F

For(i in 1:180) {  
  ##Slice Data, take specific time  
  ssrd\_slice<-ssrd\_array[,,i]  
  length(na.omit(as.vector(ssrd\_slice)))/length(as.vector(ssrd\_slice))  
  max\_rad <- max(ssrd\_slice, na.rm=TRUE)  
  
    ##Combine data & Visualise  
  lonlat <- as.matrix( (expand.grid(lon, lat)))  
  ssrd\_vec <- as.vector( ssrd\_slice)   
  ssrd\_df <- data.frame(cbind(lonlat,ssrd\_vec))  
  colnames(ssrd\_df) <- c("lon", "lat", "ssrd")  
  ssrd\_df\_value <- na.omit(ssrd\_df)  
  ssrd\_sf<- st\_as\_sf( ssrd\_df\_value, coords = c("lon", "lat"))  
  st\_crs(ssrd\_sf) <- 4326   
  ssrd\_sf <- st\_transform(ssrd\_sf, 4326 )  
  ncatt\_get(era,"ssrd","units")  
  
  ssrd\_kwh <- as.data.frame (radiation\_to\_power (ssrd\_df\_value))  
  ssrd\_df\_value <- cbind(ssrd\_df\_value,ssrd\_kwh$ssrd)  
  colnames(ssrd\_df\_value) [4] <- 'ssrd\_kwh'  
  ssrd\_sf$ssrd\_kwh = ssrd\_kwh$ssrd

  solar\_sf<-st\_transform(ssrd\_sf,4326)  
  coor=as.data.frame(st\_coordinates(solar\_sf))  
  solar\_sf$x=coor$X  
  solar\_sf$y=coor$Y  
  solar\_nogeom=st\_drop\_geometry(solar\_sf)  
  solar\_nogeom=na.omit(solar\_nogeom)  
  gs <-gstat(formula=ssrd\_kwh~1, locations=~x+y, data=solar\_nogeom, nmax=20,set=list(idp=5))  
  #Interpolate  
  idw <- interpolate(raster\_template, gs, debug.level=0)  
  idw\_results[[as.character(i)]] <- idw  
}

##Check RMSE for (j in 1:n\_idp)  {   ... by Alius, QayyumAlius, Qayyum21:05

##Check RMSE  
for (j in 1:n\_idp)   
{  
  for (i in 1:n\_fold) {  
    test <- solar\_nogeom[kf == 1, ]  
    train <- solar\_nogeom[kf != 1, ]  
    gs <- gstat(formula=ssrd\_kwh~1, locations=~x+y, data=train, nmax=20, set=list(idp=j))  
    pre = predict(gs, test, debug.level=0 )  
    rmse[i] <- RMSE(test$ssrd\_kwh, pre$var1.pred)  
  }  
  va[j,2] = (mean(rmse) )  
}

va[which(va$rmse==min(va)),]

library(ggplot2)  
ggplot(va) +  
  geom\_point(aes(x = idp, y= rmse))+  
  geom\_hline(yintercept=min(va), linetype="dashed", color = "red")+  
  theme\_classic()

has context menu