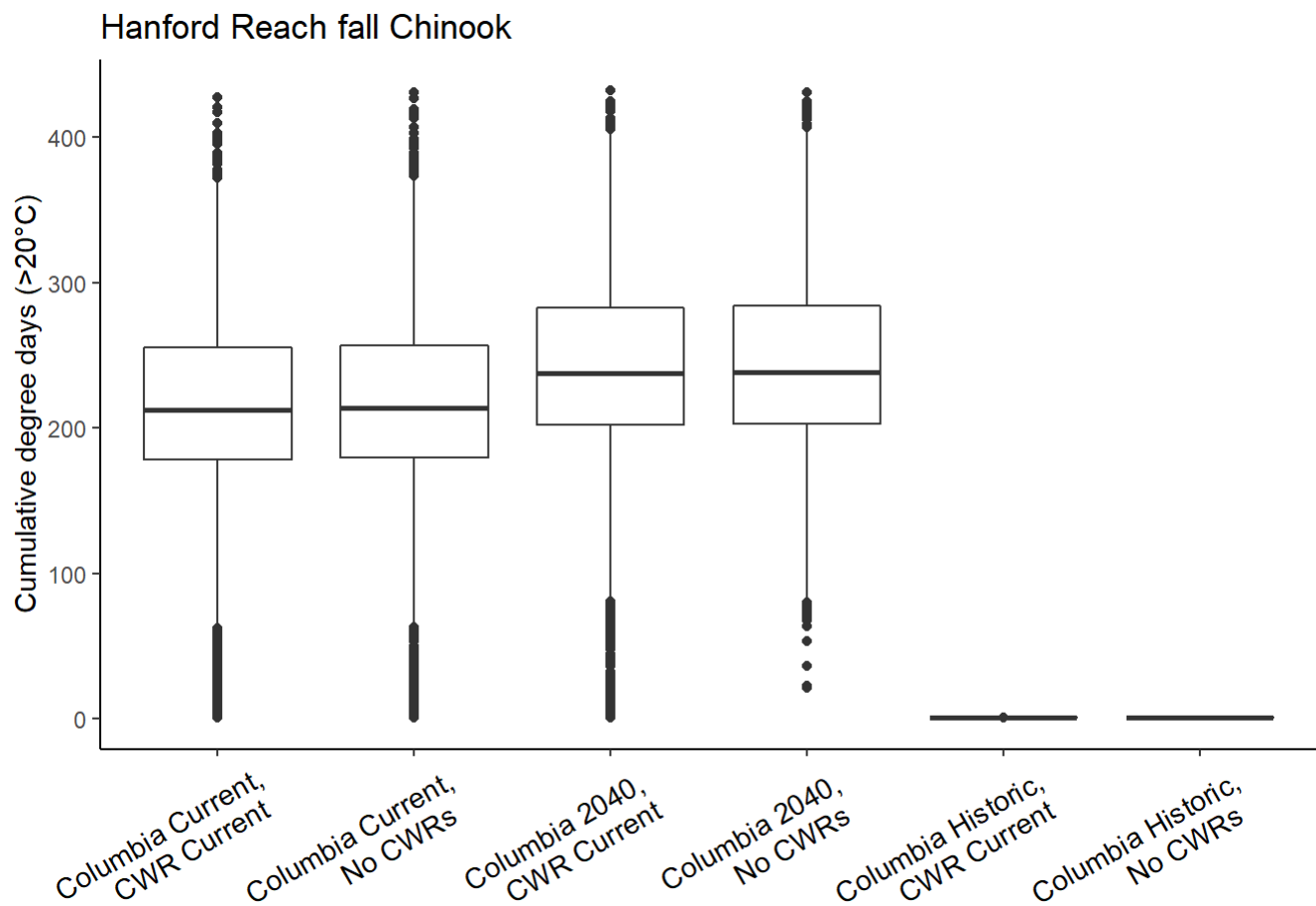


Fig. 7.4 Boxplots of modeled Hanford Reach fall Chinook accumulated degrees day over 20°C from Bonneville to the Hanford Reach confluence in the Columbia River.

Table 7.2 Cumulative degree days (>20°C) used across different HexSim thermalscapes summarized for Hanford Reach fall Chinook.

| Scenario | Minimum | 25% quantile | Median | 75% quantile | Maximum |
|--------------------------------|---------|--------------|--------|--------------|---------|
| Columbia 2040, CWR Current | 1 | 202 | 238 | 283 | 432 |
| Columbia Historic, CWR Current | 1 | 1 | 1 | 1 | 1 |
| Columbia Current, CWR Current | 1 | 178 | 212 | 256 | 427 |
| Columbia 2040, No CWRs | 21 | 203 | 238 | 284 | 431 |
| Columbia Historic, No CWRs | 1 | 1 | 1 | 1 | 1 |
| Columbia Current, No CWRs | 1 | 179 | 214 | 257 | 431 |

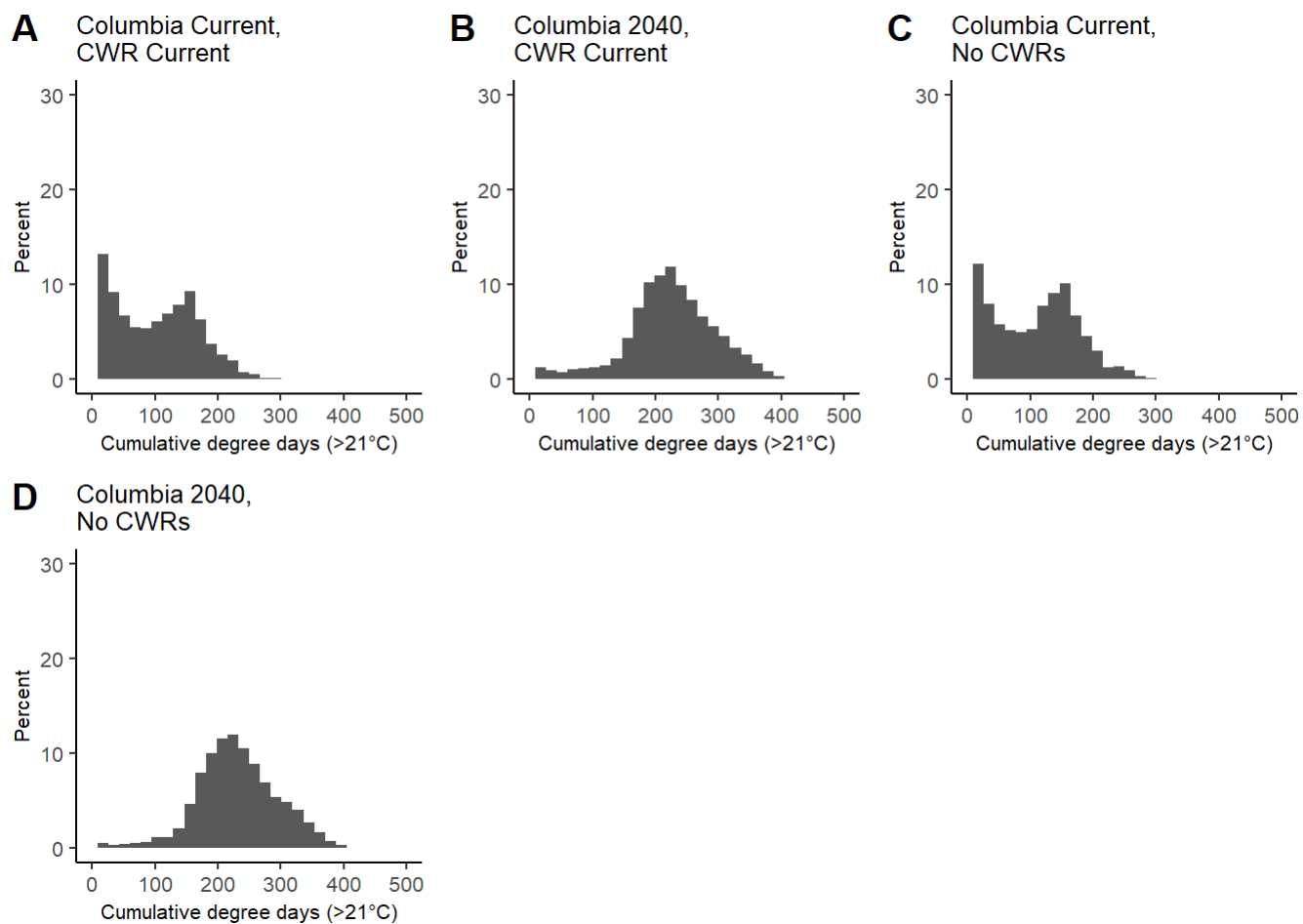


Fig. 7.5 Histograms of modeled Hanford Reach fall Chinook accumulated degrees day over 21°C from Bonneville to the Hanford Reach confluence in the Columbia River.

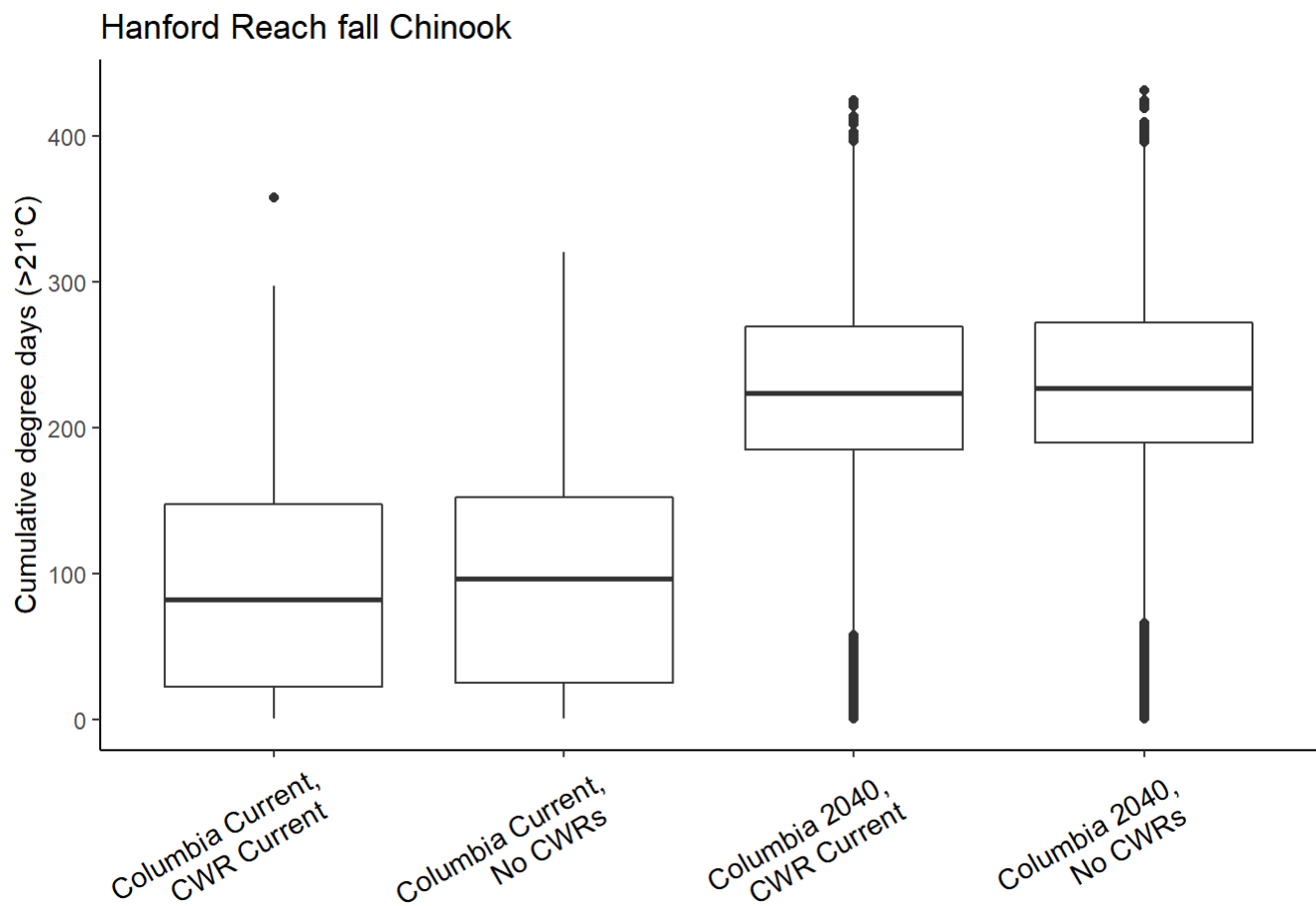


Fig. 7.6 Boxplots of modeled Hanford Reach fall Chinook accumulated degrees day over 21°C from Bonneville to the Hanford Reach confluence in the Columbia River.

Table 7.3 Cumulative degree days (>21°C) used across different HexSim thermalscapes summarized for Hanford Reach fall Chinook.

| Scenario | Minimum | 25% quantile | Median | 75% quantile | Maximum |
|-------------------------------|---------|--------------|--------|--------------|---------|
| Columbia 2040, CWR Current | 1 | 185 | 224 | 269 | 425 |
| Columbia Current, CWR Current | 1 | 23 | 83 | 148 | 358 |
| Columbia 2040, No CWRs | 1 | 190 | 227 | 272 | 431 |
| Columbia Current, No CWRs | 1 | 25 | 97 | 153 | 320 |