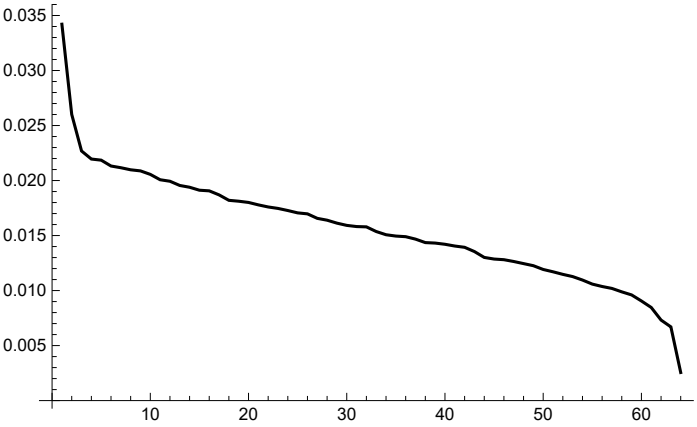
```
StringJoin["Normalized Singular Value Spectrum ", "of Λ number ", ToString[numSVD]]
```

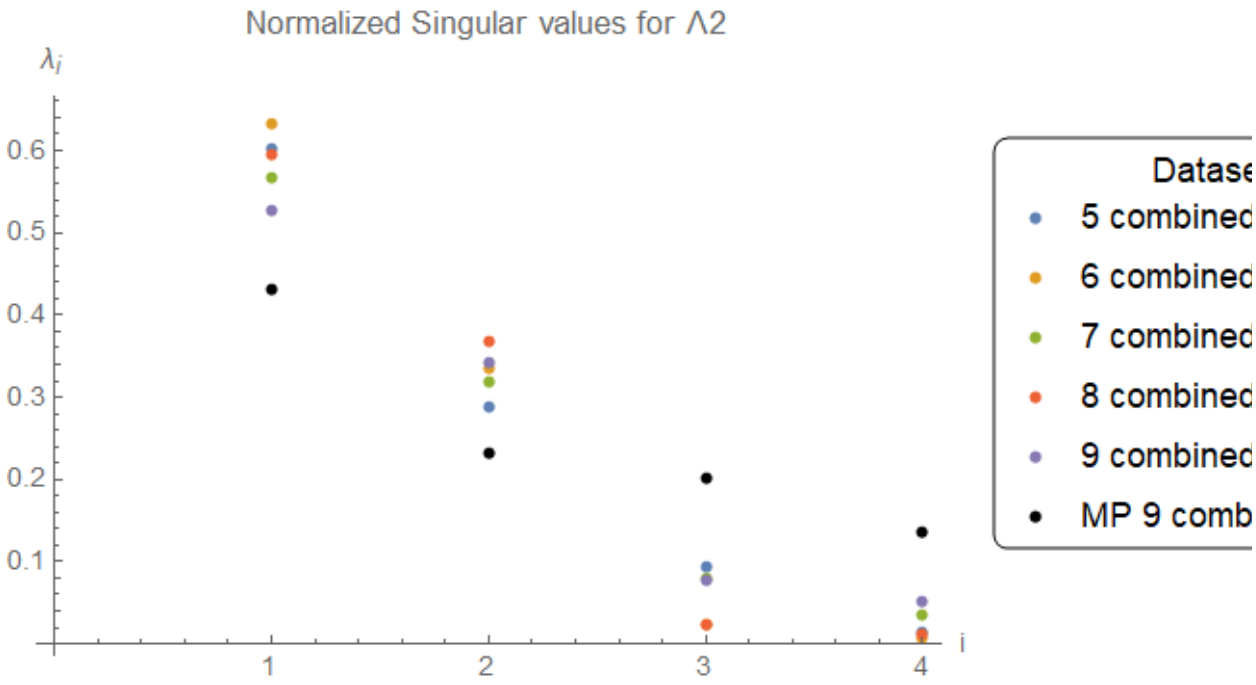
In[ ]:=
```
ListLinePlot[ToExpression[
  {StringJoin["Normalized", "MP1", ToString[9], "num", ToString[6]]}], PlotStyle → Black]
```

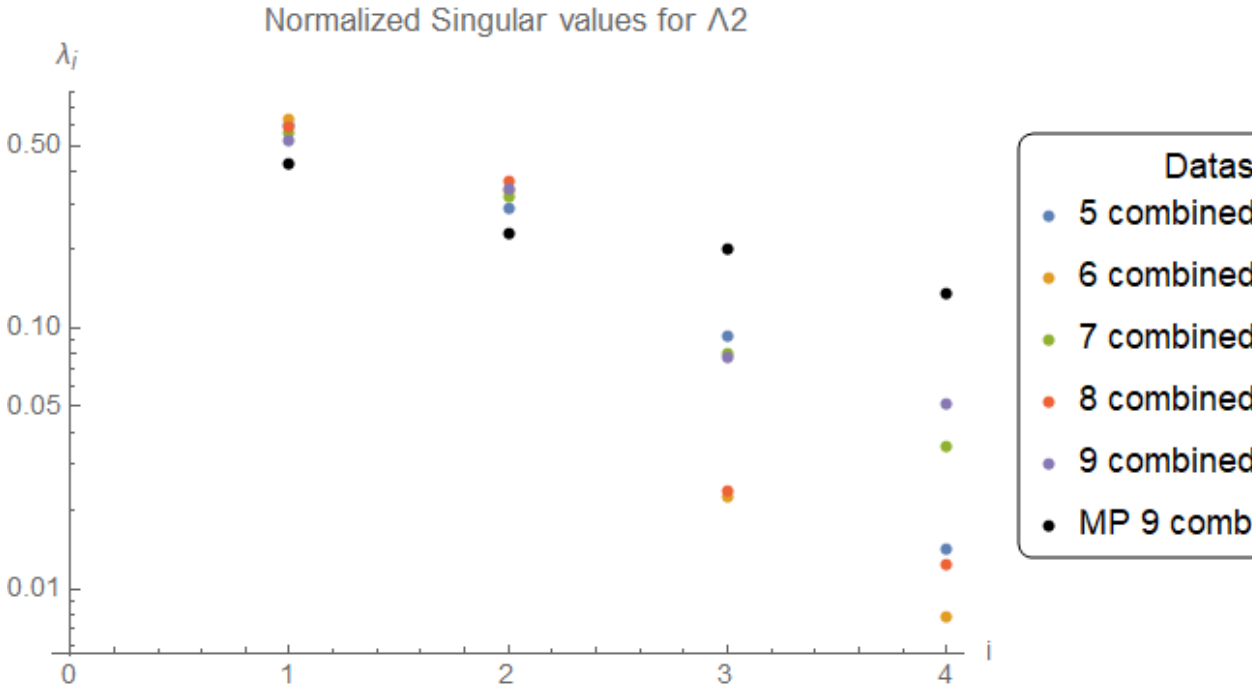
Out[ ]=



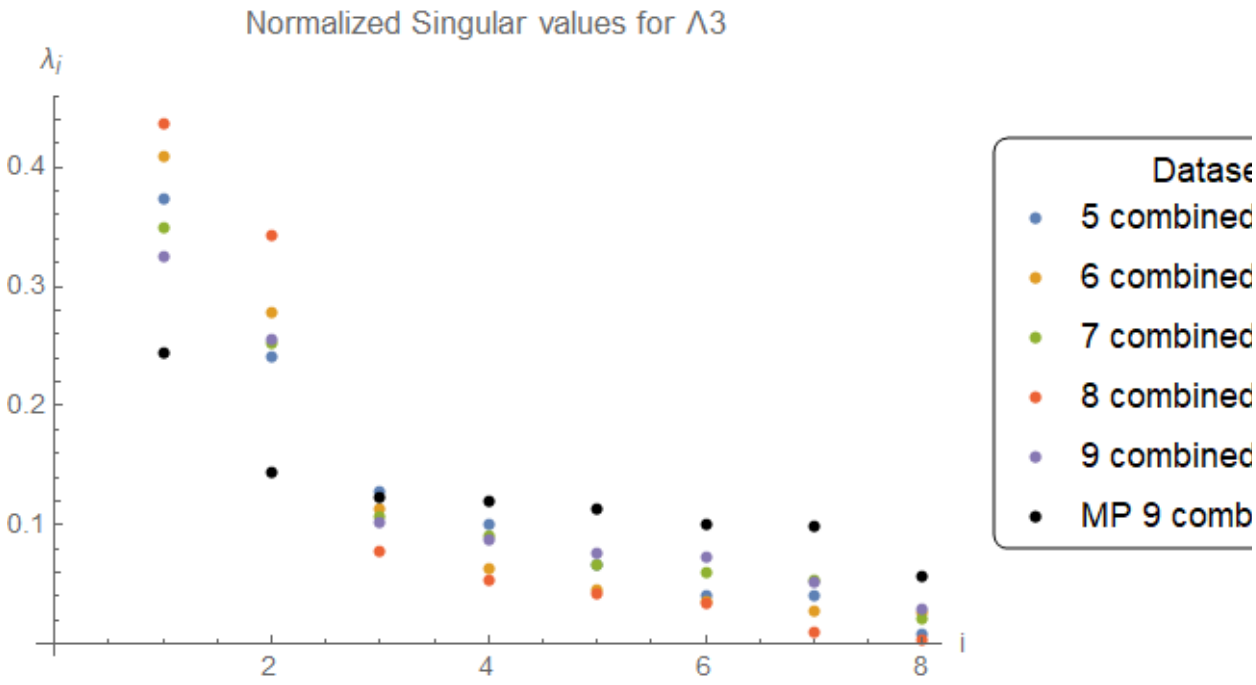
In[ ]:=
```
amin = 5;
amax = 9;
Do[
 Print[ Style[StringJoin["For the ", ToString[numSVD],
     "-th SVD, the Singular Values are:"], Black, Bold, 22] ]
  ×
  Print[
   Rasterize[
    ListPlot[
     ToExpression[Join[
       Table[StringJoin["Normalized", "C1",
         ToString[a], "num", ToString[numSVD]], {a, amin, amax}],
       {StringJoin["Normalized", "MP1", ToString[9], "num", ToString[numSVD]]}
      ]]
     , PlotLegends → PointLegend[Automatic,
       {"5 combined PCV1", "6 combined PCV1", "7 combined PCV1", "8 combined PCV1",
        "9 combined PCV1", "MP 9 combined analog"}, LegendMarkers → Automatic,
       LegendFunction → "Frame", LegendLabel → "Datasets"], PlotLabel →
      StringJoin["Normalized Singular values for ", "Λ", ToString[numSVD]],
     AxesLabel → {"i", "λi"},
     PlotStyle → {Automatic, Dashed, Dotted, DotDashed, Automatic, Black}(*,
     PlotMarkers→{Automatic, Automatic,Automatic,Automatic,Automatic,Black}*)
    ], RasterSize → 750, ImageSize → 750]
  ]
  ×
  Print[
   Rasterize[
    ListLogPlot[
     ToExpression[Join[
       Table[StringJoin["Normalized", "C1",
         ToString[a], "num", ToString[numSVD]], {a, amin, amax}],
       {StringJoin["Normalized", "MP1", ToString[9], "num", ToString[numSVD]]}
      ]]
     , PlotLegends →
      PointLegend[Automatic, {"5 combined PCV1", "6 combined PCV1", "7 combined PCV1",
        "8 combined PCV1", "9 combined PCV1", "MP 9 combined analog"},
       LegendFunction → "Frame", LegendLabel → "Datasets"], PlotLabel →
      StringJoin["Normalized Singular values for ", "Λ", ToString[numSVD]],
     AxesLabel → {"i", "λi"},
     PlotStyle → {Automatic, Automatic, Automatic, Automatic, Automatic, Black}(*,
     PlotMarkers→{Automatic, Automatic,Automatic,Automatic,Automatic,Black}*)
    ], RasterSize → 750, ImageSize → 750]
  ] ×
  Print[
   "_____
    _____"]
 , {numSVD, 2, 12}]
```

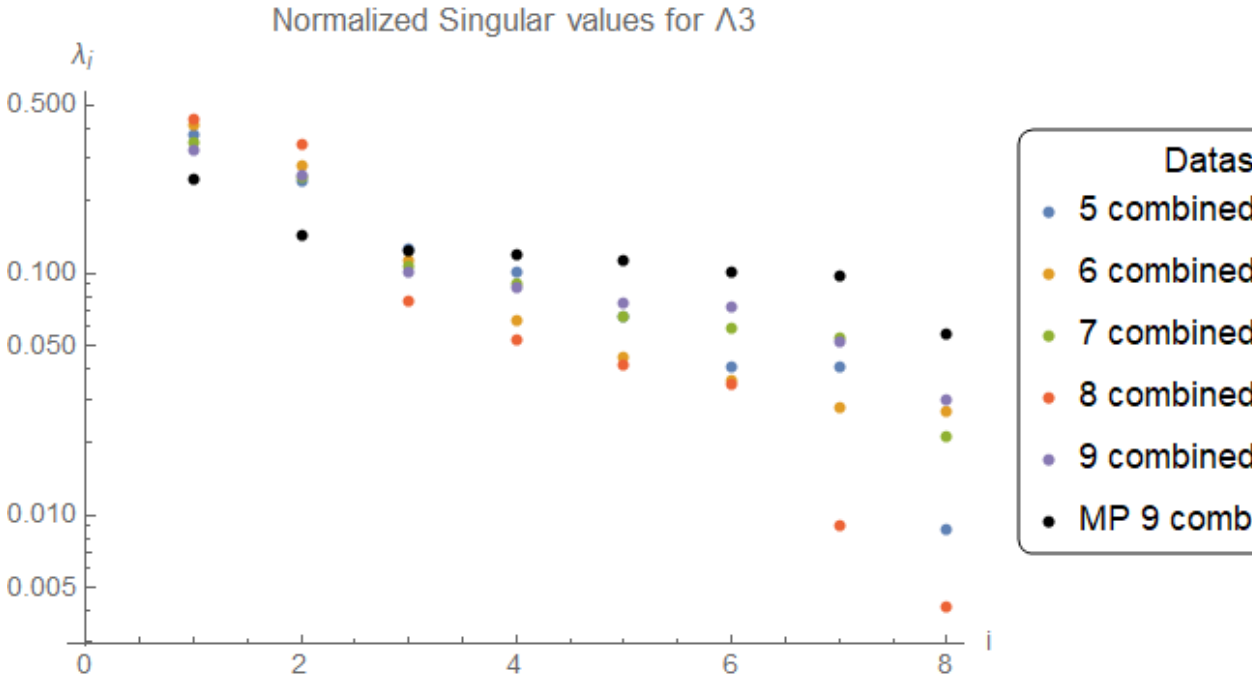
For the 2-th SVD, the Singular Values are:



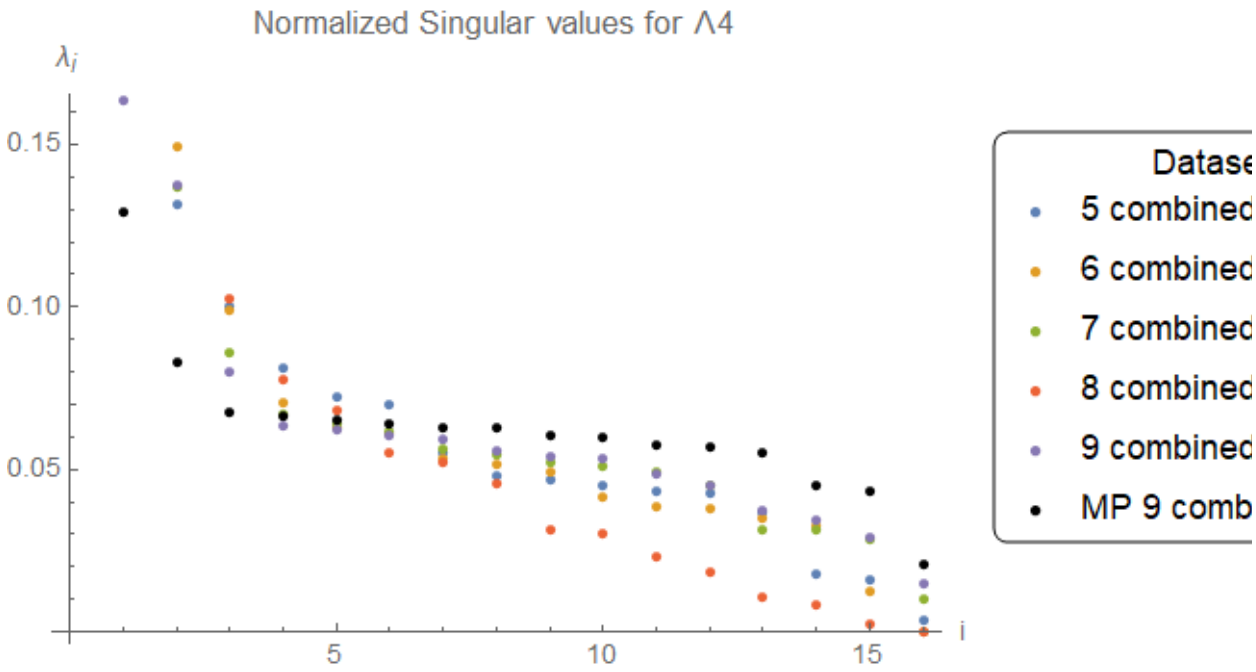


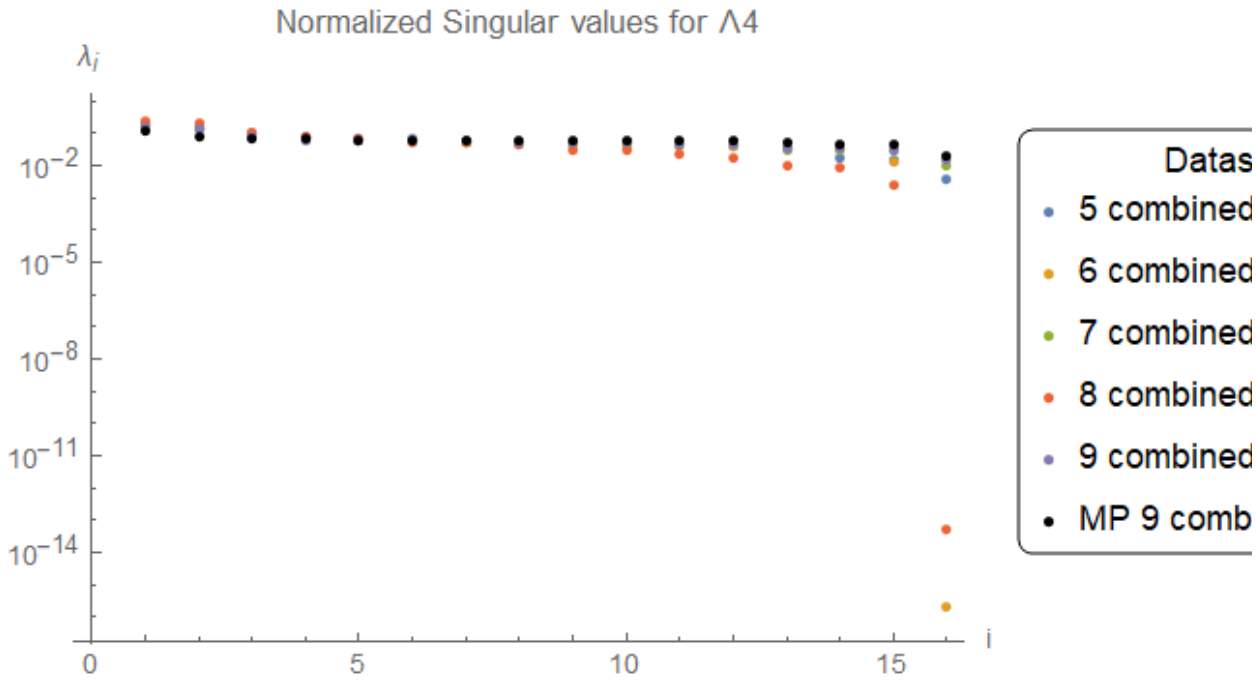
For the 3-th SVD, the Singular Values are:



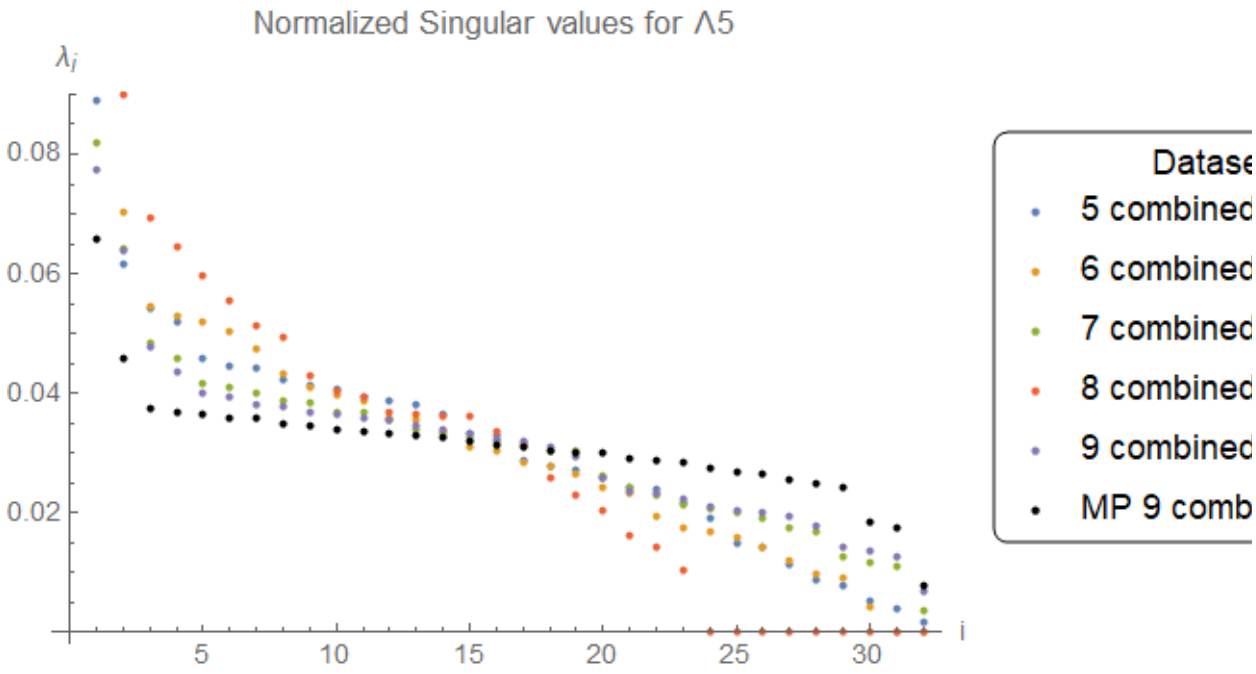


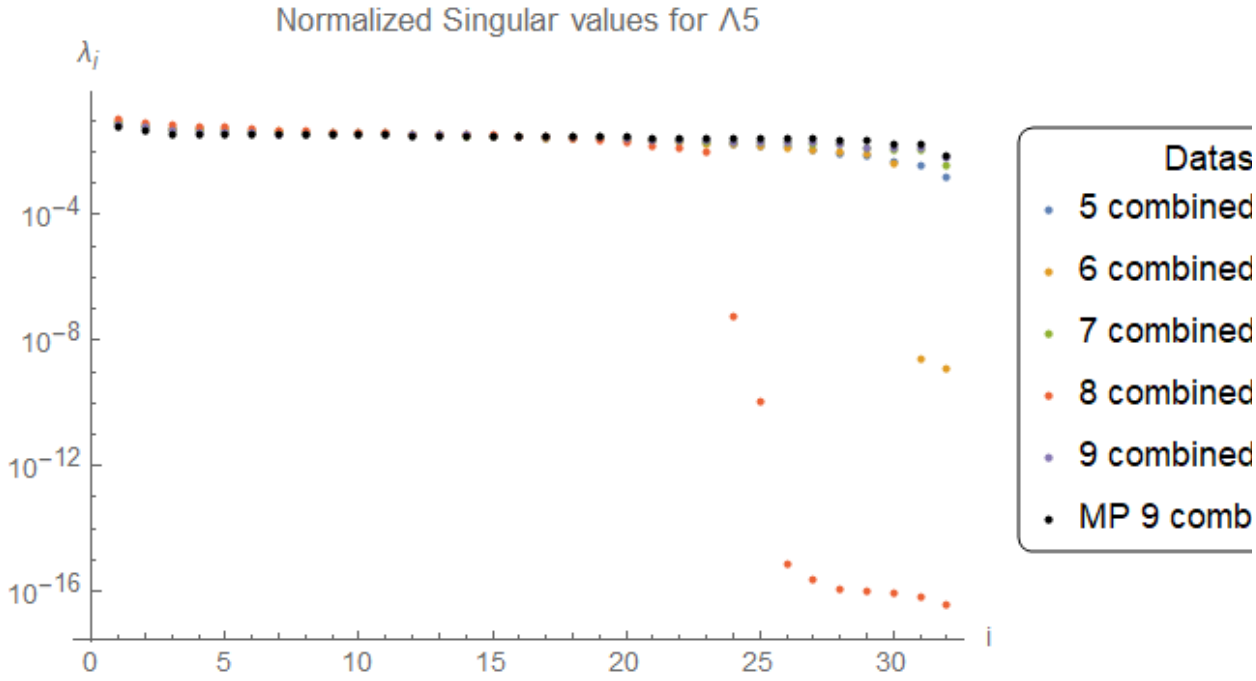
For the 4-th SVD, the Singular Values are:



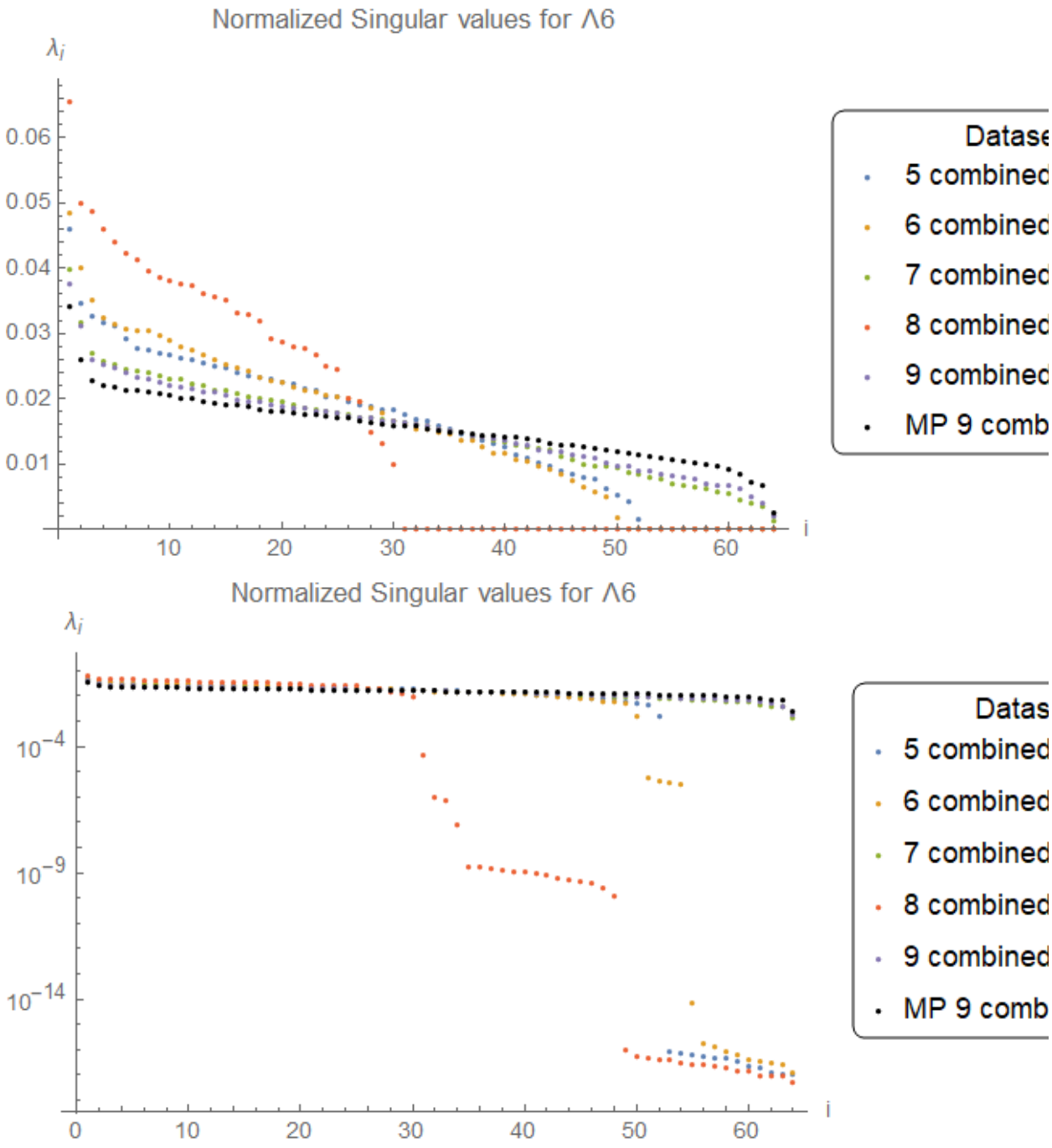


For the 5-th SVD, the Singular Values are:

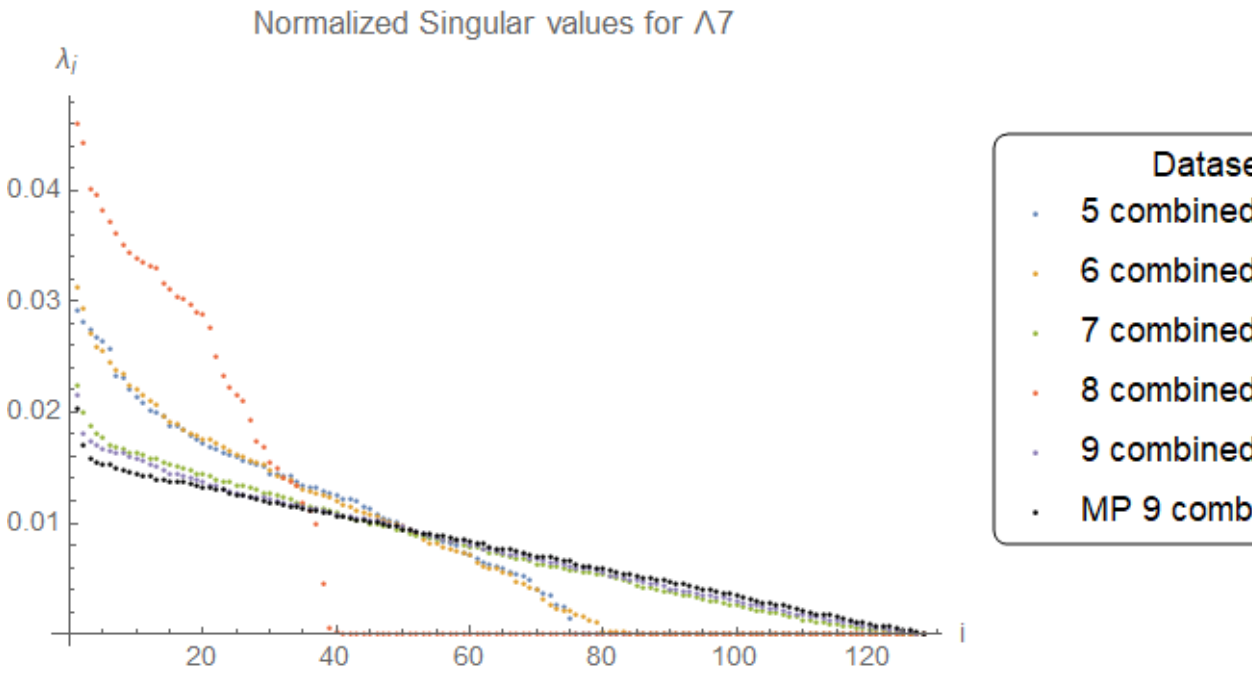


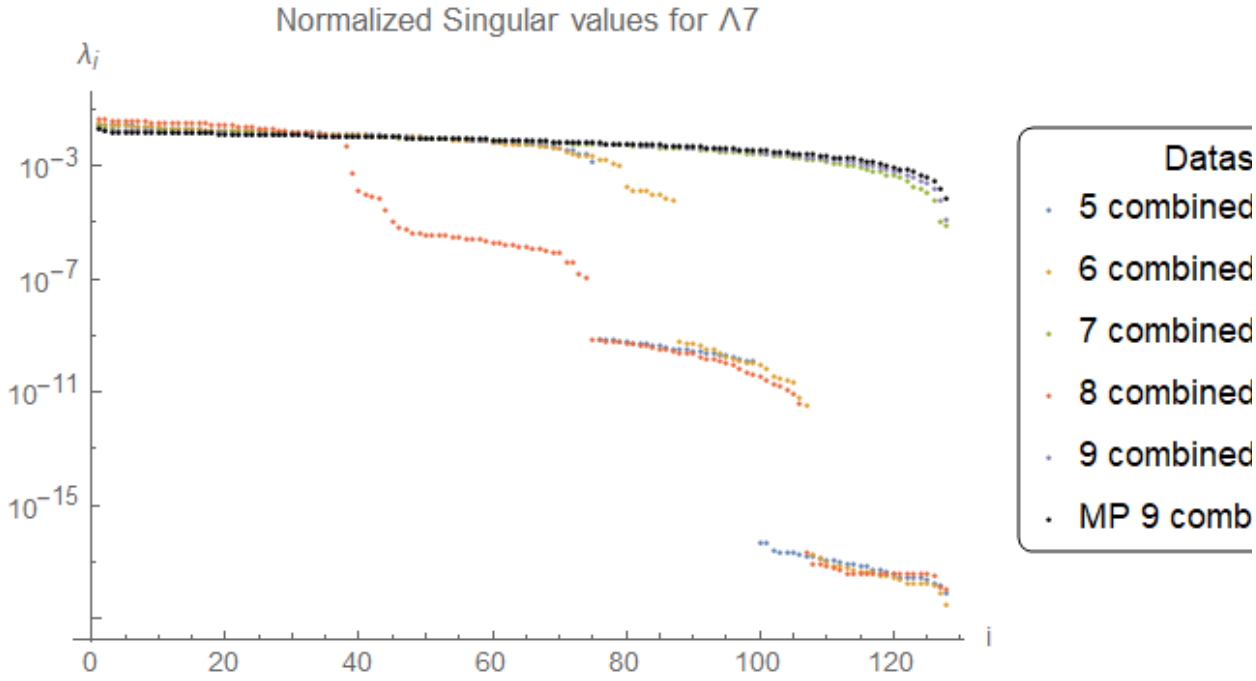


For the 6-th SVD, the Singular Values are:

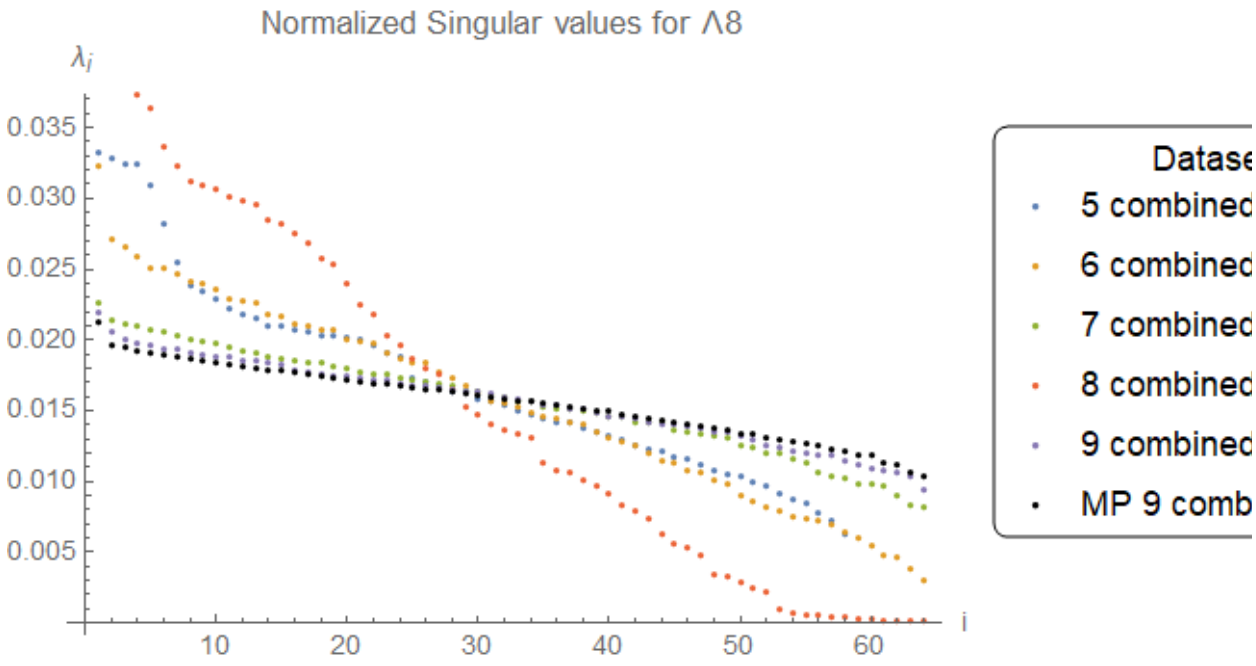


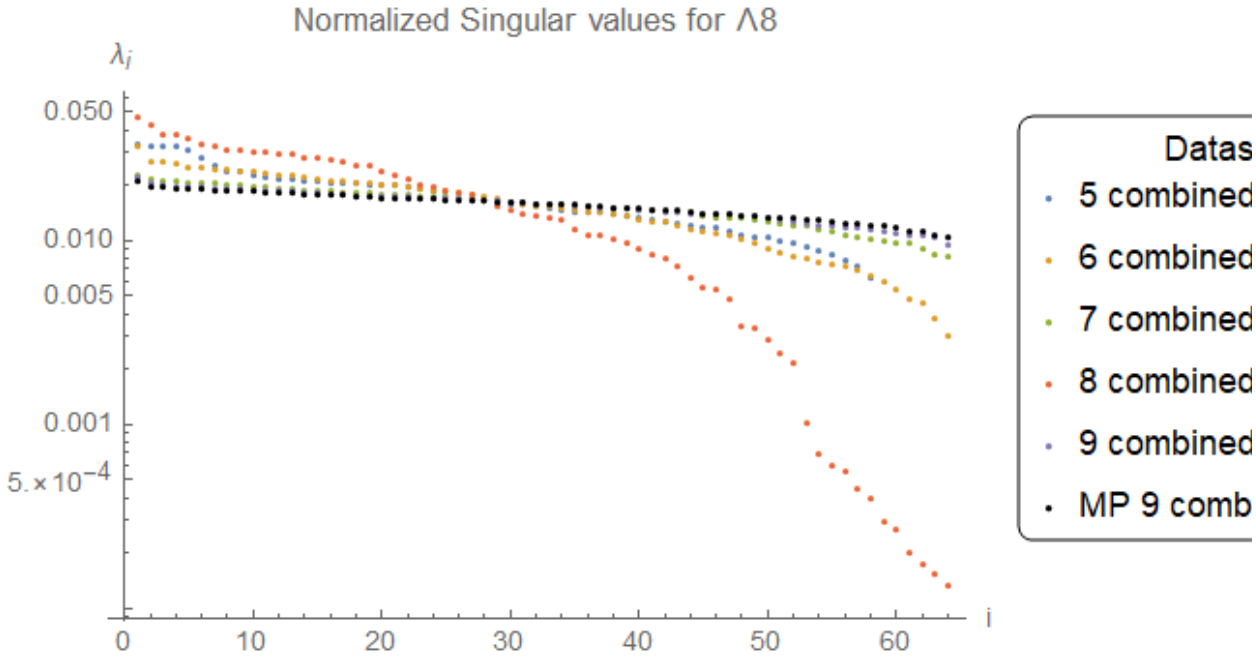
For the 7-th SVD, the Singular Values are:



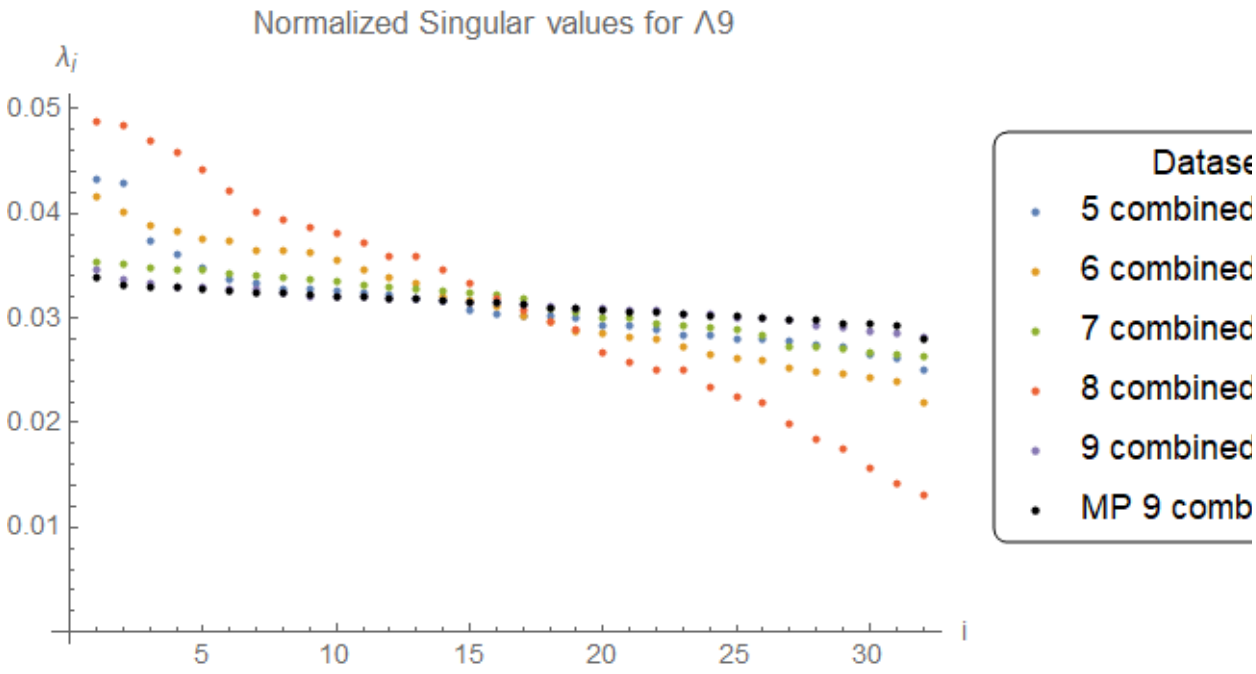


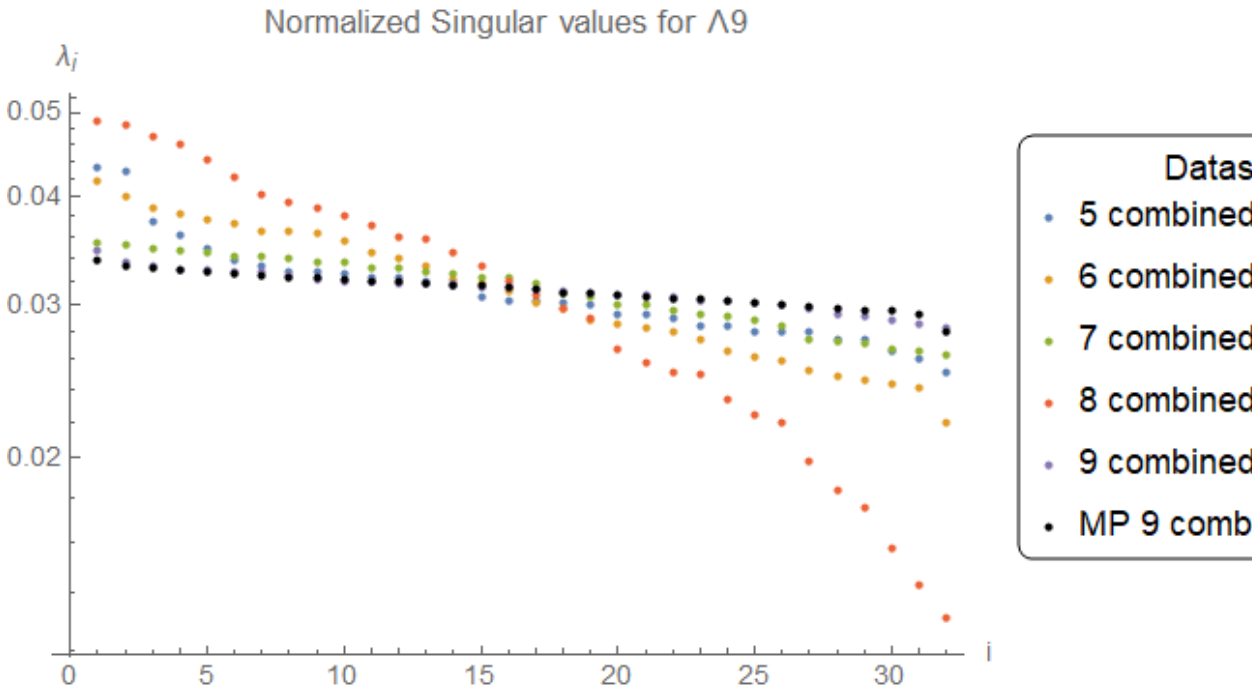
For the 8–th SVD, the Singular Values are:



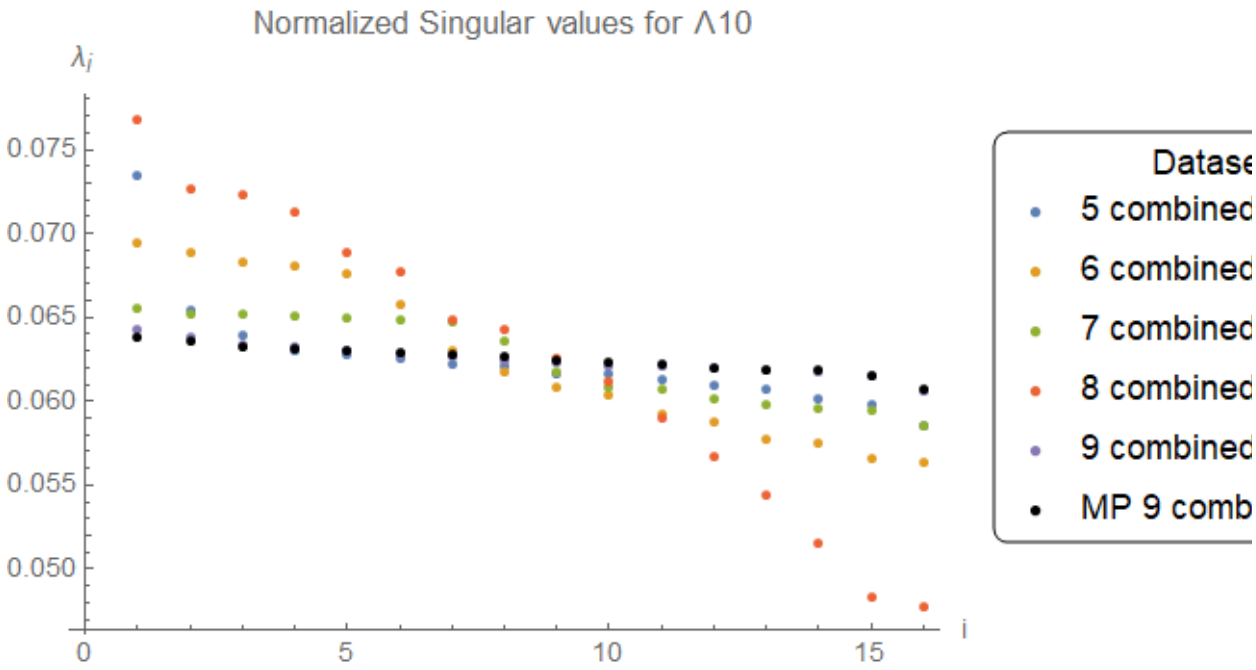


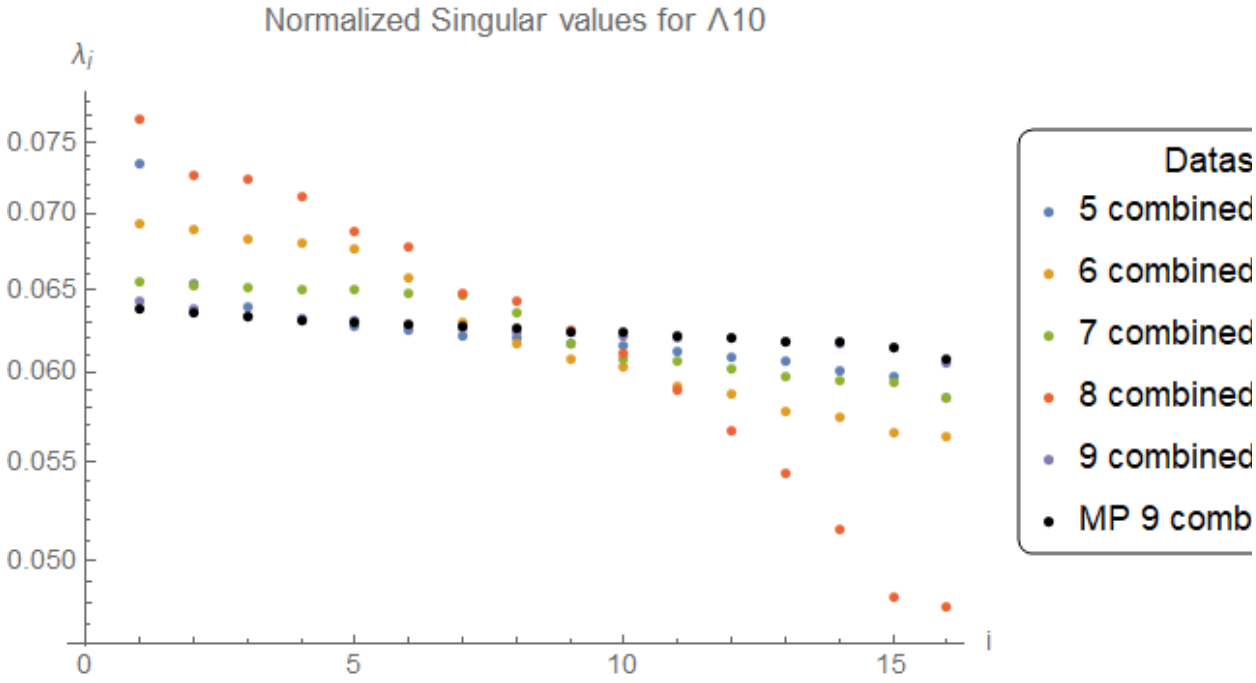
For the 9-th SVD, the Singular Values are:



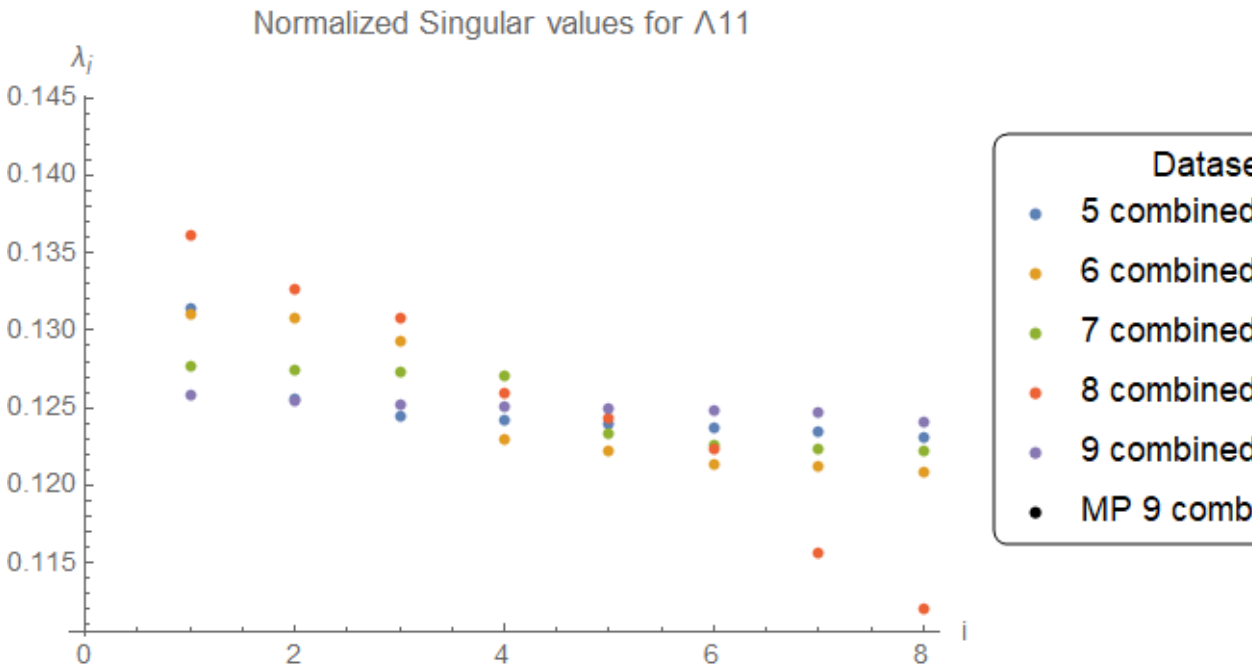


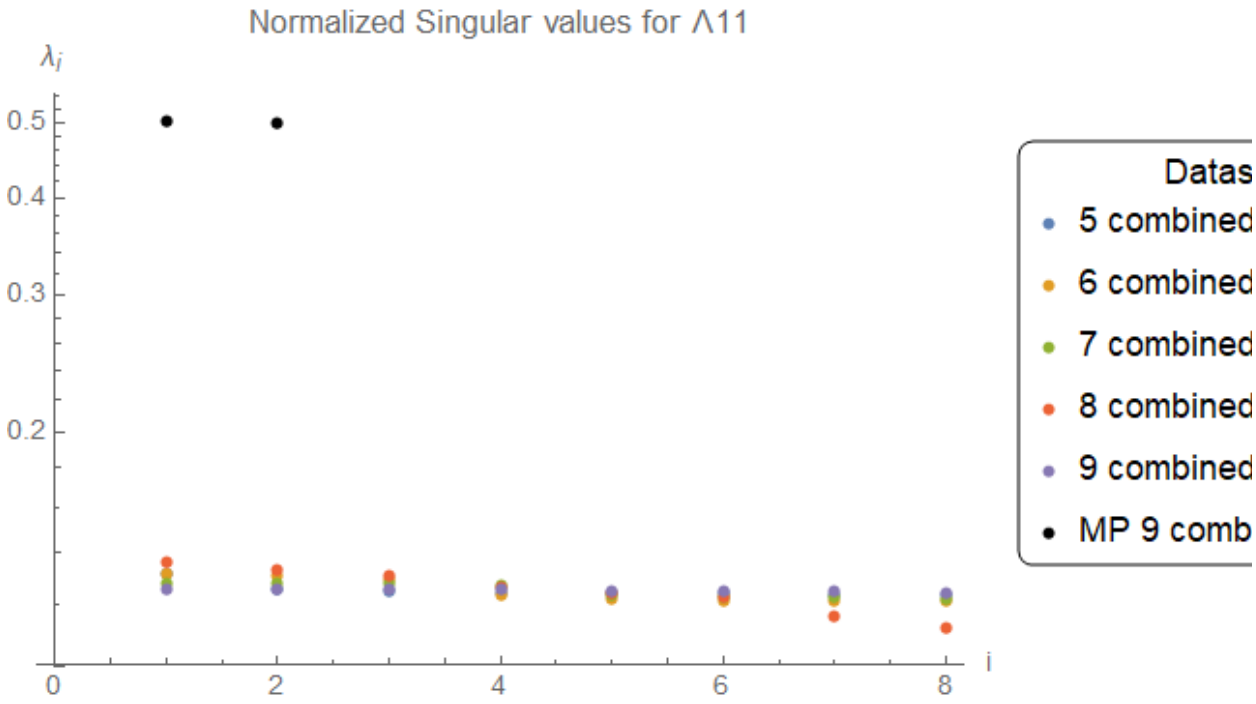
For the 10-th SVD, the Singular Values are:



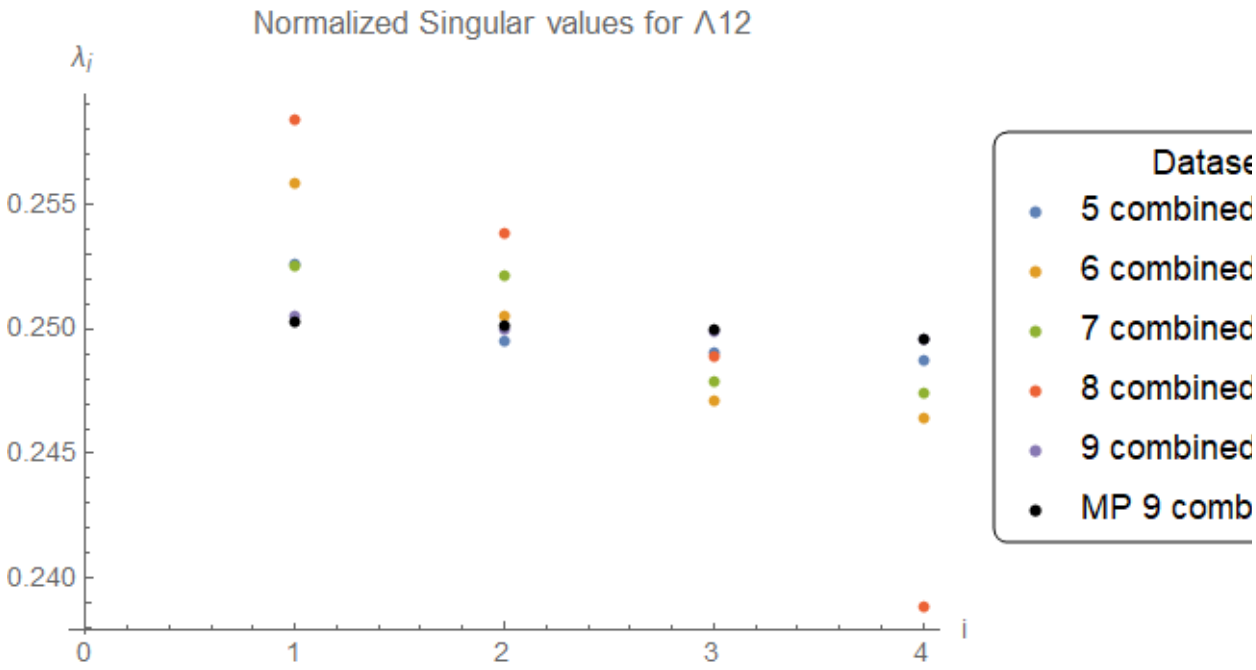


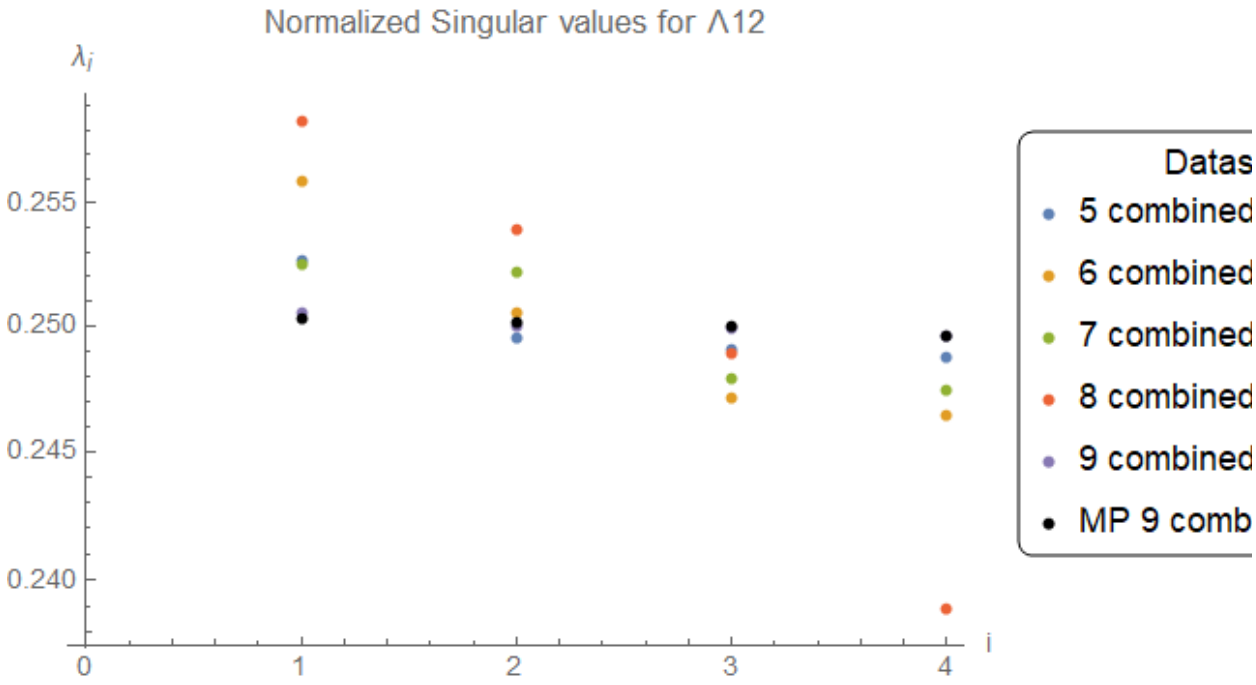
For the 11-th SVD, the Singular Values are:





For the 12-th SVD, the Singular Values are:


Normalized Singular values for Λ12
λ_i
0.255
0.250
0.245
0.240
0
1
2
3
4
i
Datase
5 combined
6 combined
7 combined
8 combined
9 combined
MP 9 comb


Normalized Singular values for Λ12
λ_i
0.255
0.250
0.245
0.240
0
1
2
3
4
i
Datas
5 combined
6 combined
7 combined
8 combined
9 combined
MP 9 comb

In[ ]:=