

Fast greedy removal algorithm

$$A = M$$

Calculate K matrix, given α value

$$\text{Calculate } r_i = \sum_{j=1}^m K_{ij}, \forall i=1, \dots, m$$

dimensions
matriz input

$$\Theta(mM^2)$$

$$\Theta(n)$$

while $|A| > N$

$$j_{\text{worst}} = \operatorname{argmax}_{j=1, \dots, m} |A|^{r_j}$$

for $i=1$ to $|A|$

$$r_i = r_i - K_{ii}^{j_{\text{worst}}}$$

$$\Theta(|M| - N)$$

~~$$\Theta(n) \text{ OCM}$$~~

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O(1)

Delete $j_{\text{worst}}^{\text{th}}$ column and row from K

O(1)

Delete $j_{\text{worst}}^{\text{th}}$ component of \vec{r}

O(1)

$$A = A \setminus \{a_{j_{\text{worst}}}\}$$

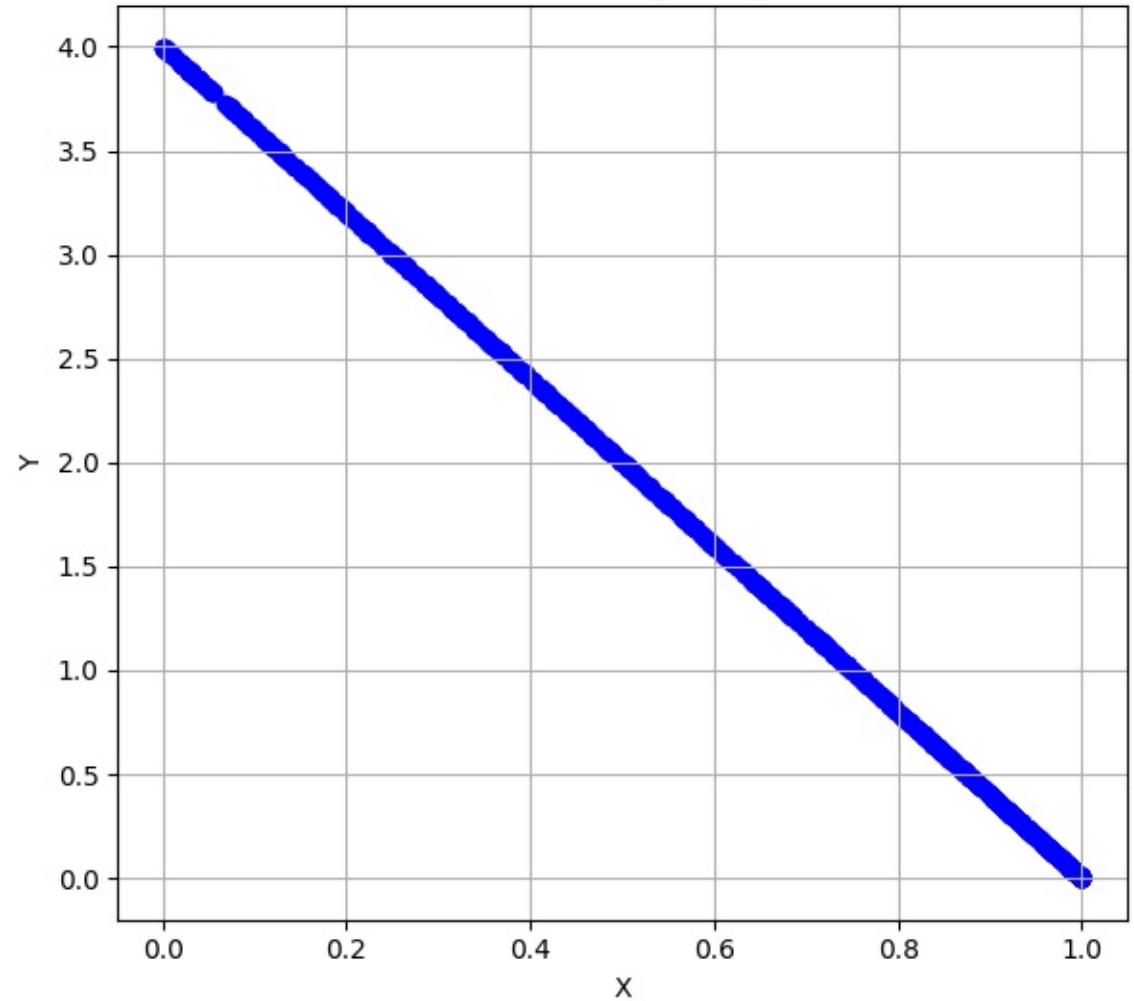
O(1)

return \vec{r}

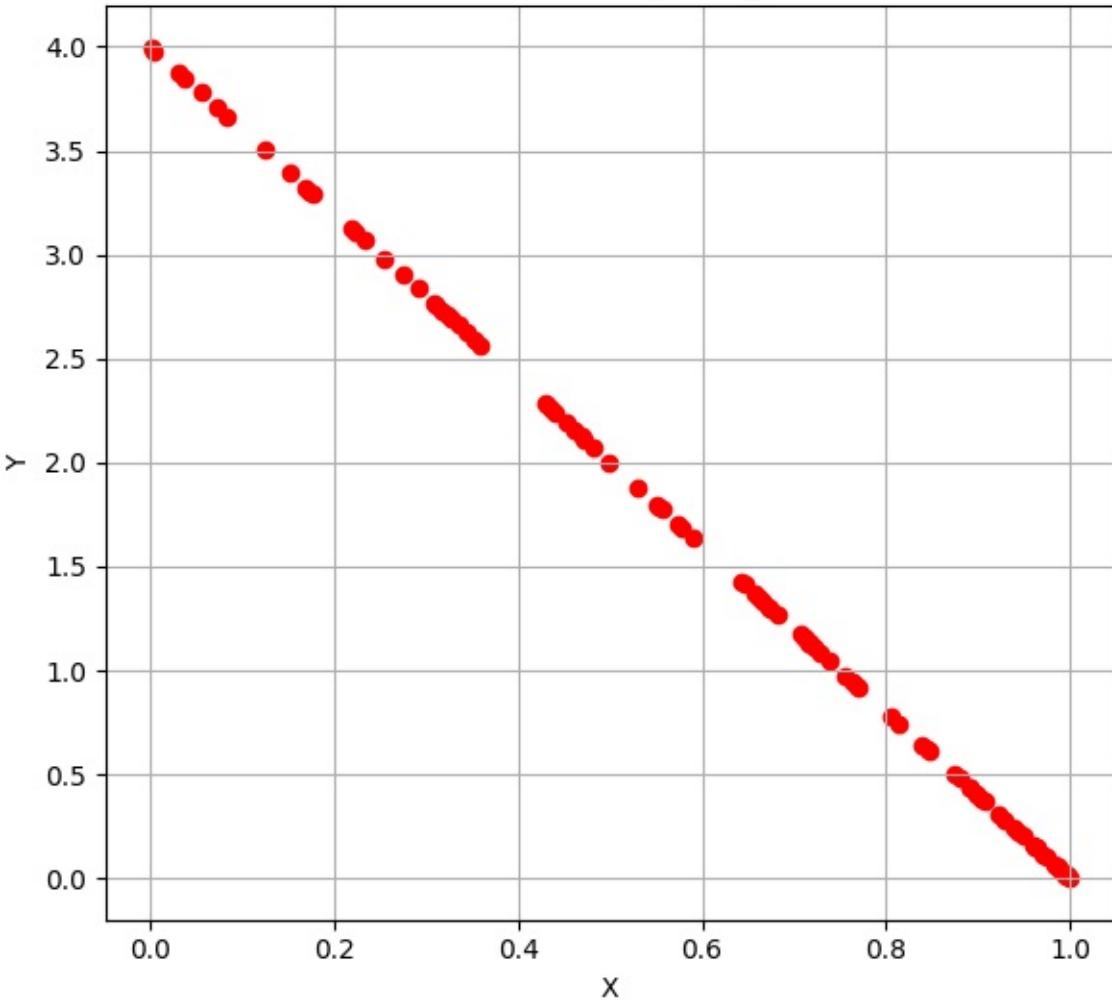
O(1)

$$\text{FGRA} = \Theta(mM^2)$$

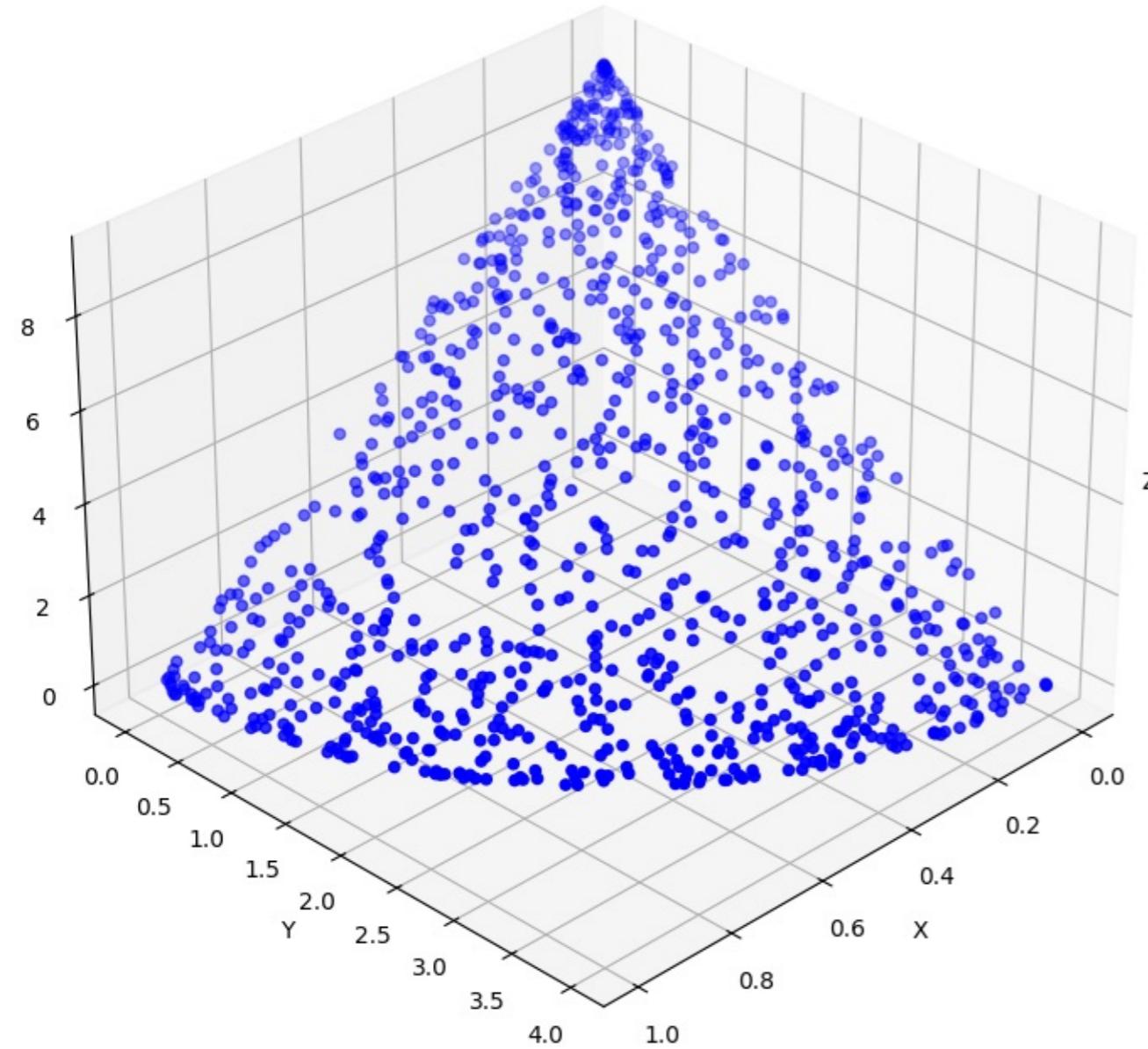
Original ZCAT1_1000_02D



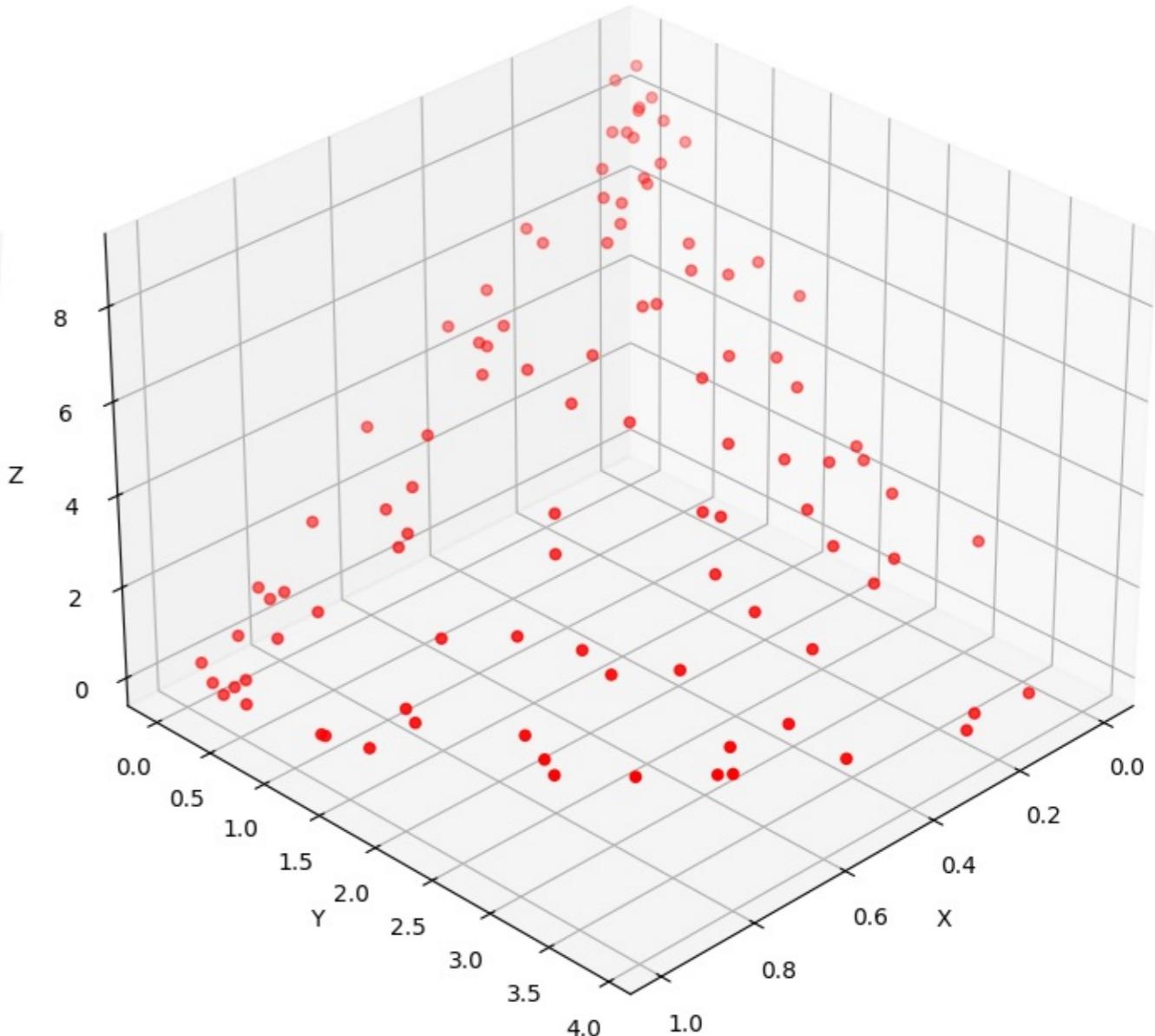
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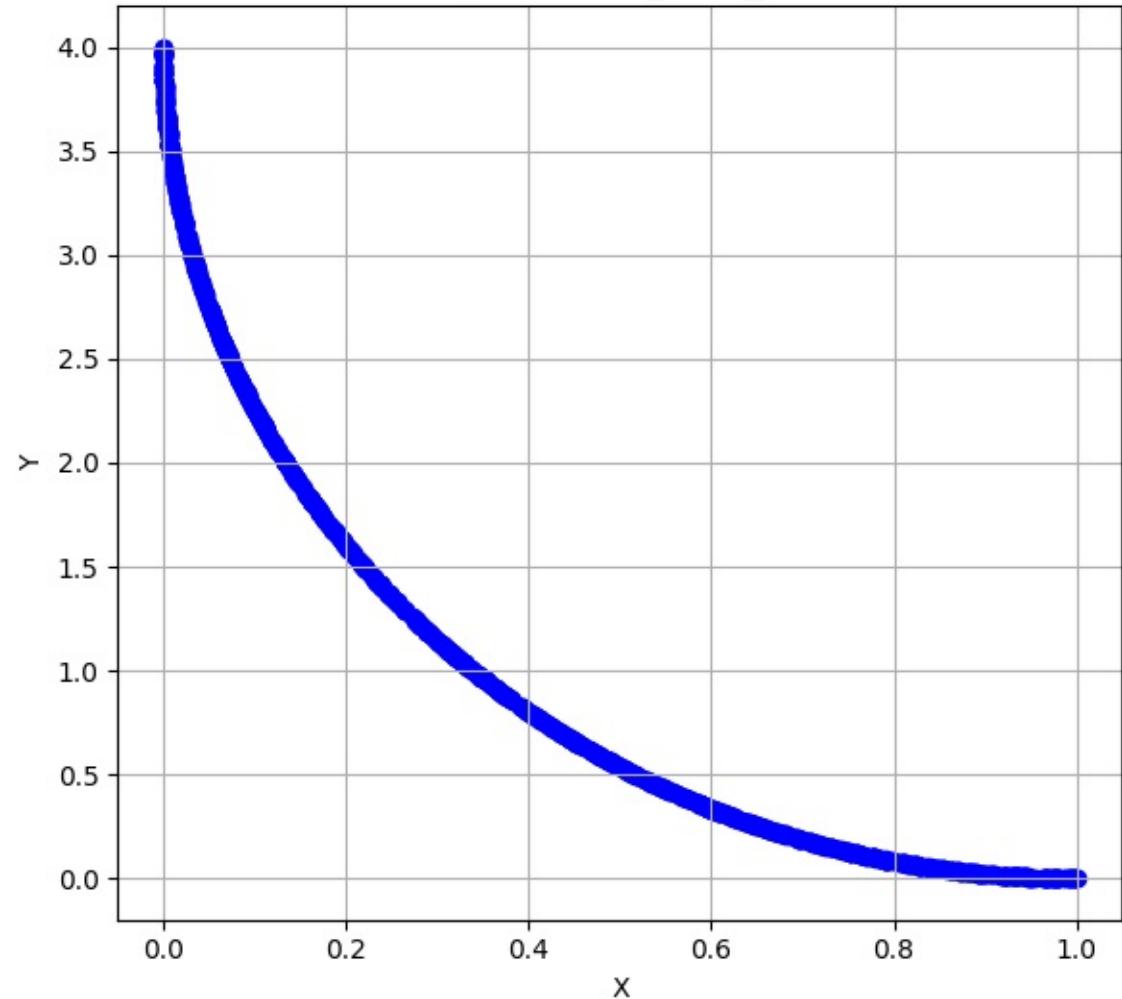
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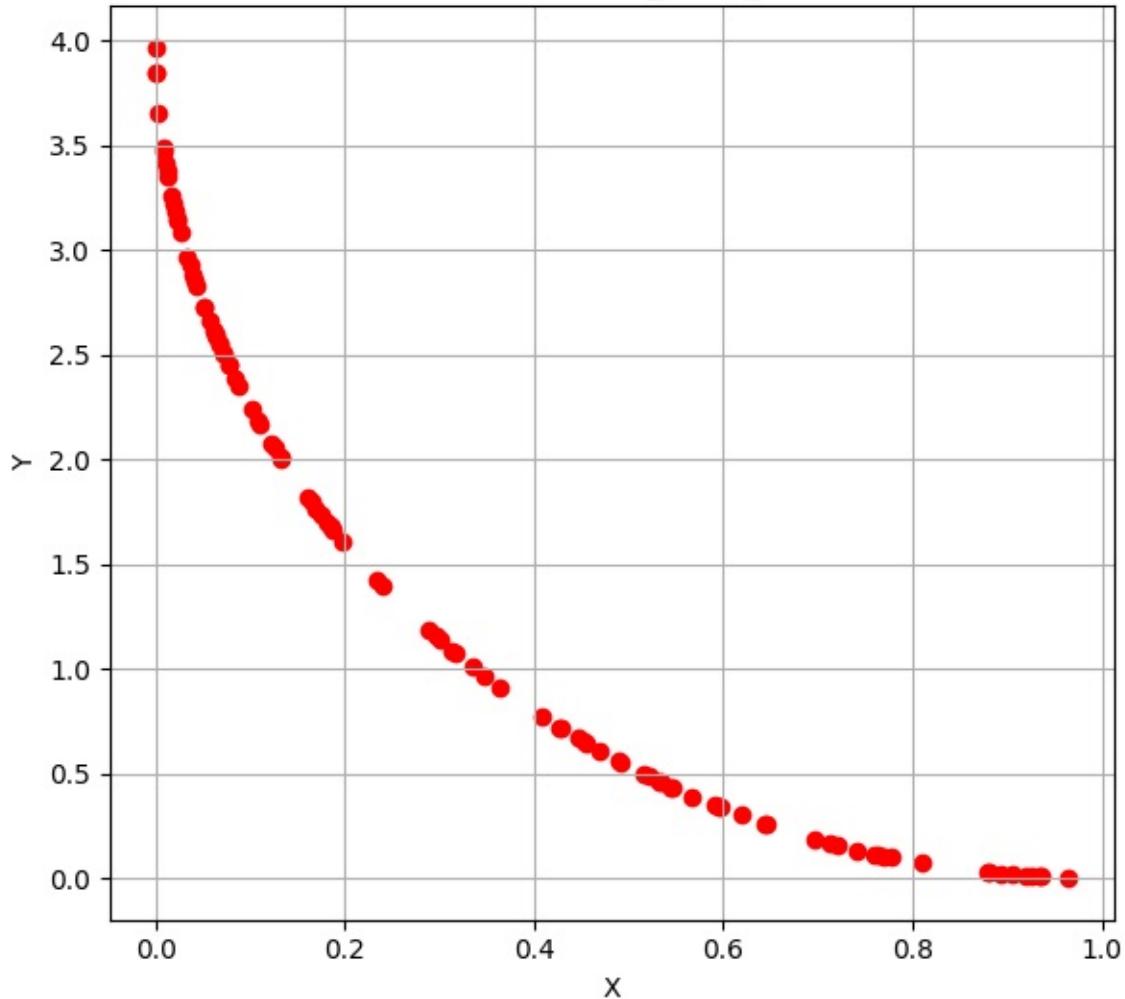
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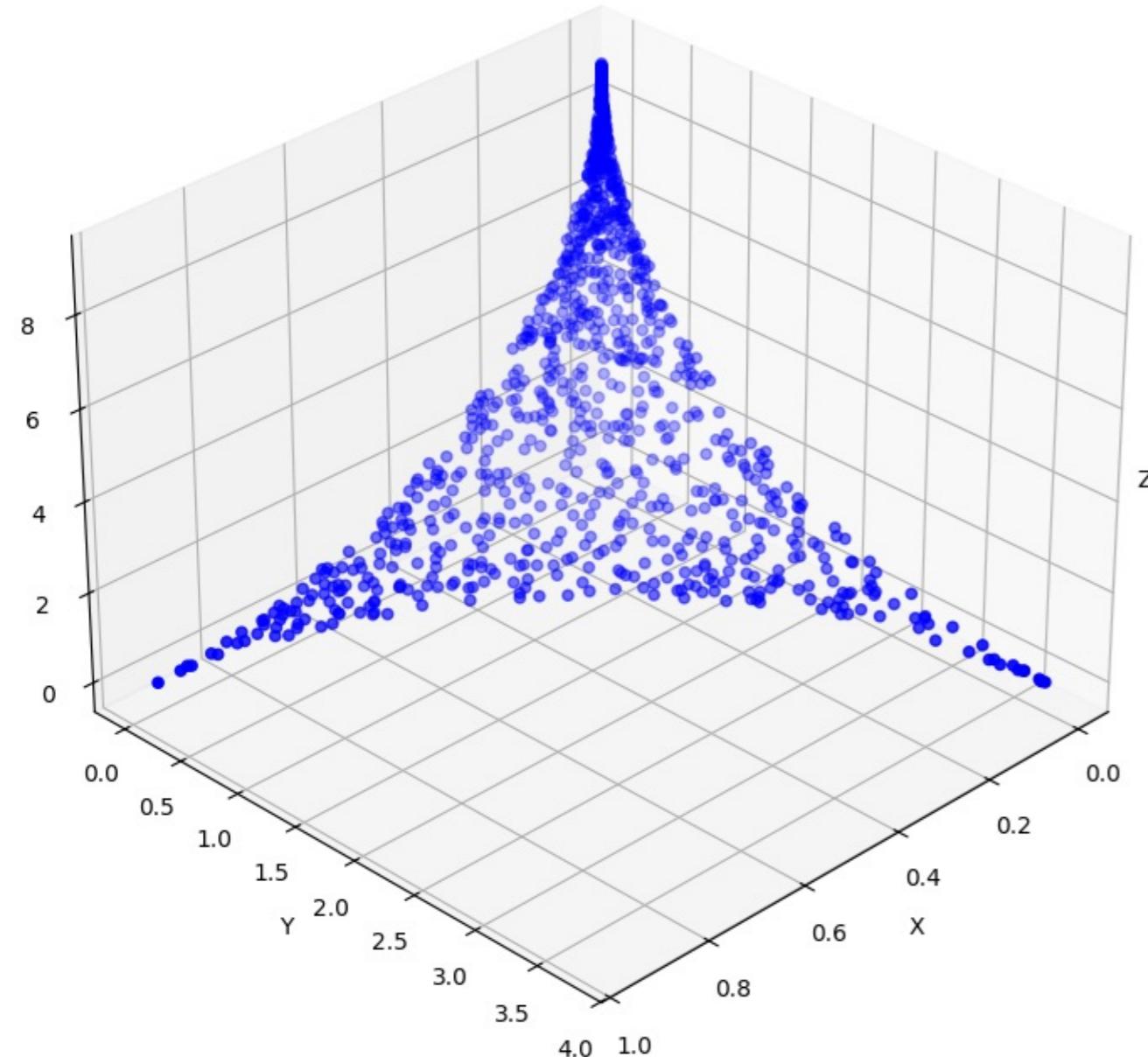
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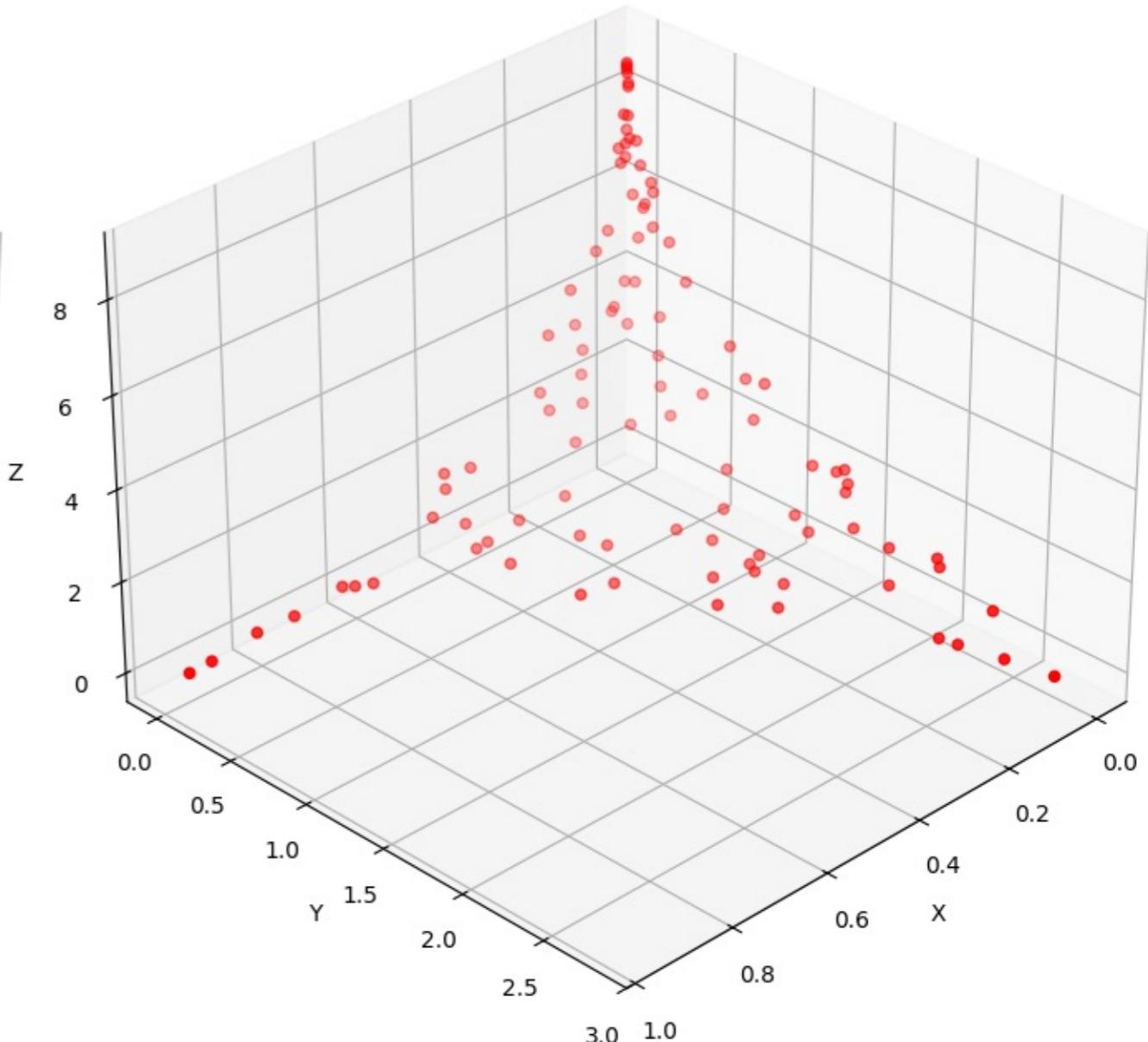
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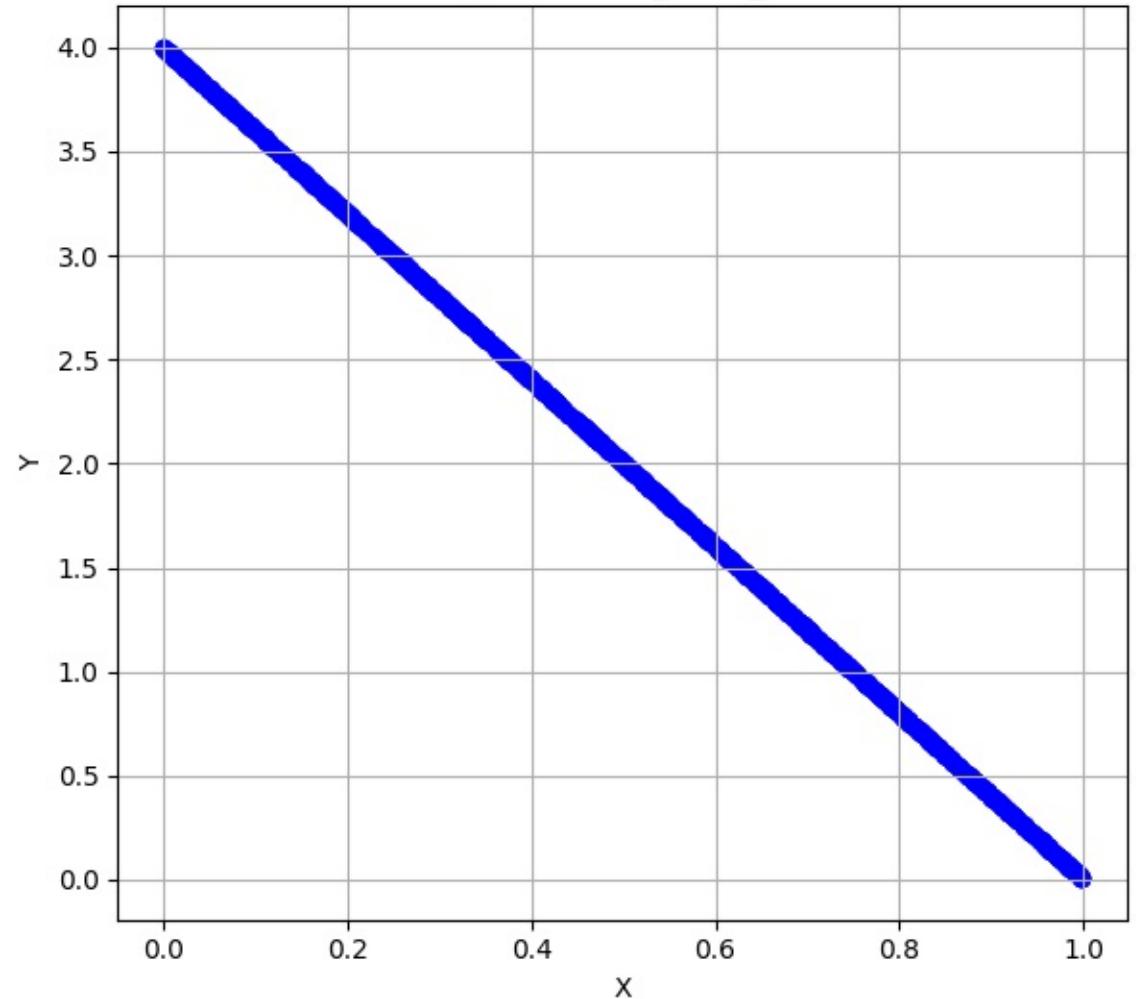
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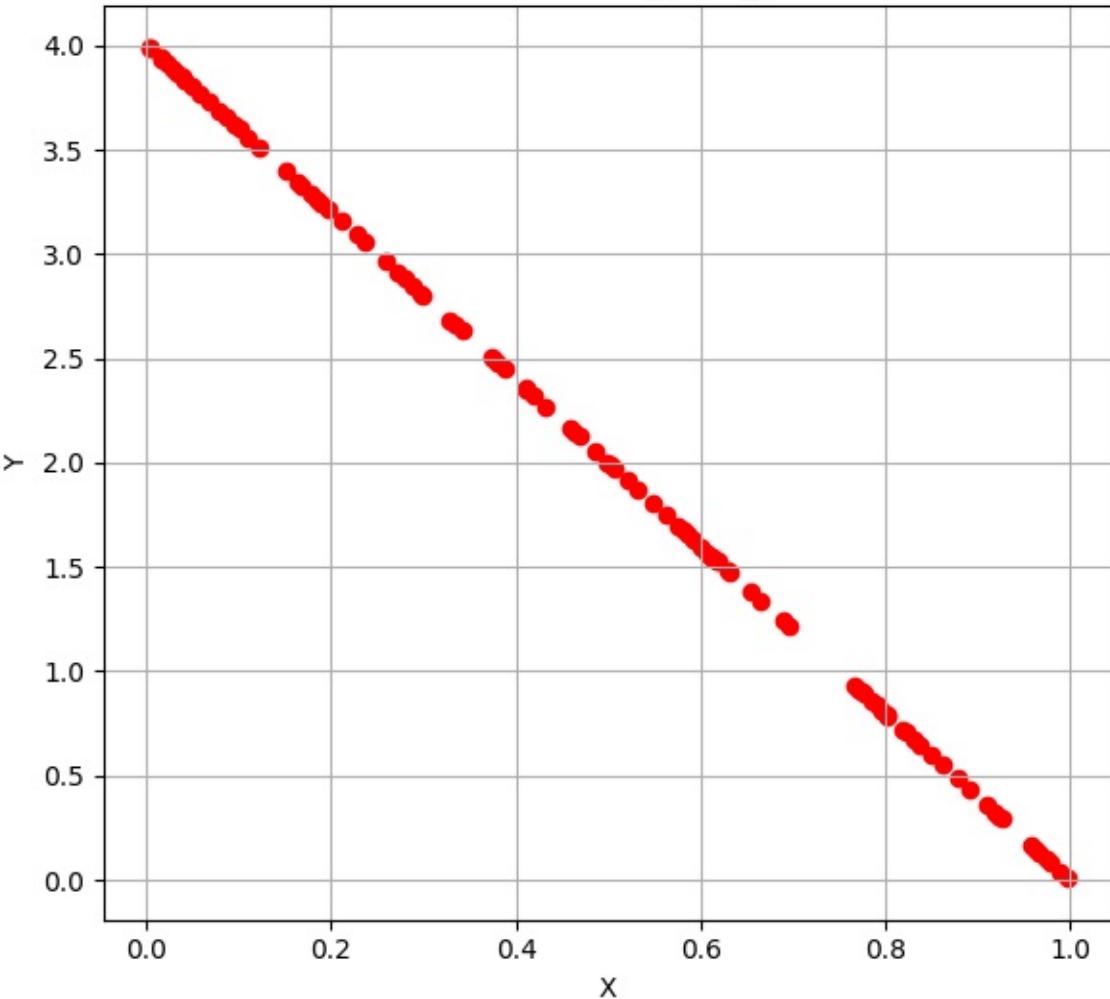
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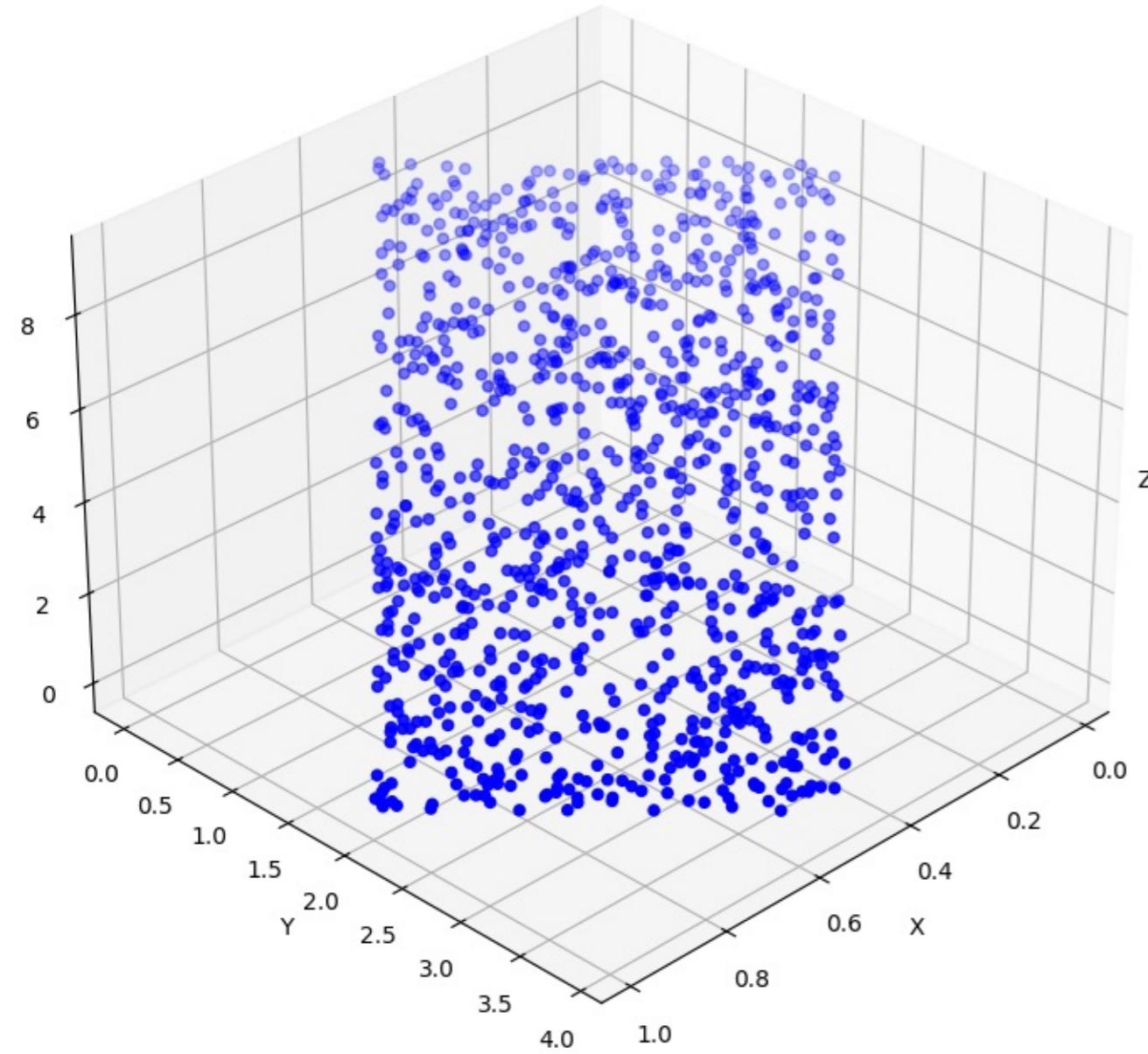
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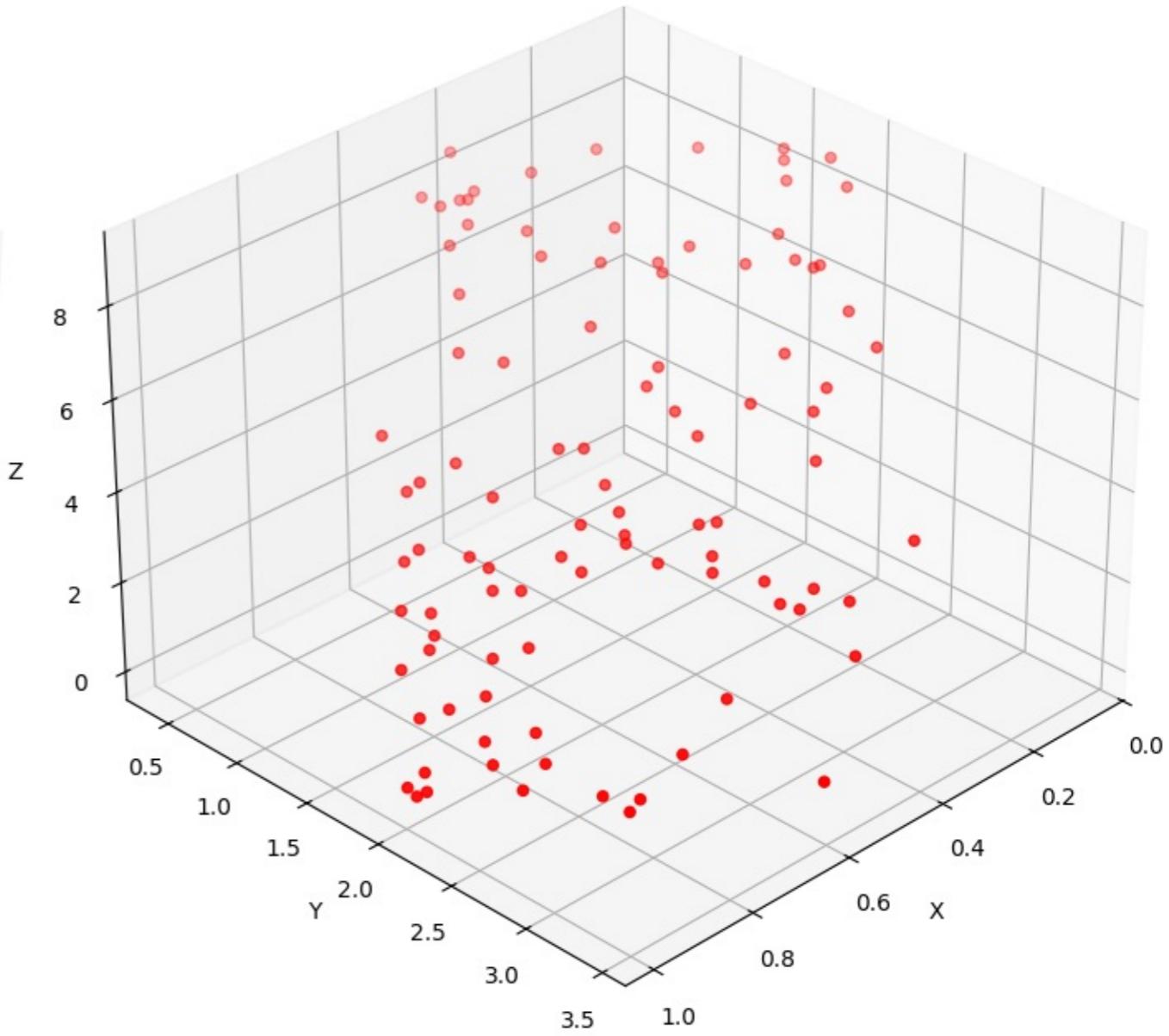
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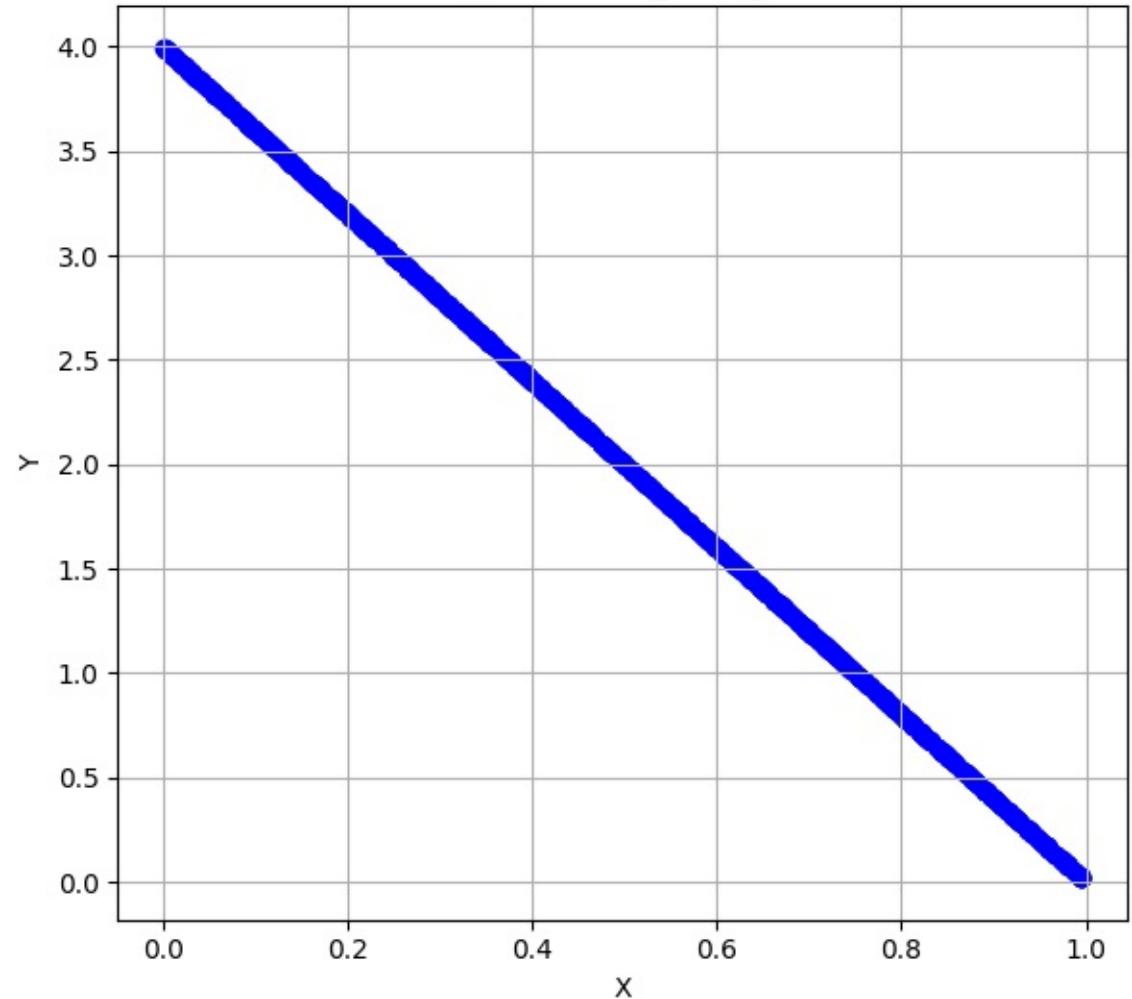
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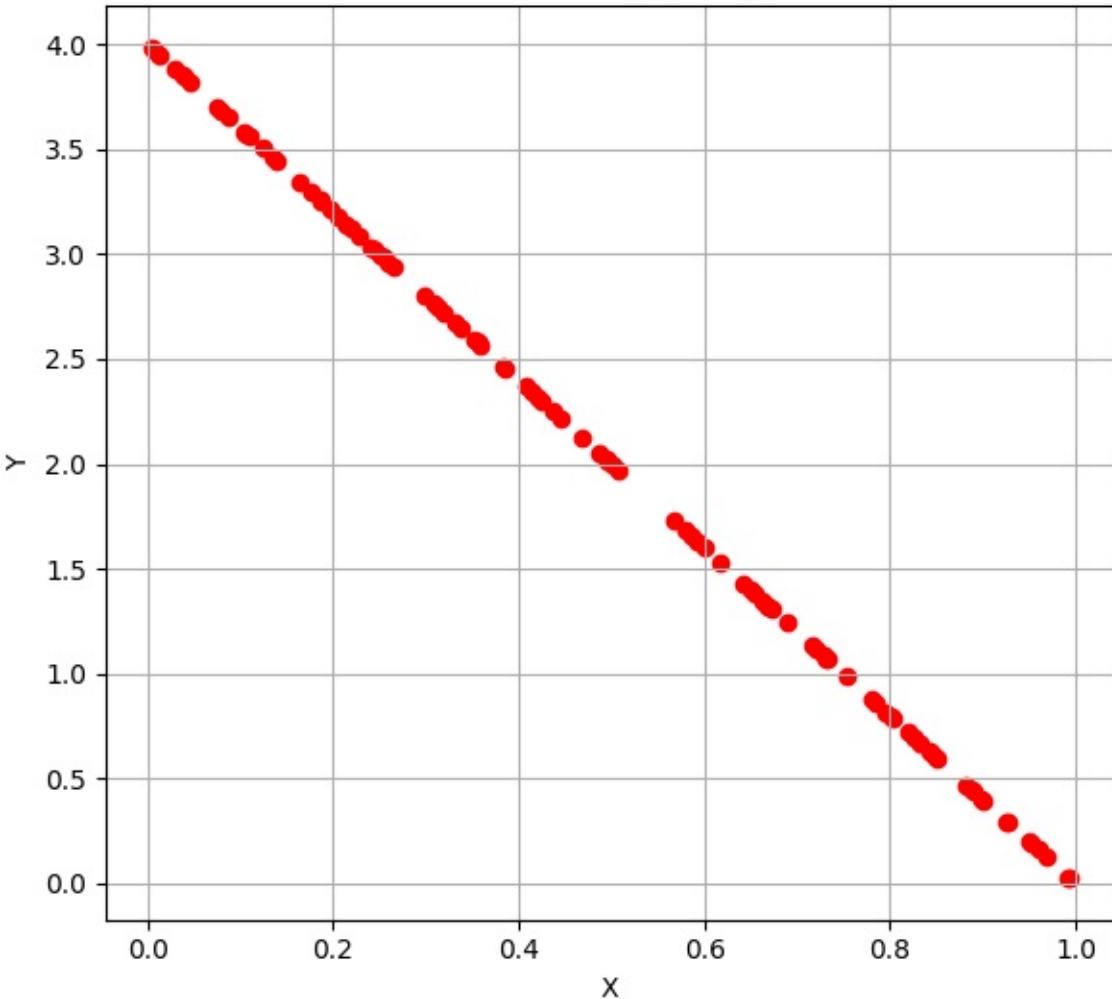
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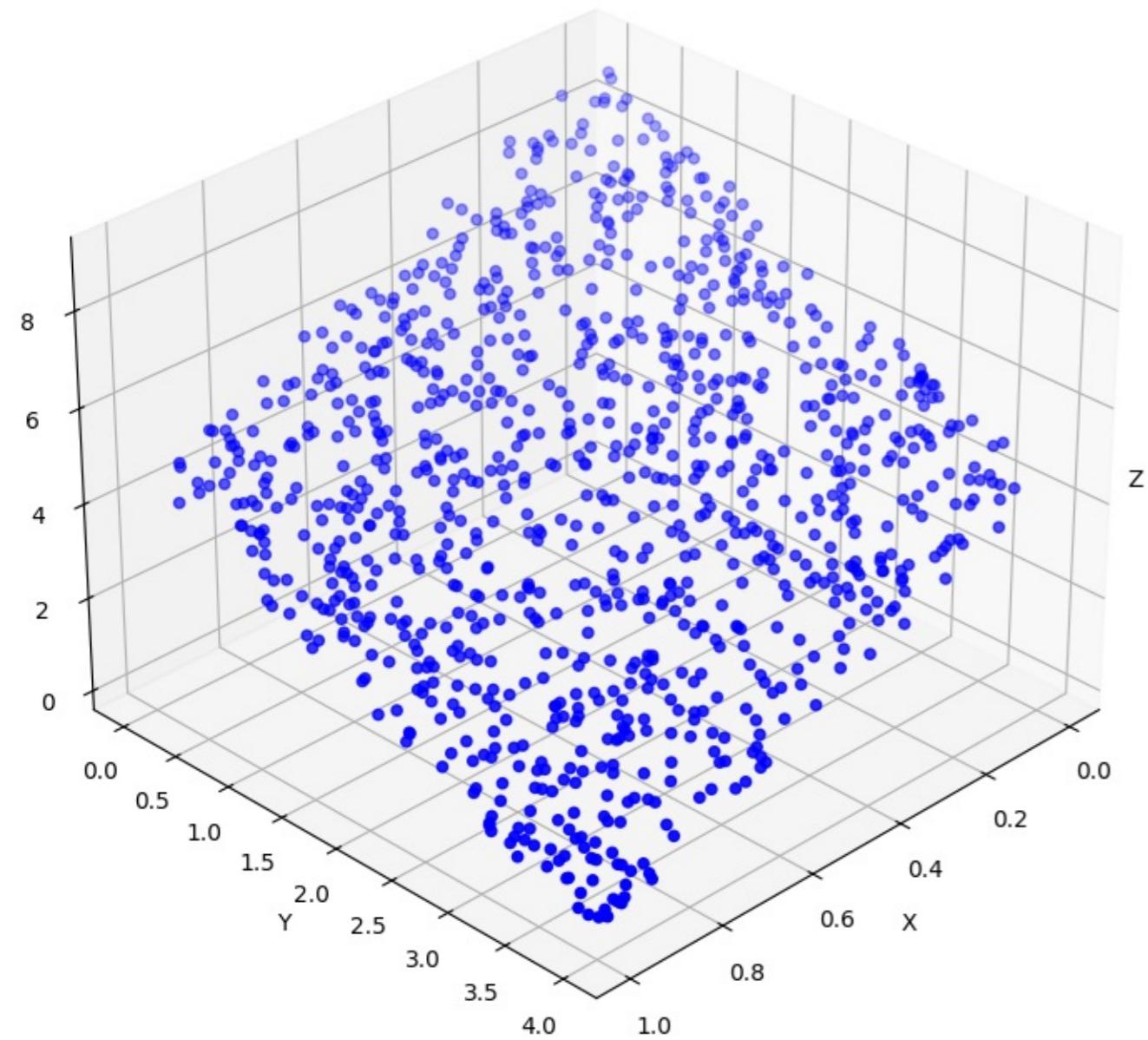
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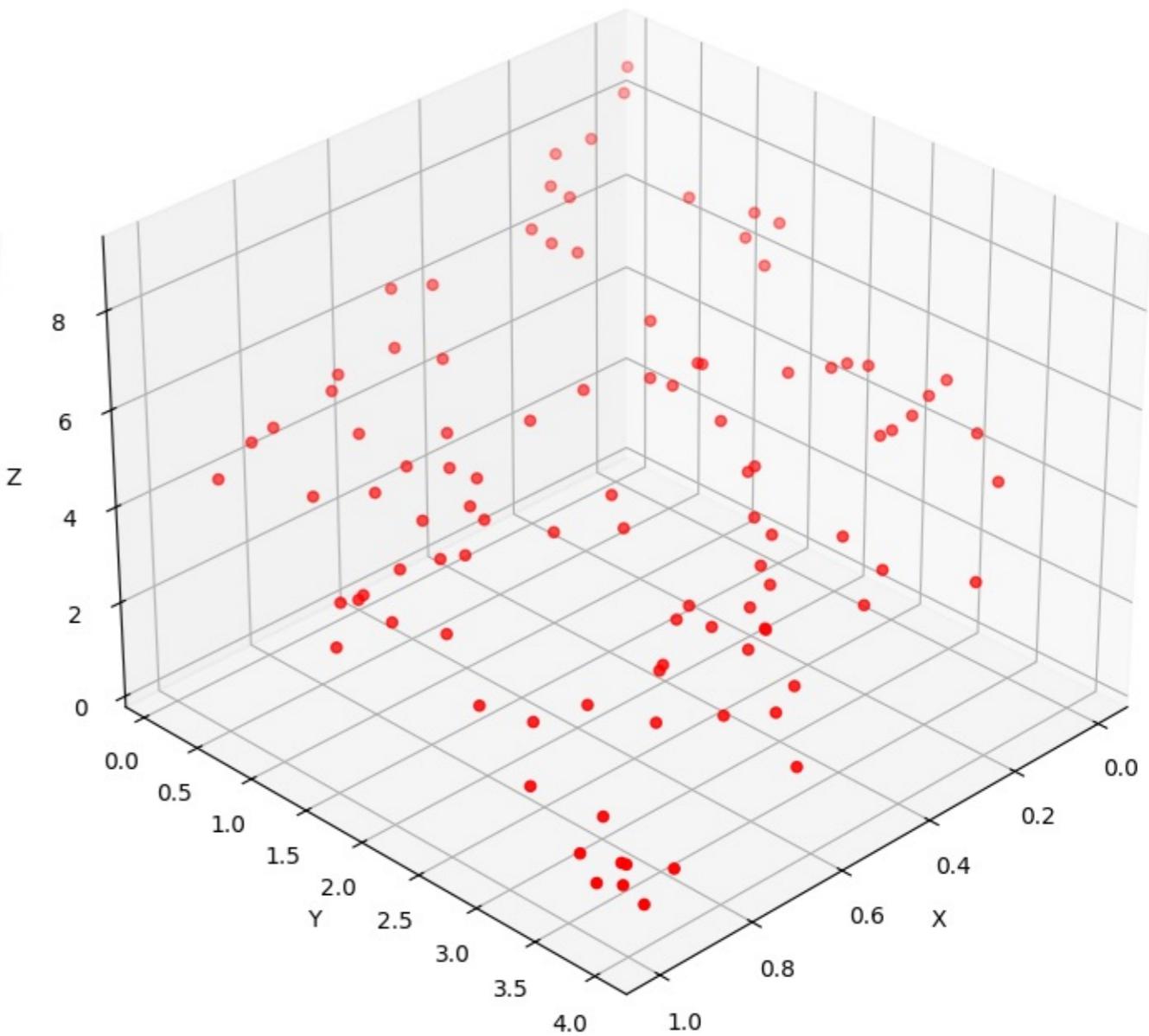
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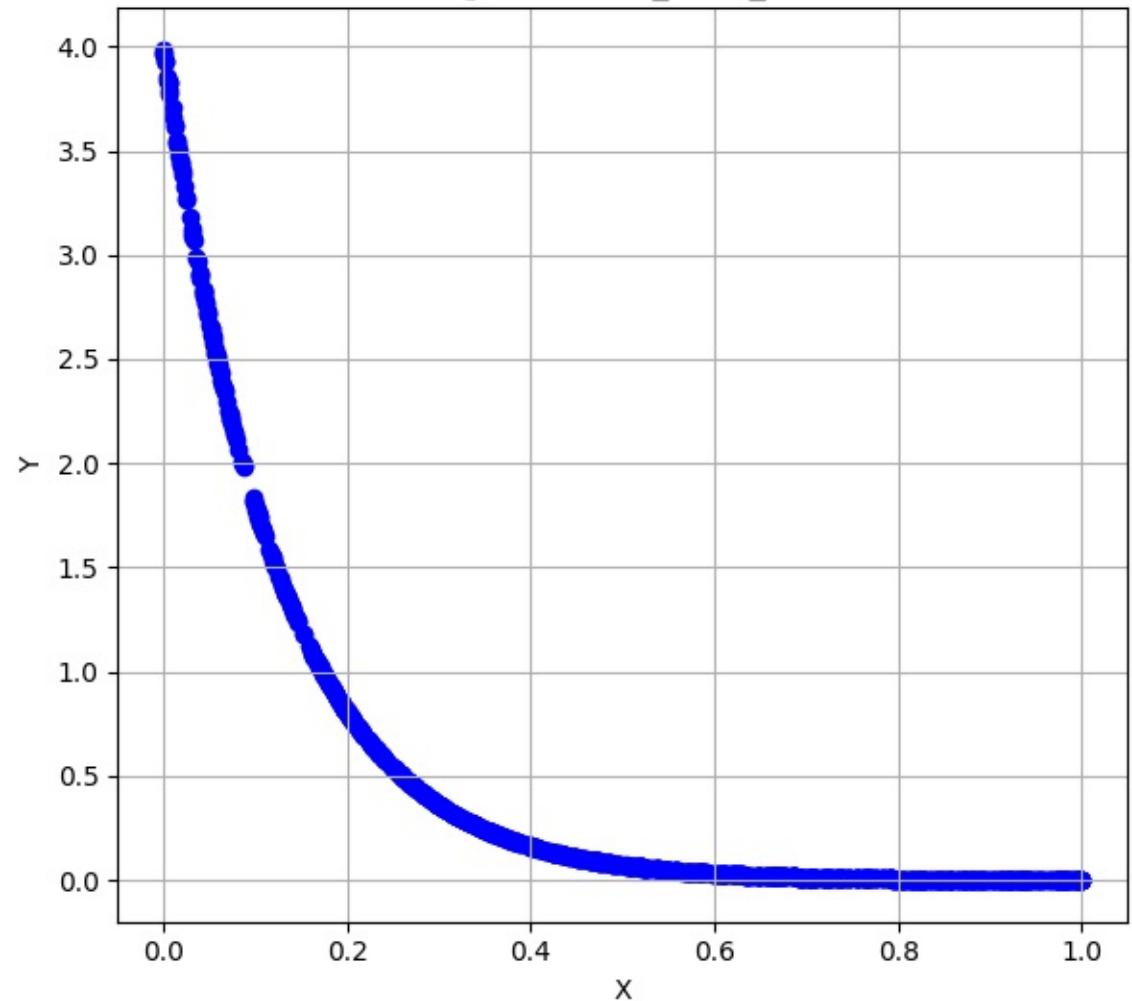
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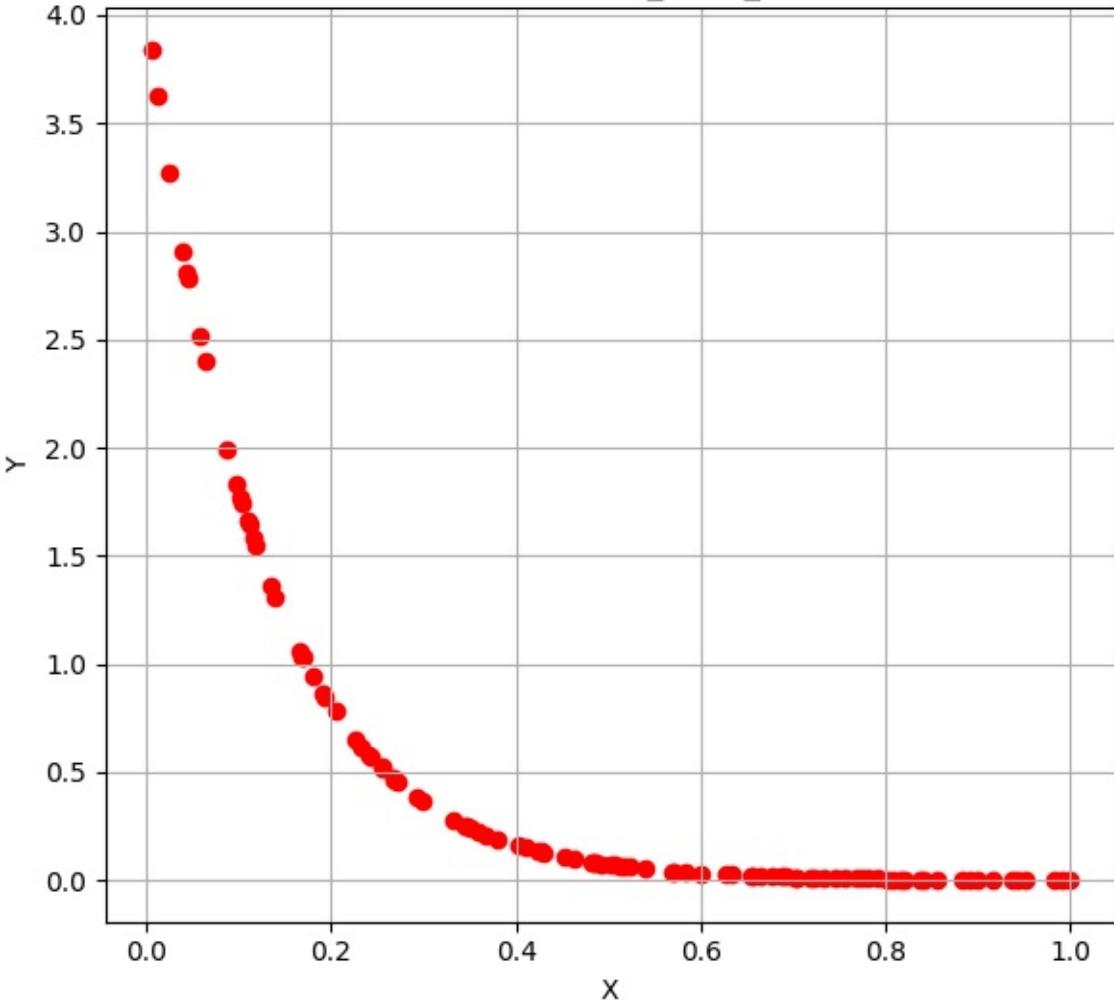
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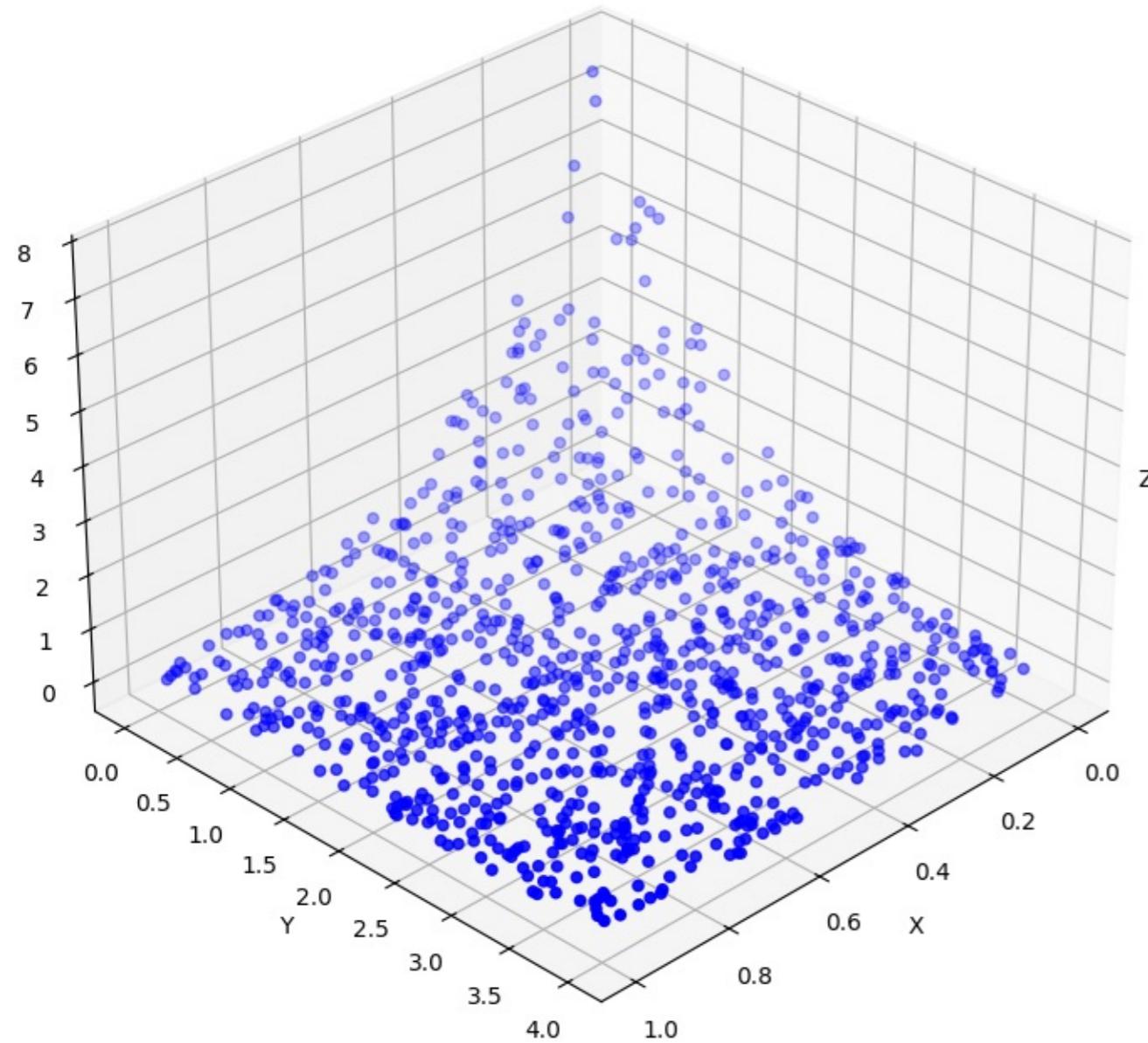
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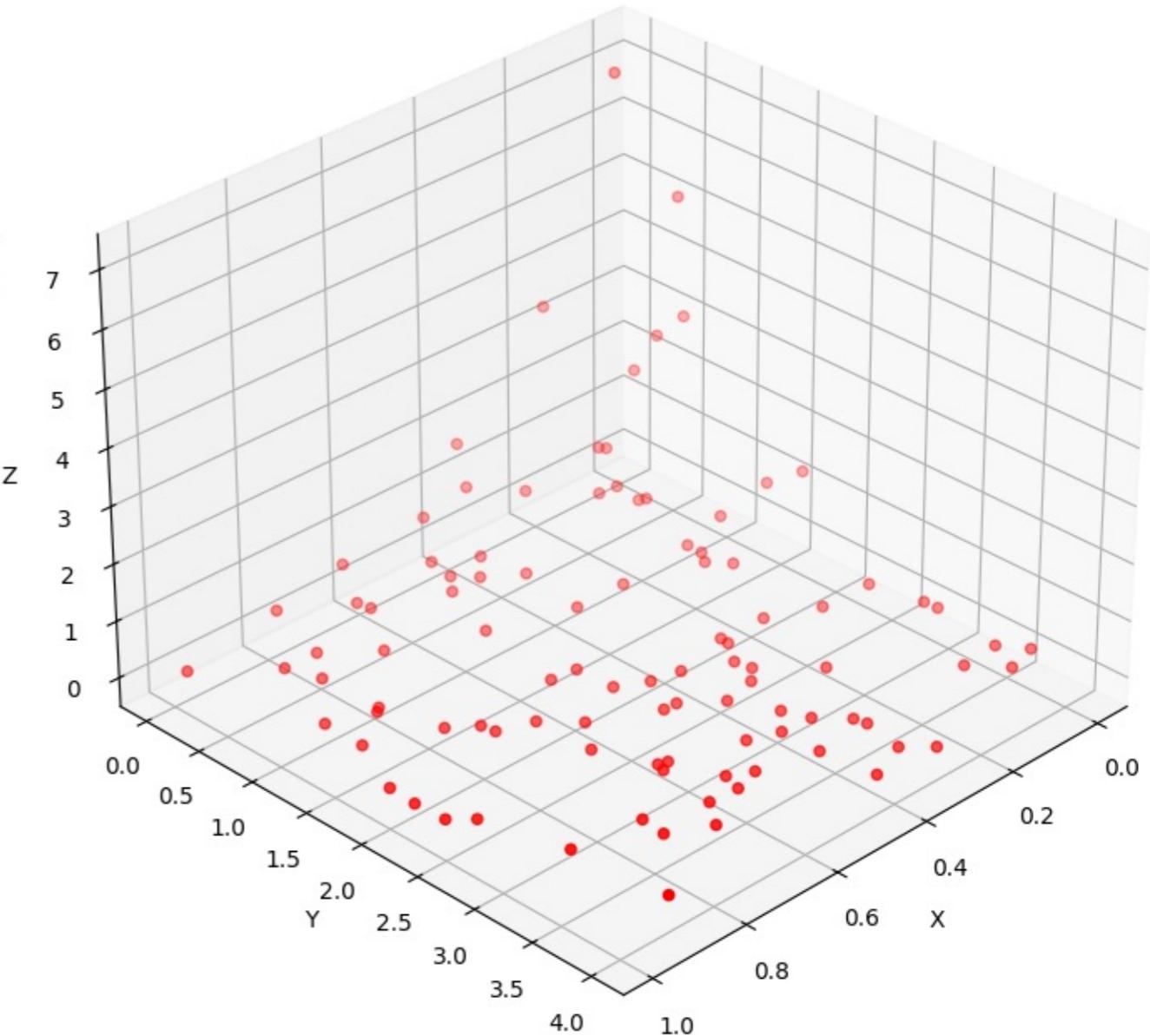
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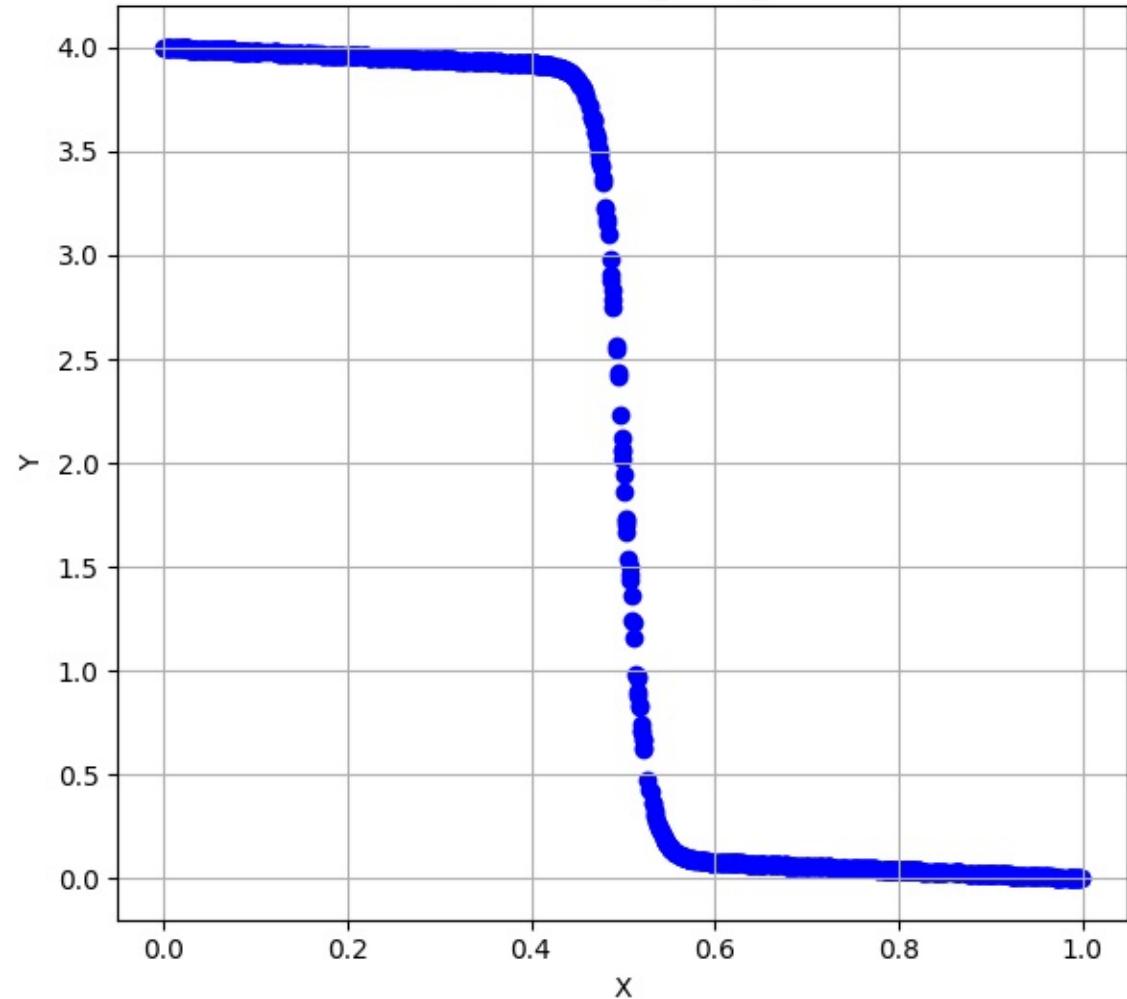
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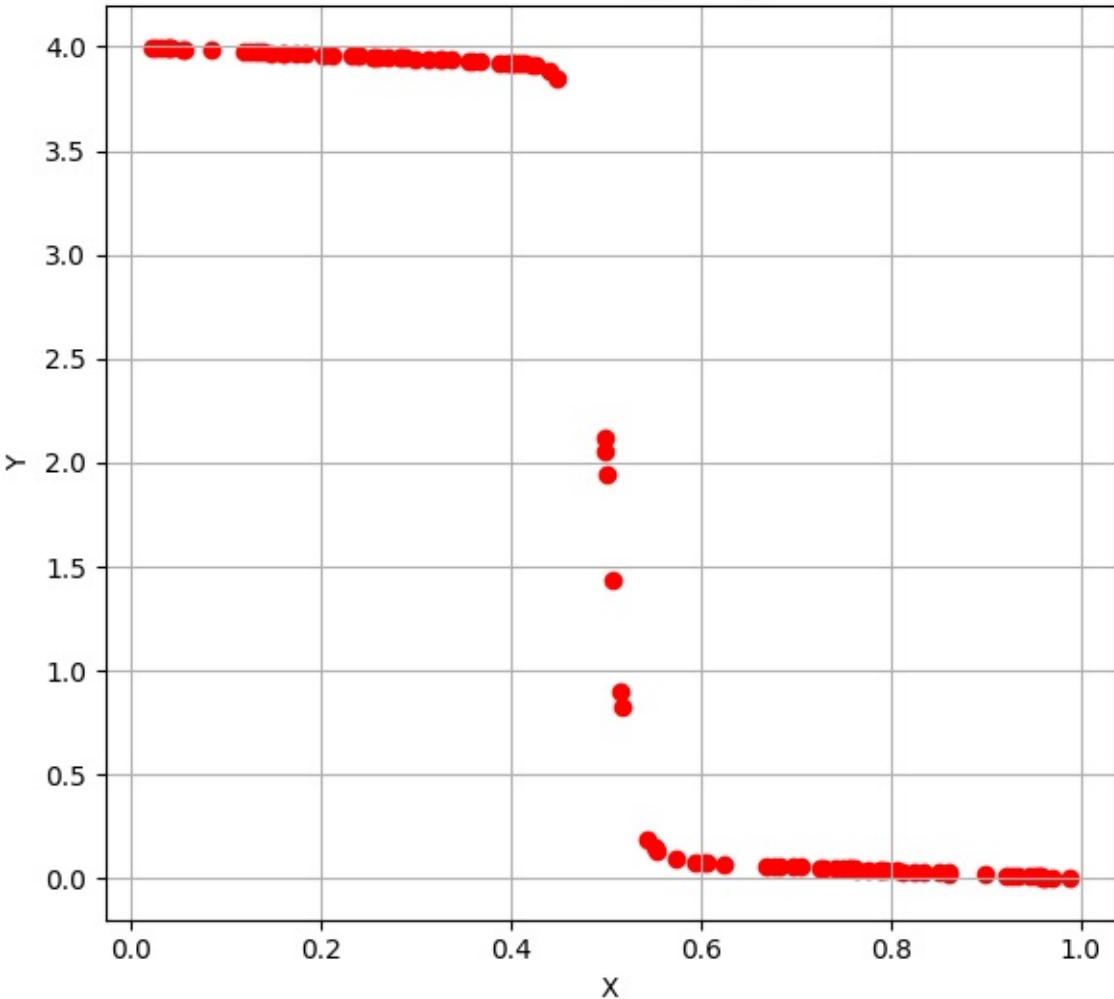
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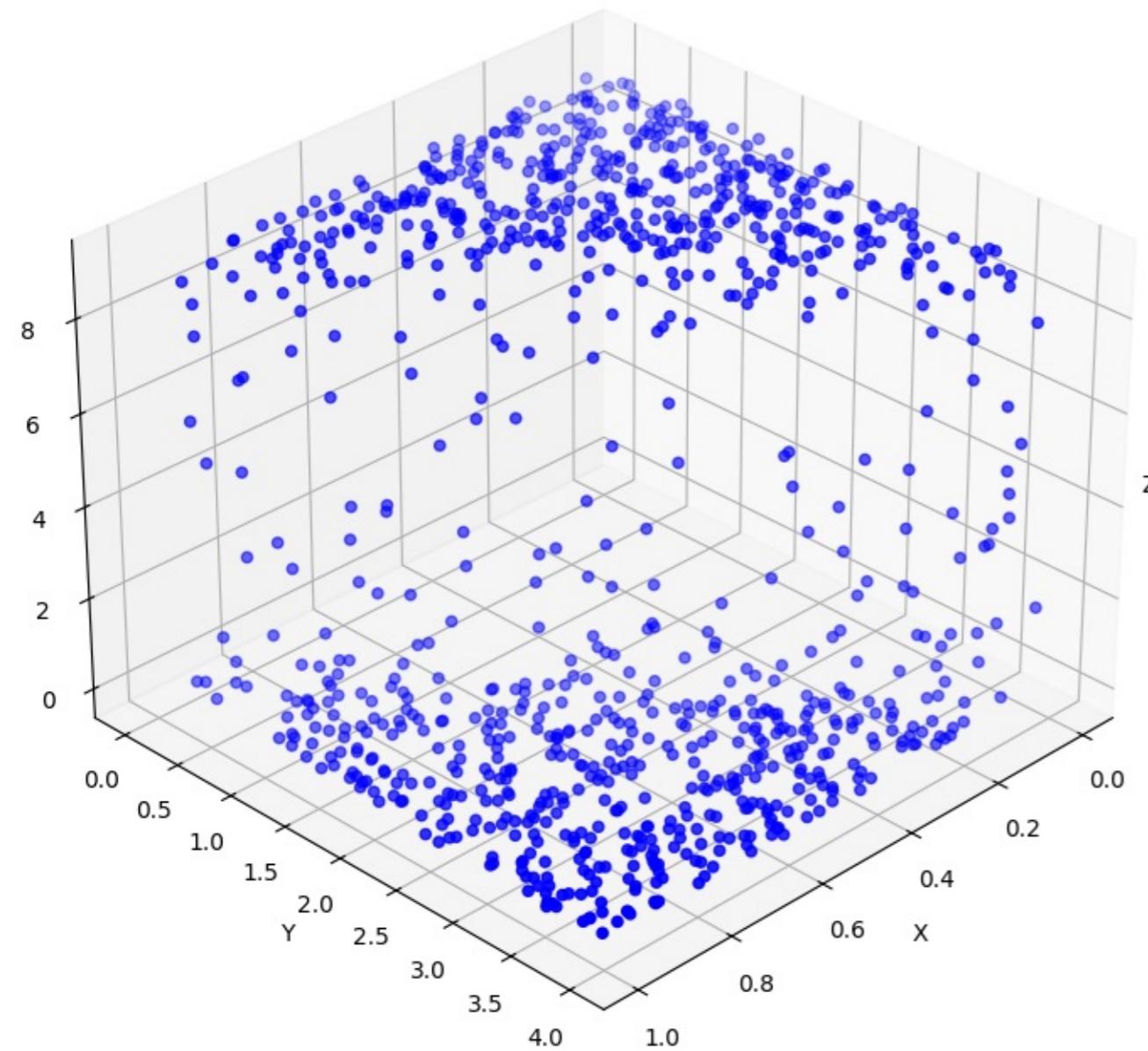
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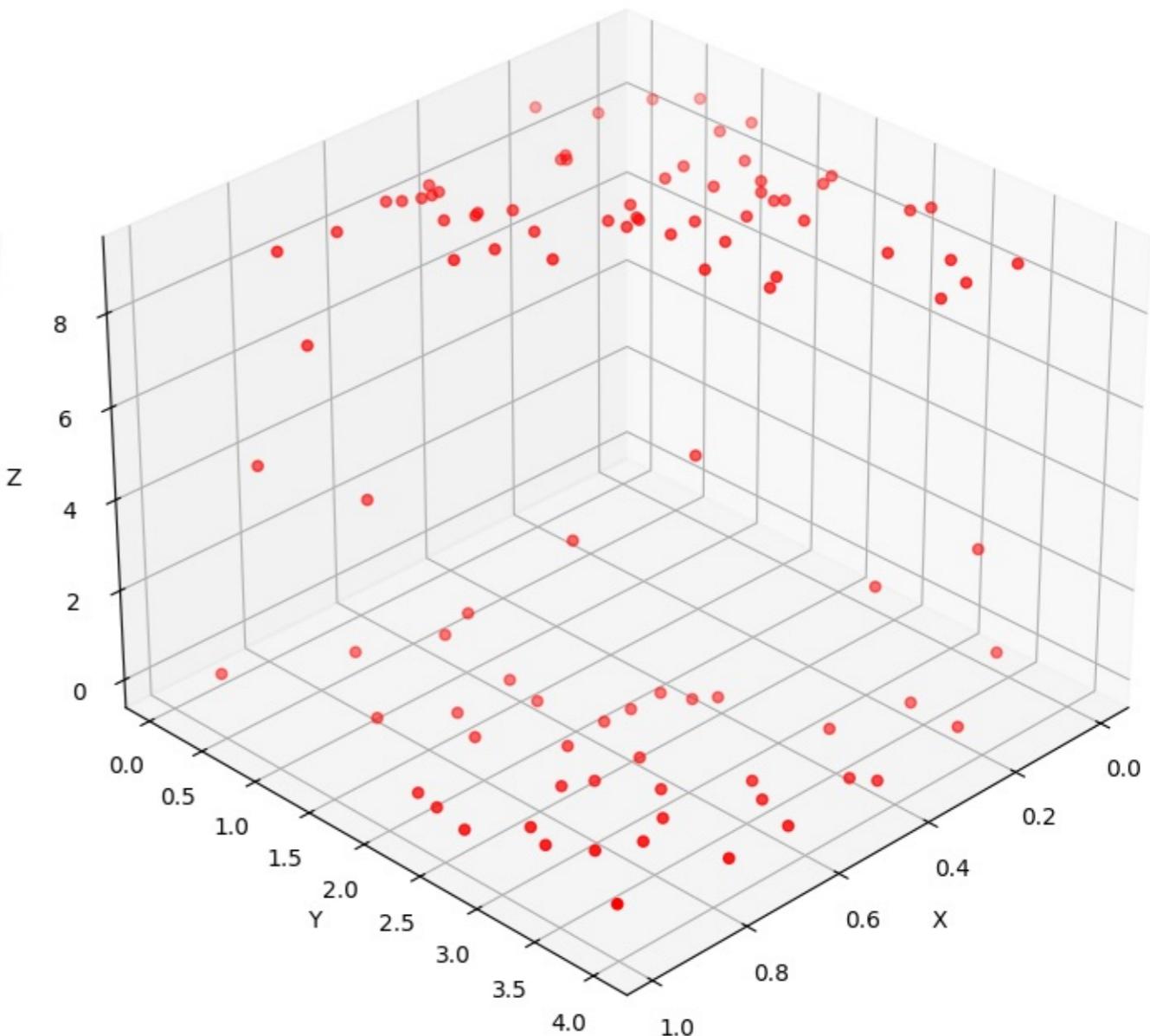
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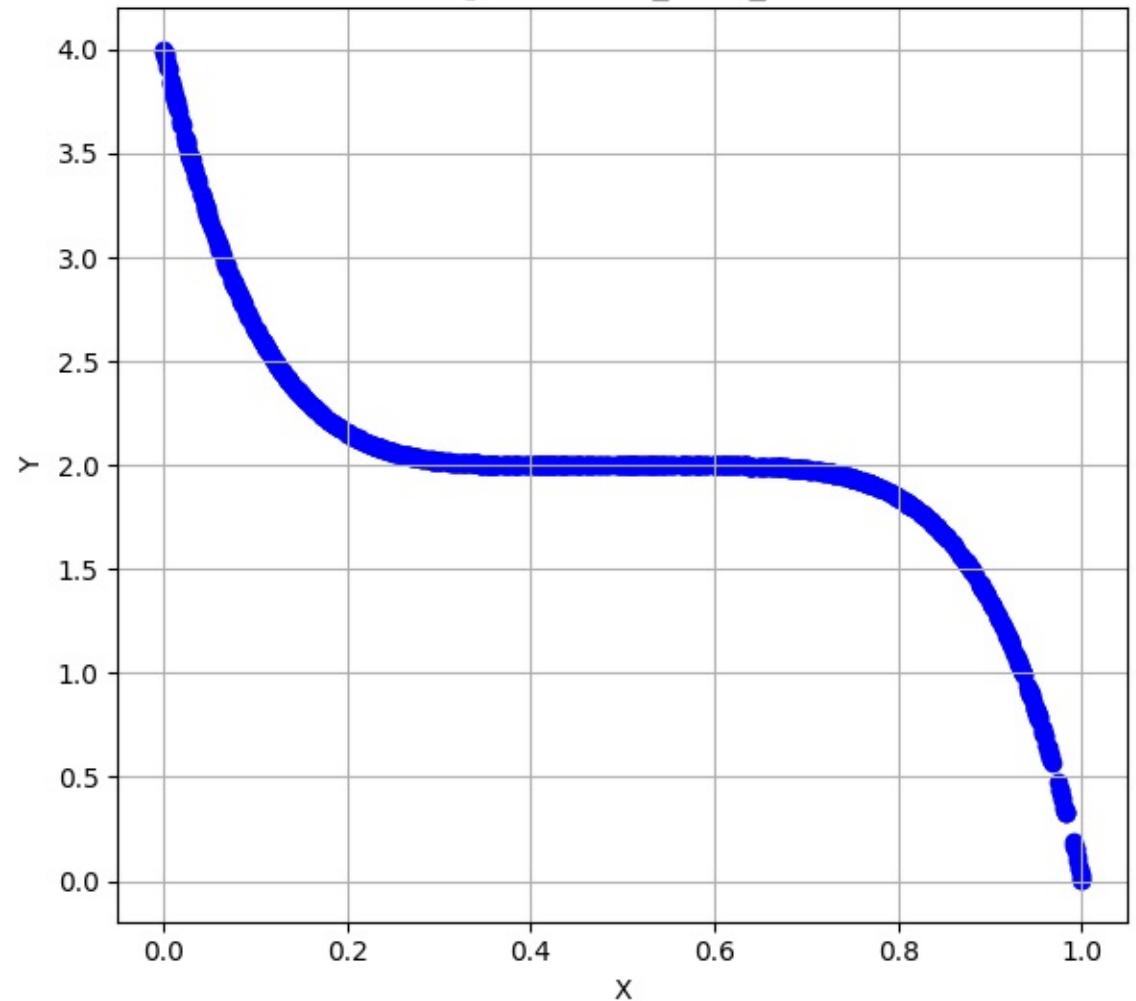
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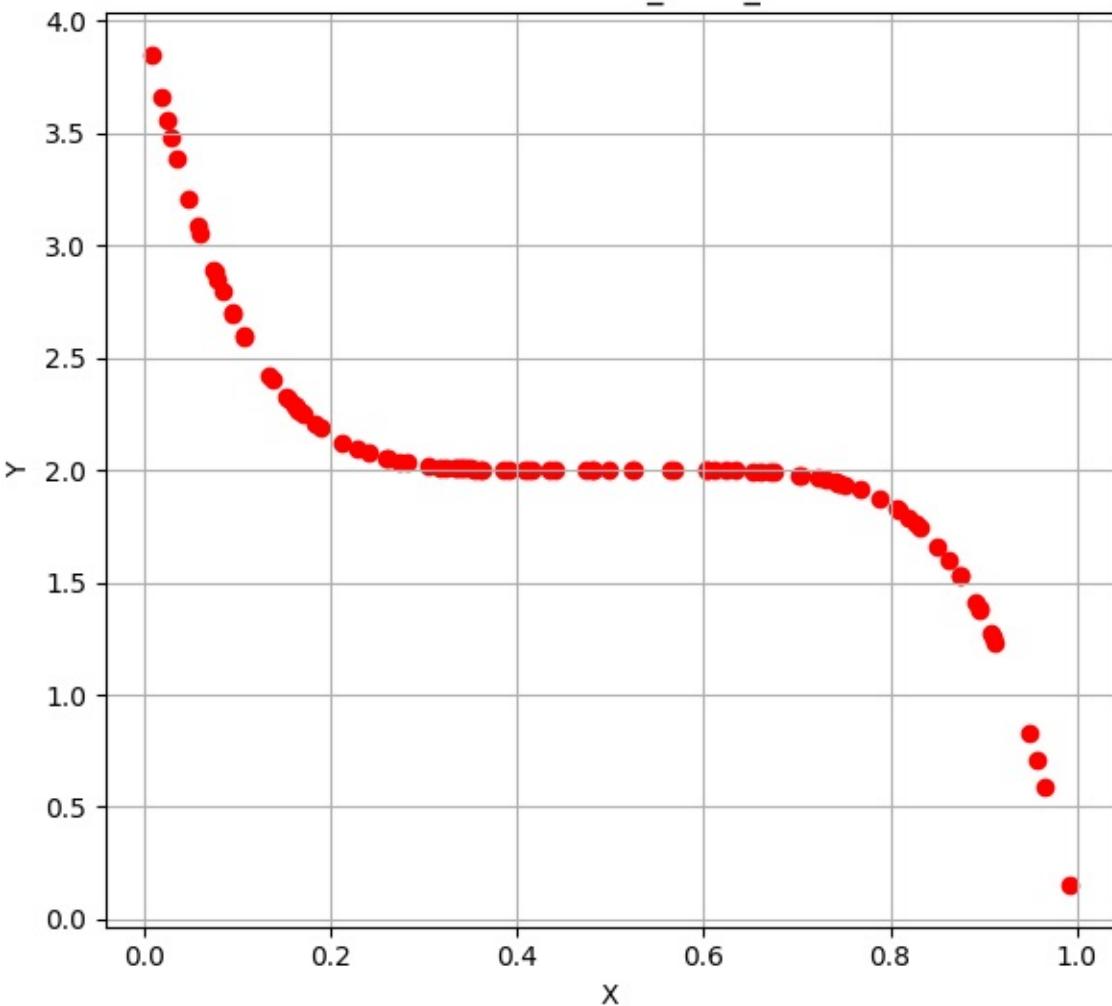
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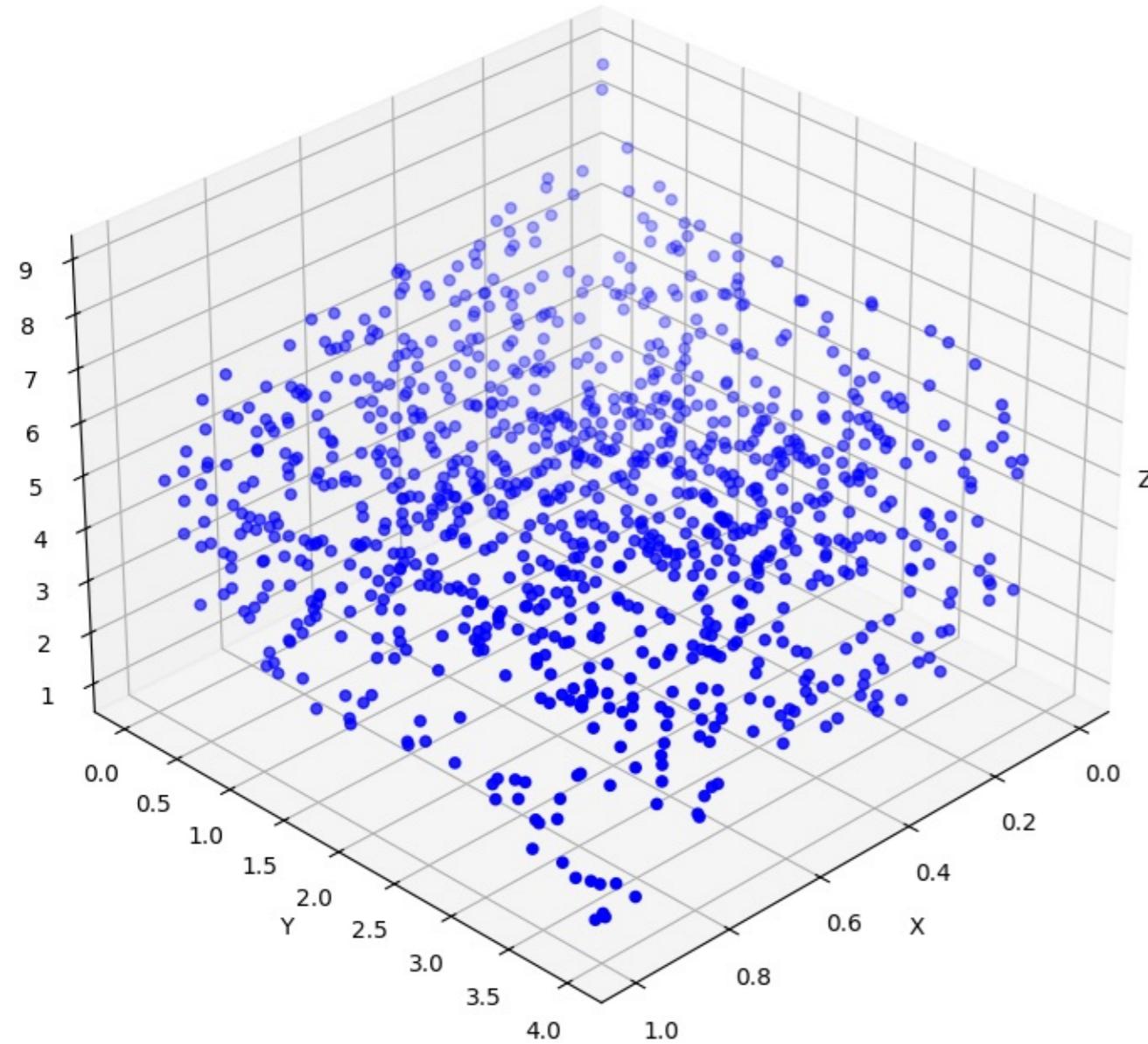
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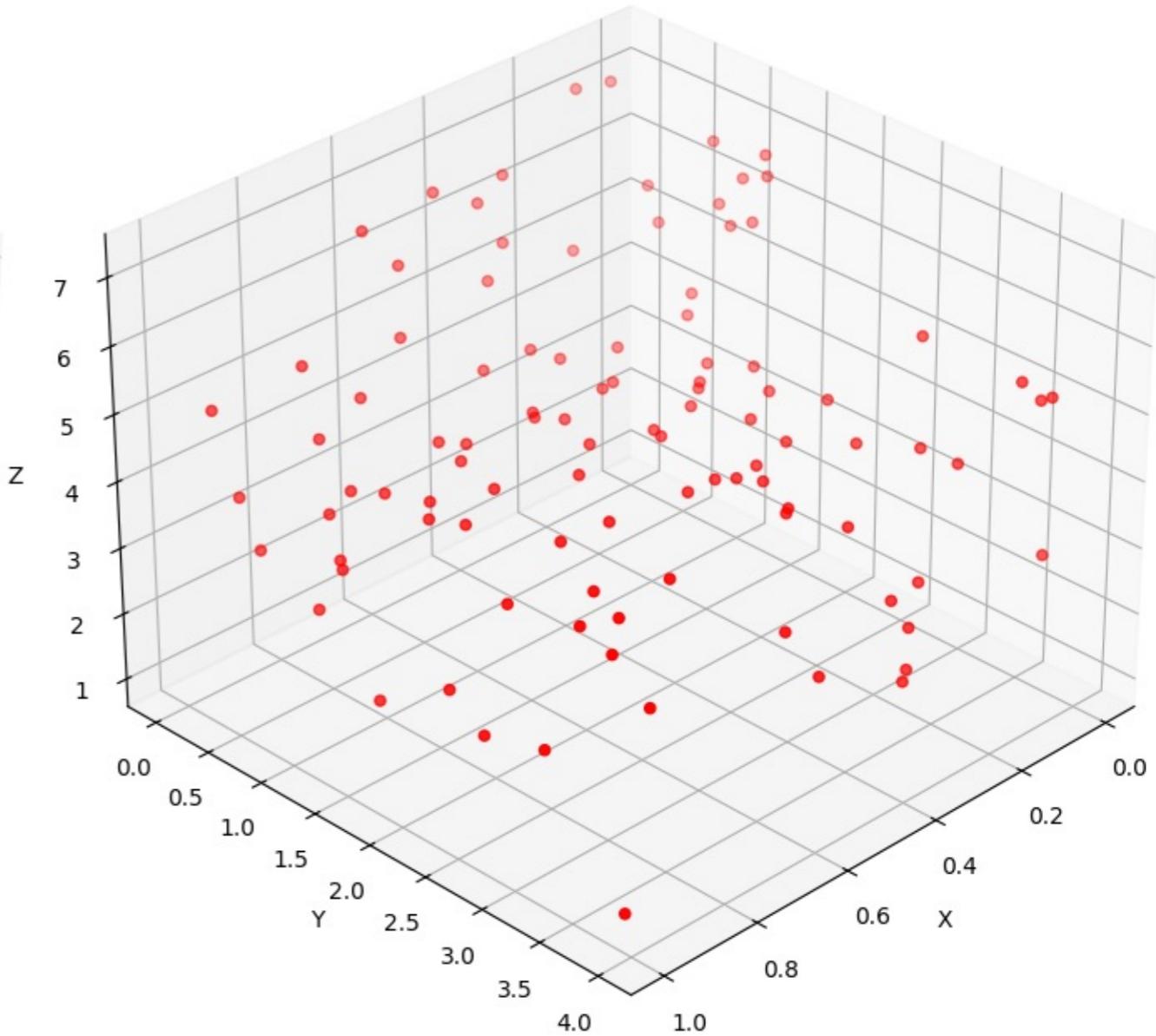
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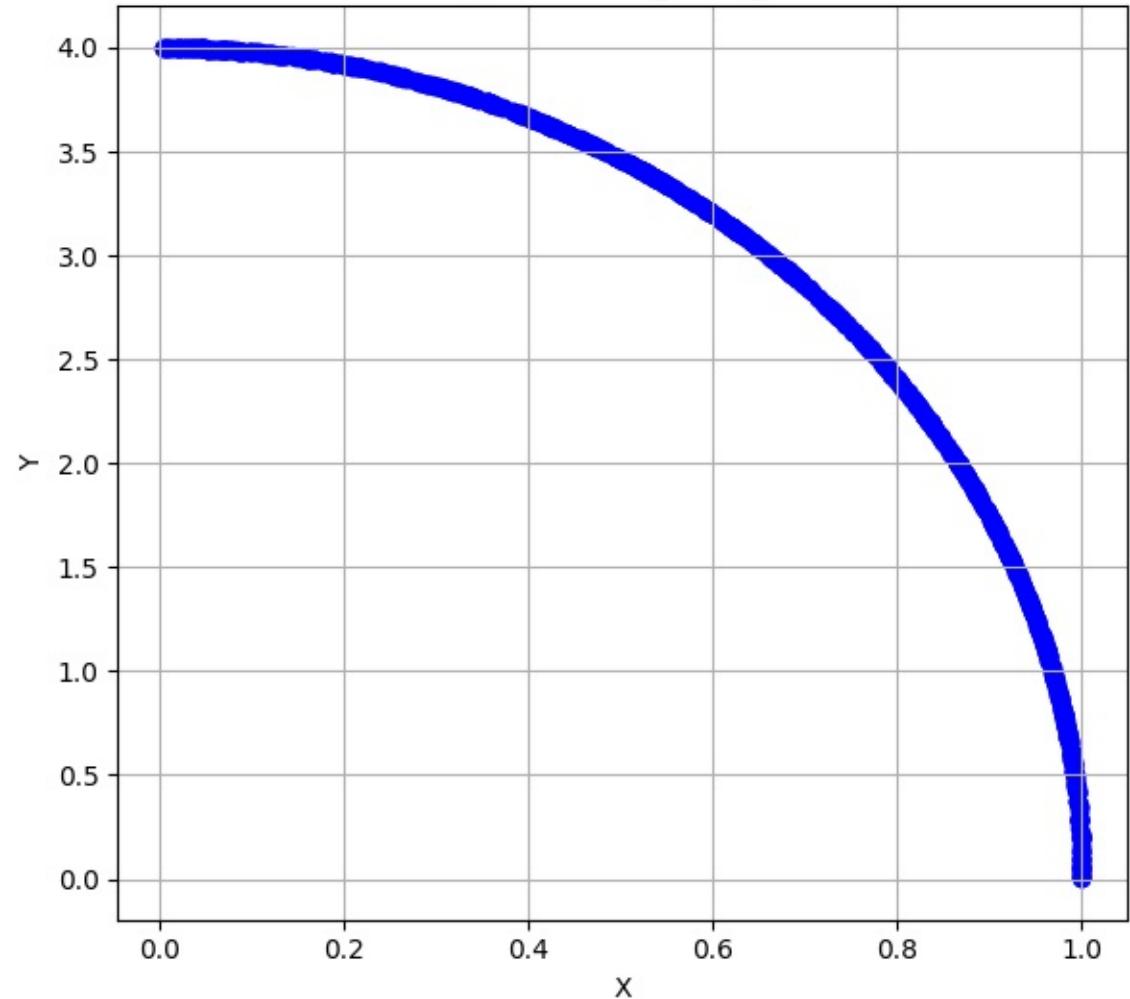
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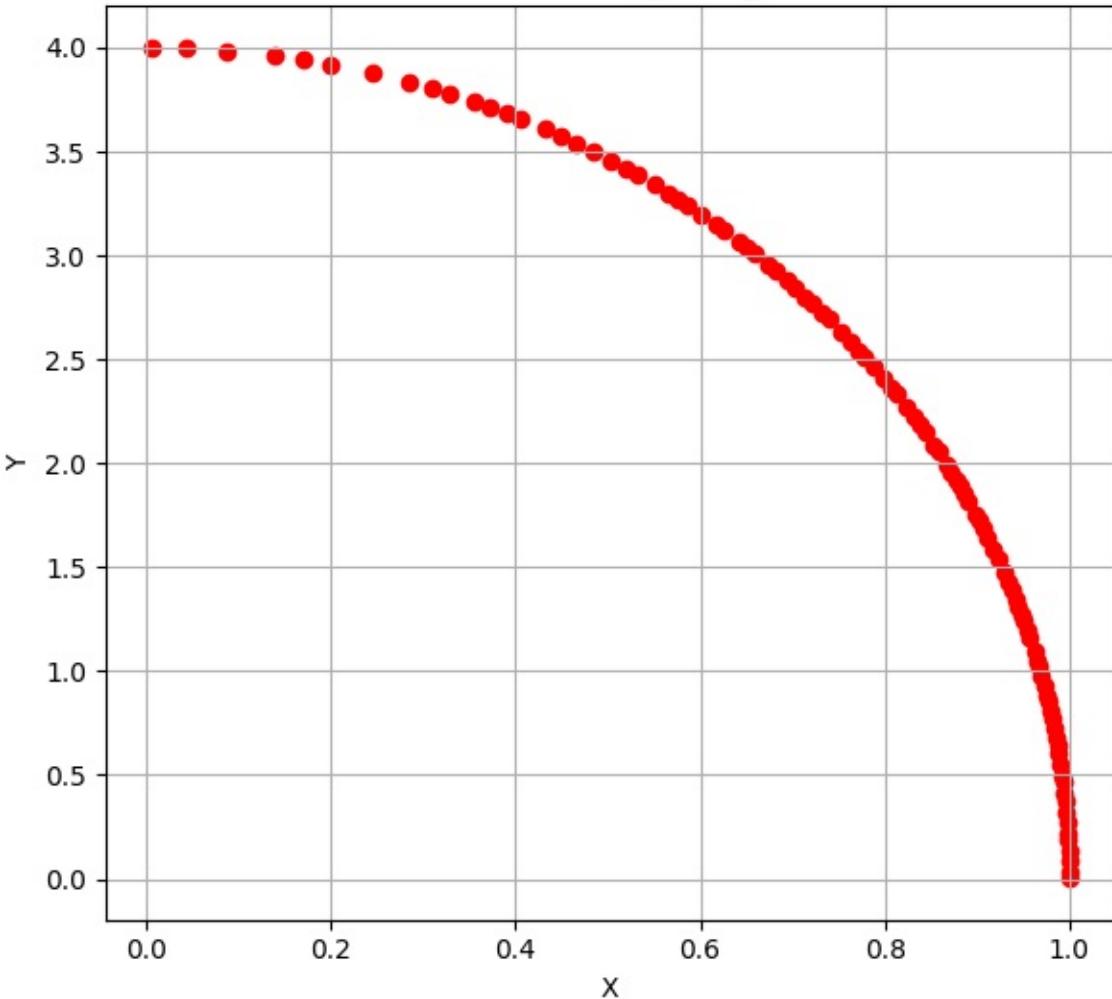
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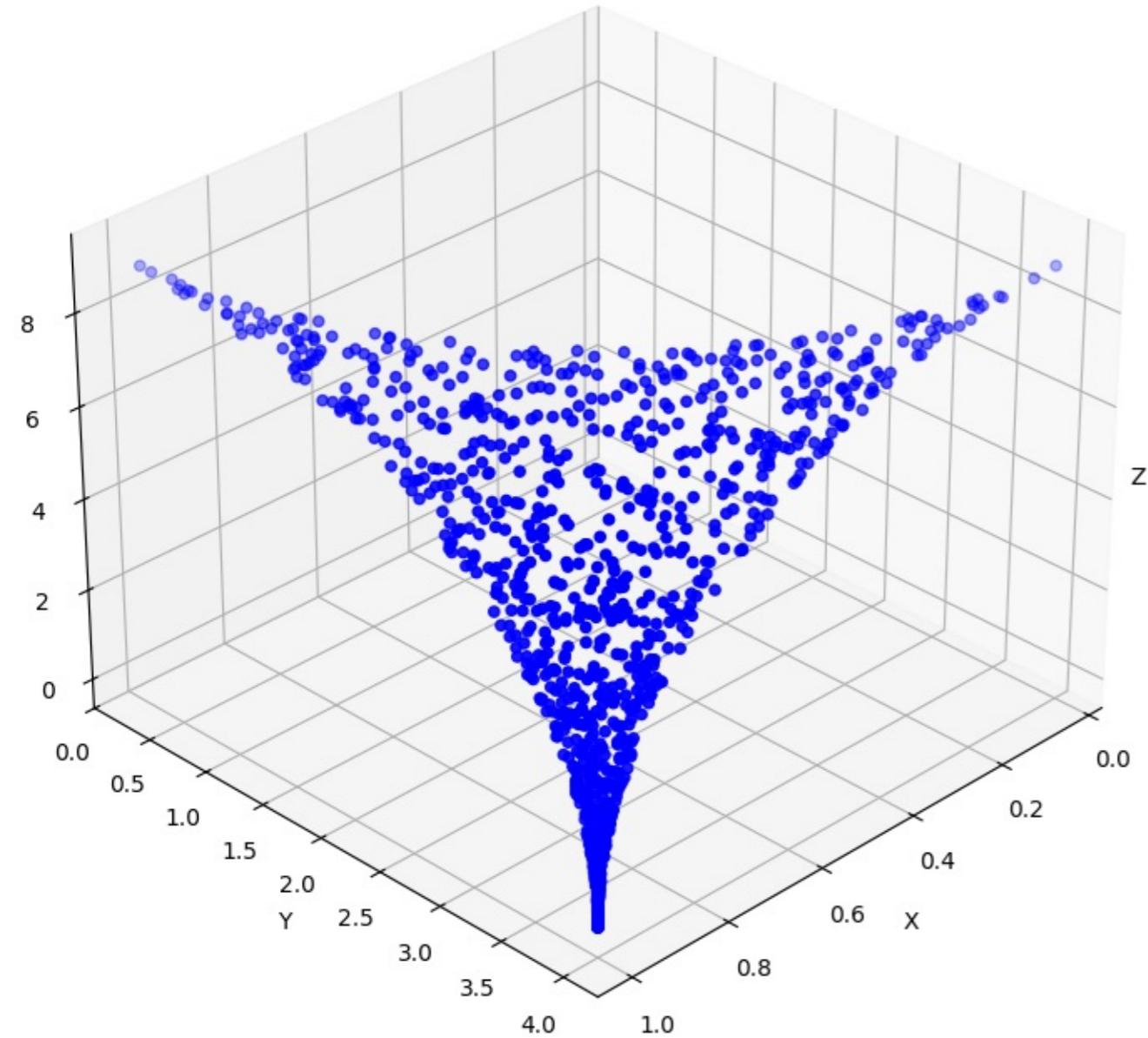
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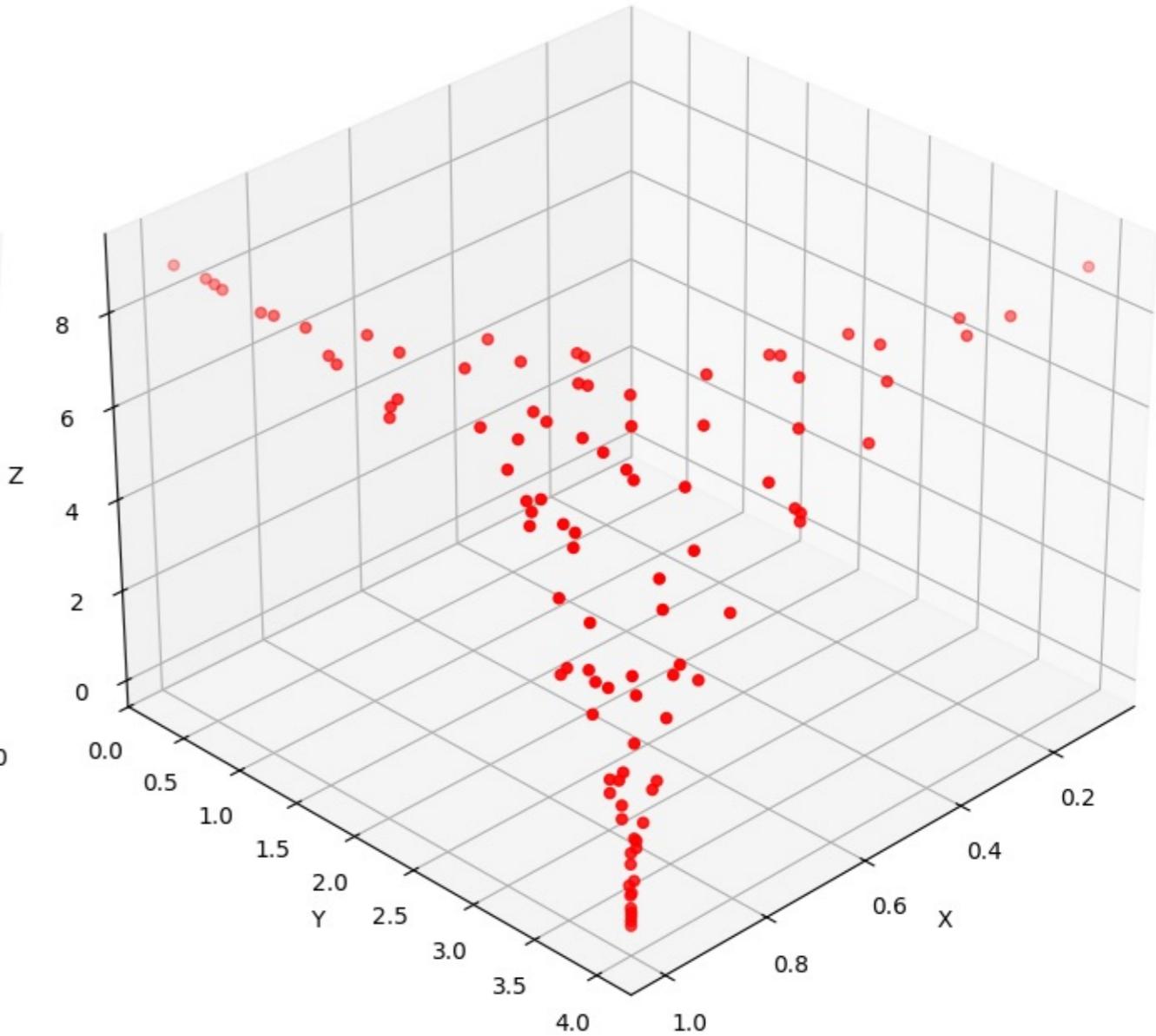
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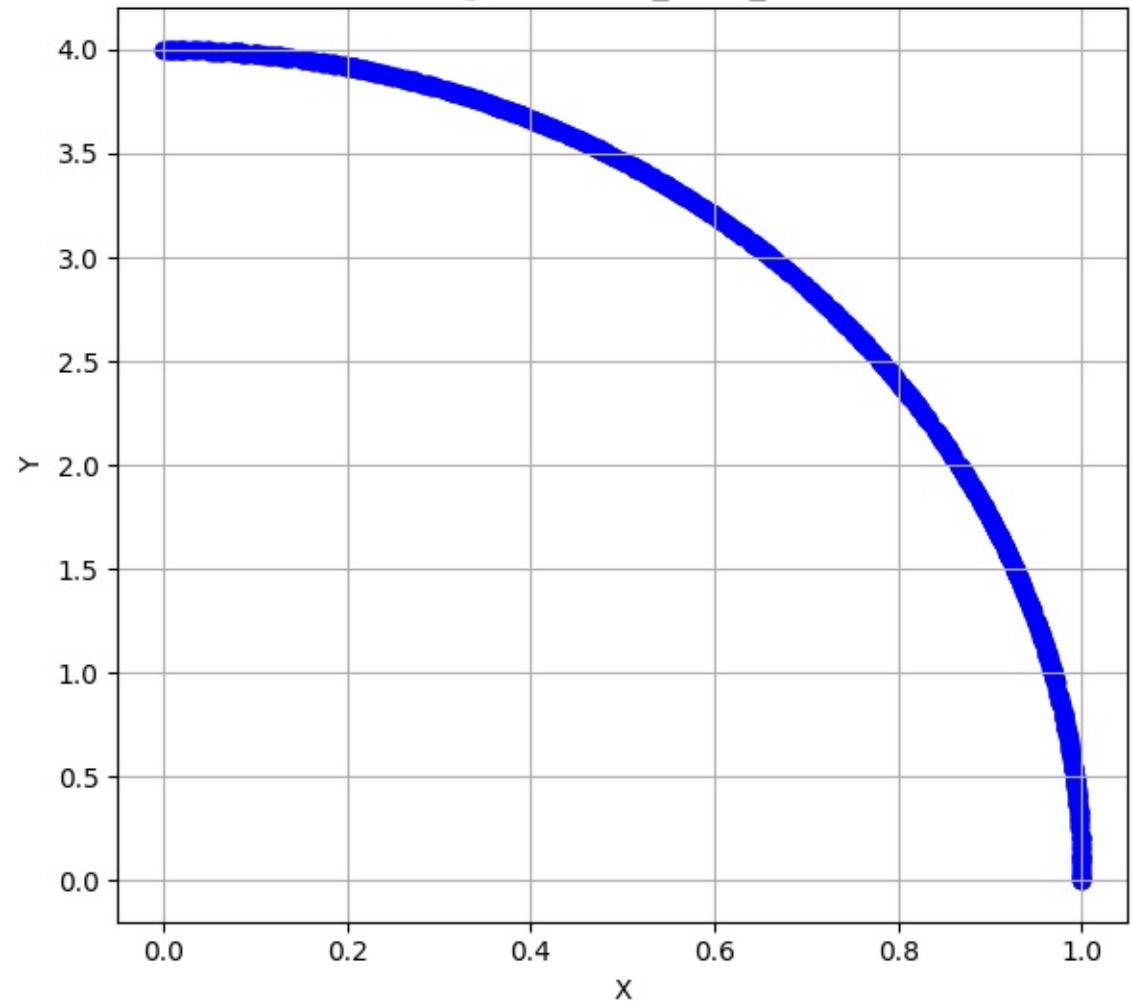
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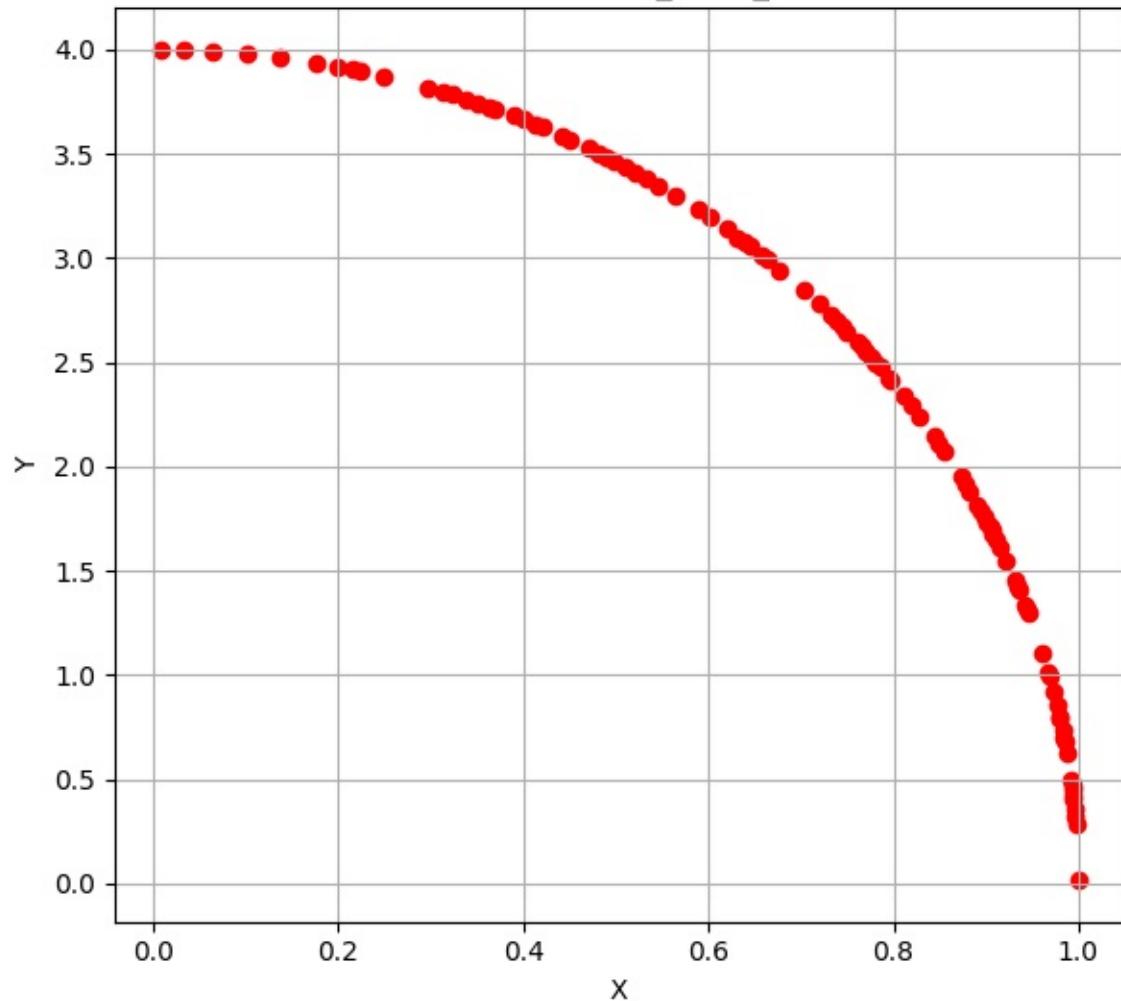
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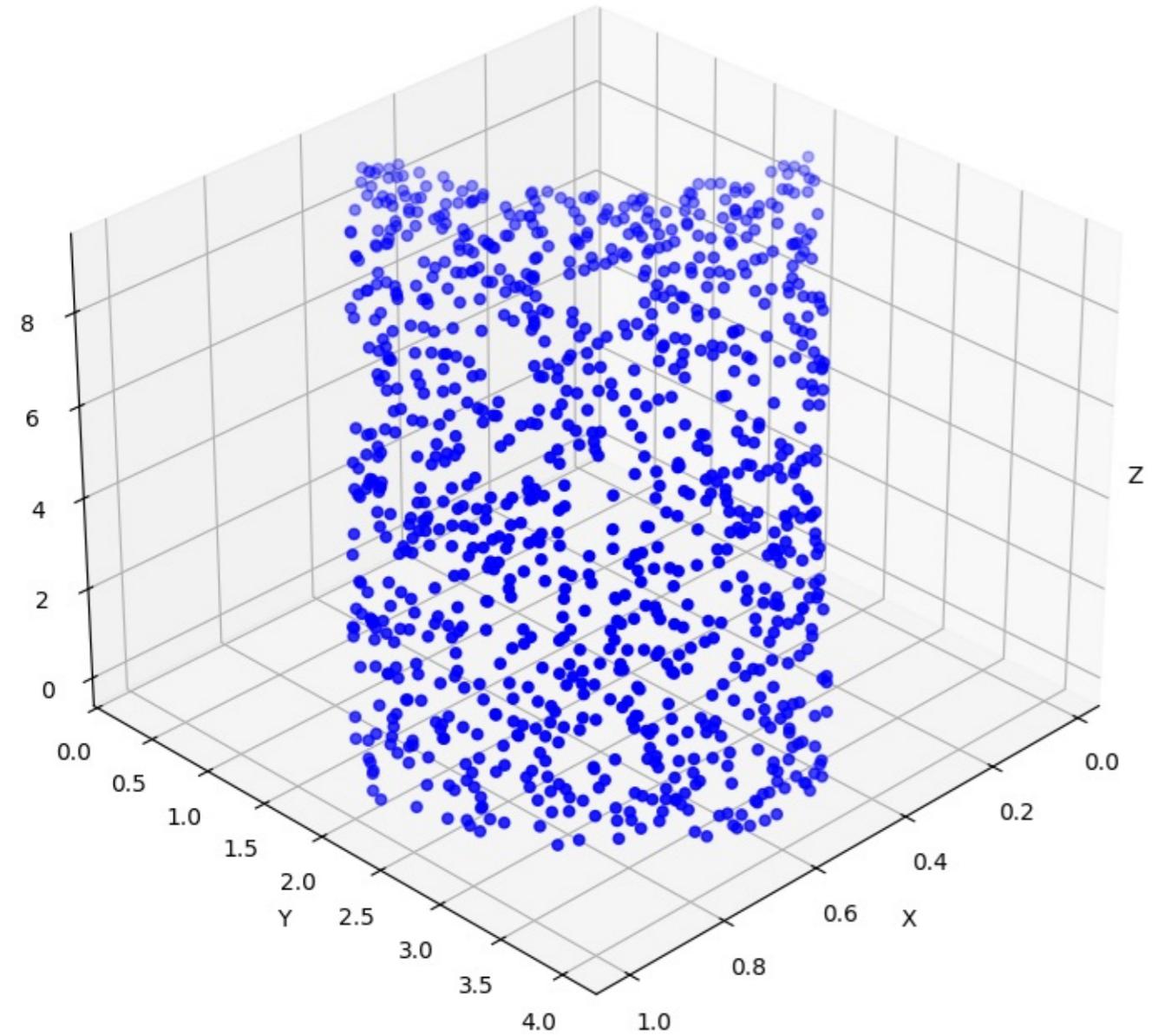
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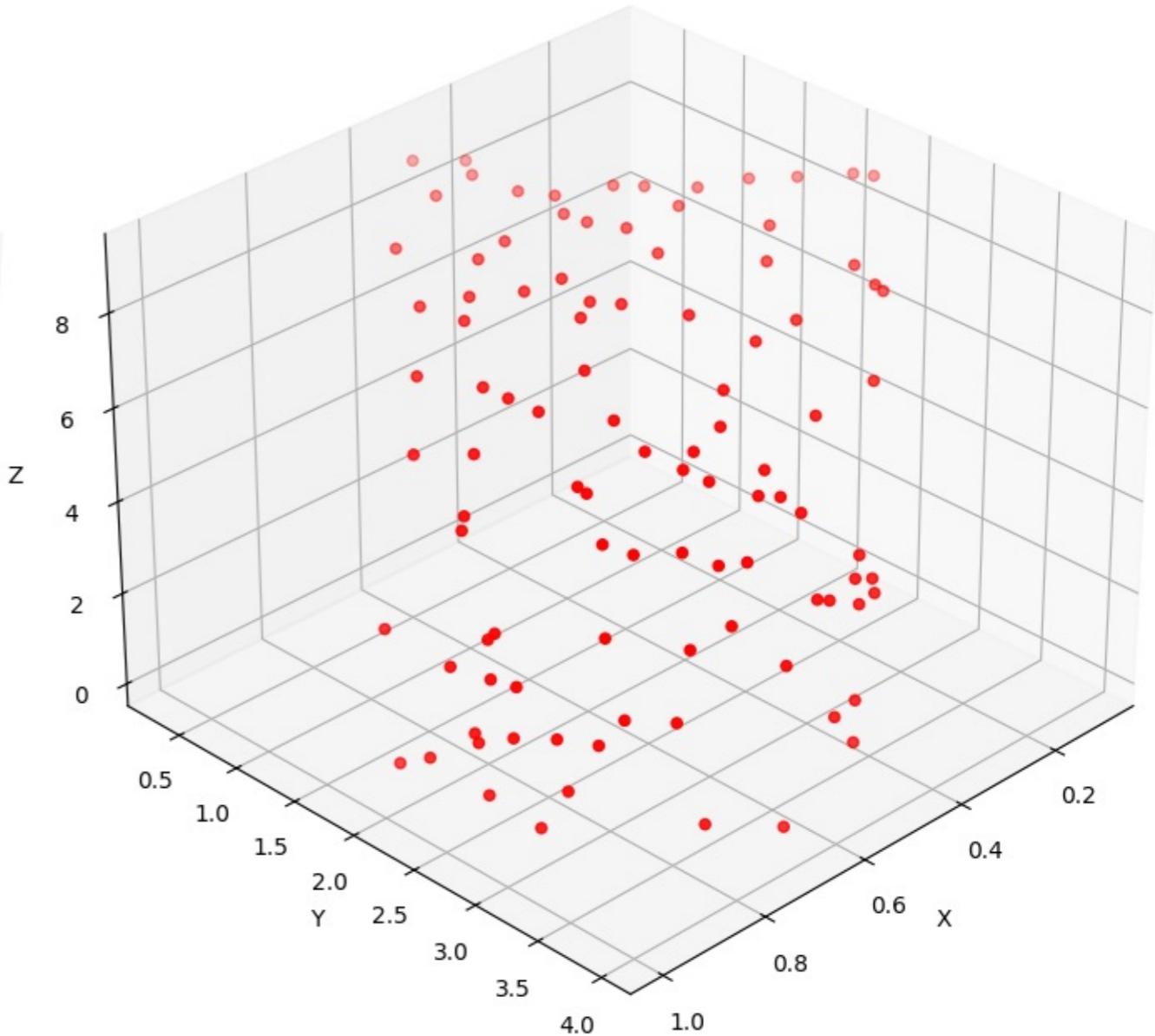
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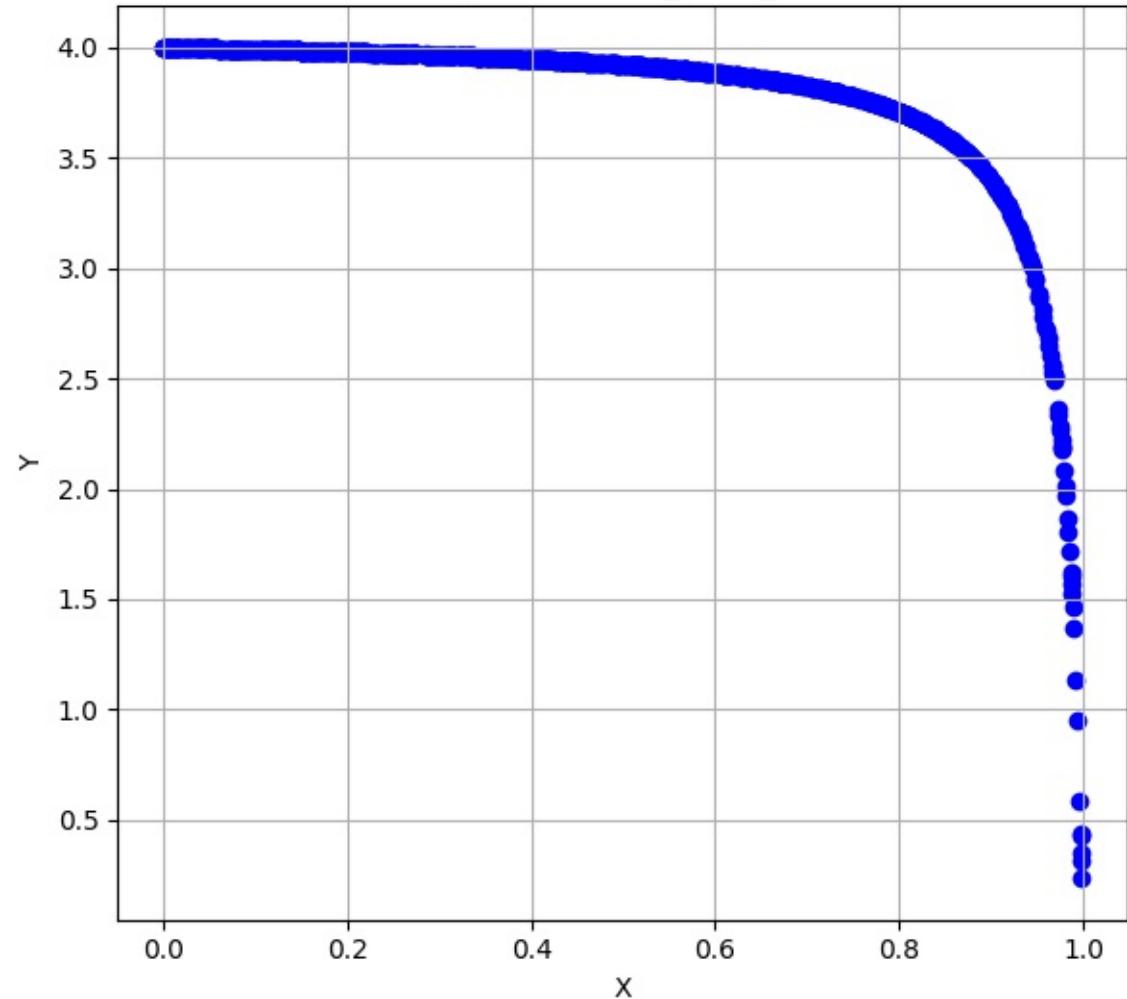
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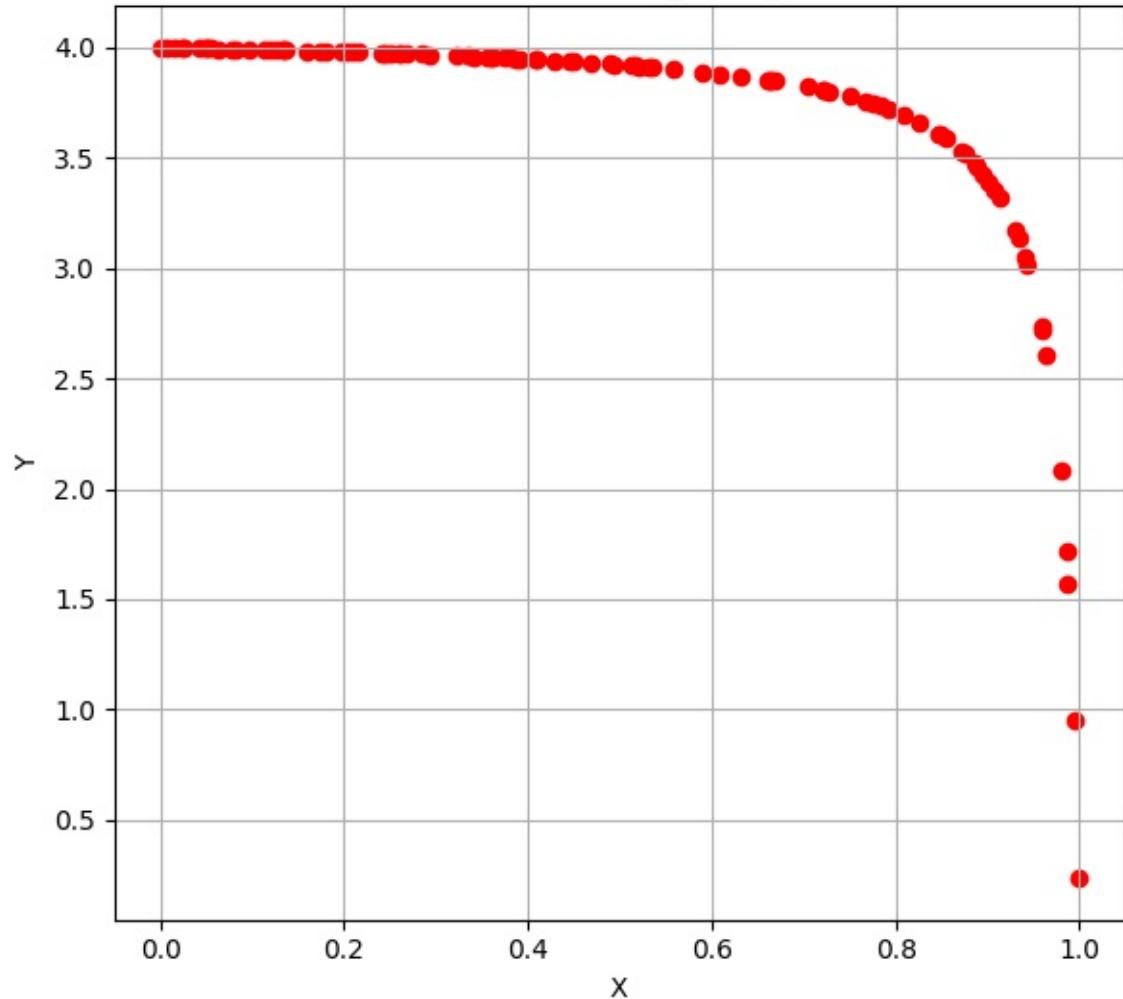
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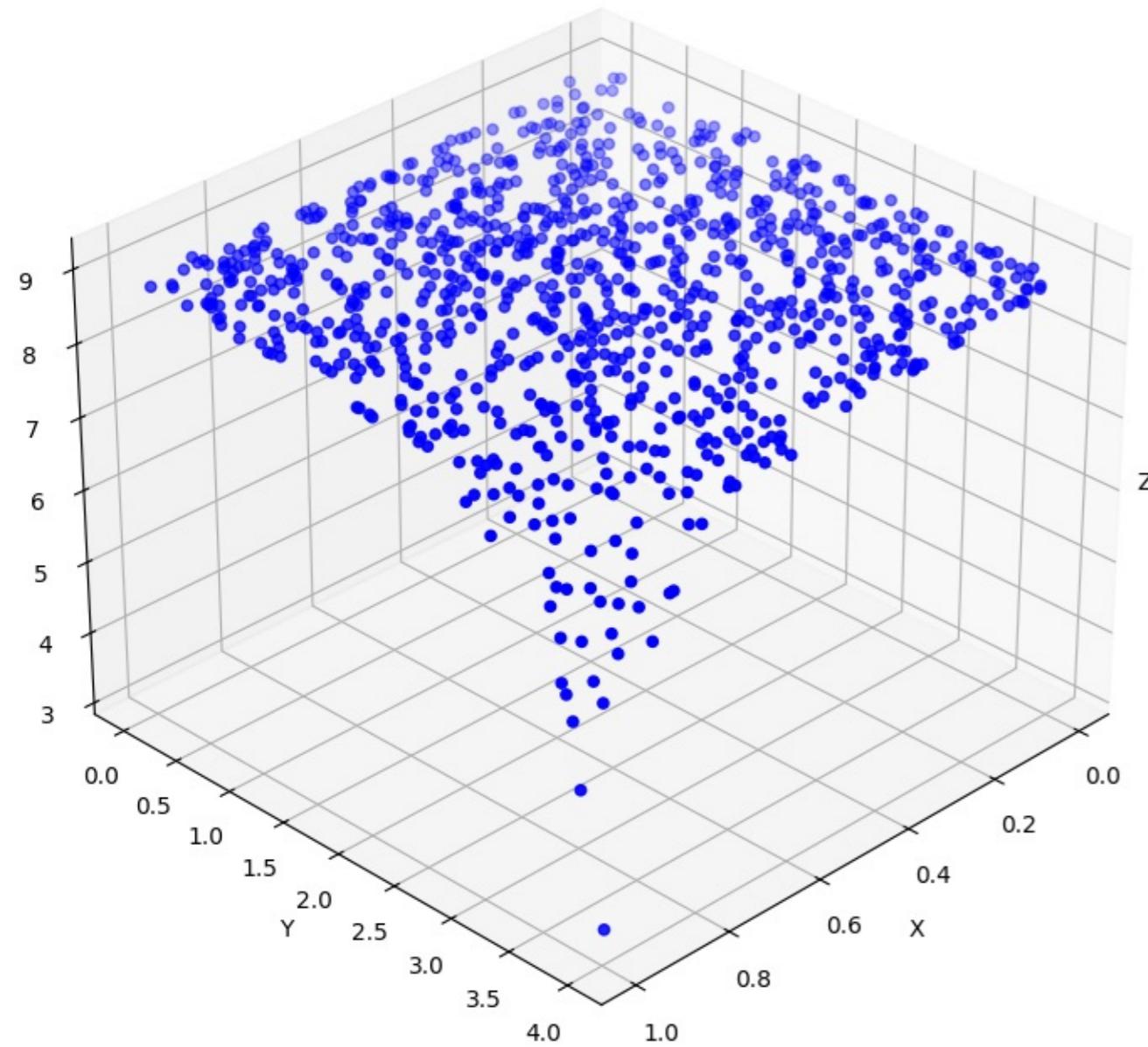
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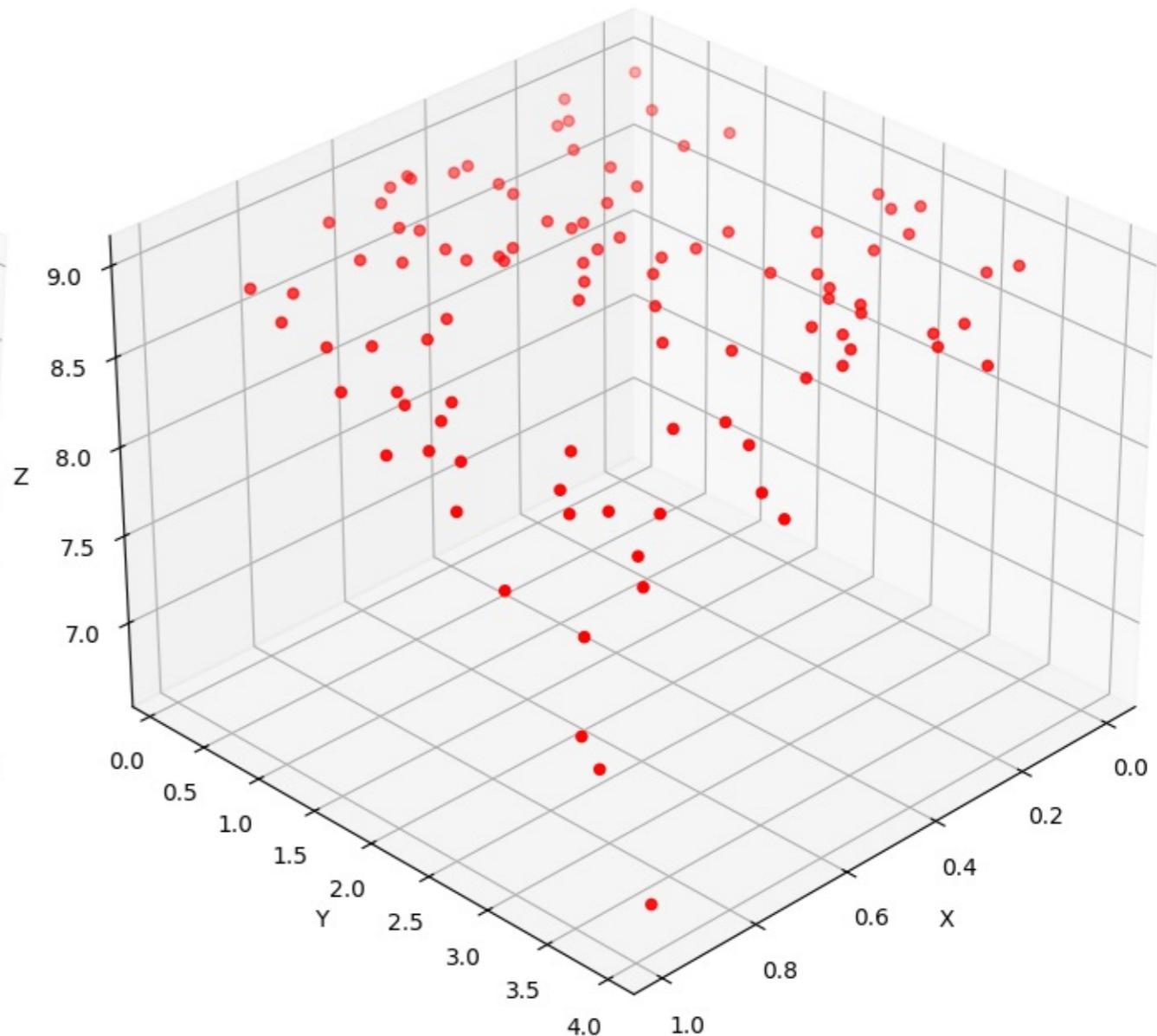
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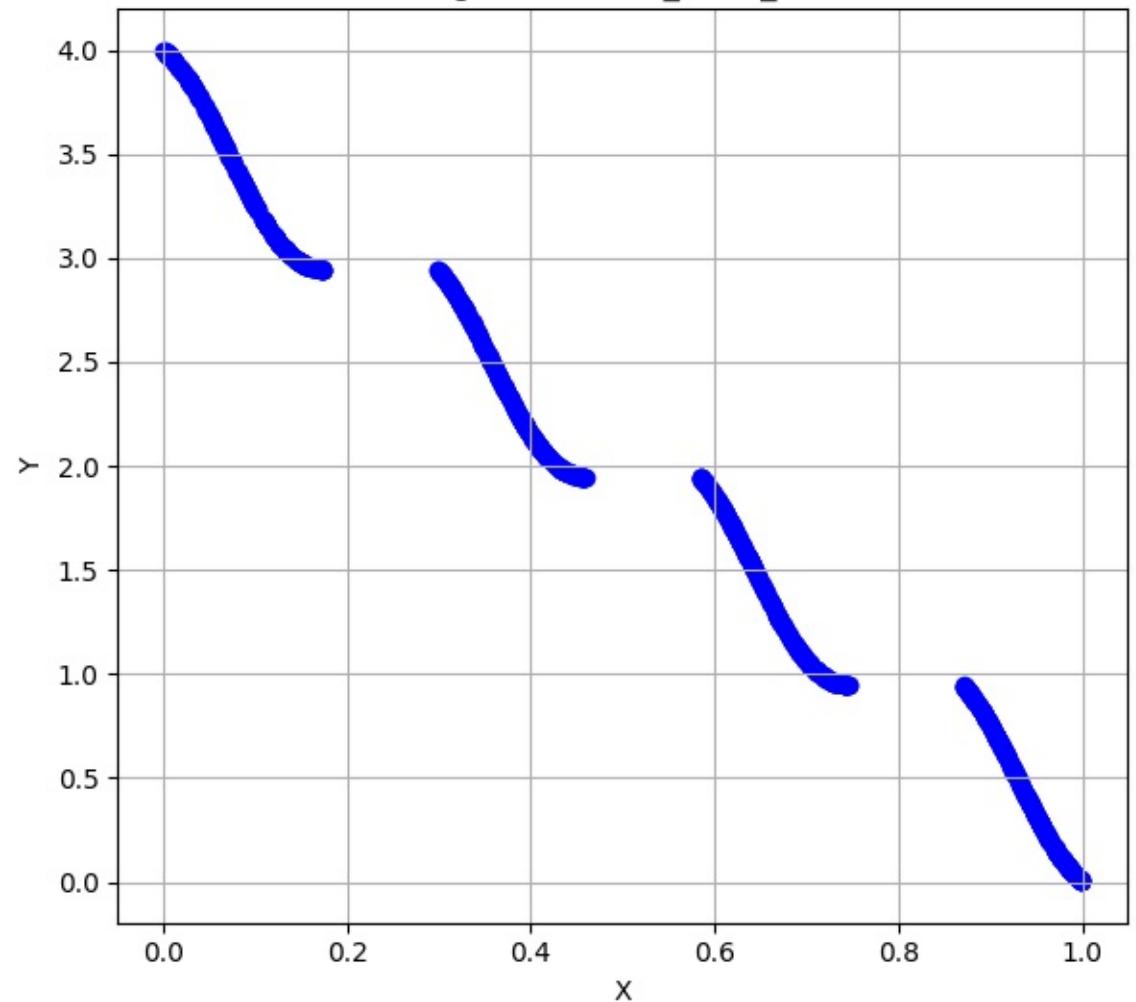
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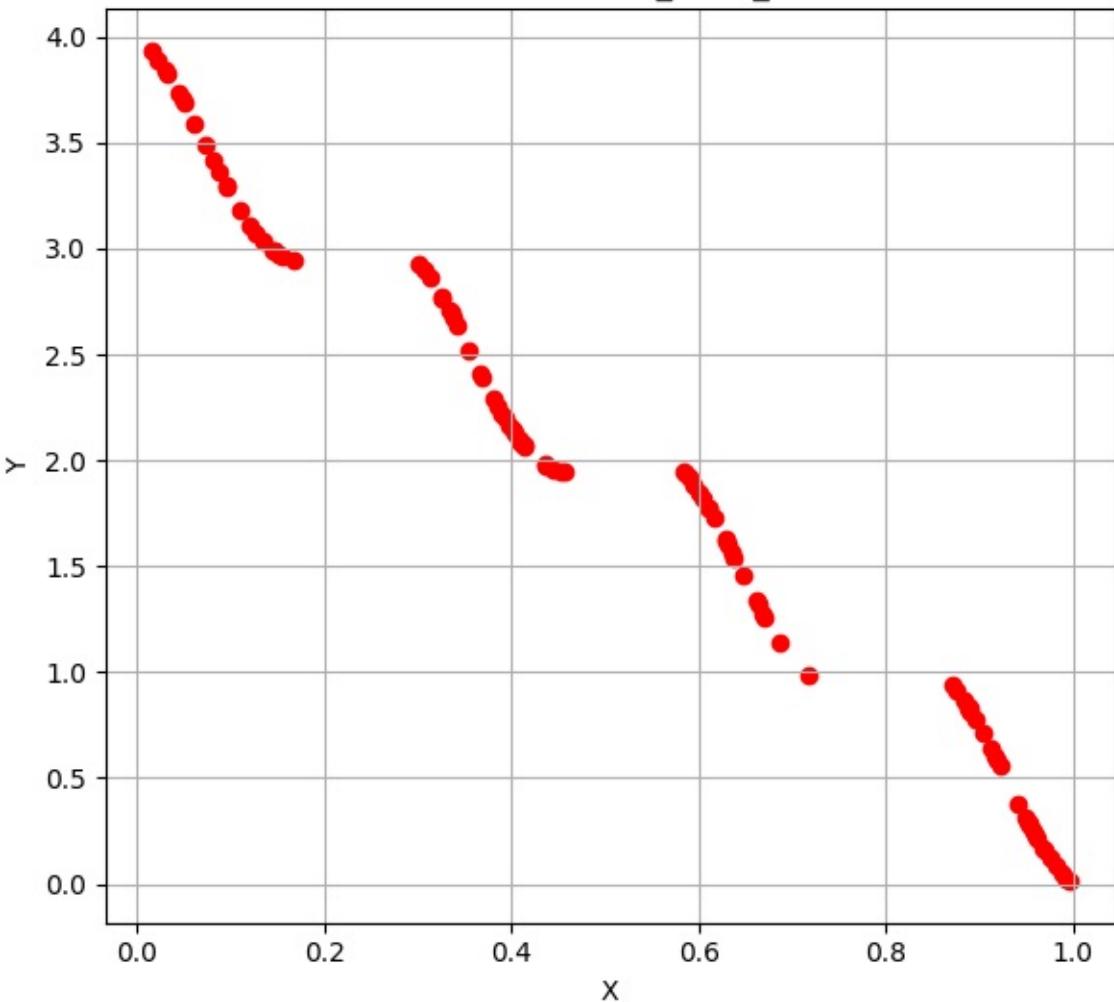
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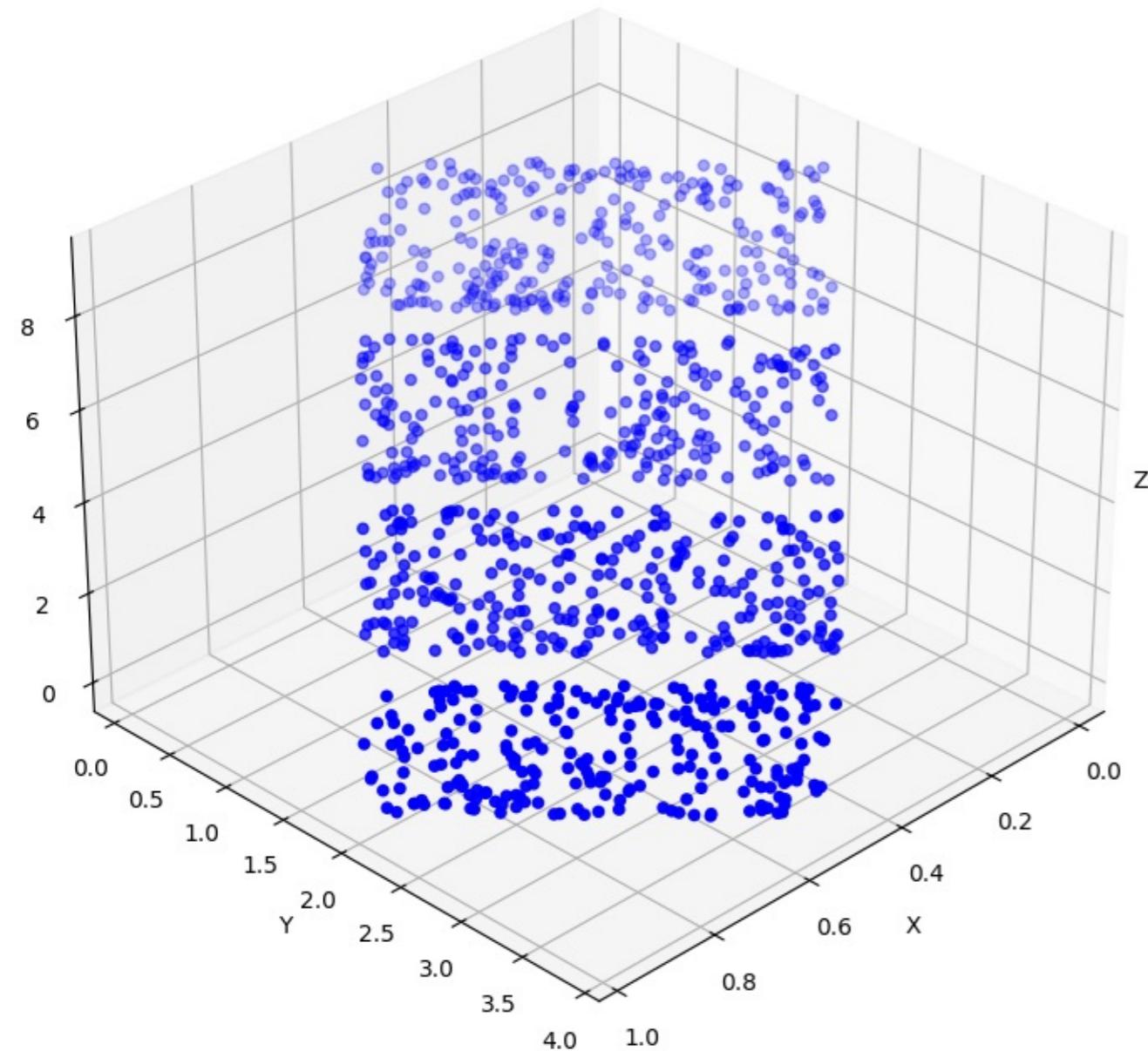
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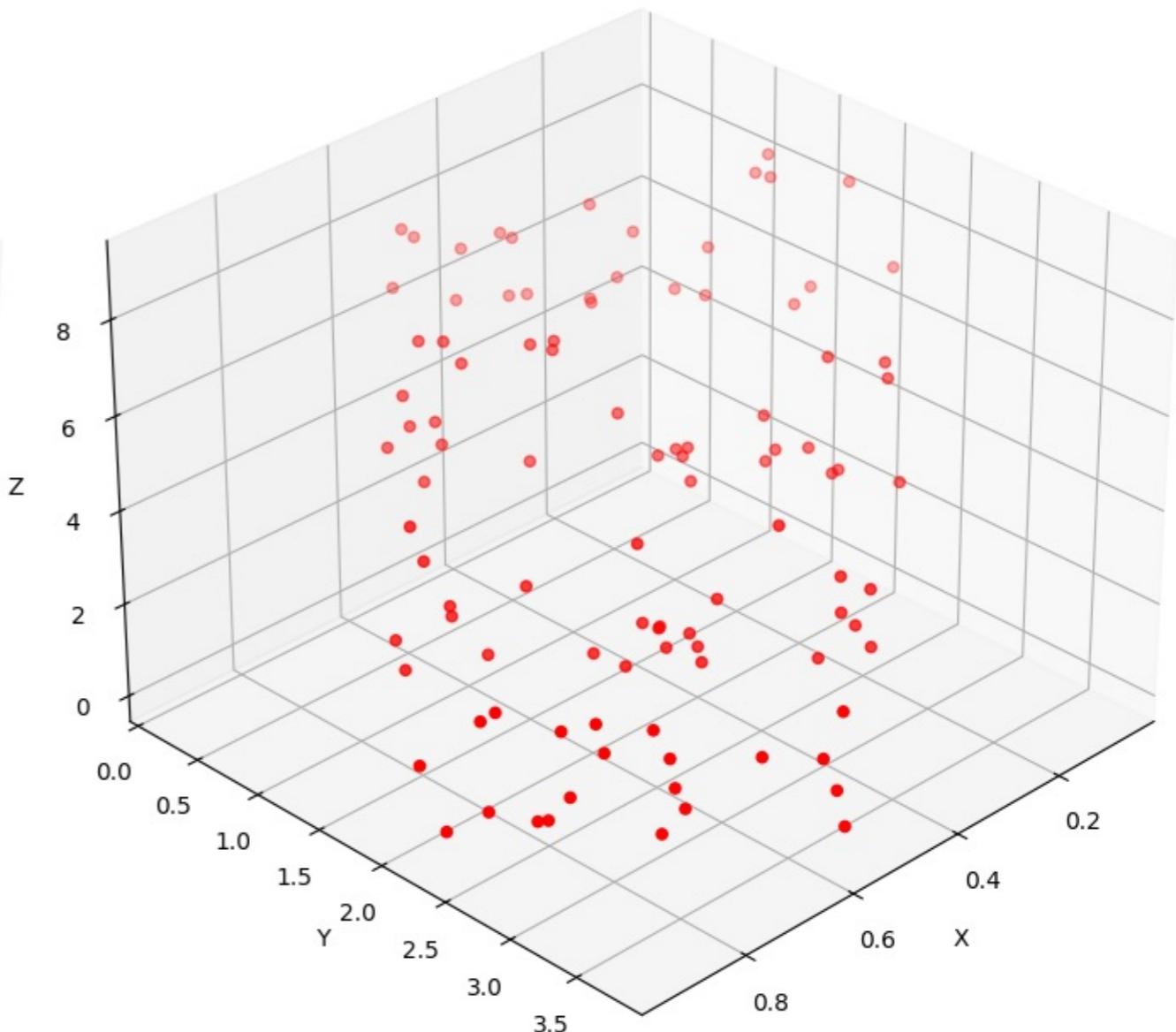
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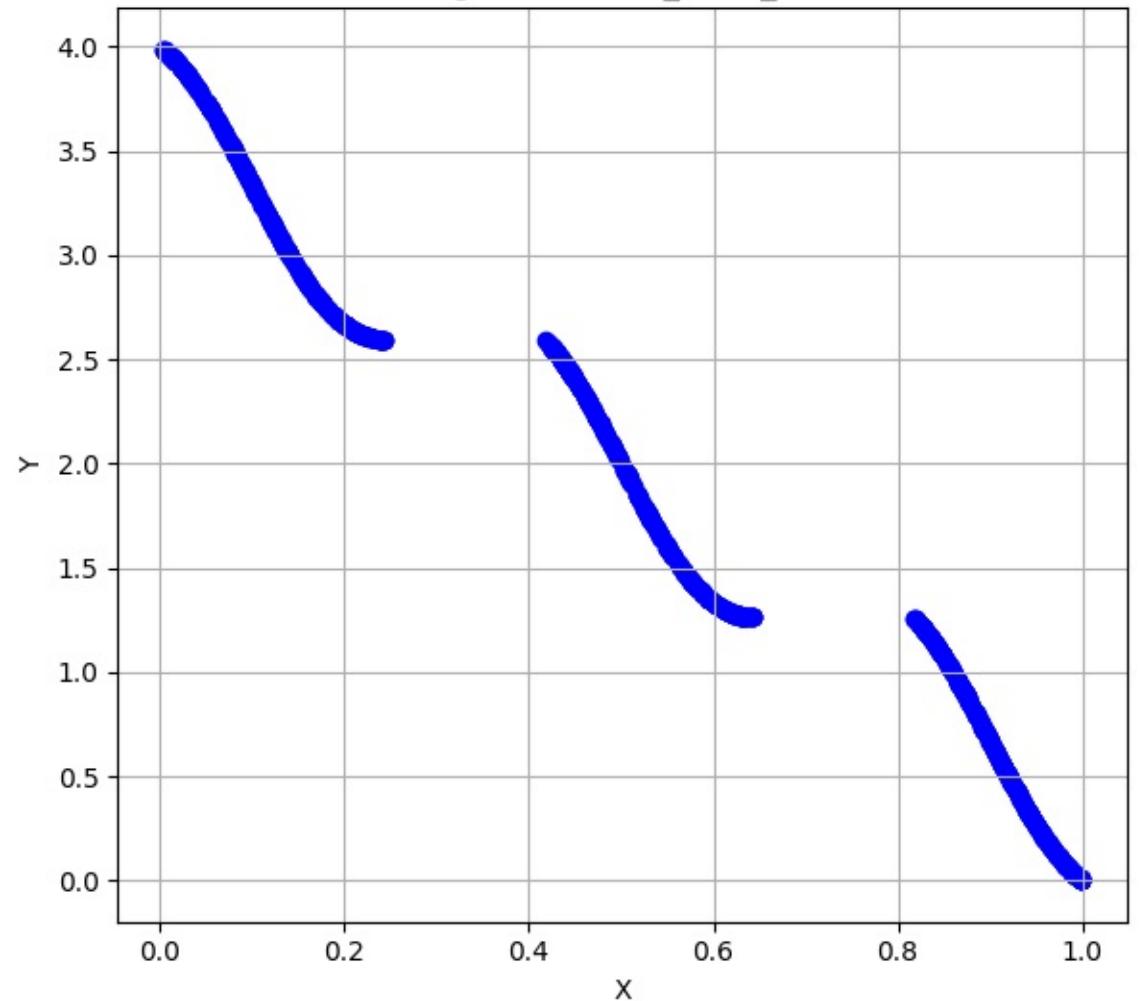
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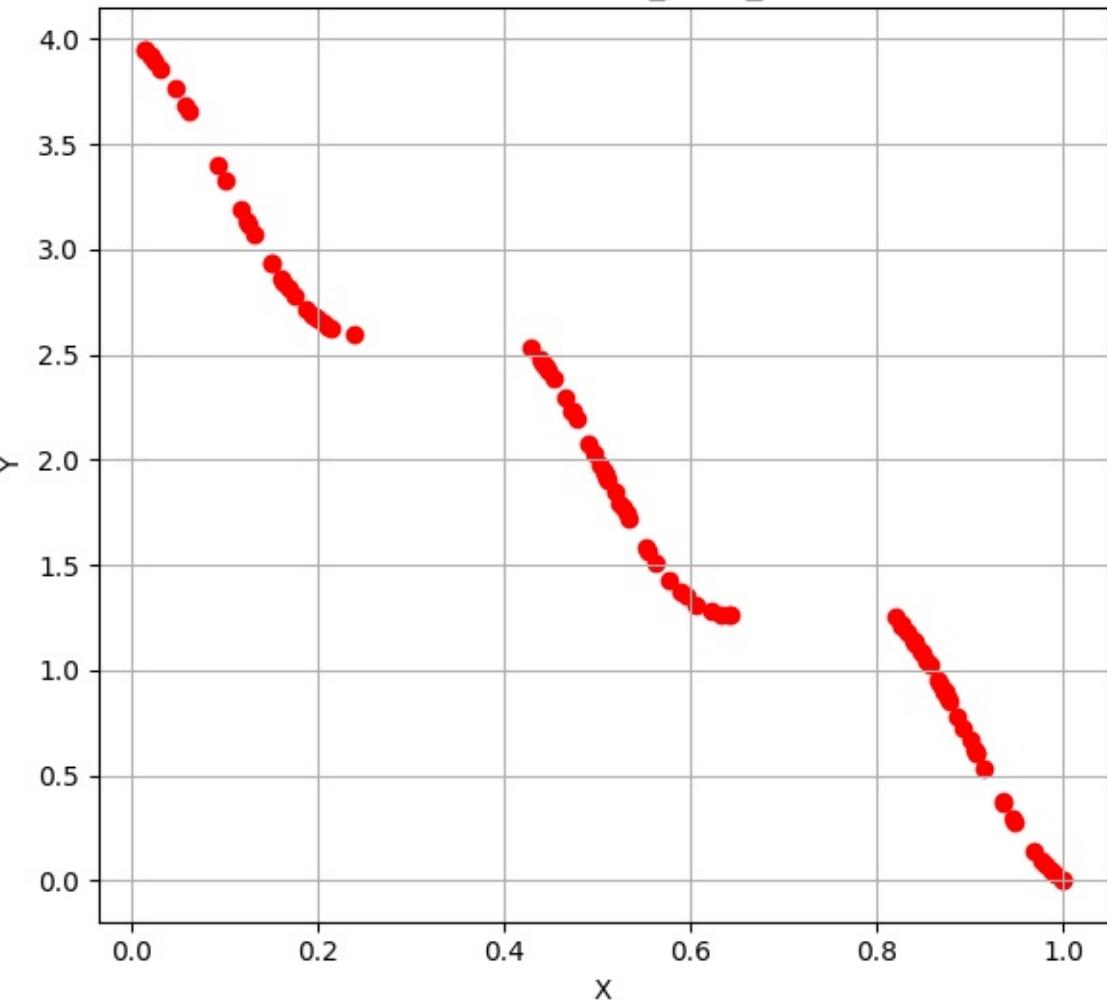
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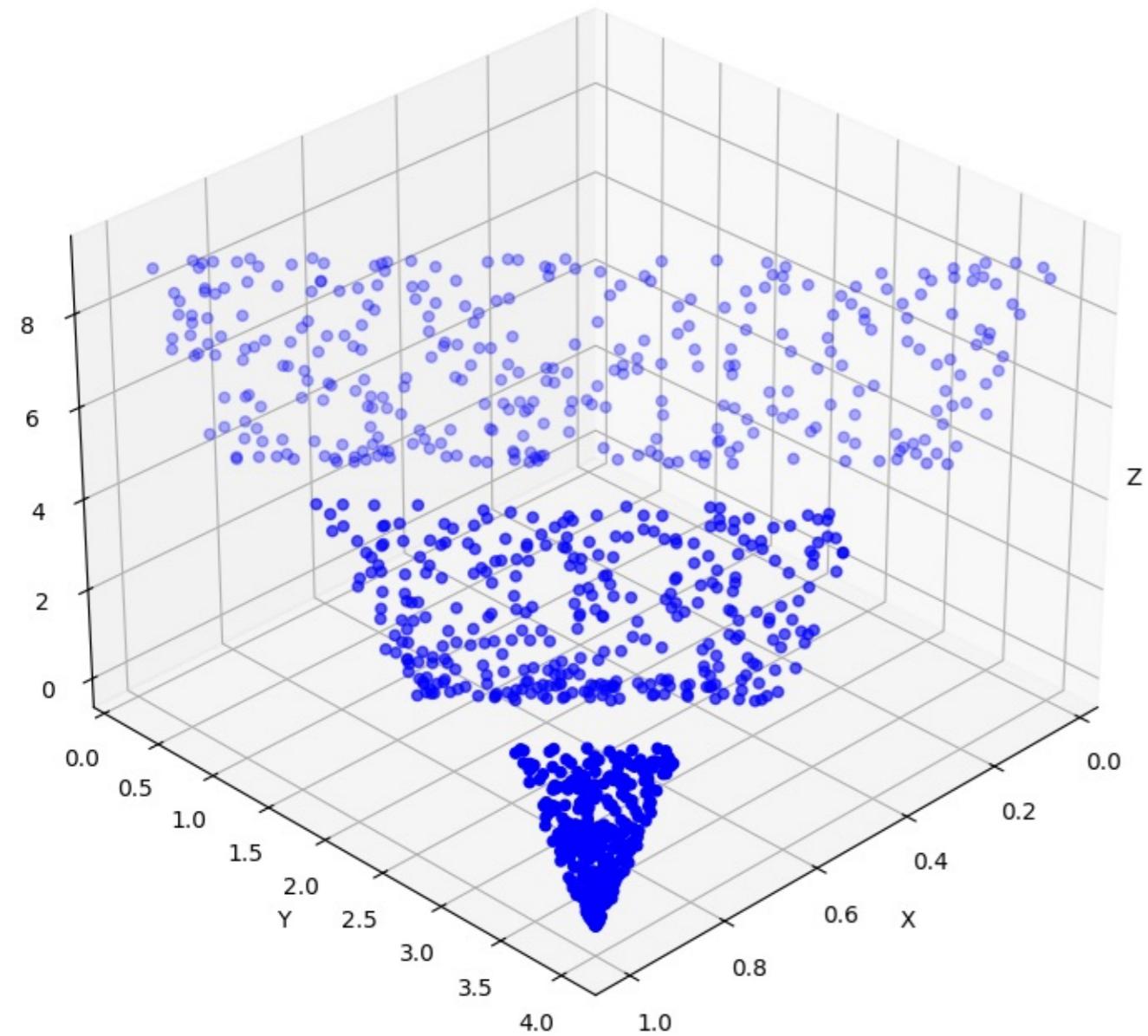
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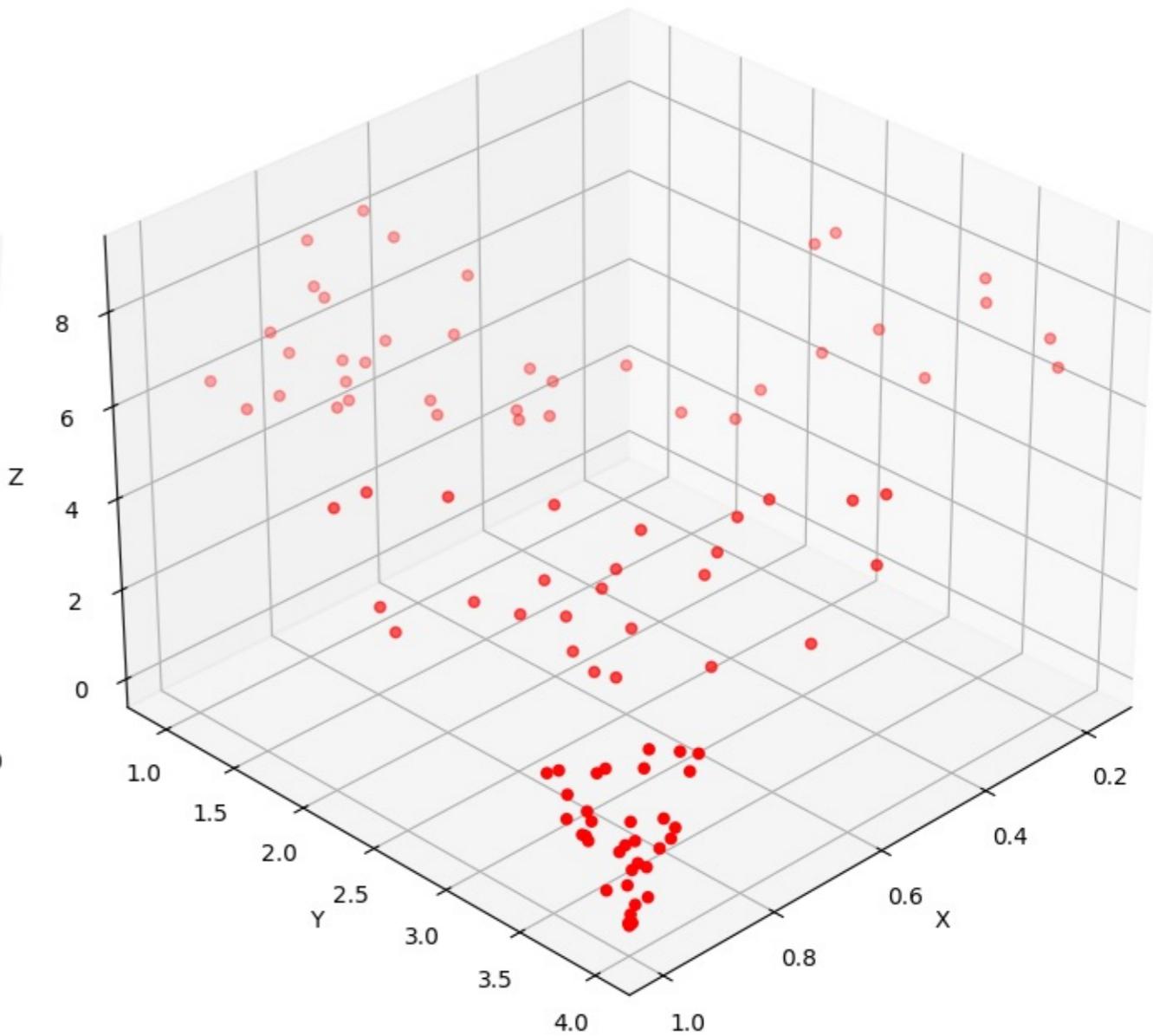
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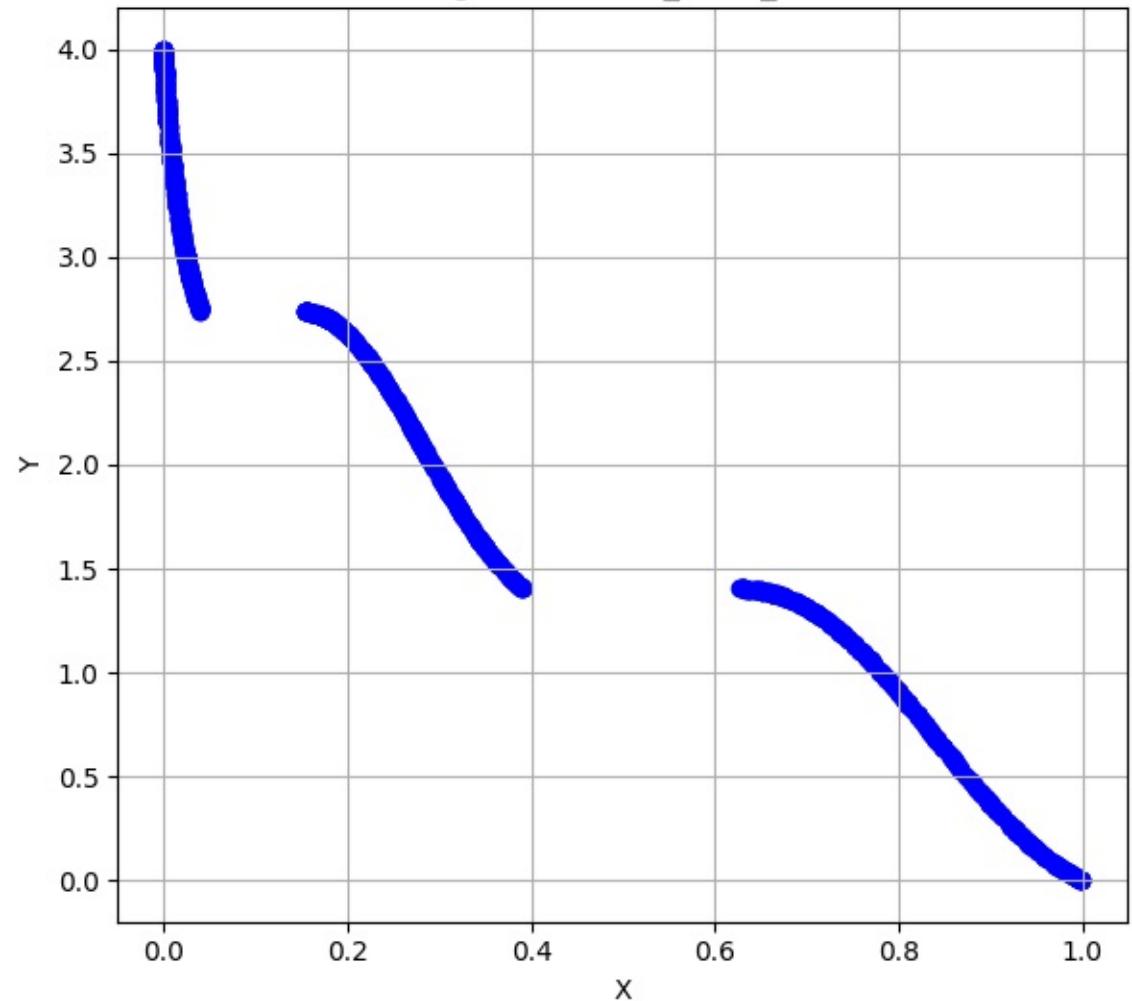
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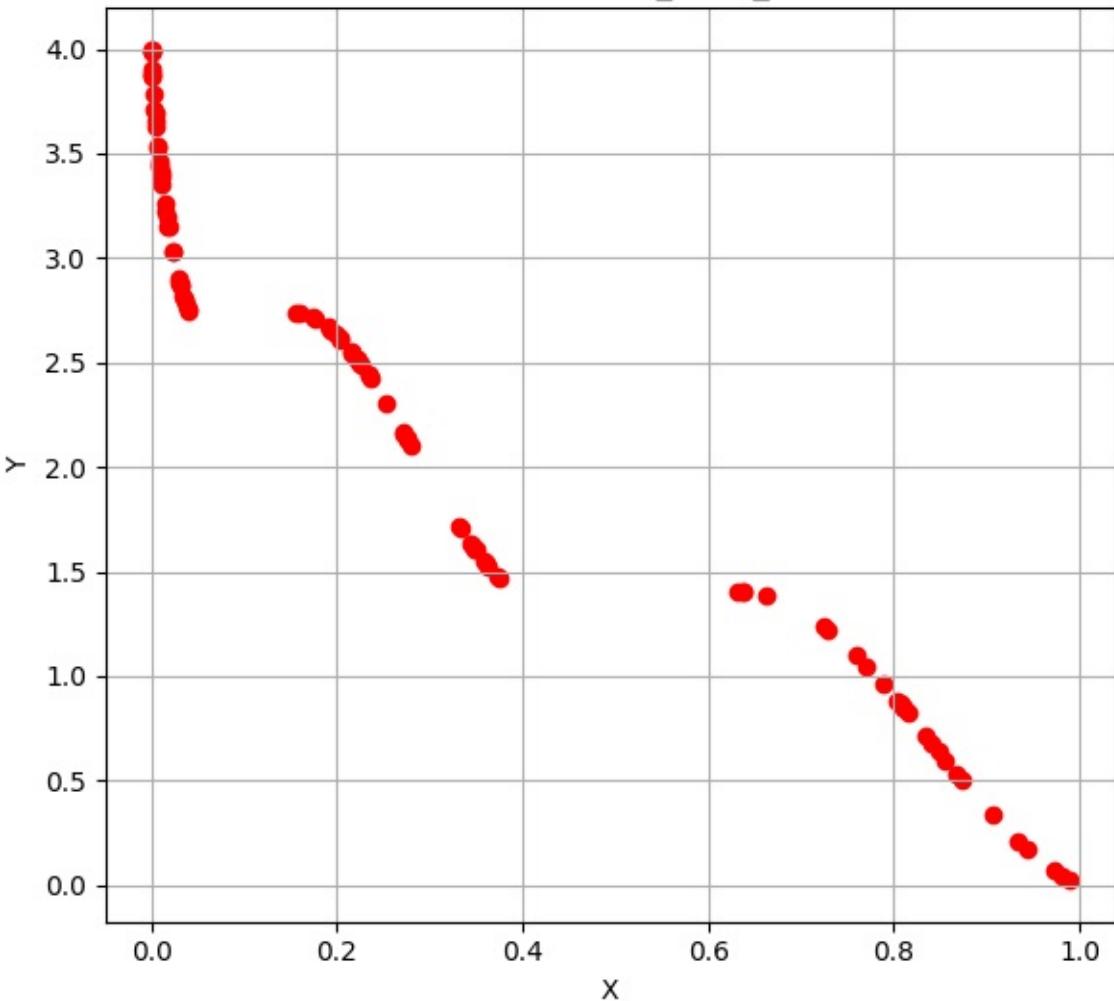
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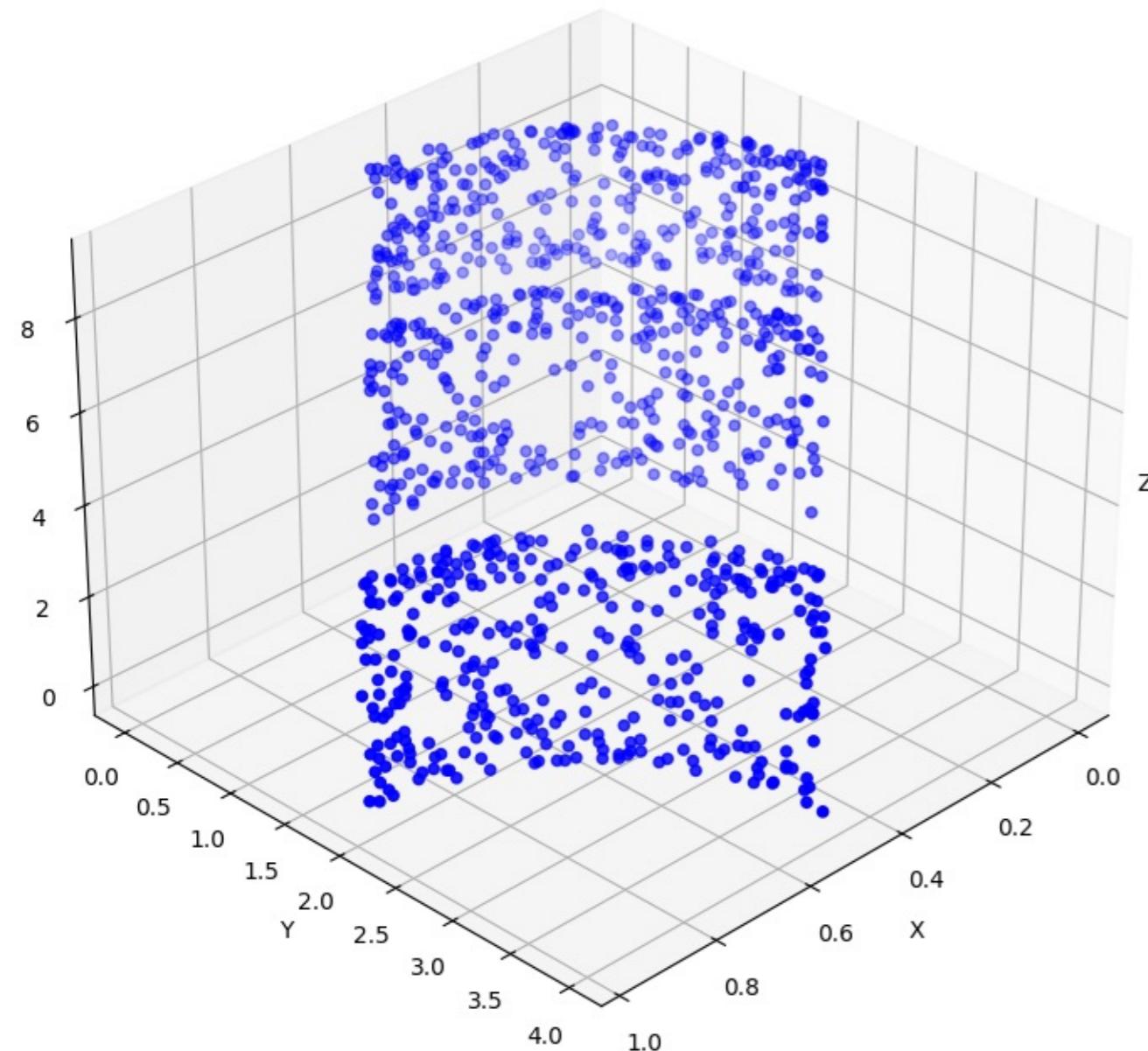
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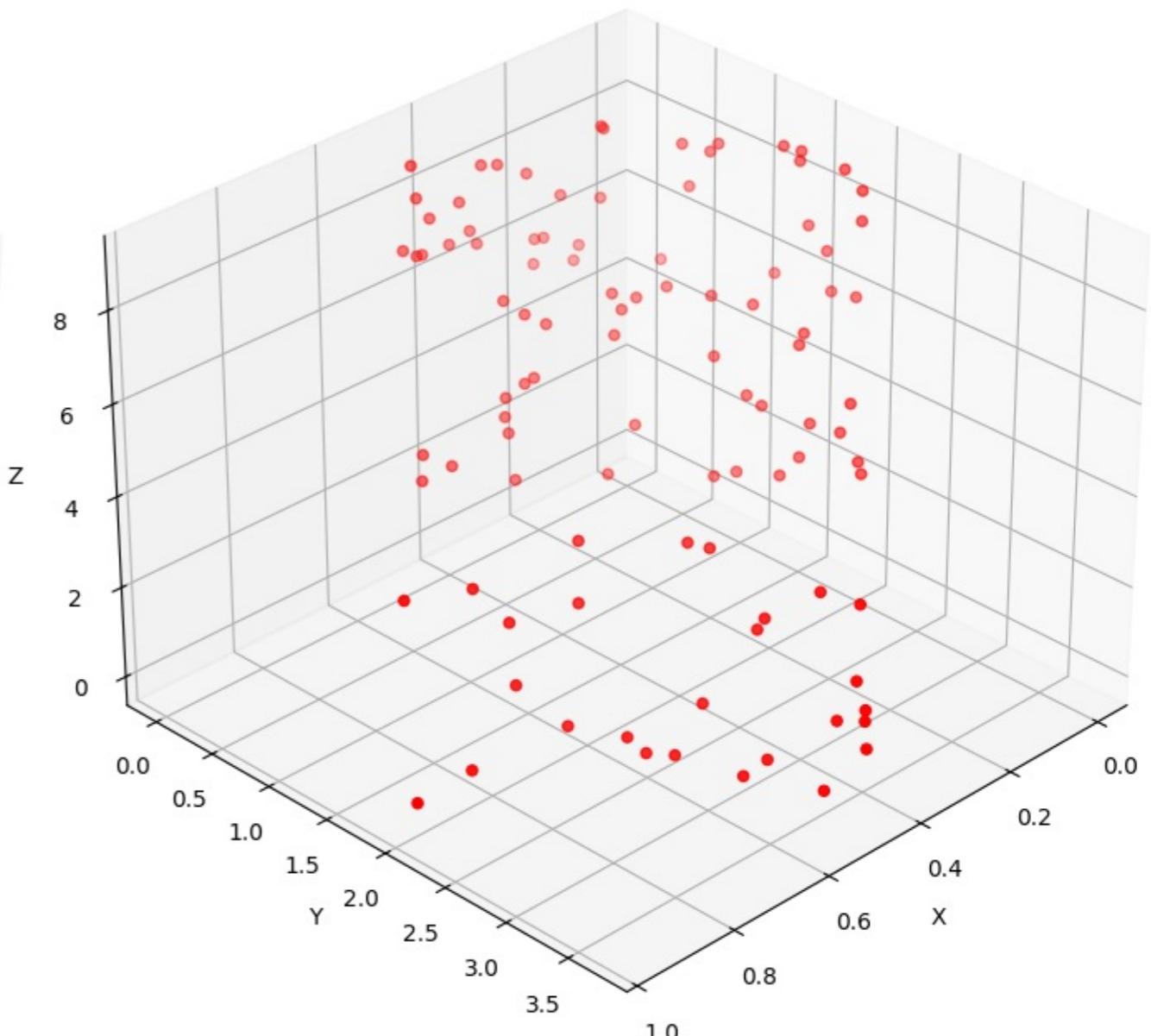
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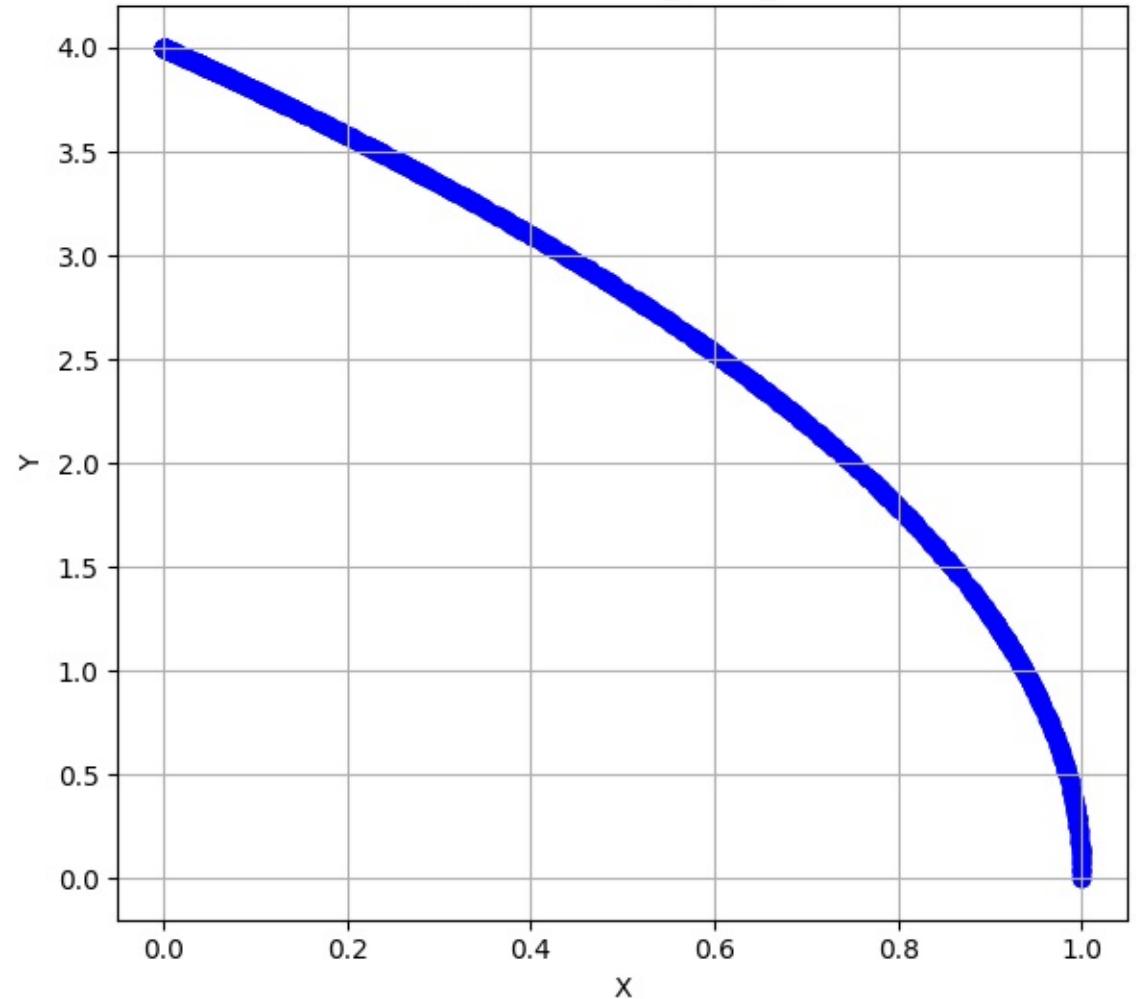
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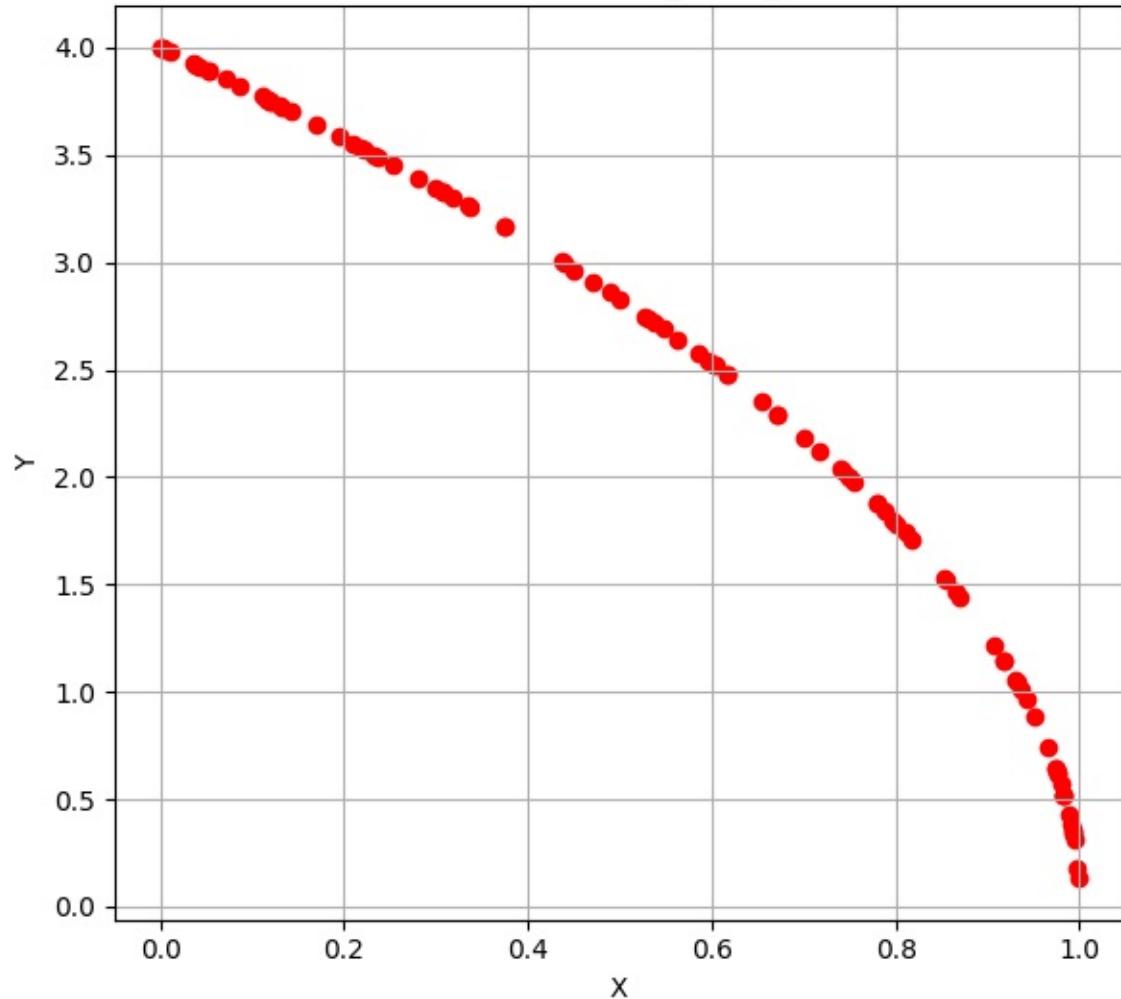
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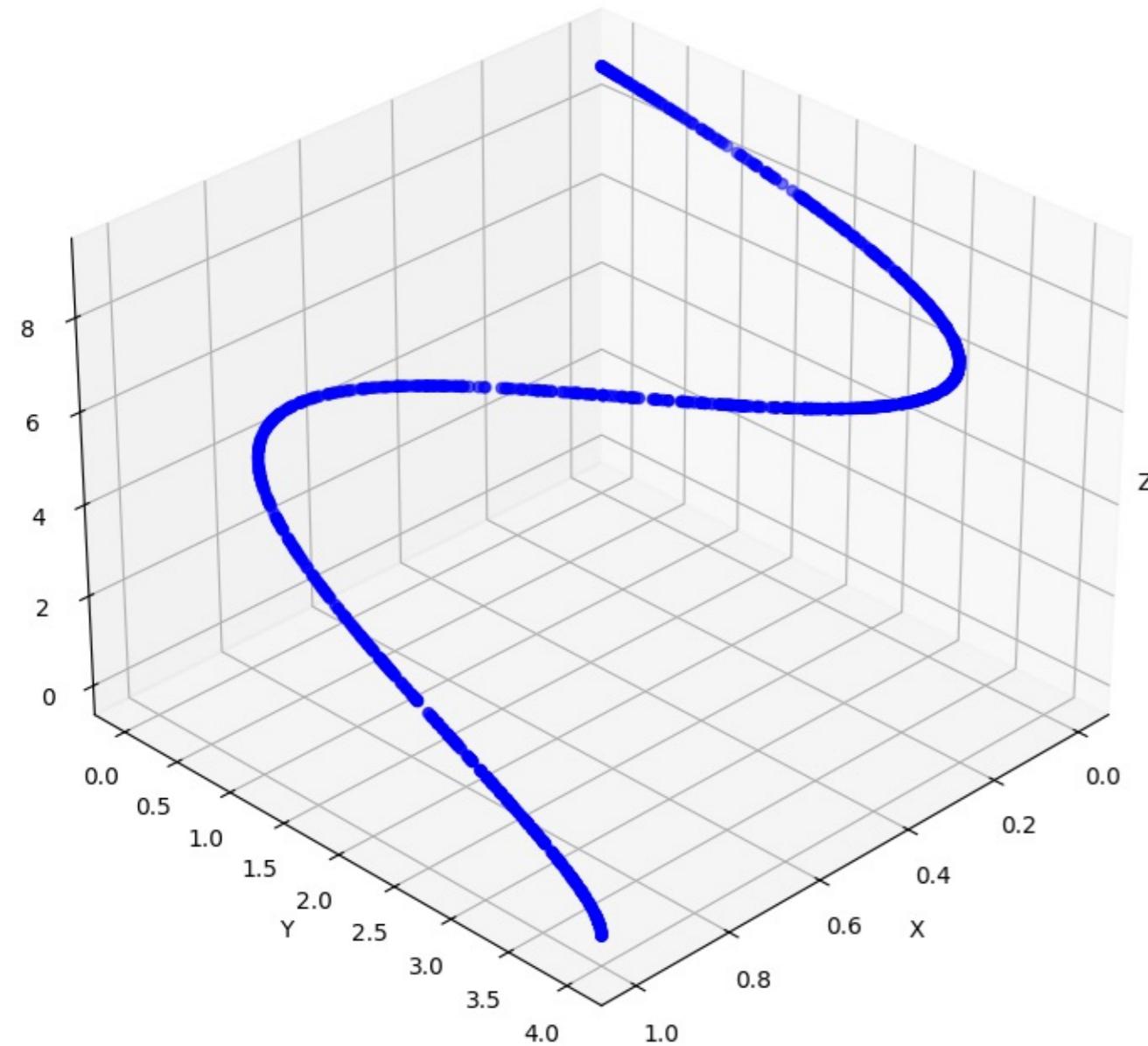
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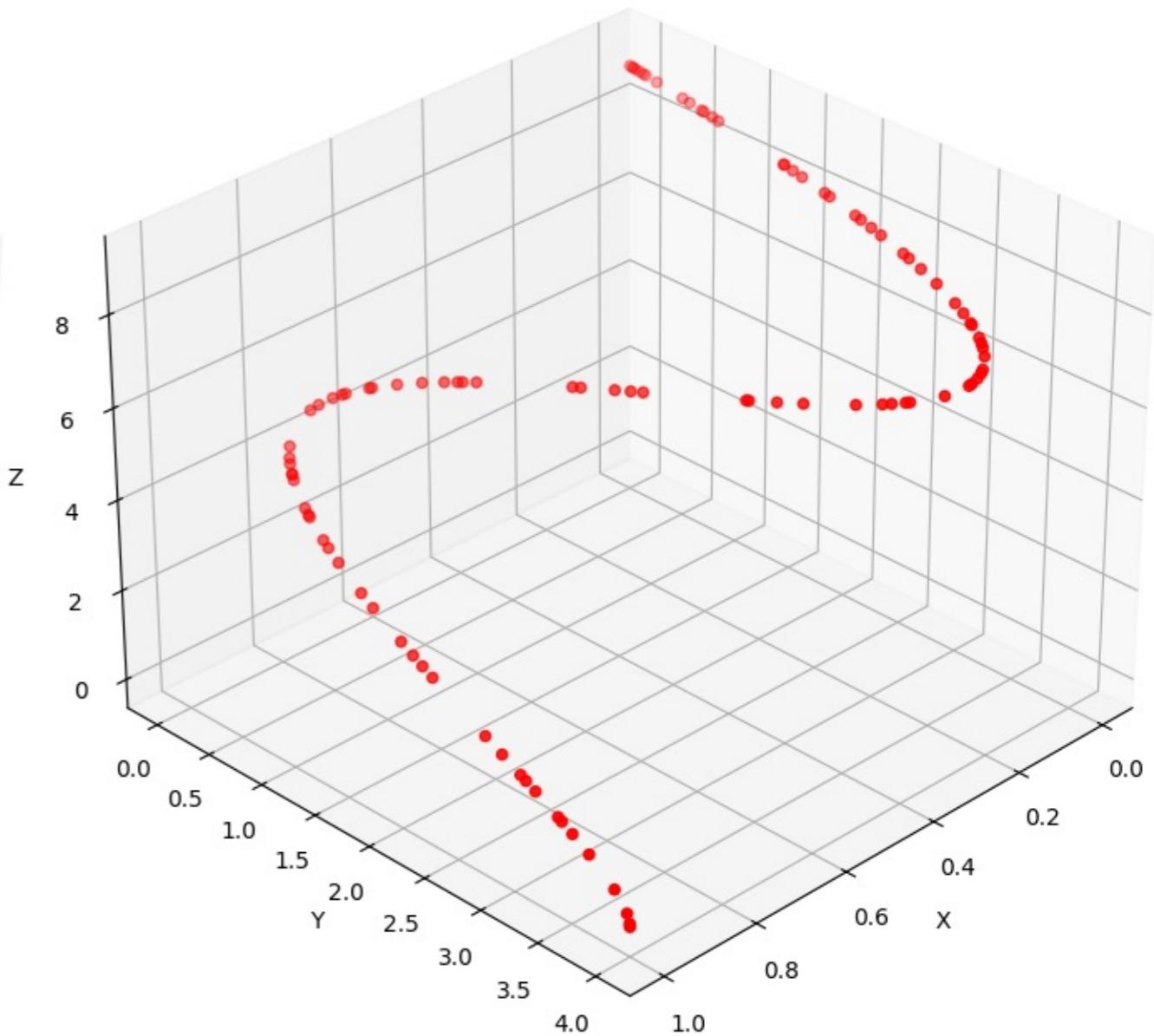
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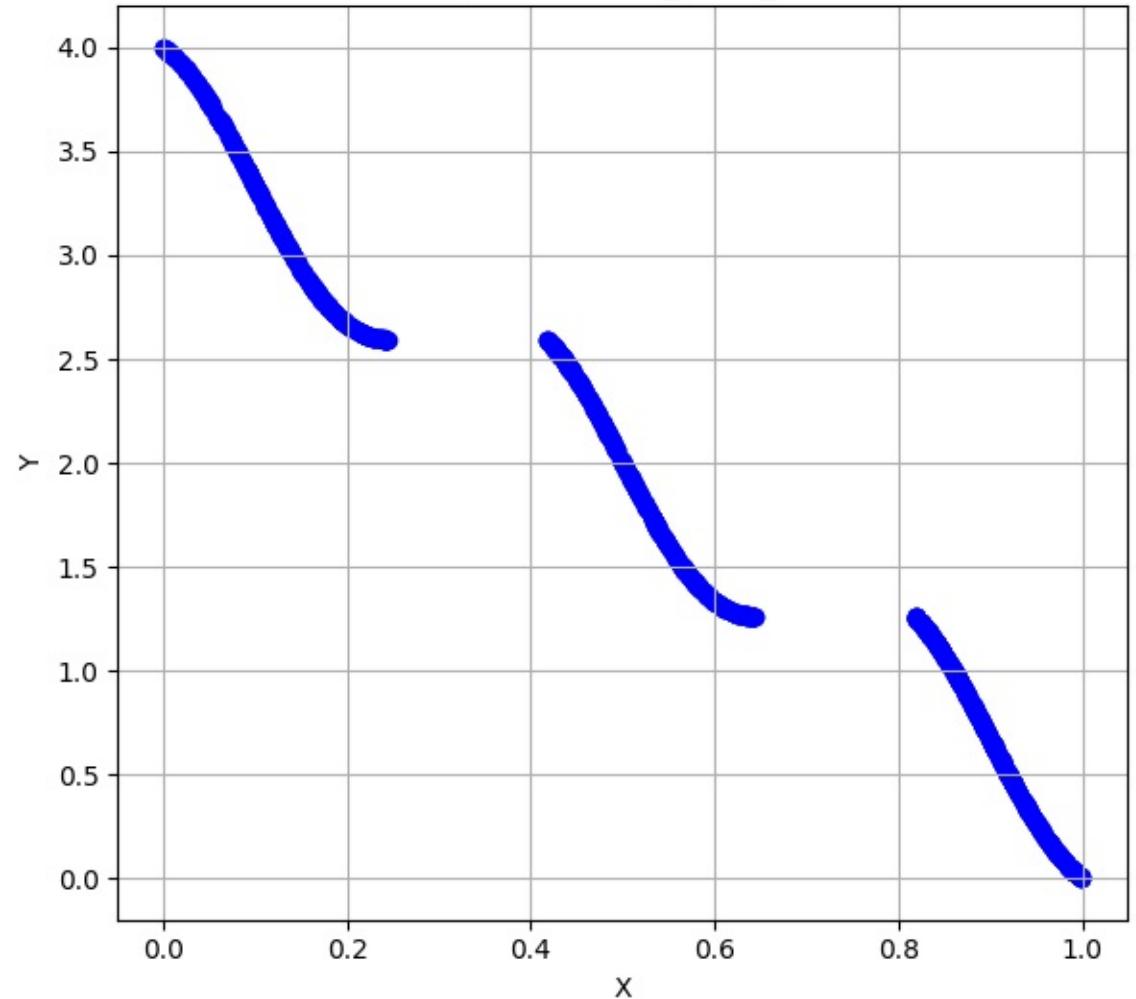
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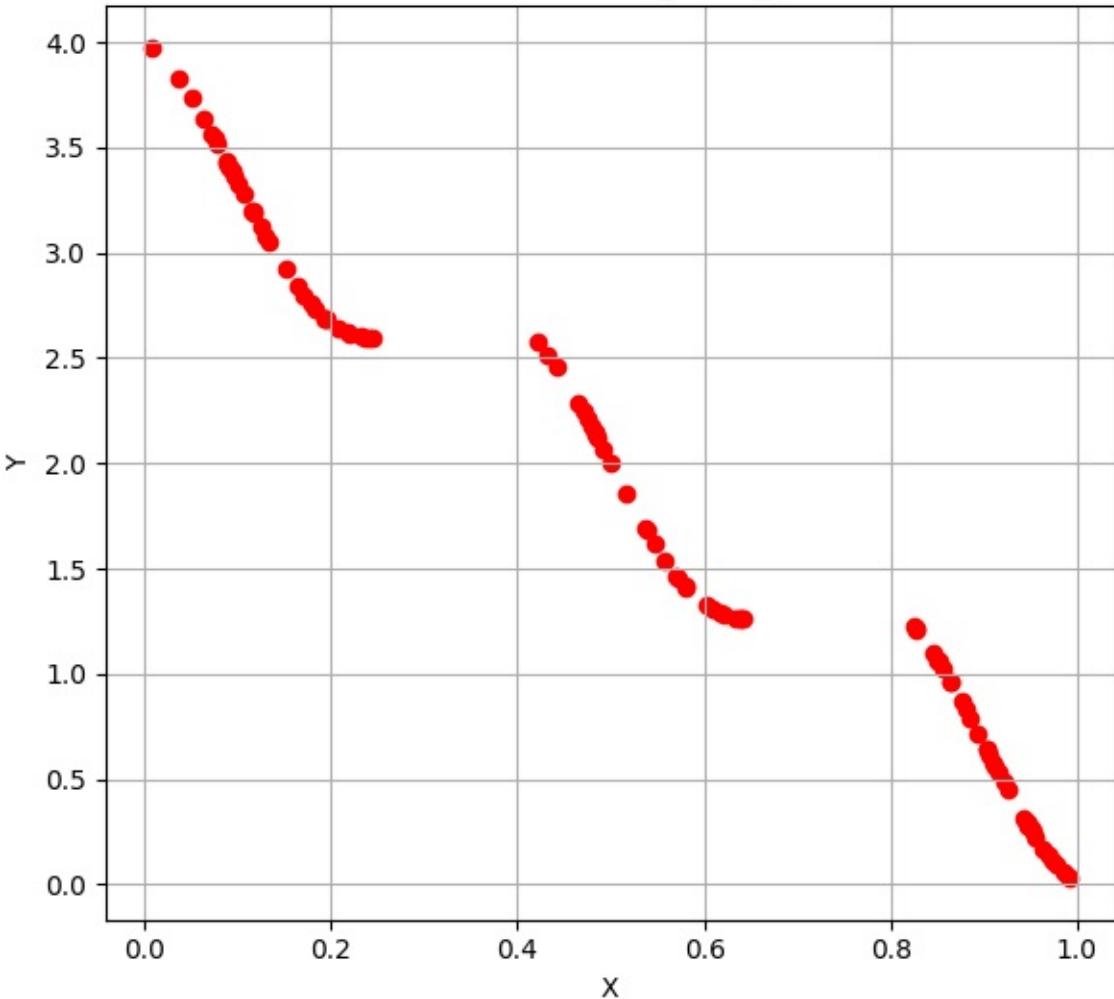
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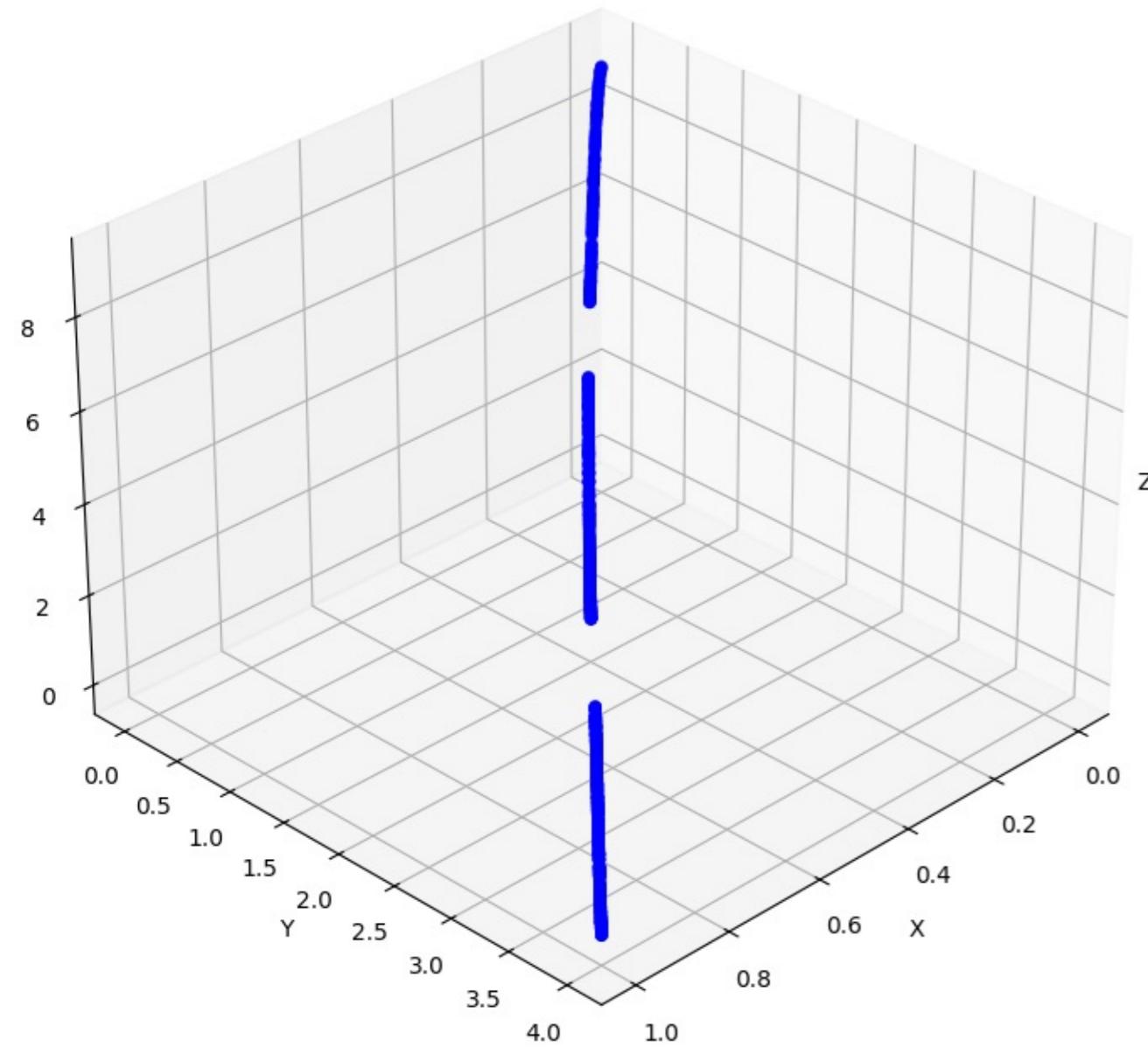
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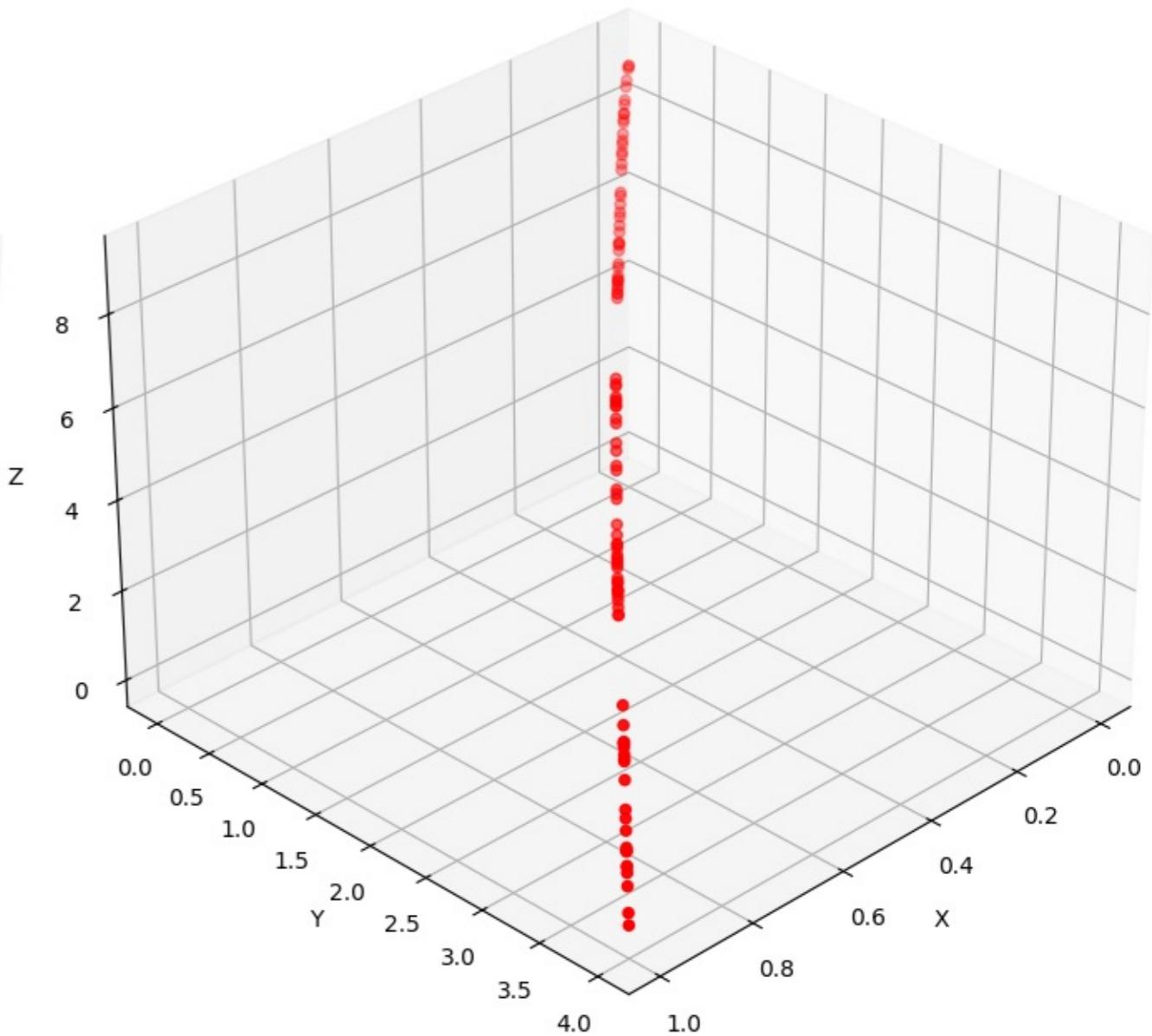
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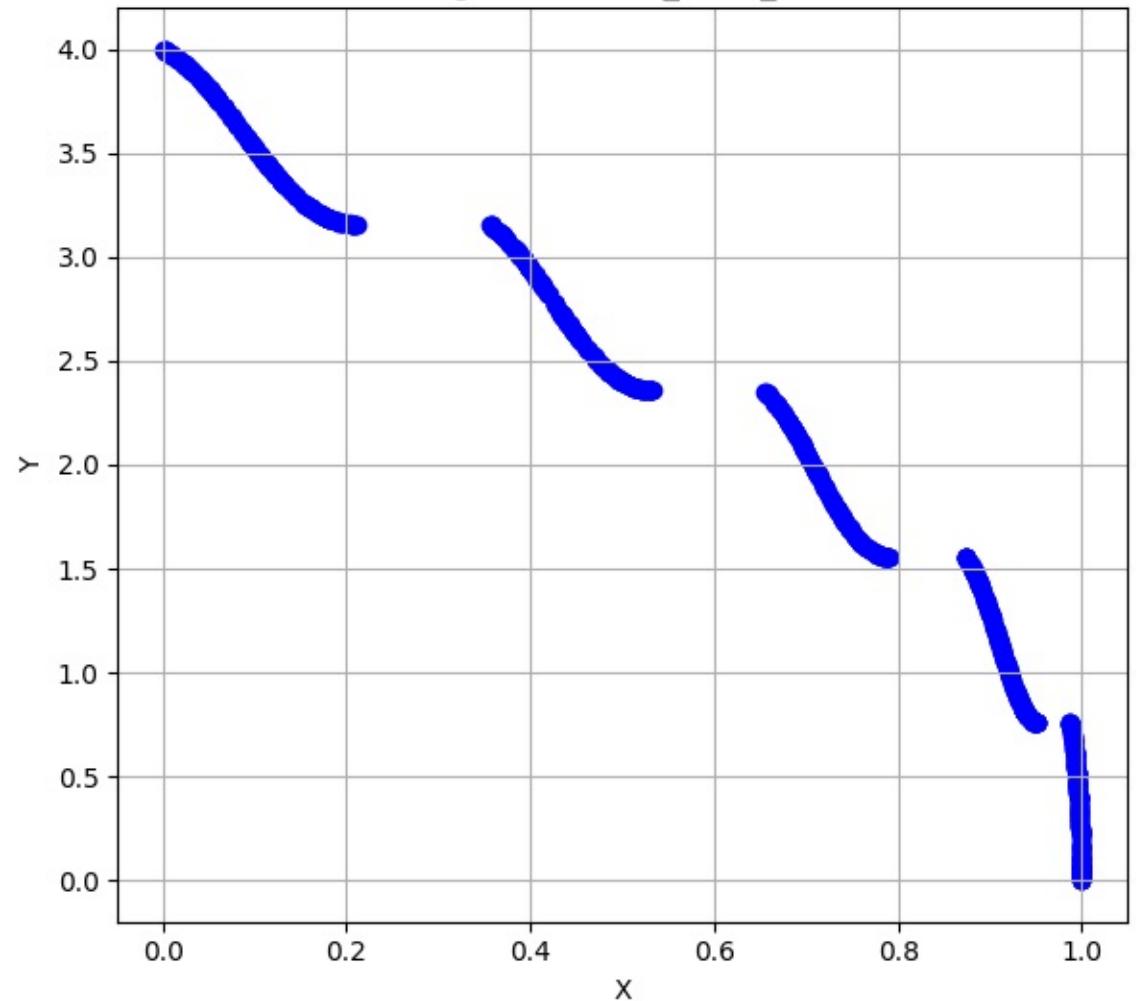
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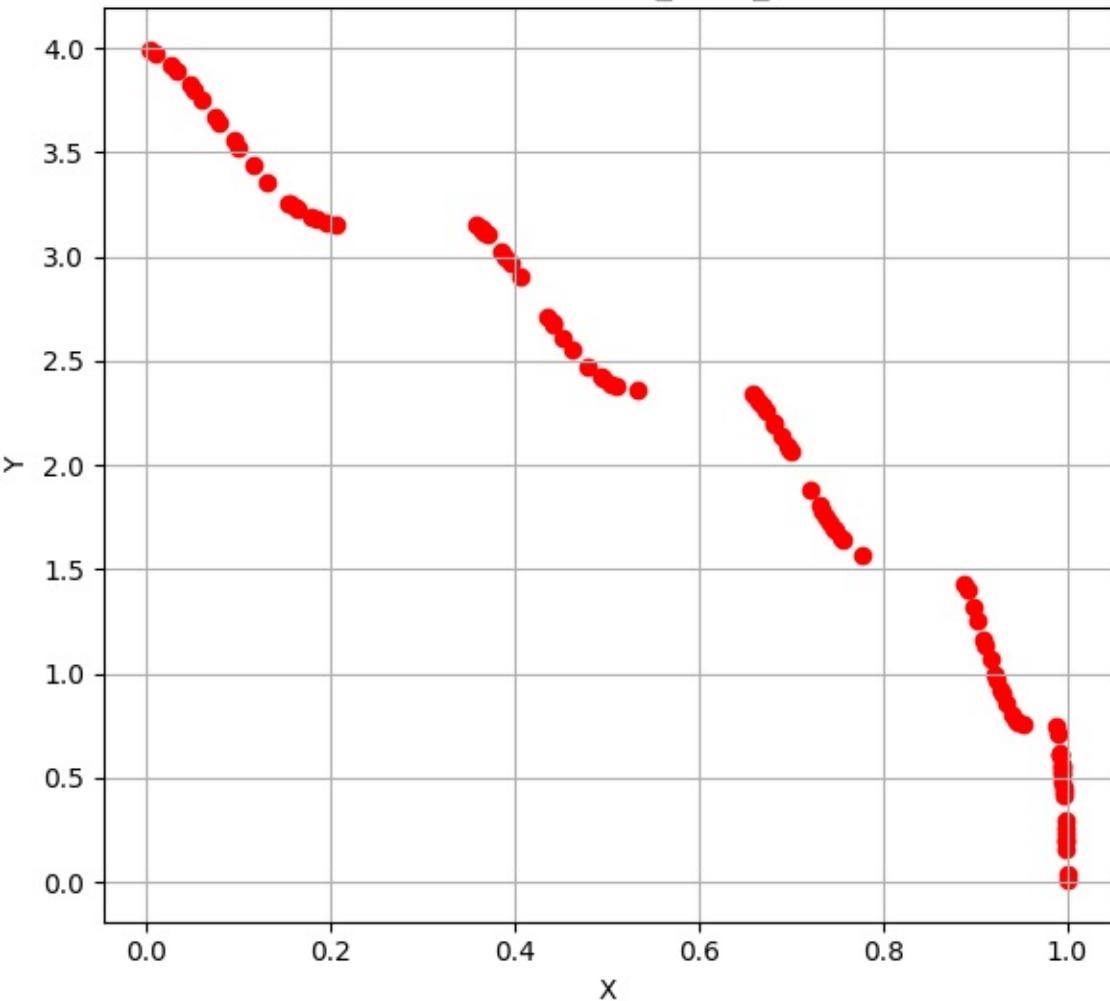
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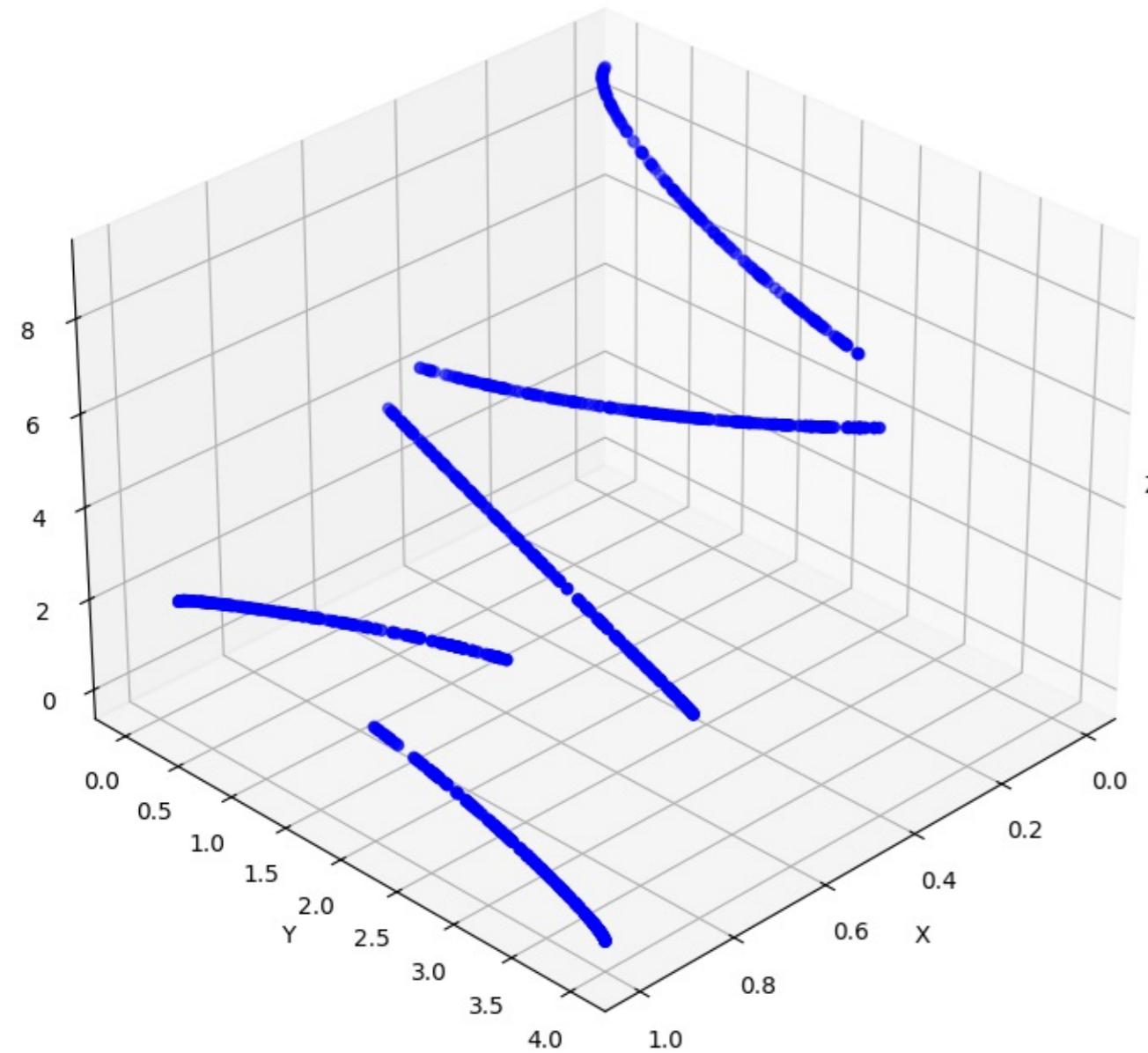
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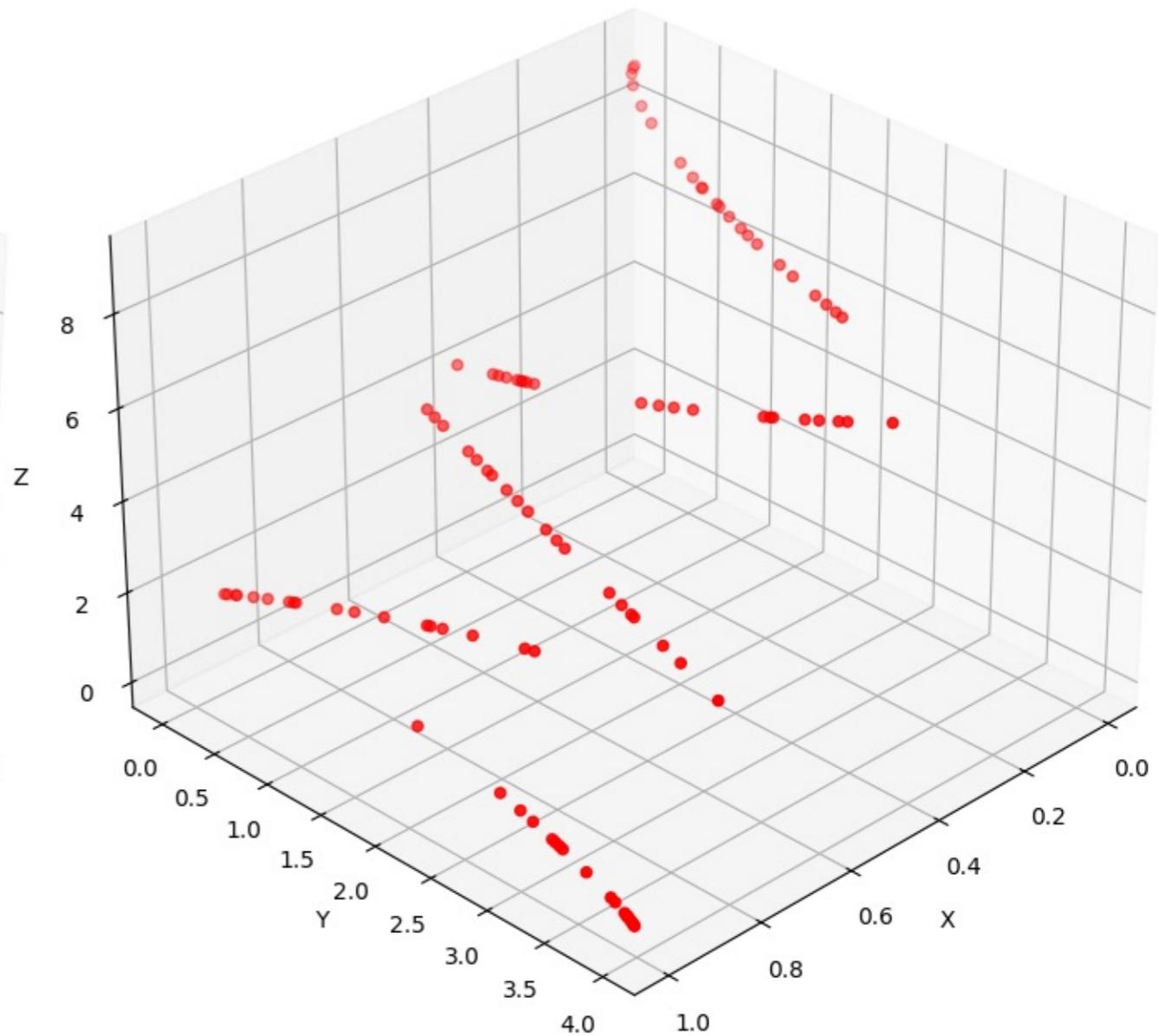
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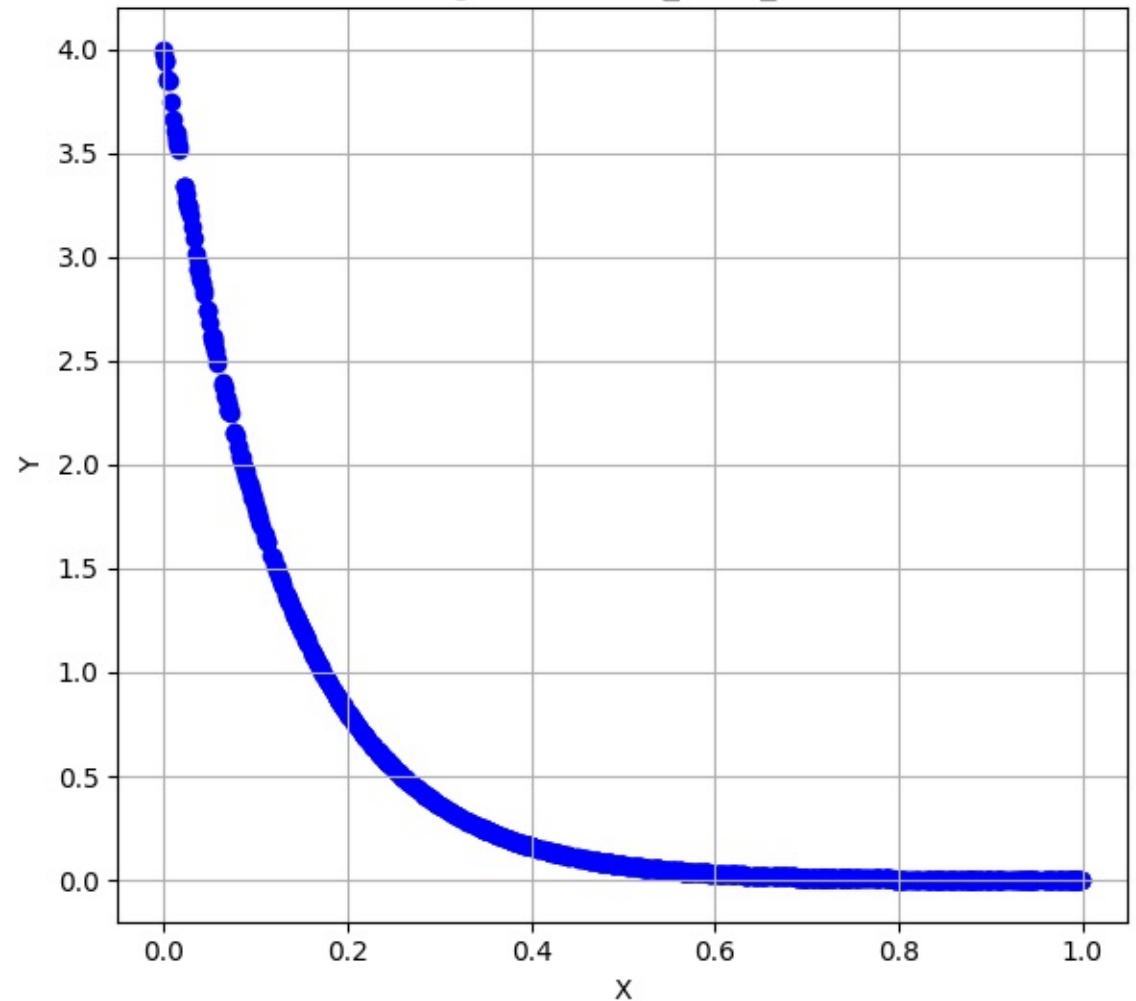
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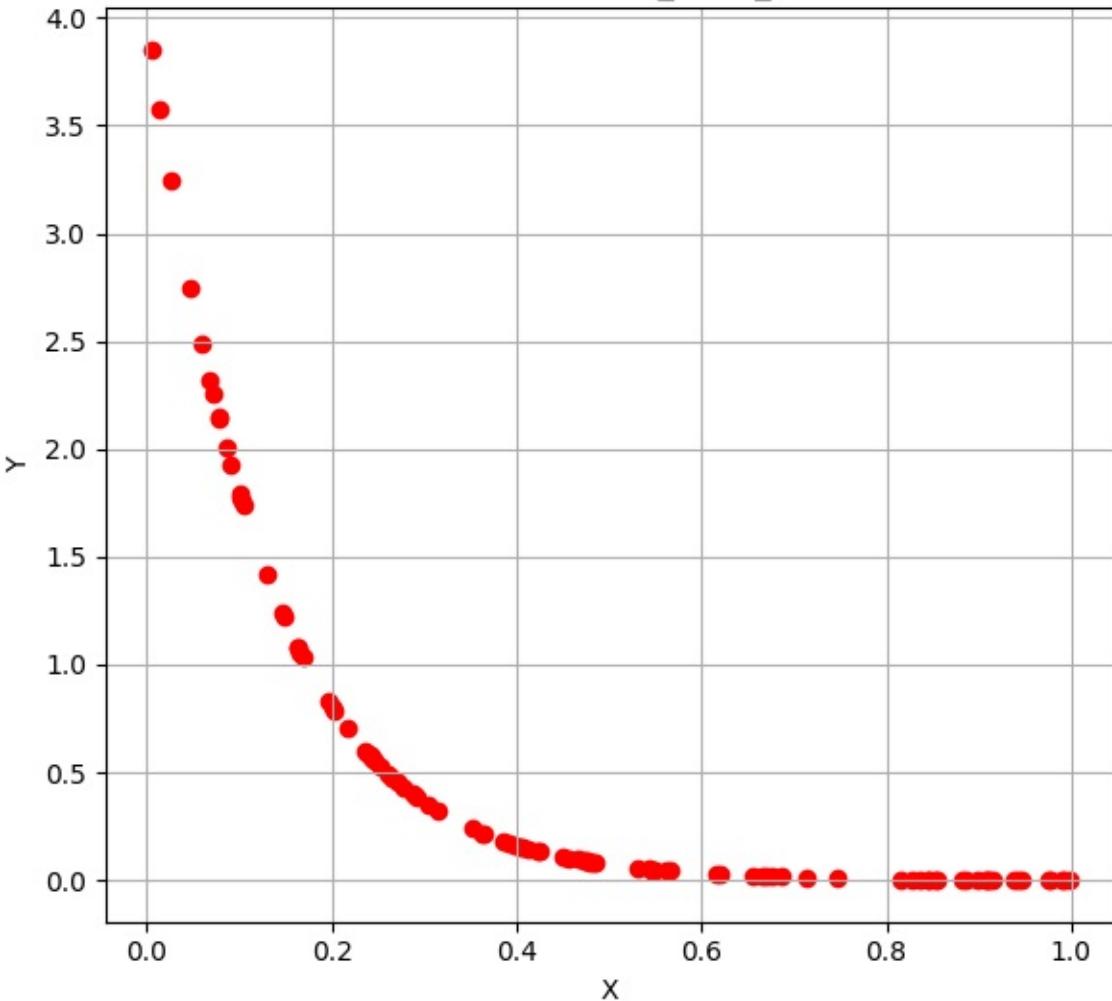
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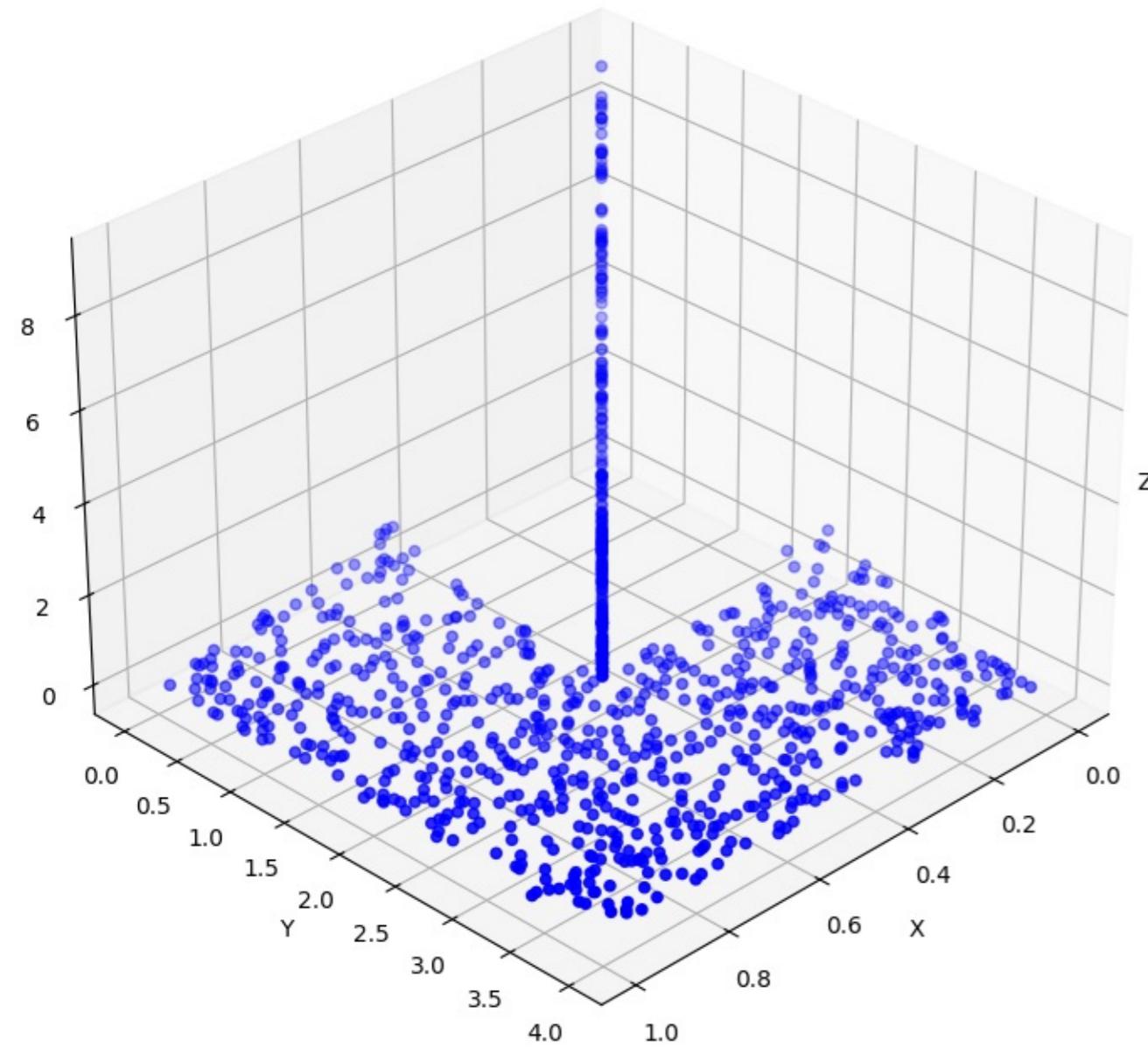
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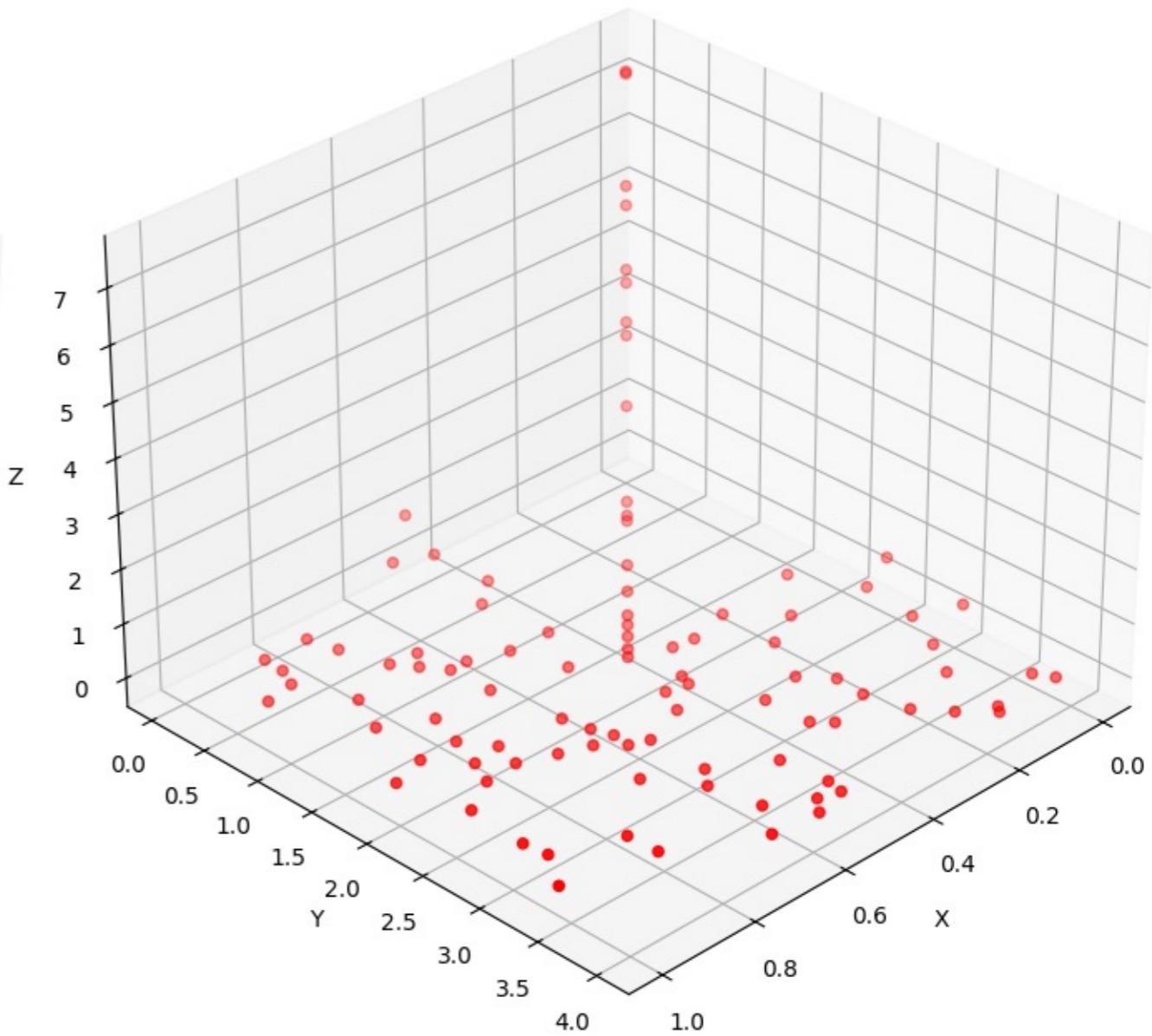
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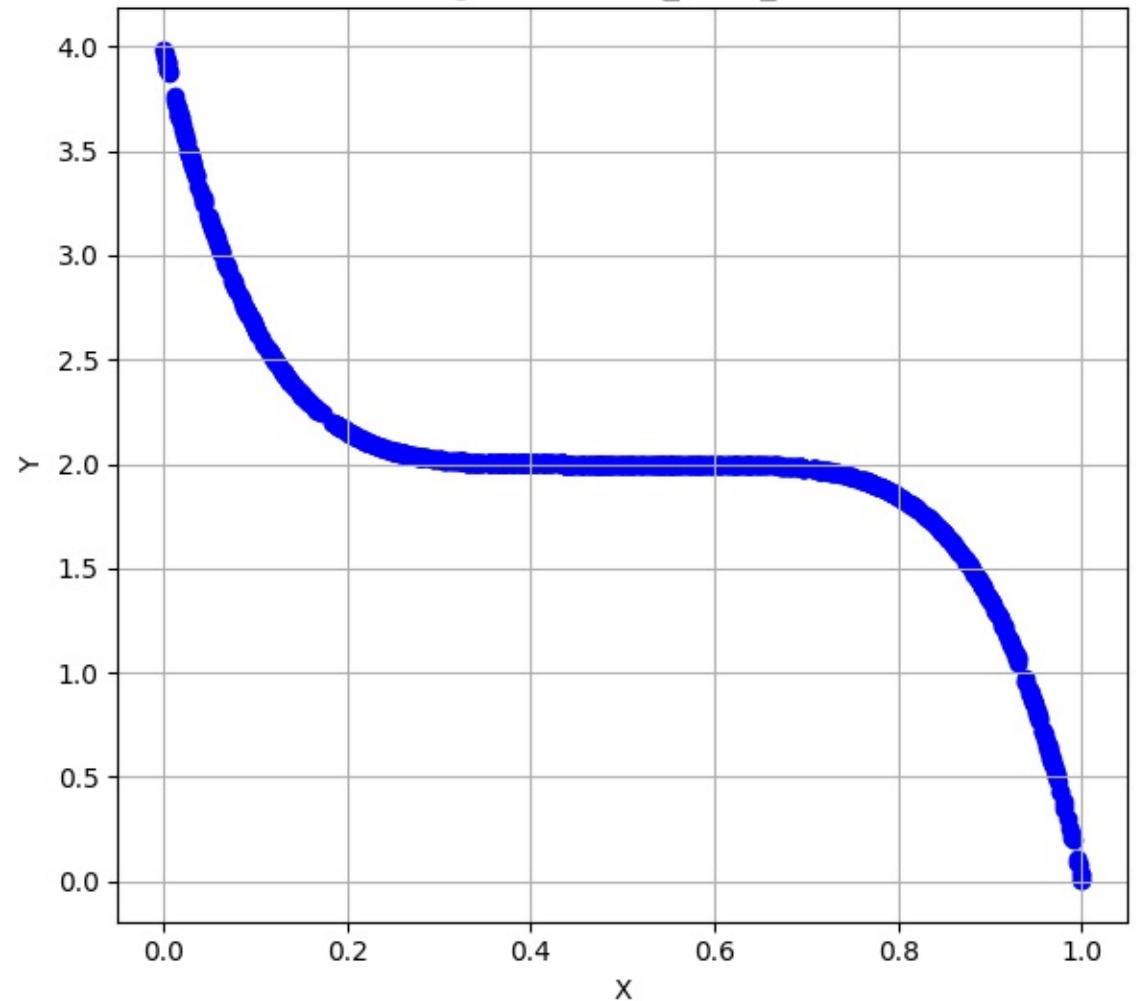
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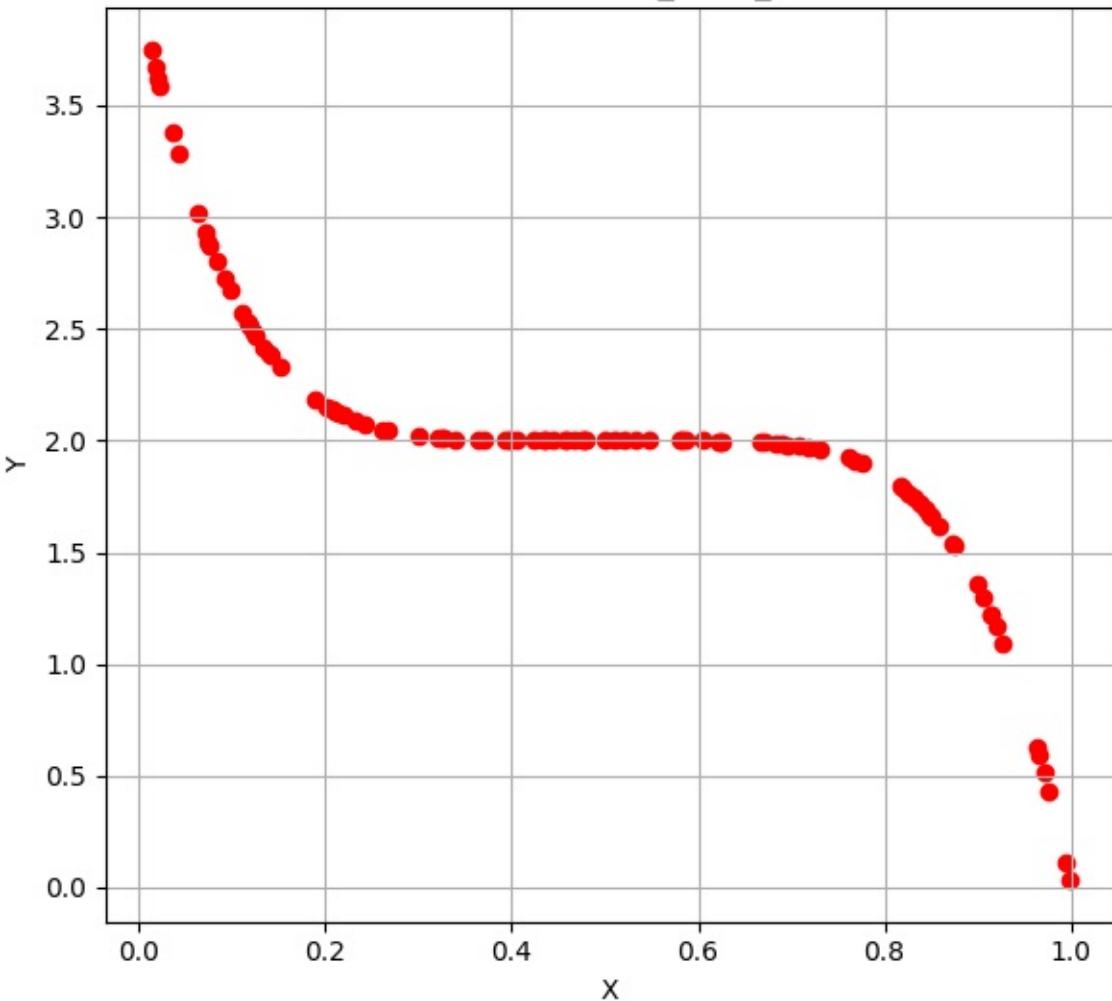
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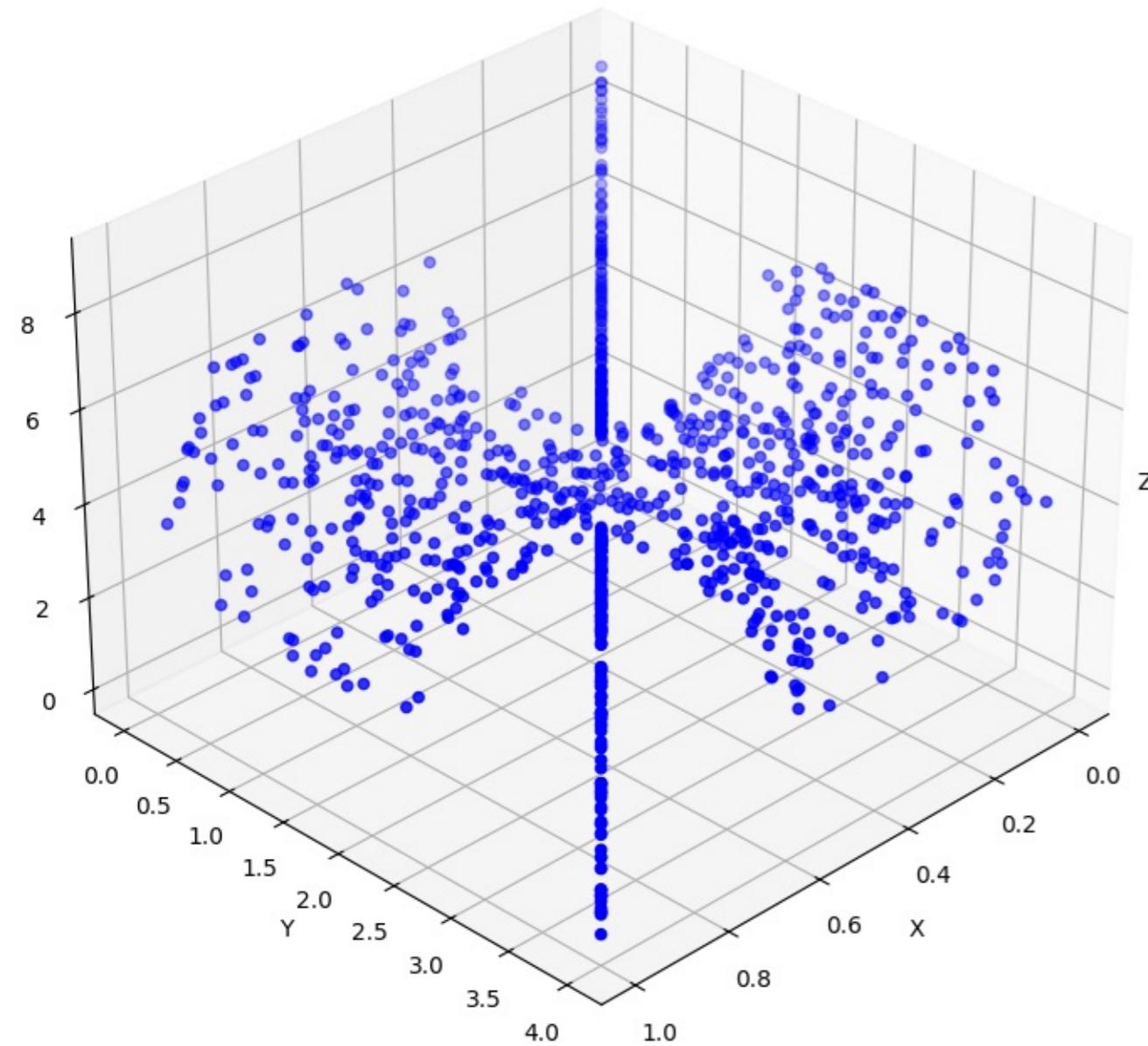
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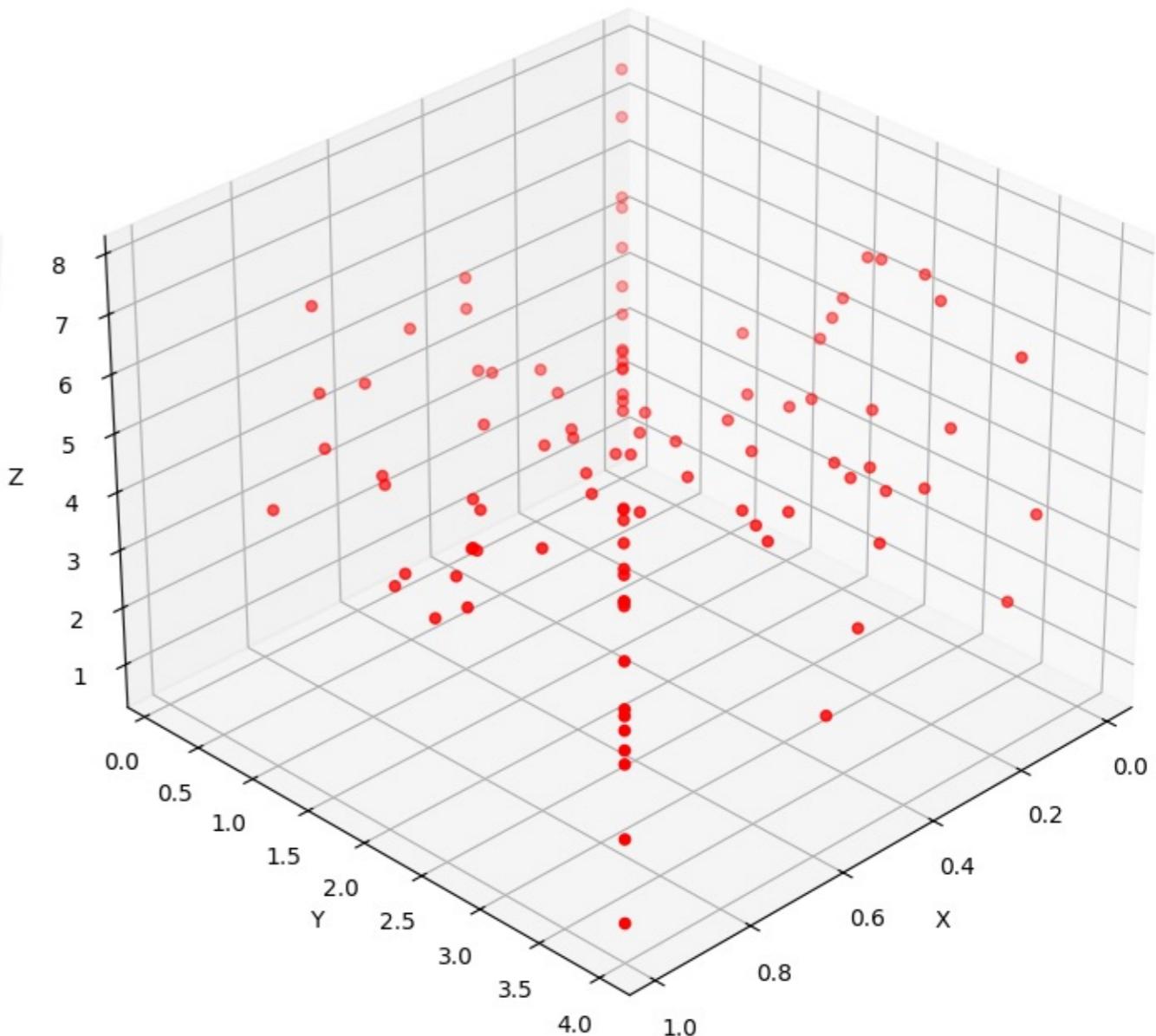
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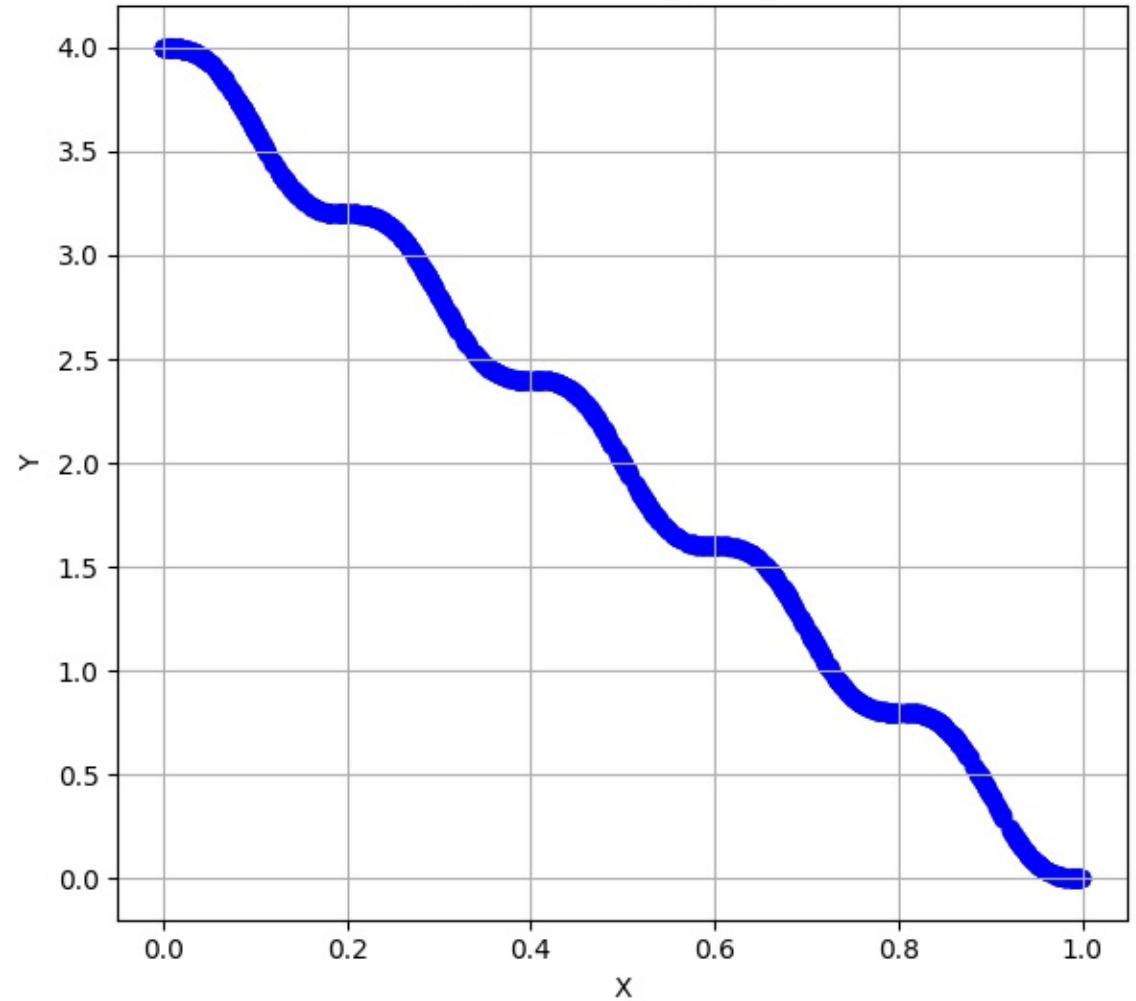
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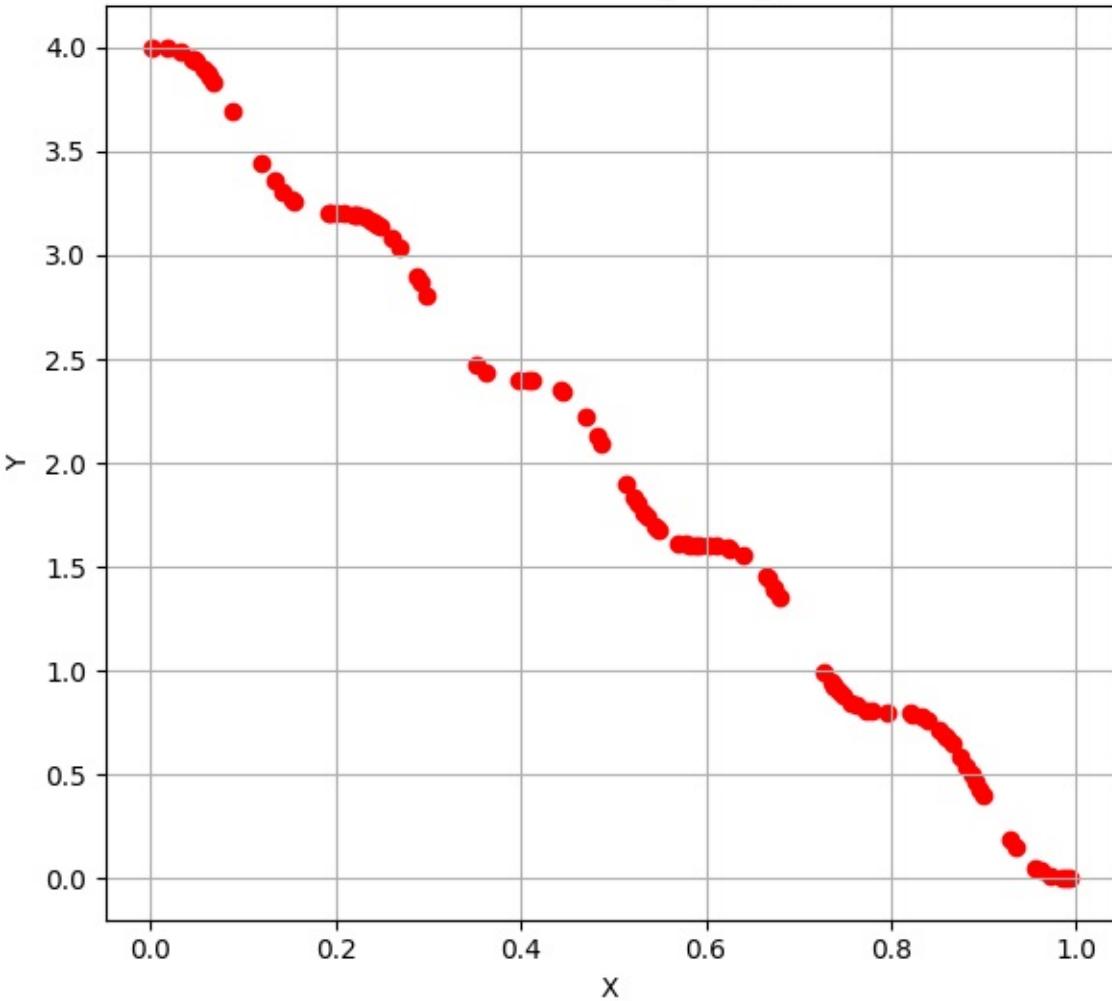
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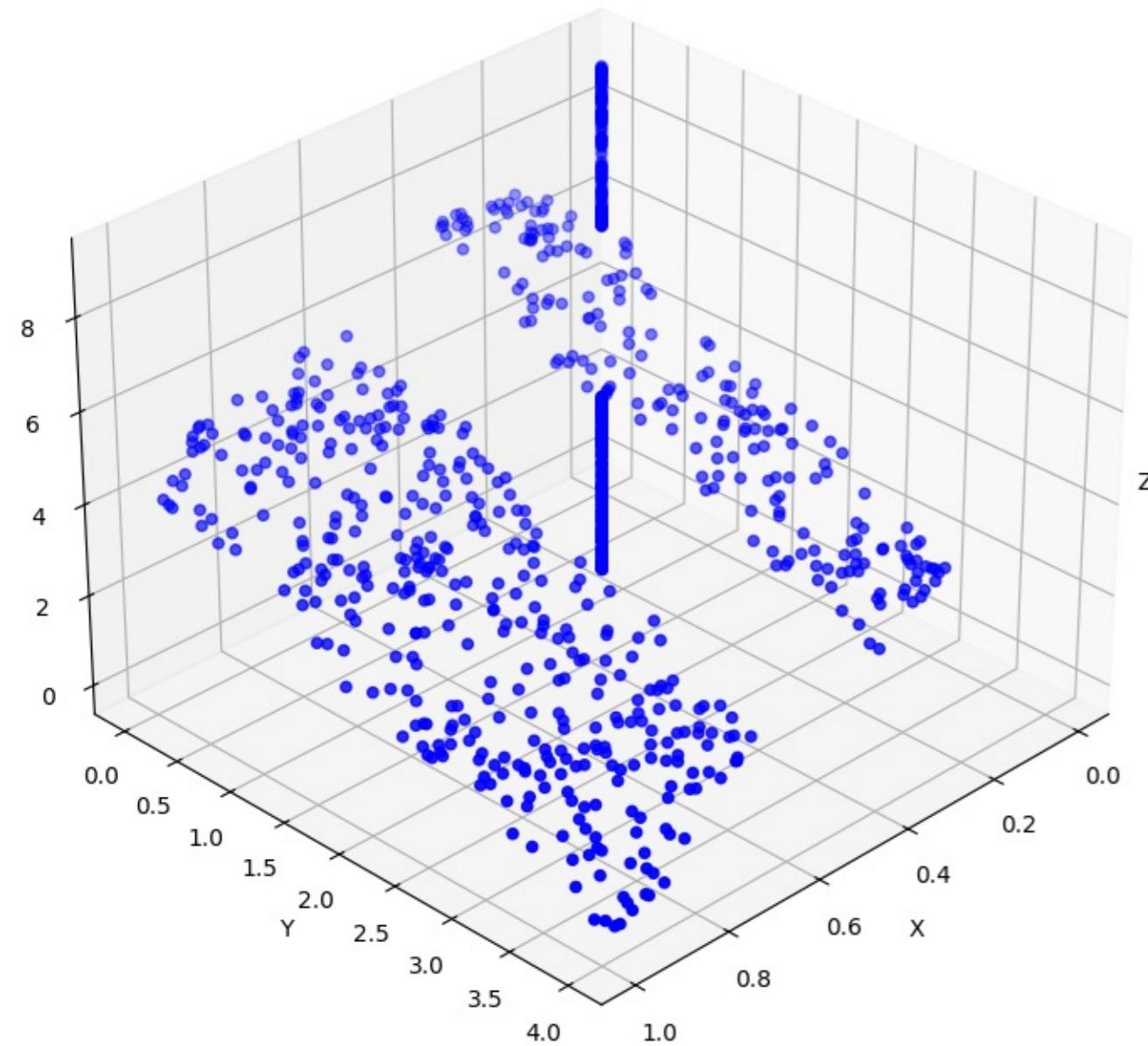
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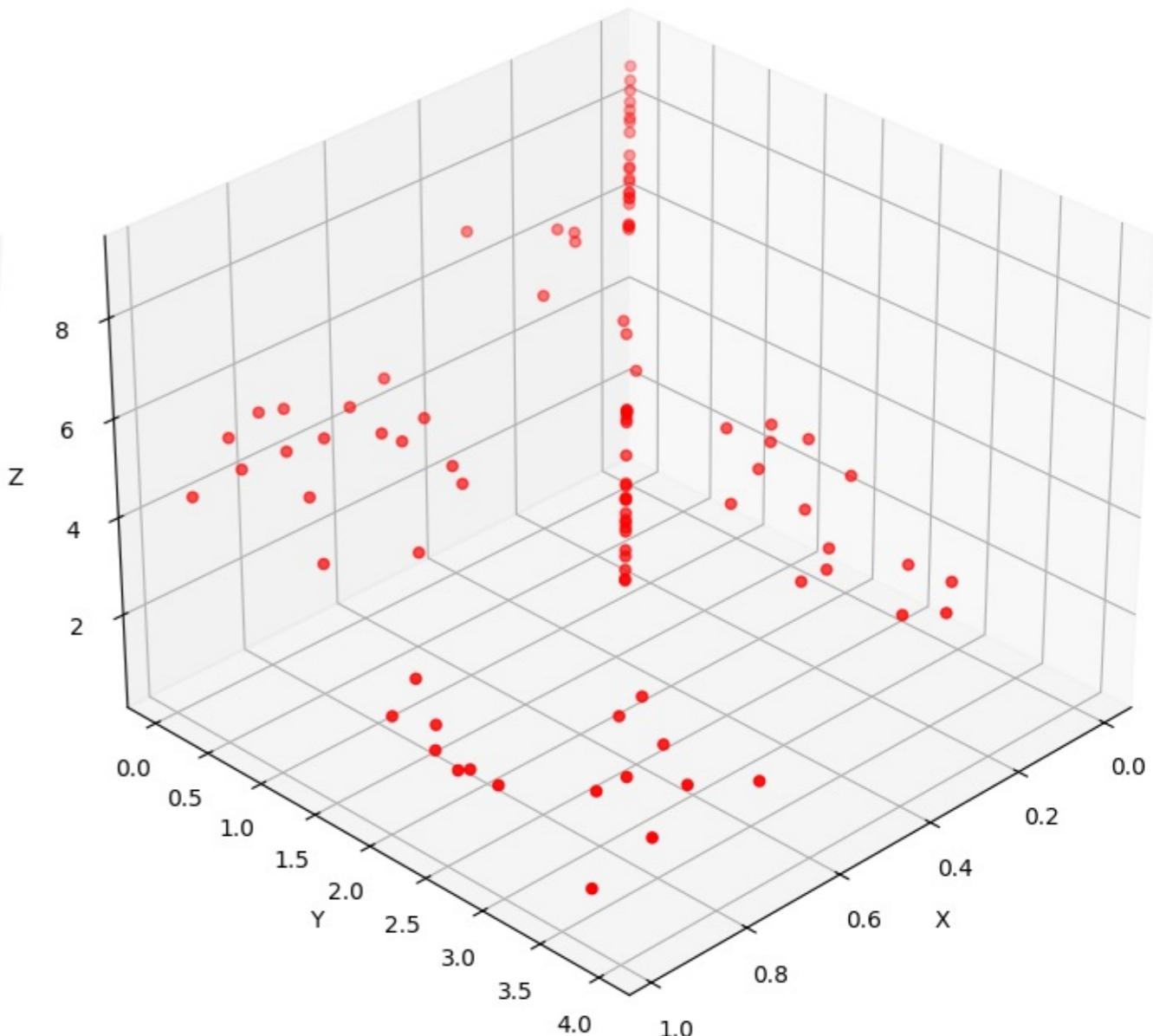
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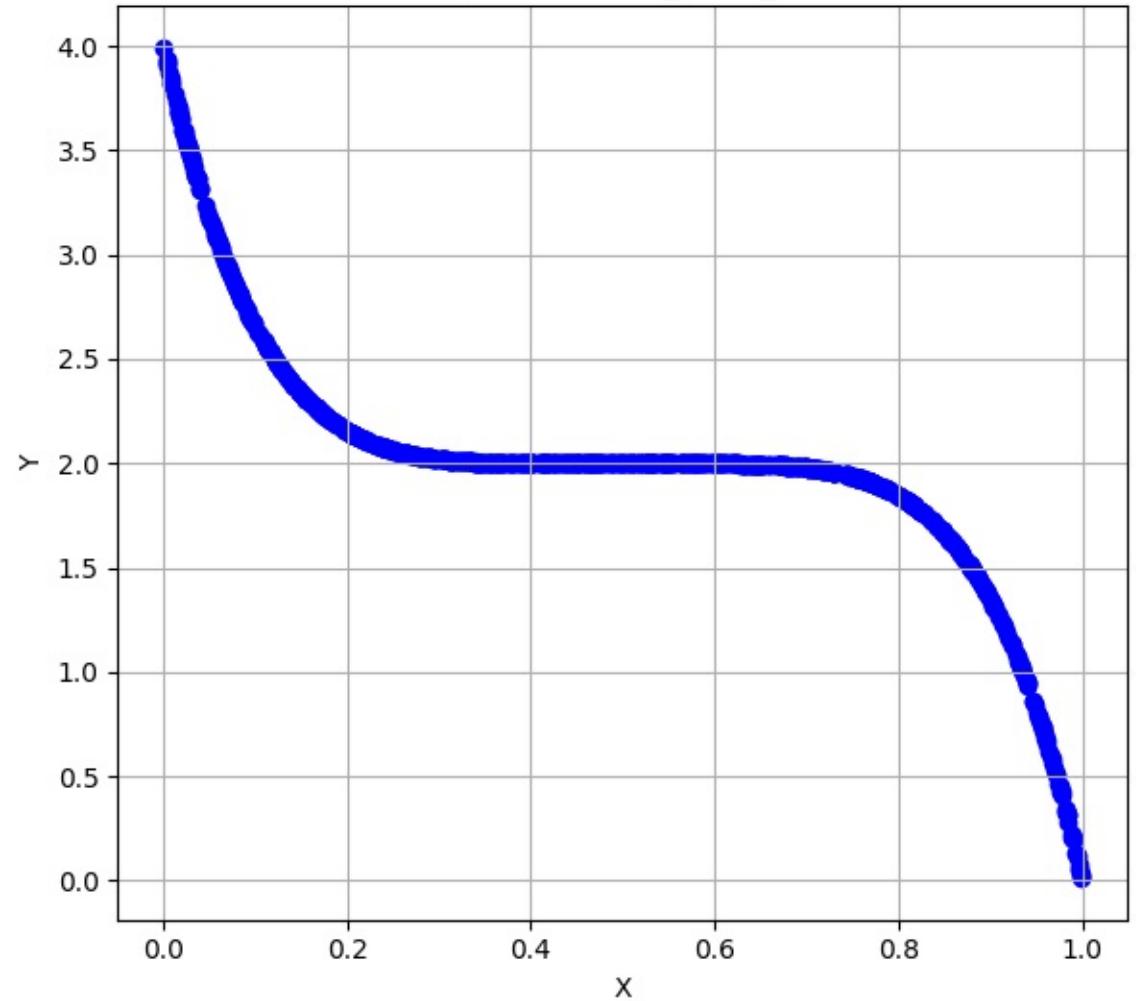
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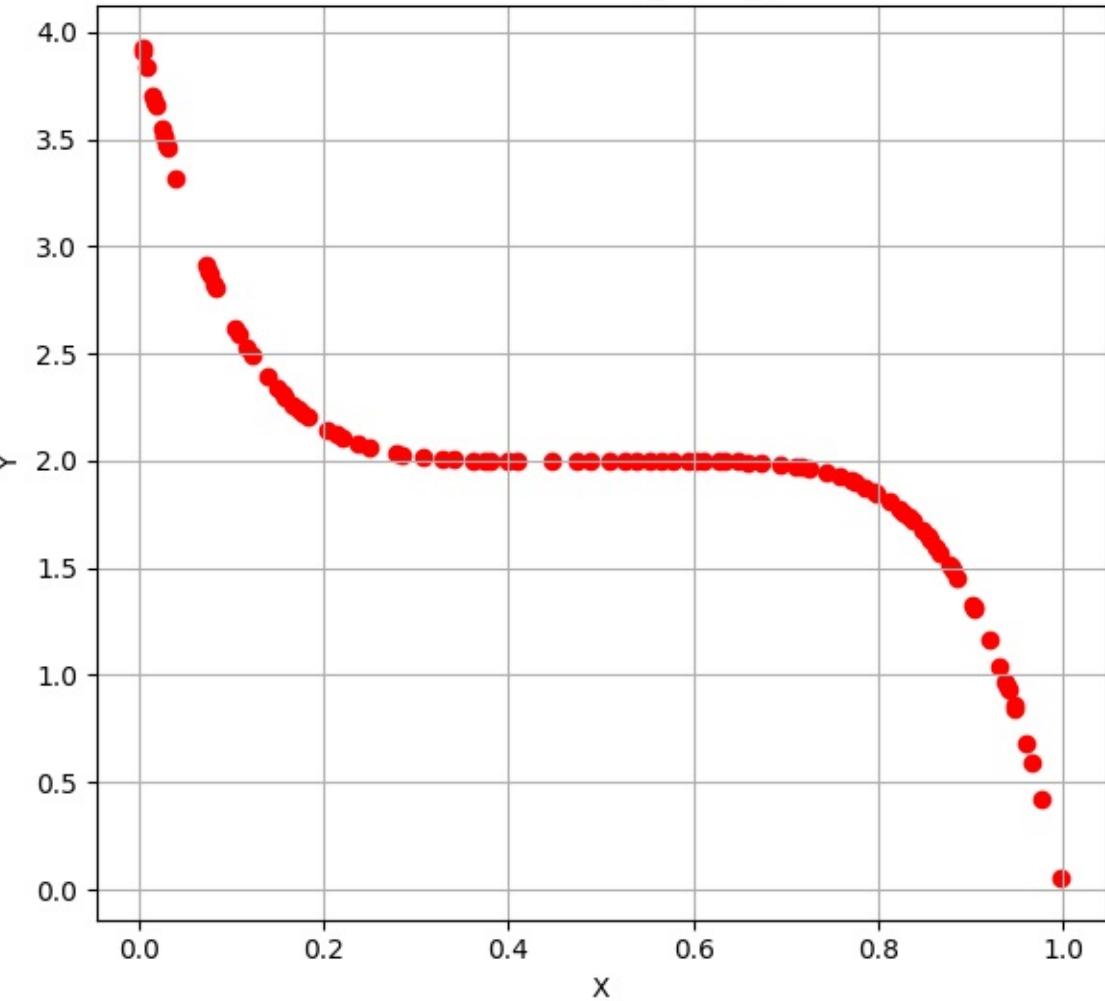
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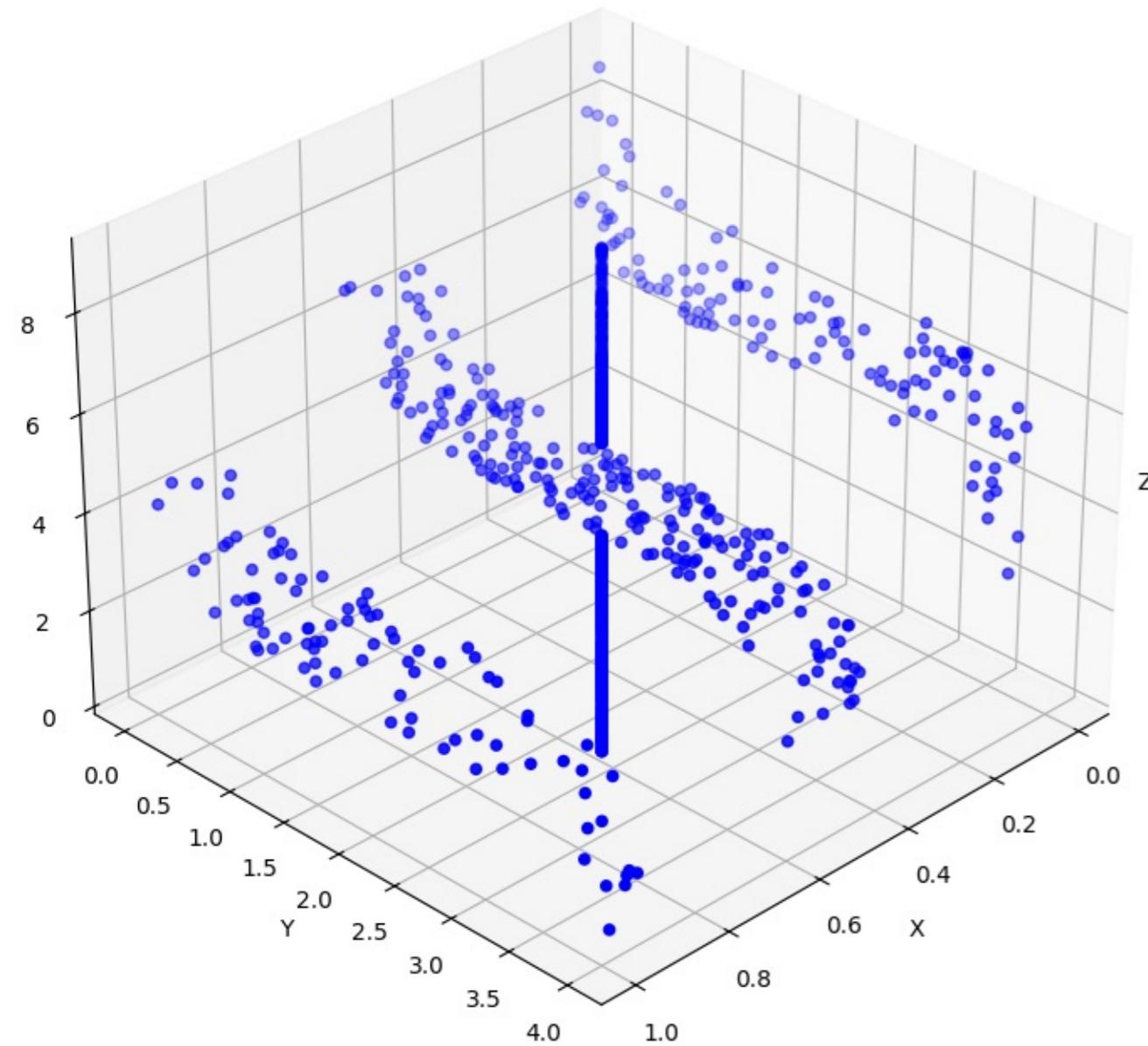
Original ZCAT20_1000_02D



Reduced ZCAT20_1000_02D



Original ZCAT20_1000_03D



Reduced ZCAT20_1000_03D

