

Project Proposal

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Purpose: Analyse geostatistical data using a bayesian approach and to carry out the the validations of the models.

Dataset to use: Gambia Malaria

Description of the data set:

Malaria prevalence in children recorded at villages in The Gambia, Africa.

Usage data(gambia)

Format Two objects are made available:

1. gambia

A data frame with 2035 observations on the following 8 variables.

x x-coordinate of the village (UTM).

y y-coordinate of the village (UTM).

pos presence (1) or absence (0) of malaria in a blood sample taken from the child.

age of the child, in days netuse indicator variable denoting whether (1) or not (0)

the child regularly sleeps under a bed-net.

treated indicator variable denoting whether (1) or not (0) the bed-net is treated
(coded 0 if netuse=0).

green satellite-derived measure of the green-ness of vegetation in the immediate
vicinity of the village (arbitrary units).

phc indicator variable denoting the presence (1) or absence (0) of a health center in
the village.

2. gambia.borders

A data frame with 2 variables:

x x-coordinate of the country borders.

y y-coordinate of the country borders.