

Galaxy-Bricks a Tool for Data Literacy and Scientific Approach Education in the Context of Citizen Science

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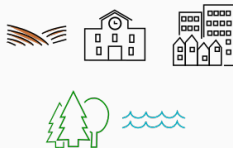
04 July 2019

Diversity of the Citizen science community

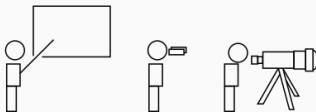
Organisms



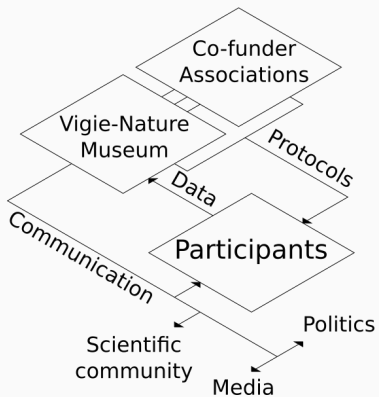
Environments



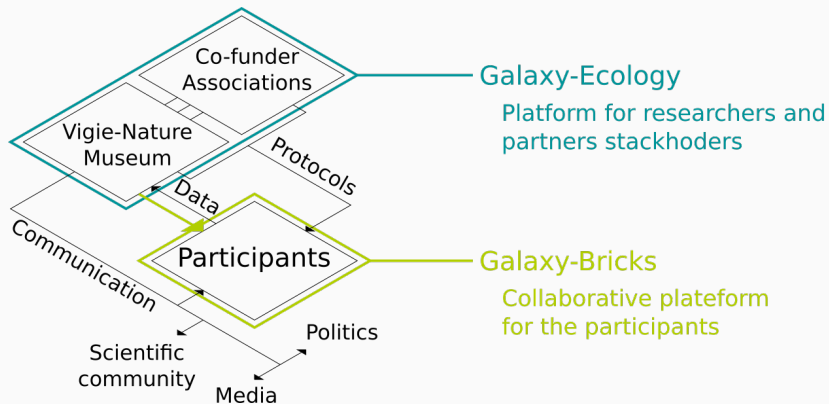
Users



Citizen science Network



Two platforms for the analysis



Objectives - “Global”

- Propose new possibilities to participate for the citizens
- Give access to data and to data analysis tools
- Give to the participants a tool to answer the questions they have

Objectives - High school students

- Give a new tool to for scientific approach education
- Data literacy education
- Increase interdisciplinary possibilities

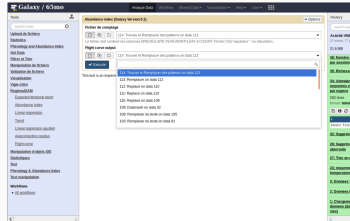
- Community
- Development and maintenance of tools
- FAIR
- Access to high performance computing

Simplification of the user interface

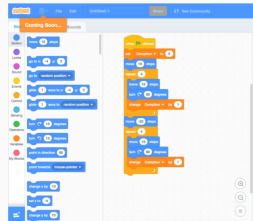
```
date serie <- as.POSIXlt(seq(as.Date(origin), length = nday,
dayno <- as.numeric(strftime(date.serie, origin = as.Date(origin),
month <- as.numeric(strftime(date.serie, format = "%m"))
week <- as.numeric(strftime(date.serie, format = "%W"))
week day <- as.numeric(strftime(date.serie, format = "%u"))
day <- as.numeric(strftime(date.serie, format = "%d"))

site_list <- sp_data[!(duplicated(sp_data$SITE)), c("SITE")]
all_day_site <- data.frame(SPECIES = sp_data$SPECIES[,], SITE =
YEAR = sp_data$YEAR[,], MONTH = month, WEEK = week, DAY = day,
COUNT = 1)

count_index <- match(paste(sp_data$SITE, sp_data$DAYNO, sep =
"sp
all_day_site$COUNT[count_index] <- sp_data$COUNT
site_count_length <- aggregate(sp_data$COUNT, by = list(sp_data
some(site_count_length$) <- as.character(site_count_length$ob
site_countno <- utils::stack(site_count_length$)
all_day_site$COUNTno <- count_index
all_day_site$COUNTno[count_index] <- site_countno$values # add
# Add zero to close observation season two weeks before and after
first_obs <- min(all_day_site$DAYNO[is.na(all_day_site$COUNT)])
last_obs <- max(all_day_site$DAYNO[is.na(all_day_site$COUNT)])
closing_season <- c((first_obs - 1):(first_obs - 1), (last_obs
# If closing season is before day 1 or day 365, simply set the
if (min(closing_season) < 1)
closing_season[1:] <- c(1:)
if (max(closing_season) > nday)
```



NGPhylogeny.fr



Scratch

- Collaborative analysis

Want to know more or collaborate

- Poster 45C
- CoFest project

Thank you

