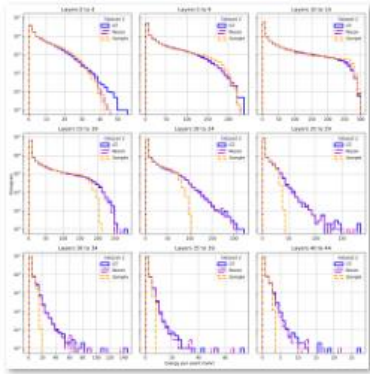


Weekly Update

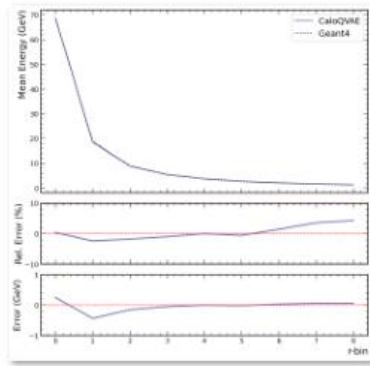
- Insights into FPD/KPD and Model Evaluation
- Warm Restarts with Convolutional Decoder

12 Dec 2024

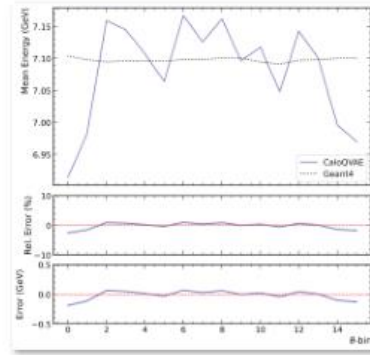
Background:



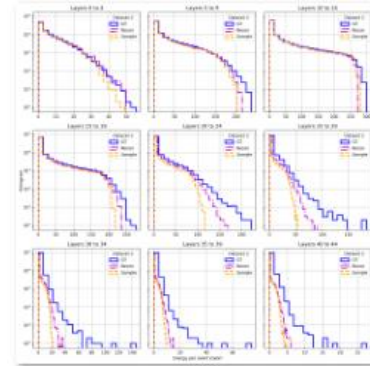
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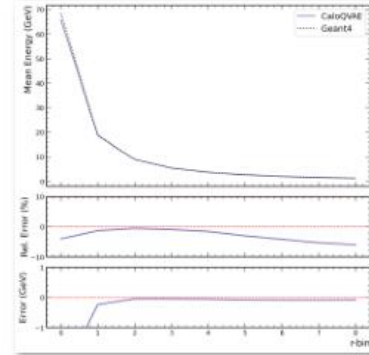
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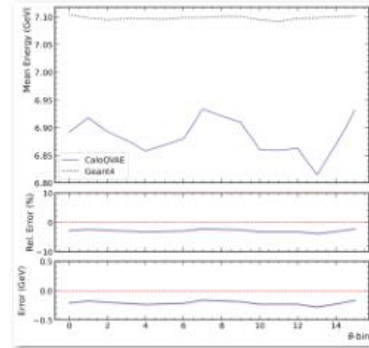
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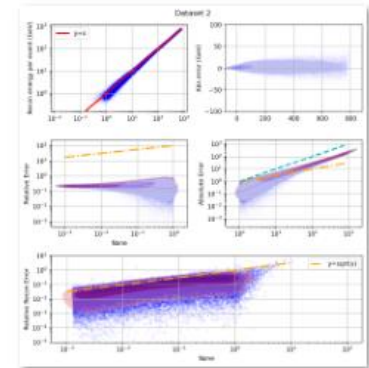
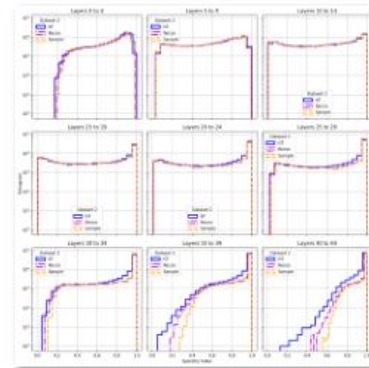
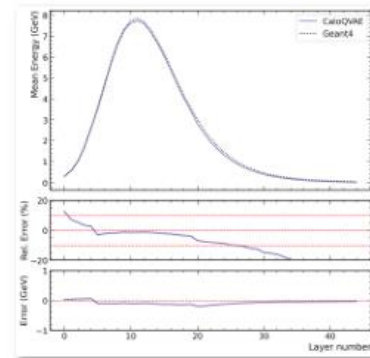
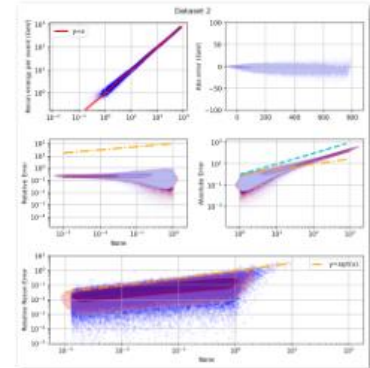
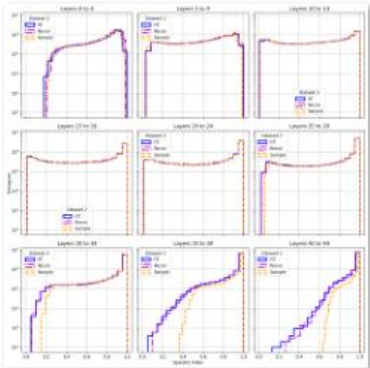
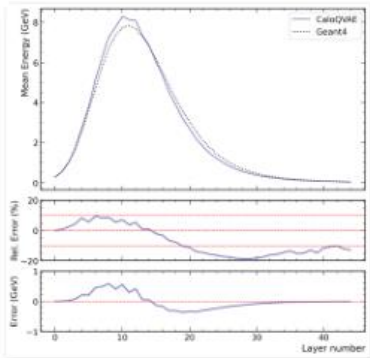
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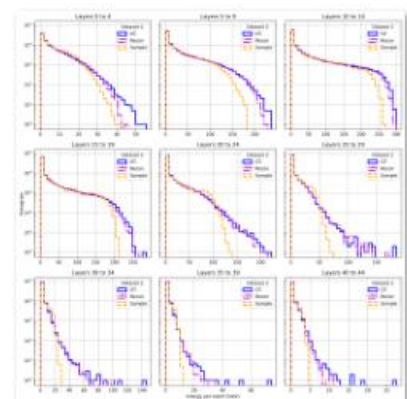
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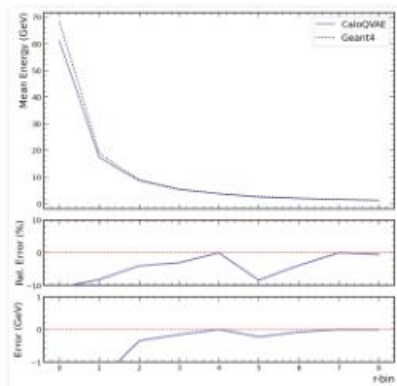
FPD: 384
KPD: 0.72

FPD: 4190
KPD: 52

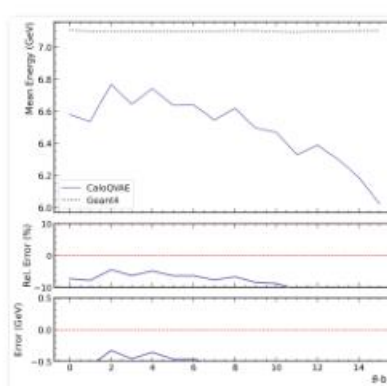
First Comparison



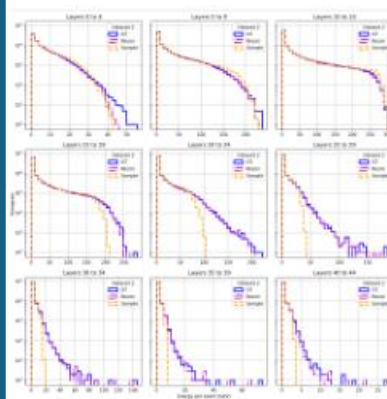
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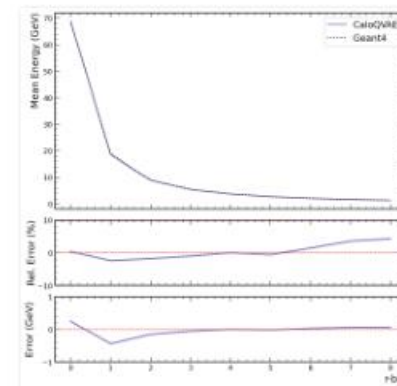
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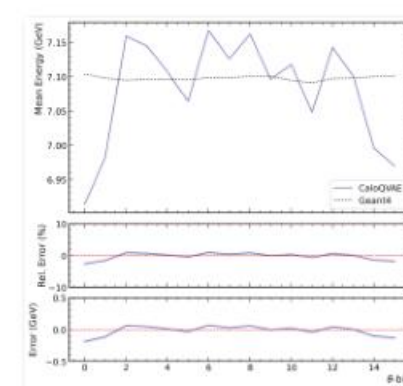
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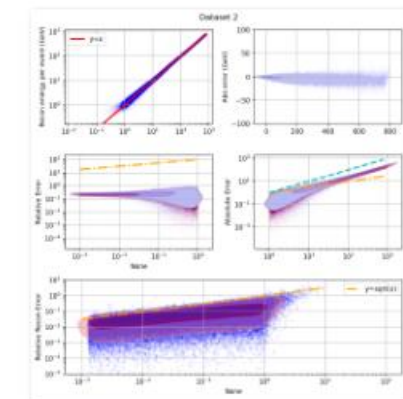
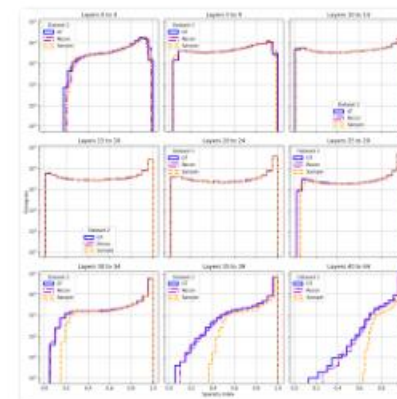
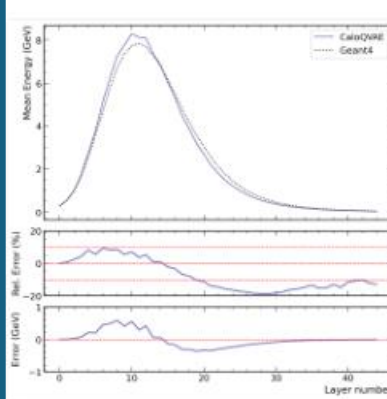
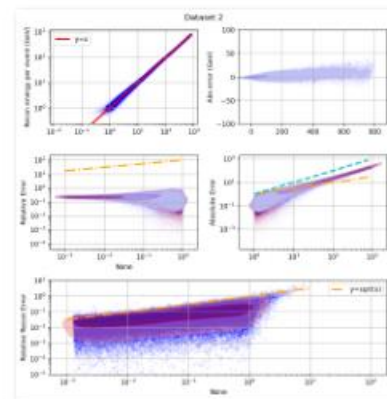
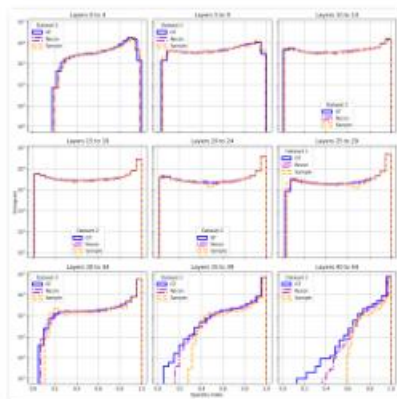
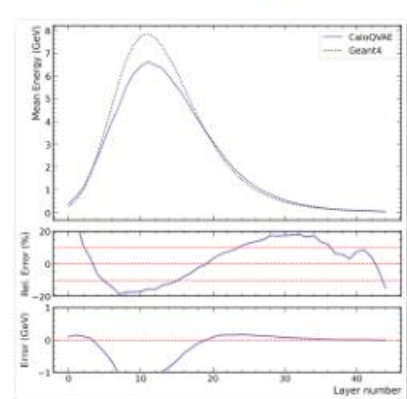
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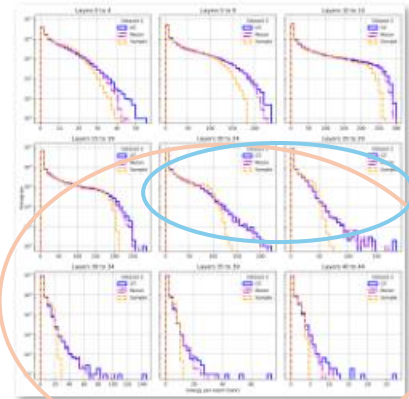
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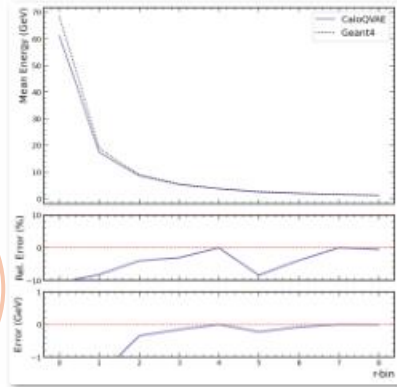
Model 485 (current best)
 Epoch 10
 Convolutional
 No Warm Restarts
 FPD: 468; KPD: 1.01

Model 485 (current best)
Epoch 150
Convolutional
No Warm Restarts
FPD: 384; KPD: 0.73

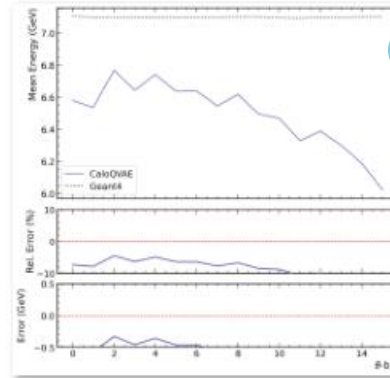
First Comparison



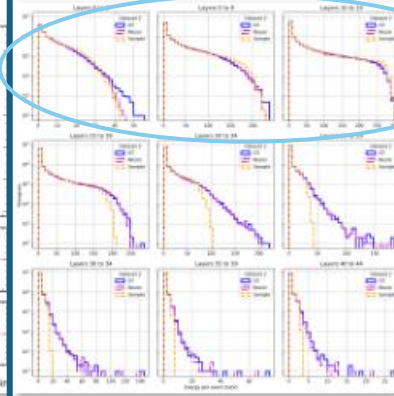
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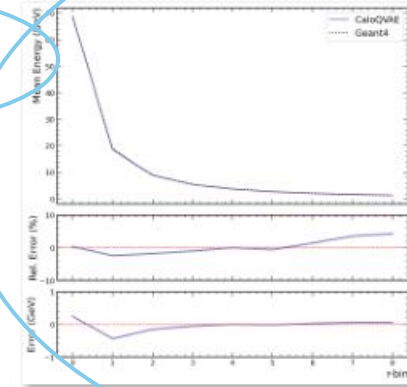
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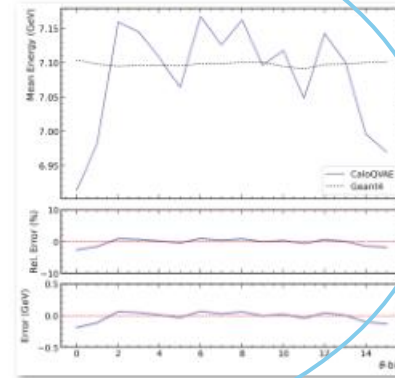
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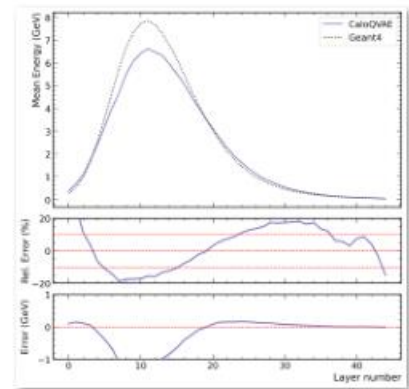
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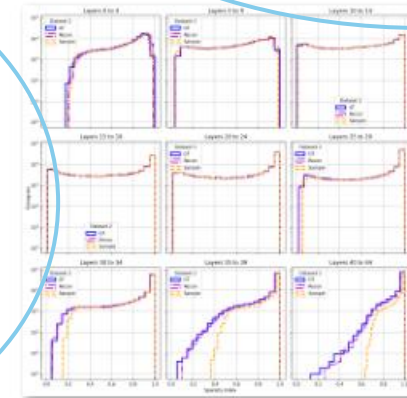
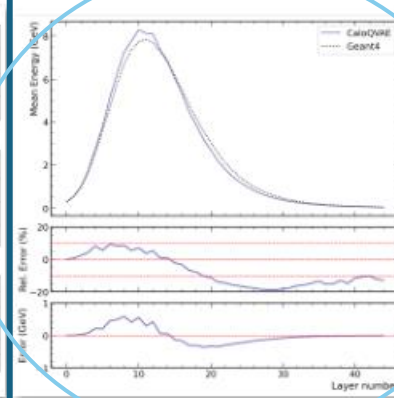
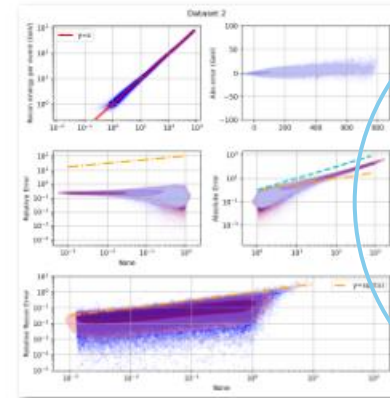
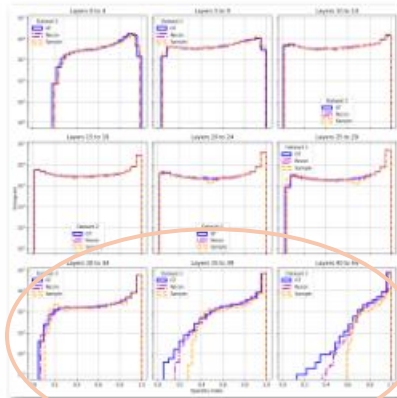
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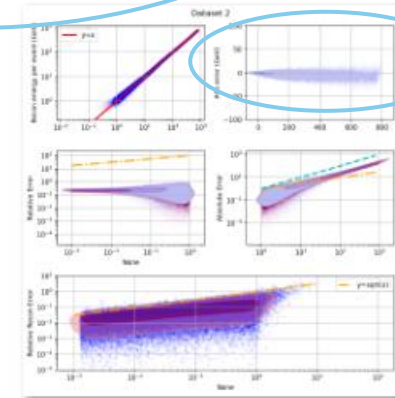
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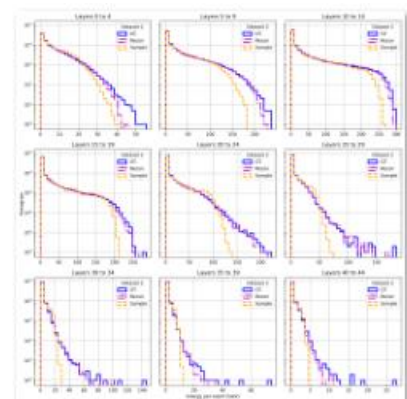
Model 485 (current best)
Epoch 10
Convolutional
No Warm Restarts
FPD: 468; KPD: 1.01



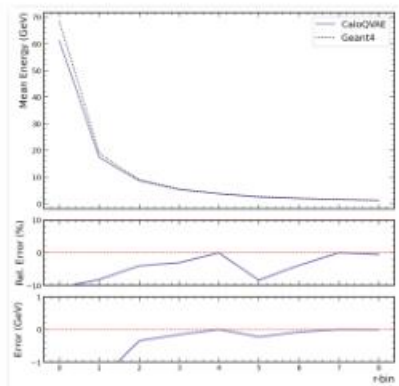
Model 485 (current best)
Epoch 150
Convolutional
No Warm Restarts
FPD: 384; KPD: 0.73



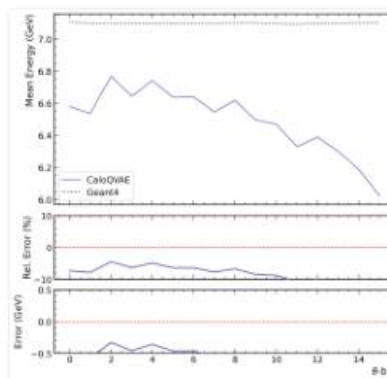
Second Comparison



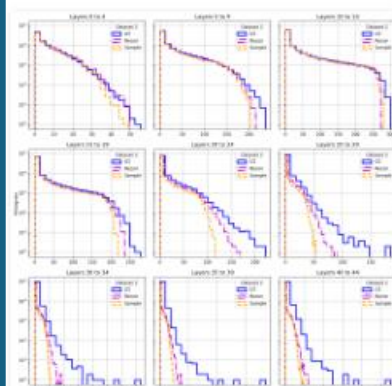
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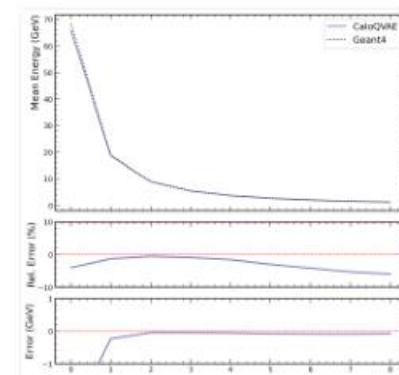
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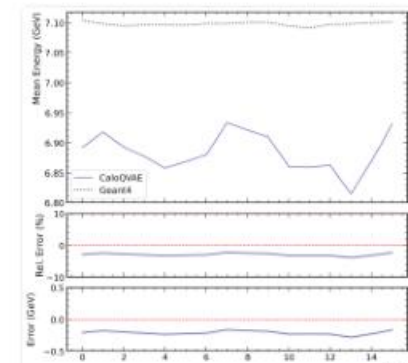
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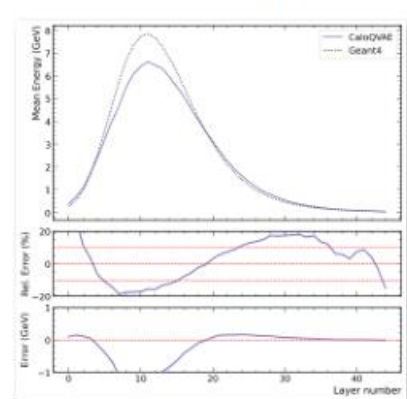
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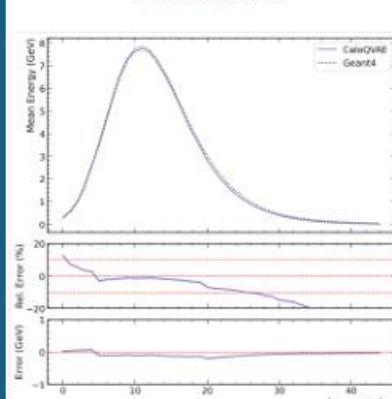
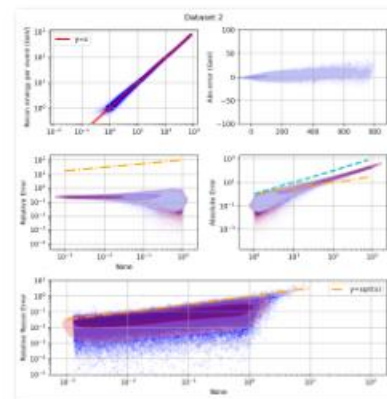
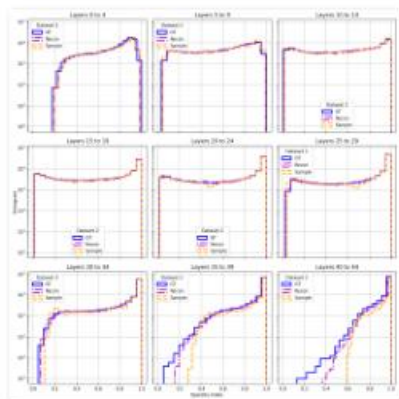
Model 485 (current best)

Epoch 10

Convolutional

No Warm Restarts

FPD: 468; KPD: 1.01



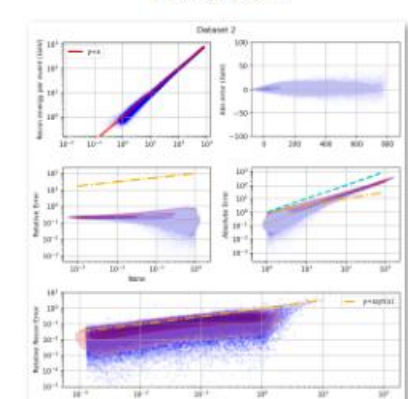
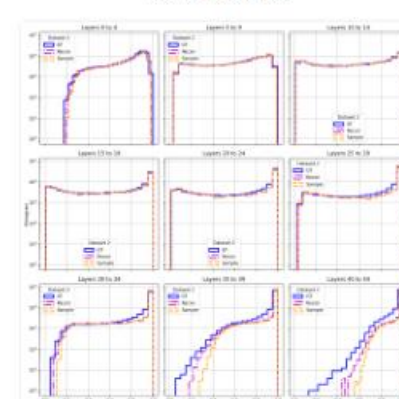
Model 470 (~2 months ago)

Epoch150

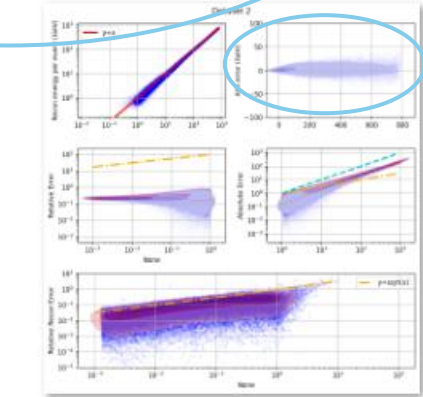
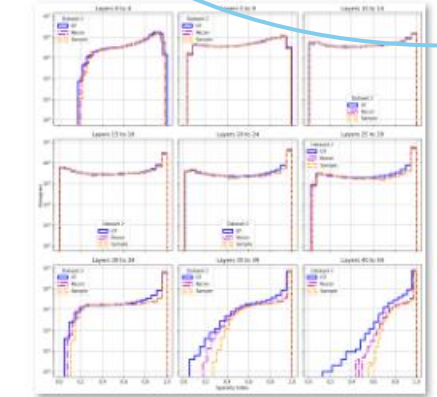
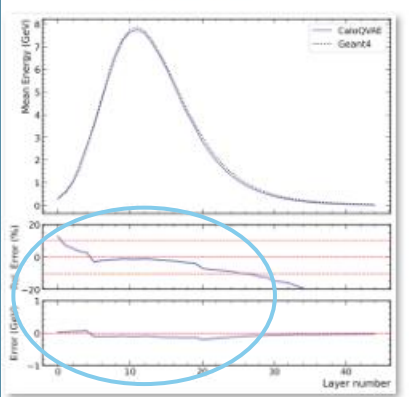
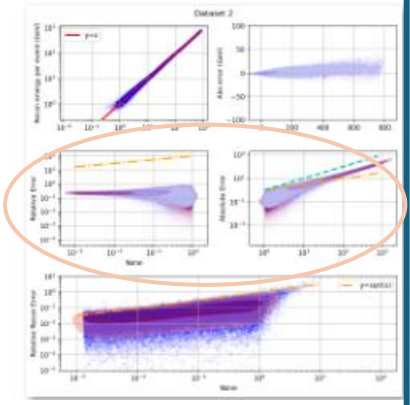
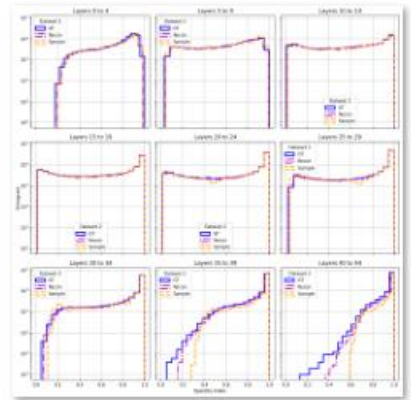
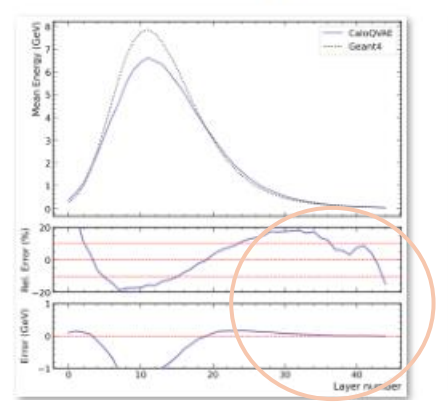
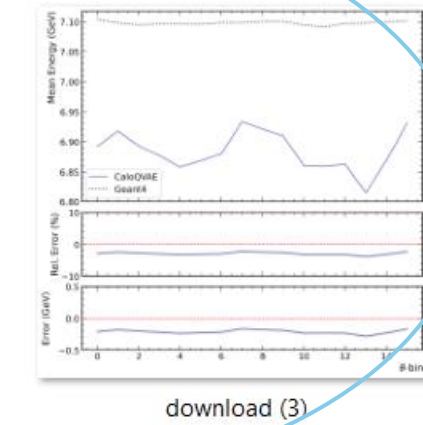
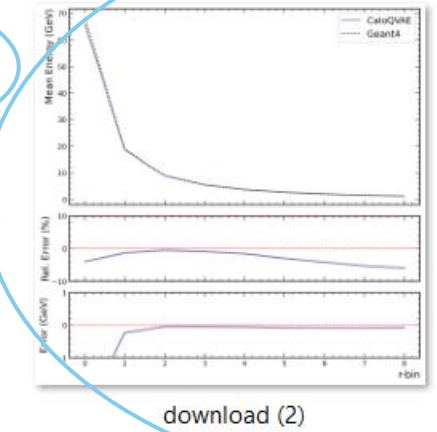
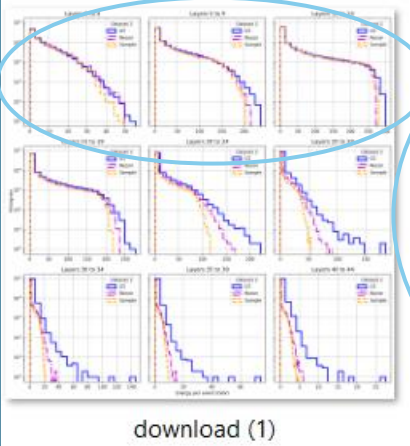
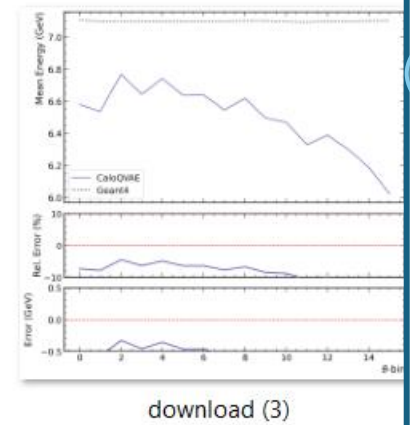
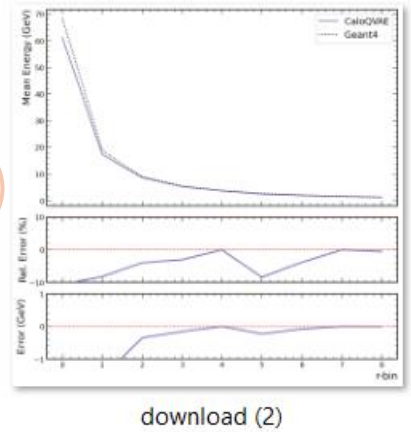
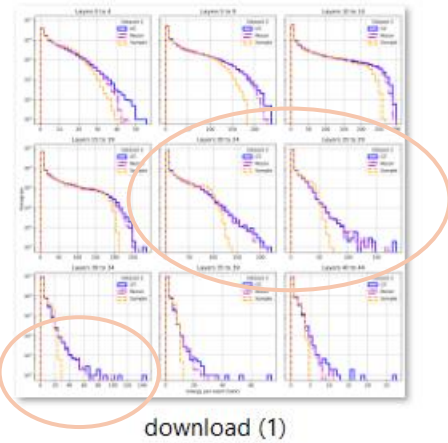
Hierarchical (9 Decoders)

Using Warm Restarts

FPD: 4190; KPD: 52



Second Comparison

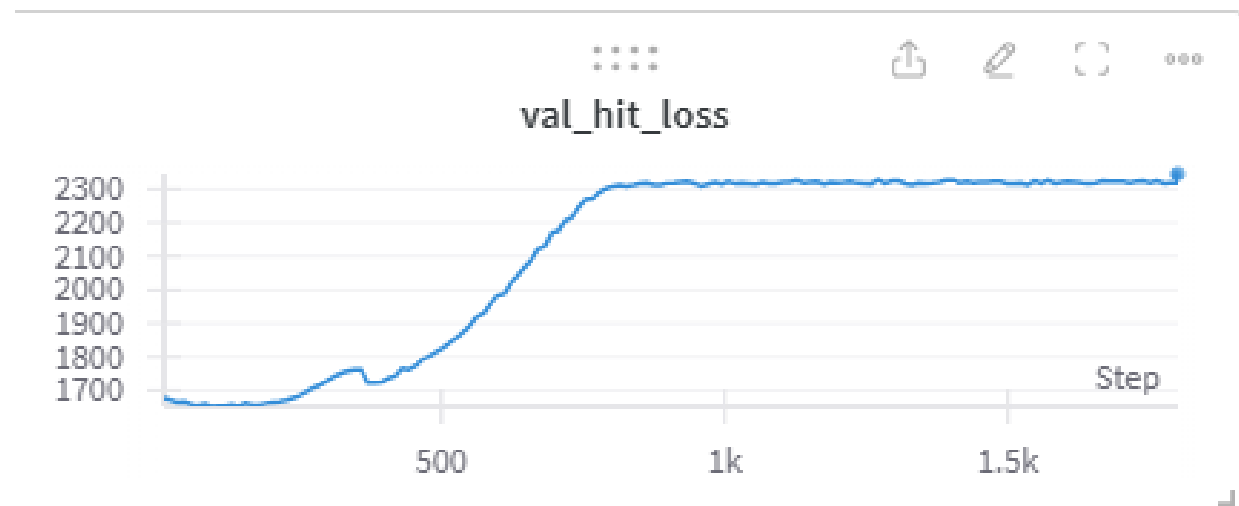
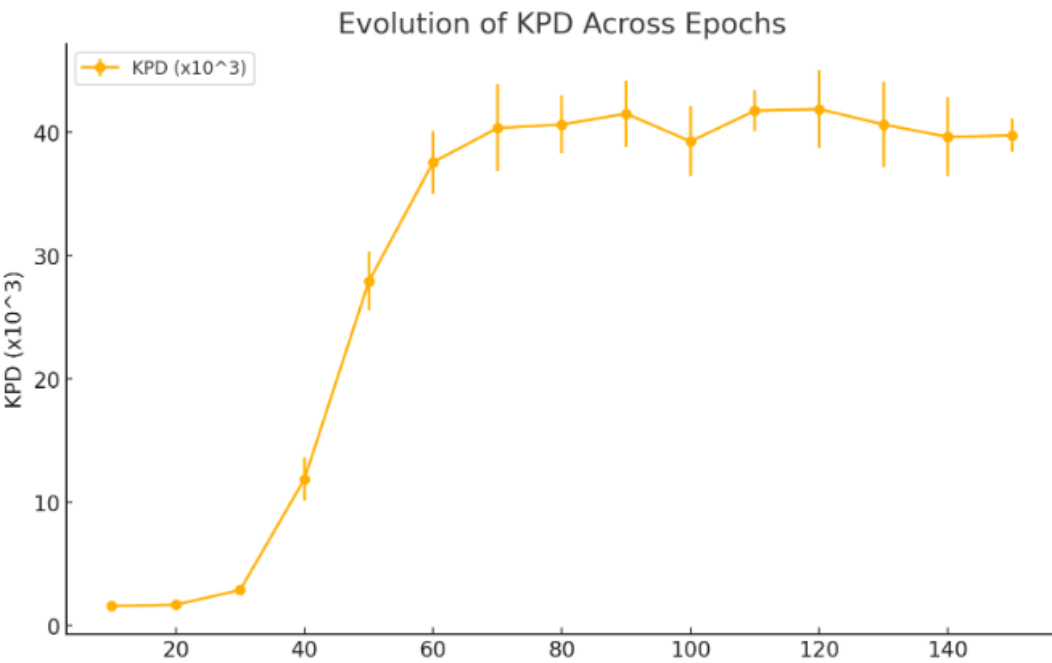


Model 485 (current best)
 Epoch 10
 Convolutional
 No Warm Restarts
 FPD: 468; KPD: 1.01

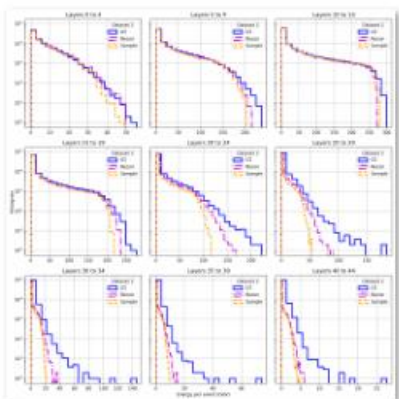
Model 470 (~2 months ago)
 Epoch 150
 Hierarchical (9 Decoders)
 Using Warm Restarts
 FPD: 4190; KPD: 52

Implications

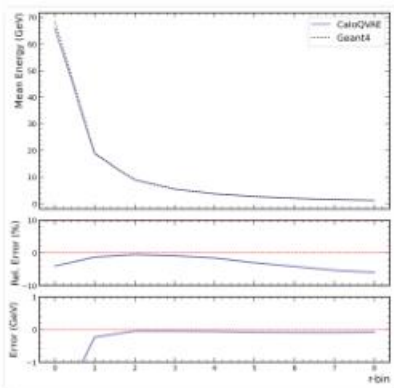
- HD might still be viable
- Comparing models with FPD/KPD alone doesn't show the full picture.
- Useful tool to find the best epoch in a selected model



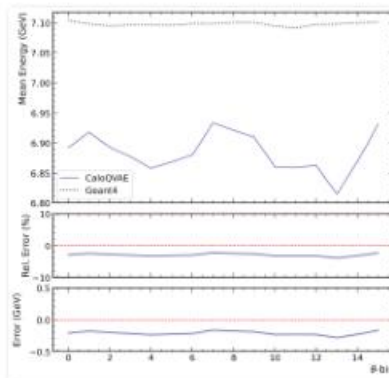
Third Comparison



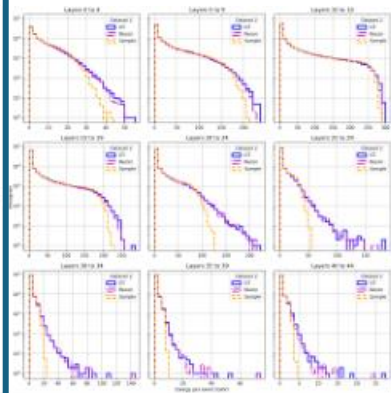
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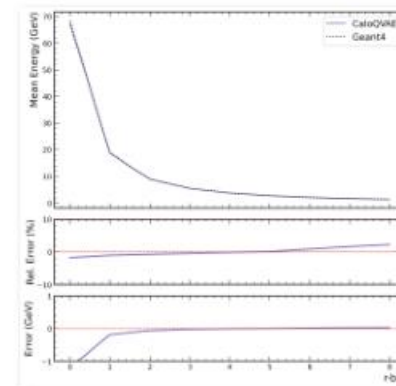
download (2)



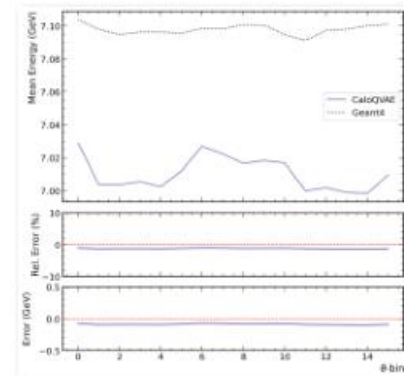
download (3)



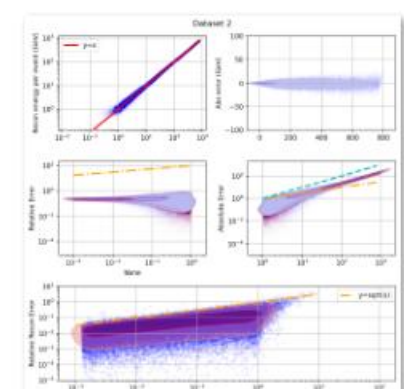
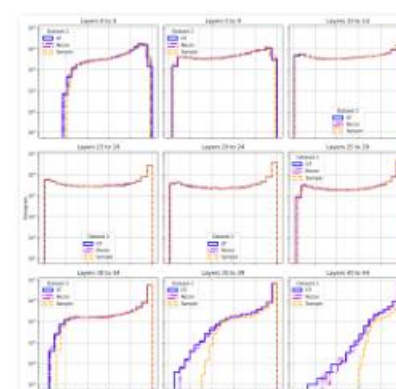
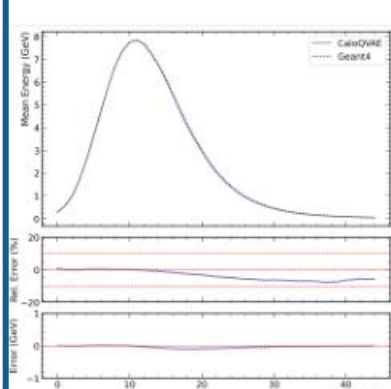
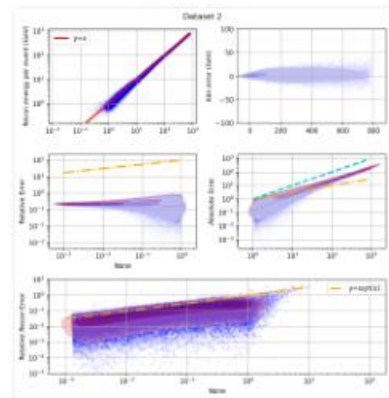
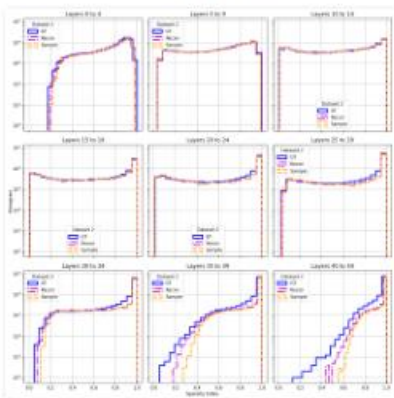
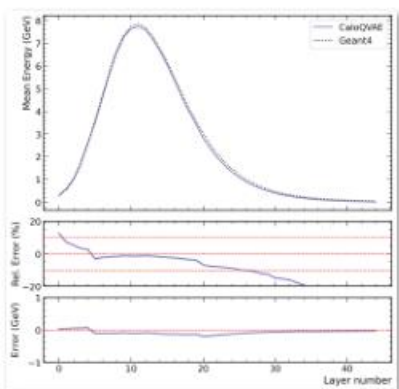
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Model 485 (current best)
Epoch 150
Convolutional
No Warm Restarts (LR: 0.0001)
FPD: 384; KPD: 0.73

Model 495 (NEW)
Epoch 150
Convolutional
Warm Restarts (LR:0.0003)
FPD: 424; KPD: 0.86

