In the name of God

We used MATLAB to calculate Requested cell values.

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| clc  clear  data = csvread("IDW\_DATA.csv");  [m,n] = size(data);  %points format i,j and rainfall  Contorol\_points(5,3)=0;  k = 1;  for i=1:m  for j=1:n  if data(i,j)>10  Contorol\_points(k,1)= i;  Contorol\_points(k,2)= j;  Contorol\_points(k,3)= data(i,j);  k = k+1;  data(i,j) =0;  end  end  end | Read data and save control points in Control points MATRIX |
| distanc(5,1)=0;  points(6,3)=0;  p =1;  for i=1:m  for j=1:n  if data(i,j)~=0  s= 0;  w = 0;  distanc(1,1) = sqrt((i- Contorol\_points(1,1))^2+(j- Contorol\_points(1,2))^2);  distanc(2,1) = sqrt((i- Contorol\_points(2,1))^2+(j- Contorol\_points(2,2))^2);  distanc(3,1) = sqrt((i- Contorol\_points(3,1))^2+(j- Contorol\_points(3,2))^2);  distanc(4,1) = sqrt((i- Contorol\_points(4,1))^2+(j- Contorol\_points(4,2))^2);  distanc(5,1) = sqrt((i- Contorol\_points(5,1))^2+(j- Contorol\_points(5,2))^2);  for d=1:5  if distanc(d,1)<=5  weight = 1/distanc(d,1)^2;  w = w + weight;  s = s + weight\*Contorol\_points(d,3);  end  end  points(p,1) = i;  points(p,2) = j;  points(p,3)=s/w;  p = p +1;  end  end  end  csvwrite("output\_points.csv",points); | We calculated distance between station and our points 5 km is Euclidean maximum distance that we have. |
| %evaluation  control\_points\_test(5,1)=0;  MAE(5,1)=0;  MBE(5,1)=0;  for i=1:6  s = 0;  w = 0;  for j=1:5  dist = (sqrt(points(i,1)-Contorol\_points(j,1))^2+(points(i,2)-Contorol\_points(j,2))^2);  if dist<=5  weight = 1/dist^2;  s = s + points(i,3)\*weight;  w = w + weight;  end  control\_points\_test(i,1) =s/w;  MAE(j,1) = abs(Contorol\_points(j,3)-control\_points\_test(j,1));  MBE(j,1) = Contorol\_points(j,3)-control\_points\_test(j,1);  end  end  csvwrite("MAE.csv",MAE);  csvwrite("MBE.csv",MBE); | We used target points as control points and calculate original control points values for evaluation |

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|  | MAE | MBE |
| 1 | 16.64 | -16.64 |
| 2 | 12.479 | 12.479 |
| 3 | 48.83 | 48.83 |
| 4 | 22.948 | -22.948 |
| 5 | 43.435 | -43.435 |