

Urban environment & postnatal depression: descriptive statistics

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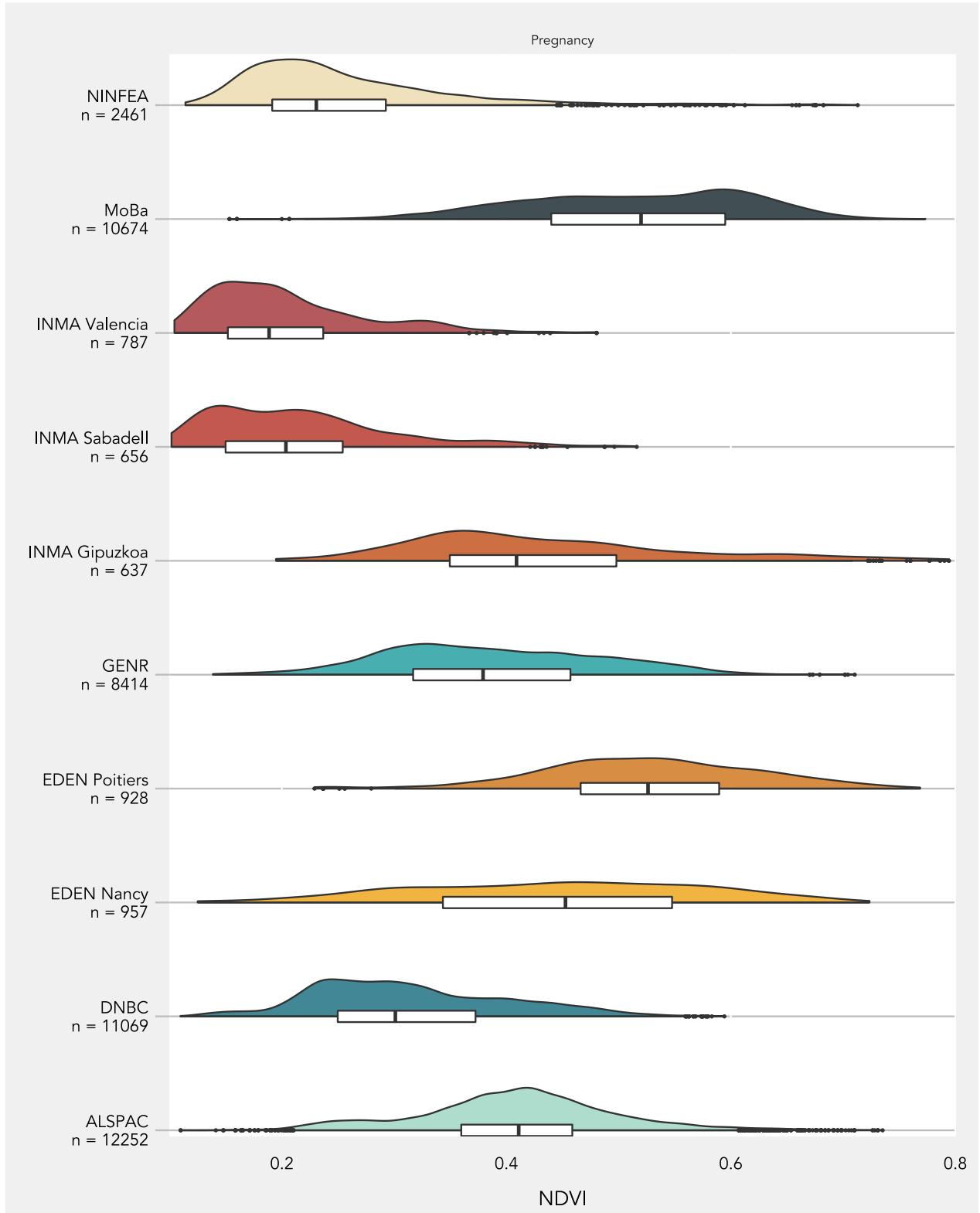
1 Overview	2
2 Descriptive statistics for exposures	3
3 Correlations between exposures	18
4 Correlations between timepoints	28
5 Descriptive statistics for outcome	28

1 Overview

I've put together (i) descriptive plots for exposures and outcomes, (ii) correlations between exposures, and (iii) associations between each exposure and outcome. I will also look at non-linearity in exposure-outcome associations, but I need to write a function to do spline modelling in DataSHIELD.

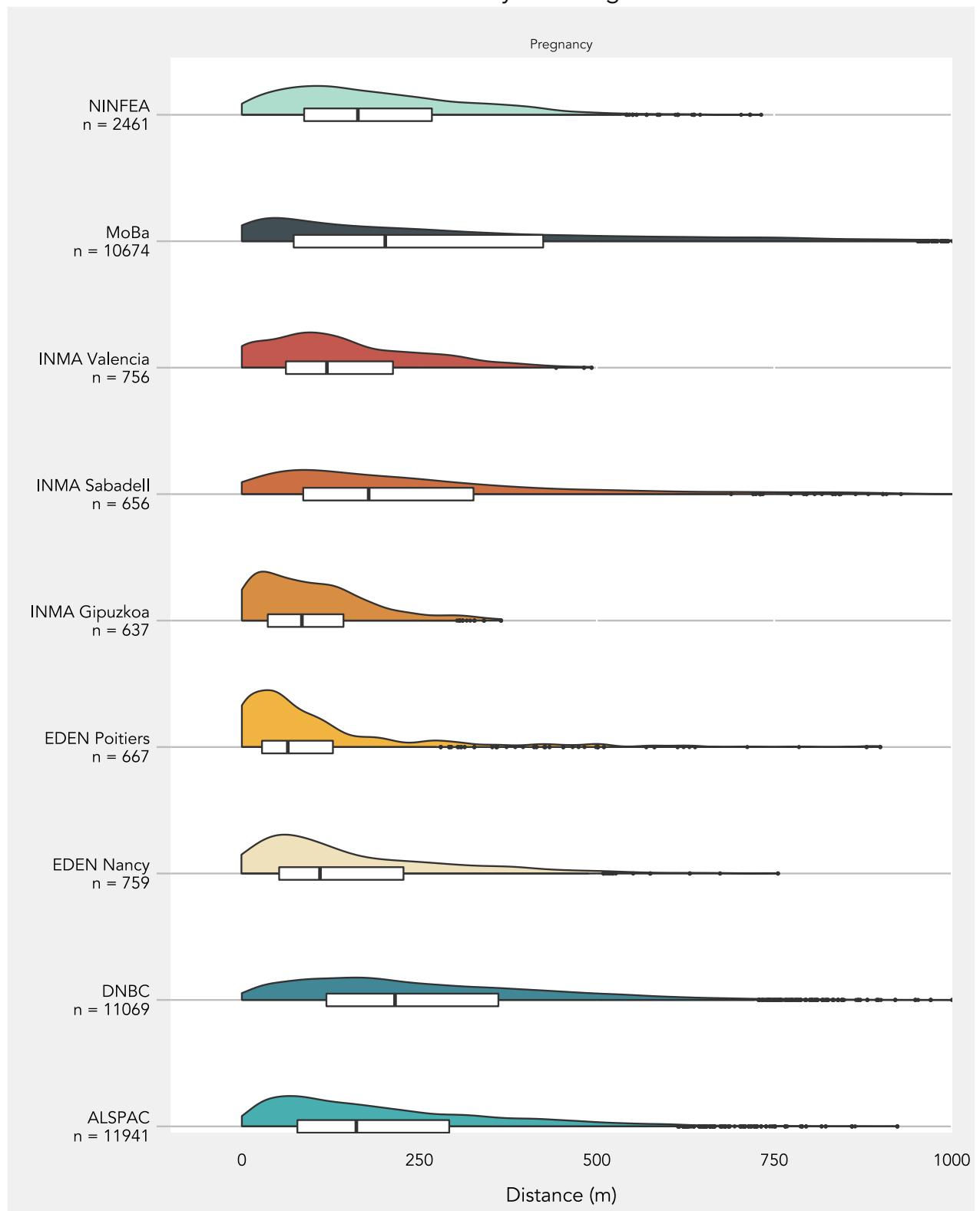
2 Descriptive statistics for exposures

2.1 NDVI (300m buffer)



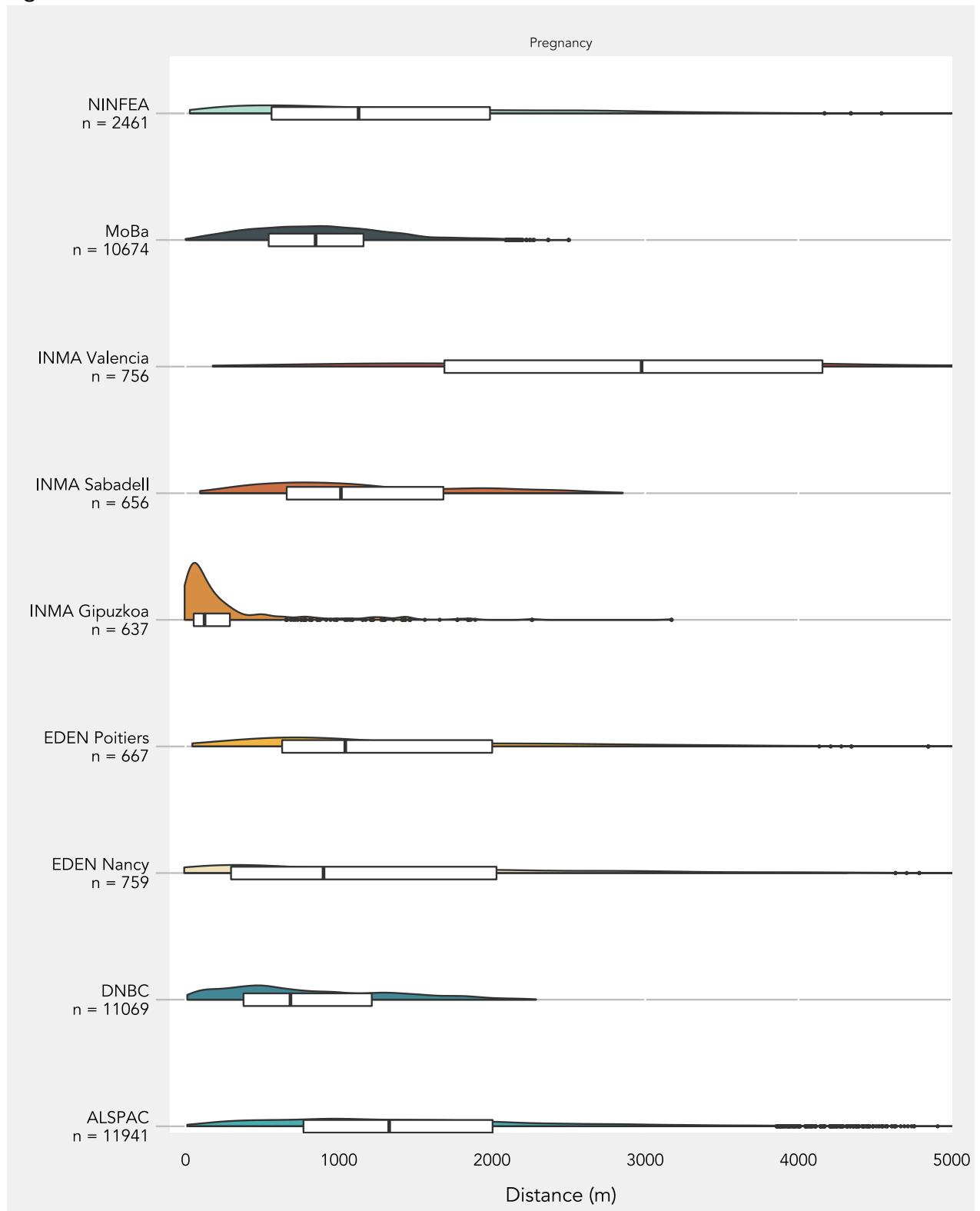
2.2 Distance to nearest green spaces > 5000m²

There is a mistake with GEN-R data which they are fixing.

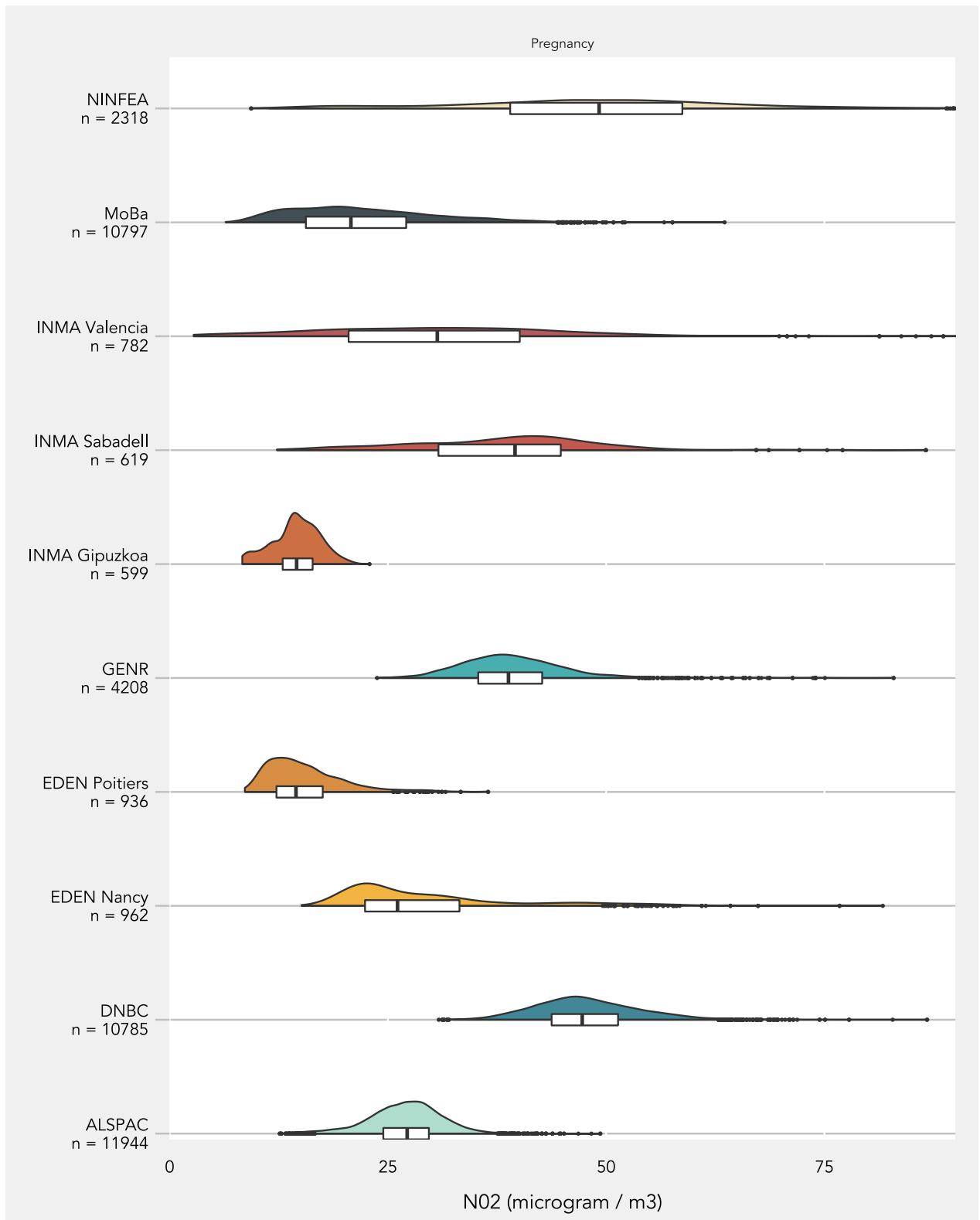


2.3 Distance to nearest blue spaces > 5000m²

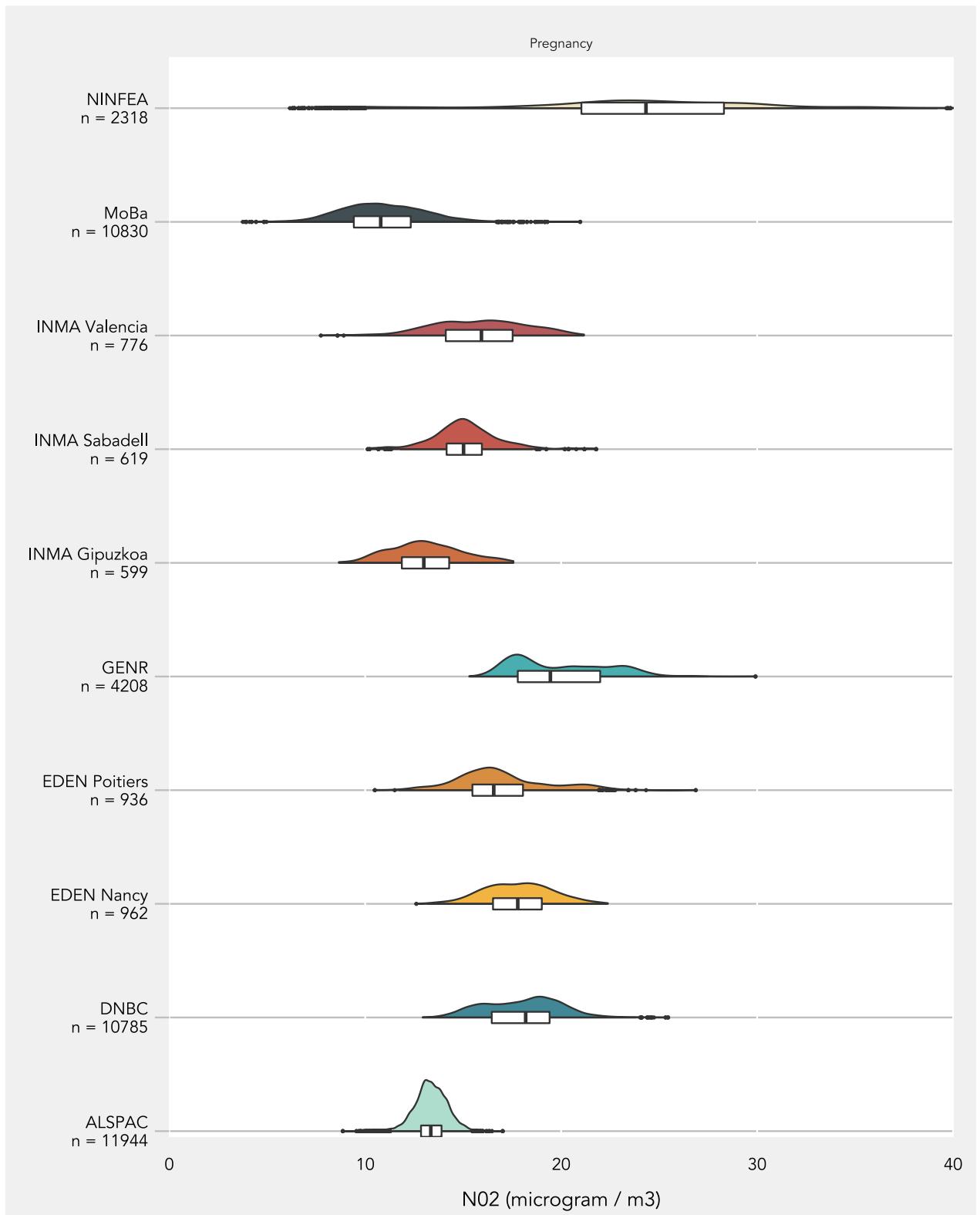
Again, GEN-R is excluded because of an error with their data.



2.4 Mean NO₂ in pregnancy



2.5 Mean PM_{2.5} in pregnancy



2.6 Mean PM_{2.5} from 0-1 years

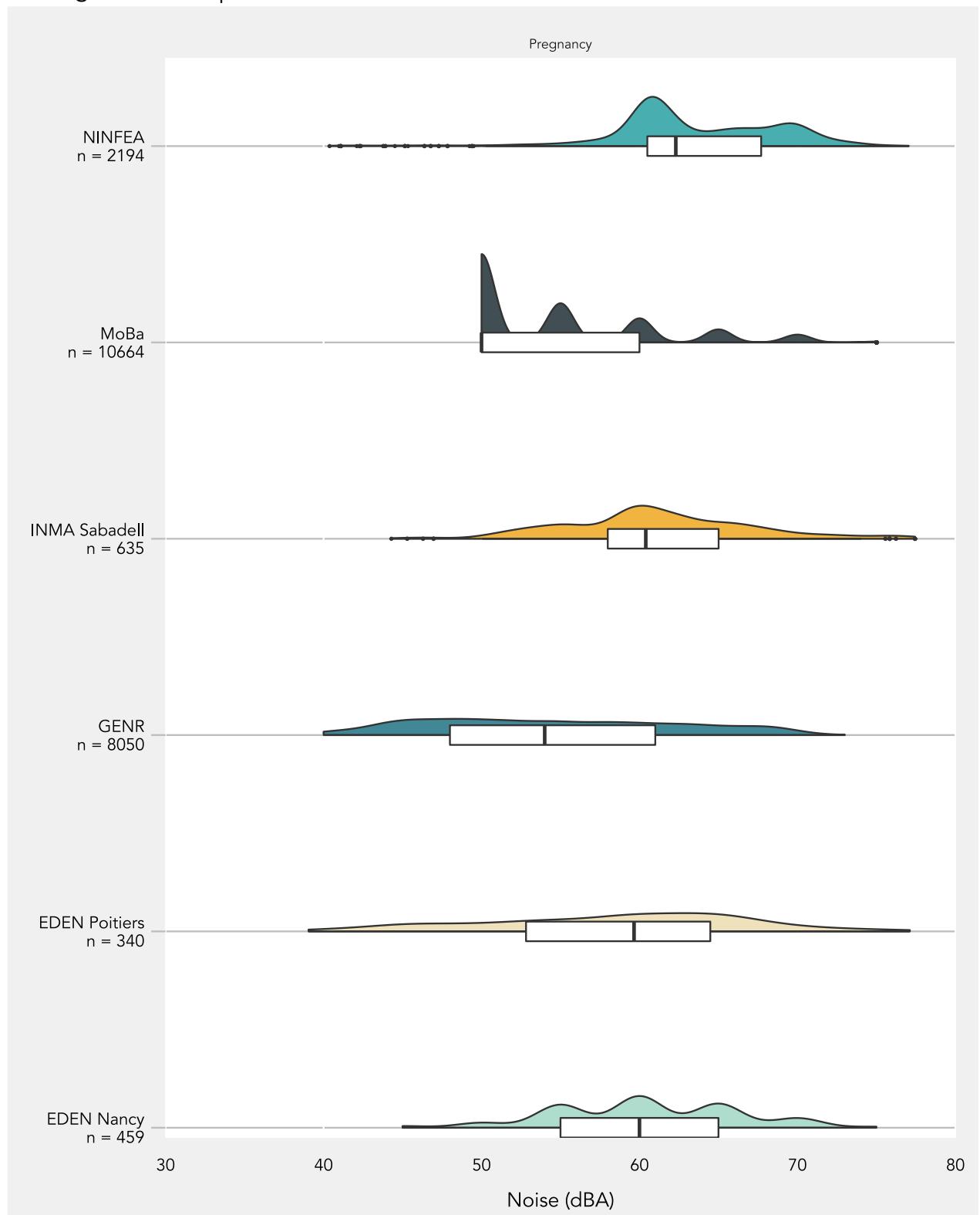
For some reason this is missing in the data - will check.

2.7 Mean NO₂ from 0-1 years

Again this is missing but I'm not sure why.

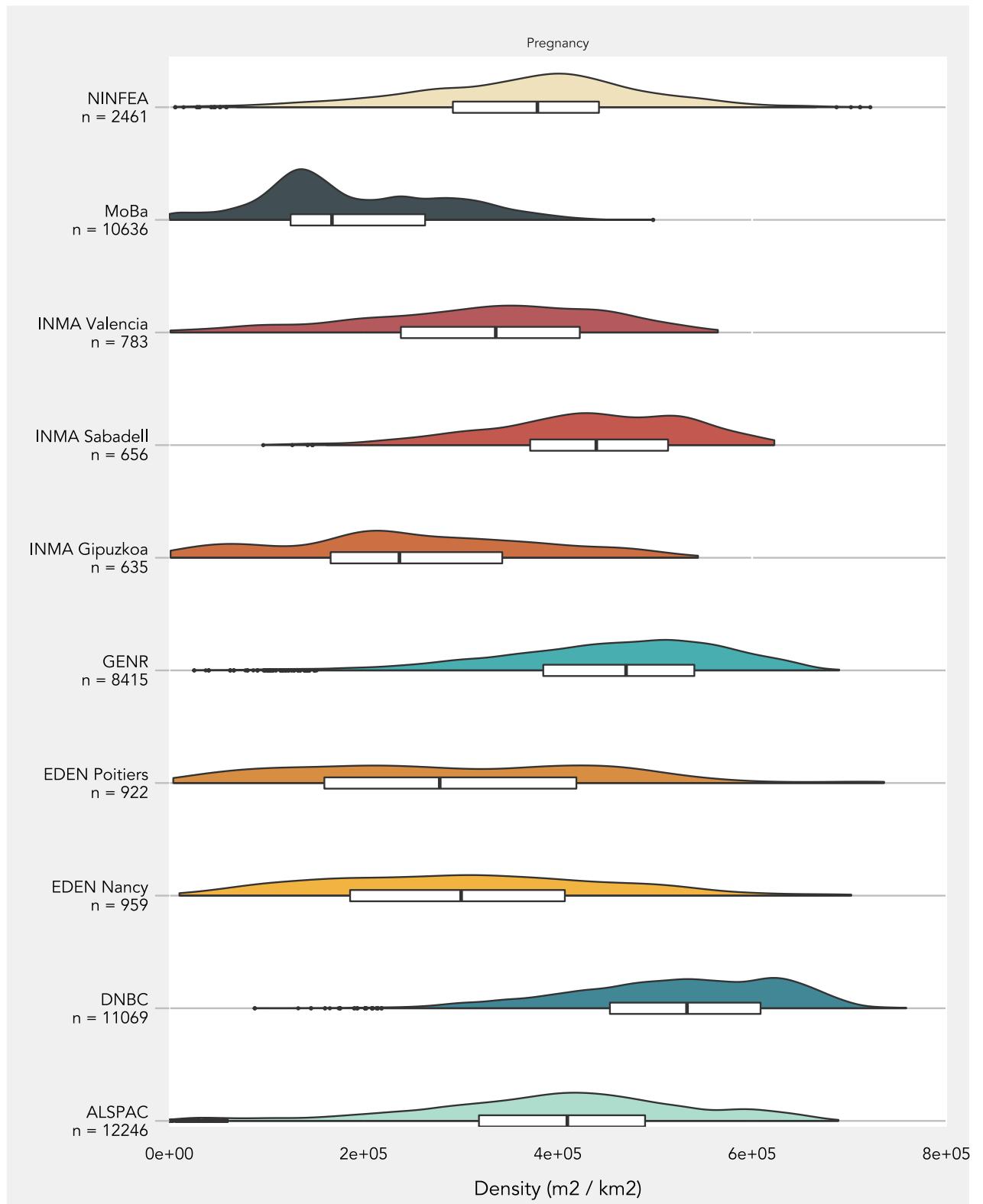
2.8 Mean day-evening-night traffic noise

Missing in INMA Gipuzkoa & Valencia - is this correct?

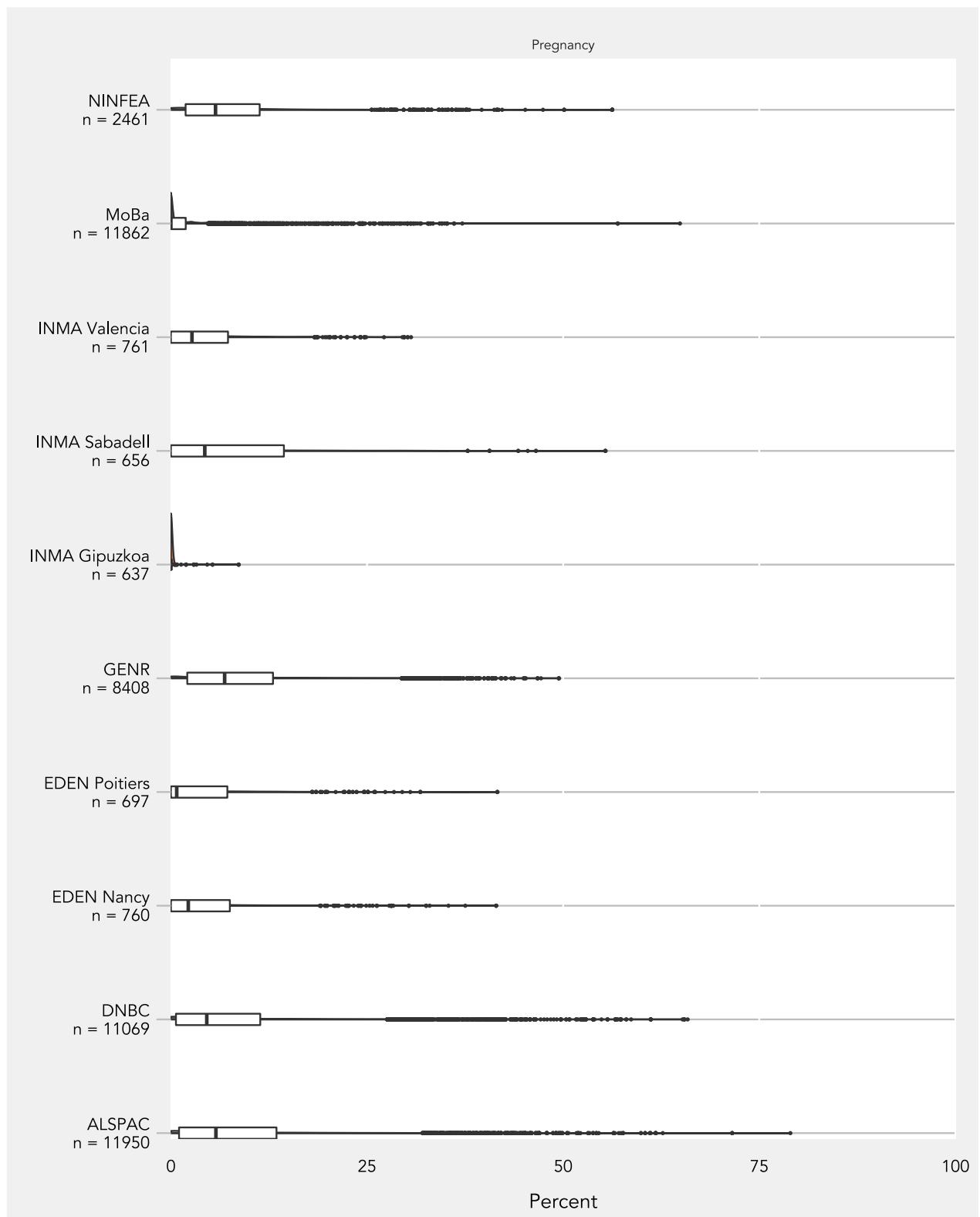


For ALSPAC (and DNBC?) only the categorical version is available - I will add this.

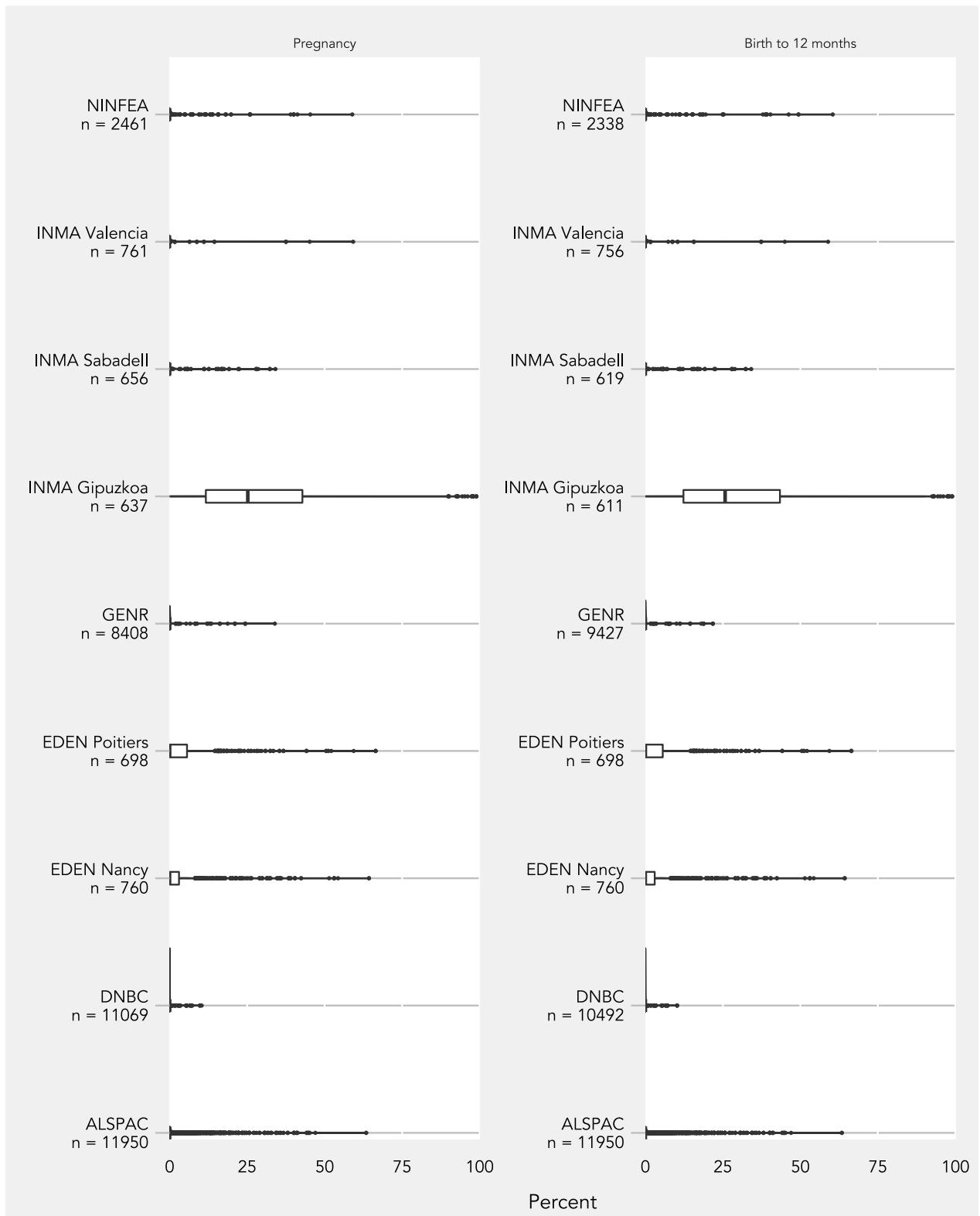
2.9 Mean building density



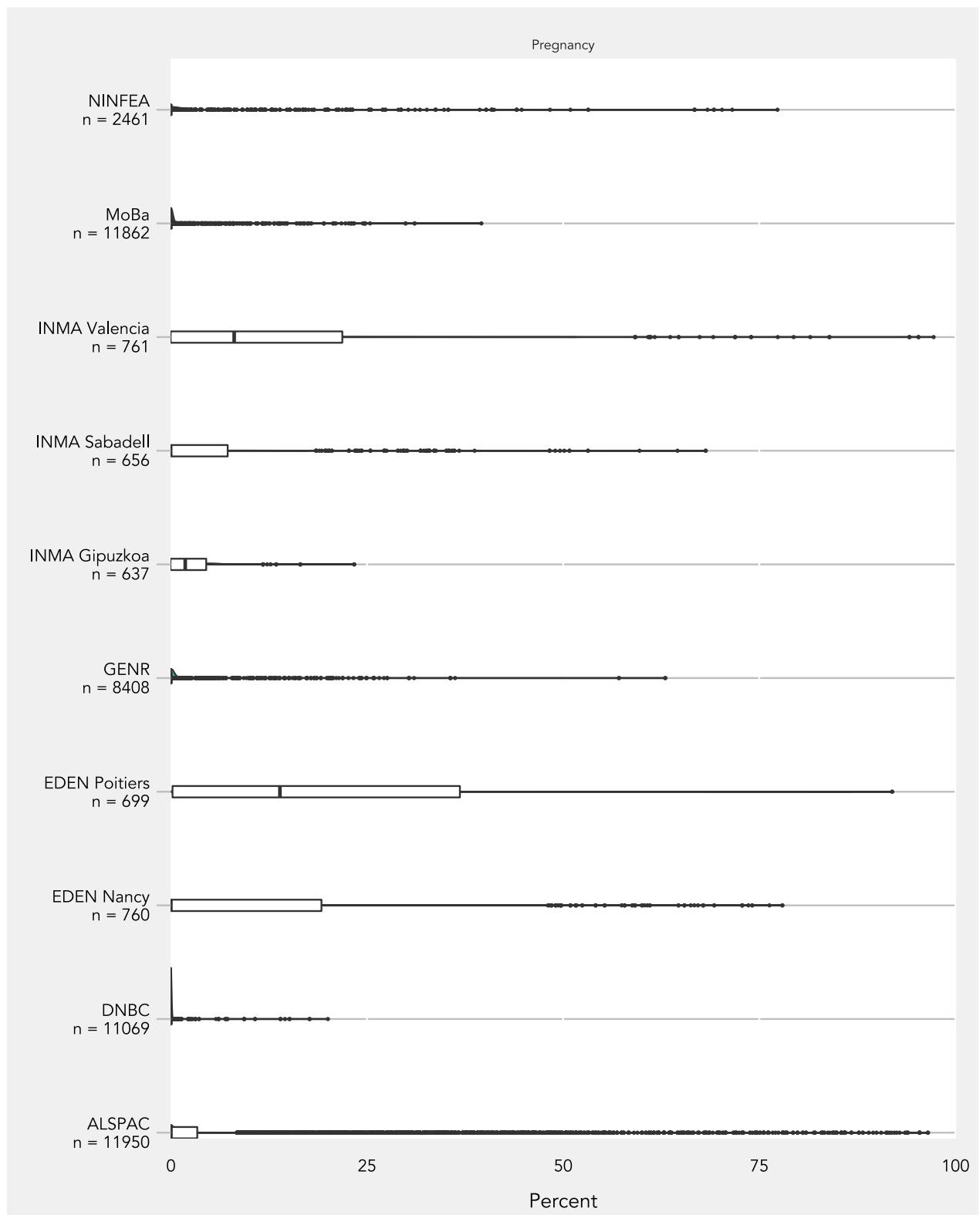
2.10 Percentage of urban green land use



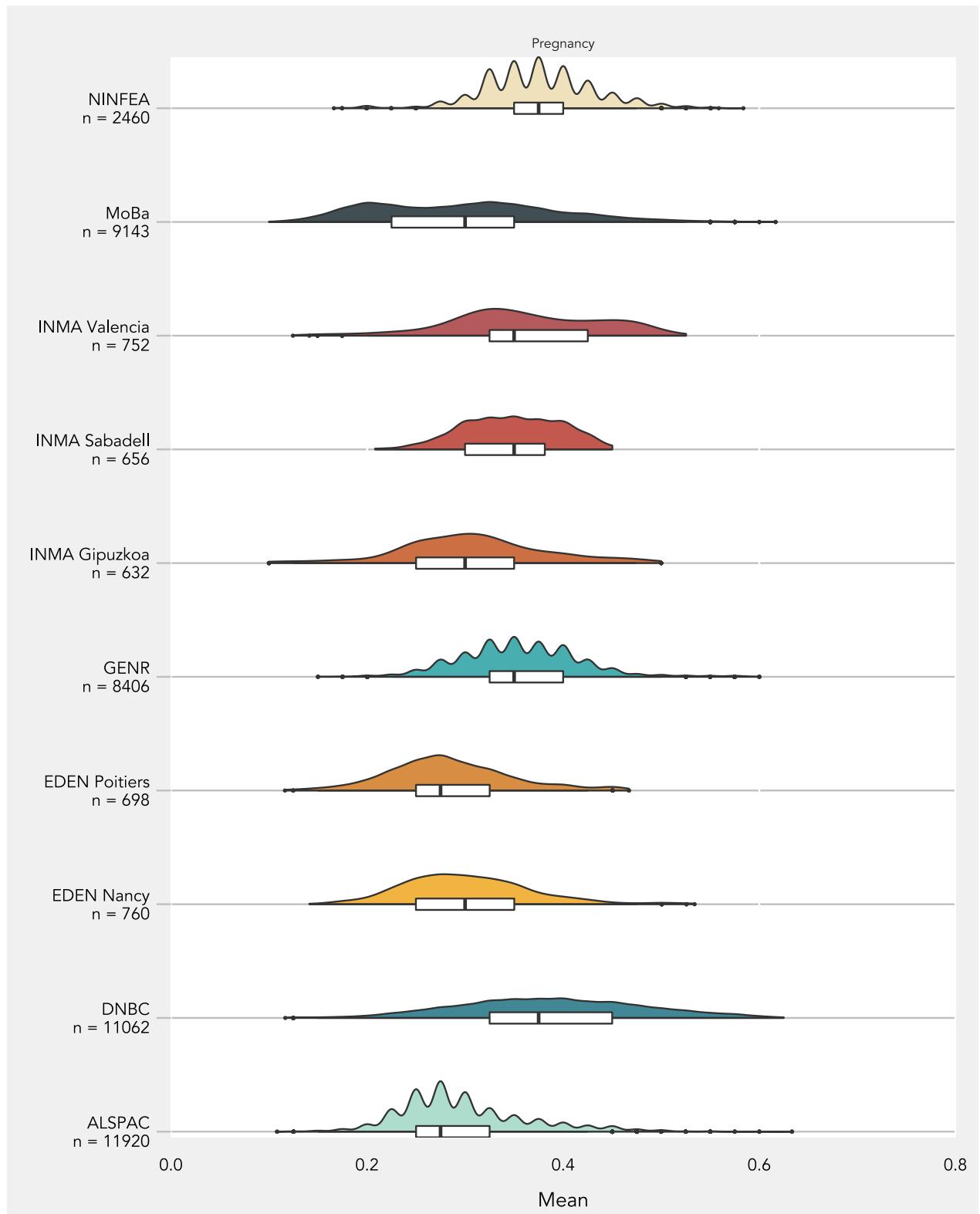
2.11 Percentage of forest land use



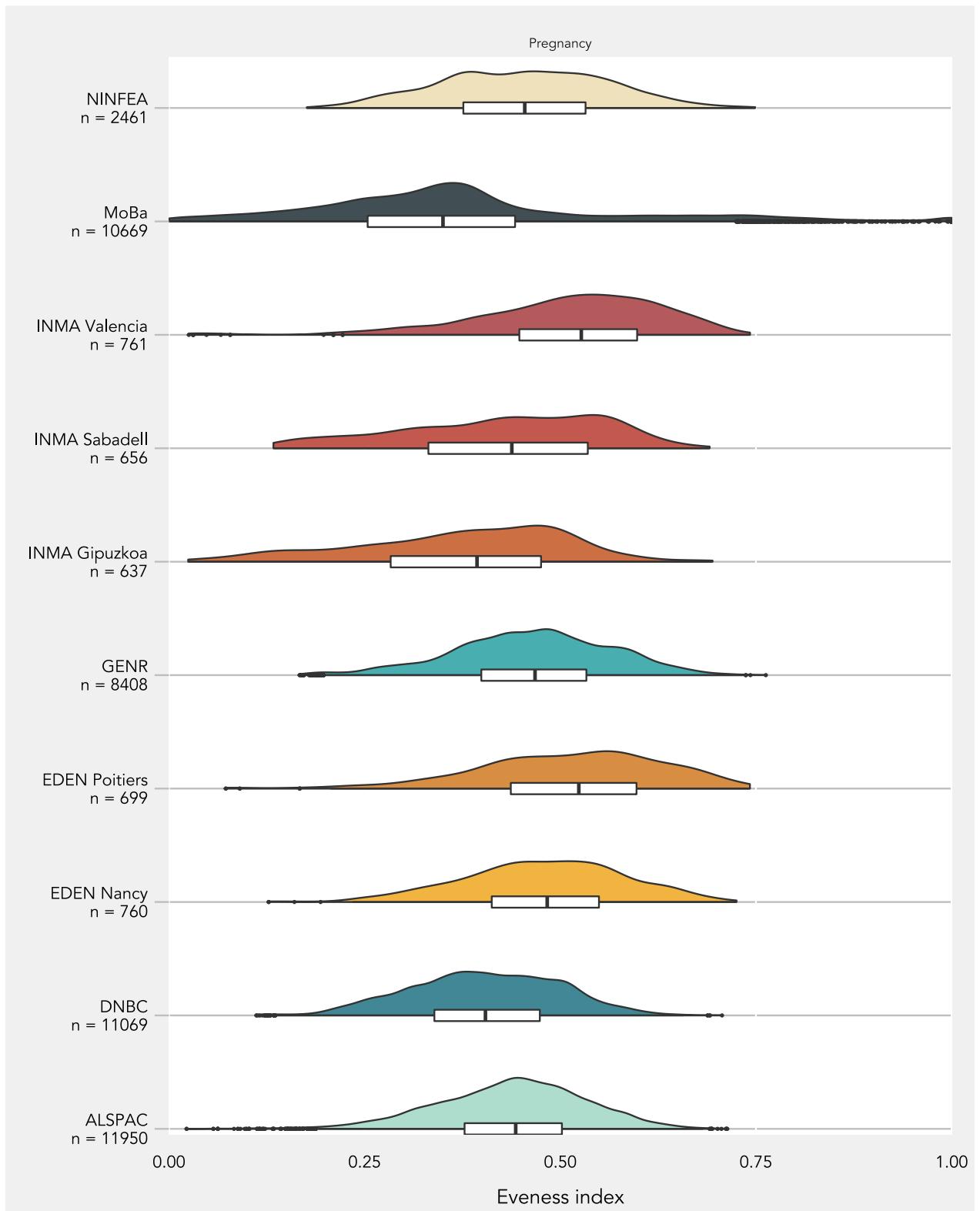
2.12 Percentage of agricultural land use



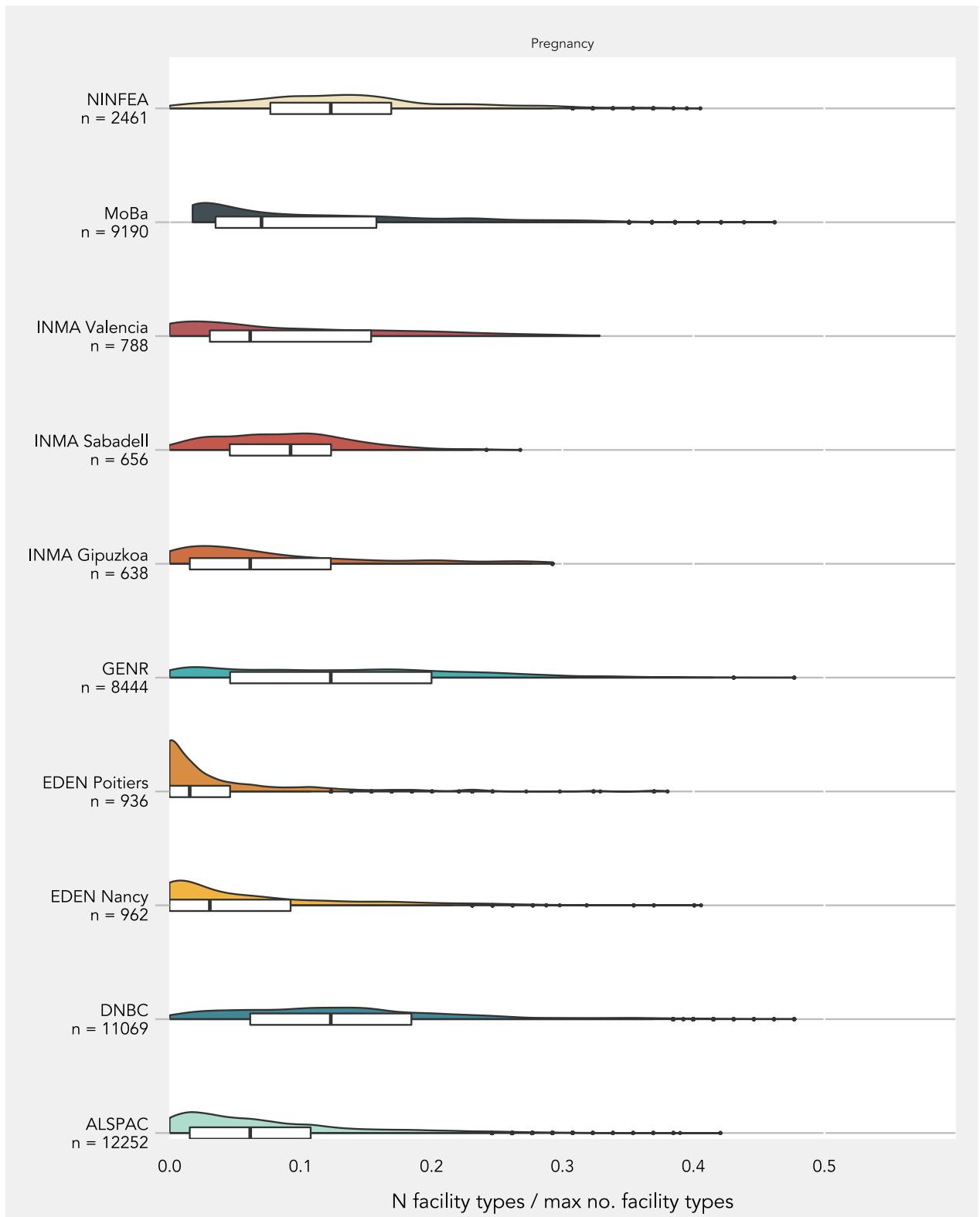
2.13 Walkability index



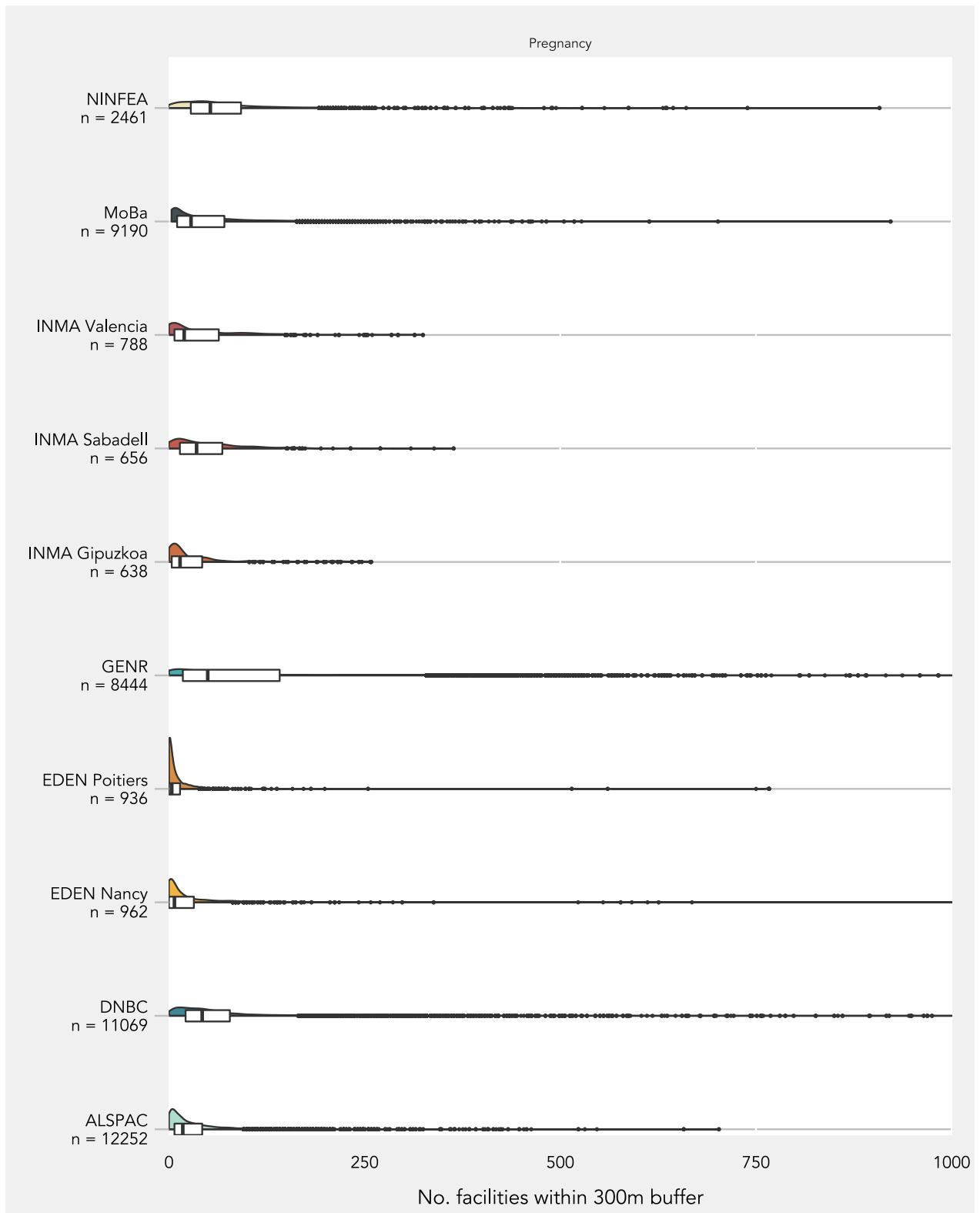
2.14 Land use (Shannon's evenness index)



2.15 Facilities richness



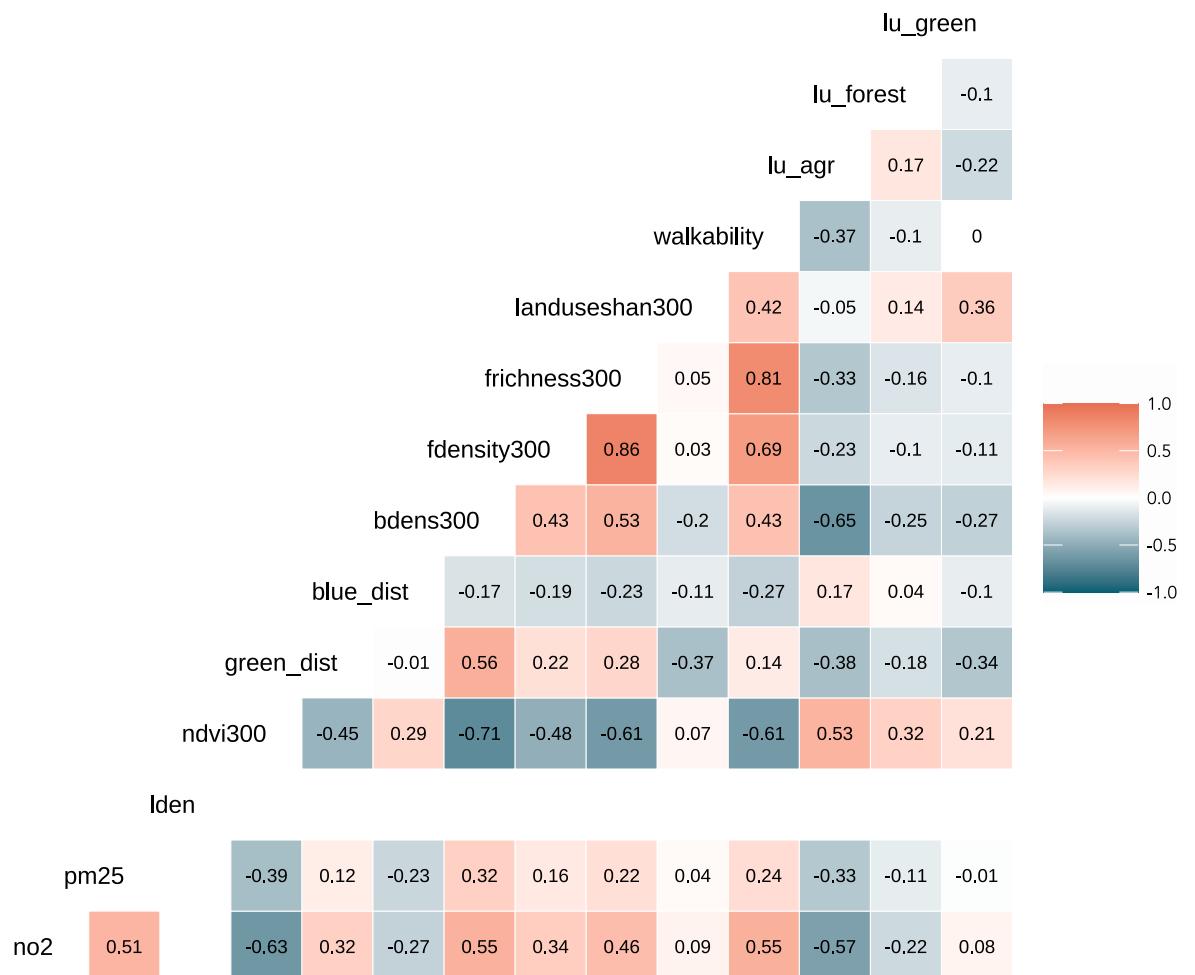
2.16 Facilities density



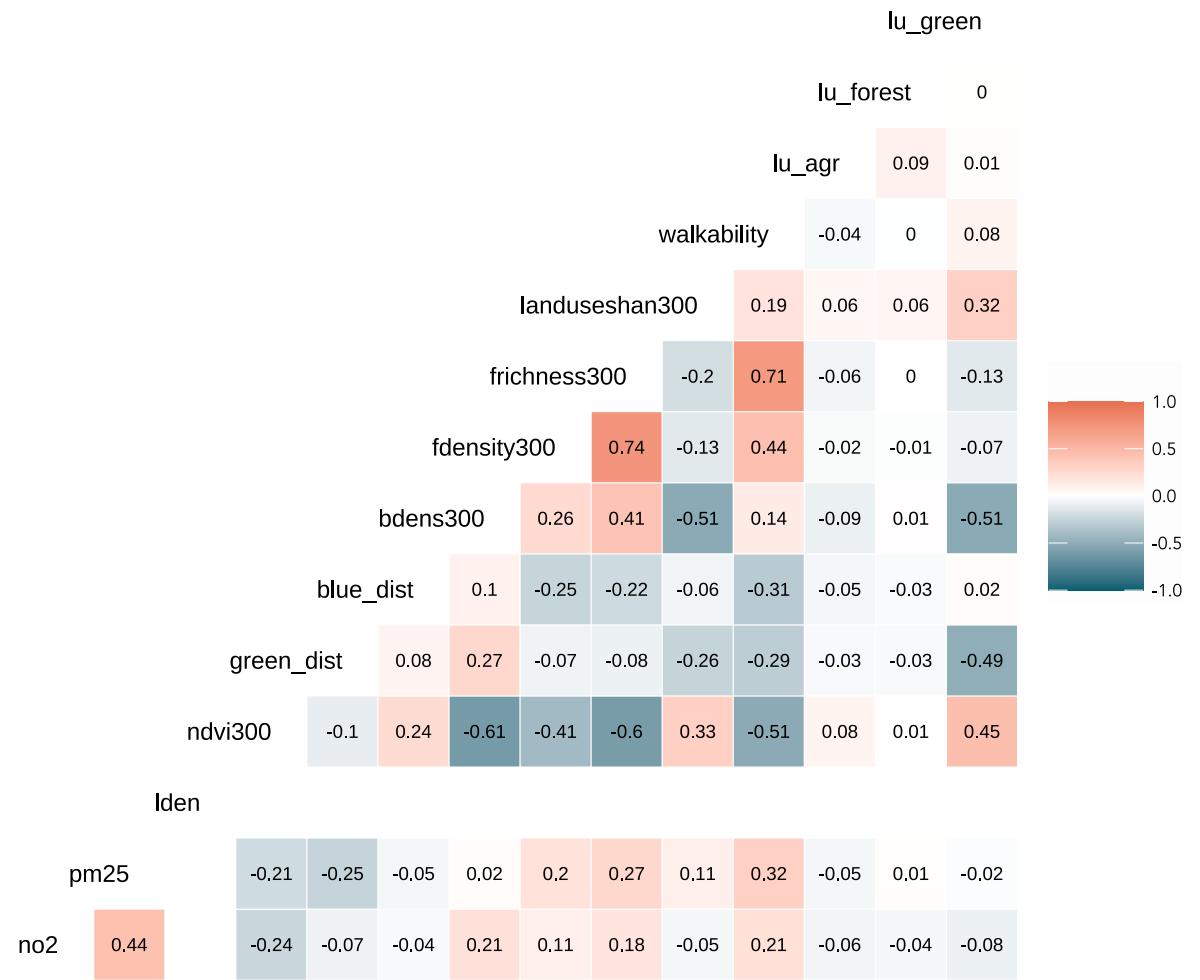
3 Correlations between exposures

To avoid overload I have just plotted correlations between the pregnancy exposures.

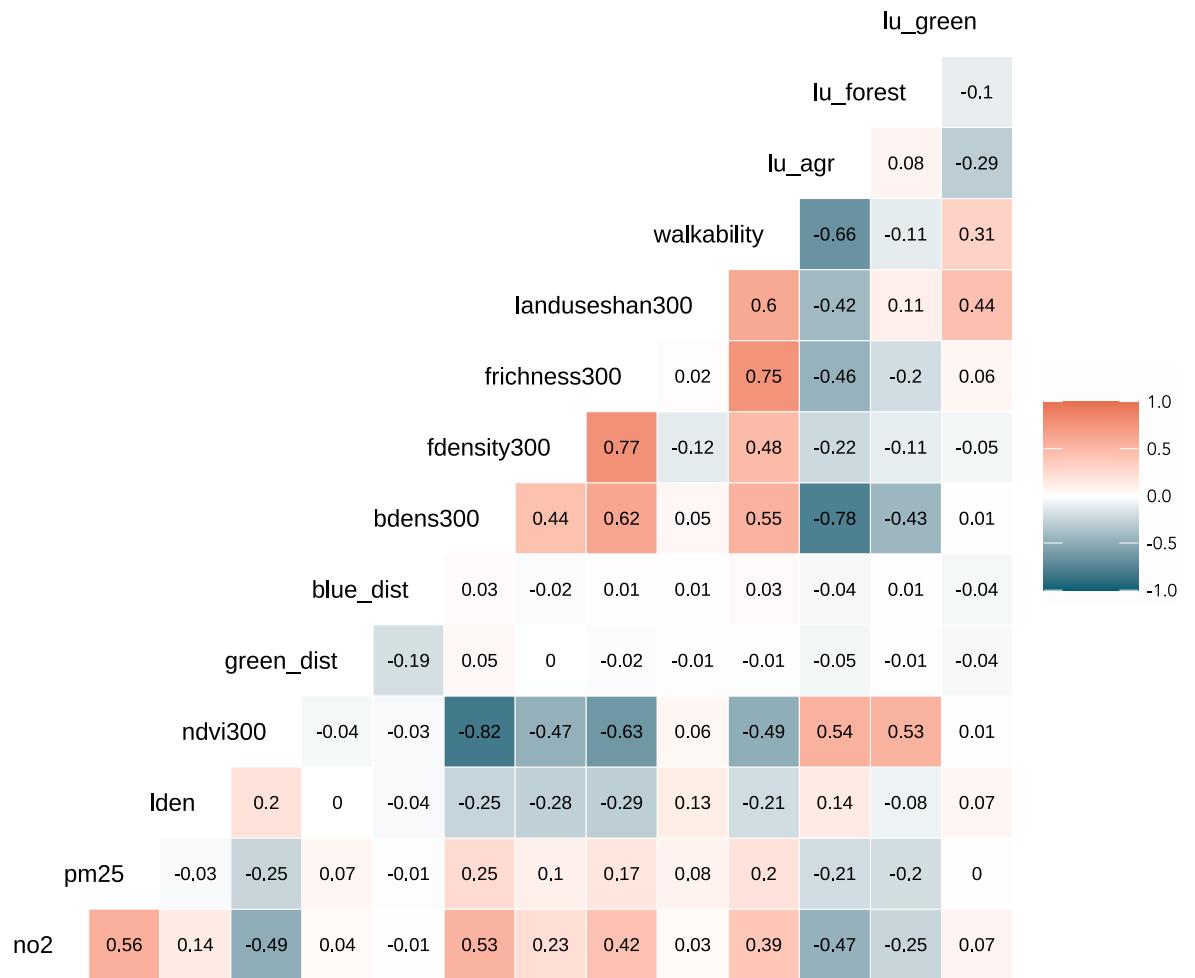
3.1 ALSPAC



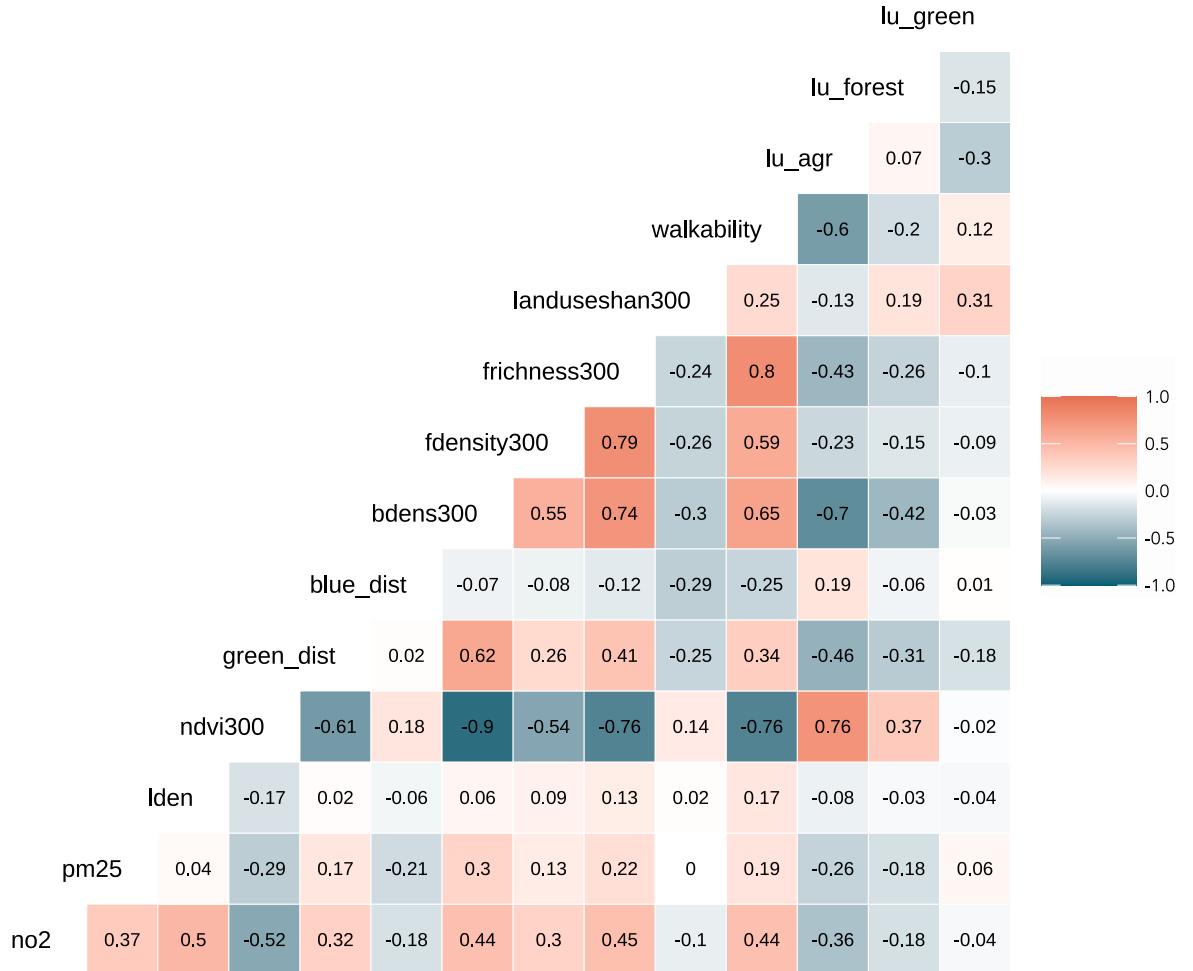
3.2 DNBC



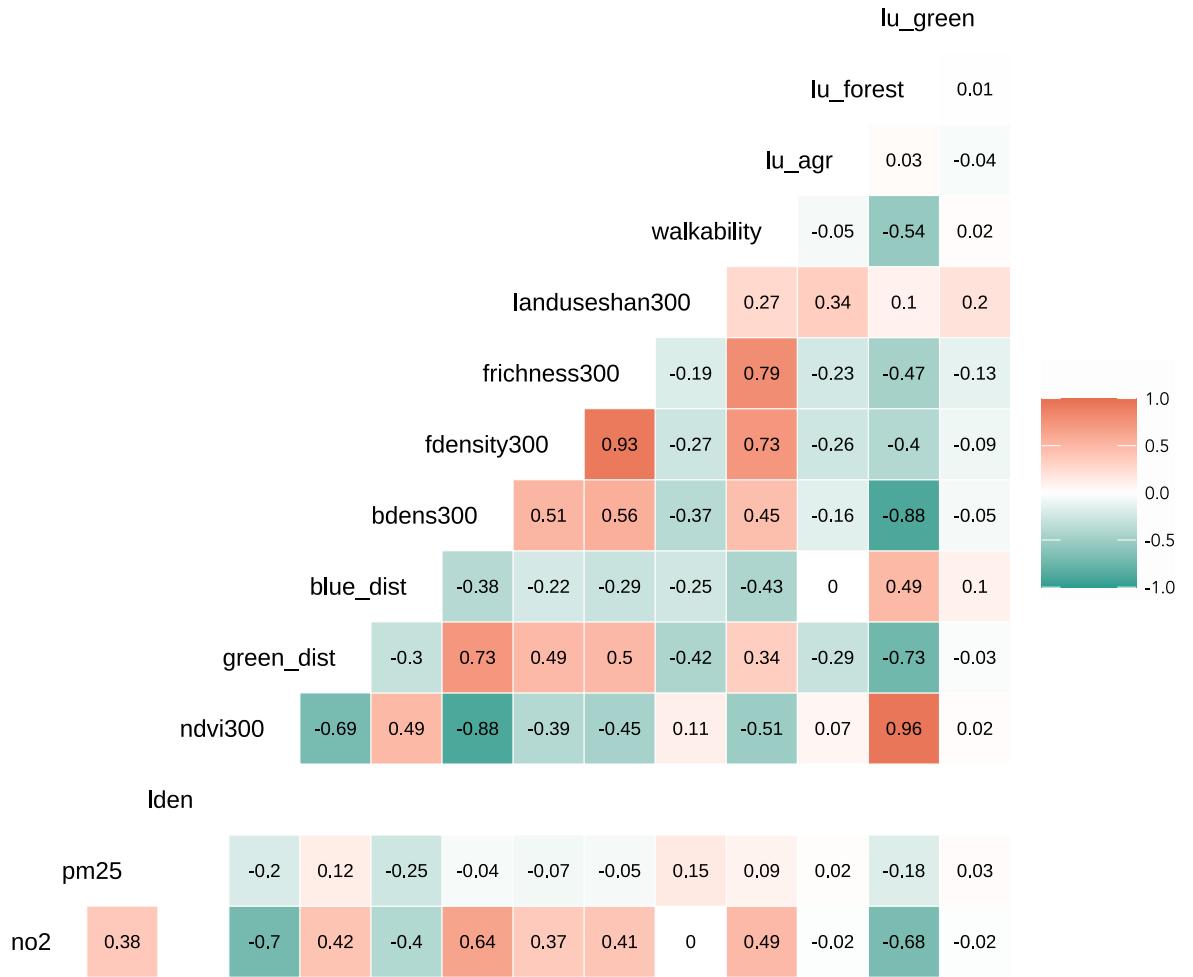
3.3 EDEN Poitieres



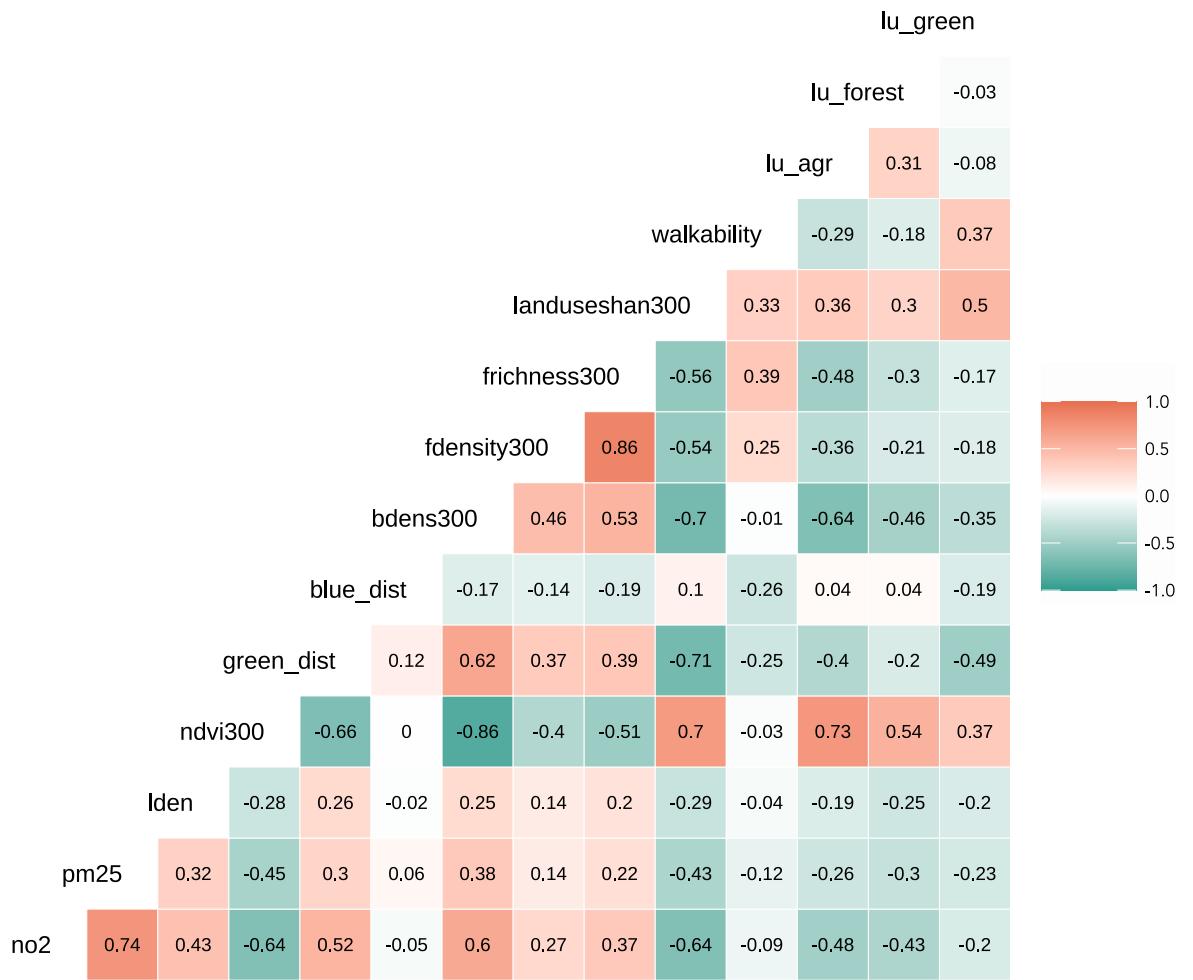
3.4 EDEN Nancy



3.5 INMA Gipuzkoa



3.6 INMA Sabadell



3.7 INMA Valencia



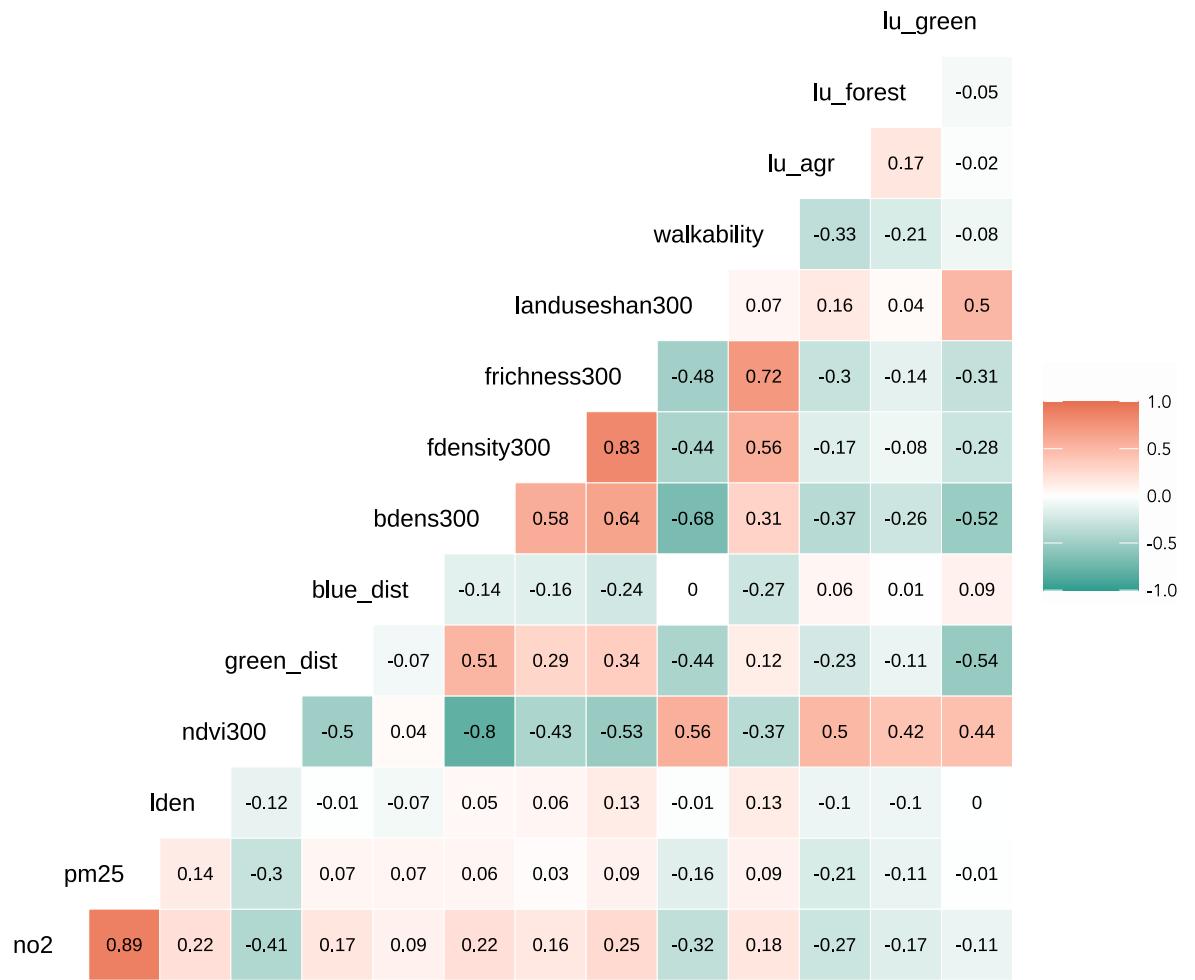
3.8 GEN-R



3.9 MoBa



3.10 NINFEA



4 Correlations between timepoints

Note I still need to get access to INMA natural space variables age 0-1.

5 Descriptive statistics for outcome

Here are the frequencies for postnatal depression. We need discuss how to code this for DNBC.

