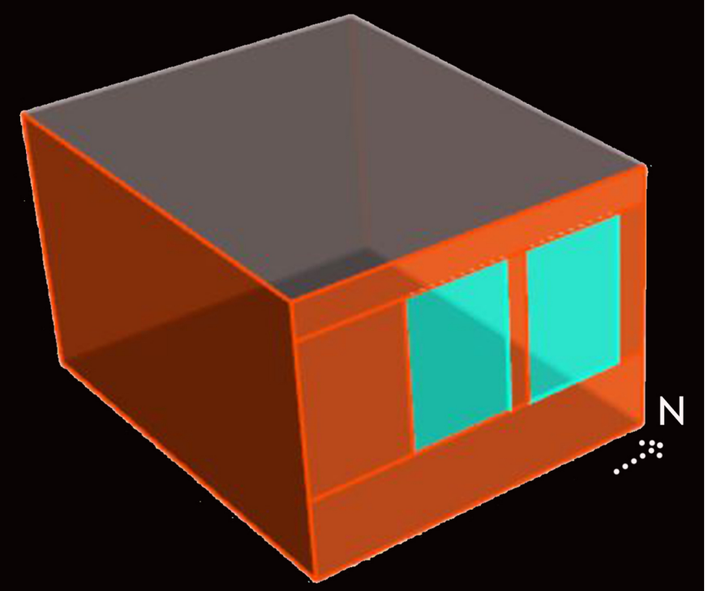
DAYLIGHT SIMULATION OF THE ROOM IN EXISTING SCENARIO



Existing Room

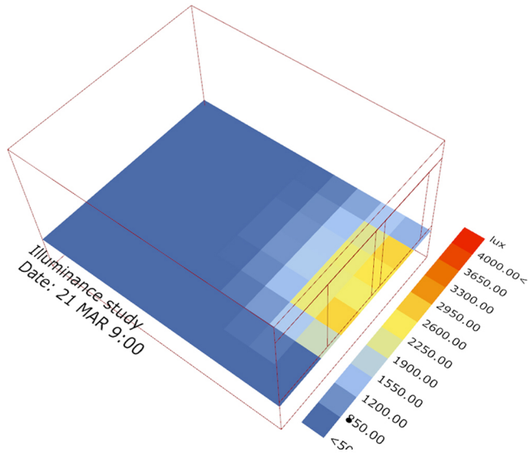
Both the windows of the room are facing east side. we generally have a problem around 9:oo AM when direct sun is entering the room. we need to design a shading device, which can reduce the excess light during morning time. althought morning light is good for our health, during summer months its going to cause problem.

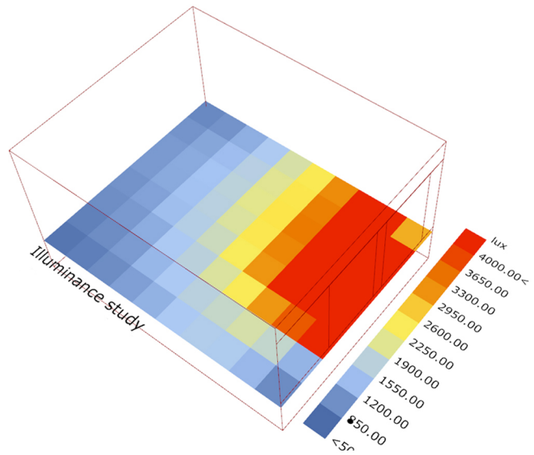
MARCH 21ST

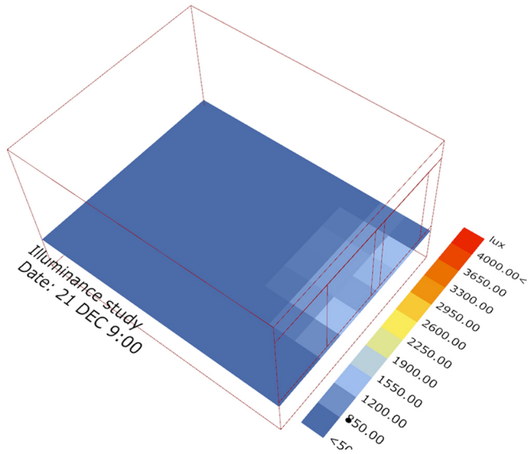
SEPTEMBER 21ST

DECEMBER 21ST

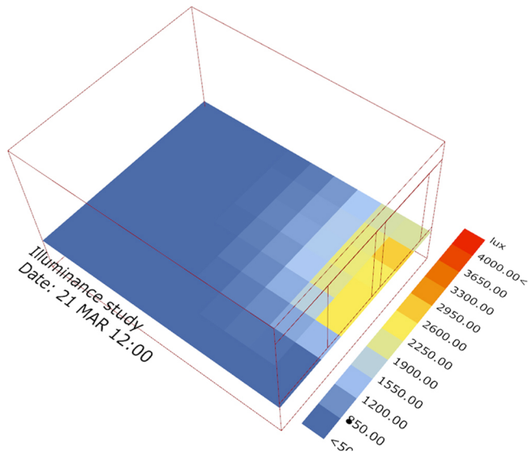
9:00 AM

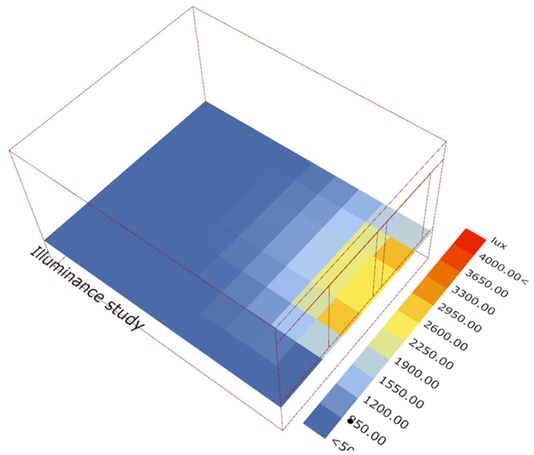


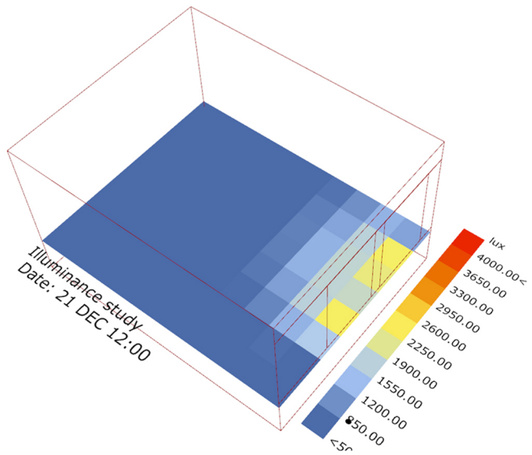




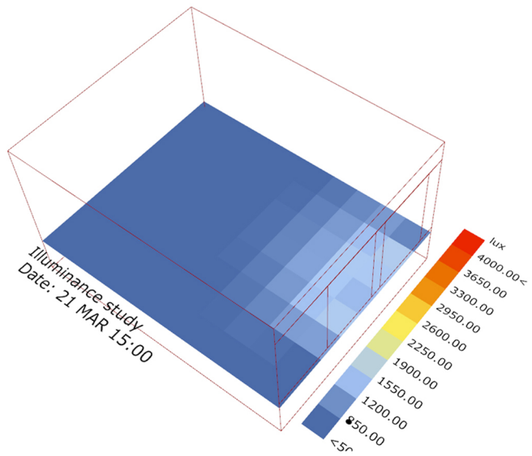
12:00 PM

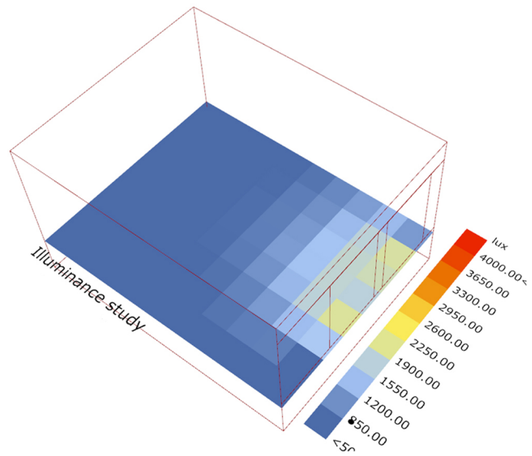


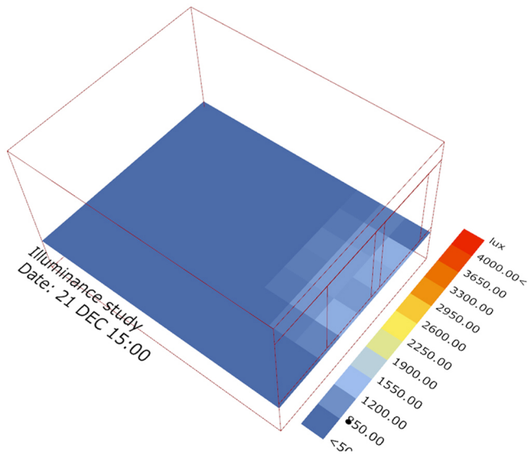




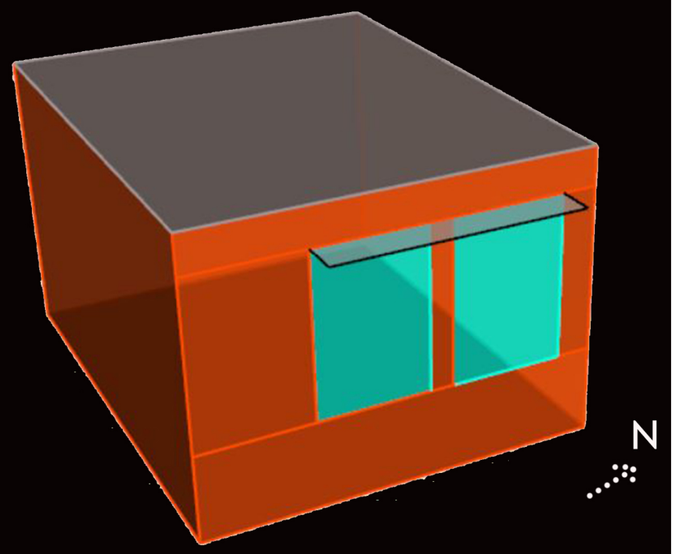
15:00 PM







DAYLIGHT SIMULATION OF THE ROOM WITH PROPOSED SHADING



Existing Room with a proposed horizontal shading device

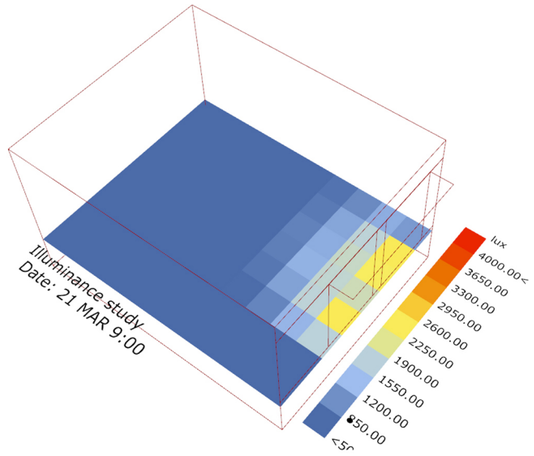
We are able to reduce the amount of daylighting in the morning. But still, it is more than required. We need more hosrizontal shading to control the daylight

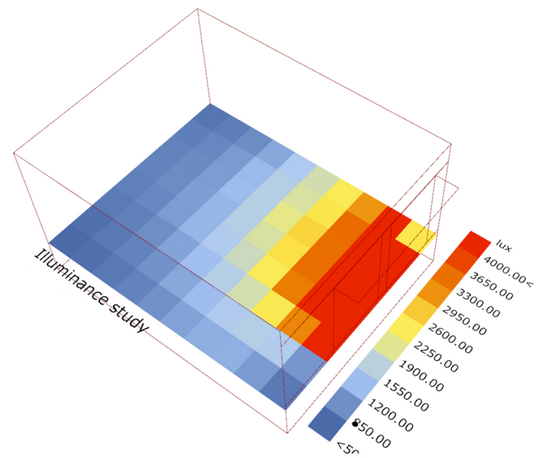
MARCH 21ST

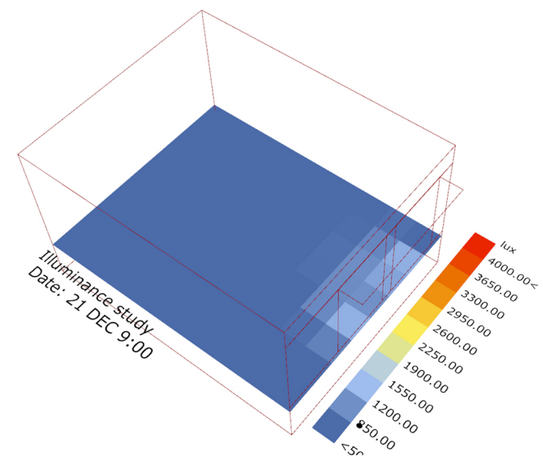
SEPTEMBER 21ST

DECEMBER 21ST

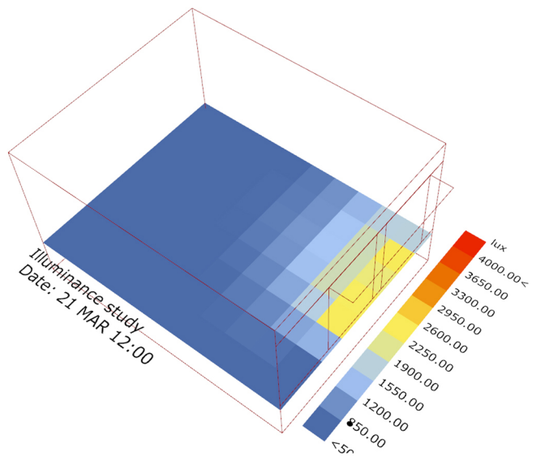
9:00 AM

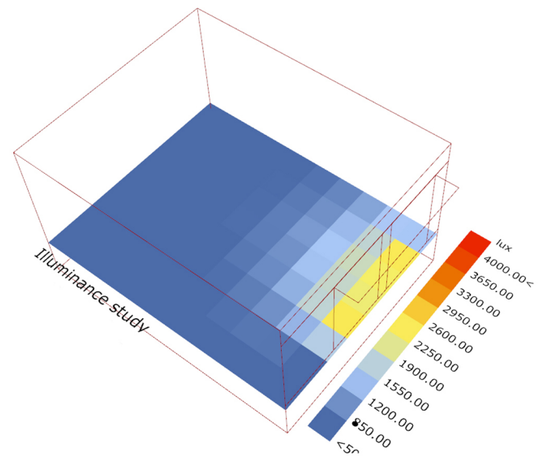


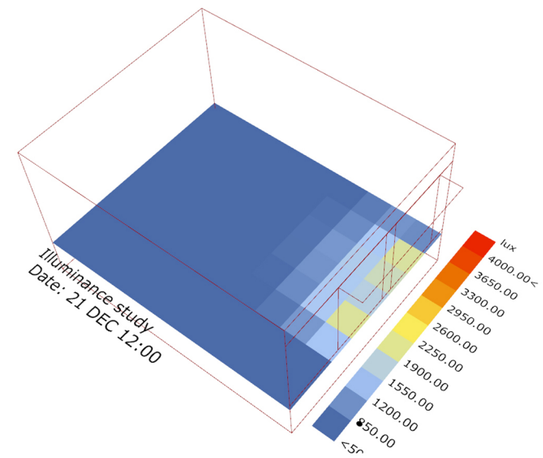




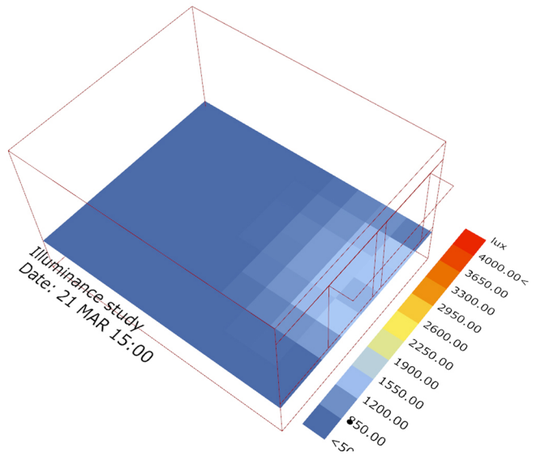
12:00 PM

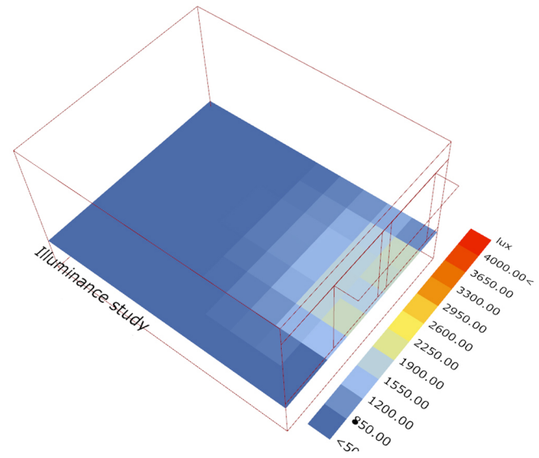


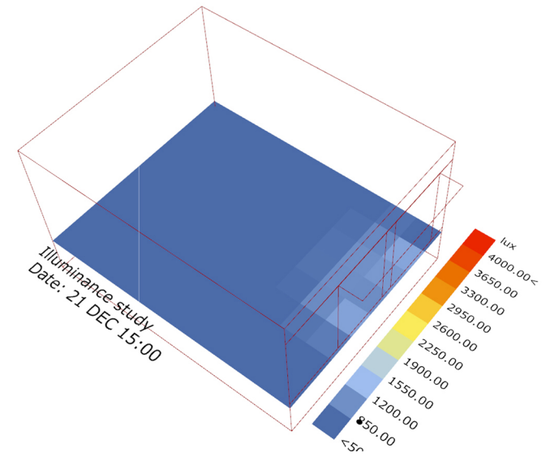




15:00 PM

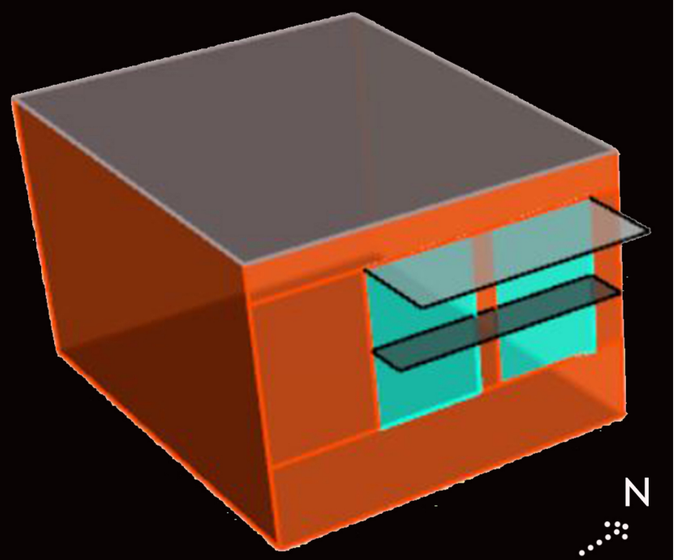






NAMAN GUPTA | MEBD

DAYLIGHT SIMULATION OF THE ROOM WITH PROPOSED SHADING.



Existing Room with a proposed horizontal shading device

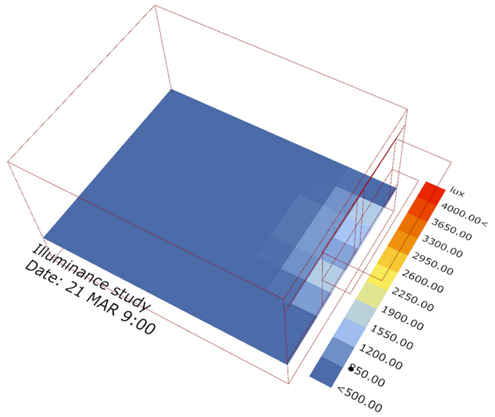
We are able to reduce the amount of daylighting in the morning. But we have a particular strip in the near the window which requires to be shaded.

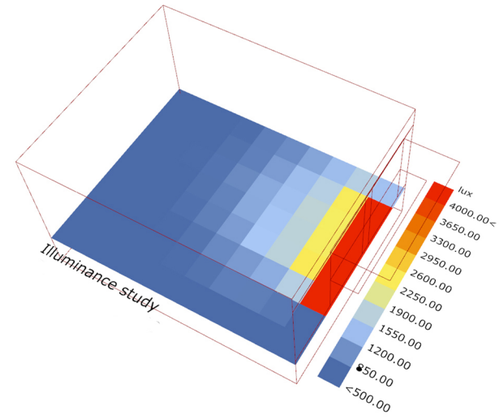
MARCH 21ST

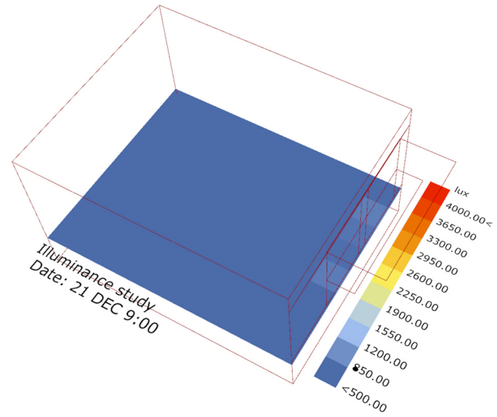
SEPTEMBER 21ST

DECEMBER 21ST

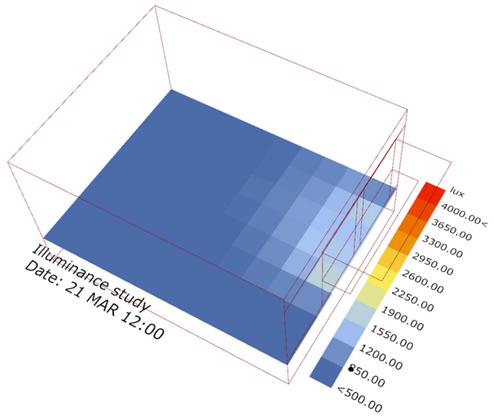
9:00 AM

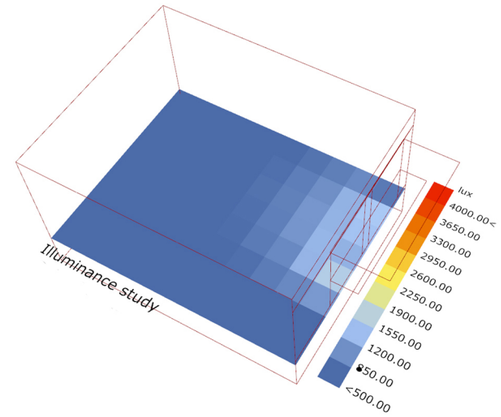


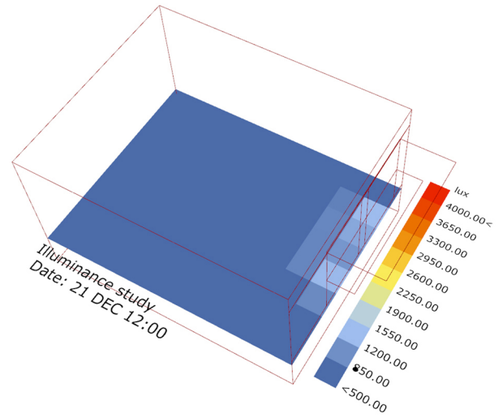




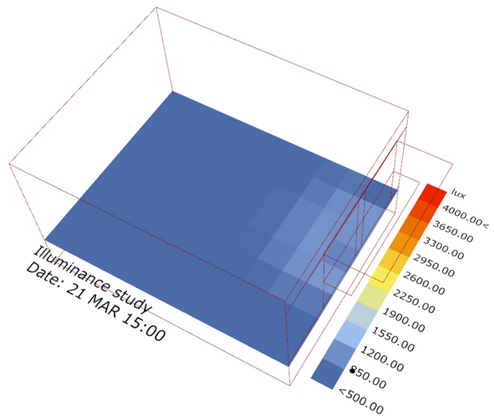
12:00 PM

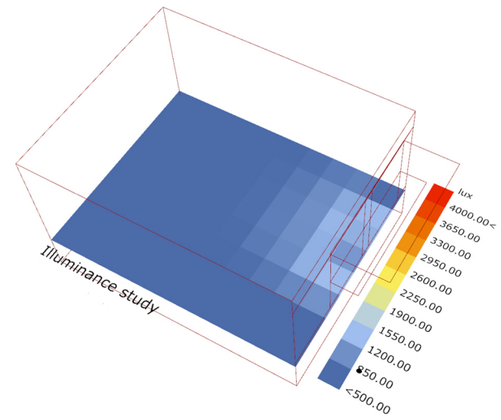


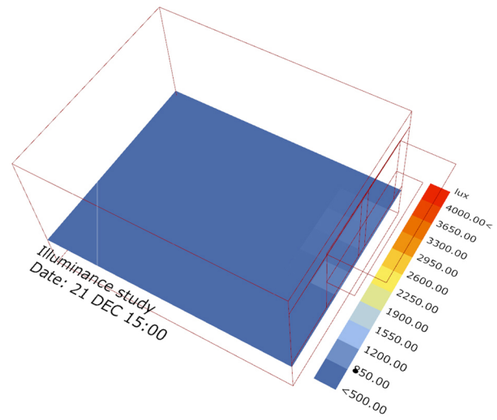




15:00 PM

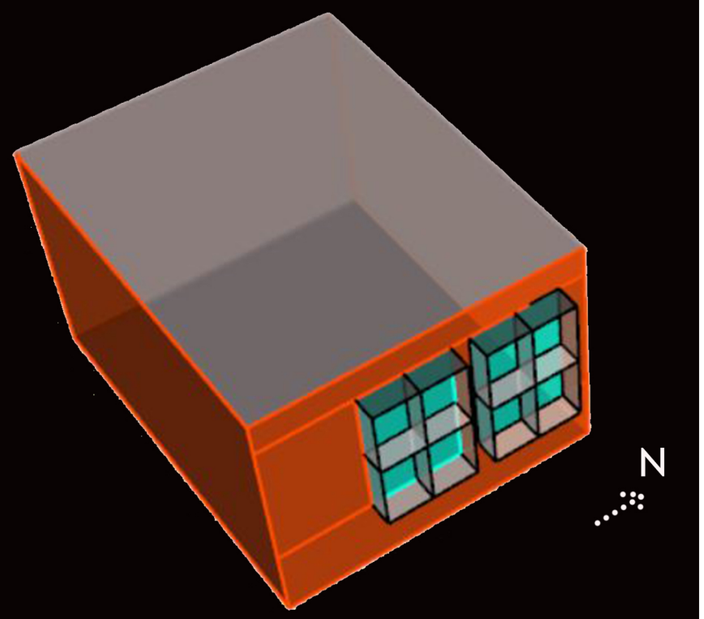






NAMAN GUPTA | MEBD

DAYLIGHT SIMULATION OF THE ROOM WITH PROPOSED SHADING.



Existing Room with proposed shading

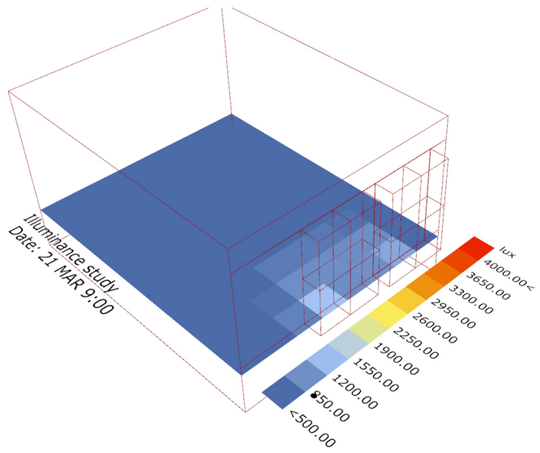
With this shading we are not able to reduce the problem of excess light. Some amount of light is reduce but excess light is still there. We can try introducing an angle in the shading.

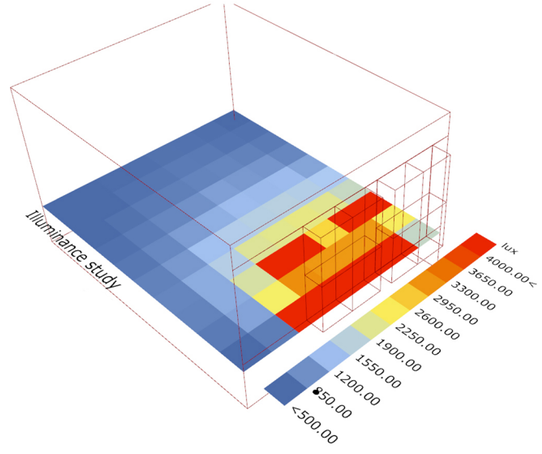
MARCH 21ST

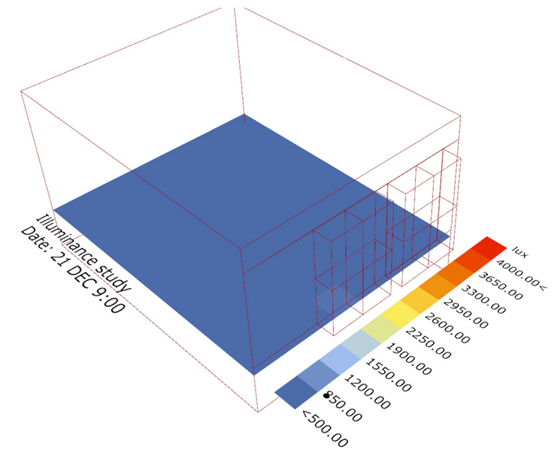
SEPTEMBER 21ST

DECEMBER 21ST

9:00 AM







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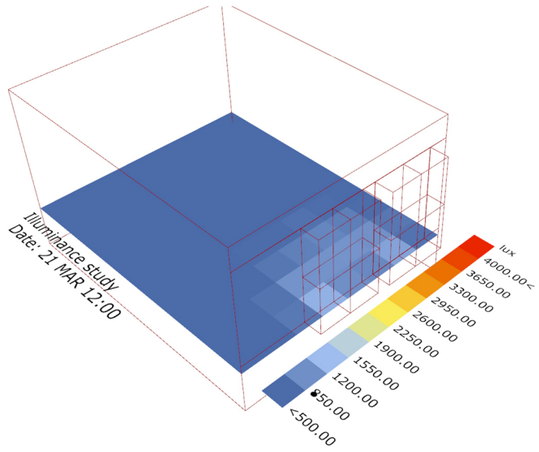
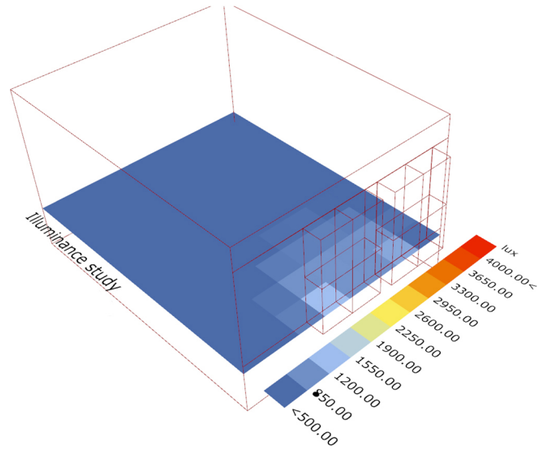
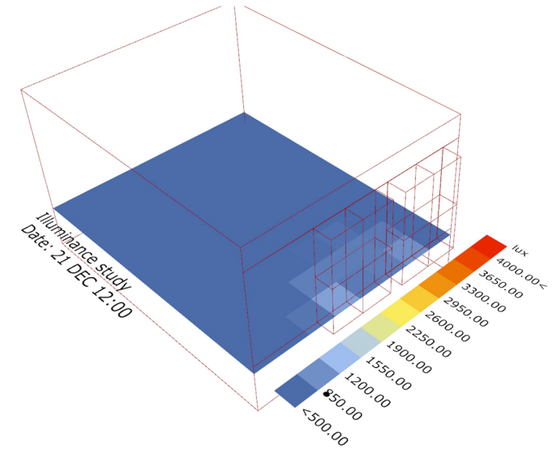
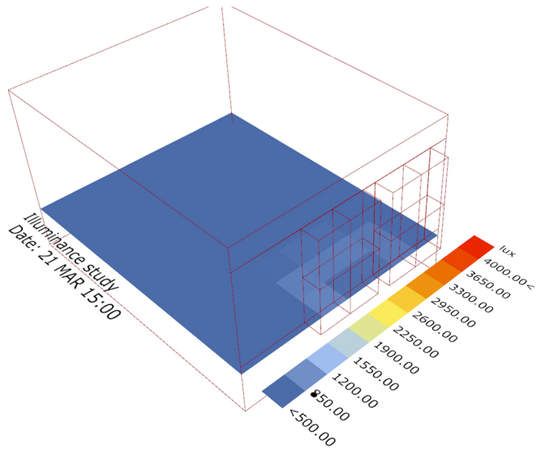
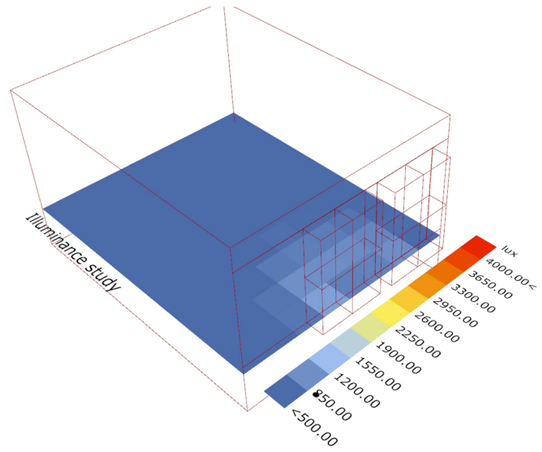


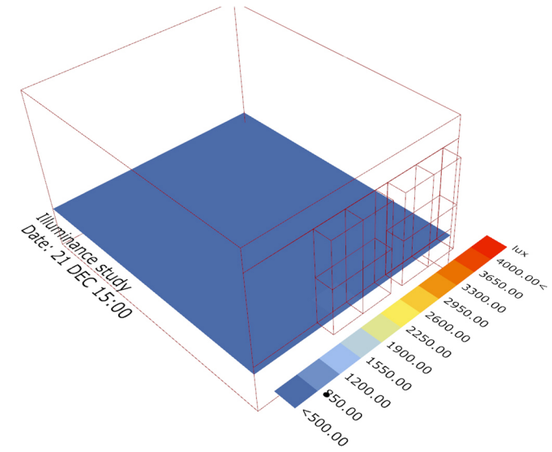




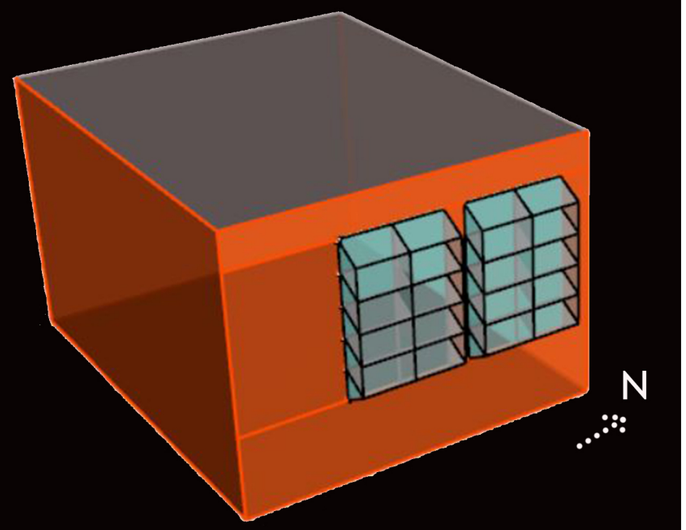
15:00 PM







DAYLIGHT SIMULATION OF THE ROOM WITH PROPOSED SHADING.



Existing Room with proposed shading

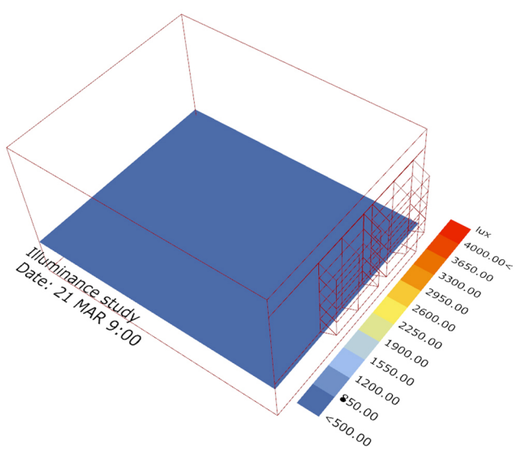
With providing a shading like this we are able to reduce the daylight during summers, but it might be too dark for the other portion of the room

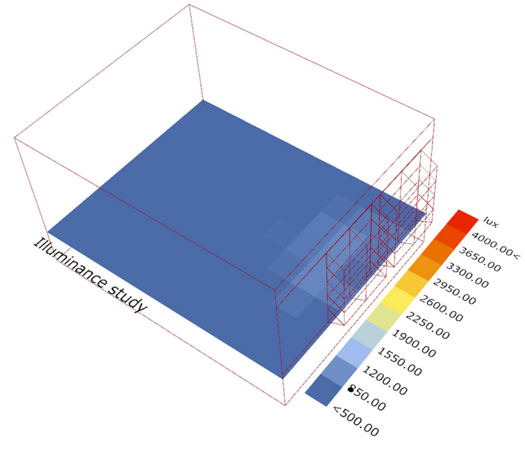
MARCH 21ST

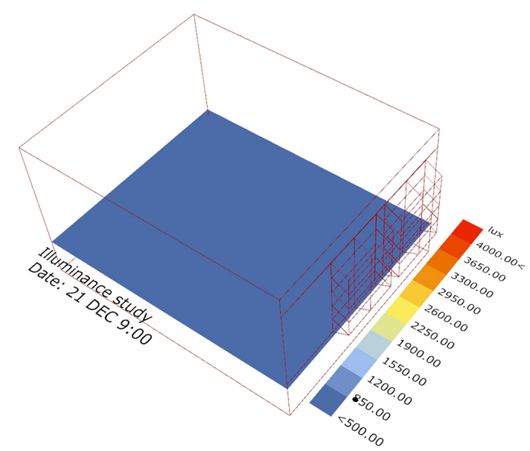
SEPTEMBER 21ST

DECEMBER 21ST

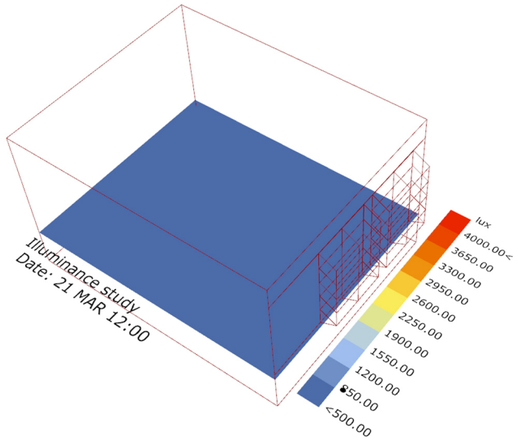
9:00 AM

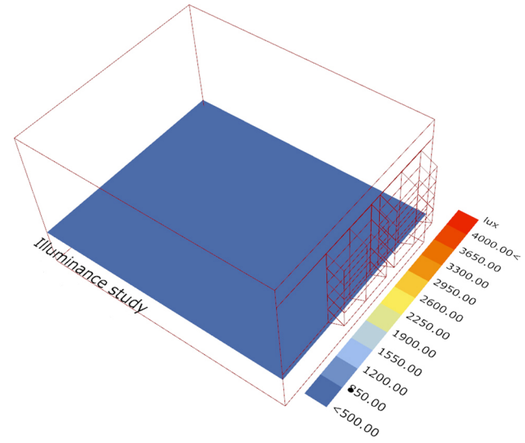


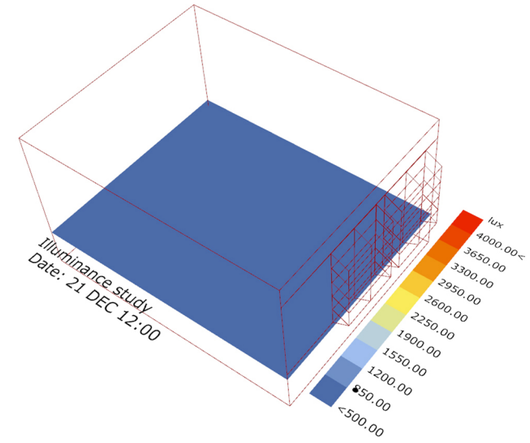




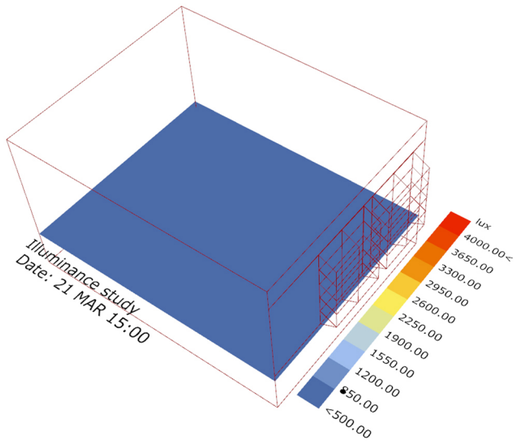
12:00 PM

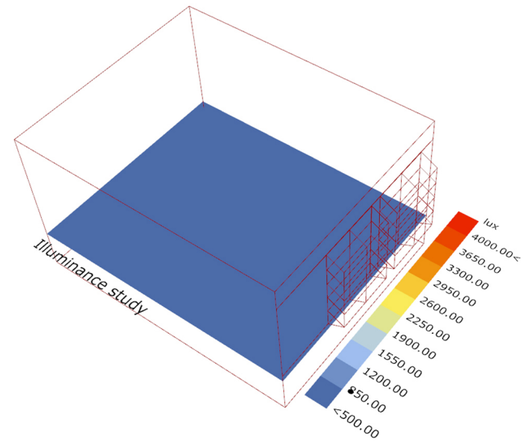


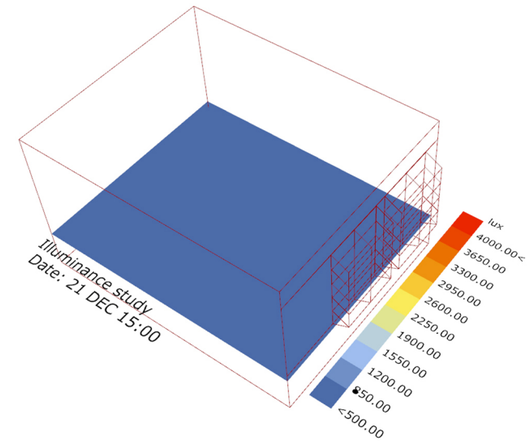




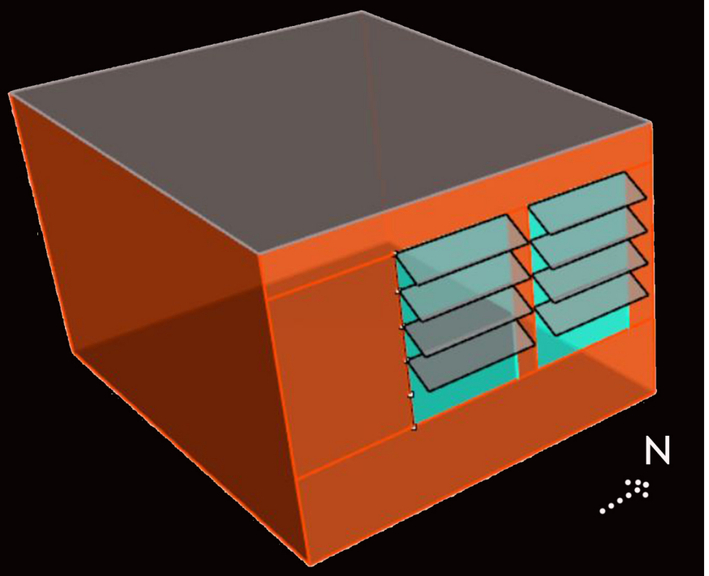
15:00 PM







DAYLIGHT SIMULATION OF THE ROOM WITH PROPOSED SHADING.



Existing Room with proposed shading

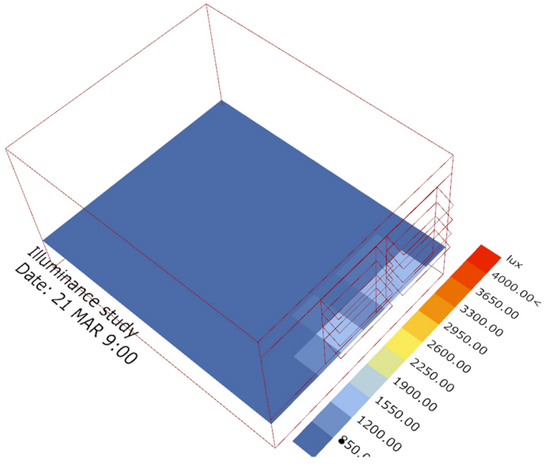
Introduction of angle in the shading has helped in reduction of the light. But since we dont require vertical shading, we have removed the corner shading and we only having horizontal shading devices. The shading is working best for this scenario , we can use deflector to redirect diffused light till the end of the room .

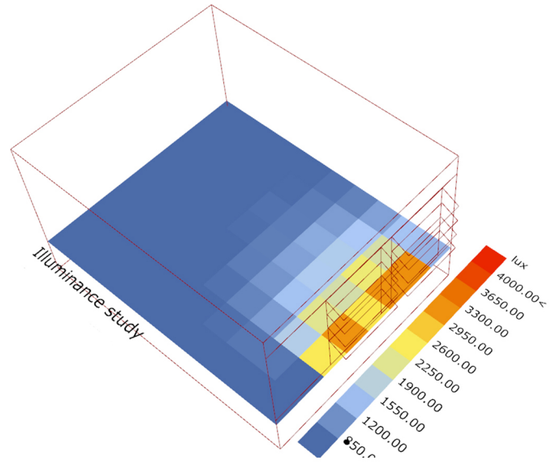
MARCH 21ST

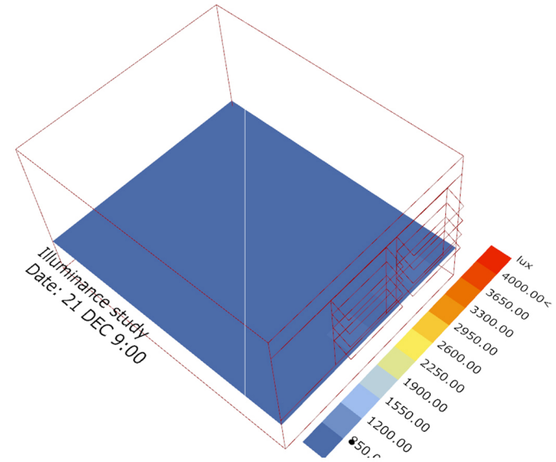
SEPTEMBER 21ST

DECEMBER 21ST

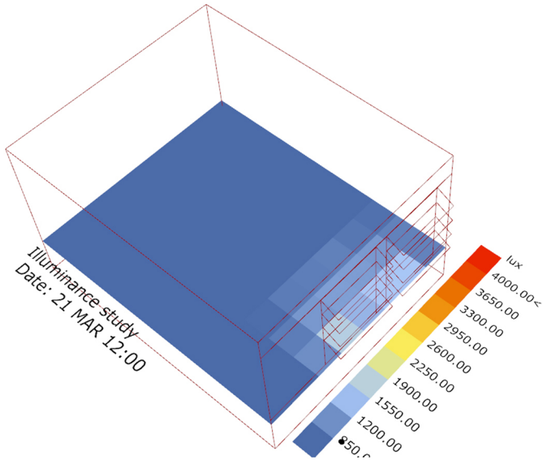
9:00 AM

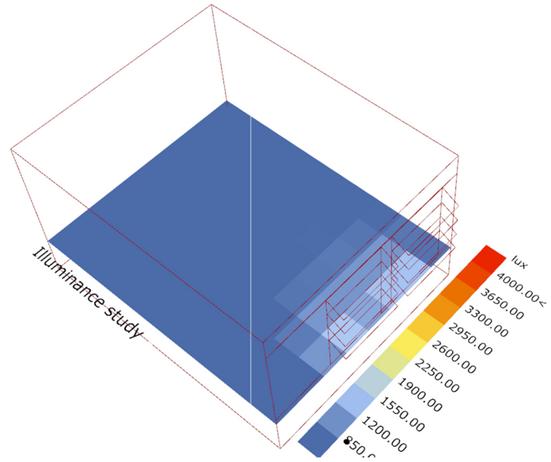


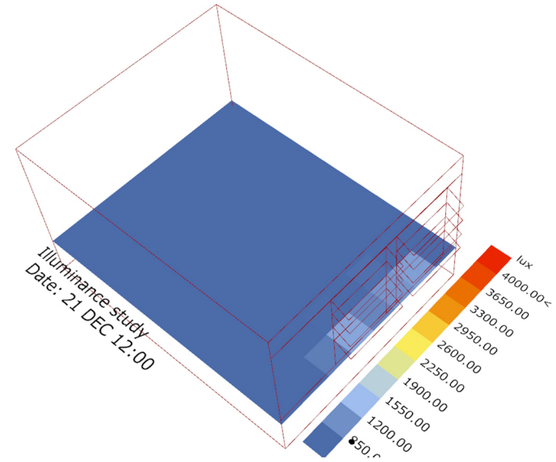




12:00 PM







15:00 PM