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(* Copyright March 14, 2006 by Doug Youvan - doug@youvan.com *)

(* generate pseudocolor hotmap source in this program (modified from Shro3) *)
(* accretion code from 'ring10' code *)
(* add direction (mask matrix) matrix, first coded here,  *)
(* this particular version adds 3 and 4 pixels per loop;
 that is easily removed by commenting out those lines - just within the beginning of the big

(* hotmap ramp *)
ramp = Table[{
    Piecewise[{
      {1, 1 <= i < 42},
      {1, 42 <= i < 84},
      {Floor[5.8 * (i - 83)], 84 <= i < 128},
      {256, 128 <= i < 170},
      {256, 170 <= i < 212},
      {256, 212 <= i <= 256}
     }],
    Piecewise[{
      {1, 1 <= i < 42},
      {(i - 41) * 6, 42 <= i < 84},
      {256, 84 <= i < 128},
      {256 - (i - 128) * 6, 128 <= i < 170},
      {1, 170 <= i < 212},
      {Floor[(i - 211) * 5.7], 212 <= i <= 256}
     }],
    Piecewise[{
      {Floor[i * 5.8], 1 <= i < 42},
      {256 - ((i - 42) * 6), 42 <= i < 84},
      {1, 84 <= i < 128},
      {1, 128 <= i < 170},
      {(i - 169) * 6, 170 <= i < 212},
      {256, 212 <= i <= 256}
     }]
   },
   {i, 1, 256, 1}];


 (* Construct mask matrix with eight directions; needs more logic checks; use as square for

 height = width = 150;

 maskmat =.
 maskmat = Table[{x, y}, {x, 1, height}, {y, 1, width}];
 maskmat[[All, All]] = 0;

 (* Direction NNE # 1 in matrix, i.e., 1,1 is top left in matrix and lower right in images -
 For[i = 1, i <= height, i++,
```

In[1]:=

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HTMLSave["C:\\Documents and Settings\\K64S\\Desktop\\accretion.html"];
```

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