

More snow Examples

Luke Tierney

Department of Statistics & Actuarial Science
University of Iowa

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Parallel Kriging

- Several R packages provide spatial prediction (kriging).
- Sgeostat has a pure R version, `krige`.
- Computation is a simple loop over points.
- Fairly slow when using only points within `maxdist`.
- Result structure is fairly simple.
- Easy to write a parallel version.



Parallel Version of krige

```
parKrige <- function(cl, s, ...) {  
  # split the prediction points s  
  idx <- clusterSplit(cl, 1: dim(s)[1])  
  ssplt <- lapply(idx, function(i) s[i,])  
  
  # compute the predictions in parallel  
  v <- clusterApply(cl, ssplt, krige, ...)  
  
  # assemble and return the results  
  merge <- function(x, f) do.call("c", lapply(x, f))  
  s.o <- point(s)  
  s.o$do <- merge(v, function(y) y$do)  
  s.o$zhat <- merge(v, function(y) y$zhat)  
  s.o$sigma2hat <- merge(v, function(y) y$sigma2hat)  
  return(s.o)  
}
```