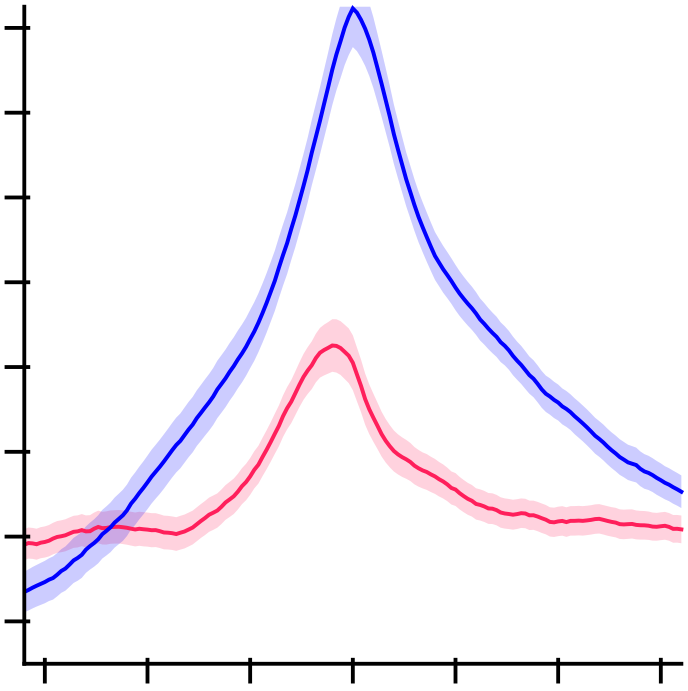
```
In[•]:= ccColor = RGBColor["#ff1f5b"];

In[•]:= ctColor = Blue;

        (*********************************)

        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 S4L****************)
        (*********************************************)

In[•]:= meanDFFpupilCCV1CC = ToExpression /@
            Import["C:/Users/garrett/Desktop/PopulationAnalyses/Observational/Dendrites/V1CC/
               ValuesForPlotting/meanDFFpupilCrossCorr_V1CC_nonDupROIs.txt",
             "List"];

In[•]:= semDFFpupilCCV1CC = ToExpression /@
            Import["C:/Users/garrett/Desktop/PopulationAnalyses/Observational/Dendrites/V1CC/
               ValuesForPlotting/semDFFpupilCrossCorr_V1CC_nonDupROIs.txt",
             "List"];

In[•]:= (*********)

In[•]:= meanDFFpupilCCV1CT = ToExpression /@
            Import["C:/Users/garrett/Desktop/PopulationAnalyses/Observational/Dendrites/V1CT/
               ValuesForPlotting/meanDFFpupilCrossCorr_V1CT_nonDupROIs.txt",
             "List"];

In[•]:= semDFFpupilCCV1CT = ToExpression /@
            Import["C:/Users/garrett/Desktop/PopulationAnalyses/Observational/Dendrites/V1CT/
               ValuesForPlotting/semDFFpupilCrossCorr_V1CT_nonDupROIs.txt",
             "List"];
```

In[•]:=
```
ListLinePlot[{Part[#, 2] & /@ meanDFFpupilCCV1CC,
  Part[#, 2] & /@ meanDFFpupilCCV1CC + (Part[#, 2] & /@ semDFFpupilCCV1CC),
  Part[#, 2] & /@ meanDFFpupilCCV1CC - (Part[#, 2] & /@ semDFFpupilCCV1CC),
  Part[#, 2] & /@ meanDFFpupilCCV1CT,
  Part[#, 2] & /@ meanDFFpupilCCV1CT + (Part[#, 2] & /@ semDFFpupilCCV1CT),
  Part[#, 2] & /@ meanDFFpupilCCV1CT - (Part[#, 2] & /@ semDFFpupilCCV1CT)},
 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 → {-8, 8}, PlotRange → {{-8, 8}, {-0.03, 0.125}}, FrameTicks →
  {{LinTicks[-0.03, 0.125, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None},
   {LinTicks[-8, 8, 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[•]=



```
(*********************************************)
(*******Generate plots in Figure S4M***************)
(*********************************************)
```

In[•]:=
```
meanDFFpupilPhaseV1CC = ToExpression /@
   Import["C:/Users/garrett/Desktop/PopulationAnalyses/Observational/Dendrites/V1CC/
      ValuesForPlotting/meanDFFpupilPhase_V1CC_nonDupROIs.txt", "List"];
```

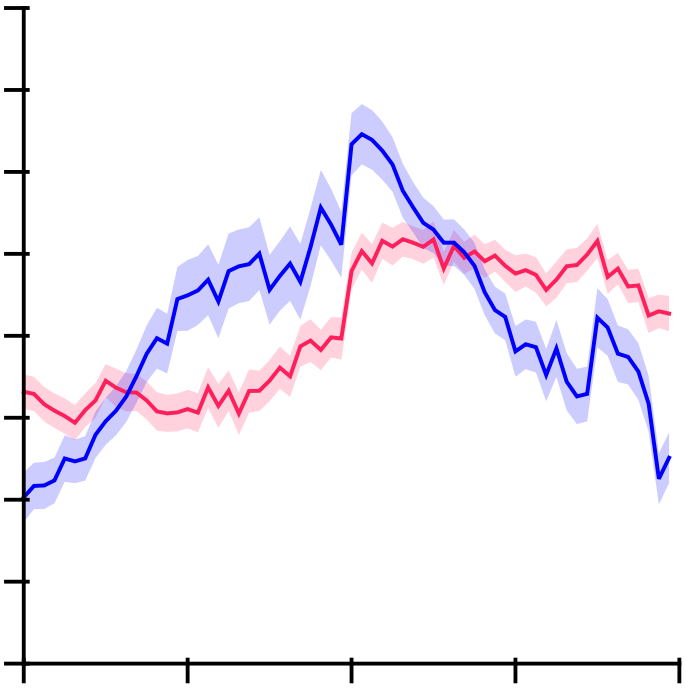
In[•]:=
```
semDFFpupilPhaseV1CC = ToExpression /@
   Import["C:/Users/garrett/Desktop/PopulationAnalyses/Observational/Dendrites/V1CC/
      ValuesForPlotting/semDFFpupilPhase_V1CC_nonDupROIs.txt", "List"];
```

In[•]:=
```
meanDFFpupilPhaseV1CT = ToExpression /@
   Import["C:/Users/garrett/Desktop/PopulationAnalyses/Observational/Dendrites/V1CT/
      ValuesForPlotting/meanDFFpupilPhase_V1CT_nonDupROIs.txt", "List"];
```

In[•]:=
```
semDFFpupilPhaseV1CT = ToExpression /@
   Import["C:/Users/garrett/Desktop/PopulationAnalyses/Observational/Dendrites/V1CT/
      ValuesForPlotting/semDFFpupilPhase_V1CT_nonDupROIs.txt", "List"];
```

In[•]:=
```
ListLinePlot[{Part[#, 2] & /@ meanDFFpupilPhaseV1CC,
  Part[#, 2] & /@ meanDFFpupilPhaseV1CC + (Part[#, 2] & /@ semDFFpupilPhaseV1CC),
  Part[#, 2] & /@ meanDFFpupilPhaseV1CC - (Part[#, 2] & /@ semDFFpupilPhaseV1CC),
  Part[#, 2] & /@ meanDFFpupilPhaseV1CT,
  Part[#, 2] & /@ meanDFFpupilPhaseV1CT + (Part[#, 2] & /@ semDFFpupilPhaseV1CT),
  Part[#, 2] & /@ meanDFFpupilPhaseV1CT - (Part[#, 2] & /@ semDFFpupilPhaseV1CT)},
 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 → {-π, 31 π/32}, PlotRange → {{-π, π}, {-0.1, 0.1}}, FrameTicks →
  {{LinTicks[-0.1, 0.1, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None},
   {LinTicks[-π, π, π/2, 4, TickLabelFunction → (Rationalize[# / π] * π &),
     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[•]=



```
(*********************************************)
(*******Generate plots in Figure S4N***************)
(*********************************************)
```

In[ ]:=
```
peakCCValsV1CC = ToExpression /@
   Import["C:/Users/garrett/Desktop/PopulationAnalyses/Observational/Dendrites/V1CC/
      ValuesForPlotting/peakDFFpupilCC_V1CC.txt", "List"];
```

In[ ]:=
```
peakCCValsV1CT = ToExpression /@
   Import["C:/Users/garrett/Desktop/PopulationAnalyses/Observational/Dendrites/V1CT/
      ValuesForPlotting/peakDFFpupilCC_V1CT.txt", "List"];
```

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

```
ccAxonCharts =
  Show[BoxWhiskerChart[peakCCValsV1CC, {{"Whiskers", Directive[Darker@ccColor, Thick]},
     {"Fences", Directive[Darker@ccColor, Thick]}, {"MedianMarker",
      Directive[Darker@ccColor, Thickness[0.009]]}}, PlotRange → {All, {-0.07, 0.5}},
    ChartStyle → Directive[ccColor, Opacity[0.3]], Frame → False],
   DistributionChart[peakCCValsV1CC, PlotRange → {All, {-0.07, 0.5}},
    ChartStyle → Directive[EdgeForm[Transparent], Opacity[0.2], ccColor], Frame → False],
   FrameTicks → {{LinTicks[-0.07, 0.5, 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[peakCCValsV1CT, {{"Whiskers", Directive[Darker@ctColor, Thick]},
     {"Fences", Directive[Darker@ctColor, Thick]}, {"MedianMarker",
      Directive[Darker@ctColor, Thickness[0.009]]}}, PlotRange → {All, {-0.07, 0.5}},
    ChartStyle → Directive[ctColor, Opacity[0.3]], Frame → False],
   DistributionChart[peakCCValsV1CT, PlotRange → {All, {-0.07, 0.5}},
    ChartStyle → Directive[EdgeForm[Transparent], Opacity[0.2], ctColor], Frame → False],
   FrameTicks → {{LinTicks[-0.07, 0.5, 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[peakCCValsV1CT, {{"Whiskers", Directive[Transparent, Thick]},
     {"Fences", Directive[Transparent, Thick]},
     {"MedianMarker", Directive[Transparent, Thickness[0.009]]}},
    PlotRange → {All, {-0.07, 0.5}}, ChartStyle → Transparent, Frame → False],
   DistributionChart[peakCCValsV1CT, PlotRange → {All, {-0.07, 0.5}},
    ChartStyle → Directive[EdgeForm[Transparent], Opacity[0.2], Transparent],
    Frame → False], FrameTicks →
    {{LinTicks[-0.07, 0.5, 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[ ]=