1 dy predetion no normlization

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| woa\_cnn\_att\_lstm | |  | |
| Epochs number | | | R2 | | | Train loss,mae | | Predited temp | | Test loss,mae | |
| 150 | | | 0.8552864654858846 | | | Train Loss: 7.4053,  Train MAE: 2.0338Test | | 28.583836 | | Test MAE: 1.9483  Test Loss: 6.6027 | |
| 250 | | | 0.8423980546690875 | | | Train Loss: 7.8568, Train MAE: 2.1152 | | 26.29691 | | Test Loss: 7.1908, Test MAE: 2.0575 | |
| 350 | | | 0.8440352287033608 | | | Train Loss: 8.1447, Train MAE: 2.1214 | | 0.85305354642177 | | Test Loss: 7.1161, Test MAE: 2.0194 | |
| 500 | | | 0.8064115648127643 | | | Train Loss: 9.4803, Train MAE: 2.4087 | | 31.879967 | | Test Loss: 8.8327, Test MAE: 2.4015 | |
| 1000 | | | 0.8334759346108818 | | | Train Loss: 8.1953, Train MAE: 2.1767 | | 28.902287 | | Test Loss: 7.5979, Test MAE: 2.1110 | |
| 1500 | | | R²: 0.8726244295861966 | | | Train Loss: 6.5304, Train MAE: 1.8949 | | 28.396677 | | Test Loss: 5.8117, Test MAE: 1.8220 | |
| 2000 | | | 0.7930255020121231 | | | Train Loss: 9.7212, Train MAE: 2.3891 | | 28.423824 | | Test Loss: 9.4435, Test MAE: 2.3696 | |
| lstm | |  | |
| Epochs number | R2 | | | | Train loss,mae | | Predited temp | | Test loss,mae | |
| 150 | 0.7536435643135514 | | | | Train Loss: 12.8507,  Test MAE: 2.6698 | | 25.983585 | | Train MAE: 2.4860  Test Loss: 11.2403 | |
| 250 | 0.85305354642177 | | | | Train Loss: 7.5727, Train MAE: 2.0736 | | 27.984156 | | Test Loss: 6.7046, Test MAE: 2.0043 | |
| 350 | 0.7854966619803853 | | | | Train Loss: 10.2651, Train MAE: 2.4532 | | 29.351137 | | Test Loss: 9.7870, Test MAE: 2.4300 | |
| 500 | 0.8240996988215071 | | | | Train Loss: 8.7578, Train MAE: 2.2837 | | 32.19824 | | Test Loss: 8.0257, Test MAE: 2.2123 | |
| 1000 | 0.8304529345026581 | | | | Train Loss: 8.5156, Train MAE: 2.1895 | | 26.727093 | | Test Loss: 7.7358, Test MAE: 2.1580 | |
| 1500 | 0.8007806298018924 | | | | Train Loss: 9.5340, Train MAE: 2.3112 | | 26.987549 | | Test Loss: 9.0896, Test MAE: 2.3002 | |
| 2000 | 0.8354181121409359 | | | | Train Loss: 8.0433, Train MAE: 2.1323 | | 25.801966 | | Test Loss: 7.5093, Test MAE: 2.1115 | |

3 dy predetion no normlization

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| woa\_cnn\_att\_lstm | |  | |
| Epochs number | | | R2 | | | Train loss,mae | | Predited temp | | Test loss,mae | |
| 150 | | | 0.7626181635655614 | | | Train Loss: 11.8752, Train MAE: 2.6363 | | [[32.121044 32.51329 31.891783]] | | Test Loss: 10.8409423828125, Test MAE: 2.5635945796966553 | |
| 250 | | | 0.7638076942997056 | | | Train Loss: 11.6121, Train MAE: 2.5954 | | [26.99712 26.943653 26.91321 ] | | Test Loss: 10.7866, Test MAE: 2.5373 | |
| 500 | | | 0.7565596491526367 | | | Train Loss: 12.1018, Train MAE: 2.6859 | | [32.153915 31.932676 32.012222] | | Test Loss: 11.1176, Test MAE: 2.6048 | |
| lstm | |  | |
| Epochs number | R2 | | | | Train loss,mae | | Predited temp | | Test loss,mae | |
| 150 | 0.7418 | | | | Train Loss: 12.4927, Train MAE: 2.8082 | | [32.793835 32.55058 32.657032] | | Test Loss: 11.7899, Test MAE: 2.7581 | |
| 250 | 0.7752 | | | | Train Loss: 11.1014, Train MAE: 2.4861 | | [26.99712 26.943653 26.91321 ] | | Test Loss: 10.2647, Test MAE: 2.4558 | |
| 350 | 0.8022 | | | | Train Loss: 10.2162, Train MAE: 2.3772 | | [29.179766 29.001621 29.197372] | | Test Loss: 9.0324, Test MAE: 2.2893 | |
| 500 | 0.7417 | | | | Train Loss: 12.5406, Train MAE: 2.6935 | | [26.641779 26.716492 26.961811] | | Test Loss: 11.7951, Test MAE: 2.6507 | |