APPENDIX

RMSE REPORTED WITH VARIOUS MODELS USED

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Index | MODELS USED | RMSE,R2  (WITH ELEMENTAL DATA) For TC | RMSE,R2  (WITH  ELEMENTAL DATA) For TN | RMSE,R2  (WITH  SPECTRAL DATA)  For TC | RMSE,R2  (WITH SPECTRAL DATA)  For TN | RMSE,R2  (WITH  COMBINED DATA)  For TC | RMSE,R2  (WITH  COMBINED DATA)  For TN |
| 1. | Linear Regression | 2.226,r2=0.86 | 0.191,r2=0.72 | 2.906,r2=0.76 | 0.162,r2=0.80 | 2.160,r2=0.86 | 0.138,r2=0.85 |
| 2. | Decision Tree Regression | 2.645,r2=0.80 | 0.252,r2=0.52 | 4.047,r2=0.54 | 0.328,r2=0.18 | 3.896,r2=0.57 | 0.334,r2=0.16 |
| 3. | Random Forest Regression | 2.160,r2=0.86 | 0.188,r2=0.73 | 2.553,r2=0.81 | 0.228,r2=0.60 | 2.424,r2=0.83 | 0.196,r2=0.70 |
| 4. | KNN-Regression | 2.345,r2=0.84 | 0.149,r2=0.83 | 2.329,r2=0.84 | 0.260,r2=0.48 | 2.345,r2=0.84 | 0.218,r2=0.64 |
| 5. | Ada-Boost Regression | 2.426,r2=0.87 | 0.189,r2=0.78 | 1.835,r2=0.83 | 0.219,r2=0.68 | 1.565,r2=0.88 | 0.183,r2=0.72 |
| 6. | Gradient Boost Regression | 2.122,r2=0.91 | 0.169,r2=0.78 | 2.458,r2=0.84 | 0.206,r2=0.67 | 2.056,r2=0.88 | 0.192,r2=0.71 |
| 7. | XG-Boost Regression | 1.696,r2=0.83 | 0.170,r2=0.72 | 2.329,r2=0.90 | 0.208,r2=0.63 | 2.013,r2=0.93 | 0.194,r2=0.74 |

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