

## **Model Training Logs**

These are the recorded training logs for the Solar Panel Detection Model.

The logs include training loss, validation loss, and evaluation metrics per epoch.

### **Training Summary:**

Below table summarizes the model performance during training:

Epoch	Train Loss	Val Loss	MAE	RMSE	R <sup>2</sup>	Time (sec)
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1	0.412	0.521	12.4	16.1	0.72	3.42
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2	0.355	0.498	10.3	14.9	0.78	3.40
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3	0.309	0.447	9.8	13.7	0.81	3.38
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4	0.280	0.421	9.1	12.9	0.83	3.35
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5	0.260	0.399	8.7	12.4	0.85	3.33
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### **Notes:**

- Training loss shows consistent improvement across epochs.
- Validation loss decreases gradually, indicating good generalization.
- RMSE and MAE values improve steadily.
- R<sup>2</sup> score increasing indicates better model performance.
- Training time remained stable for all epochs.

This document is part of the project deliverables and represents the logged metrics during model training.