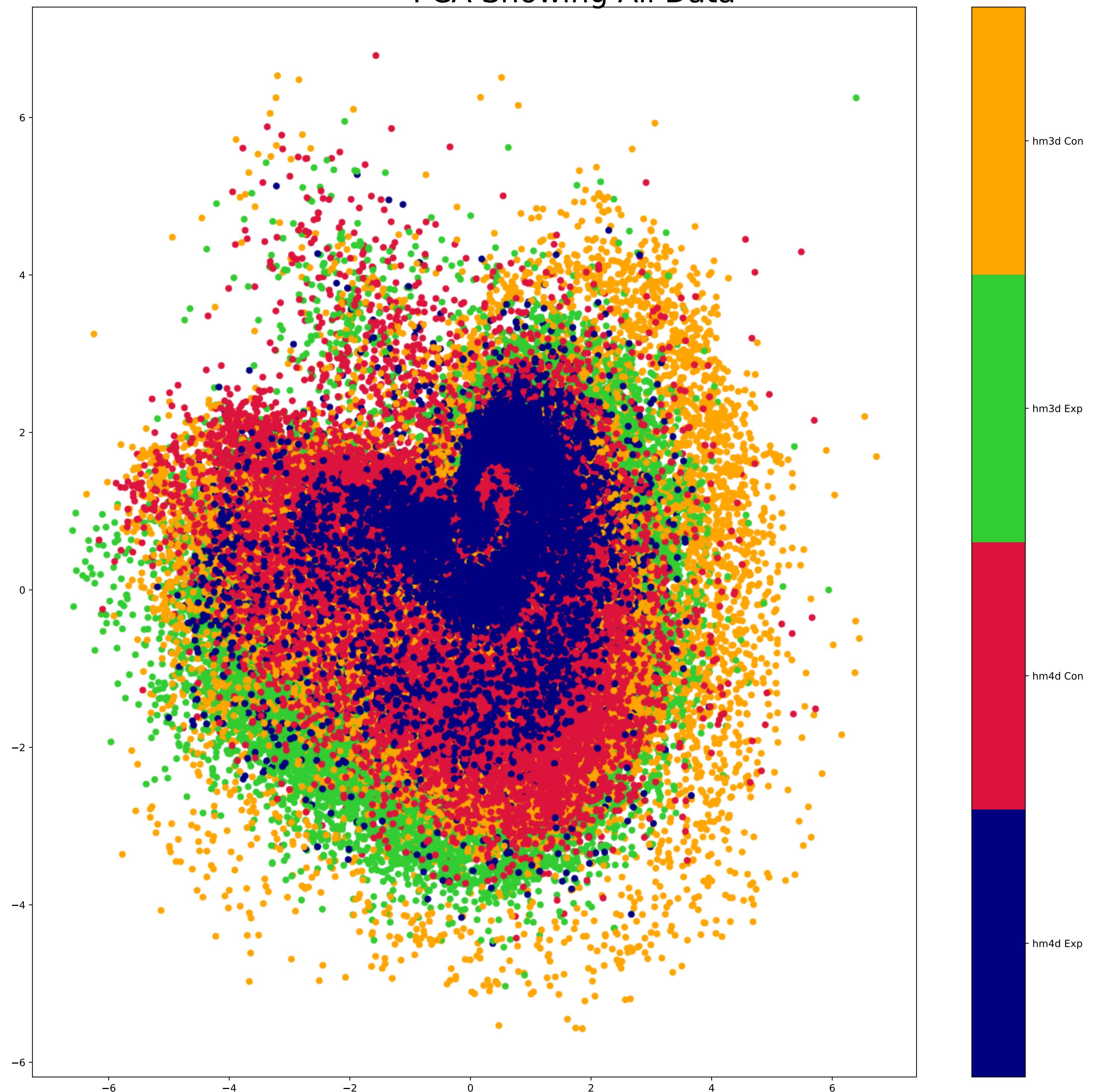
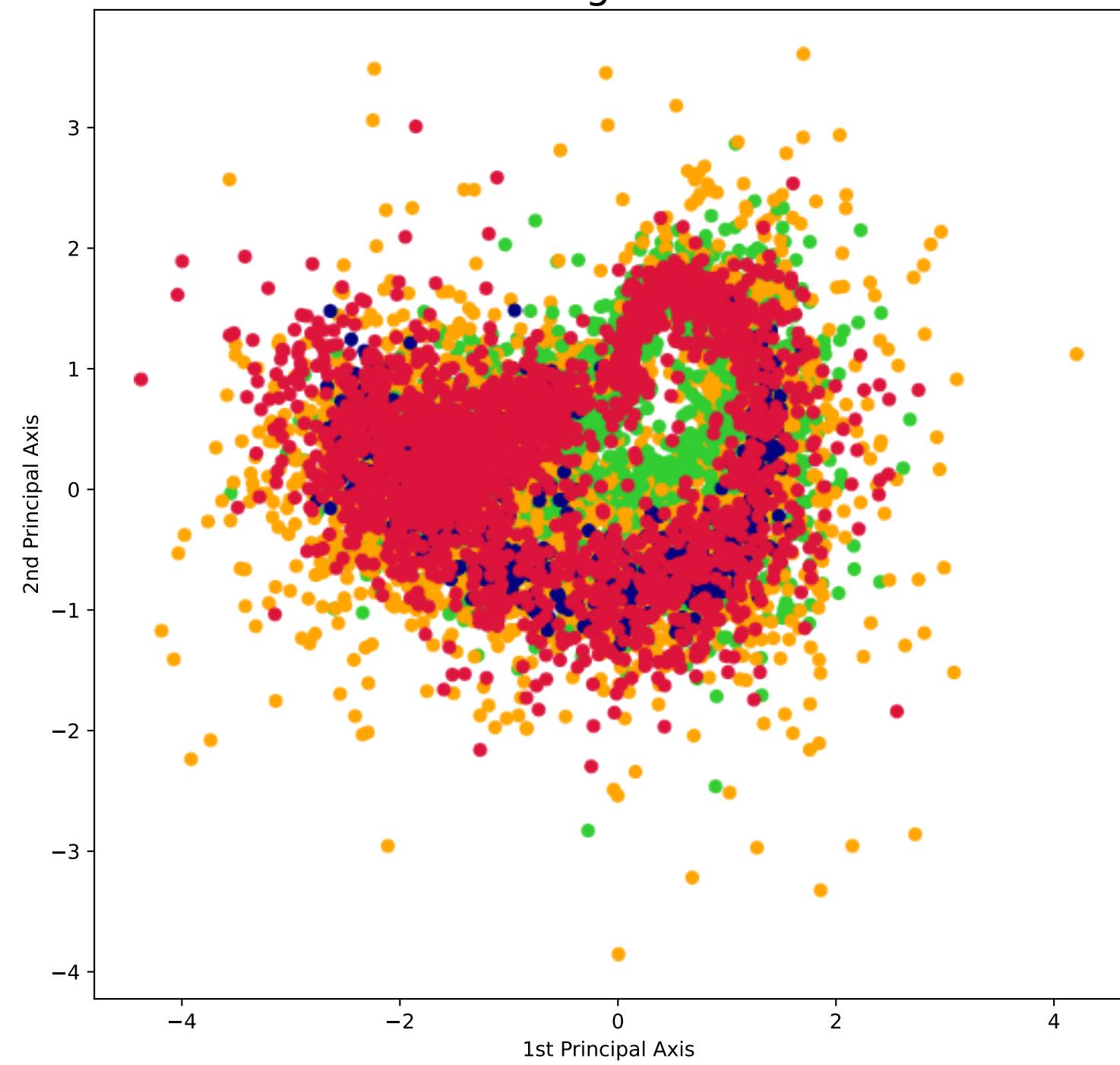


# PCA Showing All Data

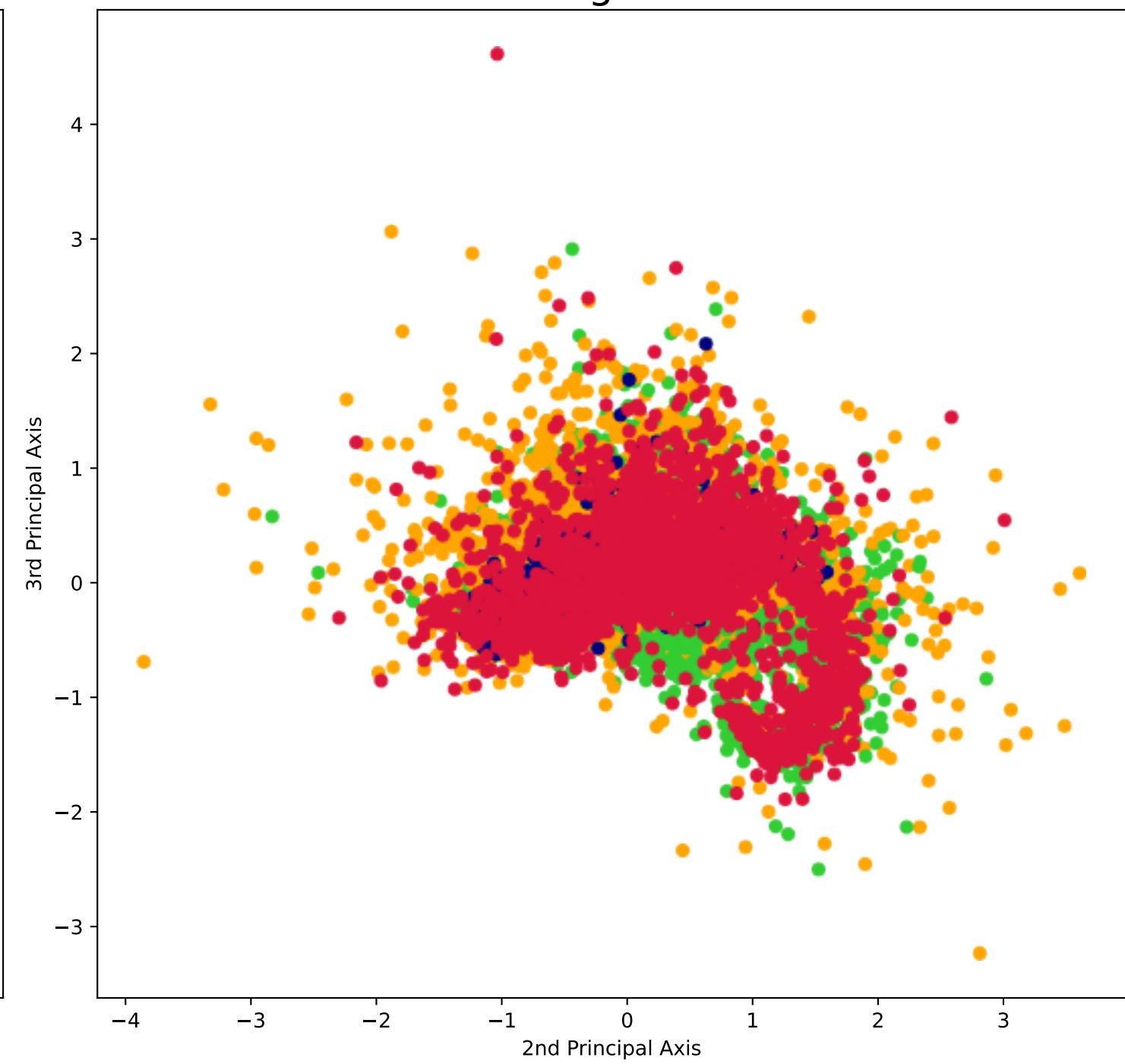


# Trial Number: 0, Phase: Cal 20 Room Air

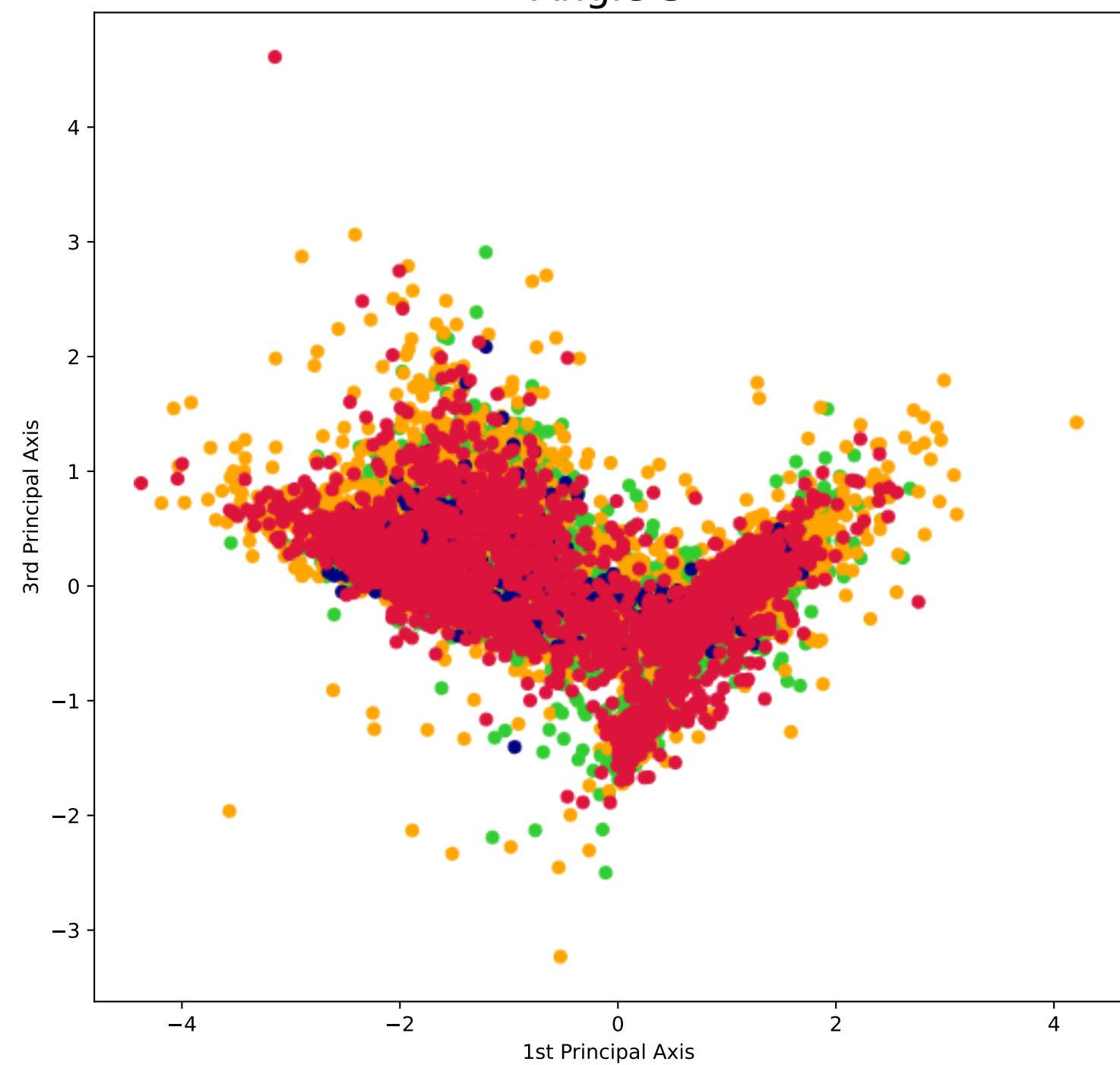
Angle 1



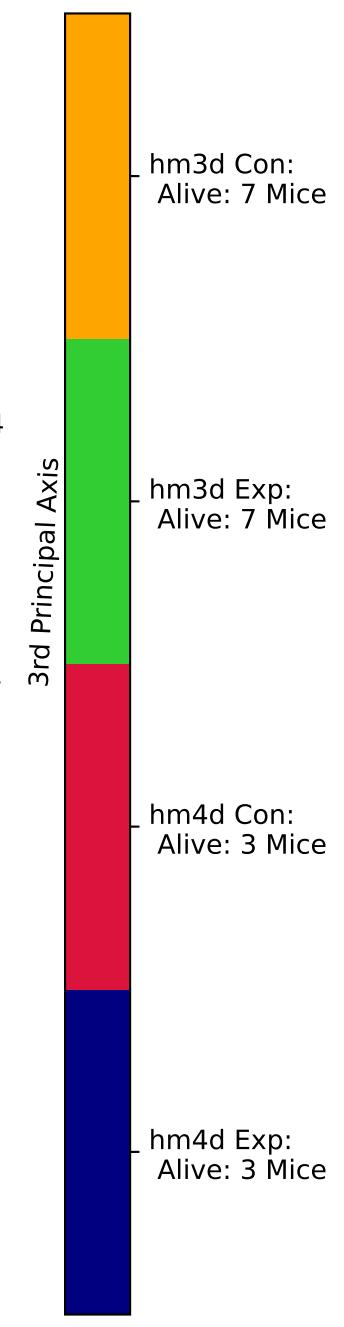
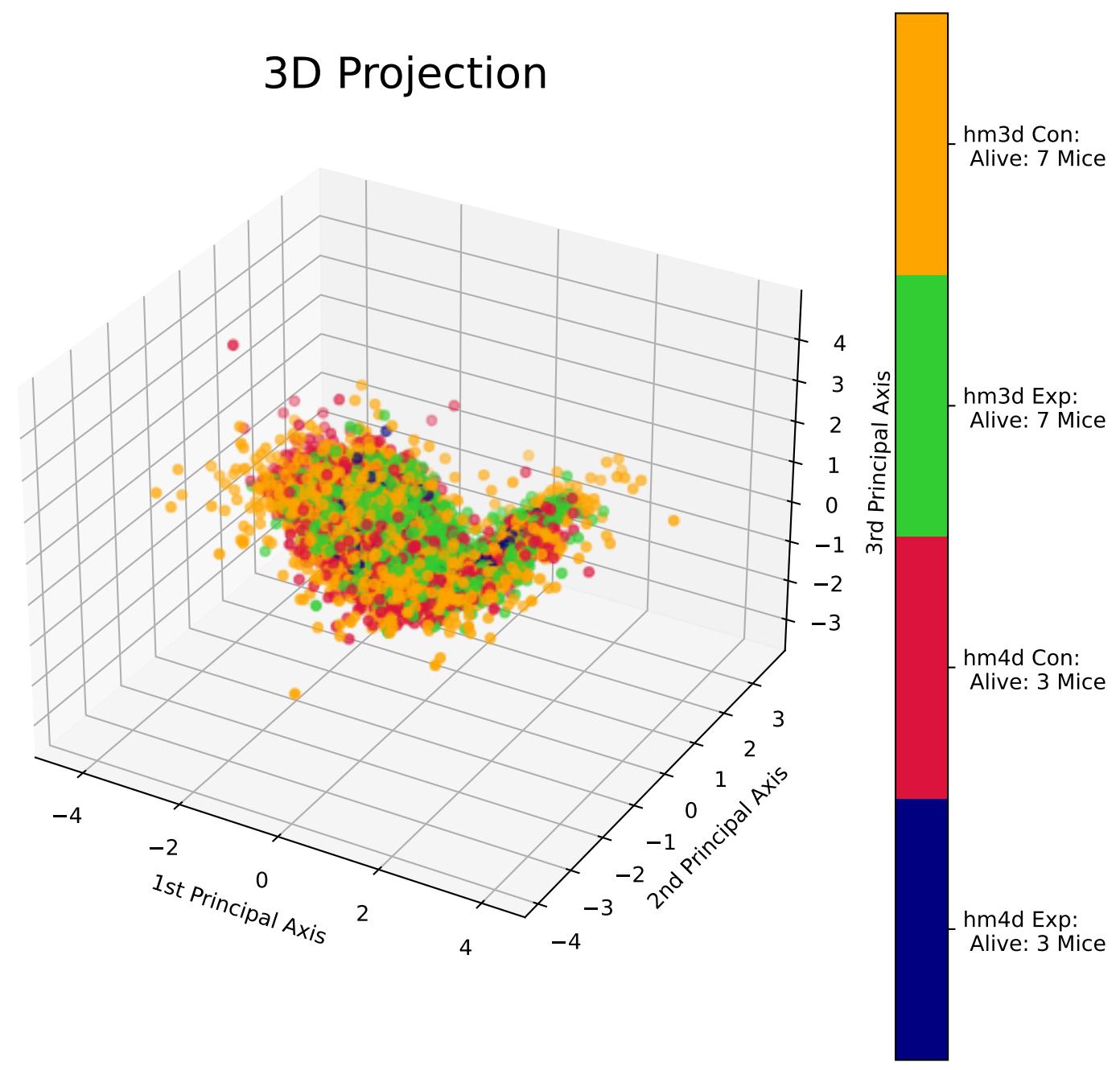
Angle 2



Angle 3

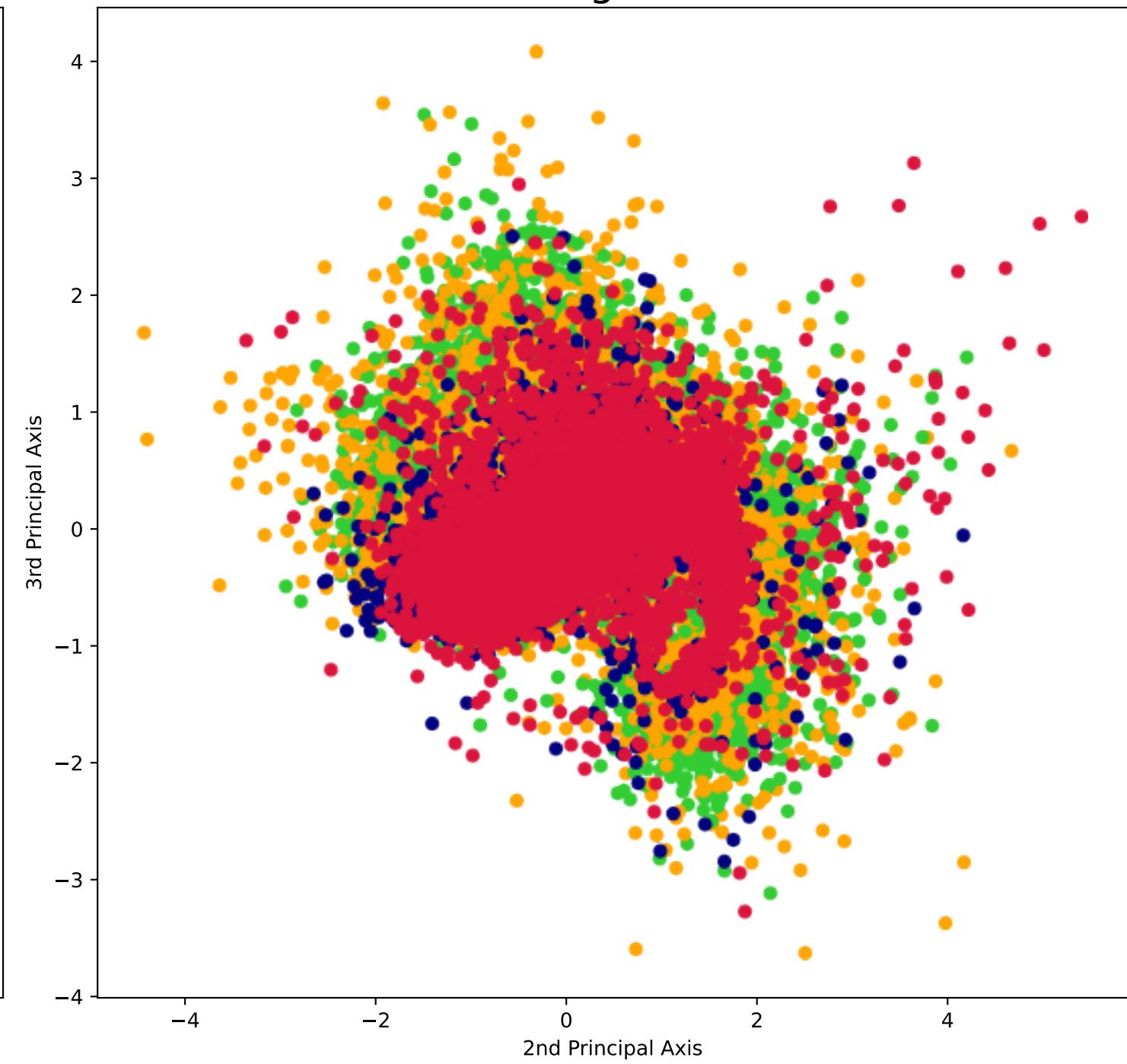
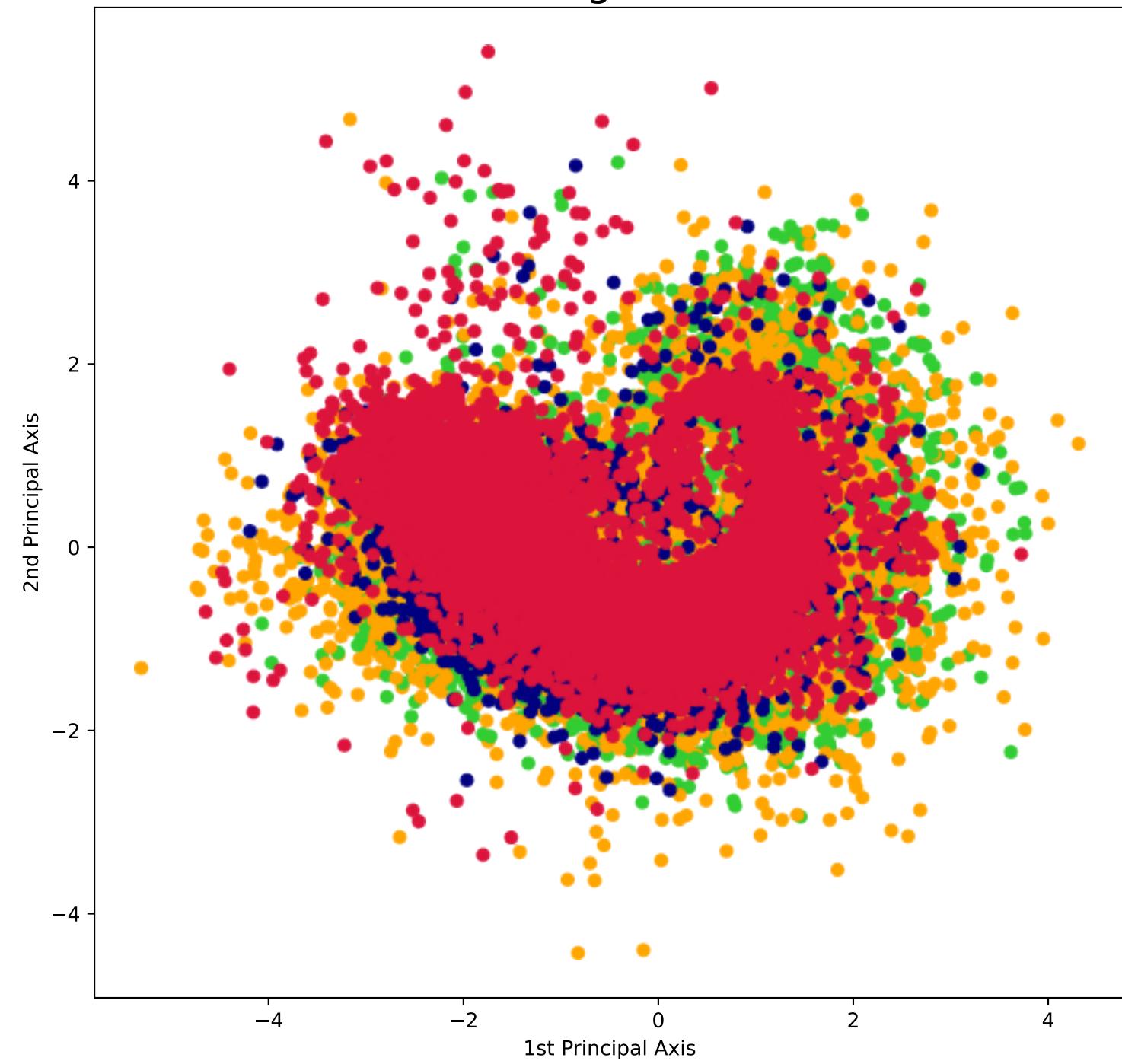


3D Projection

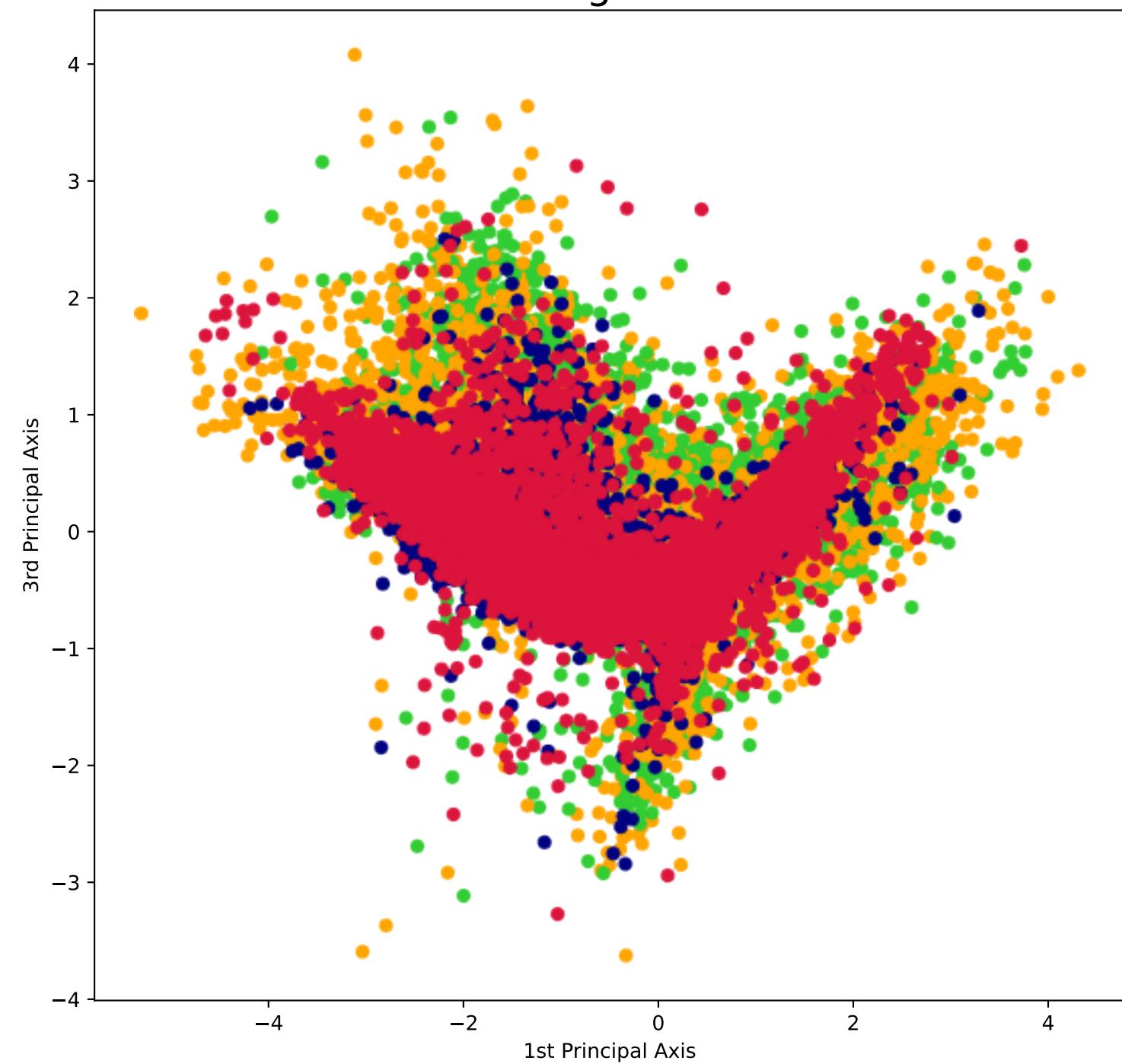


# Trial Number: 0, Phase: Pre-CNO Room Air

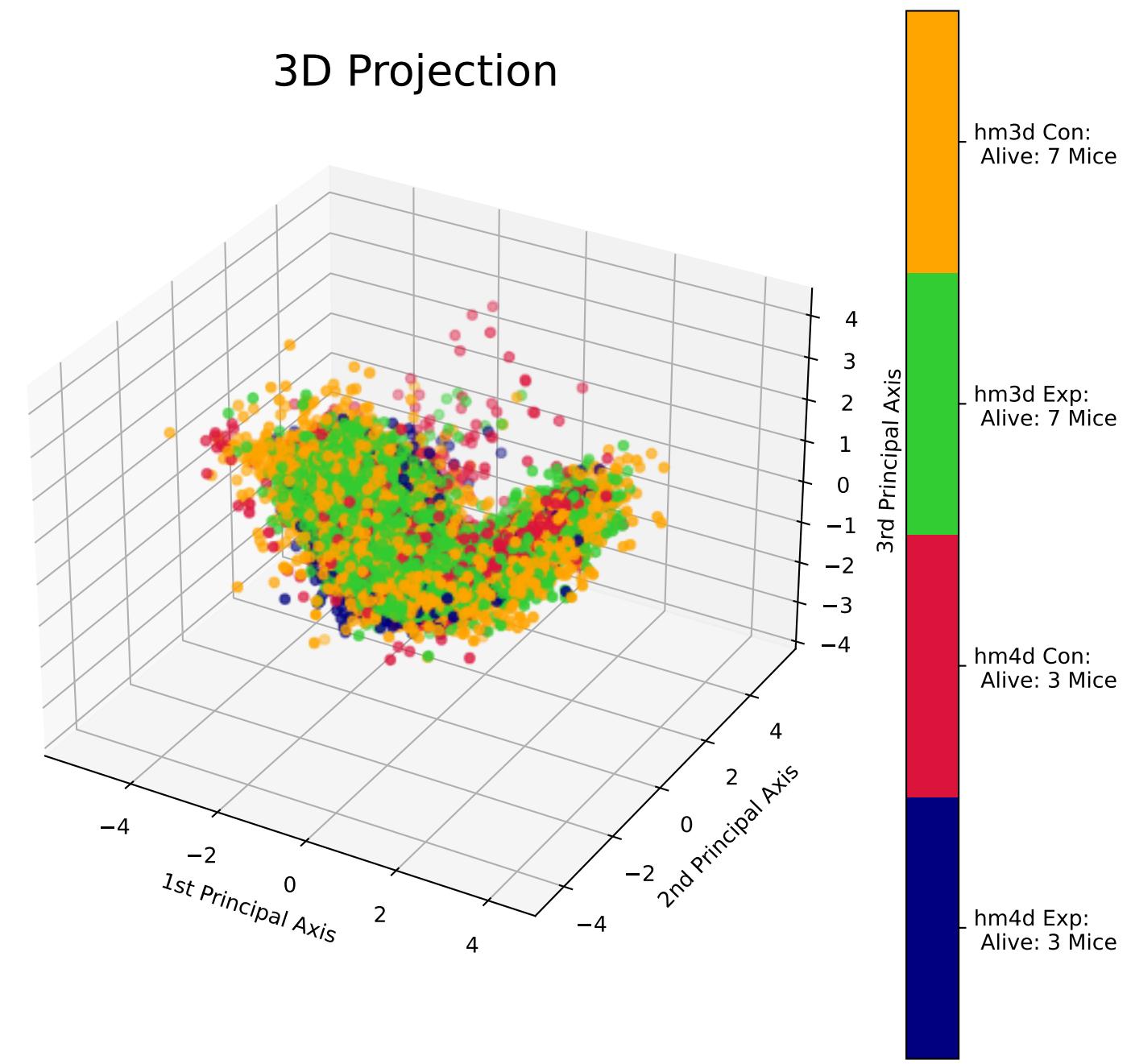
Angle 1



Angle 3

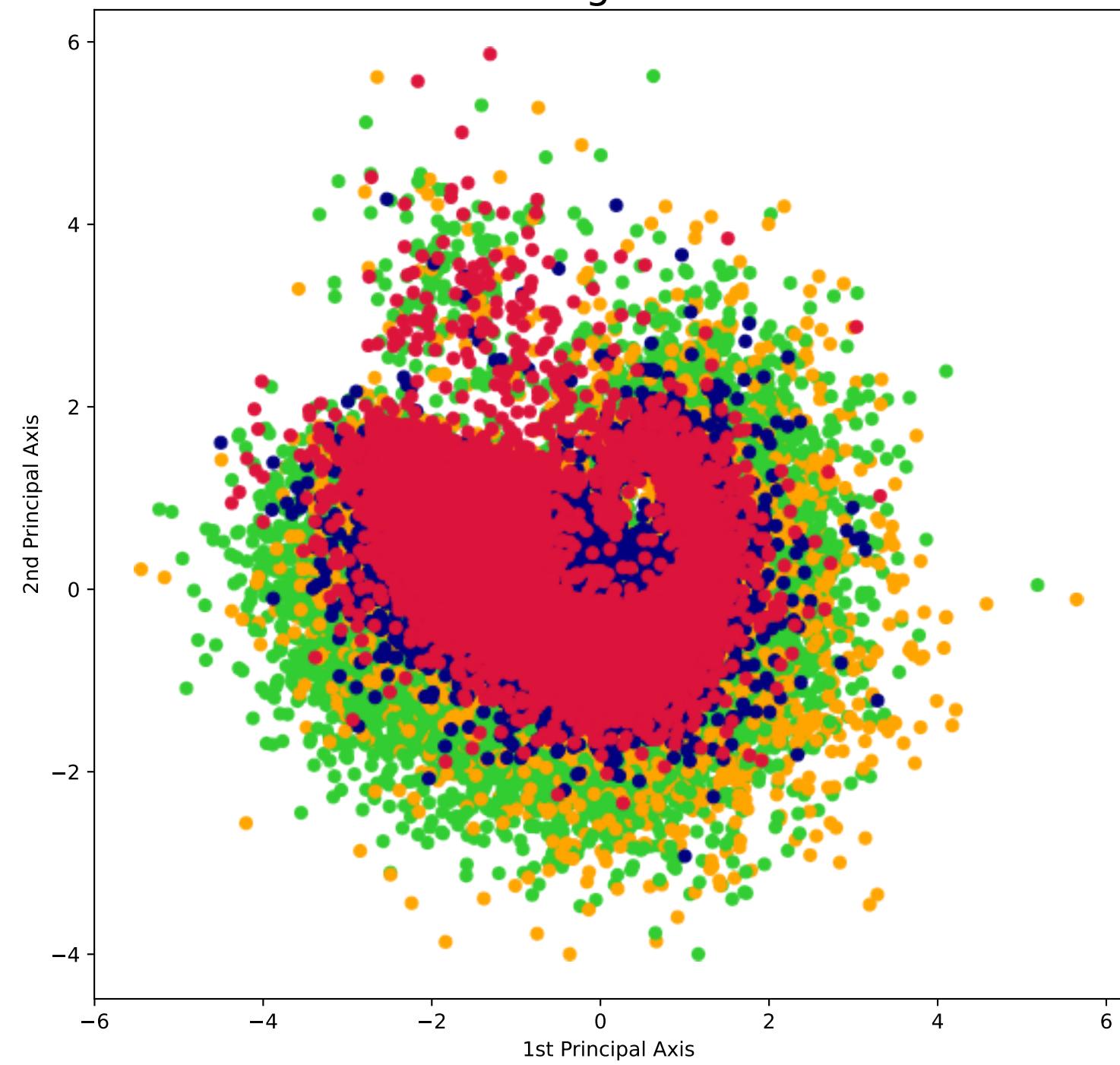


3D Projection

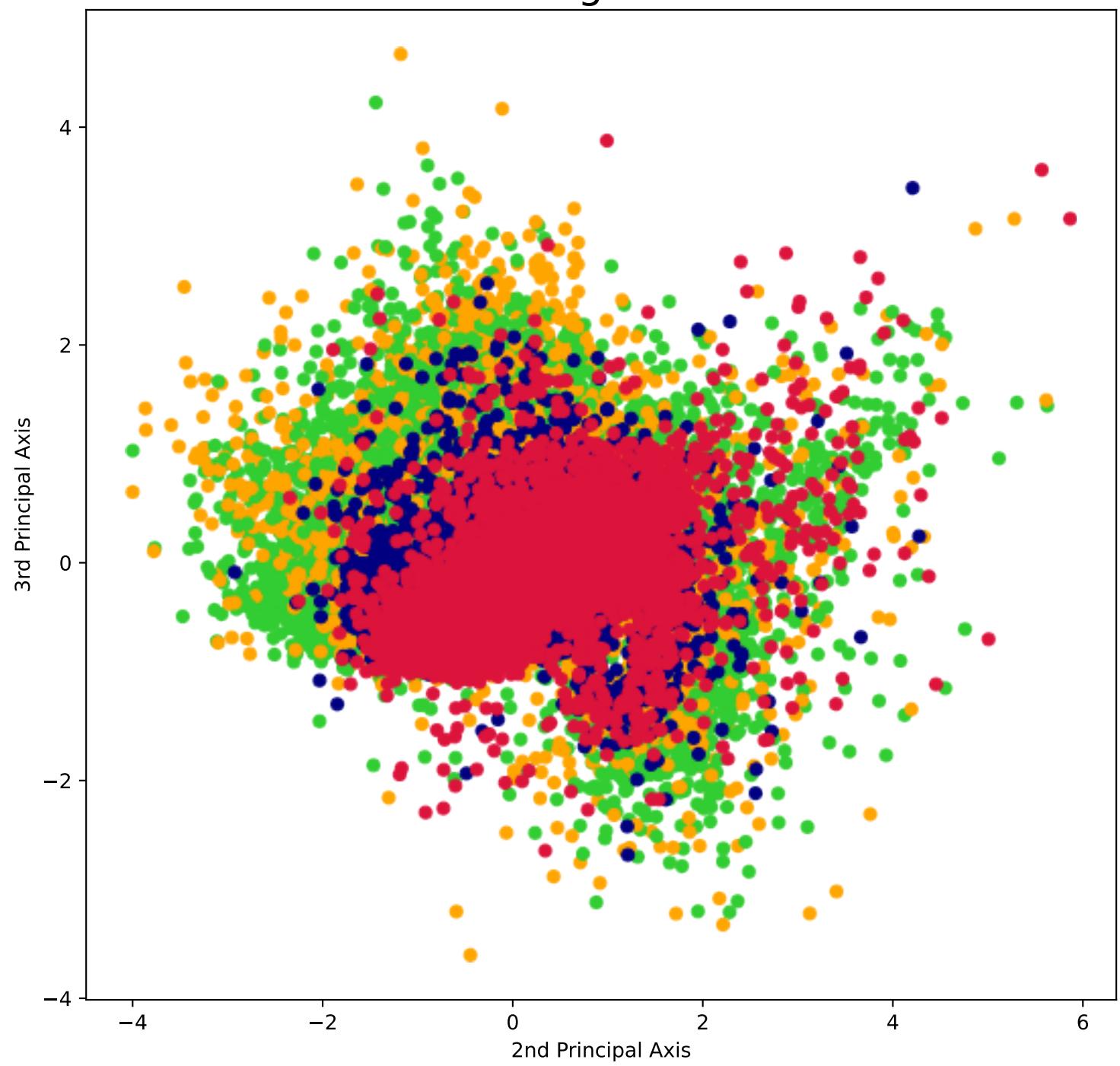


# Trial Number: 0, Phase: Post-CNO Room Air

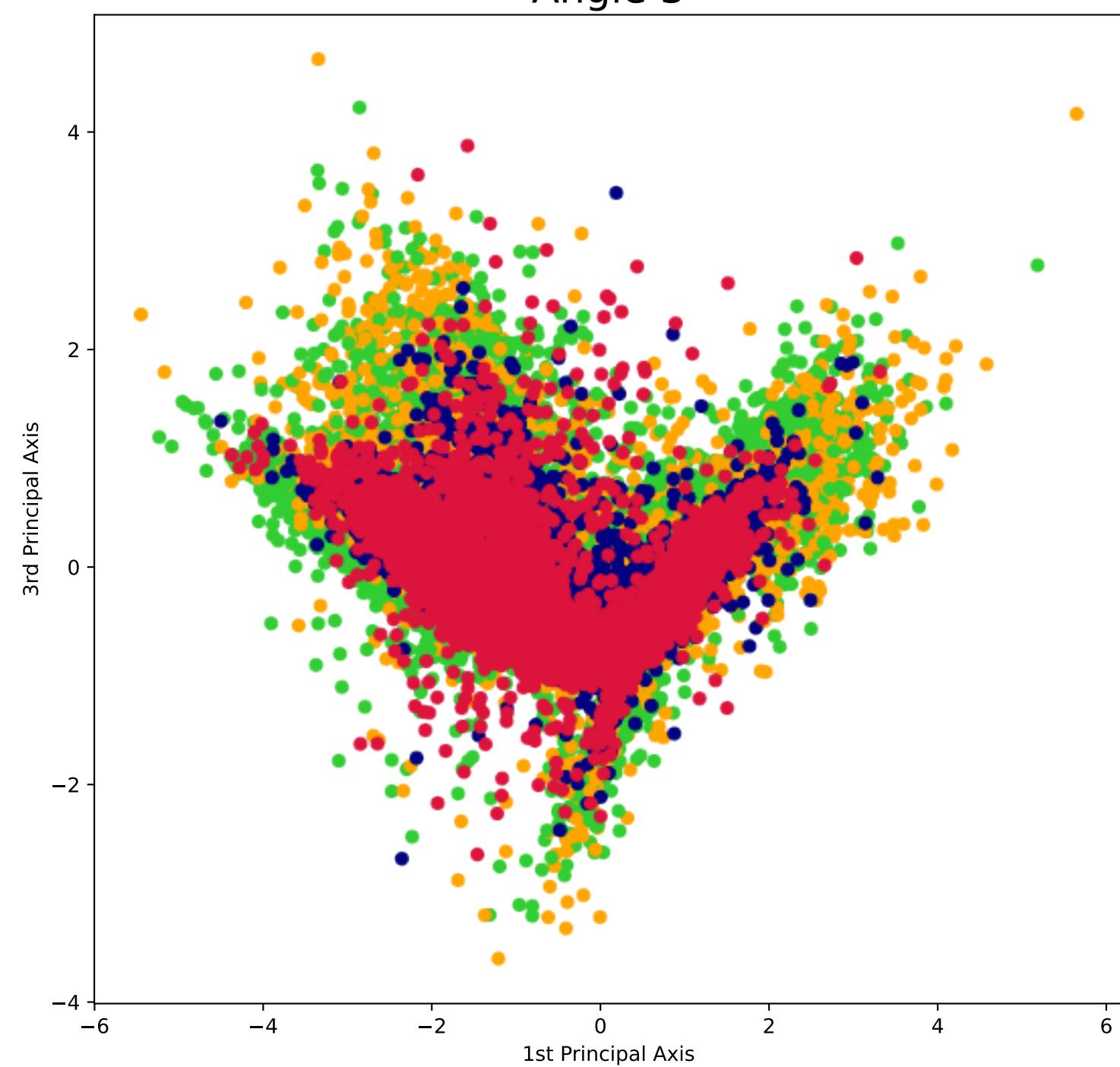
Angle 1



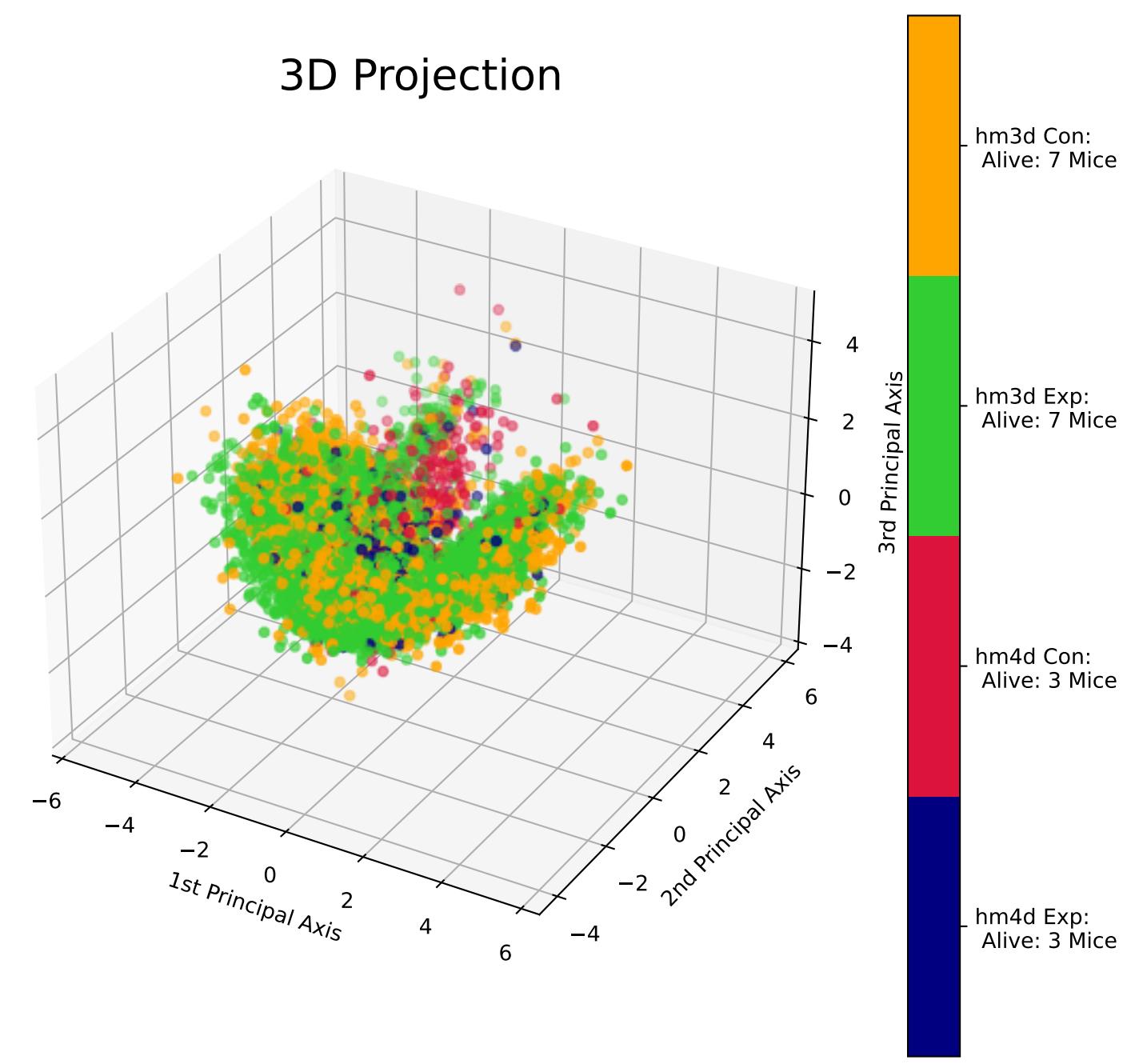
Angle 2



Angle 3

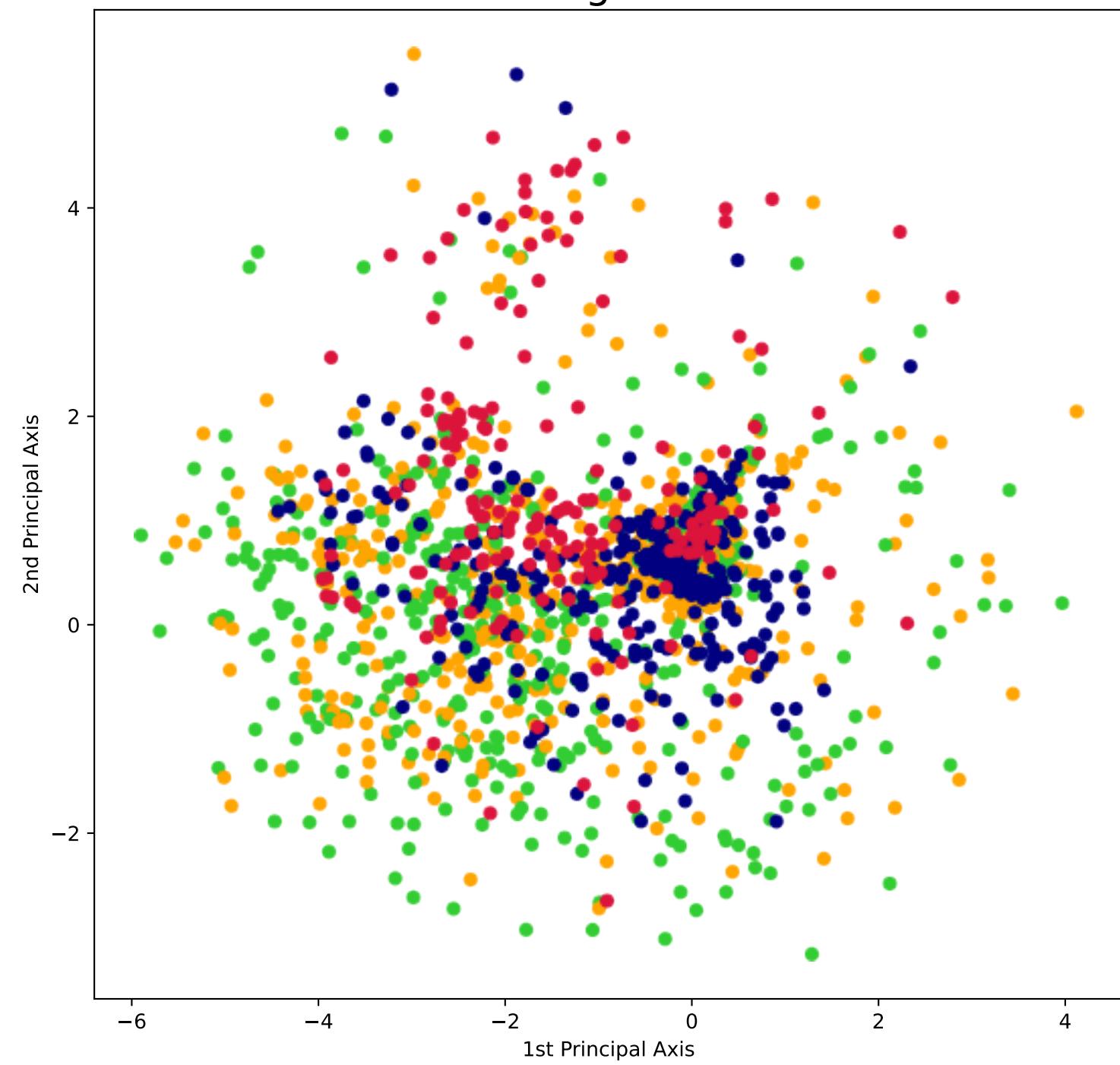


3D Projection

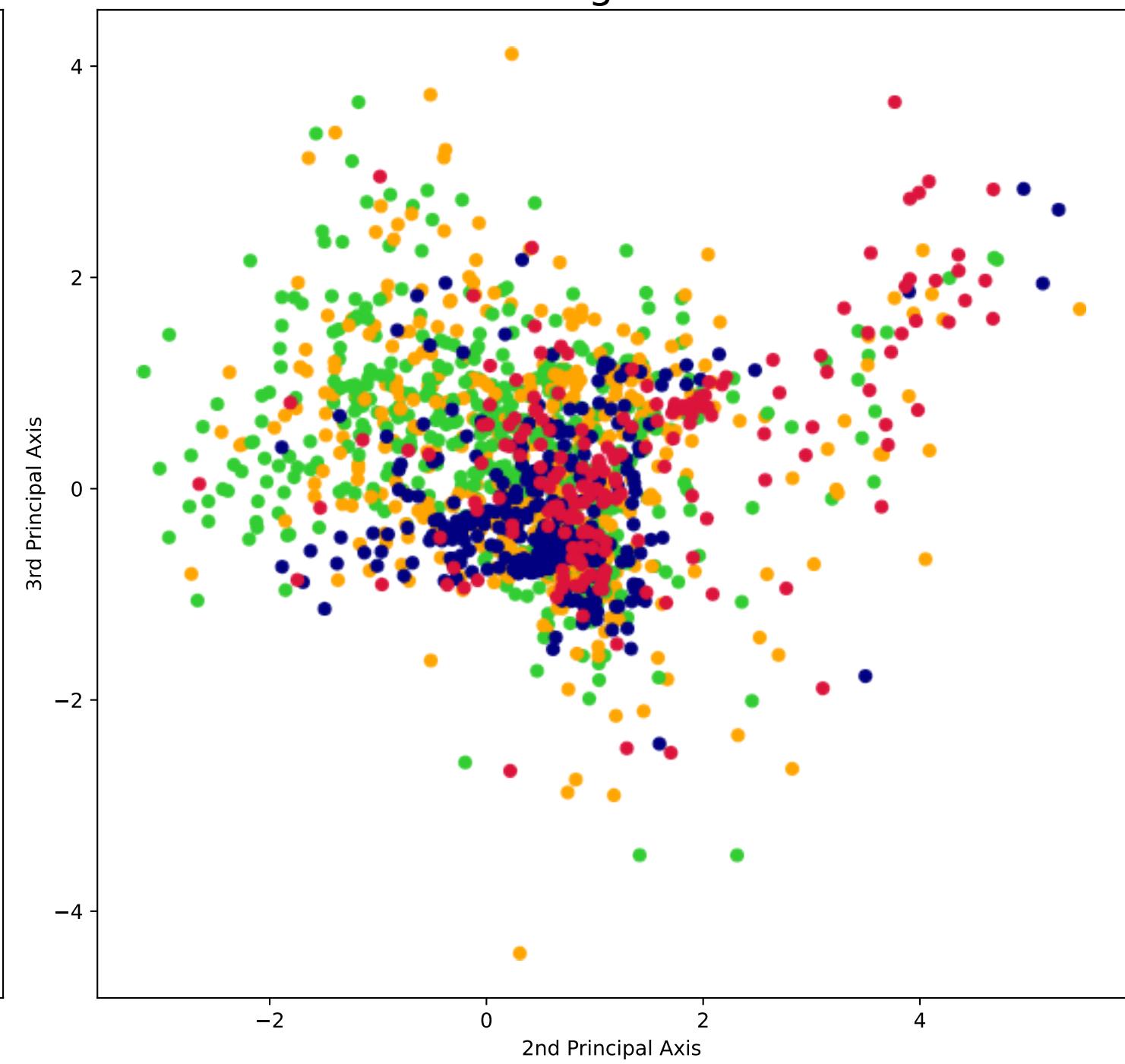


# Trial Number: 1, Phase: Trial Onset

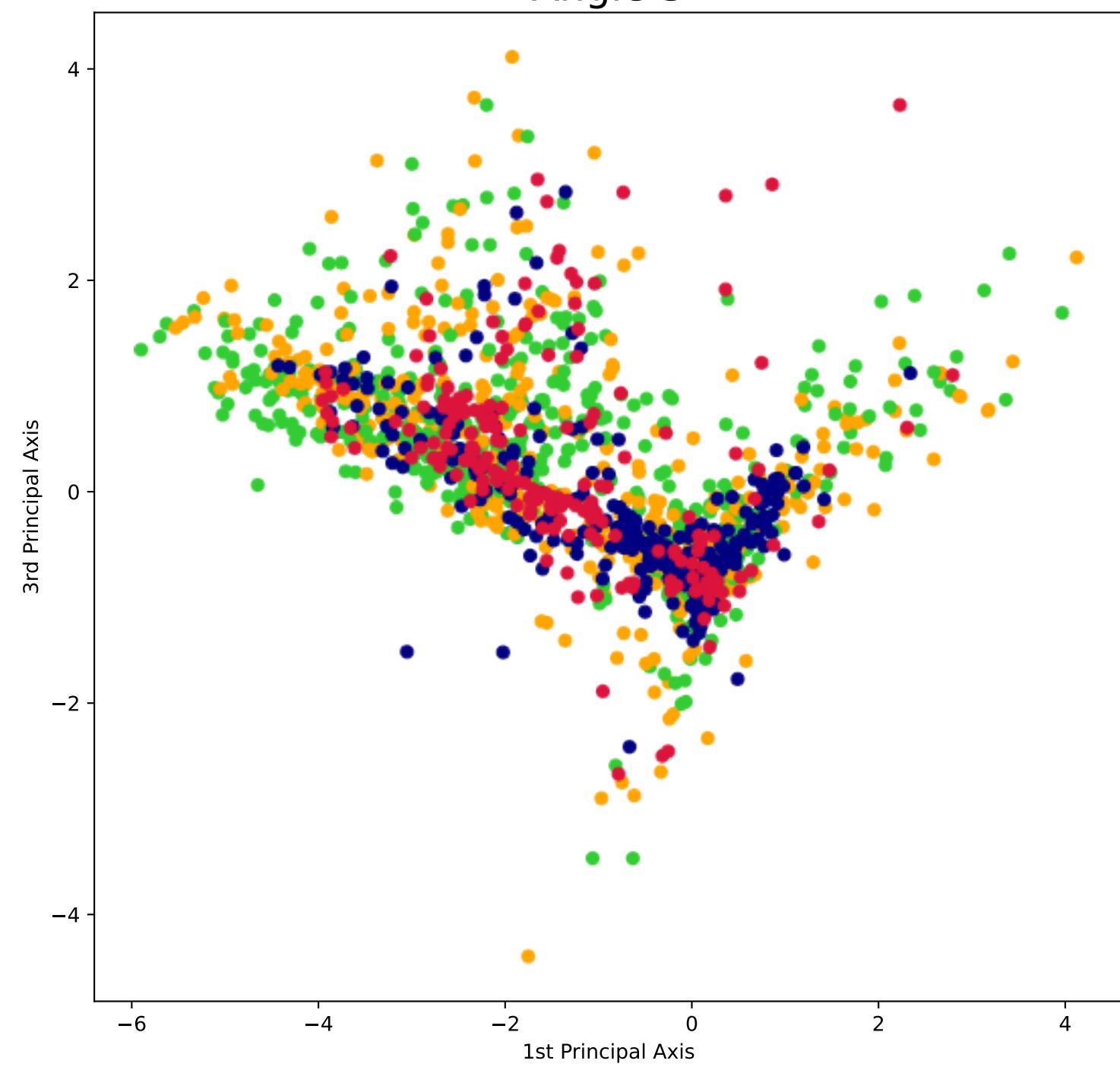
Angle 1



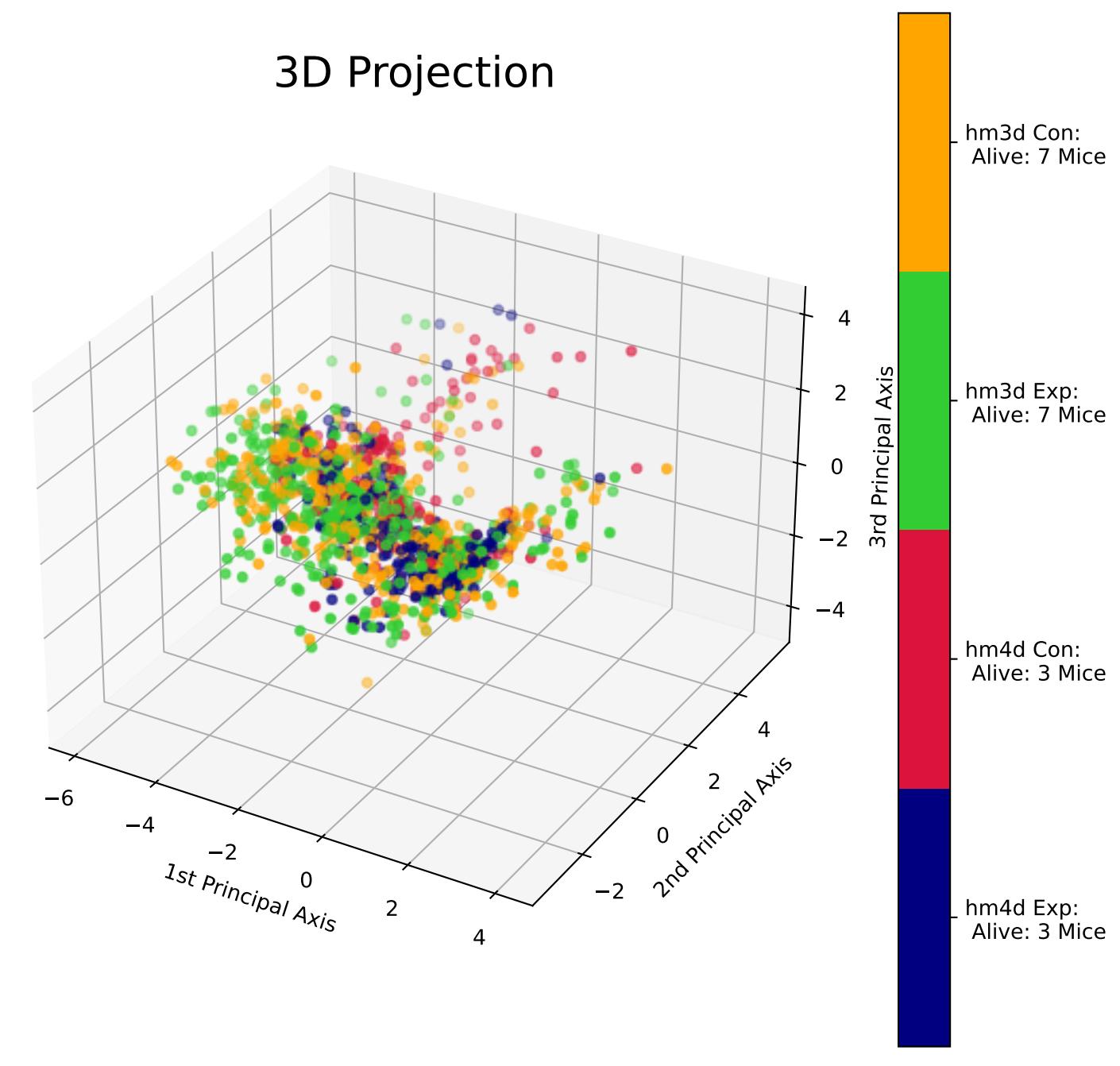
Angle 2



Angle 3

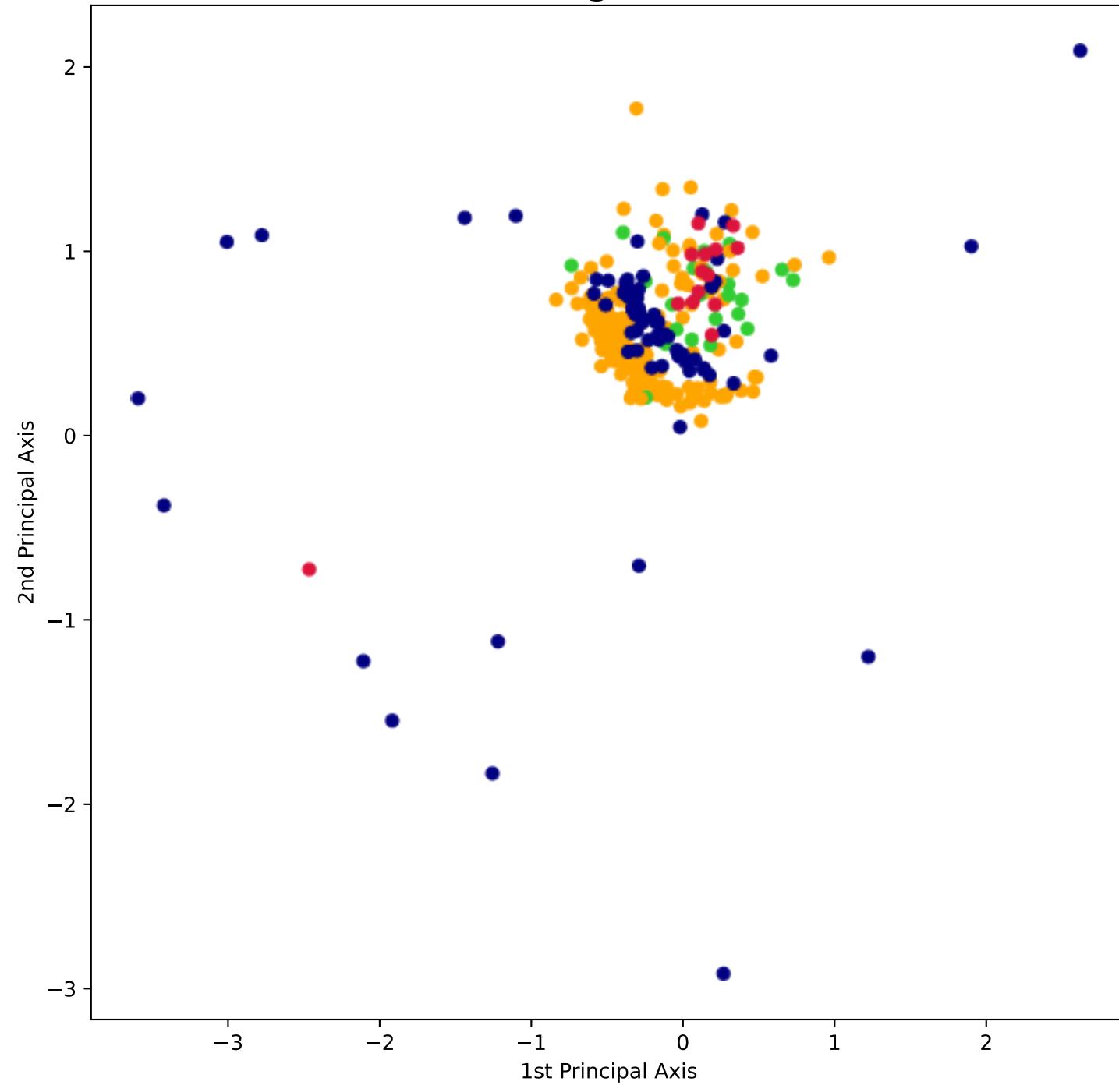


3D Projection

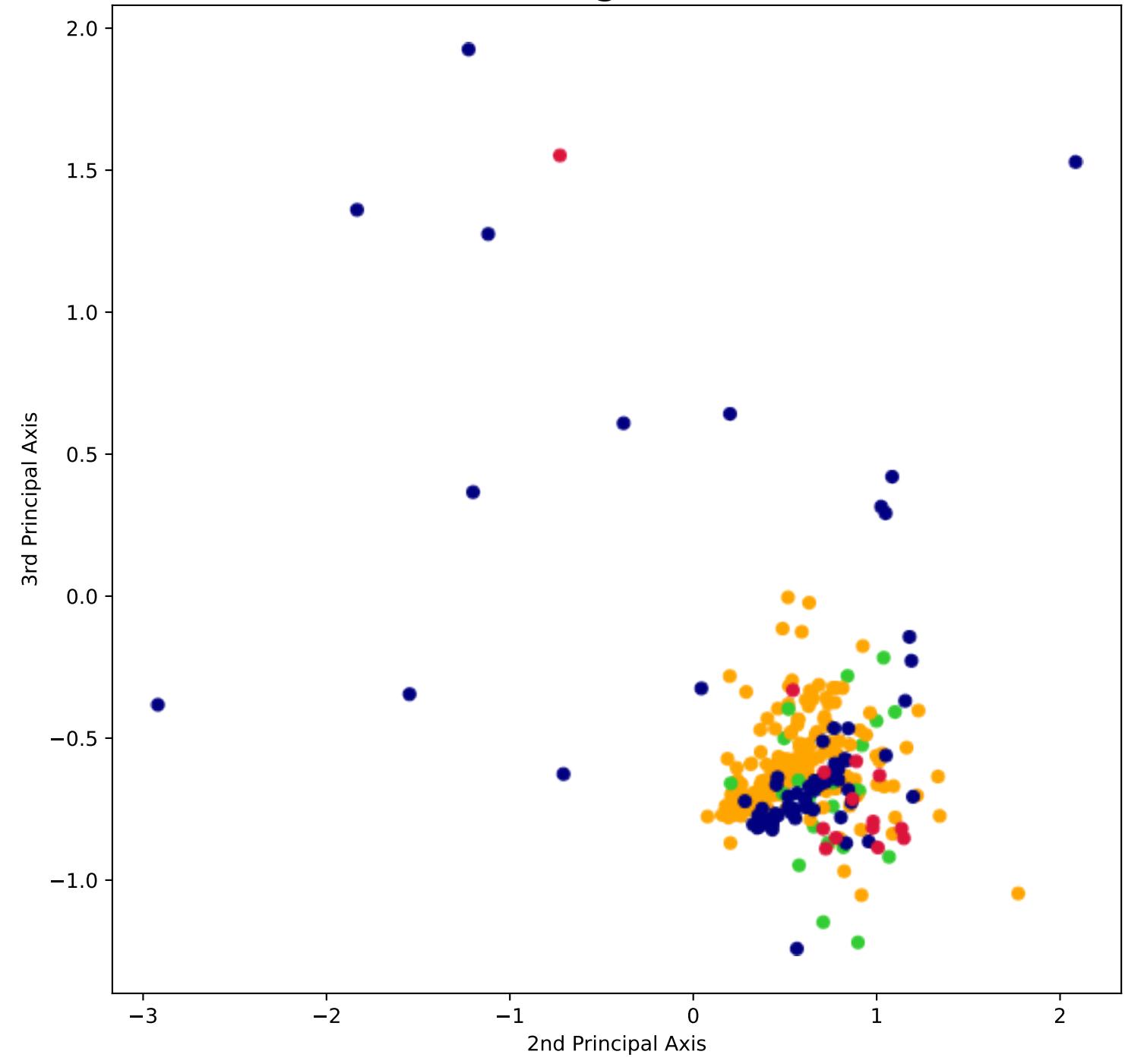


# Trial Number: 1, Phase: Apnea Starts

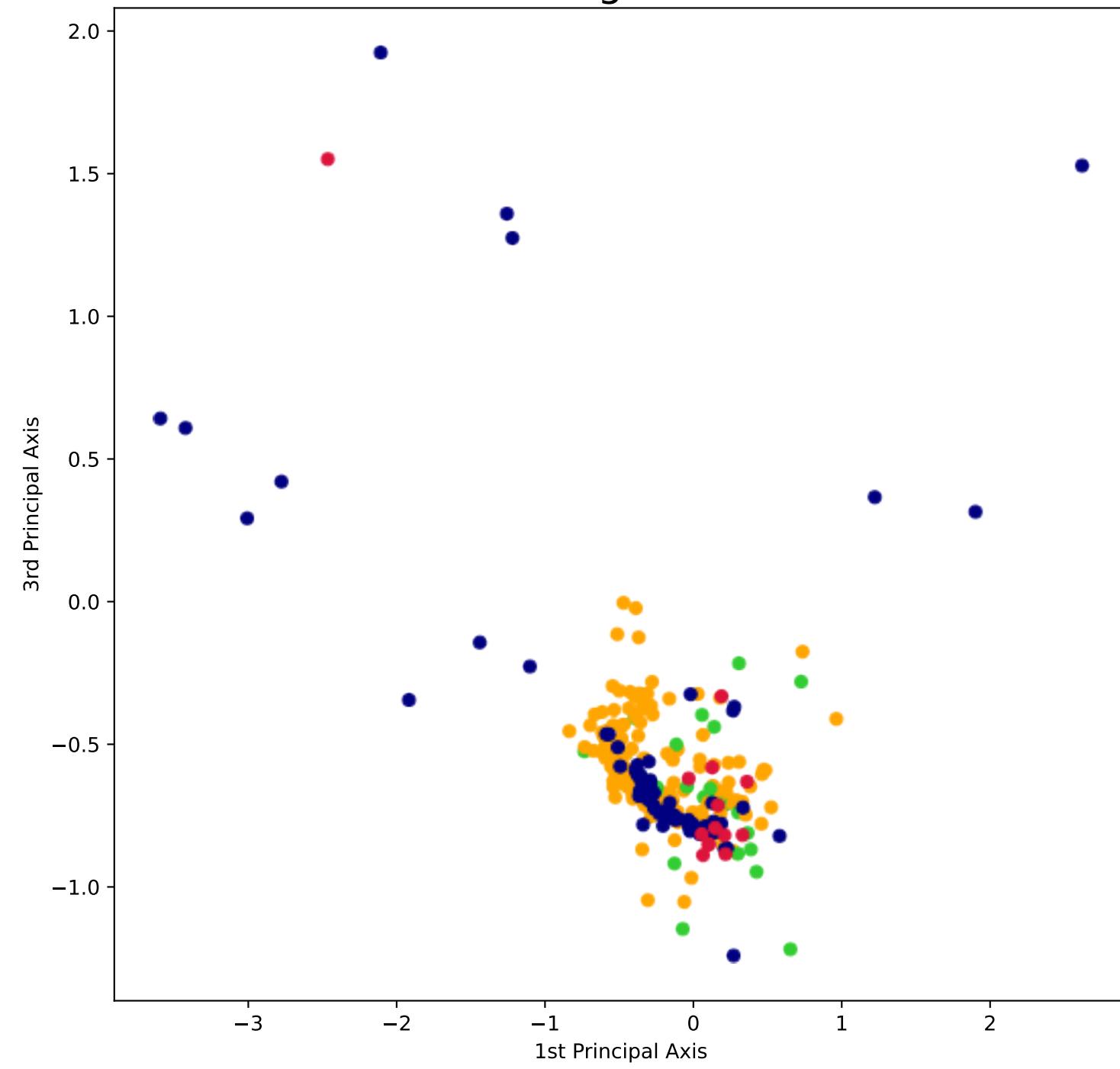
Angle 1



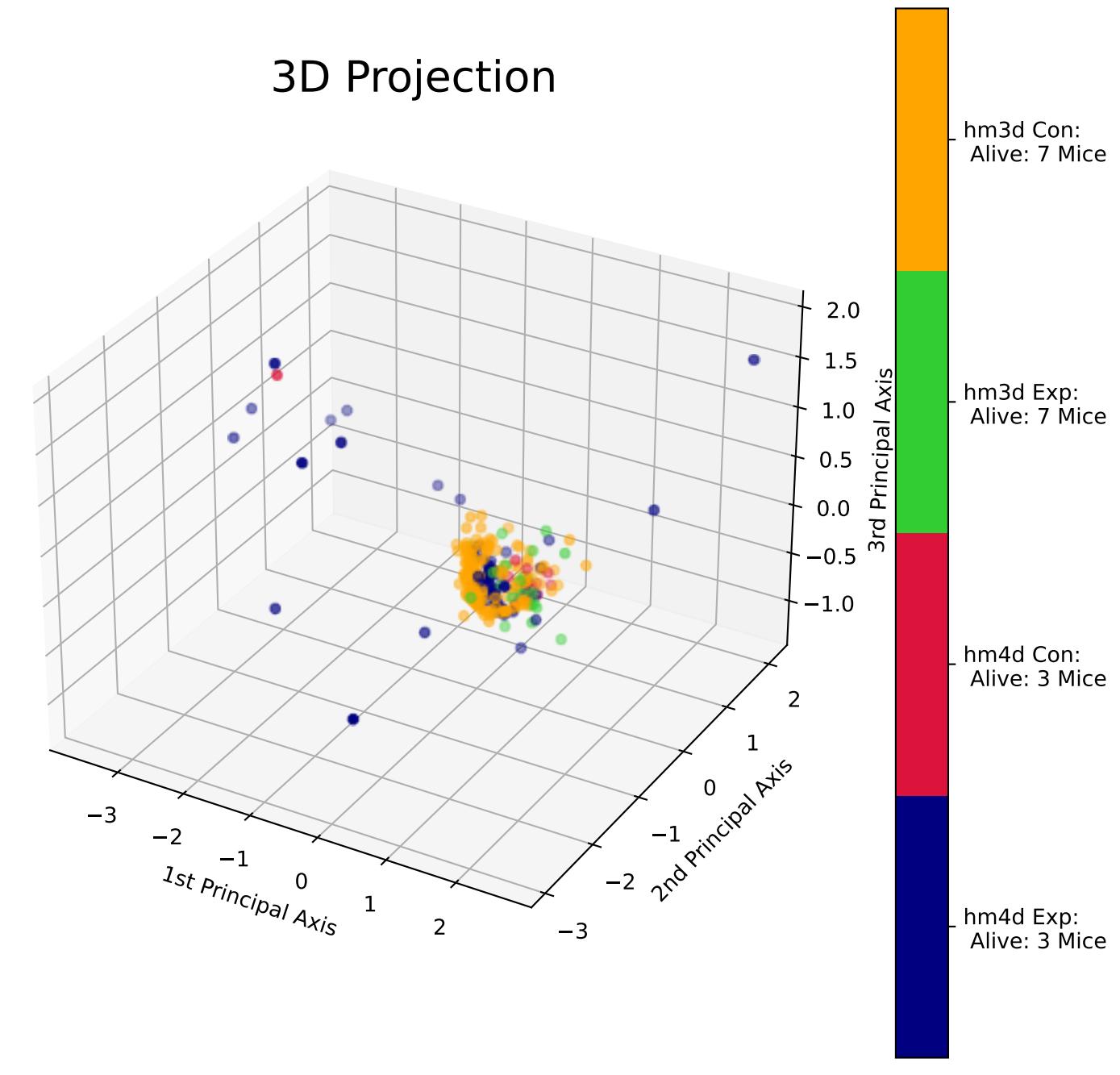
Angle 2



Angle 3

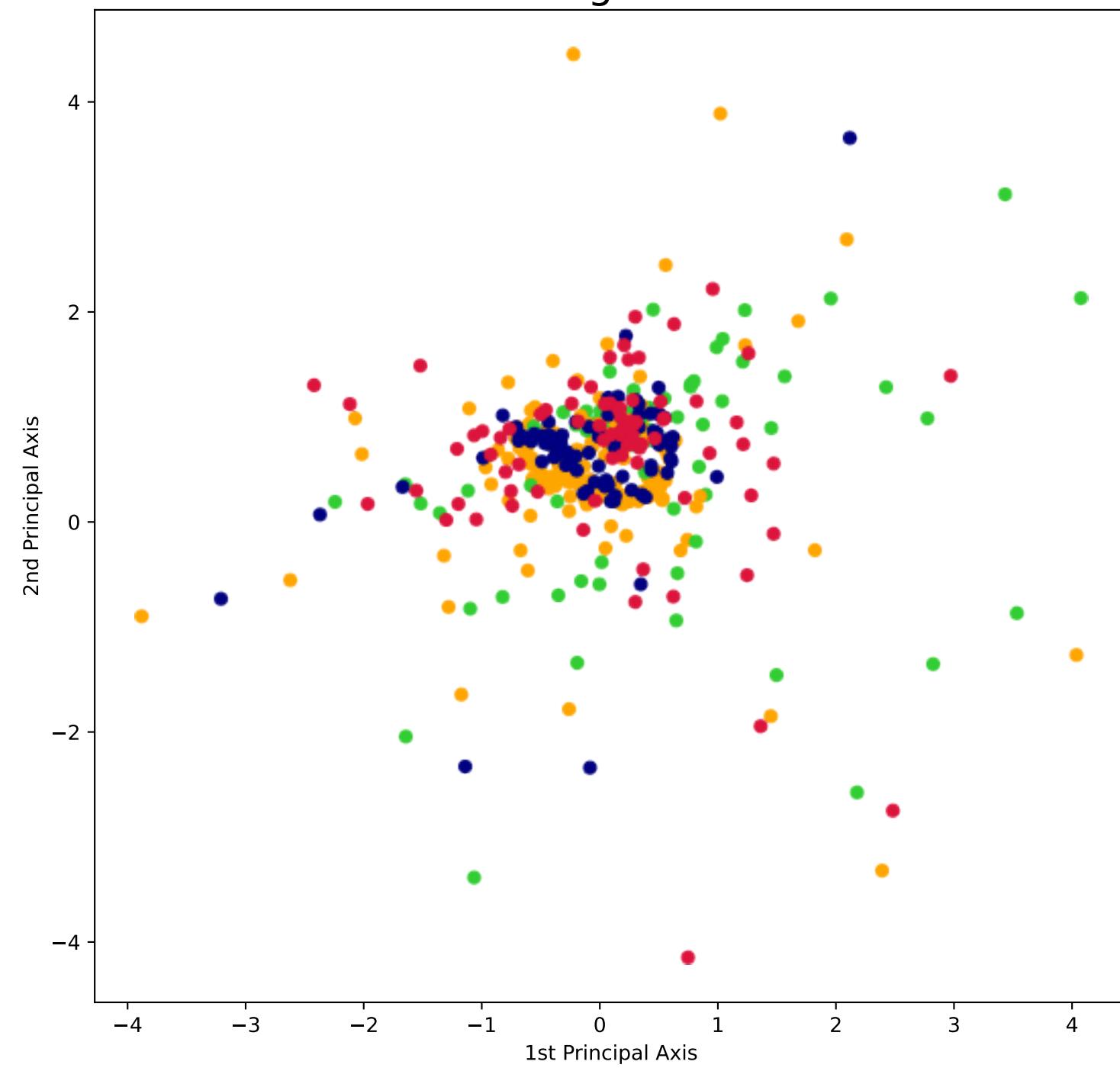


3D Projection

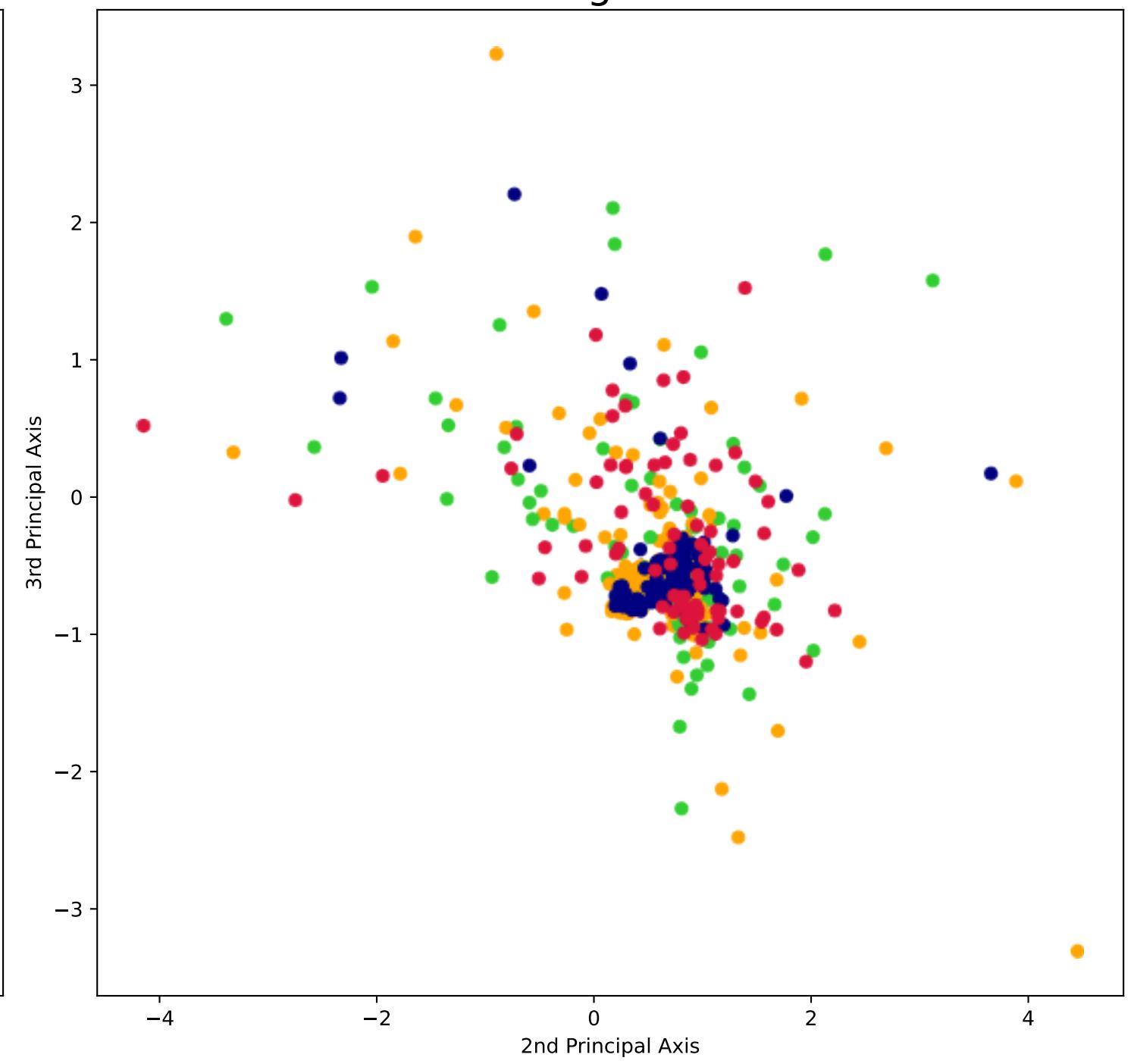


# Trial Number: 1, Phase: First Gasp

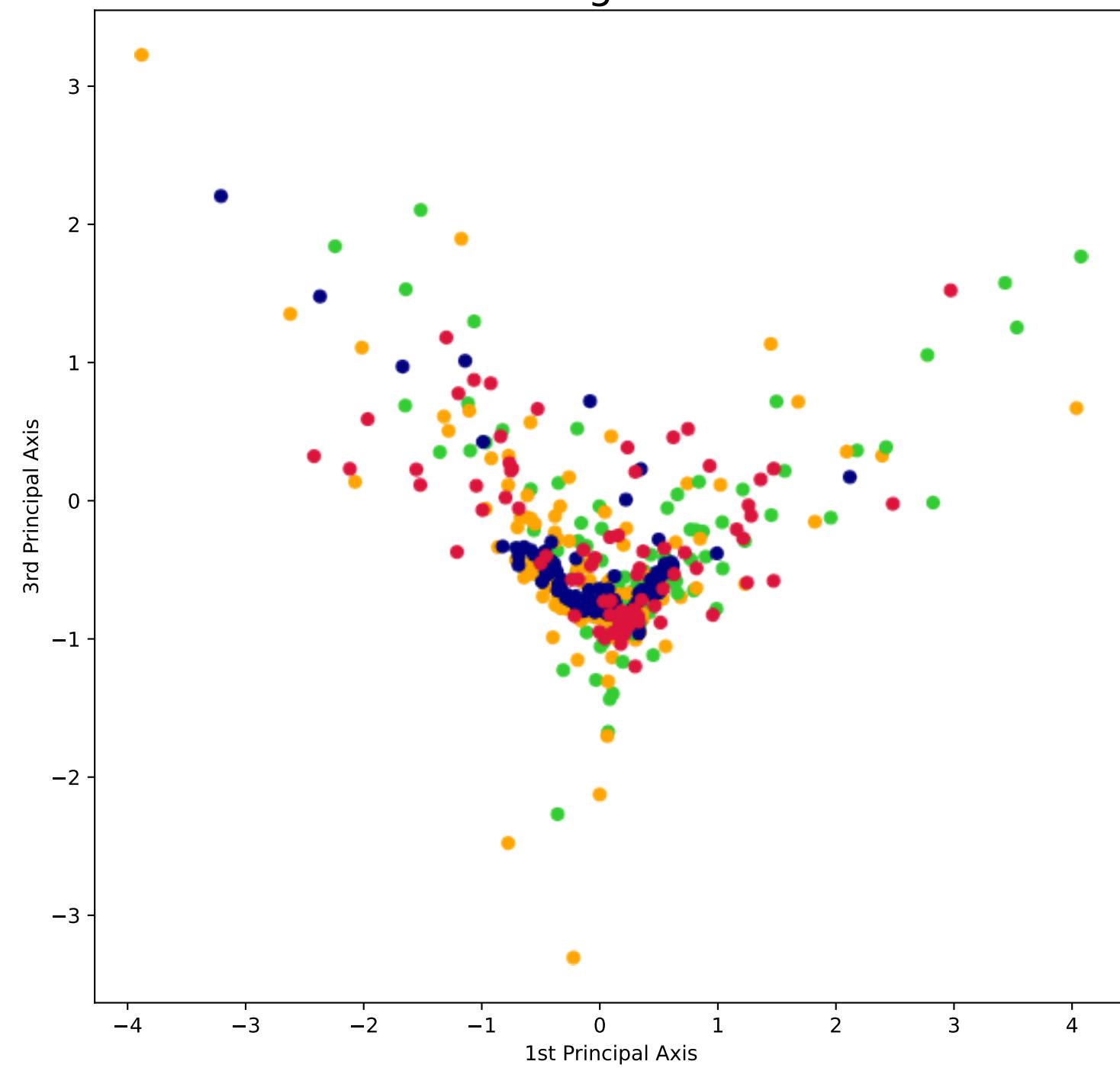
Angle 1



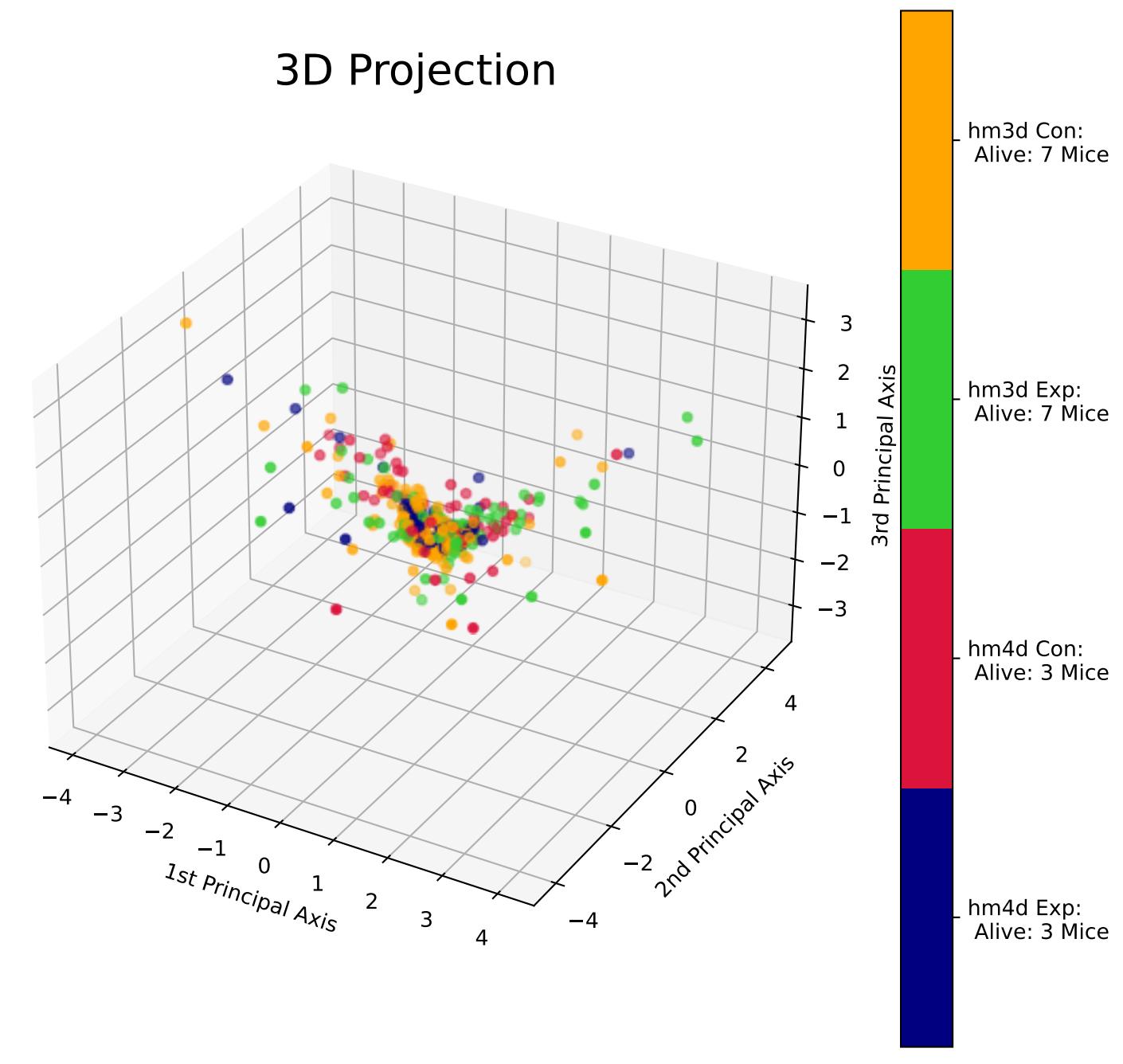
Angle 2



Angle 3

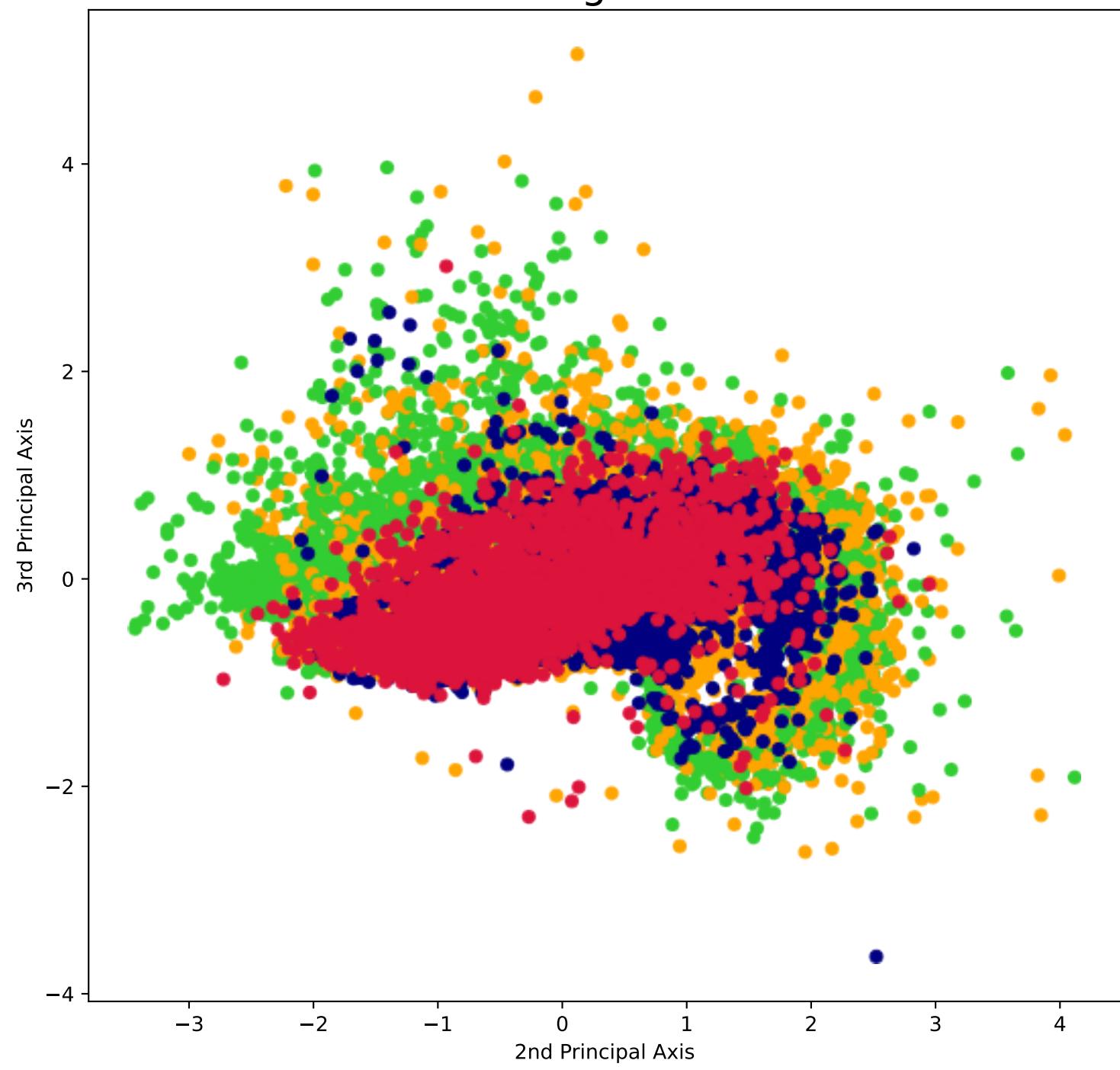
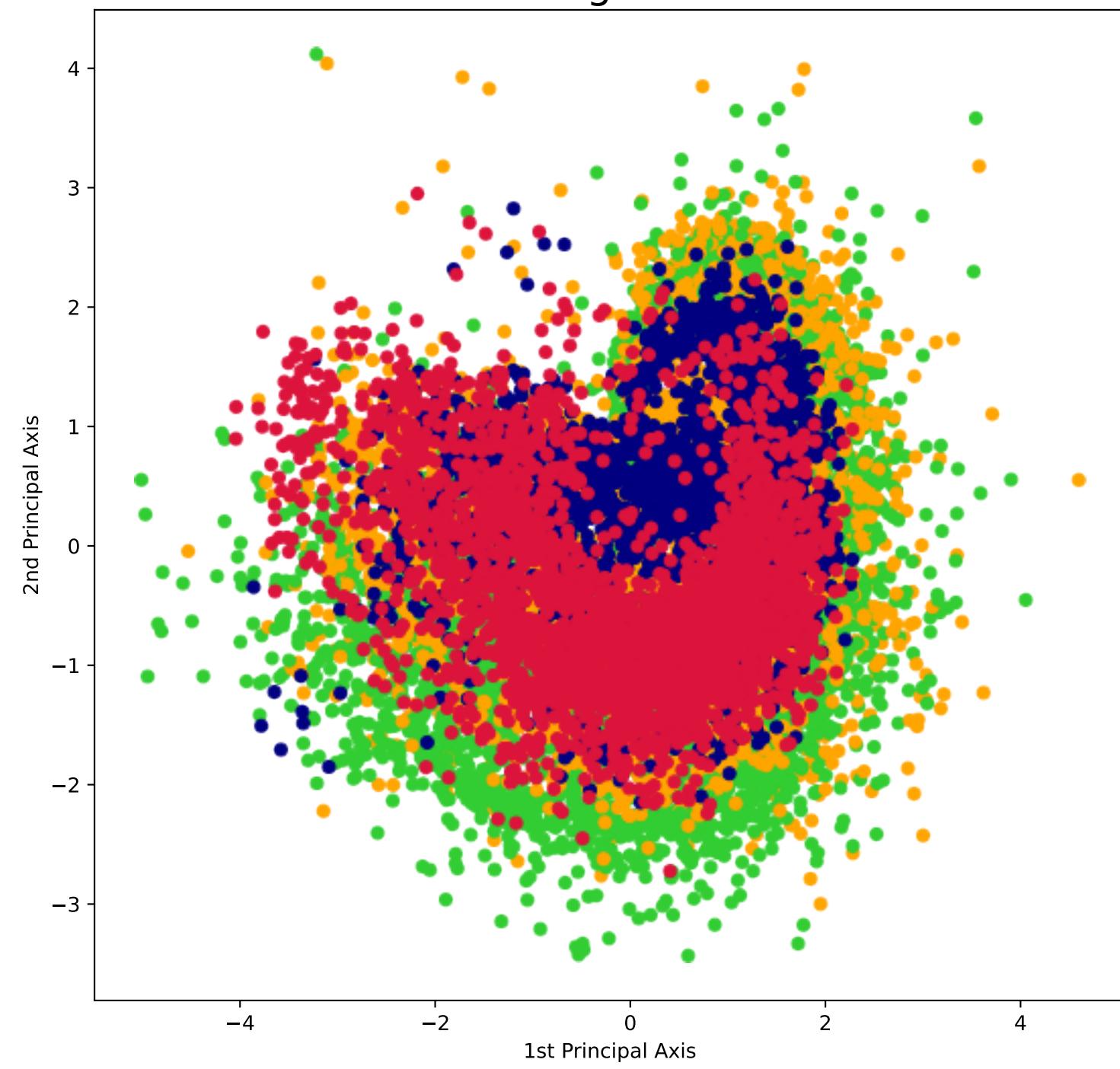


3D Projection

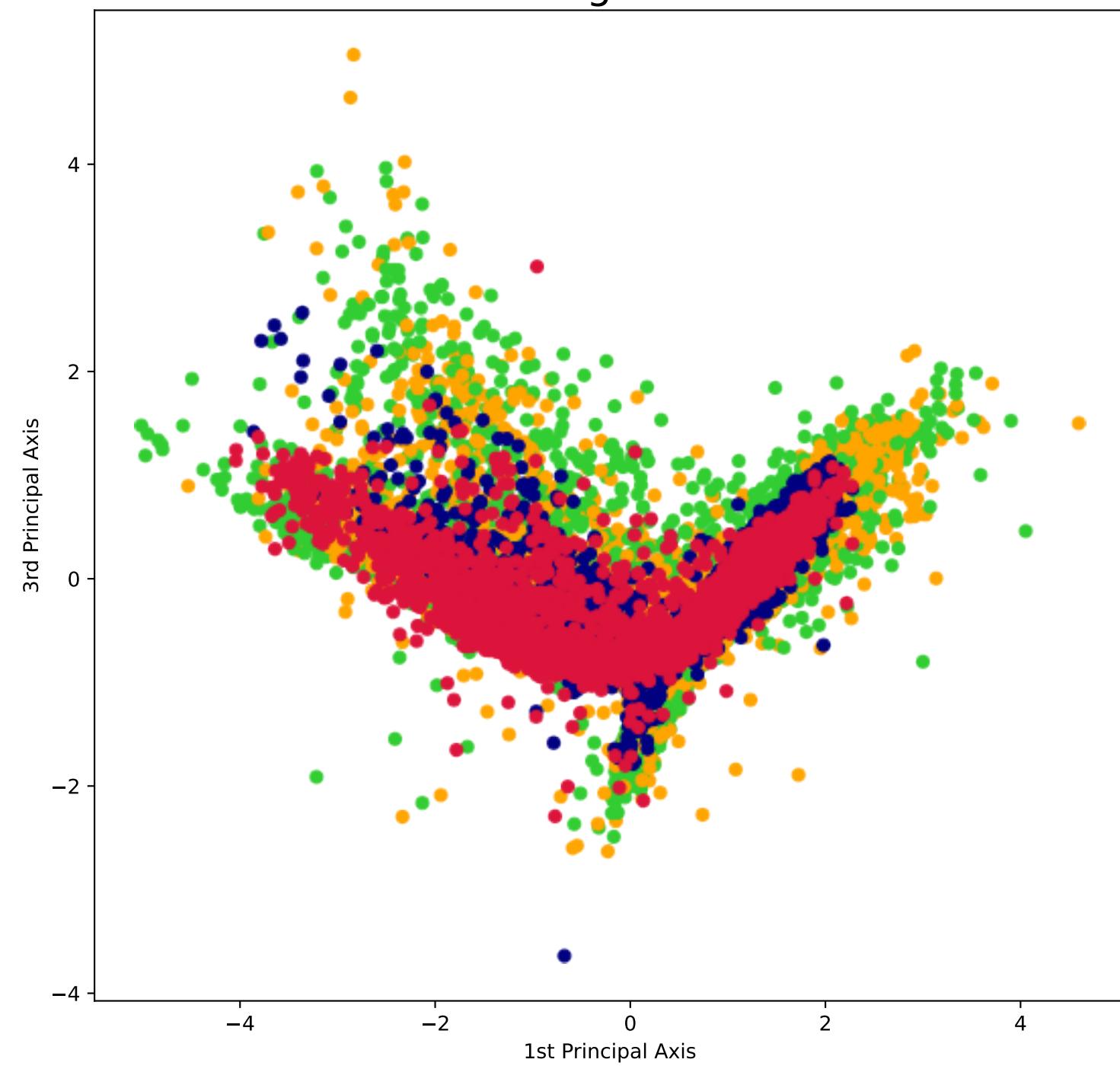


# Trial Number: 1, Phase: Eupnea Recovery

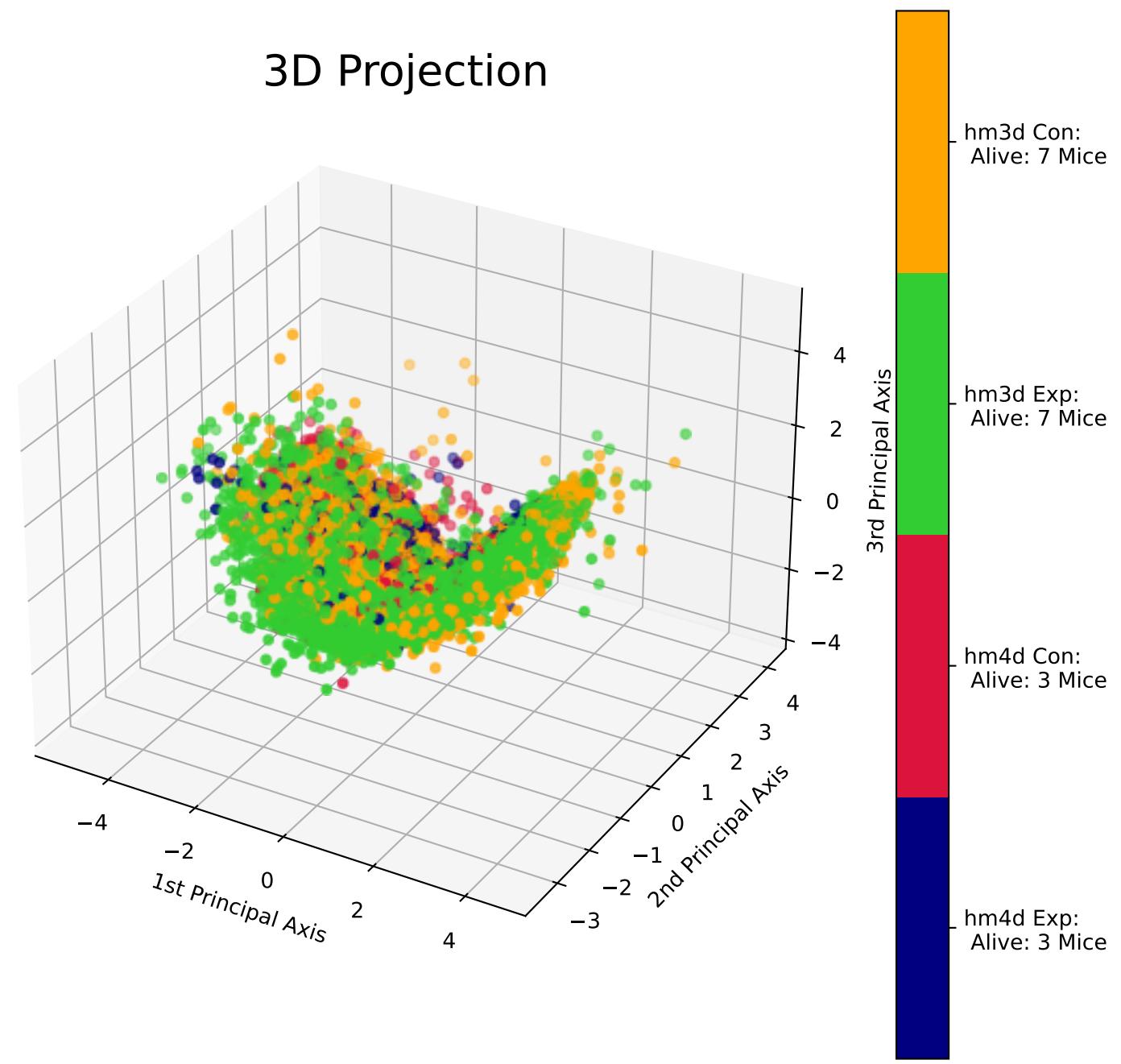
Angle 1



Angle 3

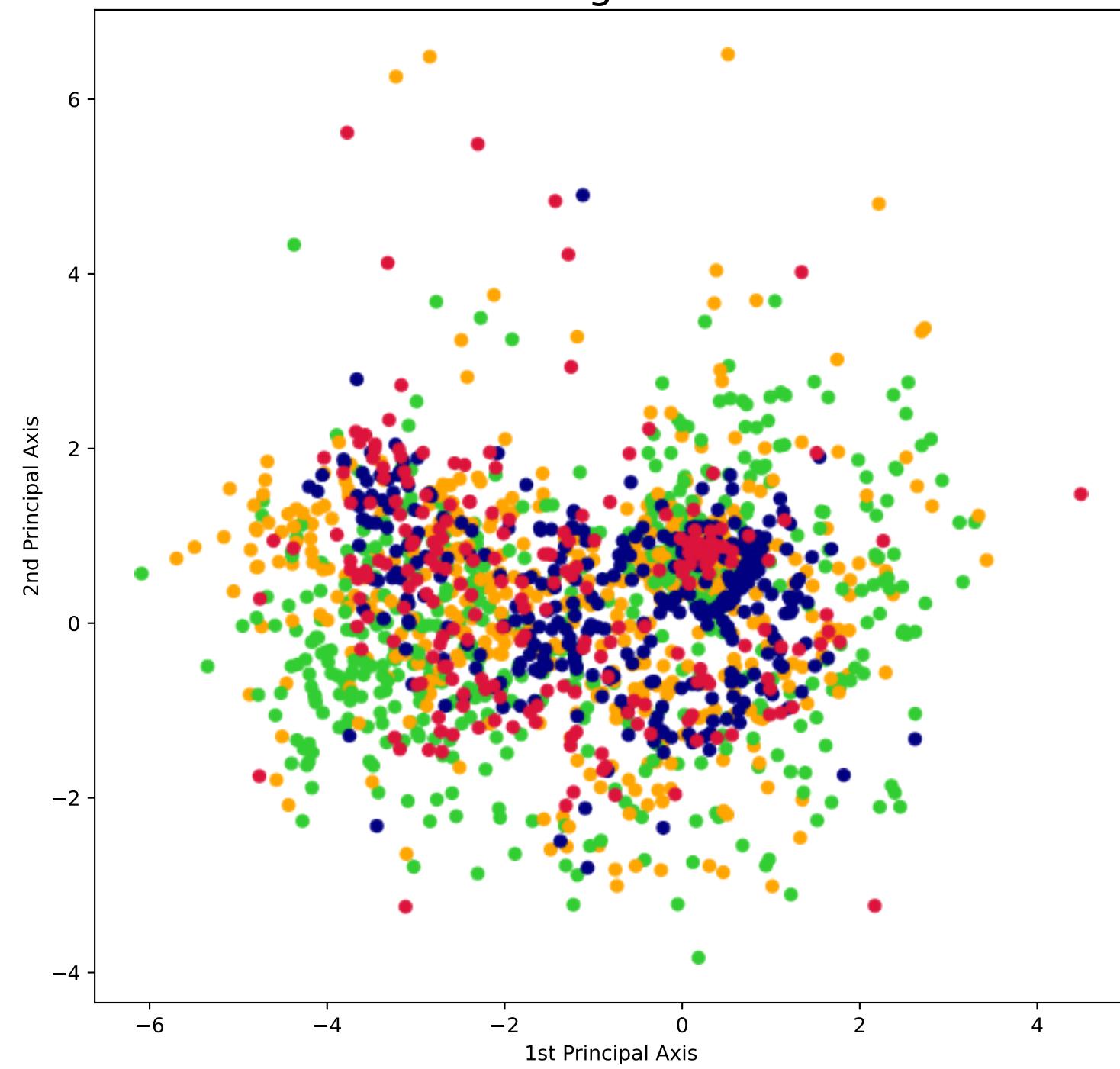


3D Projection

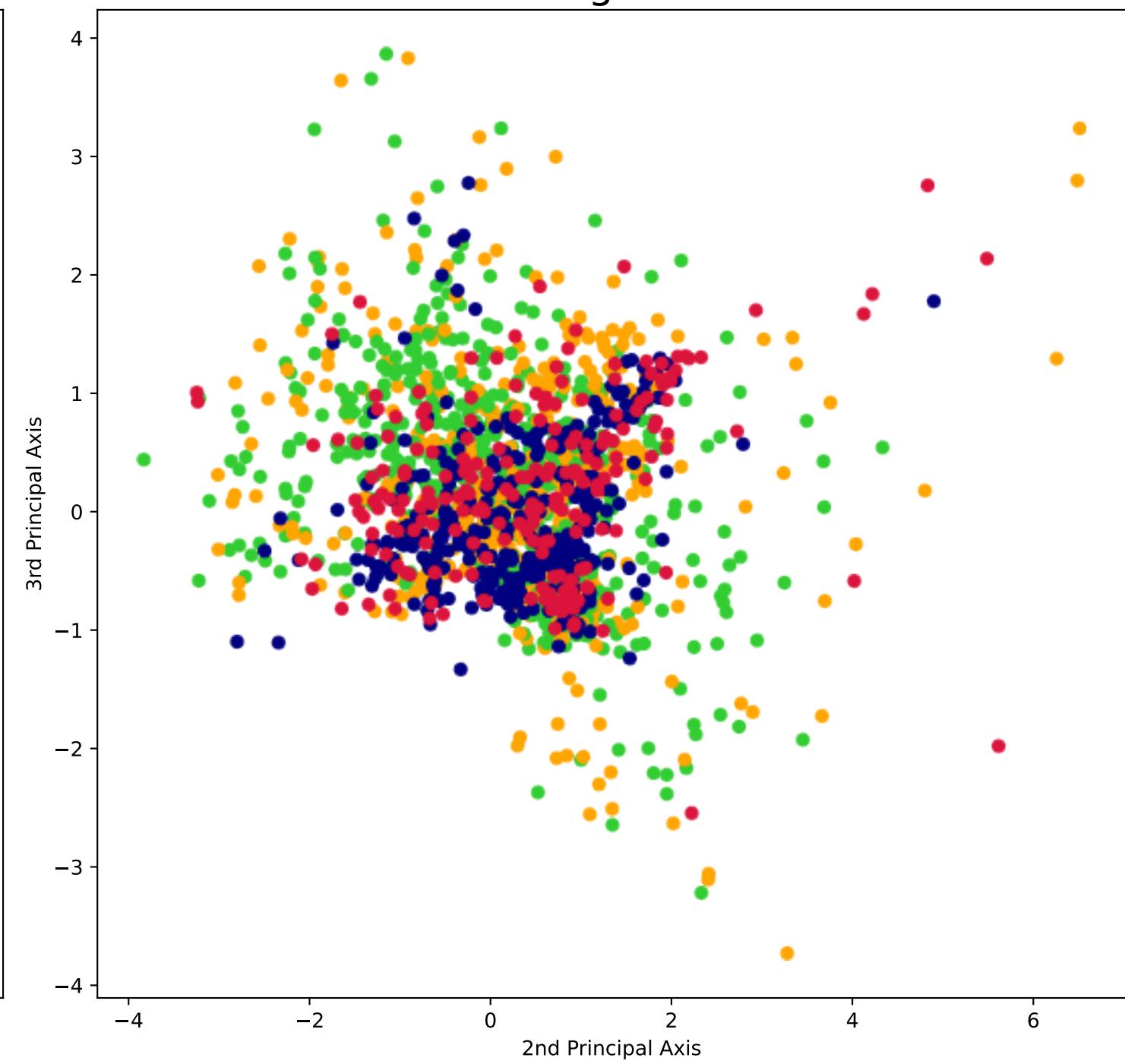


# Trial Number: 2, Phase: Trial Onset

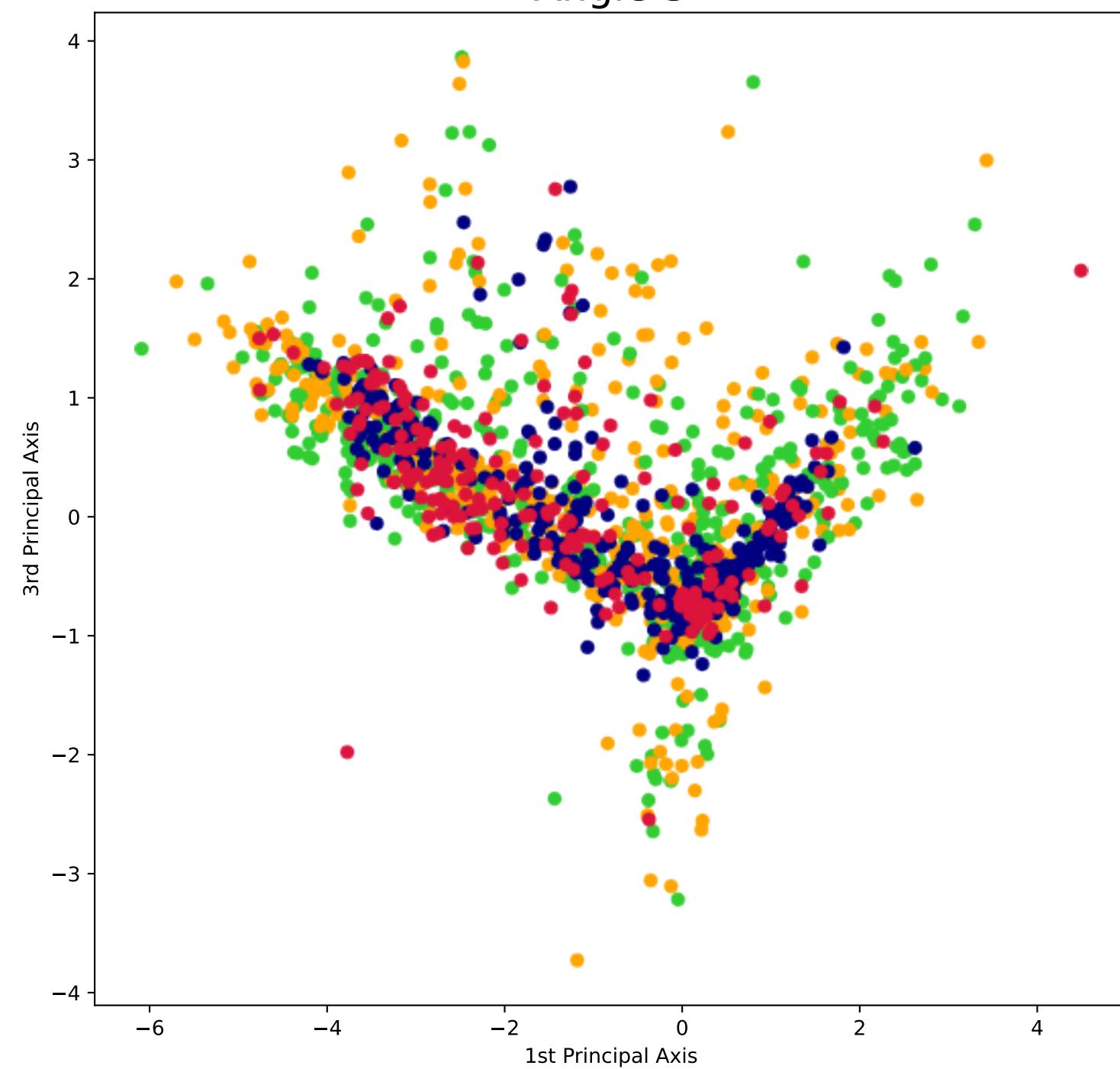
Angle 1



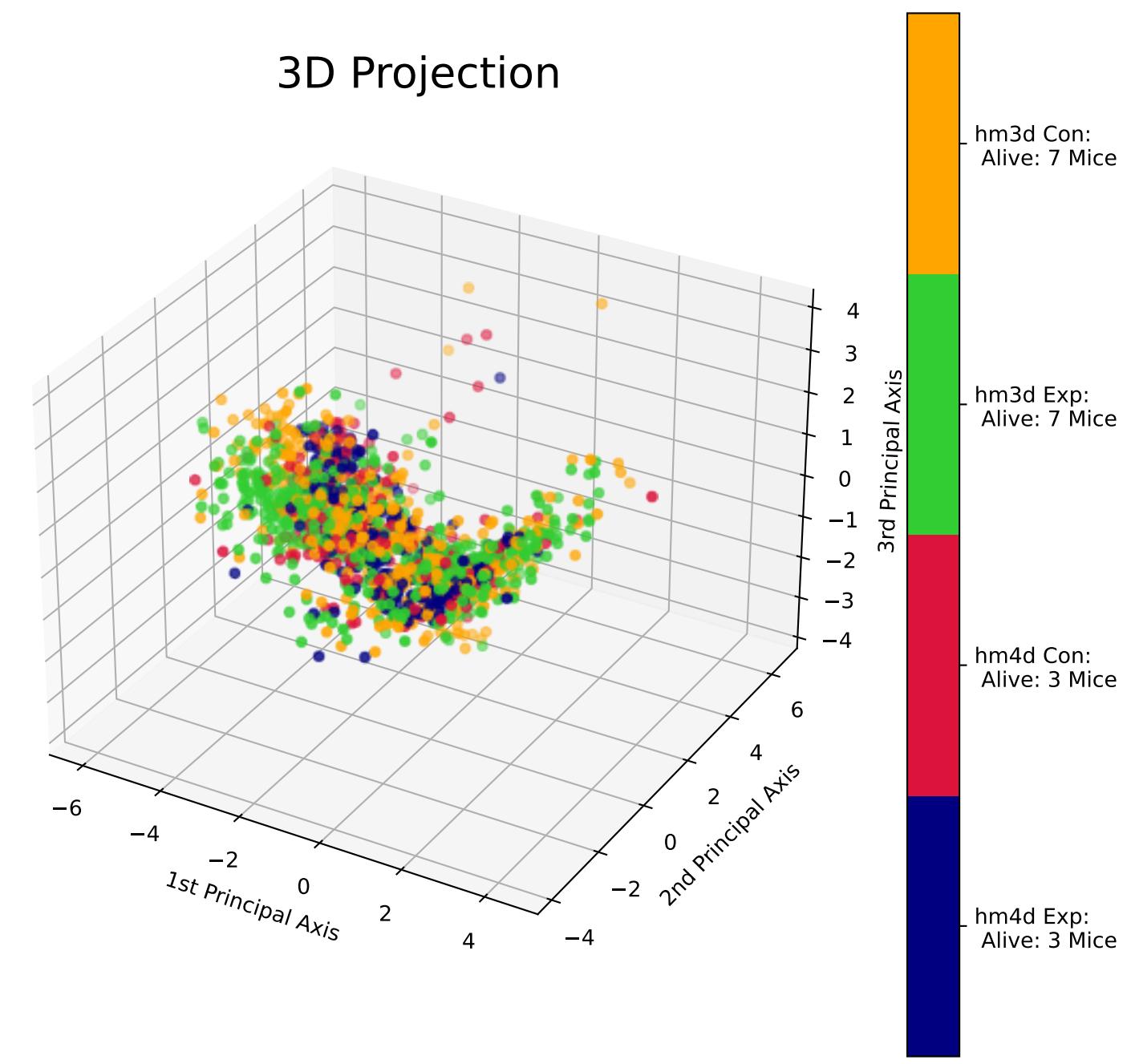
Angle 2



Angle 3



3D Projection



hm3d Con:  
Alive: 7 Mice

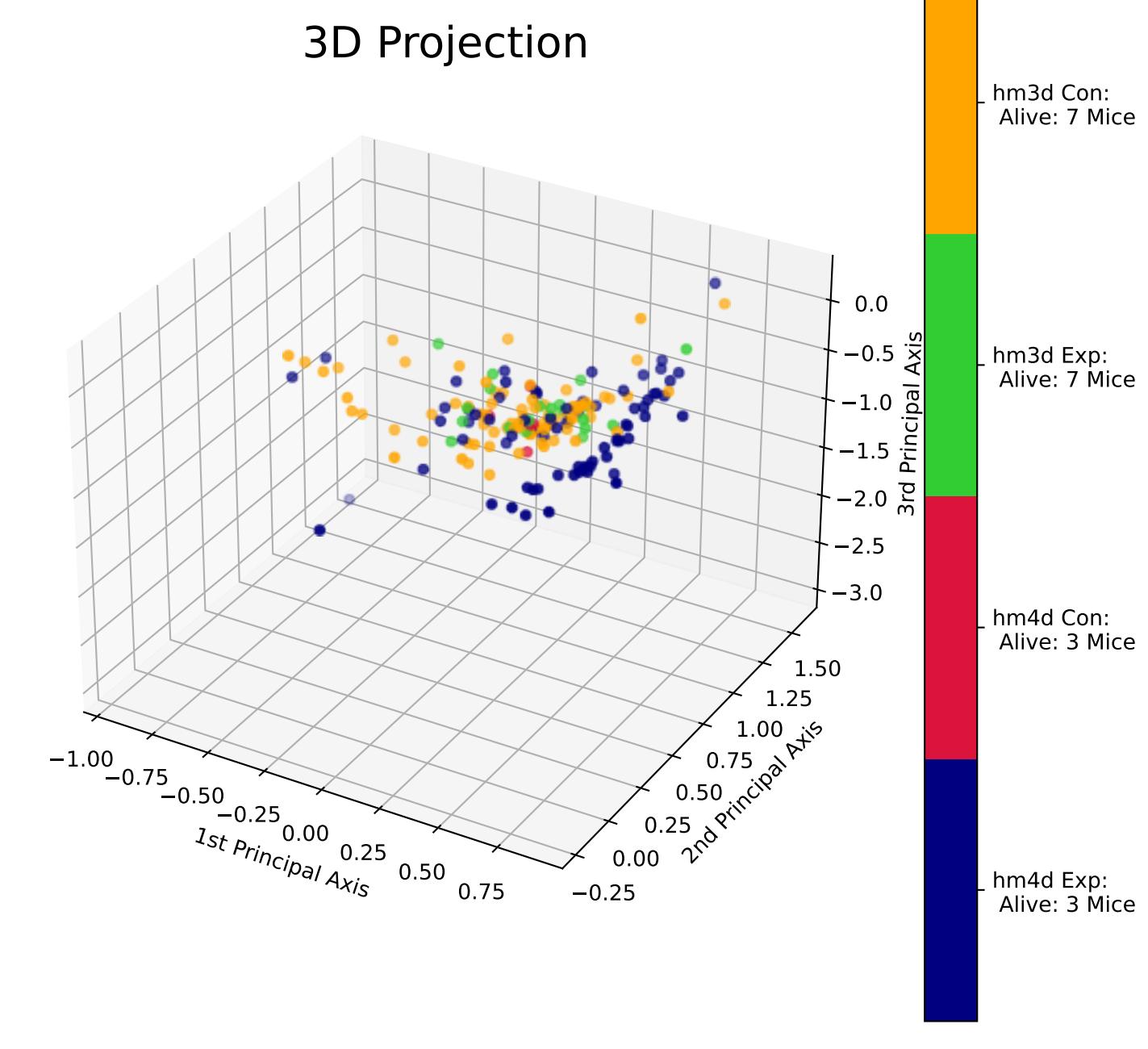
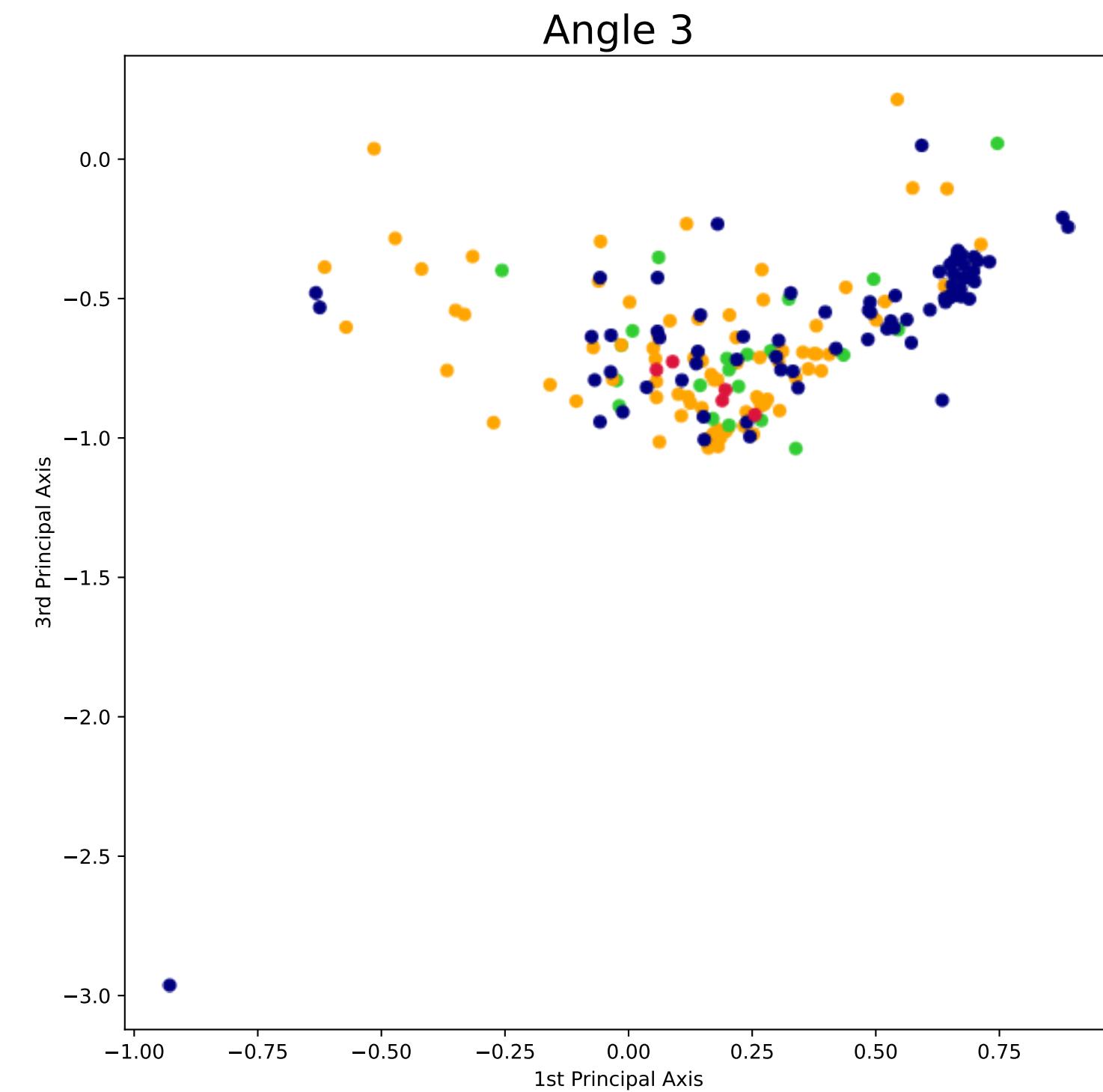
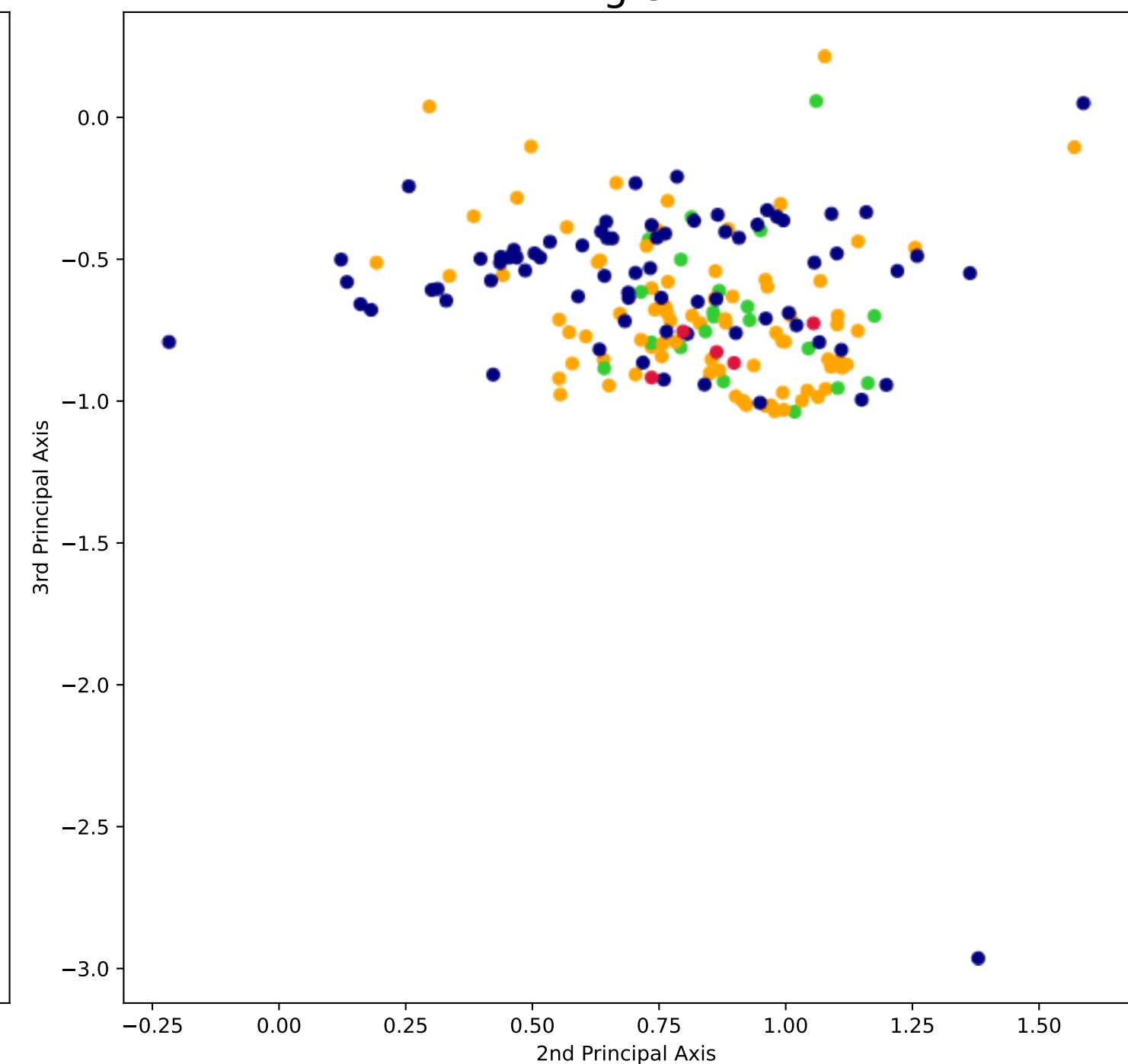
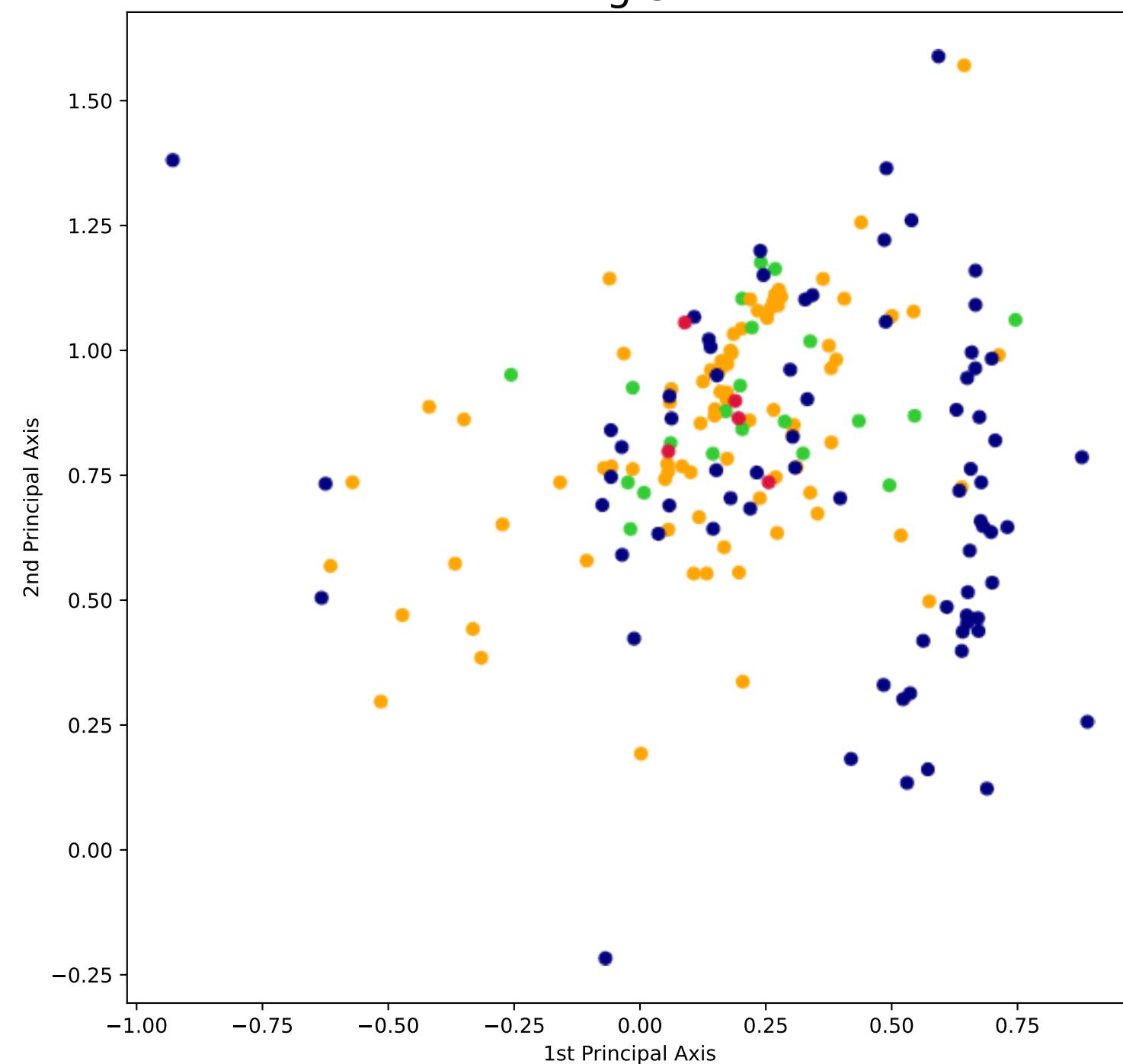
hm3d Exp:  
Alive: 7 Mice

hm4d Con:  
Alive: 3 Mice

hm4d Exp:  
Alive: 3 Mice

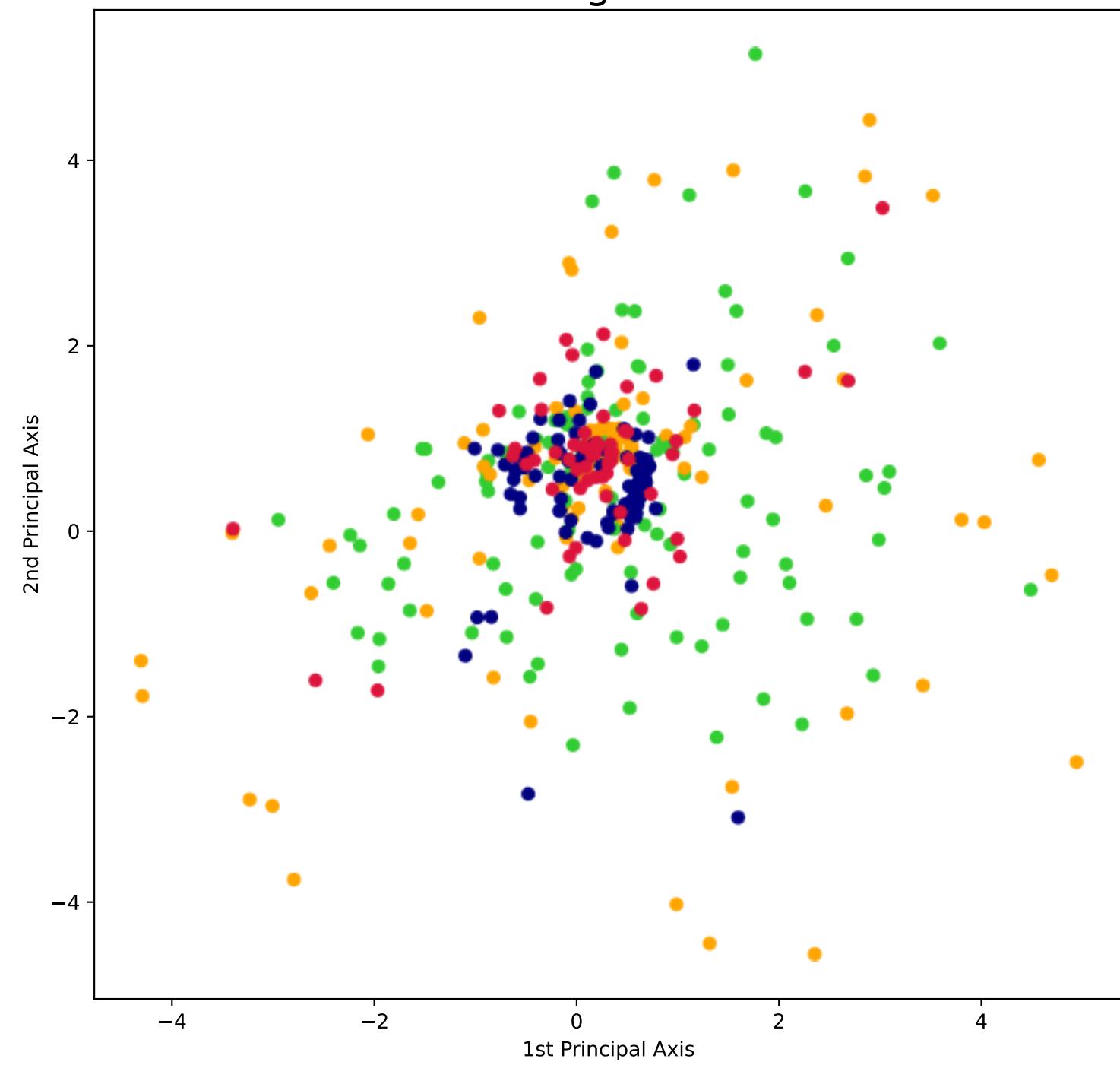
# Trial Number: 2, Phase: Apnea Starts

Angle 1                          Angle 2

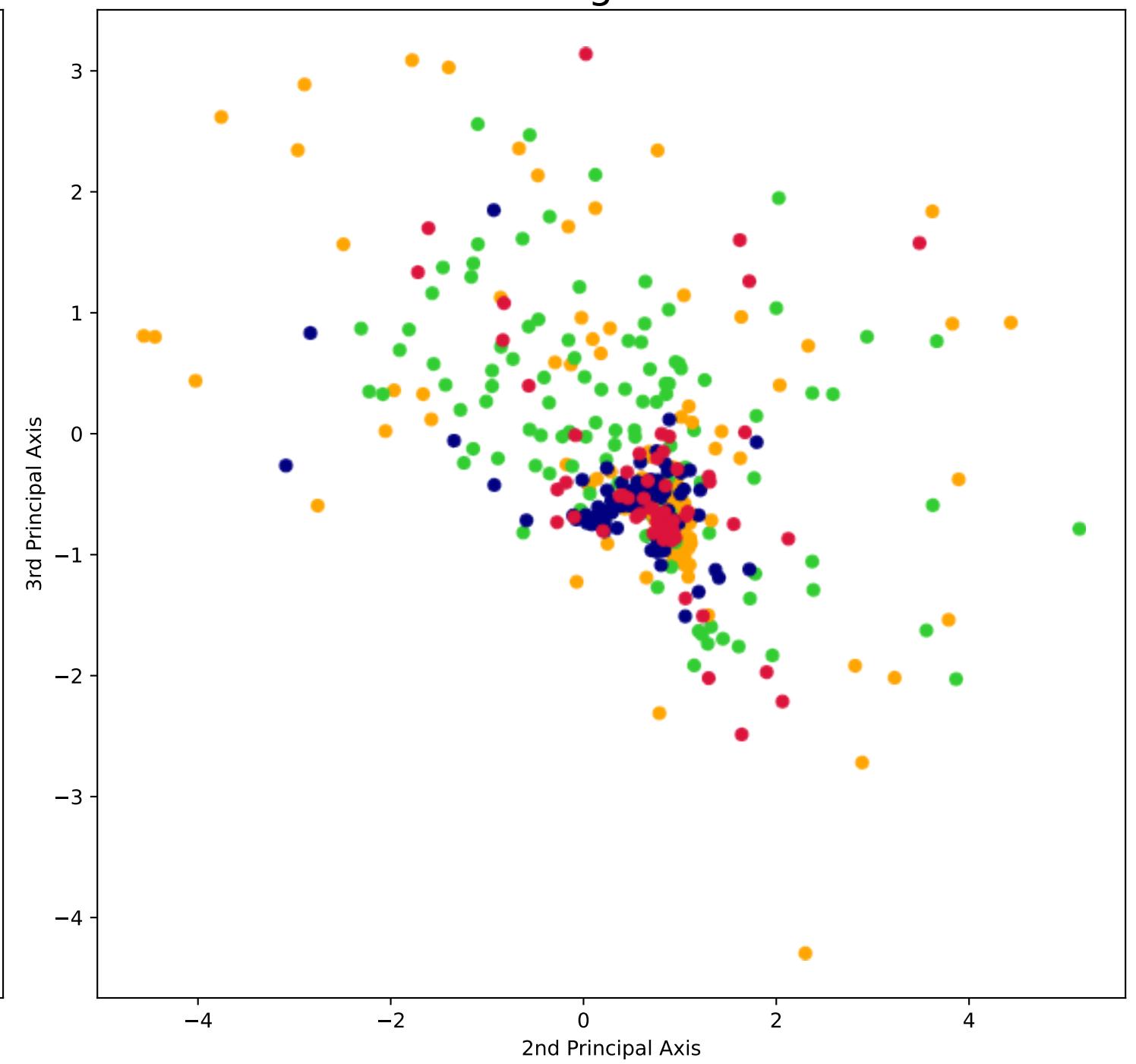


# Trial Number: 2, Phase: First Gasp

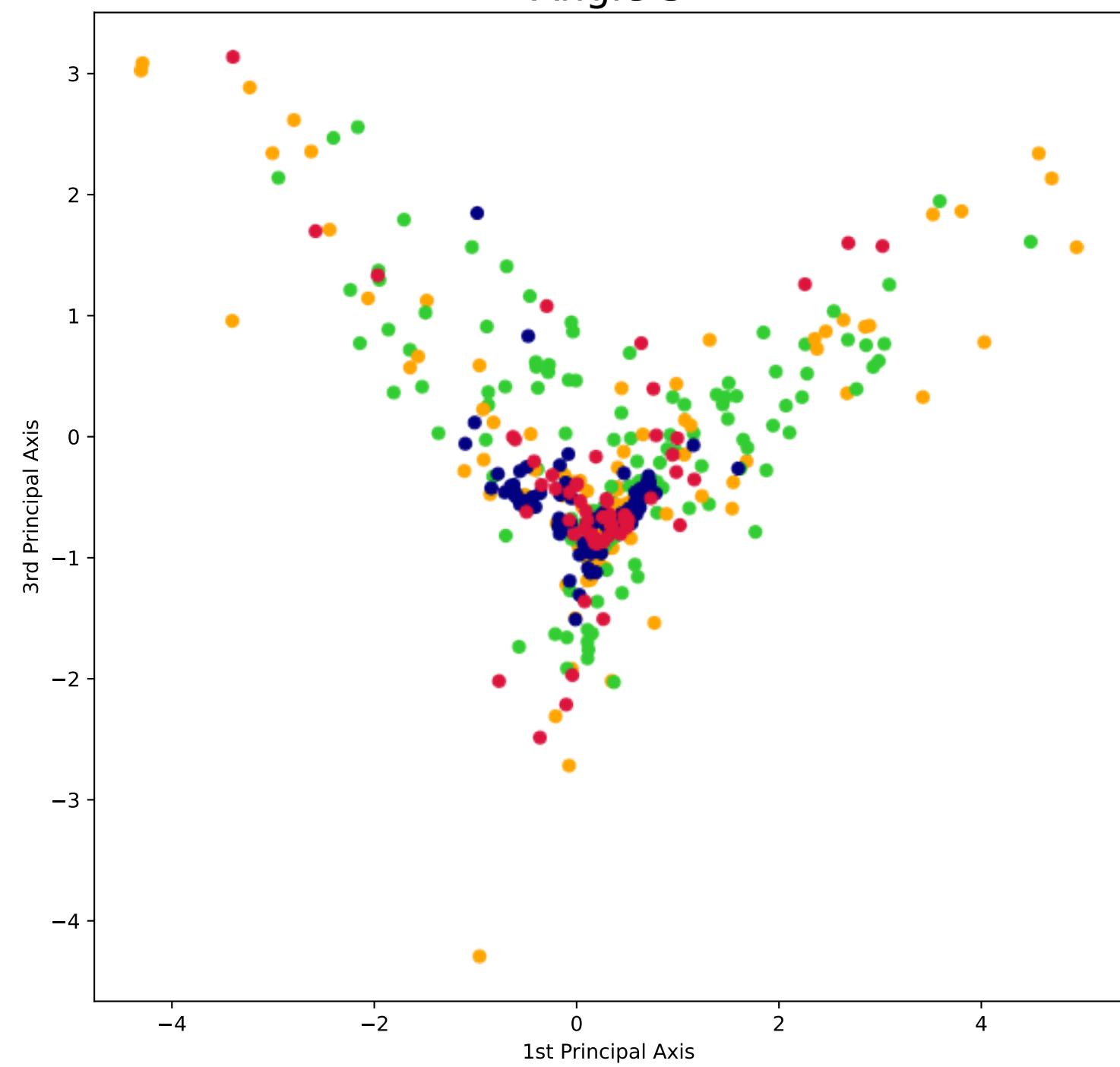
Angle 1



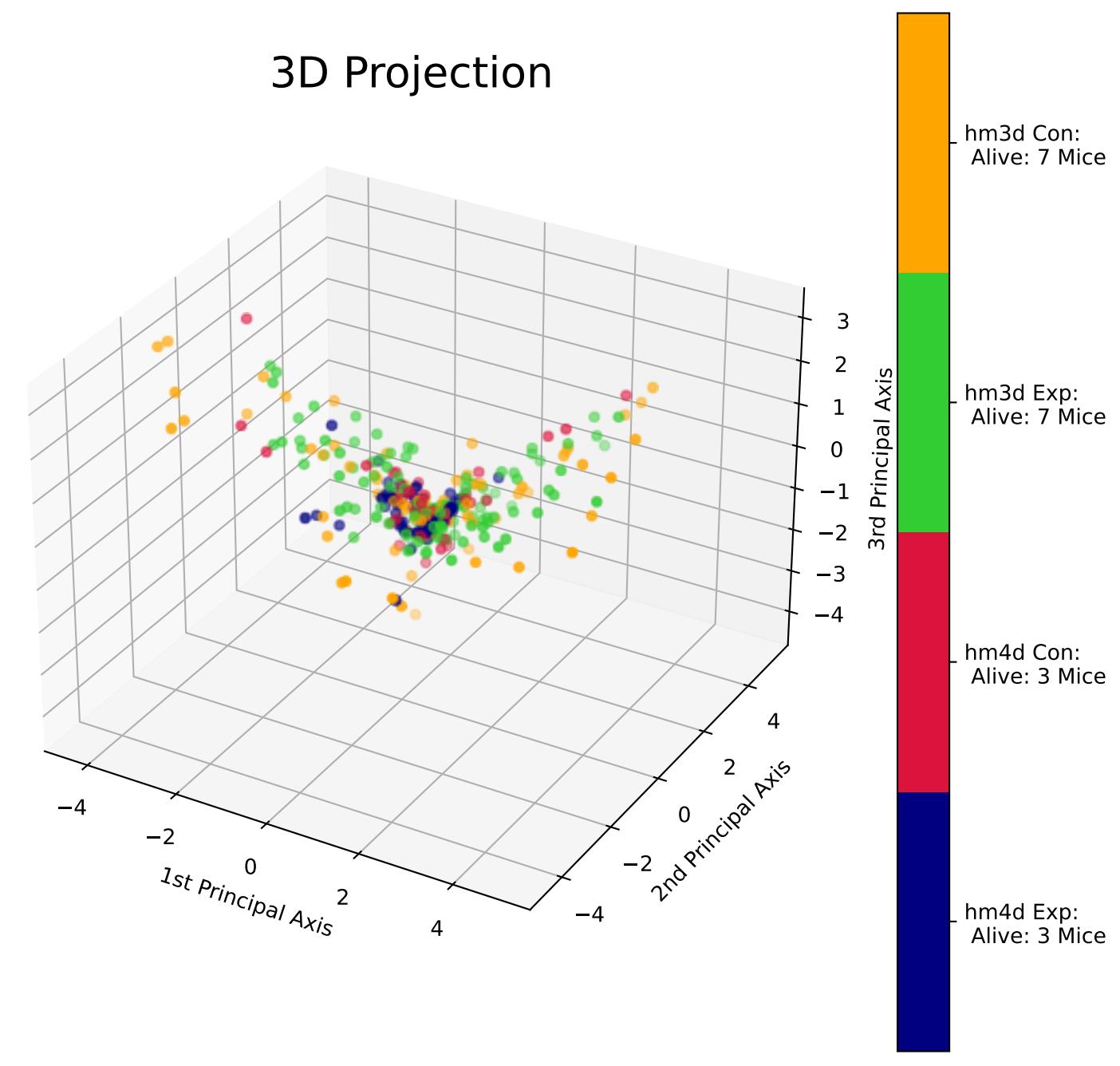
Angle 2



Angle 3

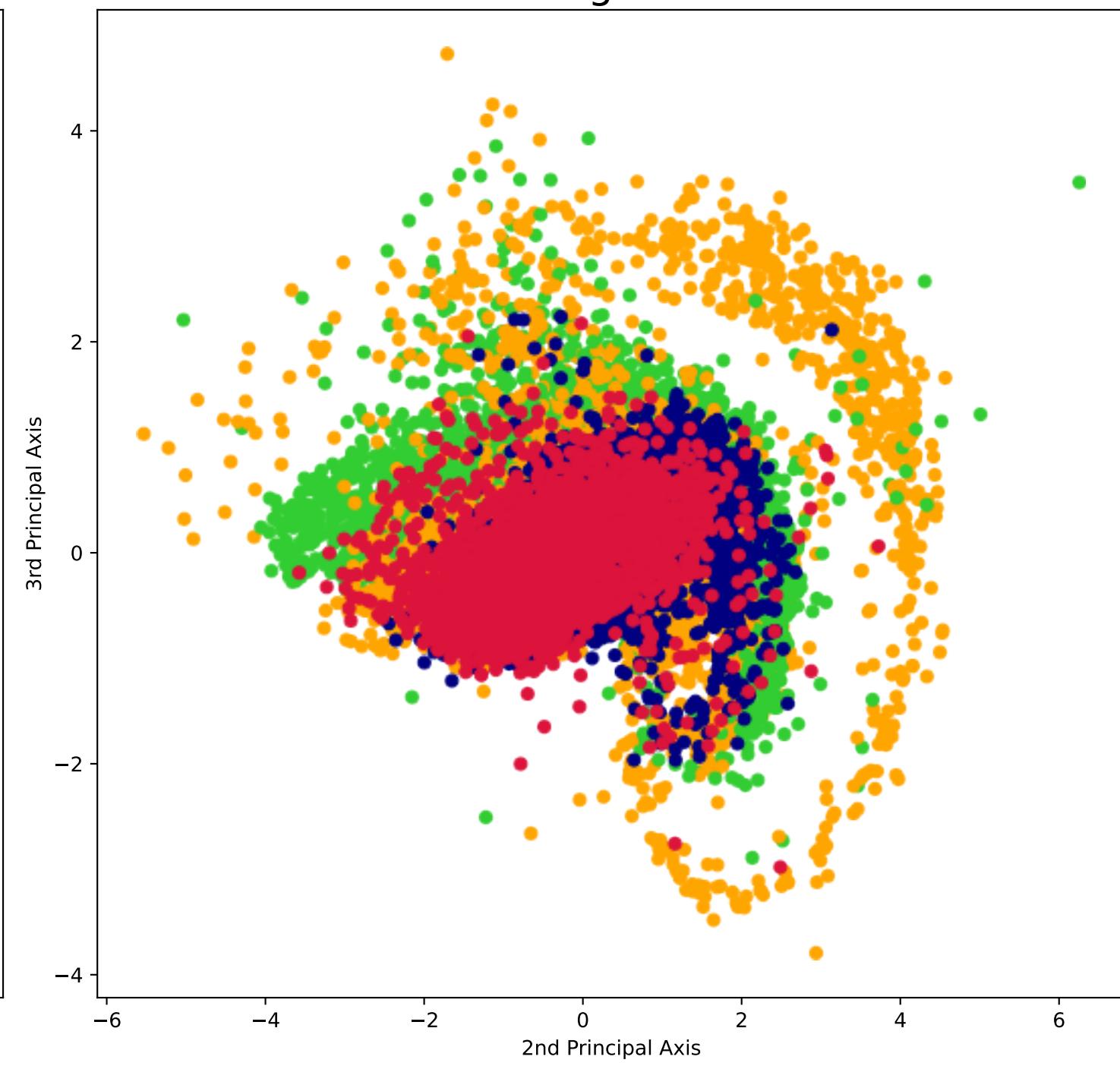
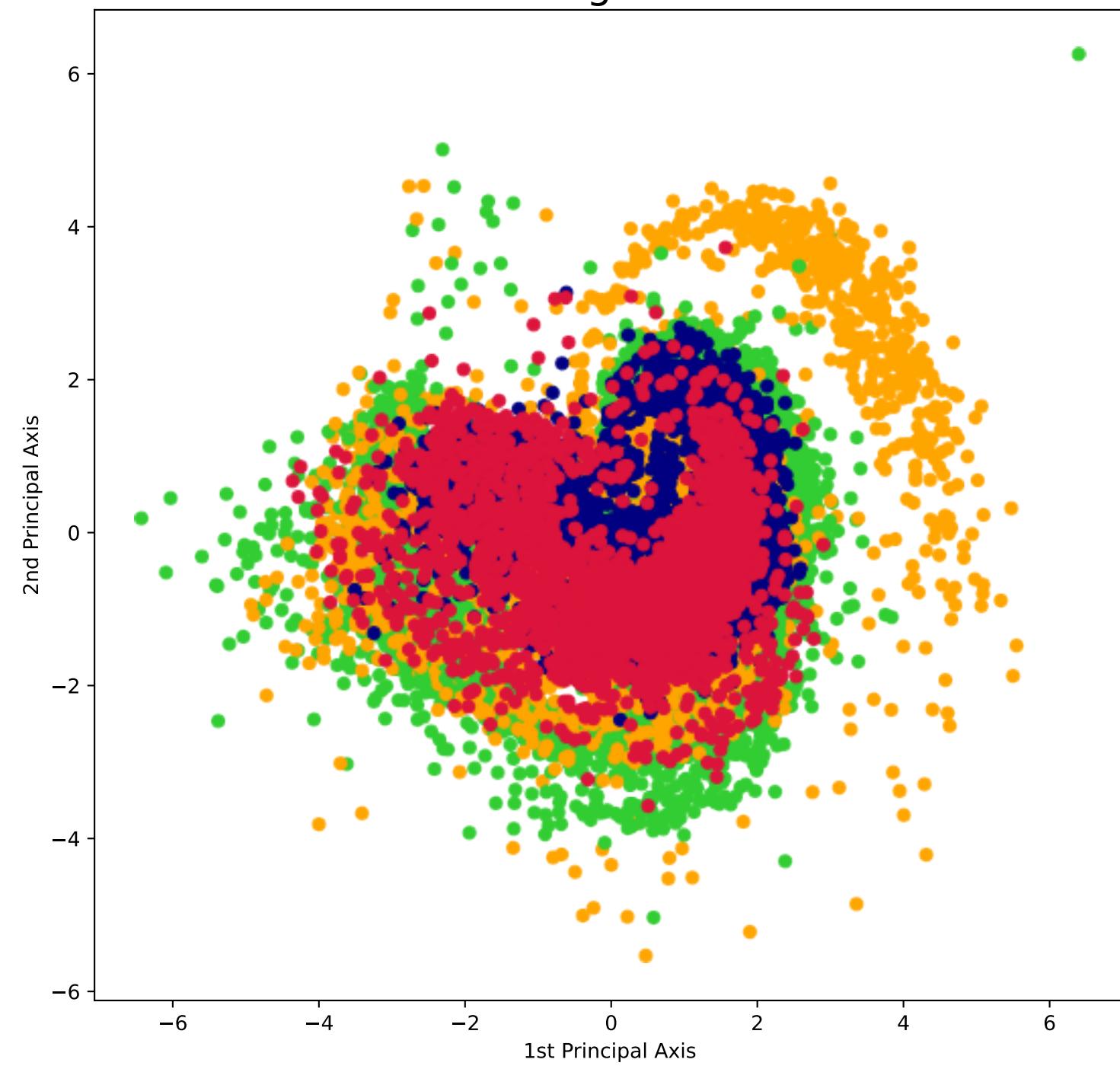


3D Projection

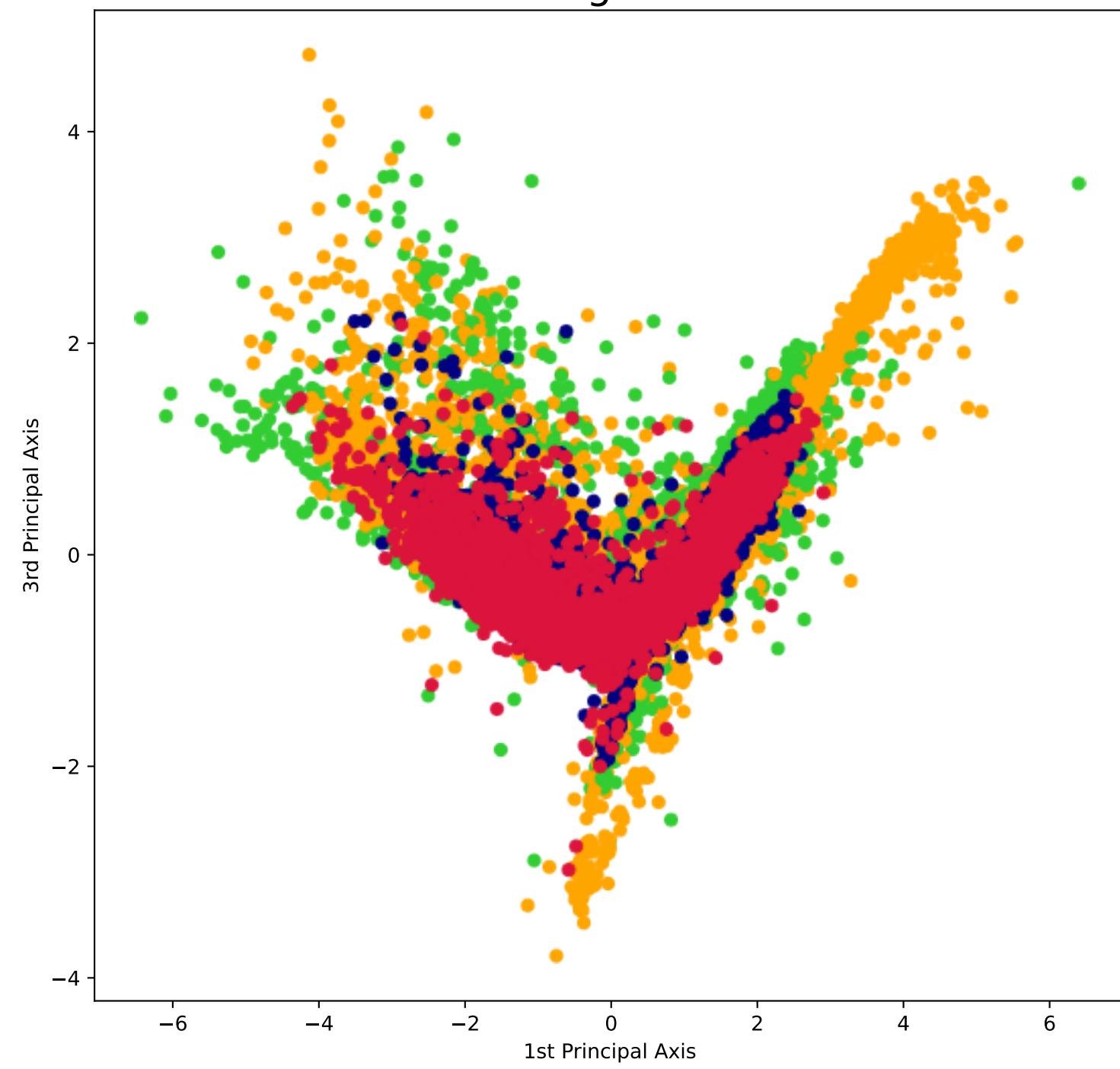


# Trial Number: 2, Phase: Eupnea Recovery

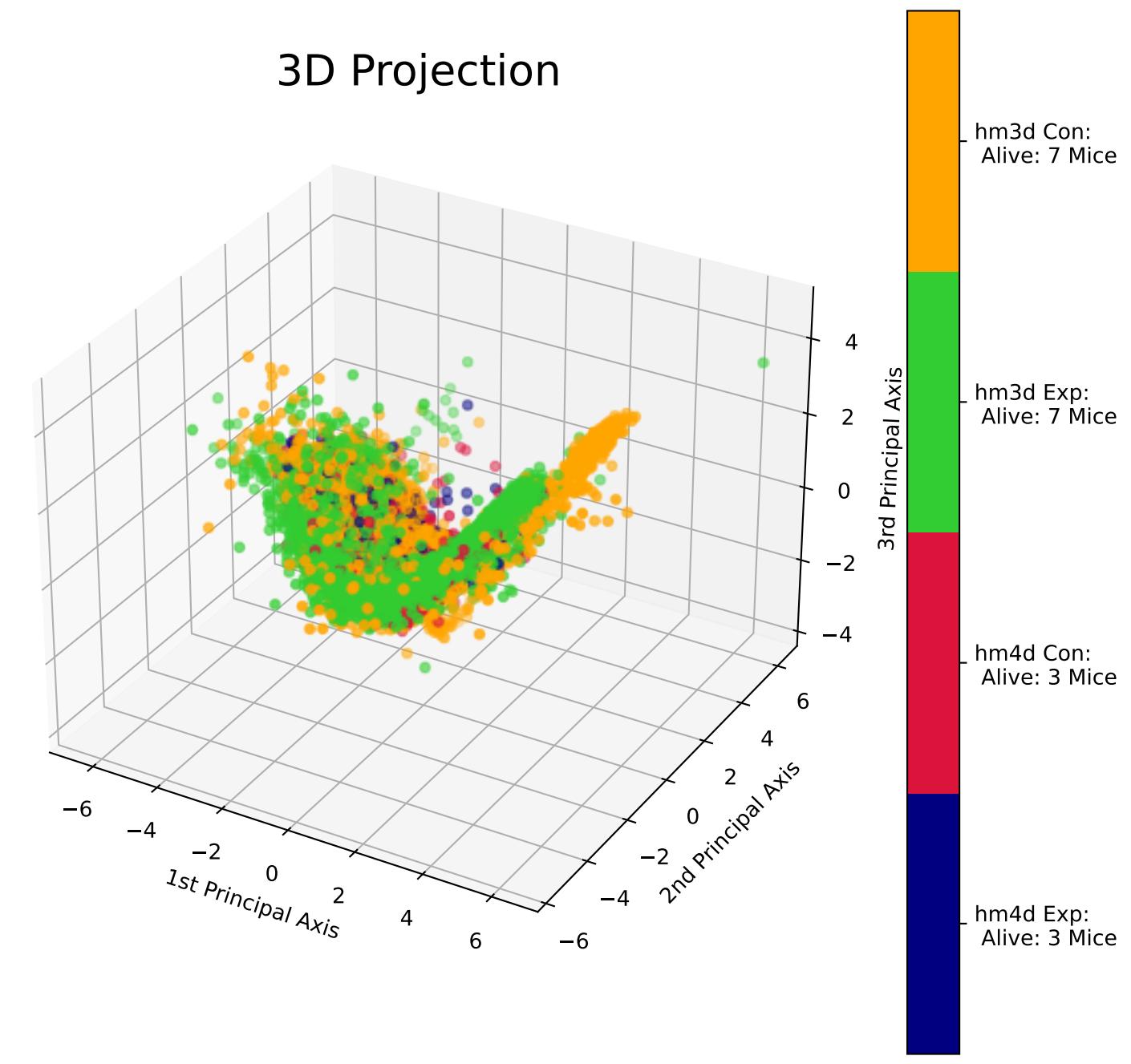
Angle 1



Angle 3

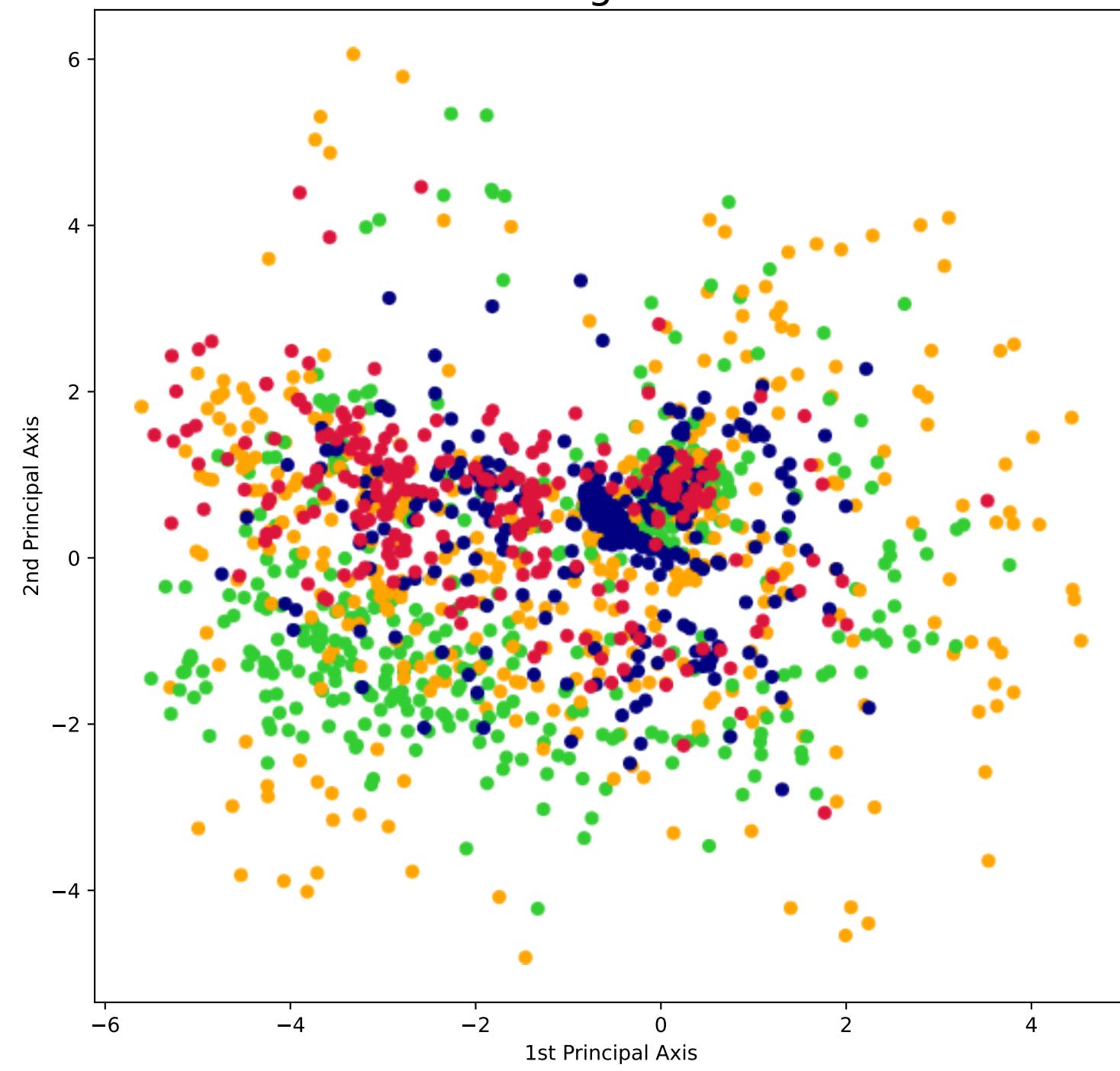


3D Projection

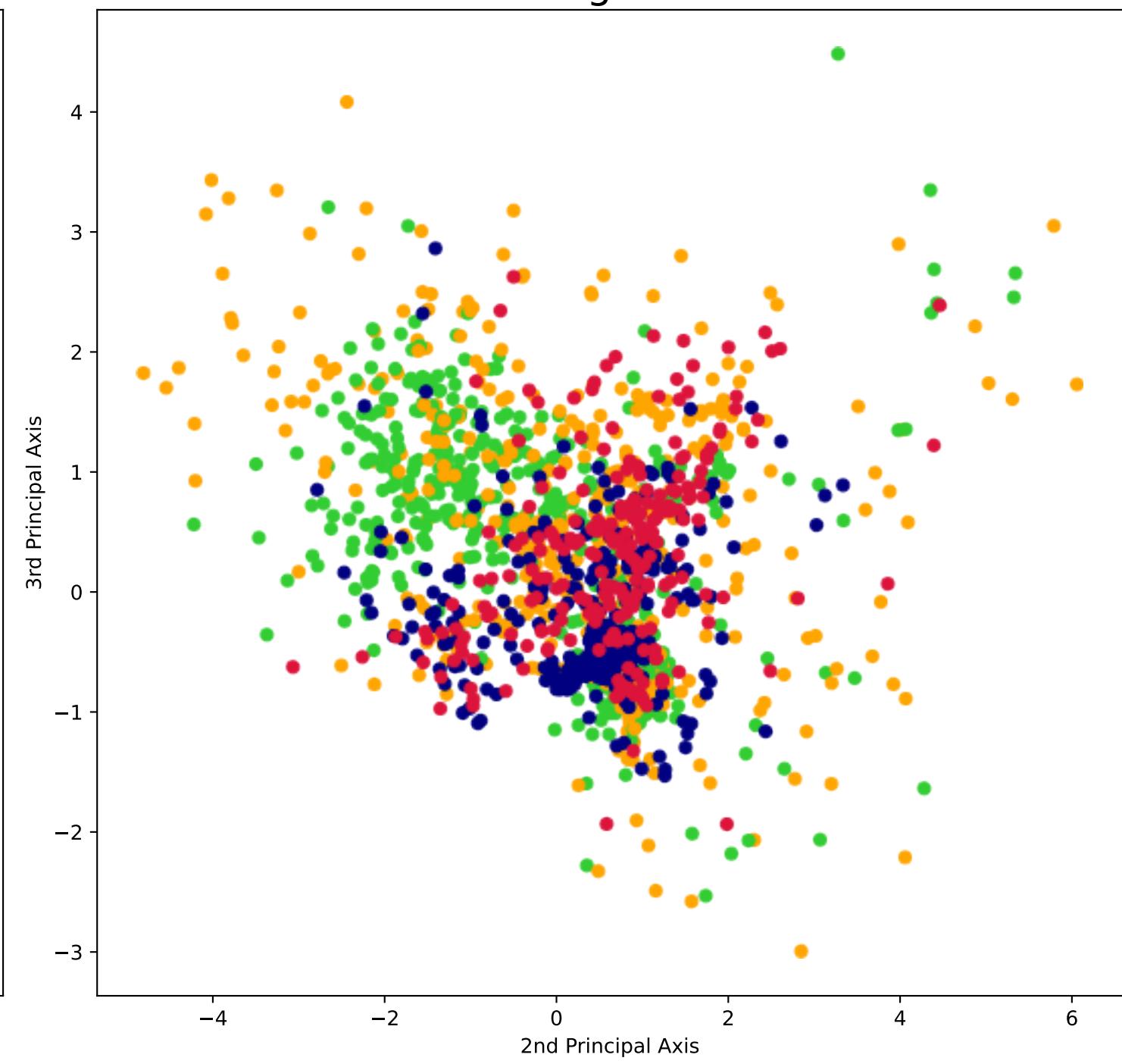


# Trial Number: 3, Phase: Trial Onset

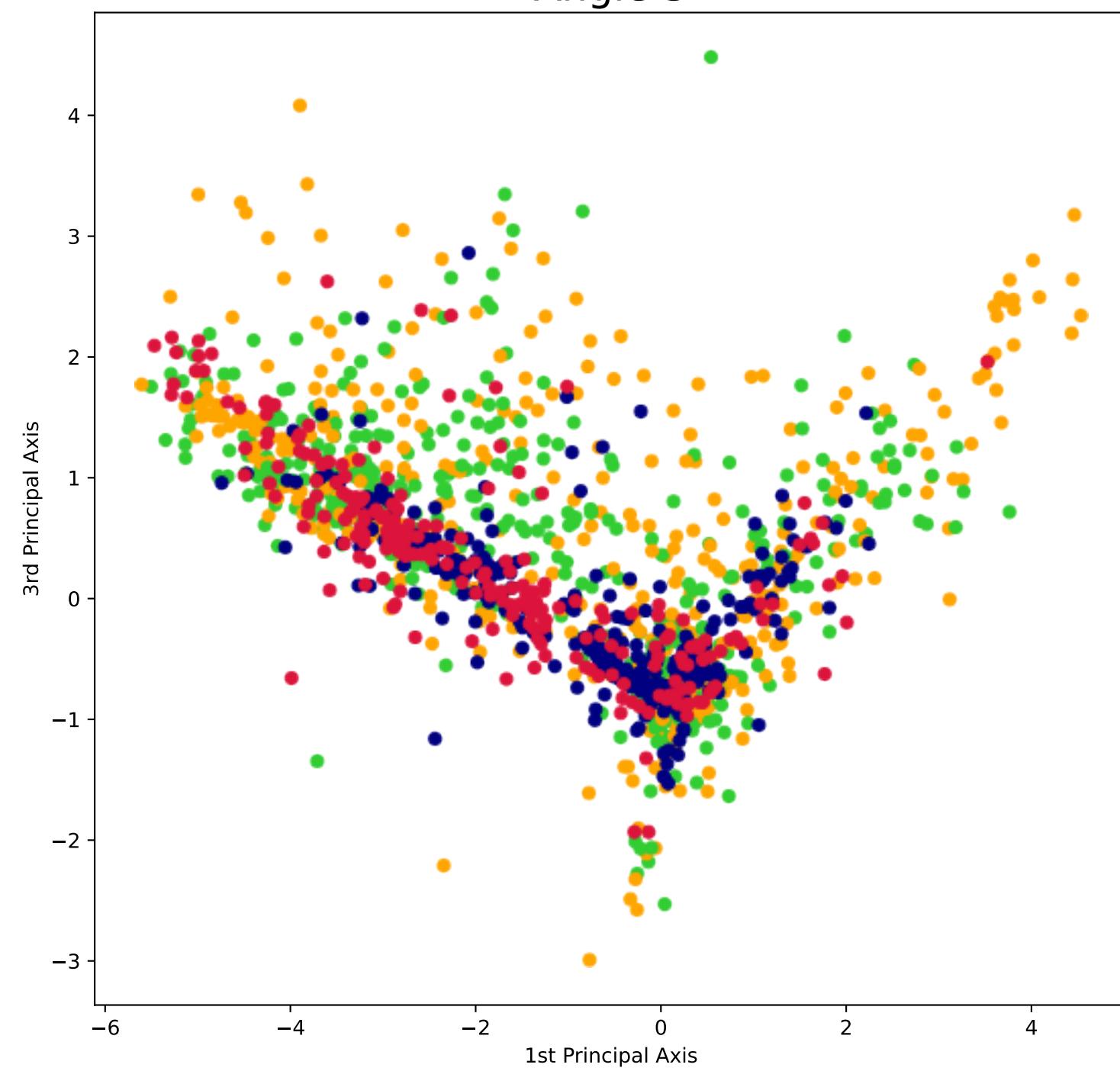
Angle 1



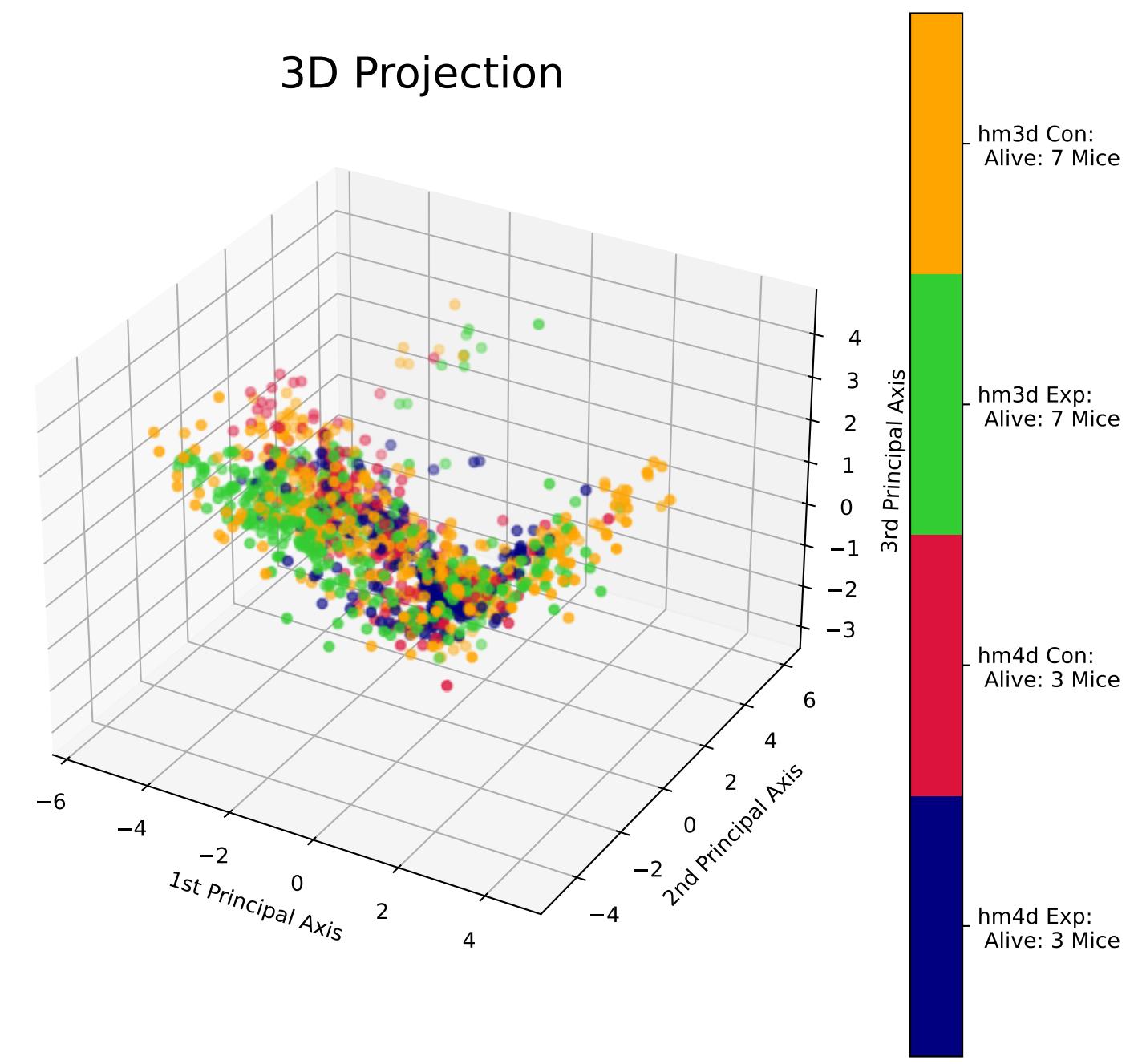
Angle 2



Angle 3

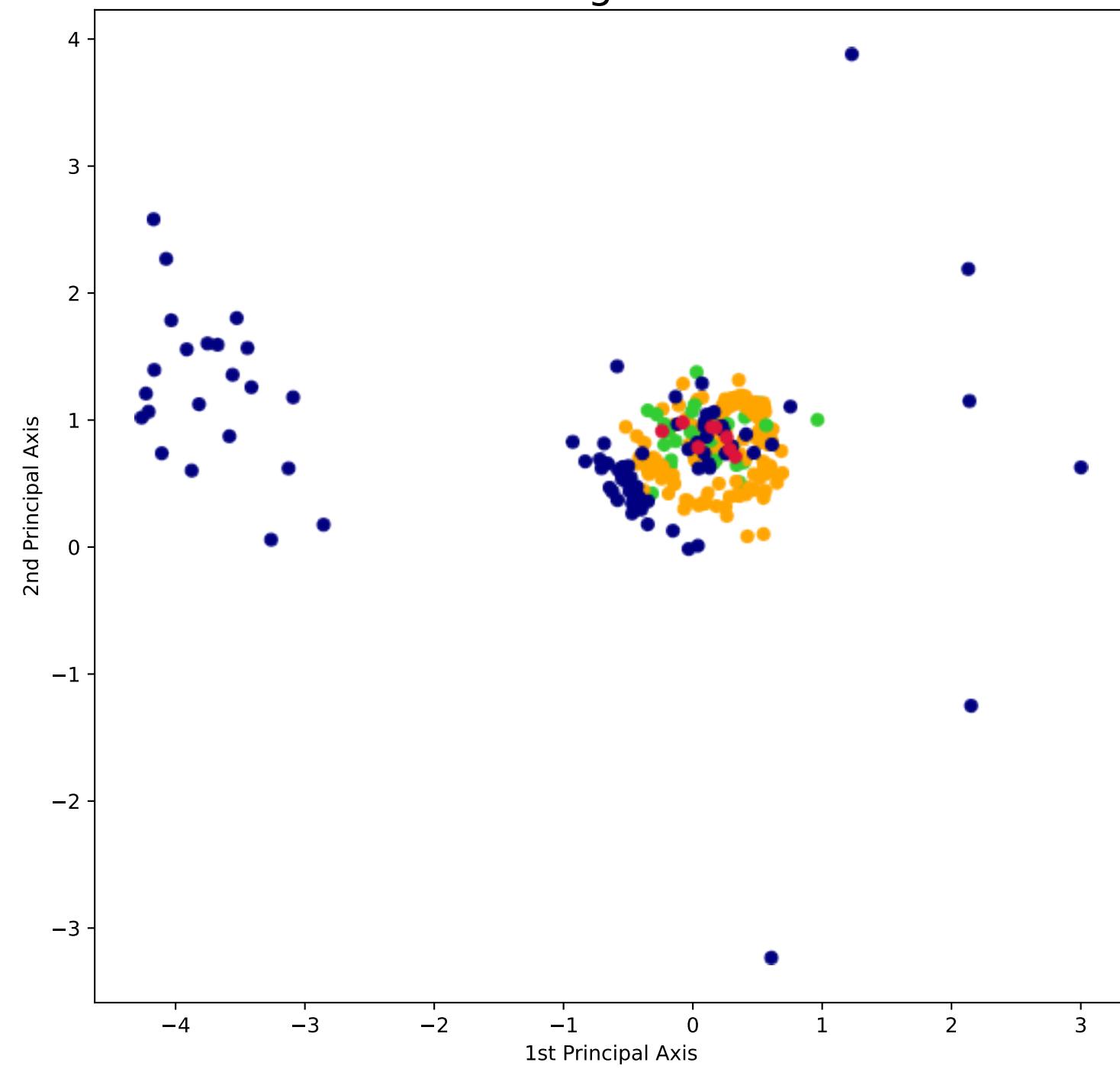


3D Projection

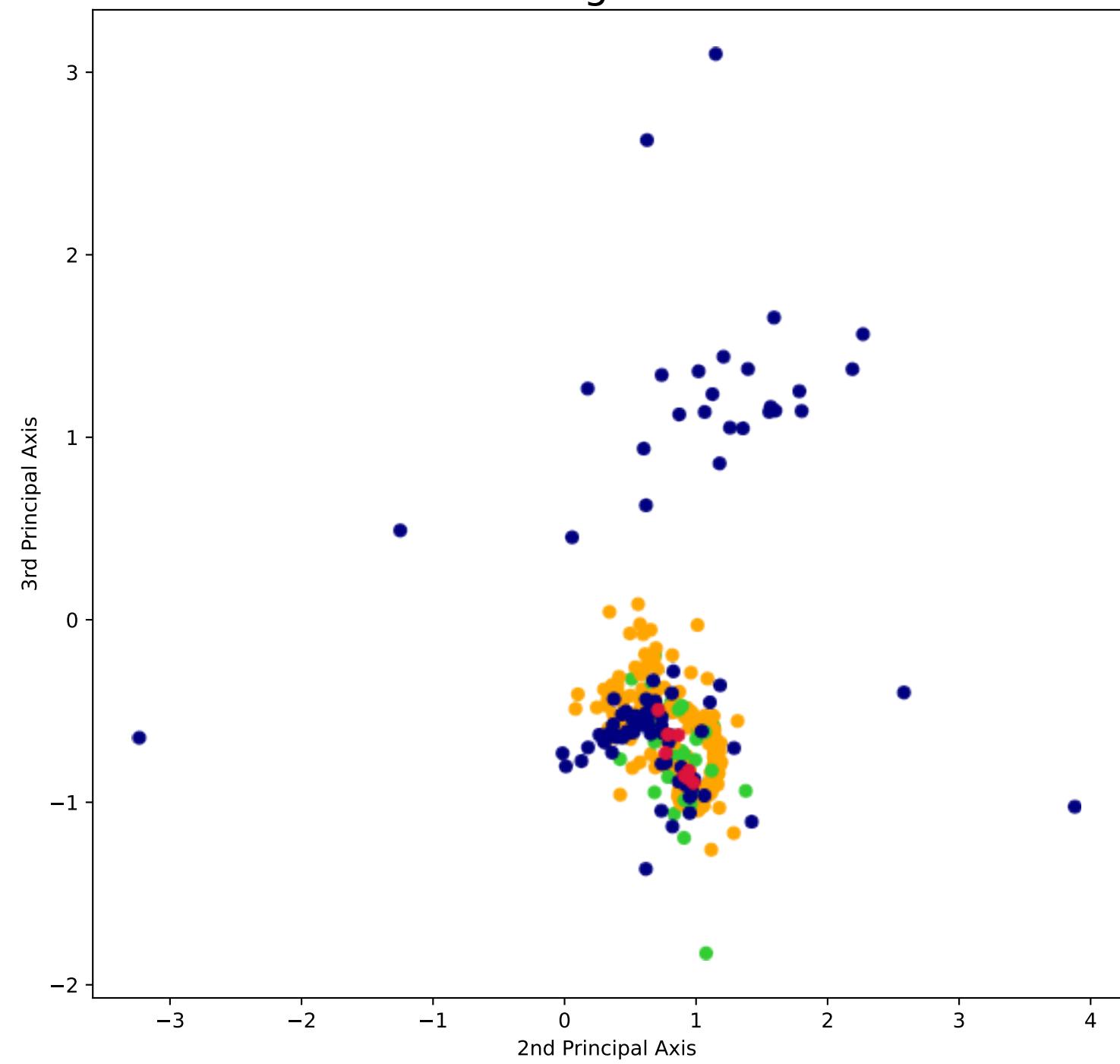


# Trial Number: 3, Phase: Apnea Starts

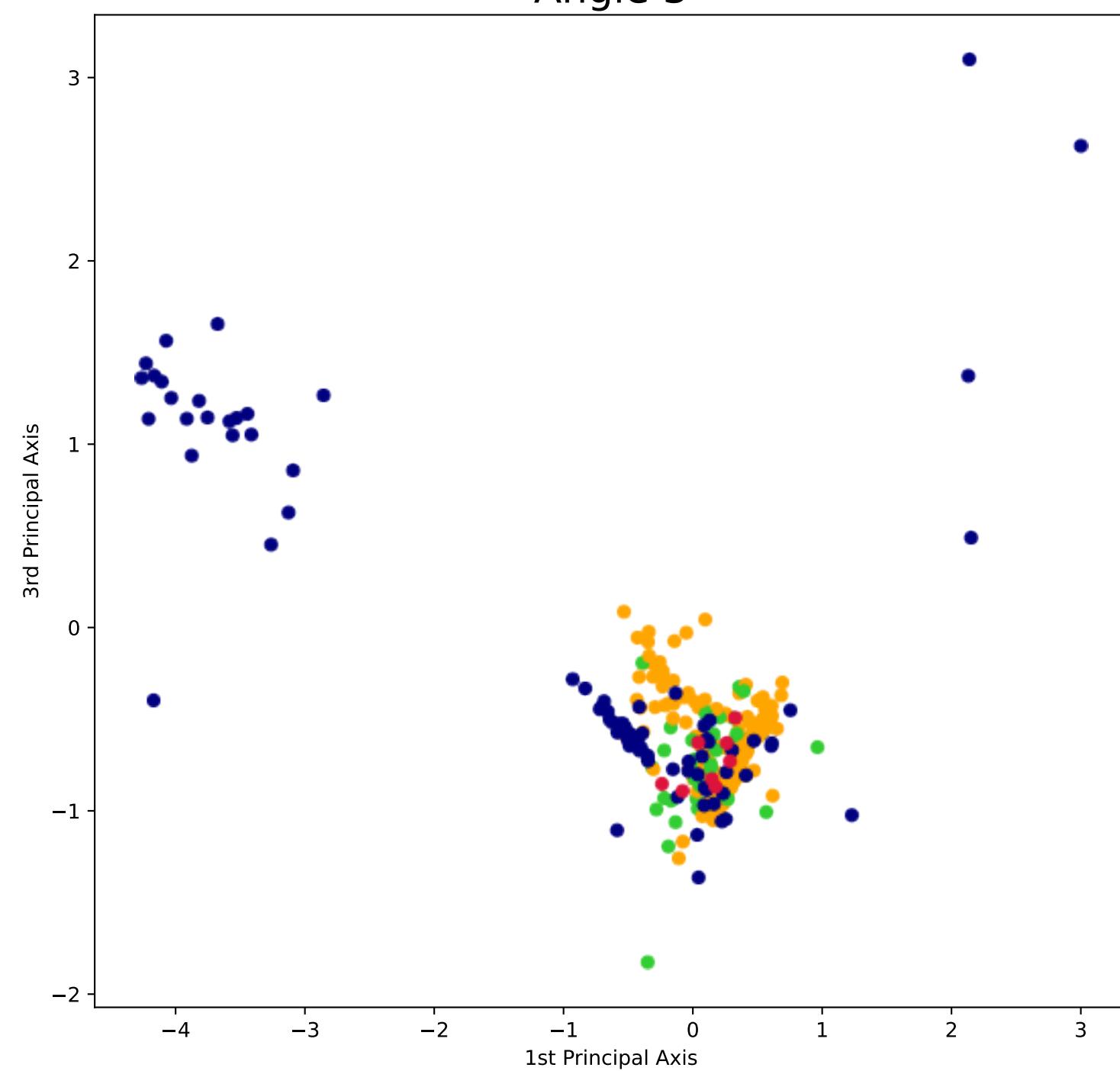
Angle 1



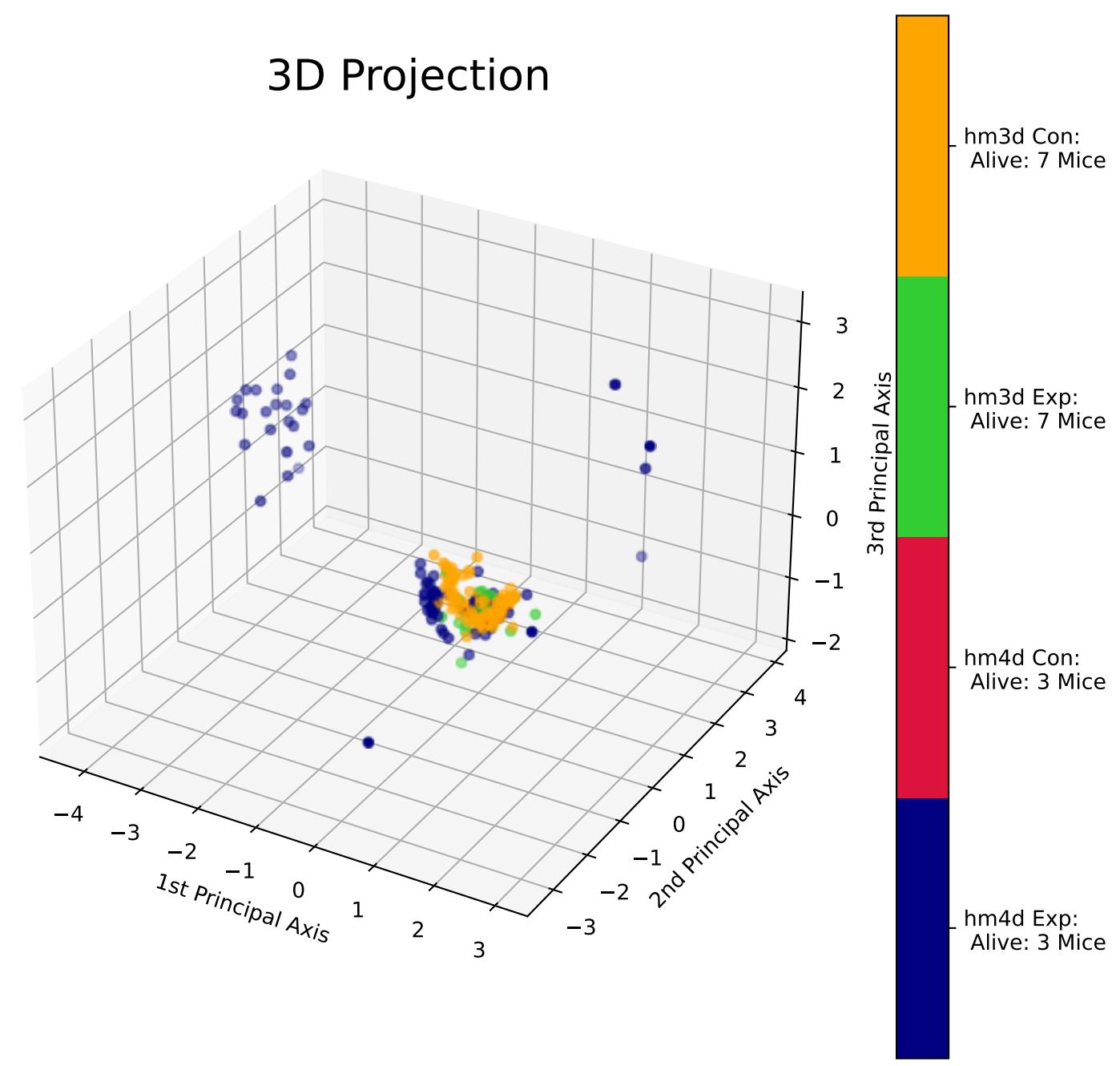
Angle 2



Angle 3

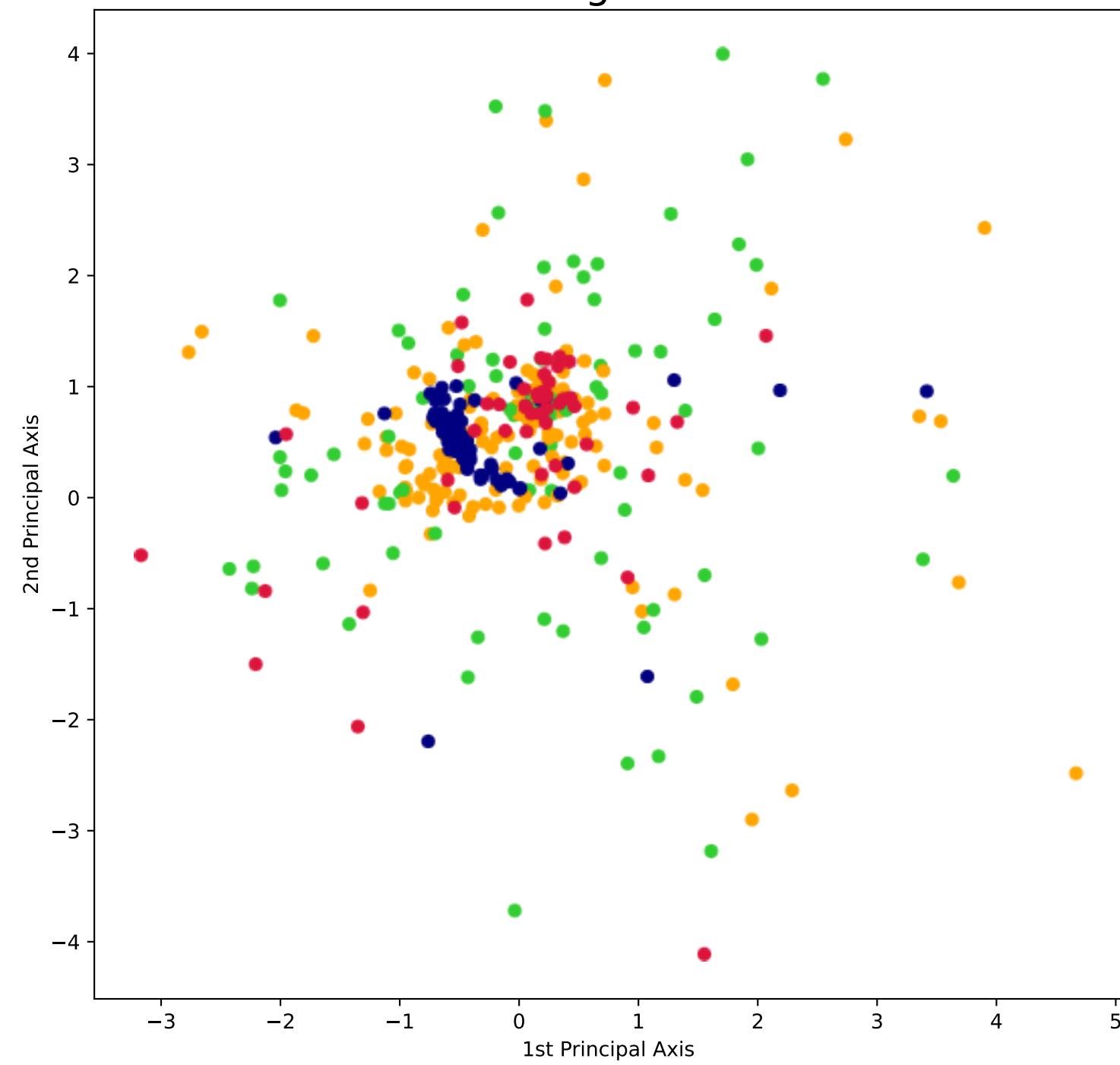


3D Projection

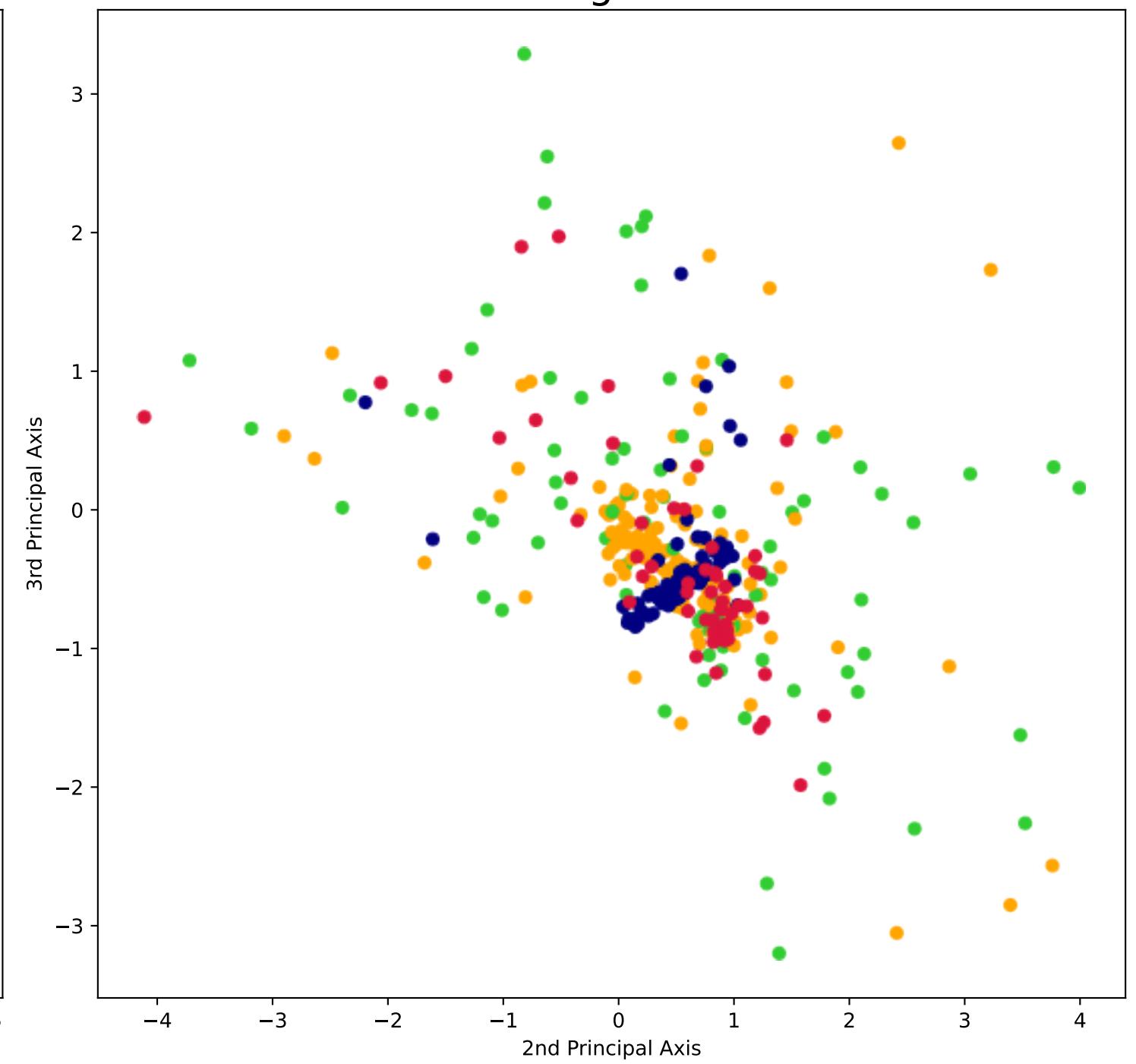


# Trial Number: 3, Phase: First Gasp

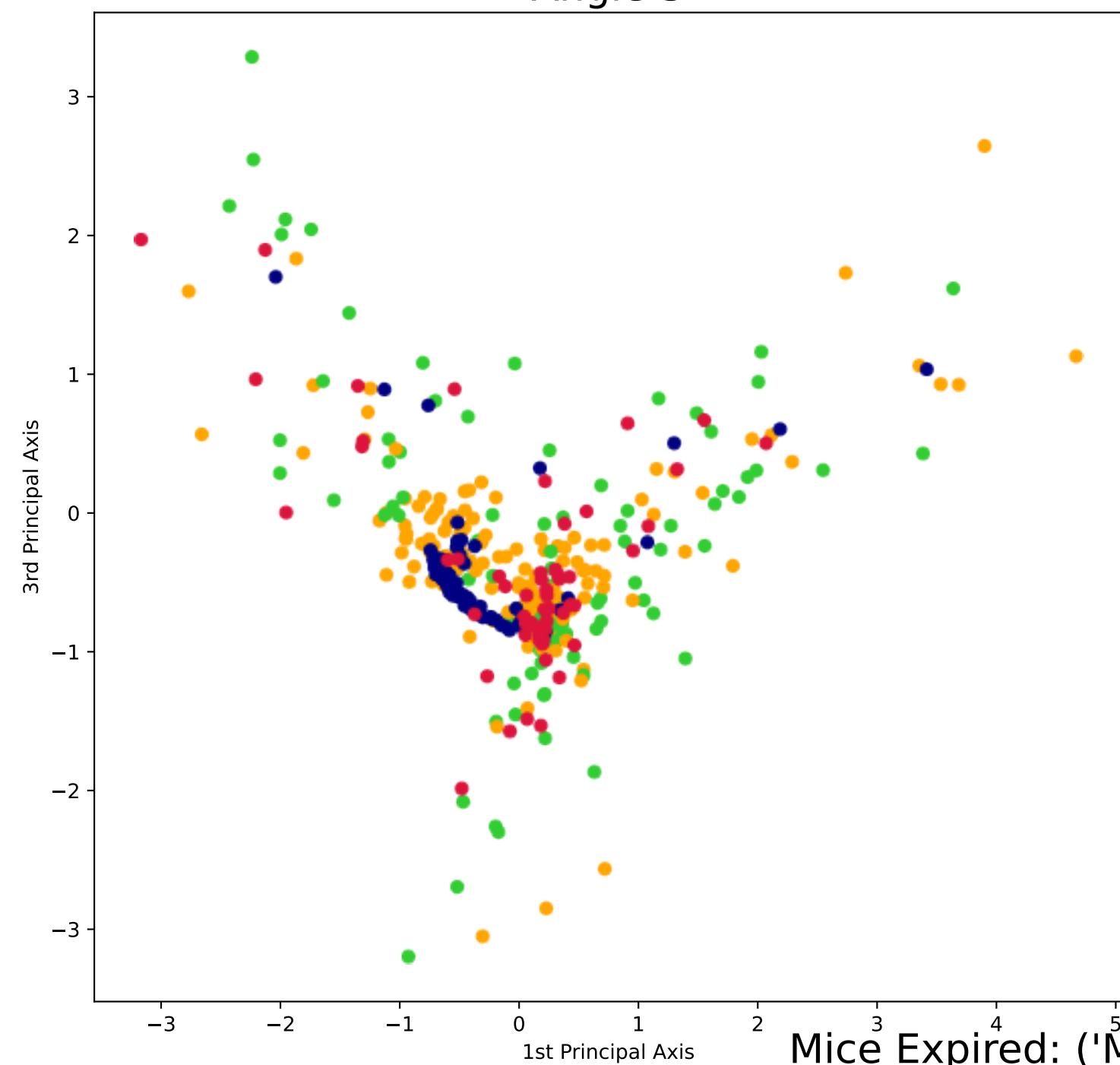
Angle 1



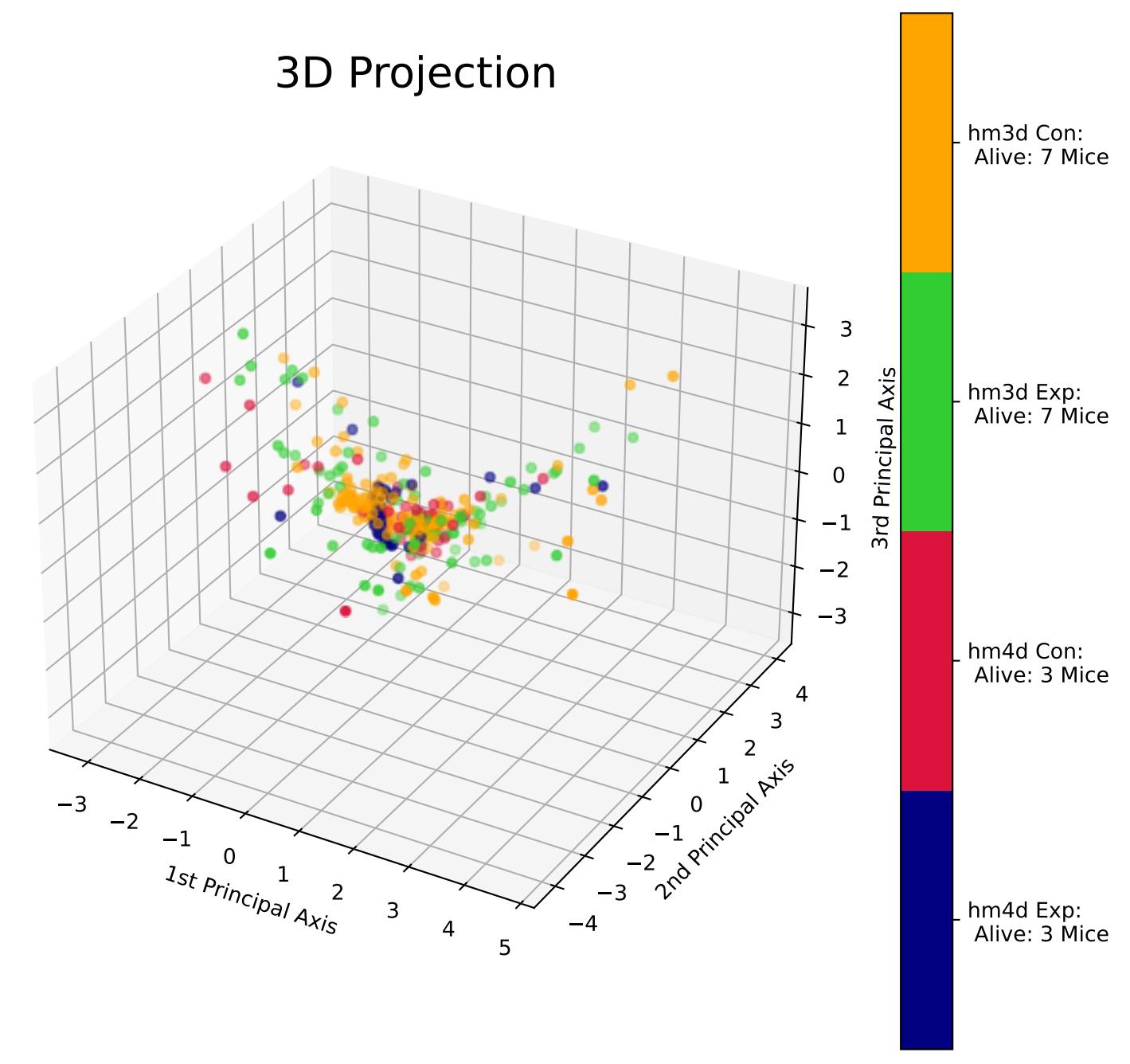
Angle 2



Angle 3



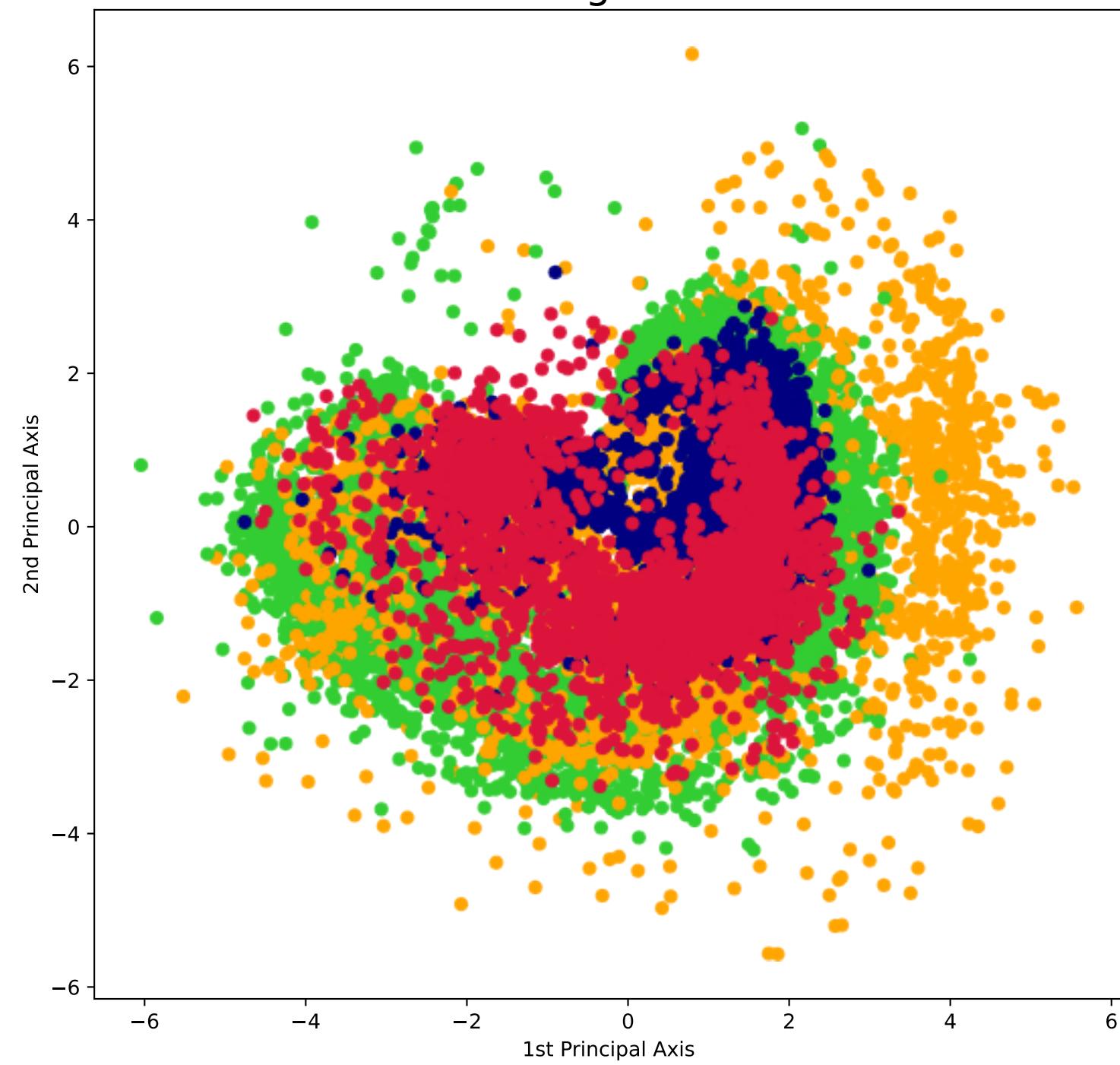
3D Projection



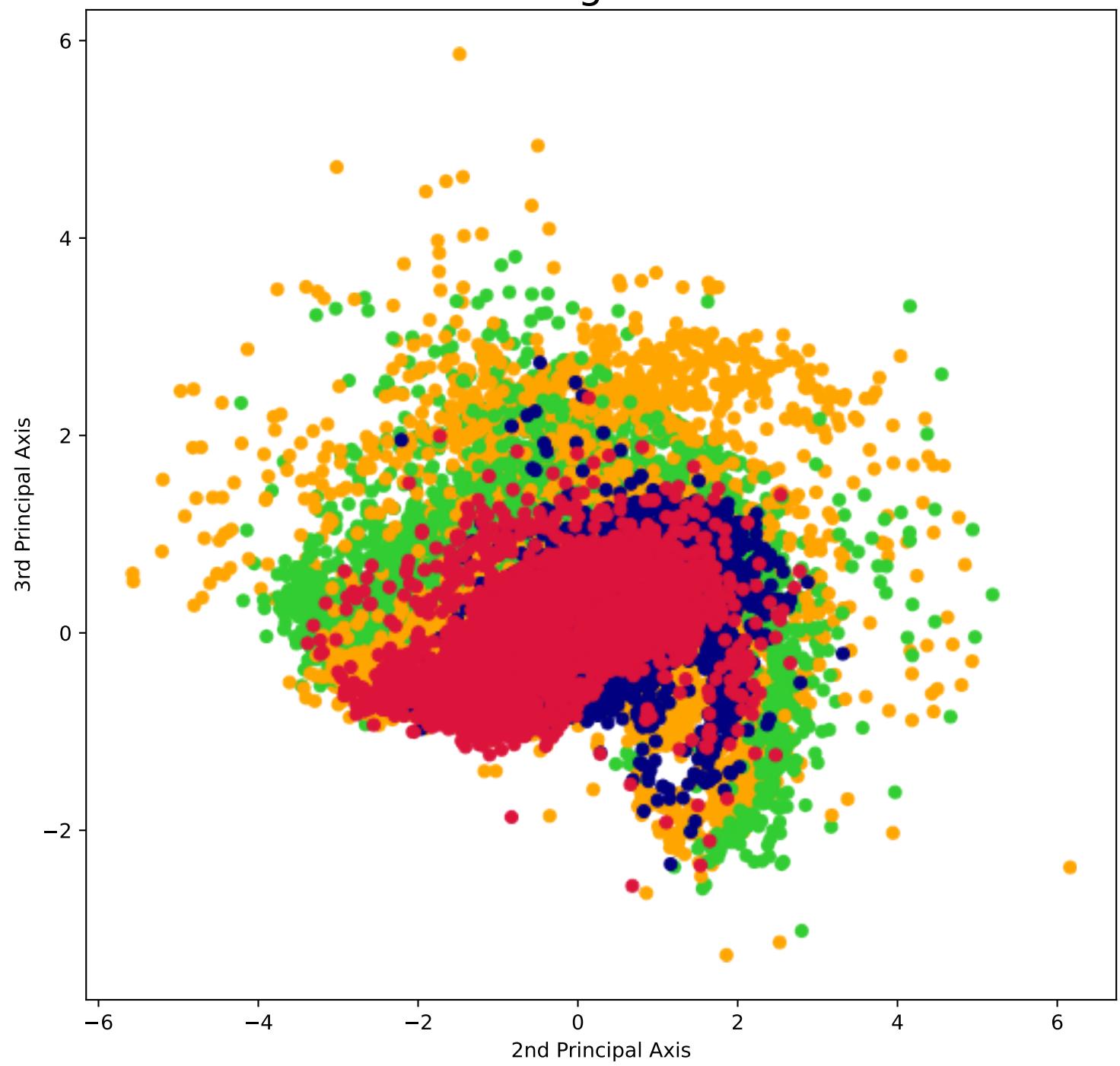
Mice Expired: ('M20874', 'hm3d Exp')

# Trial Number: 3, Phase: Eupnea Recovery

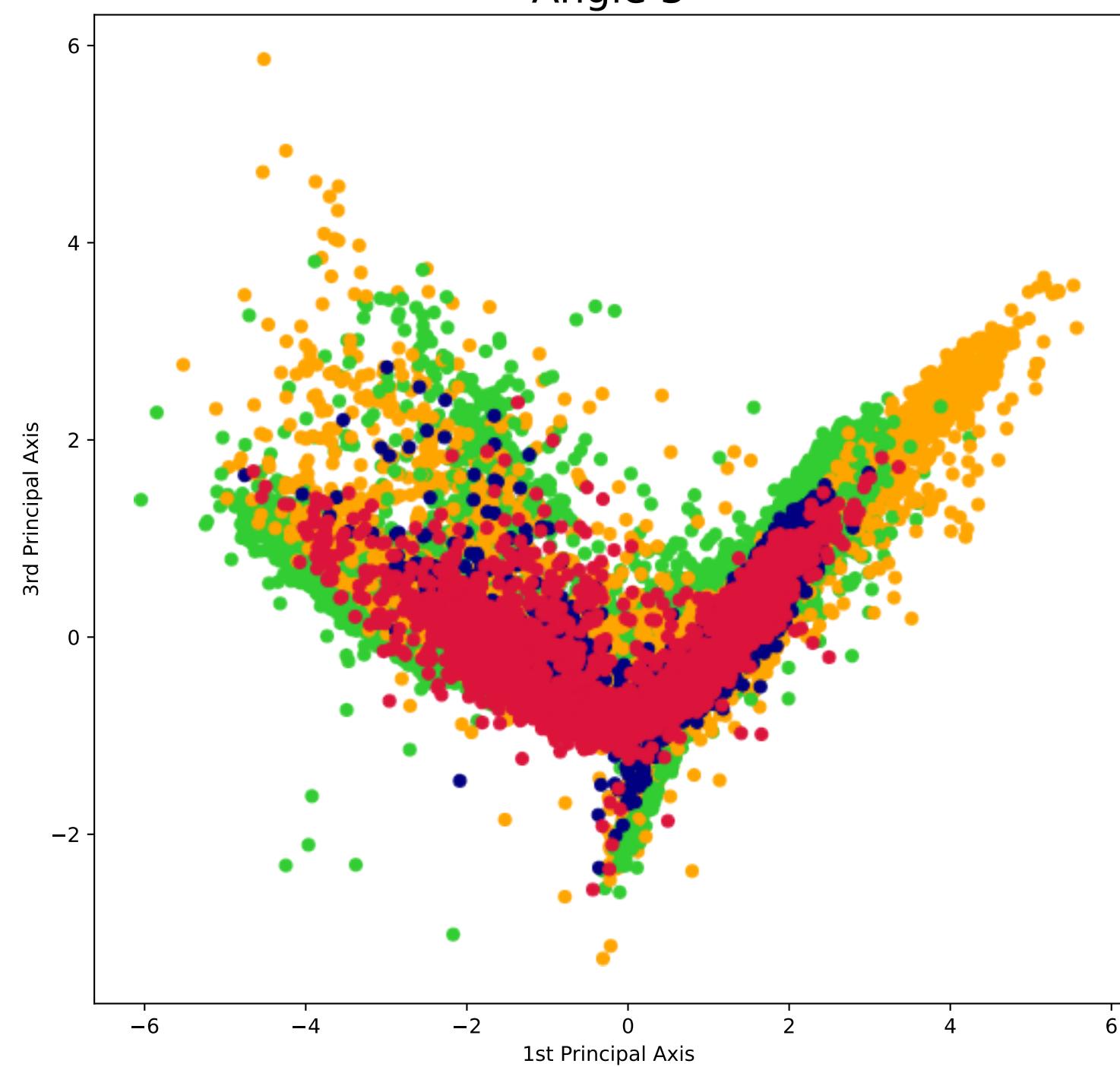
Angle 1



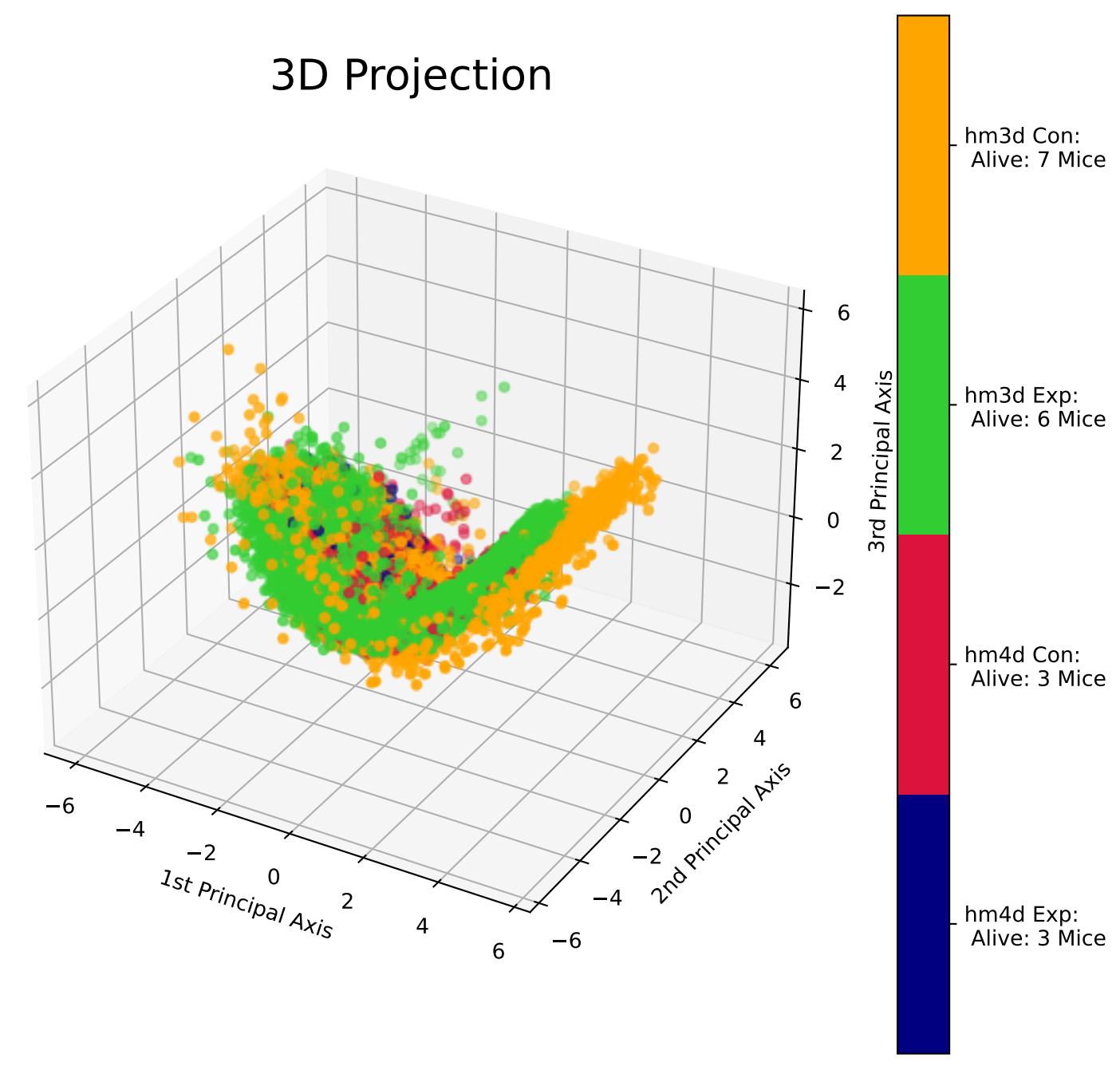
Angle 2



Angle 3

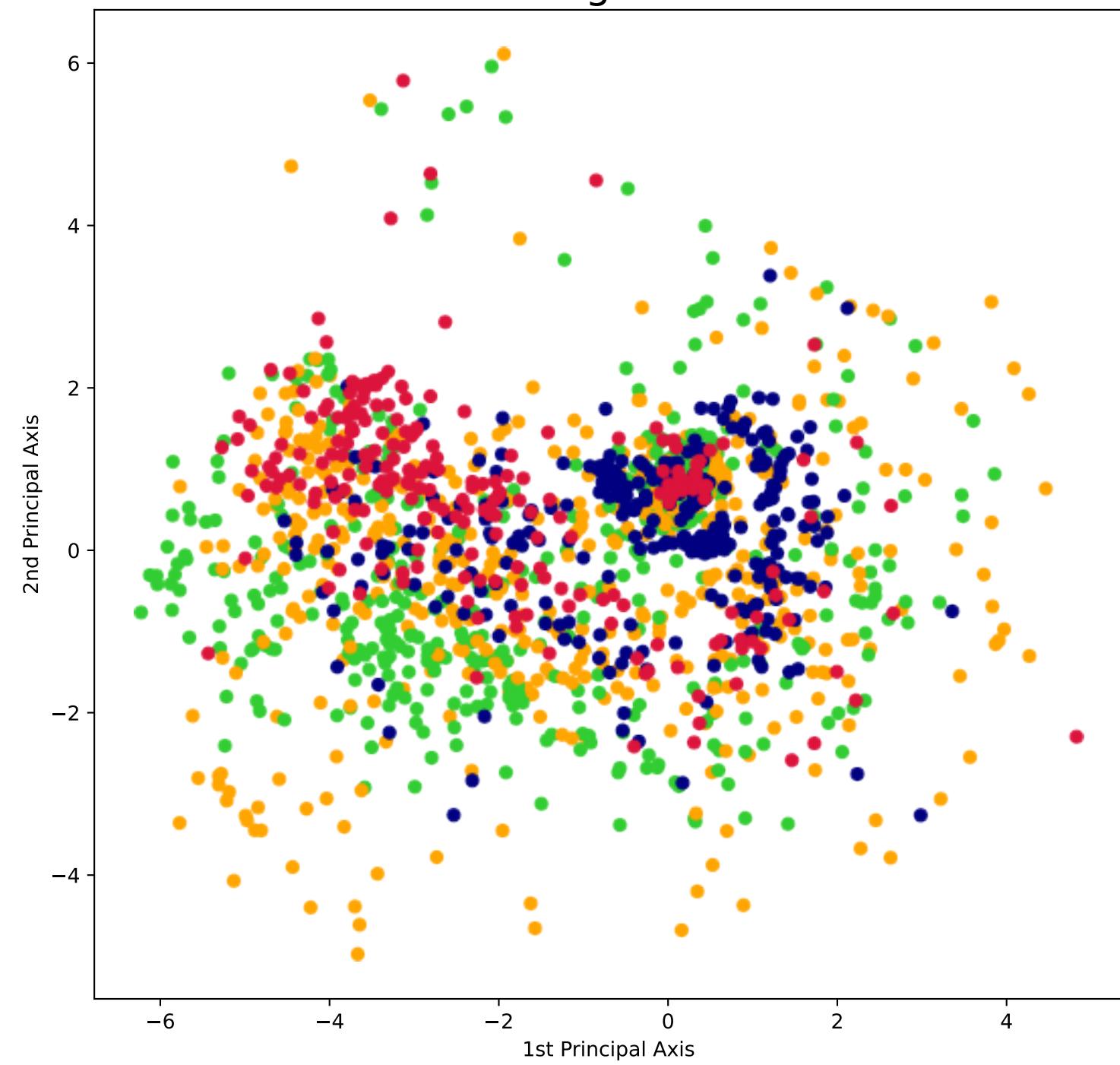


3D Projection

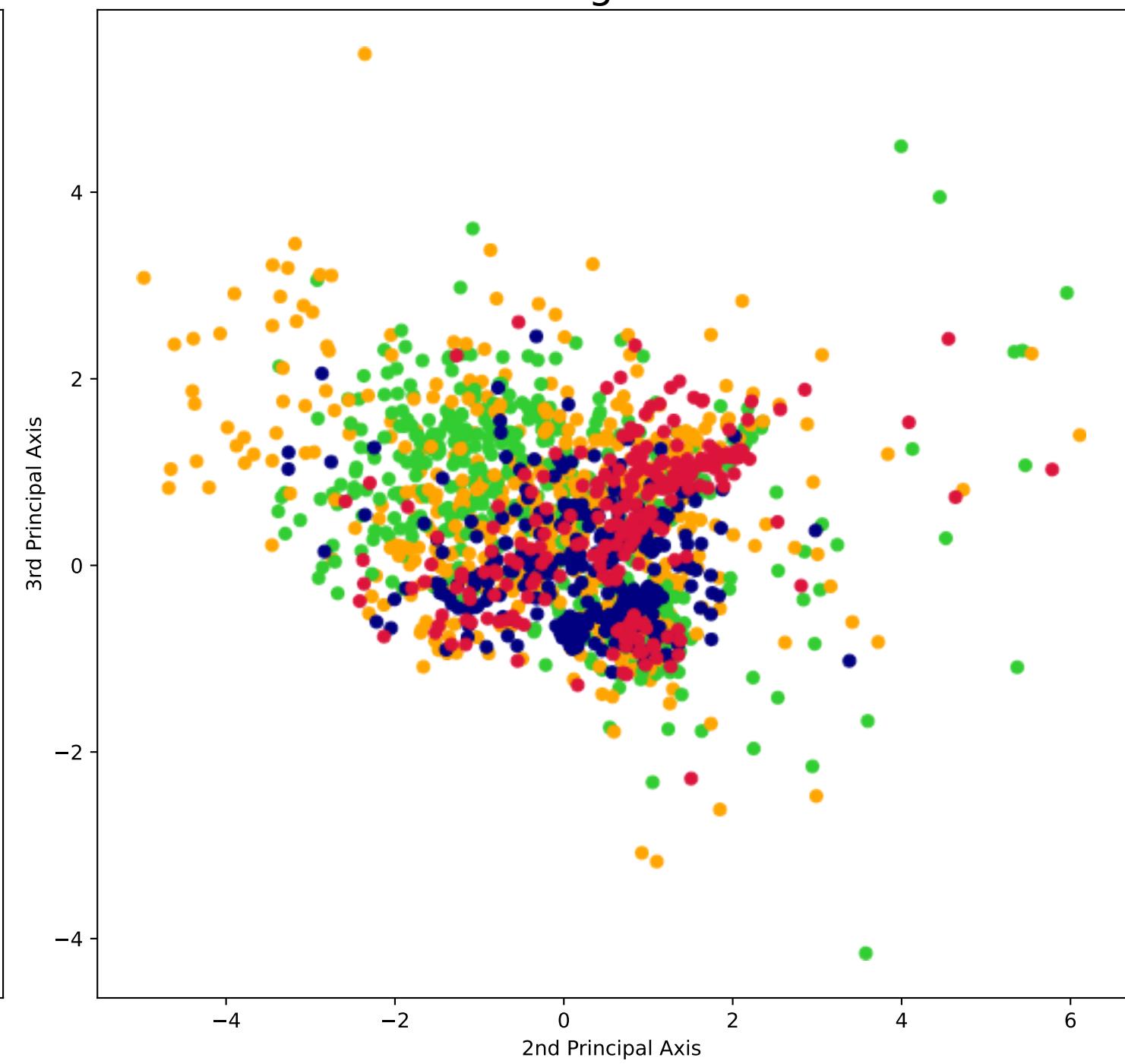


# Trial Number: 4, Phase: Trial Onset

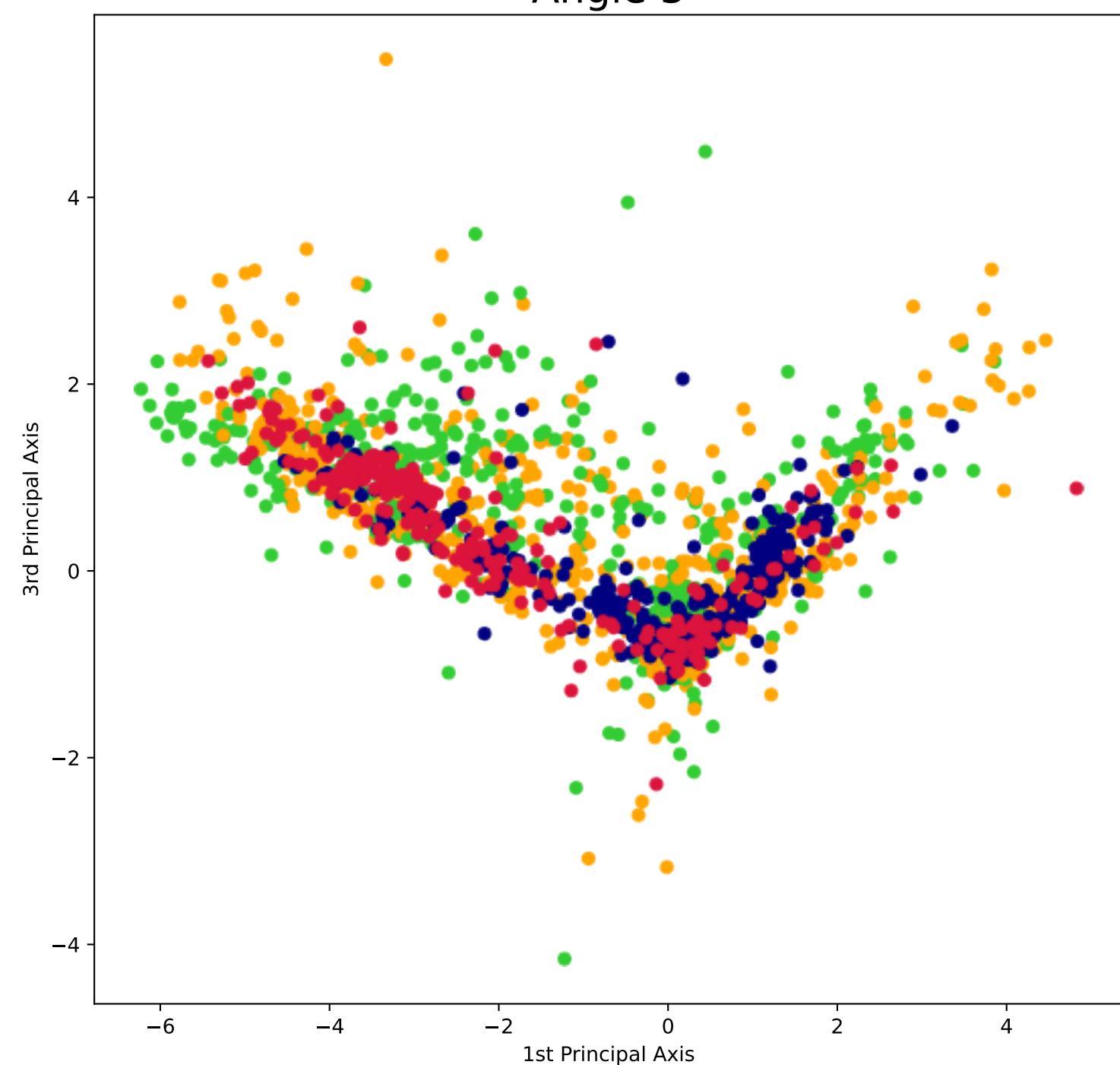
Angle 1



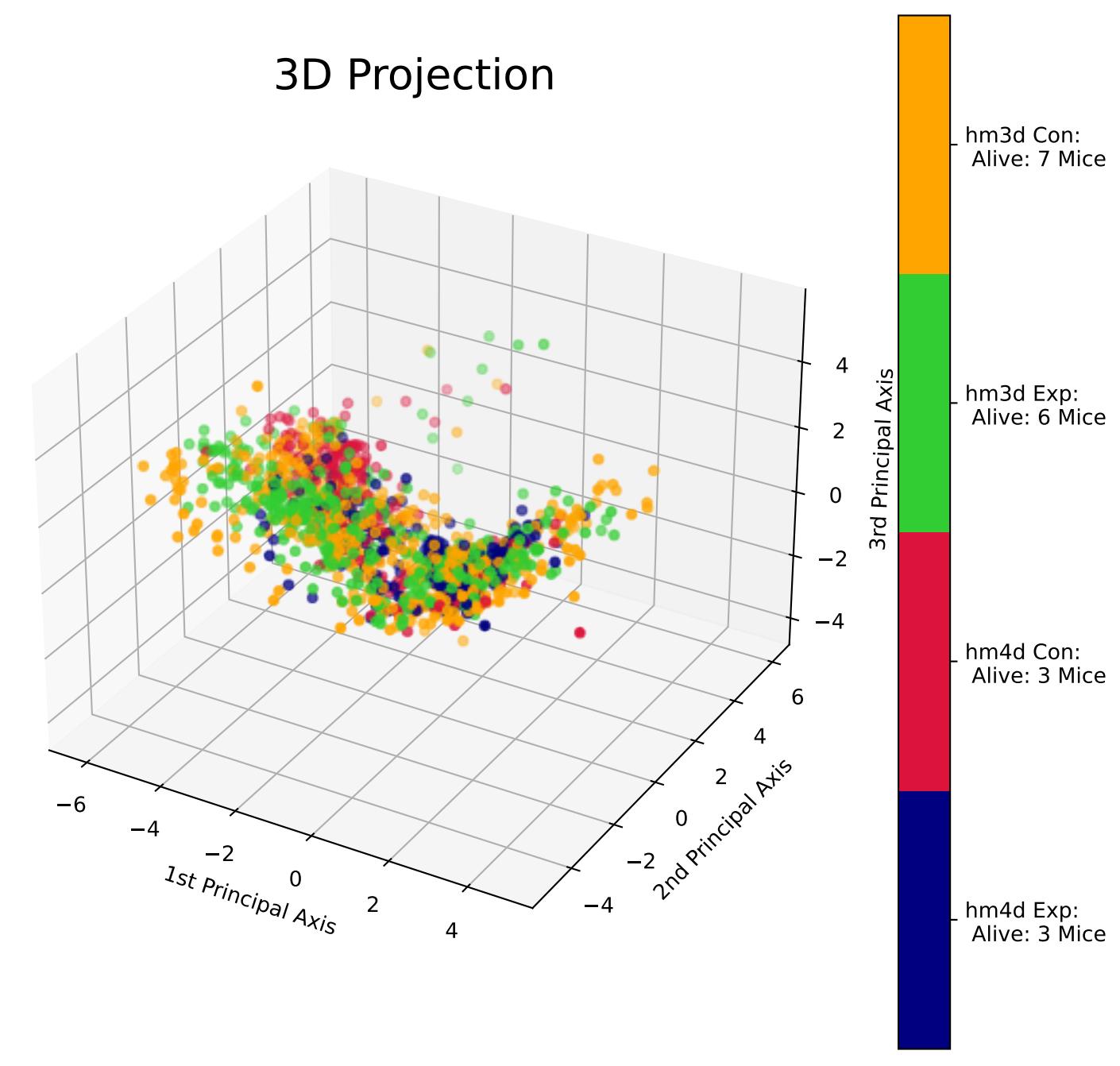
Angle 2



Angle 3



3D Projection



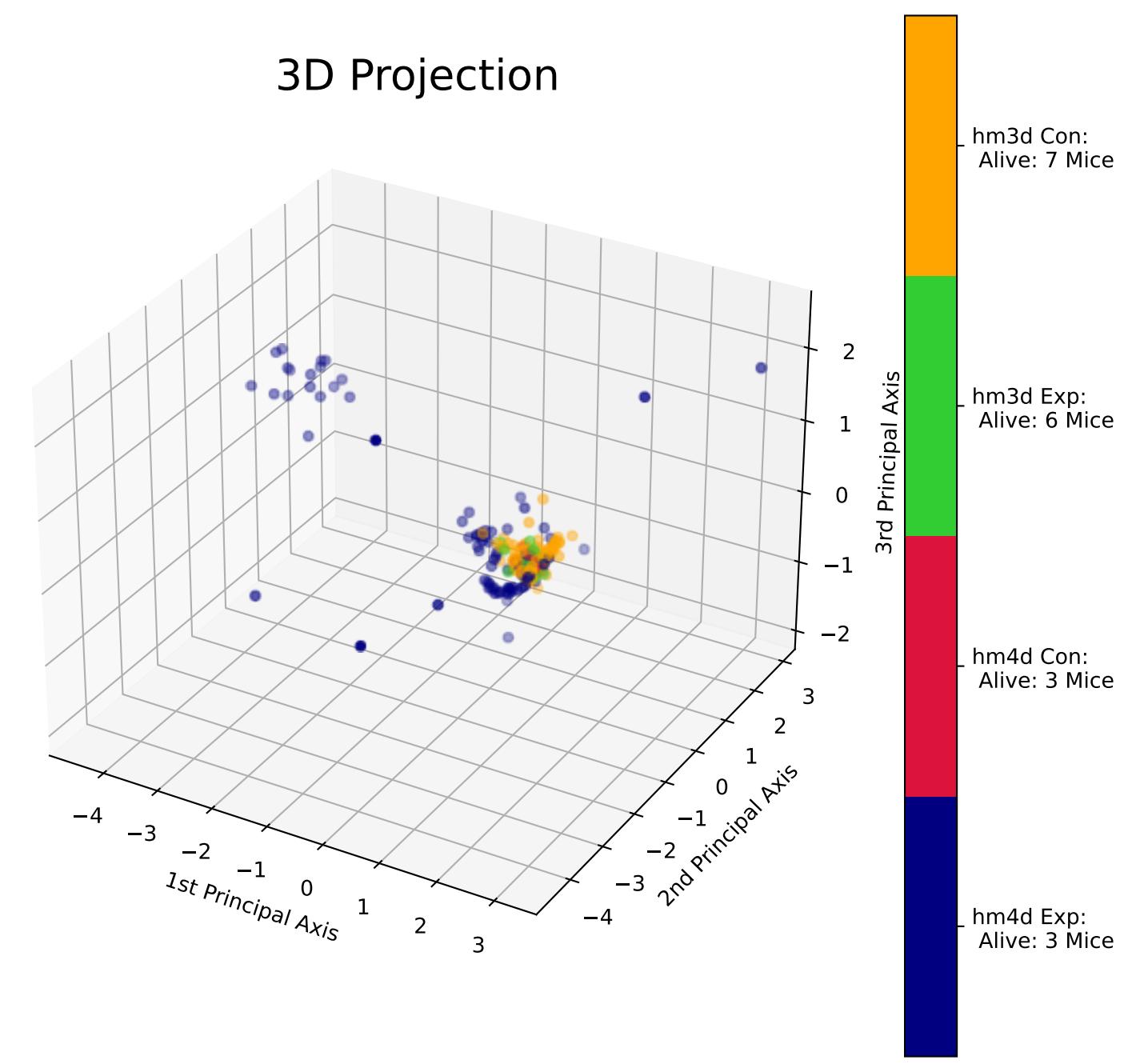
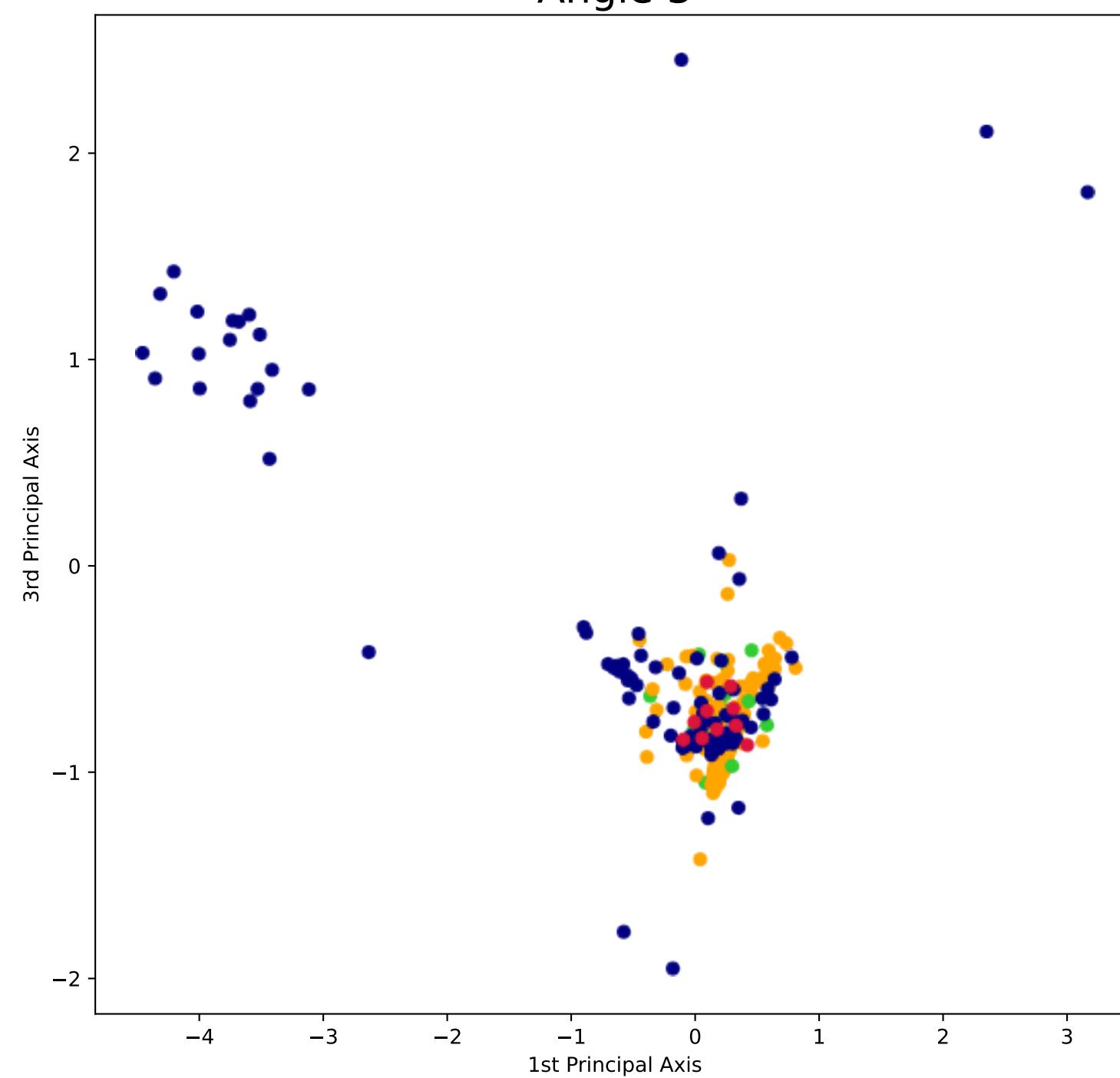
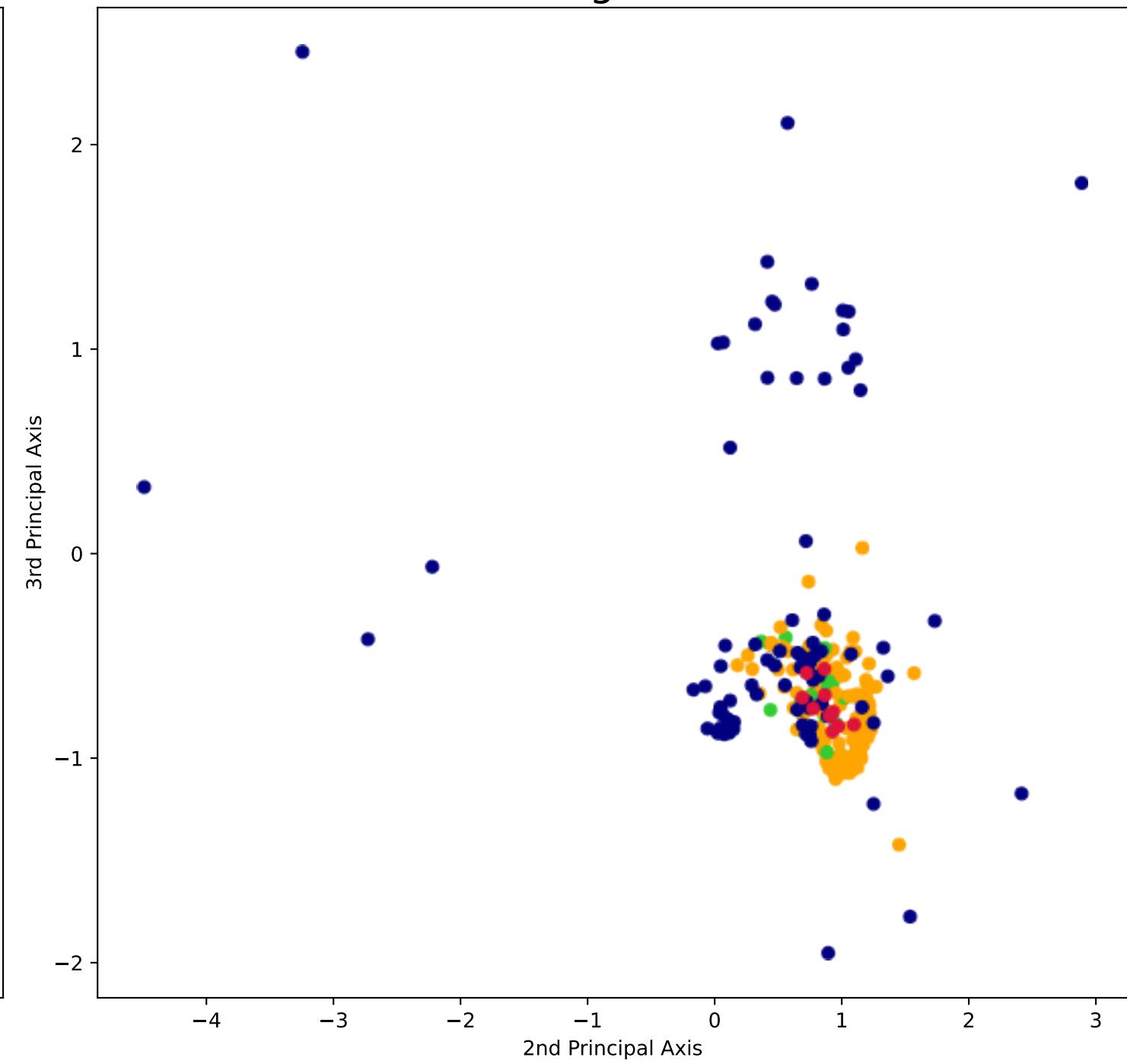
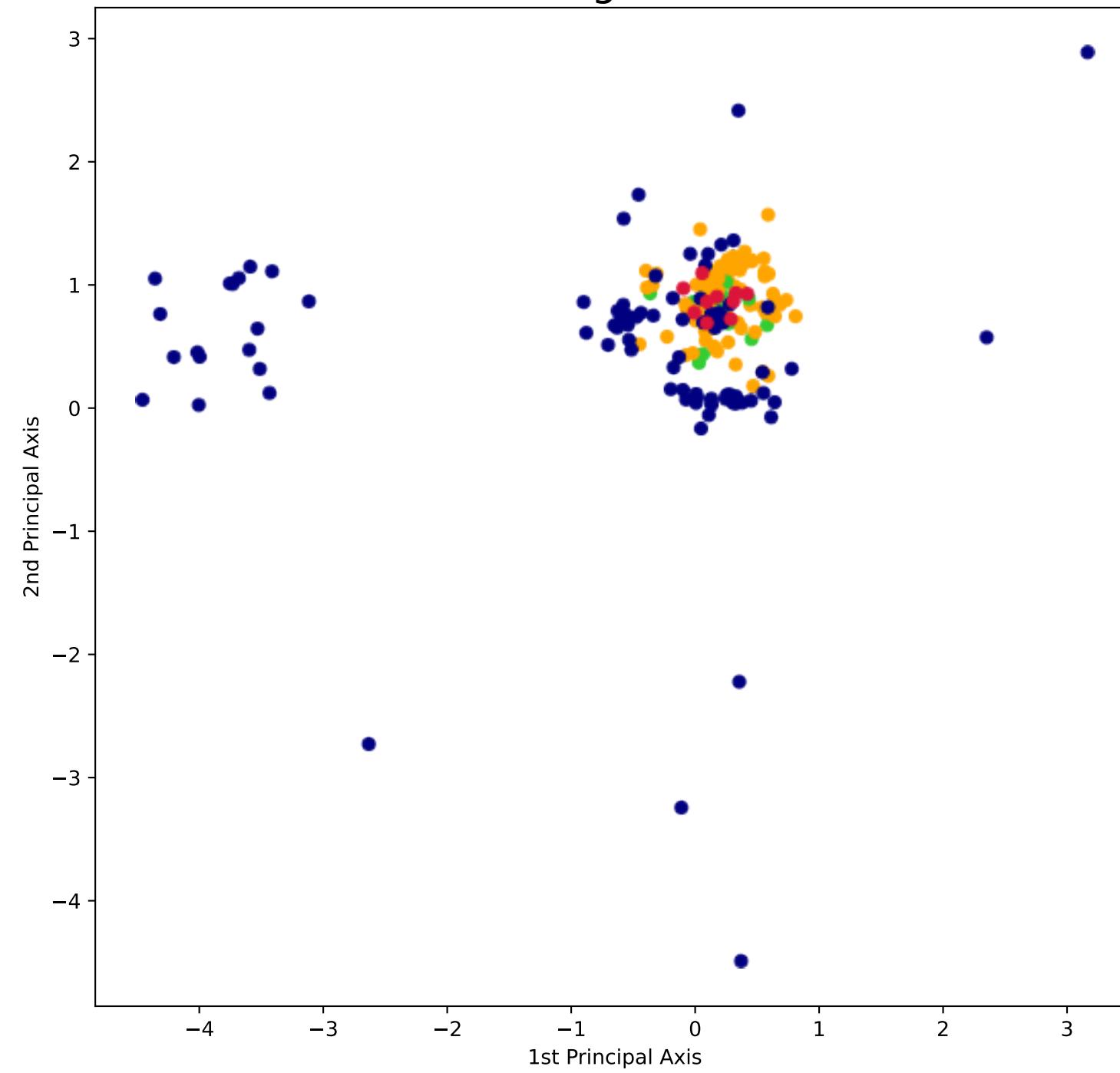
# Trial Number: 4, Phase: Apnea Starts

Angle 1

Angle 2

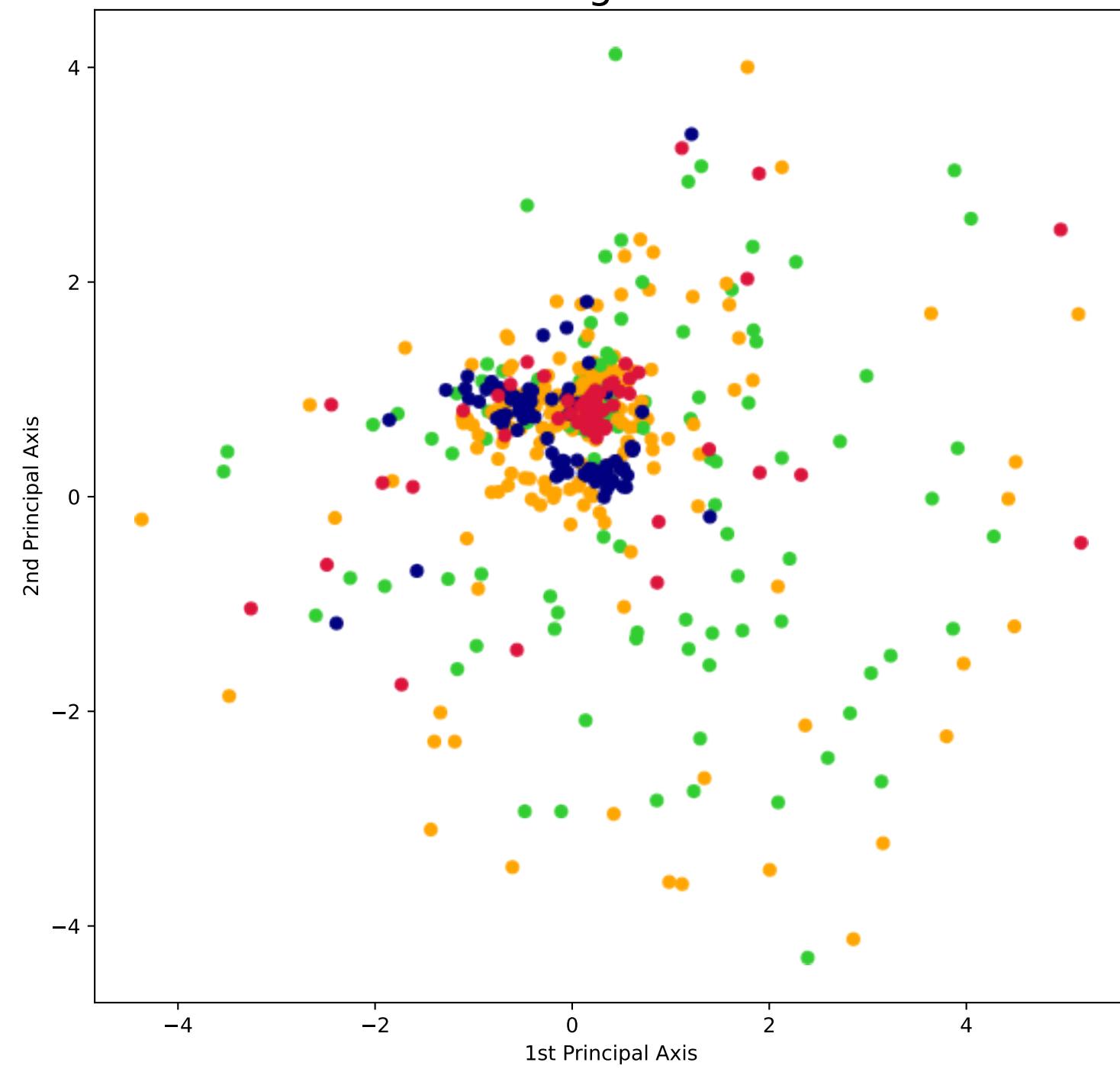
Angle 3

3D Projection

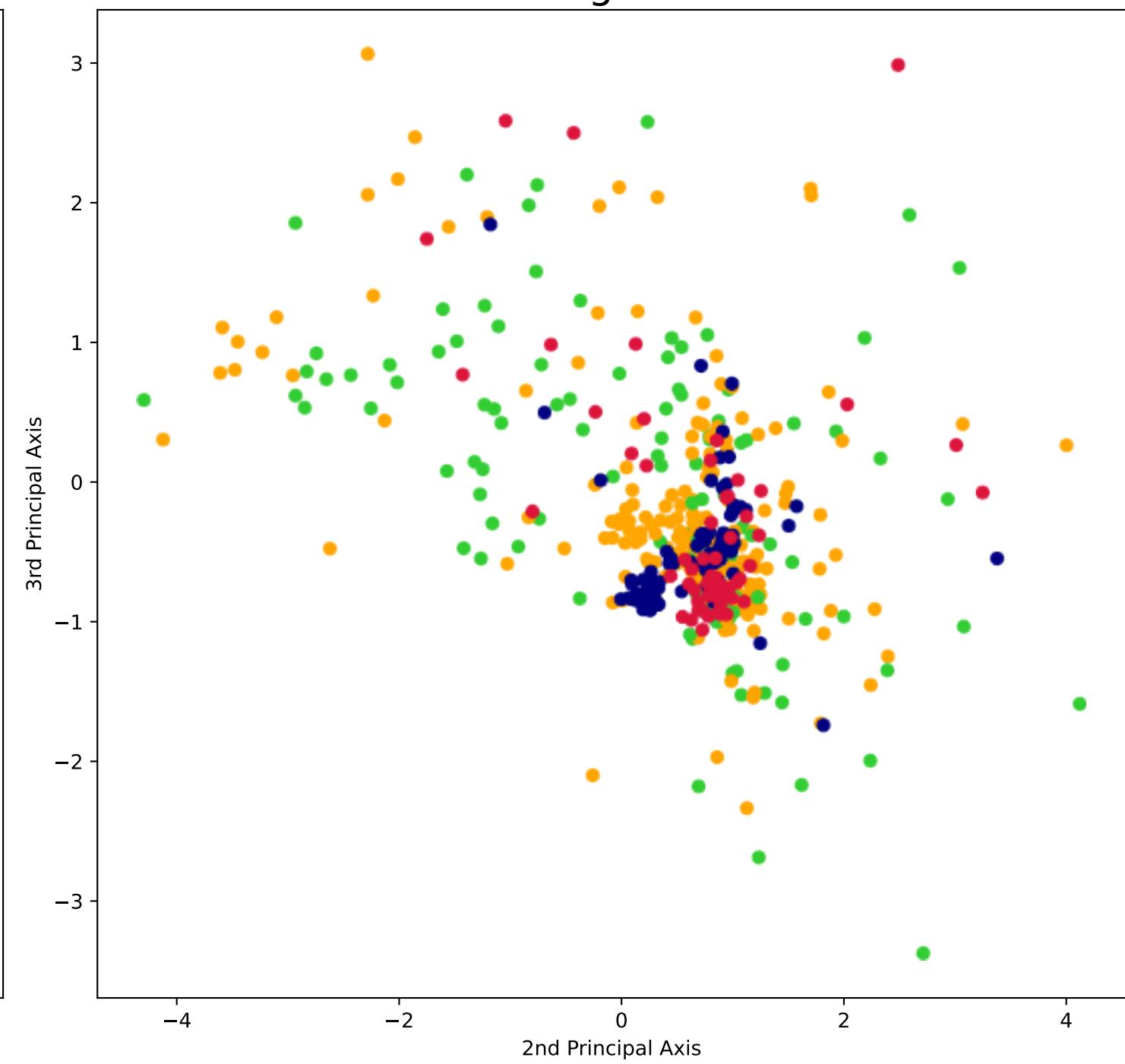


# Trial Number: 4, Phase: First Gasp

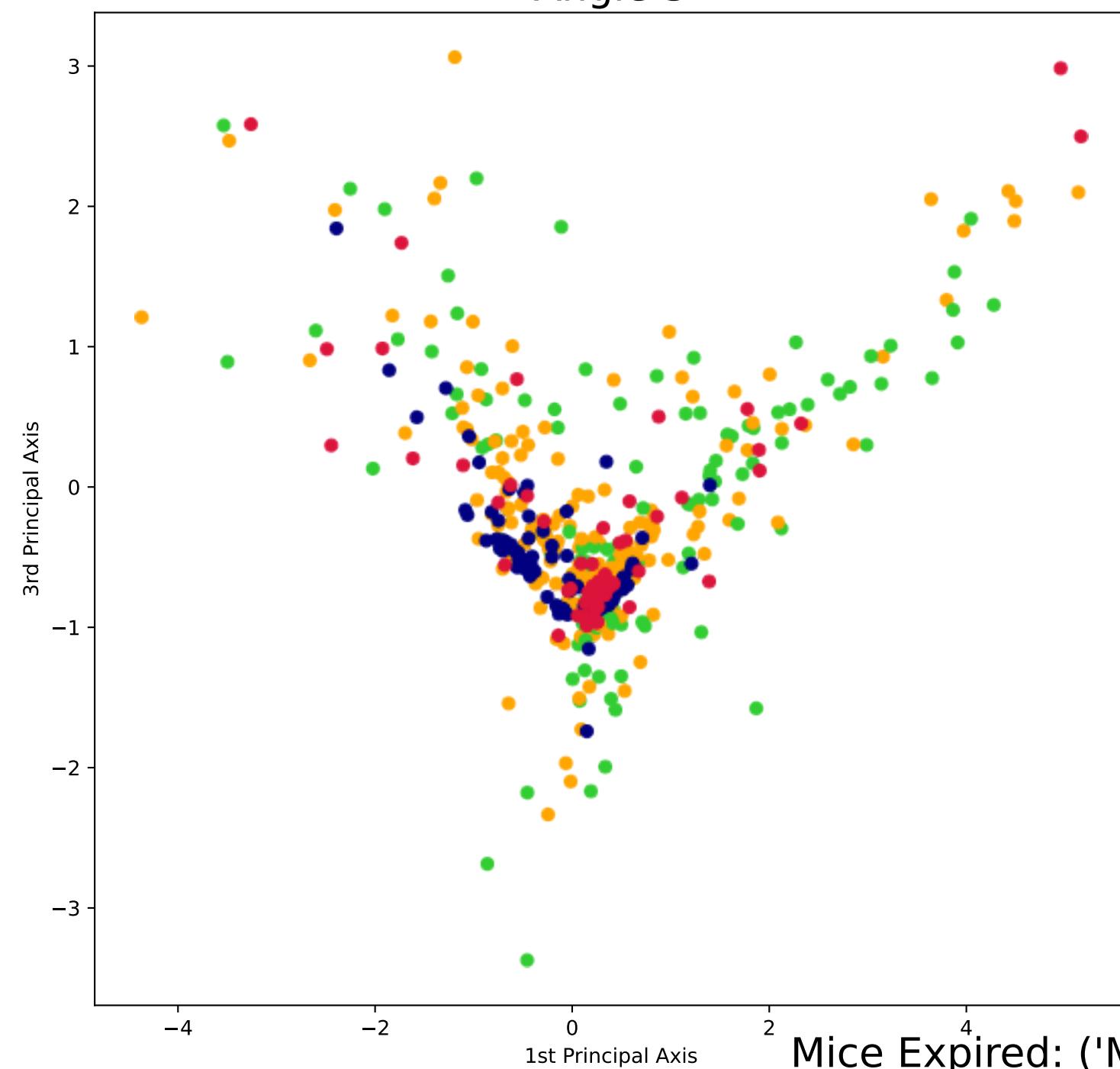
Angle 1



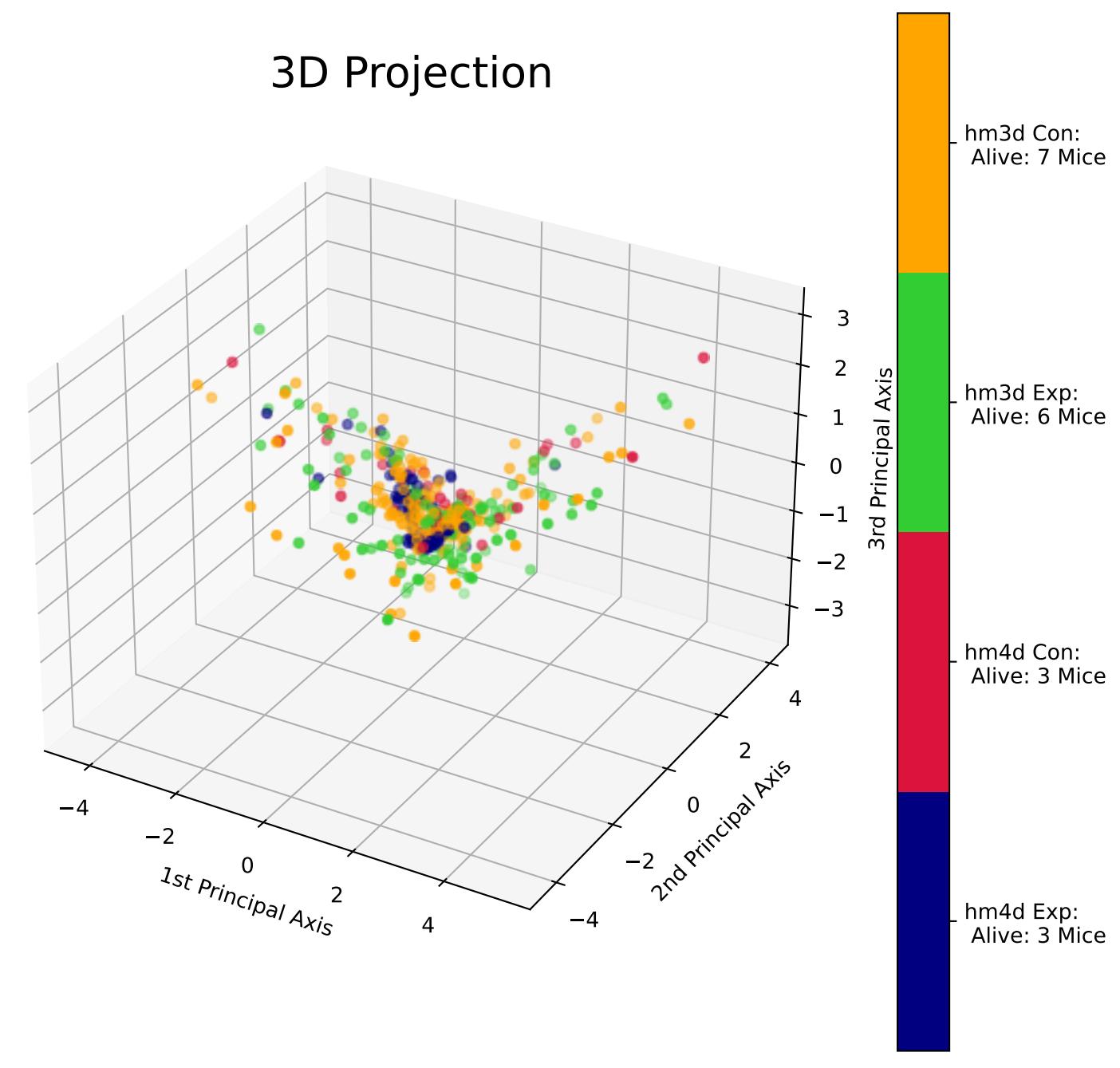
Angle 2



Angle 3



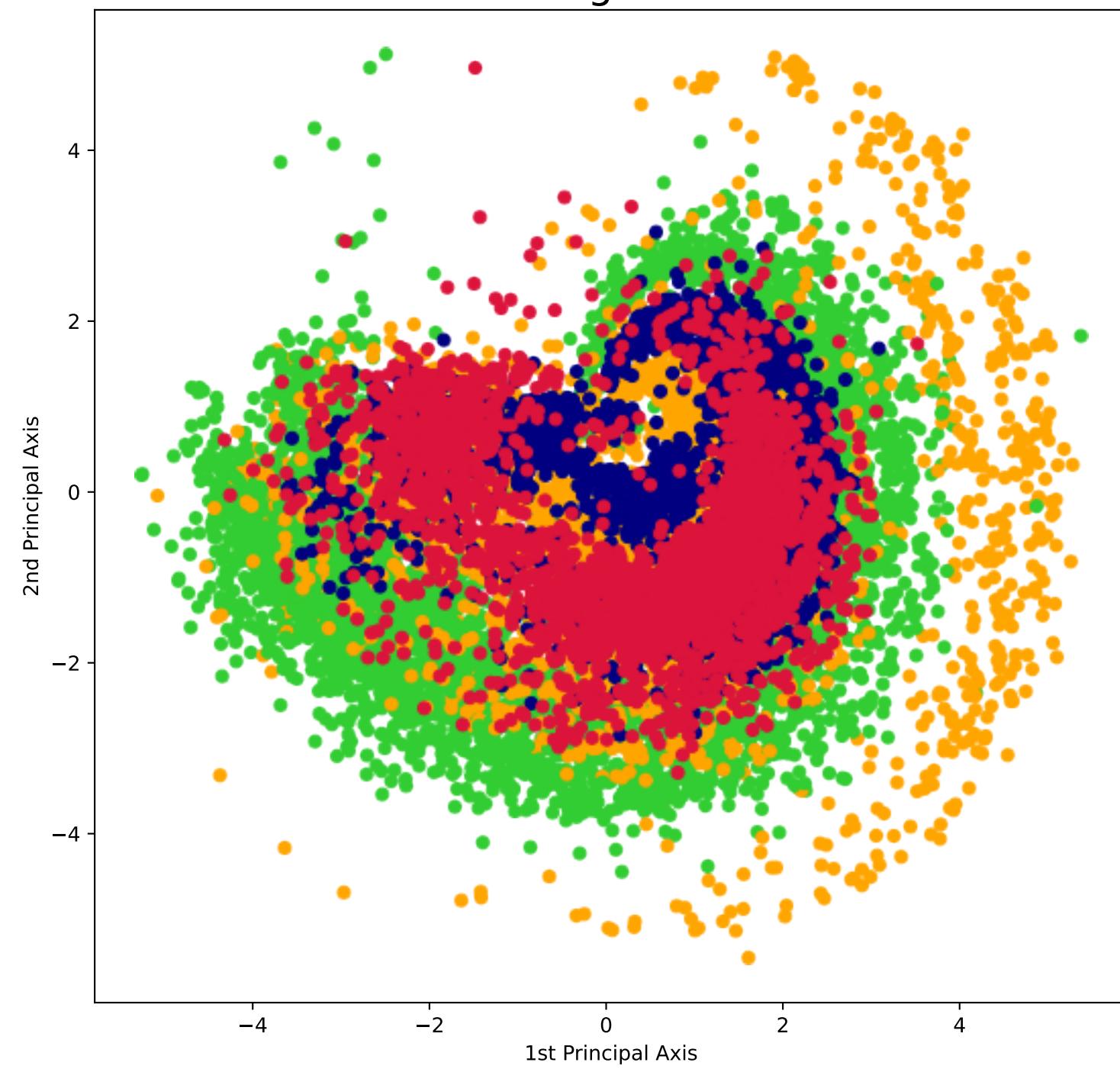
3D Projection



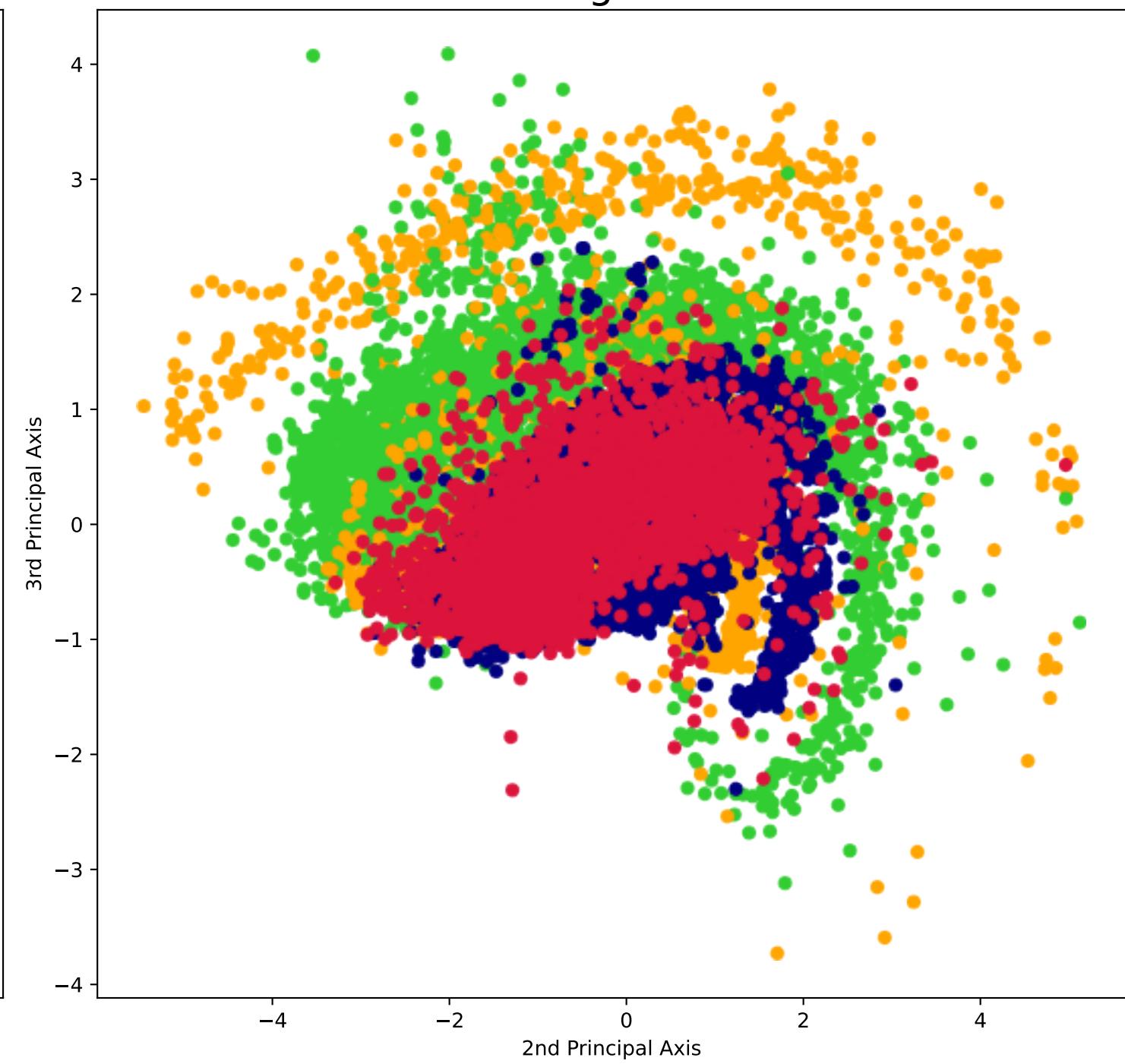
Mice Expired: ('M20864', 'hm3d Con')

# Trial Number: 4, Phase: Eupnea Recovery

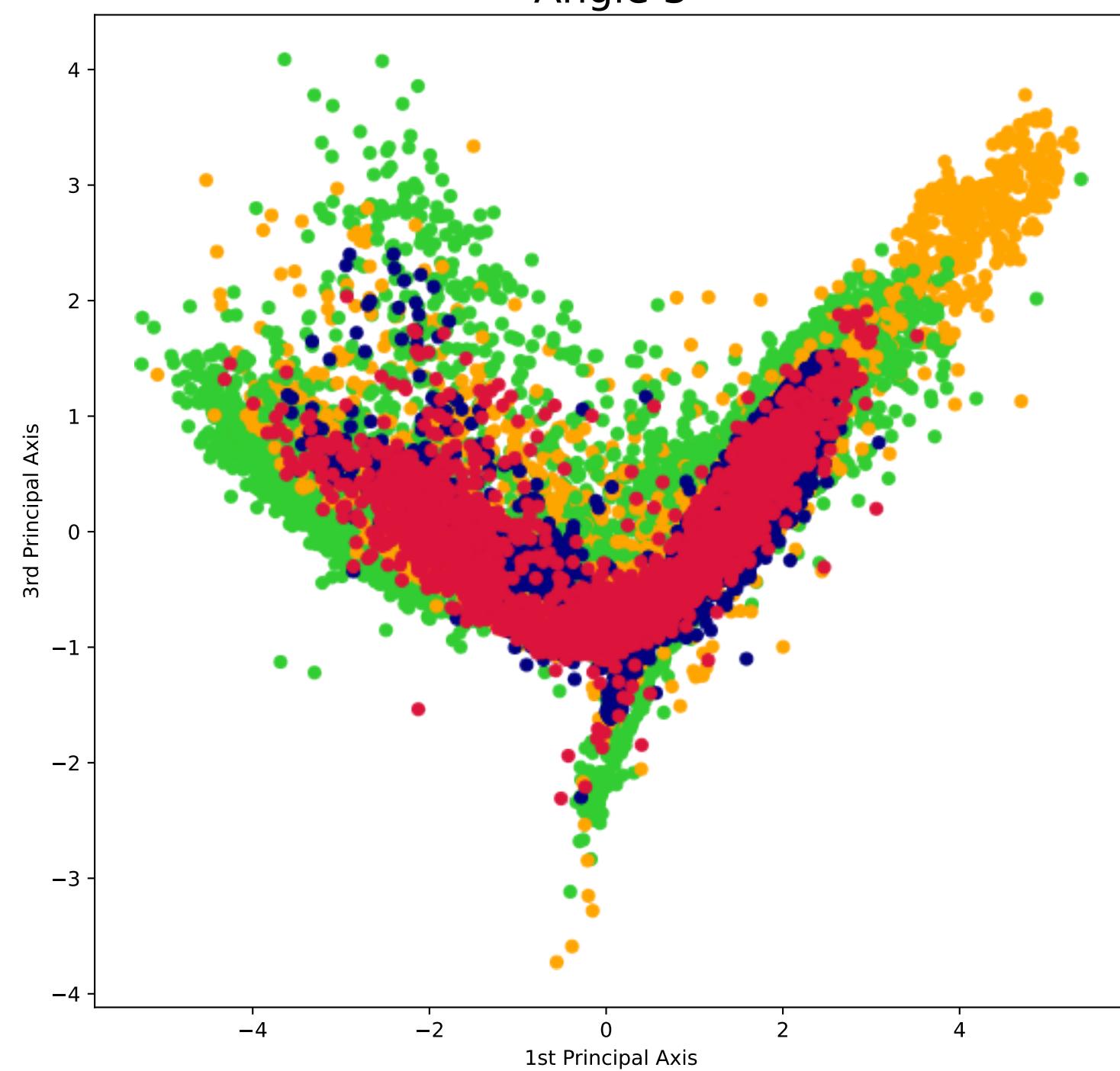
Angle 1



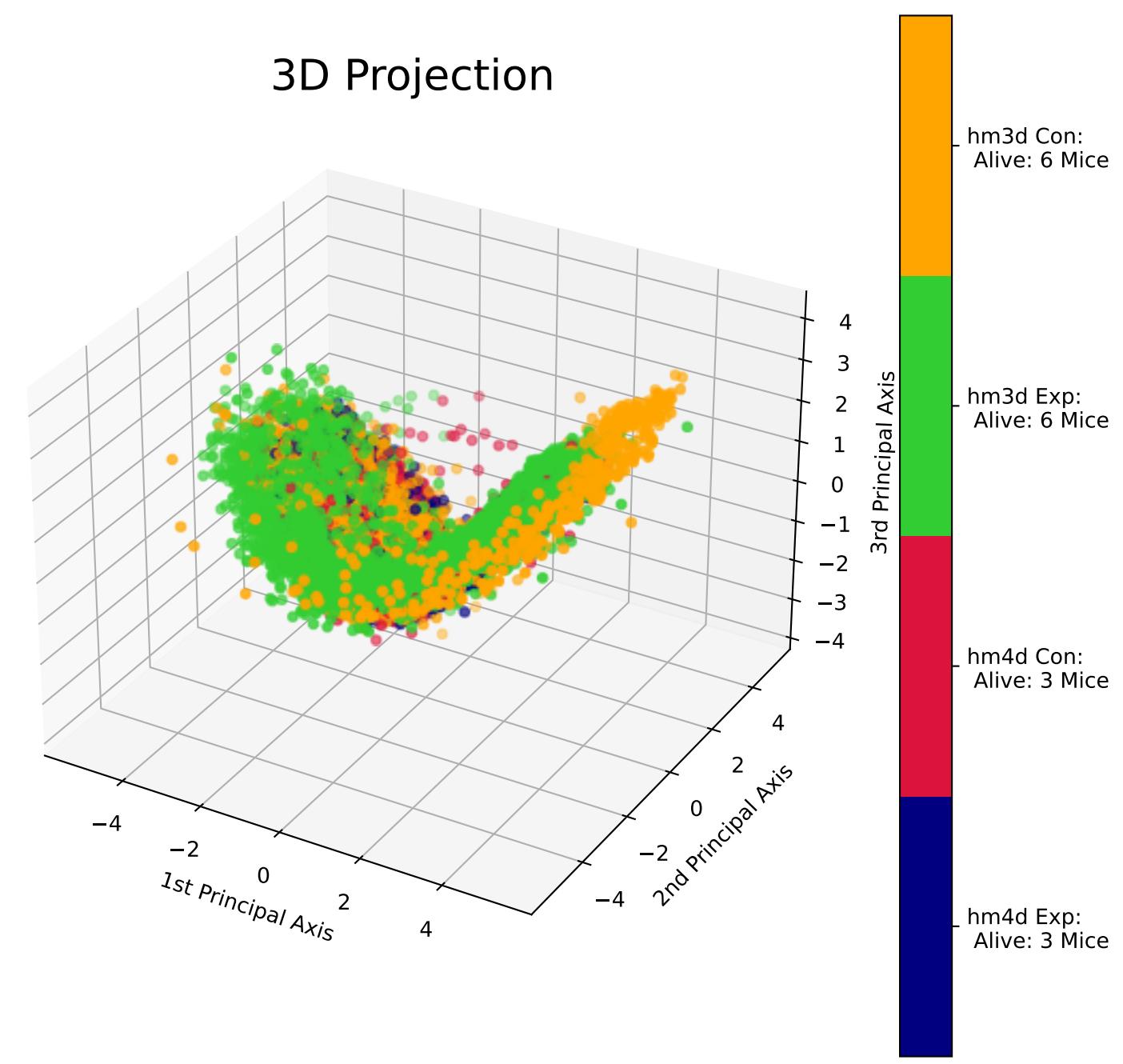
Angle 2



Angle 3

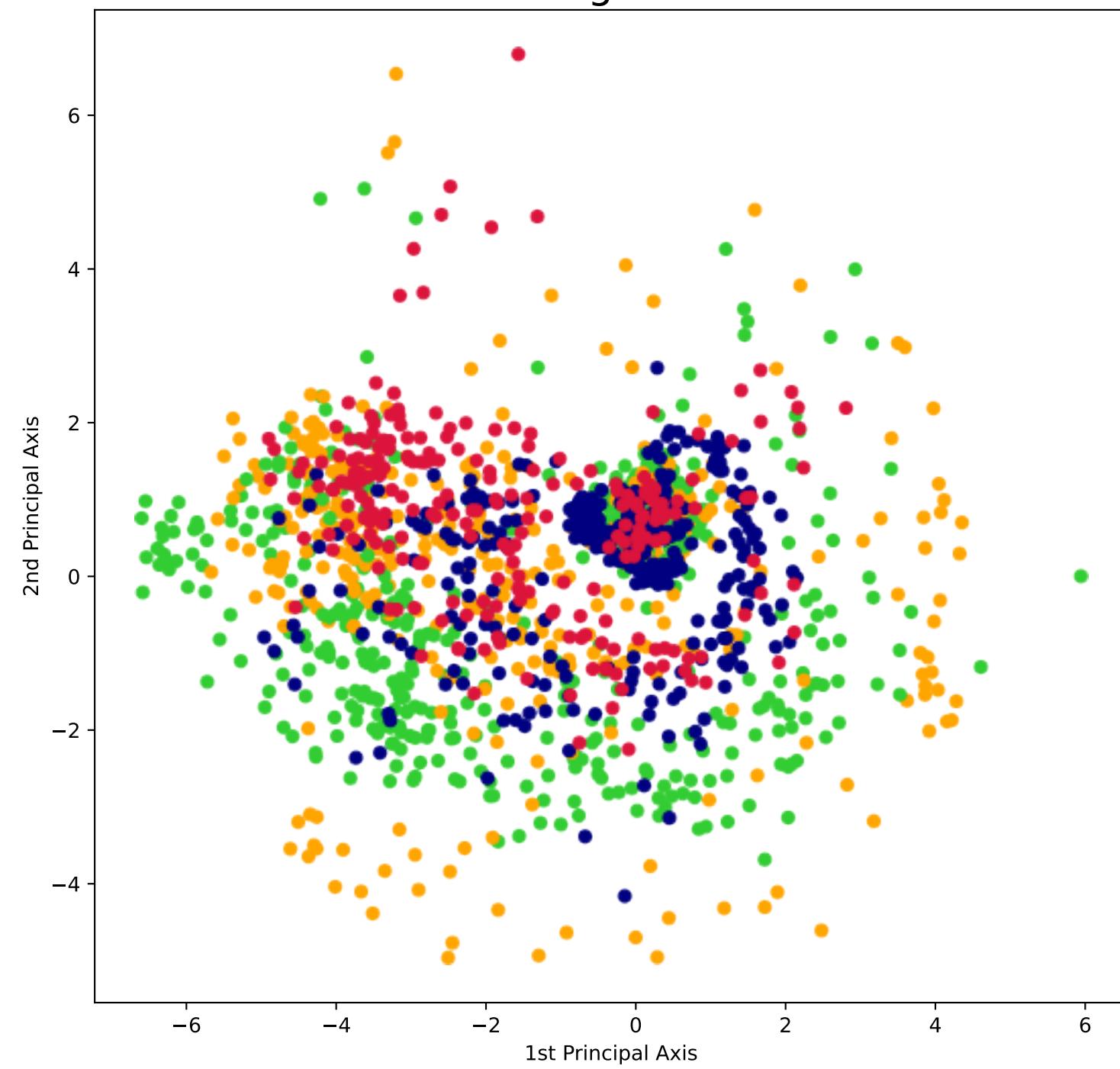


3D Projection

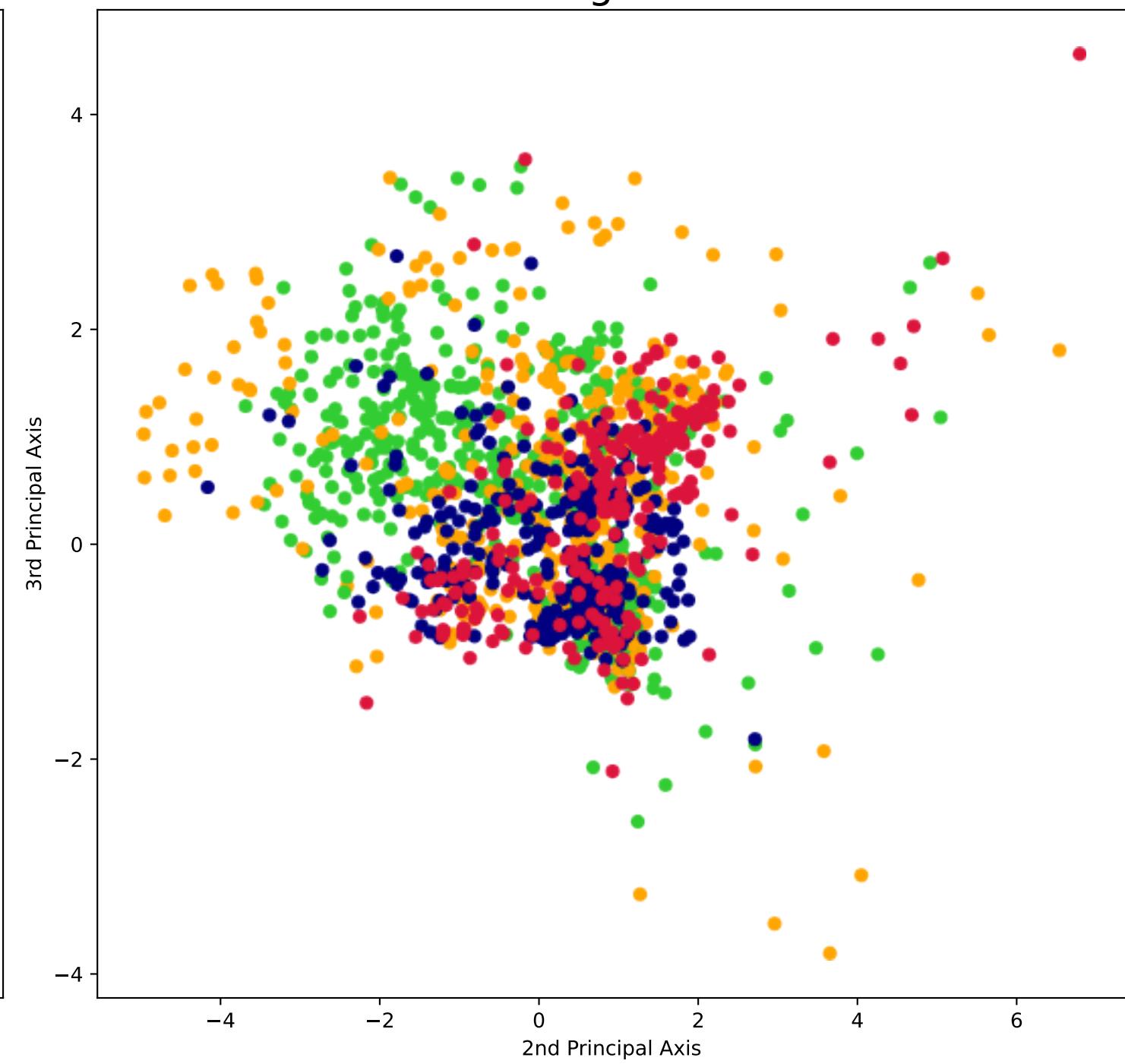


# Trial Number: 5, Phase: Trial Onset

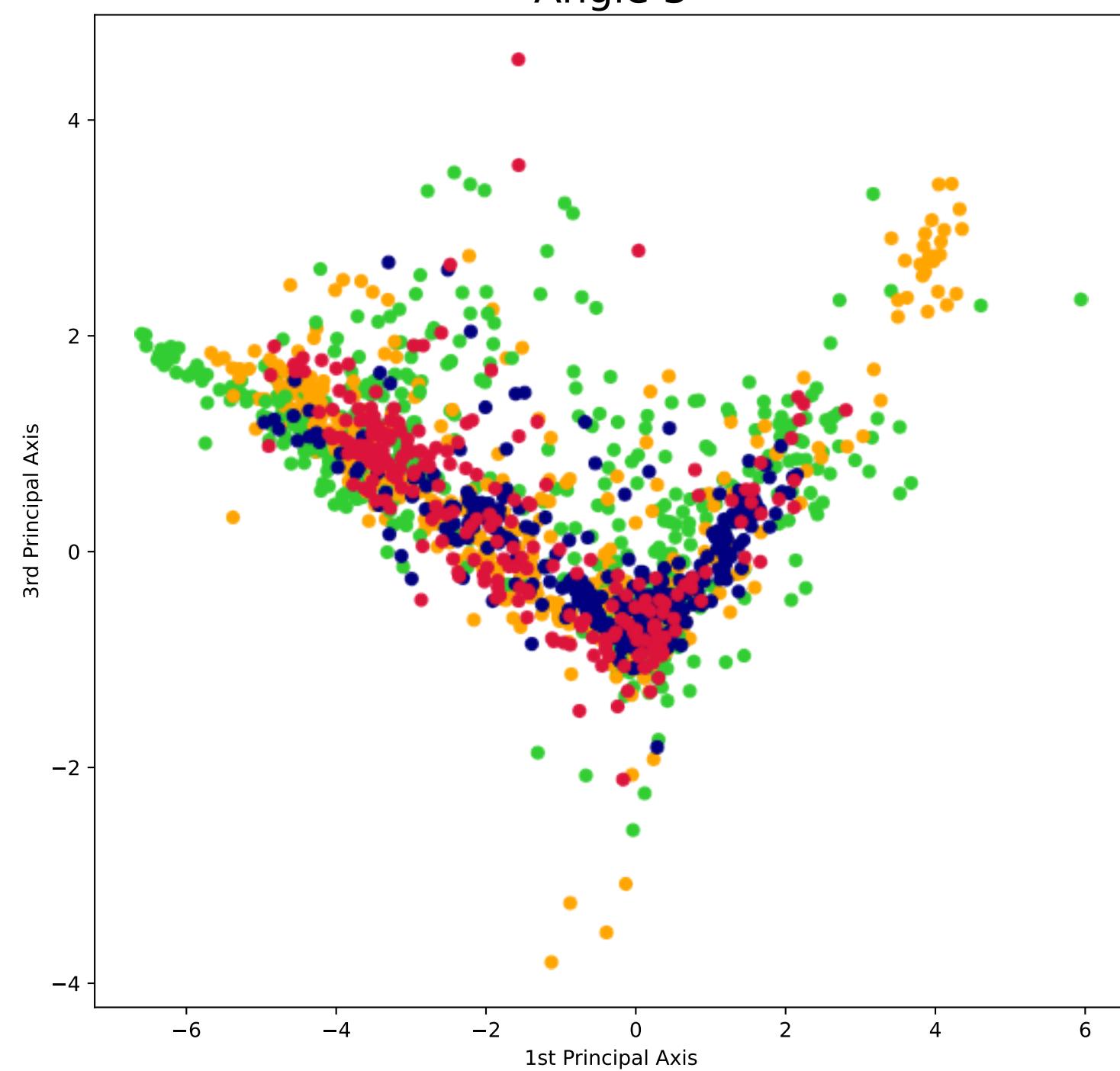
Angle 1



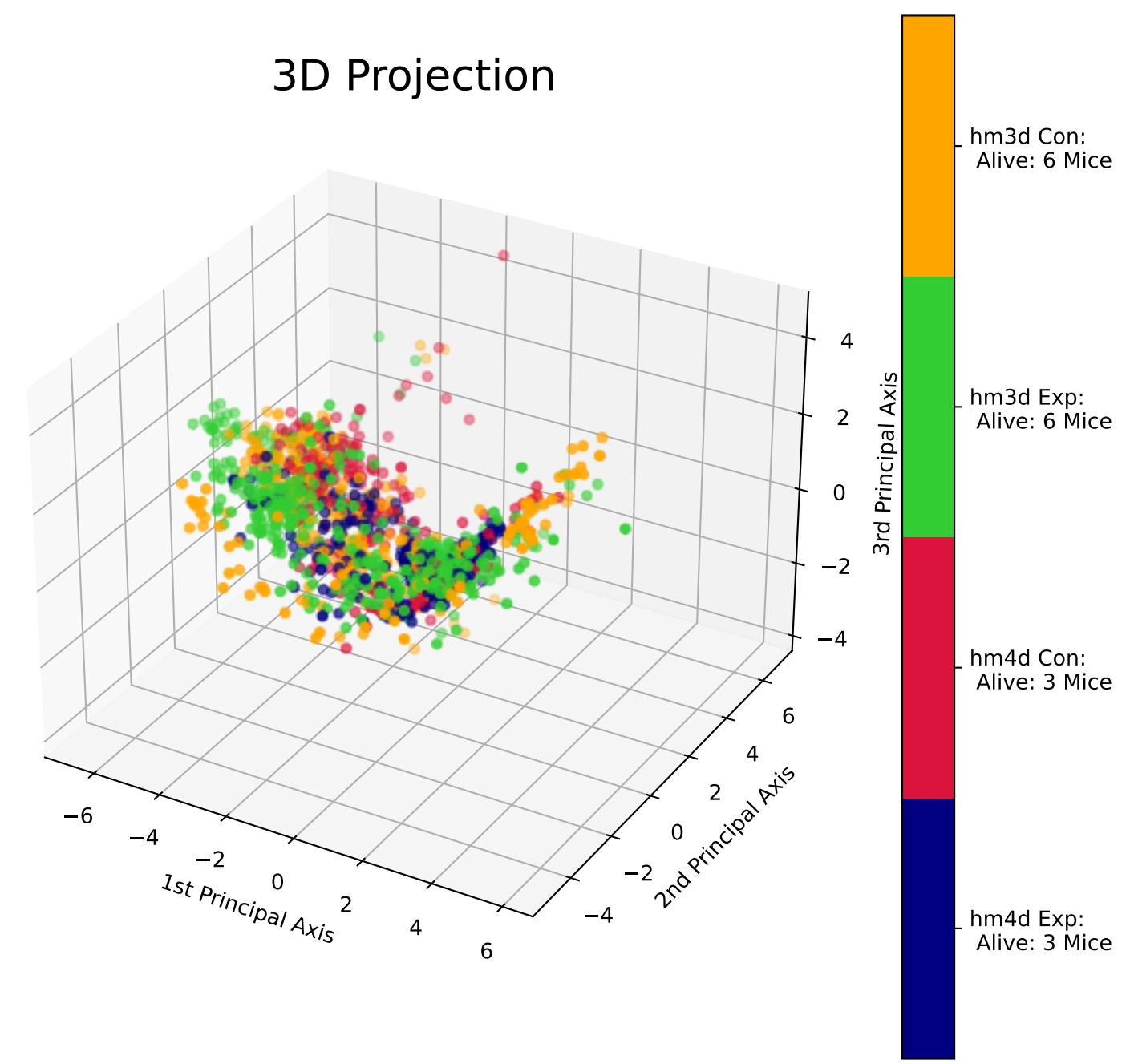
Angle 2



Angle 3



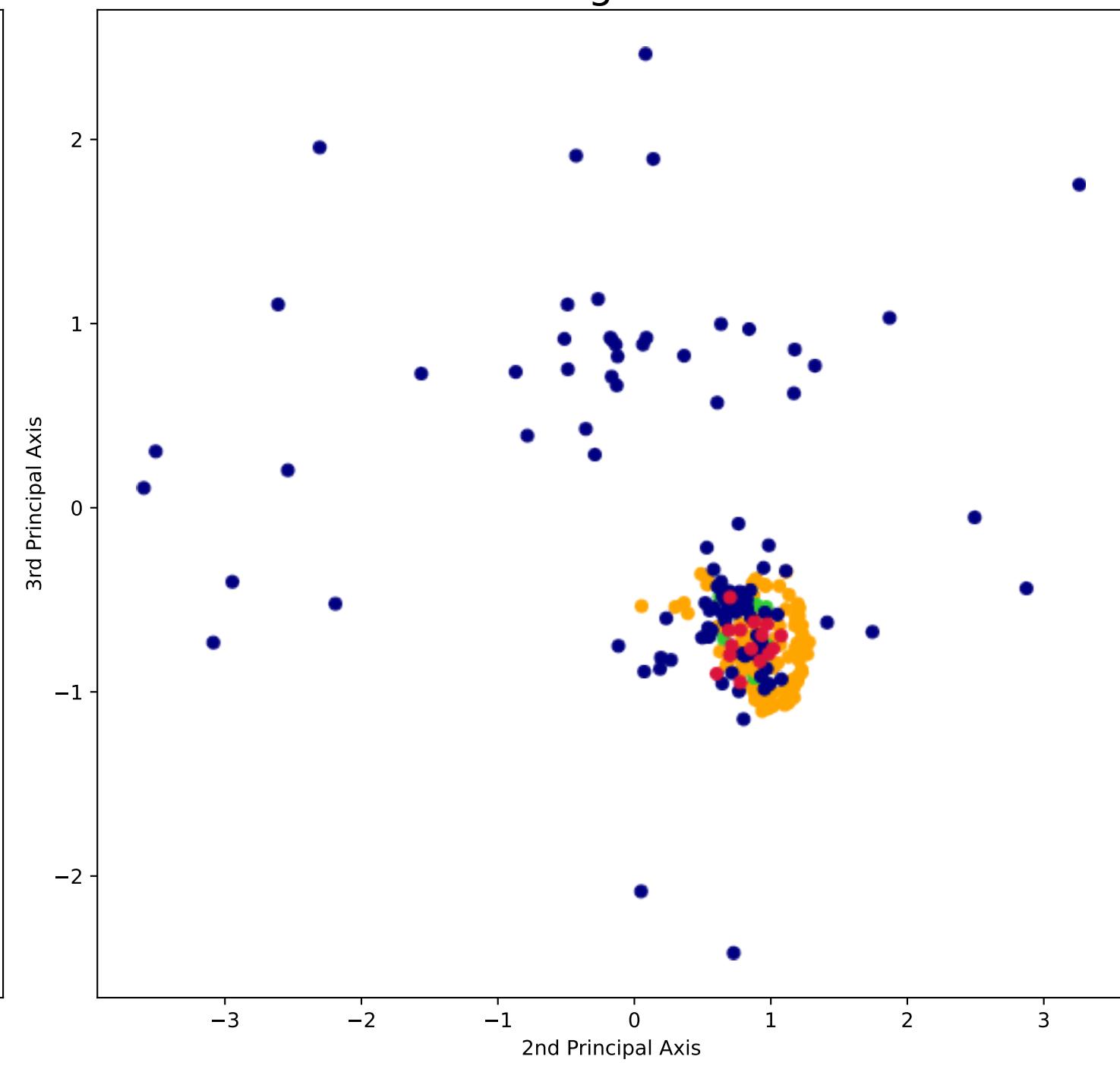
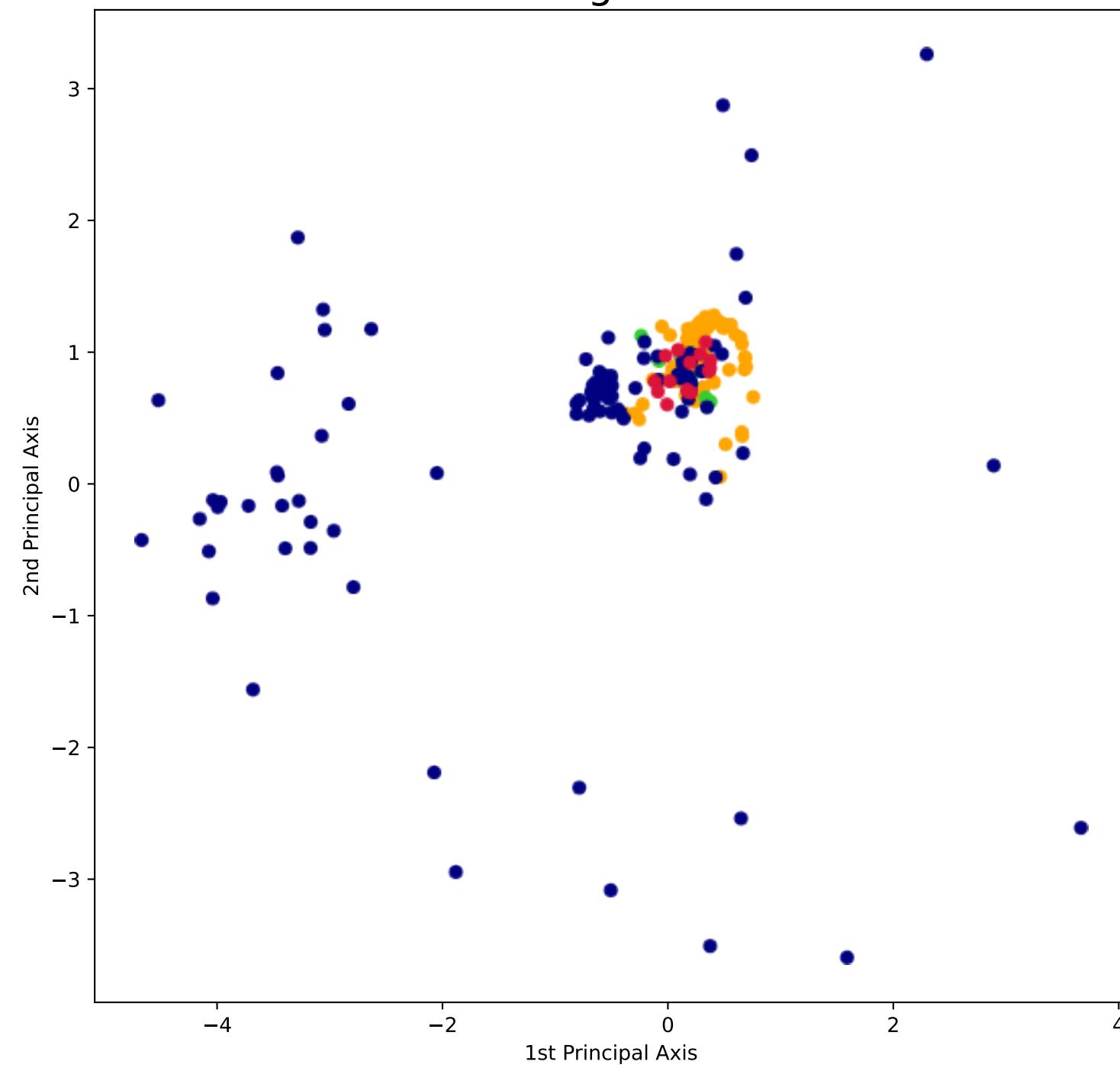
3D Projection



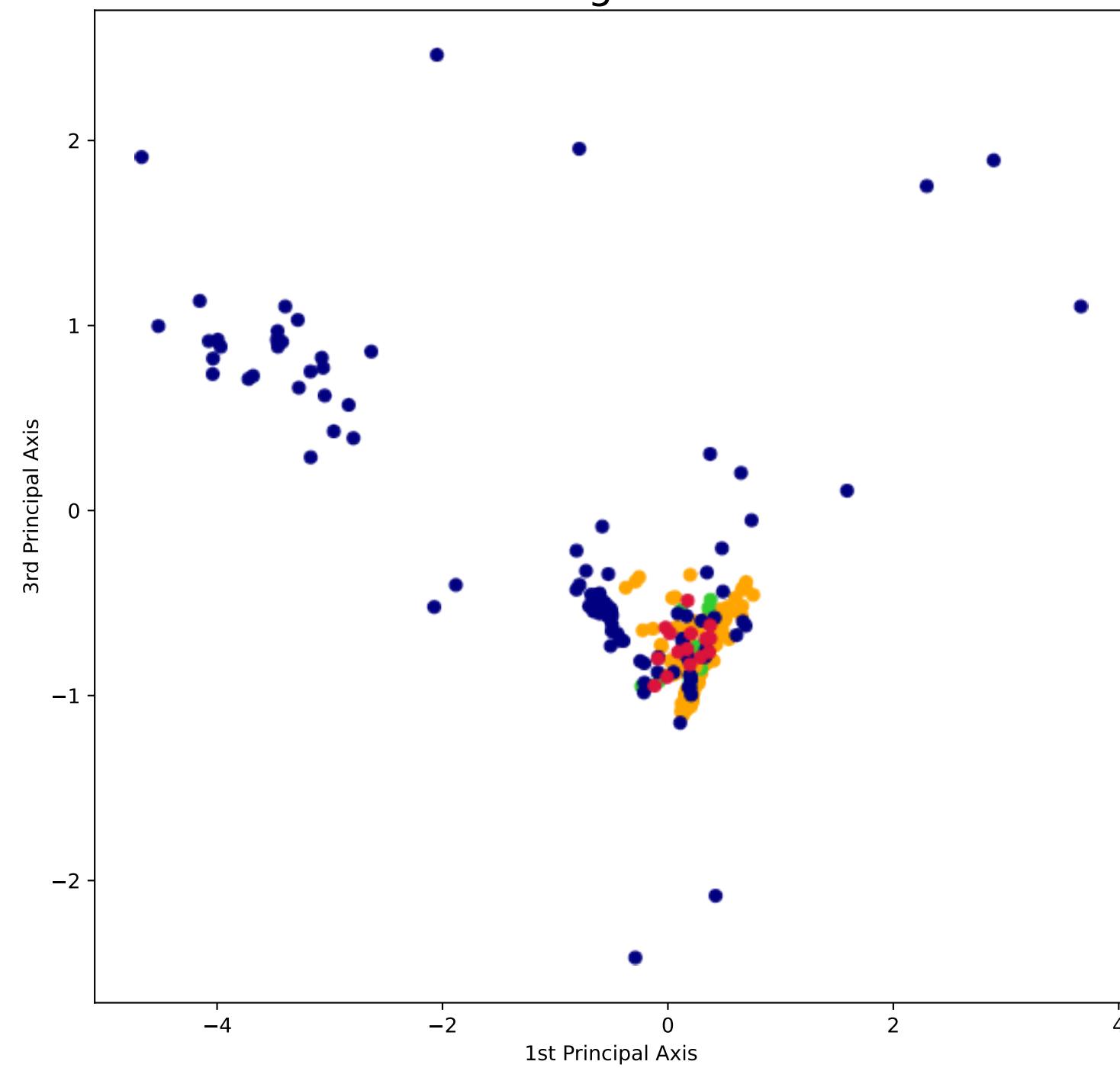
# Trial Number: 5, Phase: Apnea Starts

Angle 1

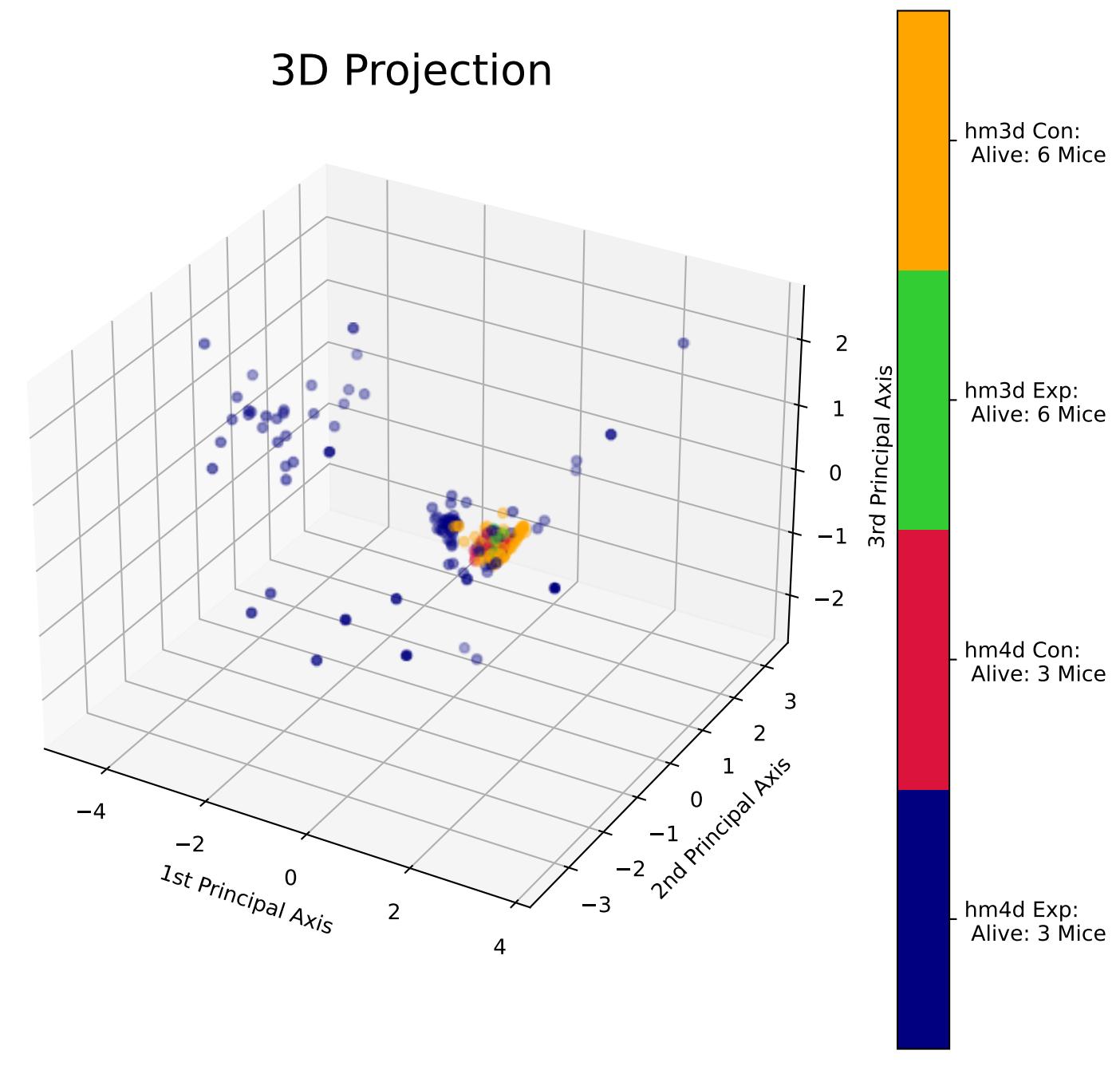
Angle 2



Angle 3

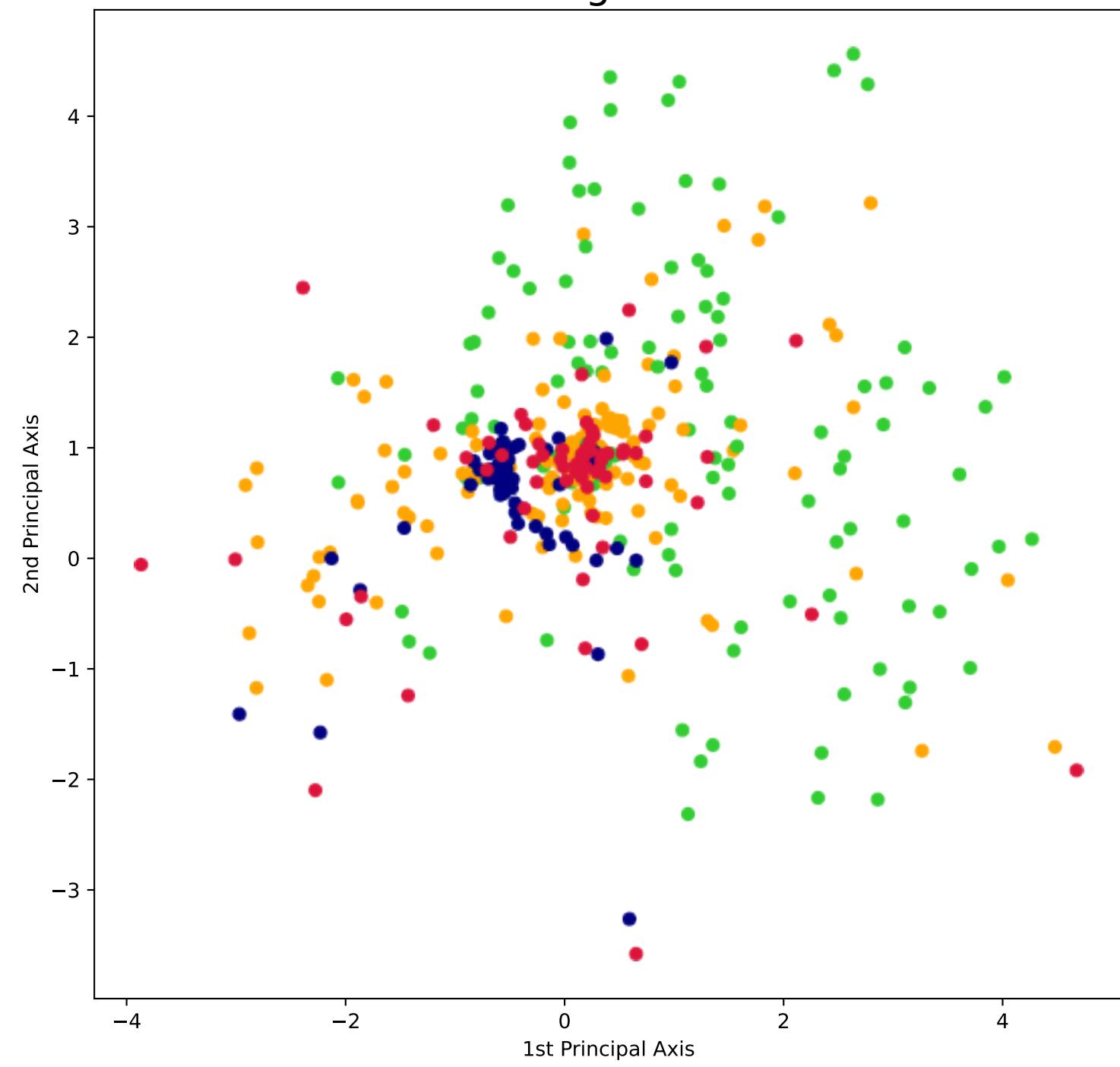


3D Projection

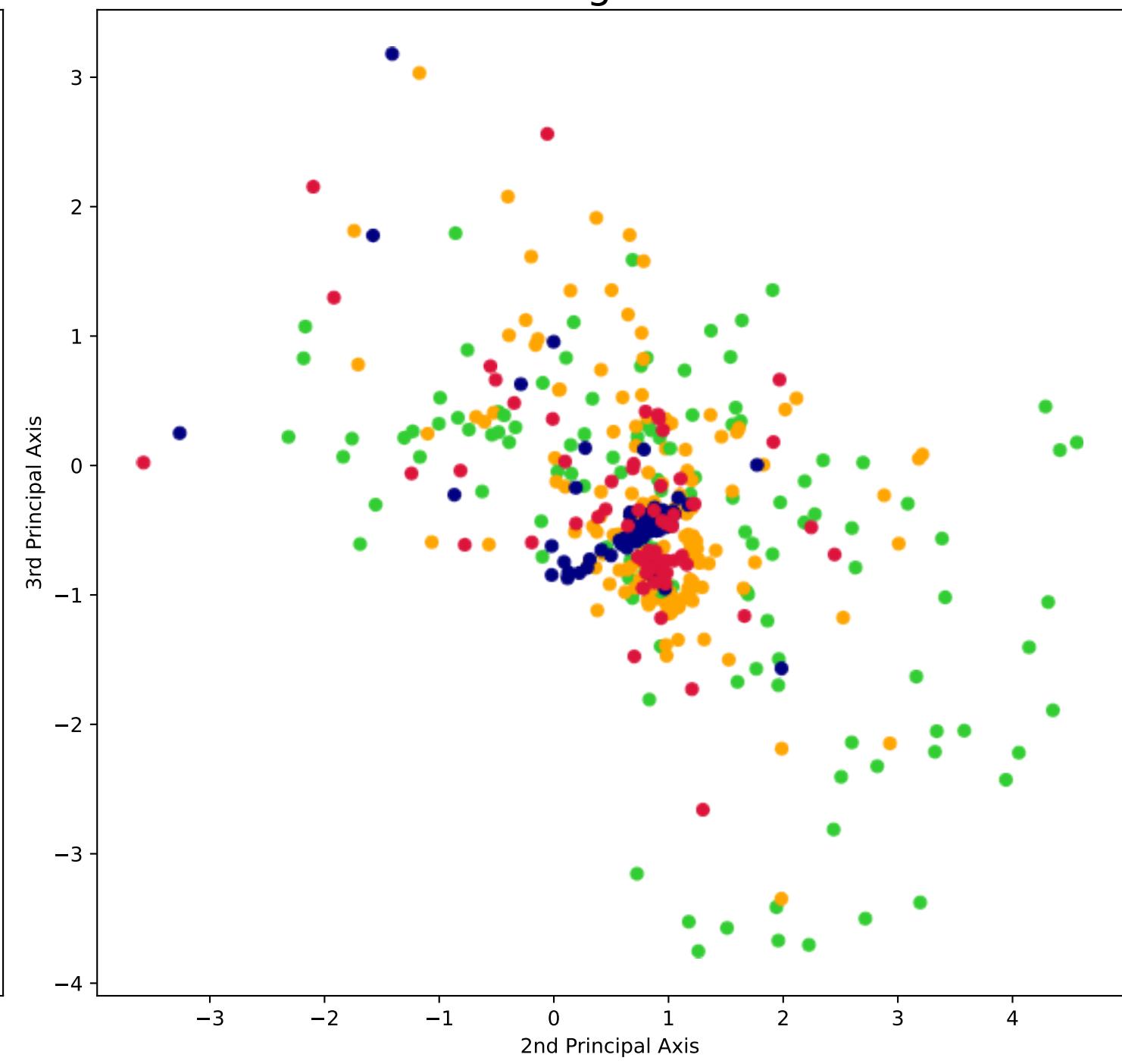


# Trial Number: 5, Phase: First Gasp

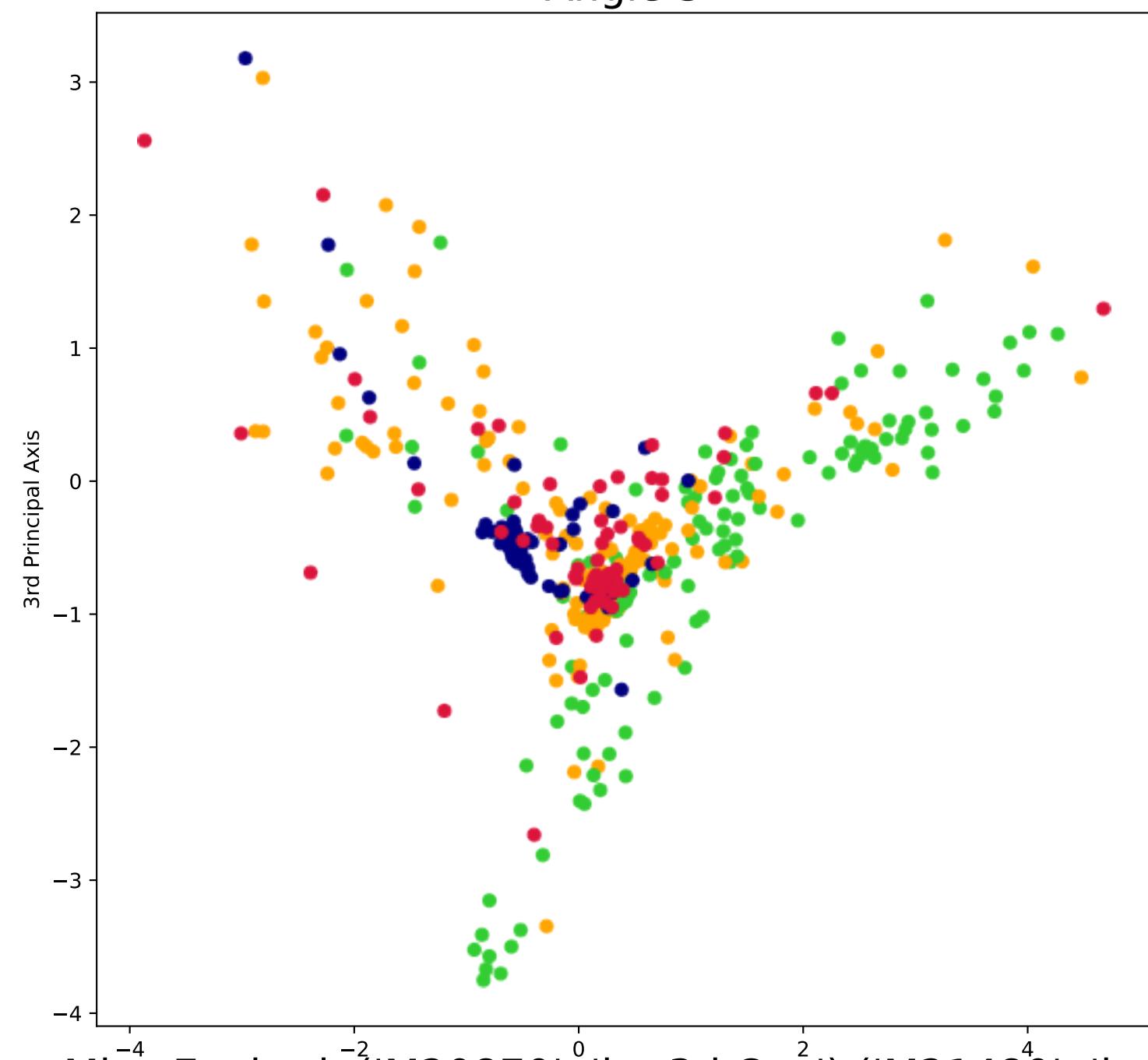
Angle 1



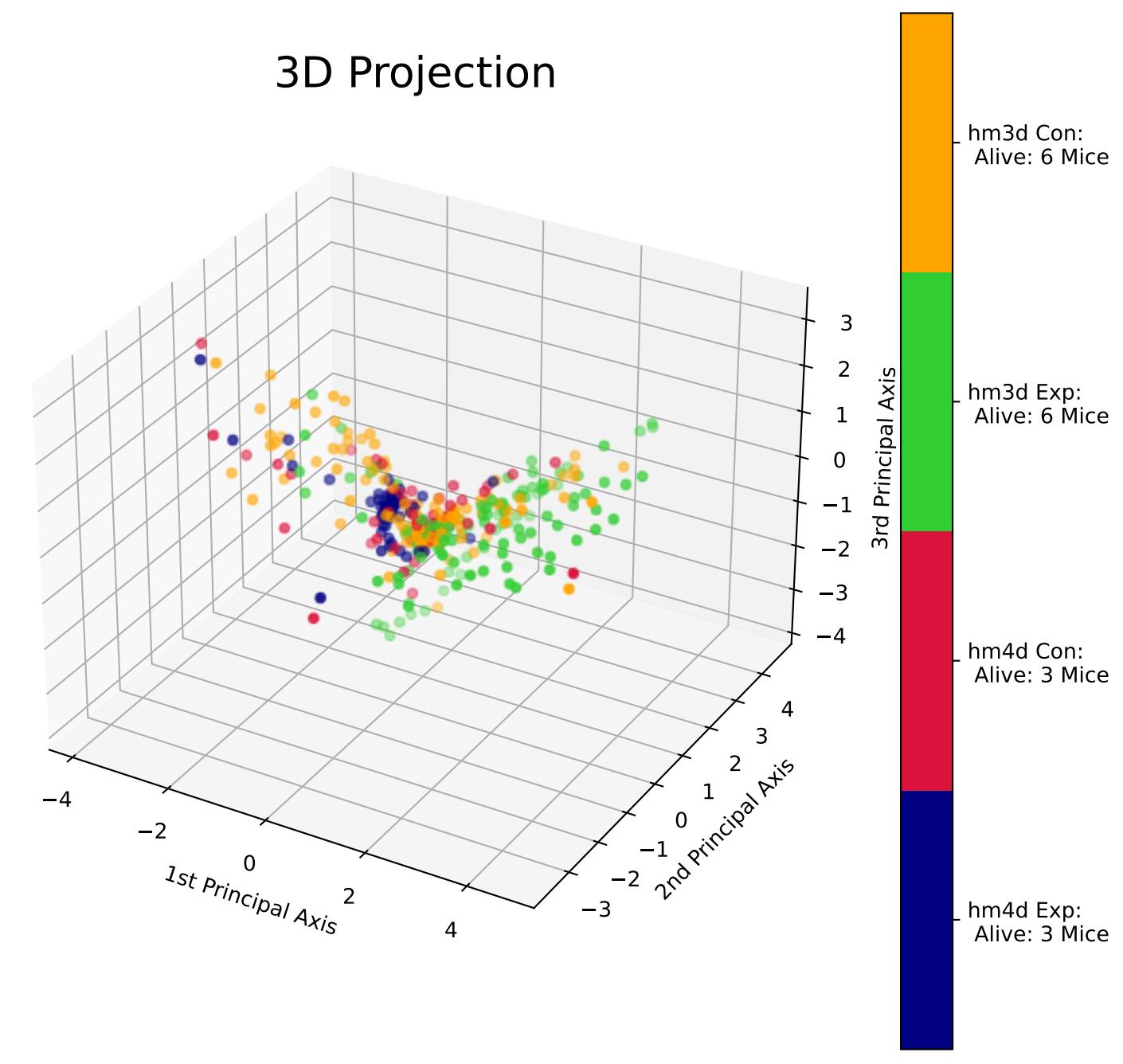
Angle 2



Angle 3



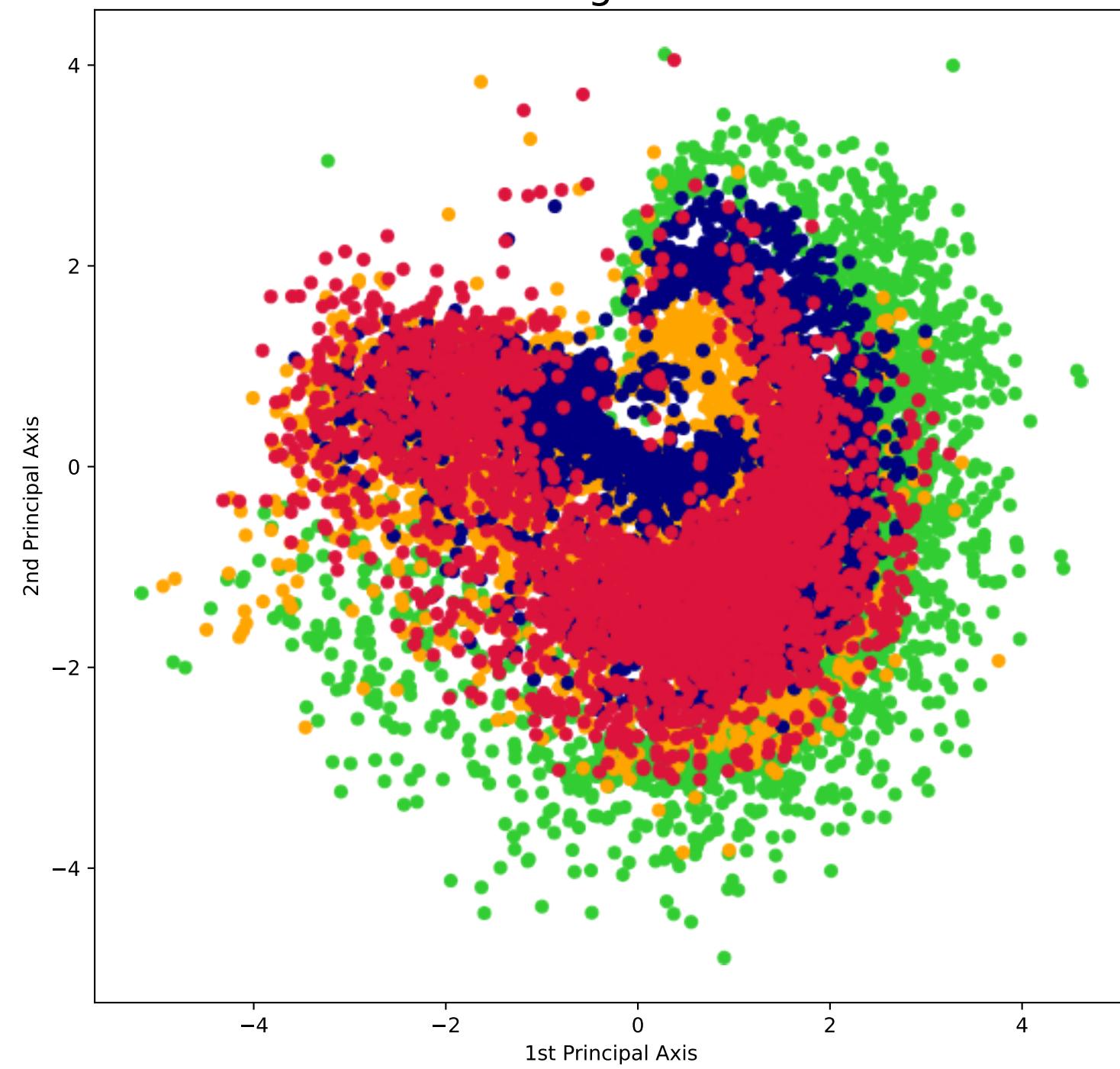
3D Projection



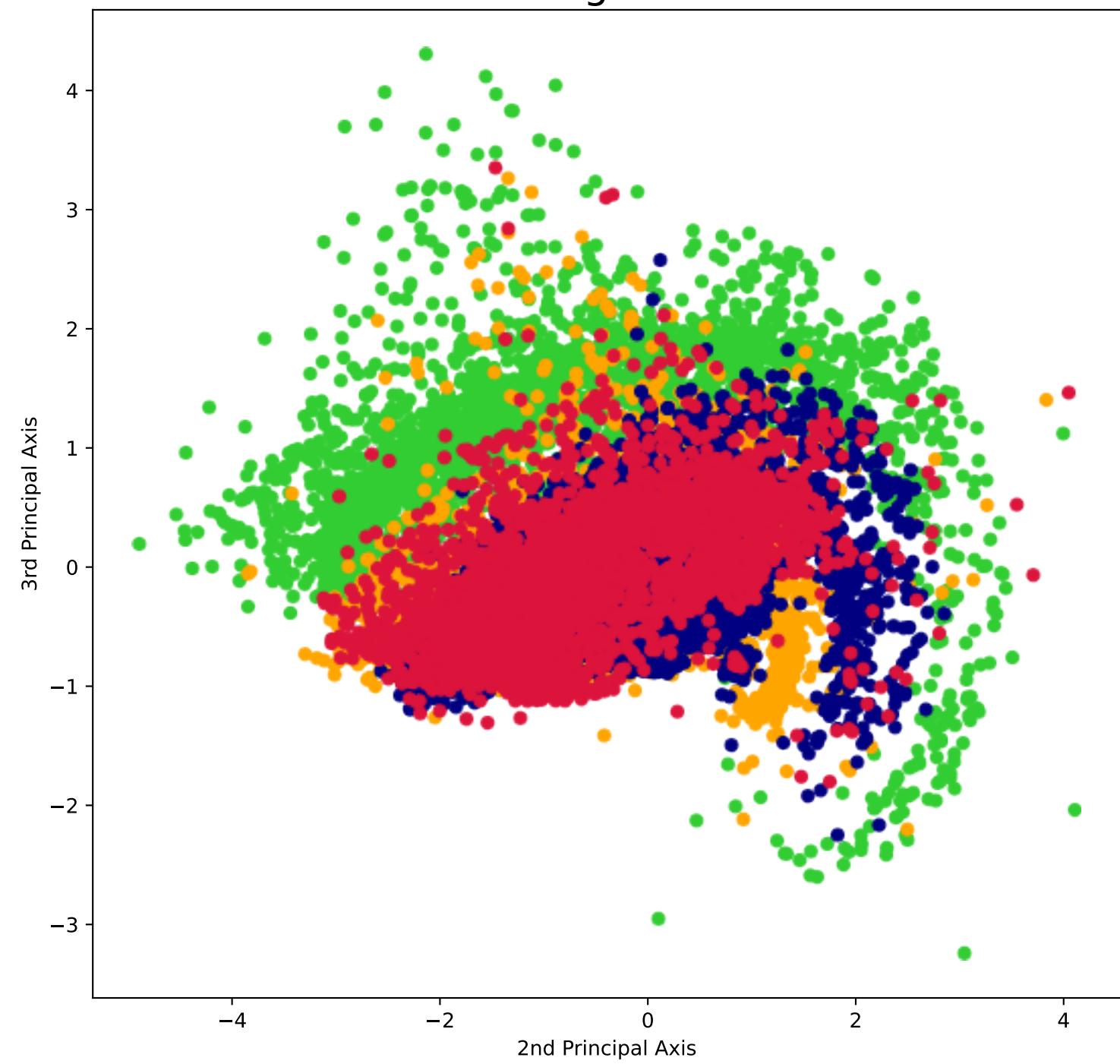
Mice Expired: ('M20870', 'hm3d Con') ('M21480', 'hm3d Exp') ('M21484', 'hm3d Exp') ('M21487', 'hm3d Exp')

# Trial Number: 5, Phase: Eupnea Recovery

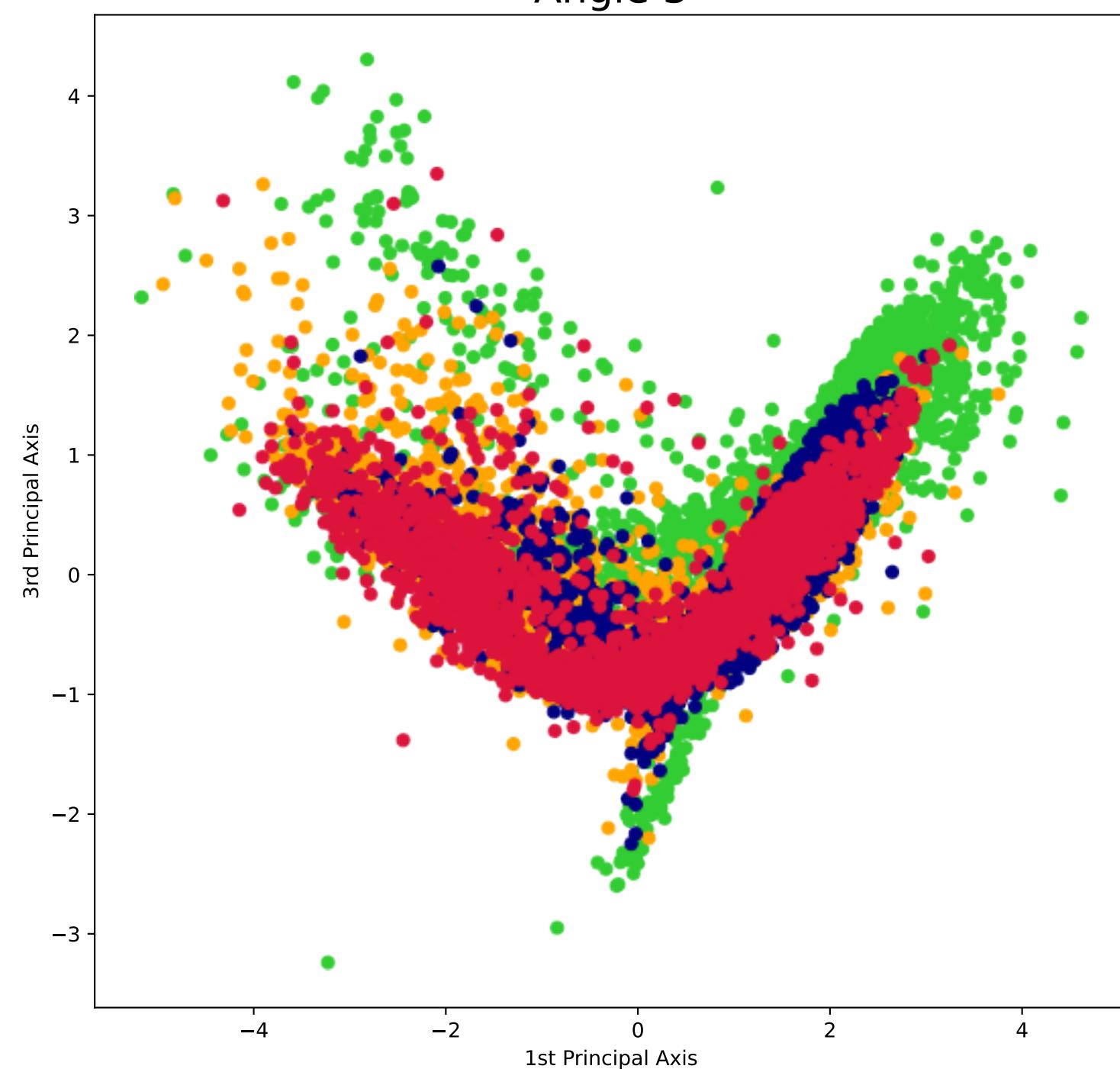
Angle 1



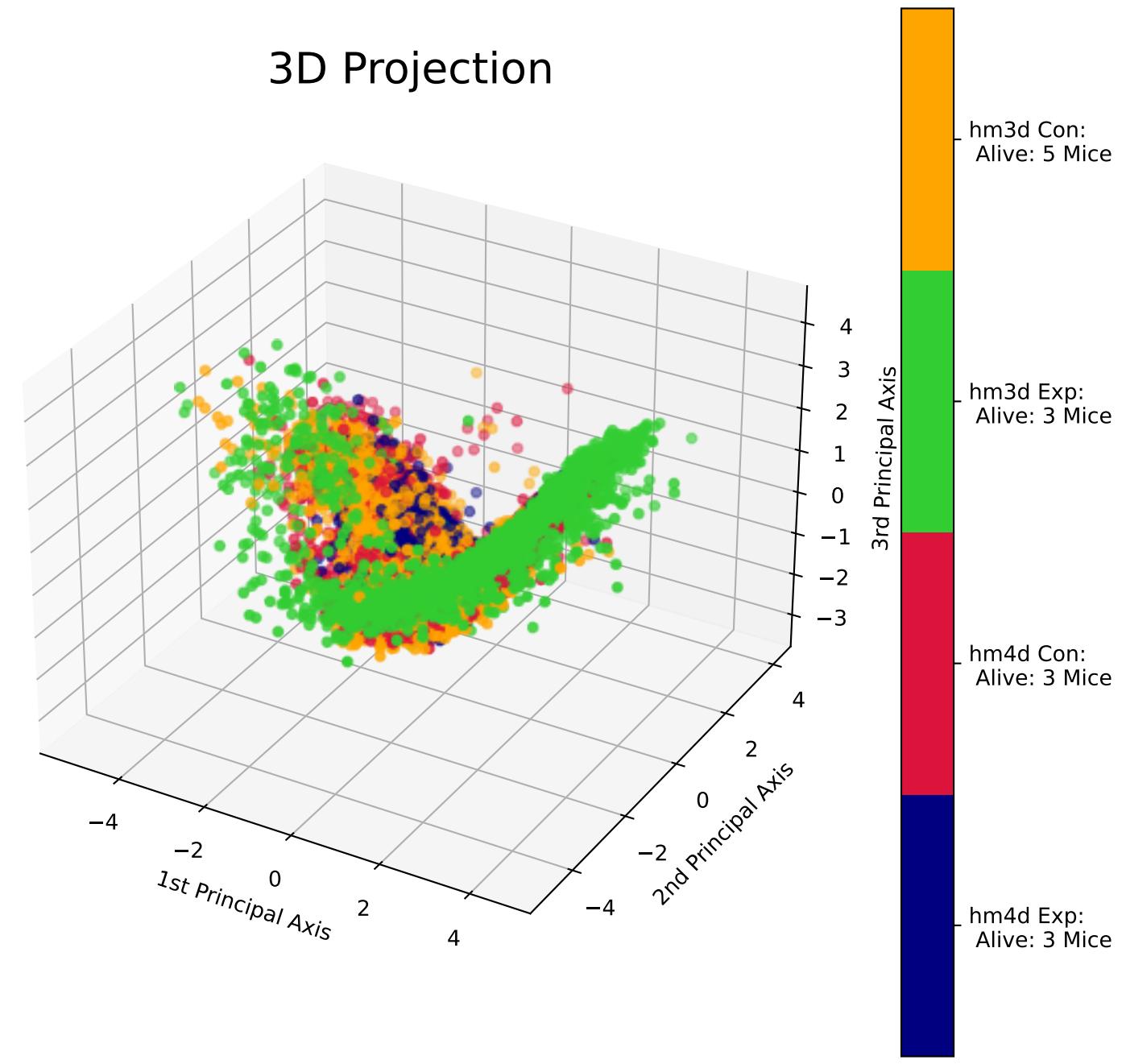
Angle 2



Angle 3

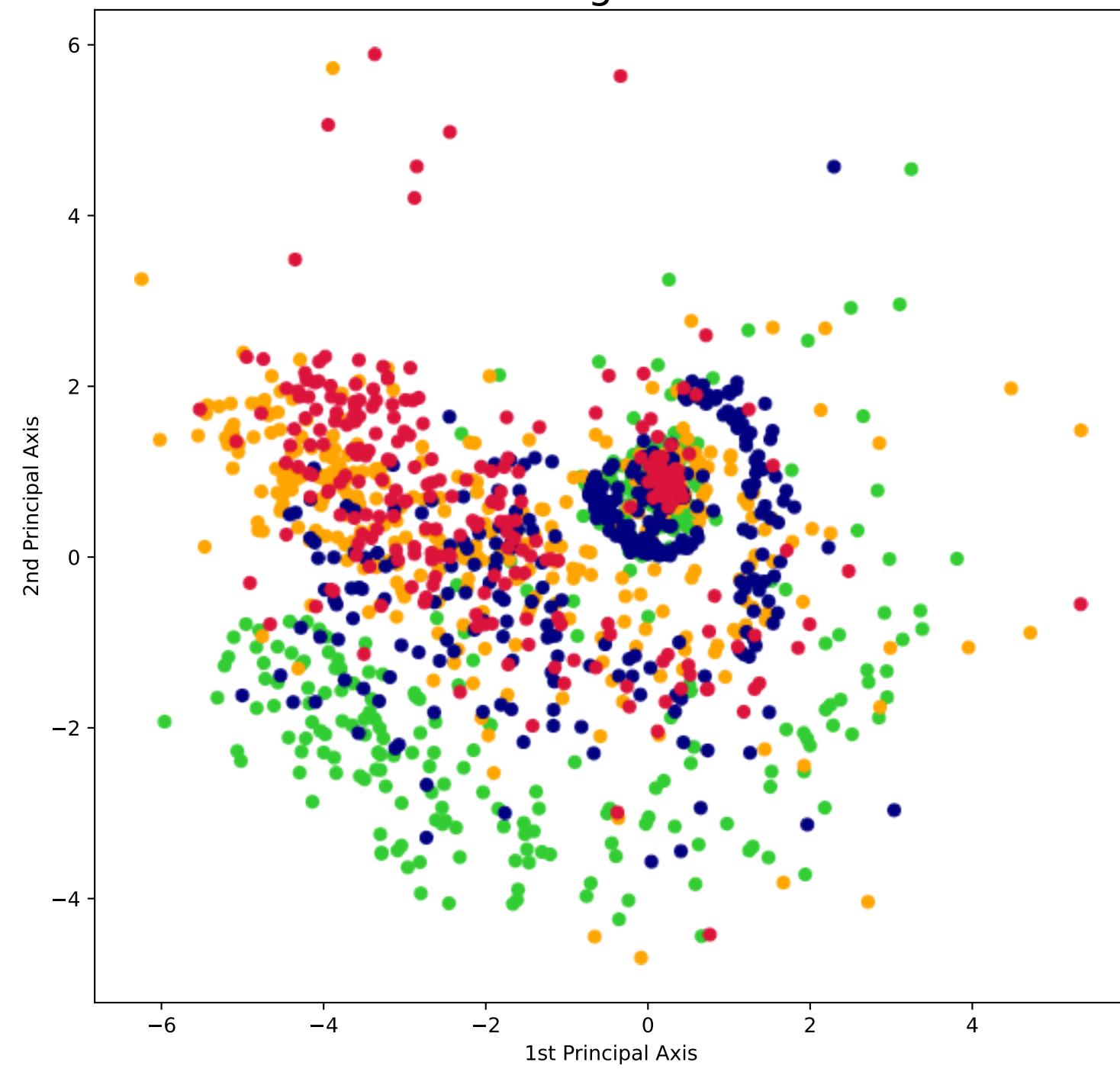


3D Projection

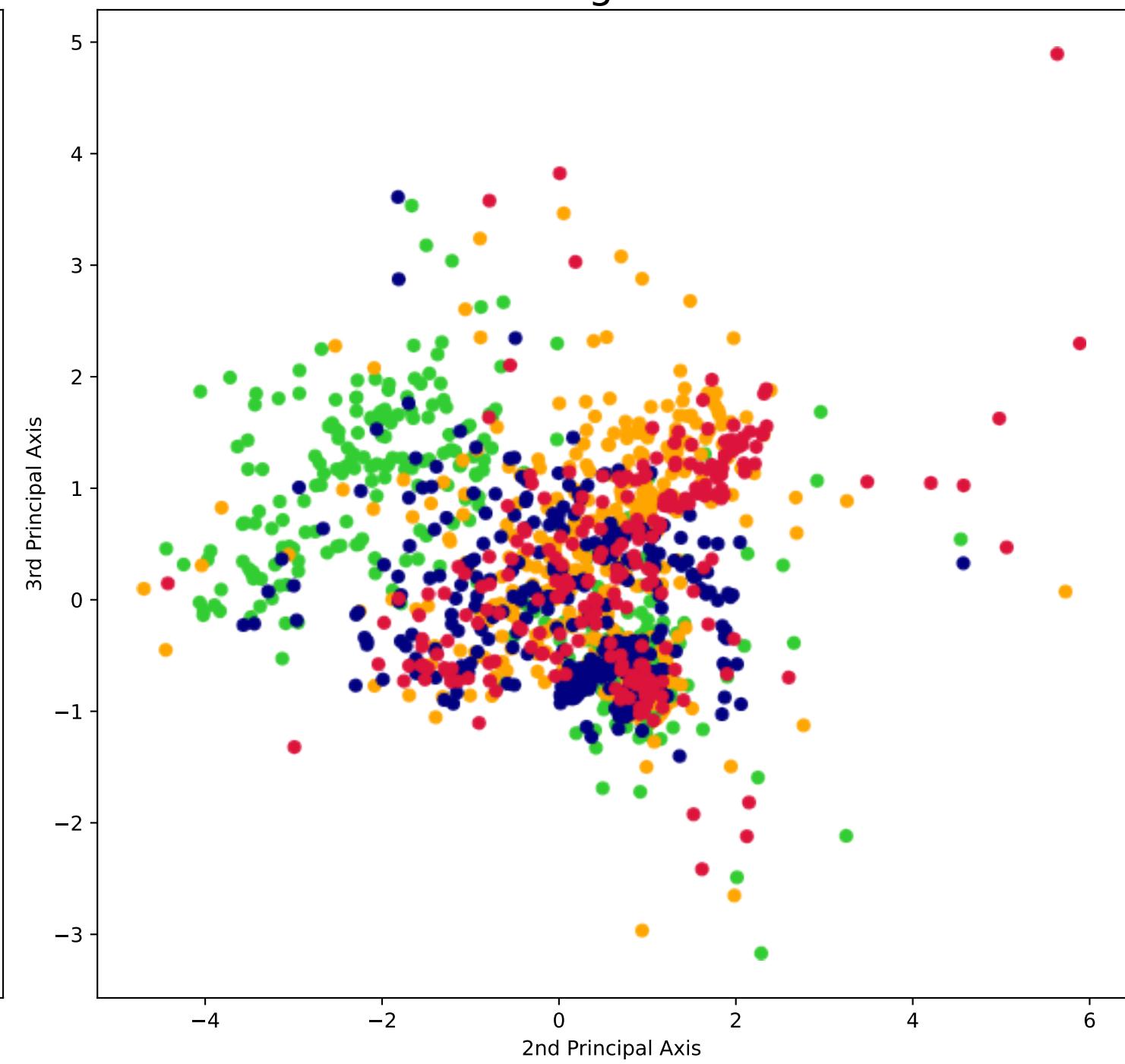


# Trial Number: 6, Phase: Trial Onset

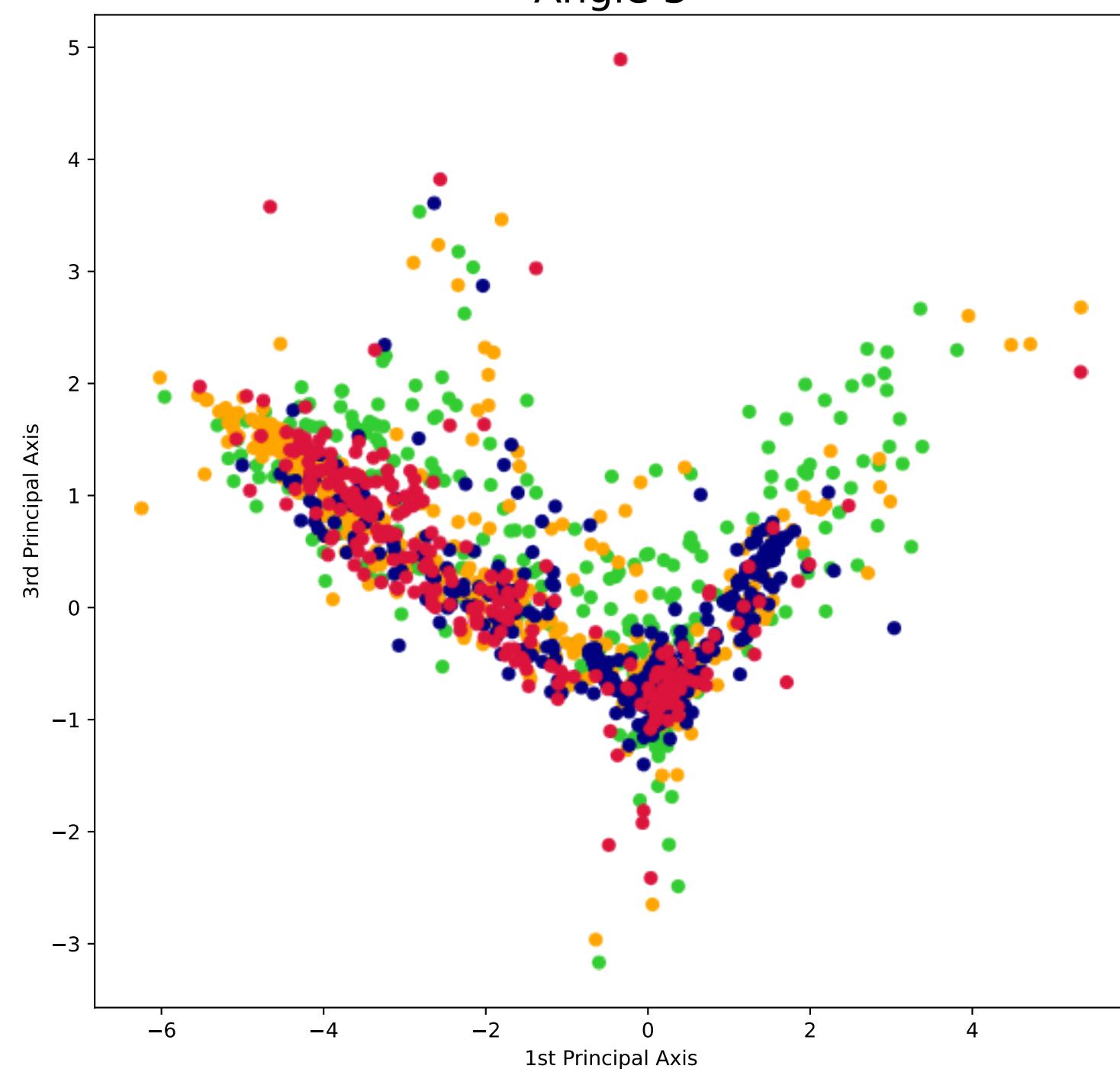
Angle 1



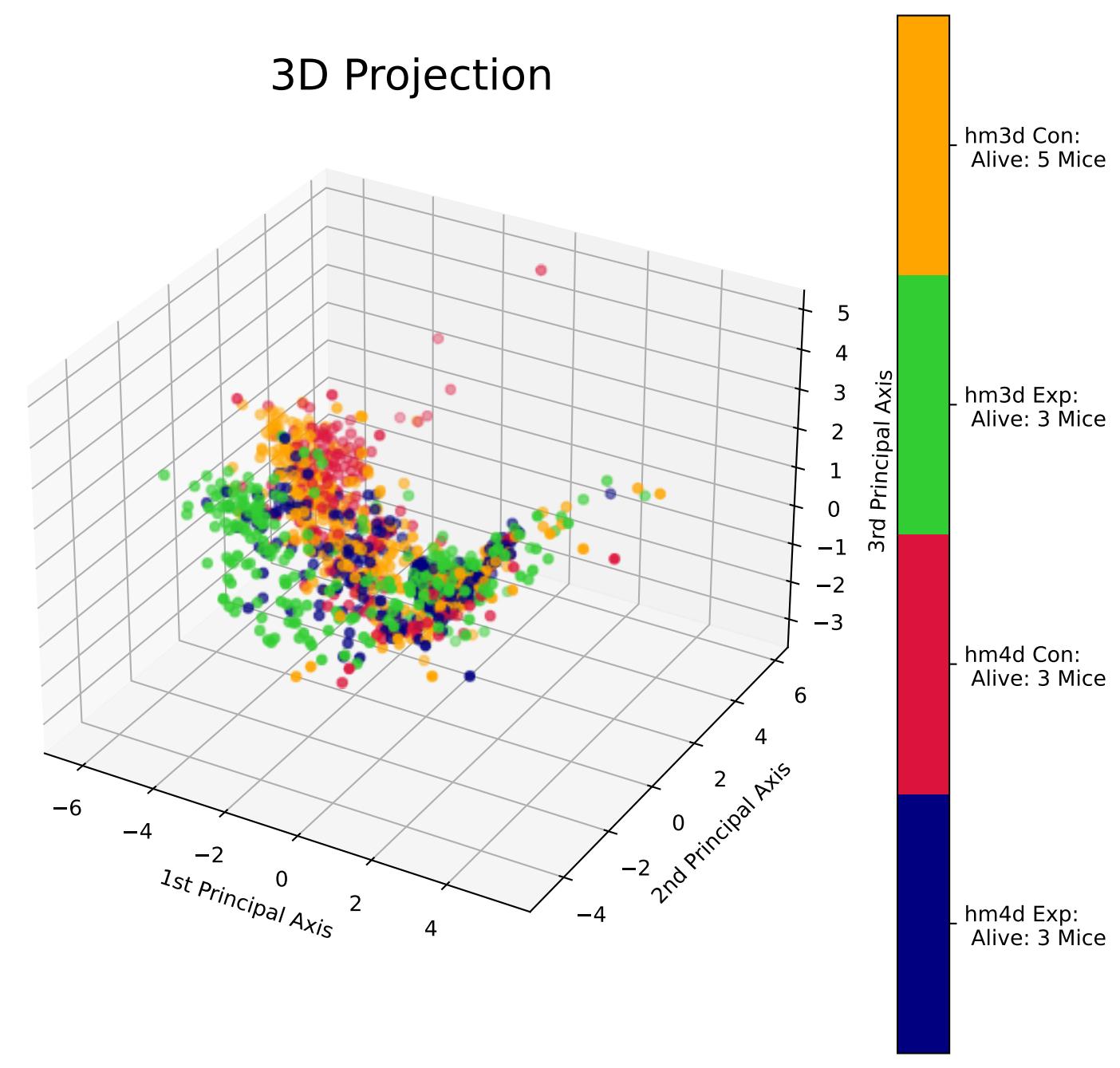
Angle 2



Angle 3



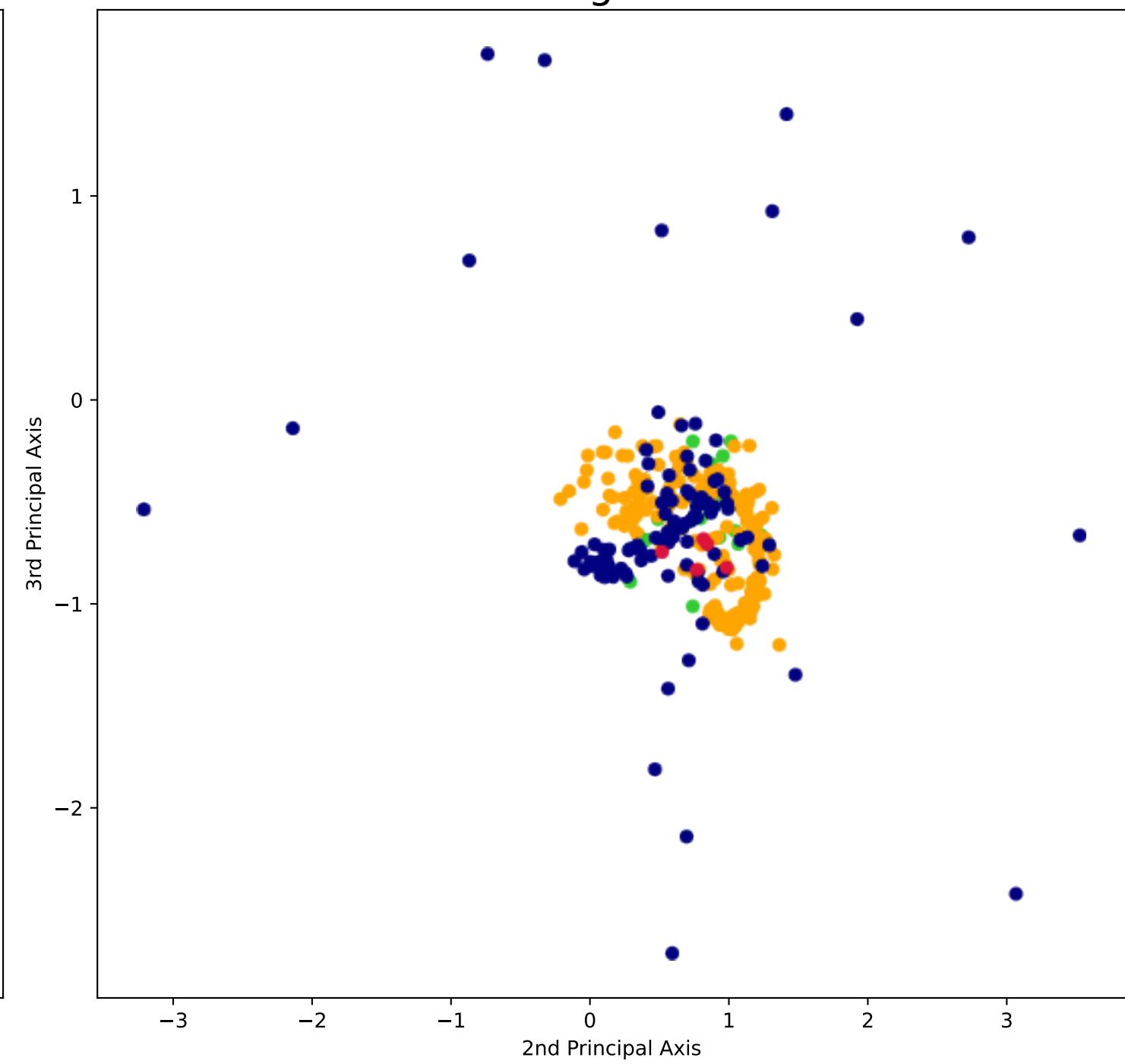
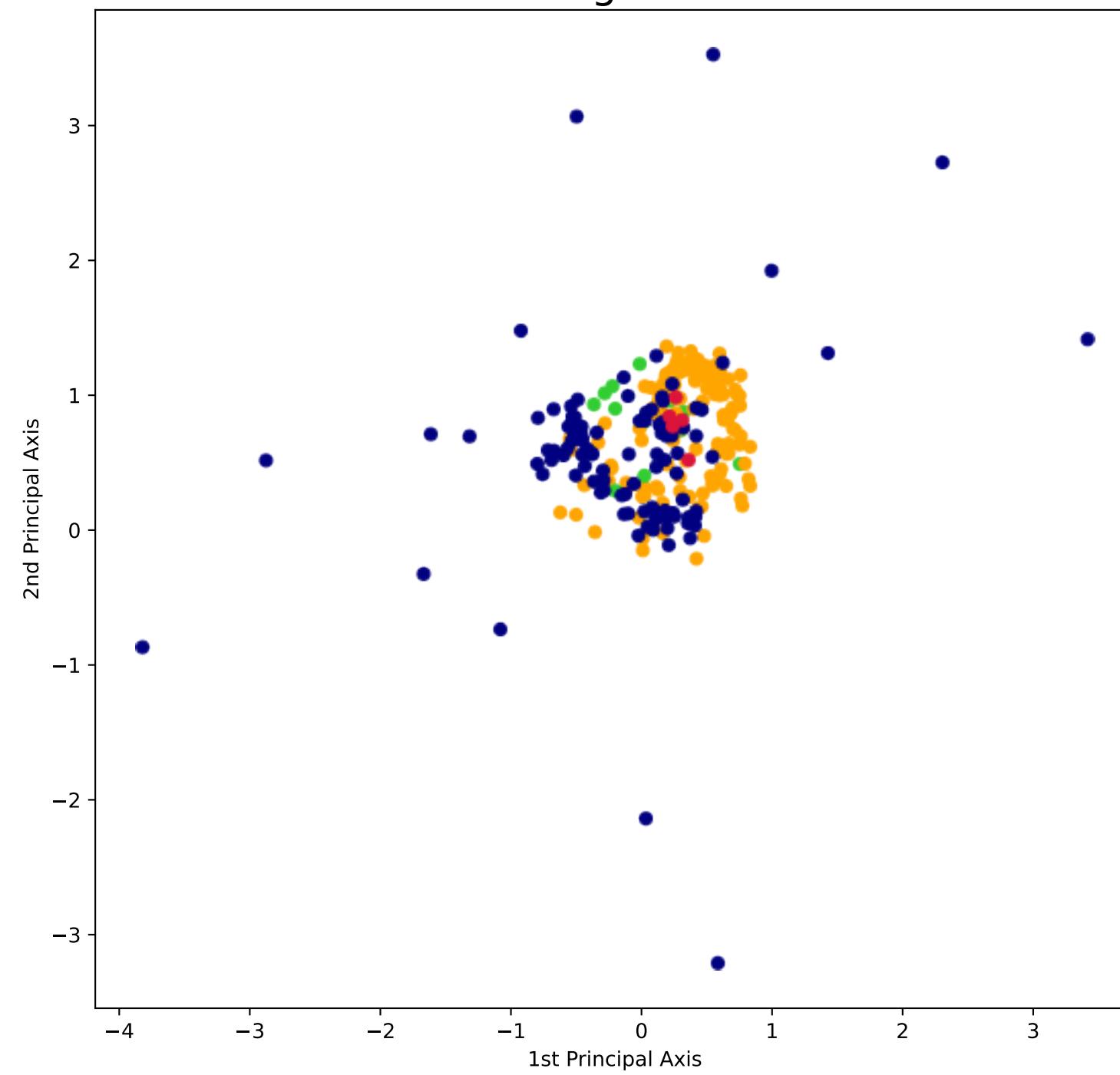
3D Projection



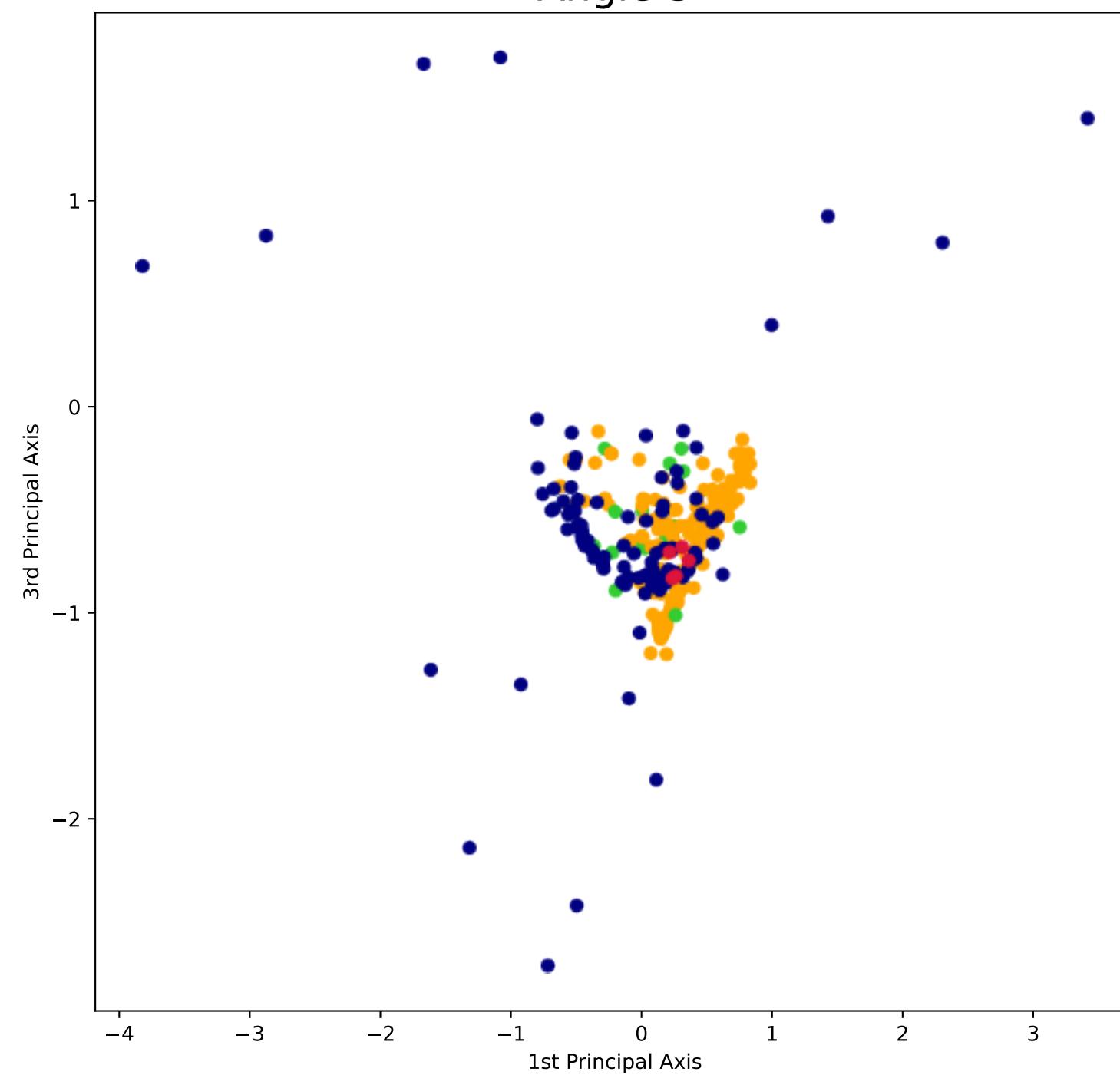
# Trial Number: 6, Phase: Apnea Starts

Angle 1

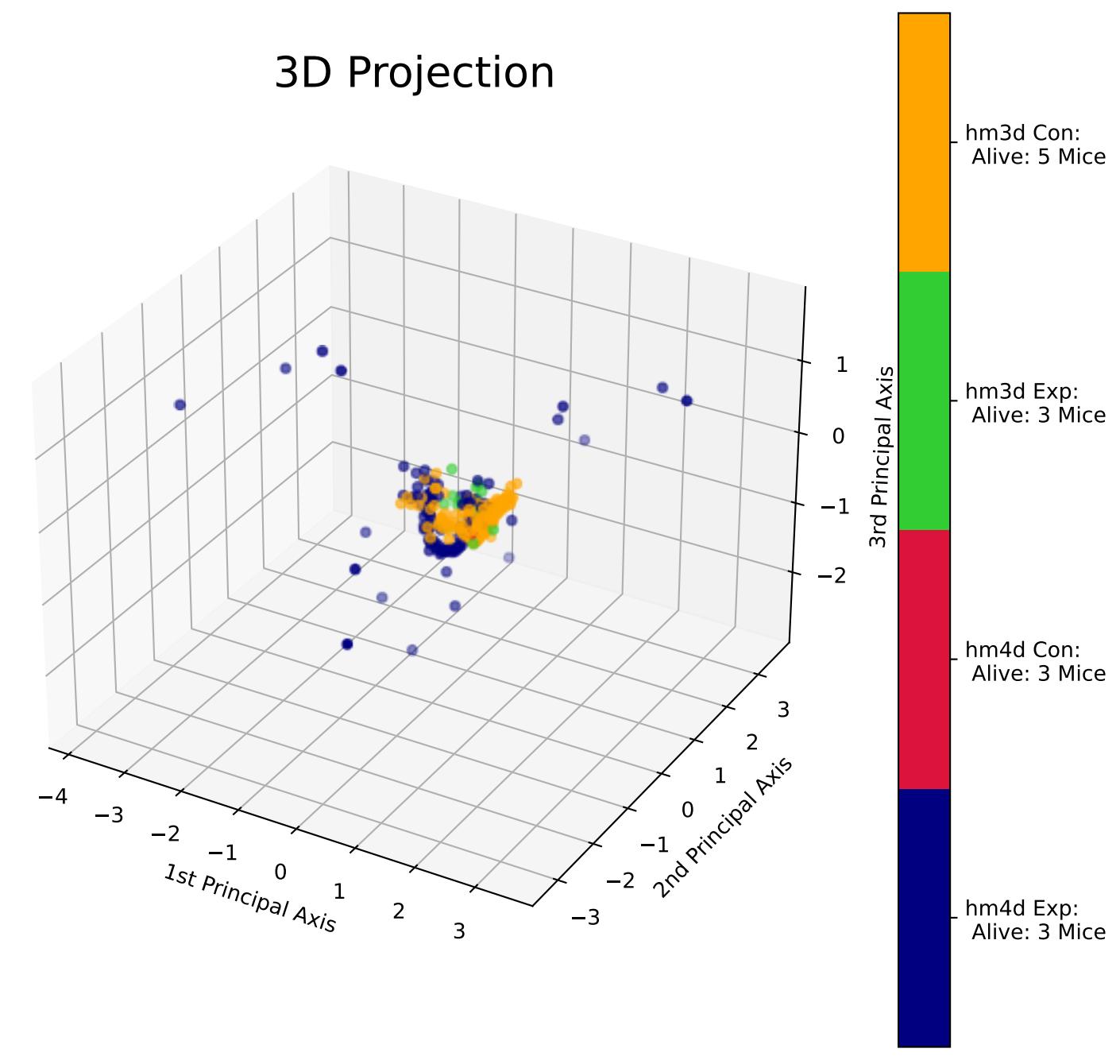
Angle 2



Angle 3



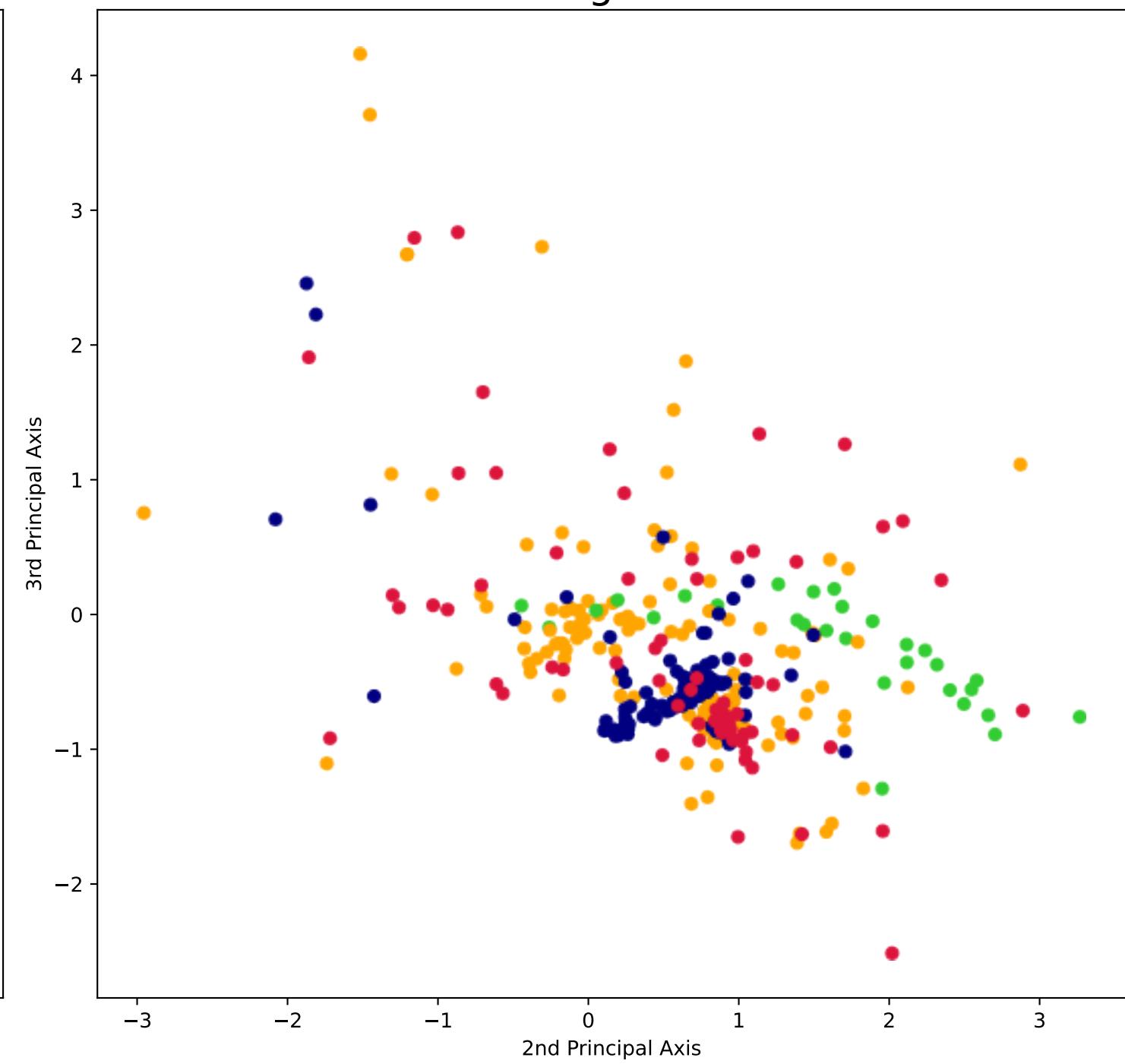
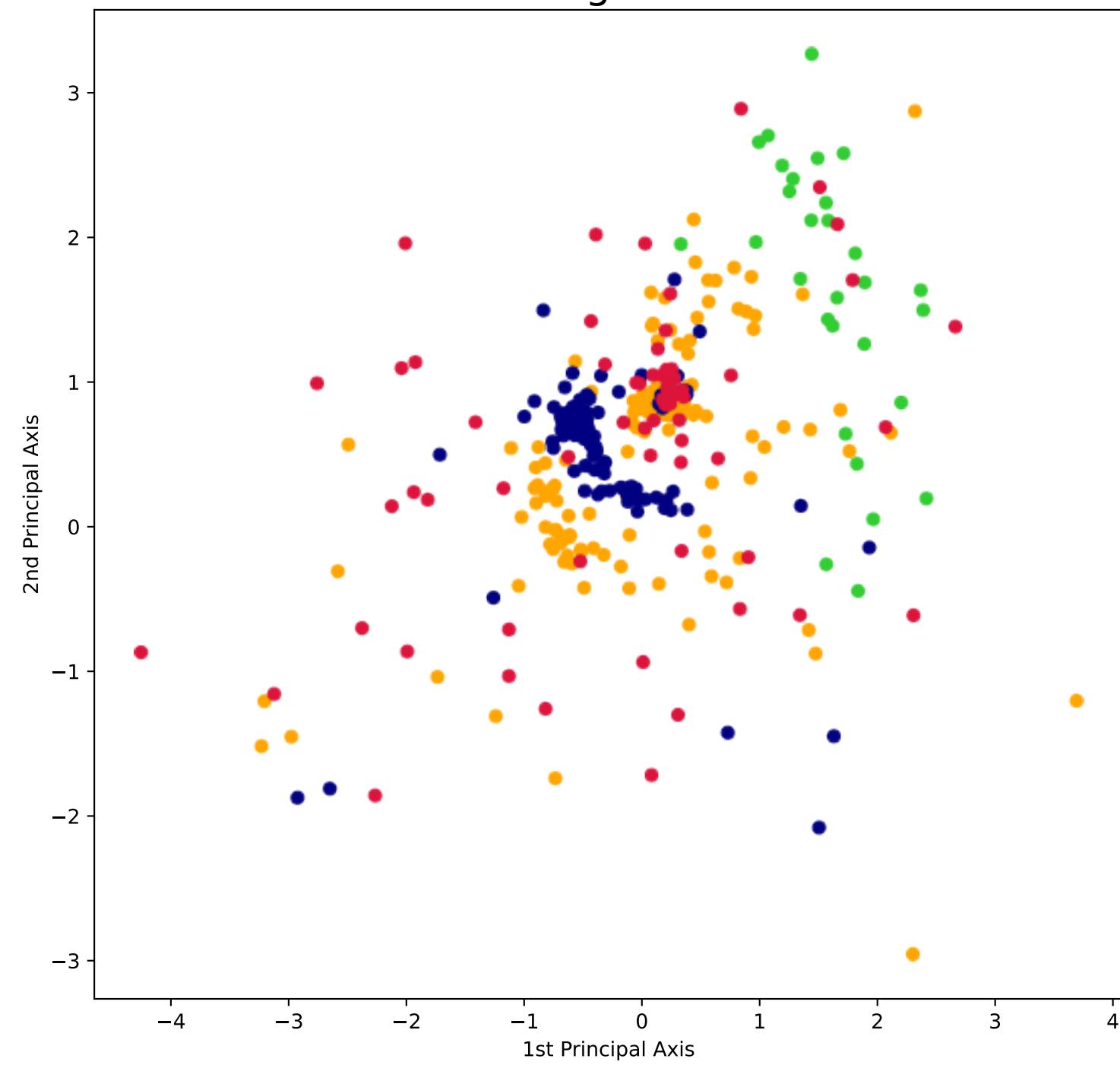
3D Projection



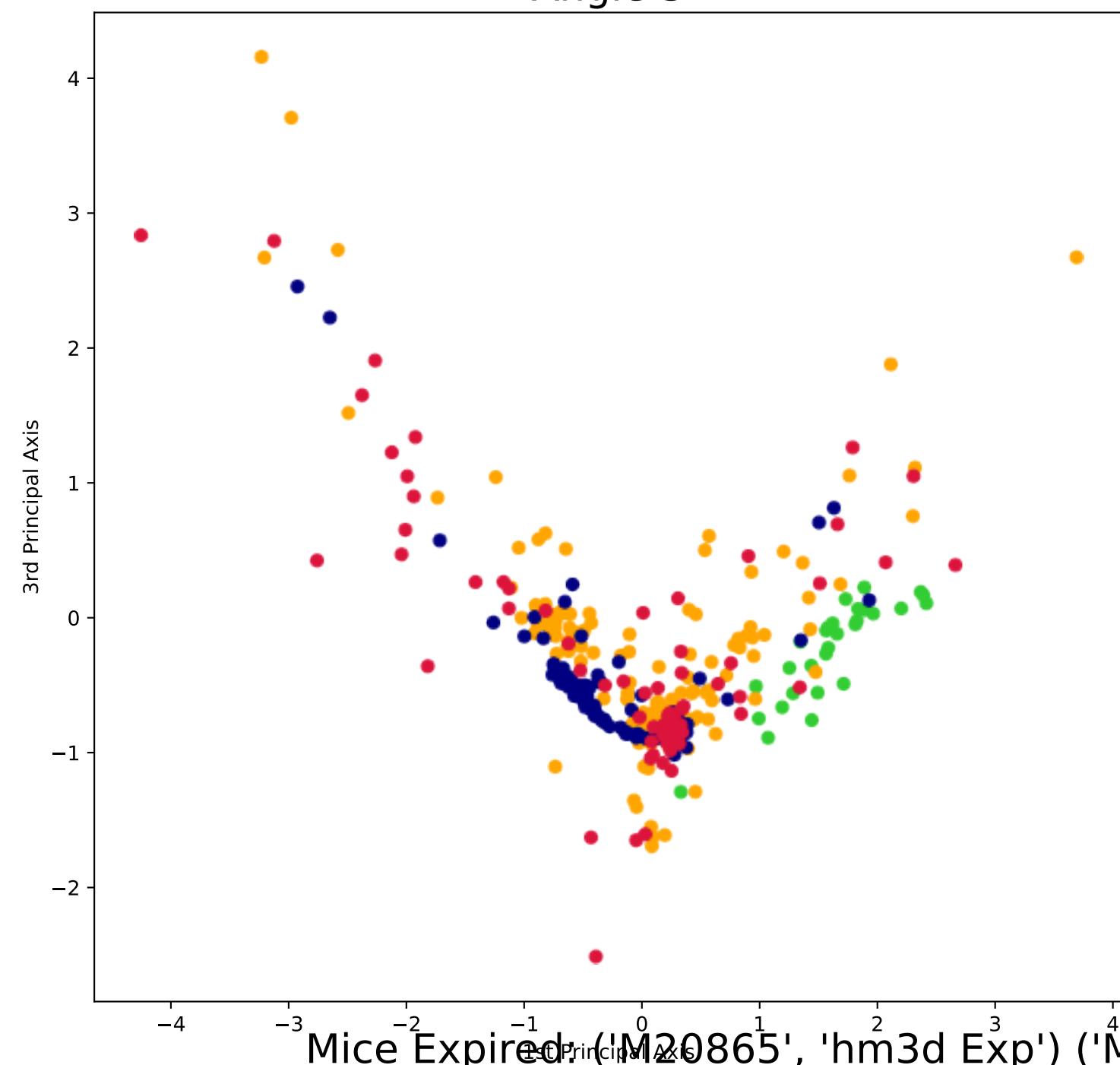
# Trial Number: 6, Phase: First Gasp

Angle 1

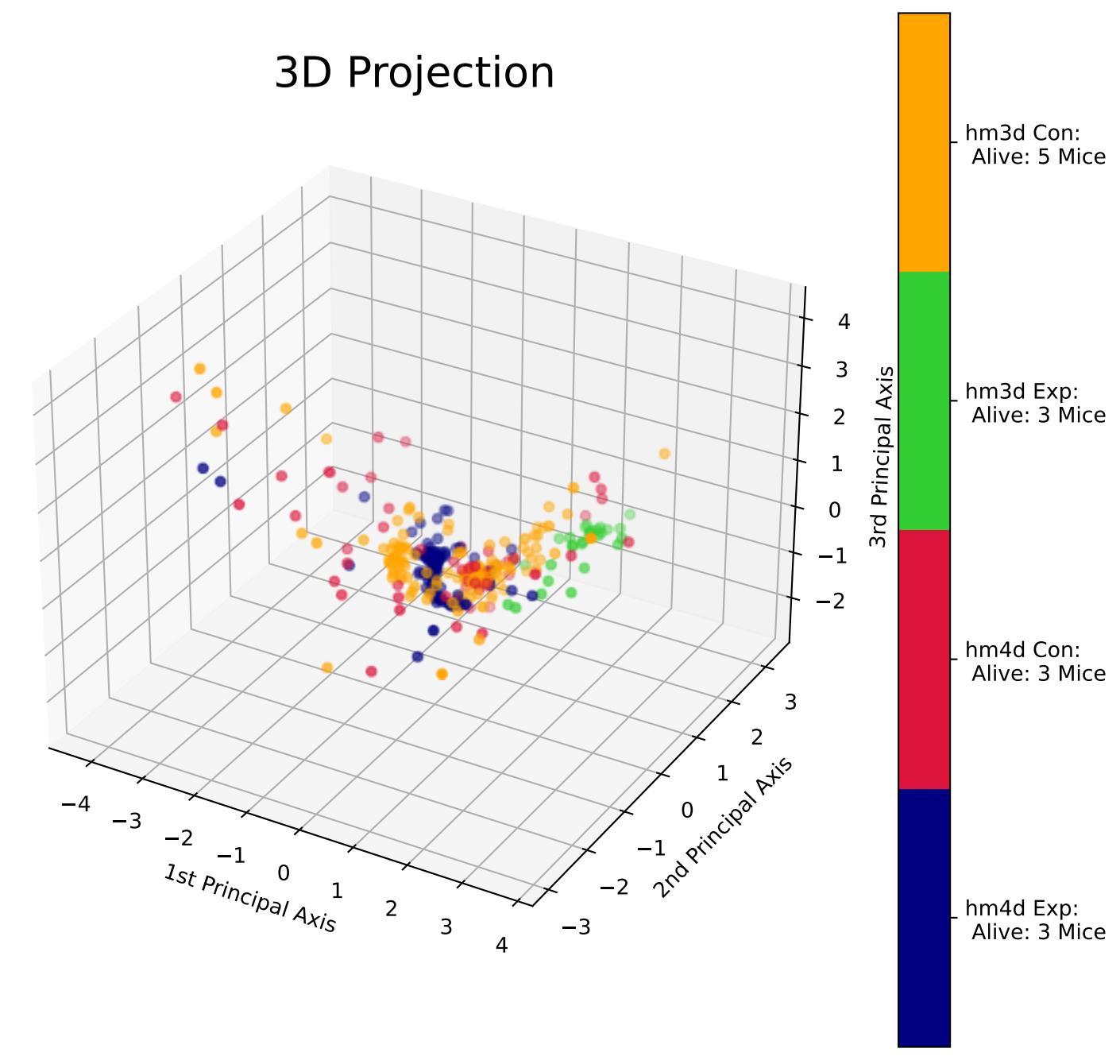
Angle 2



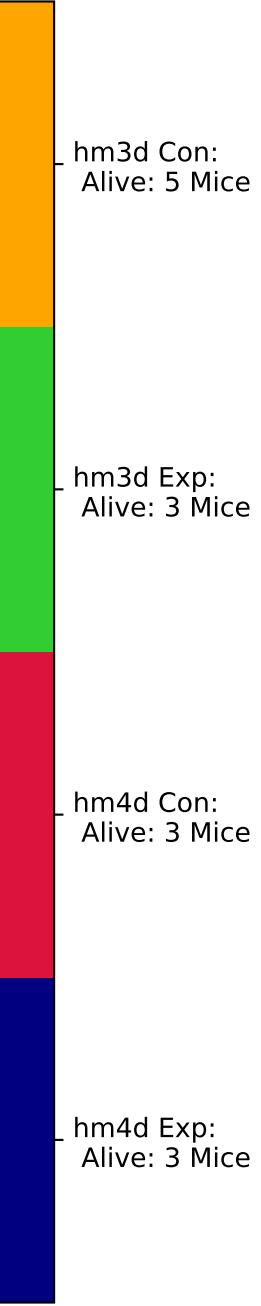
Angle 3



3D Projection

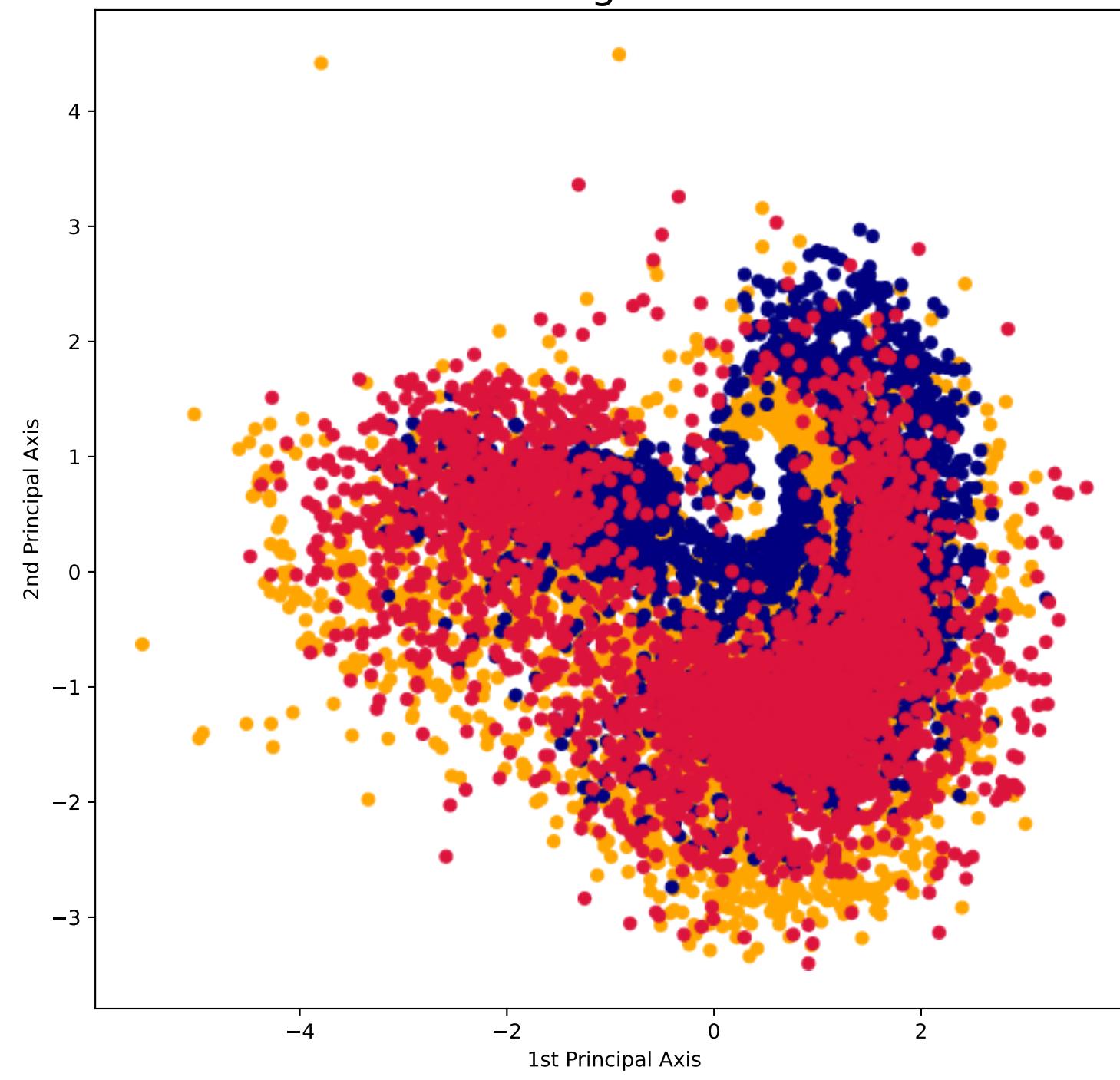


Mice Expired: ('M20865', 'hm3d Exp') ('M20867', 'hm3d Exp') ('M20869', 'hm3d Exp')

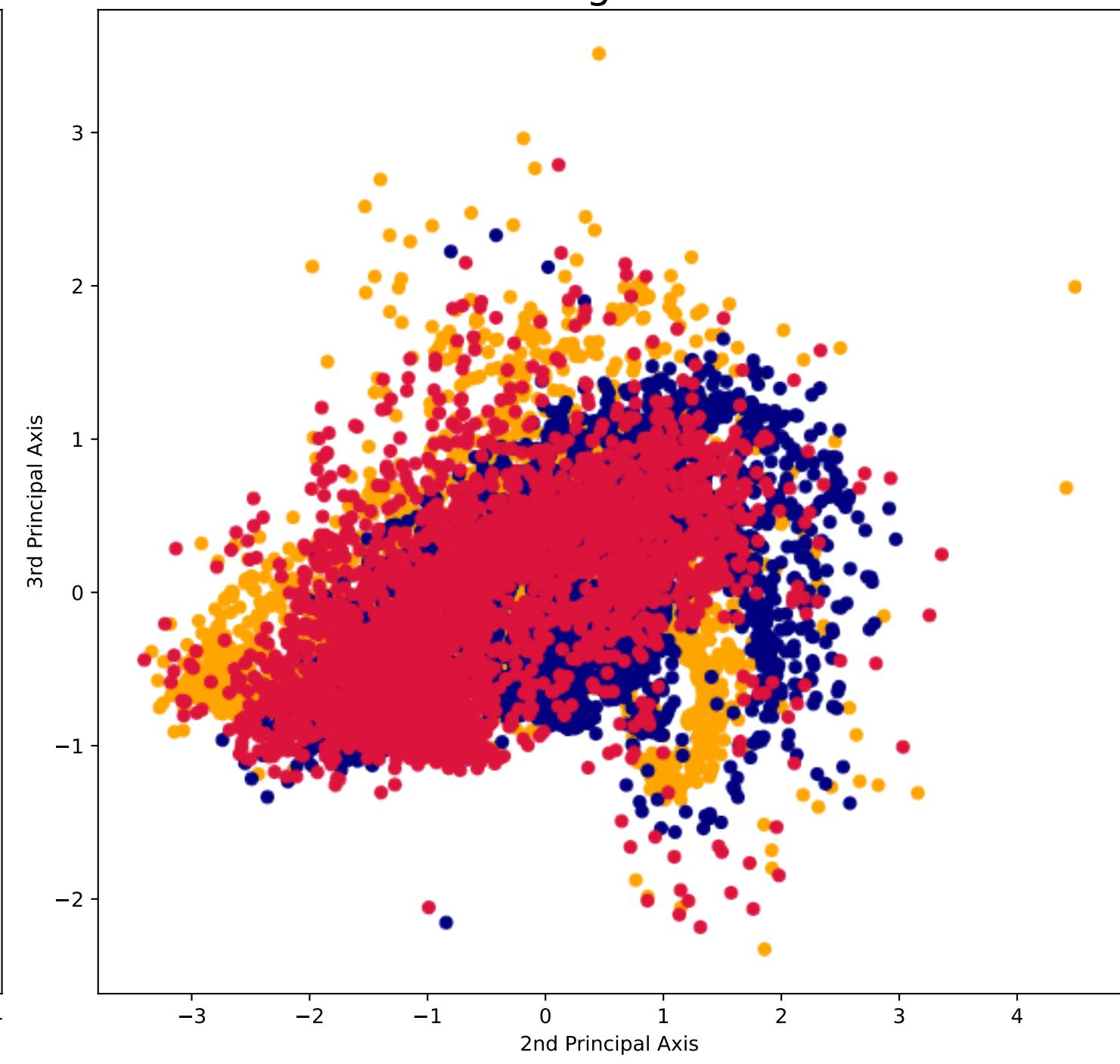


# Trial Number: 6, Phase: Eupnea Recovery

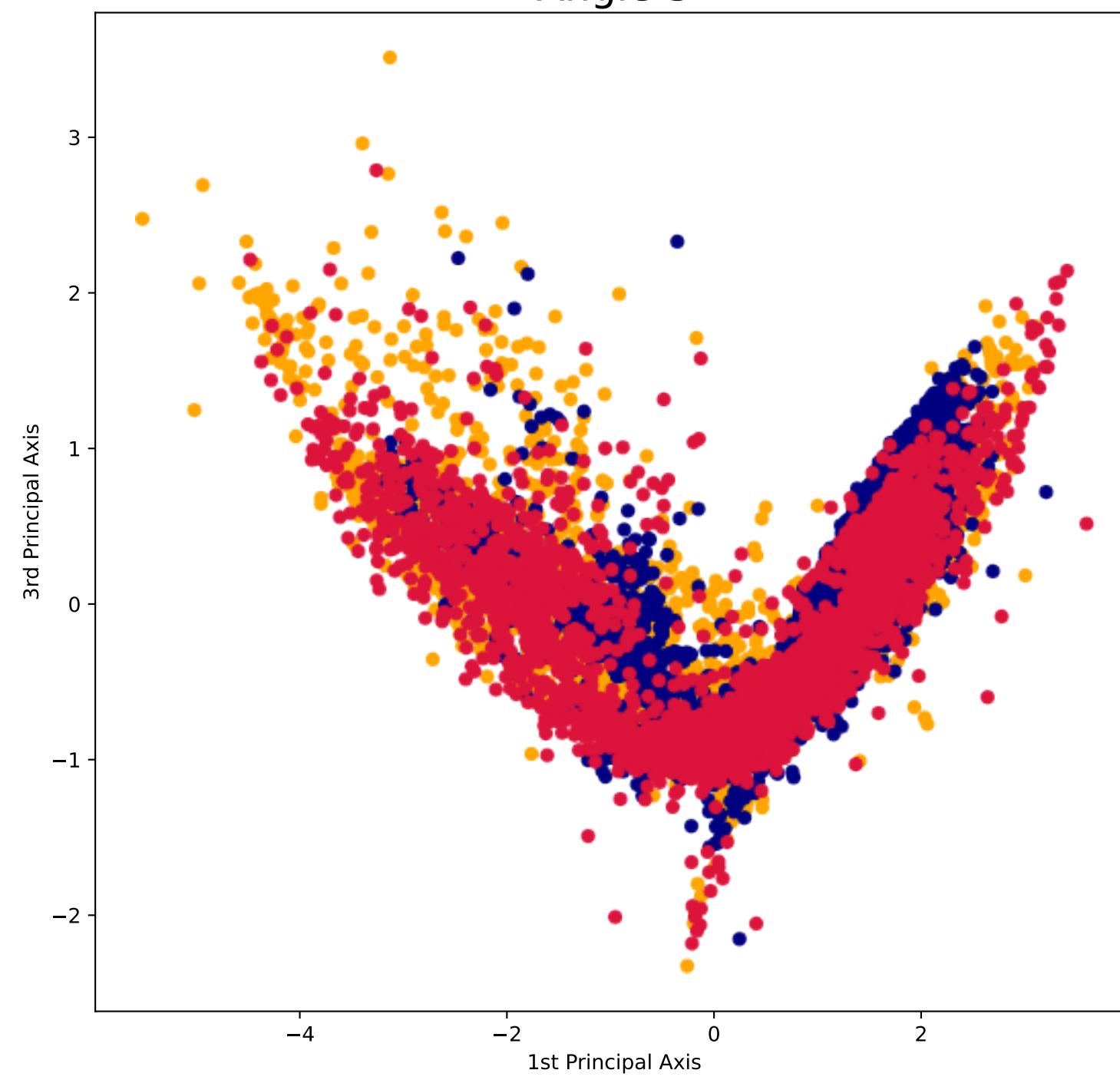
Angle 1



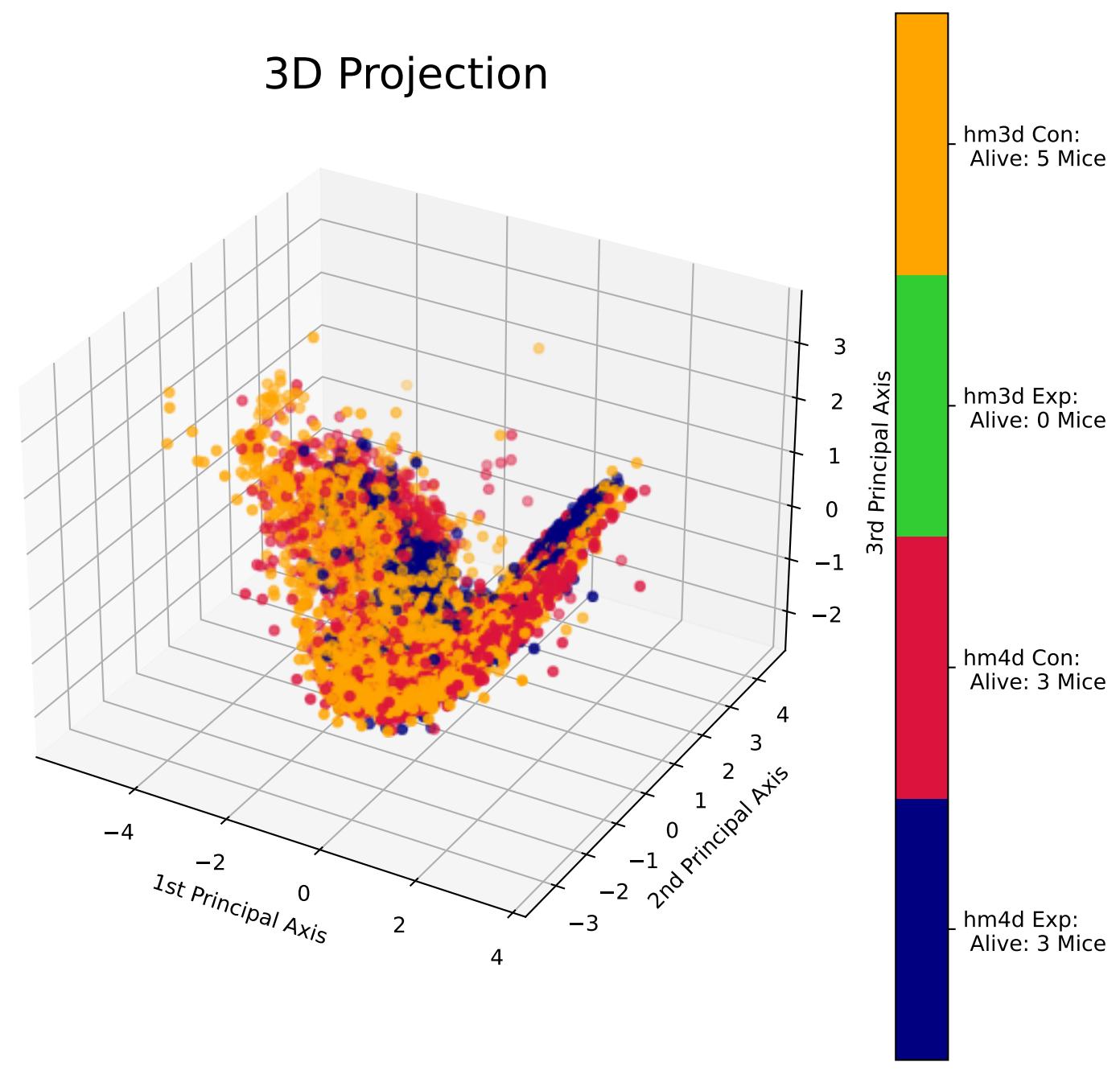
Angle 2



Angle 3

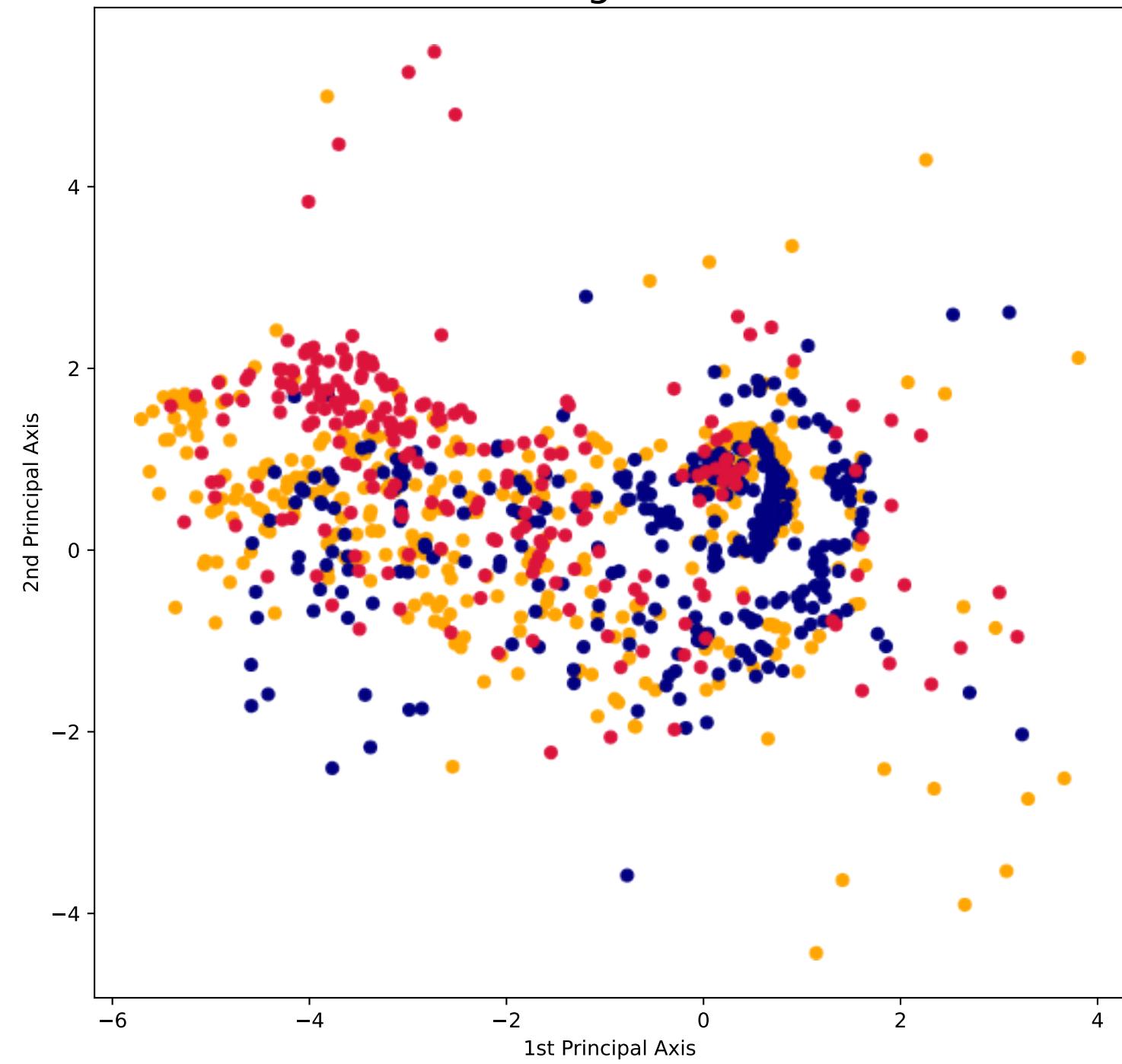


3D Projection

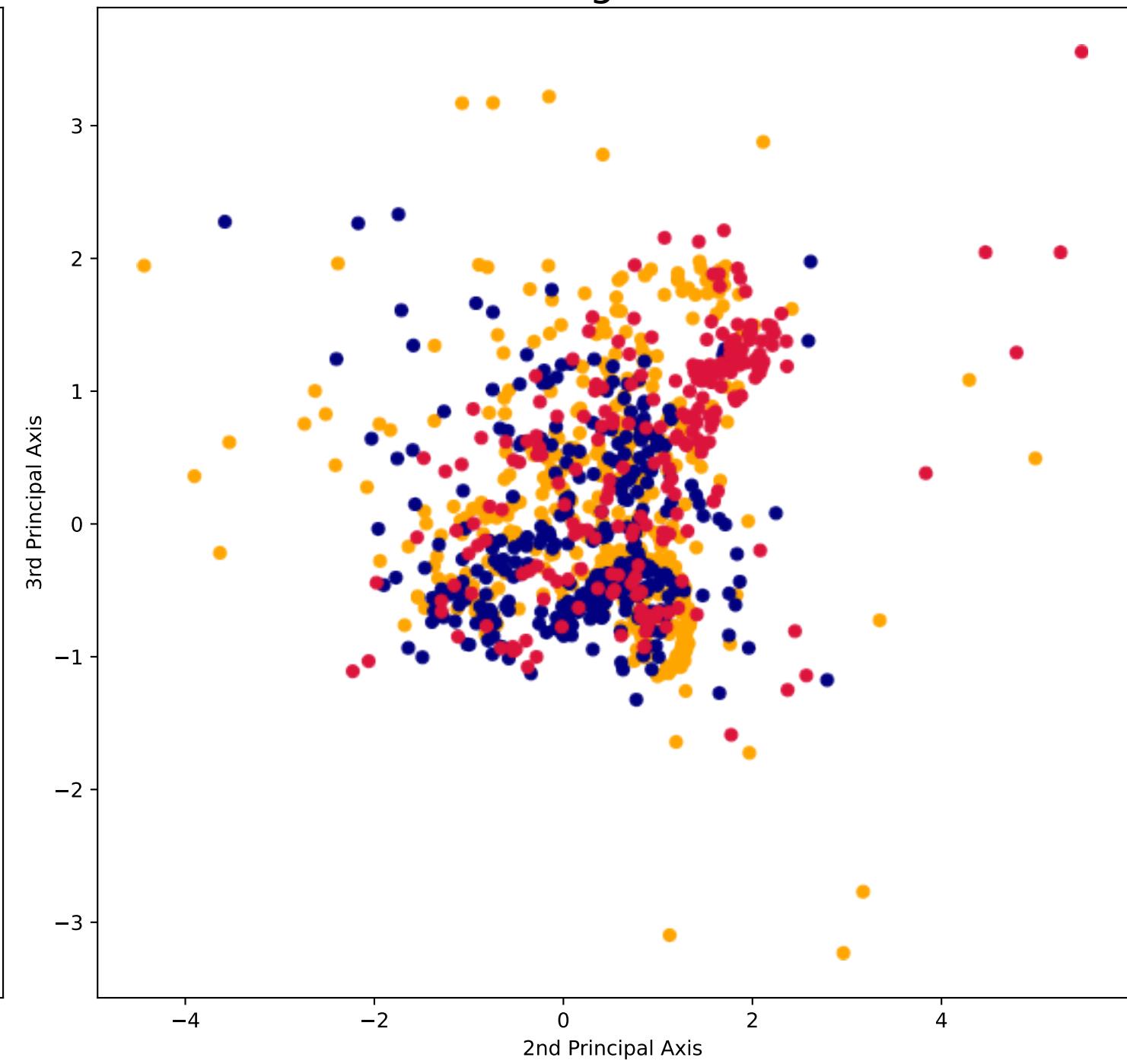


# Trial Number: 7, Phase: Trial Onset

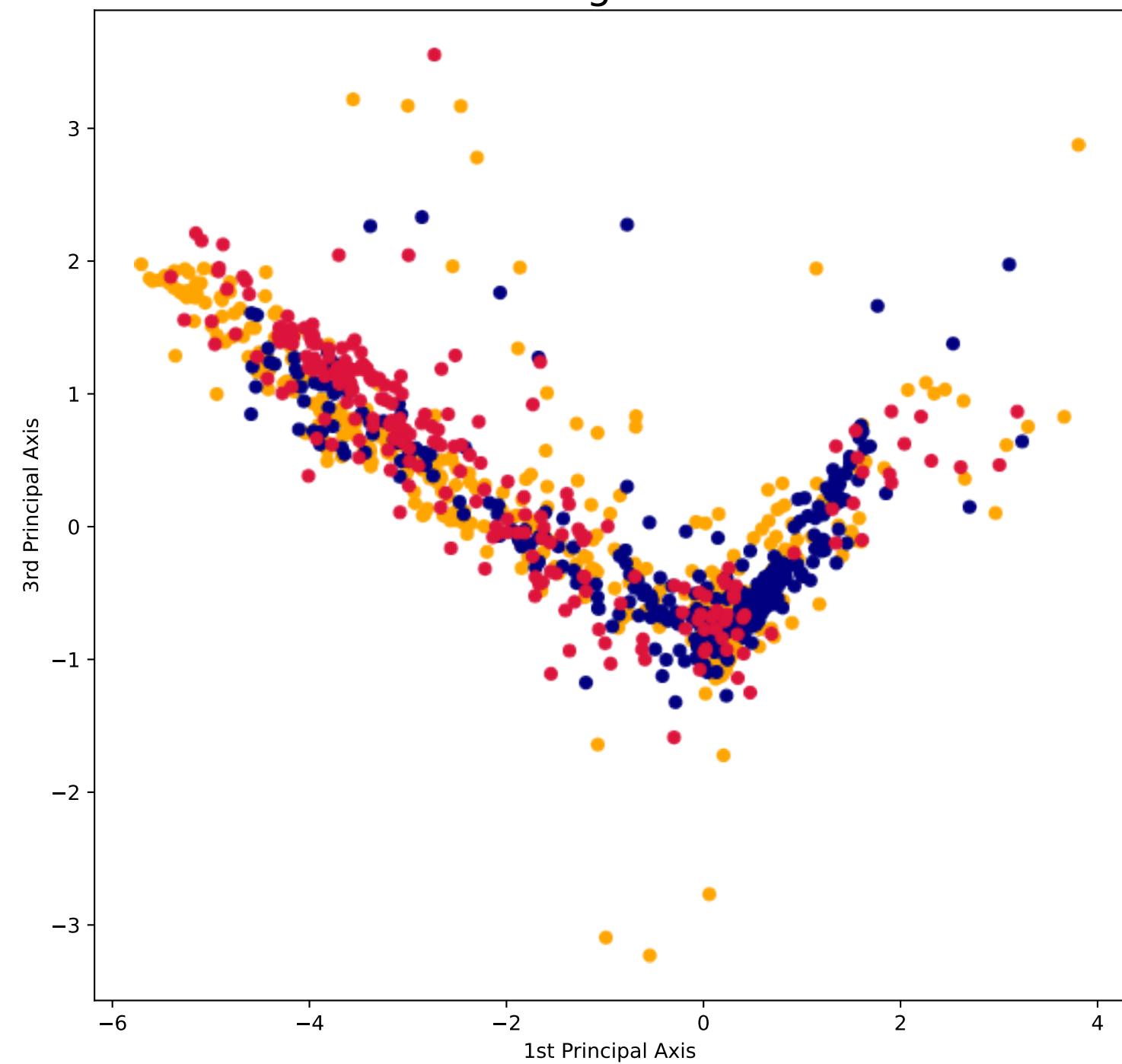
Angle 1



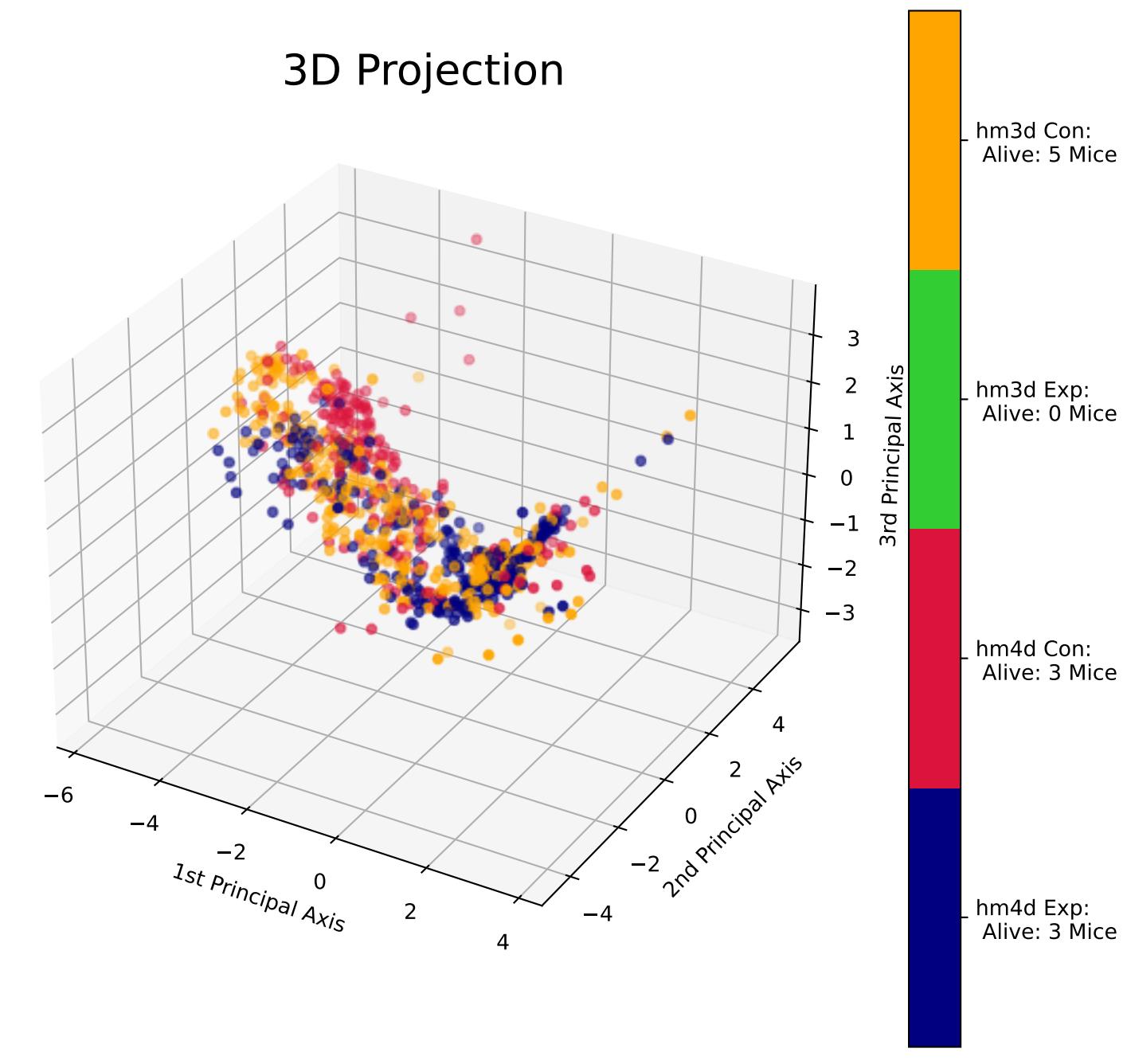
Angle 2



Angle 3



3D Projection



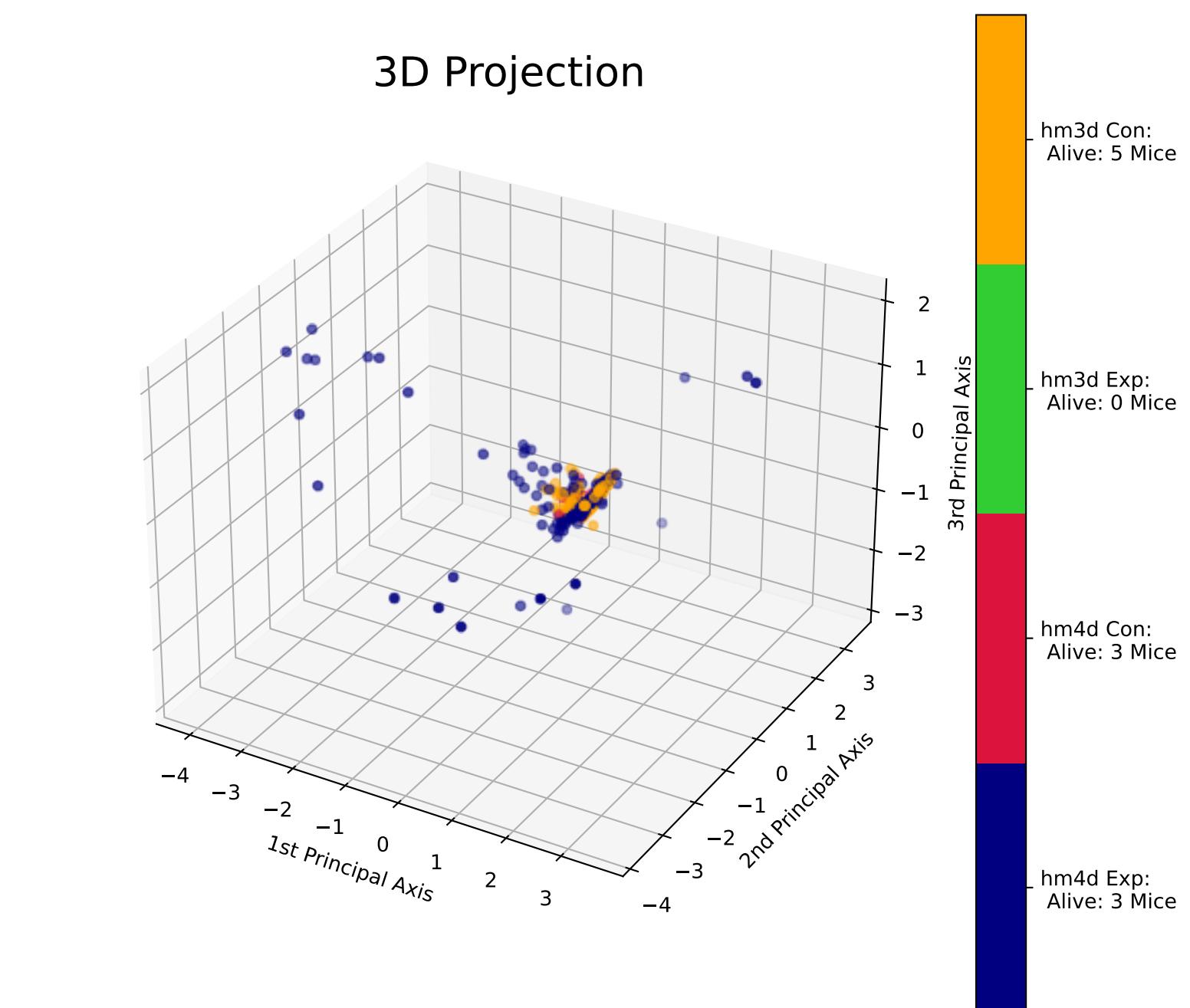
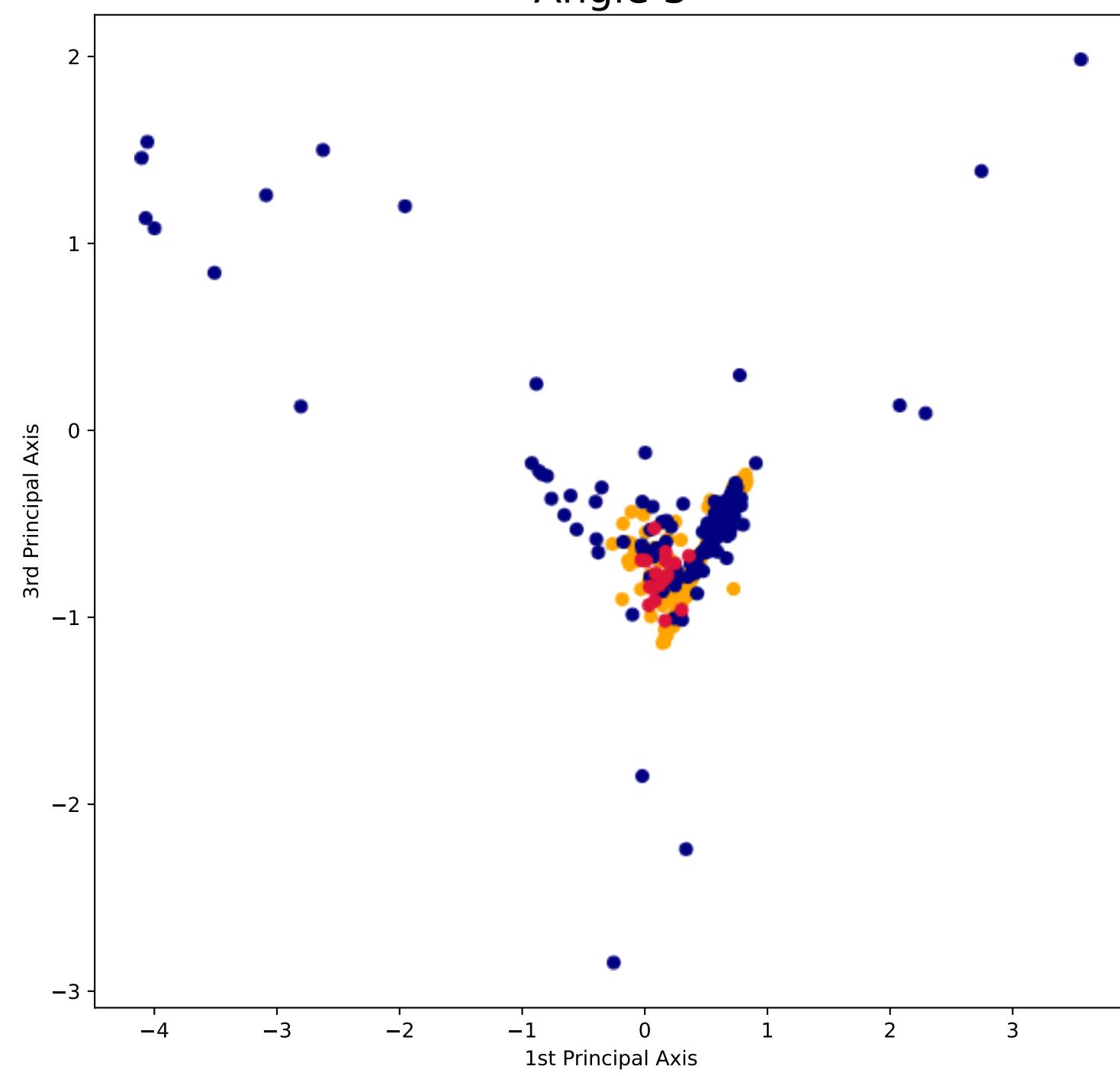
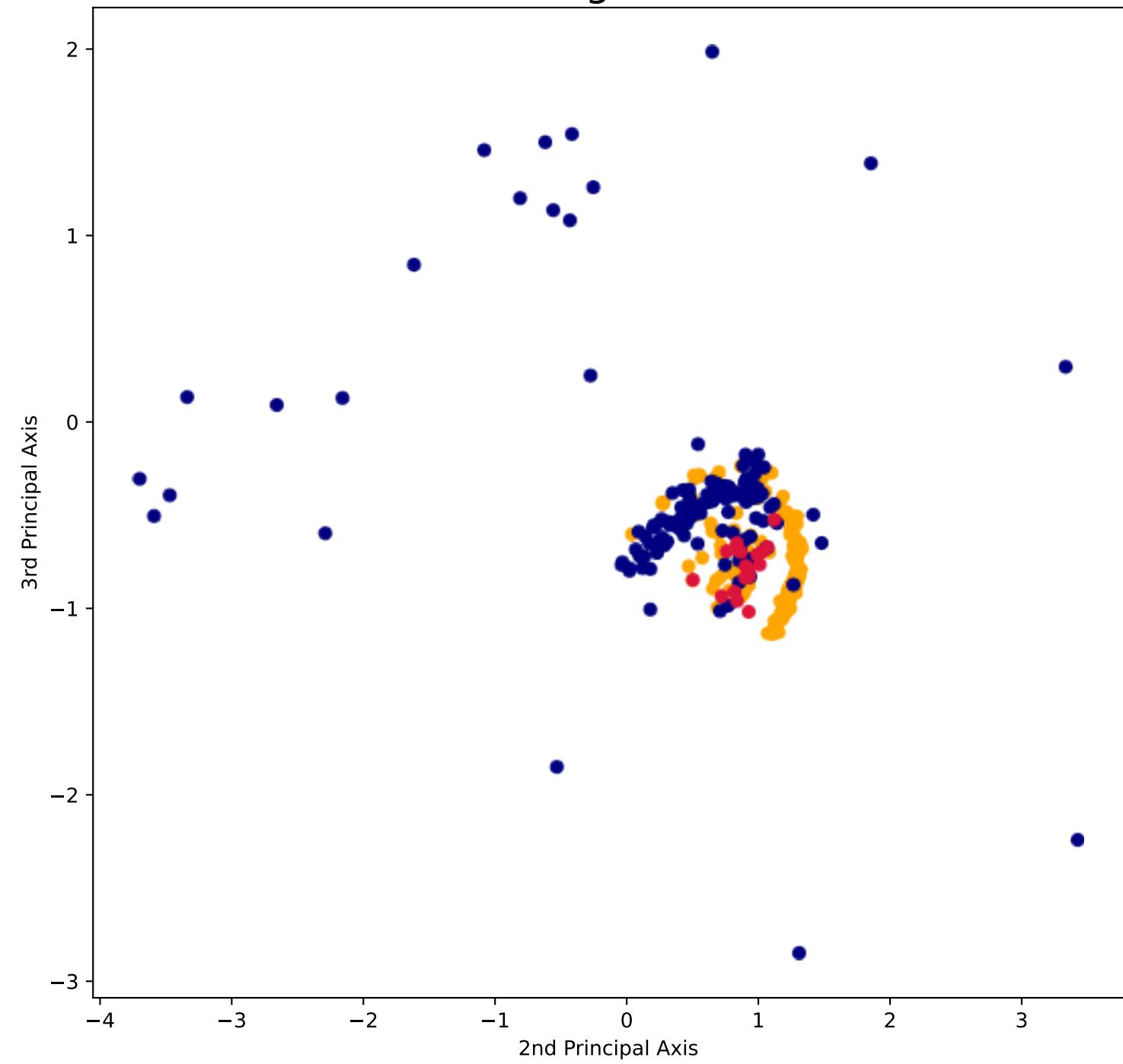
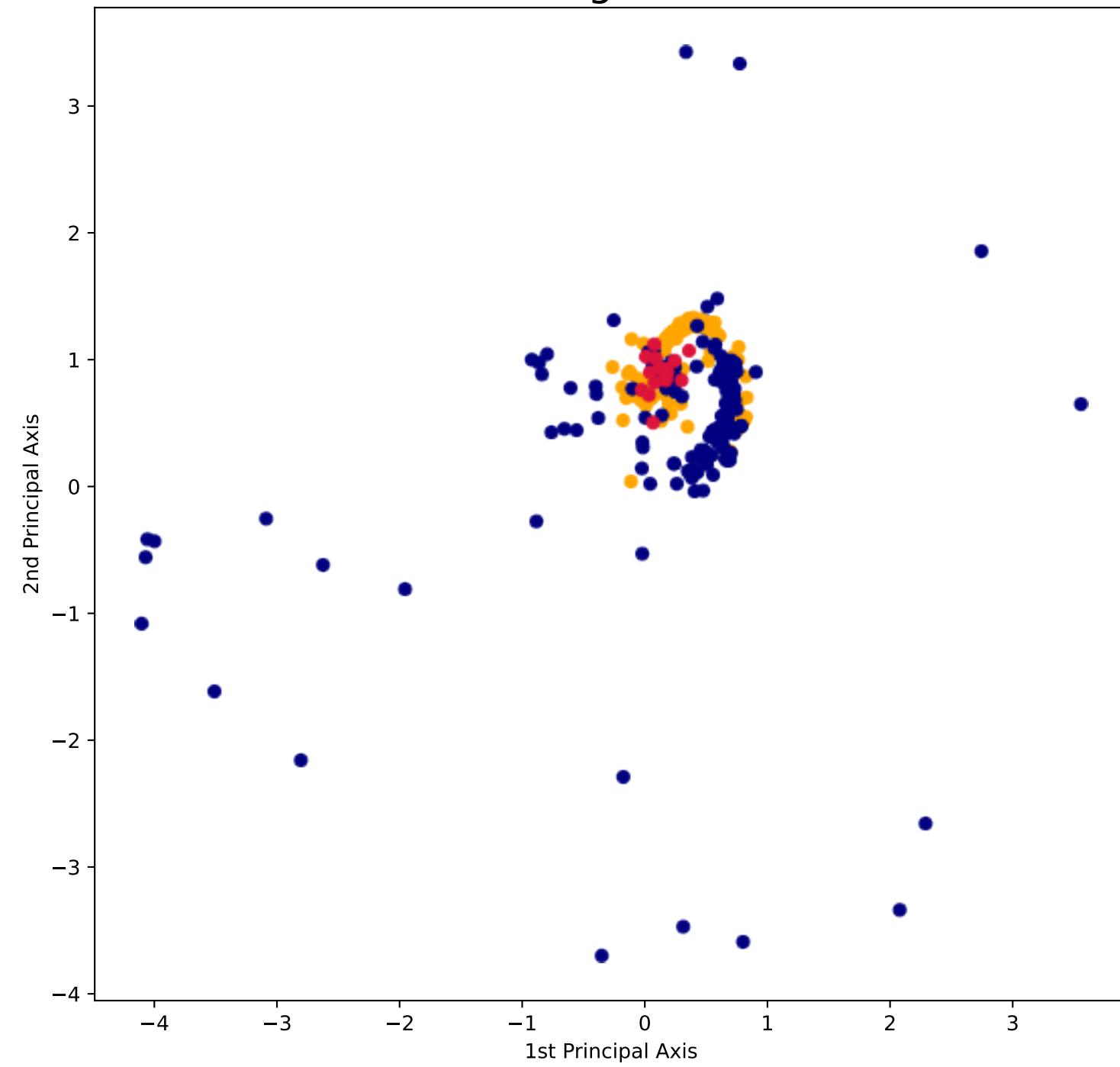
# Trial Number: 7, Phase: Apnea Starts

Angle 1

Angle 2

Angle 3

3D Projection



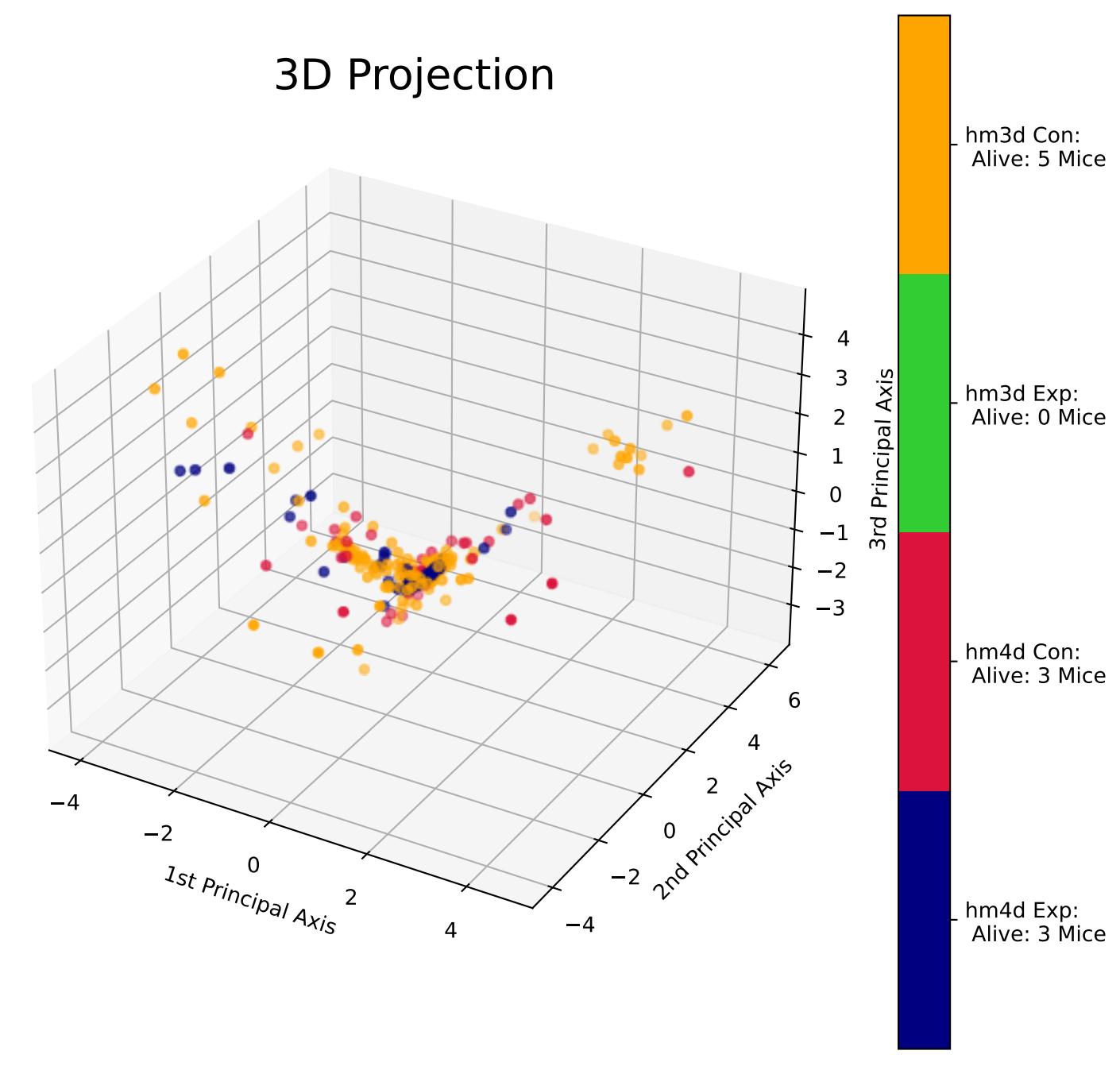
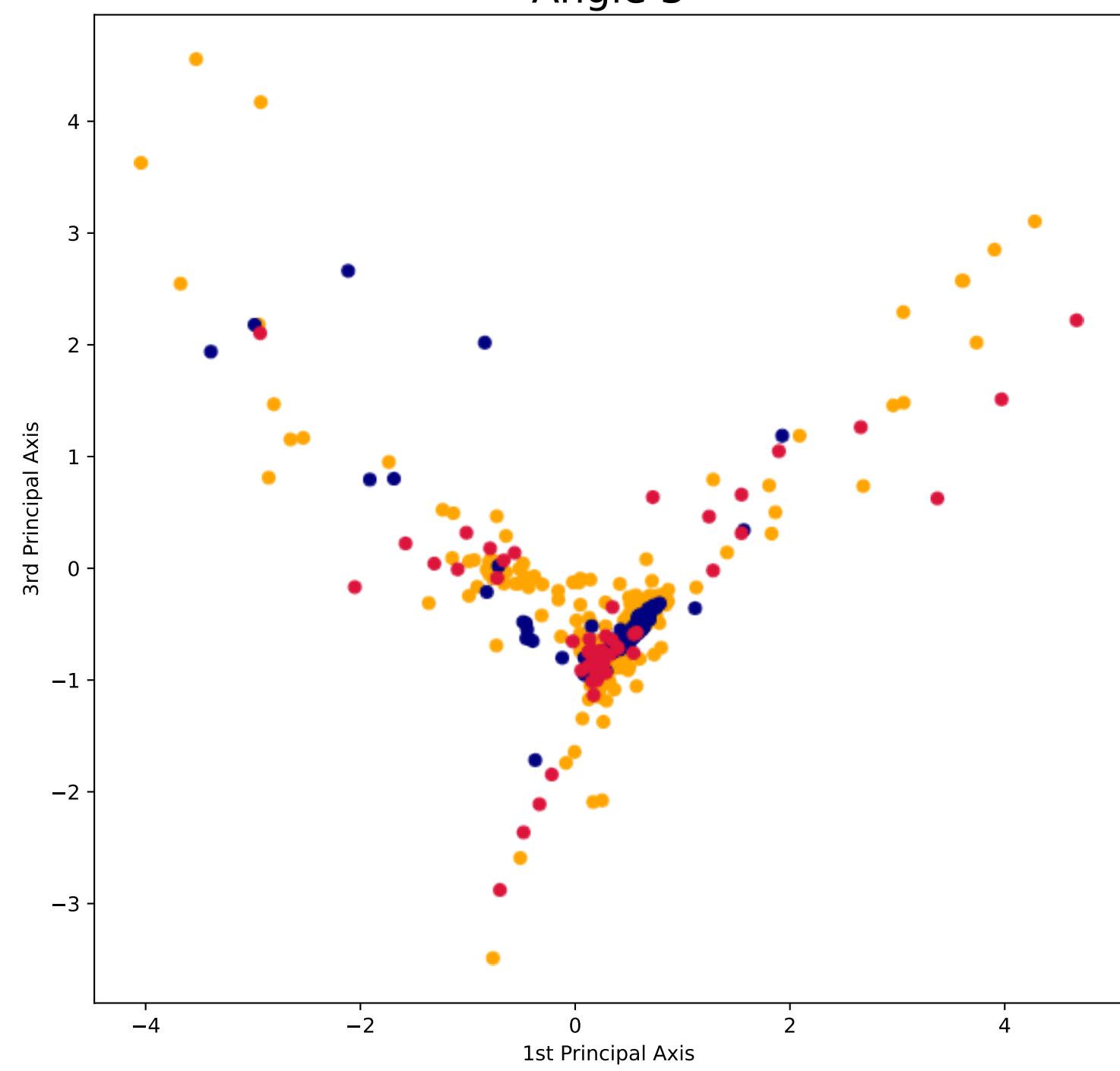
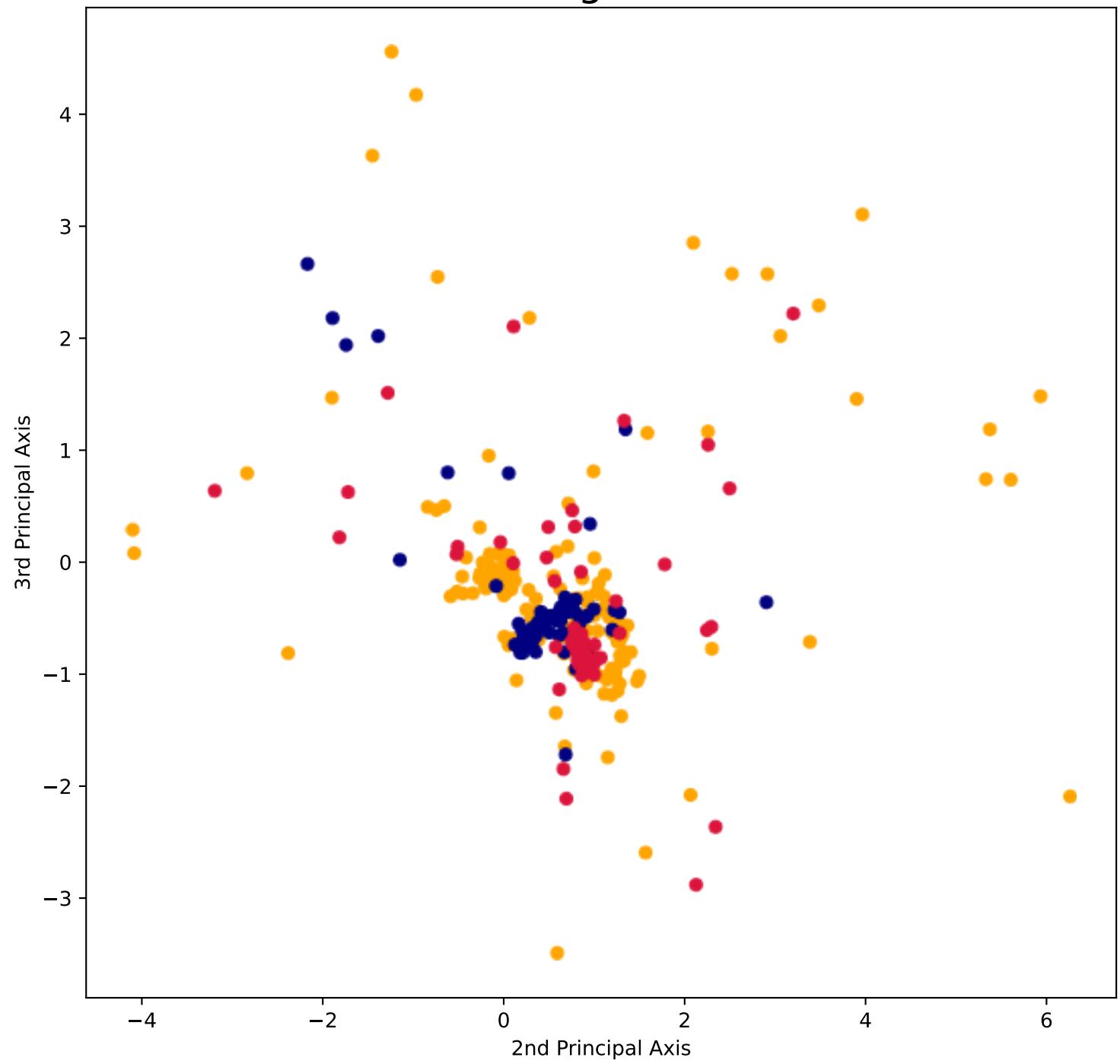
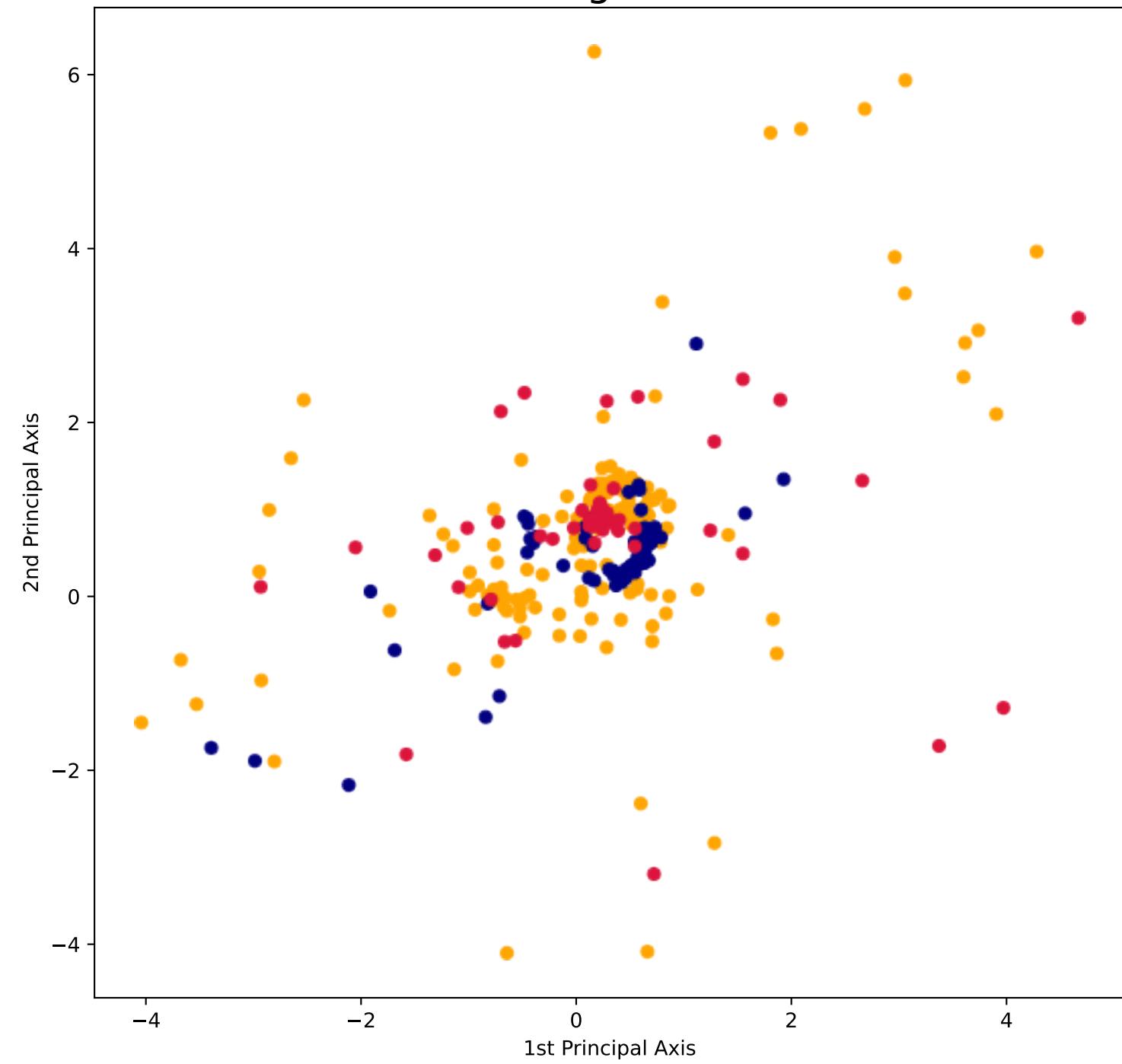
# Trial Number: 7, Phase: First Gasp

Angle 1

Angle 2

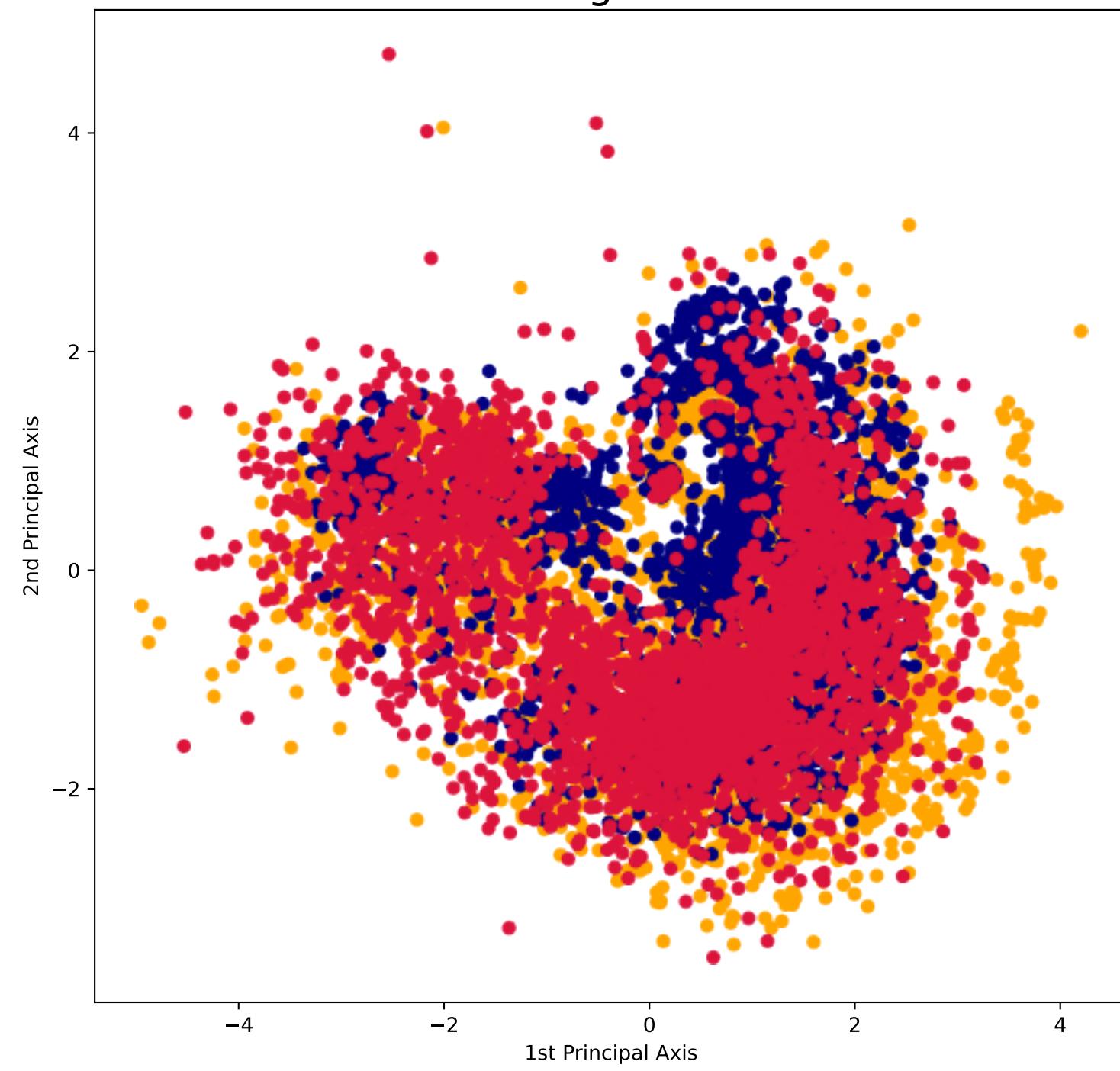
Angle 3

3D Projection

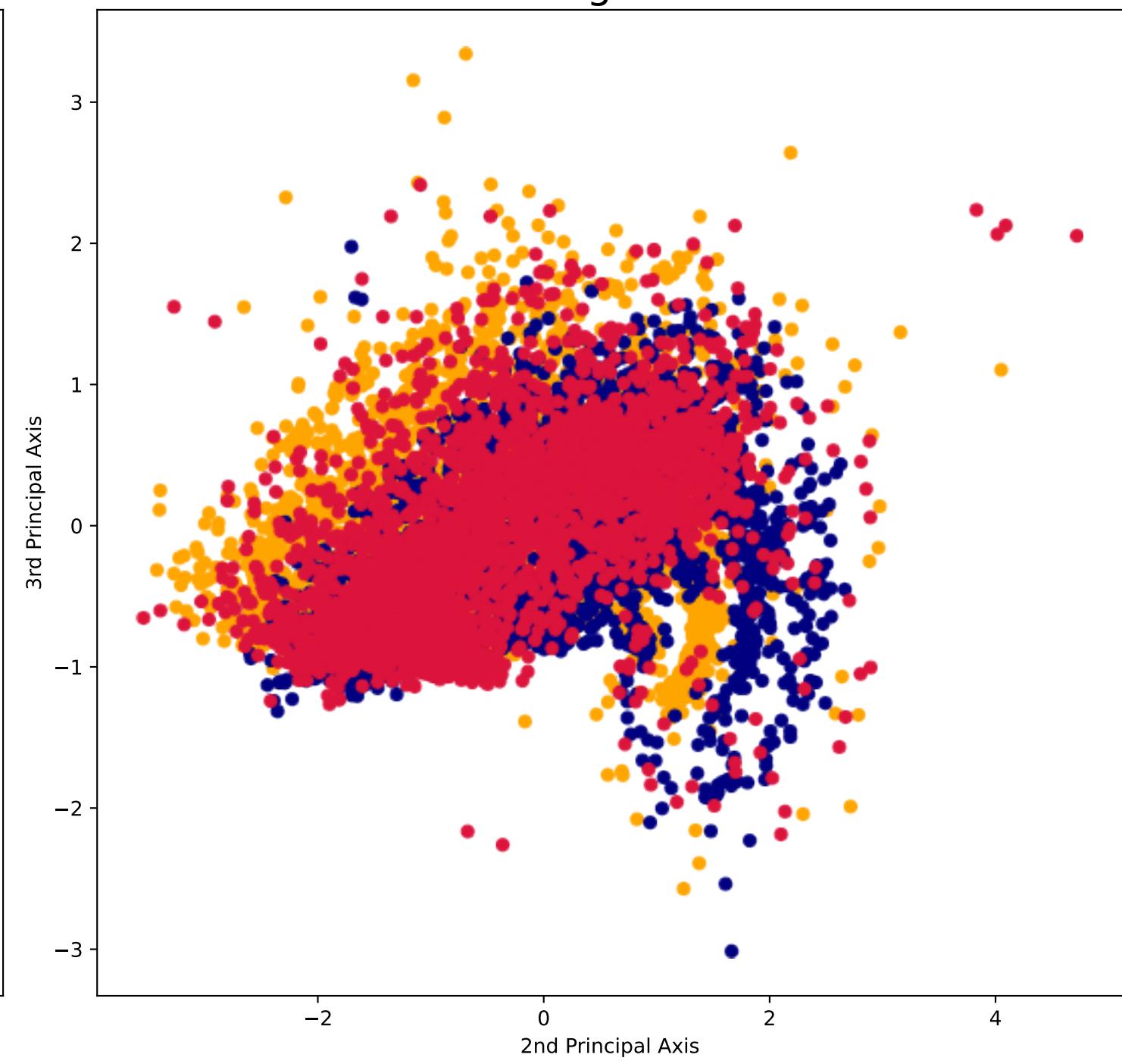


# Trial Number: 7, Phase: Eupnea Recovery

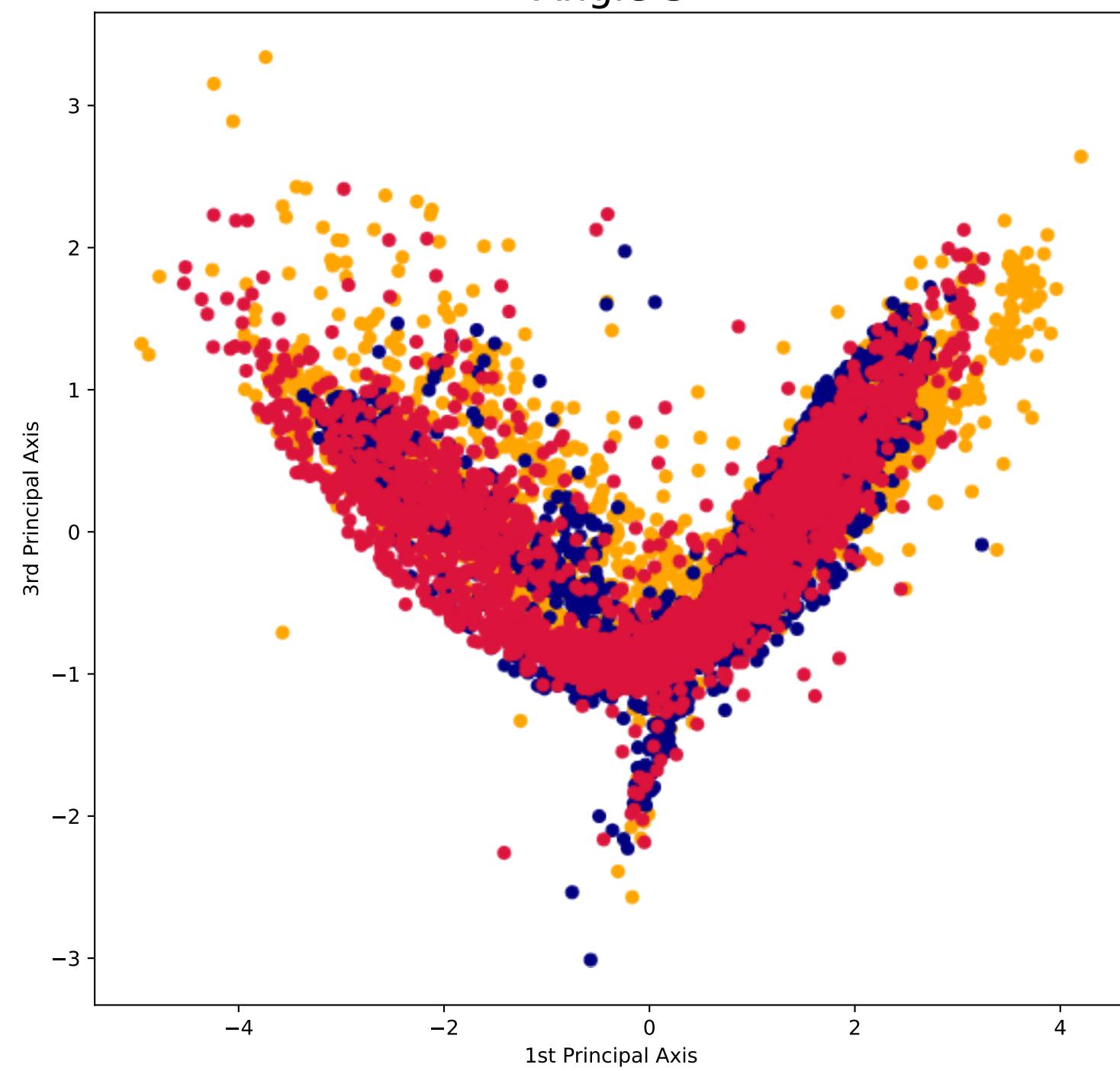
Angle 1



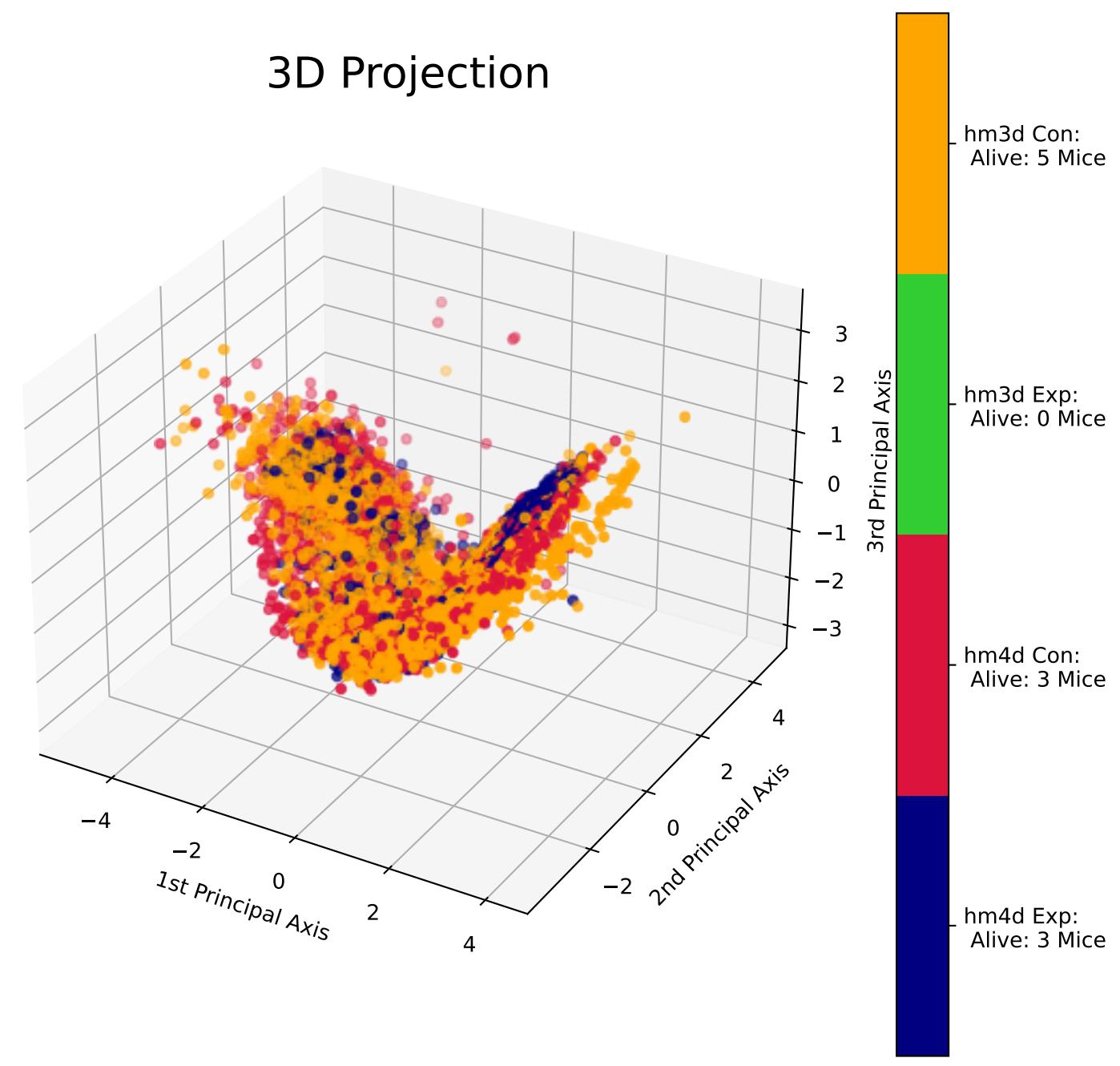
Angle 2



Angle 3

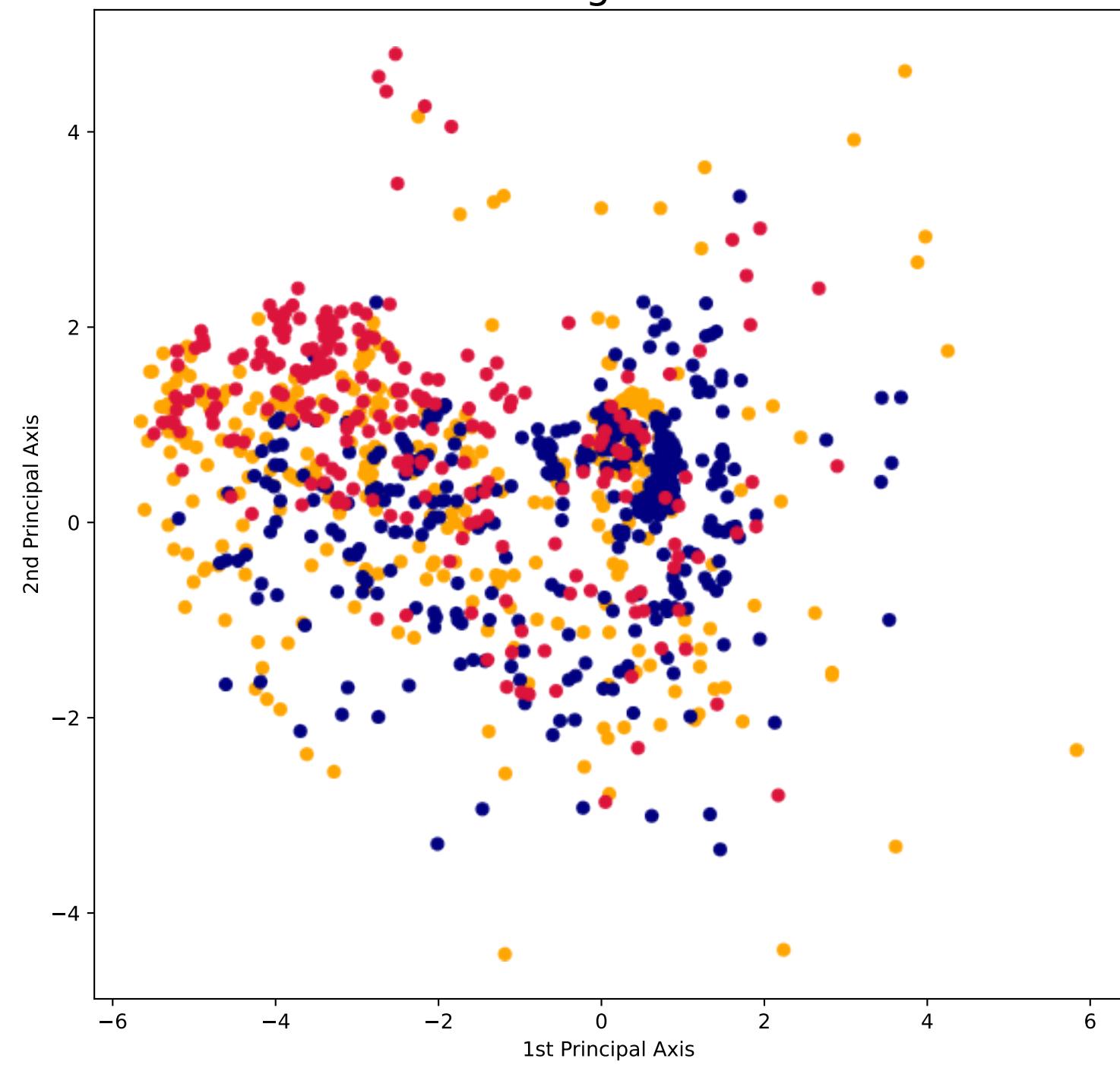


3D Projection

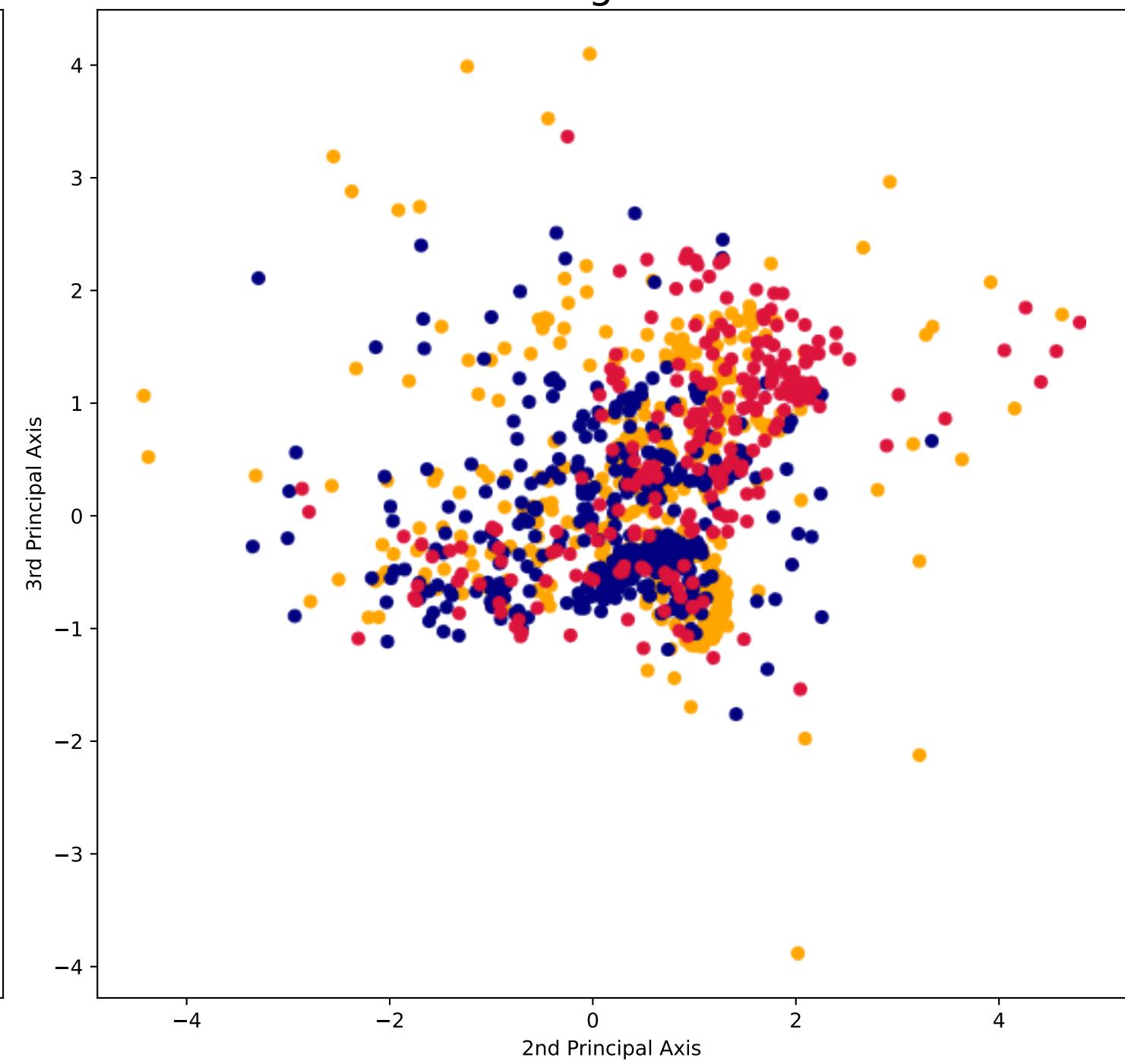


# Trial Number: 8, Phase: Trial Onset

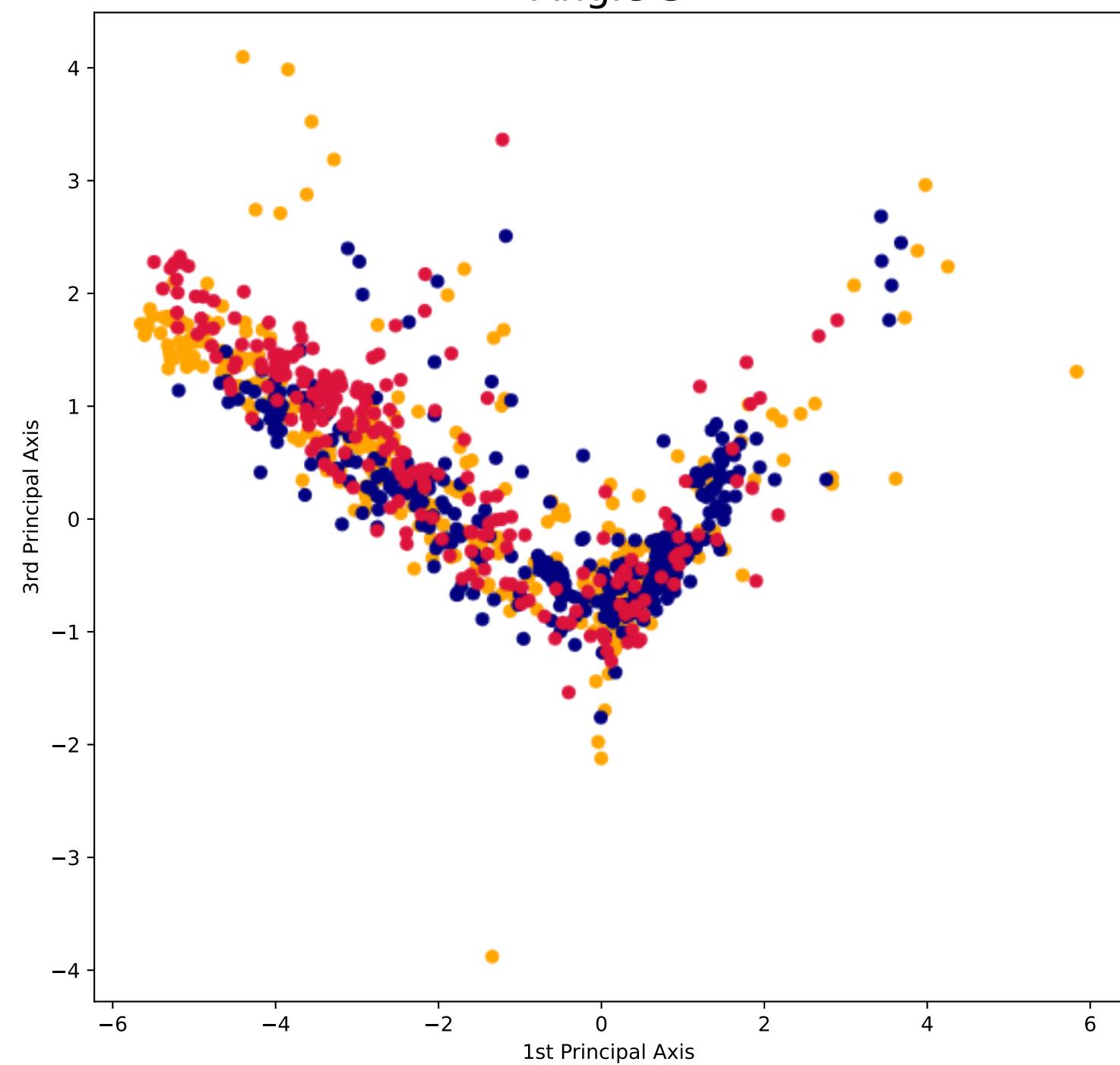
Angle 1



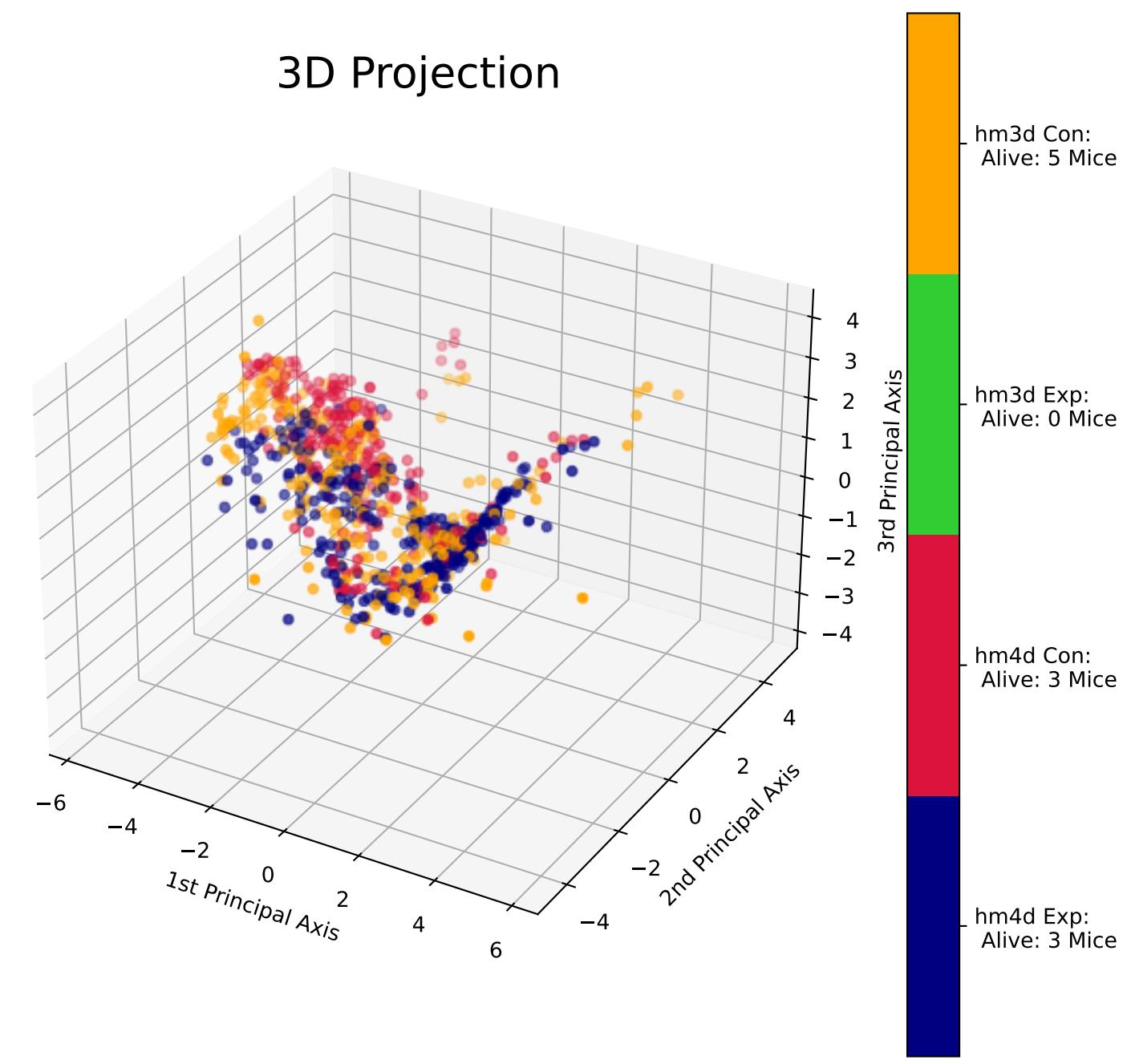
Angle 2



Angle 3



3D Projection



# Trial Number: 8, Phase: Apnea Starts

Angle 1

Angle 2

Angle 3

3D Projection

2nd Principal Axis

3rd Principal Axis

3rd Principal Axis

3rd Principal Axis

1st Principal Axis

1st Principal Axis

1st Principal Axis

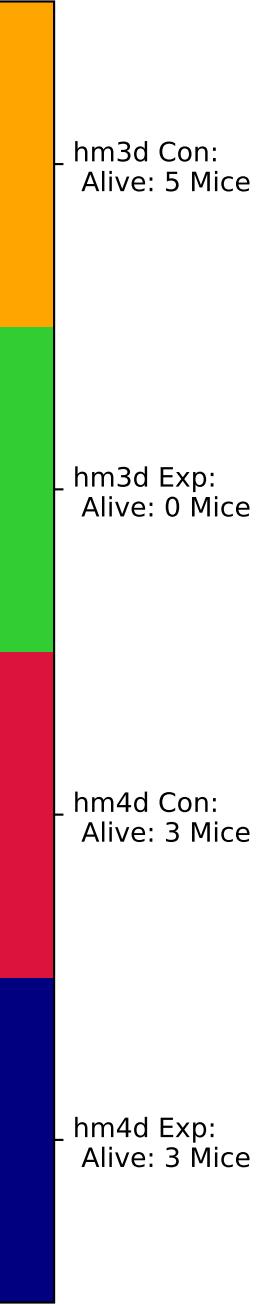
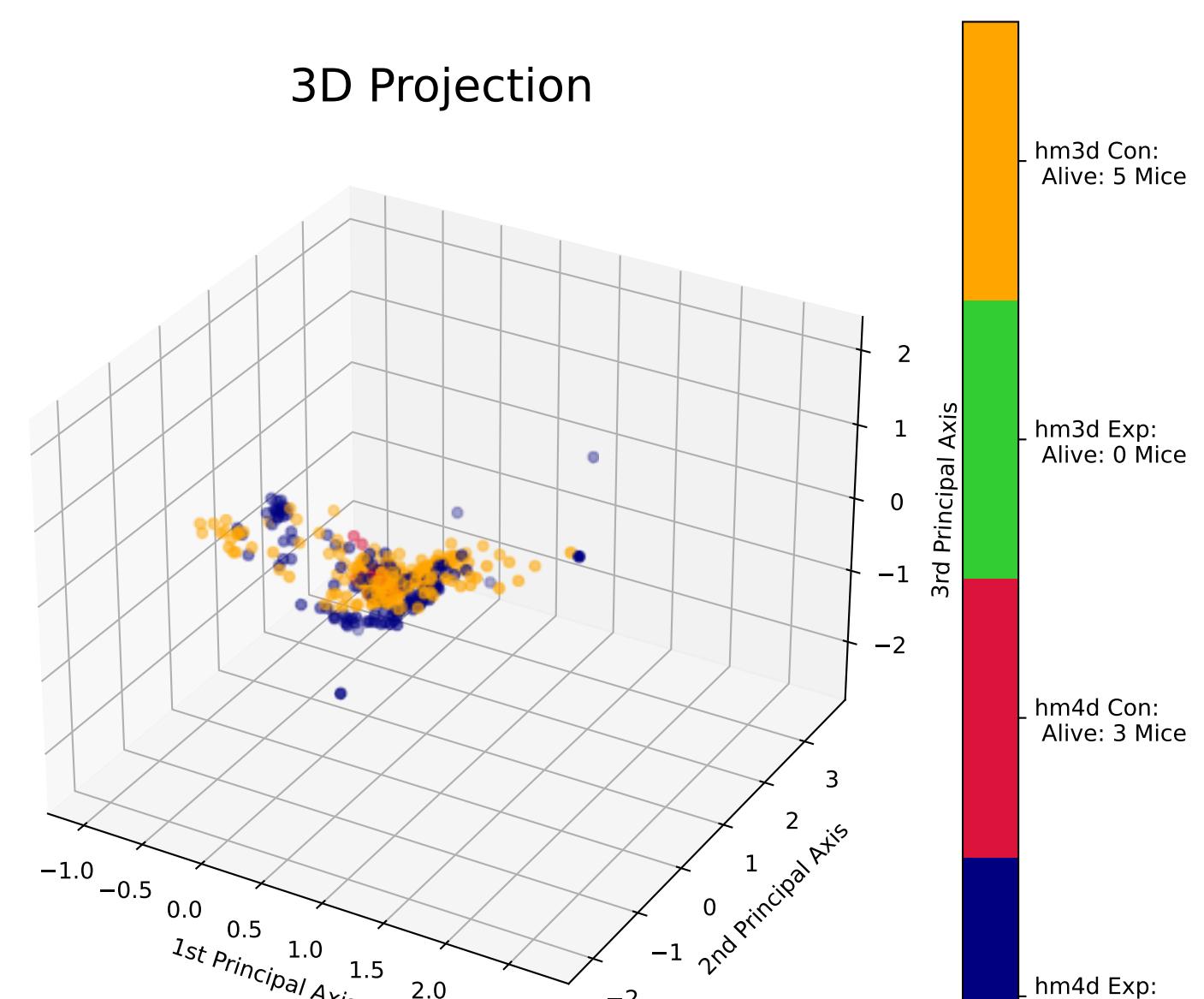
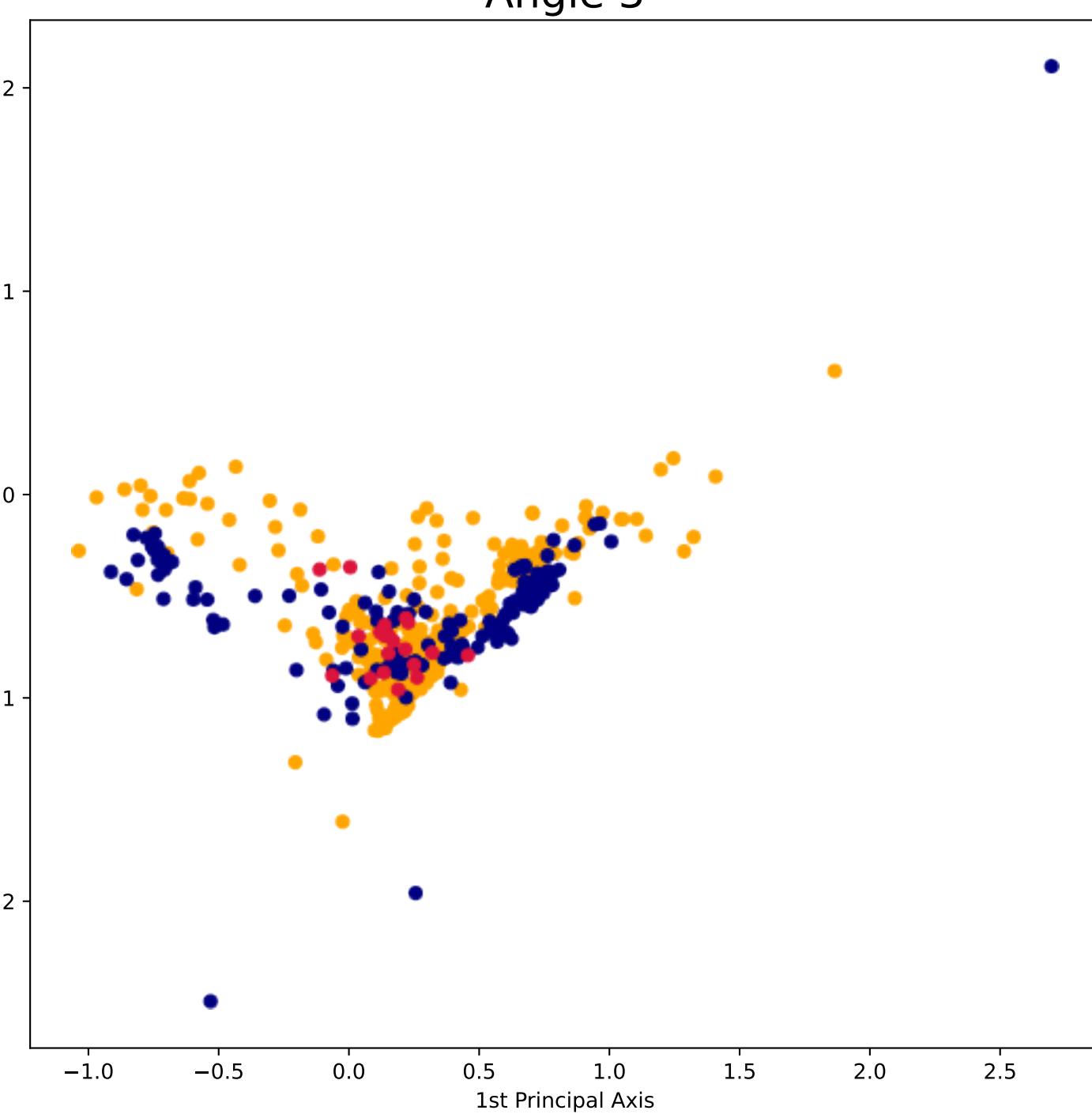
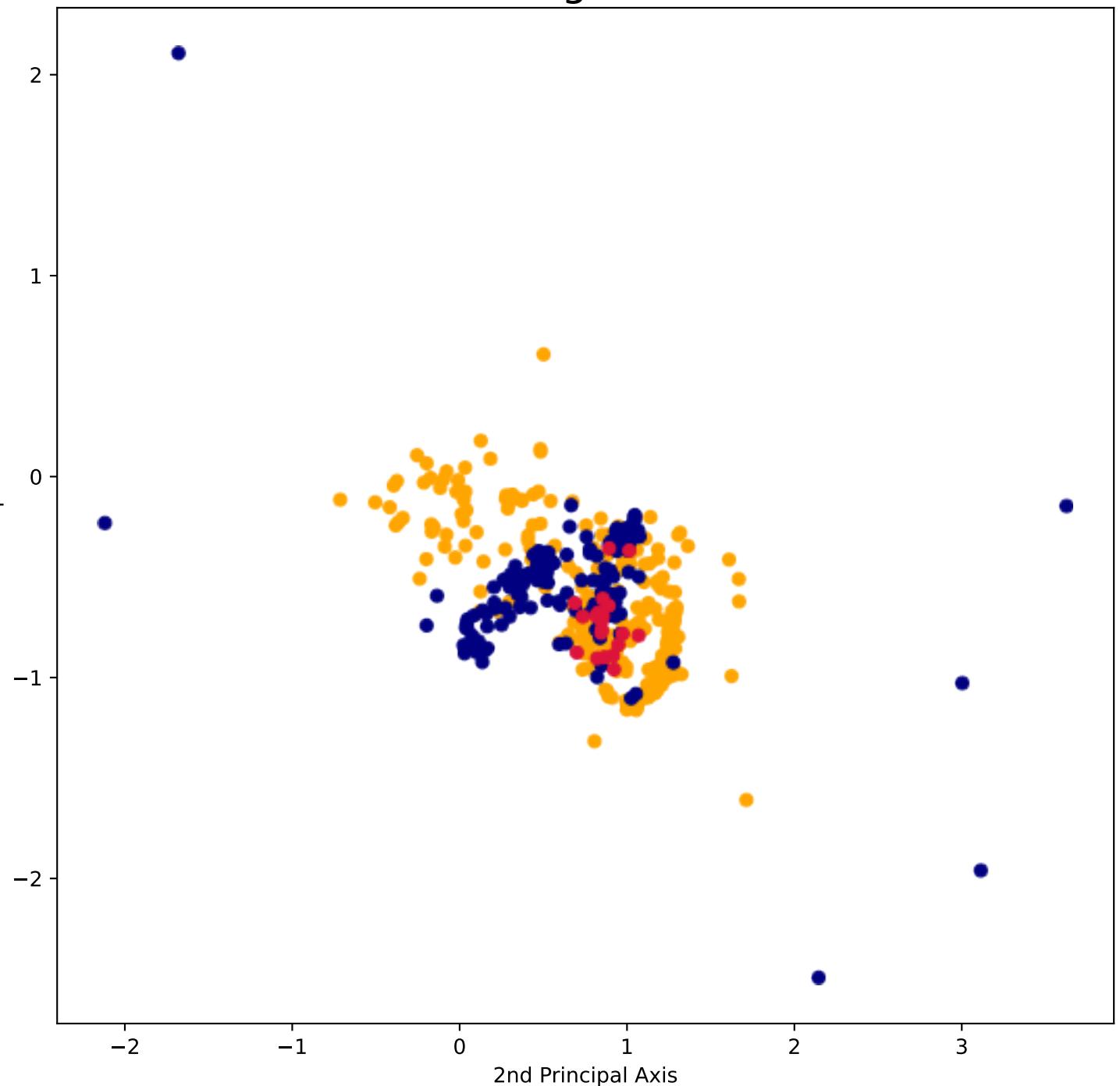
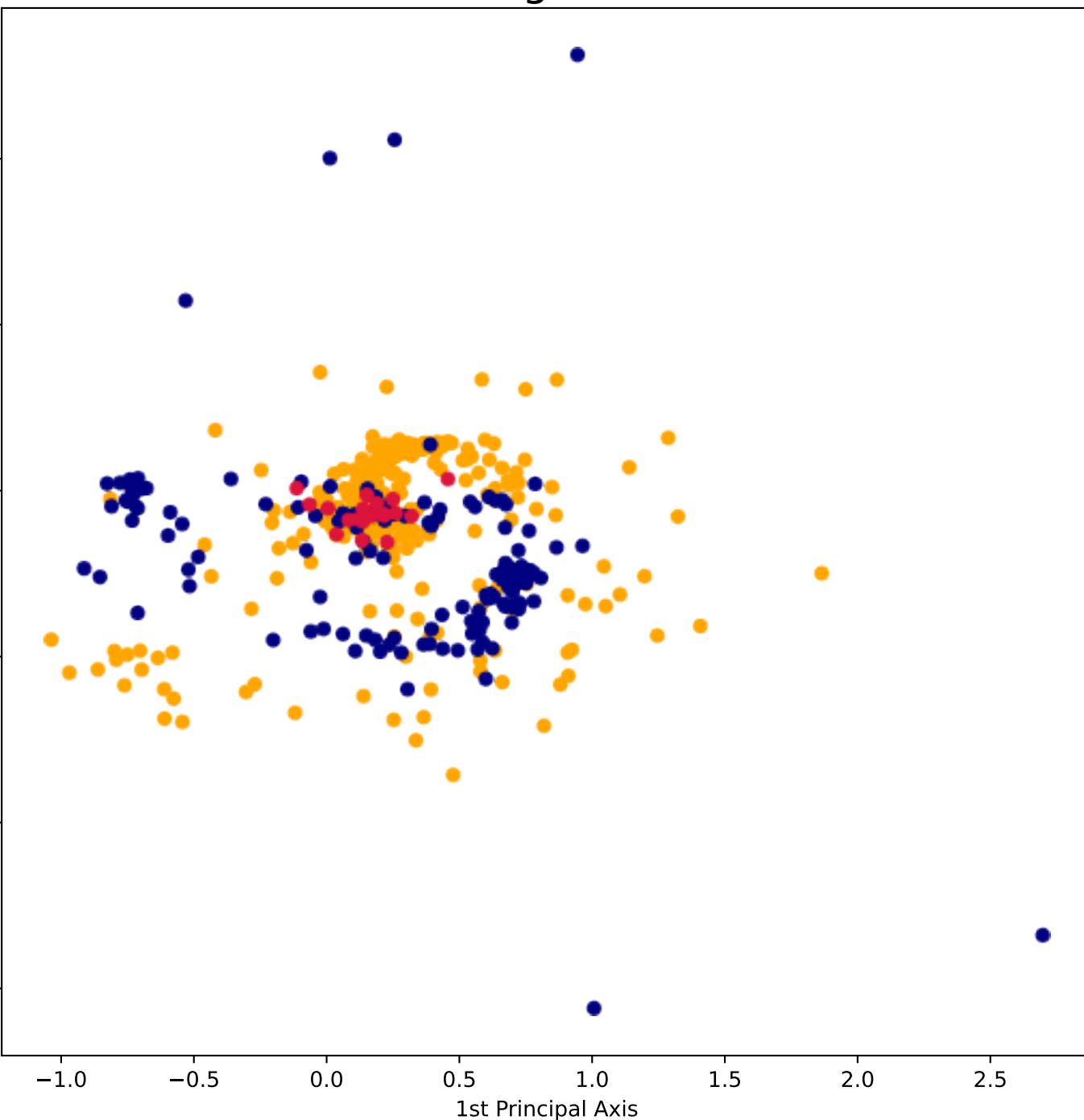
1st Principal Axis

2nd Principal Axis

2nd Principal Axis

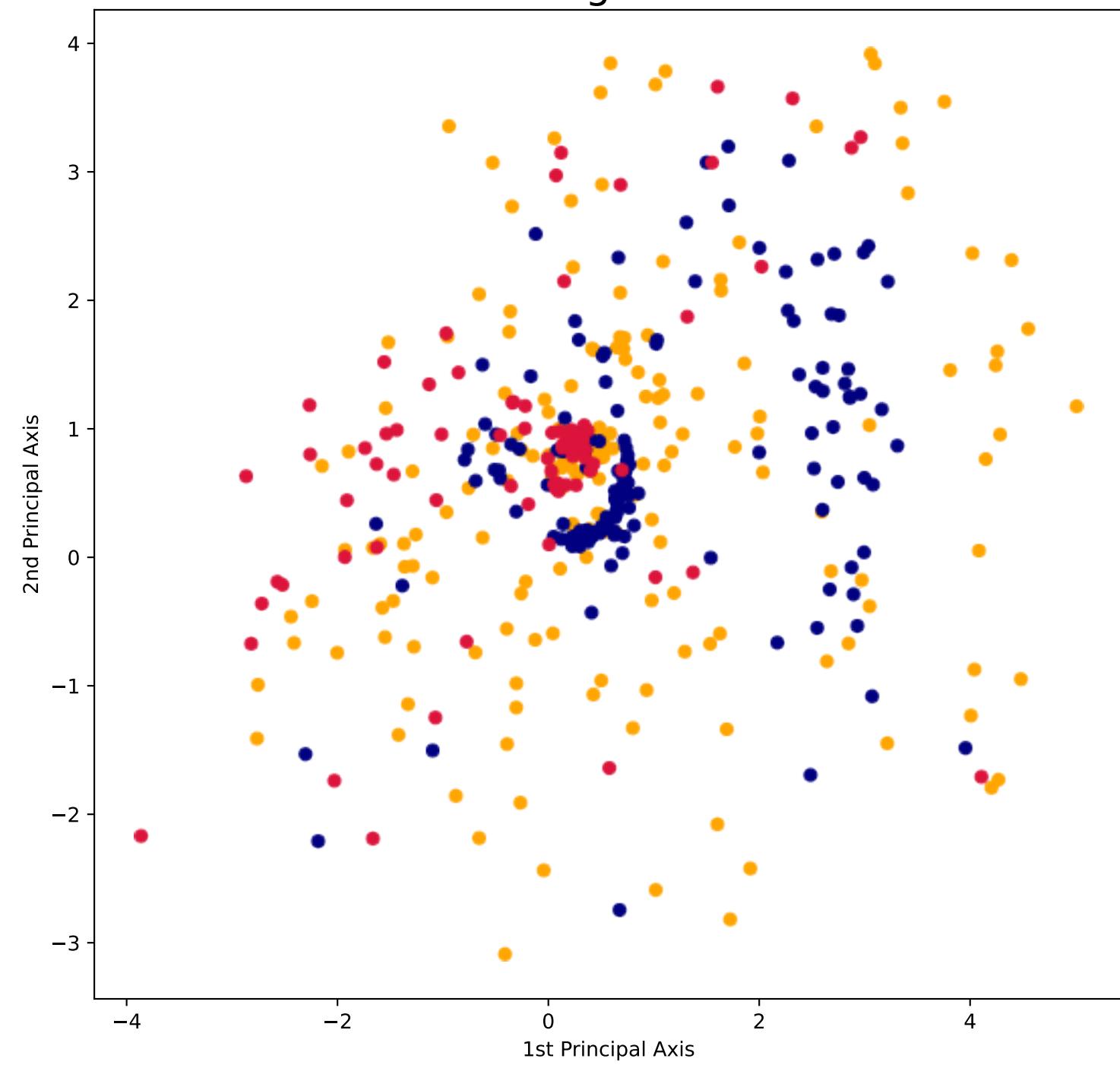
3rd Principal Axis

3rd Principal Axis

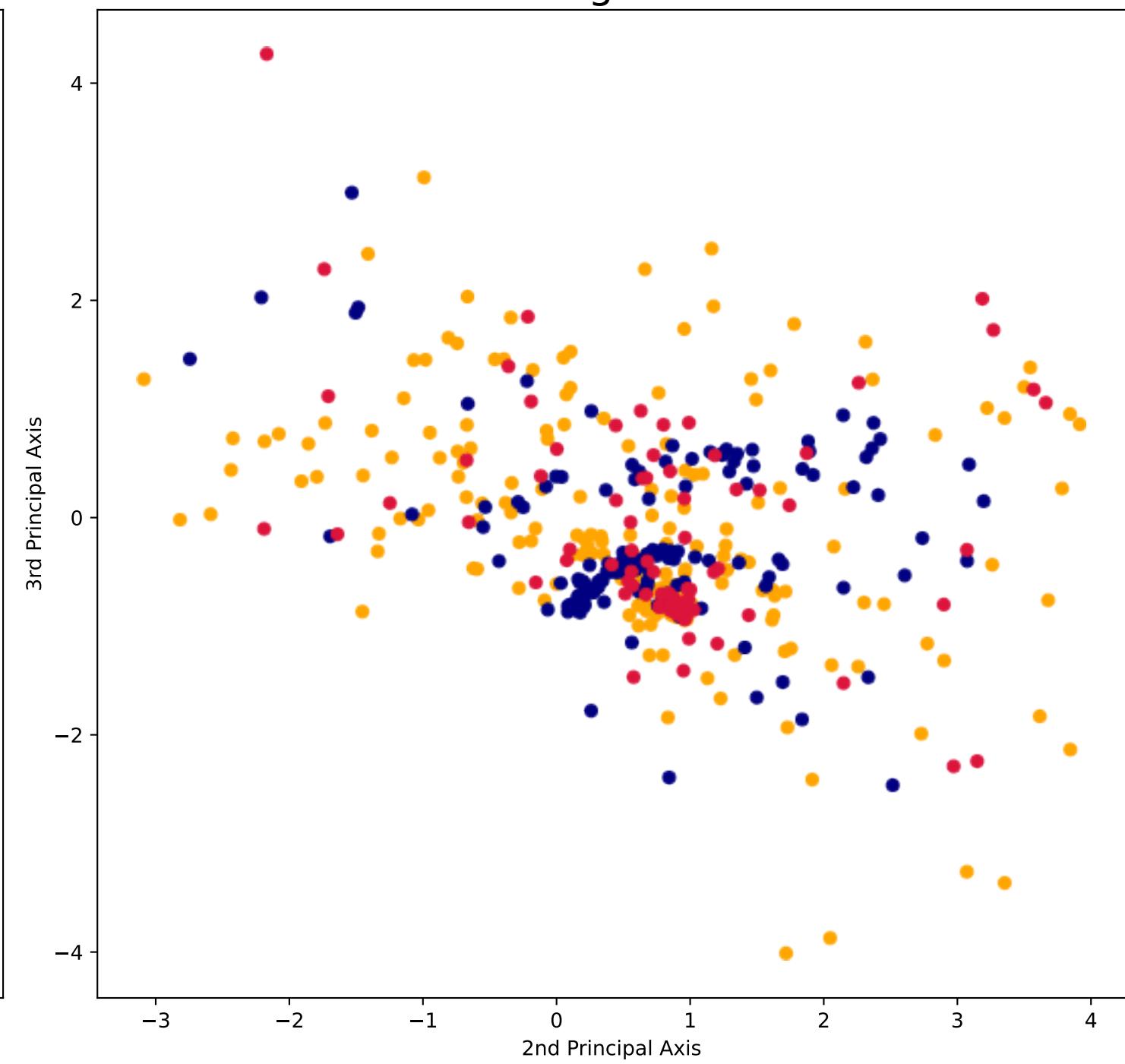


# Trial Number: 8, Phase: First Gasp

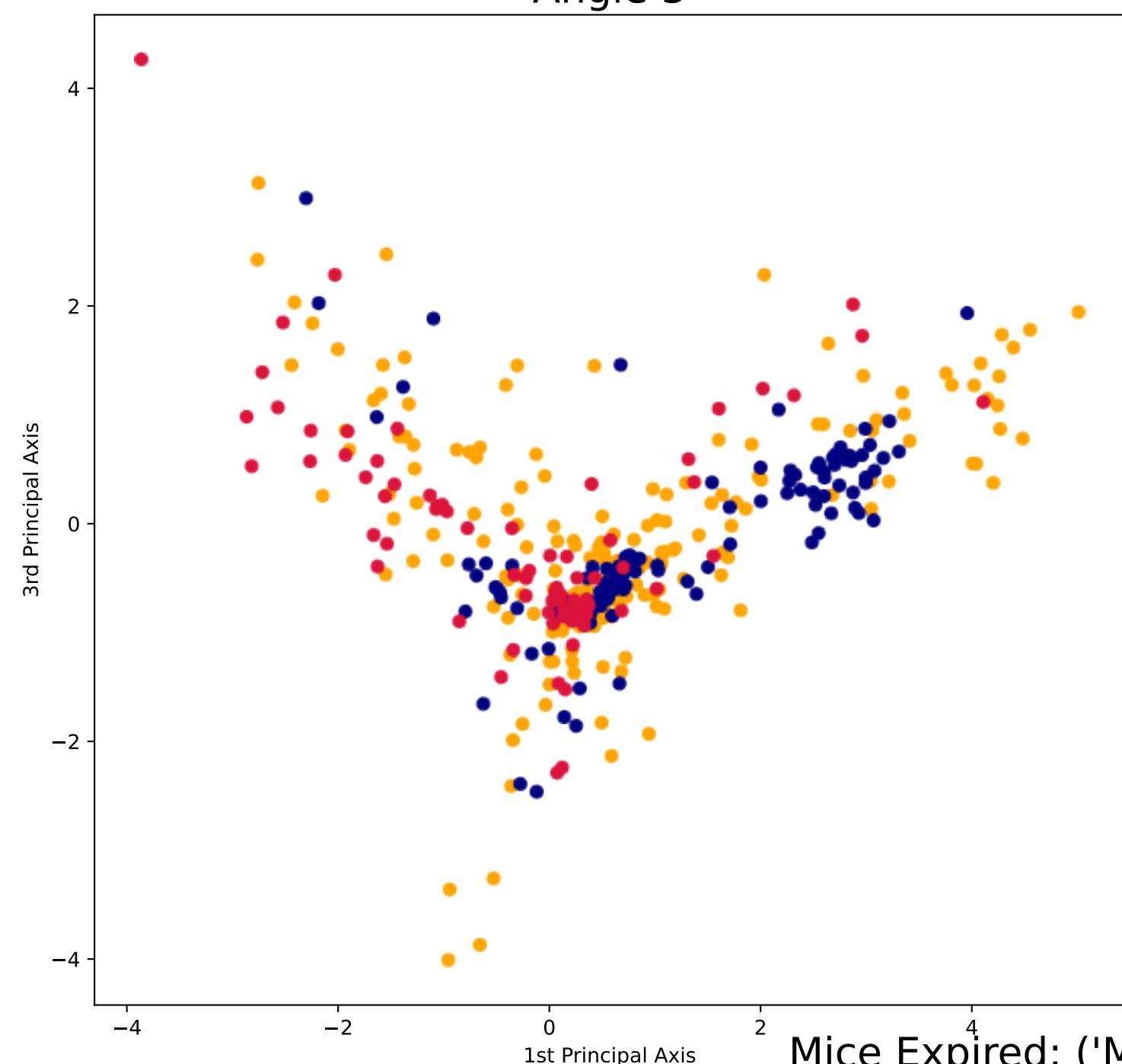
Angle 1



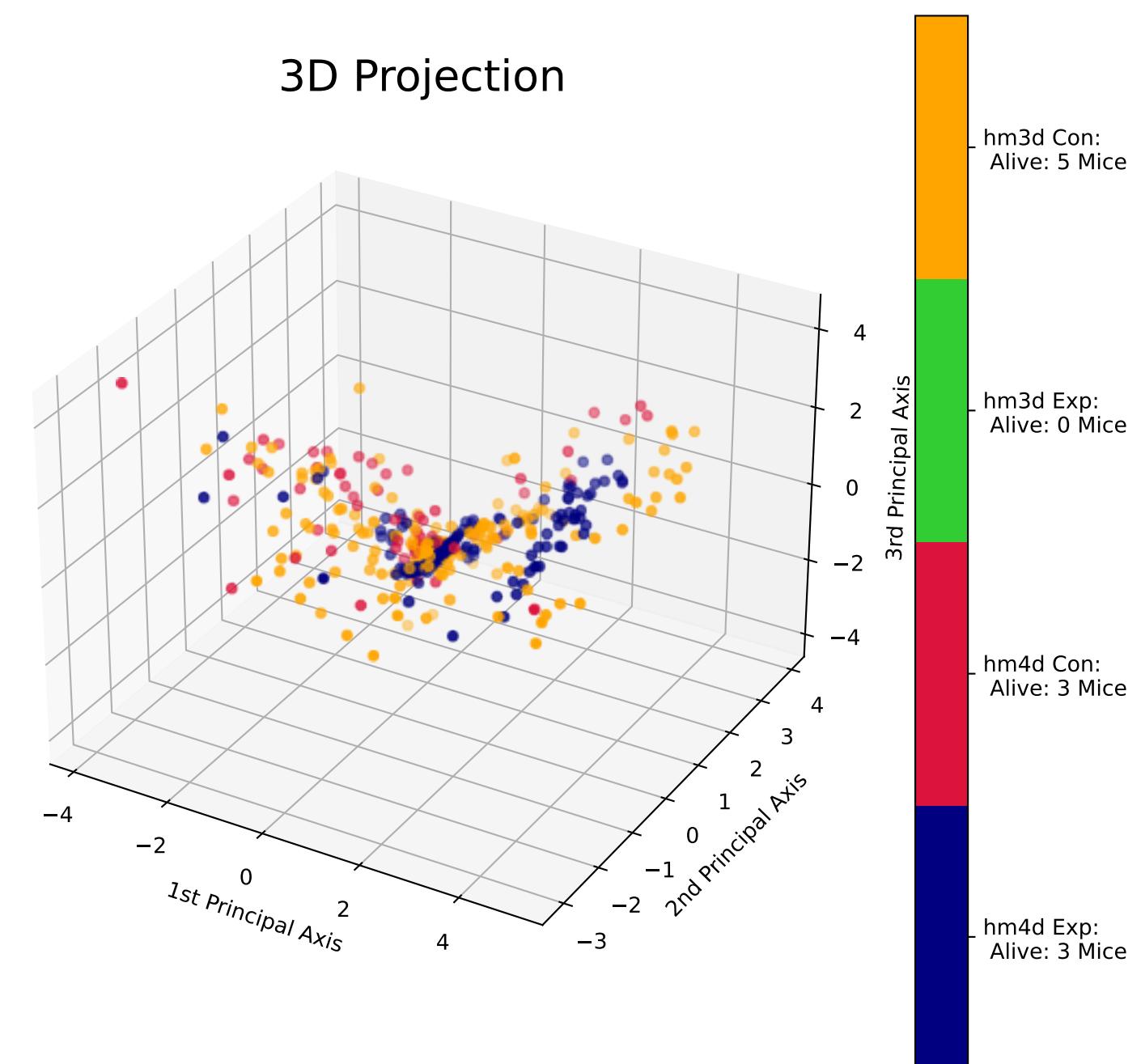
Angle 2



Angle 3



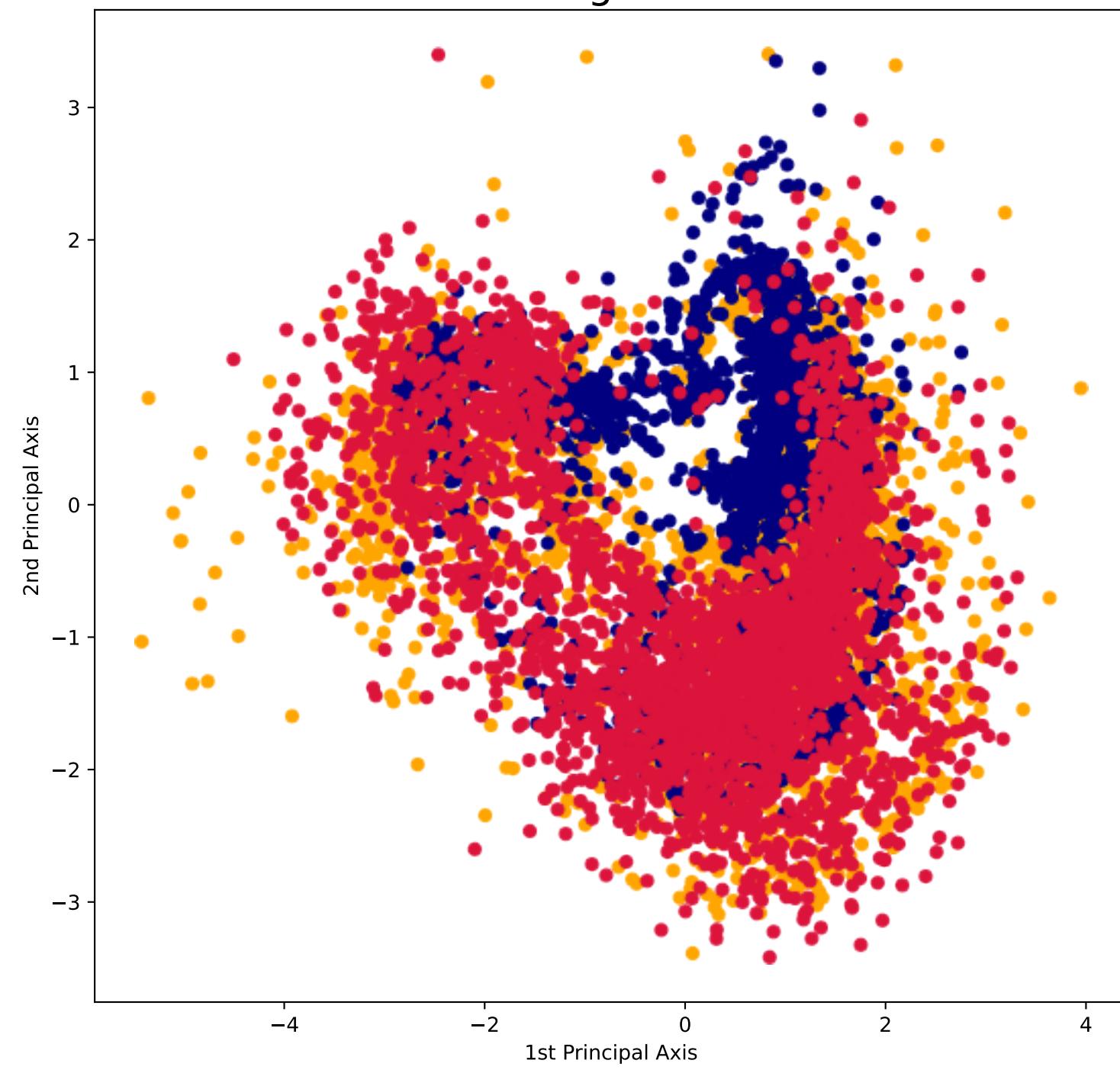
3D Projection



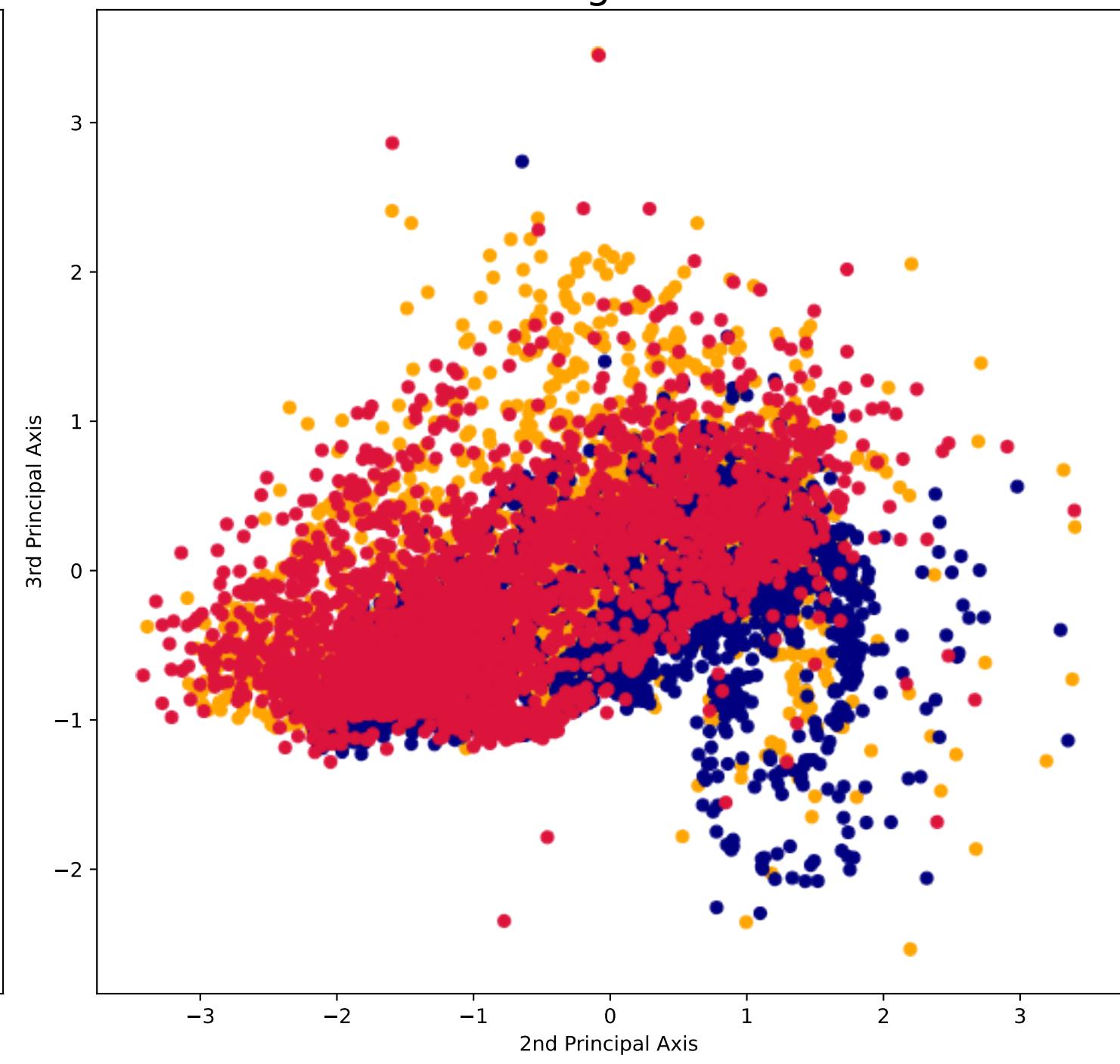
Mice Expired: ('M21488', 'hm3d Con')

# Trial Number: 8, Phase: Eupnea Recovery

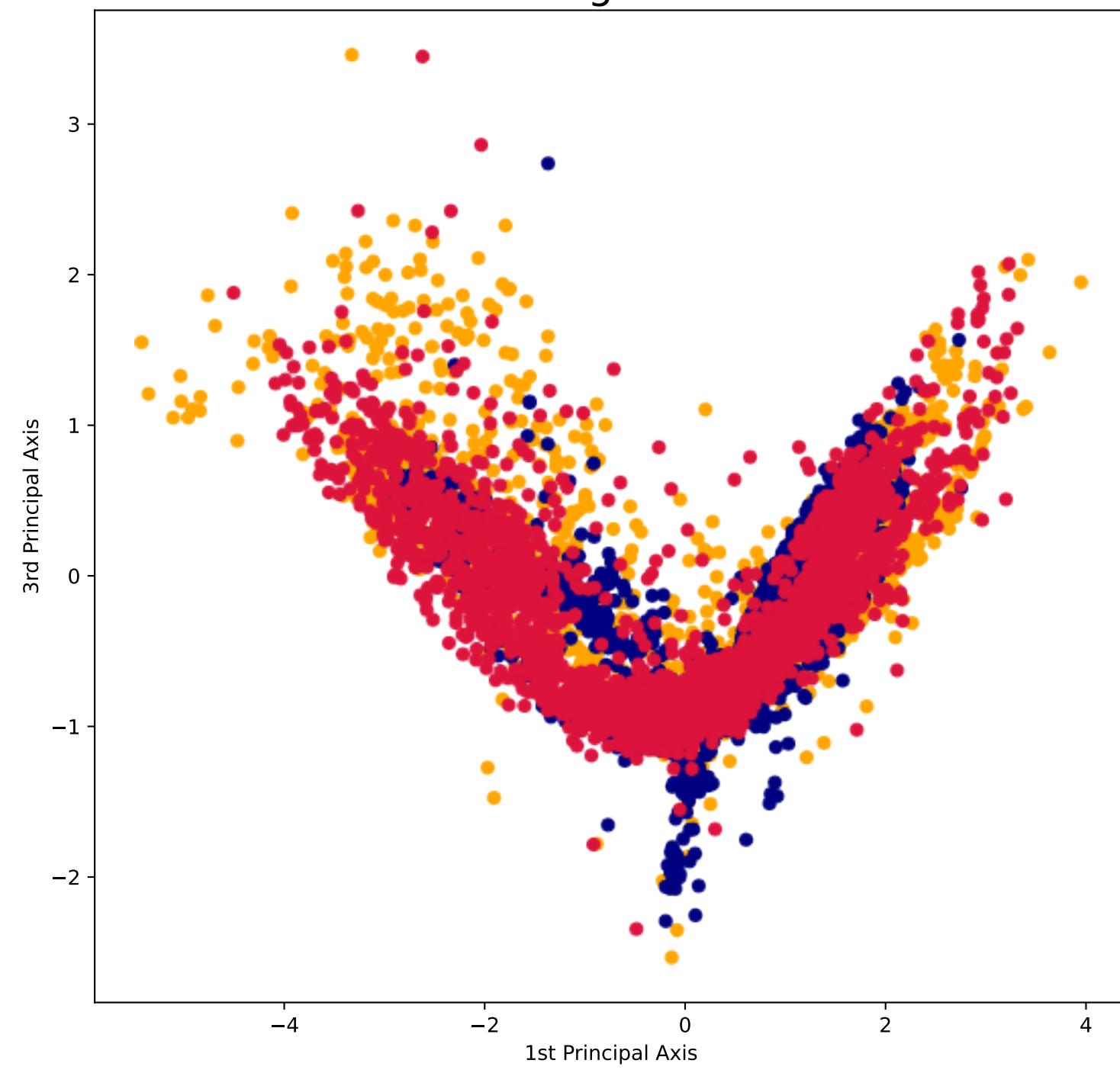
Angle 1



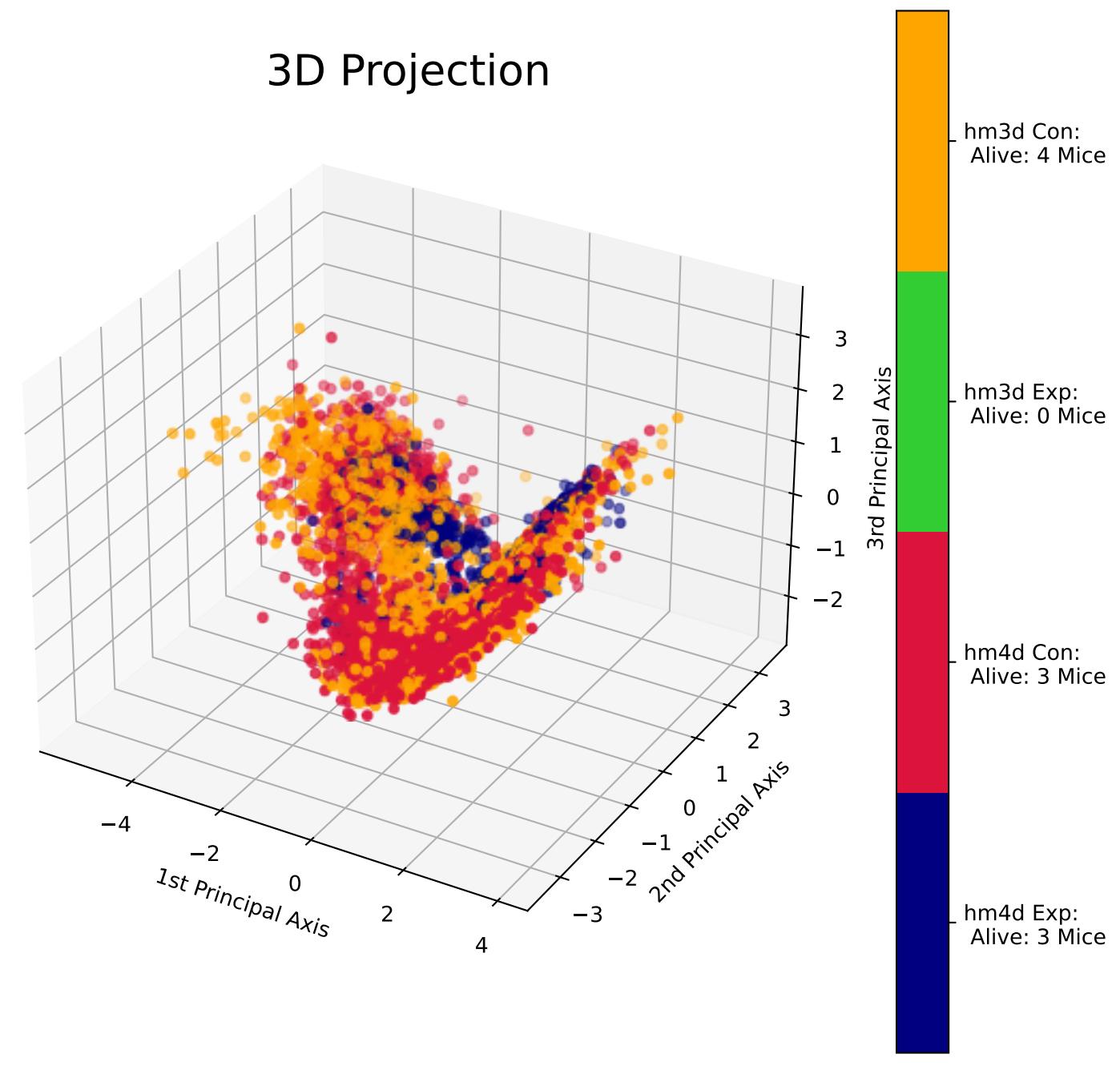
Angle 2



Angle 3

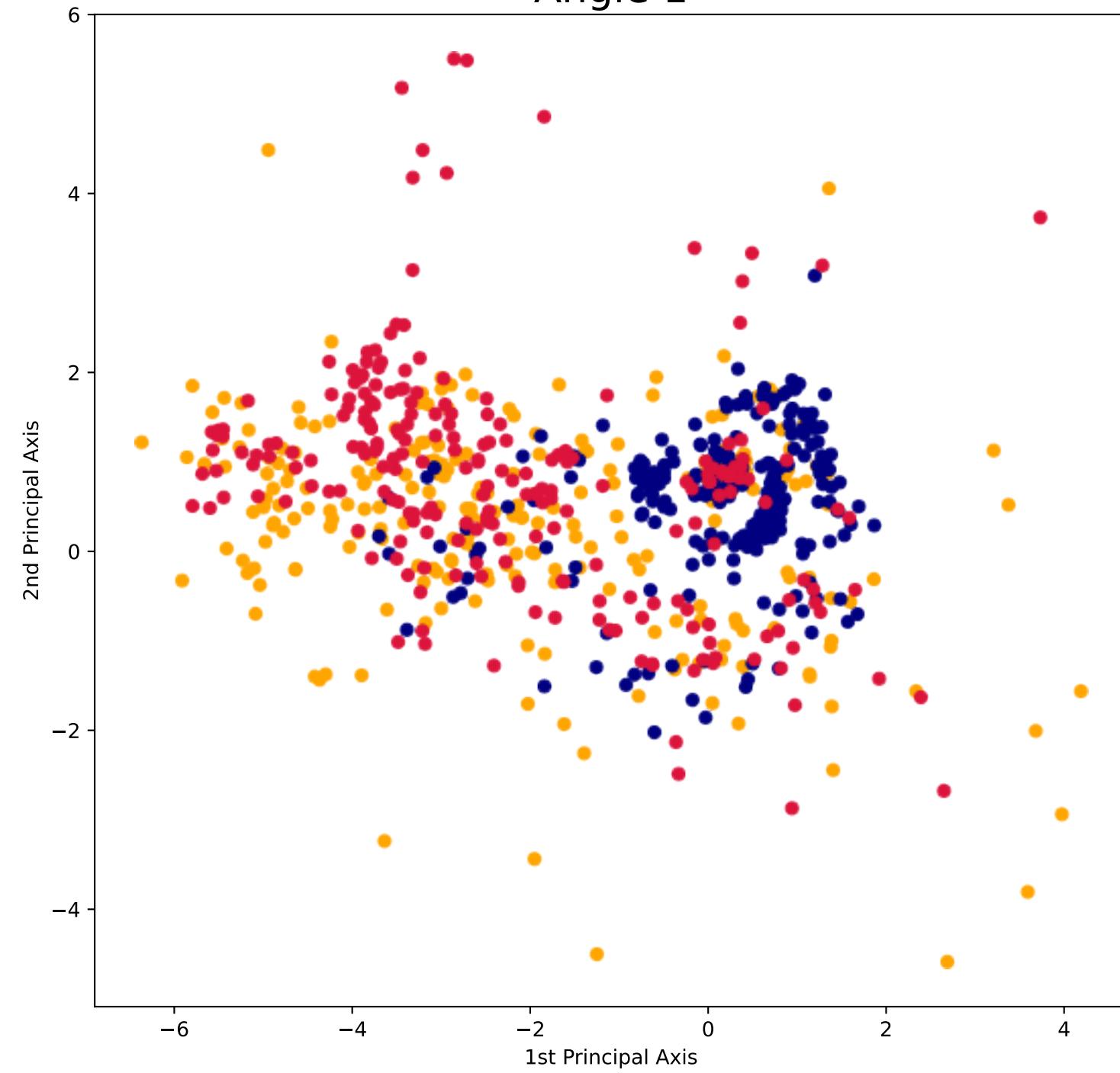


3D Projection

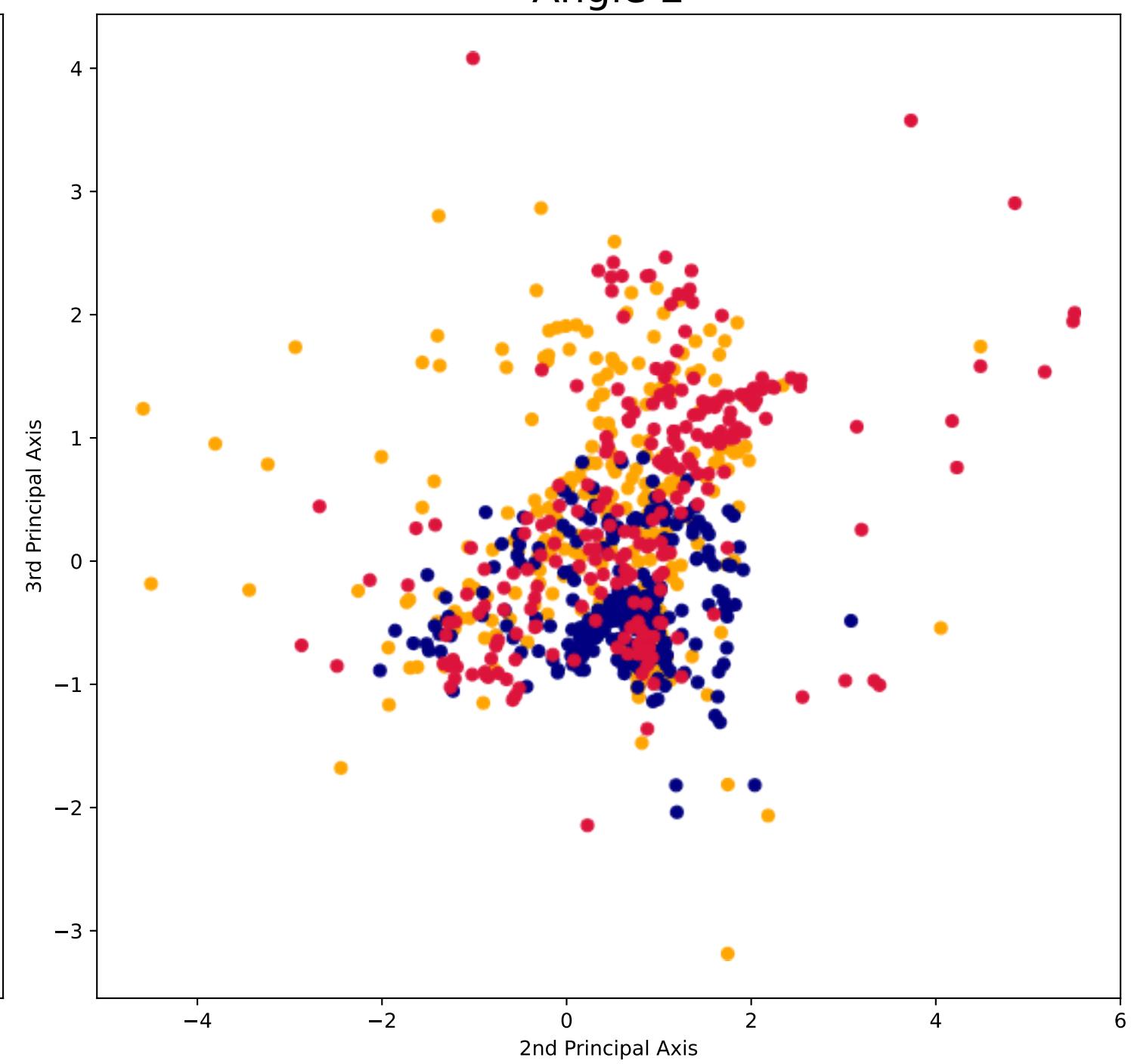


# Trial Number: 9, Phase: Trial Onset

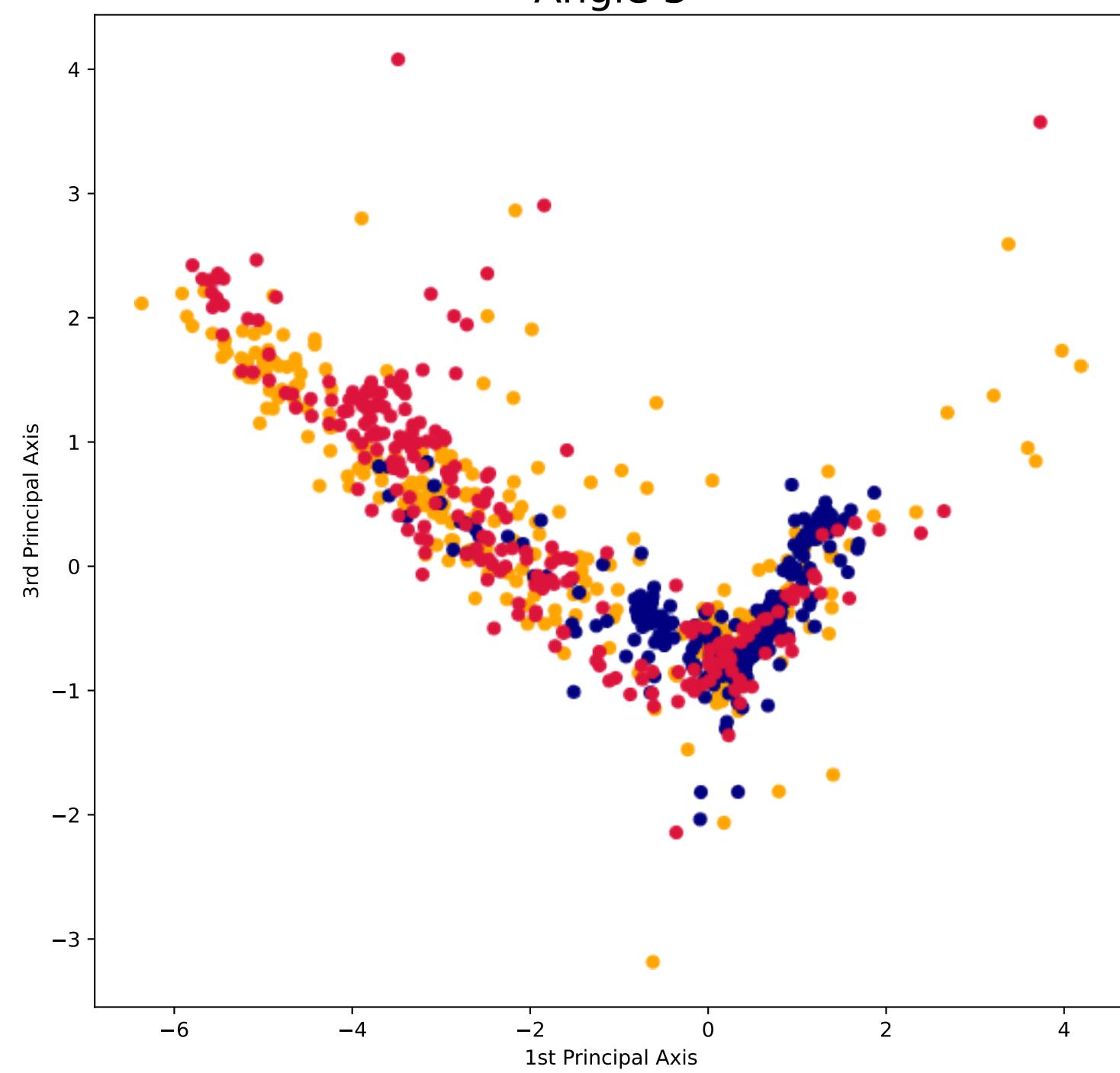
Angle 1



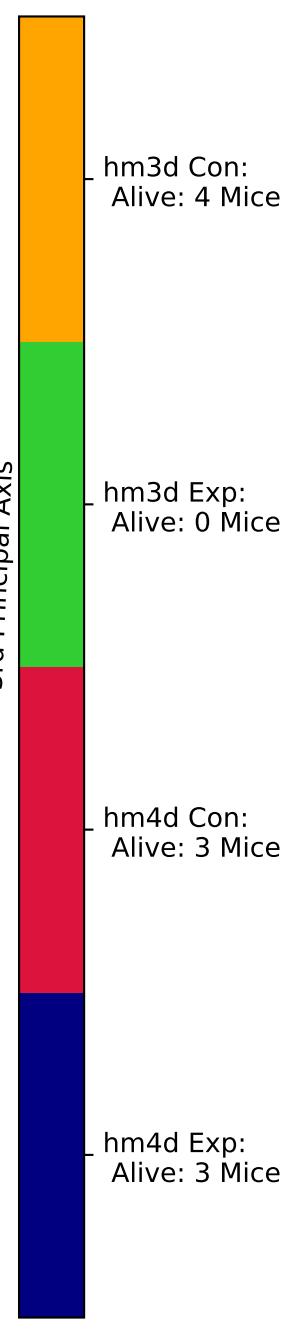
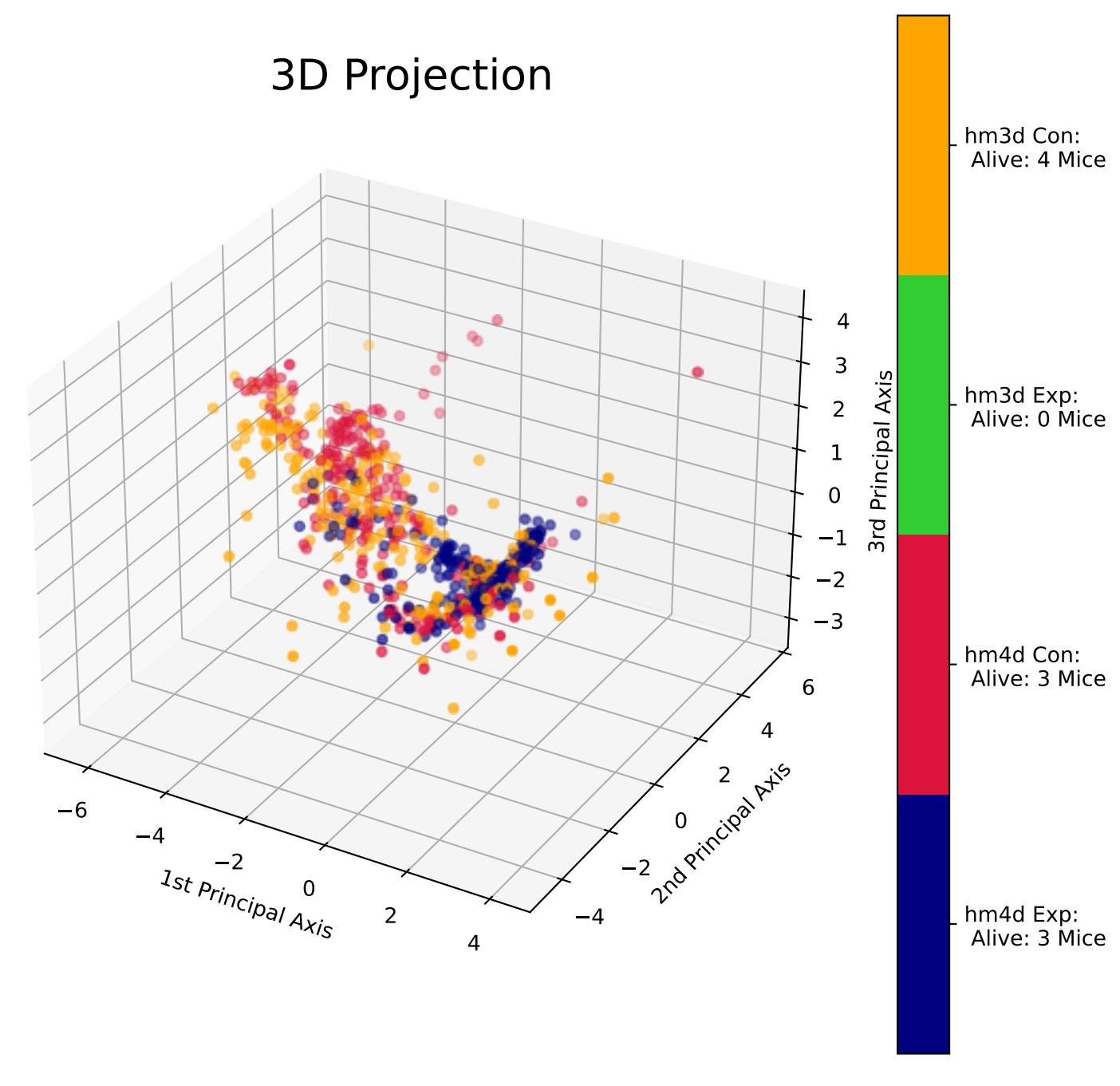
Angle 2



Angle 3



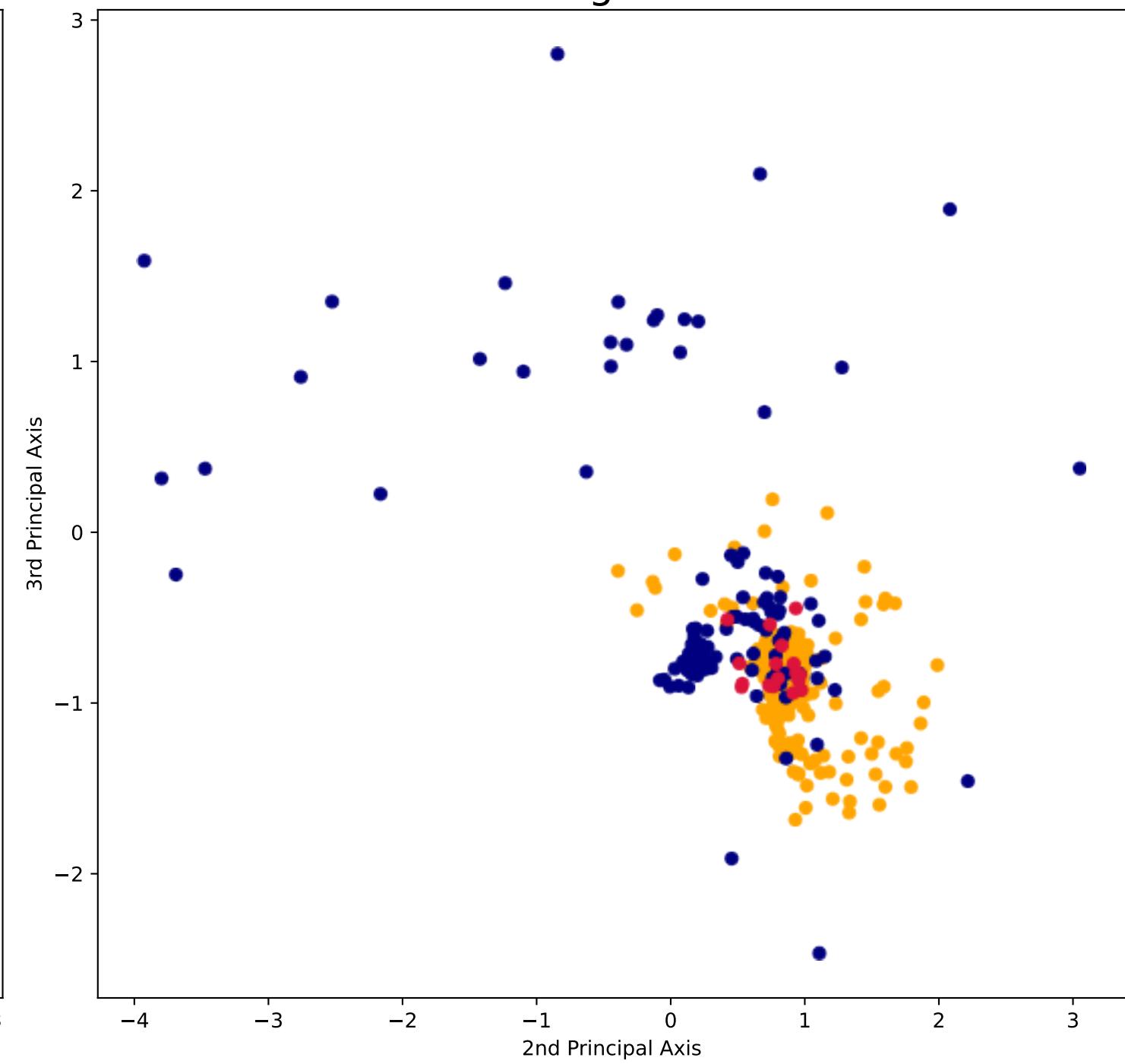
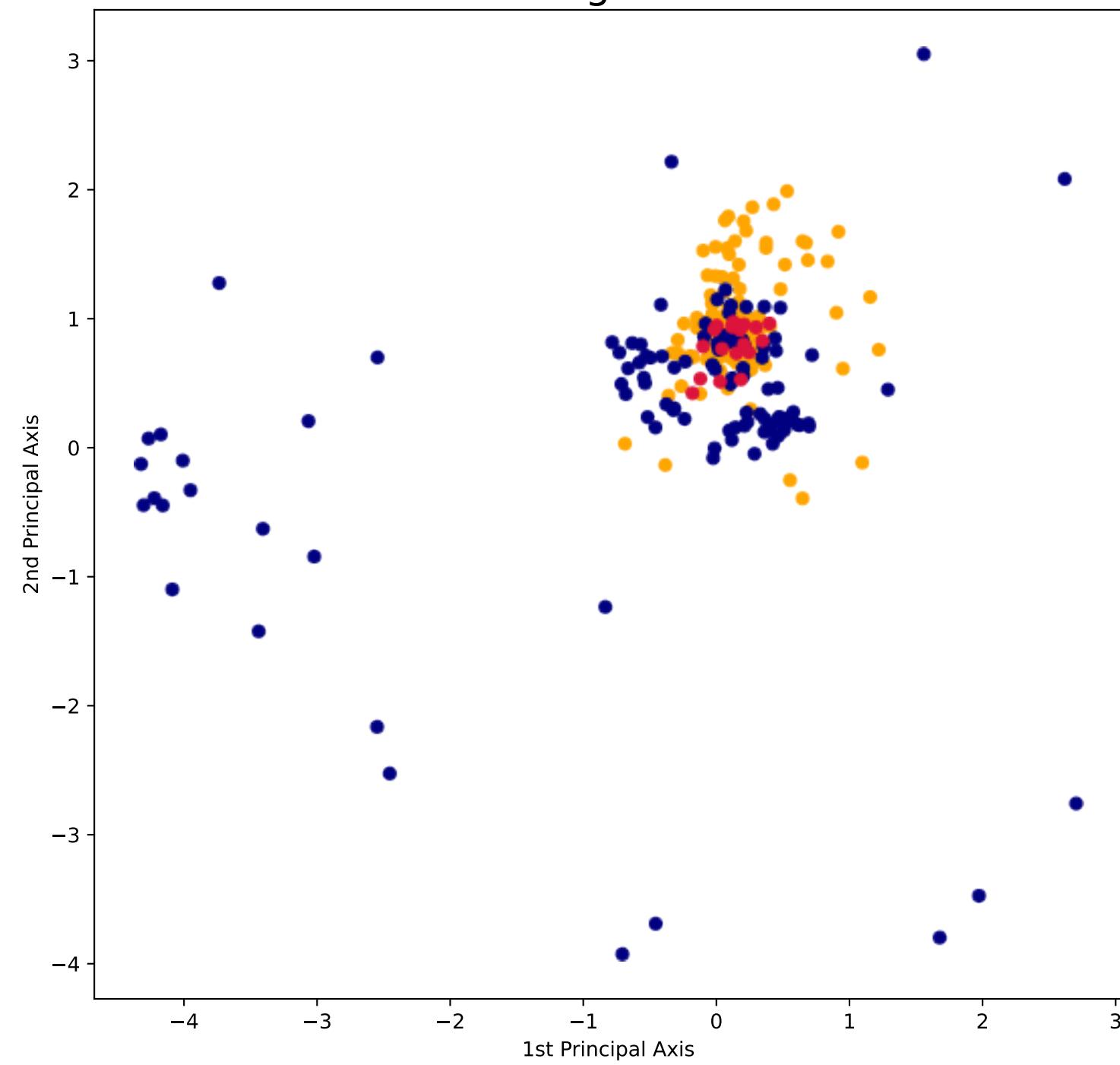
3D Projection



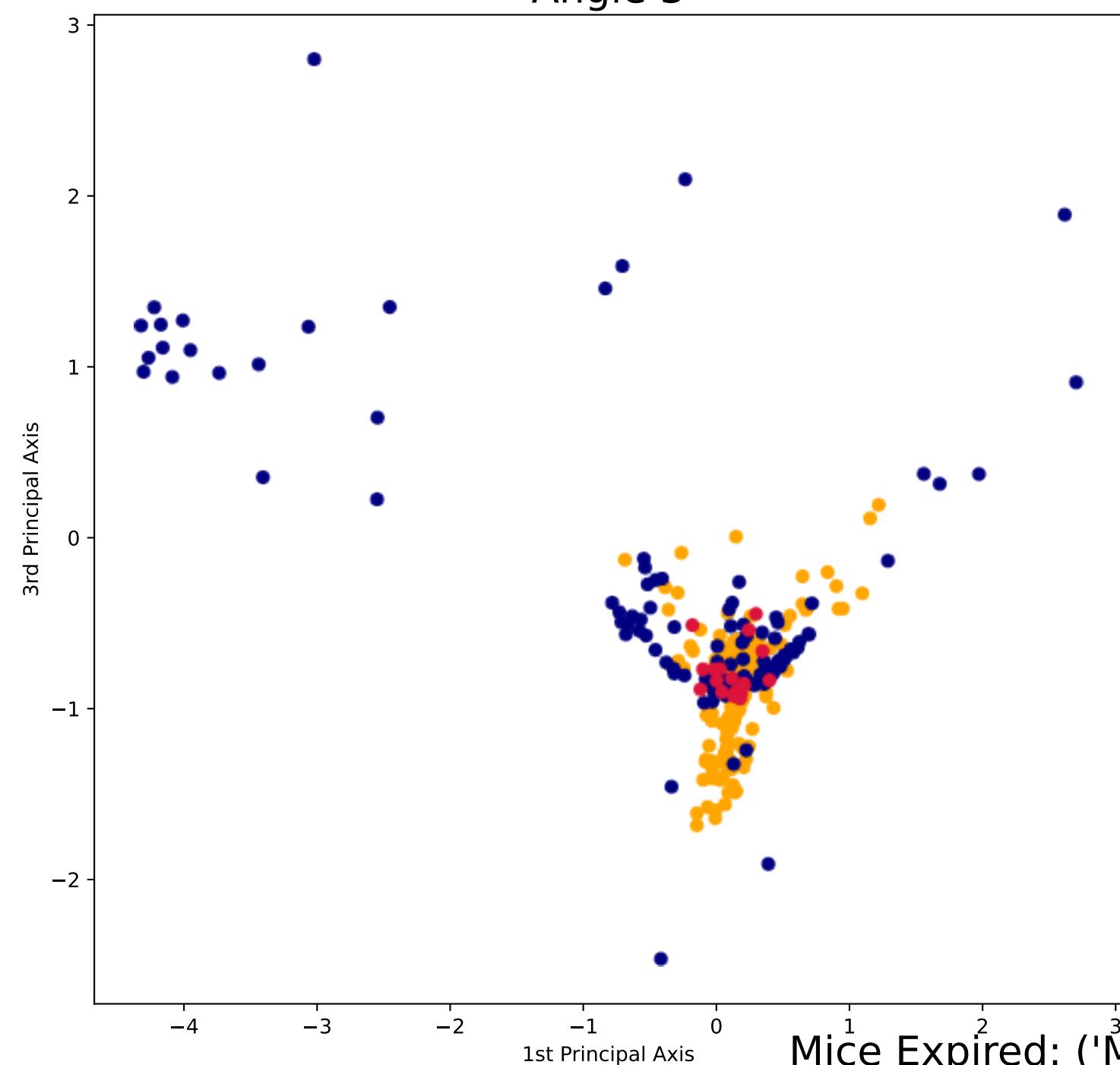
# Trial Number: 9, Phase: Apnea Starts

Angle 1

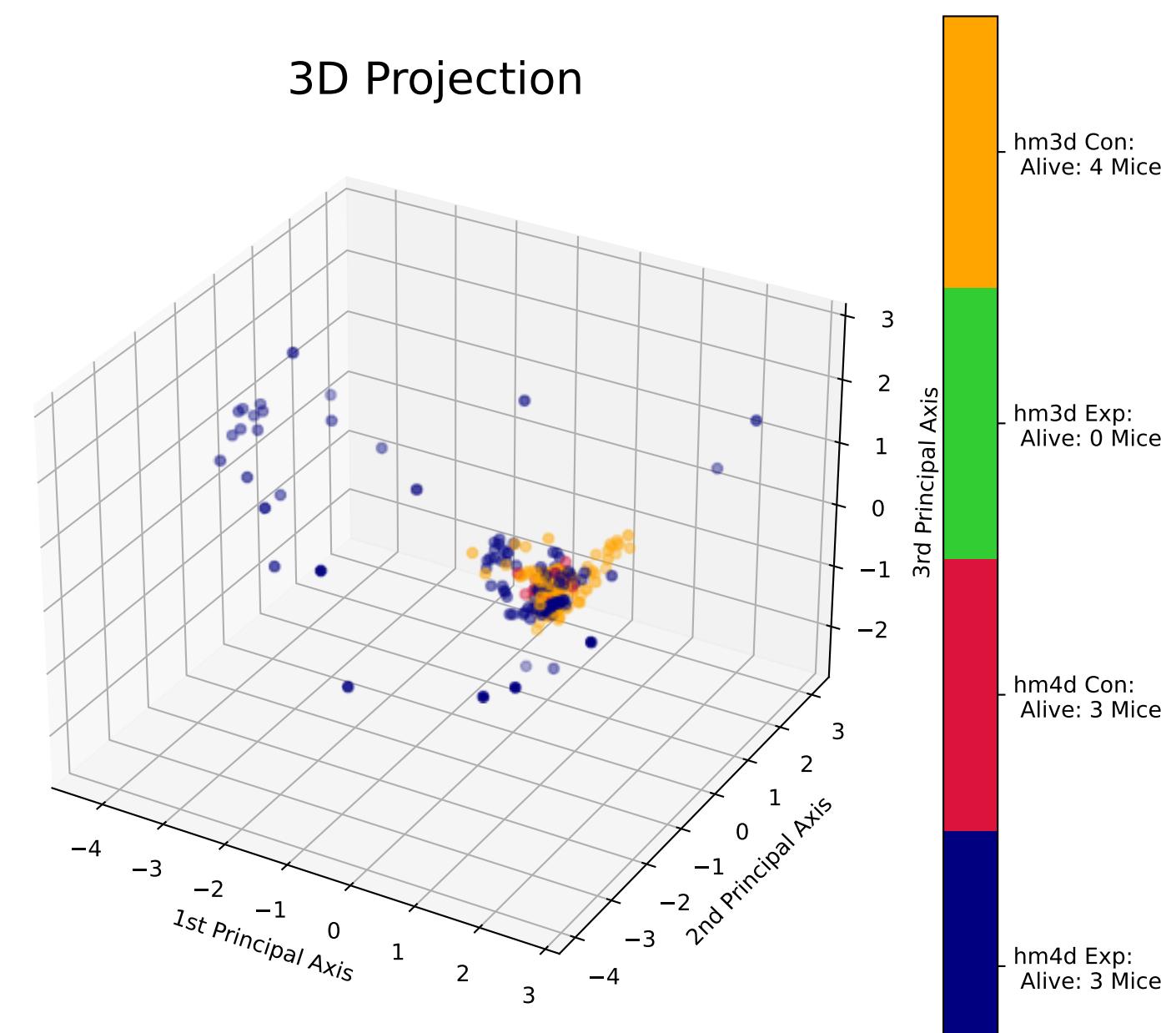
Angle 2



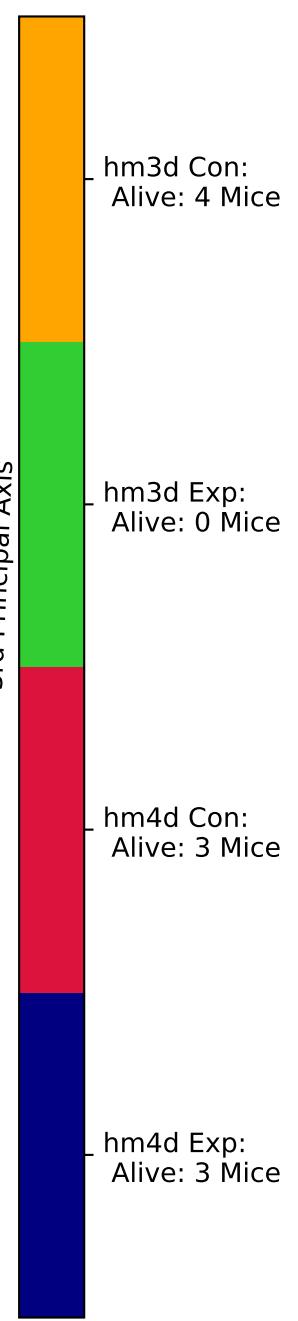
Angle 3



3D Projection

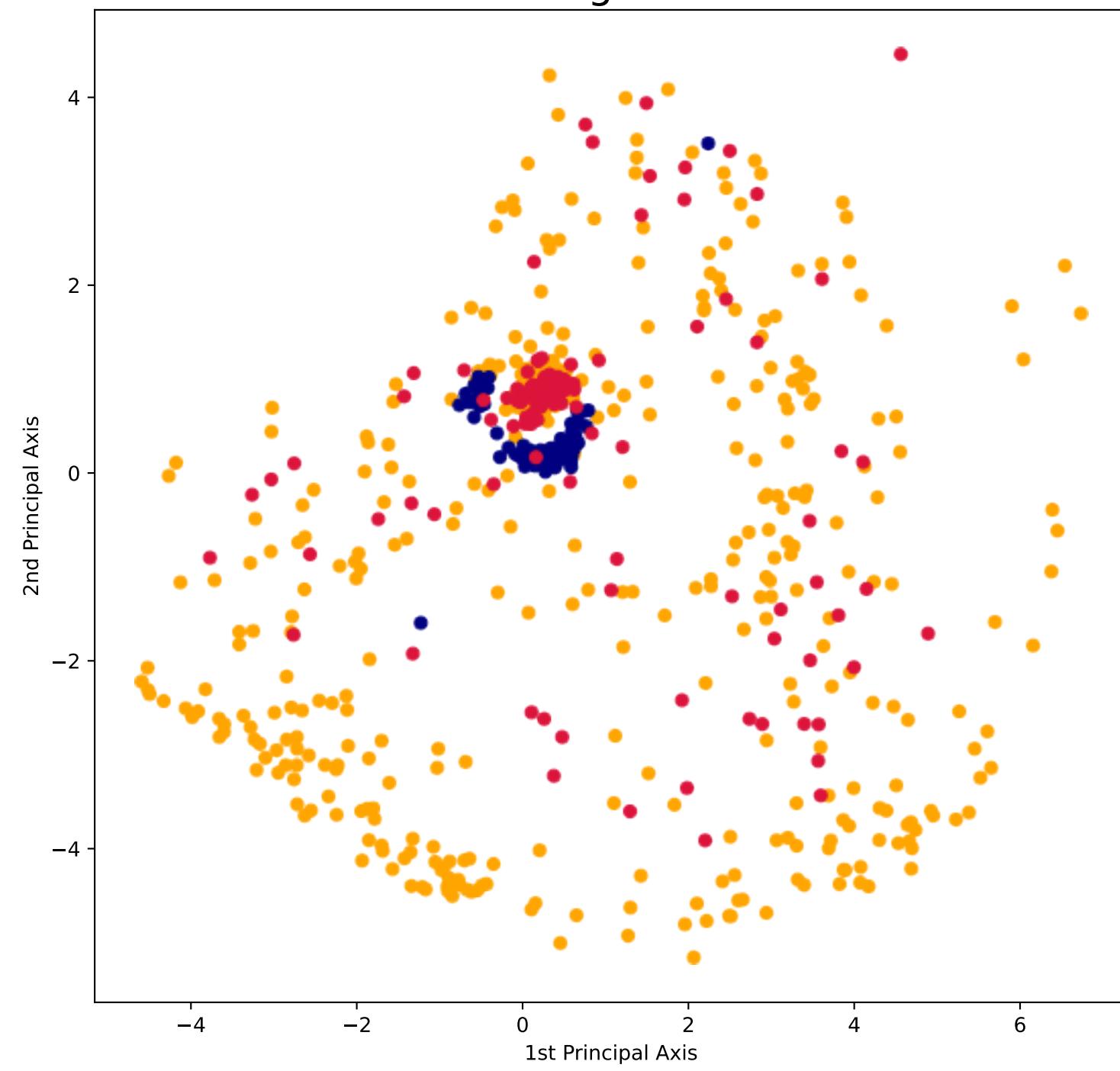


Mice Expired: ('M21264', 'hm4d Exp')

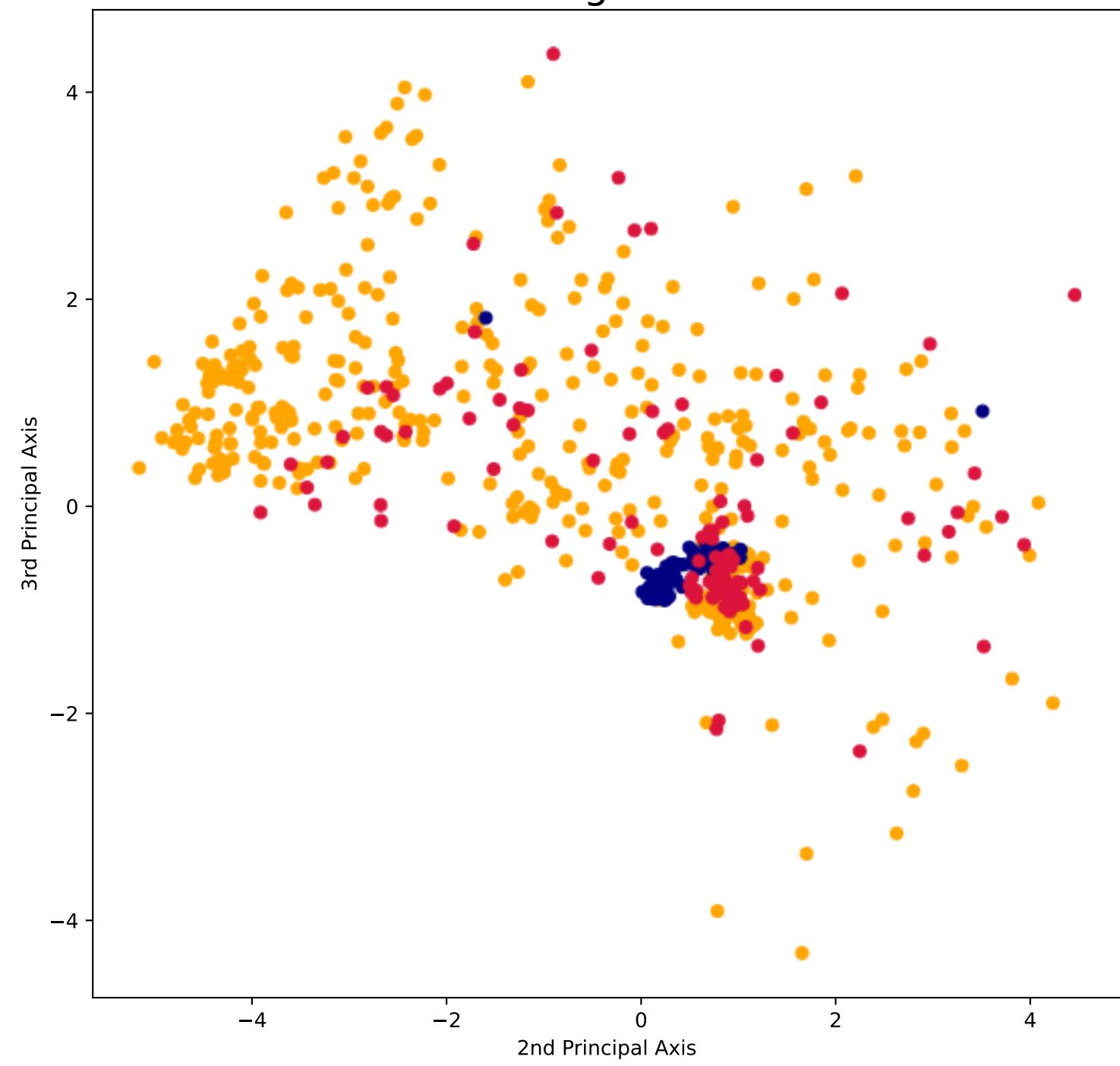


# Trial Number: 9, Phase: First Gasp

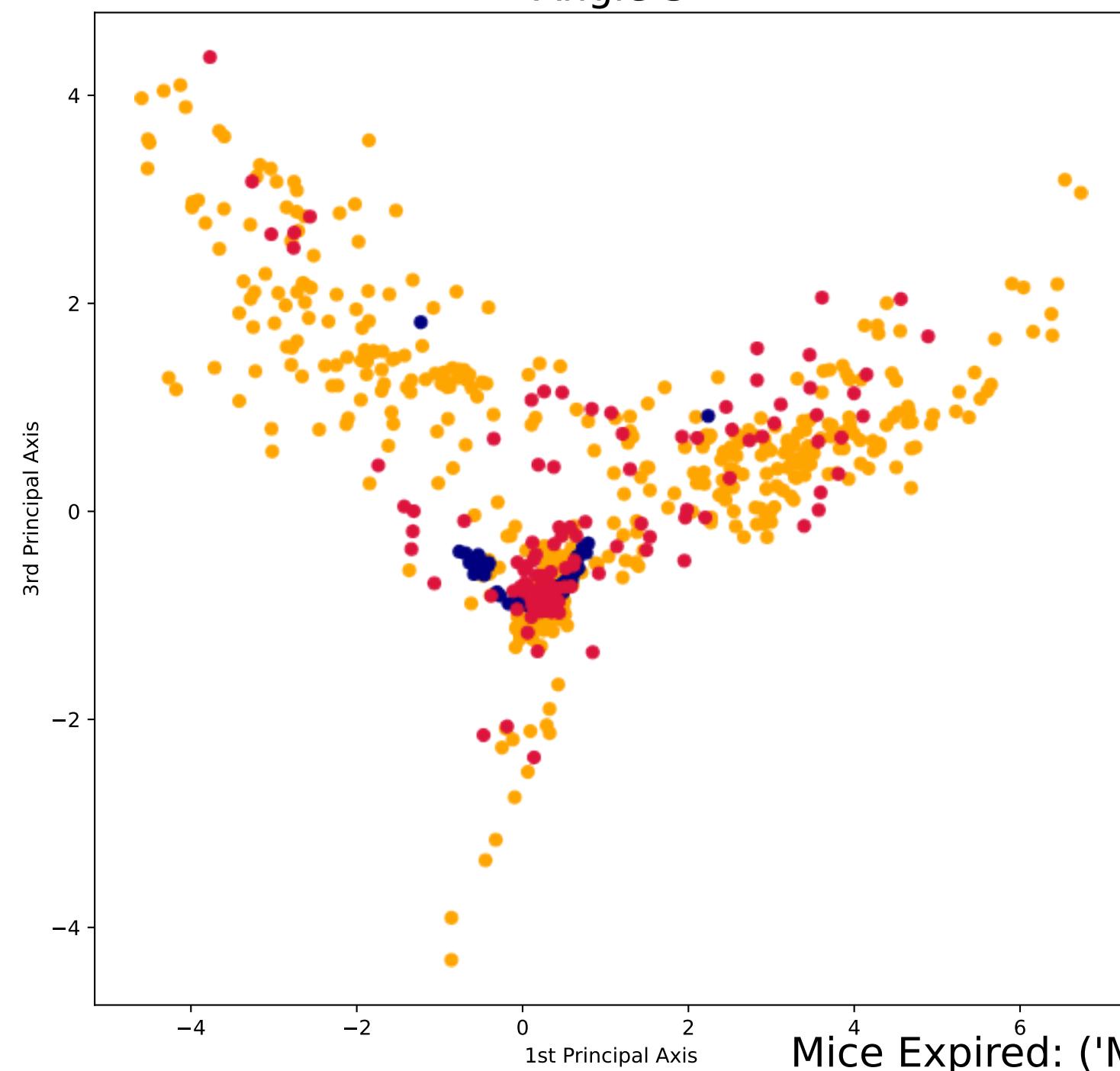
Angle 1



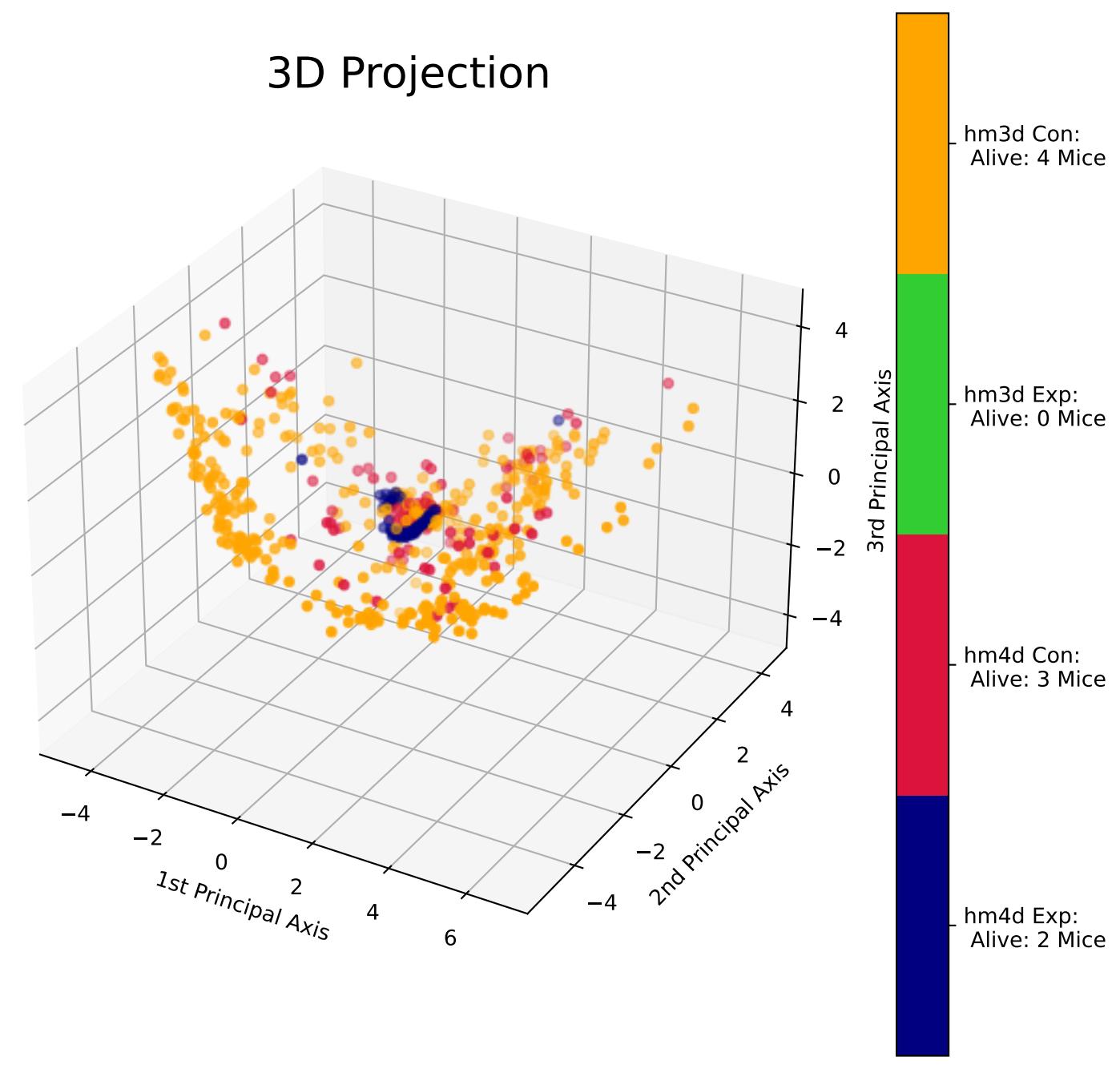
Angle 2



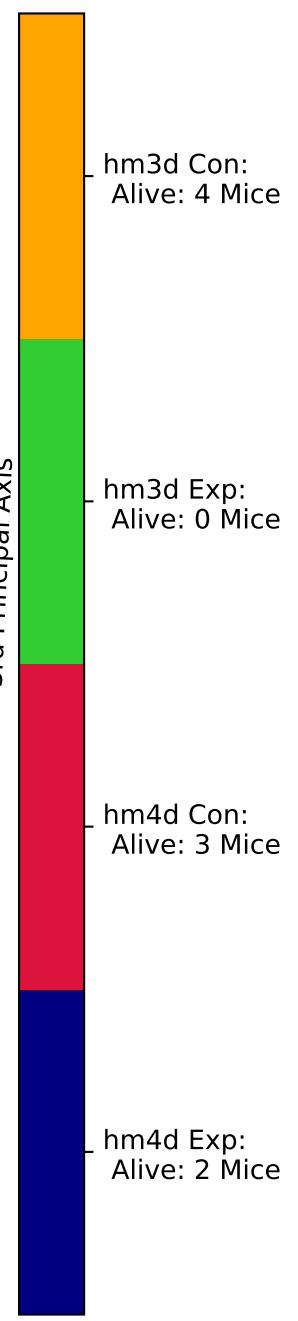
Angle 3



3D Projection

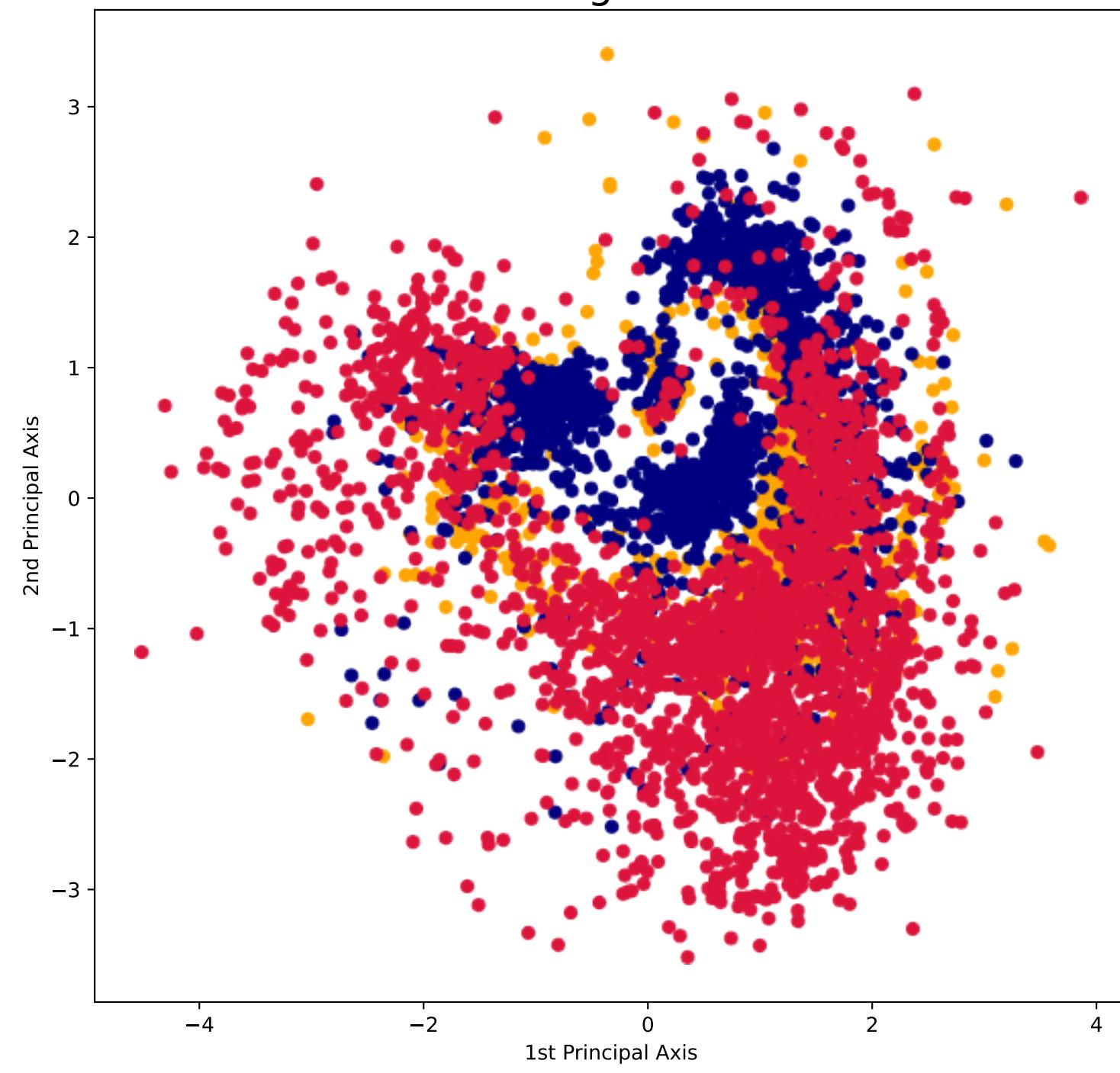


Mice Expired: ('M20868', 'hm3d Con')

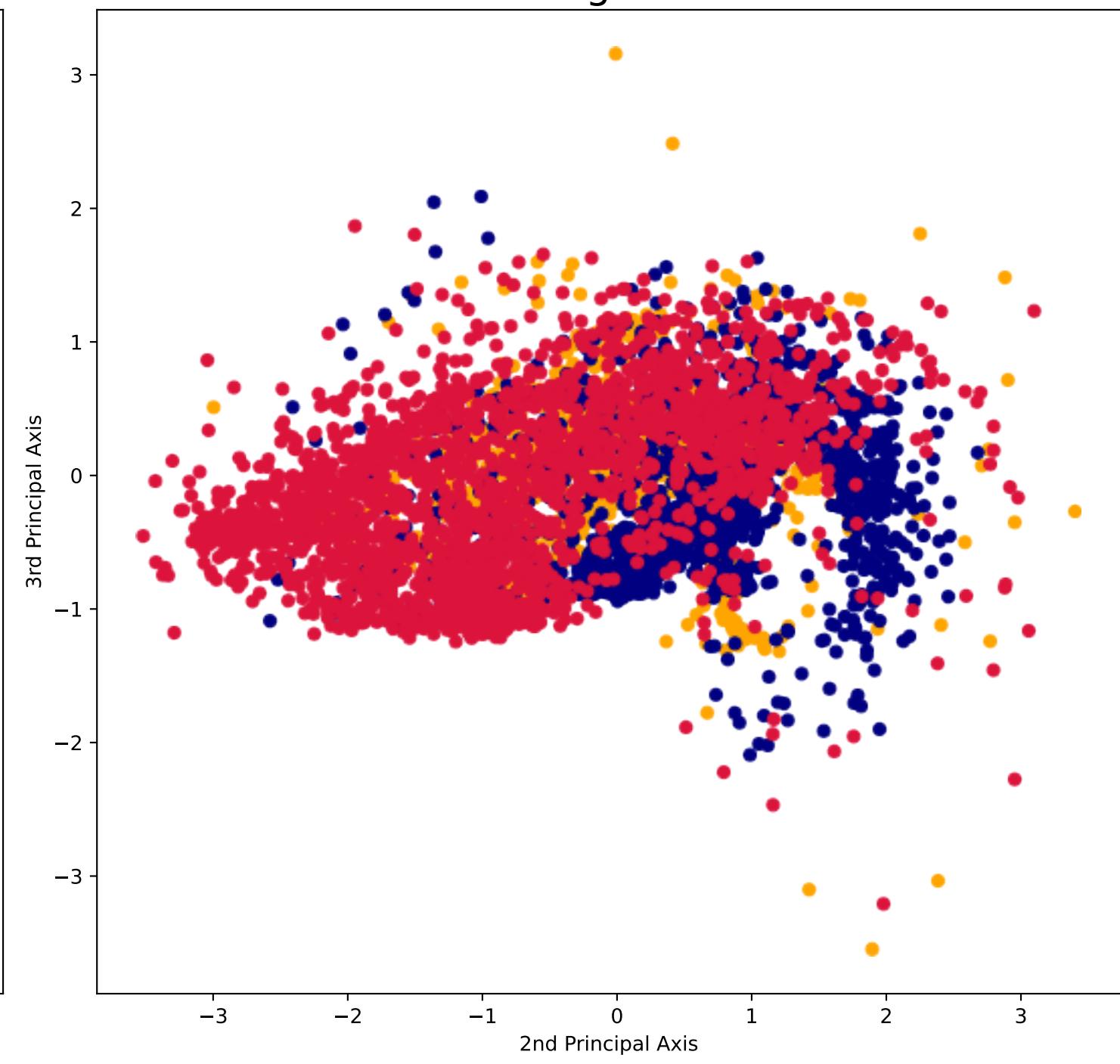


# Trial Number: 9, Phase: Eupnea Recovery

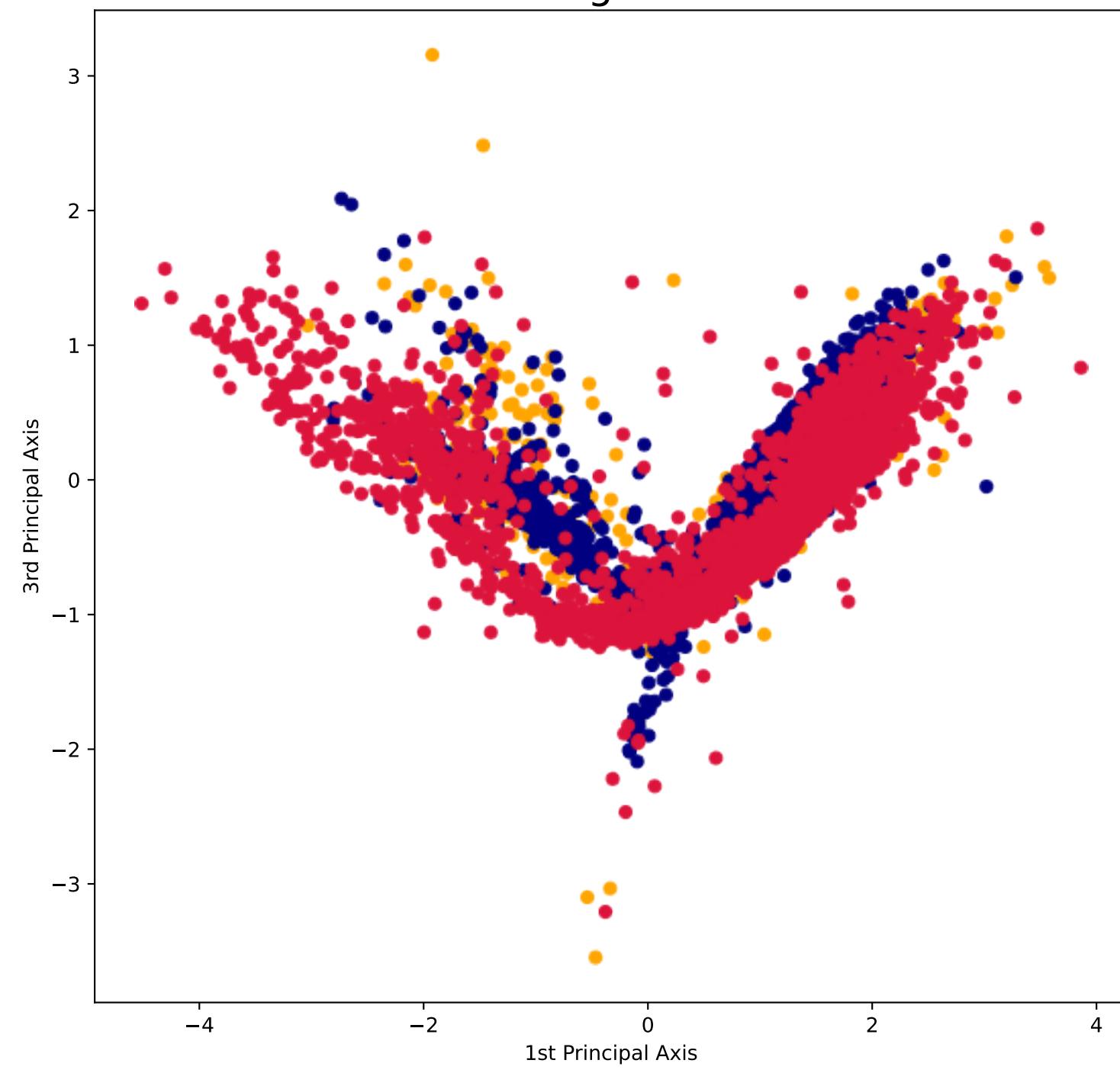
Angle 1



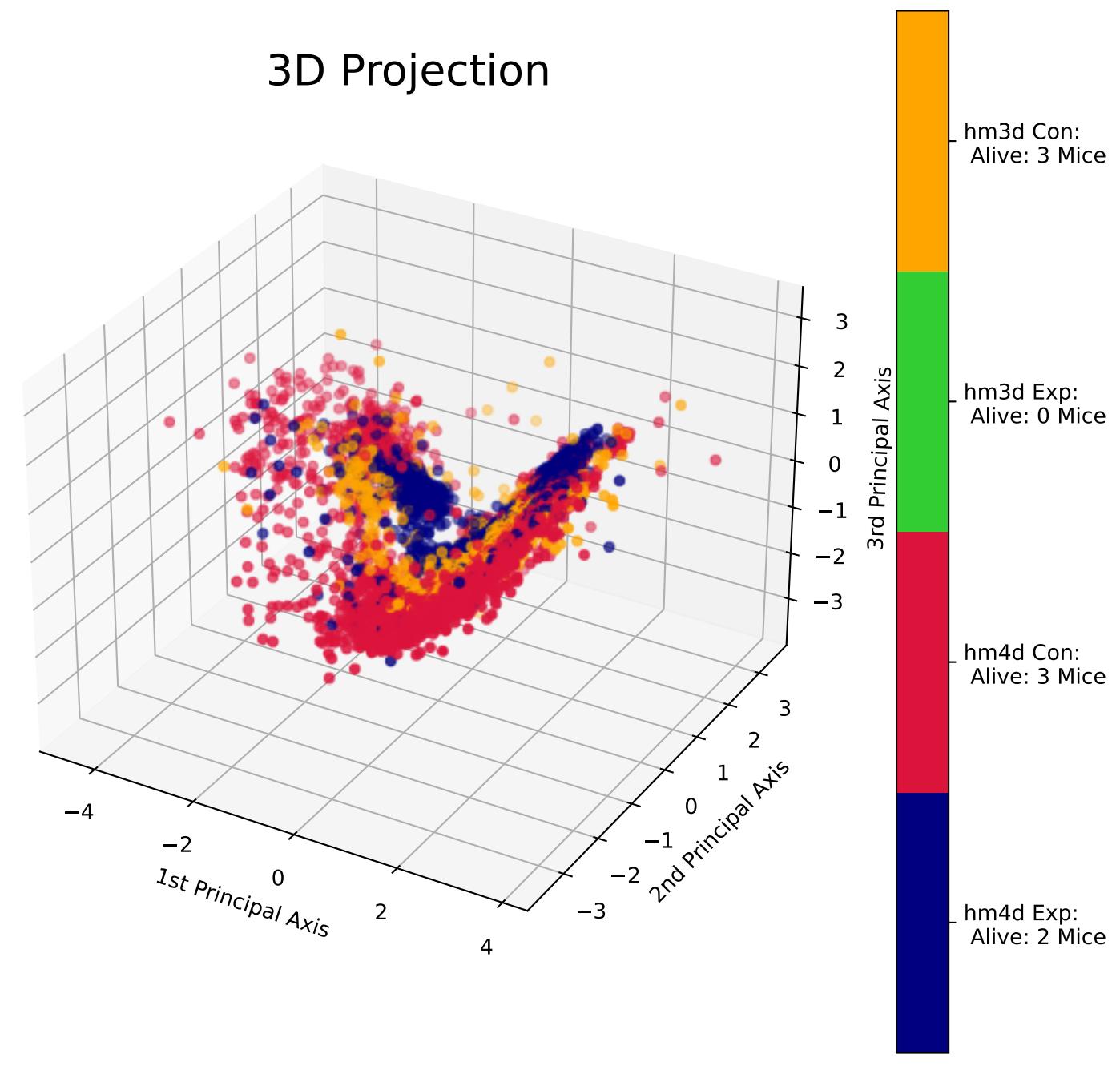
Angle 2



Angle 3

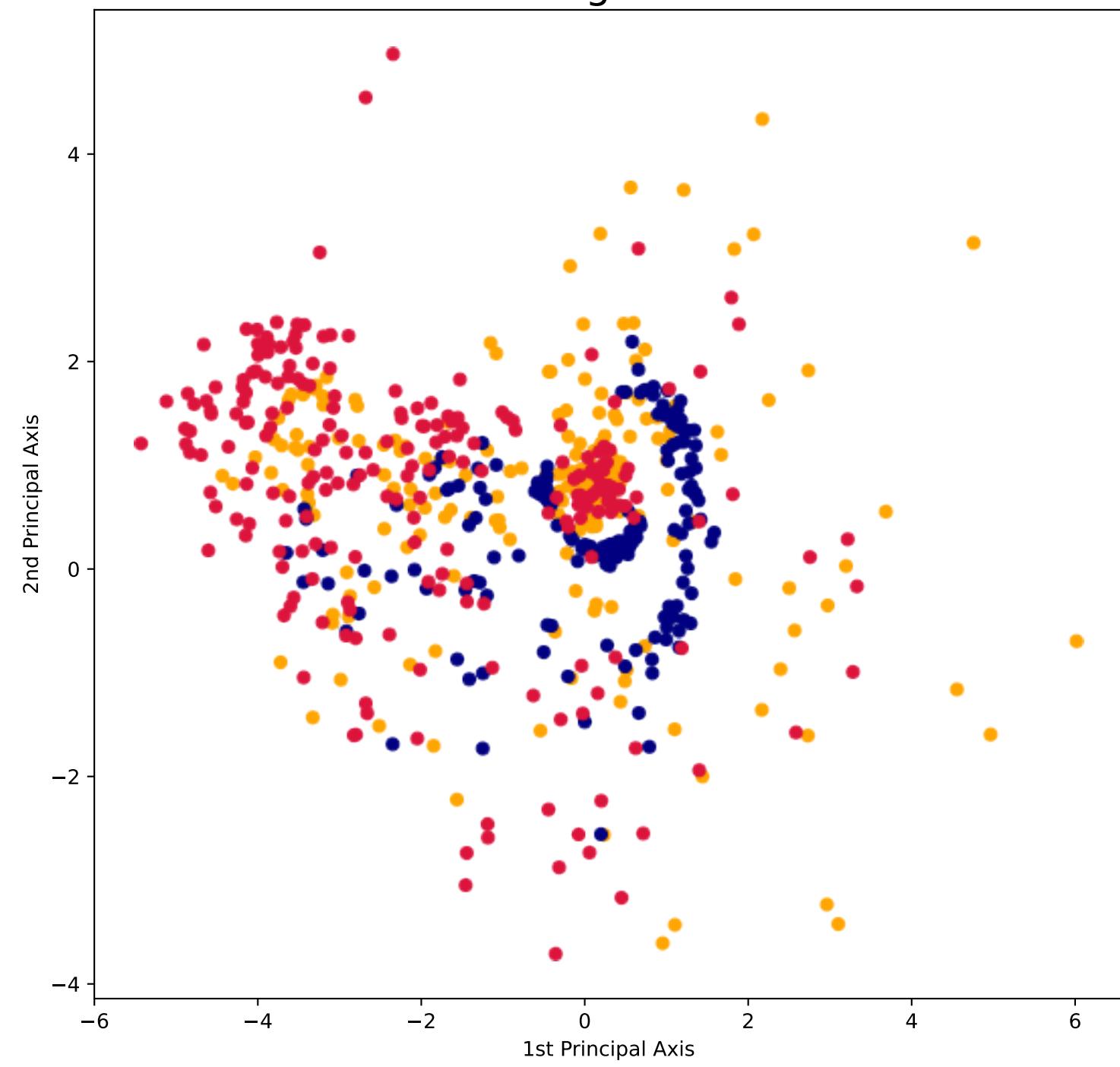


3D Projection

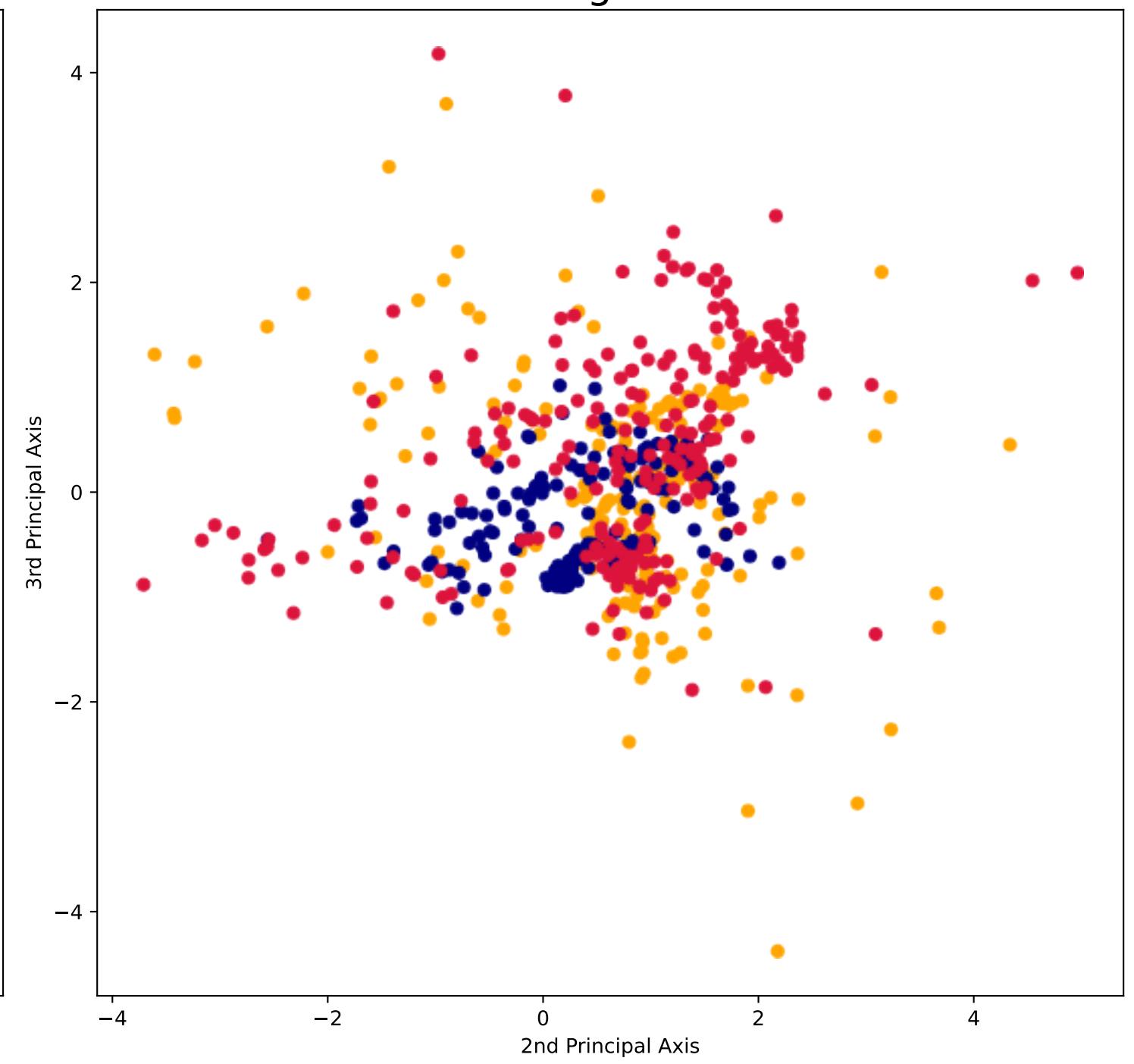


# Trial Number: 10, Phase: Trial Onset

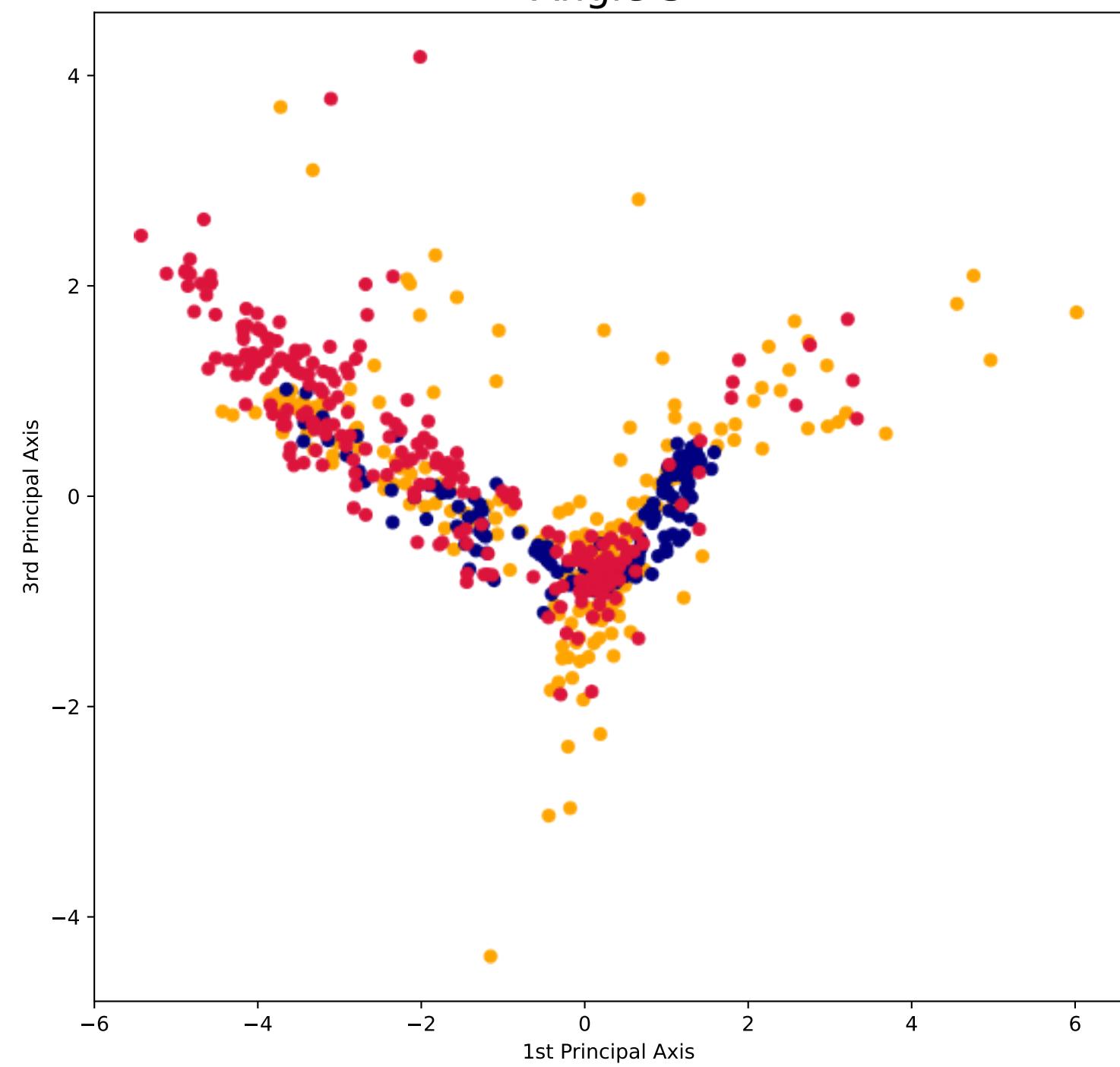
Angle 1



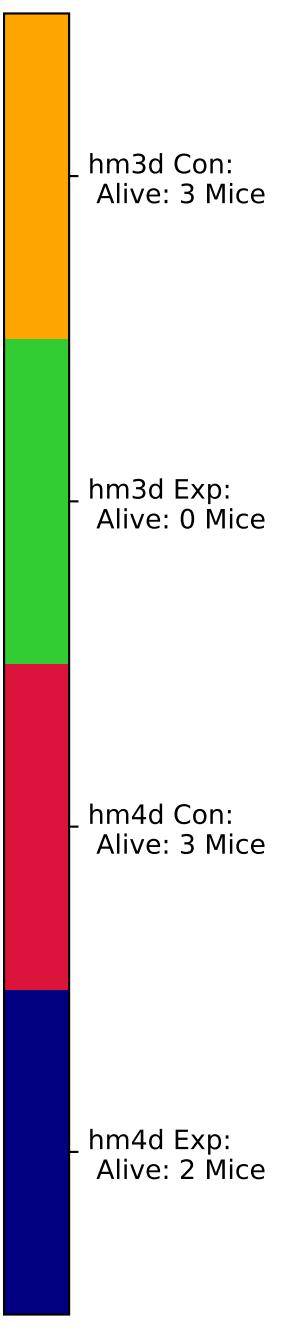
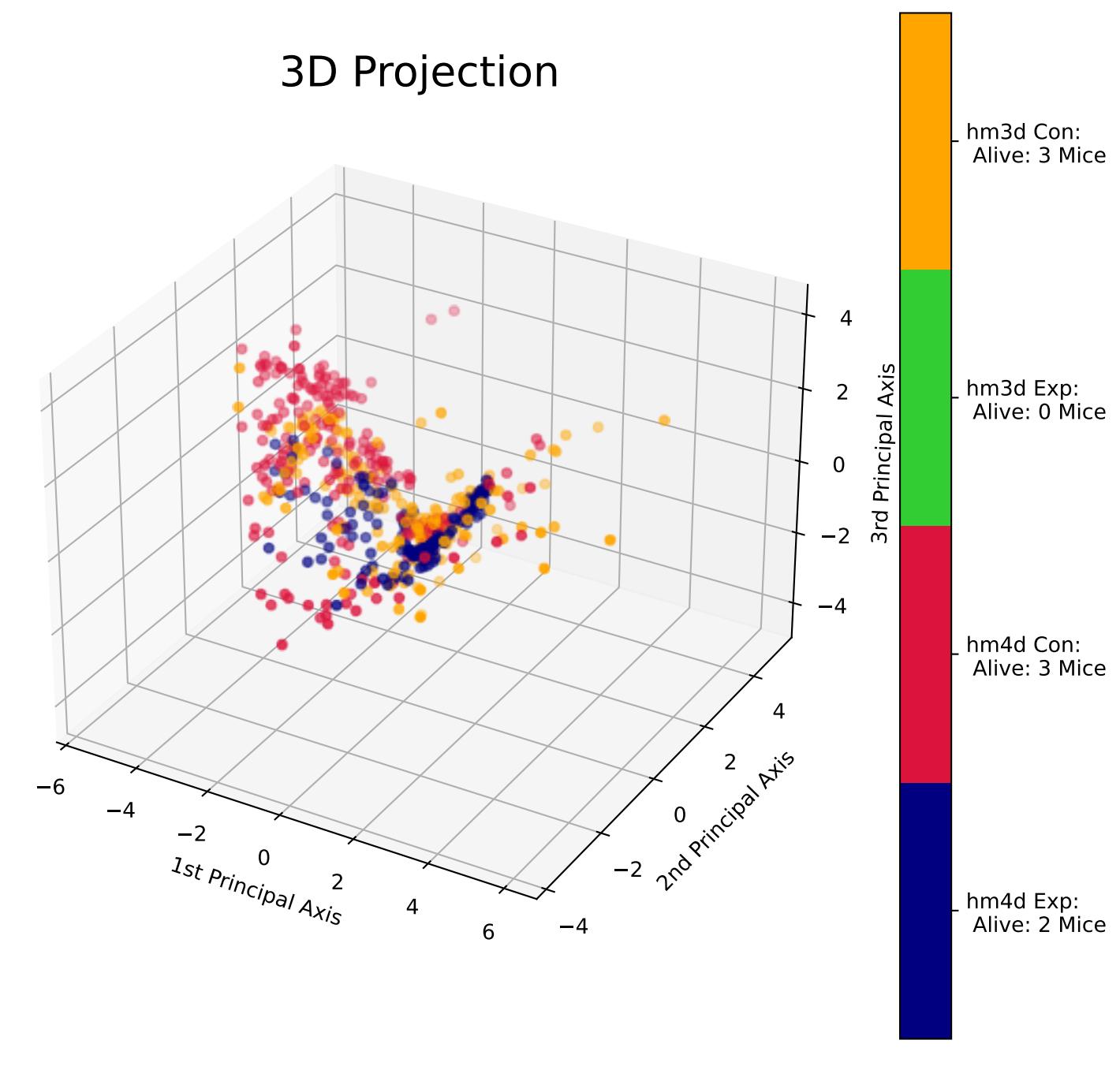
Angle 2



Angle 3



3D Projection



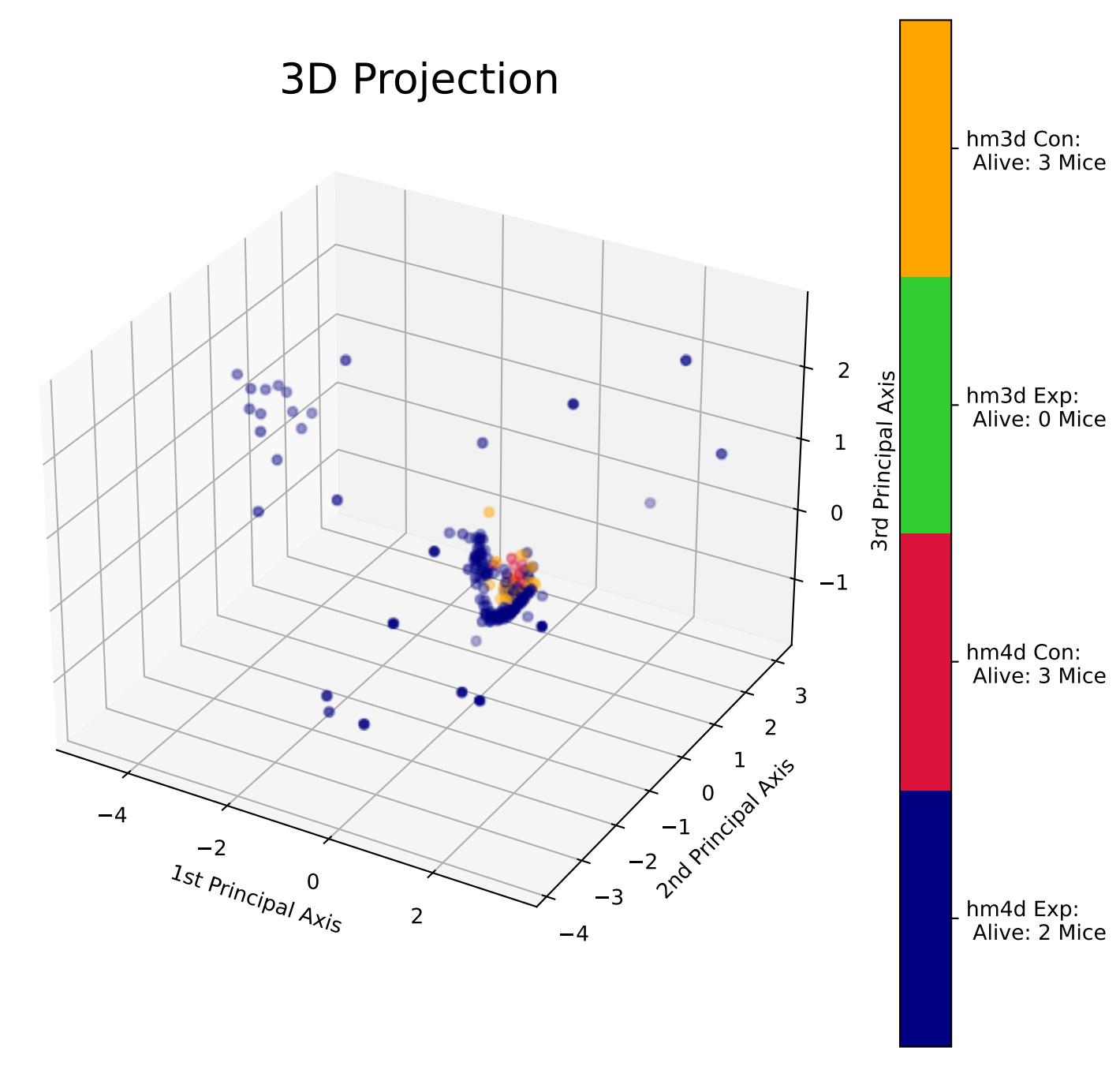
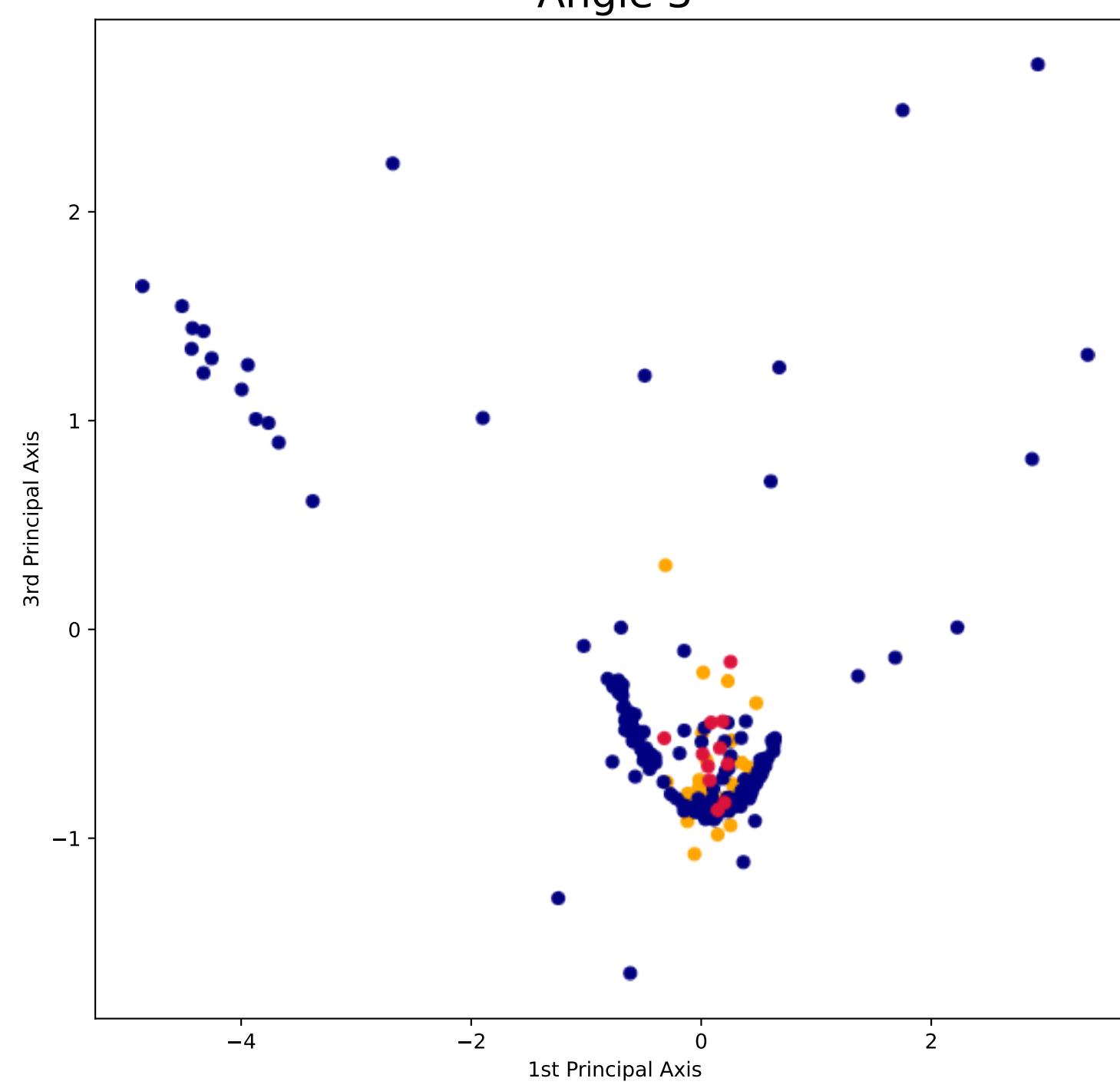
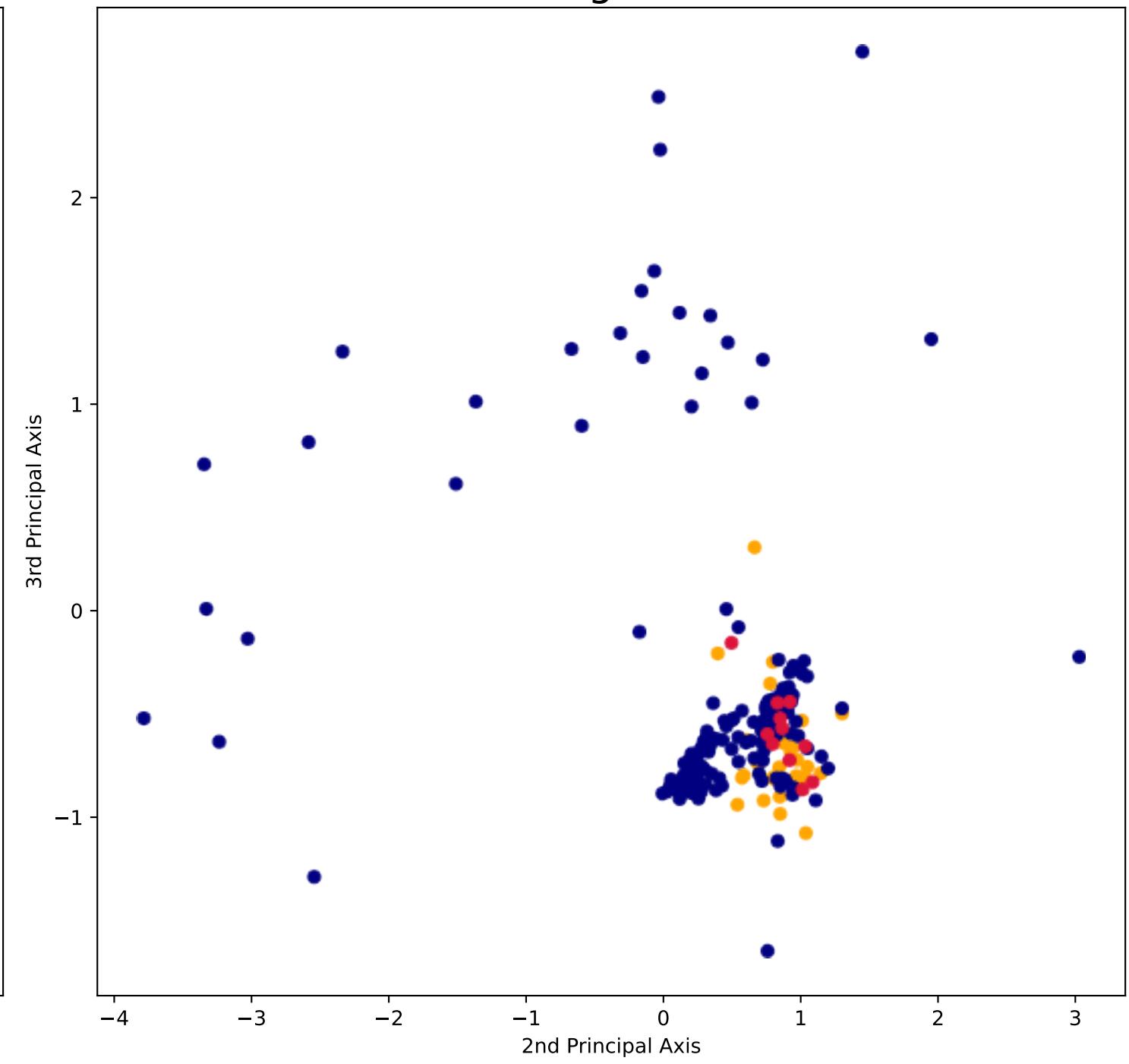
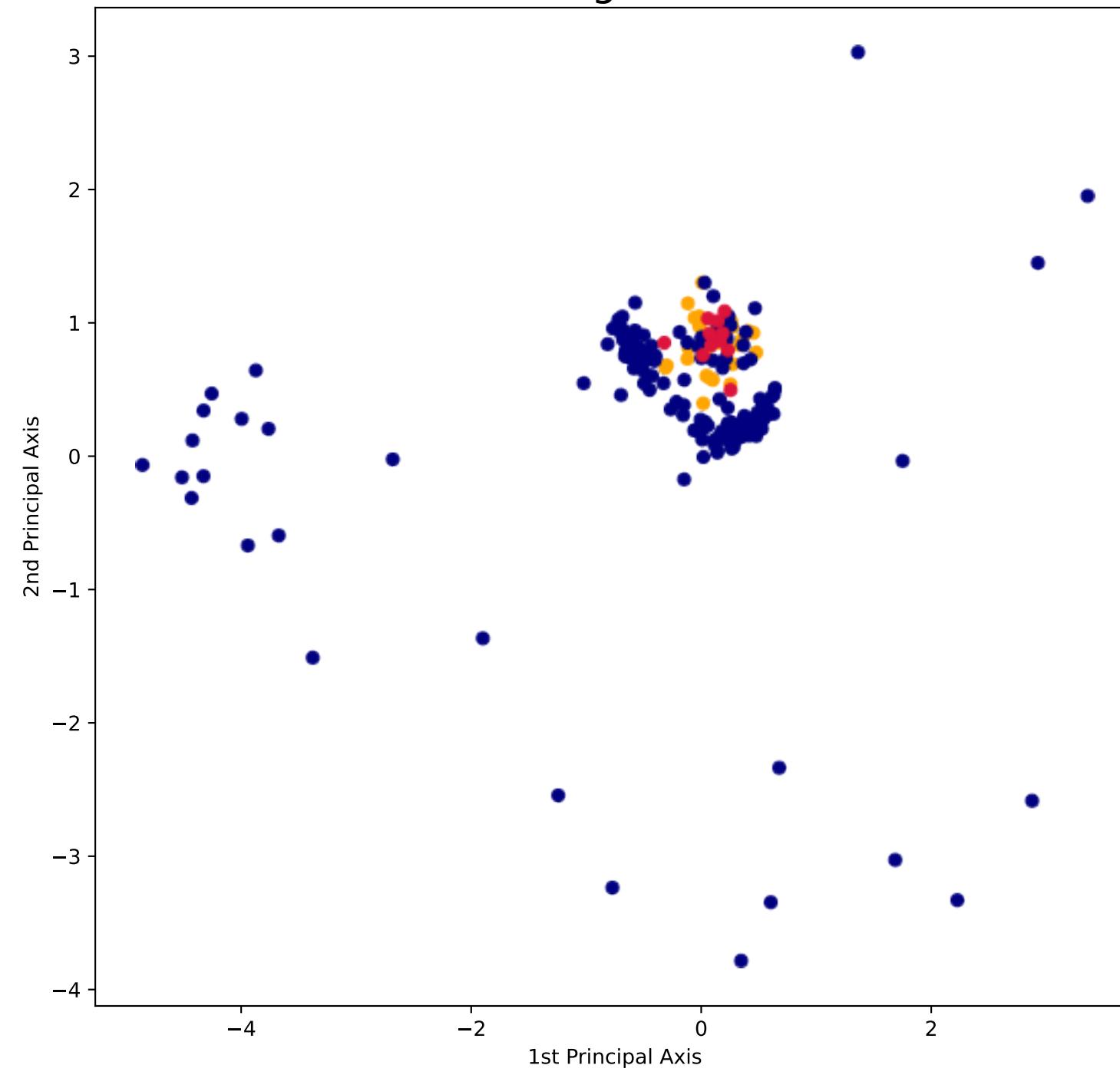
# Trial Number: 10, Phase: Apnea Starts

Angle 1

Angle 2

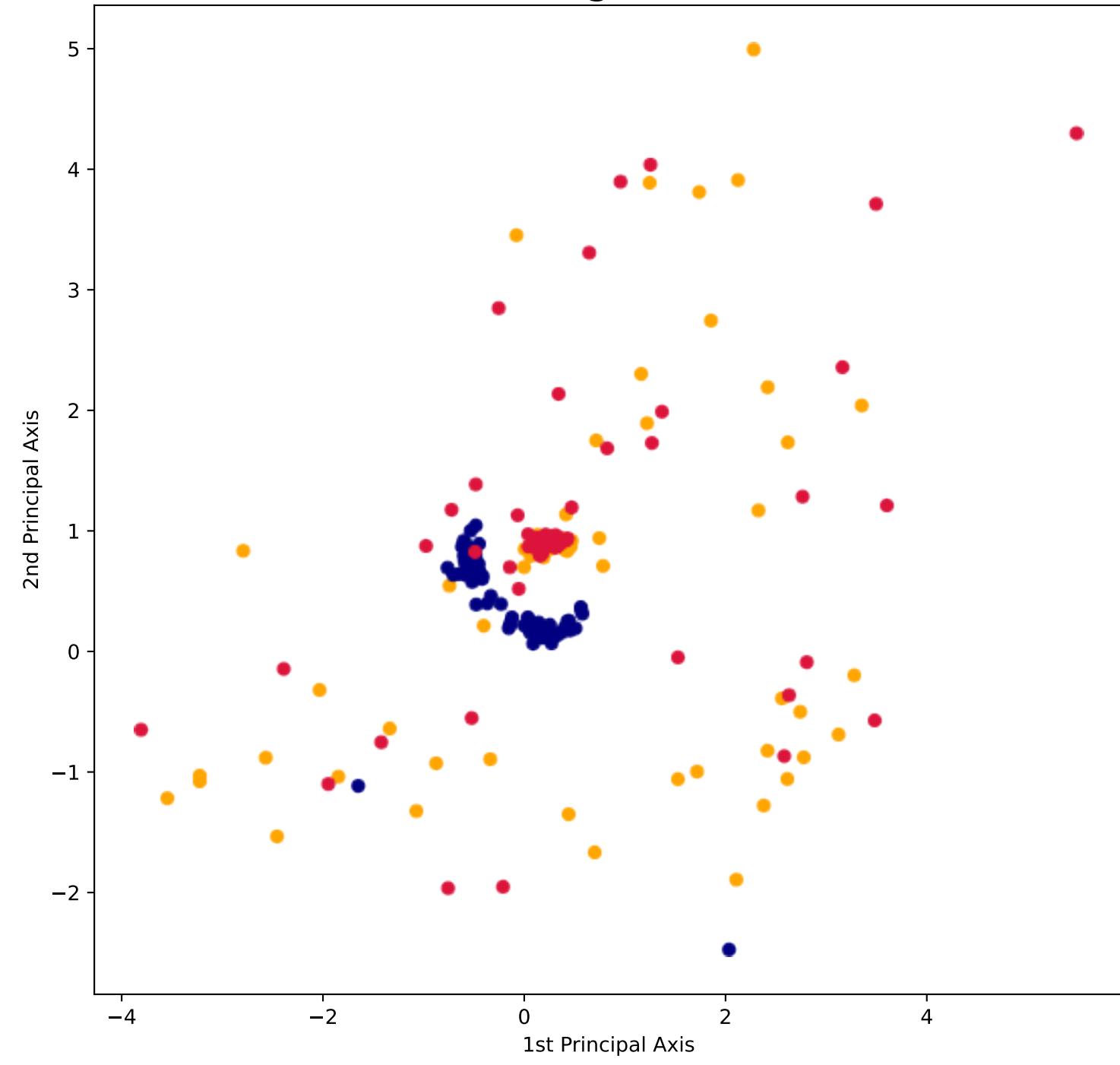
Angle 3

3D Projection

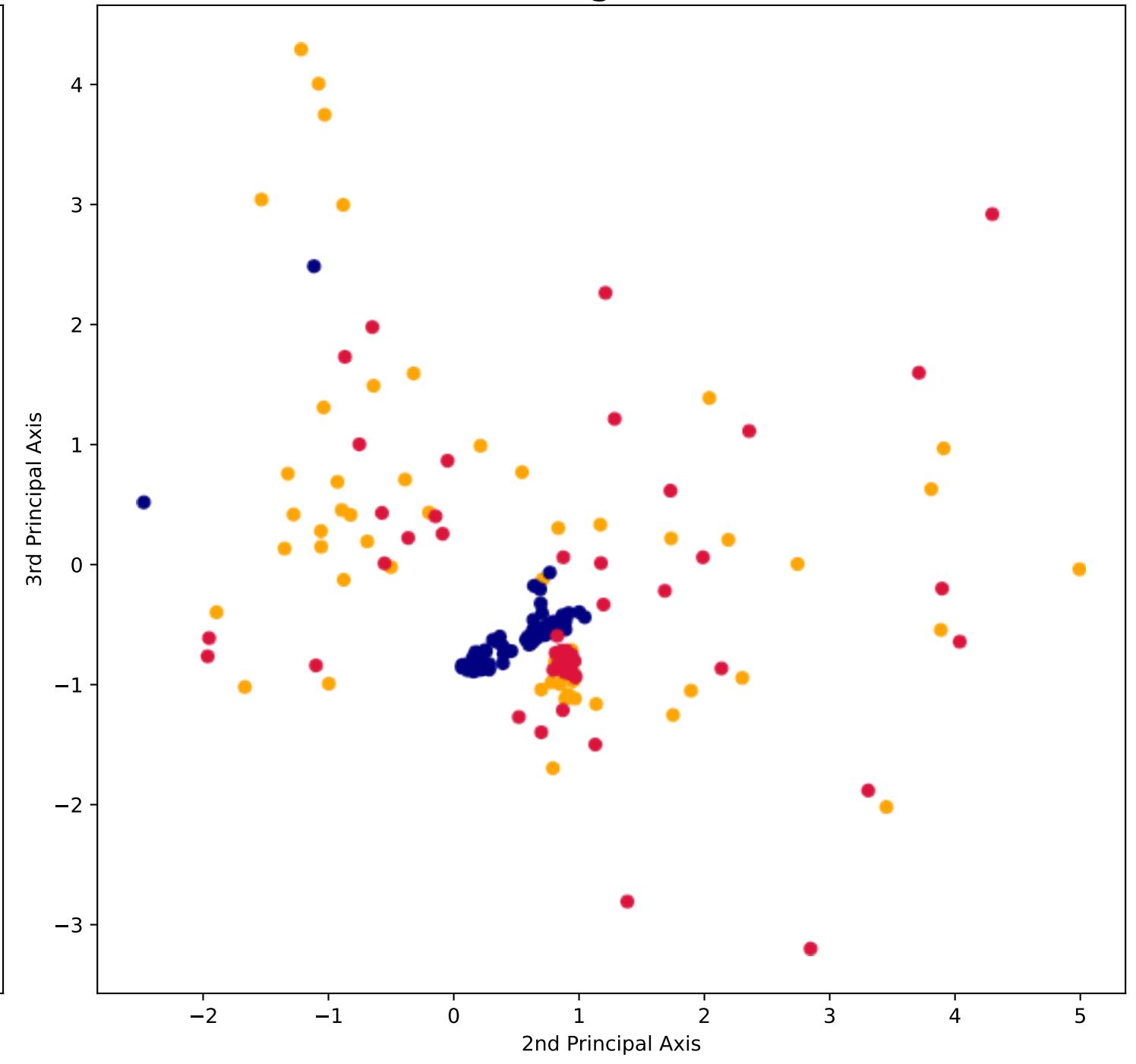


# Trial Number: 10, Phase: First Gasp

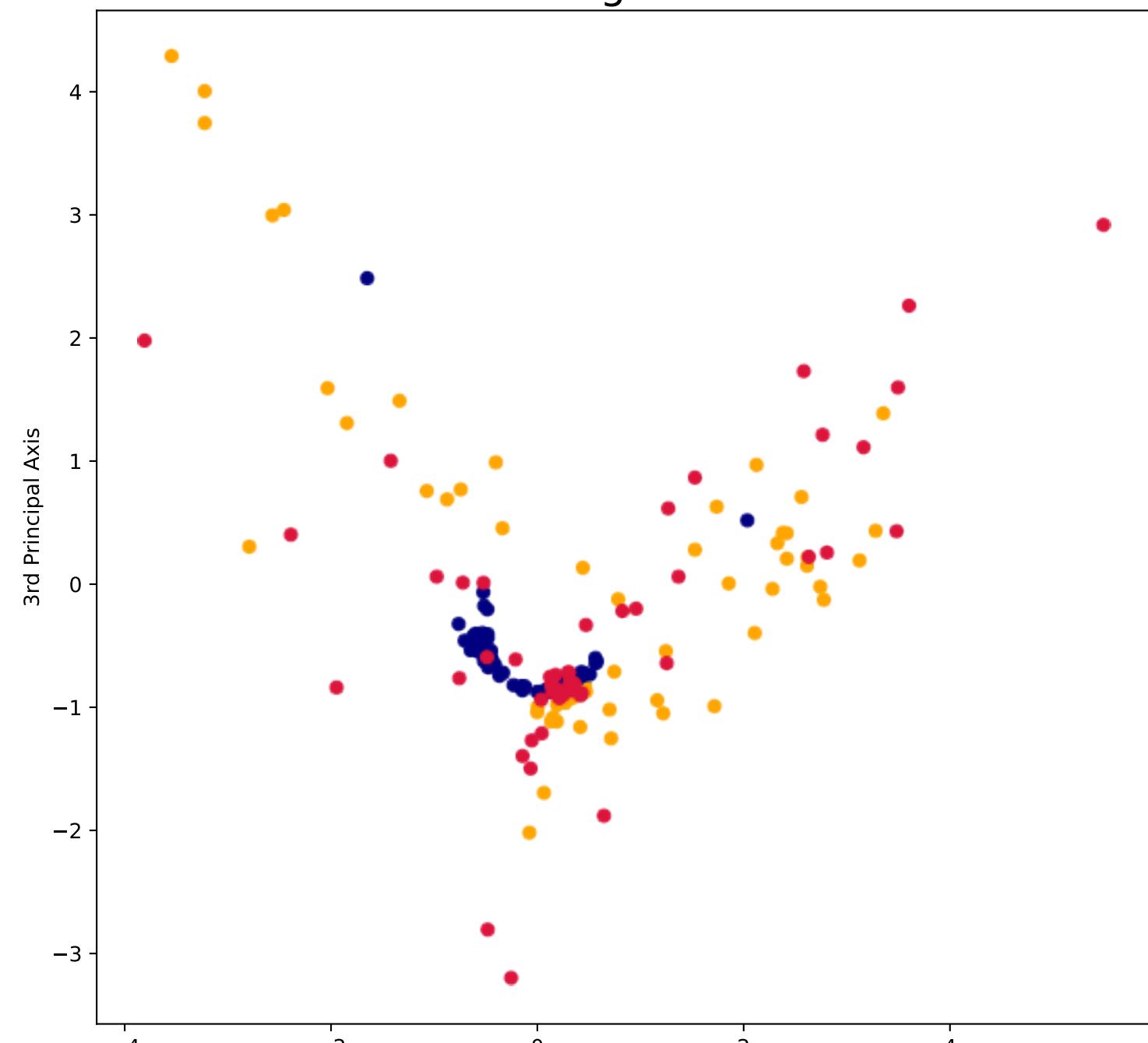
Angle 1



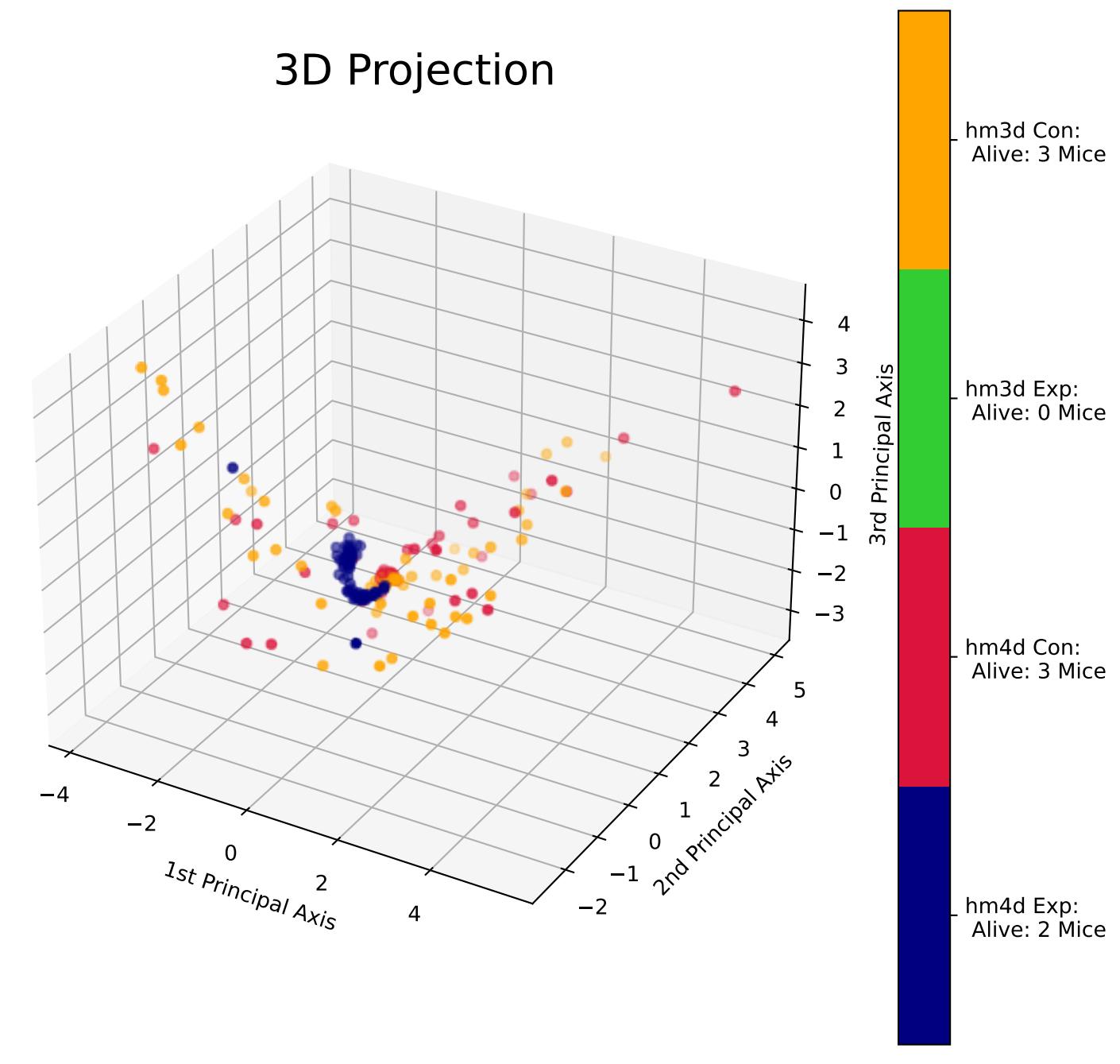
Angle 2



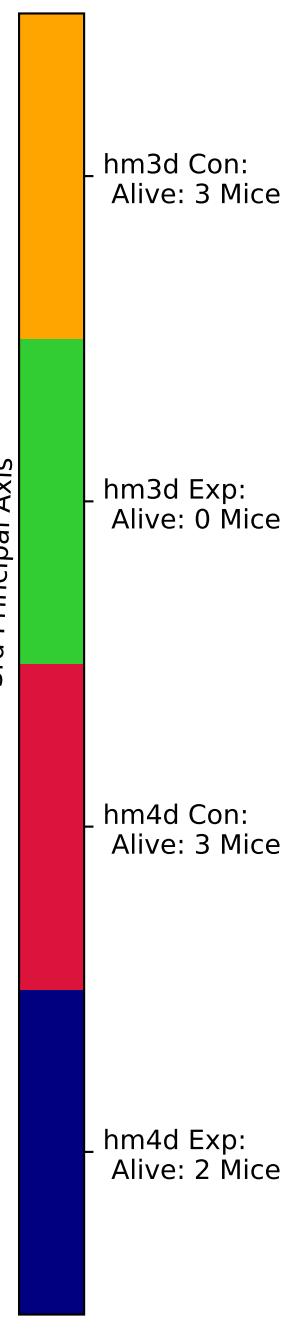
Angle 3



3D Projection

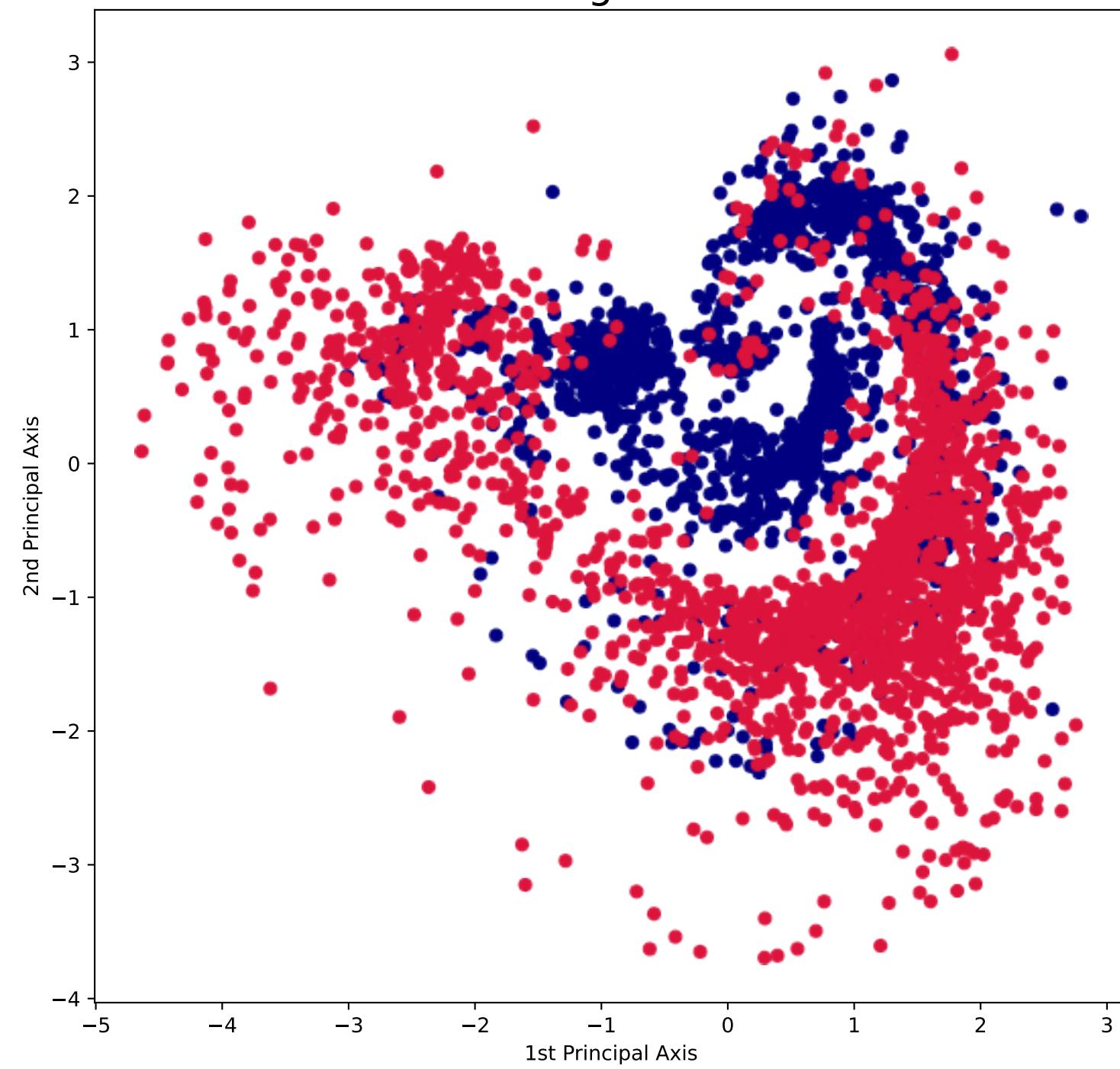


Mice Expired: ('M21481', 'hm3d Con') ('M21483', 'hm3d Con') ('M21486', 'hm3d Con') ('M21628', 'hm4d Con')

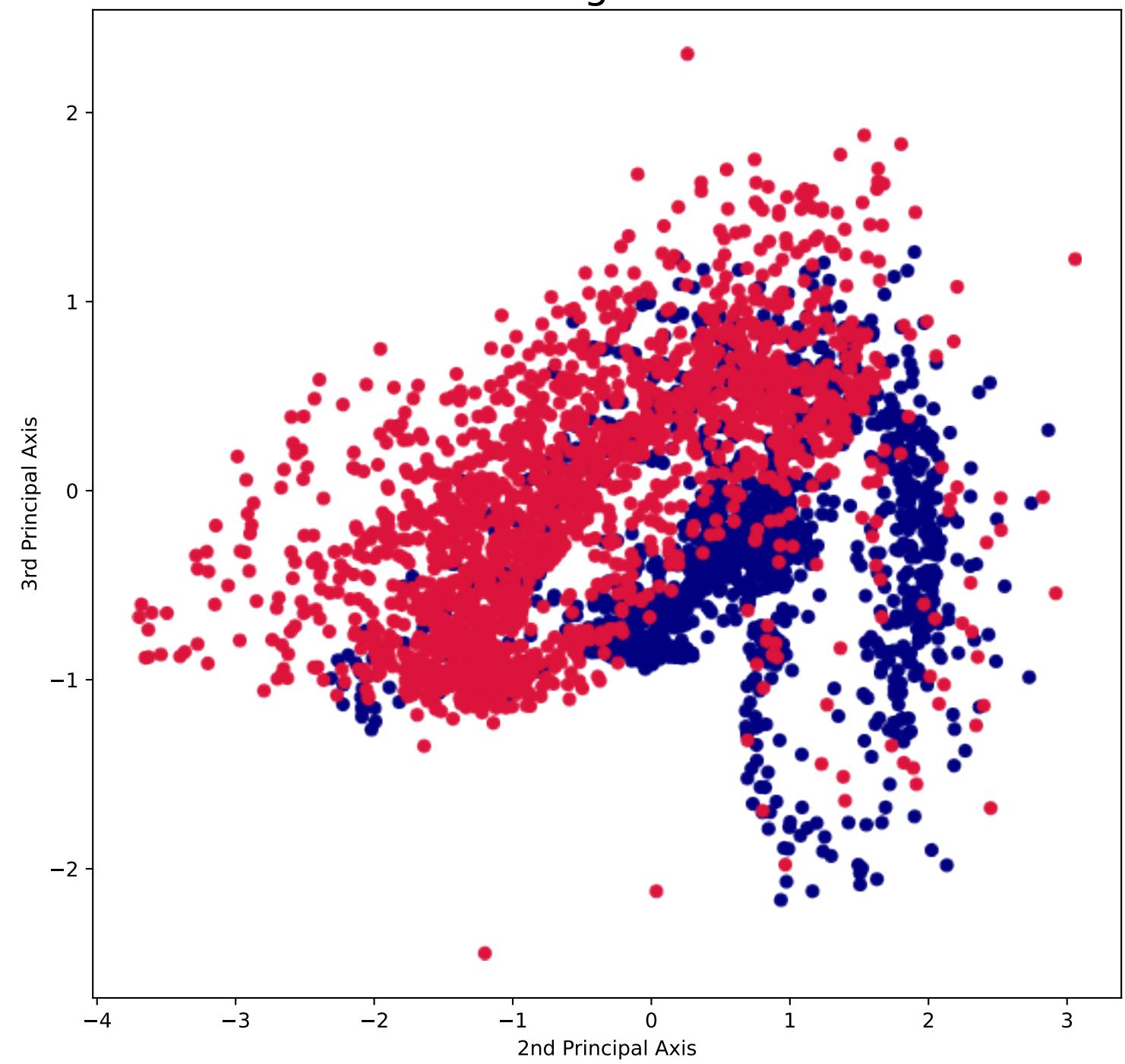


# Trial Number: 10, Phase: Eupnea Recovery

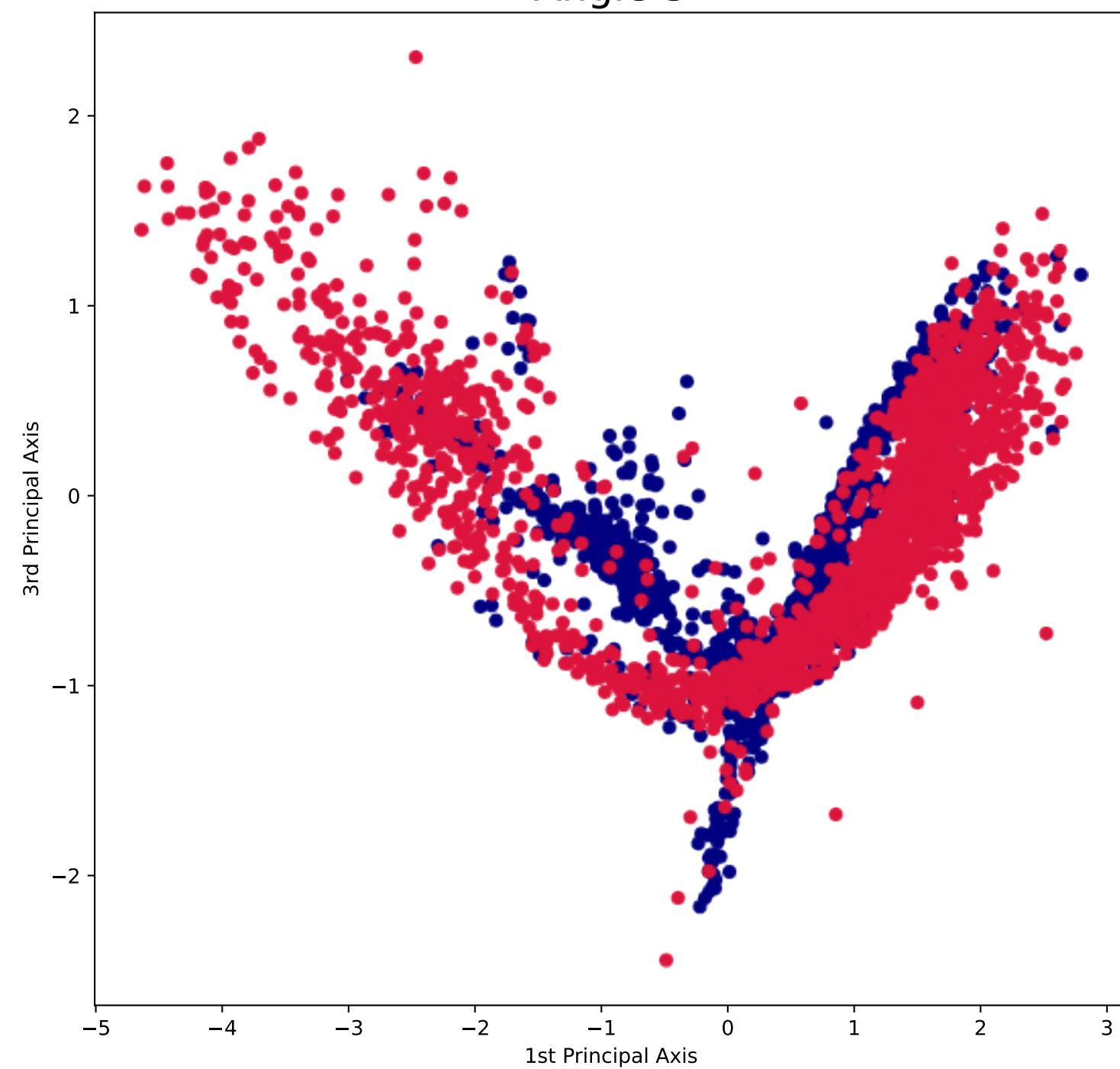
Angle 1



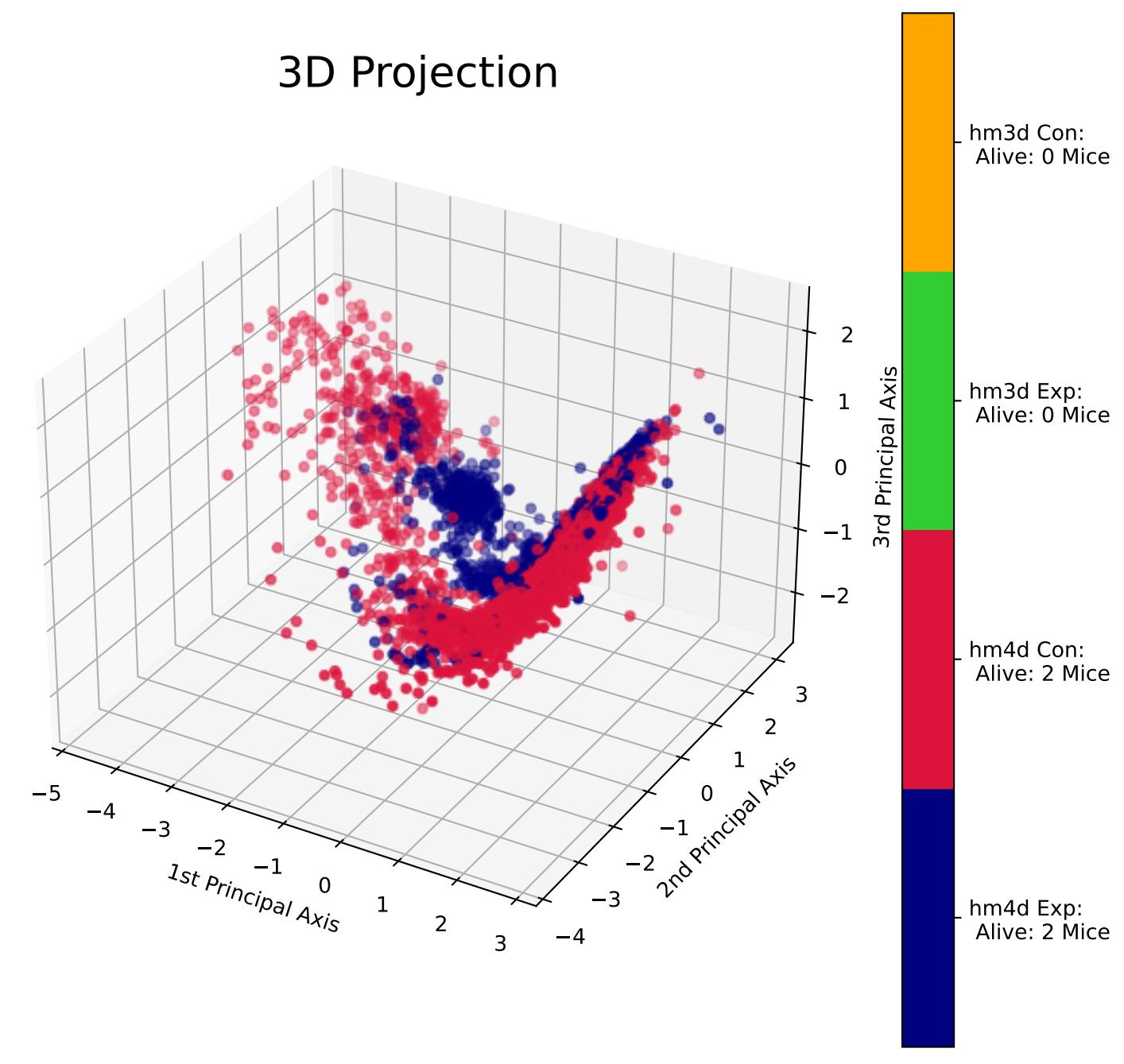
Angle 2



Angle 3

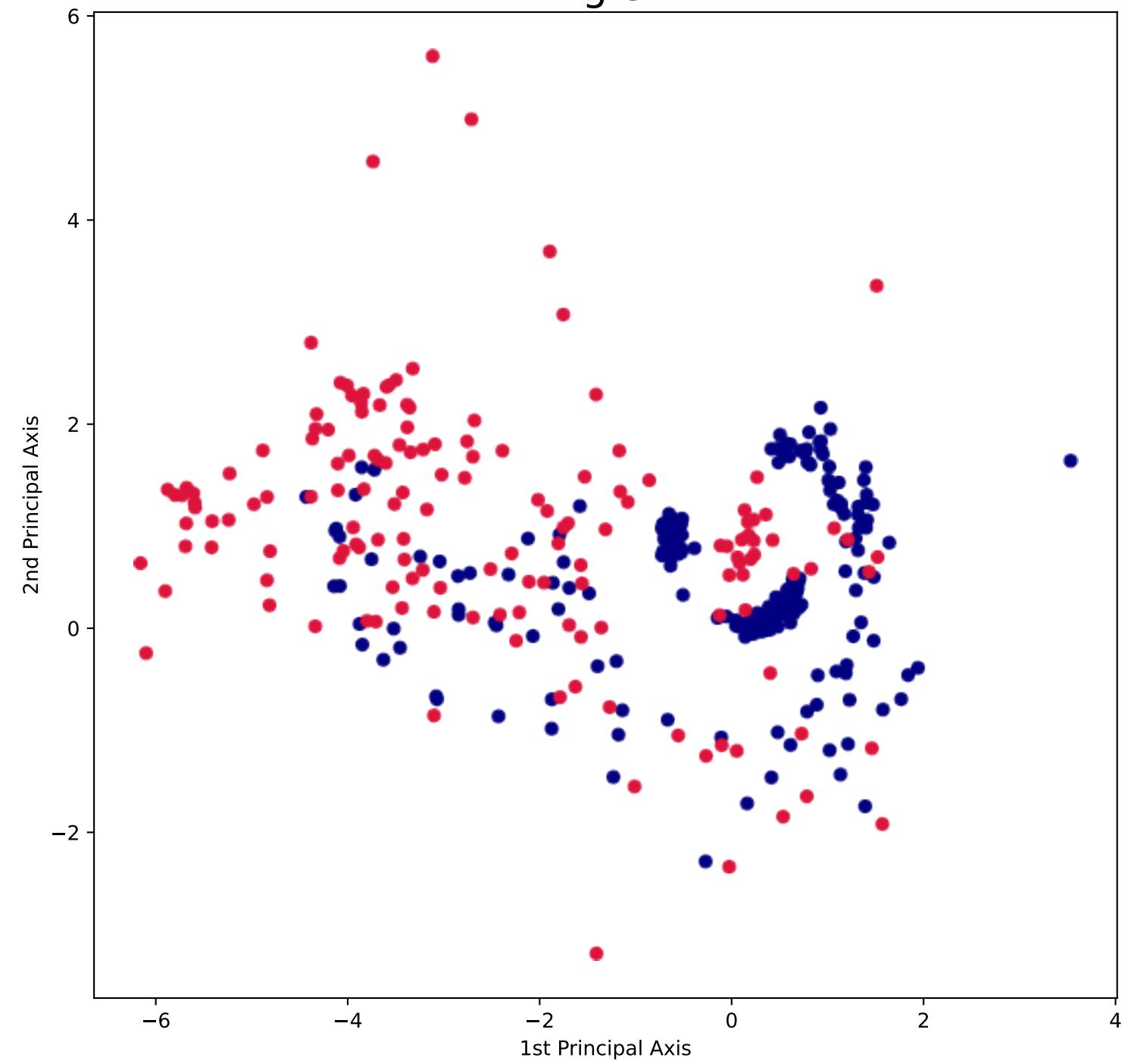


3D Projection

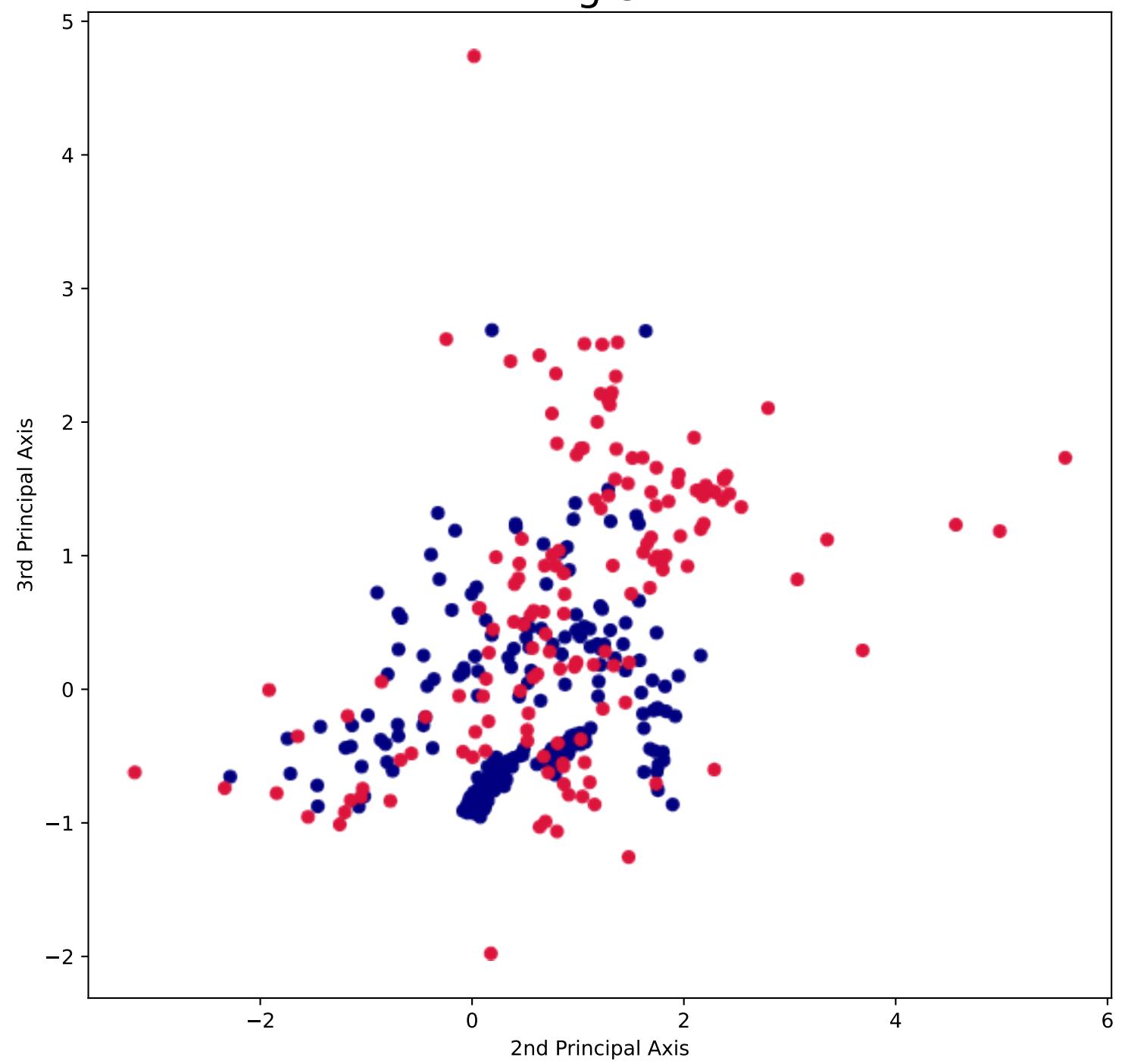


# Trial Number: 11, Phase: Trial Onset

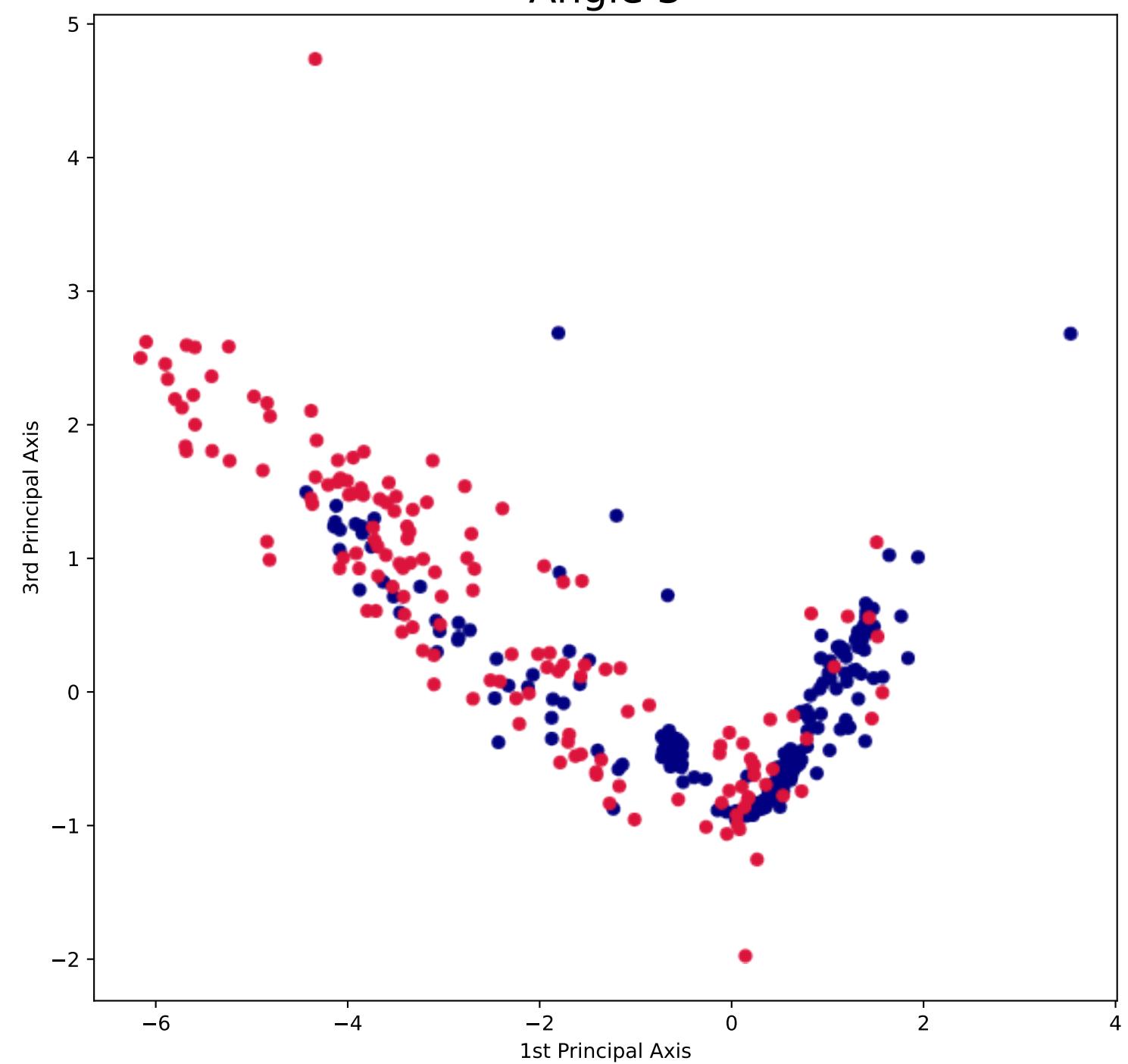
Angle 1



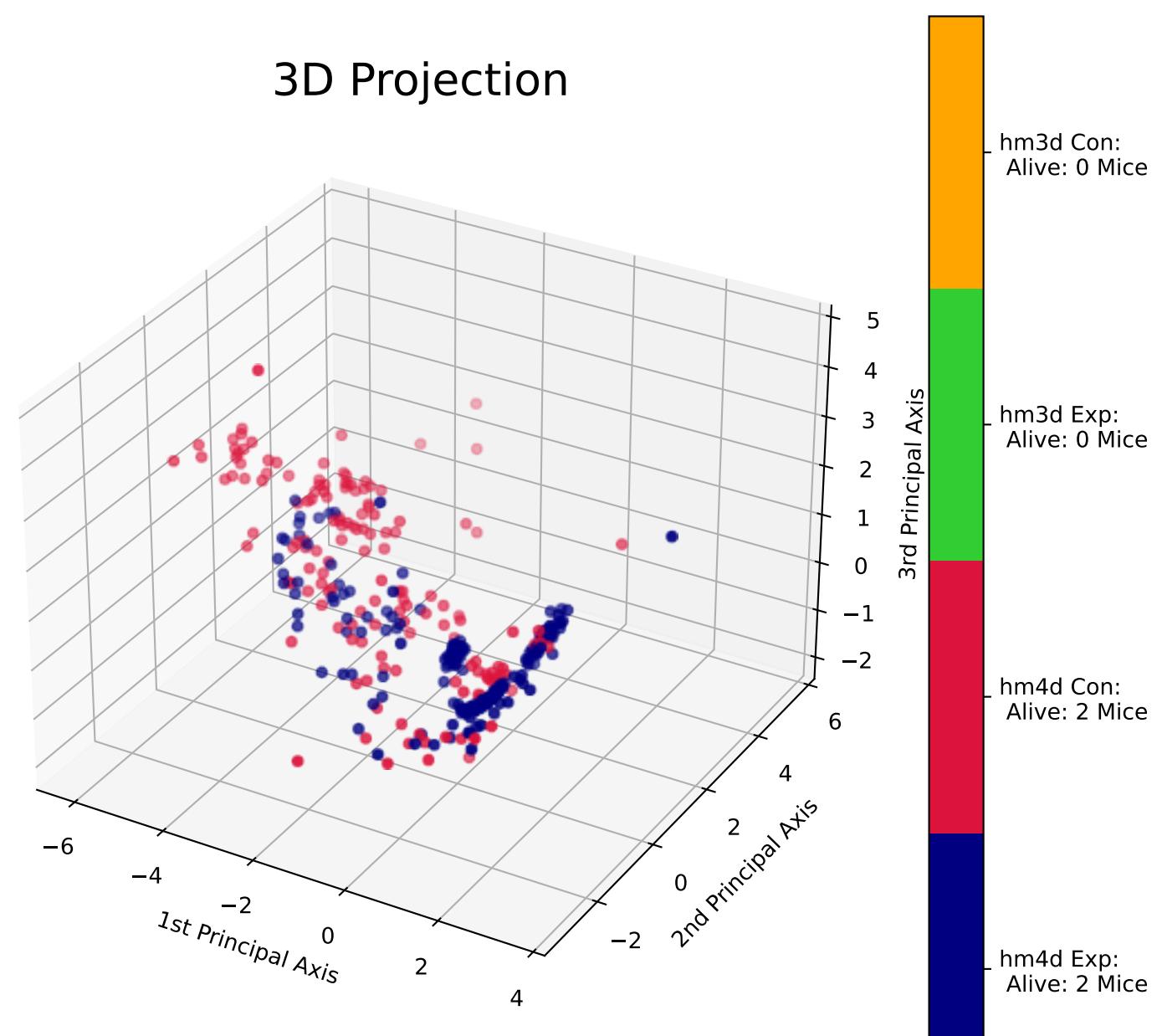
Angle 2



Angle 3



3D Projection



hm3d Con:  
Alive: 0 Mice

hm3d Exp:  
Alive: 0 Mice

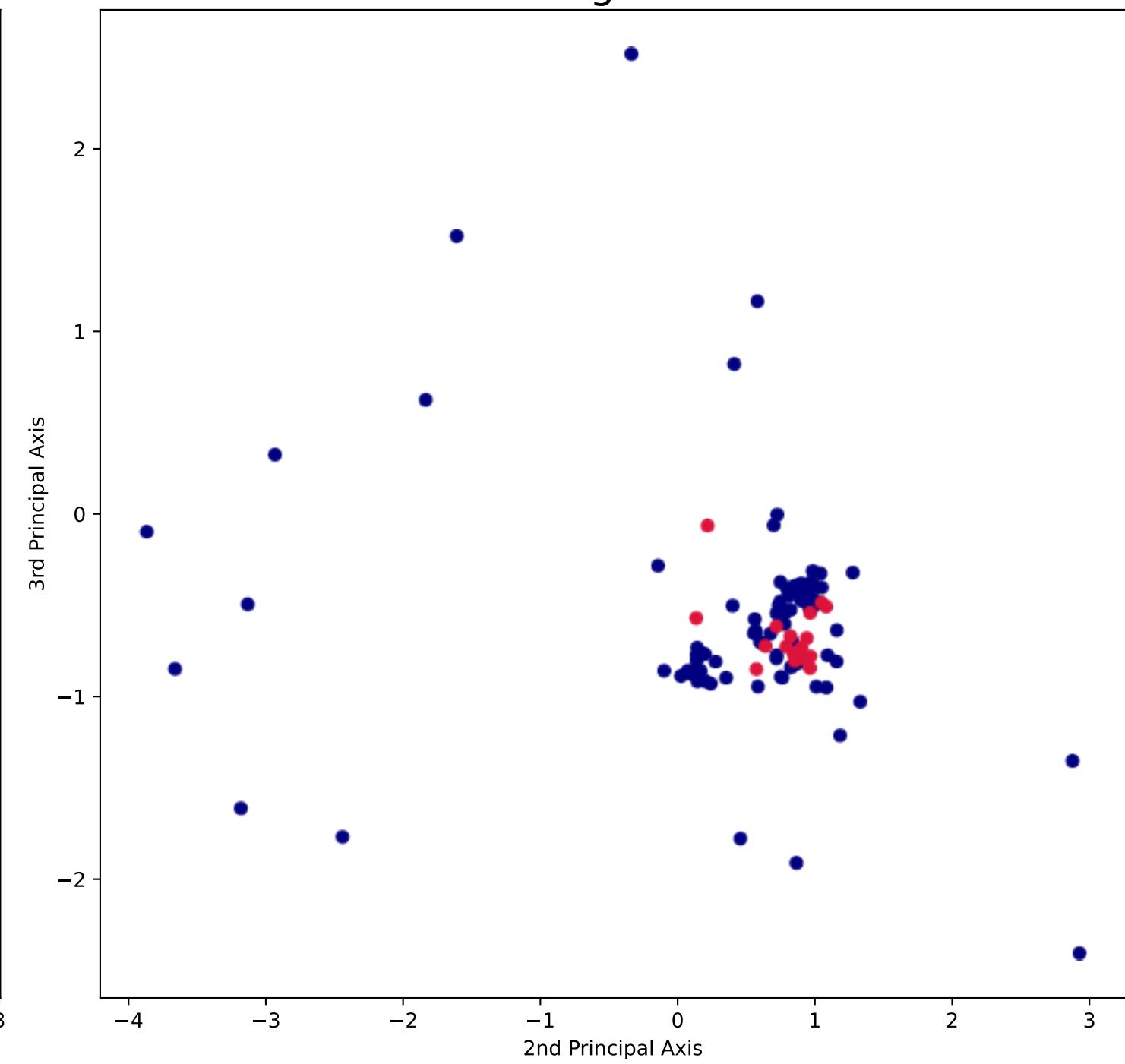
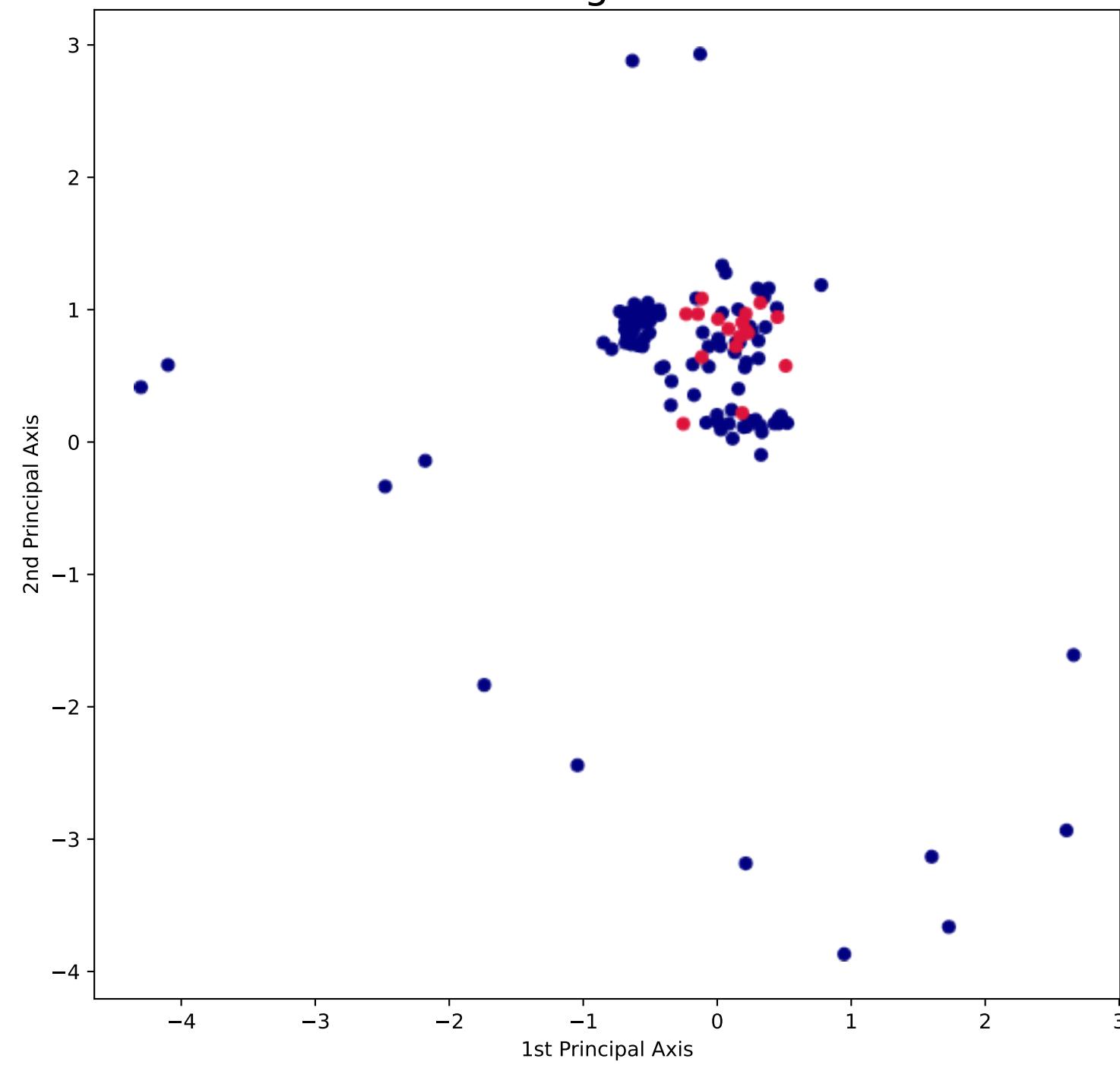
hm4d Con:  
Alive: 2 Mice

hm4d Exp:  
Alive: 2 Mice

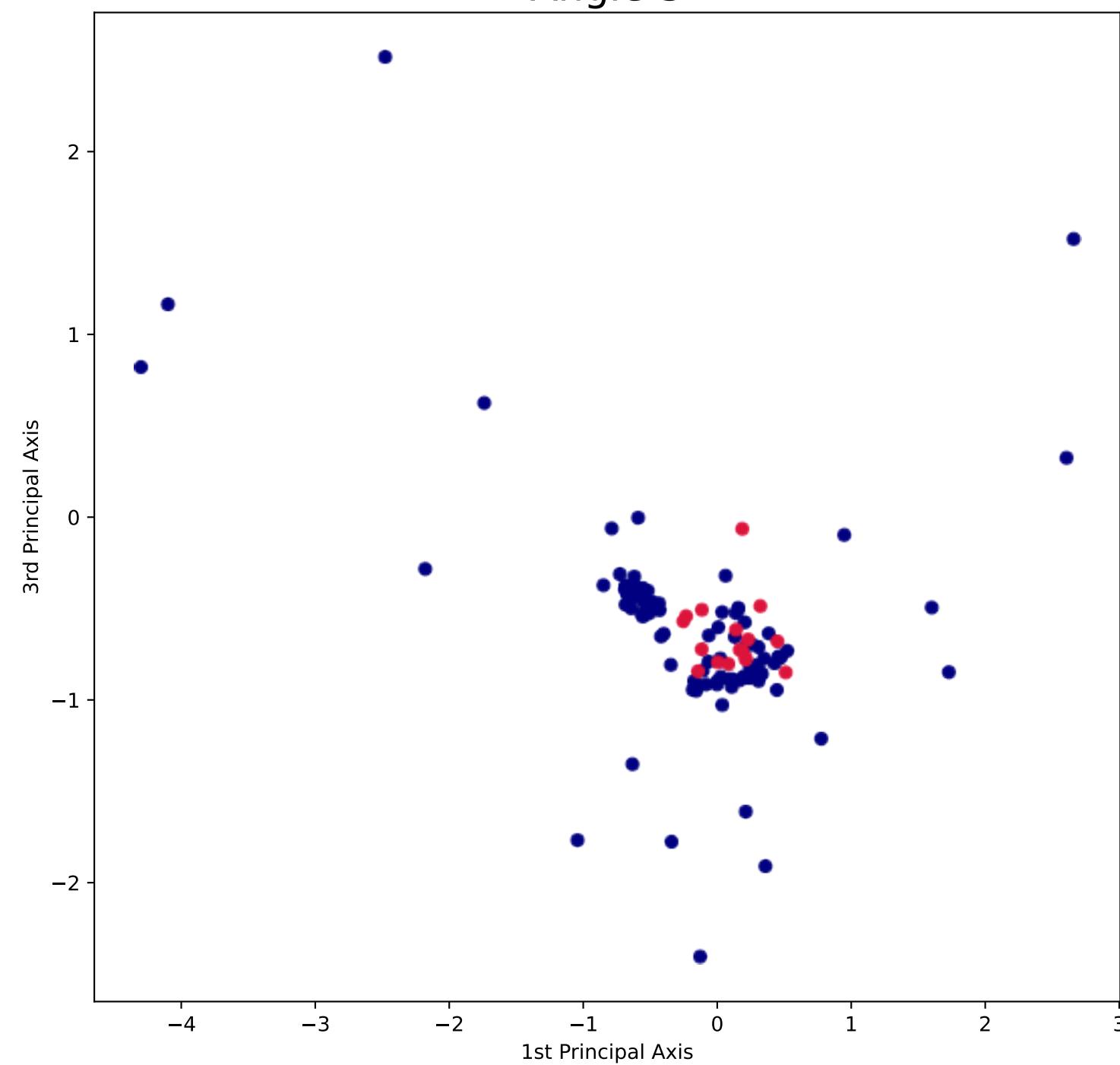
# Trial Number: 11, Phase: Apnea Starts

Angle 1

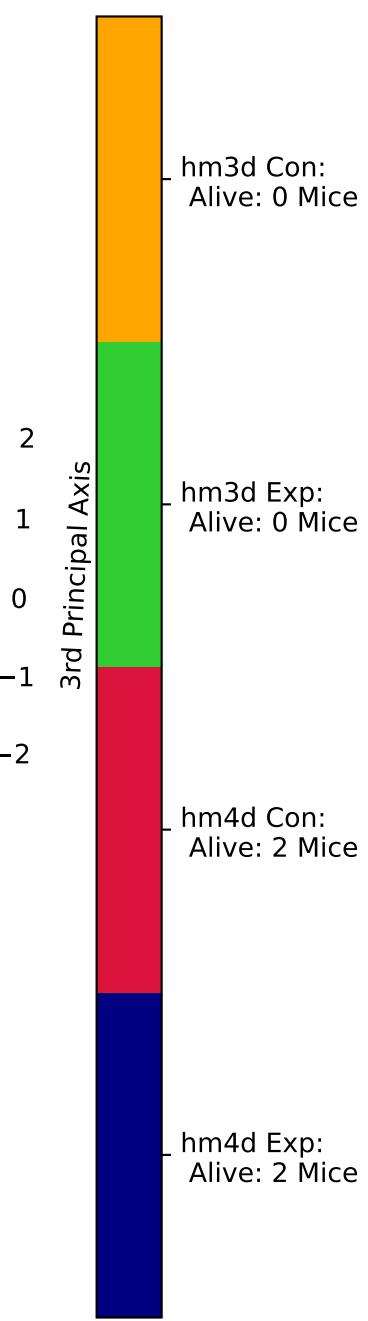
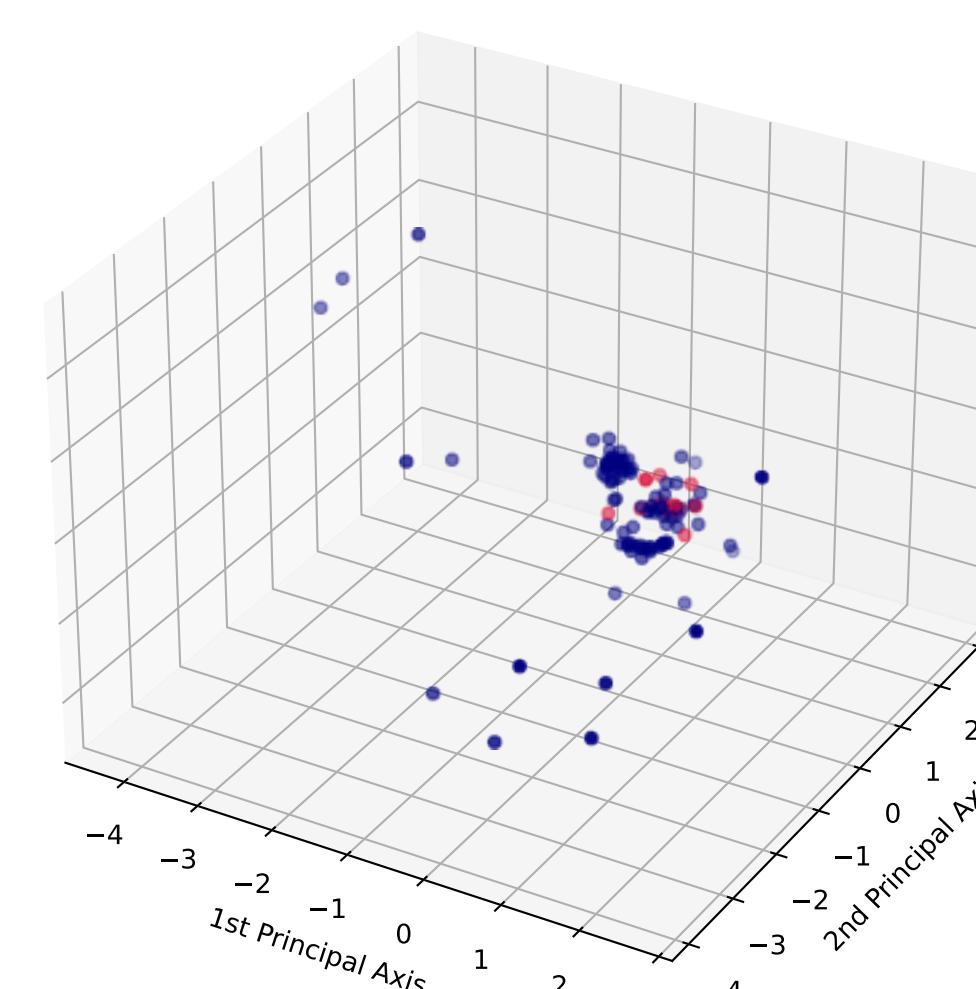
Angle 2



Angle 3

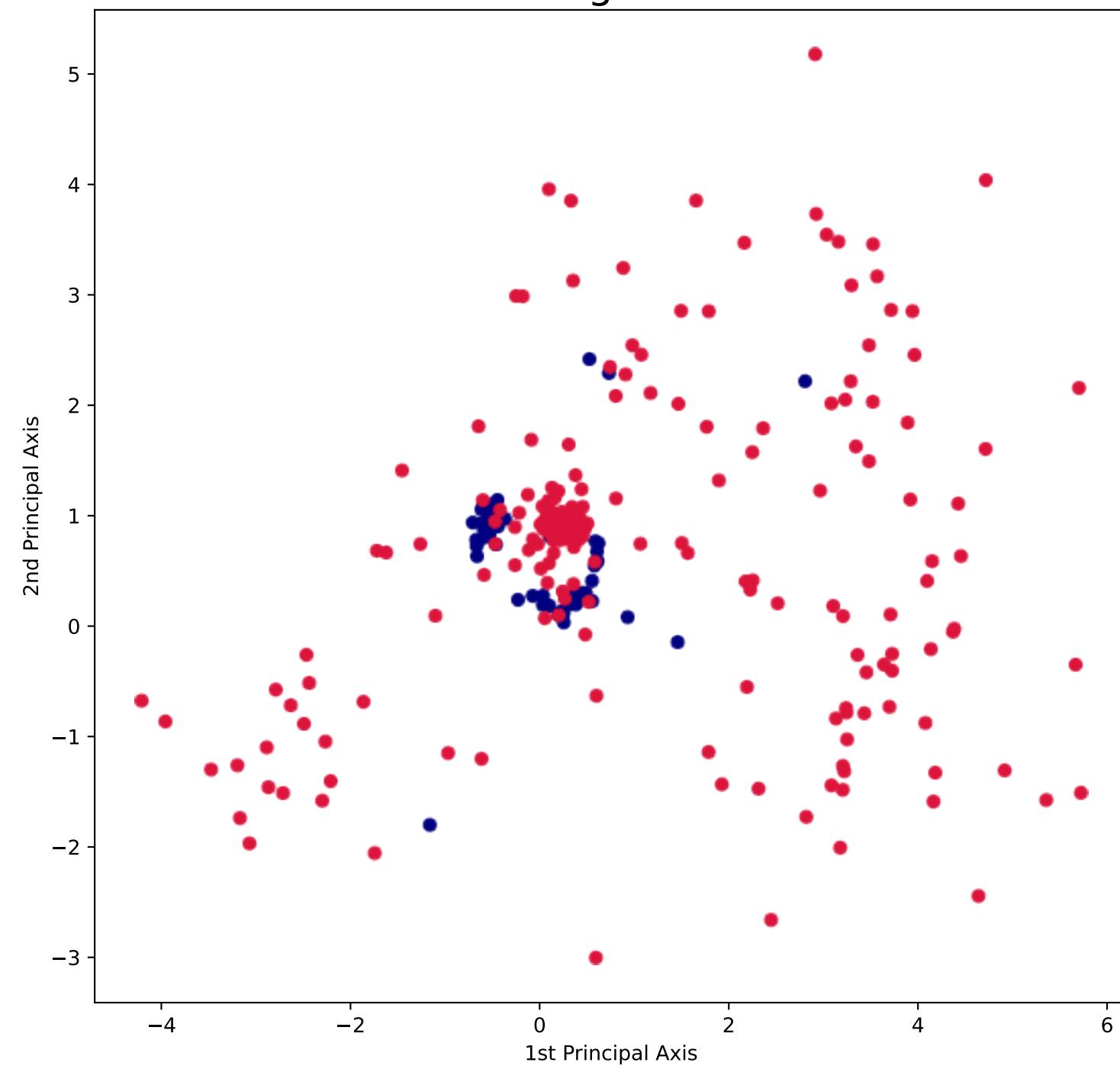


3D Projection

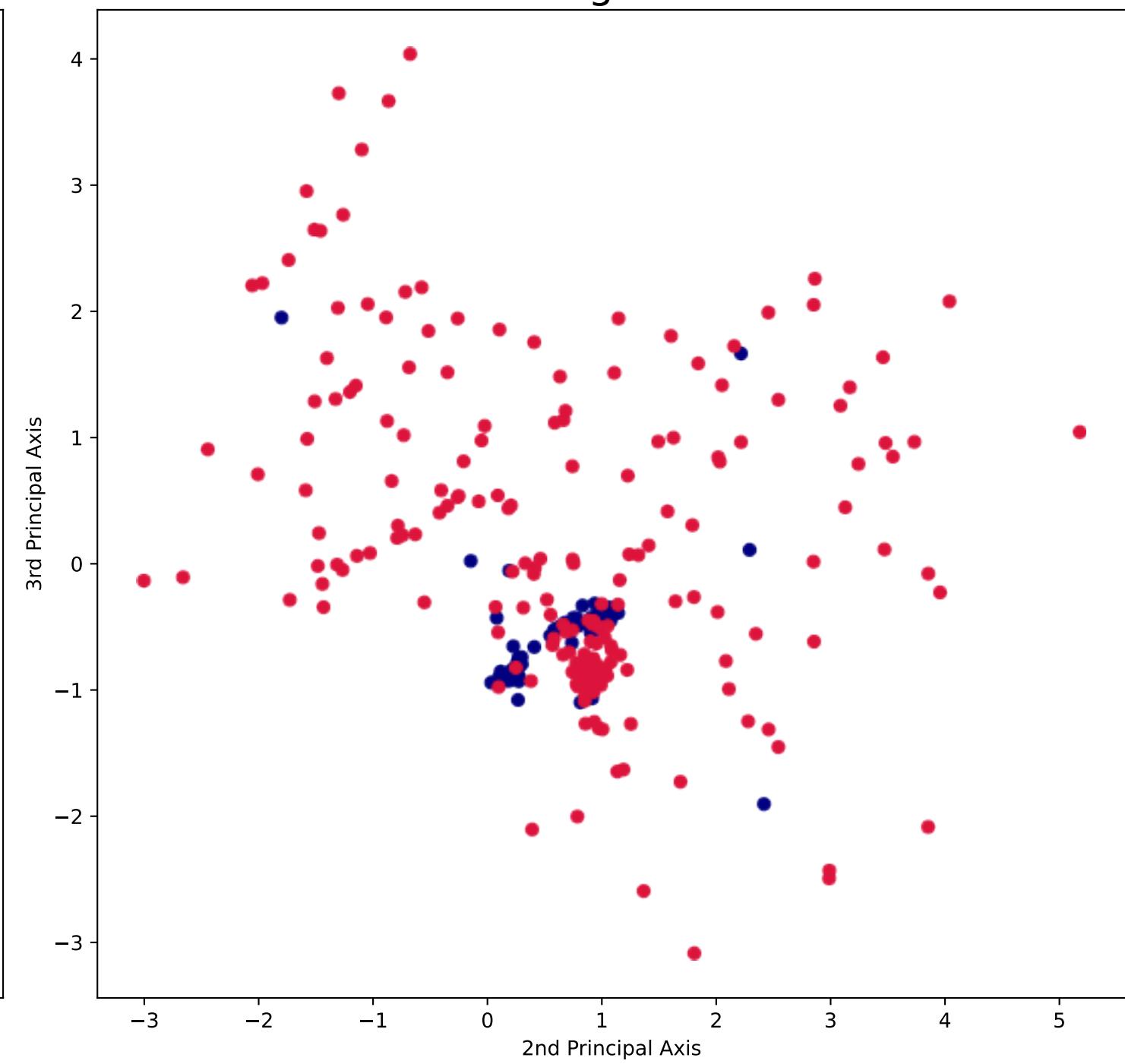


# Trial Number: 11, Phase: First Gasp

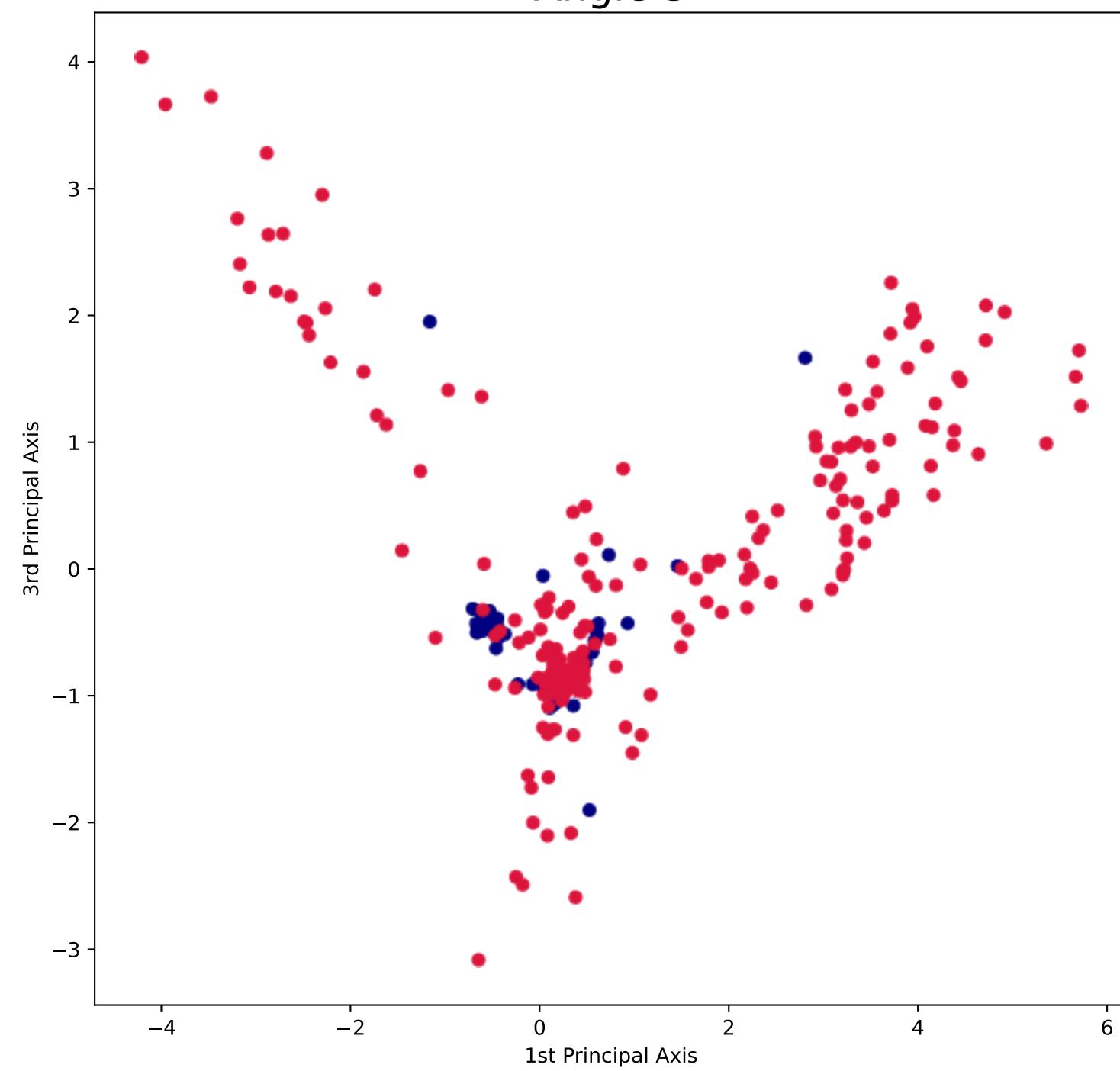
Angle 1



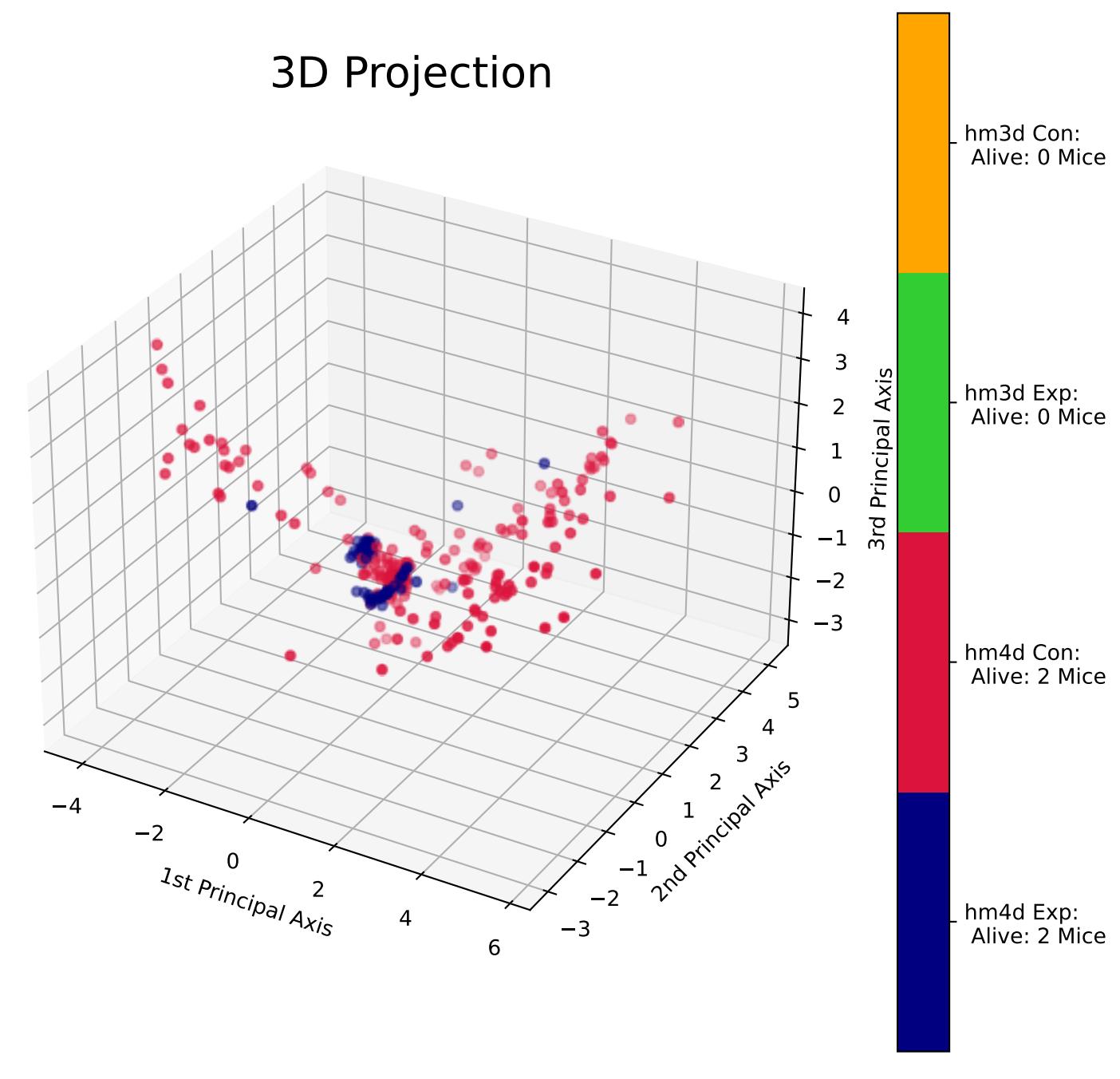
Angle 2



Angle 3

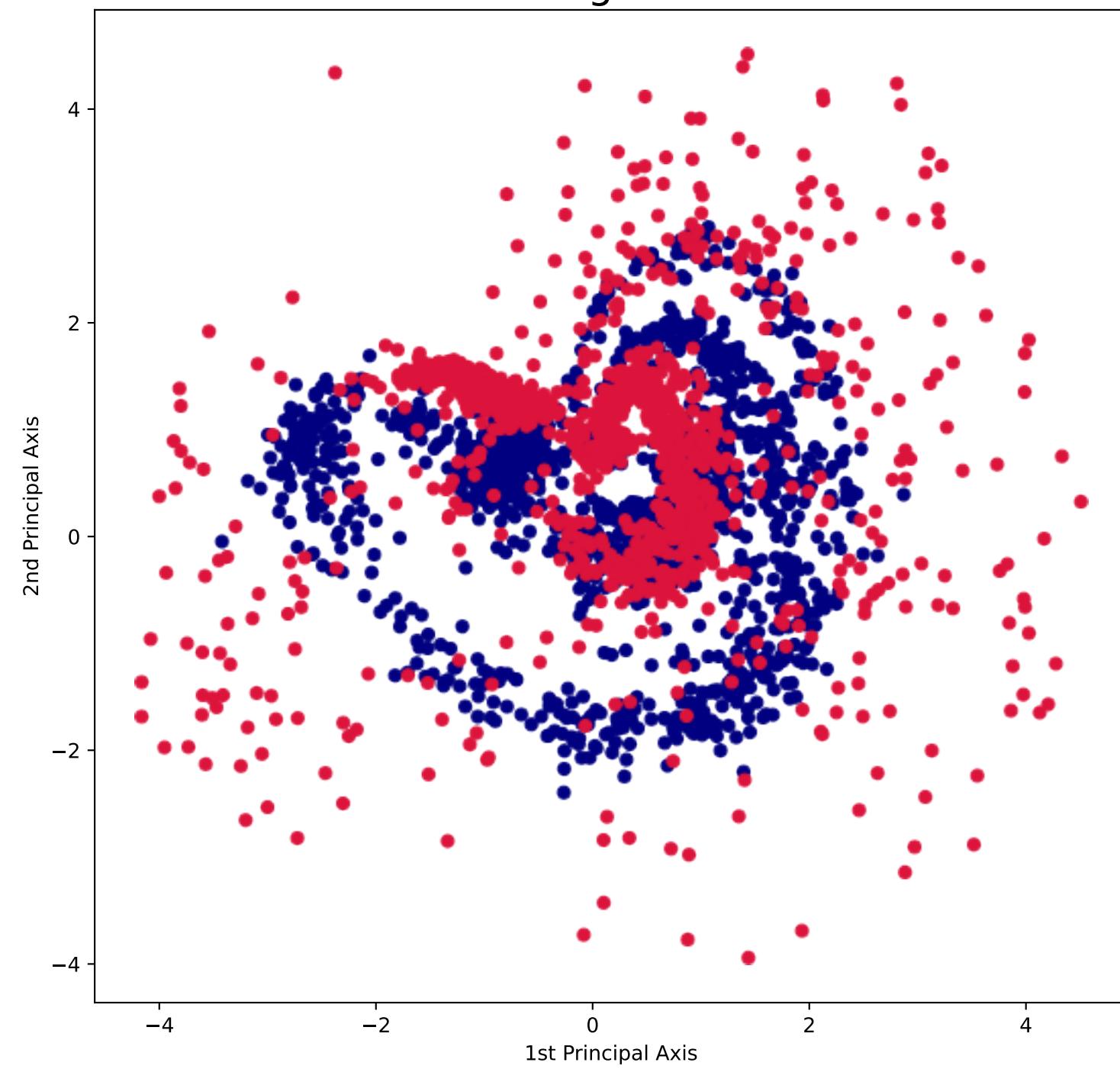


3D Projection

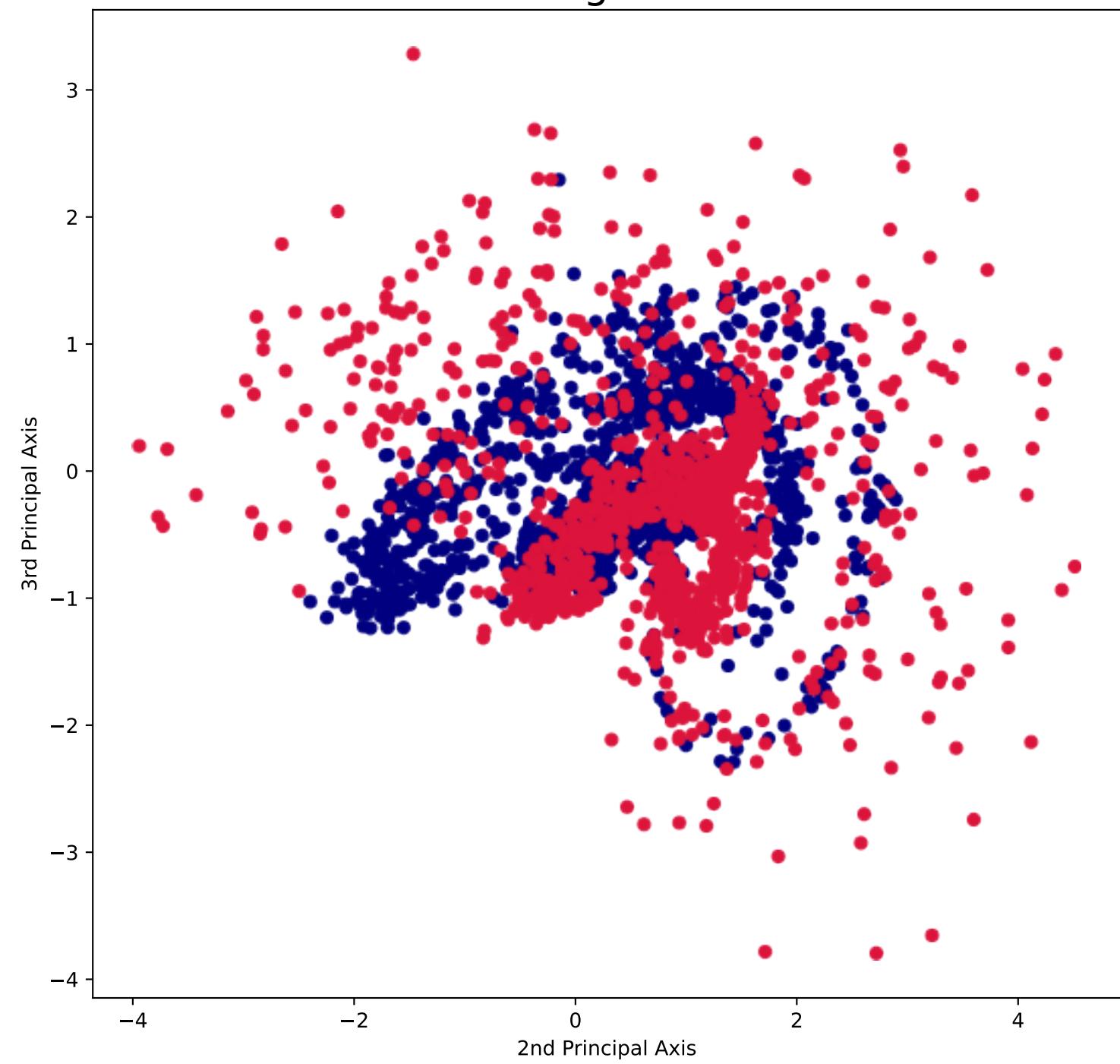


# Trial Number: 11, Phase: Eupnea Recovery

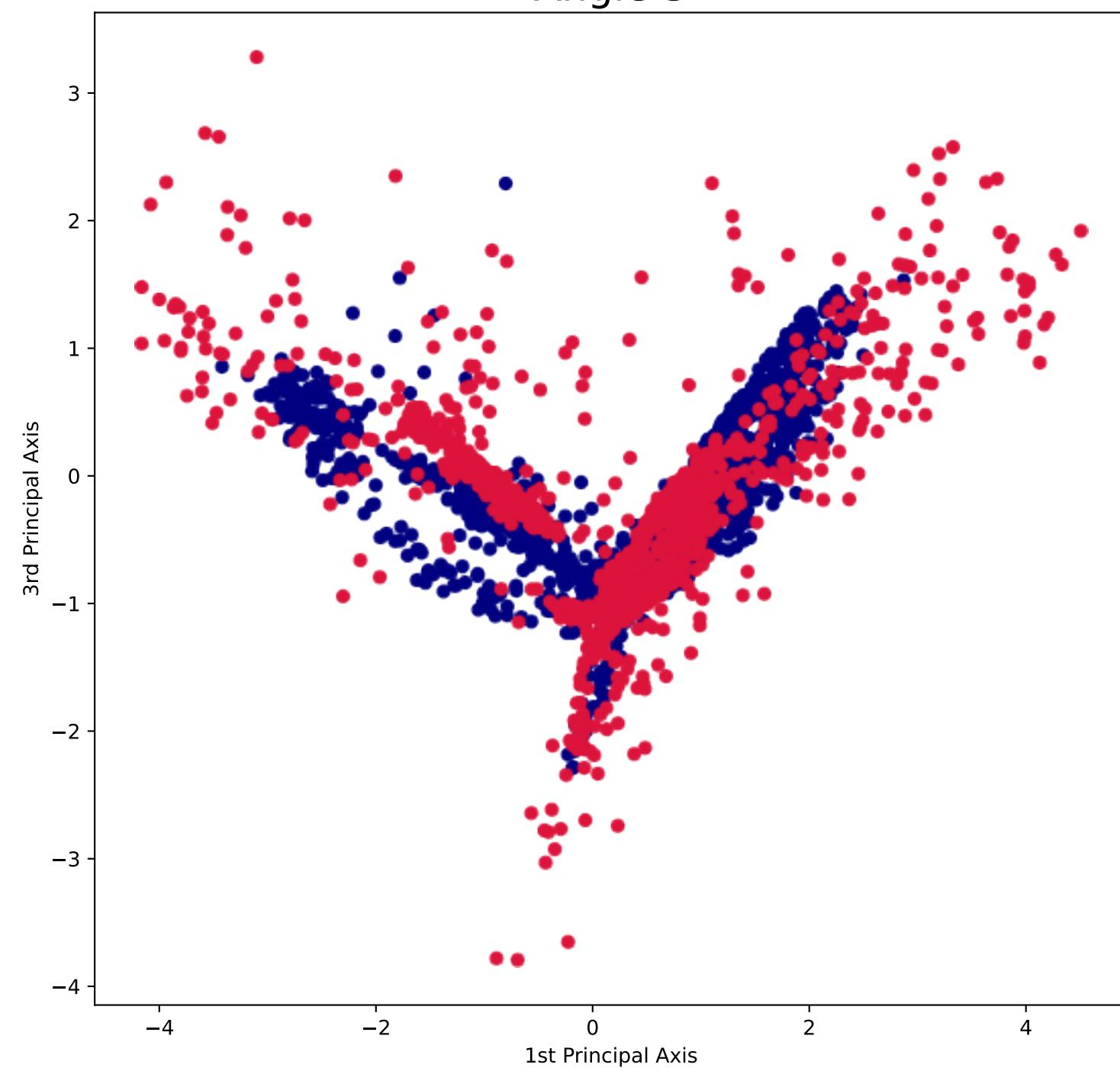
Angle 1



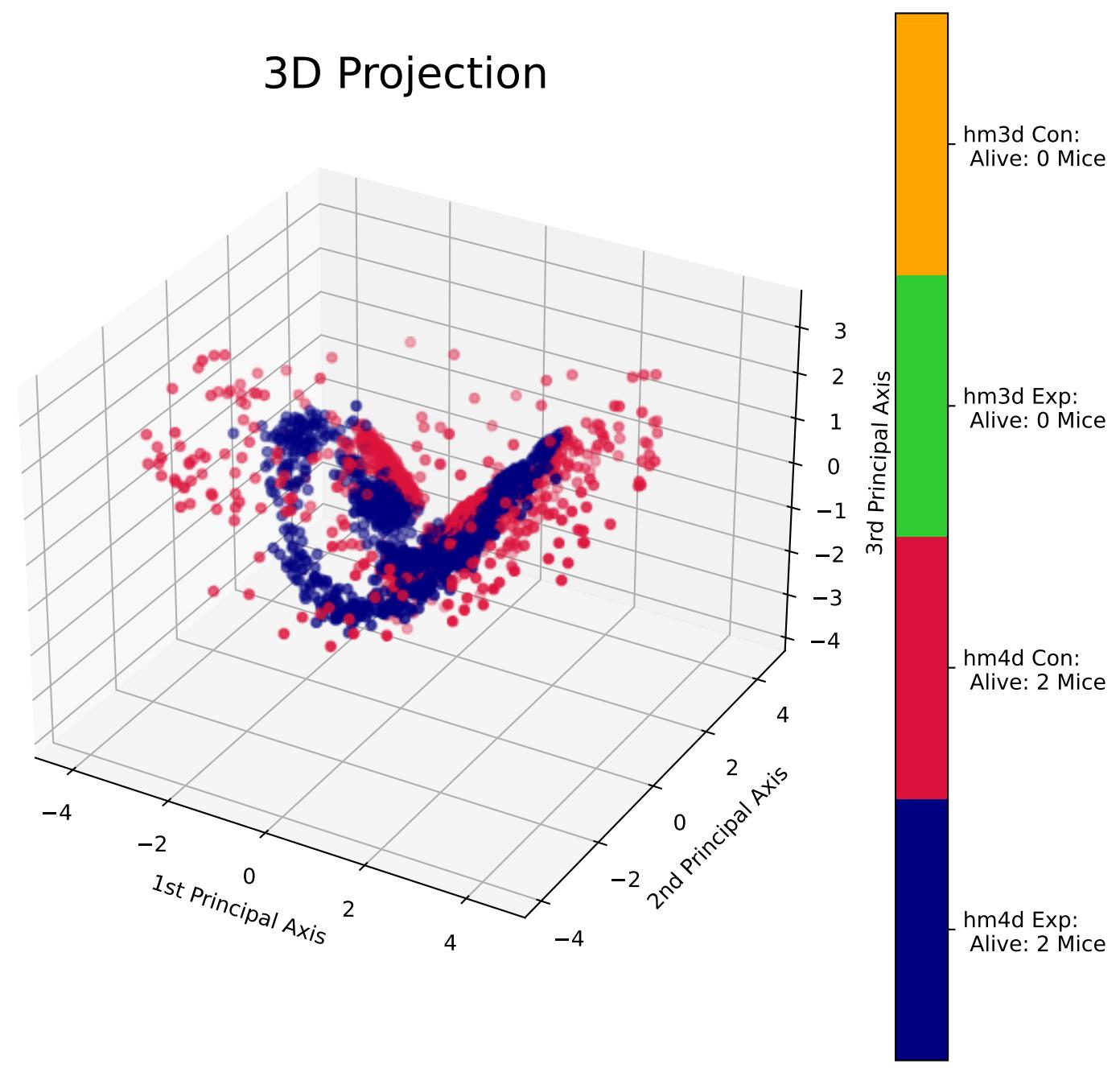
Angle 2



Angle 3

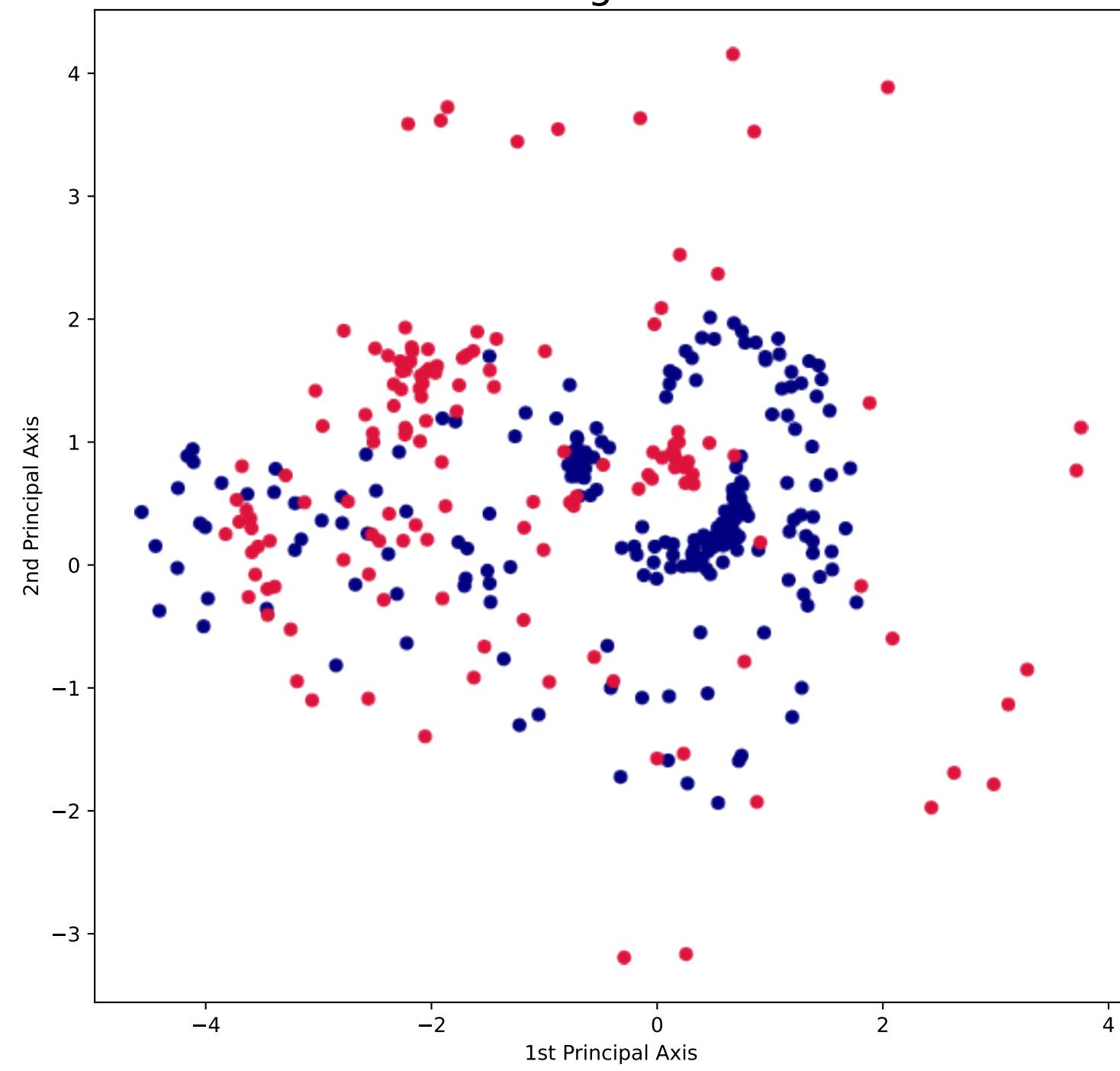


3D Projection

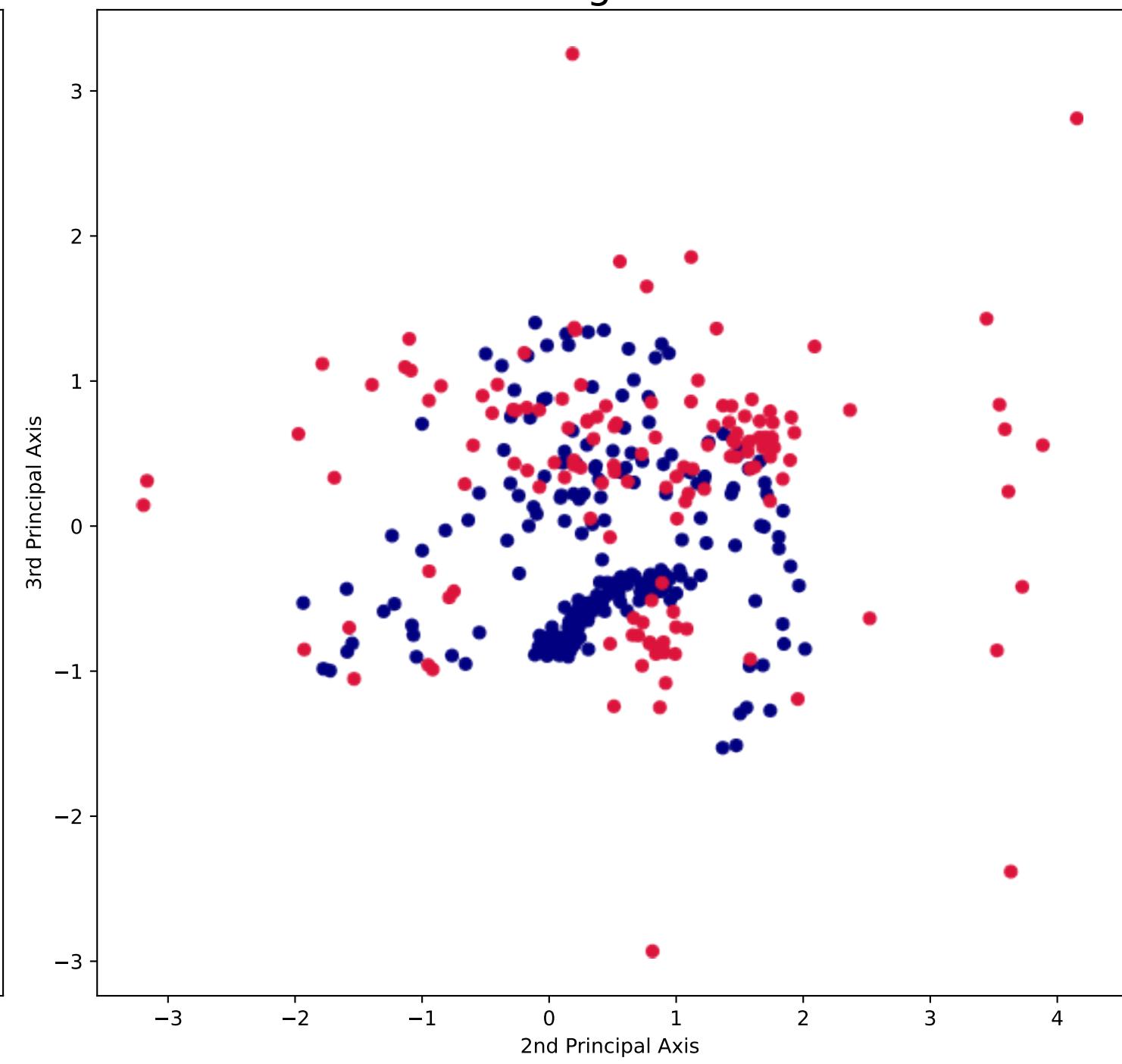


# Trial Number: 12, Phase: Trial Onset

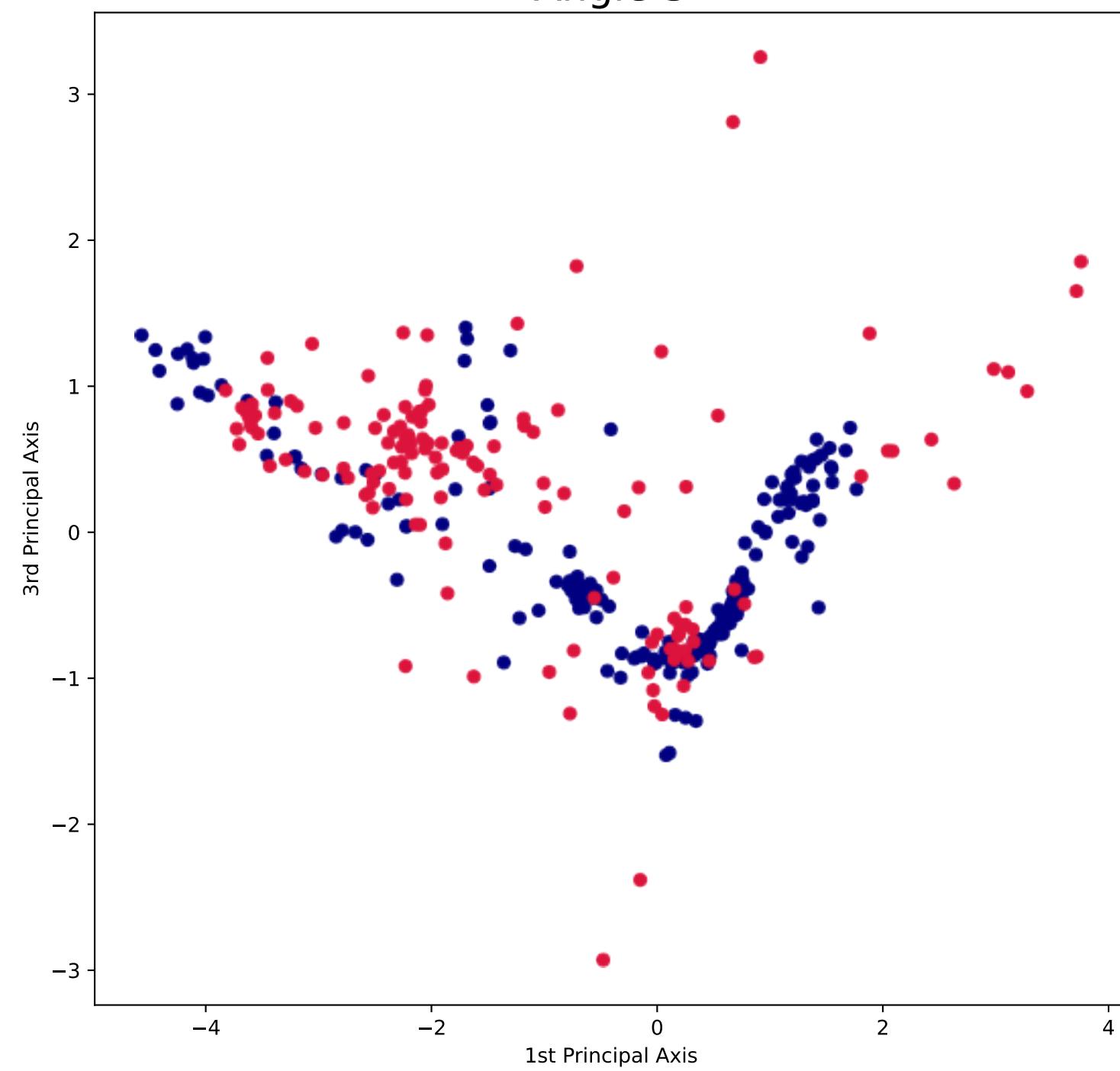
Angle 1



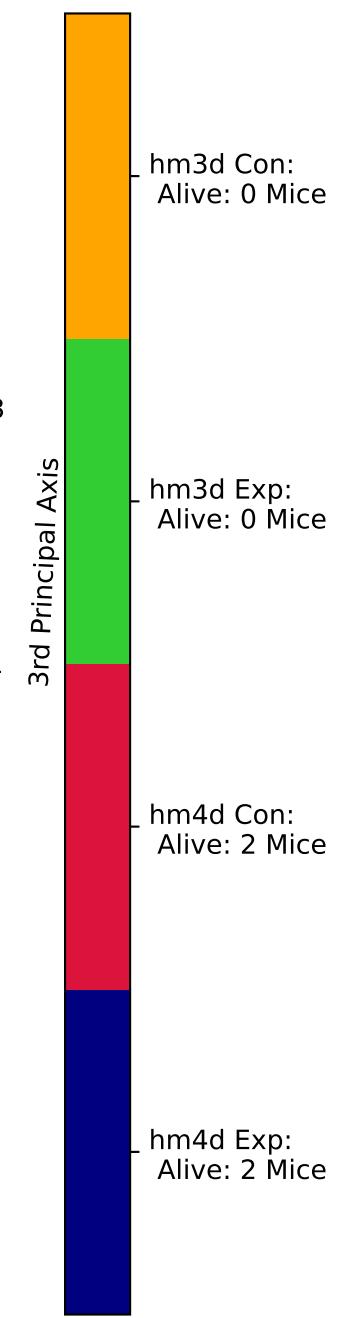
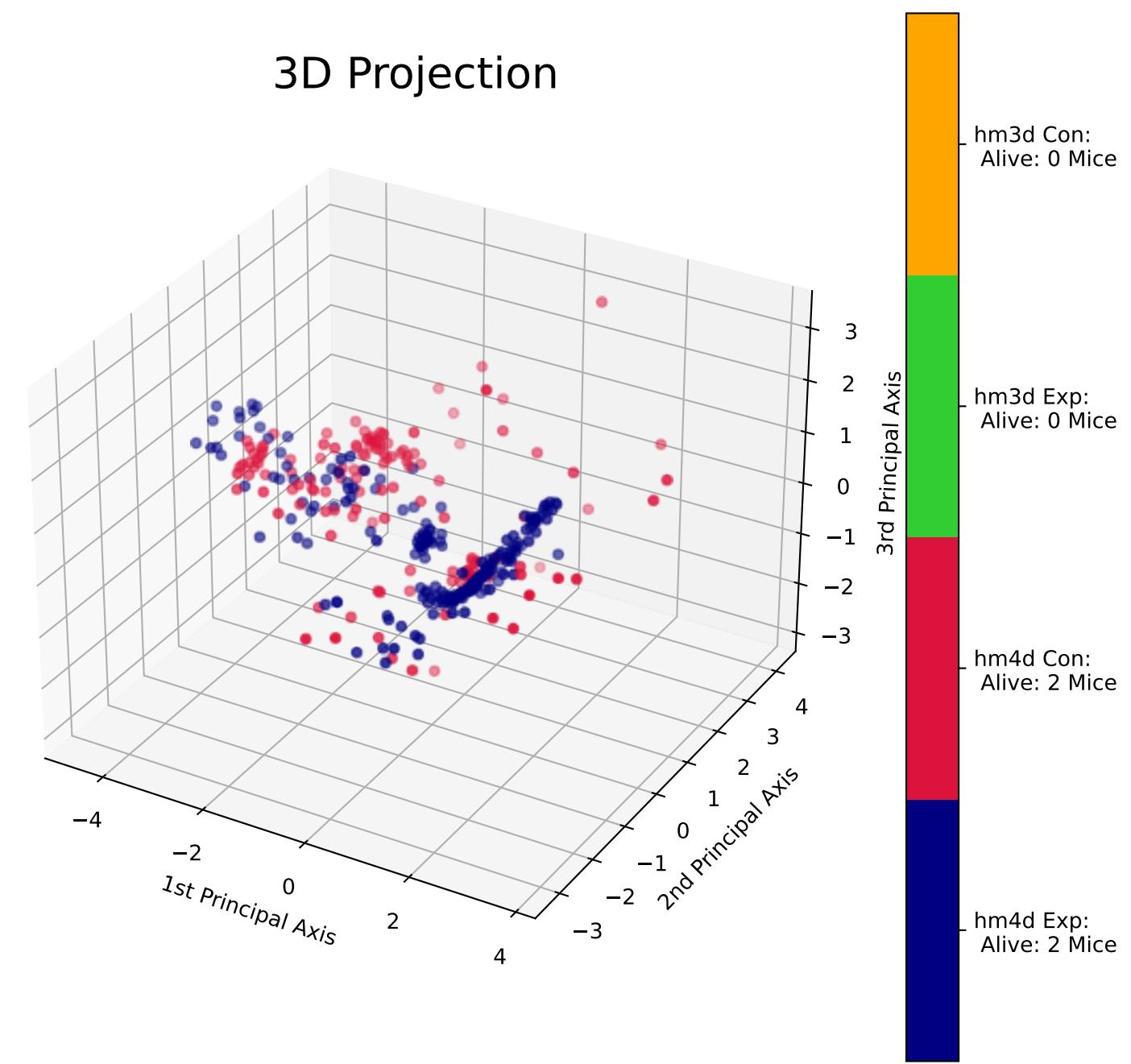
Angle 2



Angle 3



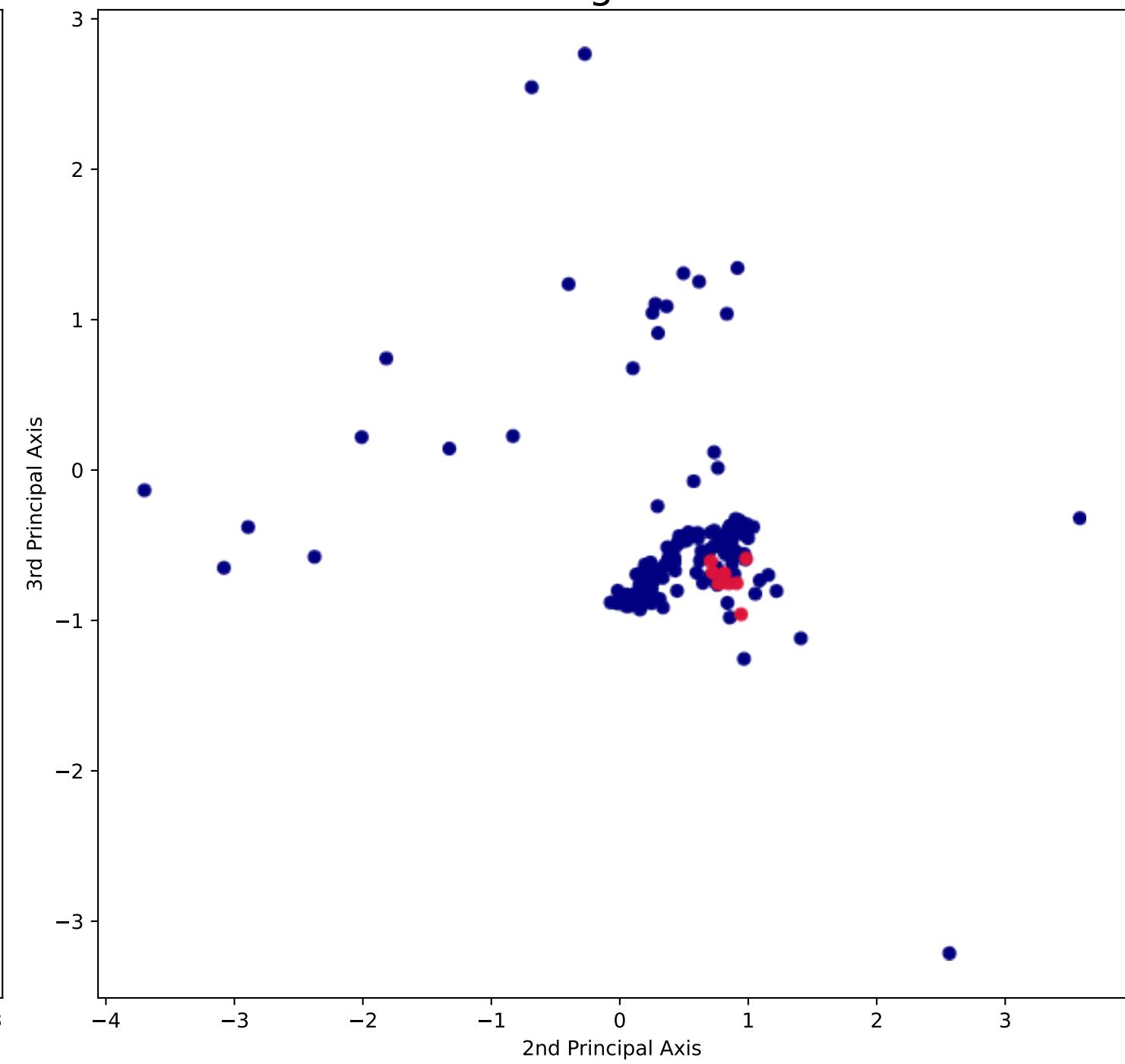
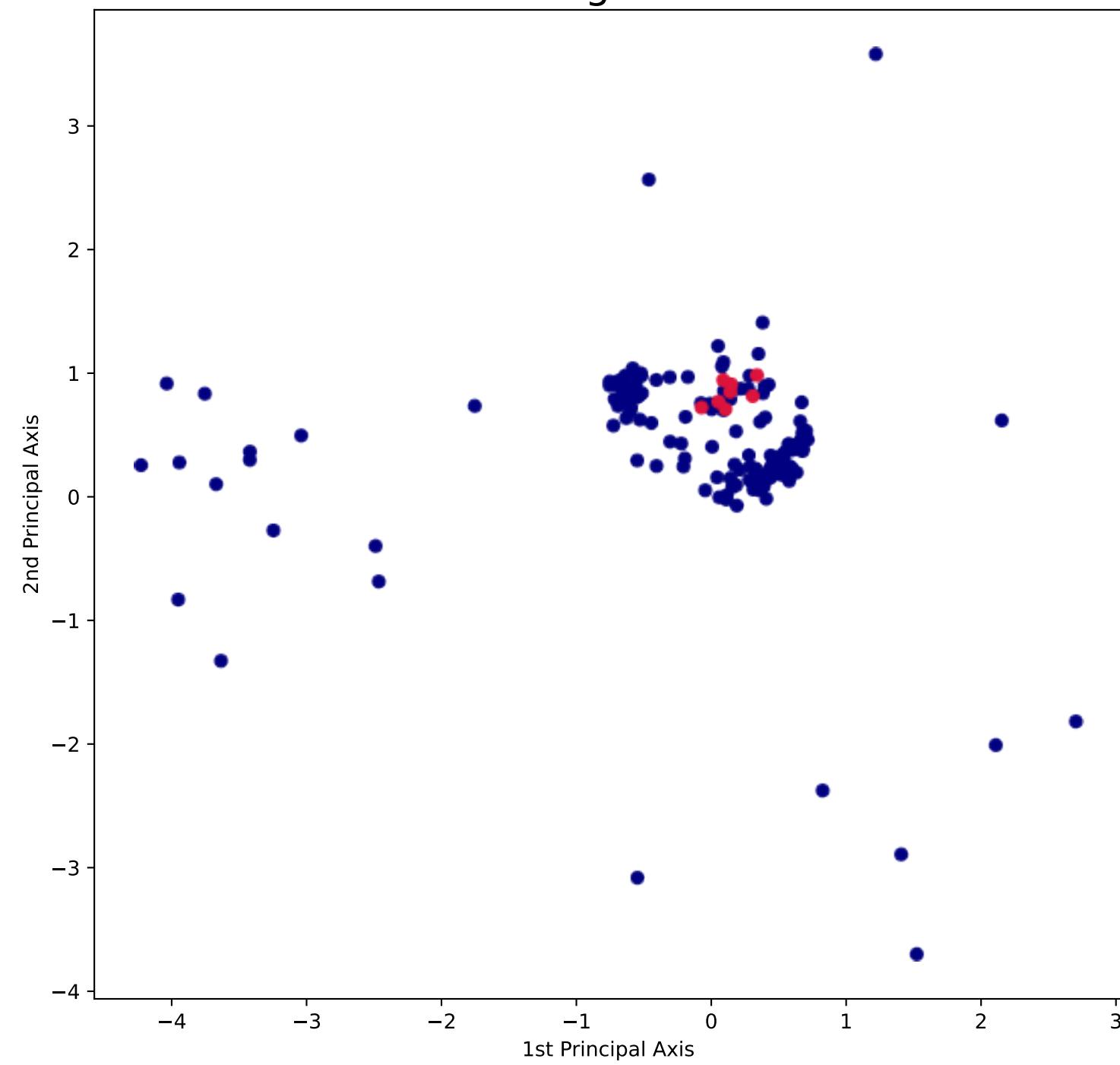
3D Projection



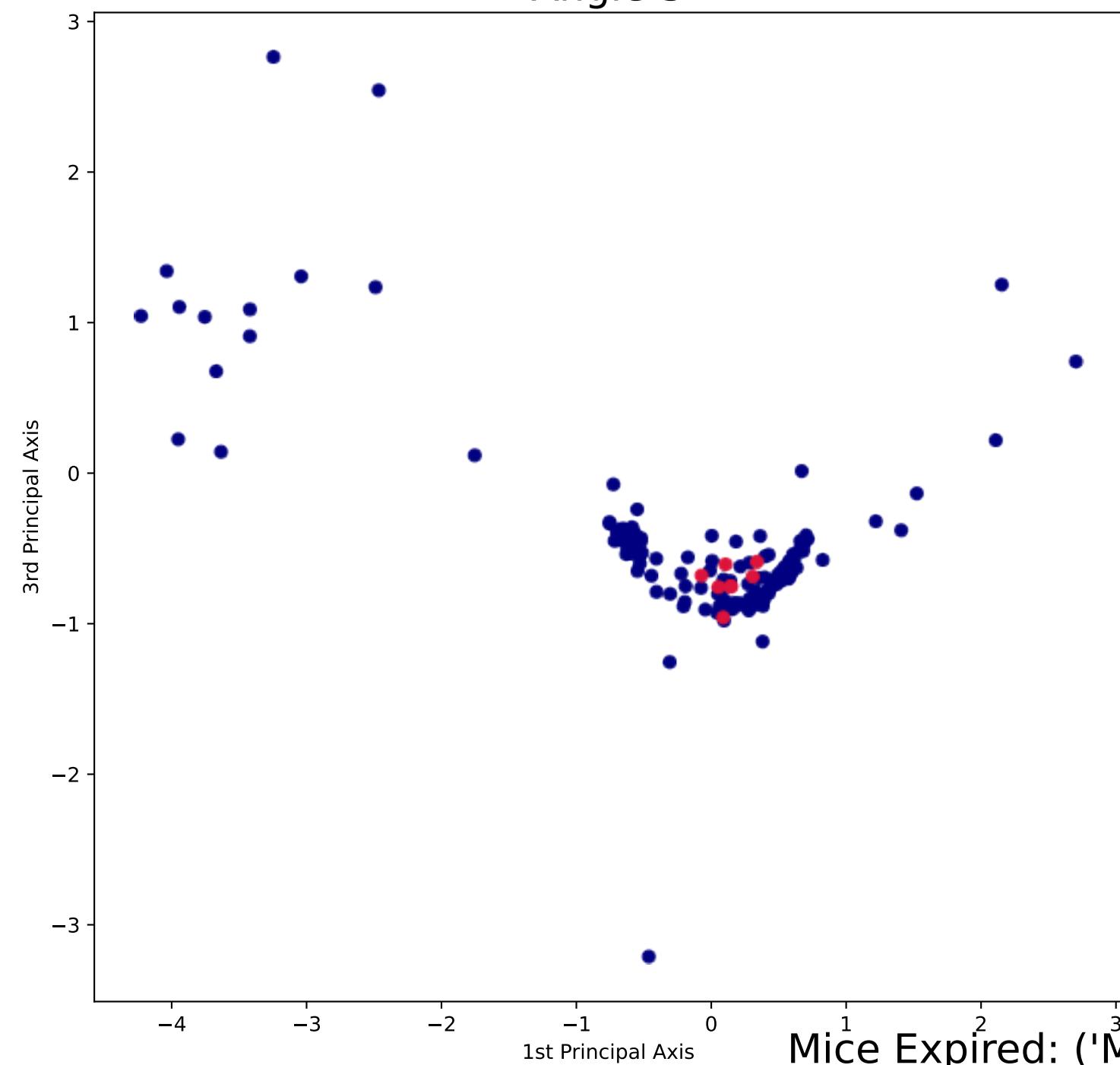
# Trial Number: 12, Phase: Apnea Starts

Angle 1

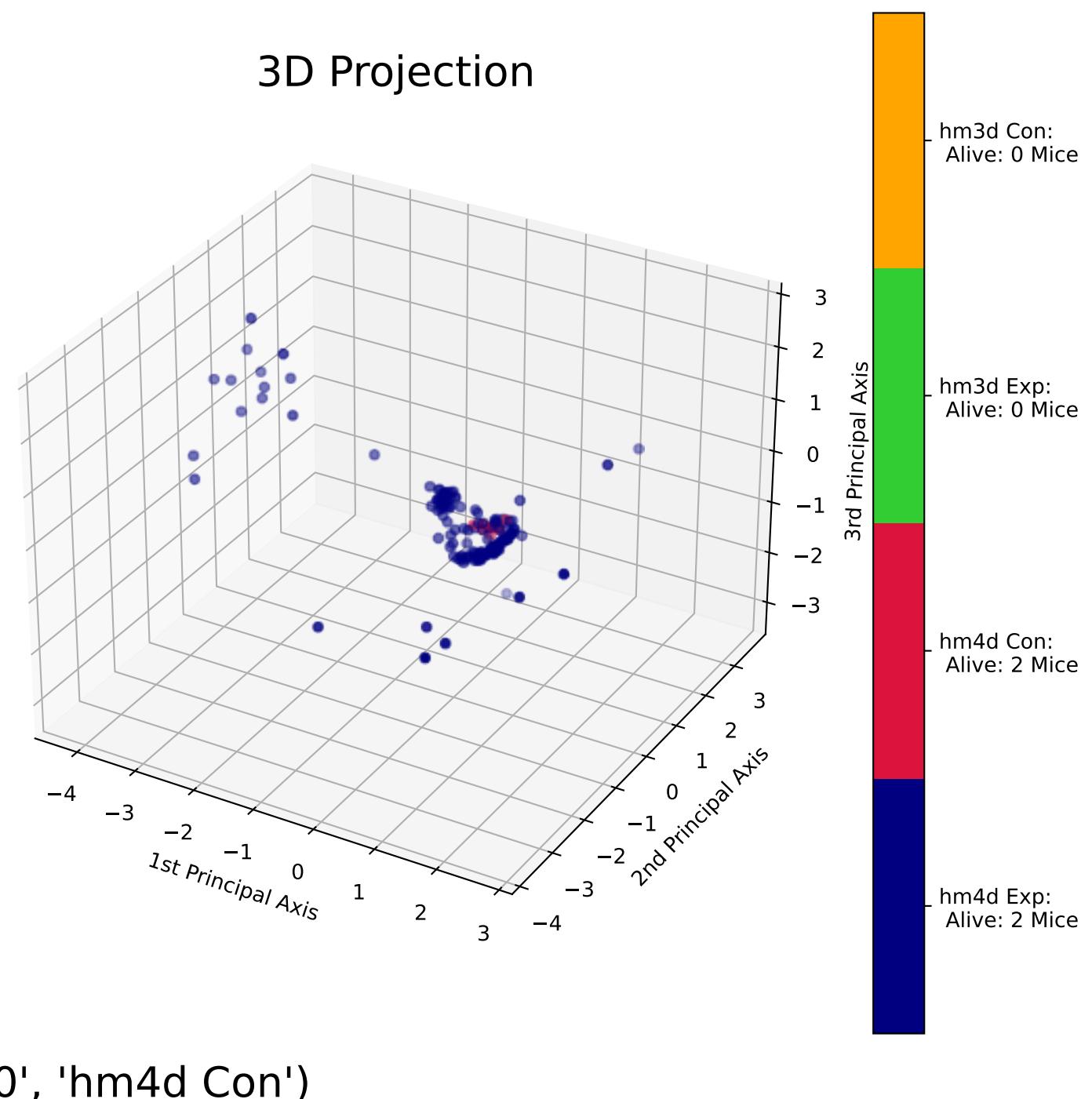
Angle 2



Angle 3



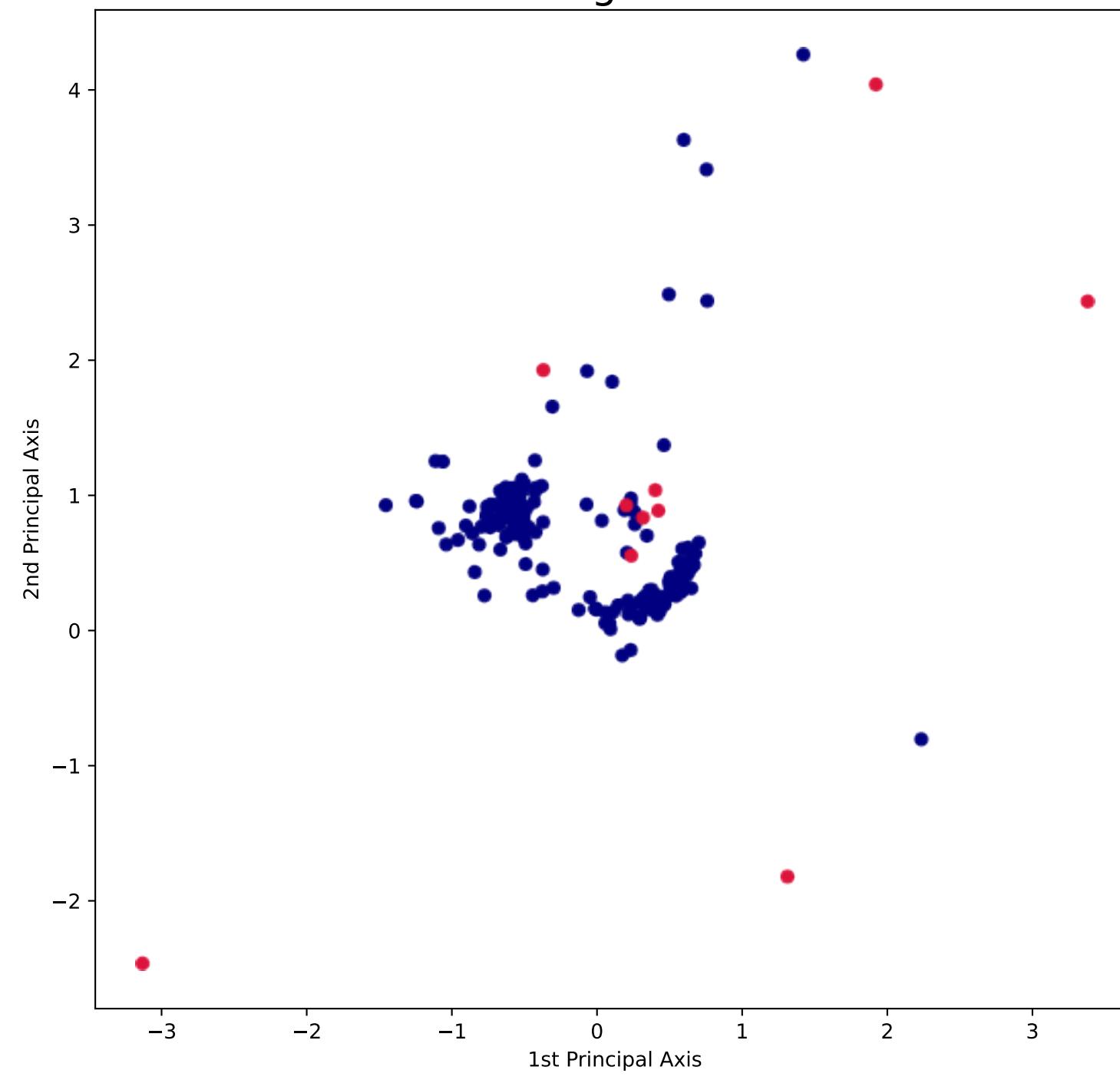
3D Projection



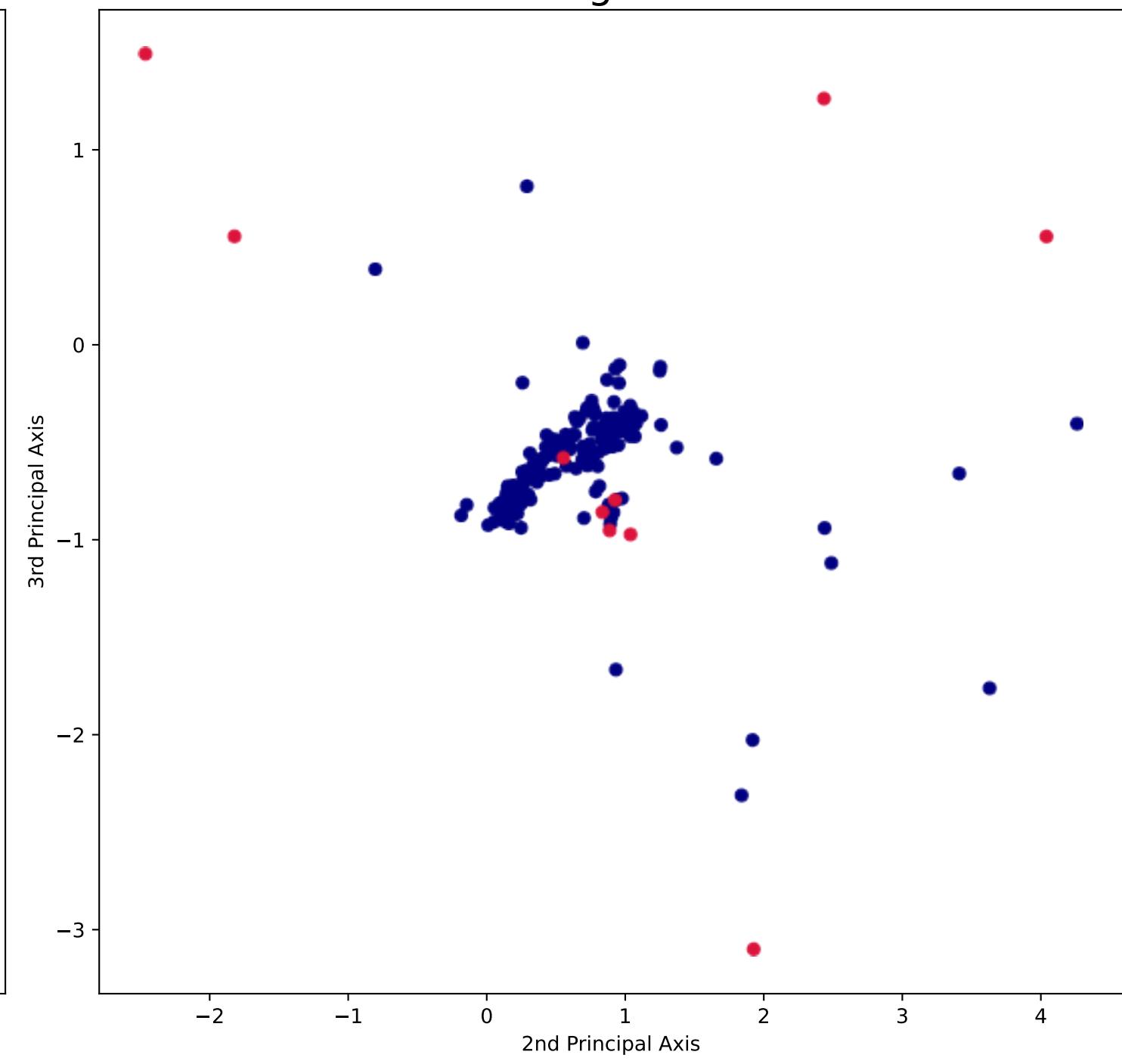
Mice Expired: ('M21630', 'hm4d Con')

# Trial Number: 12, Phase: First Gasp

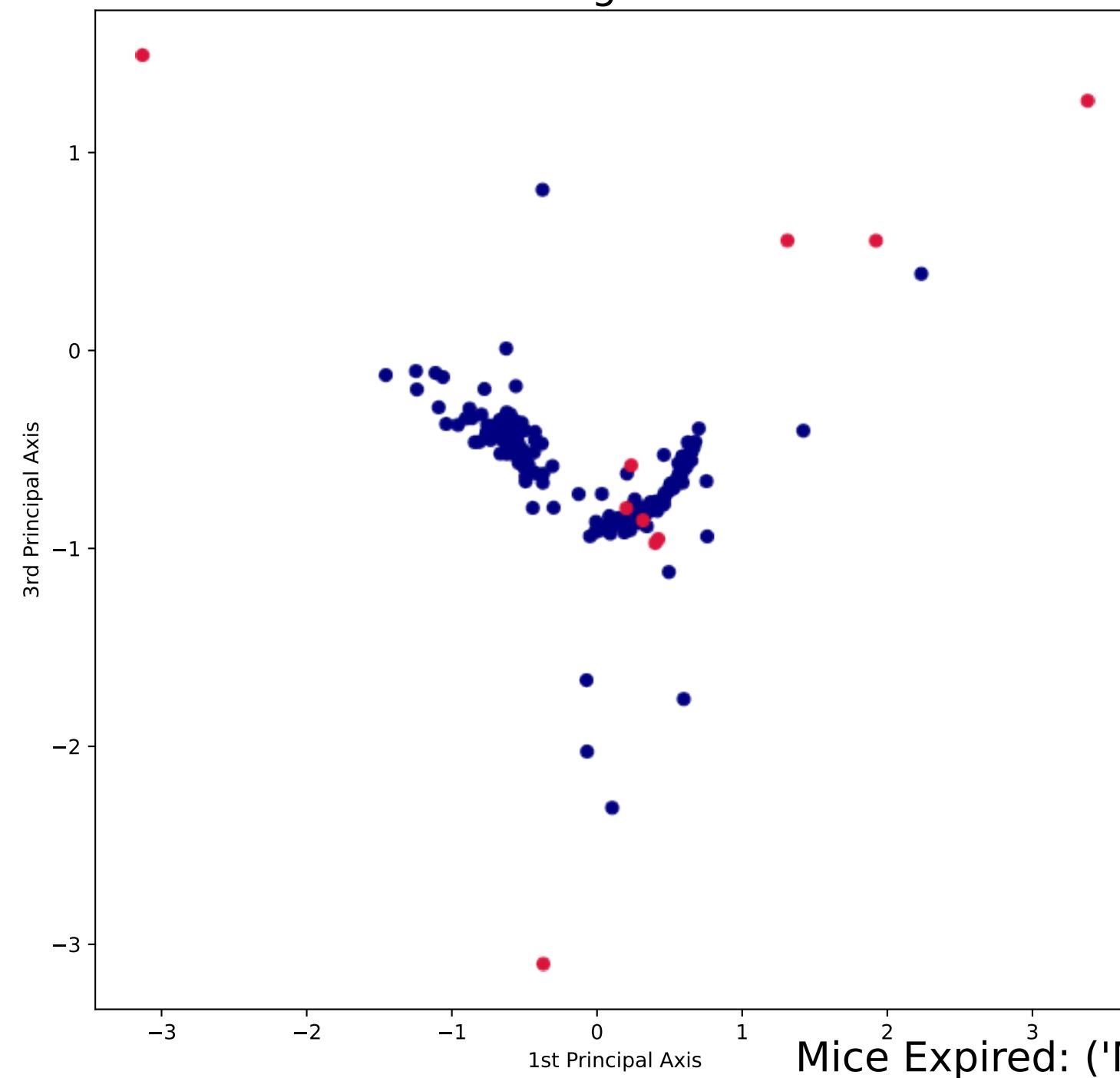
Angle 1



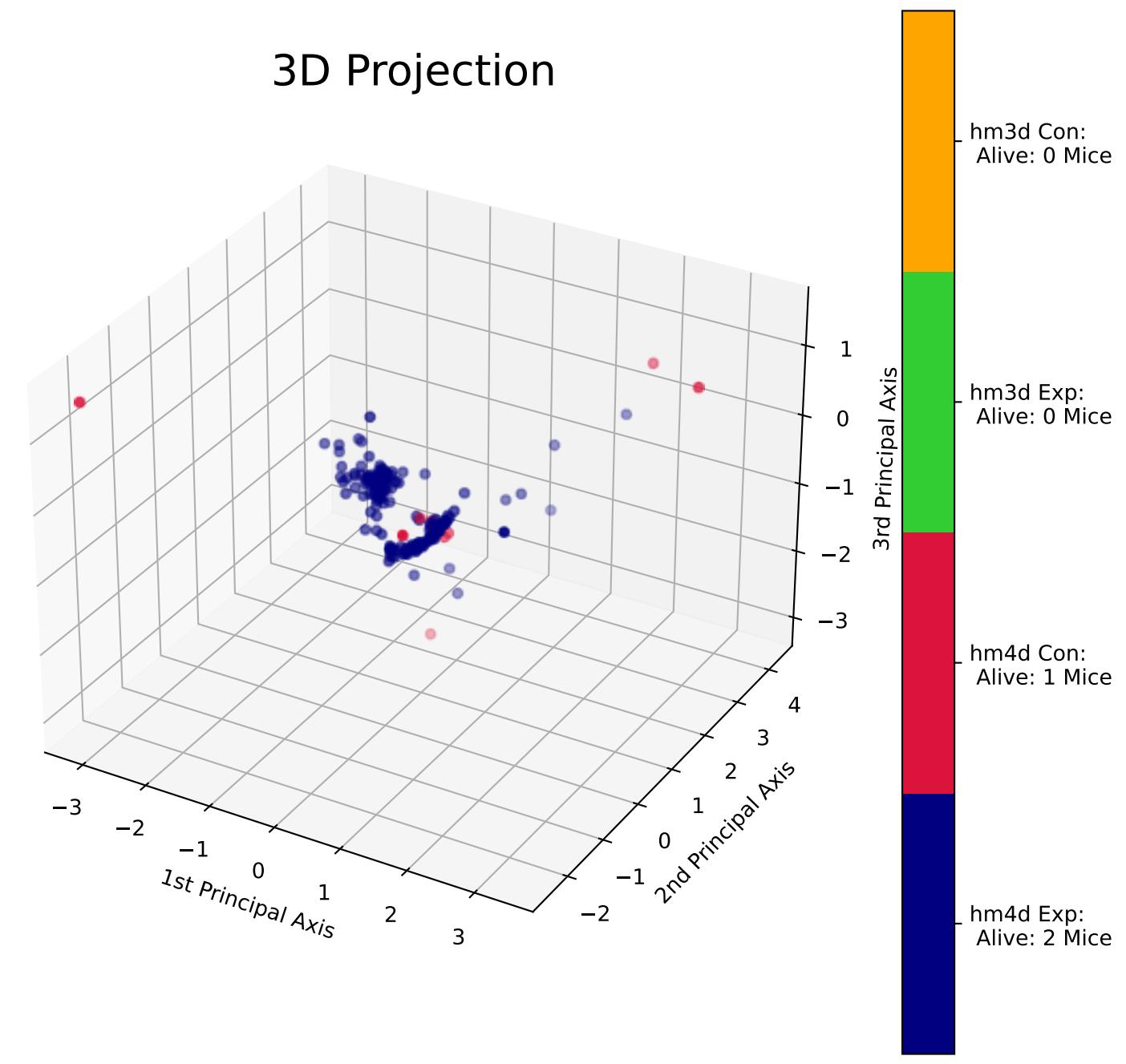
Angle 2



Angle 3



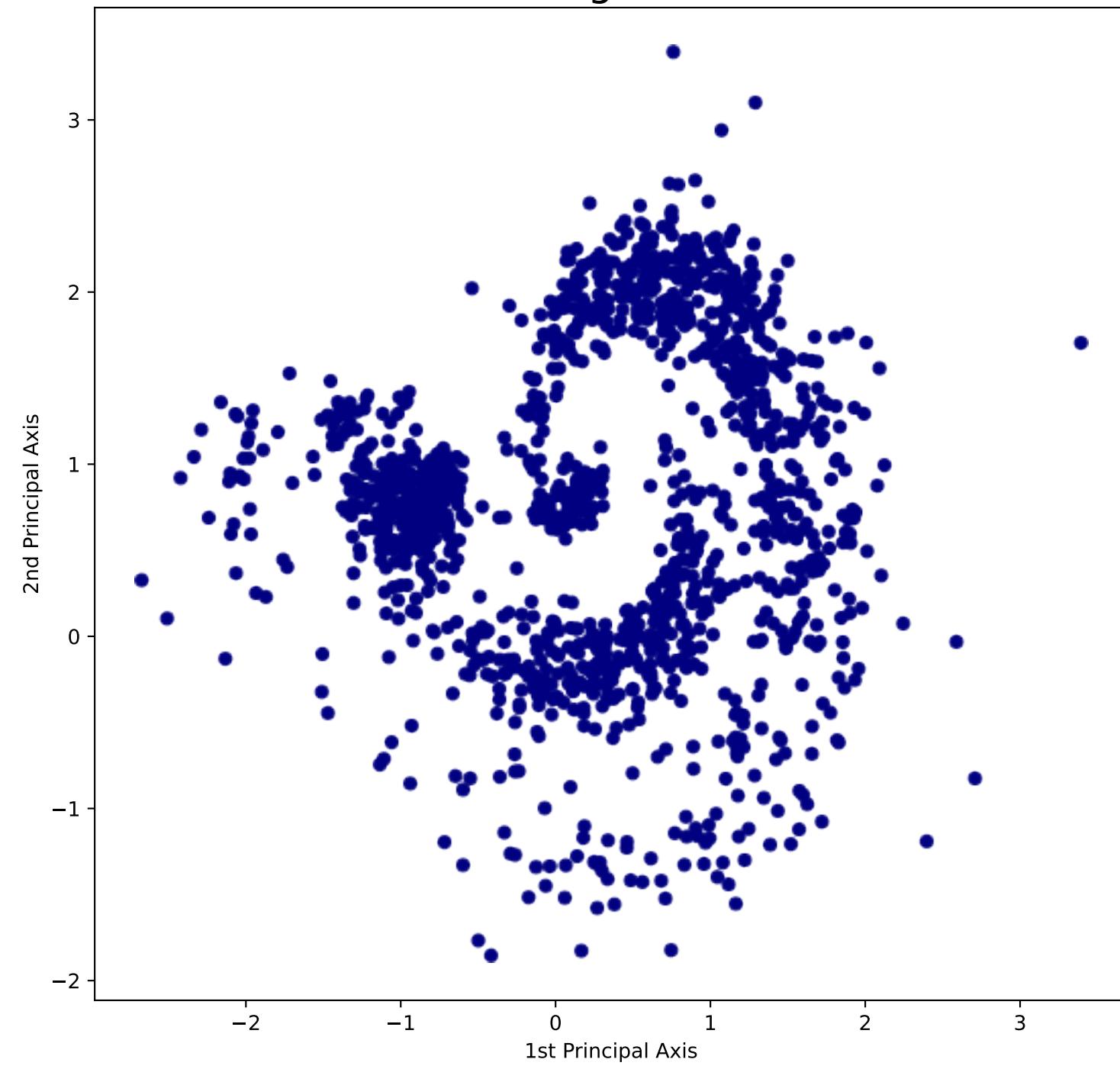
3D Projection



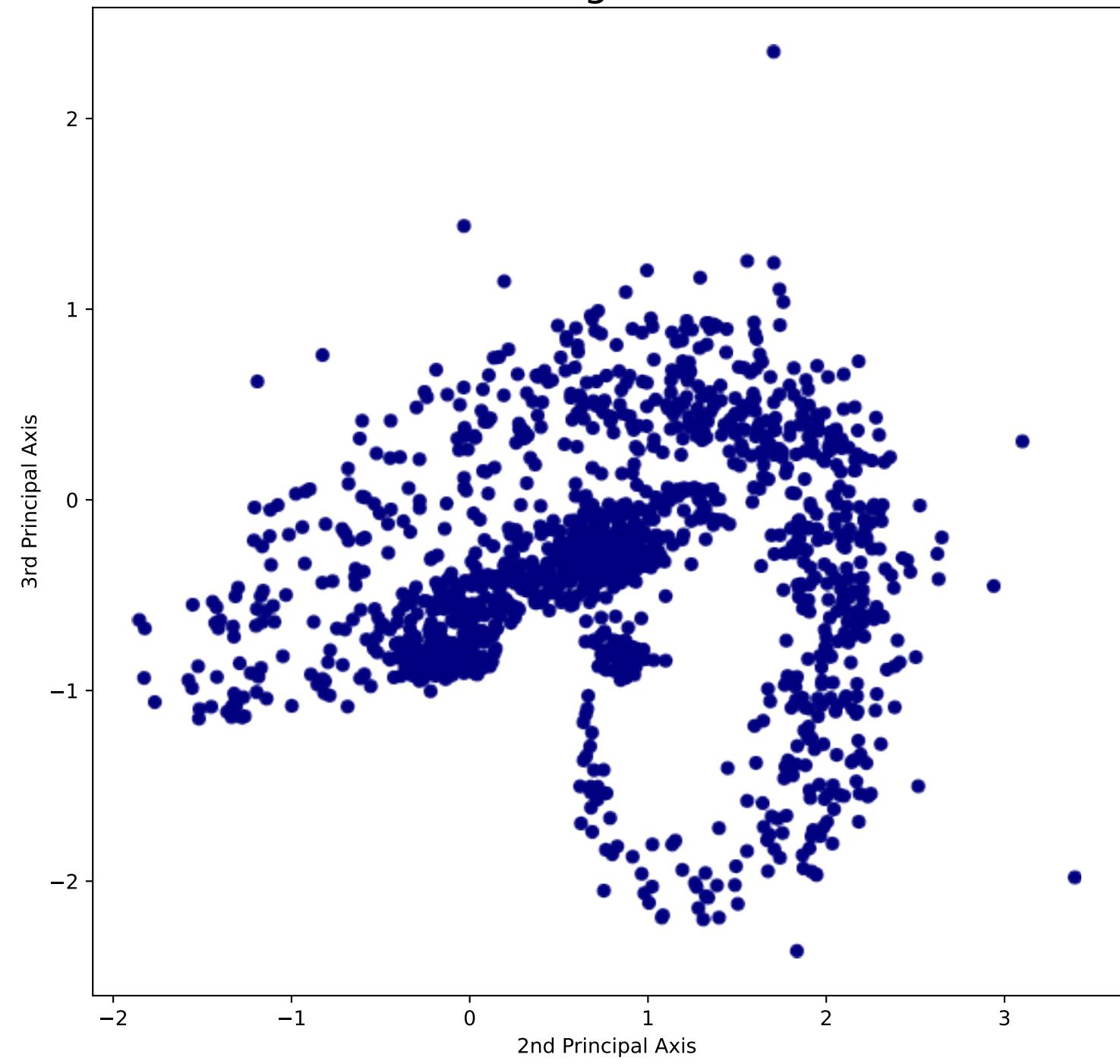
Mice Expired: ('M21627', 'hm4d Con')

# Trial Number: 12, Phase: Eupnea Recovery

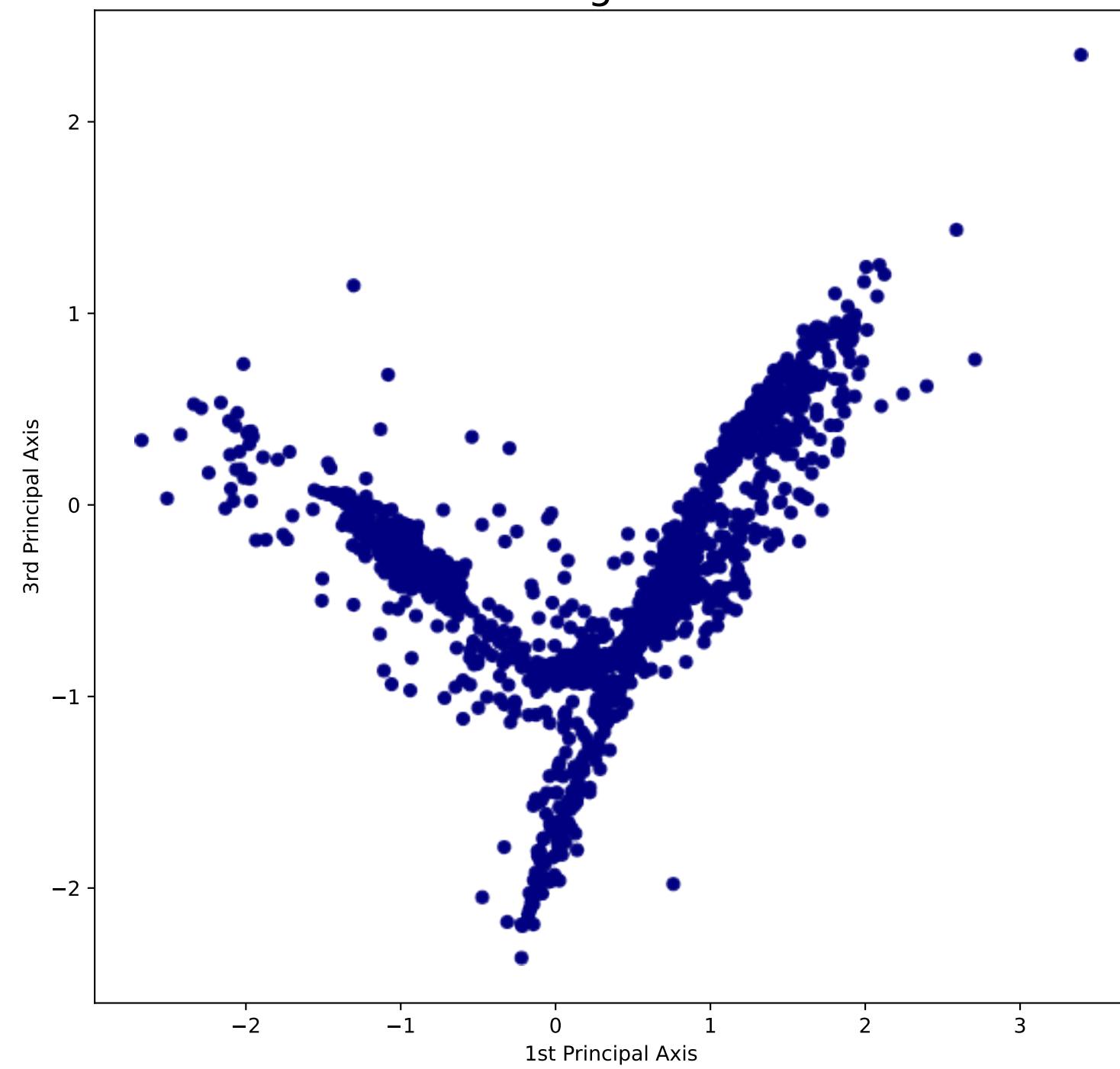
Angle 1



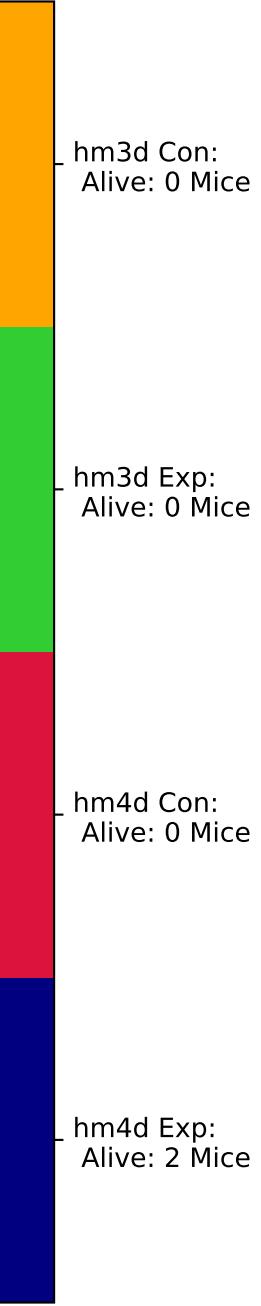
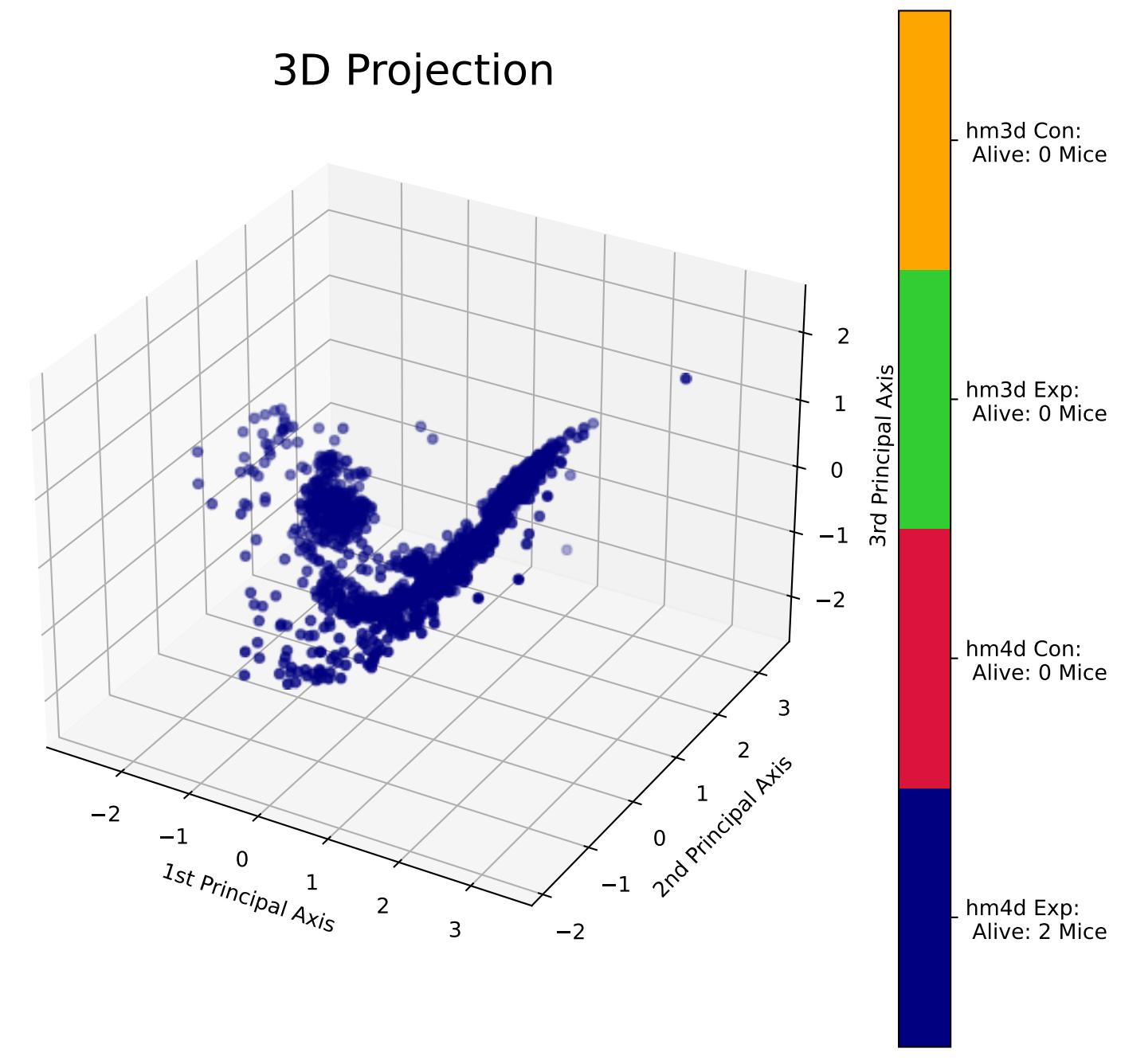
Angle 2



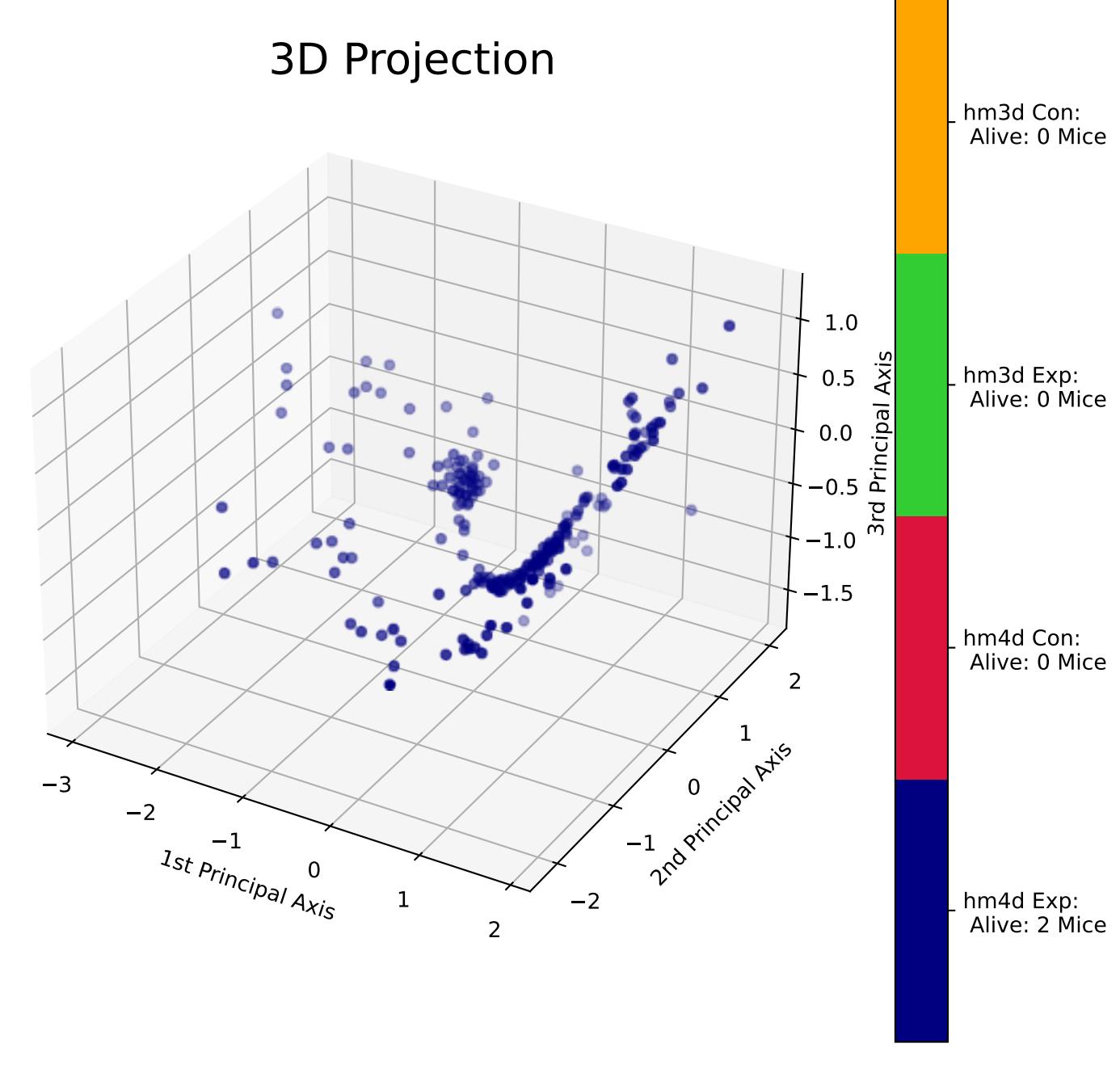
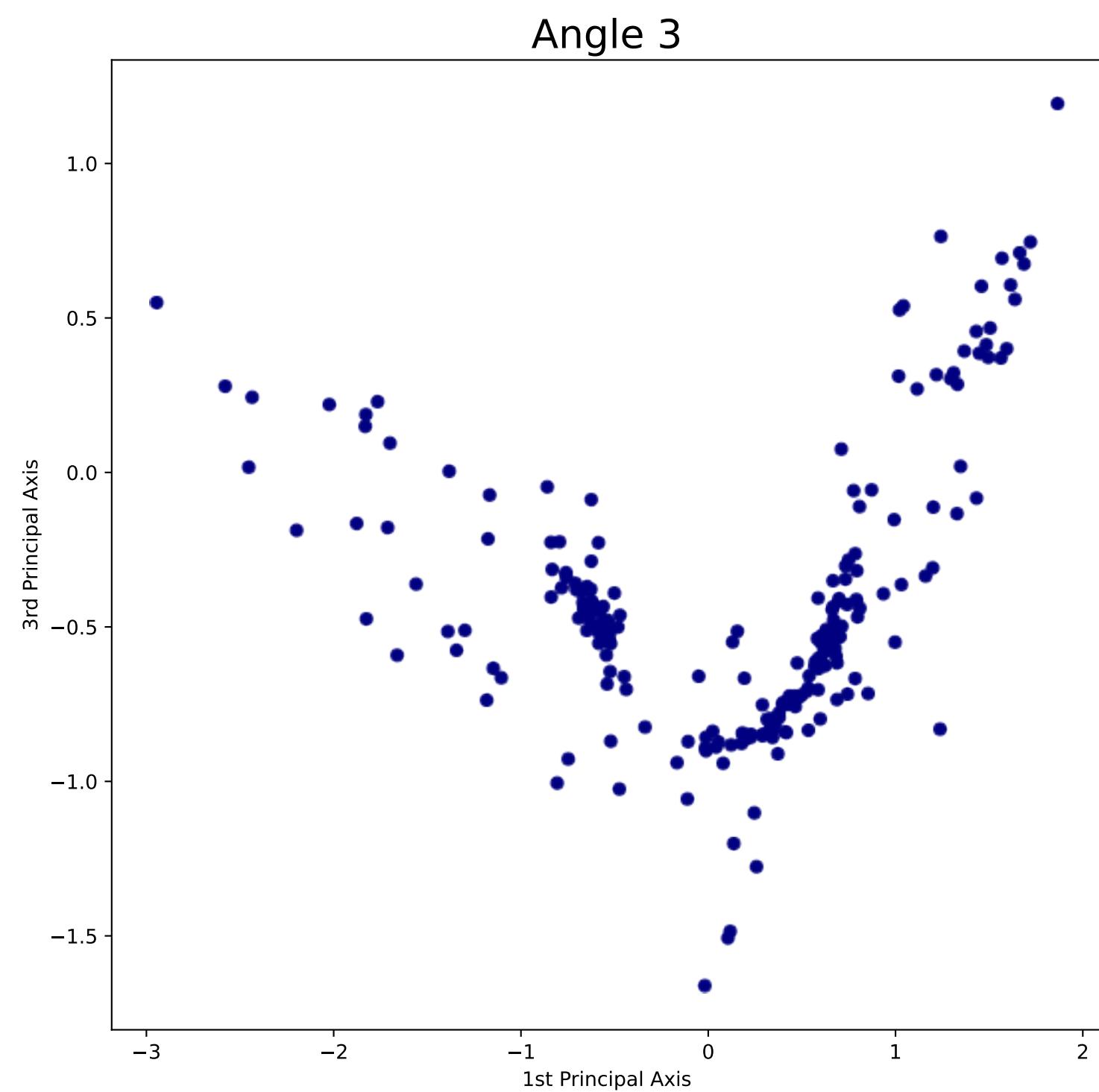
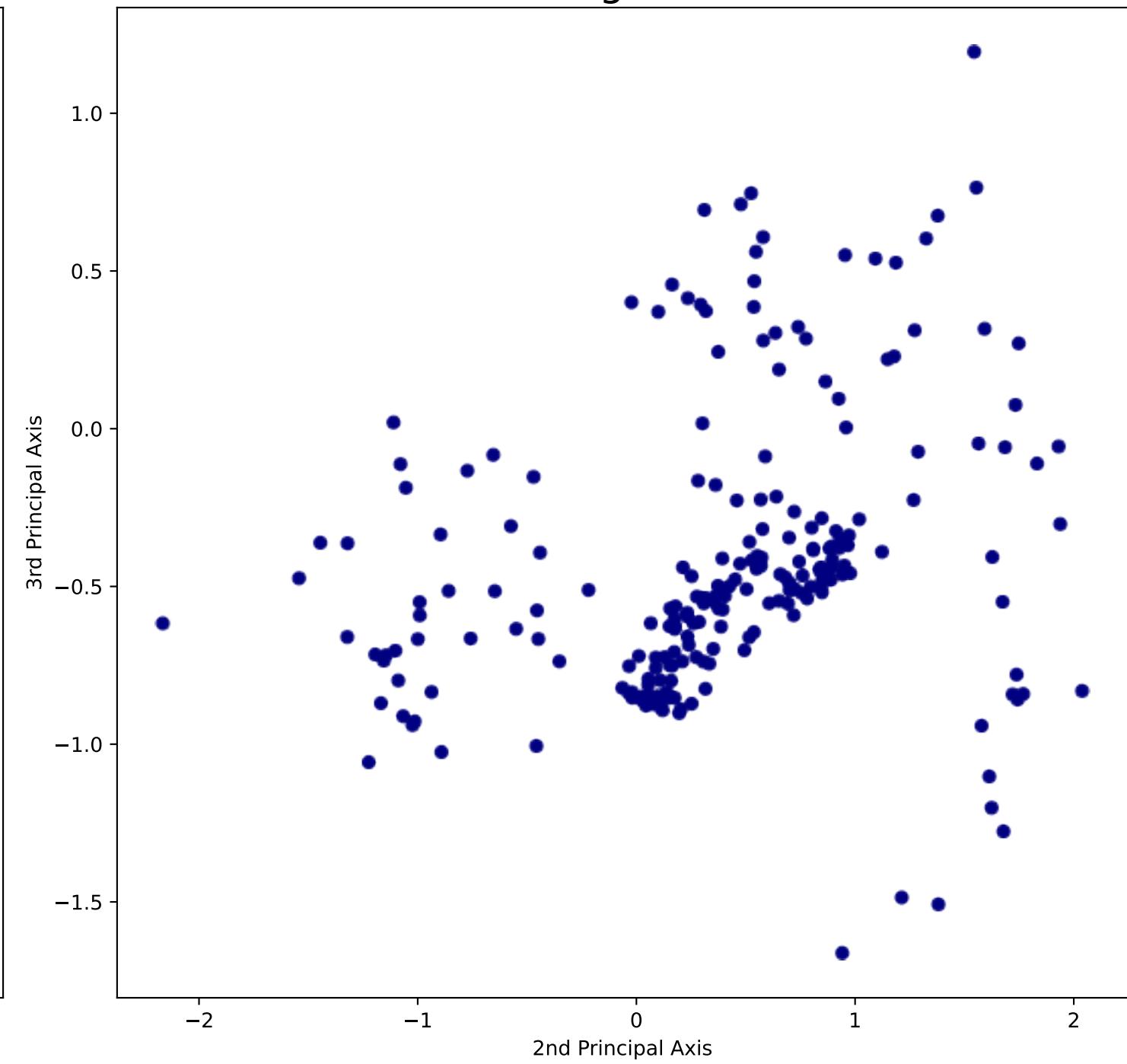
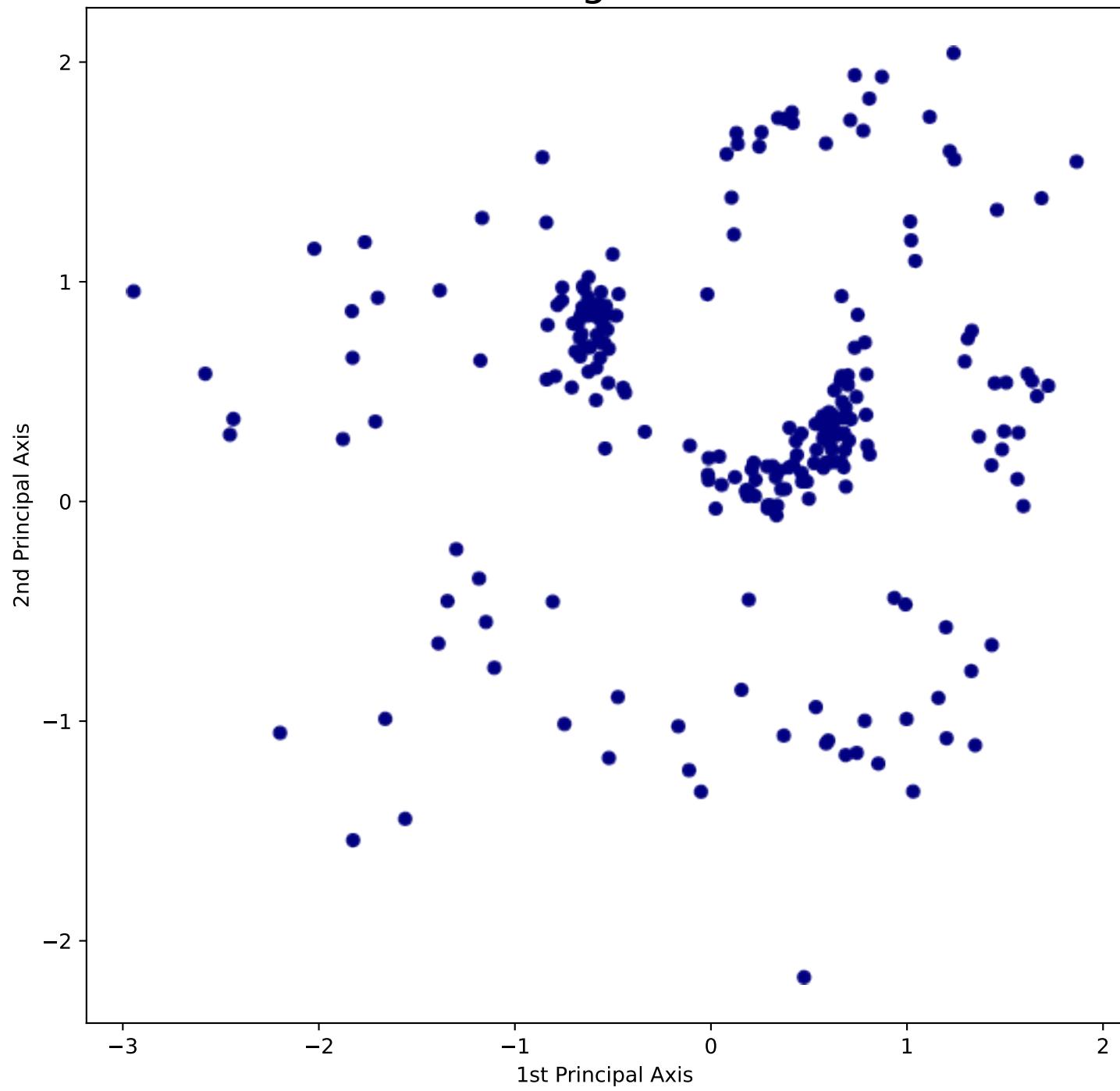
Angle 3



3D Projection



# Trial Number: 13, Phase: Trial Onset



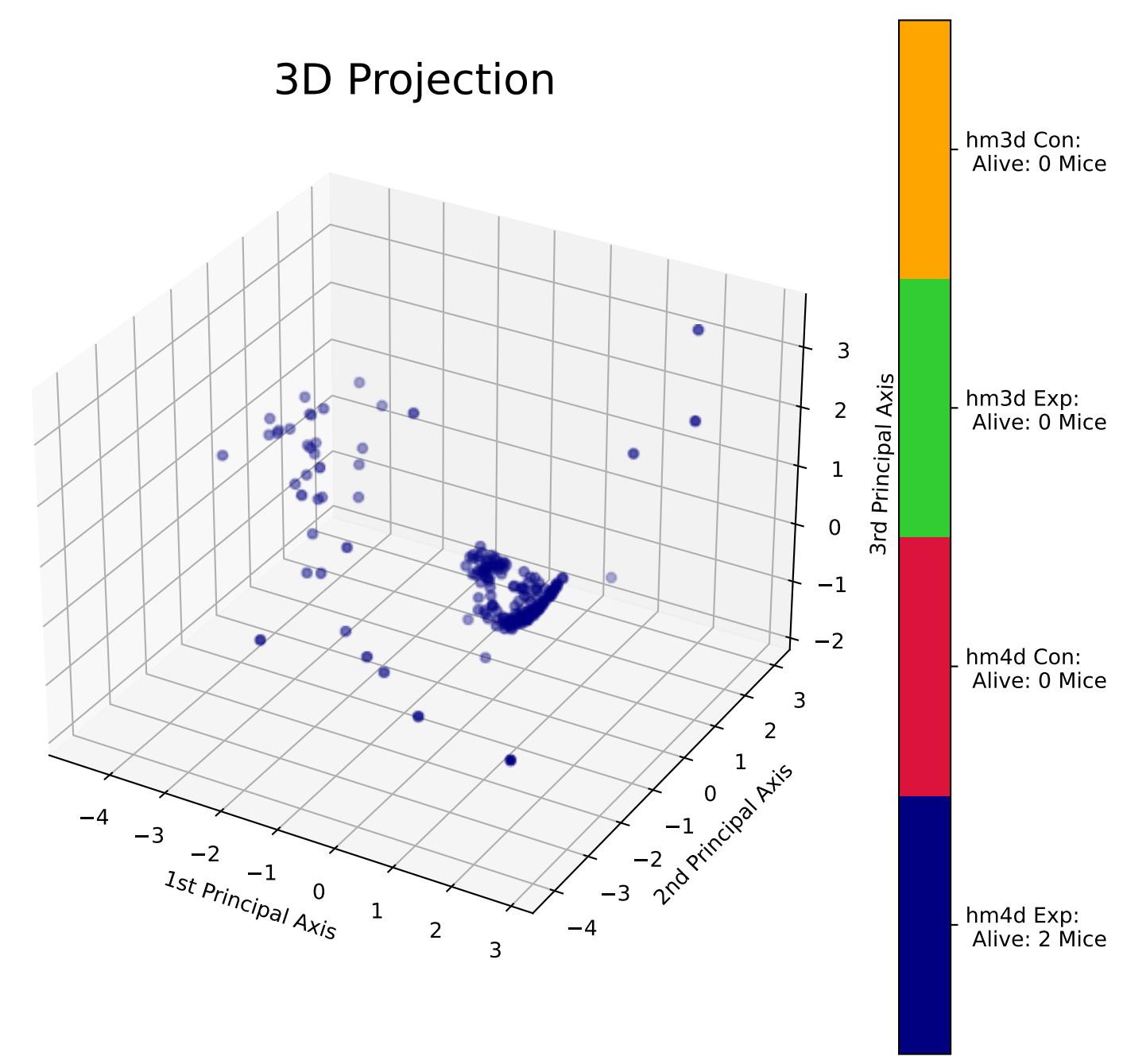
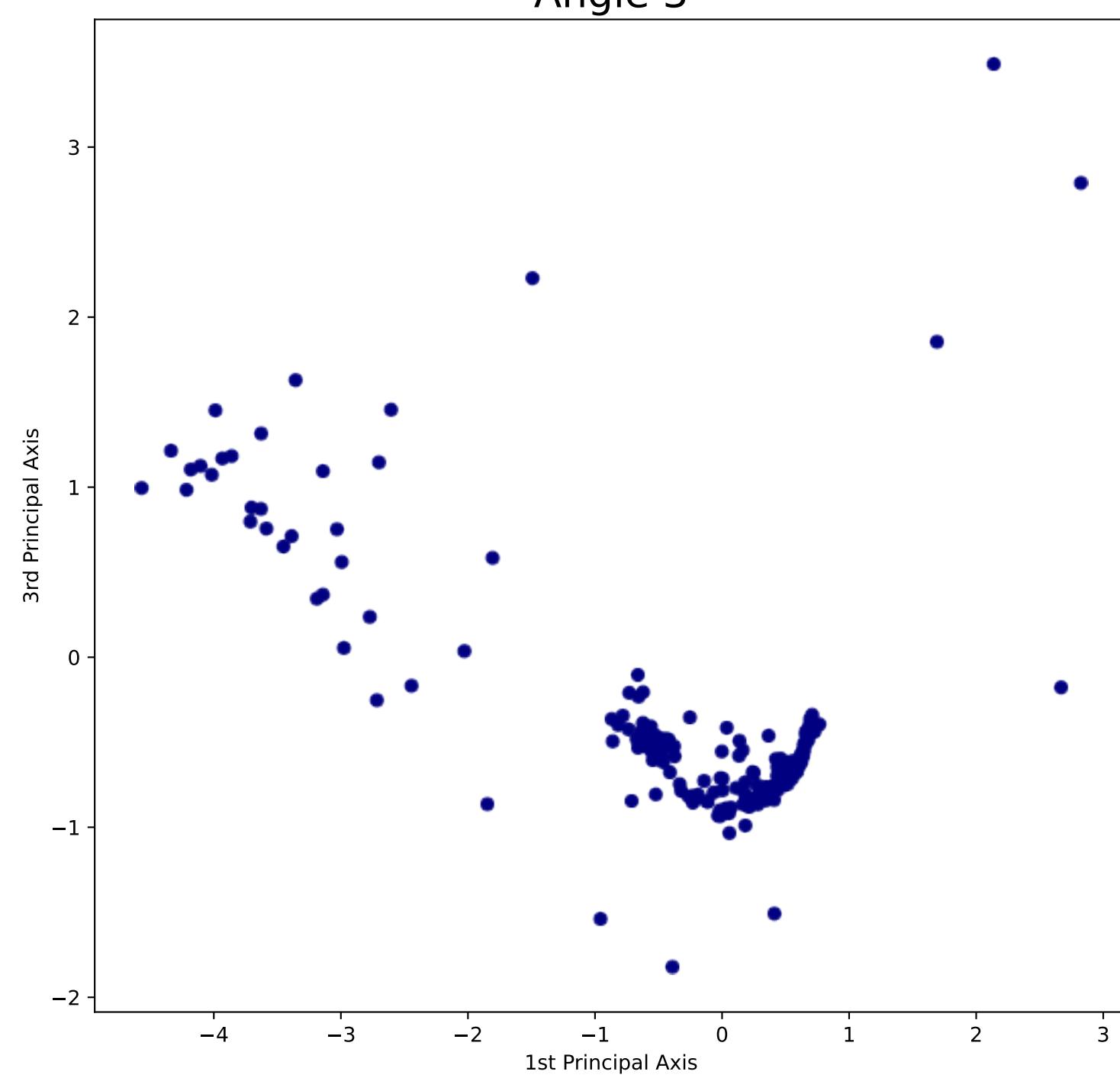
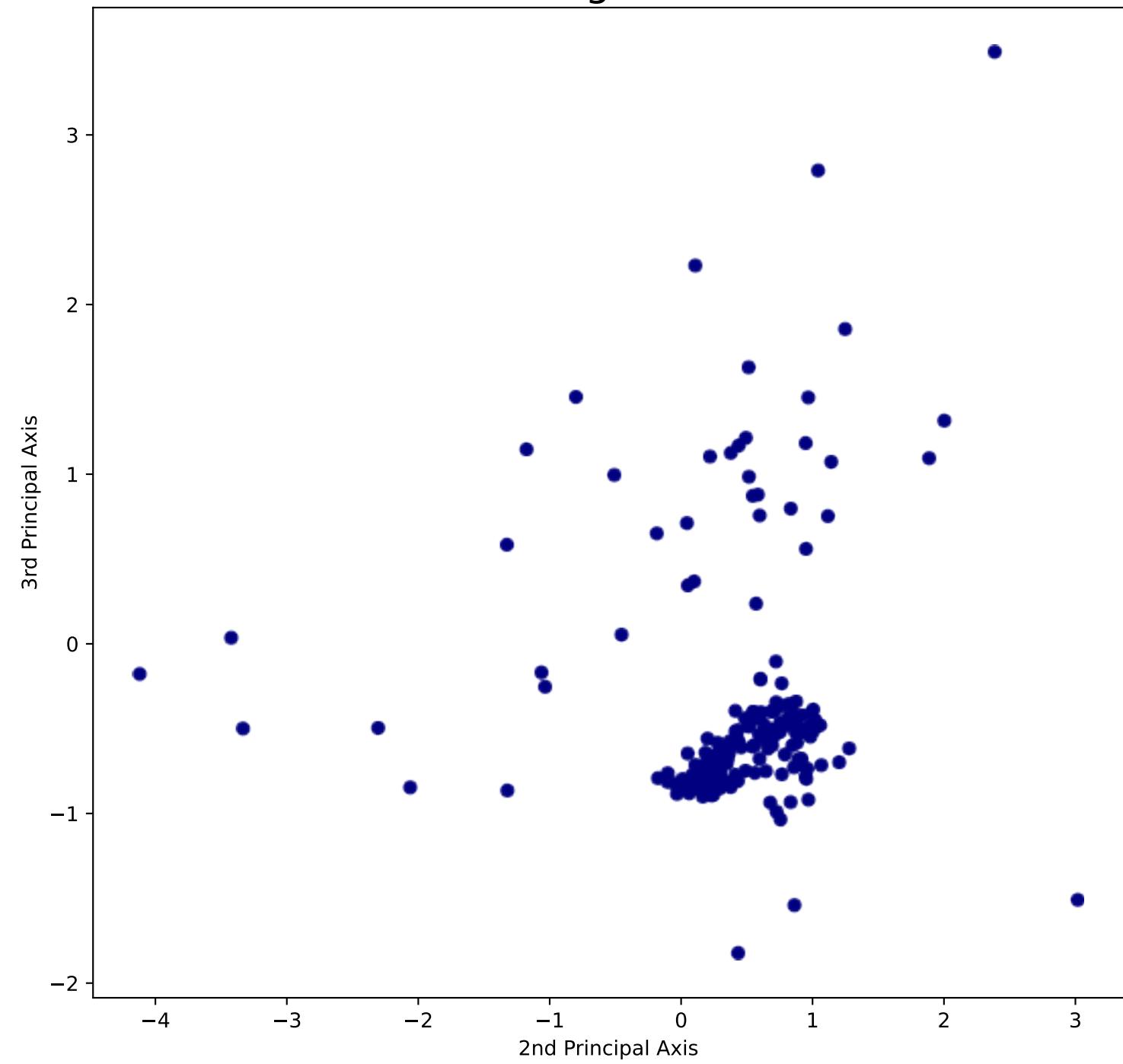
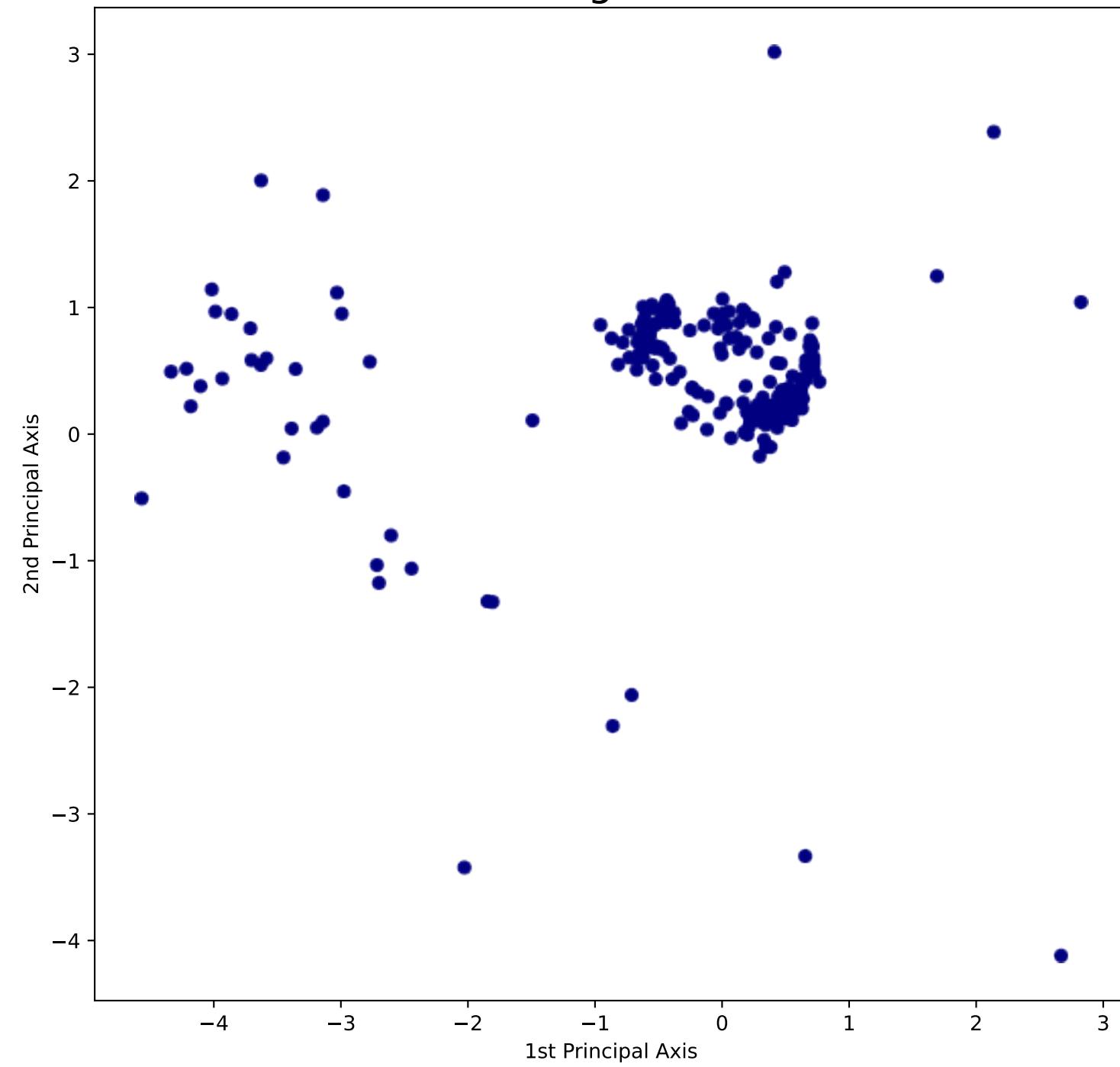
# Trial Number: 13, Phase: Apnea Starts

Angle 1

Angle 2

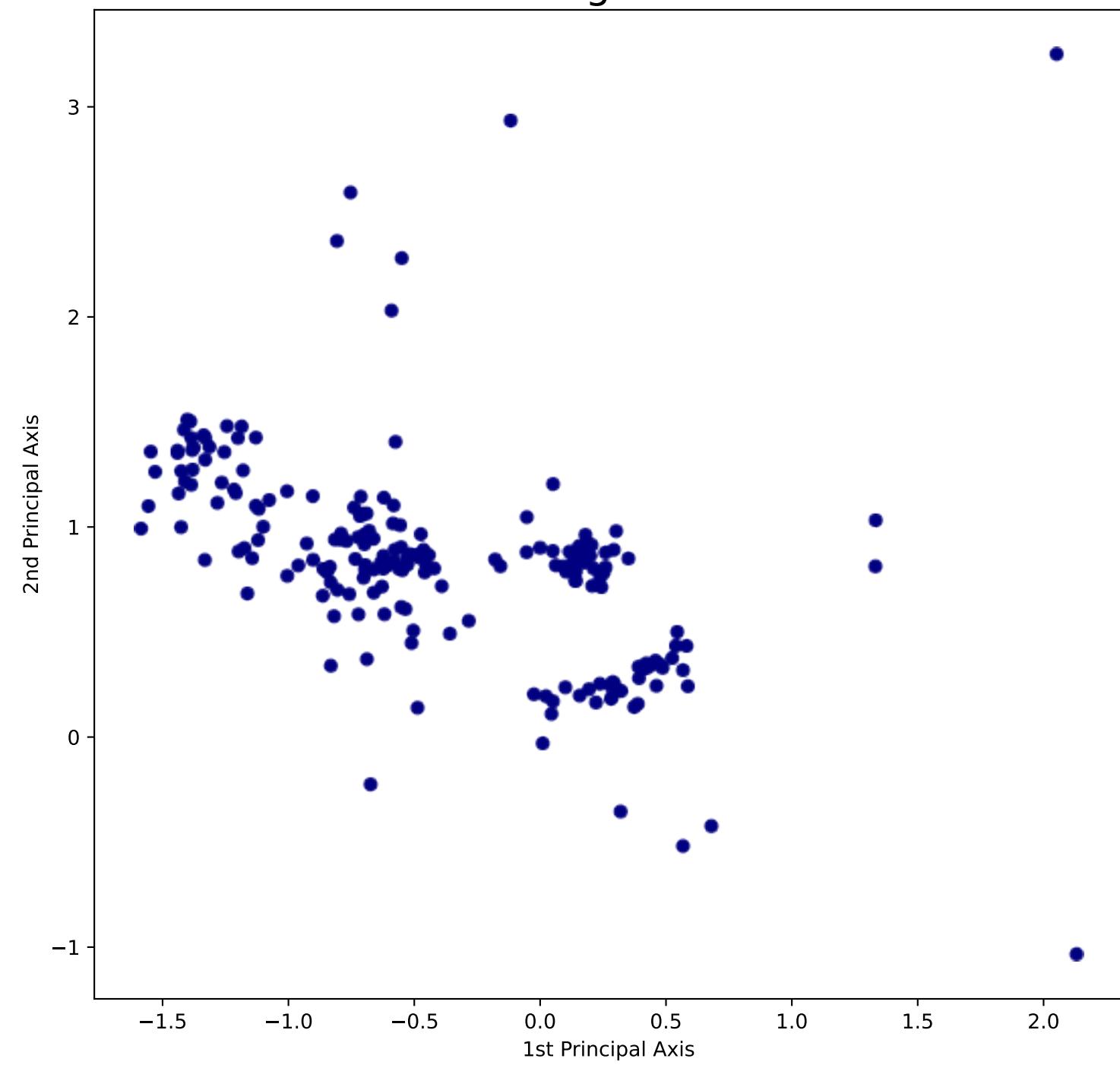
Angle 3

3D Projection

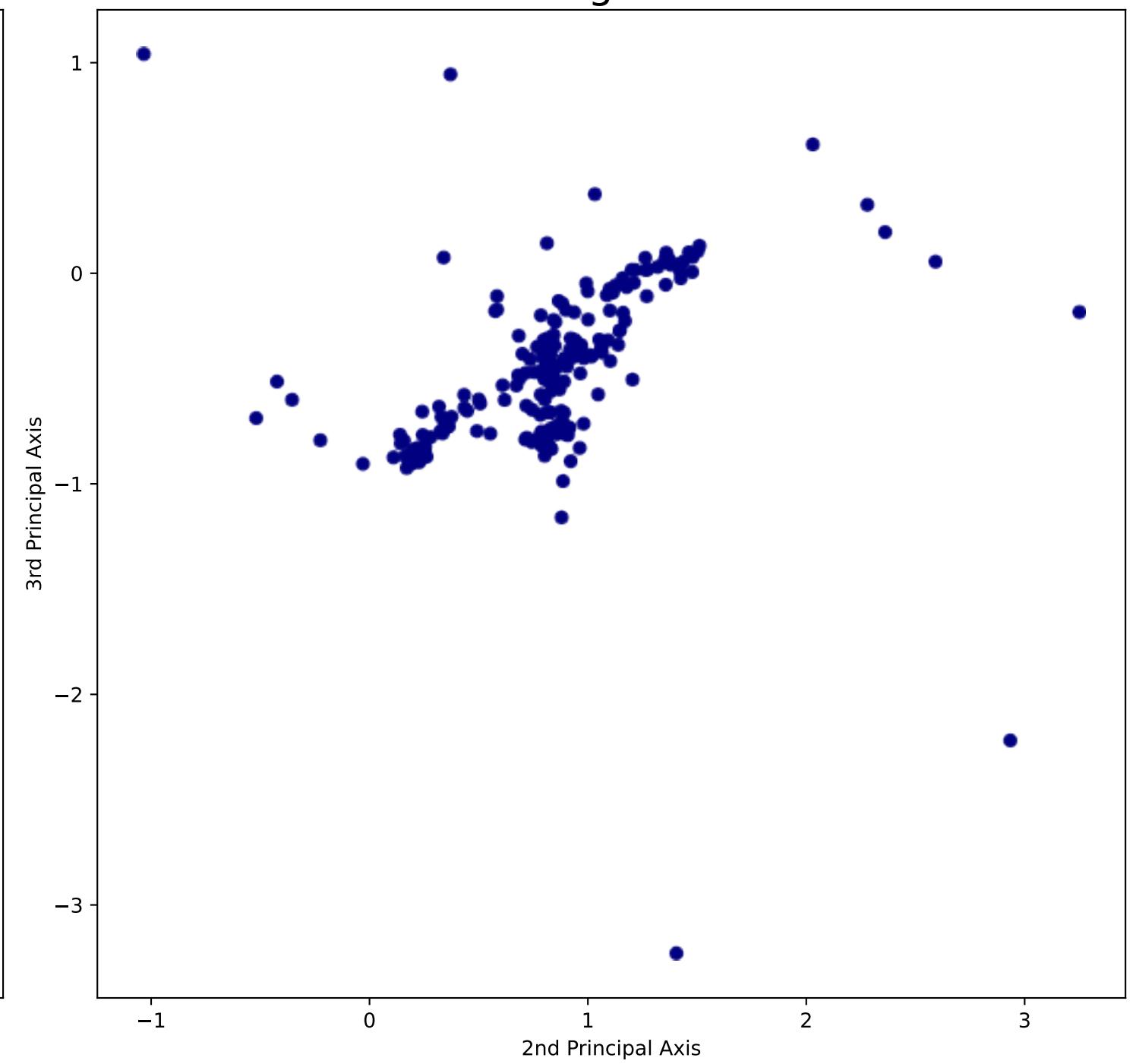


# Trial Number: 13, Phase: First Gasp

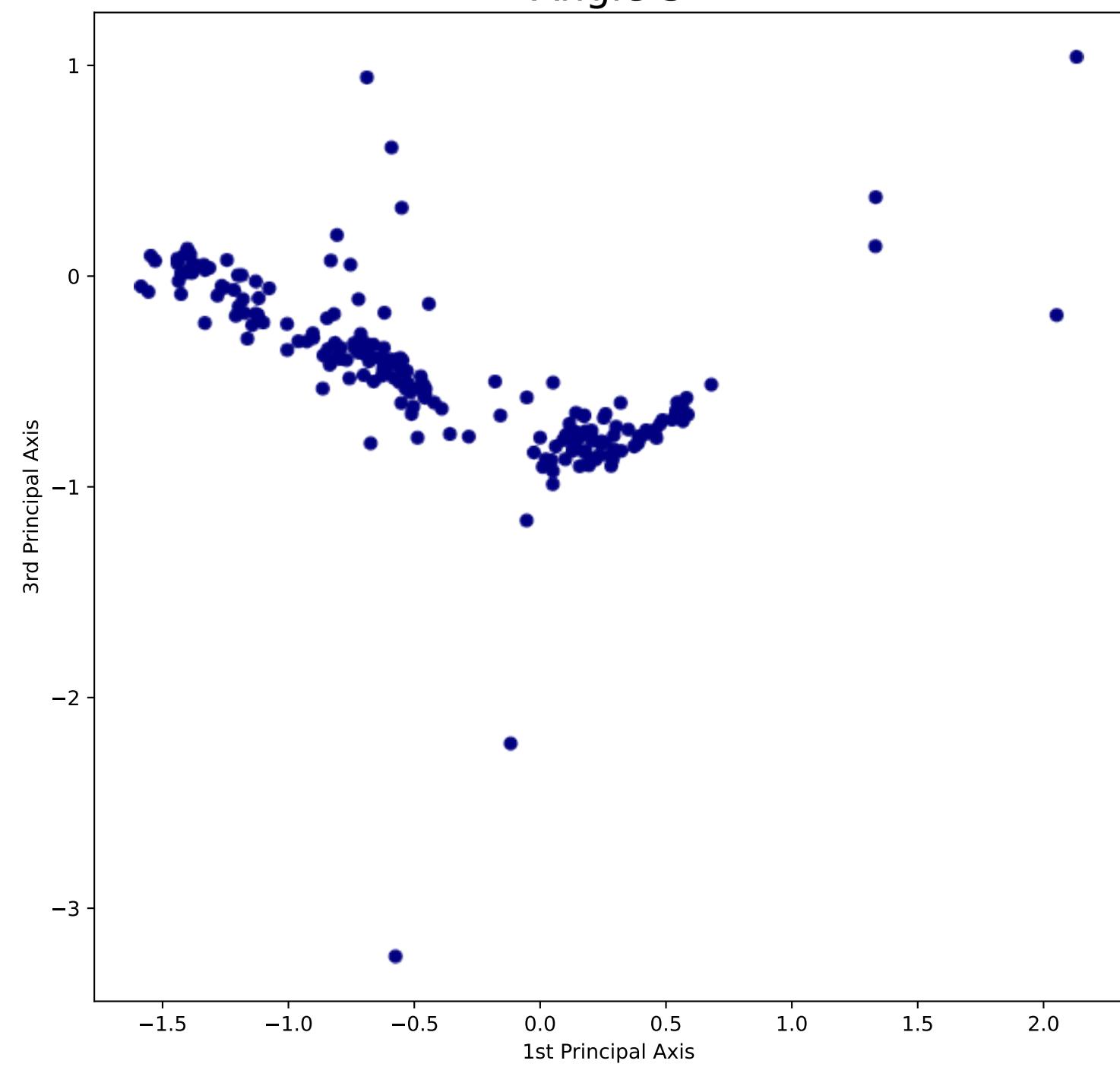
Angle 1



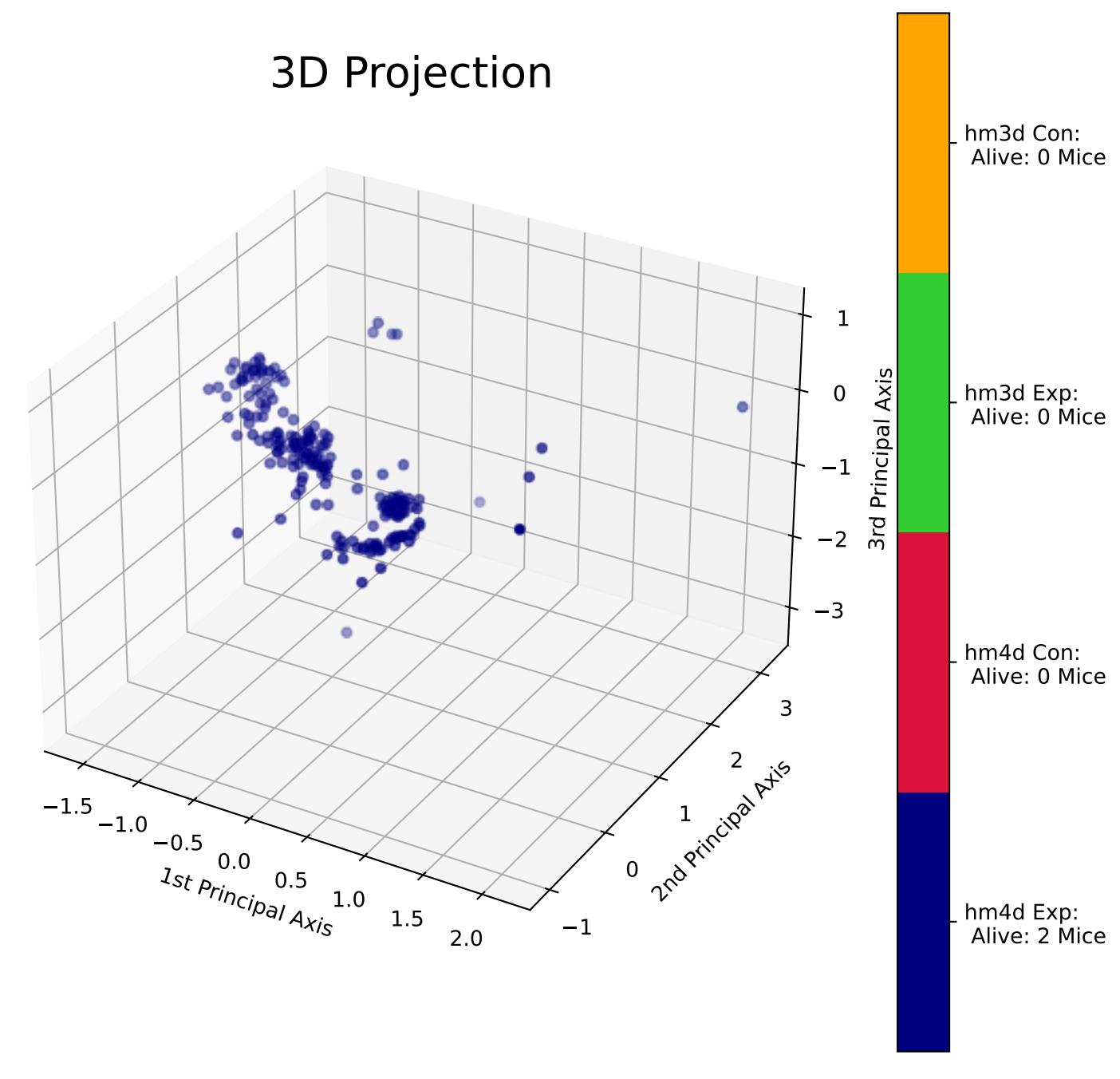
Angle 2



Angle 3

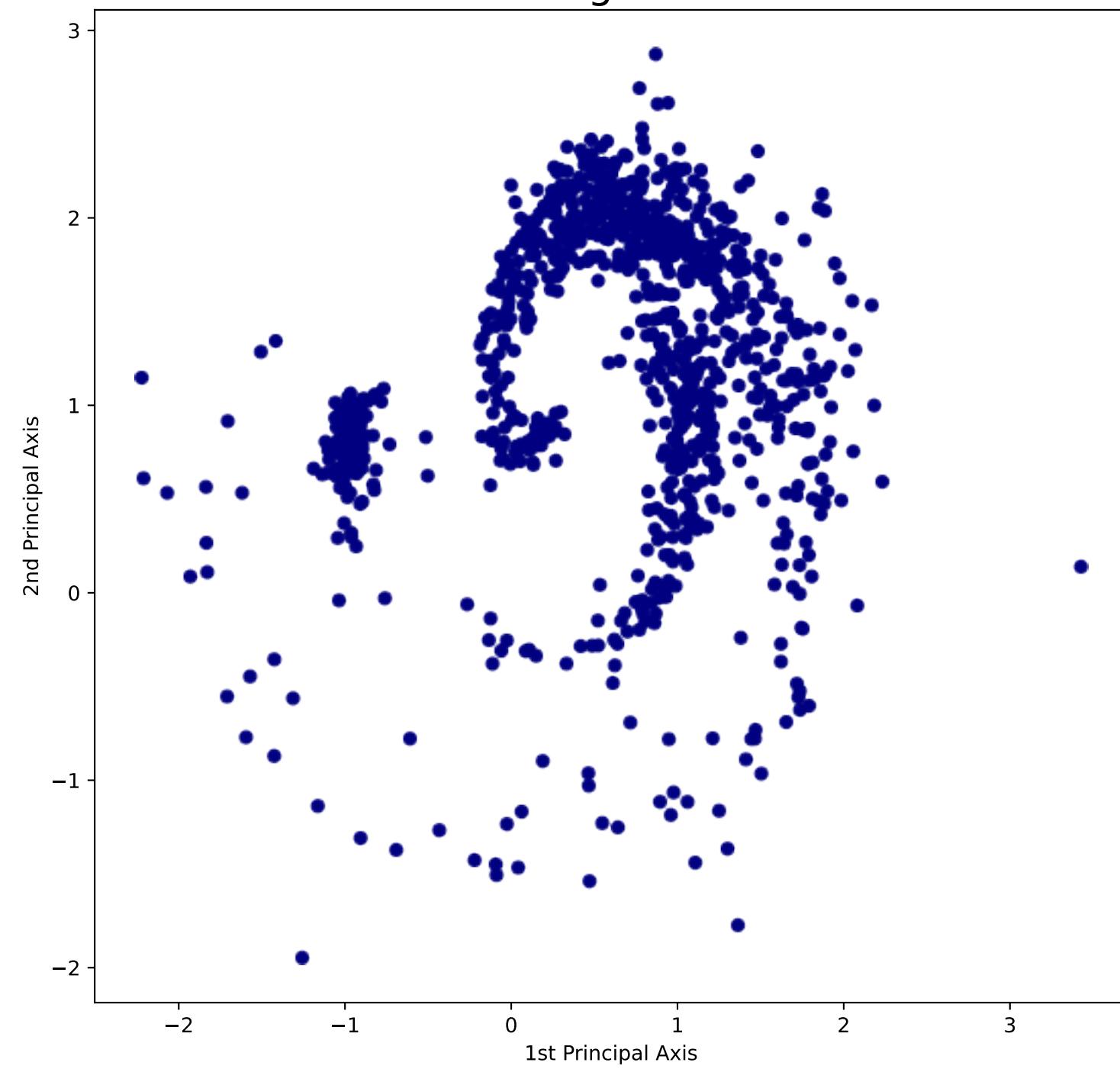


3D Projection

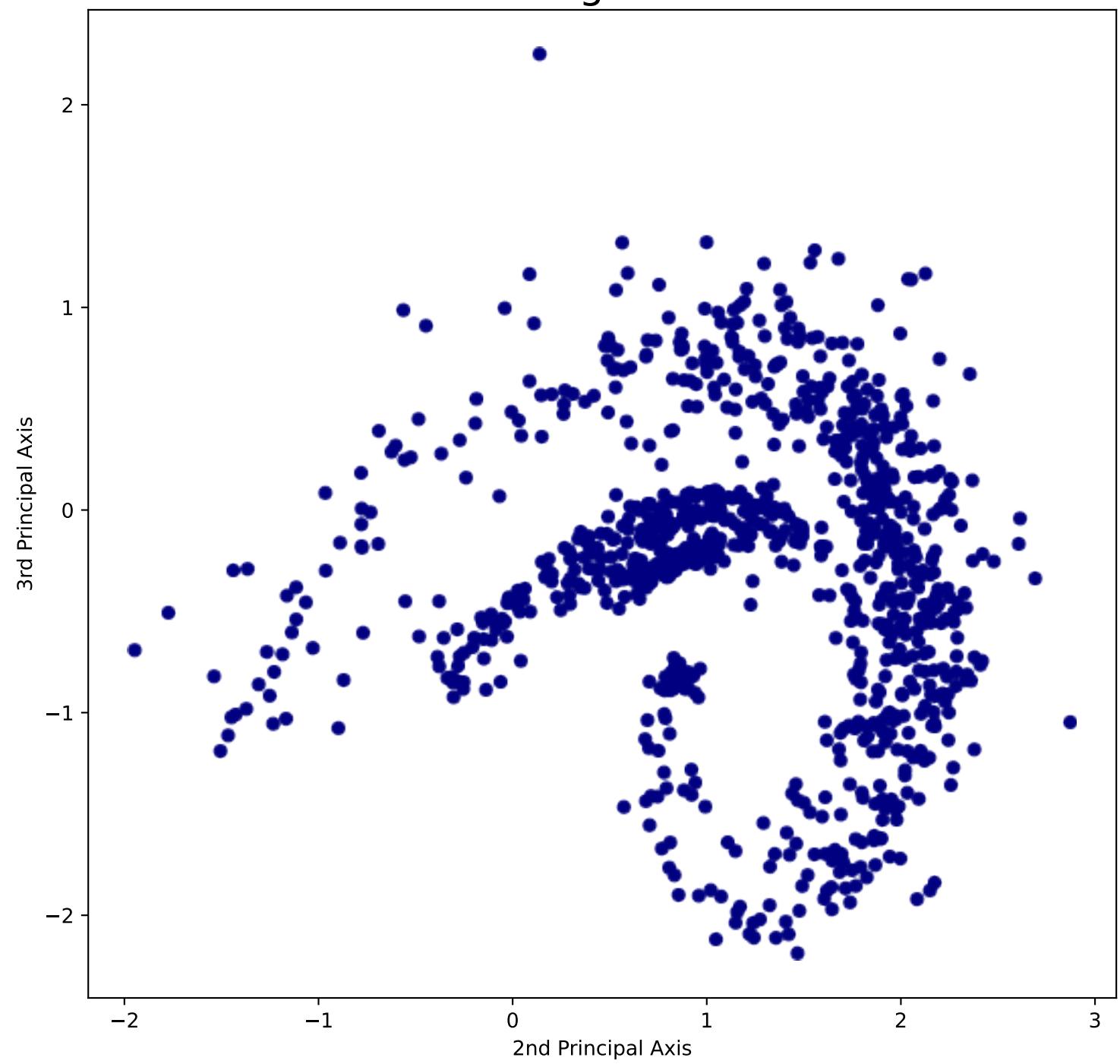


# Trial Number: 13, Phase: Eupnea Recovery

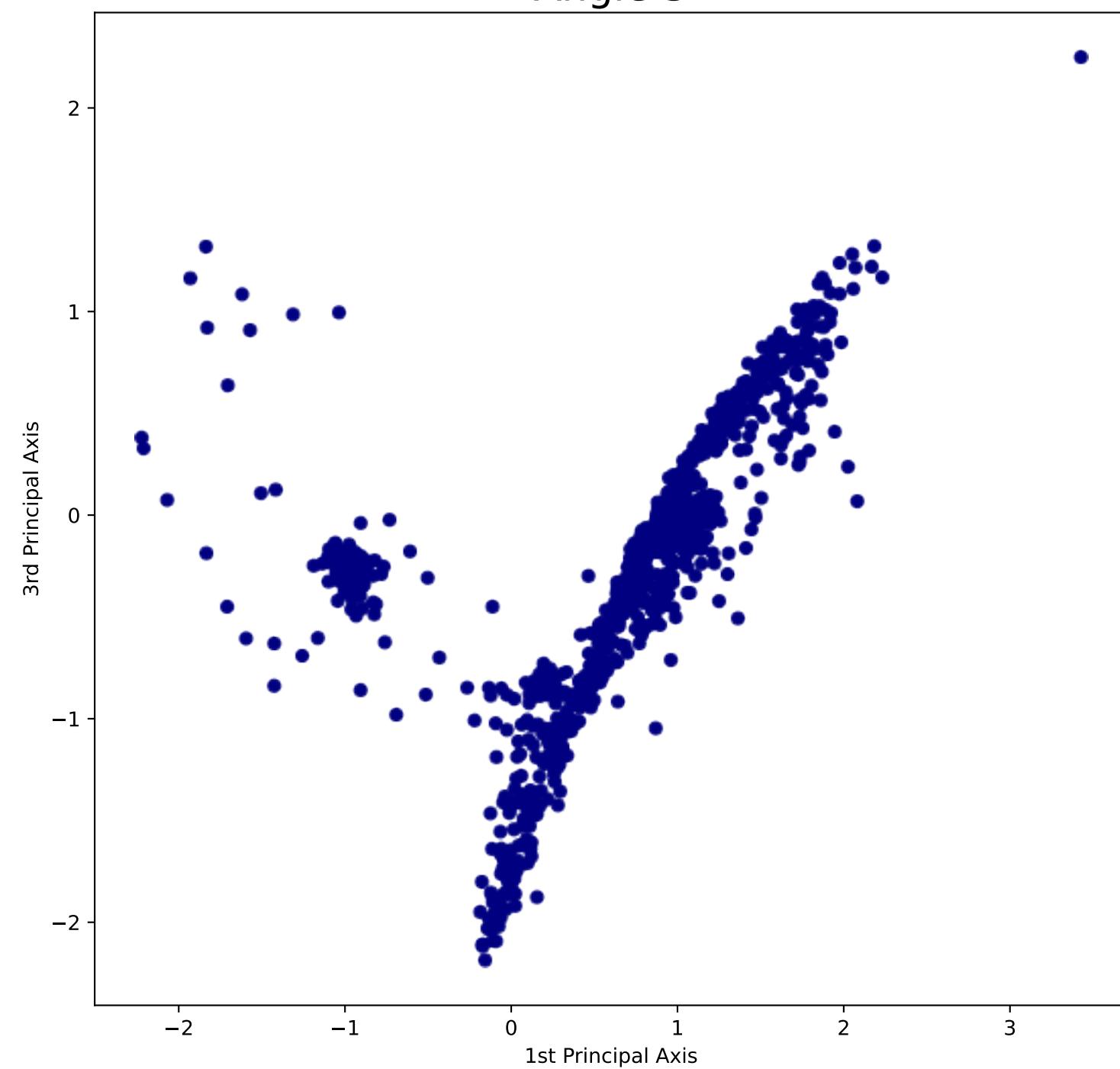
Angle 1



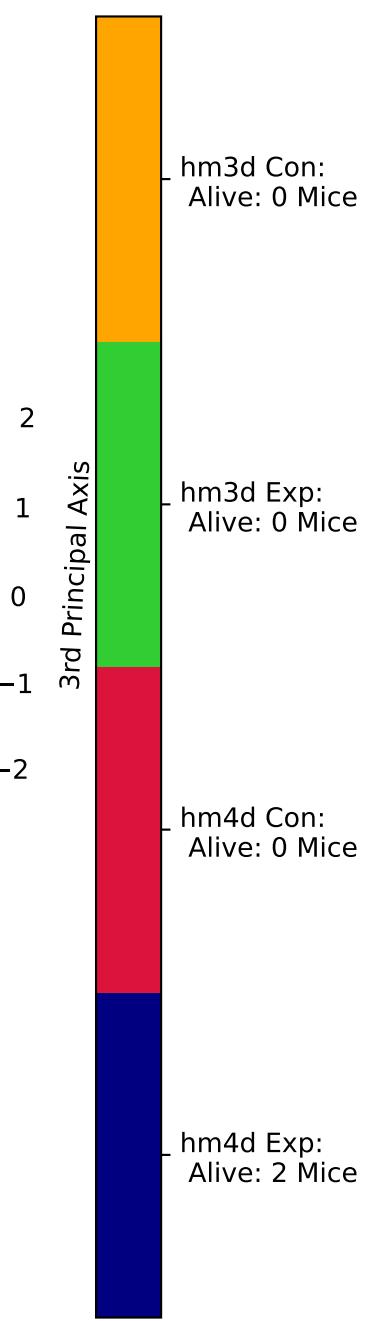
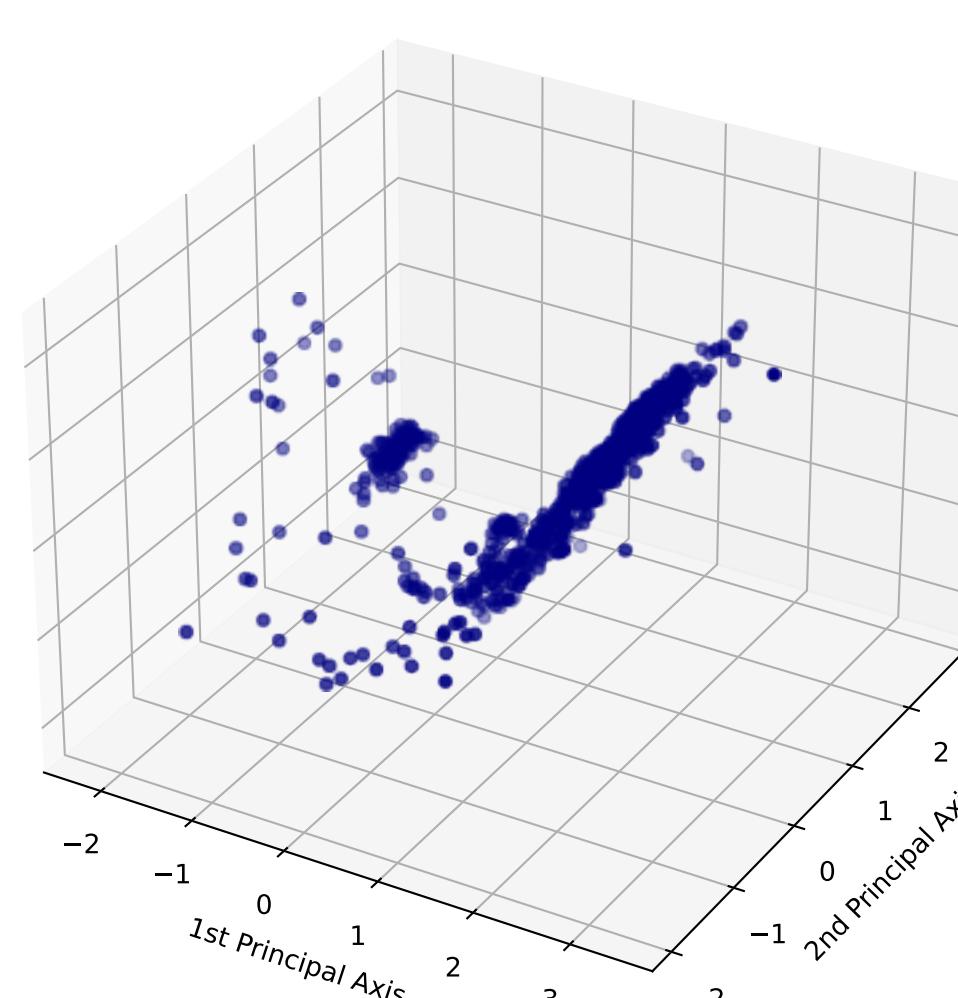
Angle 2



Angle 3

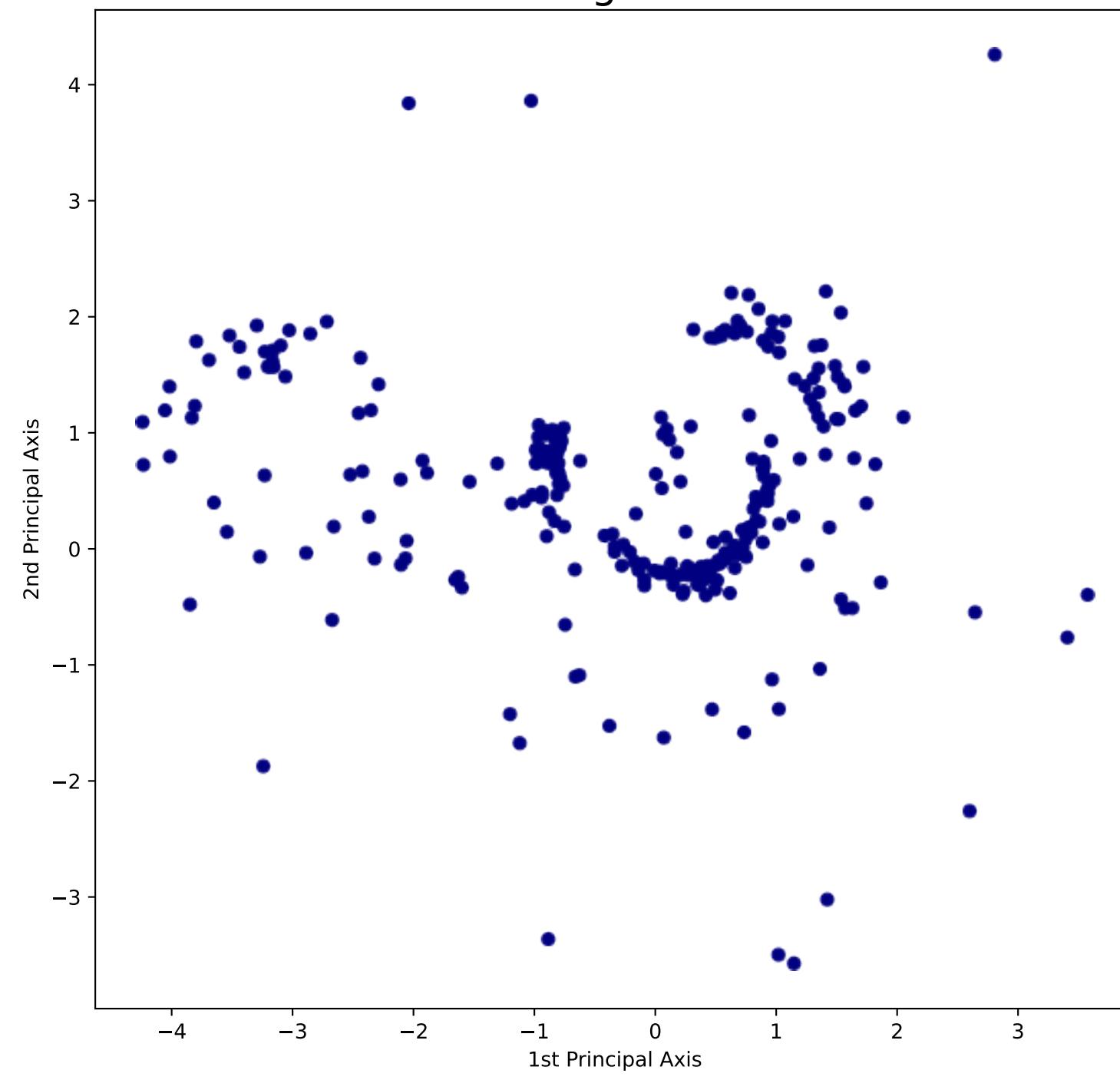


3D Projection

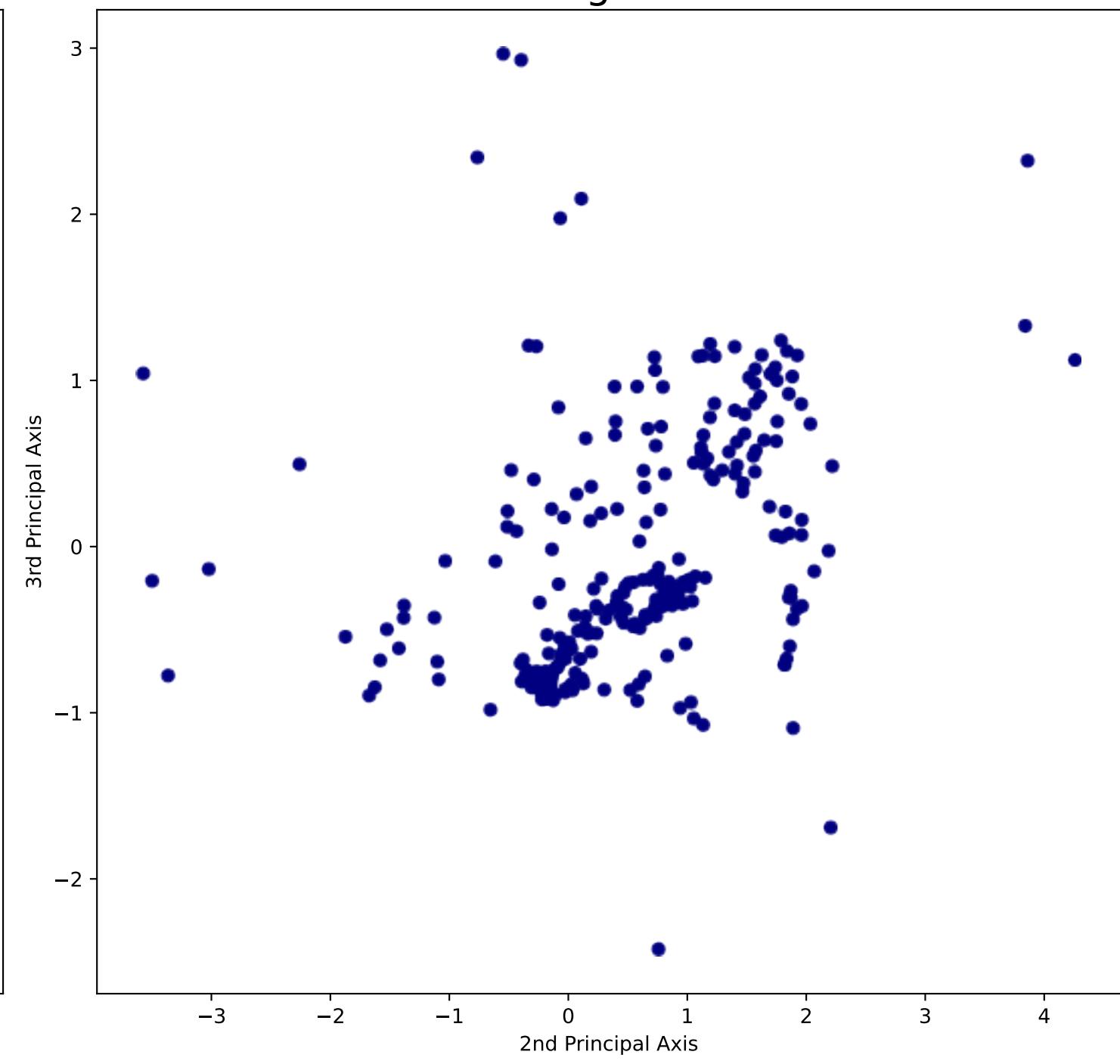


# Trial Number: 14, Phase: Trial Onset

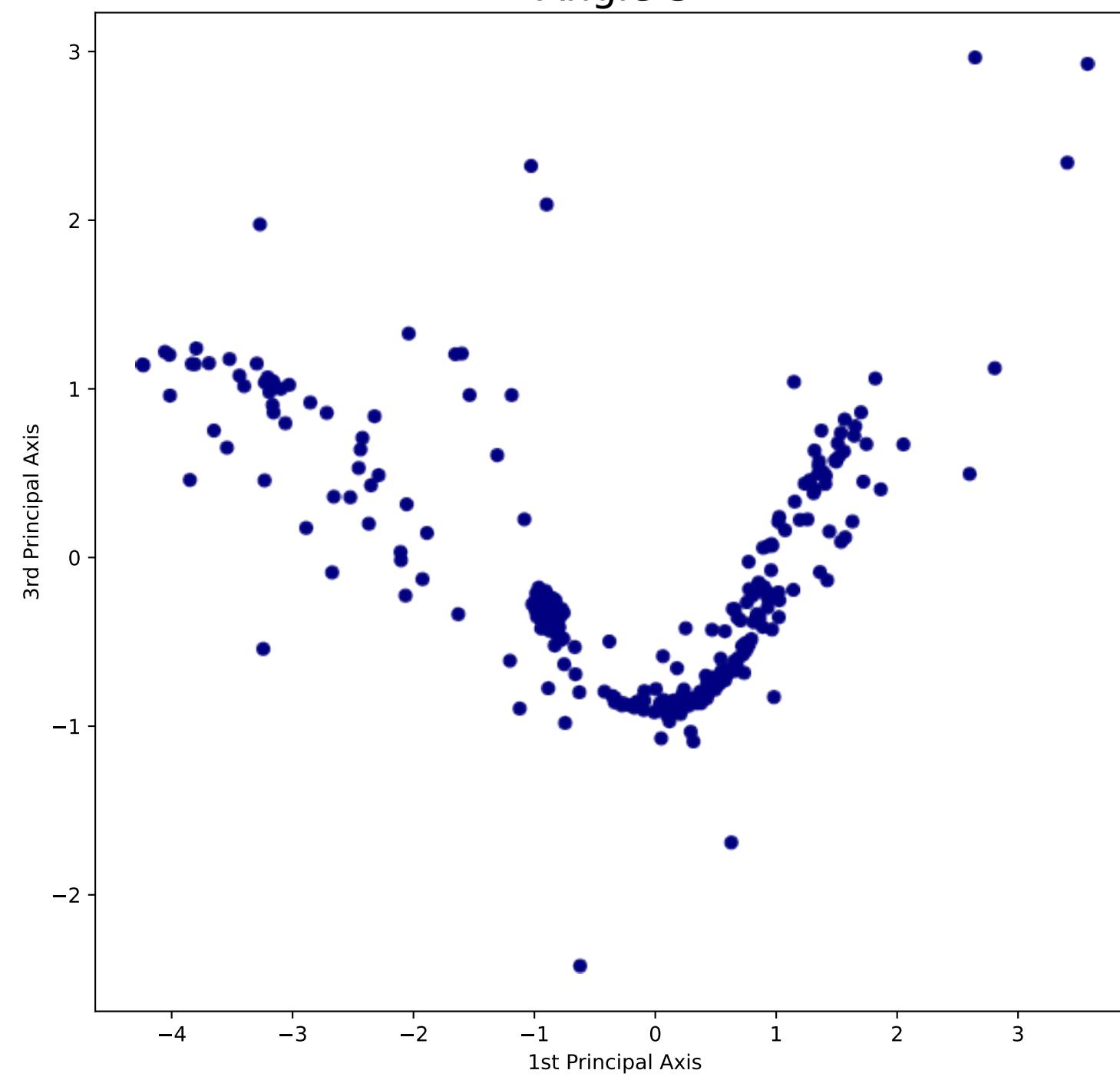
Angle 1



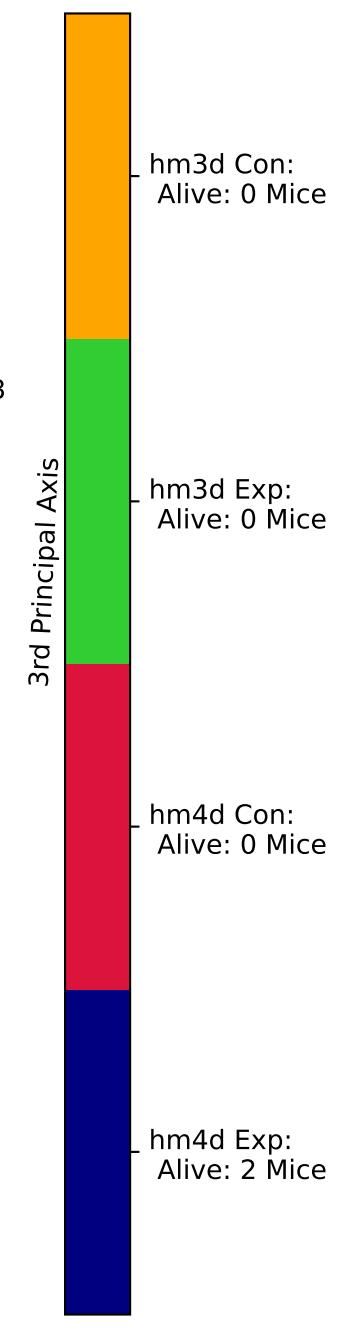
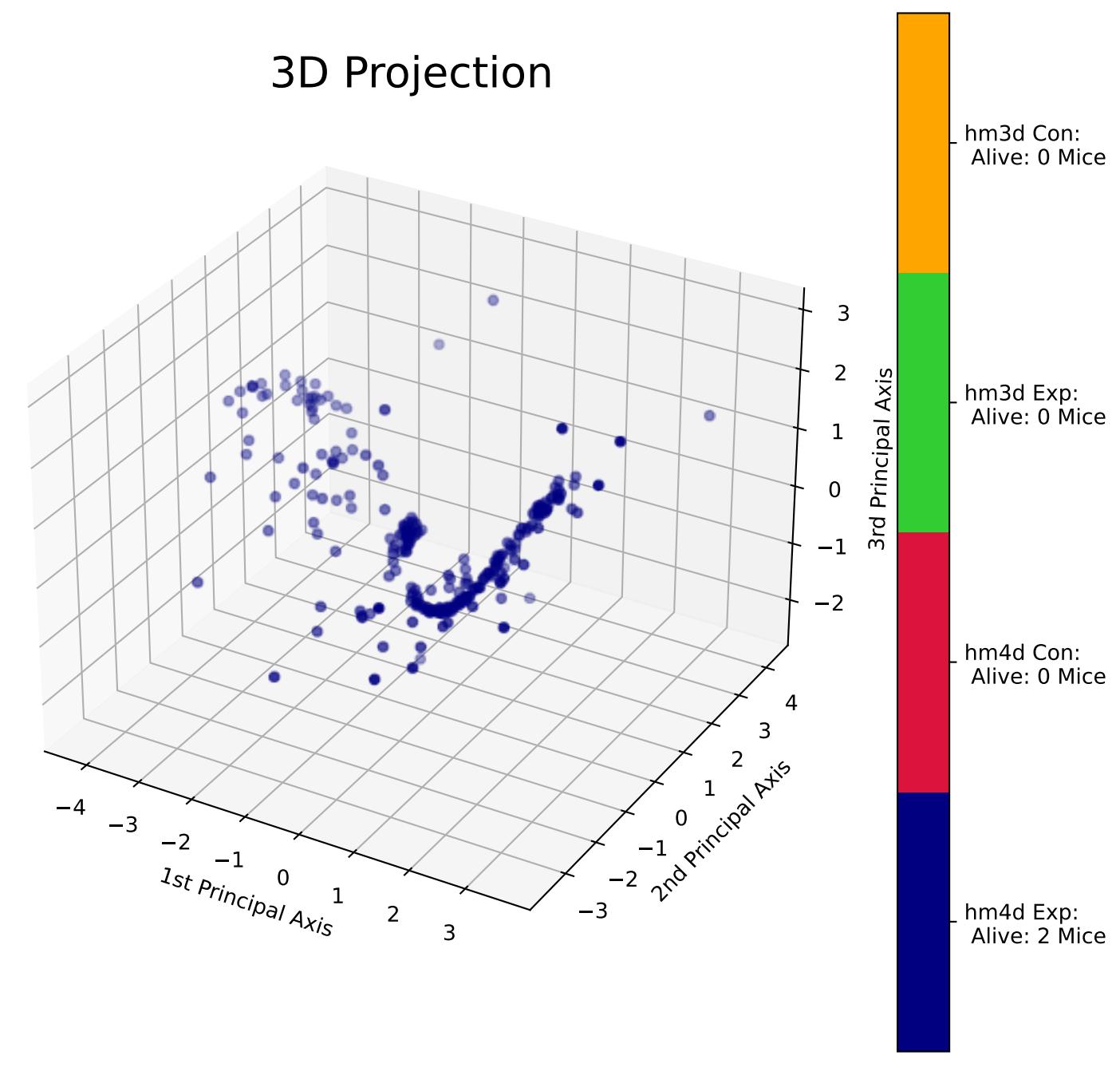
Angle 2



Angle 3



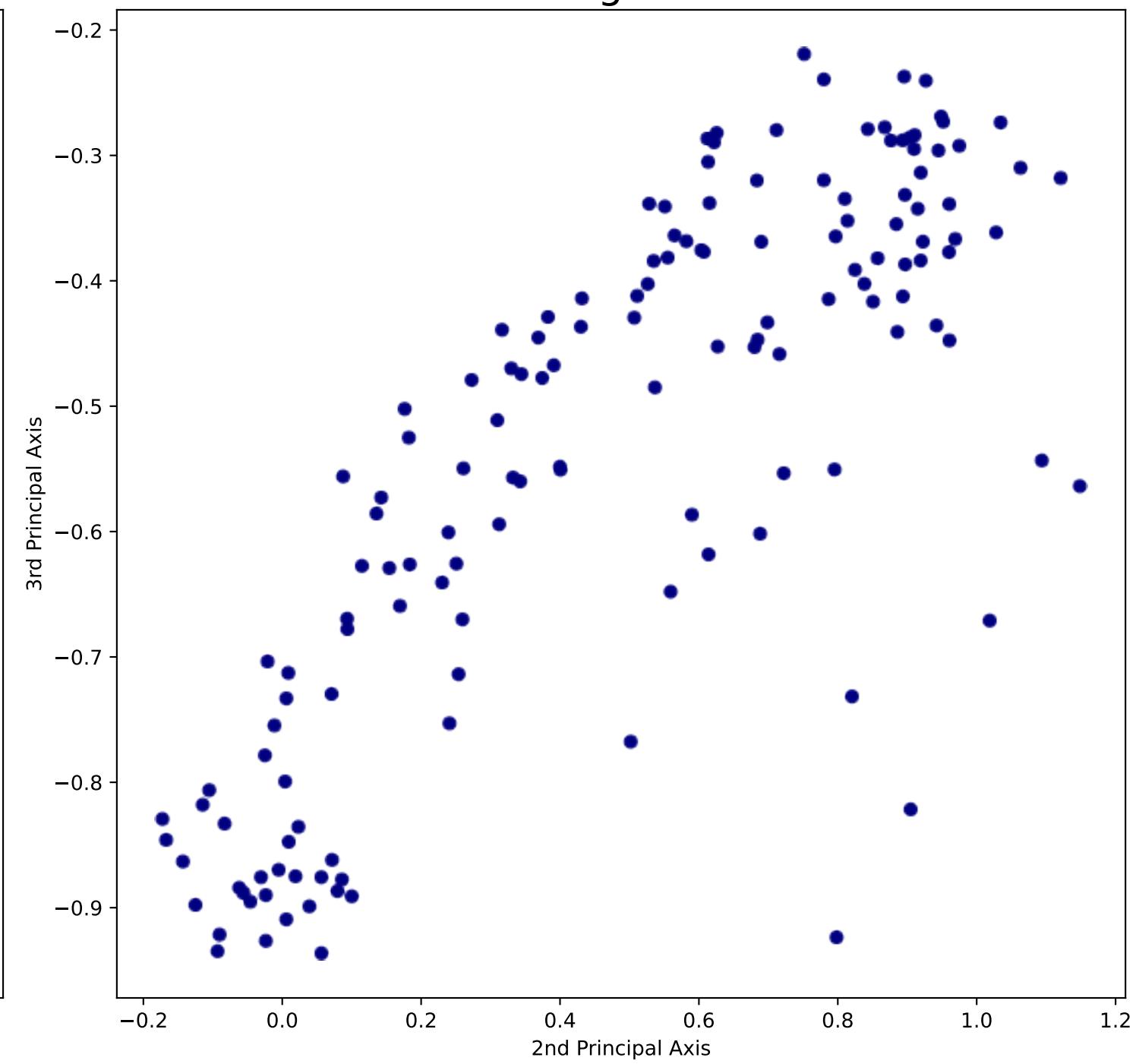
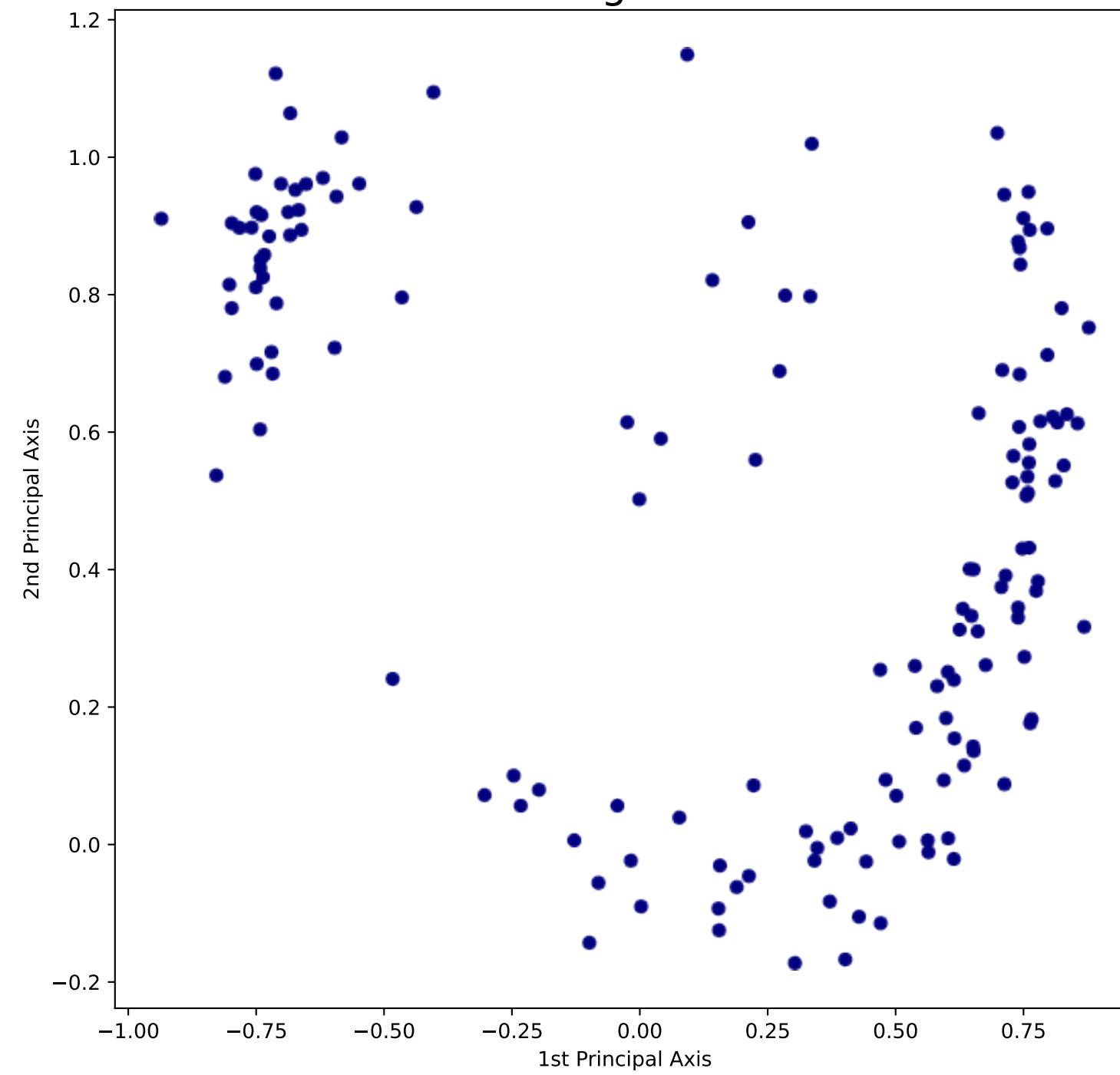
3D Projection



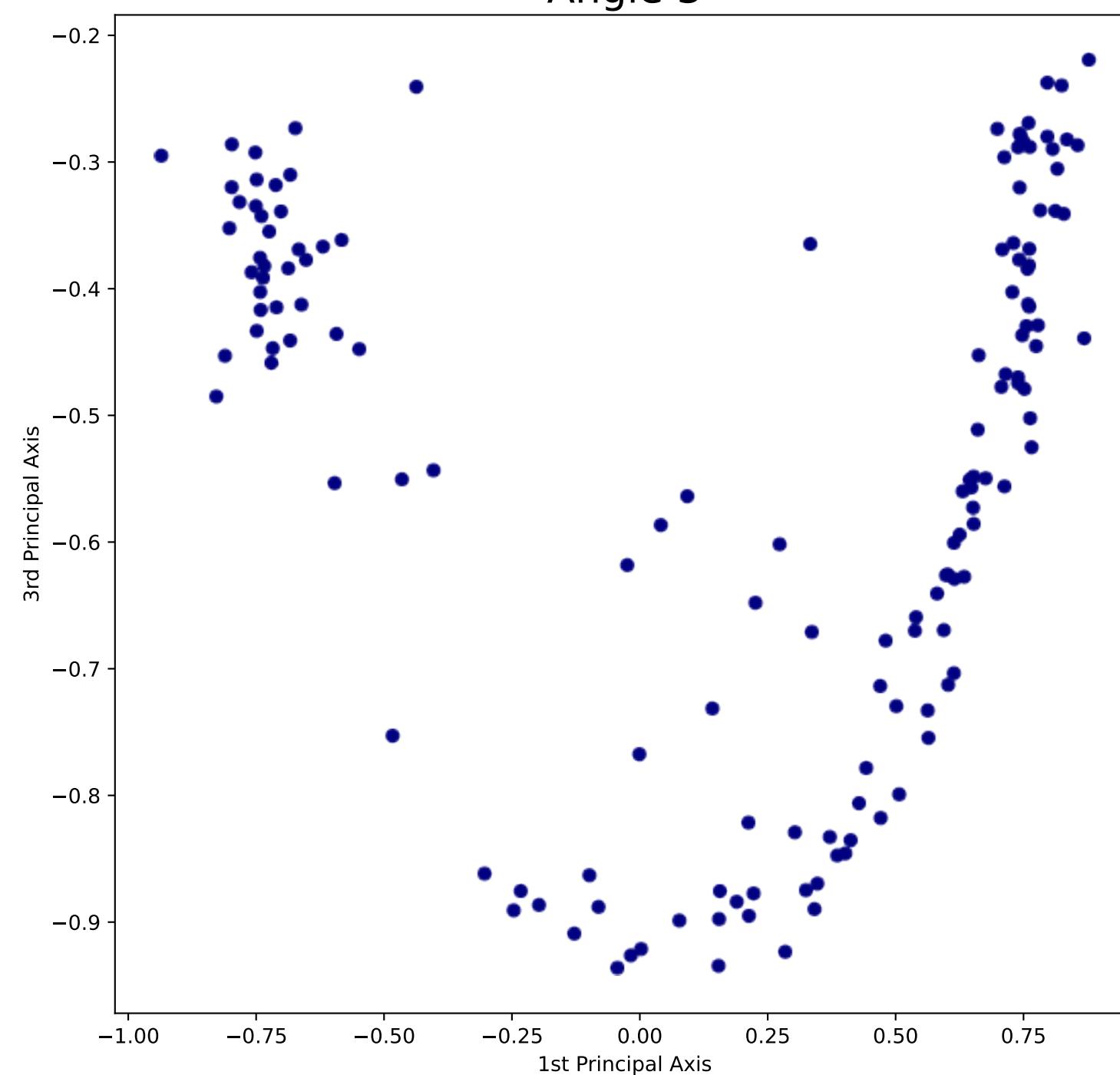
# Trial Number: 14, Phase: Apnea Starts

Angle 1

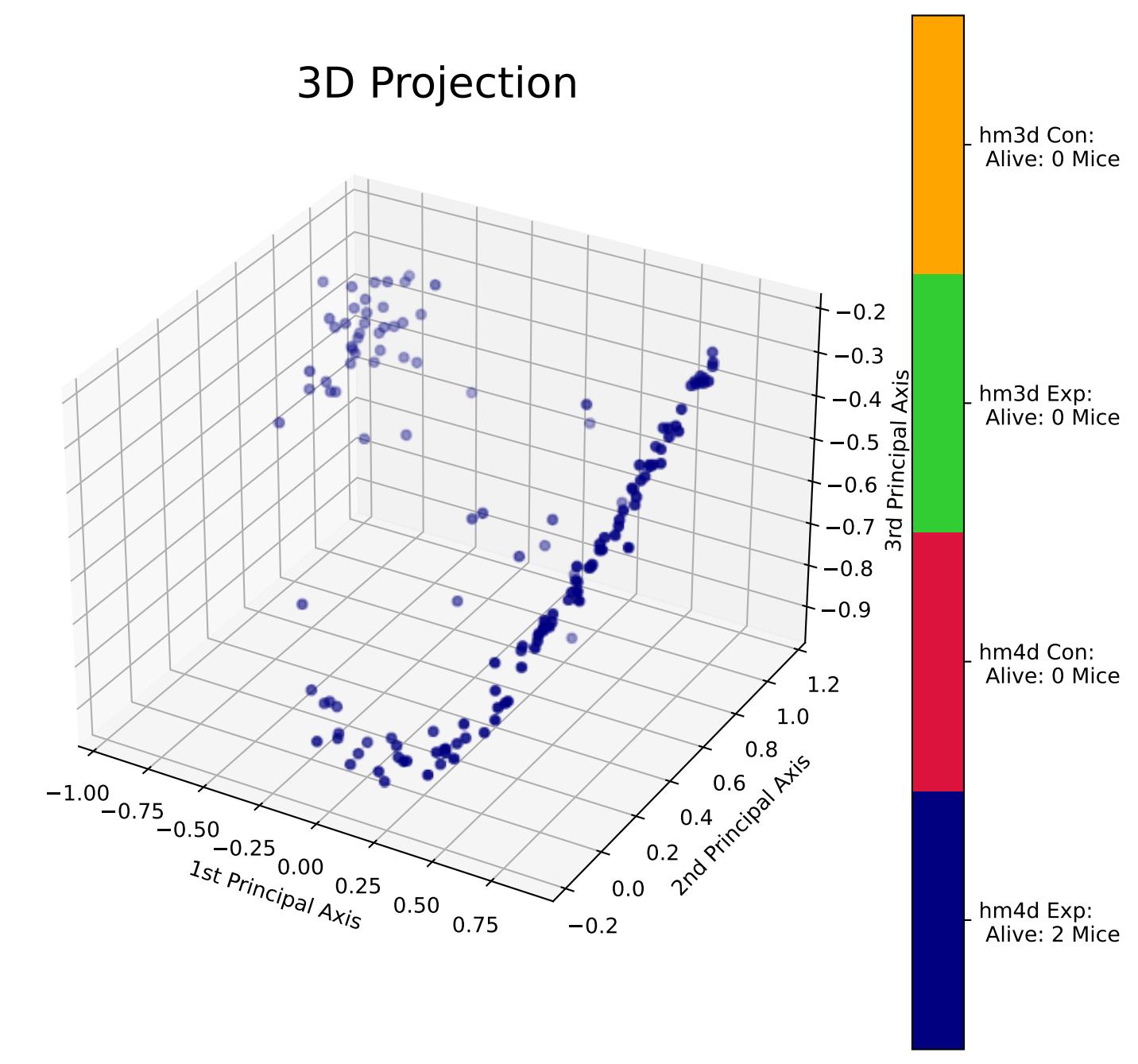
Angle 2



Angle 3



3D Projection



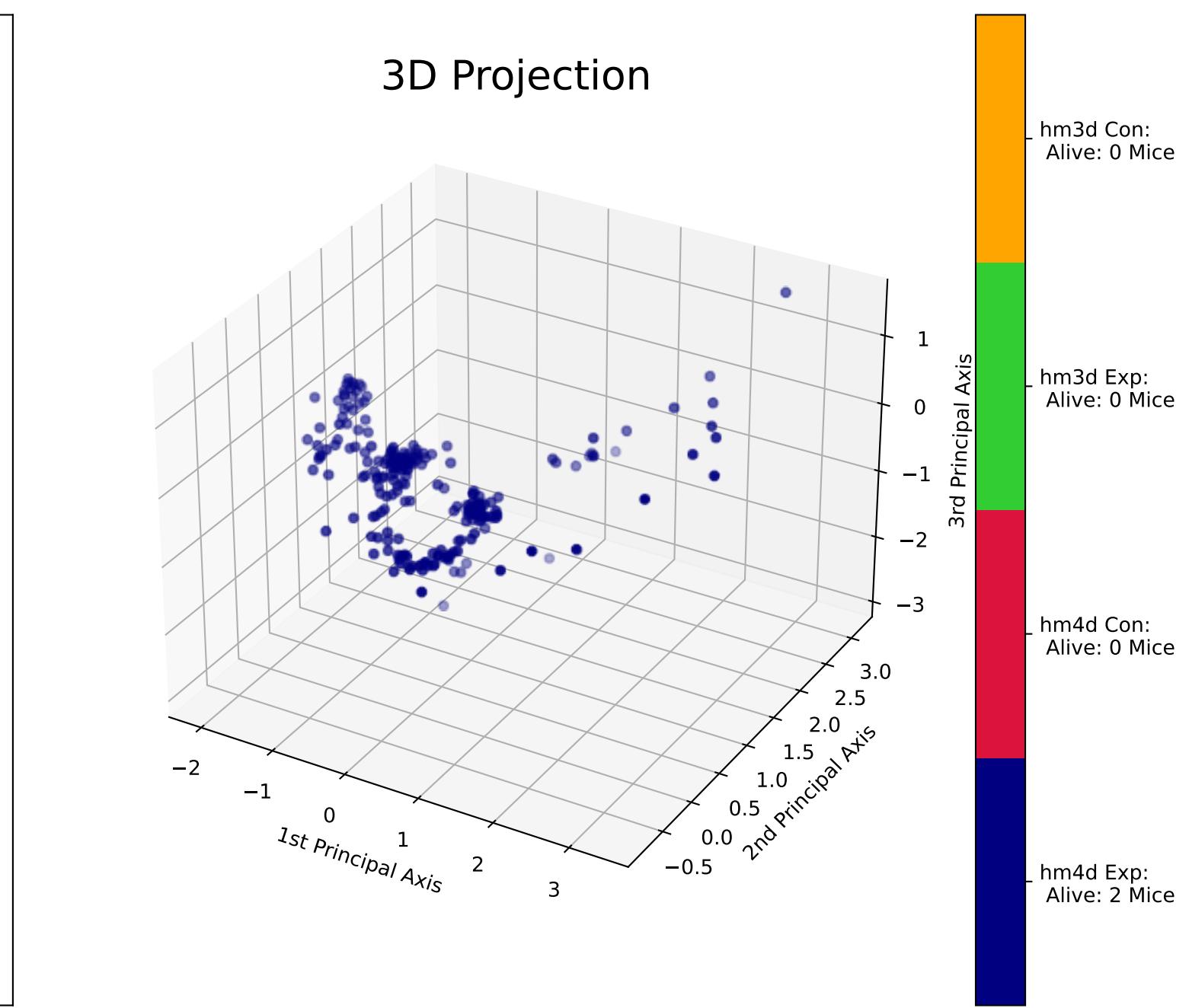
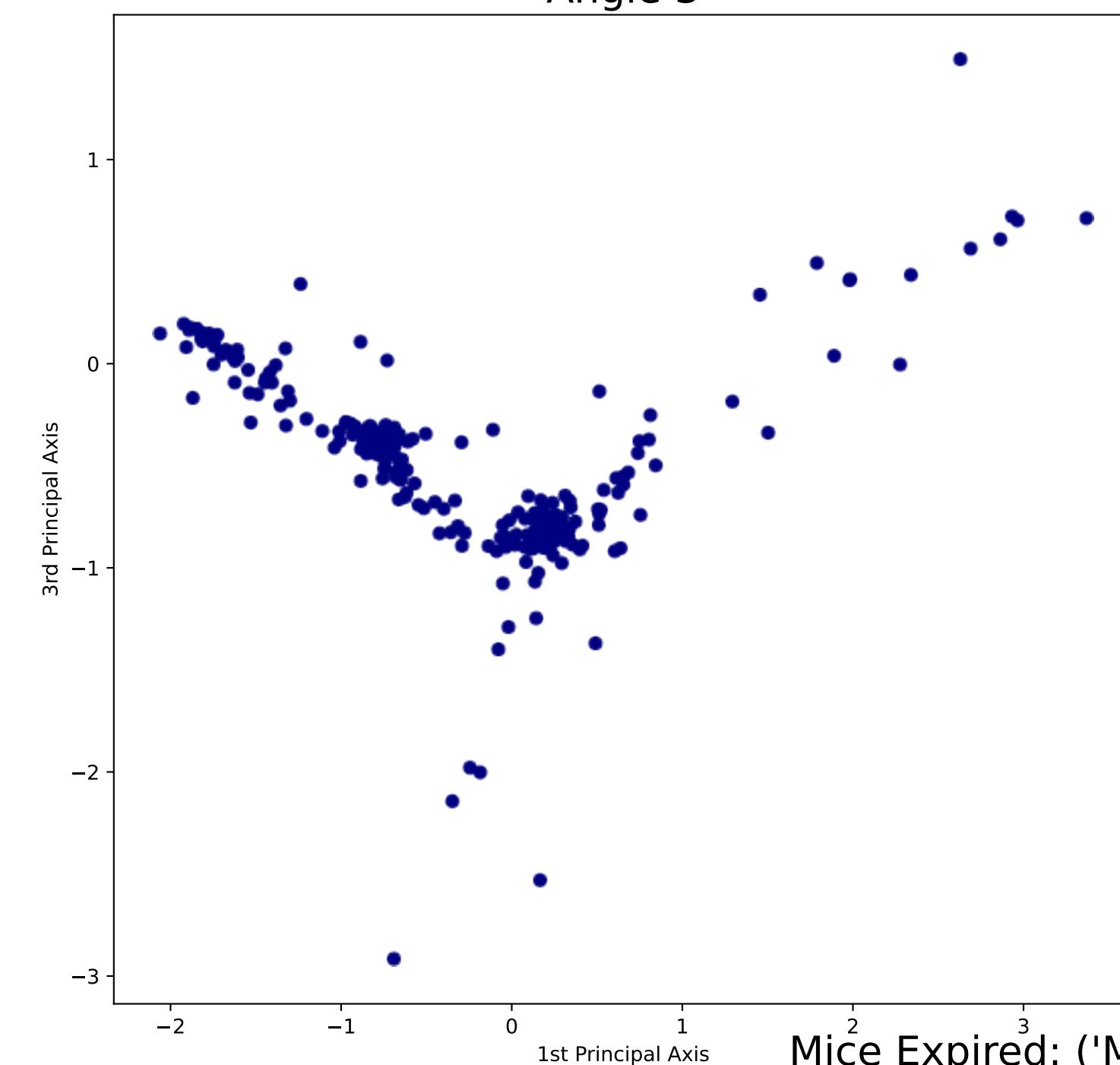
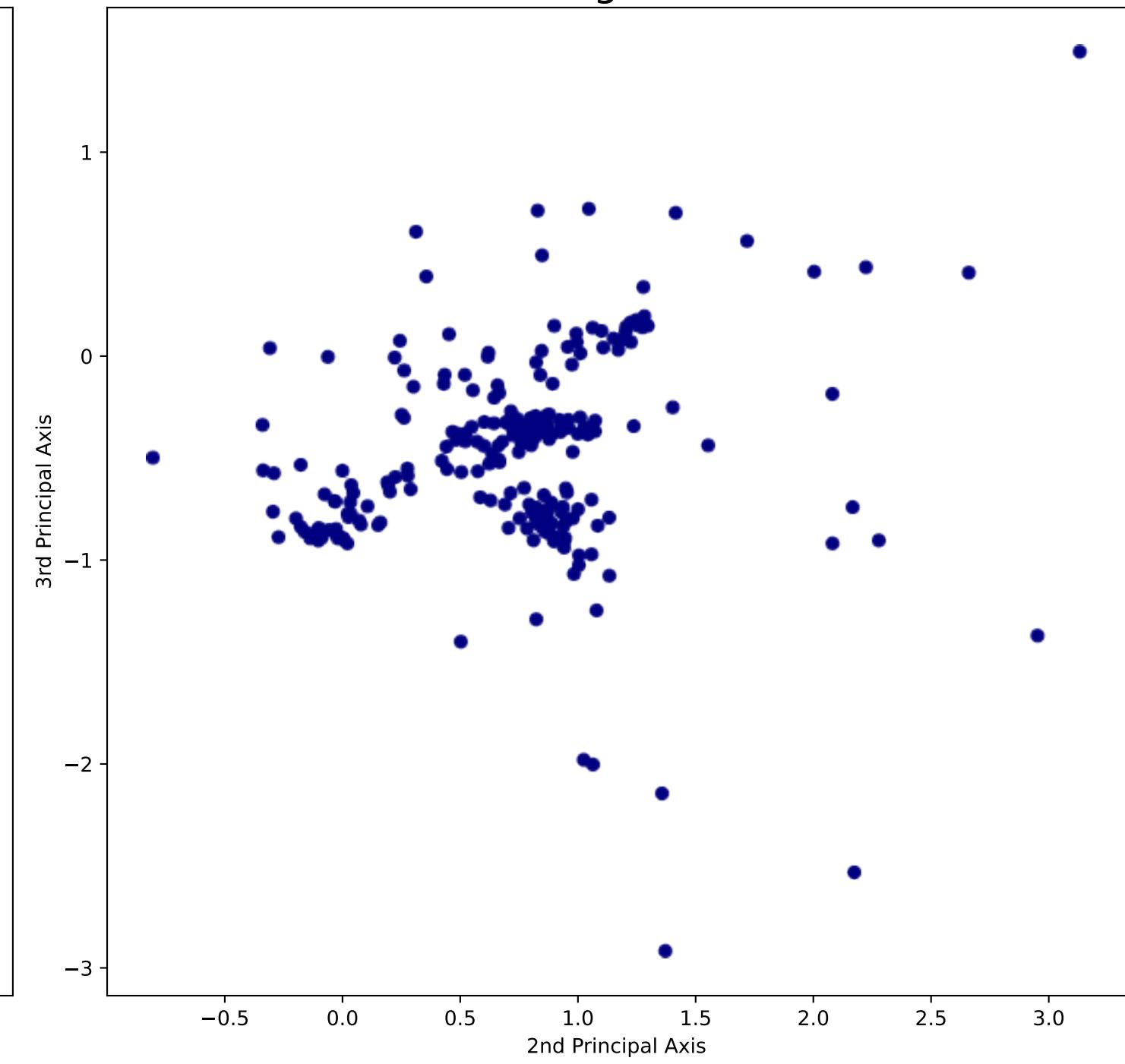
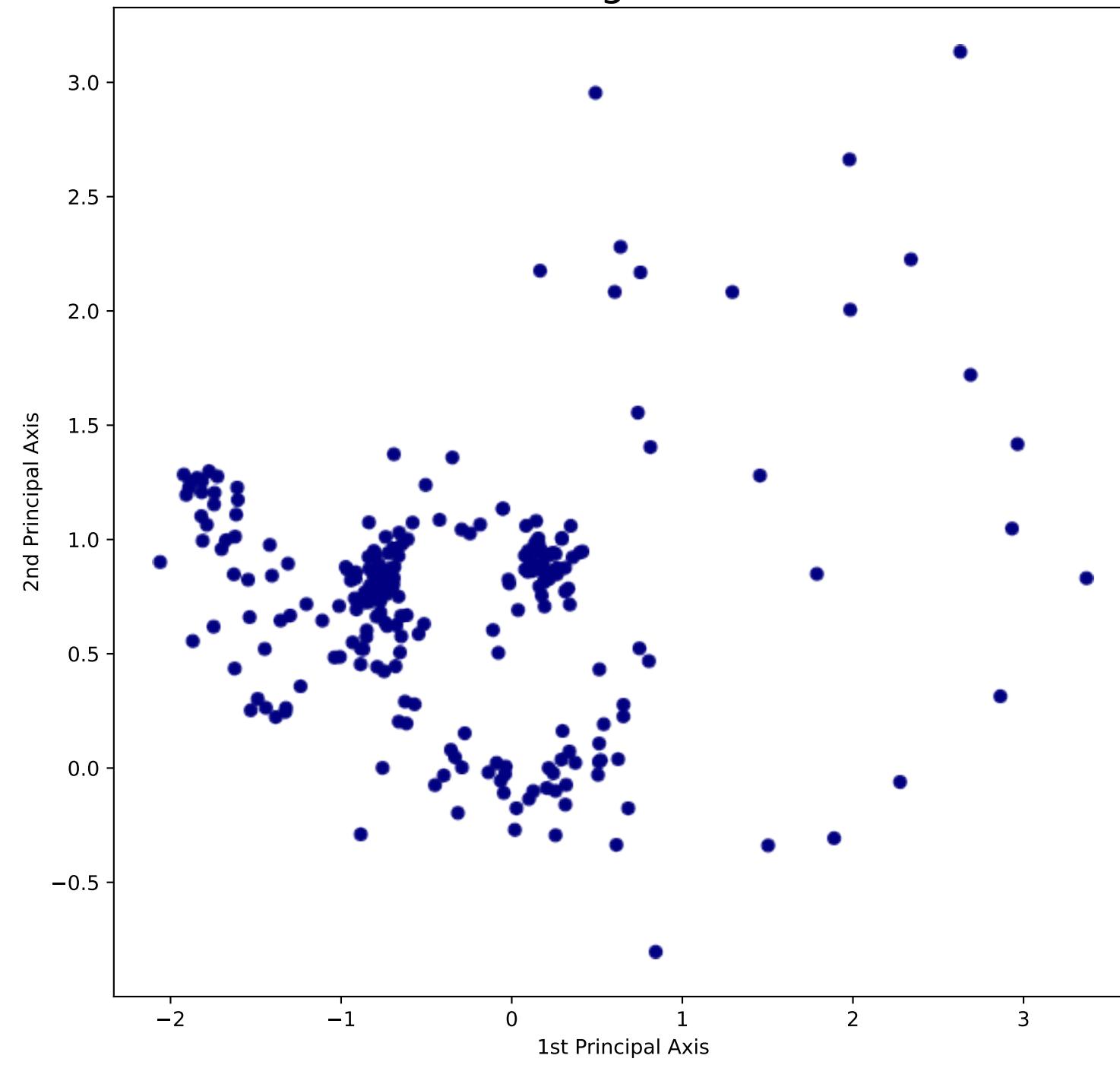
# Trial Number: 14, Phase: First Gasp

Angle 1

Angle 2

Angle 3

3D Projection

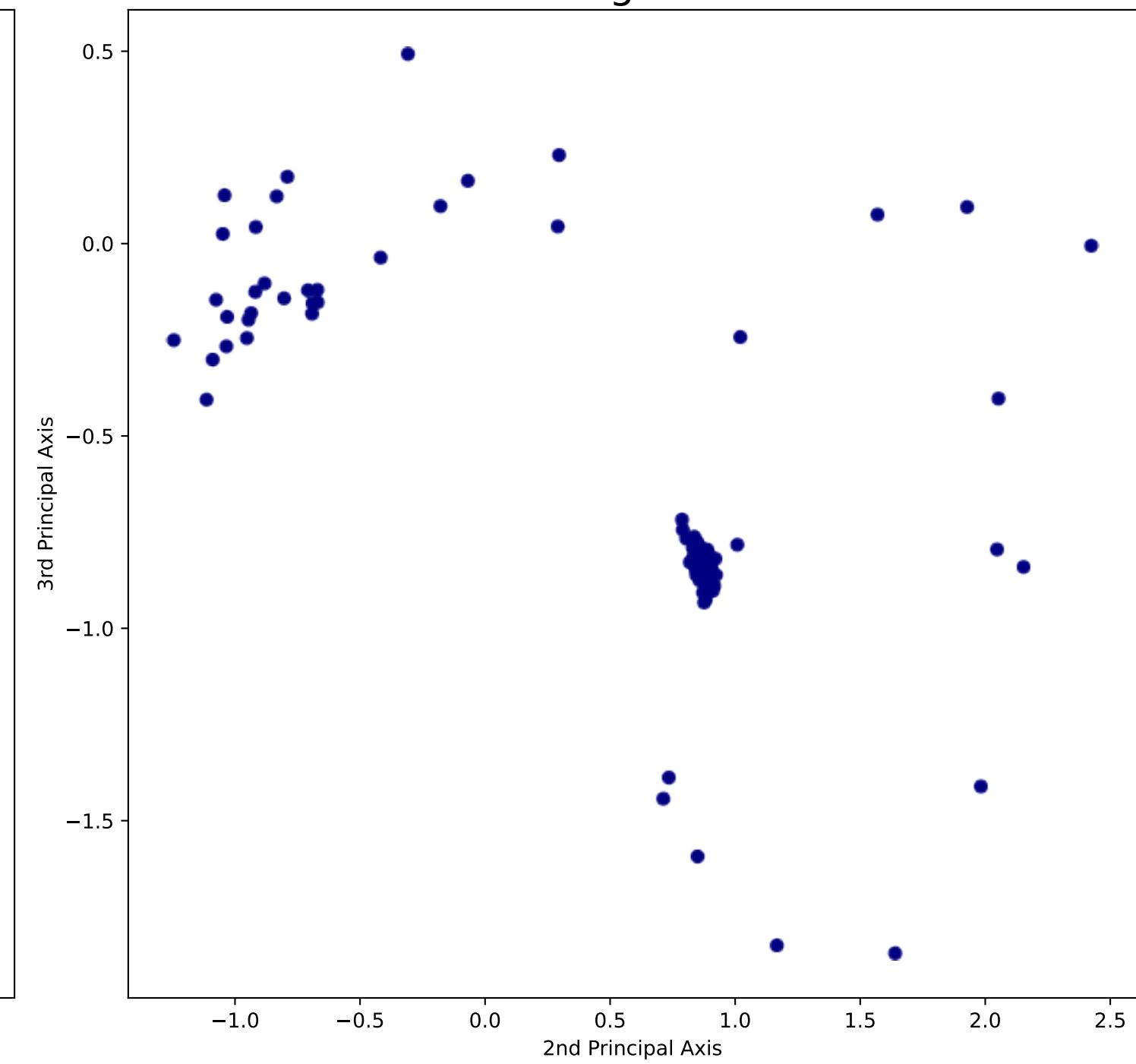
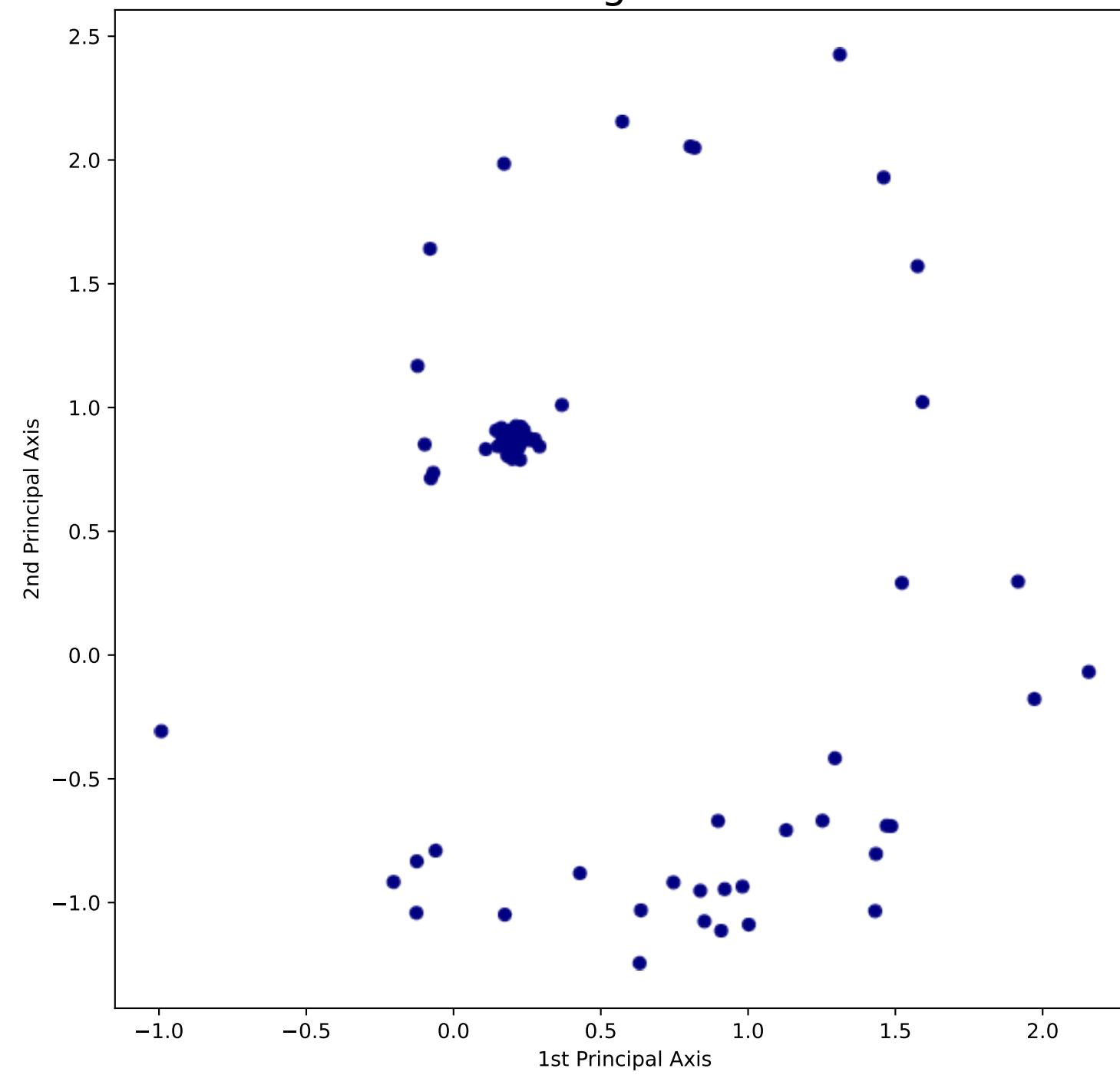


Mice Expired: ('M21267', 'hm4d Exp')

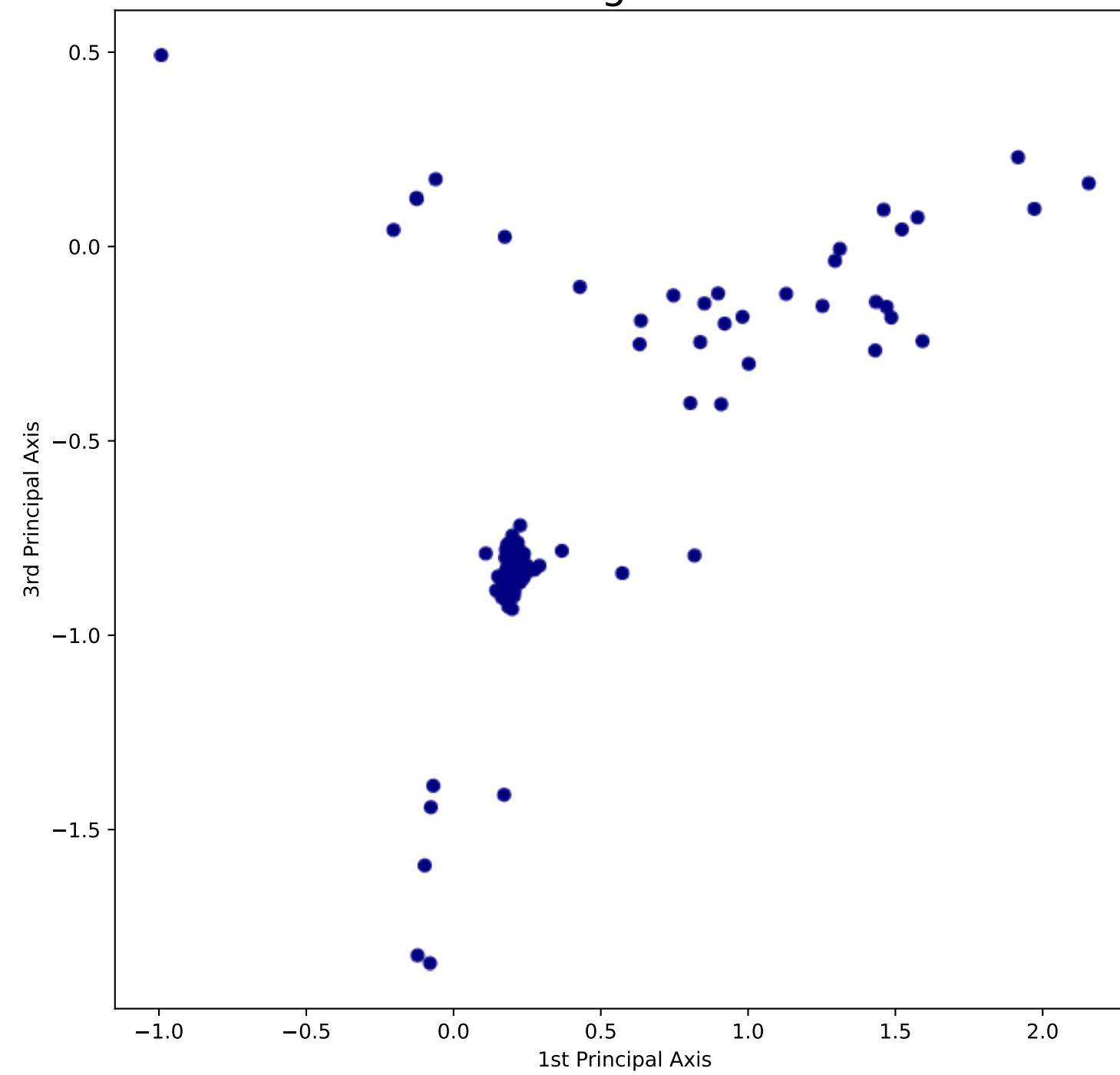
# Trial Number: 14, Phase: Eupnea Recovery

Angle 1

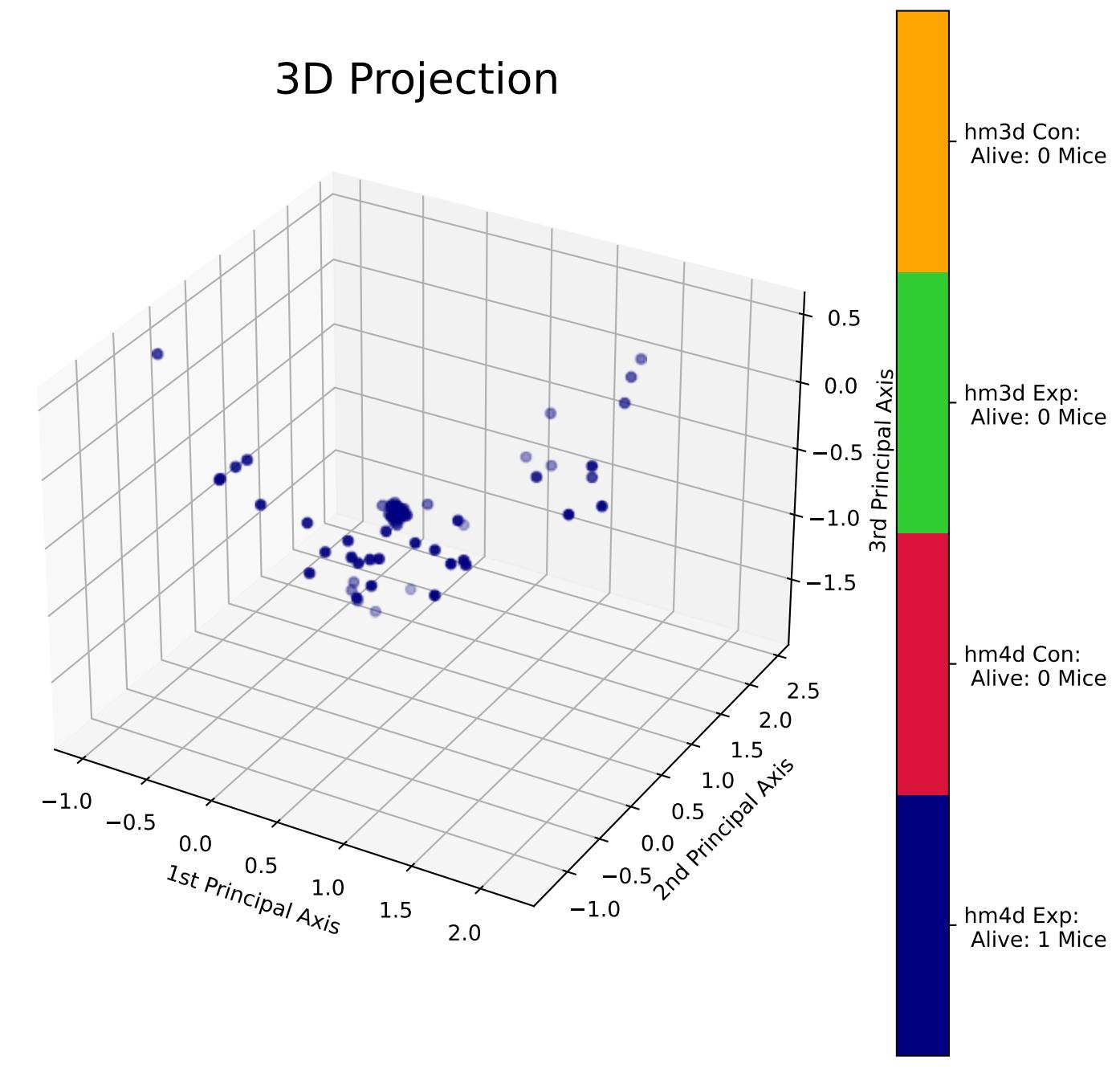
Angle 2



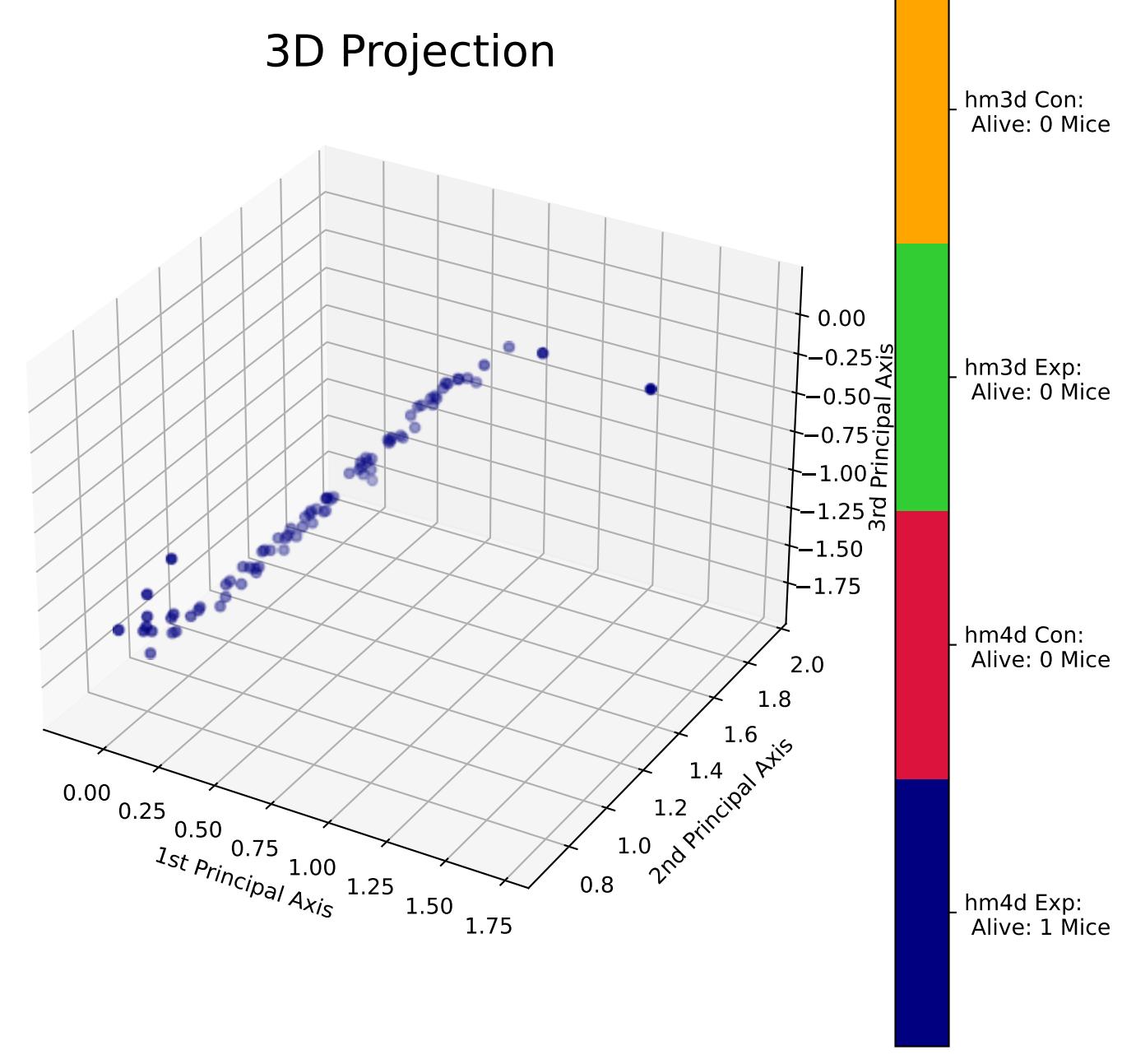
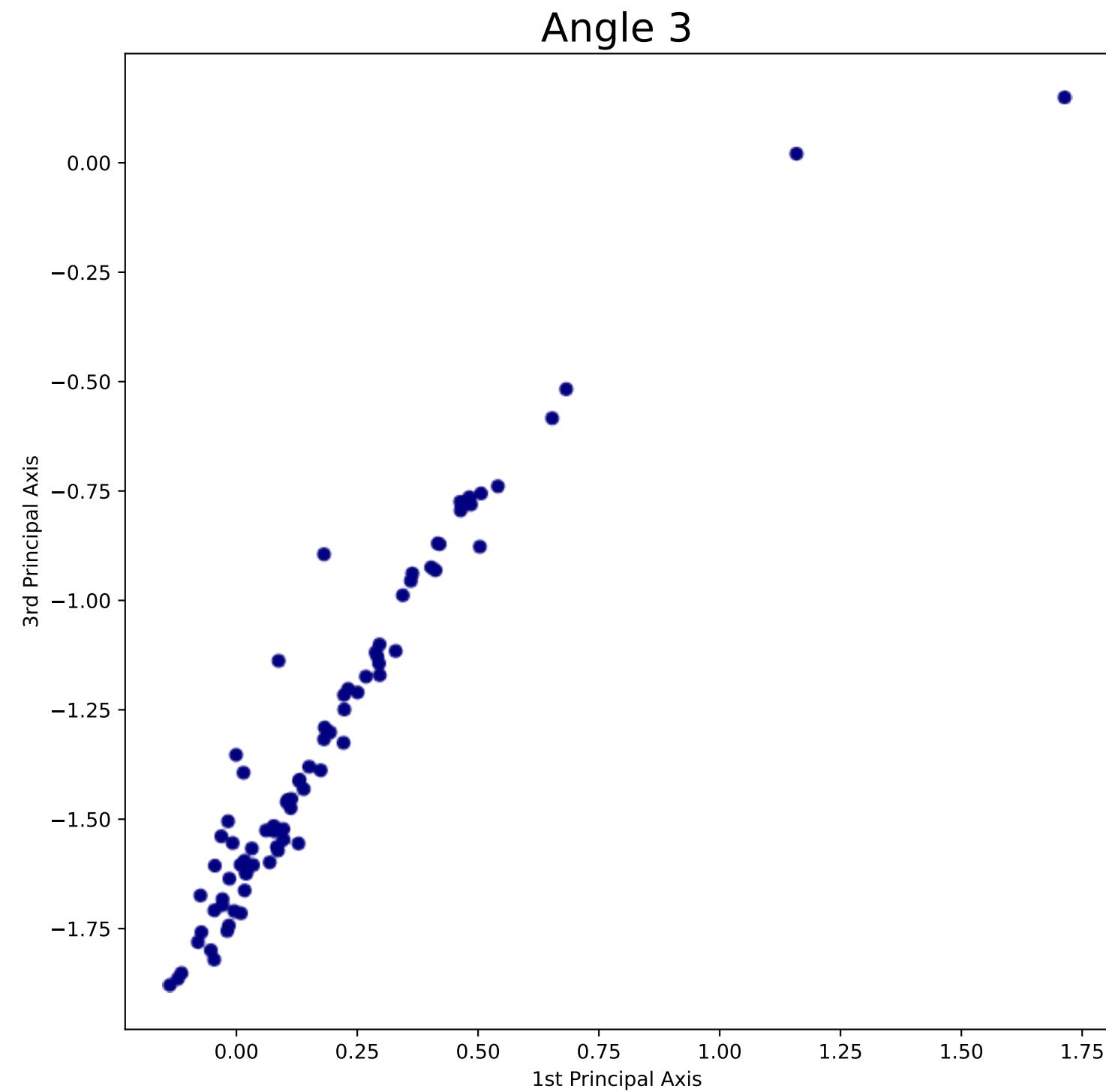
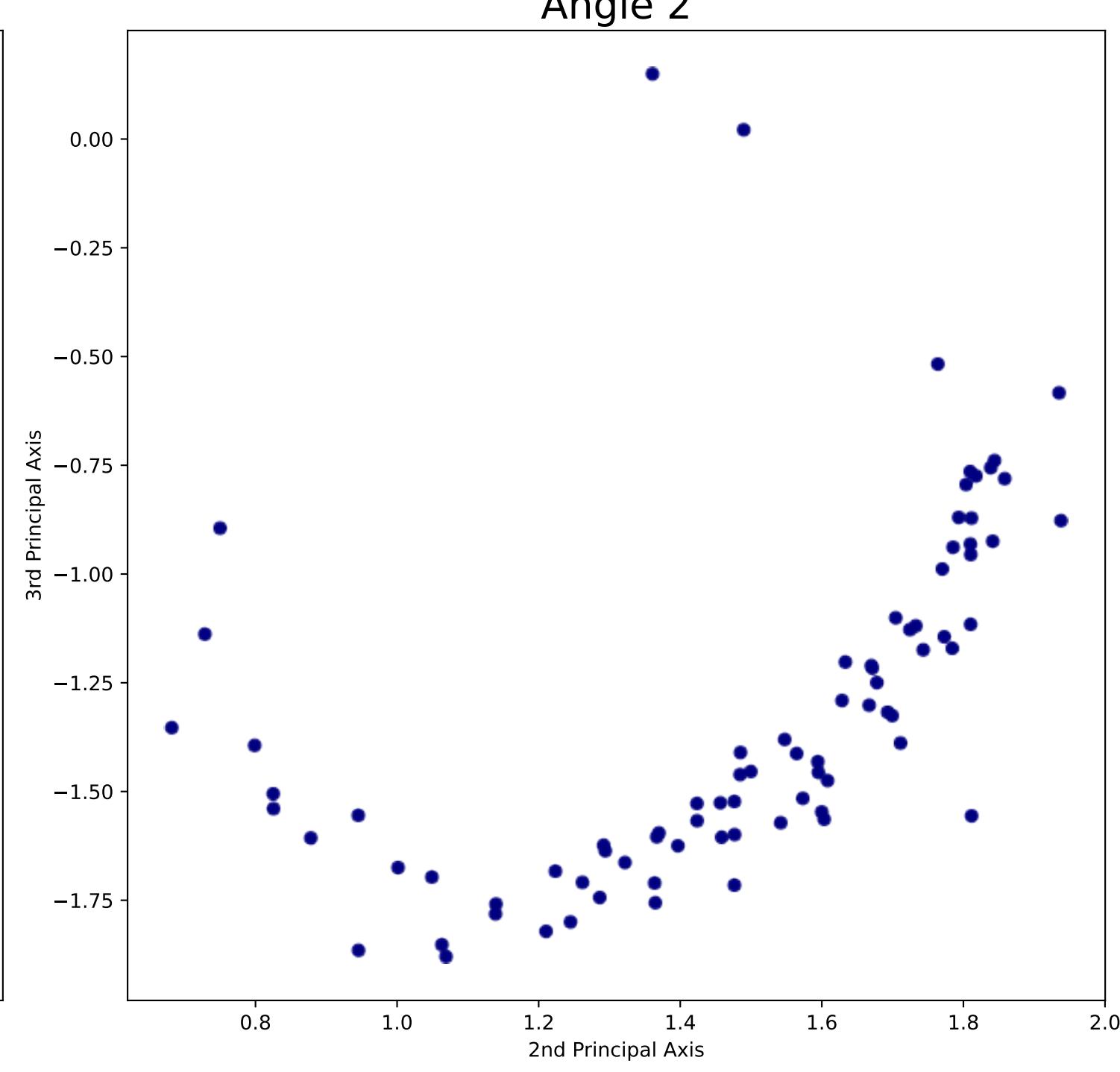
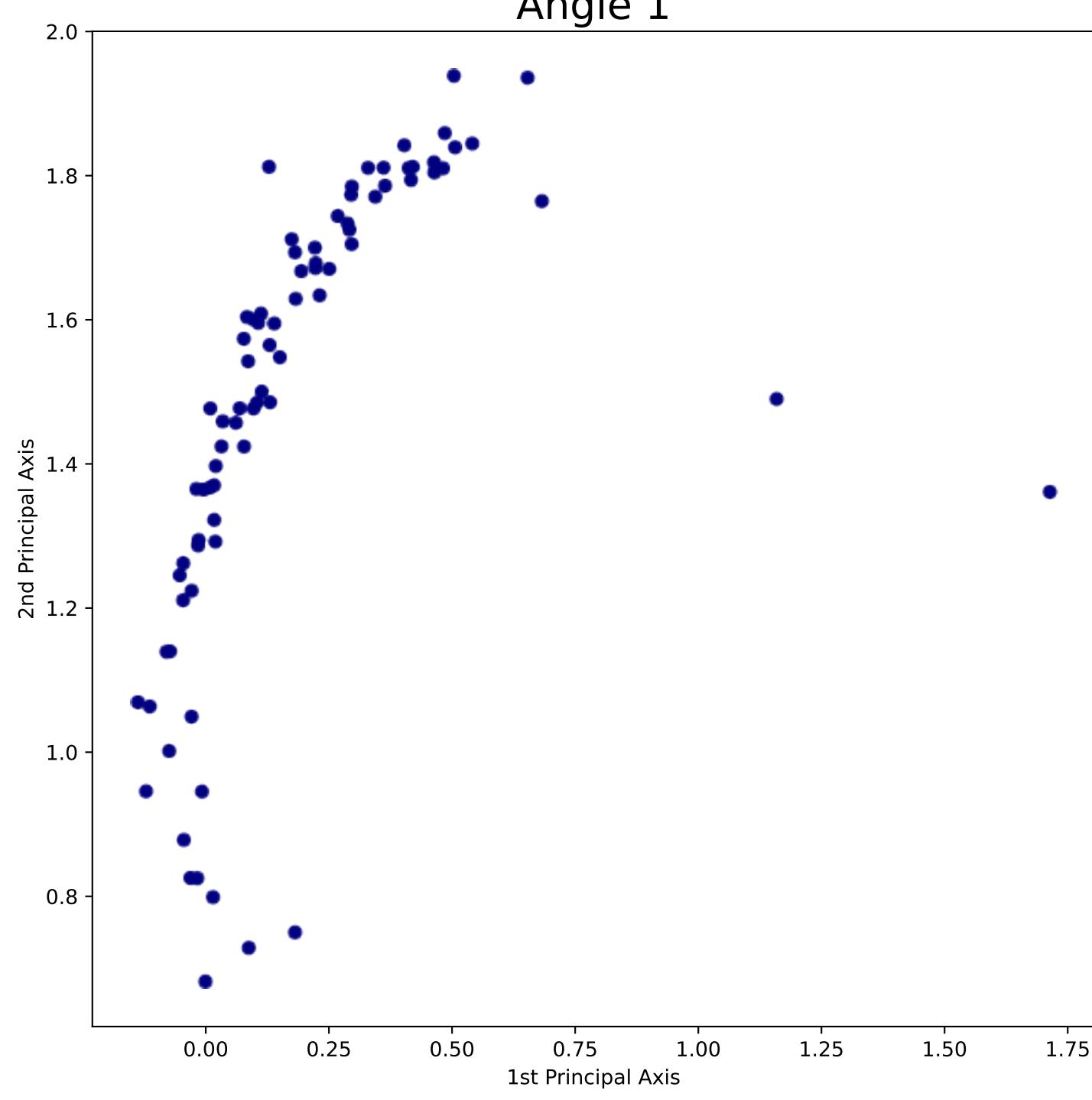
Angle 3



3D Projection



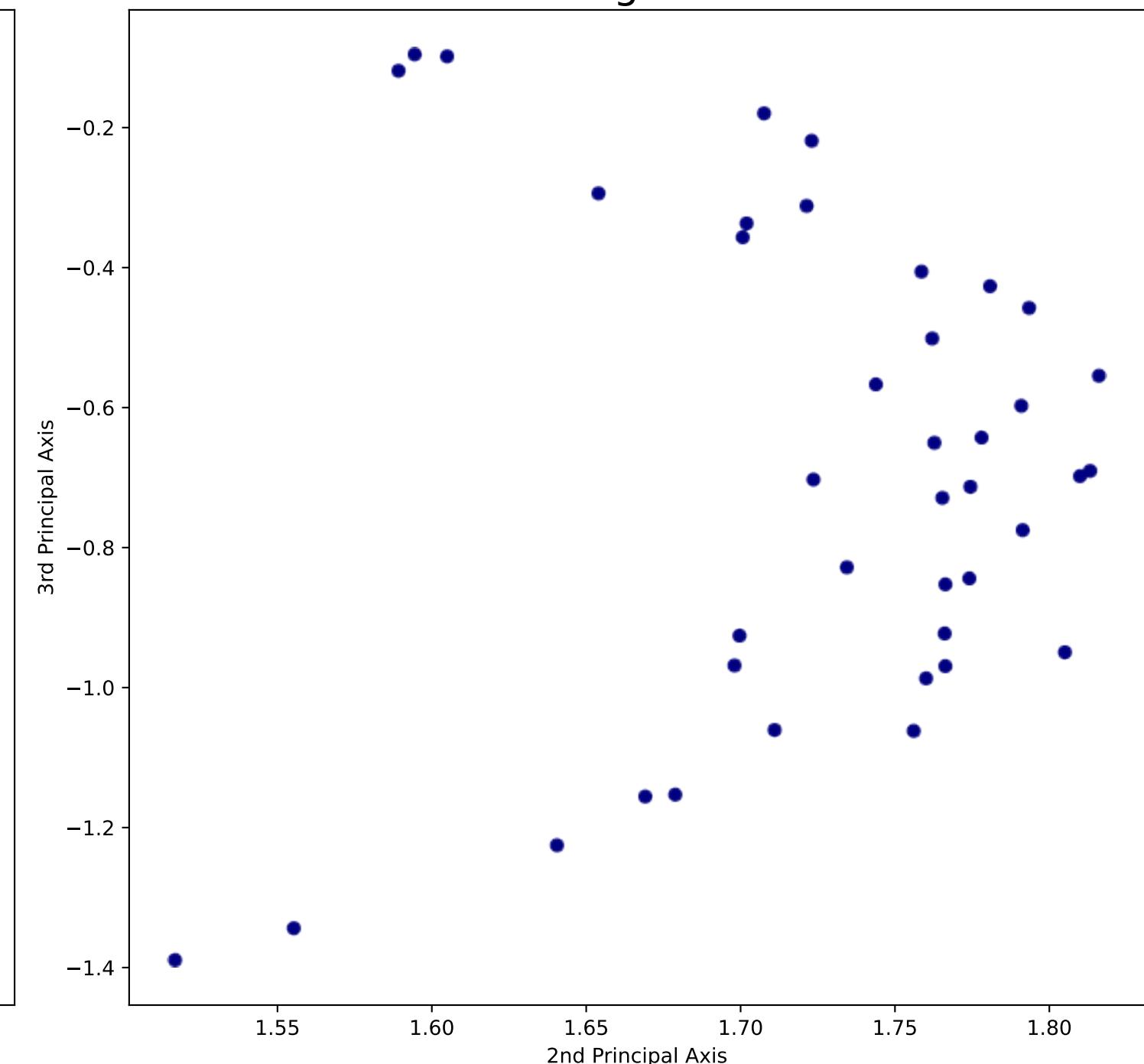
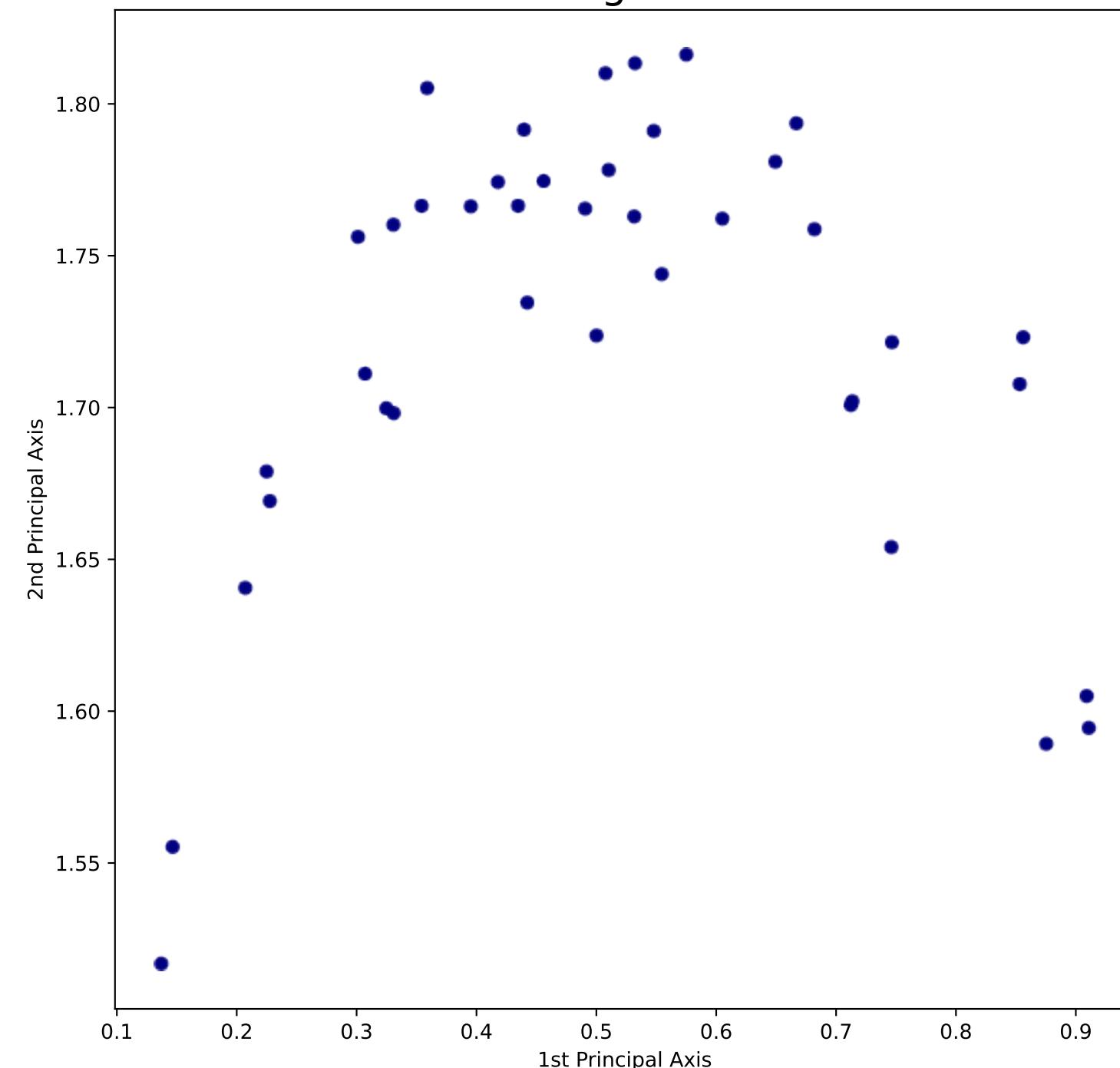
# Trial Number: 15, Phase: Trial Onset



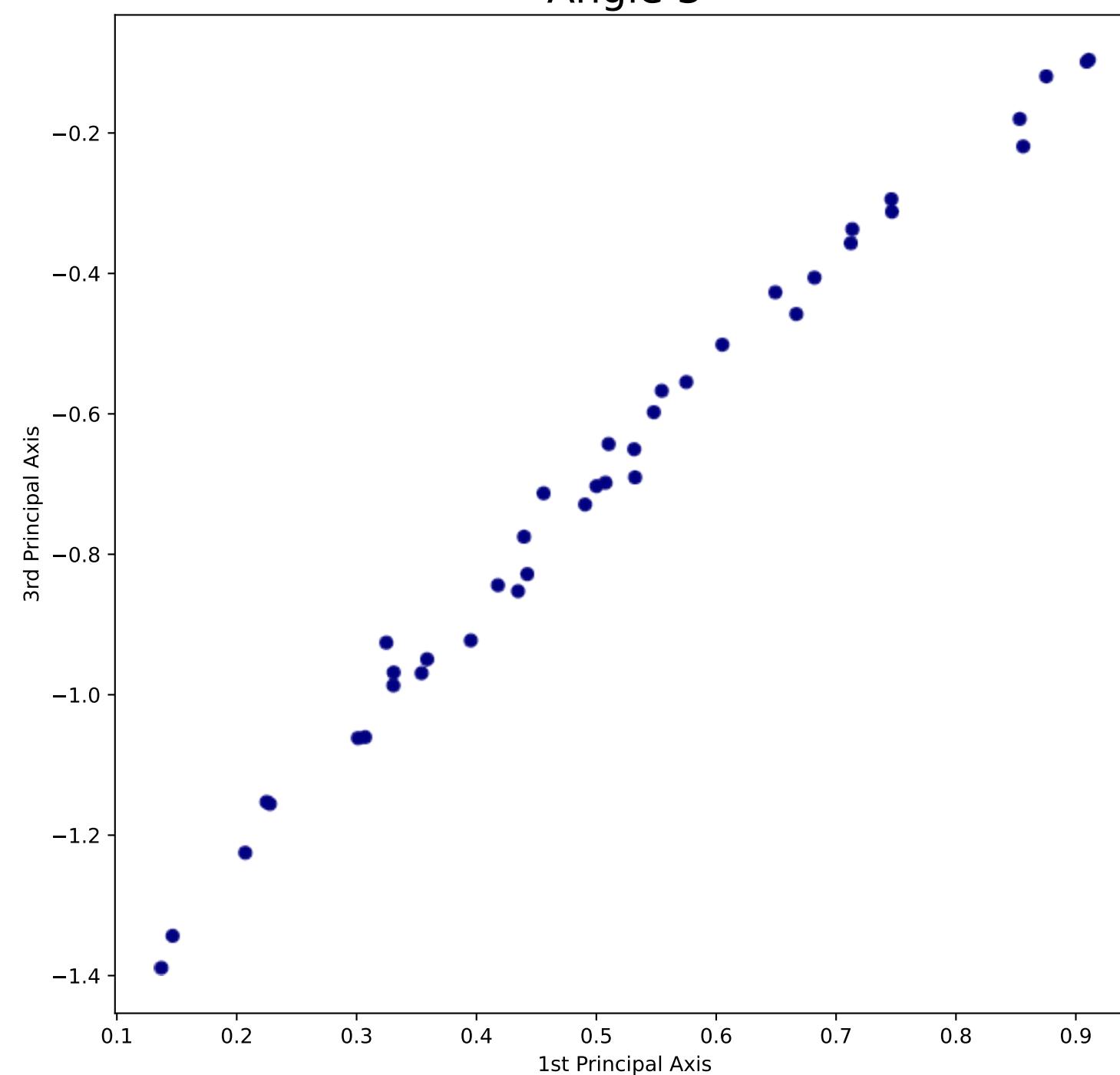
# Trial Number: 15, Phase: Apnea Starts

Angle 1

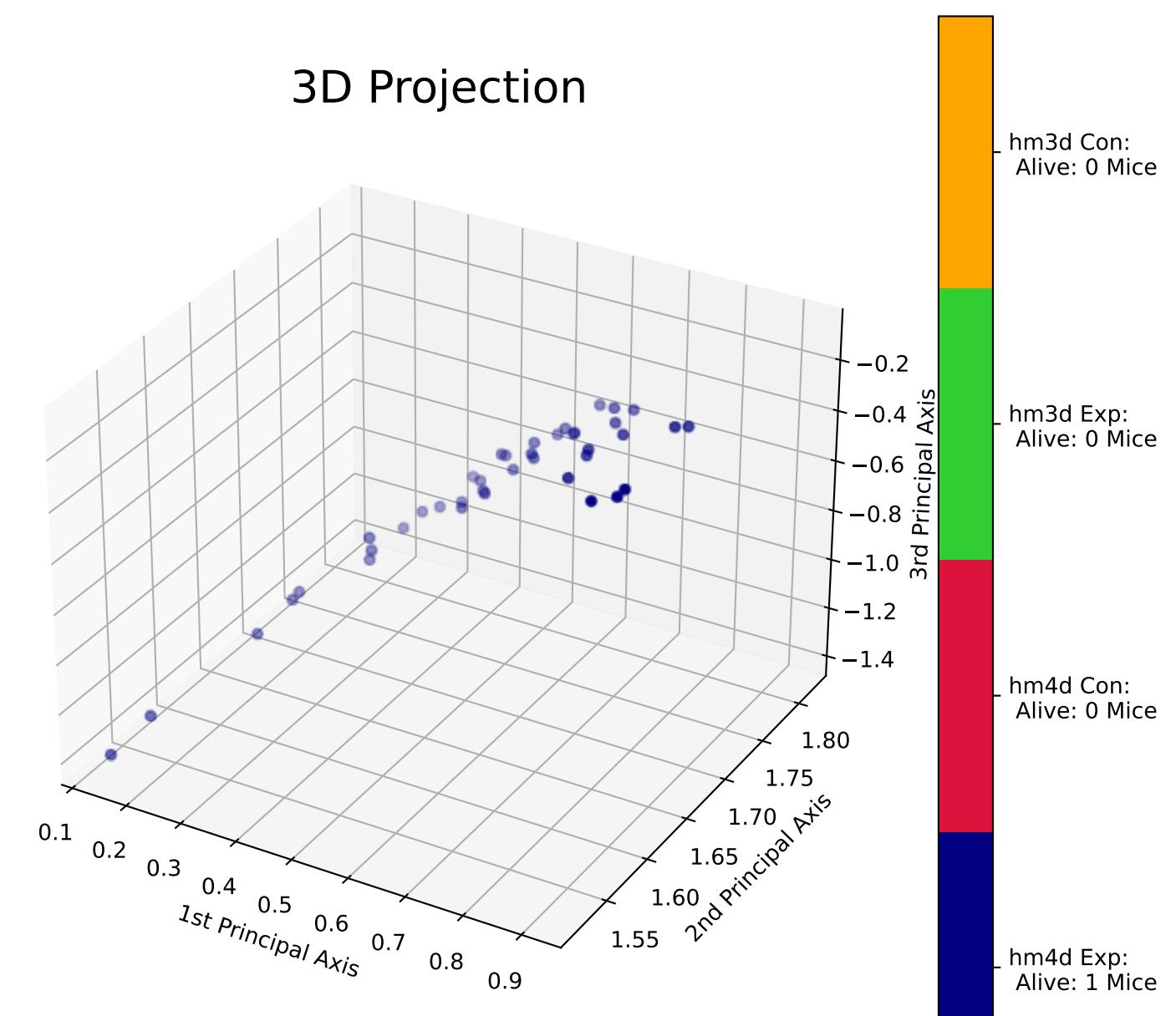
Angle 2



Angle 3

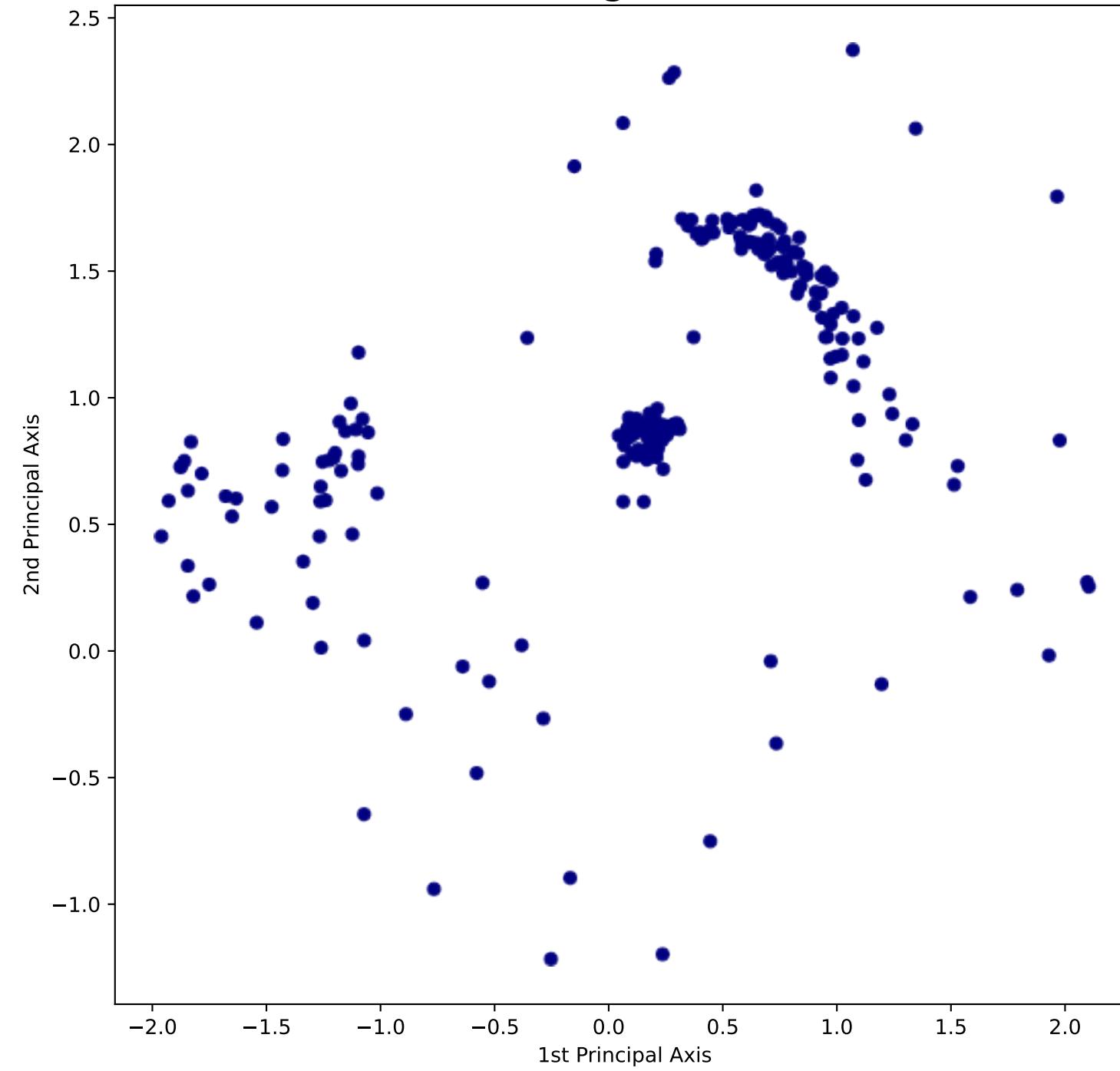


3D Projection

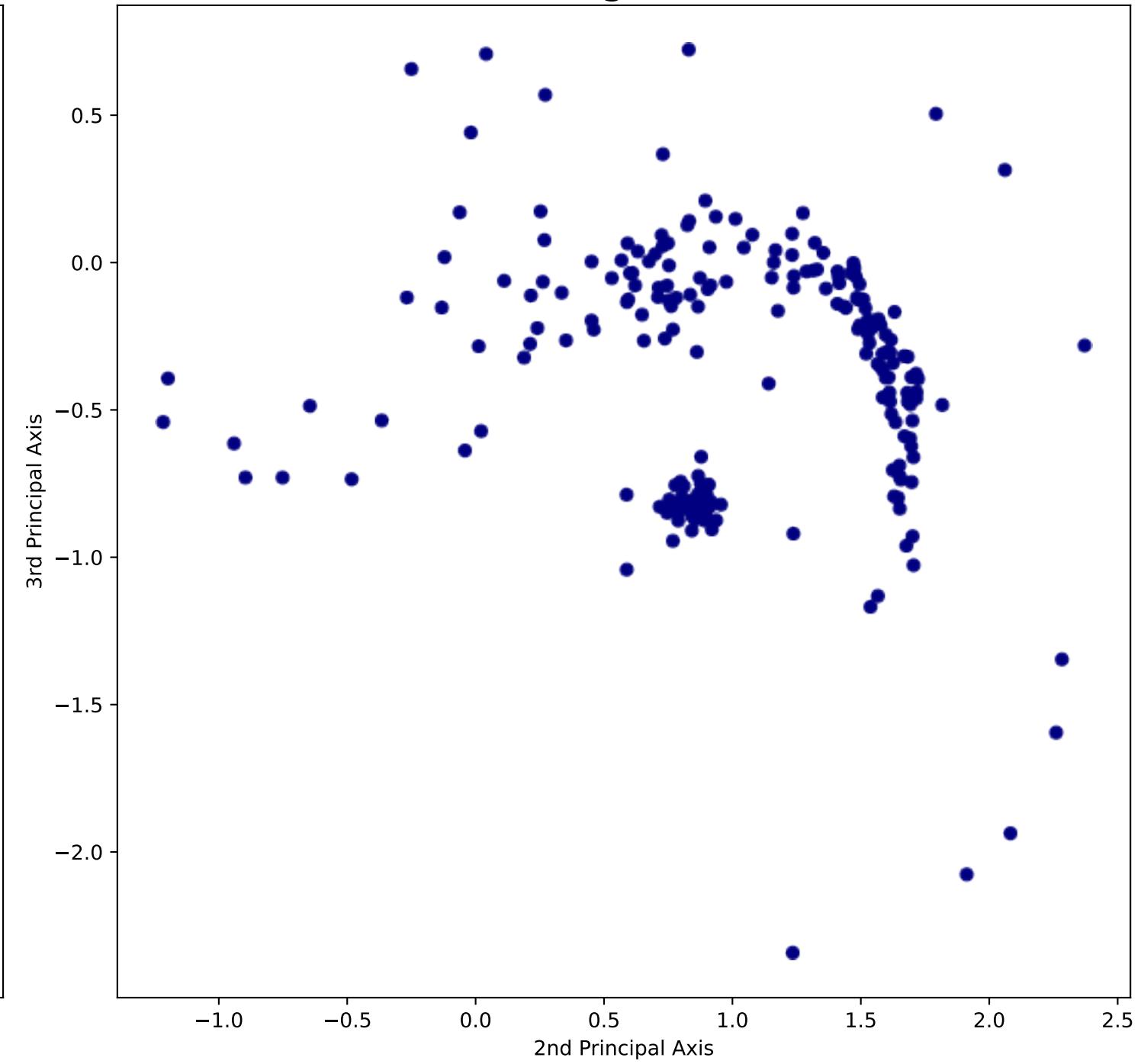


# Trial Number: 15, Phase: First Gasp

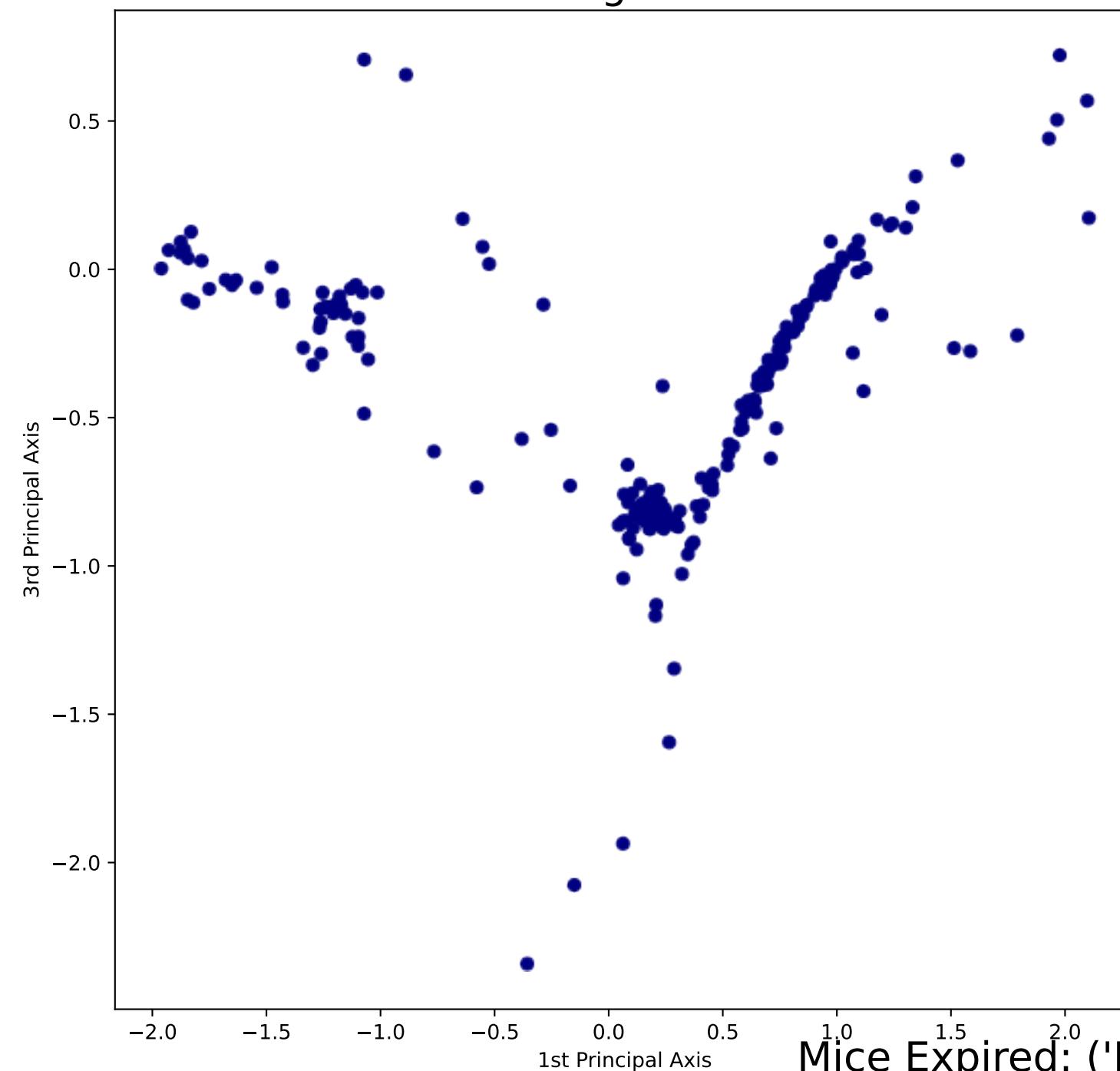
Angle 1



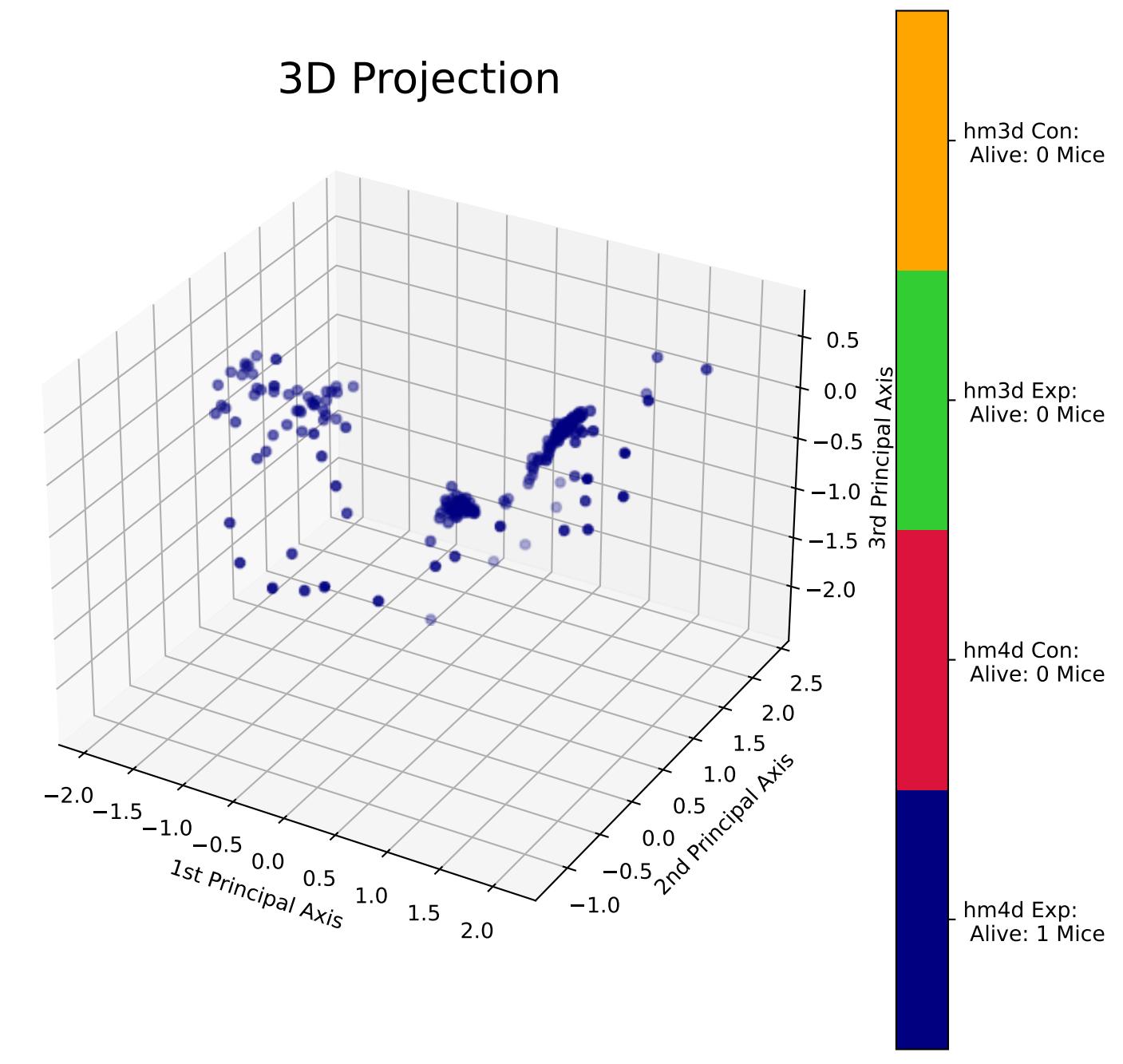
Angle 2



Angle 3



3D Projection



Mice Expired: ('M21269', 'hm4d Exp')

# Trial Number: 15, Phase: Eupnea Recovery

Angle 1

Angle 2

2nd Principal Axis

0.04  
0.02  
0.00  
-0.02  
-0.04

-0.04 -0.02 0.00 0.02 0.04  
1st Principal Axis

3rd Principal Axis

0.04  
0.02  
0.00  
-0.02  
-0.04

-0.04 -0.02 0.00 0.02 0.04  
2nd Principal Axis

Angle 3

3rd Principal Axis

0.04  
0.02  
0.00  
-0.02  
-0.04

-0.04 -0.02 0.00 0.02 0.04  
1st Principal Axis

3D Projection

