Grid points that show minimum $T_b$ in the $5\times5$ $T_b$ matrix are found.

Each $5\times5$ $T_b$ matrix is subtracted by the maximum $T_b$ value in the matrix and divided by the difference between maximum $T_b$ and minimum $T_b$.

Standard deviations of the $5\times5$ $T_b$ matrix in both directions are calculated and used to create upside down Gaussian matrix.

Calculate an absolute value of the difference between the $T_b$ matrix and the upside down Gaussian matrix for 10 time steps. If the values are smaller than 10 for consecutive 10 time steps, then decrease in minimum $T_b$ at channel 8 and 10 is calculated.

If the decreasing trend is either larger than $-0.5\, \text{K/min}$ for channel 8 or $-1\, \text{K/min}$ for channel 10, the middle and the neighboring 8 grid points are assigned as convective.