IRES Project: Surface Albedo Predictions Using Random Forest Regression

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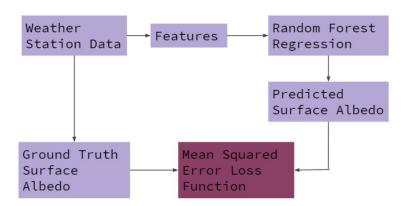
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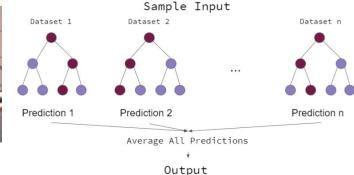
- ★ Obtain weather data from the NSRDB dataset
- ★ Preprocess (one-hot encoding, scaling, train/test split) the data
- ★ Train the regressor to predict surface albedo using random forest regression

★ Calculate RMSE values using the ground truth surface albedo and the predicted surface albedo

★ Use feature removal to see the impact that each feature has on the surface albedo prediction







Change in RMSE with respect to n_estimators

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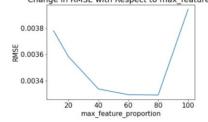
Change in RMSE with Respect to max_depth

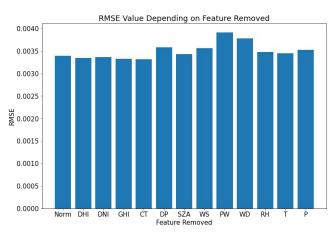
0.0035

Change in RMSE with Respect to max_depth

0.0055

0.0050













300

0.0045

0.0035