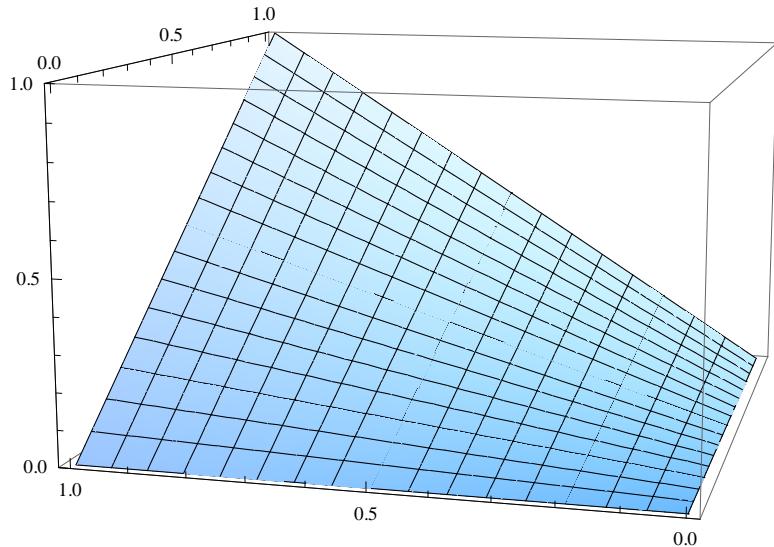
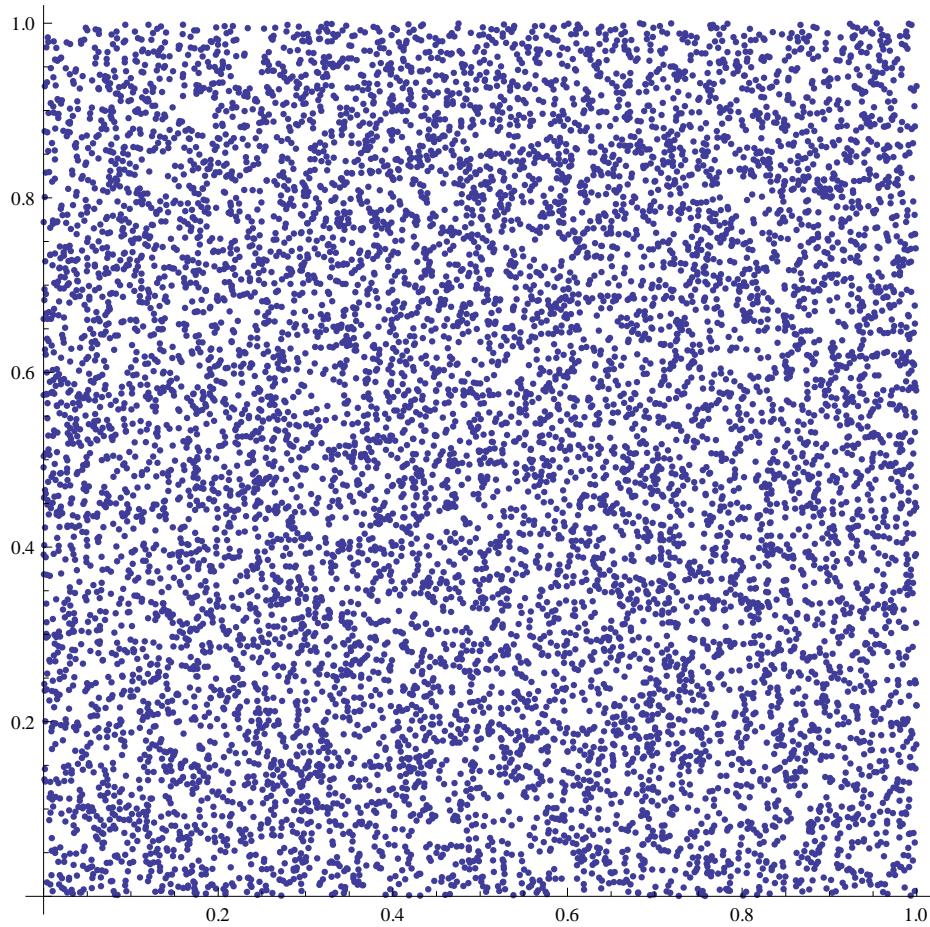

Maximum copula

```
Plot3D[x y, {x, 0, 1}, {y, 0, 1}, PlotRange -> {0, 1}, BoxRatios -> {1, 1, 0.6}]
```



```
SeedRandom[];
U = {};
For[i = 0, i < 10 000, i++,
 X = RandomReal[];
 Y = RandomReal[];
 AppendTo[U, {X, Y}]]
```

```
ListPlot[U, AspectRatio -> 1]
```



```
F[a_, b_] := 10 000 - Sort[
  Tally[UnitStep[a - #1[[2]]] UnitStep[b - #1[[1]]] & /@ U], #1[[1]] < #2[[1]] &][[1, 2]]

Sort[Tally[UnitStep[20 / 20 - #1[[2]]] UnitStep[20 / 20 - #1[[1]]] & /@ U],
  #1[[1]] < #2[[1]] &]
{{1, 10 000}]

n = 40; G = {};
For[i = 0, i < n, i++,
  For[j = 0, j < n, j++,
    AppendTo[G, {i/n, j/n, F[i/n, j/n]}];
  ]
]
G[[3]]
{0, 1/10, 0}
```

```
ListPlot3D[G, PlotRange → All, BoxRatios → {1, 1, 1}]
```

