```
In[*]:= dif = 90000;
       x1 = 39610;
        set1 = {39610, 79220, 118830, 158440, 198050, 237660, 277270, 316880, 356490, 396096};
       comp = Table[{\{\{Opacity@1, Text[xa, \{x[[1, 2]] - x1/8, 95000\}]\}, \{EdgeForm@Dashed, \}\}\}}
                   Opacity[0.3], Blue, Rectangle[{x[[1, 1]], 20000}, {x[[1, 2]], 100000}]}},
               \{\{0pacity@1, Text[xb, \{x[[2, 2]] - x1/8, 85000\}]\}, \{EdgeForm@Dashed, \{x[[2, 2]] - x1/8, 85000\}\}\}, \{EdgeForm@Dashed, \{x[[2, 2]] - x1/8, 85000\}\}\}
                   Opacity[0.3], Blue, Rectangle[{x[[2, 1]], 30000}, {x[[2, 2]], 90000}]}},
               {\{0pacity@1, Text[xc, {x[[3, 2]] - x1/8, 75000\}]\}, \{EdgeForm@Dashed,\}\}}
                   Opacity[0.3], Blue, Rectangle[\{x[[3, 1]], 40000\}, \{x[[3, 2]], 80000\}]\}\},
               \{\{0\text{pacity@1, Text}[xd, \{x[4, 2]] - x1/8, 65000\}]\}, \{EdgeForm@Dashed,\}\}
                   Opacity[0.3], Blue, Rectangle[{x[[4, 1]], 50000}, {x[[4, 2]], 70000}]}},
               {\{0pacity@1, Text[xe, {x[[5, 2]] - x1/8, 70000\}]\}, \{EdgeForm@Dashed, \}\}}
                   Opacity[0.3], Blue, Rectangle[{x[[5, 1]], 45000}, {x[[5, 2]], 75000}]}},
               {\{0pacity@1, Text[xf, {x[[6, 2]] - x1/8, 80000\}]\}, \{EdgeForm@Dashed, and a context of the cont
                   Opacity[0.3], Blue, Rectangle[{x[[6, 1]], 35000}, {x[[6, 2]], 85000}]}}},
             {x, Partition[Flatten[Table[{{z[[1]] - x1 / 2, z[[2]] - x1 / 2}, {z[[1]], z[[2]]}}, {z,
                       Partition[set1, 2, 1]}], 1], 6]}];
       x2 = 18862;
       set2 = {18862, 37724, 56586, 75448, 94310,
             113 172, 132 034, 150 896, 169 758, 188 620, 207 482, 226 344, 245 206,
             264 068, 282 930, 301 792, 320 654, 339 516, 358 378, 377 240, 396 096};
        comp2 = Table[{{{Opacity@1, Text[xaa, {x[[1, 2]] - x2 / 8, 95 000 + dif}]}, {EdgeForm@Dashed,
                   Opacity[0.3], Red, Rectangle[{x[[1, 1]], 20000 + dif}, {x[[1, 2]], 100000 + dif}]}},
               {{Opacity@1, Text[xbb, {x[[2, 2]] - x2 / 8, 80000 + dif}]}, {EdgeForm@Dashed,
                   Opacity[0.3], Red, Rectangle[\{x[[2, 1]], 35000 + dif\}, \{x[[2, 2]], 85000 + dif\}]\}\},
               {(0pacity@1, Text[xcc, {x[[3, 2]] - x2 / 8, 75000 + dif})}, {EdgeForm@Dashed,}
                   Opacity[0.3], Red, Rectangle[\{x[[3, 1]], 40000 + dif\}, \{x[[3, 2]], 80000 + dif\}]\}\},
               {{Opacity@1, Text[xdd, {x[[4, 2]] - x2 / 8, 85000 + dif}]}, {EdgeForm@Dashed,
                   Opacity[0.3], Red, Rectangle[{x[[4, 1]], 30000 + dif}, {x[[4, 2]], 90000 + dif}]}}},
             {x, Partition[Flatten[Table[{{z[[1]] - x2 / 2, z[[2]] - x2 / 2}, {z[[1]], z[[2]]}}, {z,
                       Partition[set2, 2, 1]}], 1], 4]}];
       Graphics[
          {{Join[{{Opacity@1, Text[1, {First@set1 - x1 / 8, 80000 + dif}]}, {EdgeForm@Dashed,
                   Opacity[0.3], Blue, Rectangle[{1, 35000}, {First@set1, 85000}]}},
               Join[Flatten[comp[[1]] /. Flatten@MapThread[{#1 → #2} &,
                         {{xa, xb, xc, xd, xe, xf}, {2, 3, 4, 5, 6, 7}}], 1], Flatten[comp[[2]] /.
                     Flatten@MapThread[\{#1 \rightarrow #2\} &, \{\{xa, xb, xc, xd, xe, xf\}, \{8, 9, 10, 11, 12, 13\}\}],
                   1], Flatten[comp[[3]] /. Flatten@MapThread[{#1 → #2} &,
                         {{xa, xb, xc, xd, xe, xf}, {14, 15, 16, 17, 18, 19}}], 1]]],
             {Opacity[0.3], Black, Rectangle[{1, 55000}, {Last@set1, 65000}]}},
           {Join[{{Opacity@1, Text[1, {First@set2 - x2 / 8, 85000 + dif}]}, {EdgeForm@Dashed,
                   Opacity[0.3], Red, Rectangle[{1, 30000 + dif}, {First@set2, 90000 + dif}]}},
               Join[Flatten[comp2[[1]] /. Flatten@MapThread[{#1 → #2} &,
                         {{xaa, xbb, xcc, xdd}, {2, 3, 4, 5}}], 1], Flatten[comp2[[2]] /.
                     Flatten@MapThread[\{#1 \rightarrow #2\} &, \{\{xaa, xbb, xcc, xdd\}, \{6, 7, 8, 9\}\}], 1],
                 Flatten[comp2[[3]] /. Flatten@MapThread[{#1 → #2} &,
```

```
{{xaa, xbb, xcc, xdd}, {10, 11, 12, 13}}], 1], Flatten[comp2[[4]] /.
              Flatten@MapThread[\{#1 \rightarrow #2\} &, \{\{xaa, xbb, xcc, xdd\}, \{14, 15, 16, 17\}\}], 1],
           Flatten[comp2[[5]] /. Flatten@MapThread[{#1 → #2} &,
                 {{xaa, xbb, xcc, xdd}, {18, 19, 20, 21}}], 1], Flatten[comp2[[6]] /.
              Flatten@MapThread[{#1 → #2} &, {{xaa, xbb, xcc, xdd}, {22, 23, 24, 25}}], 1],
            Flatten[comp2[[7]] /. Flatten@MapThread[{#1 → #2} &,
                 {{xaa, xbb, xcc, xdd}, {26, 27, 28, 29}}], 1], Flatten[comp2[[8]] /.
              Flatten@MapThread[\{#1 \rightarrow #2\} &, \{\{xaa, xbb, xcc, xdd\}, \{30, 31, 32, 33\}\}], 1],
            Flatten[comp2[[9]] /. Flatten@MapThread[{#1 → #2} &,
                 {{xaa, xbb, xcc, xdd}, {34, 35, 36, 37}}], 1], Flatten[comp2[[10]] /.
              Flatten@MapThread[\{#1 \rightarrow #2\} &, \{\{xaa, xbb, xcc, xdd\}, \{38, 39, 40, 41\}\}], 1]]],
         {Opacity[0.3], Black, Rectangle[{1,55000+dif}, {Last@set2,65000+dif}]}}},
      Frame → True, PlotRange →
        \{\{-20000, 420000\},
         {10000, 200000}},
      FrameTicks → {{None, None}, {All, All}},
      FrameLabel →
        "Production Events",
      \textbf{ImageSize} \rightarrow
        800]
                                      100 000
                                                                   200 000
                                                                                                300 000
Out[@]=
                                                                   9
                                                                                                     15
                                                                                          13
                                                                         10
                                                                                    12
          0
                                      100000
                                                                   200 000
                                                                                                300 000
                                                                Production Events
In[*]:= dif = 9000;
     x1 = 3214;
```

```
set1 = {3214, 6428, 9642, 12856, 16070, 19284, 22498, 25712, 28926, 32138};
comp = Table[{\{(Opacity@1, Text[xa, \{x[[1, 2]] - x1/8, 9500\})\}\}, \{EdgeForm@Dashed, (Compared to the compared to the compared
                                                                 Opacity[0.3], Blue, Rectangle[{x[[1, 1]], 2000}, {x[[1, 2]], 10000}]}},
```

```
\{\{0\text{pacity@1}, \text{Text}[xb, \{x[2, 2]] - x1/8, 8500\}\}\}, \{\text{EdgeForm@Dashed}, \}\}
       Opacity[0.3], Blue, Rectangle[{x[[2,1]], 3000}, {x[[2,2]], 9000}]}},
     {{Opacity@1, Text[xc, {x[[3, 2]] - x1 / 8, 7500}]}, {EdgeForm@Dashed,
       Opacity[0.3], Blue, Rectangle[{x[[3, 1]], 4000}, {x[[3, 2]], 8000}]}},
     {{Opacity@1, Text[xd, {x[[4, 2]] - x1 / 8, 6500}]}, {EdgeForm@Dashed,
       Opacity[0.3], Blue, Rectangle[{x[[4, 1]], 5000}, {x[[4, 2]], 7000}]}},
     \{\{0pacity@1, Text[xe, \{x[[5, 2]] - x1/8, 7000\}]\}, \{EdgeForm@Dashed,\}\}\}
       Opacity[0.3], Blue, Rectangle[{x[[5, 1]], 4500}, {x[[5, 2]], 7500}]}},
     {{Opacity@1, Text[xf, {x[[6, 2]] - x1 / 8, 8000}]}, {EdgeForm@Dashed,
       Opacity[0.3], Blue, Rectangle[{x[[6, 1]], 3500}, {x[[6, 2]], 8500}]}}},
    {x, Partition[Flatten[Table[{{z[[1]] - x1 / 2, z[[2]] - x1 / 2}, {z[[1]], z[[2]]}}, {z,
          Partition[set1, 2, 1]}], 1], 6]}];
x2 = 1692;
set2 = {1692, 3384, 5076, 6768, 8460, 10152, 11844, 13536, 15228,
    16 920, 18 612, 20 304, 21 996, 23 688, 25 380, 27 072, 28 764, 30 456, 32 138 };
comp2 = Table[{{{Opacity@1, Text[xaa, {x[[1, 2]] - x2 / 8, 9500 + dif}]}, {EdgeForm@Dashed,
       Opacity[0.3], Red, Rectangle[{x[[1, 1]], 2000 + dif}, {x[[1, 2]], 10000 + dif}]}},
     {{Opacity@1, Text[xbb, {x[[2, 2]] - x2 / 8, 8000 + dif}]}, {EdgeForm@Dashed,
       Opacity [0.3], Red, Rectangle [\{x[[2,1]], 3500 + dif\}, \{x[[2,2]], 8500 + dif\}]\}\},
     {\{0pacity@1, Text[xcc, {x[[3, 2]] - x2 / 8, 6500 + dif\}]\}, \{EdgeForm@Dashed, \}\}\}}
       Opacity[0.3], Red, Rectangle[{x[[3, 1]], 5000 + dif}, {x[[3, 2]], 7000 + dif}]}},
     \{\{0pacity@1, Text[xdd, \{x[[4, 2]] - x2 / 8, 6250 + dif\}]\}, \{EdgeForm@Dashed, \{x[[4, 2]] - x2 / 8, 6250 + dif\}\}\}\}
       Opacity[0.3], Red, Rectangle[{x[[4, 1]], 5250 + dif}, {x[[4, 2]], 6750 + dif}]}},
     \{\{0pacity@1, Text[xee, \{x[[5, 2]] - x2 / 8, 7000 + dif\}]\}, \{EdgeForm@Dashed, \{x[[5, 2]] - x2 / 8, 7000 + dif\}\}\}\}
       Opacity[0.3], Red, Rectangle[{x[[5, 1]], 4500 + dif}, {x[[5, 2]], 7500 + dif}]}},
     \{\{0pacity@1, Text[xff, \{x[[6, 2]] - x2 / 8, 8500 + dif\}]\}, \{EdgeForm@Dashed, \{0pacity@1, Text[xff, \{x[[6, 2]] - x2 / 8, 8500 + dif\}]\}\}\}
       Opacity[0.3], Red, Rectangle[{x[[6, 1]], 3000 + dif}, {x[[6, 2]], 9000 + dif}]}}},
    {x, Partition[Flatten[Table[{{z[[1]] - x2 / 2, z[[2]] - x2 / 2}, {z[[1]], z[[2]]}}, {z,
          Partition[set2, 2, 1]}], 1], 6]}];
Graphics[{{Join[{{Opacity@1, Text[1, {First@set1 - x1 / 8, 8000 + dif}}]},
      {EdgeForm@Dashed, Opacity[0.3], Blue, Rectangle[{1, 3500}, {First@set1, 8500}]}},
     Join[Flatten[comp[[1]] /. Flatten@MapThread[{#1 → #2} &,
            {{xa, xb, xc, xd, xe, xf}, {2, 3, 4, 5, 6, 7}}], 1], Flatten[comp[[2]] /.
         \label{eq:flatten@MapThread} \begin{tabular}{ll} $\{xa, xb, xc, xd, xe, xf\}, $\{8, 9, 10, 11, 12, 13\}\} \end{tabular} \label{eq:flatten} $\{xa, xb, xc, xd, xe, xf\}, $\{8, 9, 10, 11, 12, 13\}\} \end{tabular} 
       1], Flatten[comp[[3]] /. Flatten@MapThread[{#1 → #2} &,
           {{xa, xb, xc, xd, xe, xf}, {14, 15, 16, 17, 18, 19}}], 1]]],
    {Opacity[0.3], Black, Rectangle[{1,5500}, {Last@set1,6500}]}},
   {Join[{{Opacity@1, Text[1, {First@set2 - x2 / 8, 8500 + dif}]}, {EdgeForm@Dashed,
       Opacity[0.3], Red, Rectangle[{1, 3000 + dif}, {First@set2, 9000 + dif}]}},
     Join[Flatten[comp2[[1]] /. Flatten@MapThread[\{#1 \rightarrow #2\} \&,
            {{xaa, xbb, xcc, xdd, xee, xff}, {2, 3, 4, 5, 6, 7}}], 1],
      Flatten[comp2[[2]] /. Flatten@MapThread[{#1 → #2} &,
           {{xaa, xbb, xcc, xdd, xee, xff}, {8, 9, 10, 11, 12, 13}}], 1],
      Flatten[comp2[[3]] /. Flatten@MapThread[{\#1 \rightarrow \#2} &,
           {{xaa, xbb, xcc, xdd, xee, xff}, {14, 15, 16, 17, 18, 19}}], 1],
      Flatten[comp2[[4]] /. Flatten@MapThread[{#1 → #2} &,
```

```
{{xaa, xbb, xcc, xdd, xee, xff}, {20, 21, 22, 23, 24, 25}}], 1],
     Flatten[comp2[[5]] /. Flatten@MapThread[\{#1 \rightarrow #2\} \&,
          {{xaa, xbb, xcc, xdd, xee, xff}, {26, 27, 28, 29, 30, 31}}], 1],
     Flatten[comp2[[6]] /. Flatten@MapThread[\{#1 \rightarrow #2\} \&,
          {{xaa, xbb, xcc, xdd, xee, xff}, {32, 33, 34, 35, 36, 37}}], 1]]],
  {Opacity[0.3], Black, Rectangle[{1,5500+dif}, {Last@set2,6500+dif}]}}},
Frame → True,
PlotRange →
 \{\{-1500, 33500\},\
  {1000, 20000}},
FrameTicks → {{None, None}, {All, All}},
FrameLabel \rightarrow
 "Production Events",
ImageSize → 800, AspectRatio →
 2/5]
```

