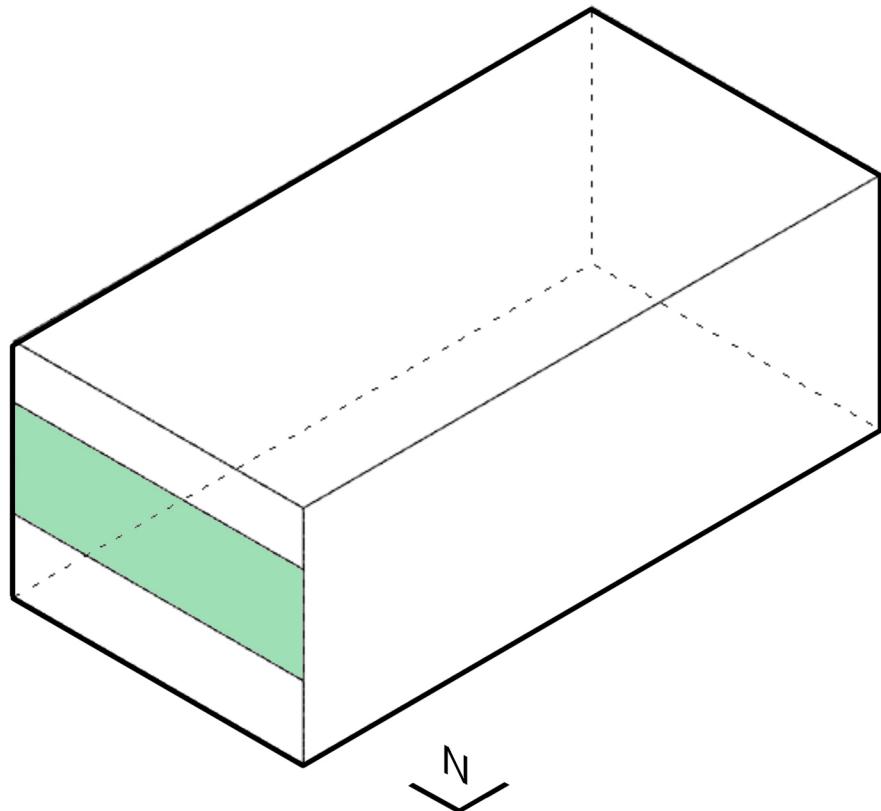
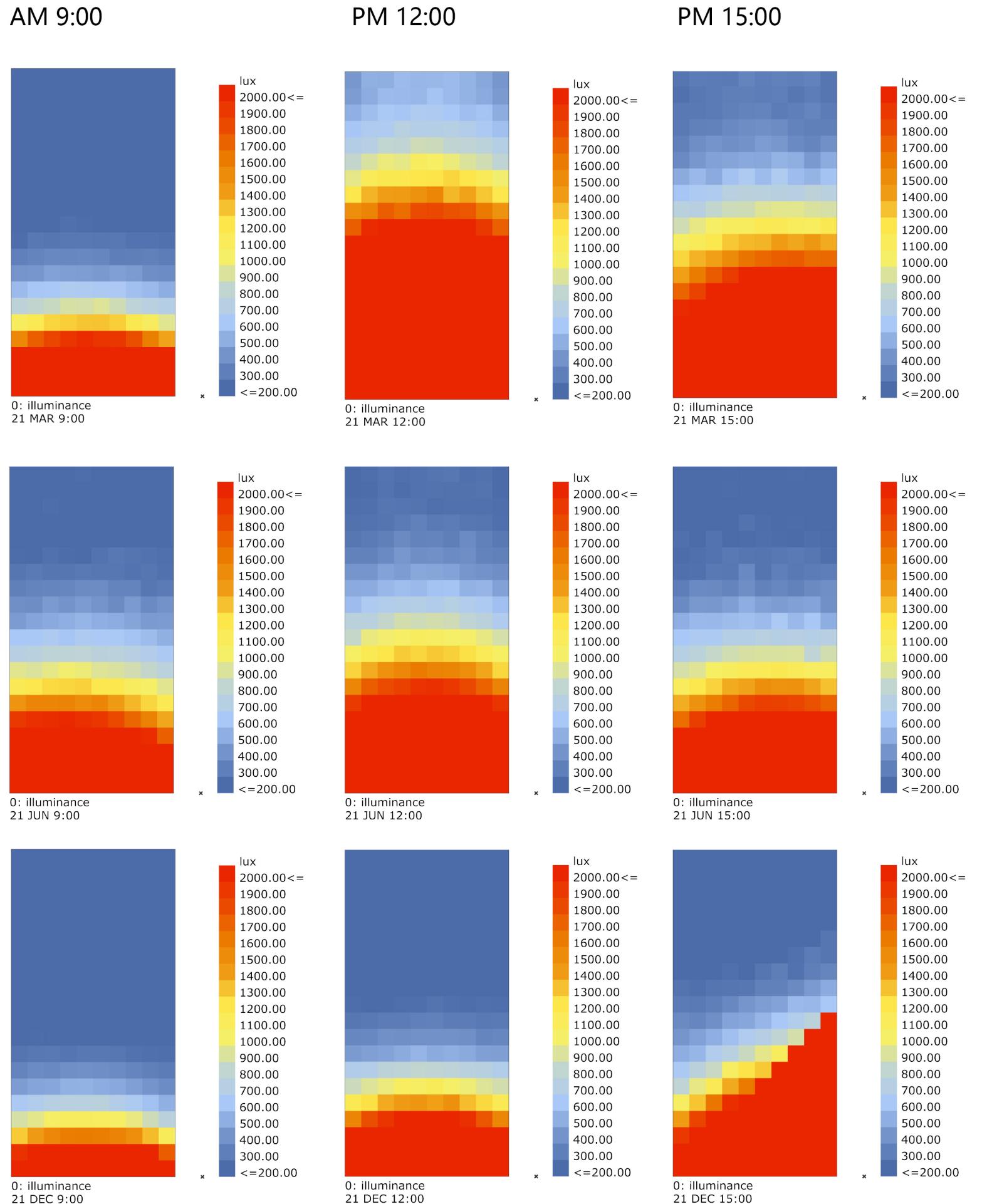


# DAYLIGHTING 2

Tan, Shengji

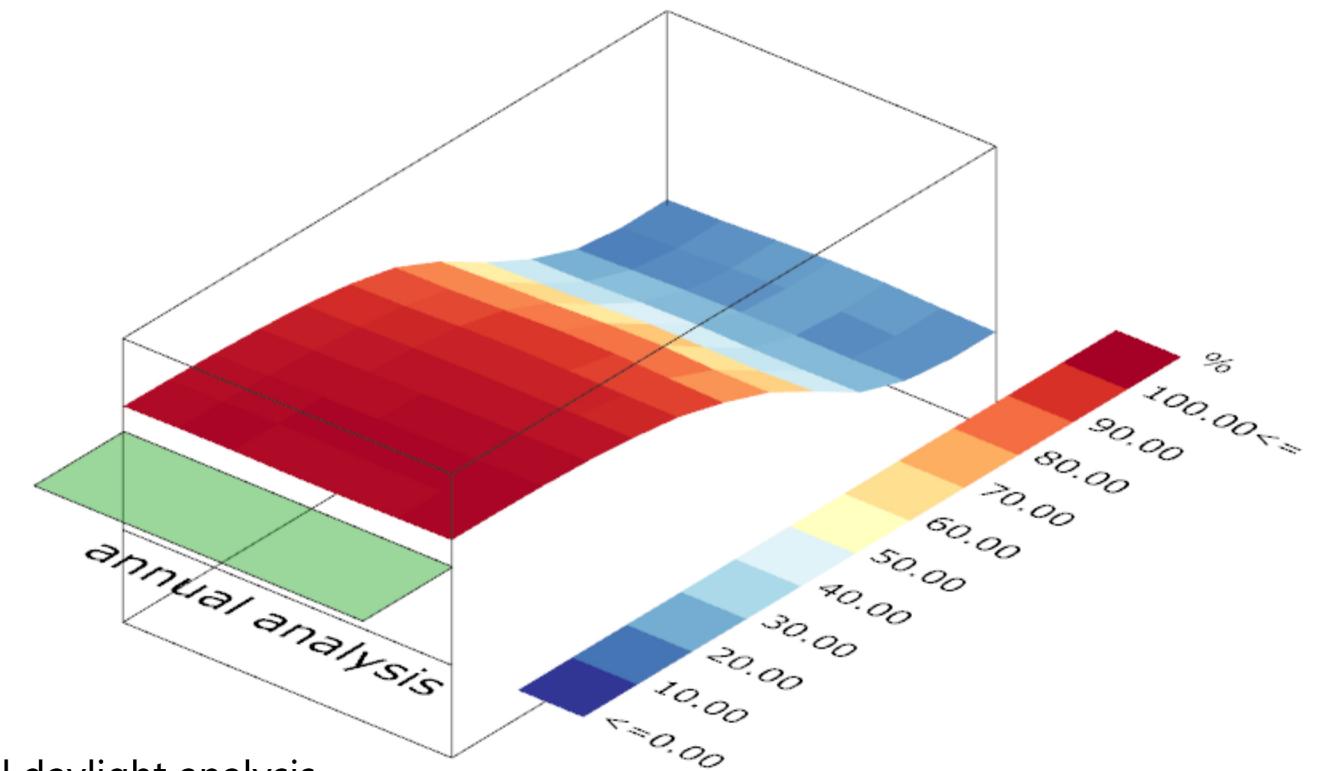
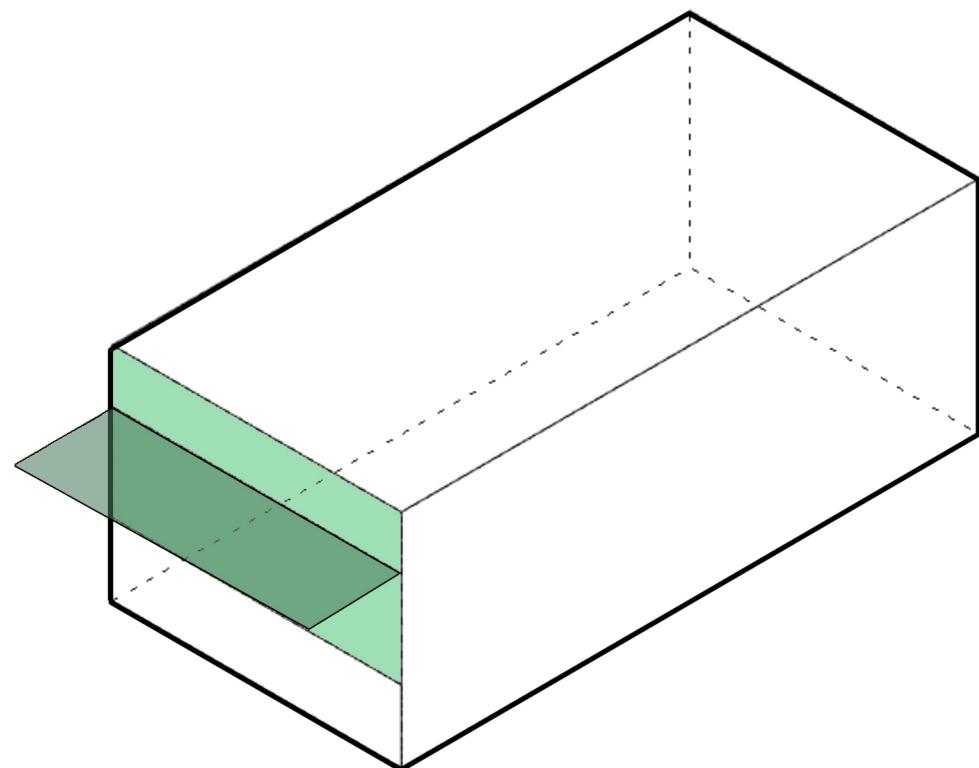


According to diagrams generated by ladybug, the area near the windows is overwhelmed with daylight all the year. but the lux data on the other part indicates inadequate sunshine. The goal is to provide a method to insure the minimum daylight above 300 lux and maximum of 2000 lux for the apartment.

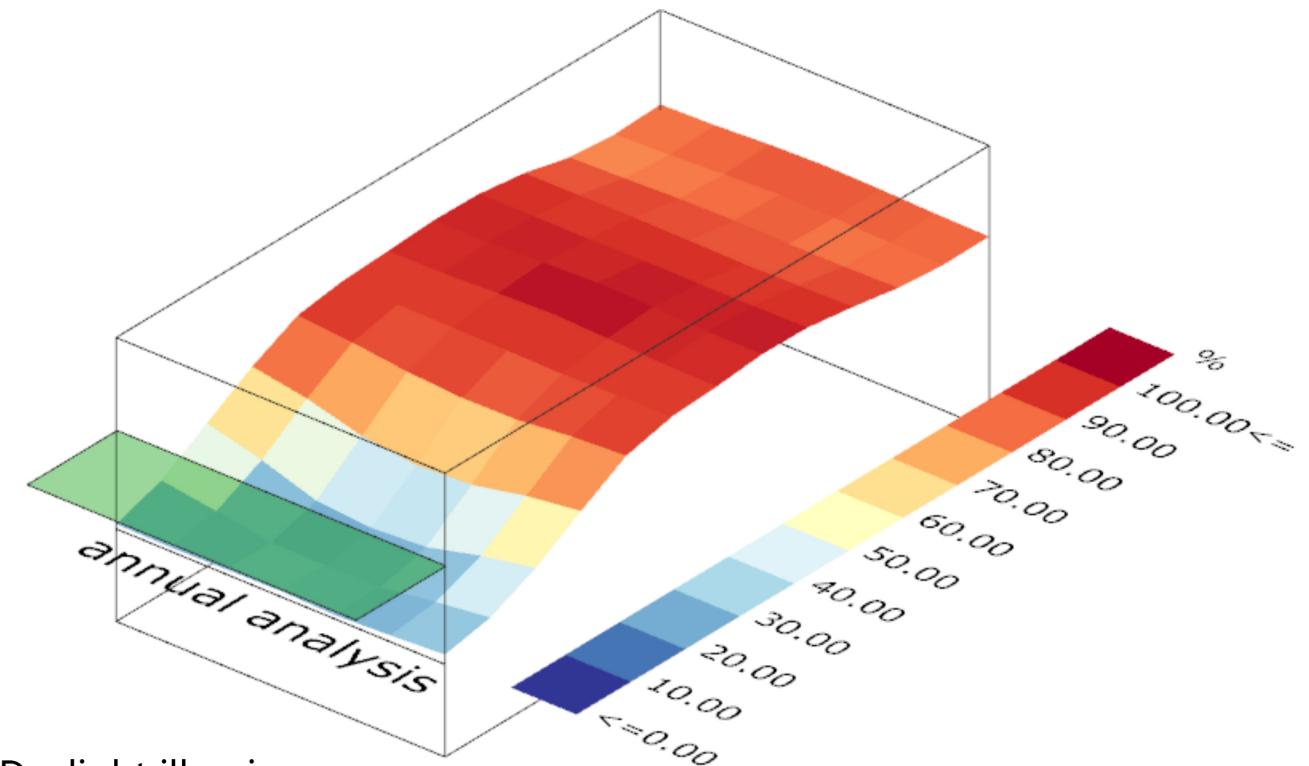


## DAYLIGHTING 2

Tan, Shengji



Annual daylight analysis

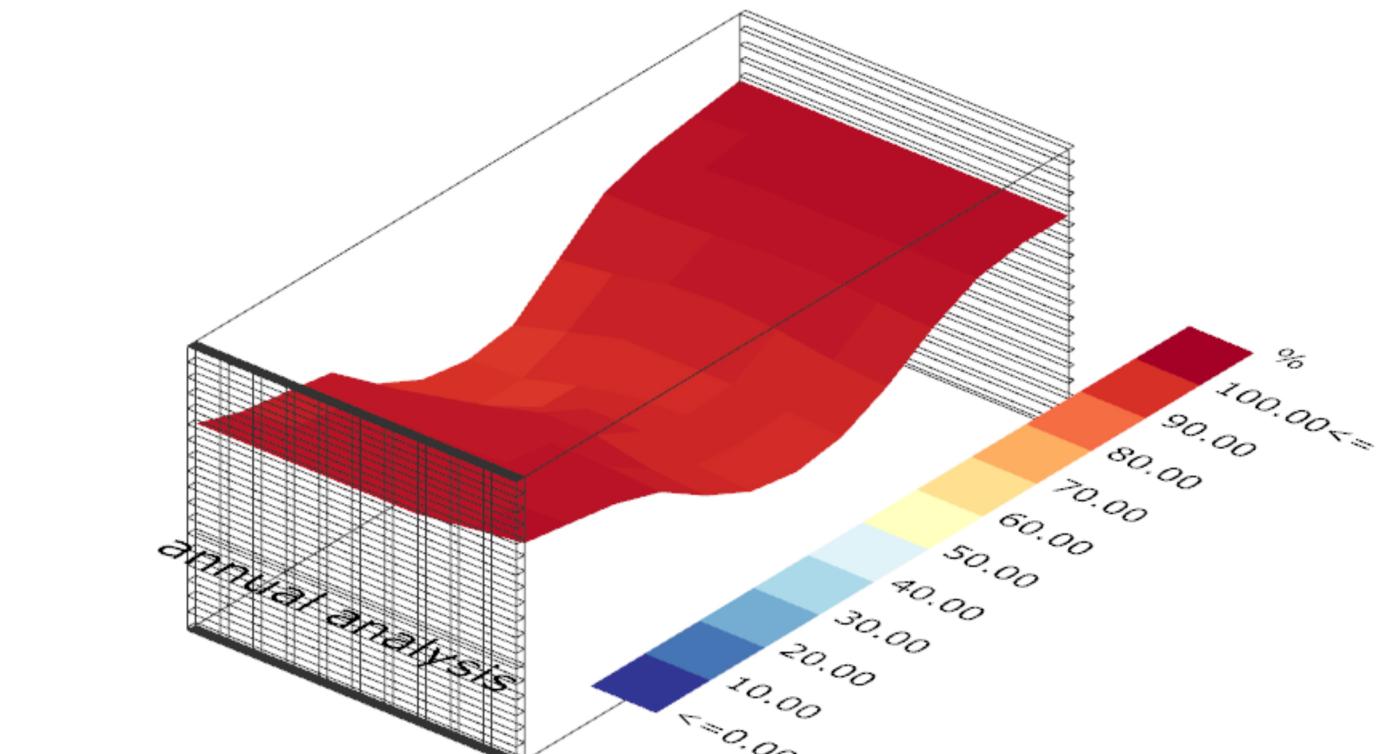
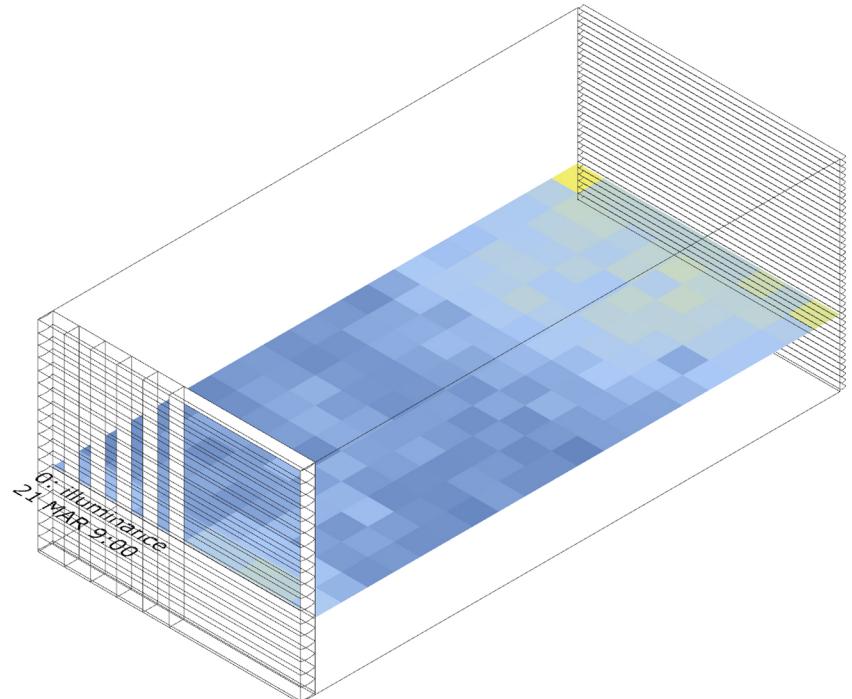


Useful Daylight illuminance

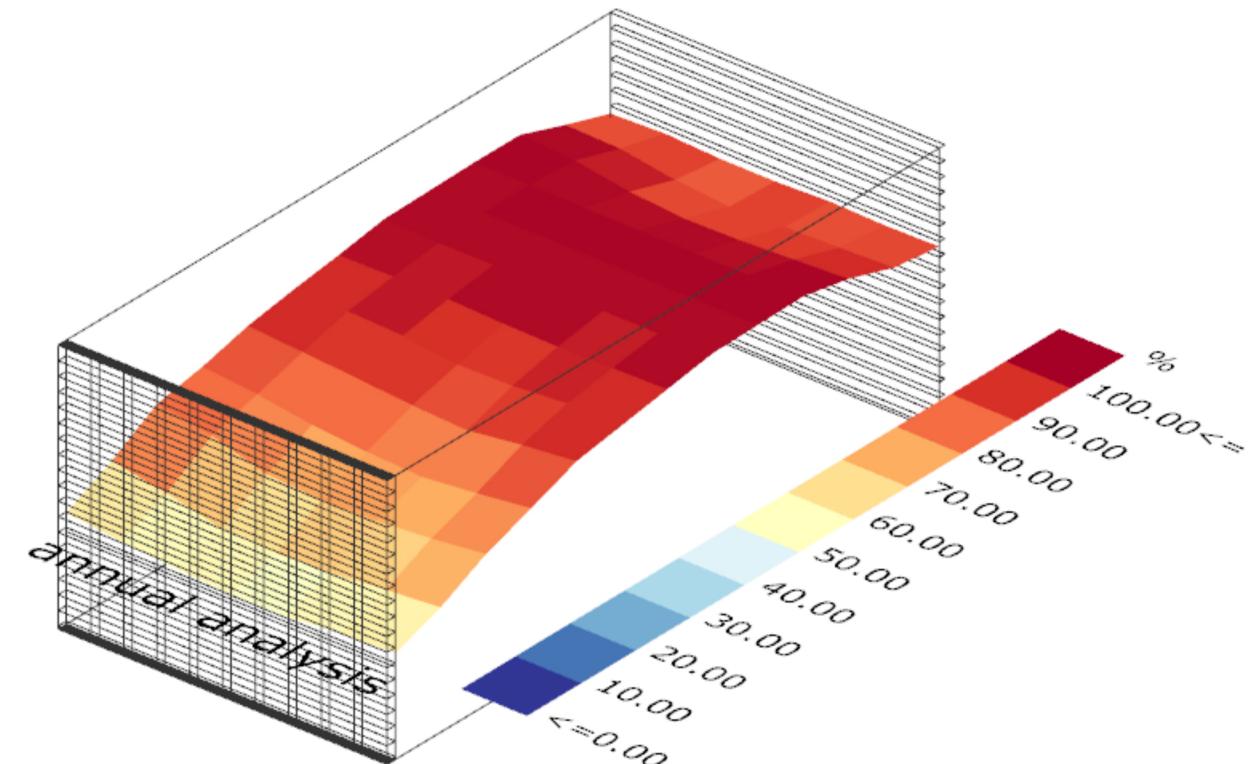
According to diagrams, after increasing the height of the window and setting an overhanging, Annual daylight analysis increases to 60%, Useful Daylight illuminance increases to about 70%. The daylight condition is good.

## DAYLIGHTING 2

Tan, Shengji



Annual daylight analysis

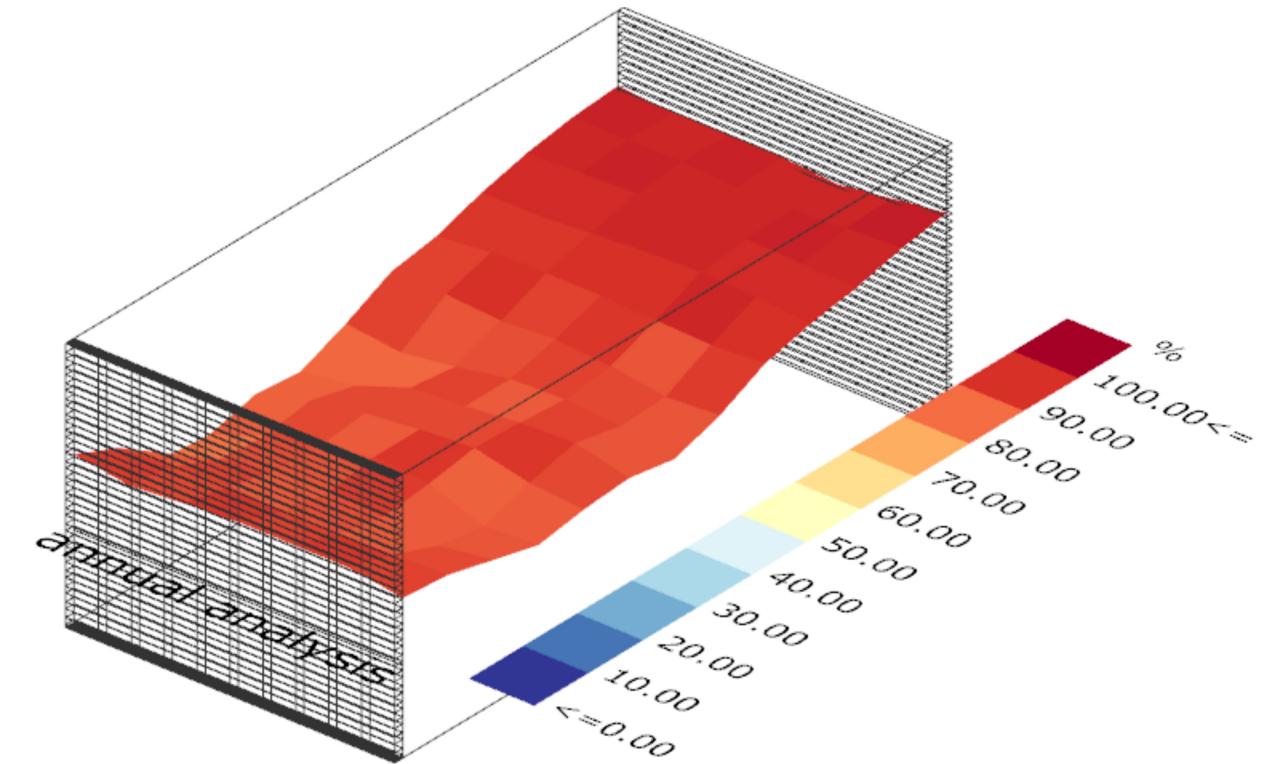


Useful Daylight illuminance

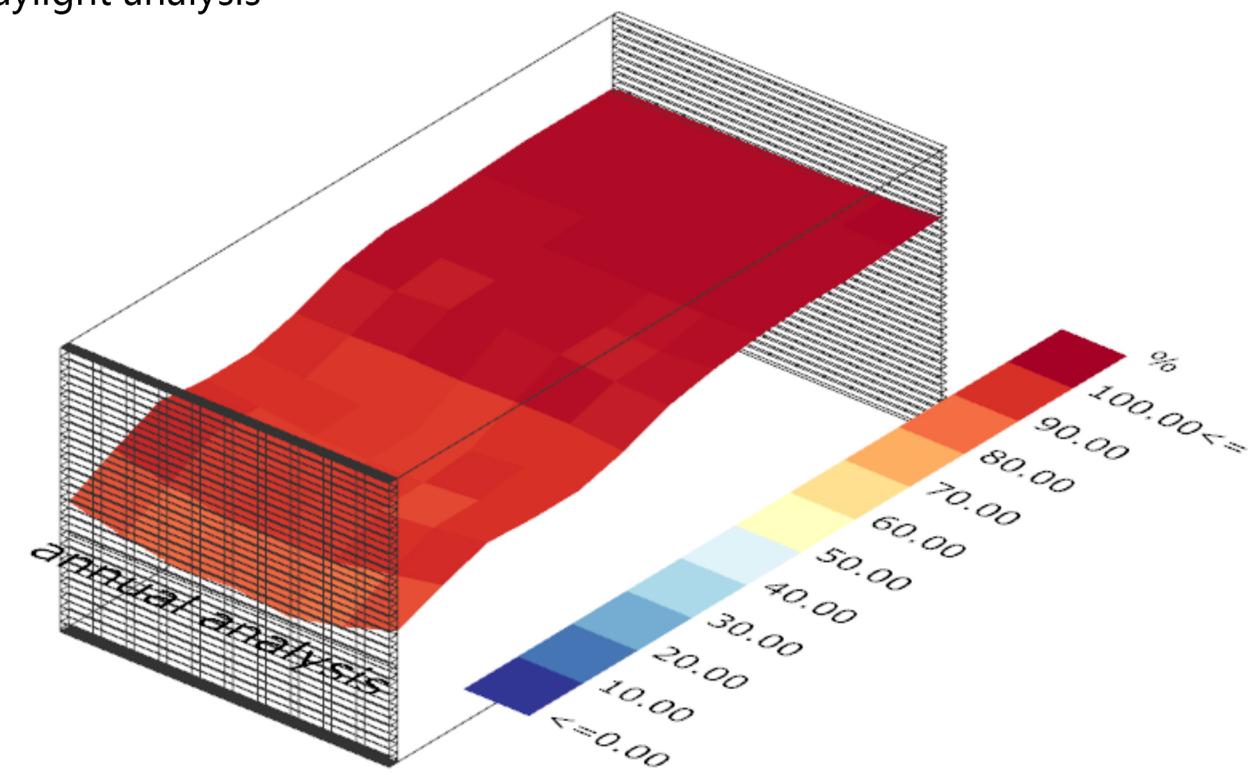
According to diagrams, after adding a window in the north wall and setting the combination of horizontal and vertical curve blinds, Annual daylight analysis increases to 100%, Useful Daylight illuminance increase to about 90%. The daylight condition is better.

## DAYLIGHTING 2

Tan, Shengji



Annual daylight analysis

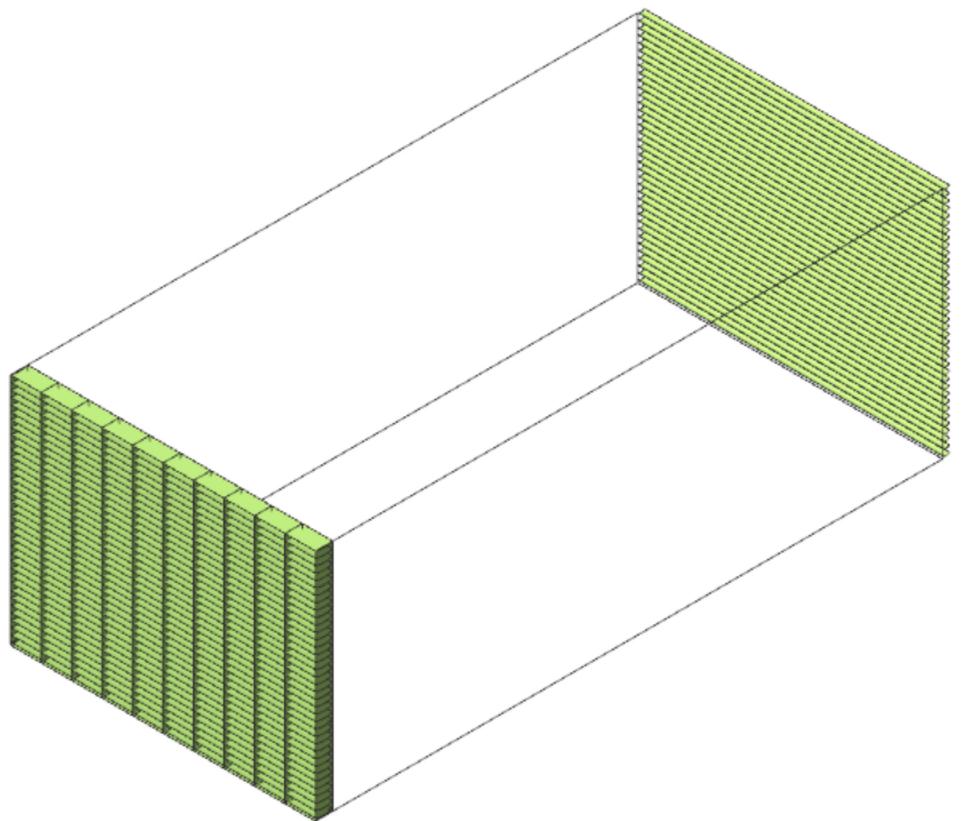


The different distance between the blinds can lead to different effect.

Useful Daylight illuminance

# DAYLIGHTING 2

Tan, Shengji



Mar 21

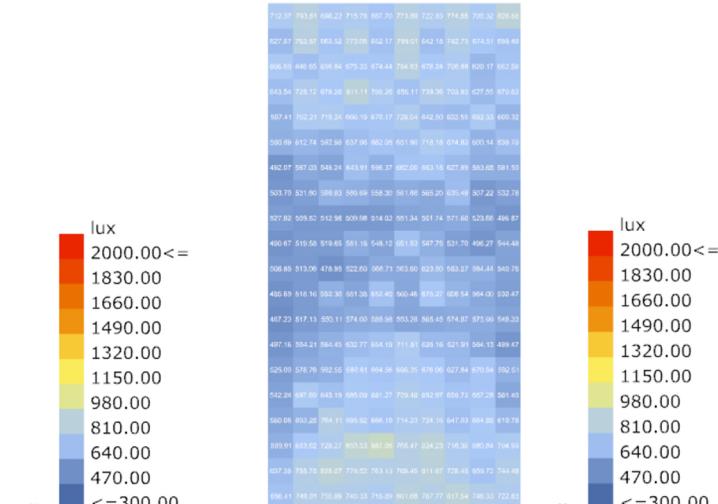
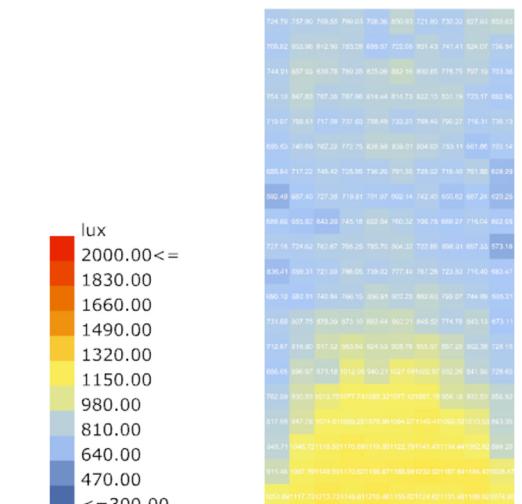
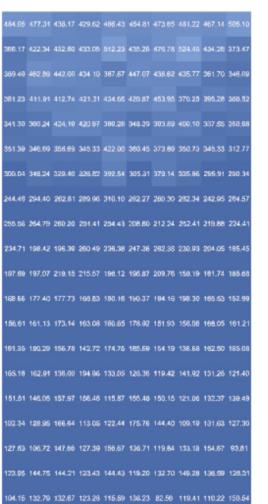
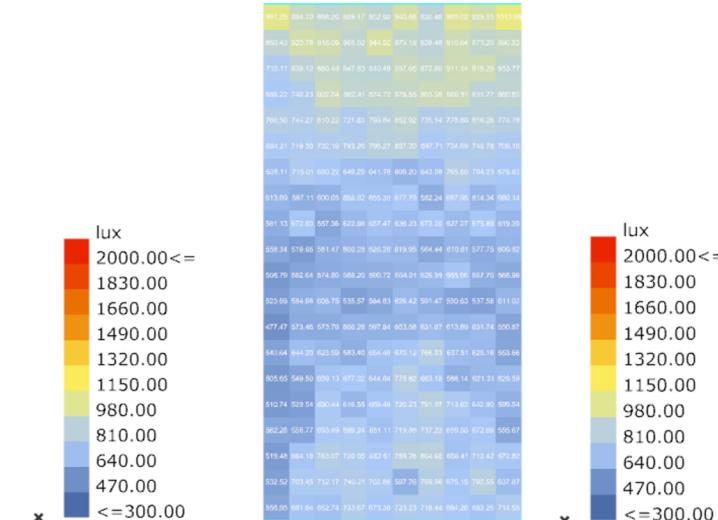
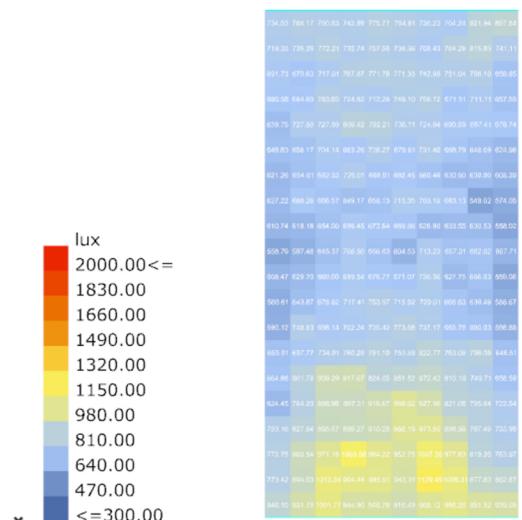
Jun 21

Dec 21

AM 9:00

PM 12:00

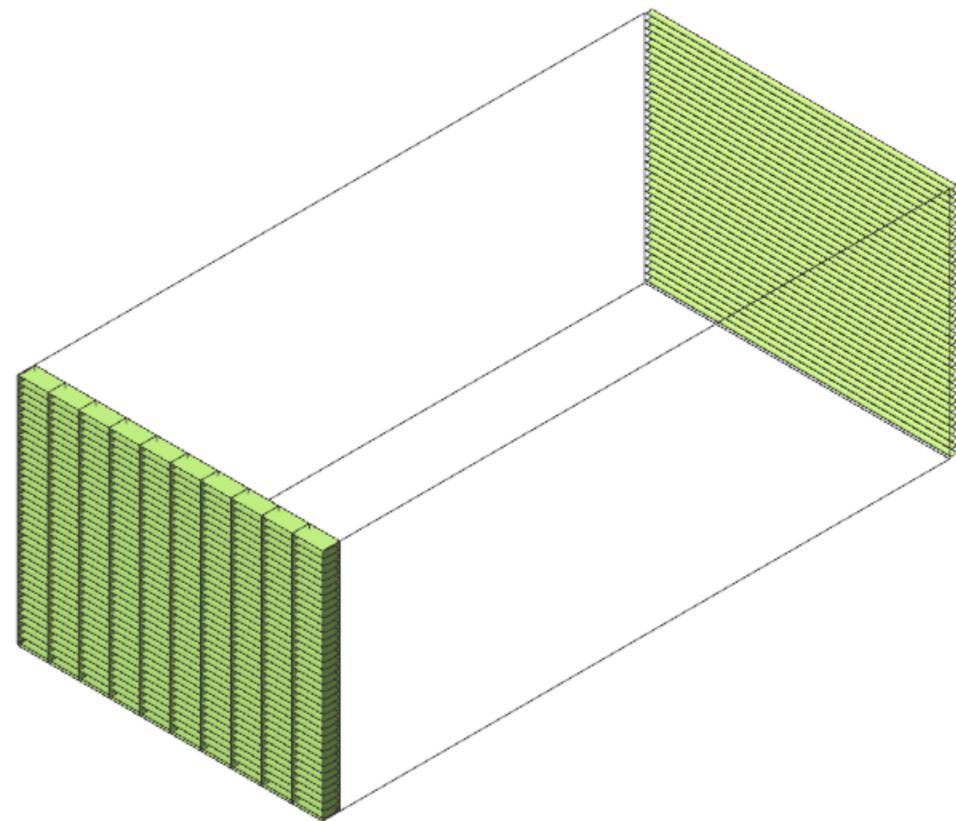
PM 15:00



More accurate material parameters can lead to more accurate results, room daylighting is slightly less than in the winter, but the daylight uniformity is relative good.

## DAYLIGHTING 2

Tan, Shengji

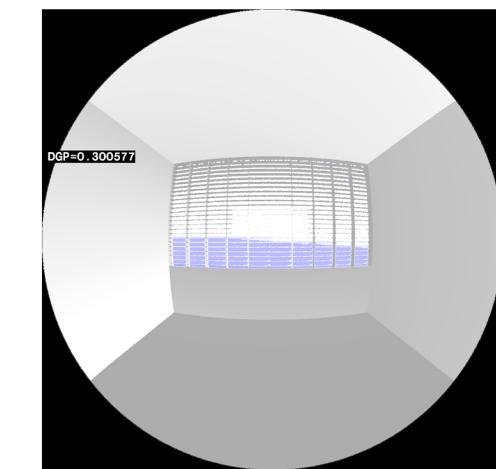
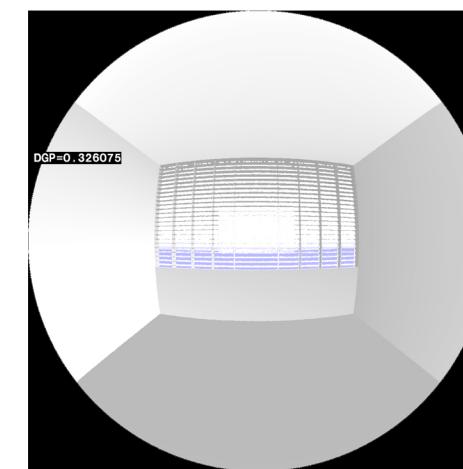
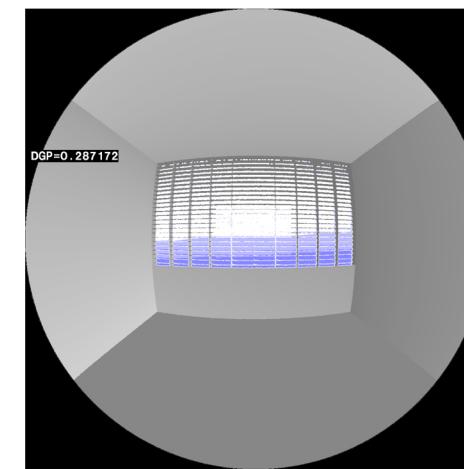


AM 9:00

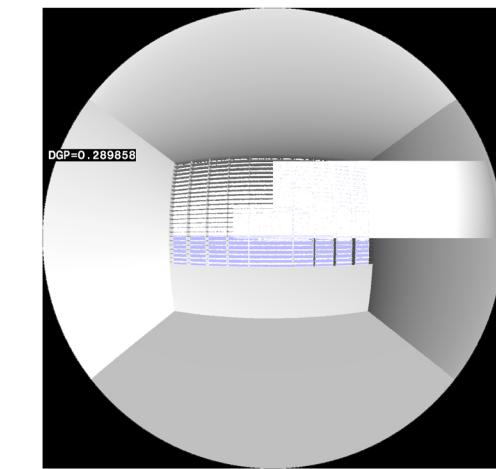
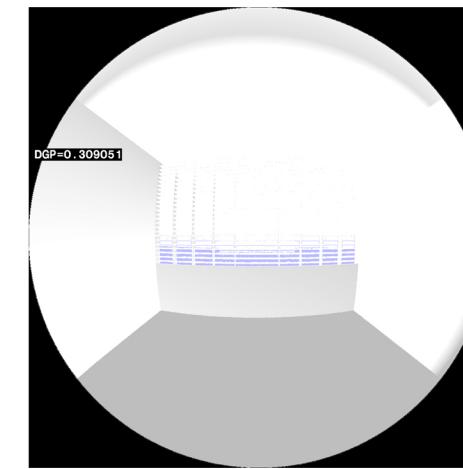
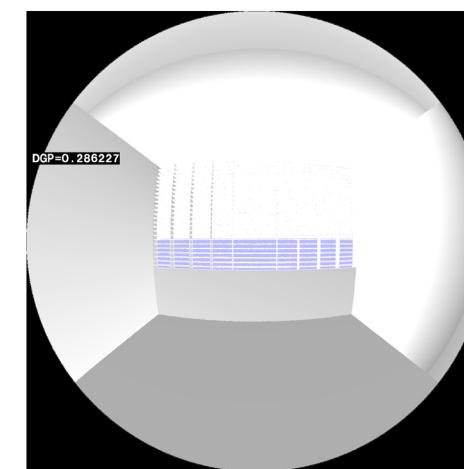
PM 12:00

PM 15:00

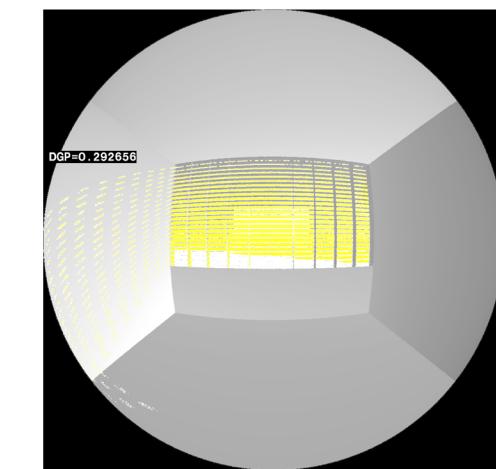
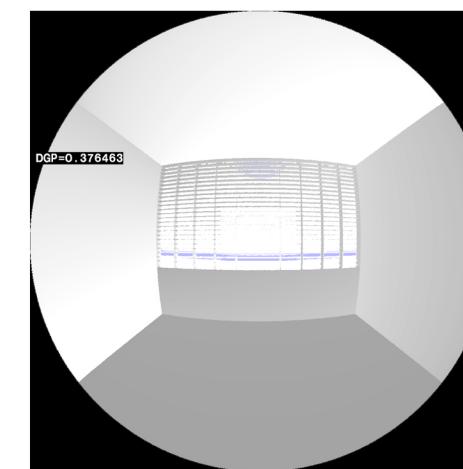
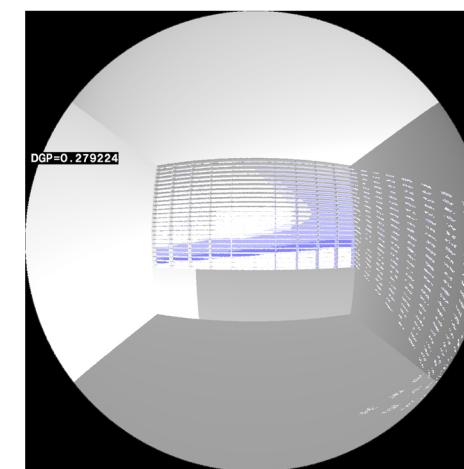
Mar 21



Jun 21



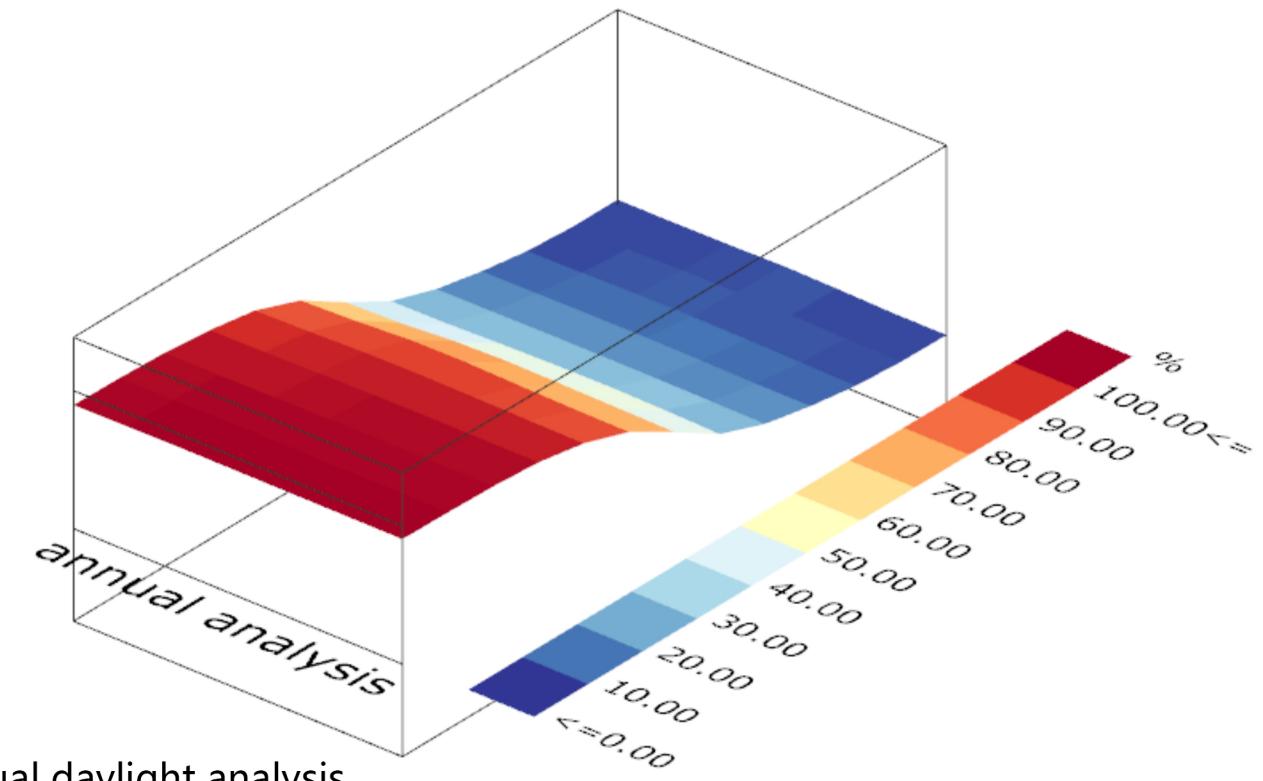
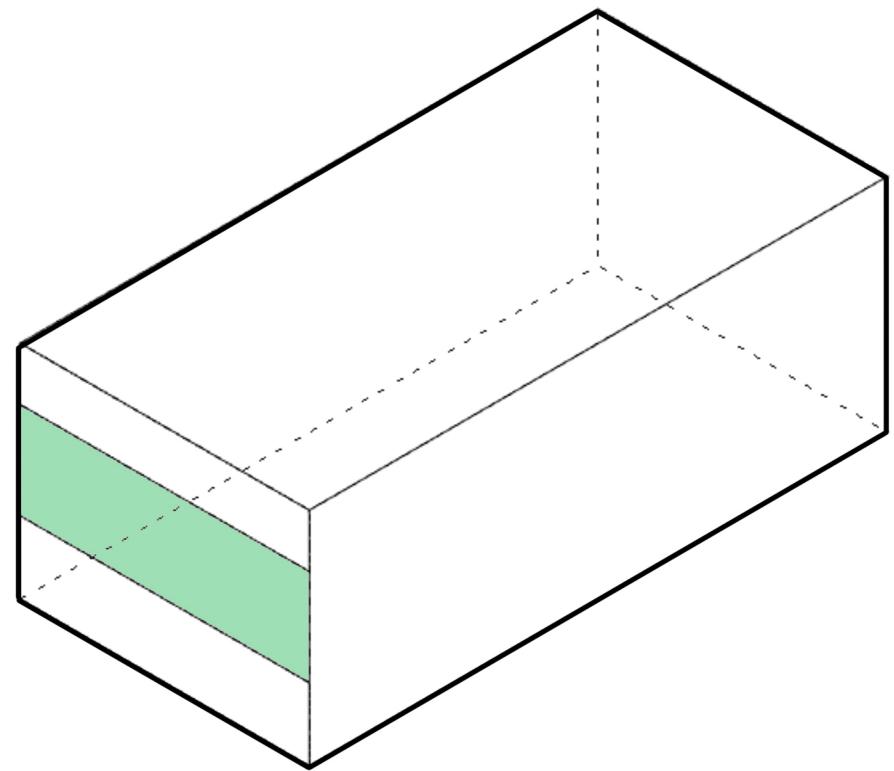
Dec 21



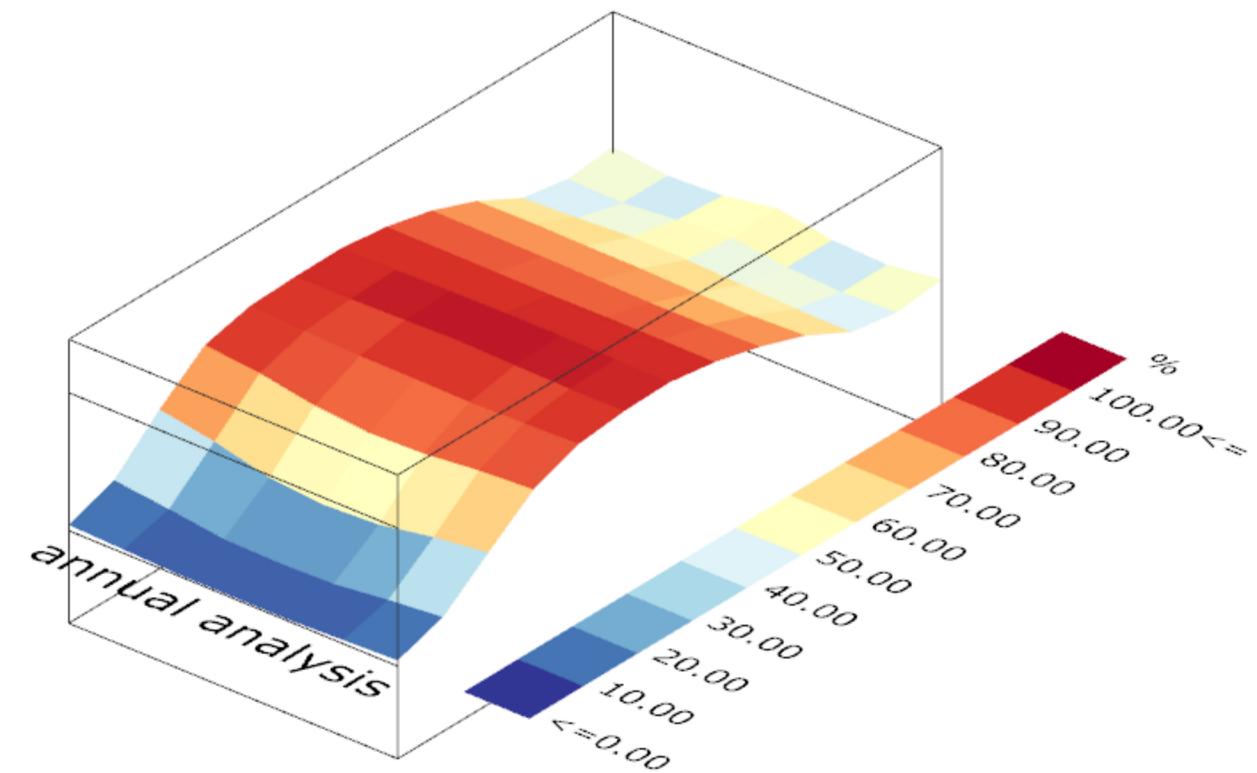
According to the data, except 12:00 on Dec21, The comfort ranges of glare are within the imperceptible glare.

## DAYLIGHTING 2

Tan, Shengji



Annual daylight analysis



Useful Daylight illuminance

According to diagrams, Annual daylight analysis is about 50%, Useful Daylight illuminance is about 60%. The daylight condition is moderate.