

# Correlation\_show

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- 1 Histogram-like plot of average Average Correlation Matrix vs. Distance for the average of 5 Layers in CaloDiffusion and Geant4 samples of Dataset 2**

Average Correlation Matrix vs. Distance for Layer 0 to Layer 4 Using Calodiffusion Samples

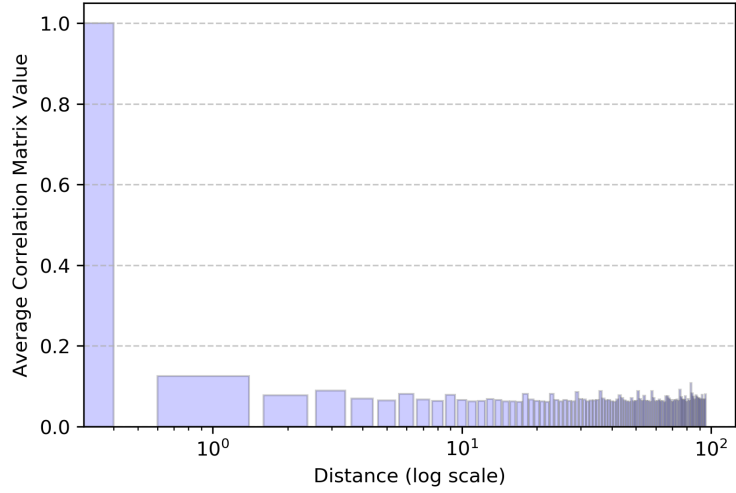


Figure 1: 'Average Correlation Matrix vs. Distance for Layer 0 to Layer 4 Using CaloDiffusion Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 0 to Layer 4 Using Geant4 Samples

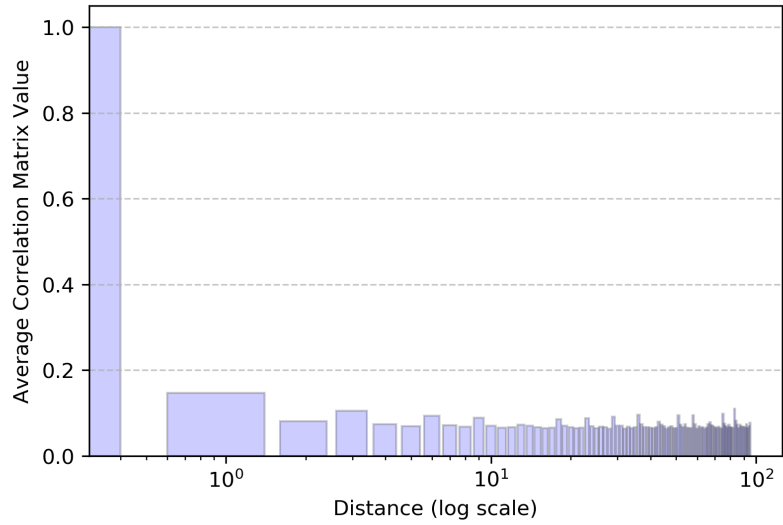


Figure 2: Average Correlation Matrix vs. Distance for Layer 0 to Layer 4 Using Geant4 Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 5 to Layer 9 Using Calodiffusion Samples

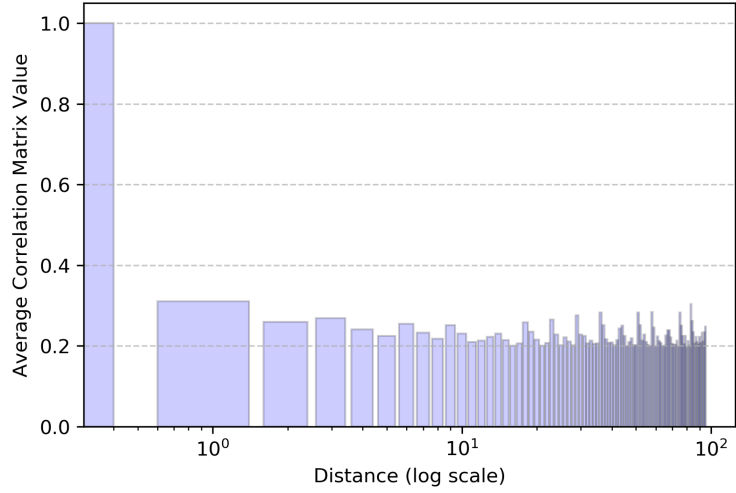


Figure 3: Average Correlation Matrix vs. Distance for Layer 5 to Layer 9 Using CaloDiffusion Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 5 to Layer 9 Using Geant4 Samples

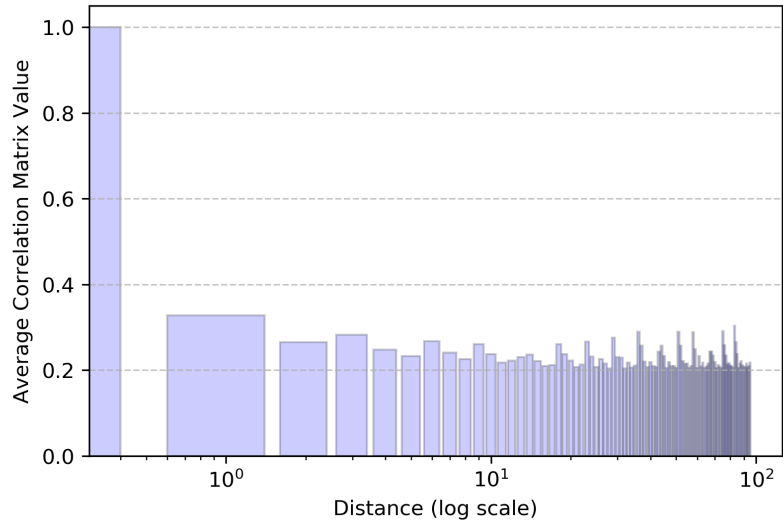


Figure 4: Average Correlation Matrix vs. Distance for Layer 5 to Layer 9 Using Geant4 Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 10 to Layer 14 Using Calodiffusion Samples

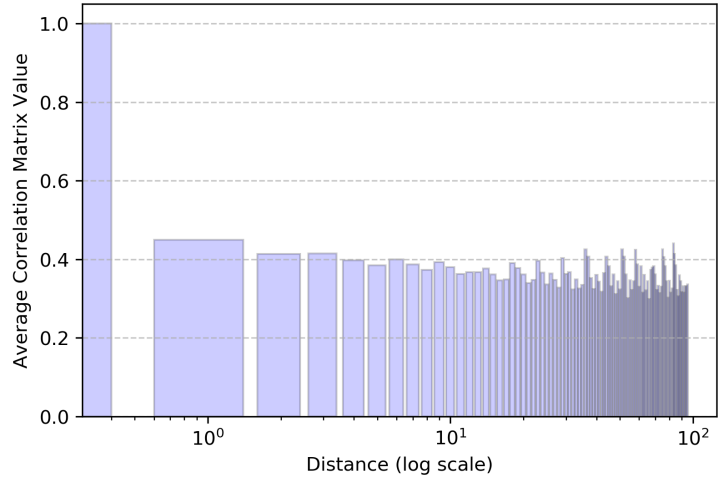


Figure 5: Average Correlation Matrix vs. Distance for Layer 10 to Layer 14 Using CaloDiffusion Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 10 to Layer 14 Using Geant4 Samples

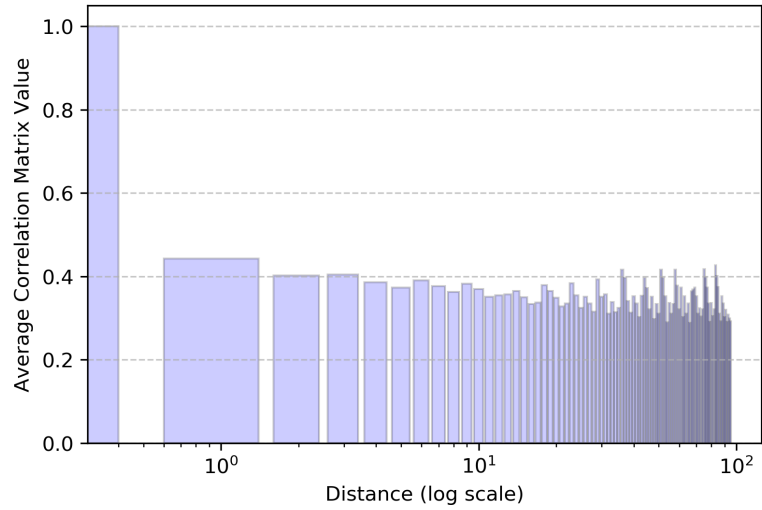


Figure 6: Average Correlation Matrix vs. Distance for Layer 10 to Layer 14 Using Geant4 Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 15 to Layer 19 Using Calodiffusion Samples

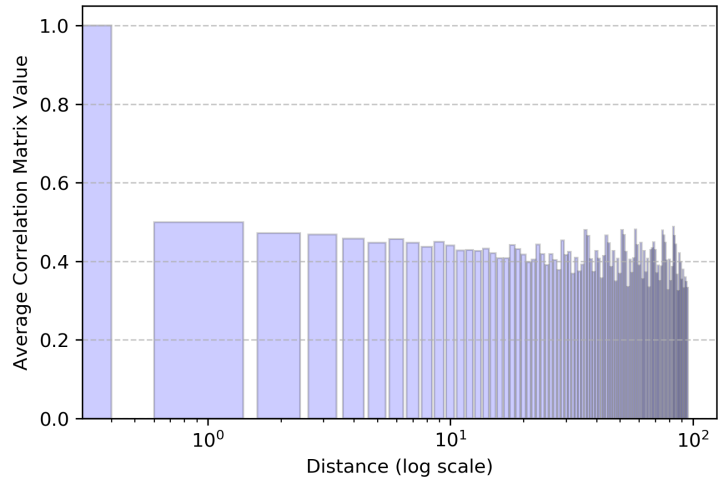


Figure 7: Average Correlation Matrix vs. Distance for Layer 15 to Layer 19 Using CaloDiffusion Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 15 to Layer 19 Using Geant4 Samples

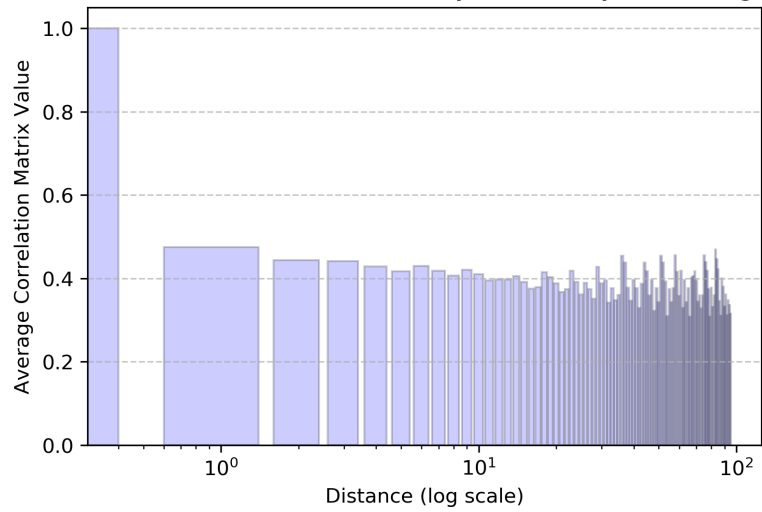


Figure 8: Average Correlation Matrix vs. Distance for Layer 15 to Layer 19 Using Geant4 Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 20 to Layer 24 Using Calodiffusion Samples

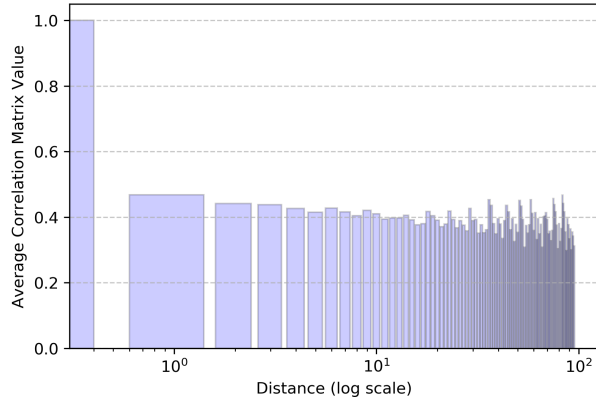


Figure 9: Average Correlation Matrix vs. Distance for Layer 20 to Layer 24 Using CaloDiffusion Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 20 to Layer 24 Using Geant4 Samples

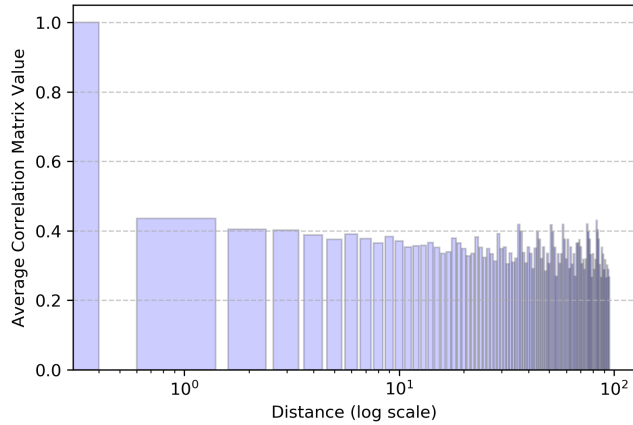


Figure 10: Average Correlation Matrix vs. Distance for Layer 20 to Layer 24 Using Geant4 Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 25 to Layer 29 Using Calodiffusion Samples

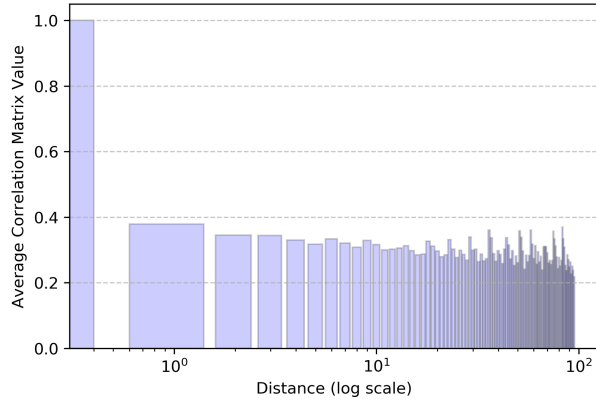


Figure 11: Average Correlation Matrix vs. Distance for Layer 25 to Layer 29 Using CaloDiffusion Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 25 to Layer 29 Using Geant4 Samples

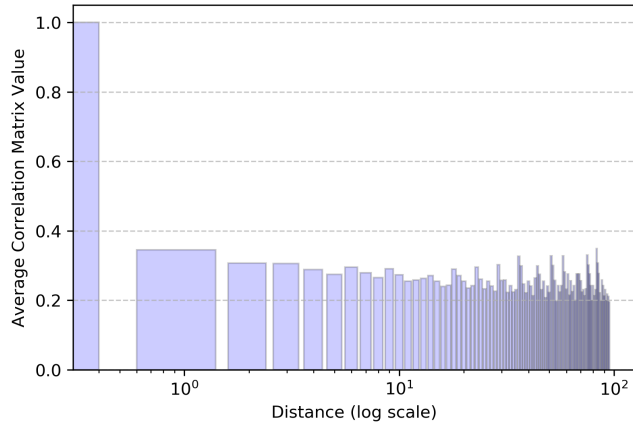


Figure 12: Average Correlation Matrix vs. Distance for Layer 25 to Layer 29 Using Geant4 Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 30 to Layer 34 Using Calodiffusion Samples

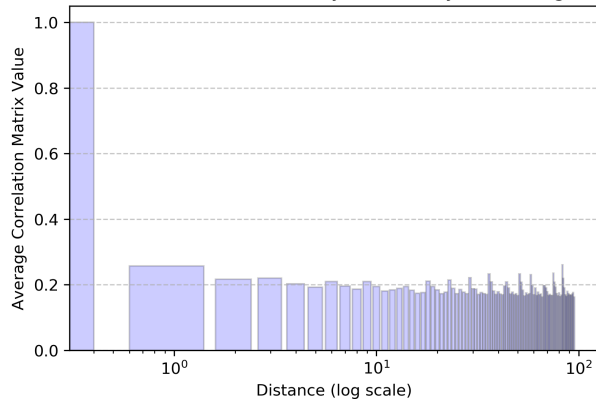


Figure 13: Average Correlation Matrix vs. Distance for Layer 30 to Layer 34 Using CaloDiffusion Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 30 to Layer 34 Using Geant4 Samples

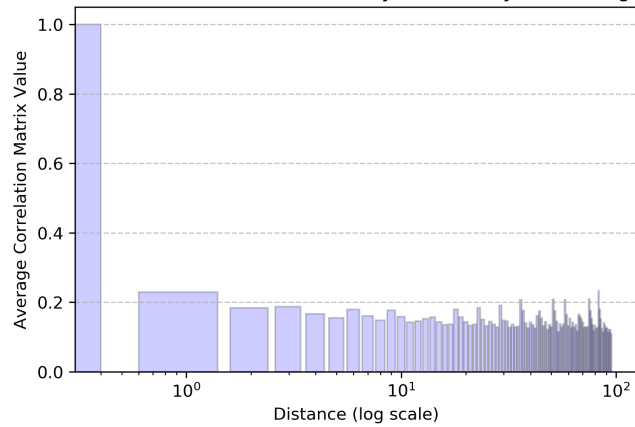


Figure 14: Average Correlation Matrix vs. Distance for Layer 30 to Layer 34 Using Geant4 Samples for Dataset 2



Average Correlation Matrix vs. Distance for Layer 34 to Layer 39 Using Calodiffusion Samples

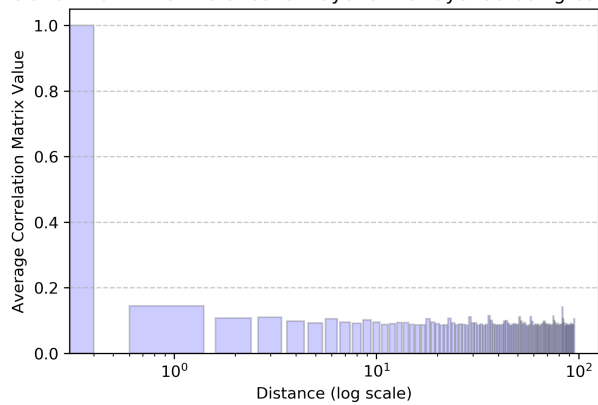


Figure 15: Average Correlation Matrix vs. Distance for Layer 35 to Layer 39 Using CaloDiffusion Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 35 to Layer 39 Using Geant4 Samples

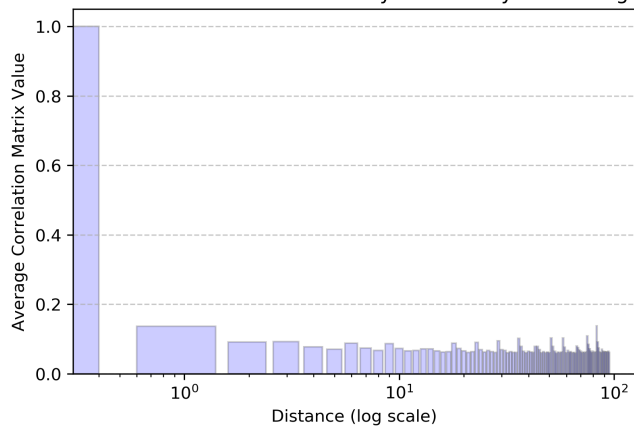


Figure 16: Average Correlation Matrix vs. Distance for Layer 35 to Layer 39 Using Geant4 Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 40 to Layer 44 Using Calodiffusion Samples

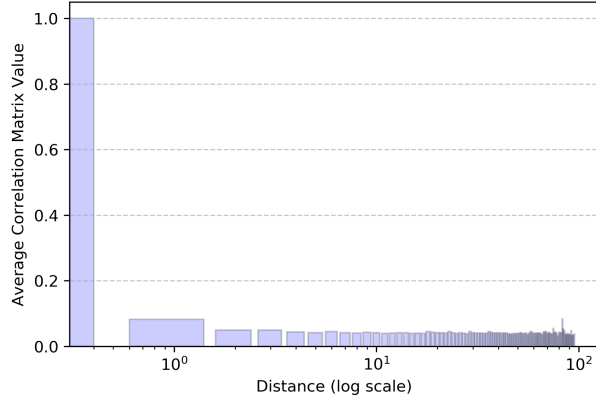


Figure 17: Average Correlation Matrix vs. Distance for Layer 40 to Layer 44 Using CaloDiffusion Samples for Dataset 2

Average Correlation Matrix vs. Distance for Layer 40 to Layer 44 Using Geant4 Samples

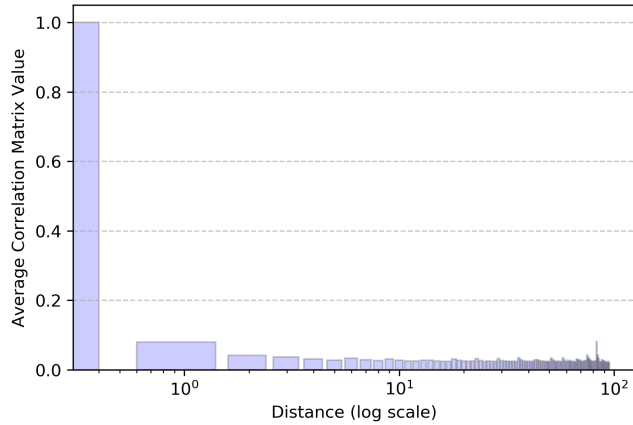


Figure 18: Average Correlation Matrix vs. Distance for Layer 40 to Layer 44 Using Geant4 Samples for Dataset 2

## 2 Histogram-like Plot of CaloDiff and Geant4 for dataset 2 in different layers

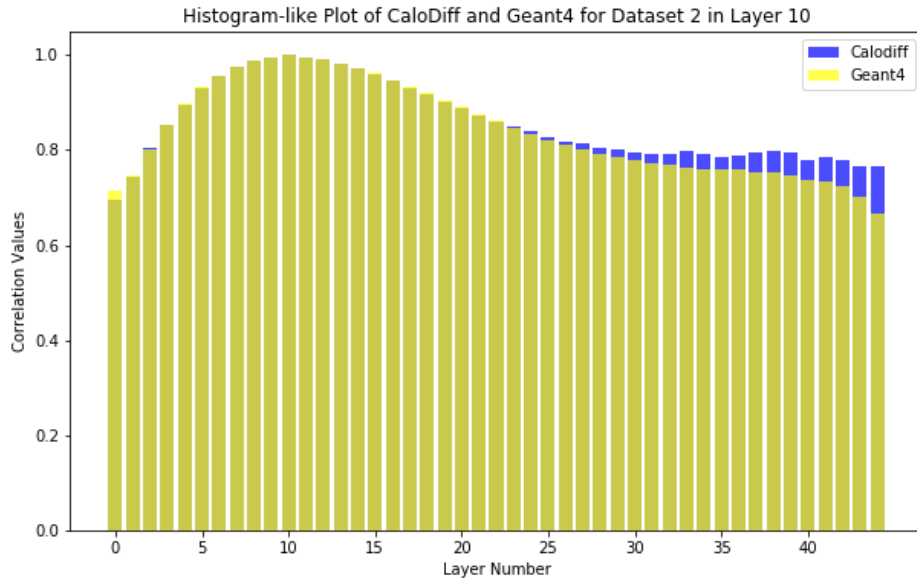


Figure 19: correlation comparison between Calodiffusion(blue) and Geant4(yellow) for layer 10 on Dataset 2

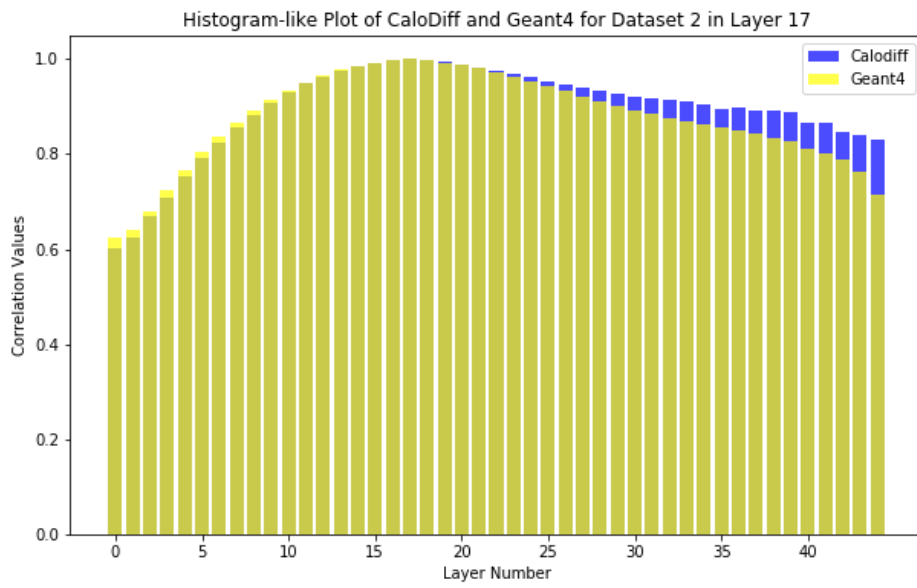


Figure 20: correlation comparison between Calodiffusion(blue) and Geant4(yellow) for layer 17 on Dataset 2

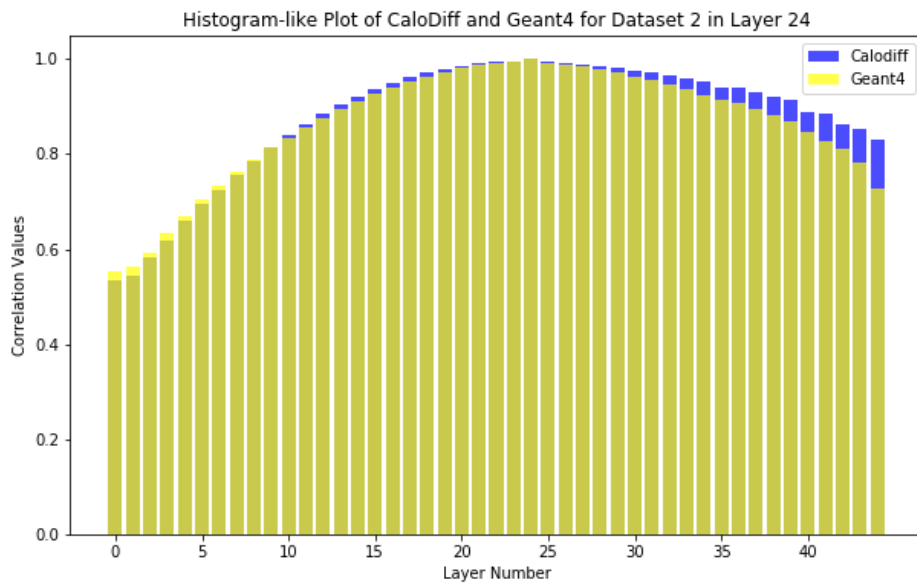


Figure 21: correlation comparison between Calodiffusion(blue) and Geant4(yellow) for layer 24 on Dataset 2

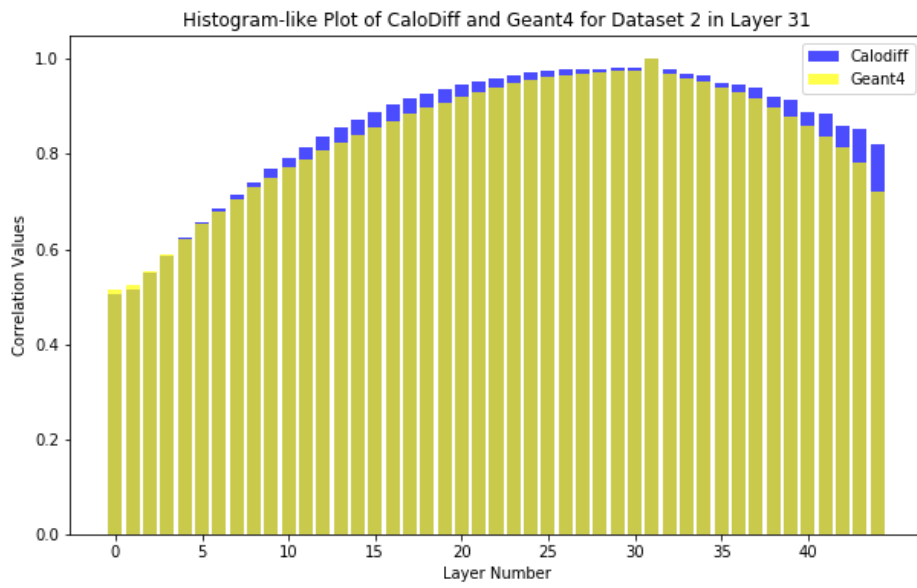


Figure 22: correlation comparison between Calodiffusion(blue) and Geant4(yellow) for layer 31 on Dataset 2

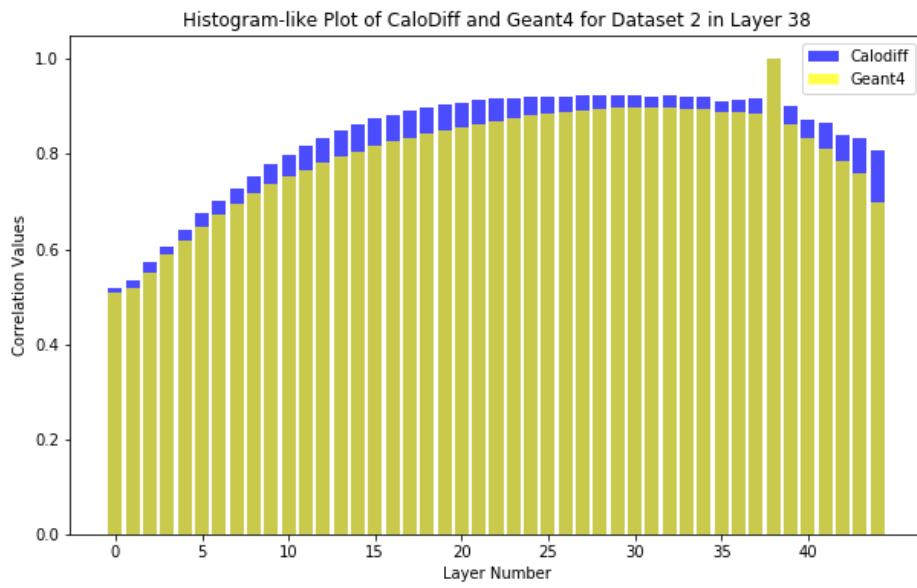


Figure 23: correlation comparison between Calodiffusion(blue) and Geant4(yellow) for layer 38 on Dataset 2

### 3 Histogram-like Plot of CaloDiff and Geant4 for dataset 3 in different layers

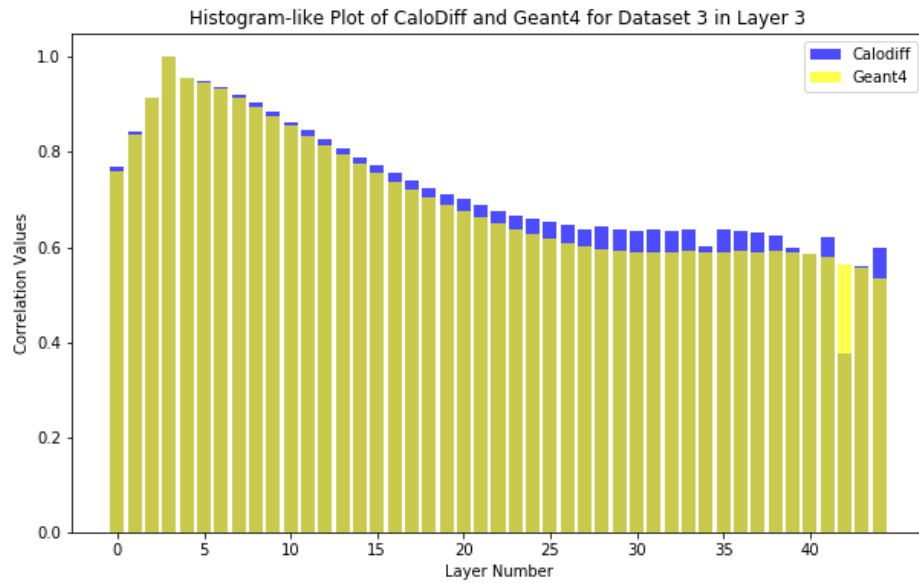


Figure 24: correlation comparison between Calodiffusion(blue) and Geant4(yellow) for layer 3 on Dataset 3



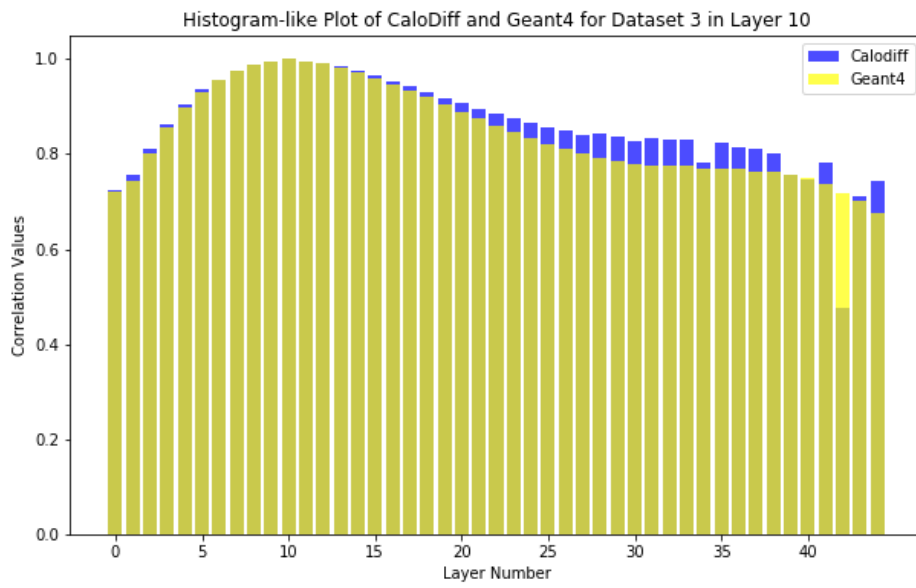


Figure 25: correlation comparison between Calodiffusion(blue) and Geant4(yellow) for layer 10 on Dataset 3

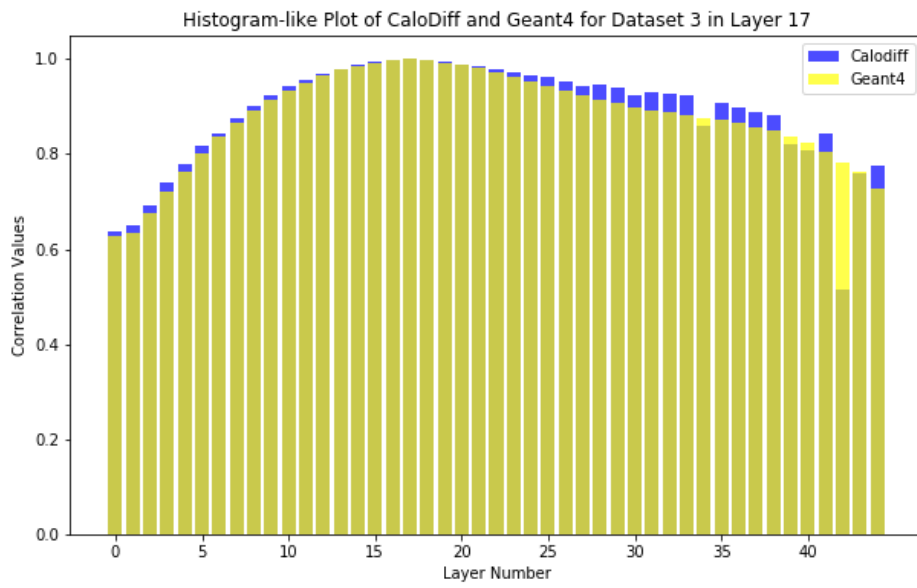


Figure 26: correlation comparison between Calodiffusion(blue) and Geant4(yellow) for layer 17 on Dataset 3

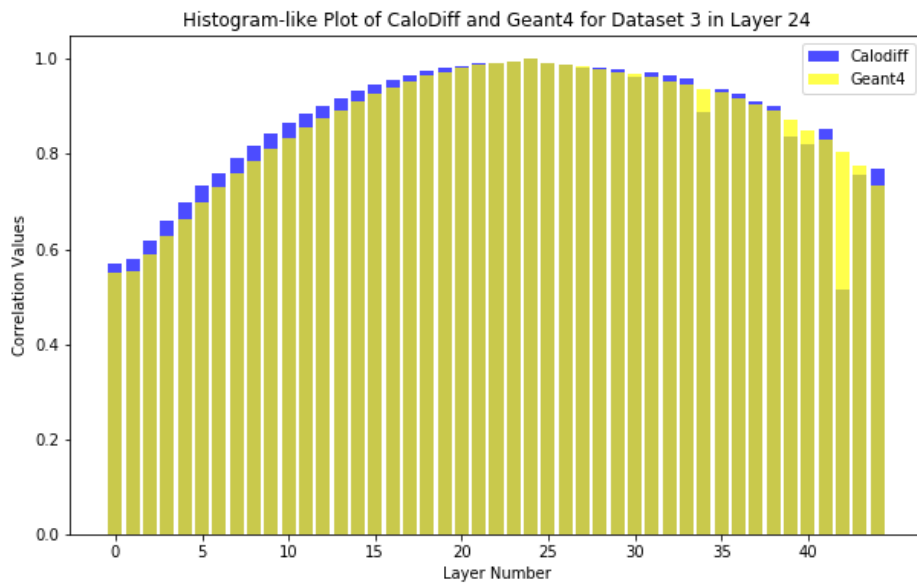


Figure 27: correlation comparison between Calodiffusion(blue) and Geant4(yellow) for layer 24 on Dataset 3

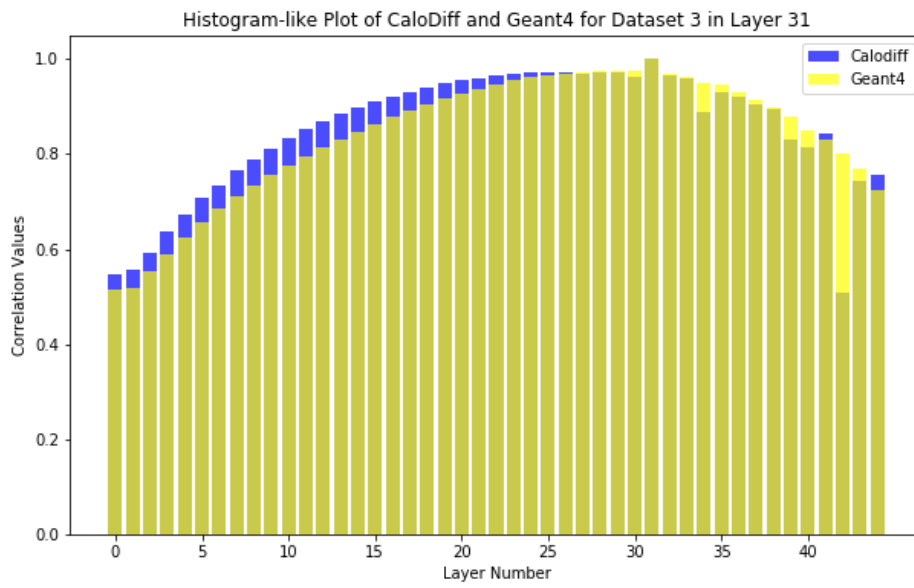


Figure 28: correlation comparison between Calodiffusion(blue) and Geant4(yellow) for layer 31 on Dataset 3

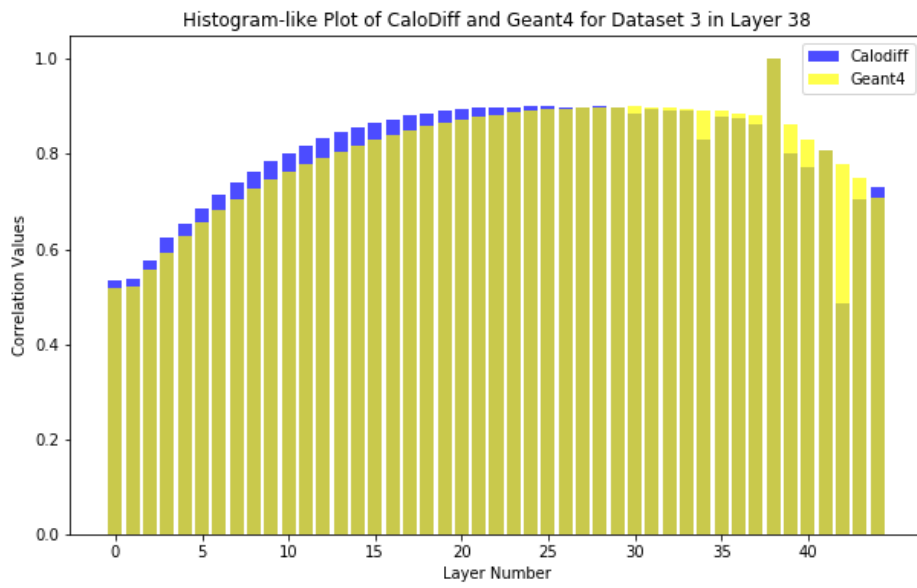


Figure 29: correlation comparison between Calodiffusion(blue) and Geant4(yellow) for layer 38 on Dataset 3

## 4 Dataset 3 Correlation comparison between Geant4 and Calodiffusion output

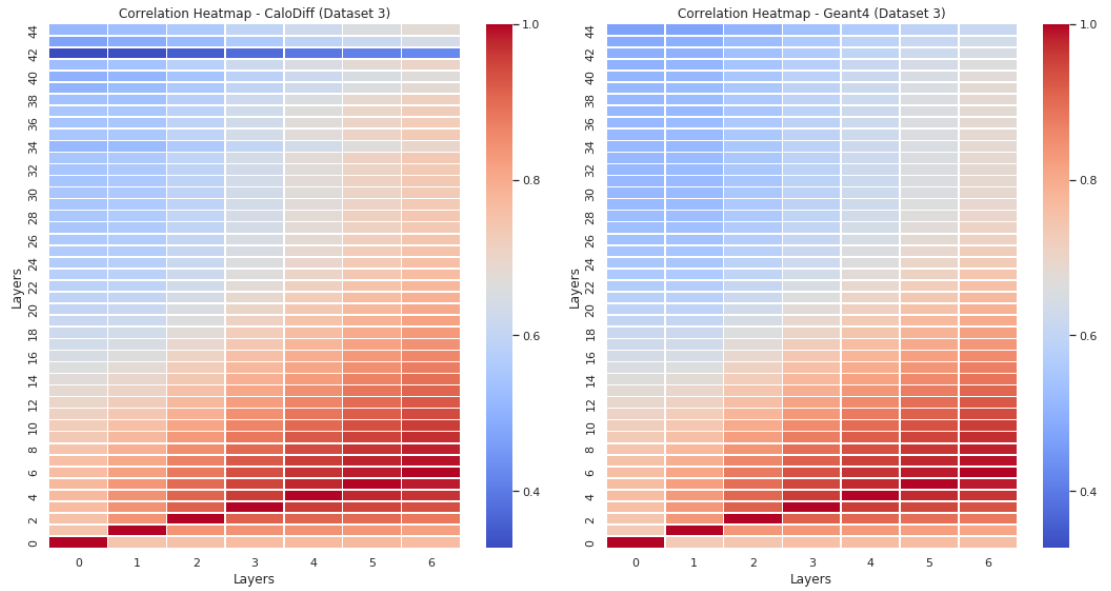


Figure 30: correlation comparison between Calodiffusion(left) and Geant4(right) for layer 0 to 6 for dataset 3

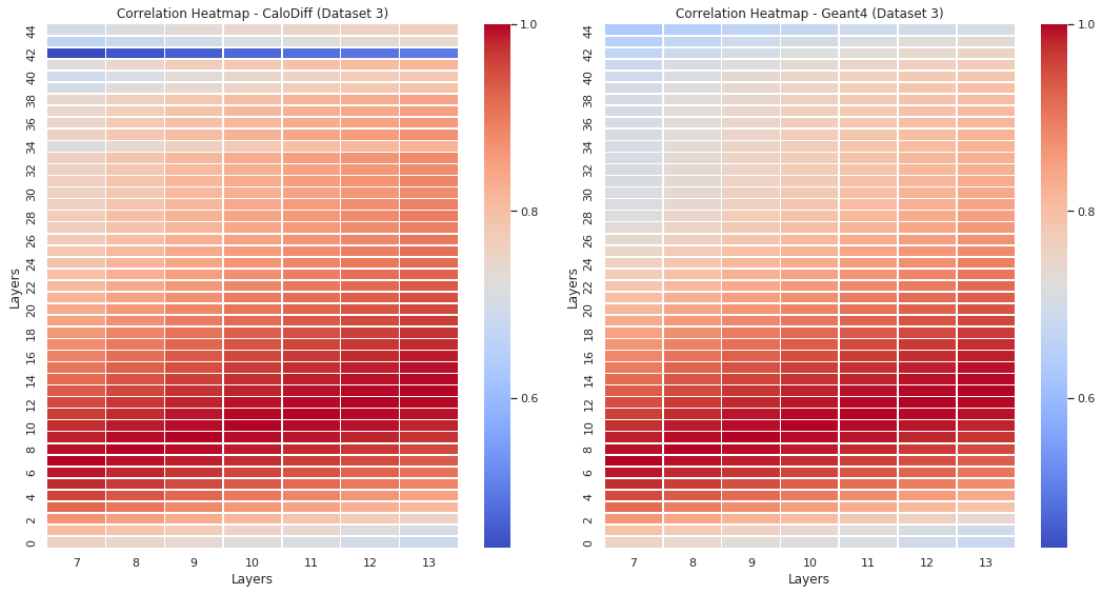


Figure 31: correlation comparison between Calodiffusion(left) and Geant4(right) for layer 7 to 13 for dataset 3

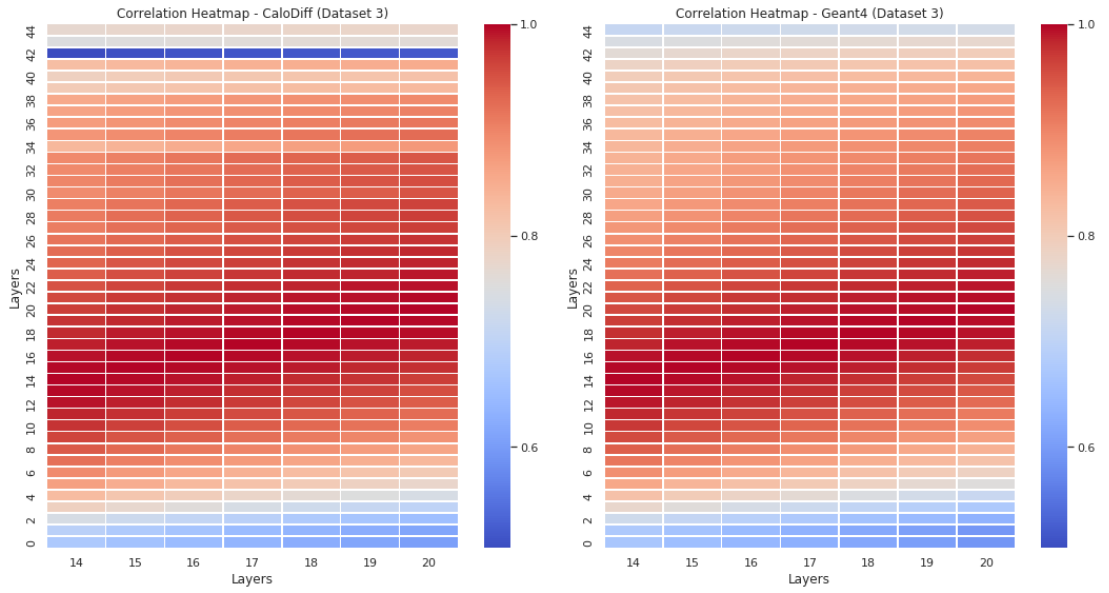


Figure 32: correlation comparison between Calodiffusion(left) and Geant4(right) for layer 14 to 20 for dataset 3

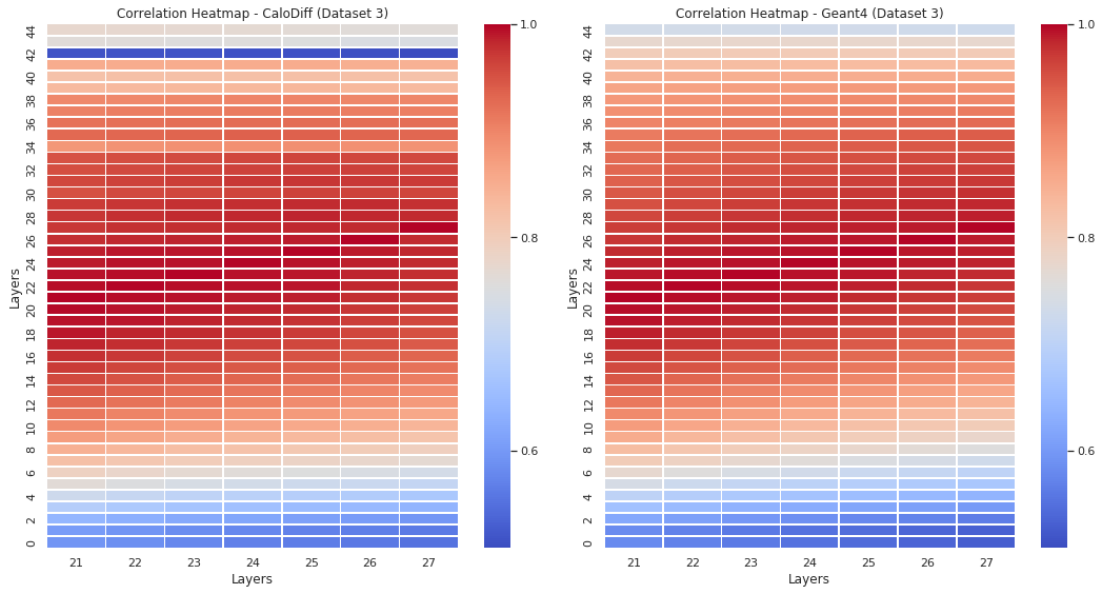


Figure 33: correlation comparison between Calodiffusion(left) and Geant4(right) for layer 21 to 27 for dataset 3

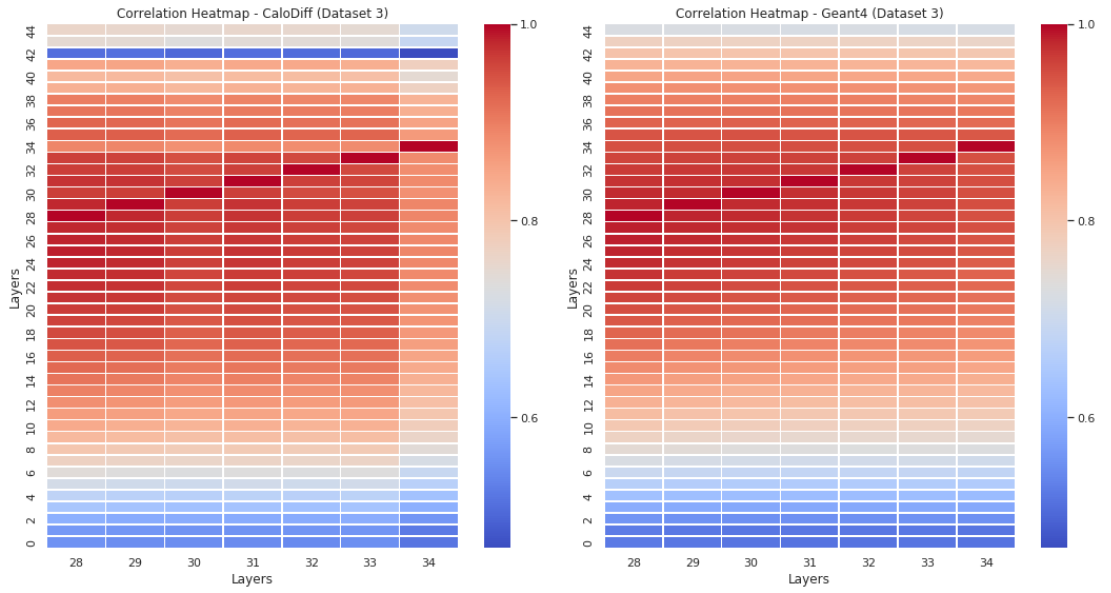


Figure 34: correlation comparison between Calodiffusion(left) and Geant4(right) for layer 28 to 34 for dataset 3



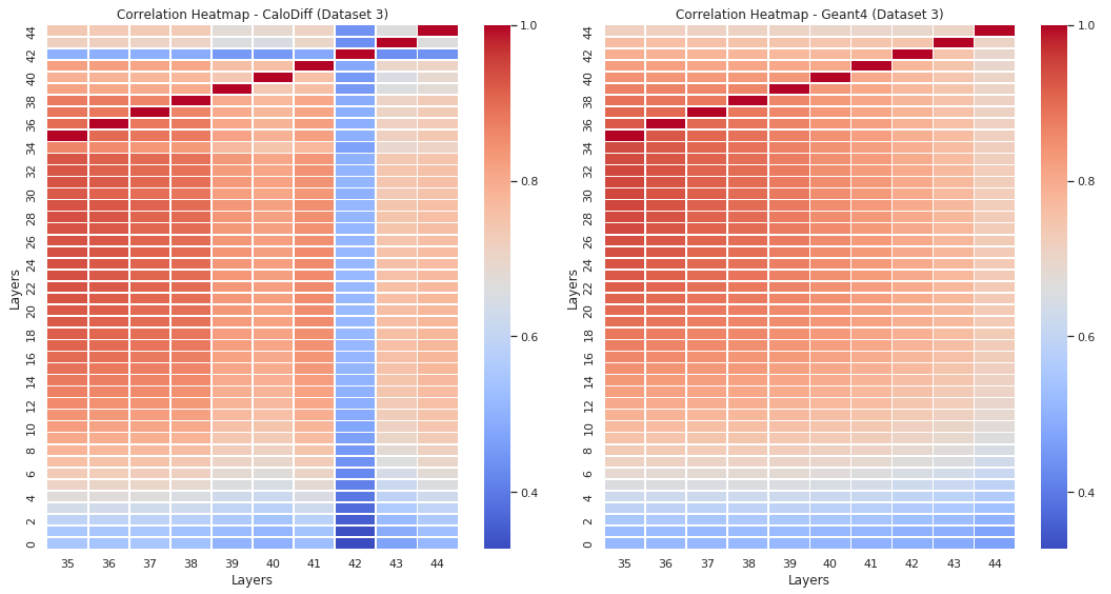
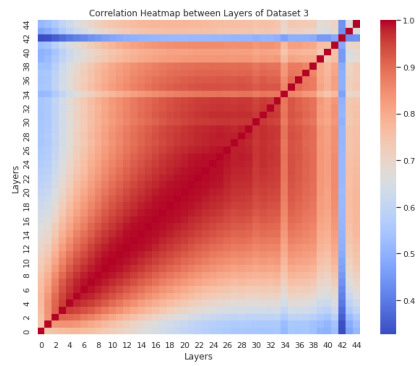
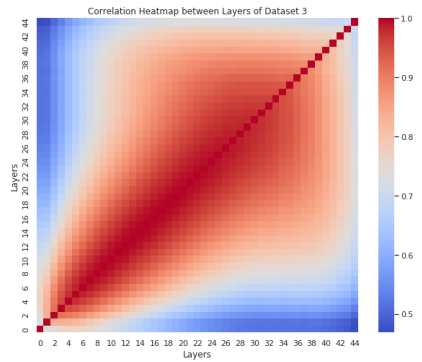


Figure 35: correlation comparison between Calodiffusion(left) and Geant4(right) for layer 35 to 45 for dataset 3



(a) Correlation between layers to layers for Calodiffusion dataset 3

Figure 36: Correlation as a Whole for dataset 3



(a) Correlation between layers to layers for Geant4 dataset 3

## 5 Dataset 2 Correlation comparison between Geant4 and Calodiffusion output

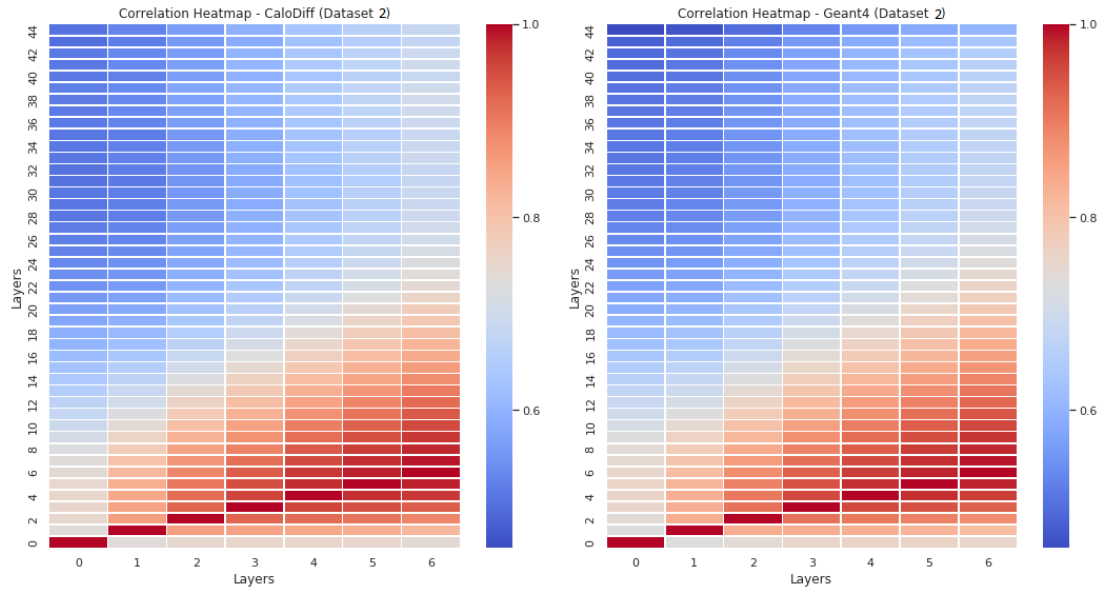


Figure 38: correlation comparison between Calodiffusion(left) and Geant4(right) for layer 0 to 6 for dataset 2

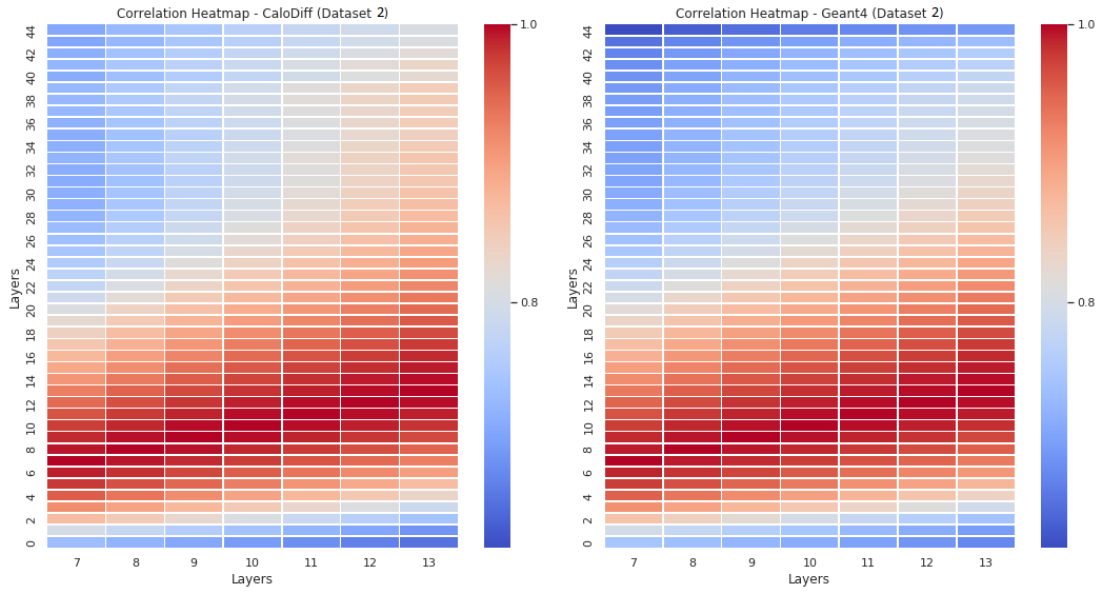


Figure 39: correlation comparison between Calodiffusion(left) and Geant4(right) for layer 7 to 13 for dataset 2

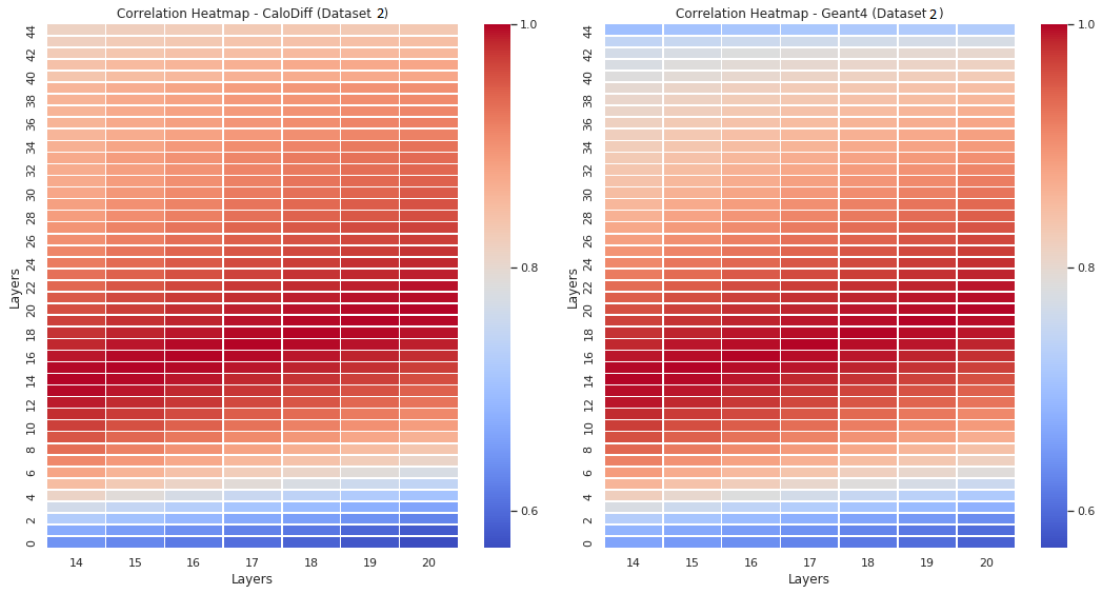


Figure 40: correlation comparison between Calodiffusion(left) and Geant4(right) for layer 14 to 20 for dataset 2

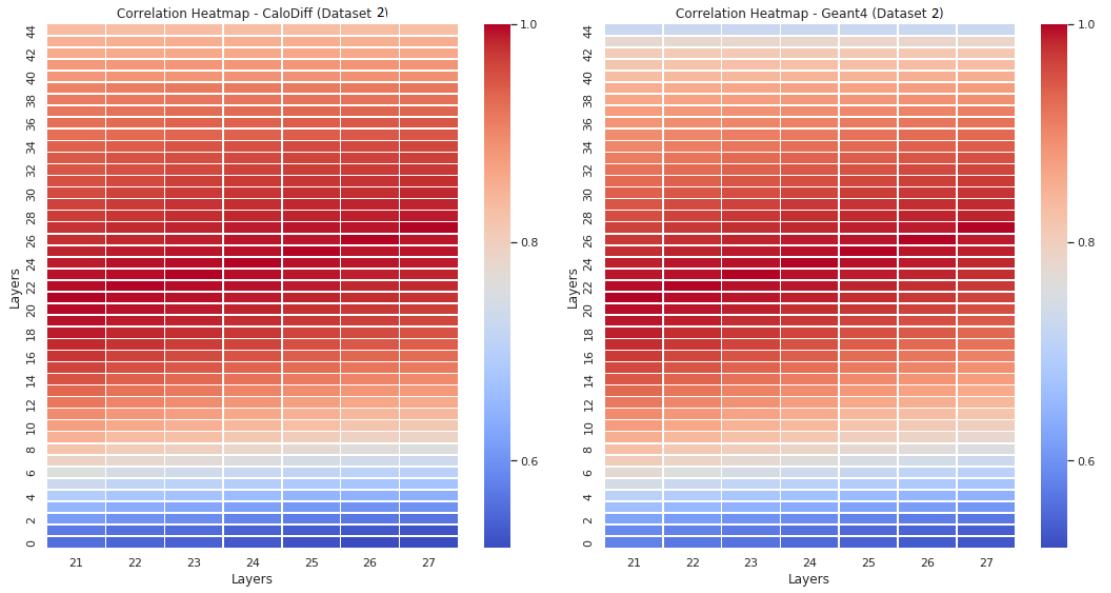


Figure 41: correlation comparison between Calodiffusion(left) and Geant4(right) for layer 21 to 27 for dataset 2

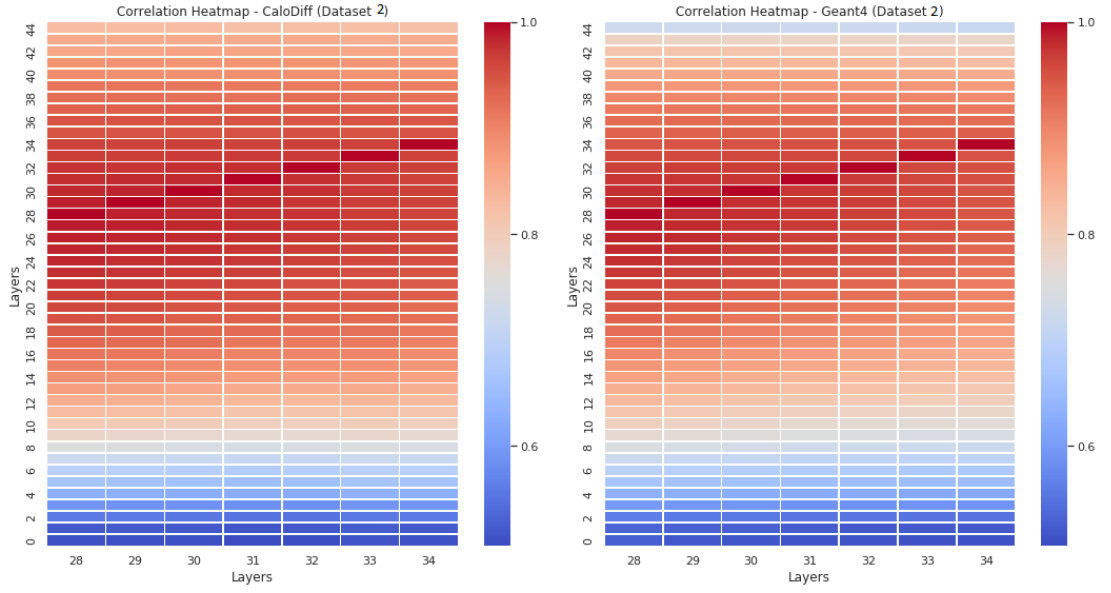


Figure 42: correlation comparison between Calodiffusion(left) and Geant4(right) for layer 28 to 34 for dataset 2

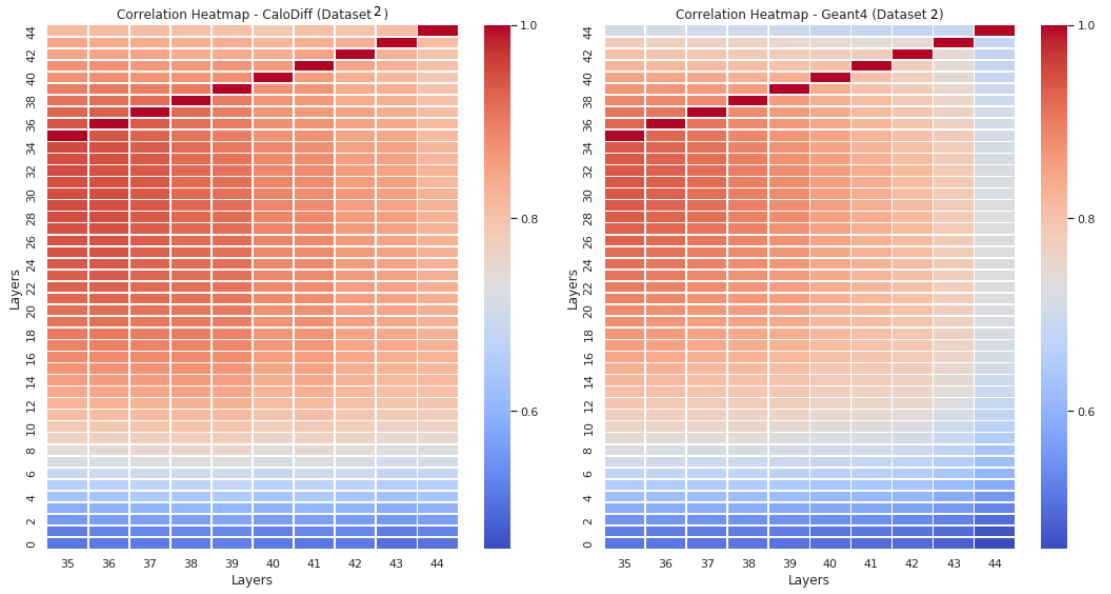
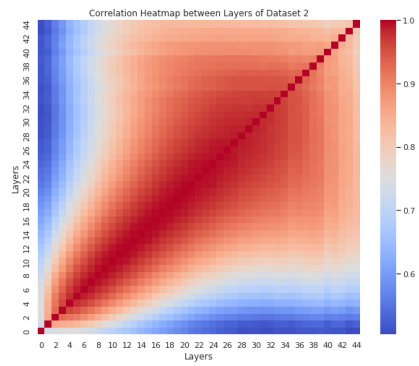
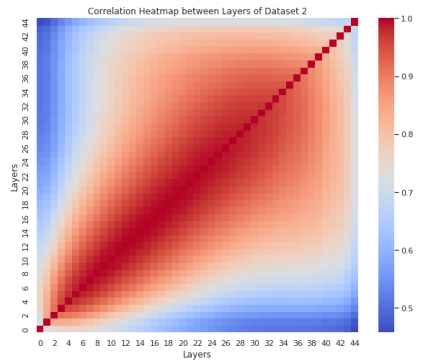


Figure 43: correlation comparison between Calodiffusion(left) and Geant4(right) for layer 35 to 45 for dataset 2



(a) Correlation between layers to layers for Calodiffusion dataset 2

Figure 44: Correlation as a Whole for dataset 2



(a) Correlation between layers to layers for Geant4 dataset 2