

## EXAMPLE 1: Loading and plotting various members

Total precipitation at the Gulf of Guinea for January 2010 forecasted in October 2009 (lead month 3) by the System4 model (seasonal range, 15 members) is next represented for each member, using the `spplot` method for the `SpatialGridDataFrame` class of library `sp`:

Data are loaded by introducing the required values for dataset, spatio-temporal window and lead month definition. Note that the argument `members` is omitted, which means that by default all available members (15 in this case, will be returned).

```
> gg.pr <- loadSeasonalForecast("System4_seasonal_15", var="tp", lonLim=c(-30,20),
+ latLim=c(-12,15), season=1, years=2010, leadMonth=3)
```

```
names(gg.pr)
str(gg.pr$MemberData)
```

```
pr.list <- lapply(1:length(gg.pr$MemberData), function(x) colSums(gg.pr$MemberData[[x]]))
df <- do.call("data.frame", pr.list)
names(df) <- names(gg.pr$MemberData)
```

```
class(gg.pr$LonLatCoords)
sgdf <- SpatialGridDataFrame(gg.pr$LonLatCoords, df)
```

```
spplot(sgdf, scales=list(draw = TRUE), col.regions = rev(terrain.colors(50)), at = seq(0, ceiling(max(sgdf@data)),10))
```



```
> data(world_map)
> wl <- as(world_map, "SpatialLines")
> ll <- list("sp.lines", wl)
```

```
spplot(sgdf, zcol = c(4,9,13,14), scales=list(draw = TRUE), col.regions = rev(terrain.colors(50)), at = seq(0, ceiling(max(sgdf@data)),10), sp.layout = list(l1))
```

