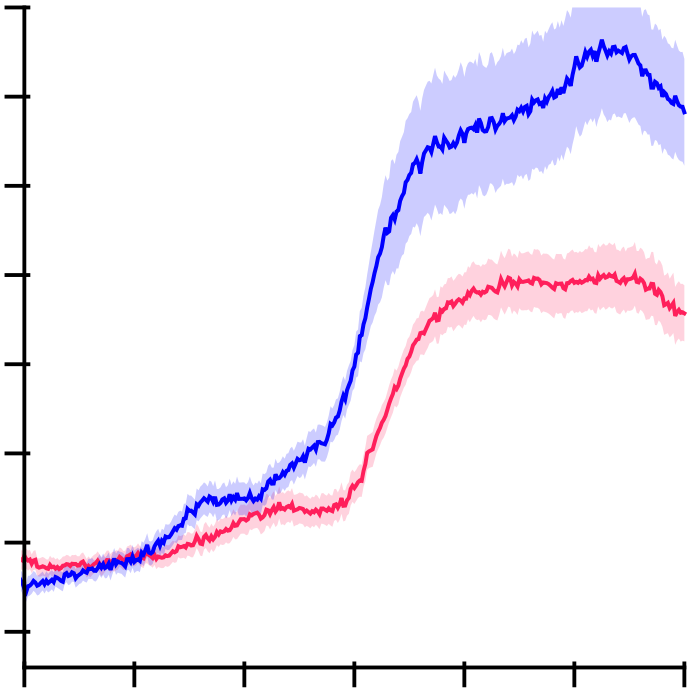
```
In[ ]:= ccColor = RGBColor["#ff1f5b"];

In[ ]:= ctColor = Blue;

In[ ]:= (**************************)

dateMouseSessionListV1CC = {{"051623", "Mouse23112", "Session1"},
   {"051723", "Mouse23112", "Session1"}, {"051623", "Mouse23166", "Session1"},
   {"051723", "Mouse23166", "Session1"}, {"043023", "Mouse23184", "Session1"},
   {"050123", "Mouse23184", "Session1"}, {"050423", "Mouse23184", "Session1"},
   {"052523", "Mouse23158", "Session1"}, {"052923", "Mouse23158", "Session1"}};

dateMouseSessionListV1CT = {{"041823", "Mouse21531", "Session1"},
   {"041923", "Mouse21531", "Session1"}, {"041823", "Mouse23138", "Session1"},
   {"041923", "Mouse23138", "Session1"}, {"042023", "Mouse23138", "Session1"},
   {"050523", "Mouse23195", "Session1"}, {"051723", "Mouse21532", "Session1"},
   {"051823", "Mouse21532", "Session1"}, {"052523", "Mouse23195", "Session1"}};

(*******************************************)
(*******Generate plots in Figure S4G***************)
(*******************************************)

meanDFFzOnsetV1CC = ToExpression /@
   Import["F:/FigureGeneration/FigureS4/FigureS4Data/V1CC/ValuesForPlotting/
      meanDFFzTraceOnset_V1CC_nonDupROIs.txt", "List"];

semDFFzOnsetV1CC = ToExpression /@
   Import["F:/FigureGeneration/FigureS4/FigureS4Data/V1CC/ValuesForPlotting/
      semDFFzTraceOnset_V1CC_nonDupROIs.txt", "List"];

meanDFFzOffsetV1CC = ToExpression /@
   Import["F:/FigureGeneration/FigureS4/FigureS4Data/V1CC/ValuesForPlotting/
      meanDFFzTraceOffset_V1CC_nonDupROIs.txt", "List"];

semDFFzOffsetV1CC = ToExpression /@
   Import["F:/FigureGeneration/FigureS4/FigureS4Data/V1CC/ValuesForPlotting/
      semDFFzTraceOffset_V1CC_nonDupROIs.txt", "List"];

meanDFFzOnsetV1CT = ToExpression /@
   Import["F:/FigureGeneration/FigureS4/FigureS4Data/V1CT/ValuesForPlotting/
      meanDFFzTraceOnset_V1CT_nonDupROIs.txt", "List"];

semDFFzOnsetV1CT = ToExpression /@
   Import["F:/FigureGeneration/FigureS4/FigureS4Data/V1CT/ValuesForPlotting/
      semDFFzTraceOnset_V1CT_nonDupROIs.txt", "List"];

meanDFFzOffsetV1CT = ToExpression /@
   Import["F:/FigureGeneration/FigureS4/FigureS4Data/V1CT/ValuesForPlotting/
      meanDFFzTraceOffset_V1CT_nonDupROIs.txt", "List"];

semDFFzOffsetV1CT = ToExpression /@
   Import["F:/FigureGeneration/FigureS4/FigureS4Data/V1CT/ValuesForPlotting/
      semDFFzTraceOffset_V1CT_nonDupROIs.txt", "List"];
```

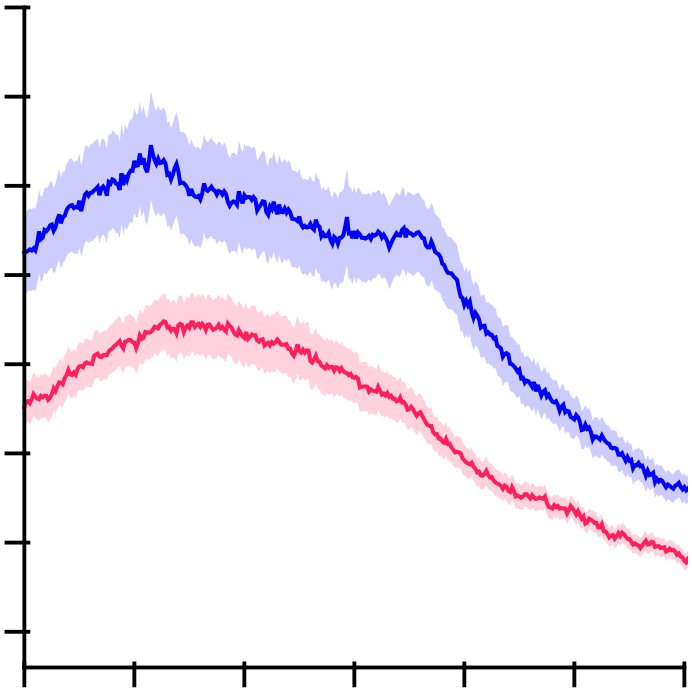
In[ ]:=
```
ListLinePlot[{Part[#, 2] & /@ meanDFFzOnsetV1CC,
  Part[#, 2] & /@ meanDFFzOnsetV1CC + (Part[#, 2] & /@ semDFFzOnsetV1CC),
  Part[#, 2] & /@ meanDFFzOnsetV1CC - (Part[#, 2] & /@ semDFFzOnsetV1CC),
  Part[#, 2] & /@ meanDFFzOnsetV1CT,
  Part[#, 2] & /@ meanDFFzOnsetV1CT + (Part[#, 2] & /@ semDFFzOnsetV1CT),
  Part[#, 2] & /@ meanDFFzOnsetV1CT - (Part[#, 2] & /@ semDFFzOnsetV1CT)},
 Filling → {1 → {{2}, Directive[Opacity[0.2], ccColor]},
   1 → {{3}, Directive[Opacity[0.2], ccColor]}, 4 →
    {{5}, Directive[Opacity[0.2], ctColor]}, 4 → {{6}, Directive[Opacity[0.2], ctColor]}},
 PlotStyle → {{ccColor, Thickness[0.006]}, Transparent, Transparent,
   {ctColor, Thickness[0.006]}, Transparent, Transparent},
 DataRange → {-15, 6}, PlotRange → {{-6, 6}, {-0.2, 3.5}}, FrameTicks →
  {{LinTicks[-0.2, 3.5, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None},
   {LinTicks[-6, 6, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None}},
 Axes → False, TicksStyle → Thick, FrameStyle → Thick,
 Frame → {{True, None}, {True, None}}, AspectRatio → 1,
 FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]]
```

Out[ ]=



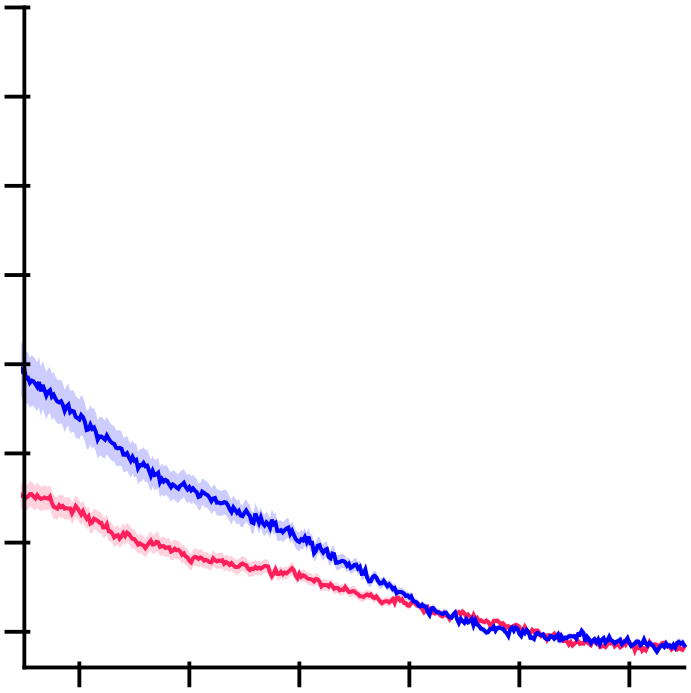
In[ ]:=
```
ListLinePlot[{Part[#, 2] & /@ meanDFFzOffsetV1CC,
  Part[#, 2] & /@ meanDFFzOffsetV1CC + (Part[#, 2] & /@ semDFFzOffsetV1CC),
  Part[#, 2] & /@ meanDFFzOffsetV1CC - (Part[#, 2] & /@ semDFFzOffsetV1CC),
  Part[#, 2] & /@ meanDFFzOffsetV1CT,
  Part[#, 2] & /@ meanDFFzOffsetV1CT + (Part[#, 2] & /@ semDFFzOffsetV1CT),
  Part[#, 2] & /@ meanDFFzOffsetV1CT - (Part[#, 2] & /@ semDFFzOffsetV1CT)},
 Filling → {1 → {{2}, Directive[Opacity[0.2], ccColor]},
   1 → {{3}, Directive[Opacity[0.2], ccColor]}, 4 →
    {{5}, Directive[Opacity[0.2], ctColor]}, 4 → {{6}, Directive[Opacity[0.2], ctColor]}},
 PlotStyle → {{ccColor, Thickness[0.006]}, Transparent, Transparent,
   {ctColor, Thickness[0.006]}, Transparent, Transparent},
 DataRange → {-6, 15}, PlotRange → {{-6, 6}, {-0.2, 3.5}}, FrameTicks →
  {{LinTicks[-0.2, 3.5, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None},
   {LinTicks[-6, 6, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None}},
 Axes → False, TicksStyle → Thick, FrameStyle → Thick,
 Frame → {{True, None}, {True, None}}, AspectRatio → 1,
 FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]]
```

Out[ ]=



In[ ]:=
```
ListLinePlot[{Part[#, 2] & /@ meanDFFzOffsetV1CC,
  Part[#, 2] & /@ meanDFFzOffsetV1CC + (Part[#, 2] & /@ semDFFzOffsetV1CC),
  Part[#, 2] & /@ meanDFFzOffsetV1CC - (Part[#, 2] & /@ semDFFzOffsetV1CC),
  Part[#, 2] & /@ meanDFFzOffsetV1CT,
  Part[#, 2] & /@ meanDFFzOffsetV1CT + (Part[#, 2] & /@ semDFFzOffsetV1CT),
  Part[#, 2] & /@ meanDFFzOffsetV1CT - (Part[#, 2] & /@ semDFFzOffsetV1CT)},
 Filling → {1 → {{2}, Directive[Opacity[0.2], ccColor]},
   1 → {{3}, Directive[Opacity[0.2], ccColor]}, 4 →
    {{5}, Directive[Opacity[0.2], ctColor]}, 4 → {{6}, Directive[Opacity[0.2], ctColor]}},
 PlotStyle → {{ccColor, Thickness[0.006]}, Transparent, Transparent,
   {ctColor, Thickness[0.006]}, Transparent, Transparent},
 DataRange → {-6, 15}, PlotRange → {{3, 15}, {-0.2, 3.5}}, FrameTicks →
  {{LinTicks[-0.2, 3.5, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None},
   {LinTicks[3, 15, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None}},
 Axes → False, TicksStyle → Thick, FrameStyle → Thick,
 Frame → {{True, None}, {True, None}}, AspectRatio → 1,
 FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]]
```

Out[ ]=



In[ ]:=
```
(***Import overall loc mod values***)

locModValsV1CC = ToExpression /@
   Import["F:/FigureGeneration/FigureS4/FigureS4Data/V1CC/ValuesForPlotting/
      locModIndexSummVals_V1CC_nonDupROIs.txt", "List"];

locModValsV1CT = ToExpression /@
   Import["F:/FigureGeneration/FigureS4/FigureS4Data/V1CT/ValuesForPlotting/
      locModIndexSummVals_V1CT_nonDupROIs.txt", "List"];
```

In[ ]:=
```
(**********************)
```

```
ccAxonCharts =
  Show[BoxWhiskerChart[locModValsV1CC, {{"Whiskers", Directive[Darker@ccColor, Thick]},
     {"Fences", Directive[Darker@ccColor, Thick]},
     {"MedianMarker", Directive[Darker@ccColor, Thickness[0.009]]}},
    PlotRange → {All, {-1.2, 1}}, ChartStyle → Directive[ccColor, Opacity[0.3]],
    Frame → False], DistributionChart[locModValsV1CC, PlotRange → {All, {-1.2, 1}},
    ChartStyle → Directive[EdgeForm[Transparent], Opacity[0.2], ccColor], Frame → False],
   FrameTicks → {{LinTicks[-1.2, 1, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}],
      None}, {None, None}}, Axes → False, TicksStyle → Thick,
   FrameStyle → Directive[Transparent, Thick], Frame → {{True, None}, {None, None}},
   FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]];

ctAxonCharts =
  Show[BoxWhiskerChart[locModValsV1CT, {{"Whiskers", Directive[Darker@ctColor, Thick]},
     {"Fences", Directive[Darker@ctColor, Thick]},
     {"MedianMarker", Directive[Darker@ctColor, Thickness[0.009]]}},
    PlotRange → {All, {-1.2, 1}}, ChartStyle → Directive[ctColor, Opacity[0.3]],
    Frame → False], DistributionChart[locModValsV1CT, PlotRange → {All, {-1.2, 1}},
    ChartStyle → Directive[EdgeForm[Transparent], Opacity[0.2], ctColor], Frame → False],
   FrameTicks → {{LinTicks[-1.2, 1, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}],
      None}, {None, None}}, Axes → False, TicksStyle → Thick,
   FrameStyle → Directive[Transparent, Thick], Frame → {{True, None}, {None, None}},
   FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]];

transp =
  Show[BoxWhiskerChart[locModValsV1CT, {{"Whiskers", Directive[Transparent, Thick]},
     {"Fences", Directive[Transparent, Thick]},
     {"MedianMarker", Directive[Transparent, Thickness[0.009]]}},
    PlotRange → {All, {-1.2, 1}}, ChartStyle → Transparent, Frame → False],
   DistributionChart[locModValsV1CT, PlotRange → {All, {-1.2, 1}}, ChartStyle →
     Directive[EdgeForm[Transparent], Opacity[0.2], Transparent], Frame → False],
   FrameTicks → {{LinTicks[-1.2, 1, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}],
      None}, {None, None}}, Axes → False, TicksStyle → Thick,
   FrameStyle → Directive[Black, Thick], Frame → {{True, None}, {None, None}},
   FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]];
```

In[ ]:=
```
GraphicsRow[{ccAxonCharts, ctAxonCharts, transp}, Spacings → {{-280, -280, -320}}]
```

Out[ ]=