

The small chiller was set at -15°C and was kept at that temperature during the entire experiment. The plate was cooled down from room temperature by steps: first to 0°C , then to -5°C , to -10°C and finally to -15°C with dry nitrogen pumping inside the box at 8 Psi. Once the temperature set at the chiller was stable, the dry nitrogen pump was set between 2 and 3 Psi and was kept like that during the rest of the experiment. The humidity sensor recorded 0.0% humidity while data was being taken.

The main idea of this experiment was to look at a small rectangle in the plate with different parts of the FOV of the camera. A piece of paper was placed on top of the surface as a reference to the camera. As it can be seen with the photo in the same folder that this document, the FOV of the camera was divided in lines ("pixel lines") starting at the pixel number 7 and with a delta of 40 pixels, keeping in mind that the first pixel line (the one of the left) is 0, then technically the line number 7 is actually the line 8 of the FOV. The 'paper line' was never moved in the entire experiment. The camera was moved in order to place the physical line in the FOV and the data was recorded for 36 second at 6 frames per second, then 216 frames were taken per line.

The height of the camera from the plate was 37.8 cm approx., and a metal ring was placed at the center of the plate to serve as reference point. The line in the FOV seems to be of 12 cm long (this needs a little

The file is saved with emissivity equals to one, and a room temperature of 22C. No offset in the temperature is considered at this point.