# Projected fire change 2000 - 2099

Unvetted preliminary rush draft from developmental code

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## 1 Projected fire change tables

In each subsection below, the third table down with percentages relates to table 8.1 in the original document. This uses strictly ALFRESCO output. The tables use years 2000 - 2009 and 2090 - 2099. There is one section for each region, Alaska and the five LCCs.

### 1.1 Alaska

#### 1.1.1 Historical fire

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 59 | 3012 |
| SRES B1 | 95th | 83 | 17293 |
| SRES A1B | 50th | 59 | 3022 |
| SRES A1B | 95th | 83 | 17313 |
| SRES A2 | 50th | 59 | 3010 |
| SRES A2 | 95th | 83 | 17317 |

#### 1.1.2 Projected fire

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 53 | 2504 |
| SRES B1 | 95th | 73 | 11594 |
| SRES A1B | 50th | 55 | 4724 |
| SRES A1B | 95th | 81 | 24527 |
| SRES A2 | 50th | 51 | 3289 |
| SRES A2 | 95th | 79 | 22389 |

#### 1.1.3 Percent change

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | -10.2 | -16.9 |
| SRES B1 | 95th | -11.2 | -33.0 |
| SRES A1B | 50th | -6.8 | 56.3 |
| SRES A1B | 95th | -2.1 | 41.7 |
| SRES A2 | 50th | -13.6 | 9.3 |
| SRES A2 | 95th | -5.4 | 29.3 |

## 1.2 Arctic

### 1.2.1 Historical fire

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 1 | 1 |
| SRES B1 | 95th | 3 | 6115 |
| SRES A1B | 50th | 1 | 0 |
| SRES A1B | 95th | 3 | 6112 |
| SRES A2 | 50th | 1 | 1 |
| SRES A2 | 95th | 3 | 6115 |

### 1.2.2 Projected fire

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 1 | 2 |
| SRES B1 | 95th | 2 | 1589 |
| SRES A1B | 50th | 1 | 68 |
| SRES A1B | 95th | 3 | 7345 |
| SRES A2 | 50th | 1 | 0 |
| SRES A2 | 95th | 3 | 6465 |

### 1.2.3 Percent change

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 0.0 | 100.0 |
| SRES B1 | 95th | -33.3 | -74.0 |
| SRES A1B | 50th | 0.0 | Inf |
| SRES A1B | 95th | 0.0 | 20.2 |
| SRES A2 | 50th | 0.0 | -100.0 |
| SRES A2 | 95th | 0.0 | 5.7 |

## 1.3 North Pacific

### 1.3.1 Historical fire

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 0 | 0 |
| SRES B1 | 95th | 2 | 24 |
| SRES A1B | 50th | 0 | 0 |
| SRES A1B | 95th | 2 | 25 |
| SRES A2 | 50th | 0 | 0 |
| SRES A2 | 95th | 2 | 25 |

### 1.3.2 Projected fire

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 0 | 0 |
| SRES B1 | 95th | 2 | 36 |
| SRES A1B | 50th | 0 | 1 |
| SRES A1B | 95th | 3 | 247 |
| SRES A2 | 50th | 0 | 0 |
| SRES A2 | 95th | 2 | 124 |

### 1.3.3 Percent change

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | - | - |
| SRES B1 | 95th | 0 | 50 |
| SRES A1B | 50th | - | - |
| SRES A1B | 95th | 64.52 | 888 |
| SRES A2 | 50th | - | - |
| SRES A2 | 95th | 29.03 | 396 |

## 1.4 Northwest Interior Forest North

### 1.4.1 Historical fire

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 42 | 2118 |
| SRES B1 | 95th | 60 | 10088 |
| SRES A1B | 50th | 42 | 2116 |
| SRES A1B | 95th | 60 | 10111 |
| SRES A2 | 50th | 42 | 2116 |
| SRES A2 | 95th | 60 | 10100 |

### 1.4.2 Projected fire

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 38 | 1737 |
| SRES B1 | 95th | 54 | 7779 |
| SRES A1B | 50th | 40 | 3098 |
| SRES A1B | 95th | 61 | 11953 |
| SRES A2 | 50th | 37 | 2092 |
| SRES A2 | 95th | 58 | 12182 |

### 1.4.3 Percent change

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | -7.2 | -18.0 |
| SRES B1 | 95th | -9.5 | -22.9 |
| SRES A1B | 50th | -2.4 | 46.4 |
| SRES A1B | 95th | 1.8 | 18.2 |
| SRES A2 | 50th | -11.9 | -1.1 |
| SRES A2 | 95th | -2.5 | 20.6 |

## 1.5 Northwest Interior Forest South

### 1.5.1 Historical fire

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 10 | 170 |
| SRES B1 | 95th | 19 | 2195 |
| SRES A1B | 50th | 10 | 169 |
| SRES A1B | 95th | 19 | 2211 |
| SRES A2 | 50th | 10 | 172 |
| SRES A2 | 95th | 19 | 2211 |

### 1.5.2 Projected fire

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 8 | 119 |
| SRES B1 | 95th | 16 | 1061 |
| SRES A1B | 50th | 8 | 244 |
| SRES A1B | 95th | 18 | 8224 |
| SRES A2 | 50th | 8 | 159 |
| SRES A2 | 95th | 17 | 4764 |

### 1.5.3 Percent change

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | -10.5 | -30.0 |
| SRES B1 | 95th | -16.2 | -51.7 |
| SRES A1B | 50th | -10.5 | 44.4 |
| SRES A1B | 95th | -2.4 | 272.0 |
| SRES A2 | 50th | -15.8 | -7.6 |
| SRES A2 | 95th | -10.8 | 115.5 |

## 1.6 Western Alaska

### 1.6.1 Historical fire

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 8 | 238 |
| SRES B1 | 95th | 16 | 6655 |
| SRES A1B | 50th | 8 | 240 |
| SRES A1B | 95th | 16 | 6595 |
| SRES A2 | 50th | 8 | 240 |
| SRES A2 | 95th | 16 | 6899 |

### 1.6.2 Projected fire

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | 6 | 193 |
| SRES B1 | 95th | 13 | 5306 |
| SRES A1B | 50th | 8 | 911 |
| SRES A1B | 95th | 14 | 9274 |
| SRES A2 | 50th | 6 | 466 |
| SRES A2 | 95th | 14 | 9724 |

### 1.6.3 Percent change

| Climate-change scenario | Percentile | Ignitions | Area burned |
|---|---|---|---|
| SRES B1 | 50th | -23.5 | -18.9 |
| SRES B1 | 95th | -19.2 | -20.3 |
| SRES A1B | 50th | -6.2 | 279.6 |
| SRES A1B | 95th | -13.0 | 40.6 |
| SRES A2 | 50th | -18.8 | 94.2 |
| SRES A2 | 95th | -12.4 | 41.0 |

# 2 Percentile fire trends by scenario

The below graph relates to figure 8.2 in the original document. This uses strictly ALFRESCO output.

## 2.1 Alaska

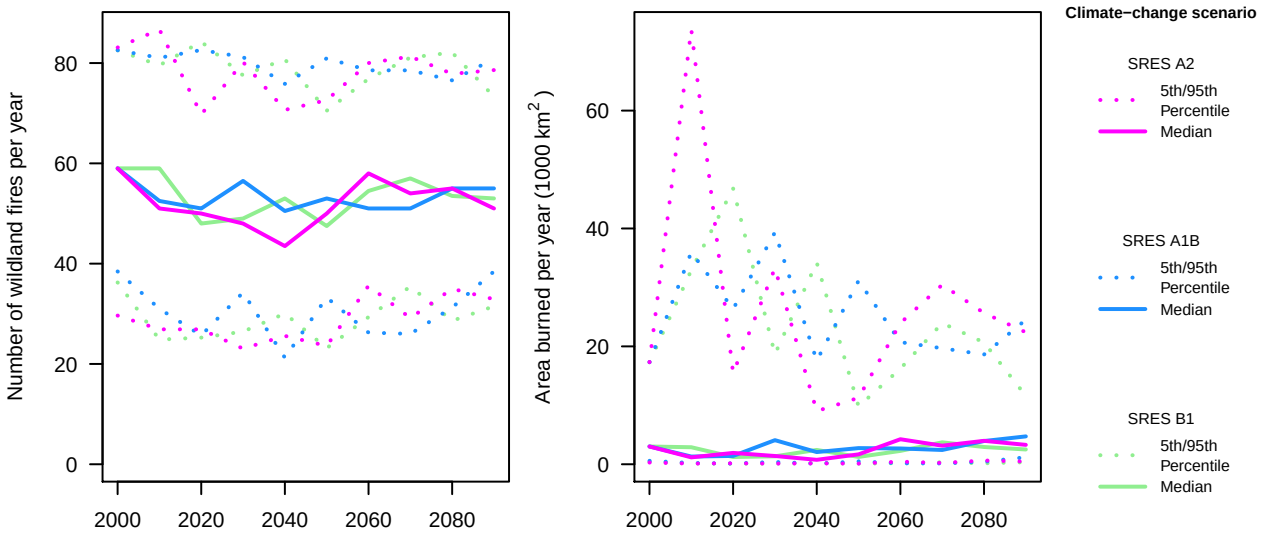


Figure 1: Alaska

All five following separate LCC graphs relate to figure 8.3 in the original document. This uses strictly ALFRESCO output.

## 2.2 Arctic

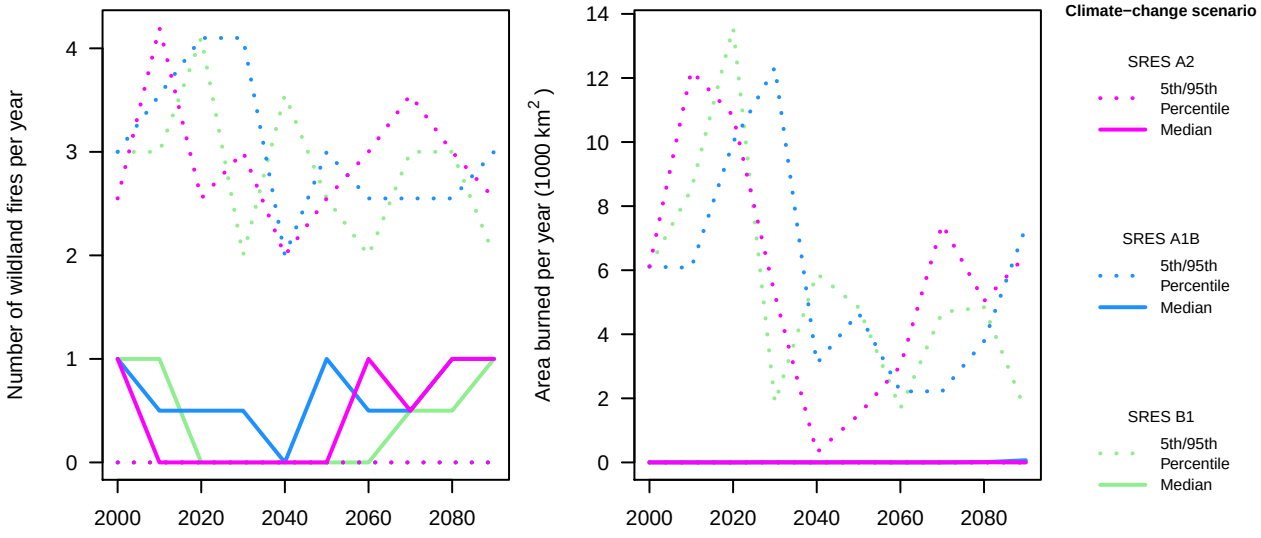


Figure 2: Arctic

## 2.3 North Pacific

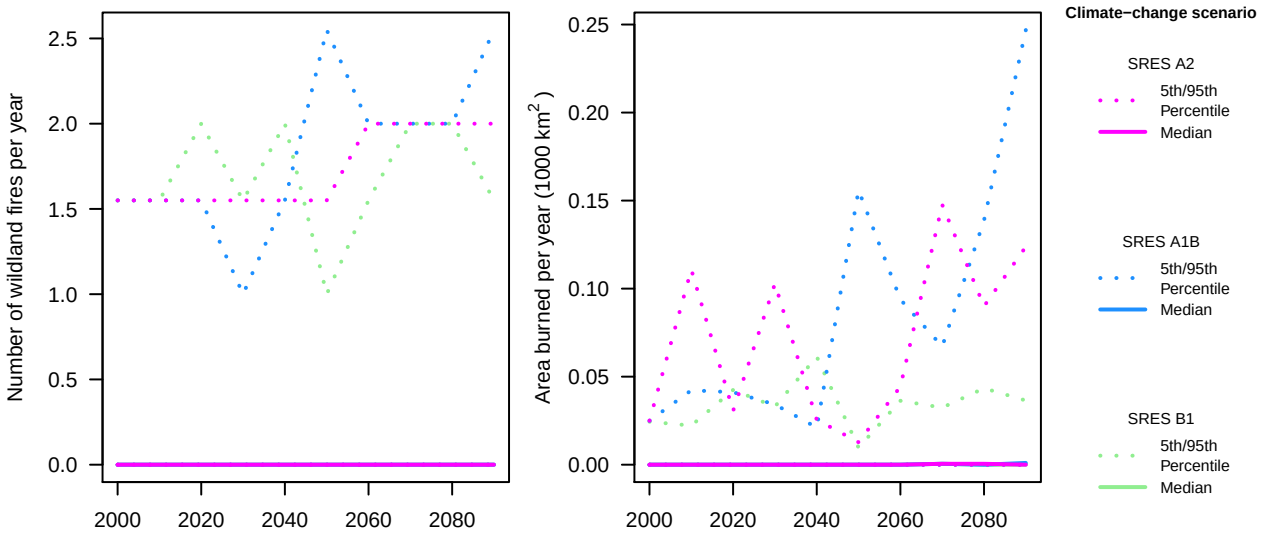


Figure 3: North Pacific

## 2.4 Northwest Interior Forest North

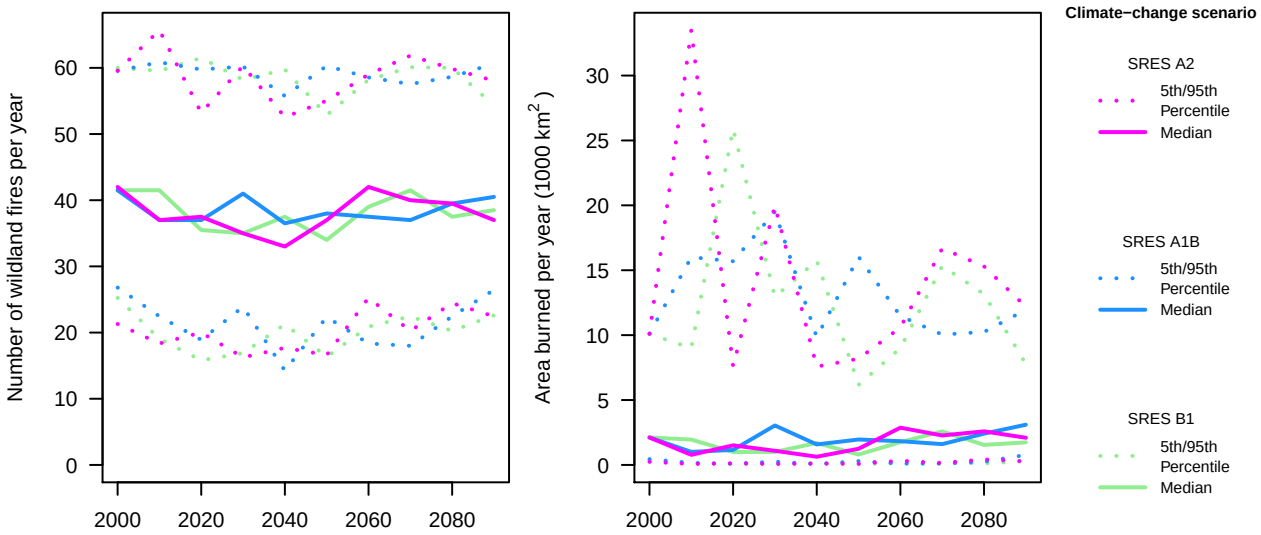


Figure 4: Northwest Interior Forest North

## 2.5 Northwest Interior Forest South

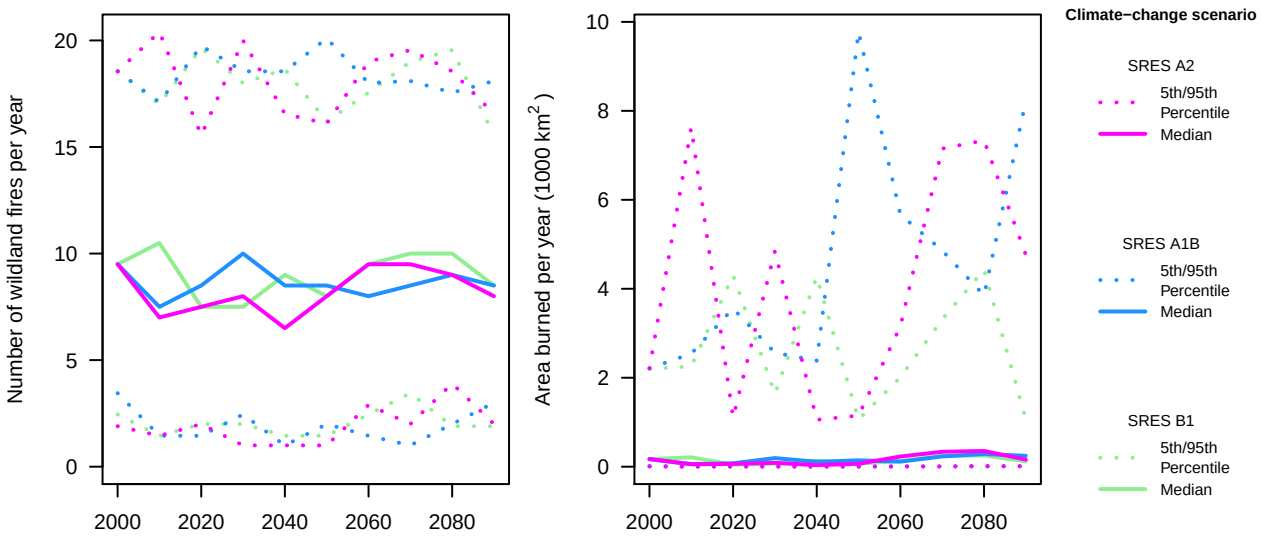


Figure 5: Northwest Interior Forest South

## 2.6 Western Alaska

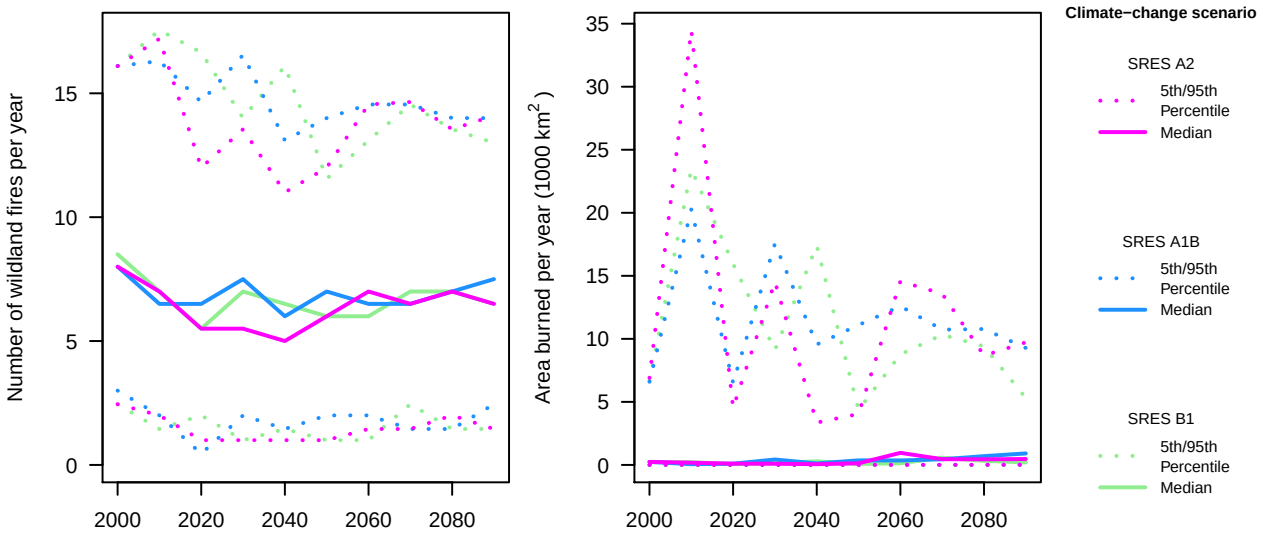


Figure 6: Western Alaska