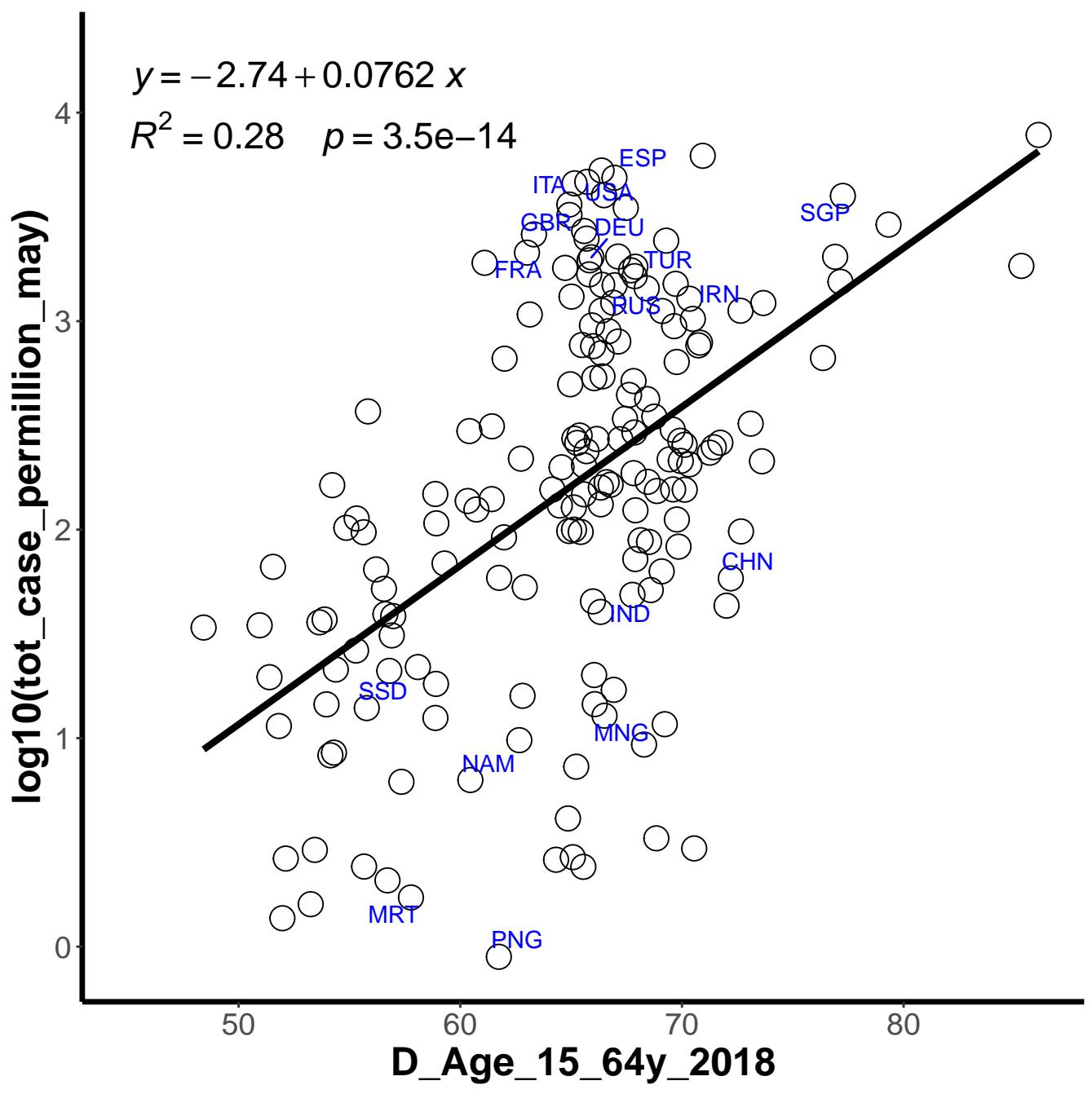
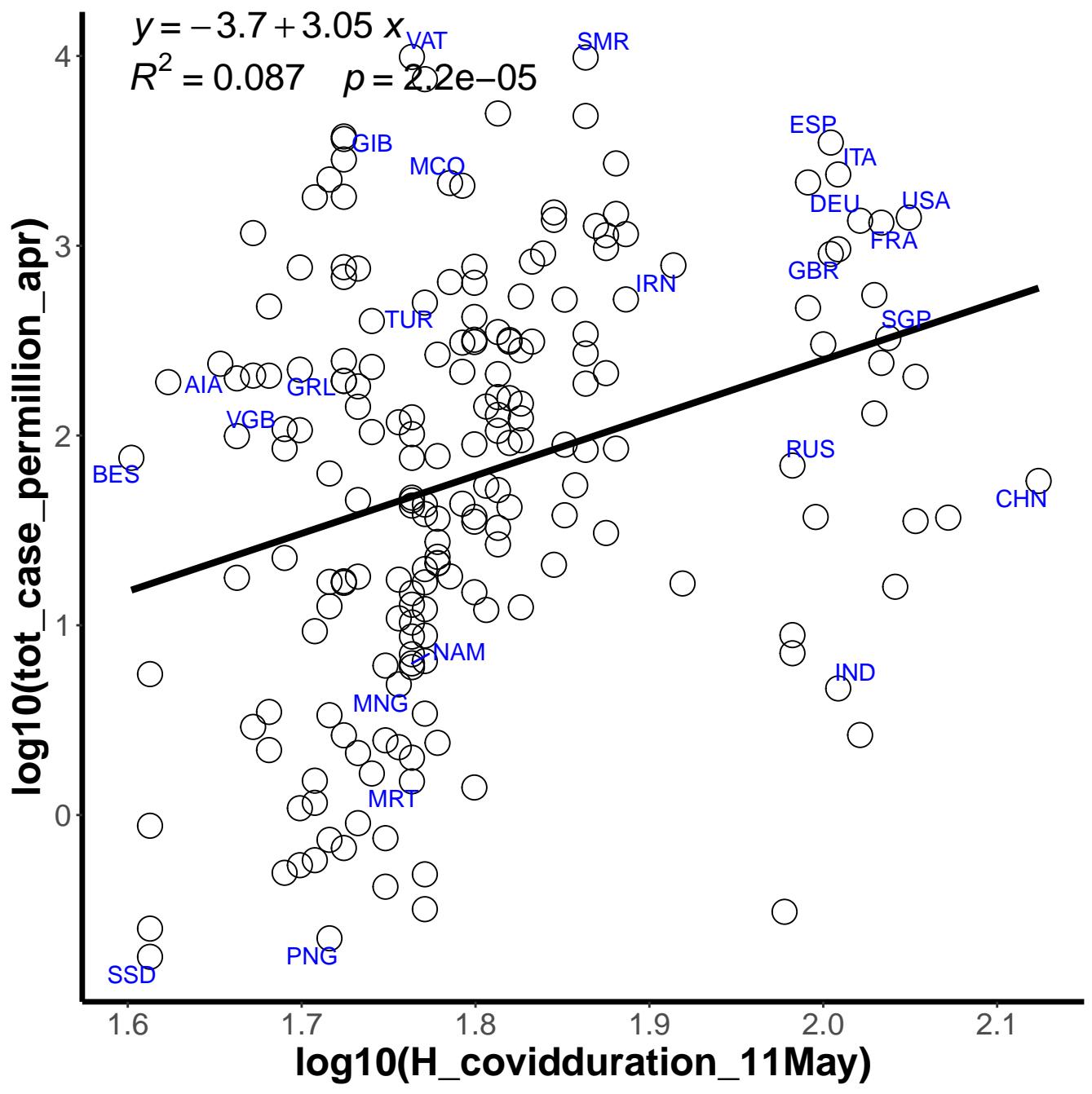
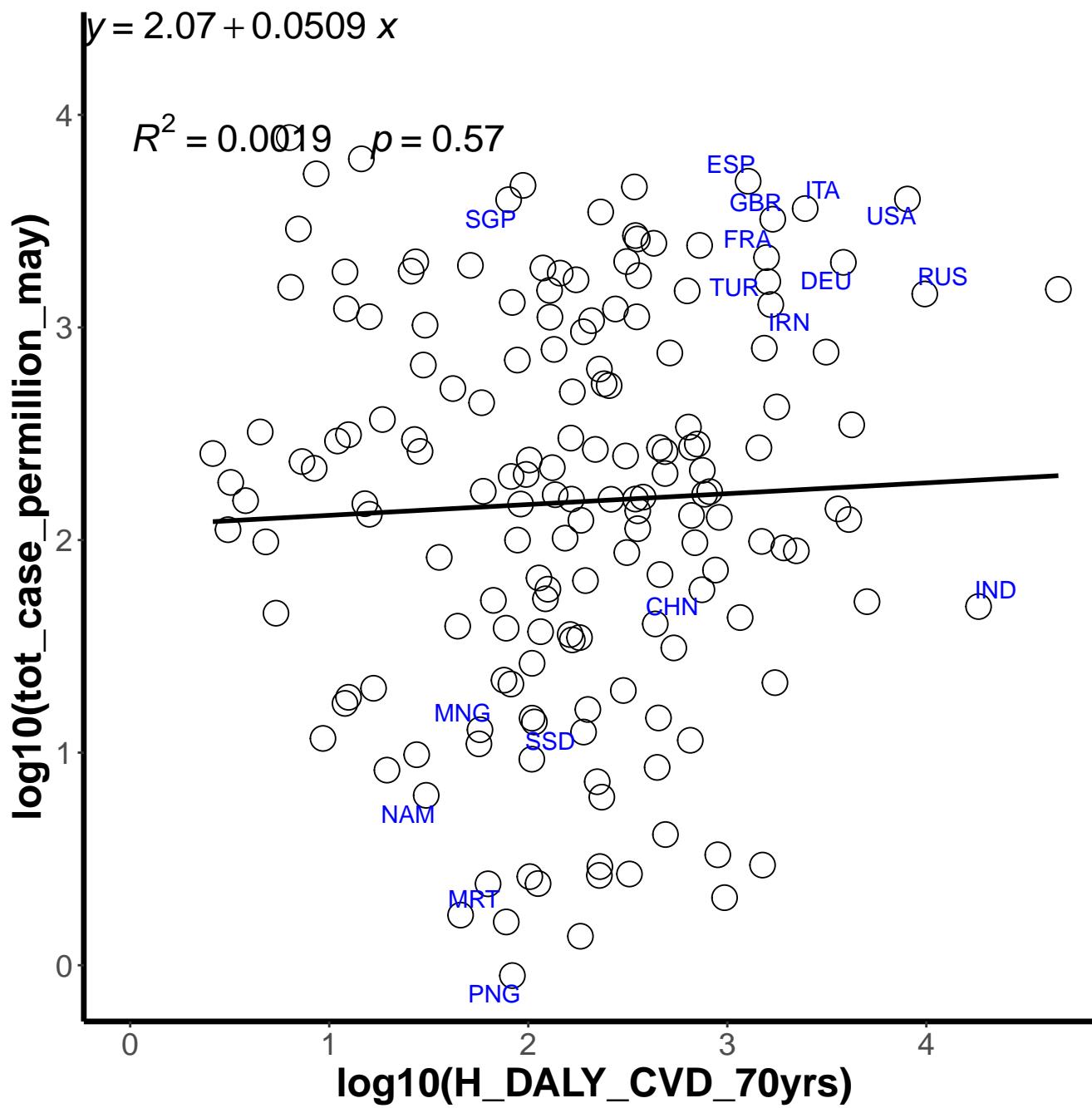


Additional File 5: Association of selected demographic, economic and meteorological variables with total COVID-19 cases in May 2020, as determined by univariate linear regression. For each plot, the X-axis shows the analysed variable and the Y-axis represents the logarithm of the country-level total COVID-19 cases per million people in May 2020. The regression equation and the associated R² and p-value are also shown. The variables analysed are described as below:

Variable	Description
D_Age_15_64y_2018	Total population between the ages 15 to 64 as a percentage of the total population in 2018.
D_Pop_over65_2018	Population ages 65 and above as a percentage of the total population in 2018.
D_Popden2018	Population density in 2018.
E_Employ_agri_%totemp_2018	Employment in agriculture, male (% total male employment)
E_Employ_ind_%totemp_2018	Employment in agriculture, male (% total male employment)
E_Employ_serv_%totemp_2018	Employment in agriculture, male (% total male employment)
E_Total_visitors2018	Number of total registered visitors in 2018.
E_Urban_pct2018	Percentage of urban living population.
G_Land_area_sqkm	Land area in square kilometers.
G_Rain_mm_Apr2016	Average rainfall in millimeters in April 2016
G_Rain_mm_Dec2016	Average rainfall in millimeters in December 2016
G_Rain_mm_Feb2016	Average rainfall in millimeters in February 2016
G_Rain_mm_Jan2016	Average rainfall in millimeters in January 2016
G_Rain_mm_Mar2016	Average rainfall in millimeters in March 2016
G_Temp_C_Apr2016	Average temperature in degrees Celsius in April 2016
G_Temp_C_Feb2016	Average temperature in degrees Celsius in February 2016
G_Temp_C_Jan2016	Average temperature in degrees Celsius in January 2016
G_Temp_C_Mar2016	Average temperature in degrees Celsius in March 2016
H_covid_duration_9Apr	A calculated estimate between April 9, 2020 and the first day of reported COVID-19 case(s) in a country
H DALY_CVD_70yrs	Disability Adjusted Life Year estimates calculated per country by cardiovascular disease incidence for people aged 70 yrs or more
H DALY_CVD_all	Disability Adjusted Life Year estimates calculated per country by cardiovascular disease incidence across all age groups
H DALY_resp_70yrs	Disability Adjusted Life Year estimates calculated per country by respiratory symptoms for people aged 70 yrs or more
H DALY_resp_all	Disability Adjusted Life Year estimates calculated per country by respiratory symptoms for all age groups
H_Diabetes2019	Diabetes prevalence refers to the percentage of people ages 20-79 who have type 1 or type 2 diabetes.
H_Total_COVID_cases	Number of total reported COVID-19 cases per day per country





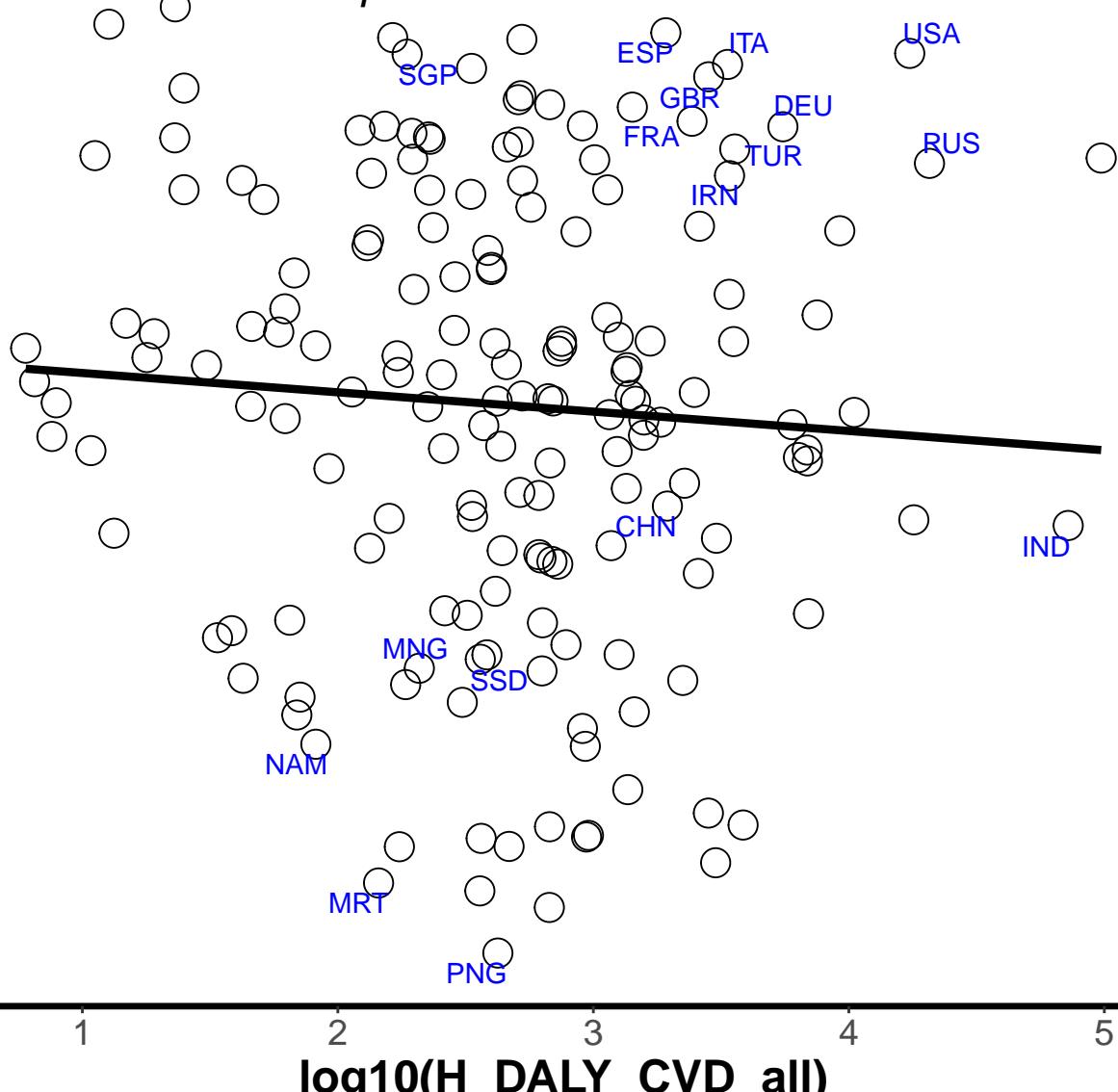


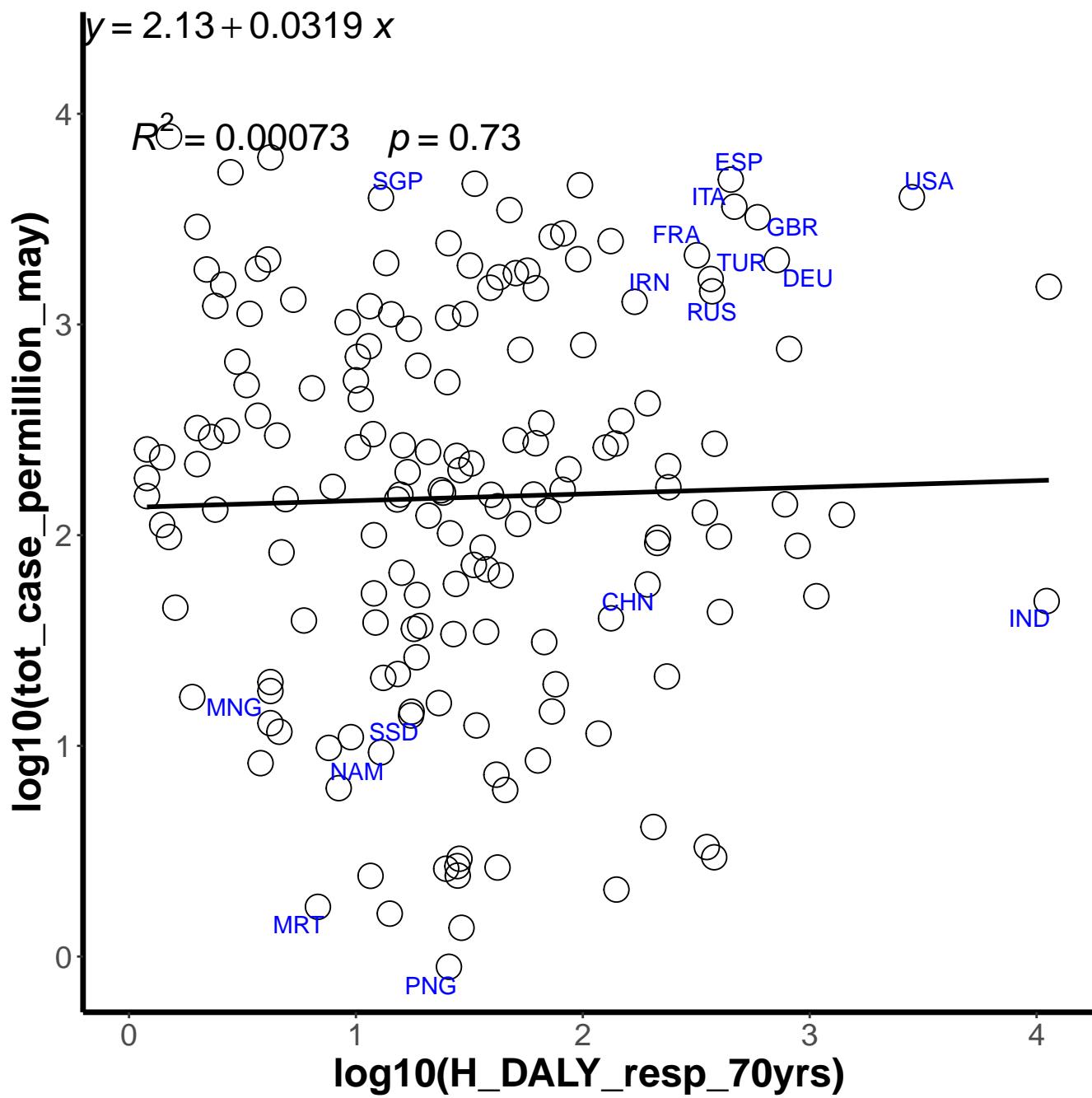
$$y = 2.38 - 0.0784 x$$

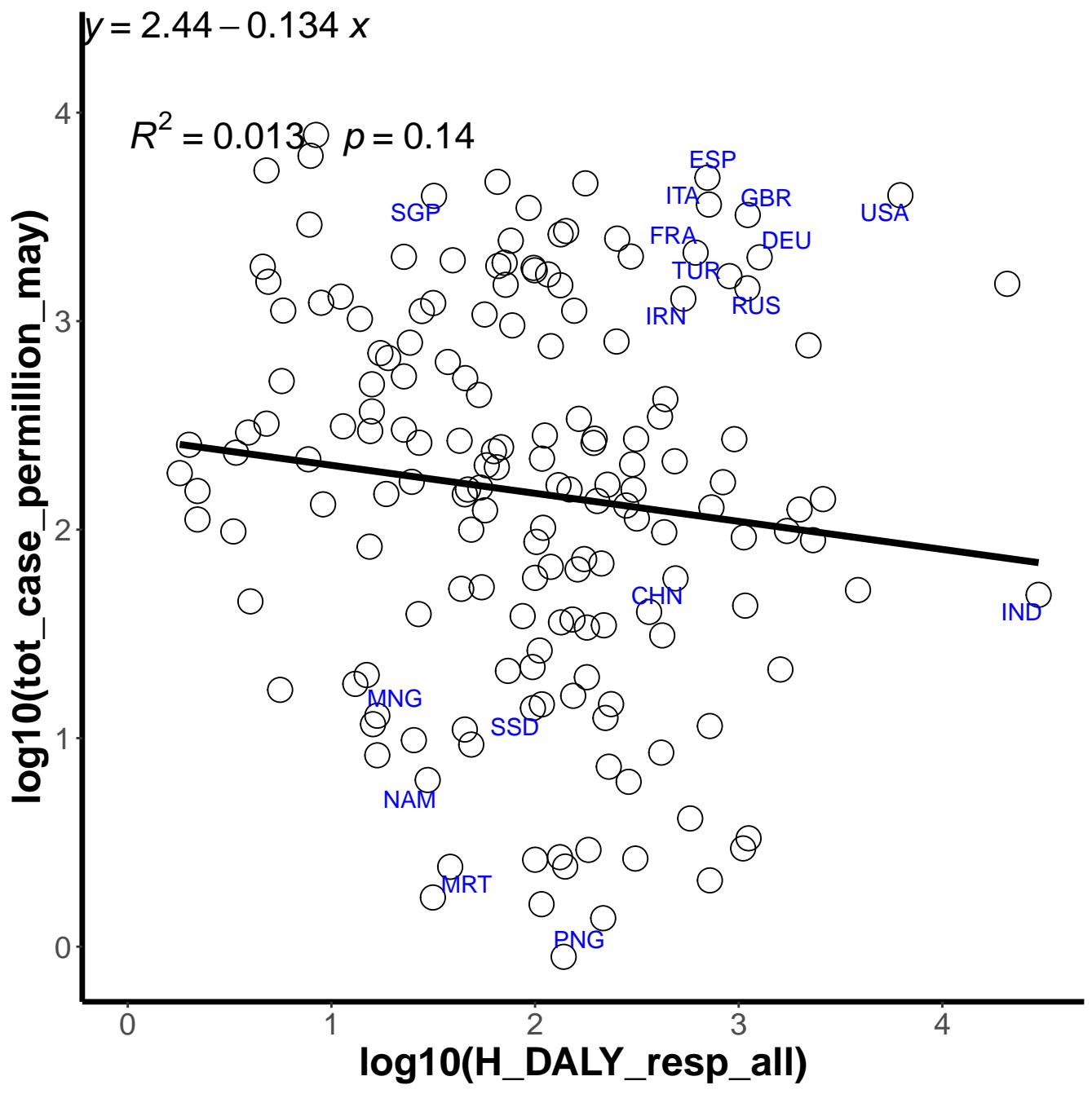
$$R^2 = 0.0044 \quad p = 0.39$$

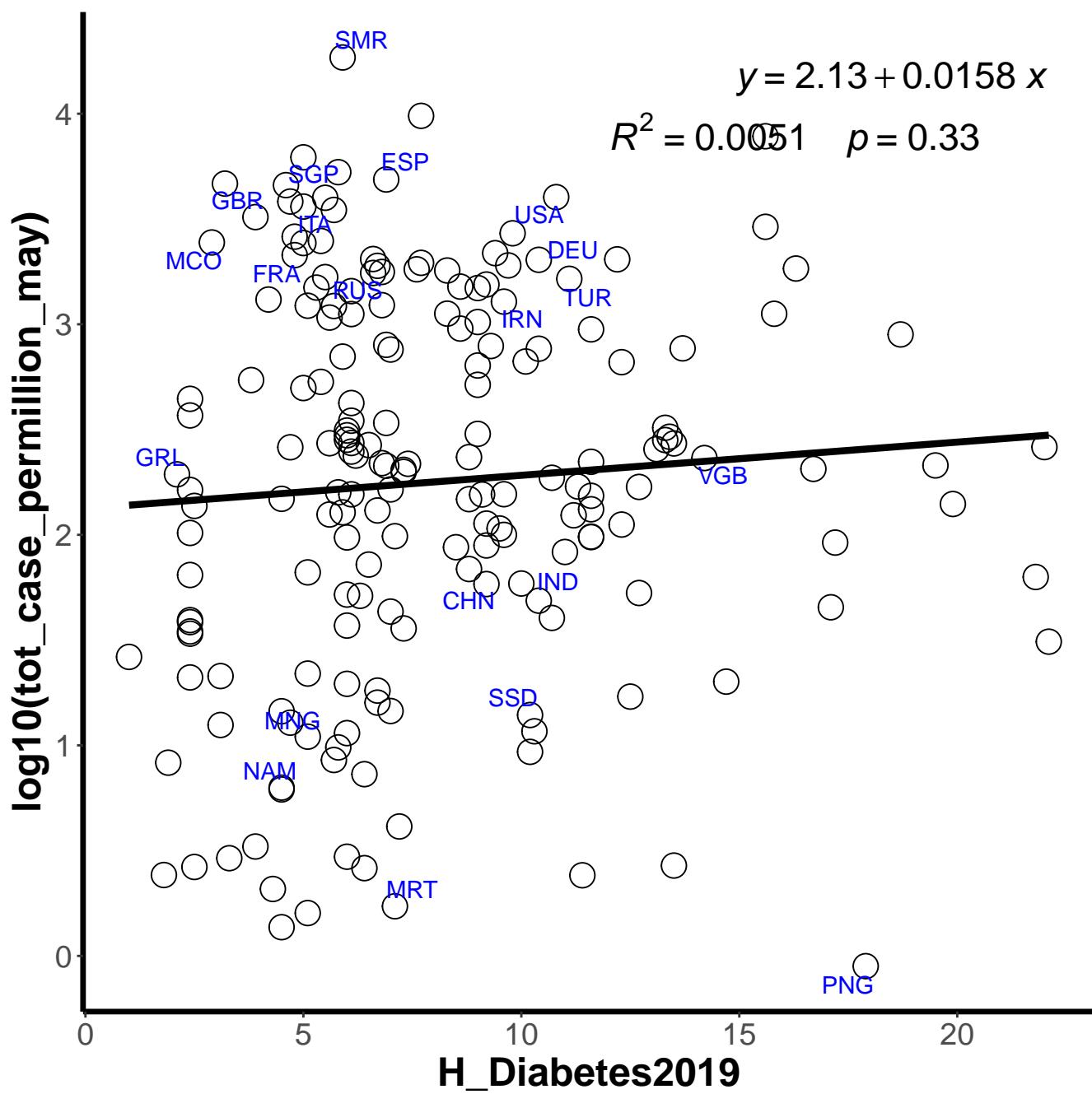
$\log_{10}(\text{tot_case_permillion_may})$

$\log_{10}(\text{H_DALY_CVD_all})$



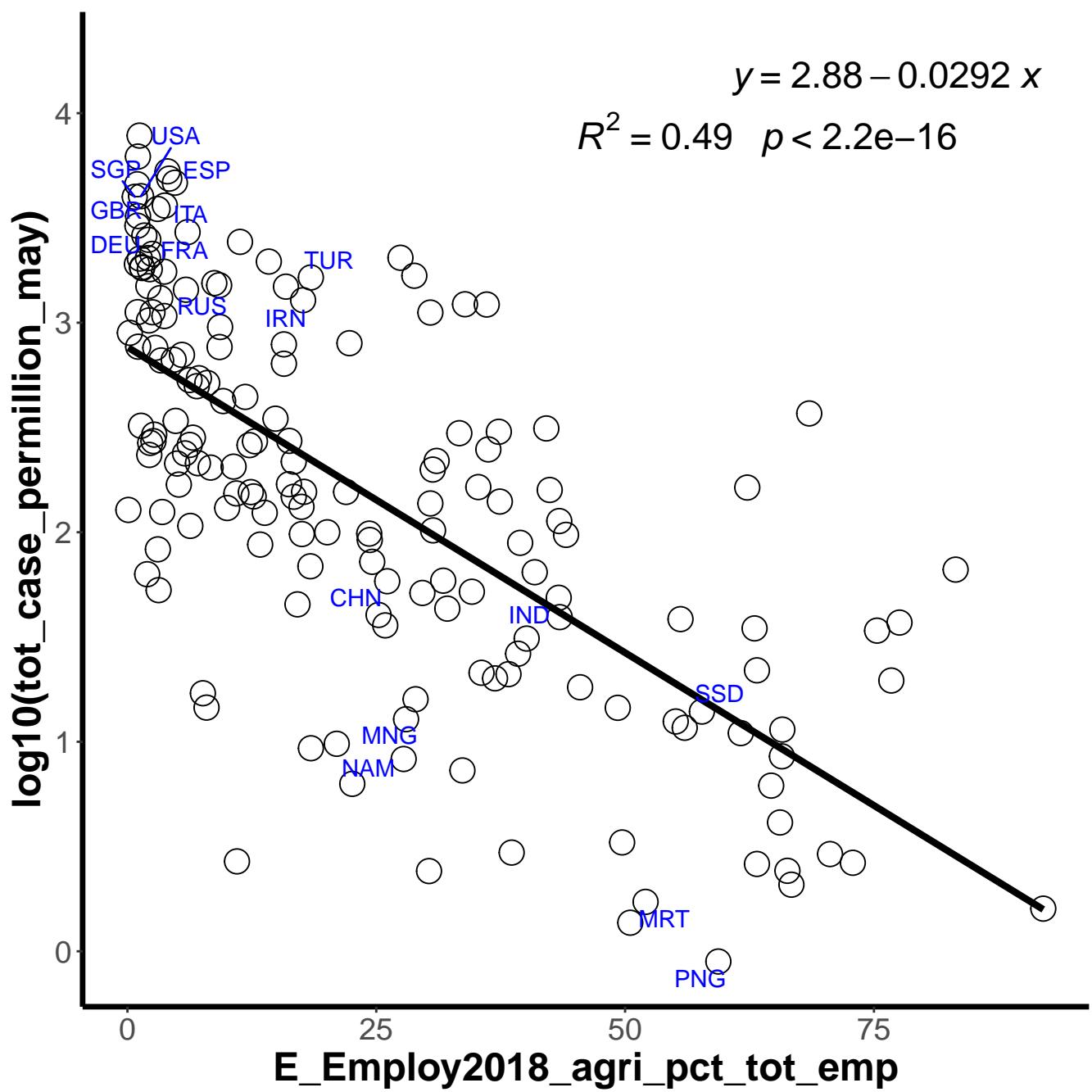


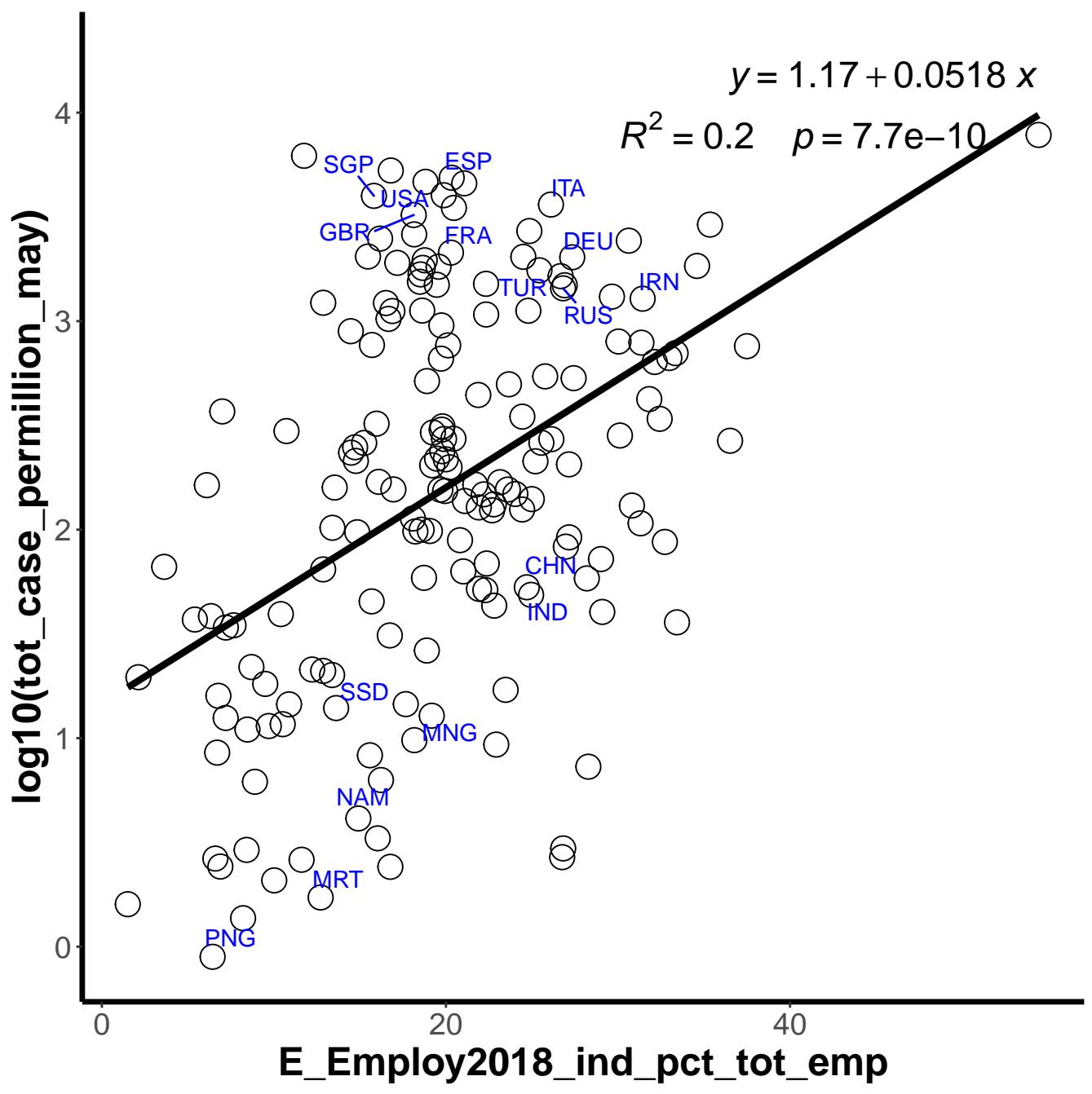




$$y = 2.88 - 0.0292 x$$

$$R^2 = 0.49 \quad p < 2.2e-16$$



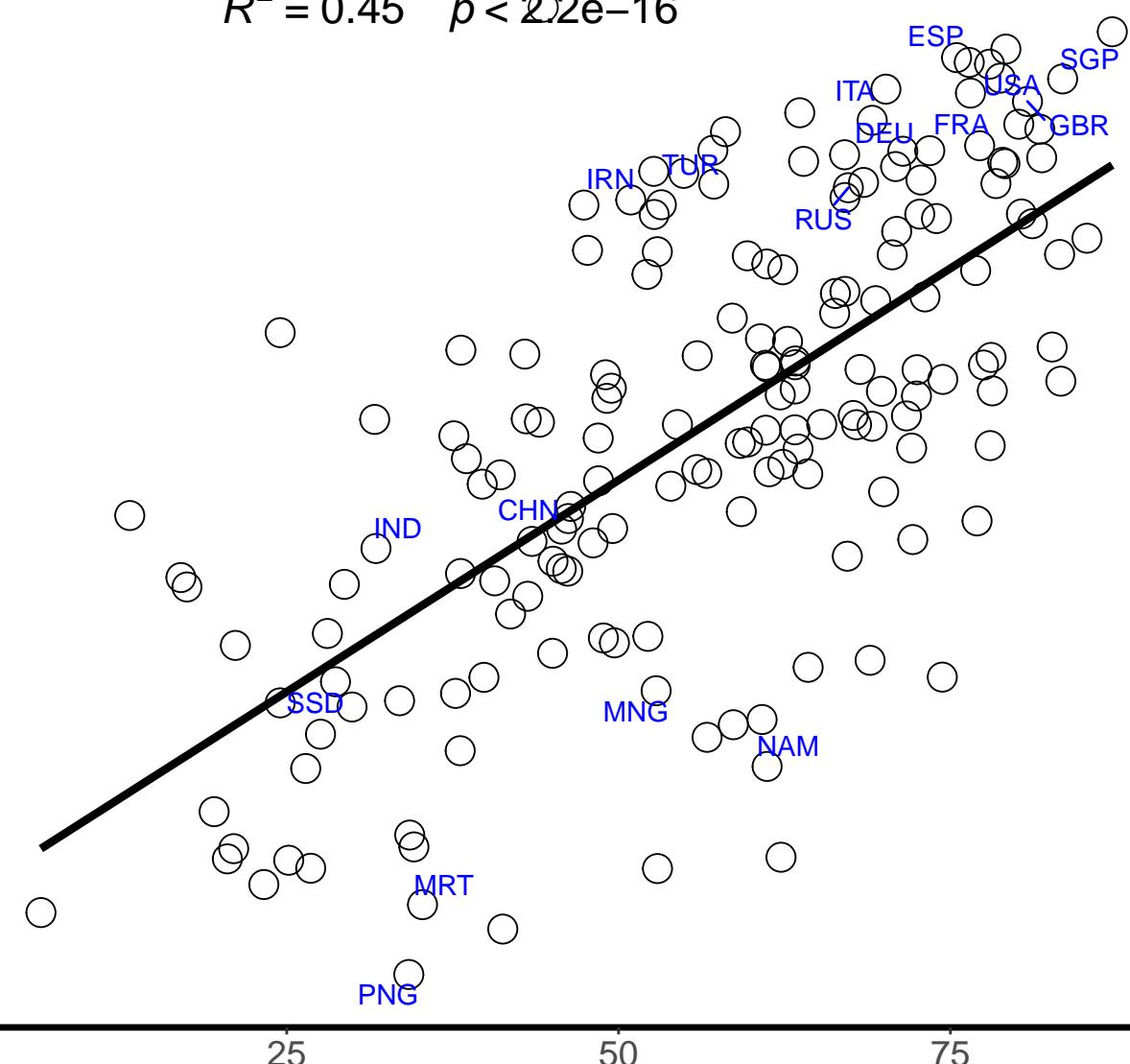


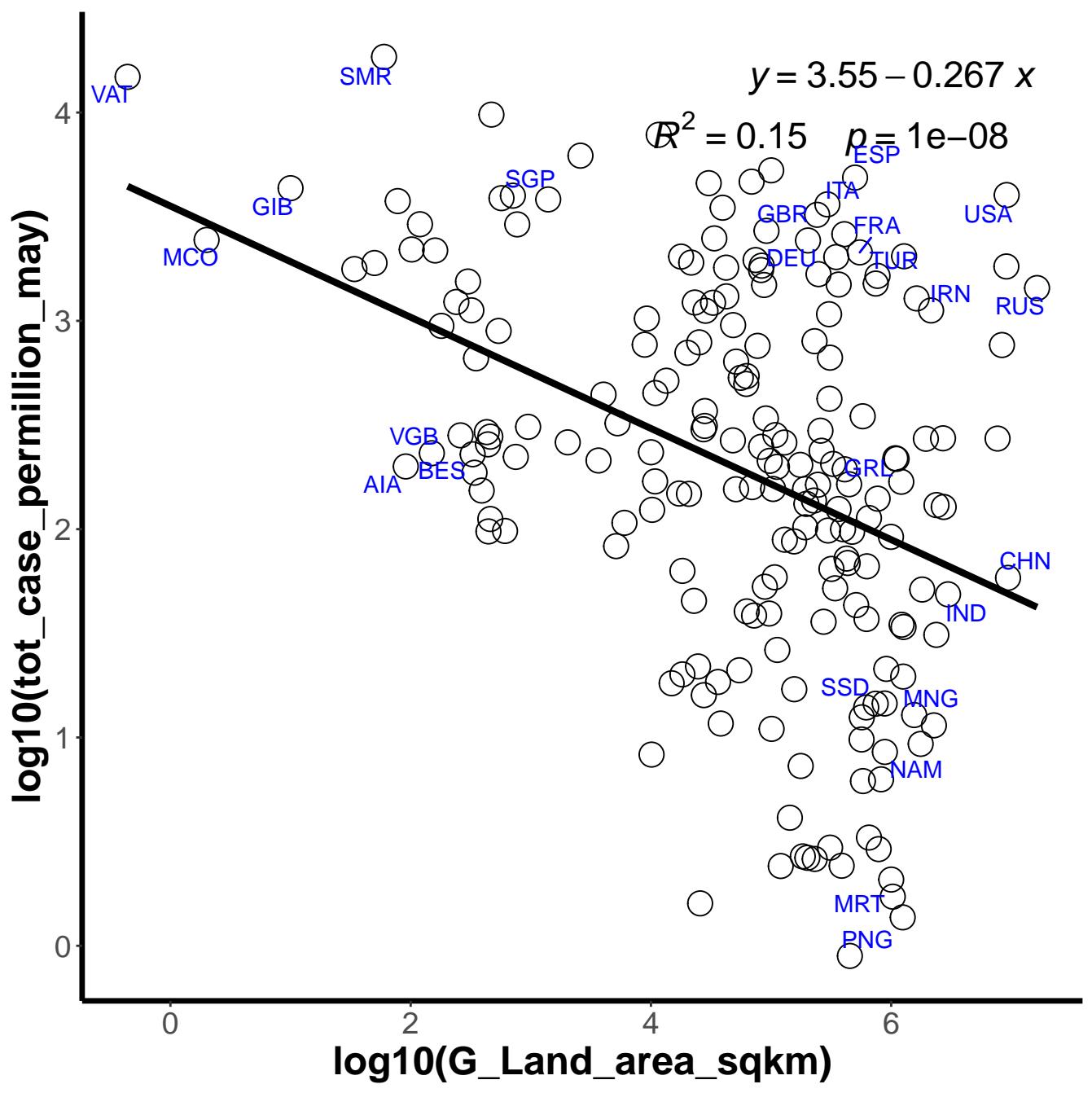
$$y = 0.24 + 0.0345 x$$

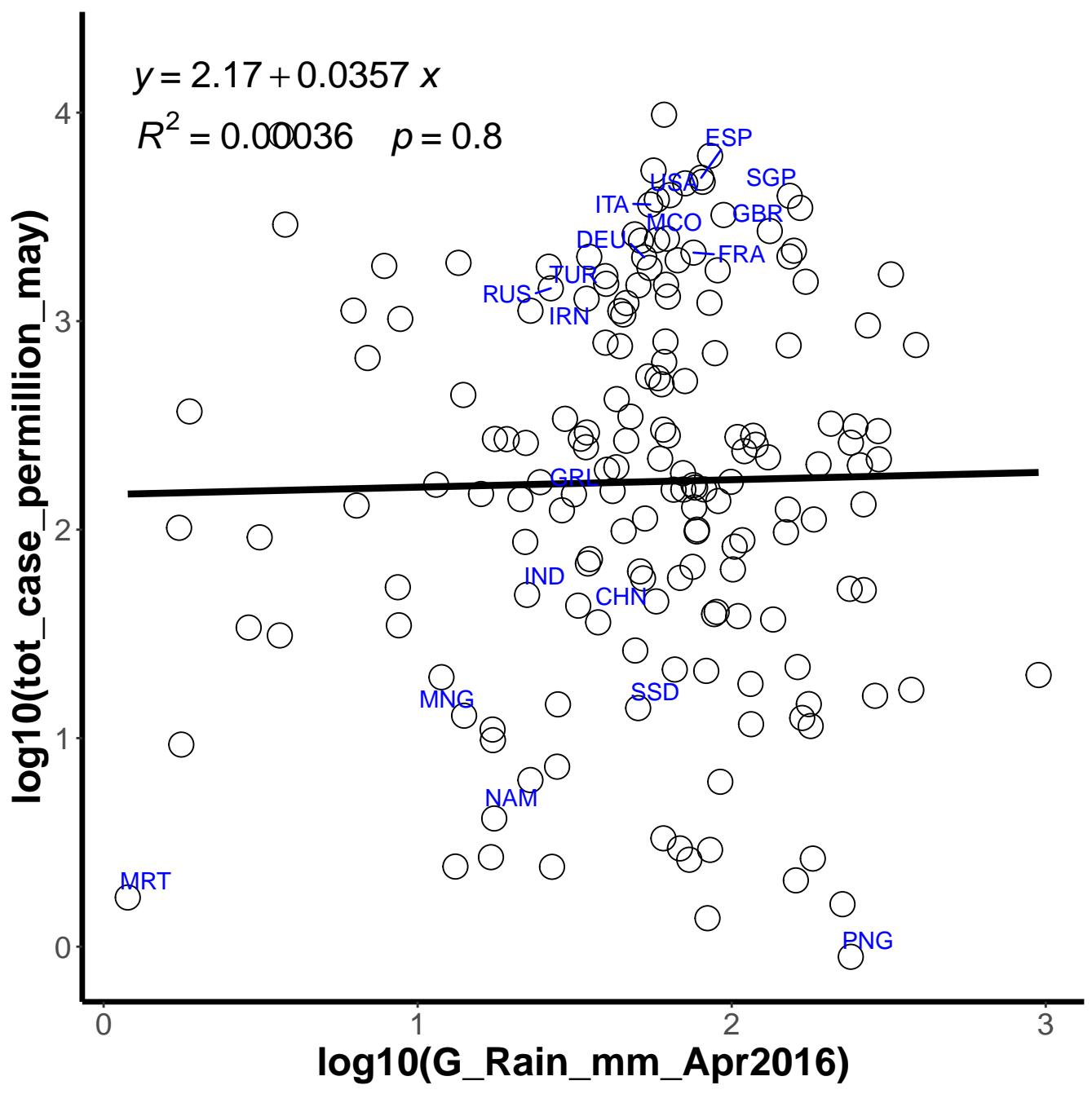
$$R^2 = 0.45 \quad p < 2.2e-16$$

log10(tot_case_permission_may)

E_Employ2018_serv_pct_tot_emp





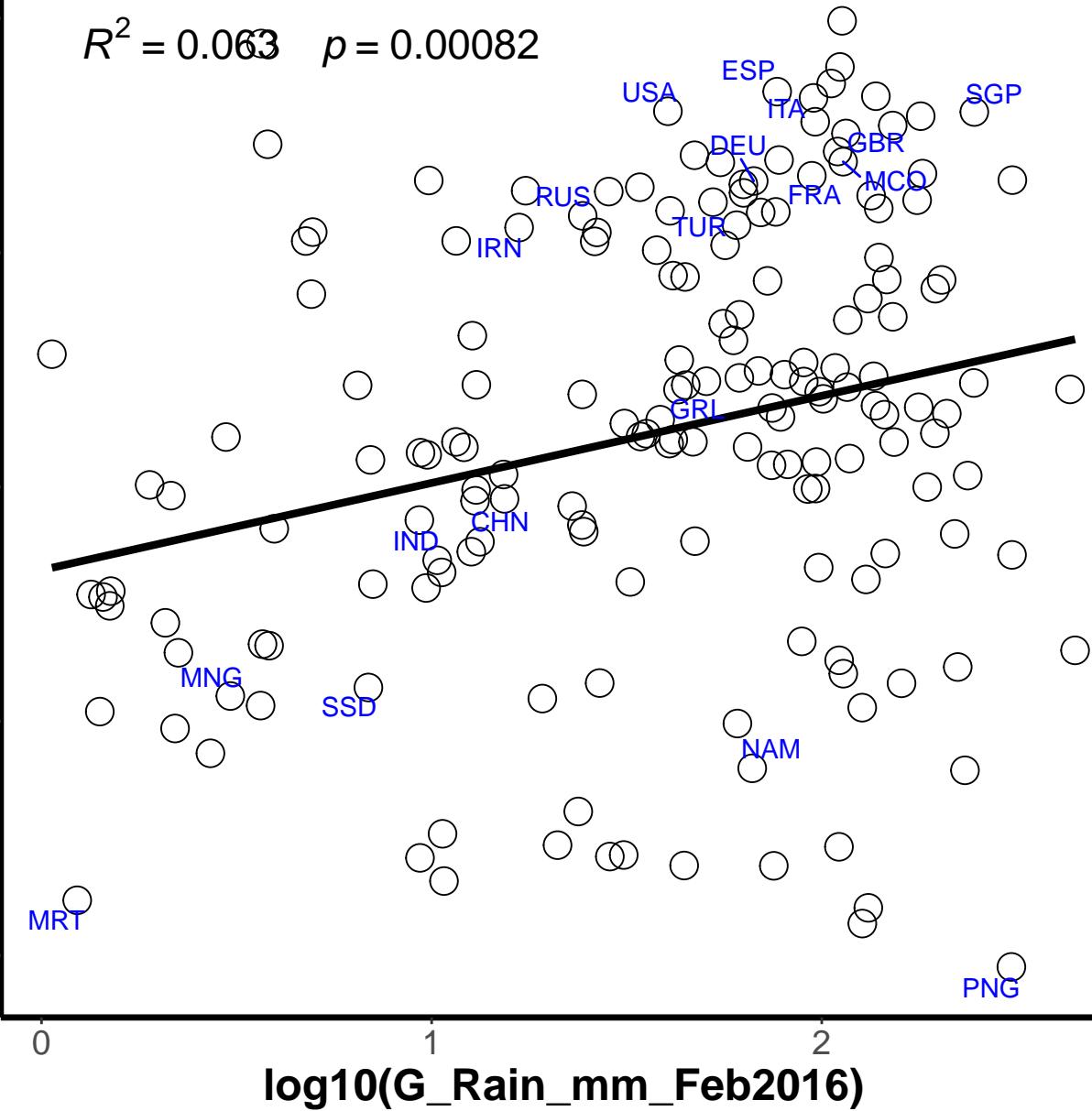


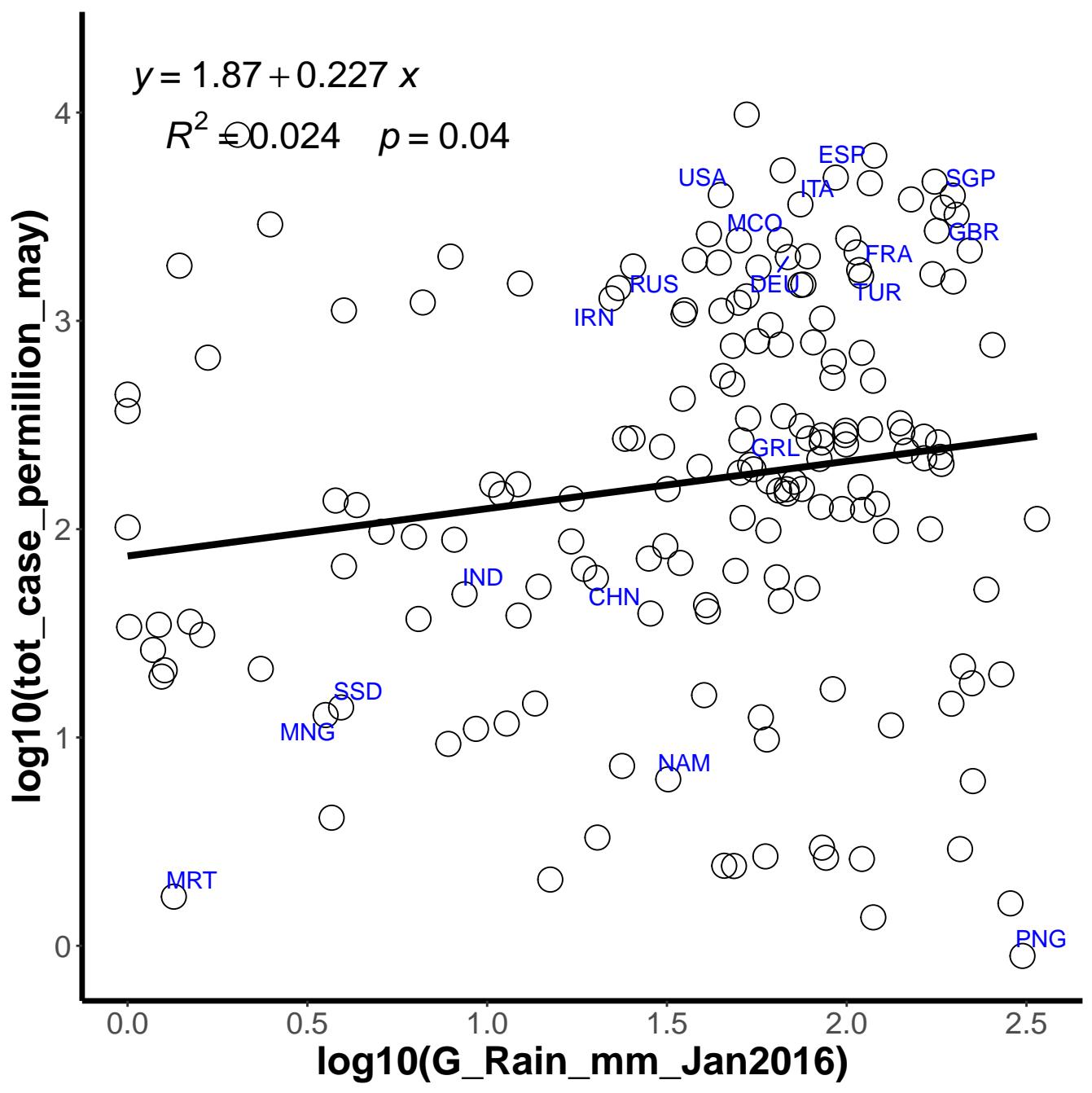
$$y = 1.65 + 0.372 x$$

$$R^2 = 0.063 \quad p = 0.00082$$

log10(tot_case_permission_may)

log10(G_Rain_mm_Feb2016)



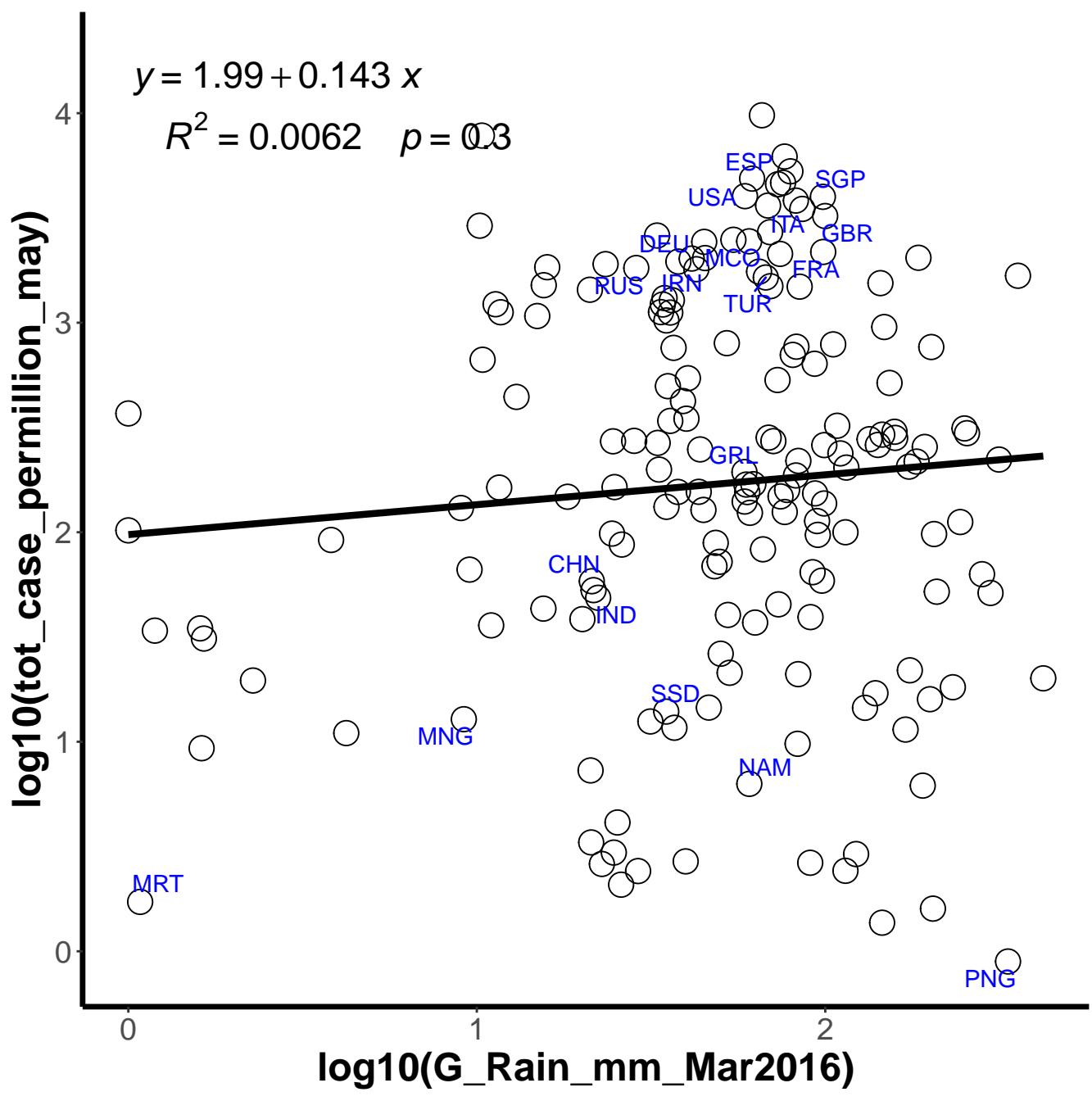


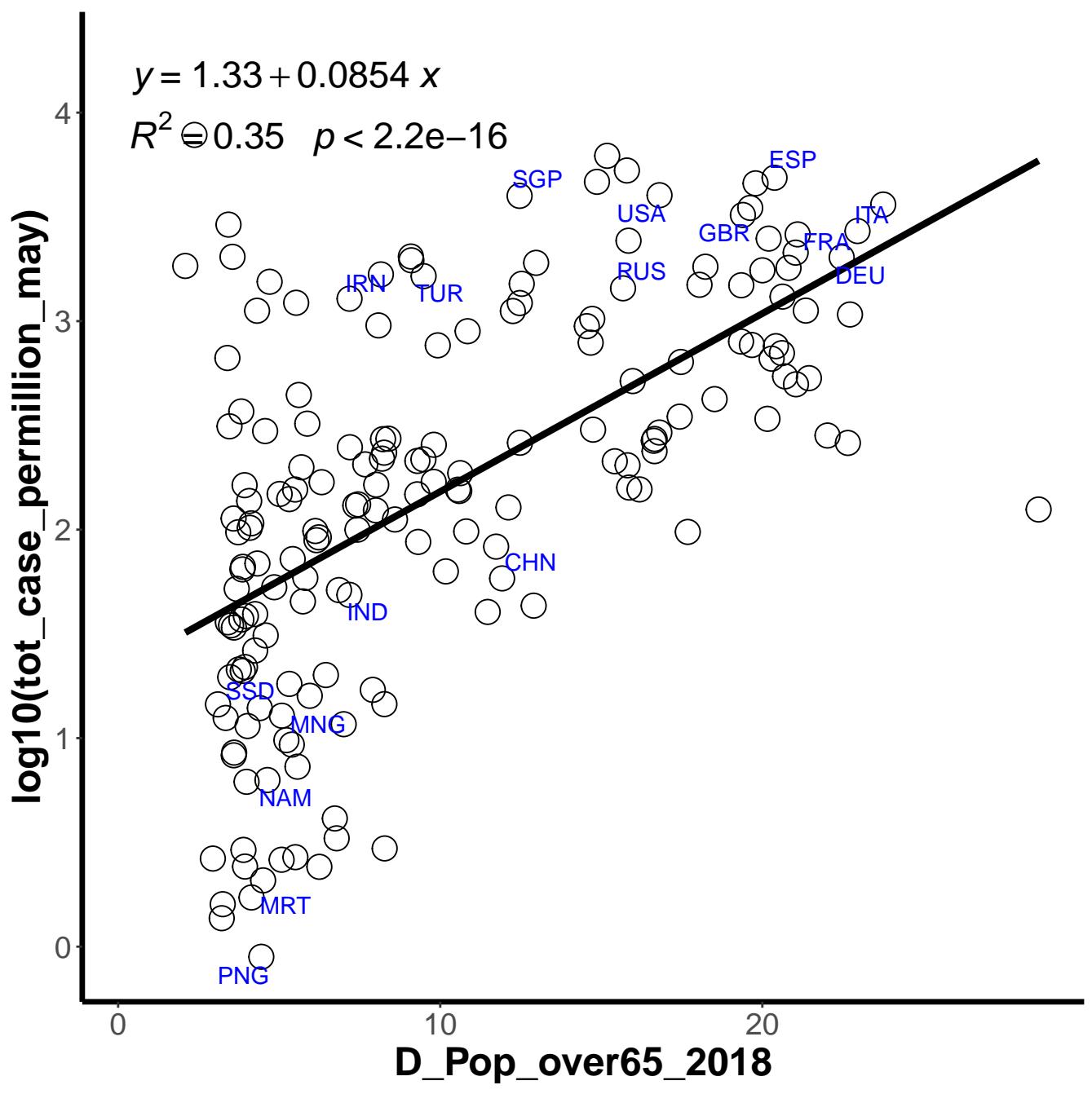
$$y = 1.99 + 0.143 x$$

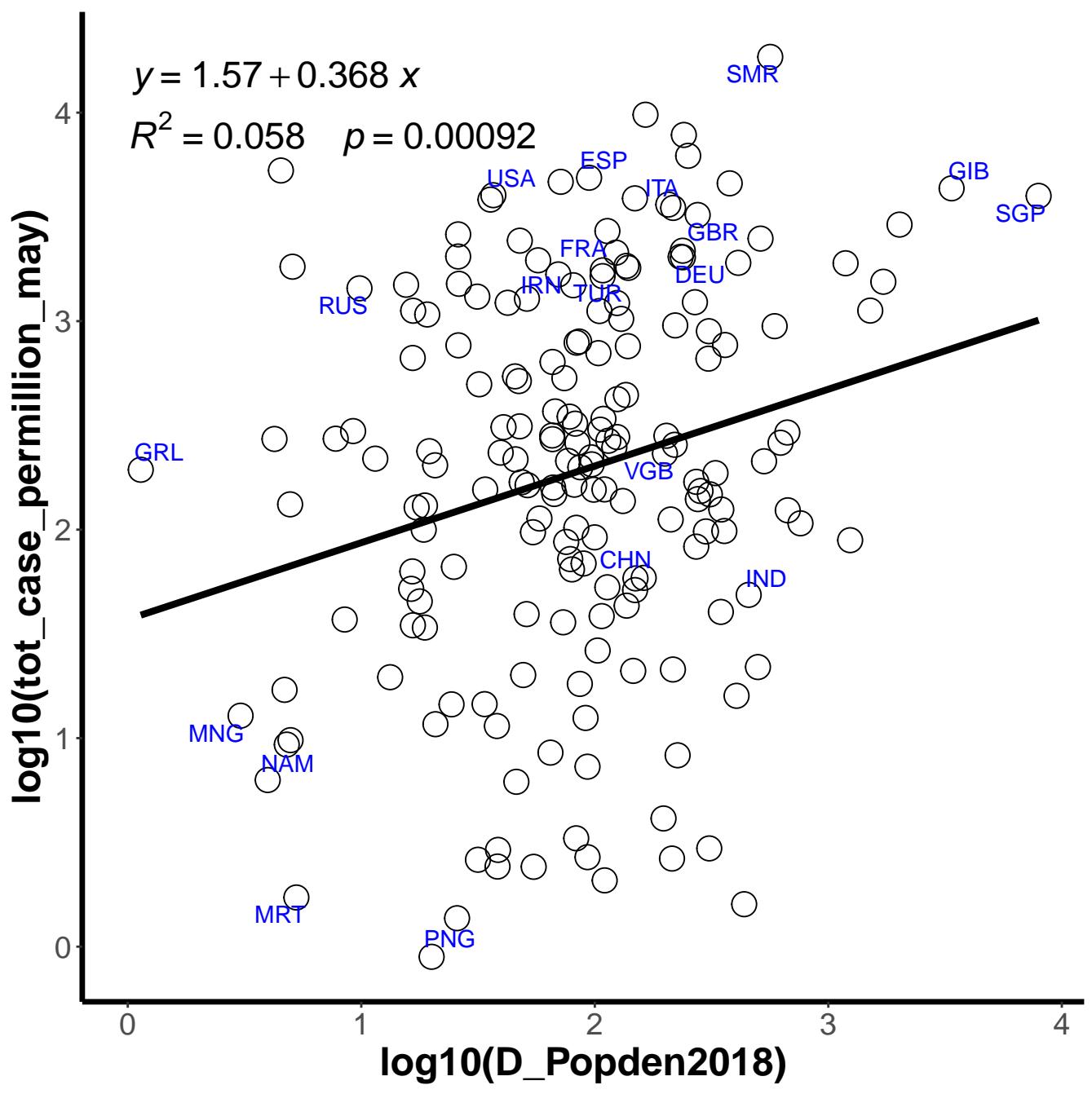
$$R^2 = 0.0062 \quad p = 0.3$$

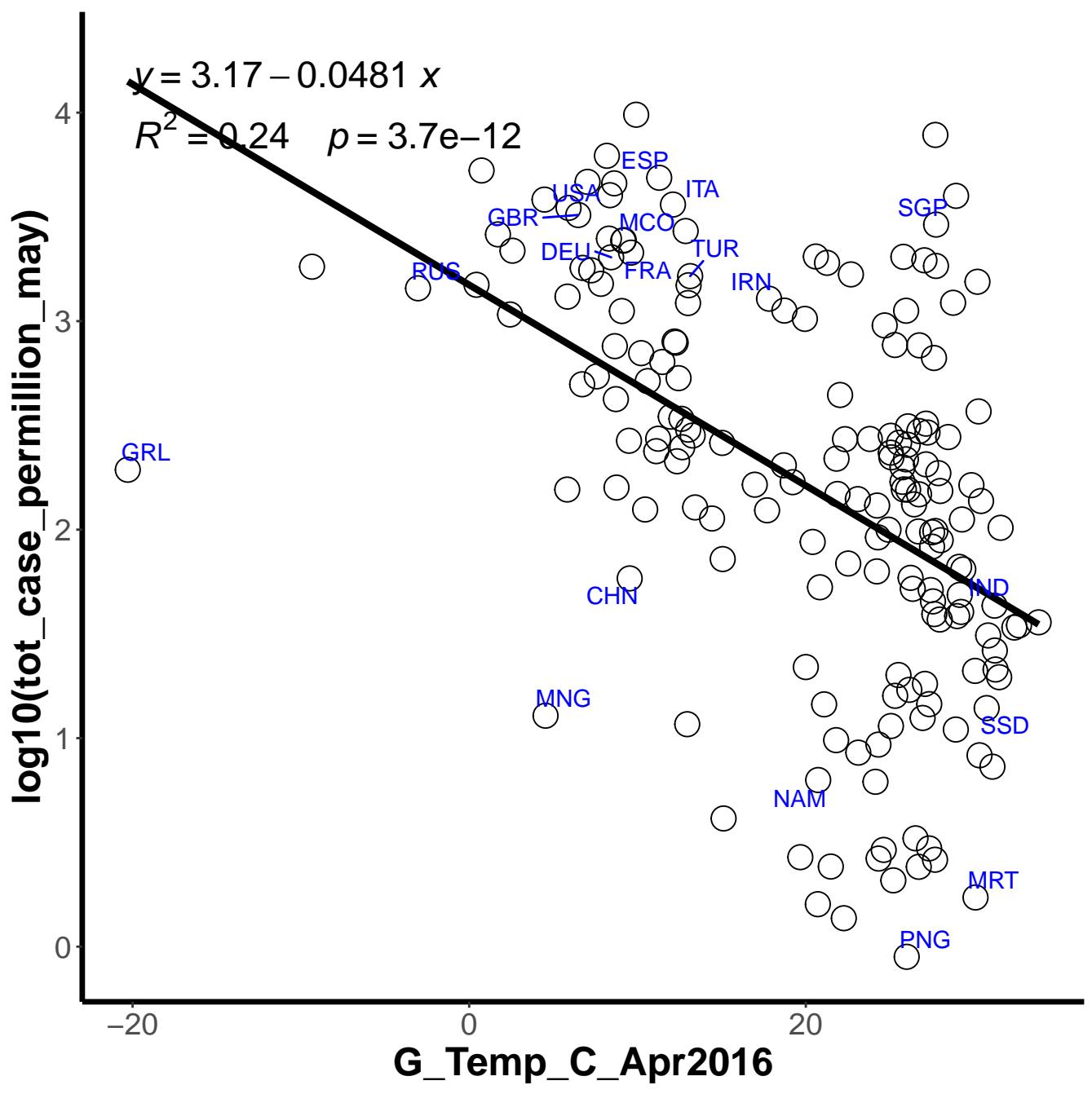
log₁₀(tot_case_permission_may)

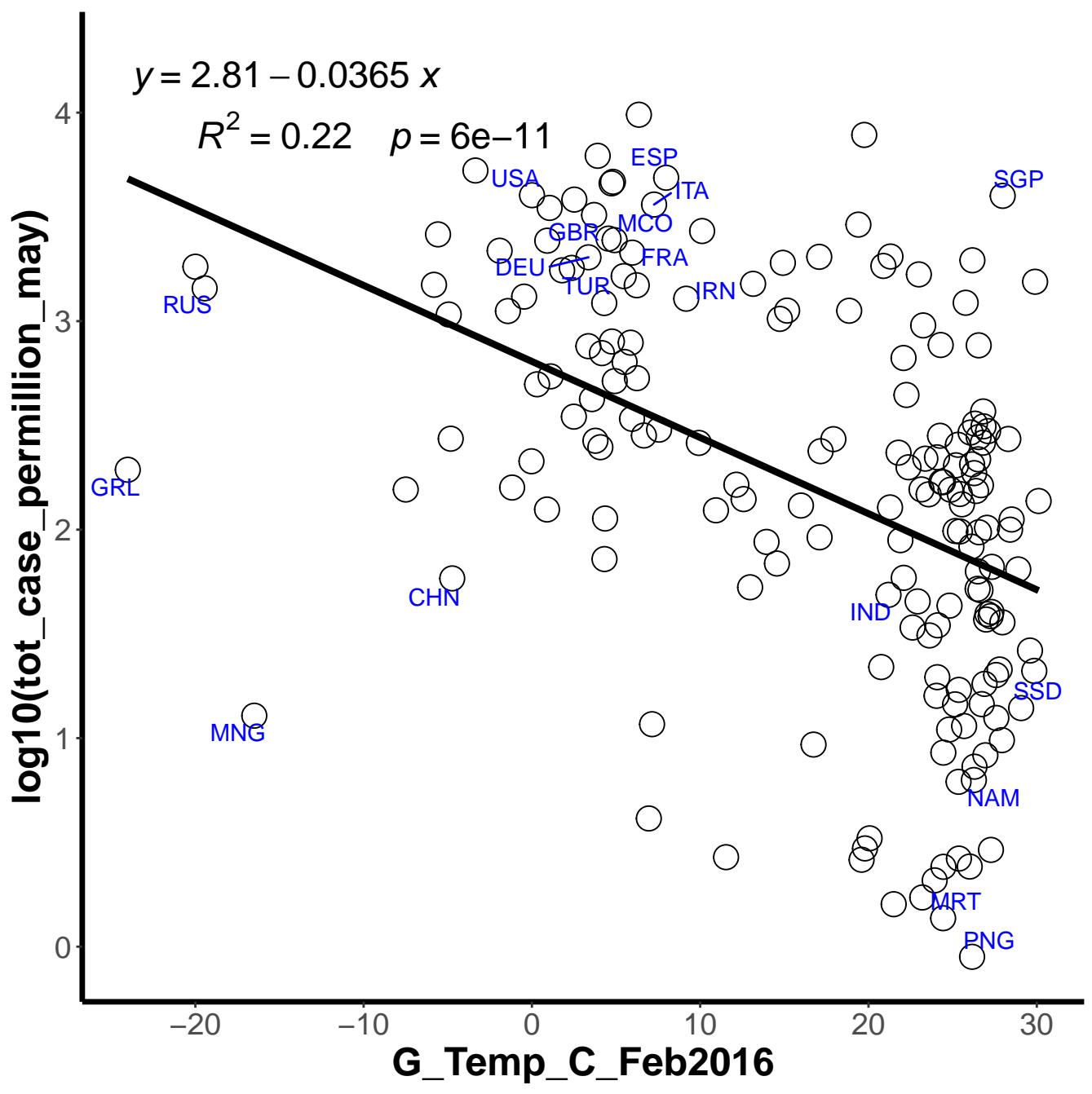
log₁₀(G_Rain_mm_Mar2016)

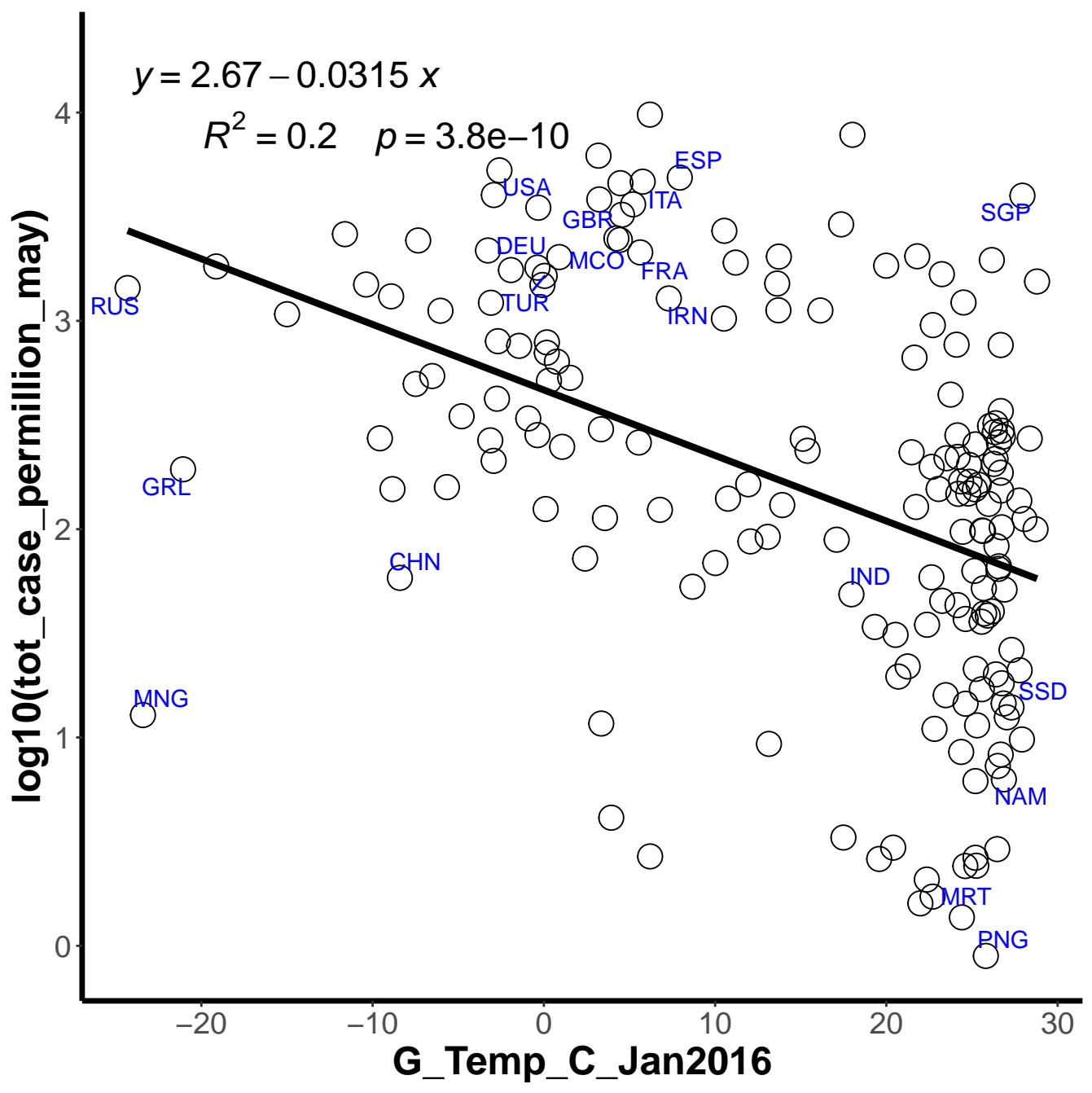


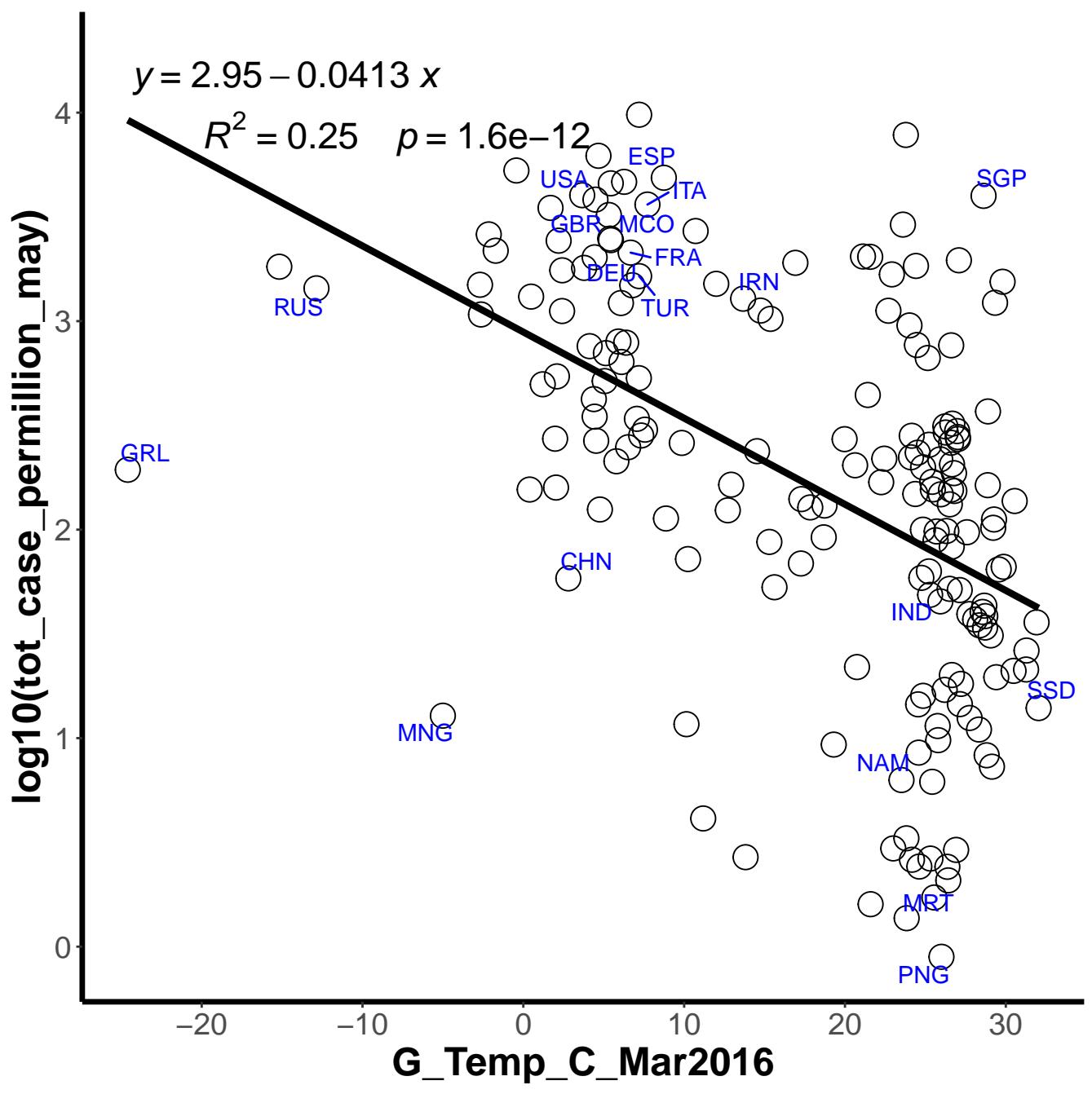


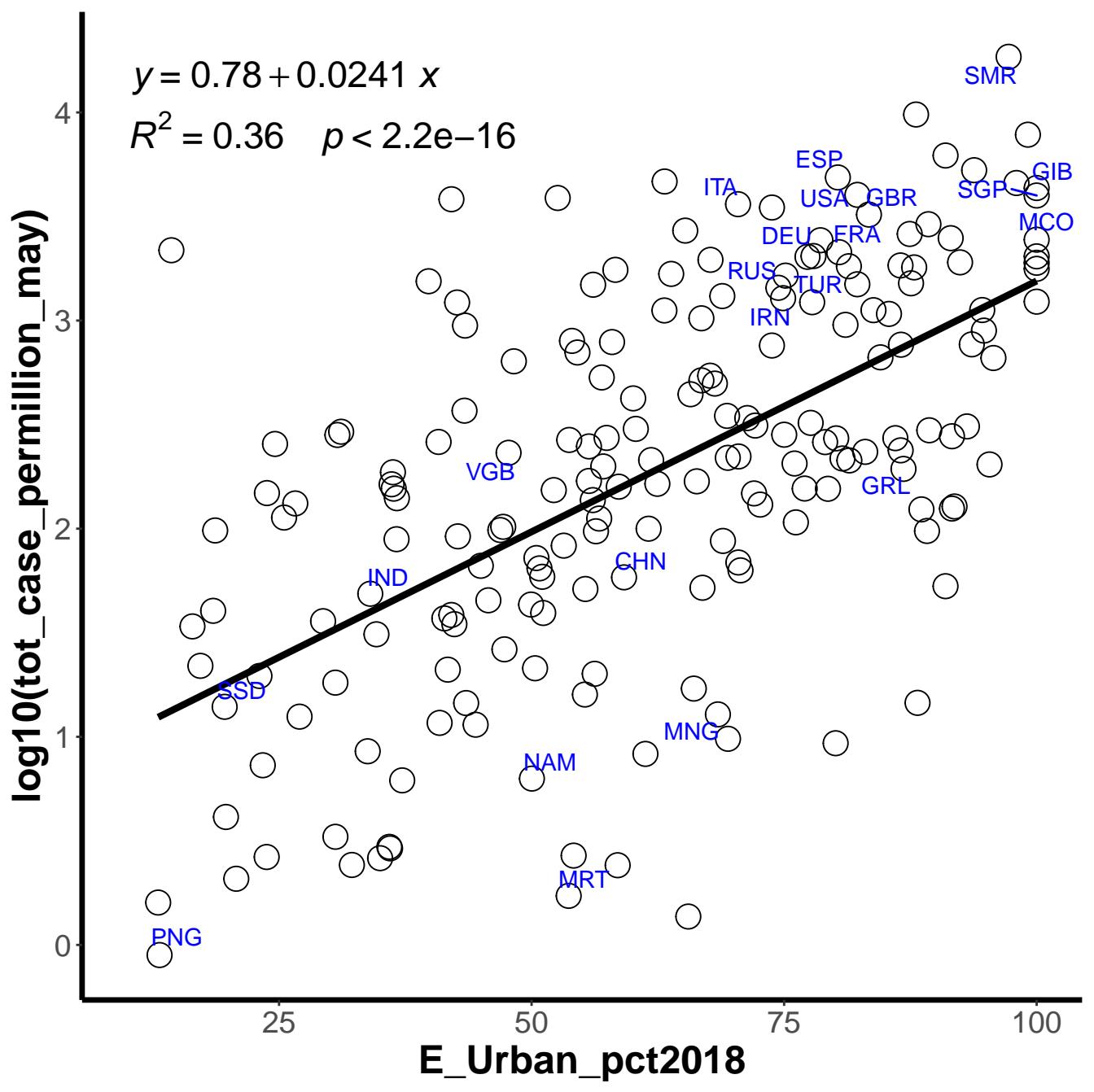












$$y = -1.54 + 0.693 x$$

$$R^2 = 0.37 \quad p < 2.2e-16$$

