Low pass filter of double moving average

The wall of the system identification model is the steady-state overall heat transmission coefficient. The effect of wall heat capacity on room temperature change is represented as the equivalent heat capacity of the room. Therefore, indoor heat generation had been a sinusoidal waveform with a slow change. However, indoor heat generation is now given a rectangular shape for ease of control. Also, a moving average of about 8 hours had been applied to all measured values as a low pass filter. Furthermore, in recent years, it was found that it is good to apply a double moving average. The figure shows that applying only one moving average leaves a corner, but applying two moving averages results in a slow and smooth change.