

# Estimation of Annual Efficiency of Heliostat Field (SEI-2)



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## Scientific Achievement:

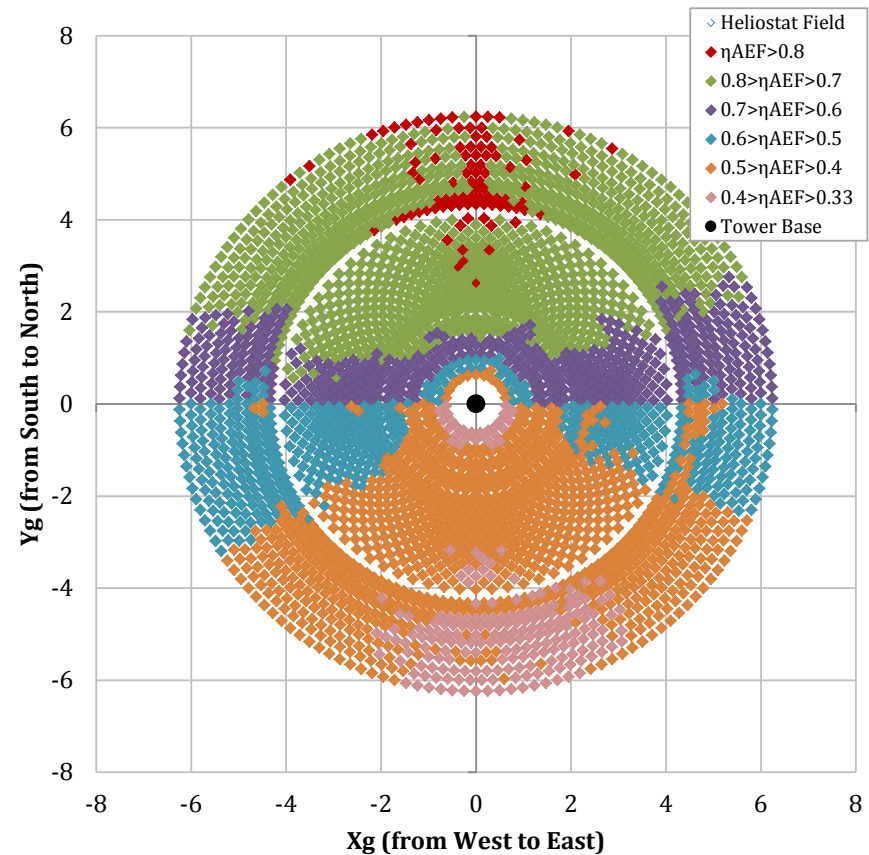
We developed a comprehensive model to determine the annual efficiency of a heliostat field, considering various factors such as shadowing, blocking effects, and cosine effects.

## Significance and Impact:

The model helps to determine the annual efficiency of the solar field for various heliostat sizes, positions, and tower heights. When coupled with the cost model, it also helps in deciding on the optimum field to be considered.

## Research Details:

- Detailed mathematical models were developed to determine the heliostat layout considering the partial blocking conditions. Results from this modeling helped in developing the procedure for handling partial blocking and shadowing conditions.



Annual efficiency factor for a heliostat layout.

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