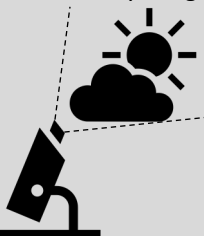


## NREL SRRL BMS

EKO All-Sky Imager (10 min.)



- Image
- Light cloud %
- Heavy cloud %
- Sun status

Meteorological Measurements (1 min)



- Temperature
- Pressure
- Humidity
- Wind
- Irradiance
- Misc.

## Ineichen Clear Sky Model

- Location
- Time



Ideal irradiance

## Data Cleaning

- Remove outliers
- Identify missing data



## Feature Engineering & Formatting

- Clear Sky Index
- Trend
- Rolling Statistics
- Irradiance Representation
- Scaling between 0-1



*Output*

## Model Training & Validation

Use the 3 **Train** **Validate** datasets to determine:

- Time representation (Step 1)
- Irradiance representation (Step 1)
- Input sequence Length (Step 2)
- Final Feature selection (Step 3)

2017-2019

2020

2017-2020

2021

2017-2021

2022