Changes in South American Surface Ozone Trends: Exploring the Influences of Precursors and Extreme Events

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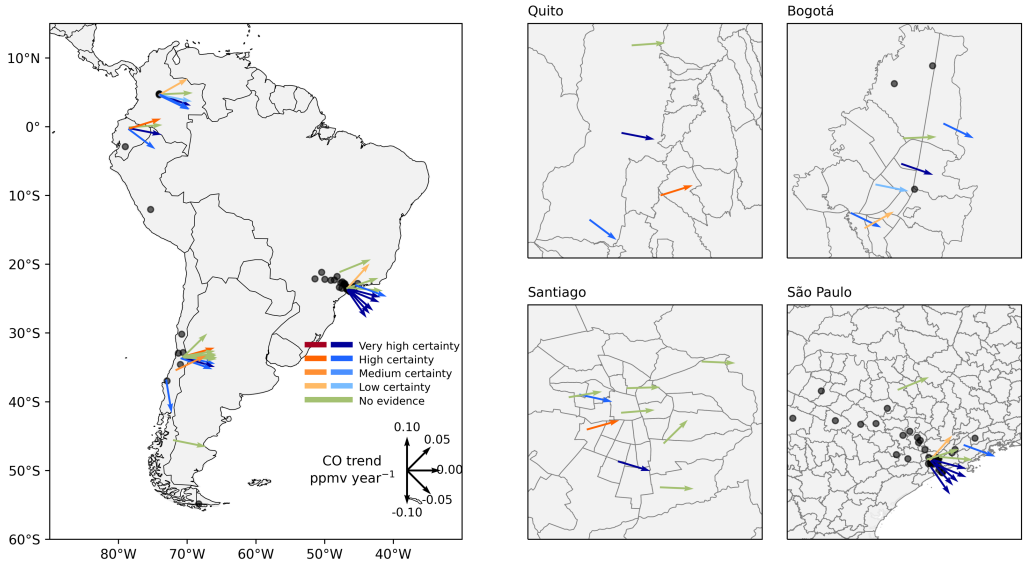

Figure S1: Ground-level carbon monoxide trends in ppbv year^{-1} and reliability levels calculated from available South American monitoring stations (left panel). When one or more change points are identified, the trend starts from the latest change point detected. The right panels focus on Bogotá, Quito, Santiago and São Paulo. The black dots denote stations with no carbon monoxide monitoring or that did not meet data quality criteria.

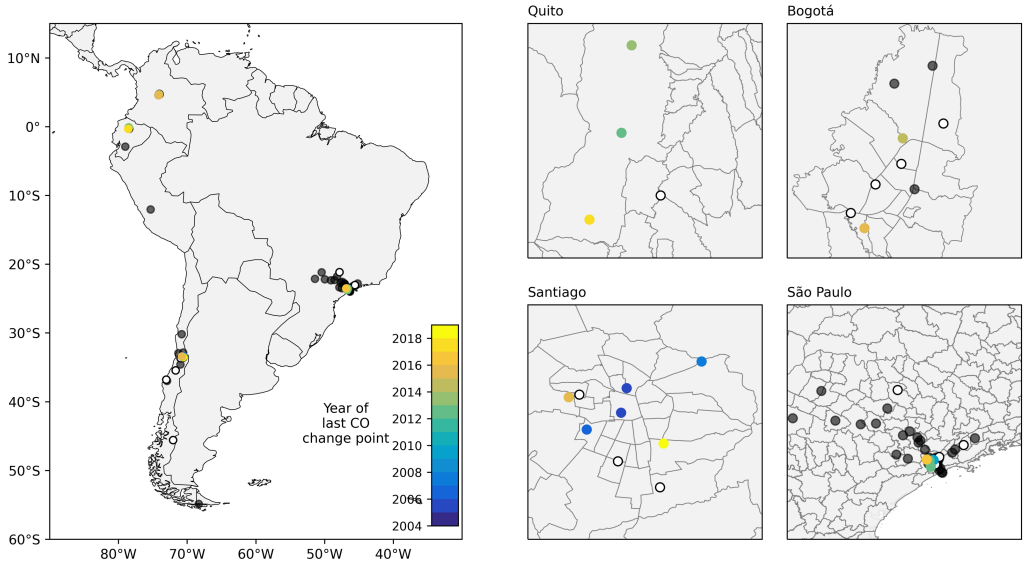

Figure S2: Year of the last detected carbon monoxide trend change point in South American monitoring stations (left panel). The right panels focus on Bogotá, Quito, Santiago and São Paulo. The black dots denote stations with no carbon monoxide monitoring or that did not meet data quality criteria and the white dots denote stations with no trend change point detected.

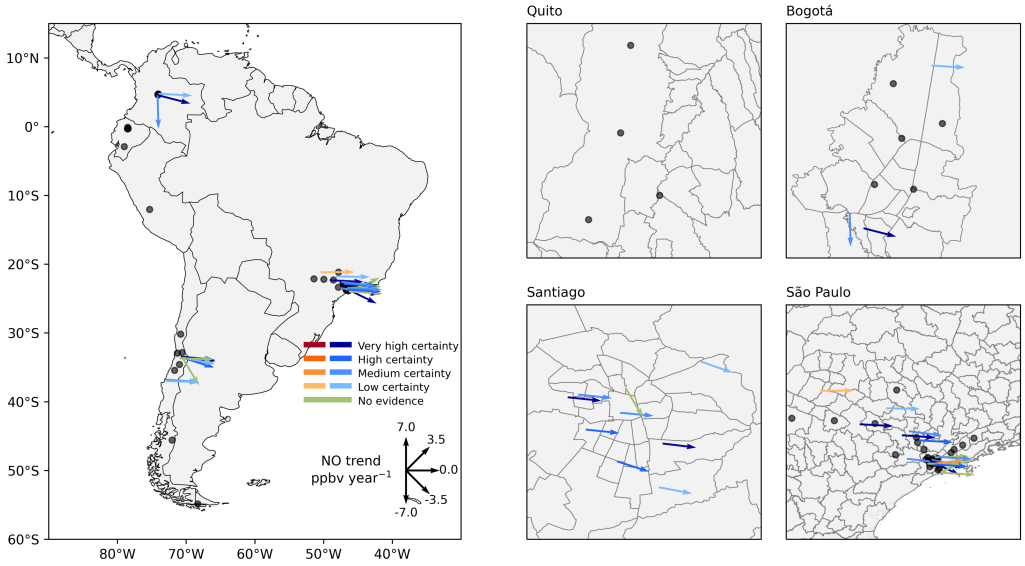

Figure S3: Ground-level nitric oxide trends in ppbv year^{-1} and reliability levels calculated from available South American monitoring stations (left panel). When one or more change points are identified, the trend starts from the latest change point detected. The right panels focus on Bogotá, Quito, Santiago and São Paulo. The black dots denote stations with no nitric oxide monitoring or that did not meet data quality criteria.

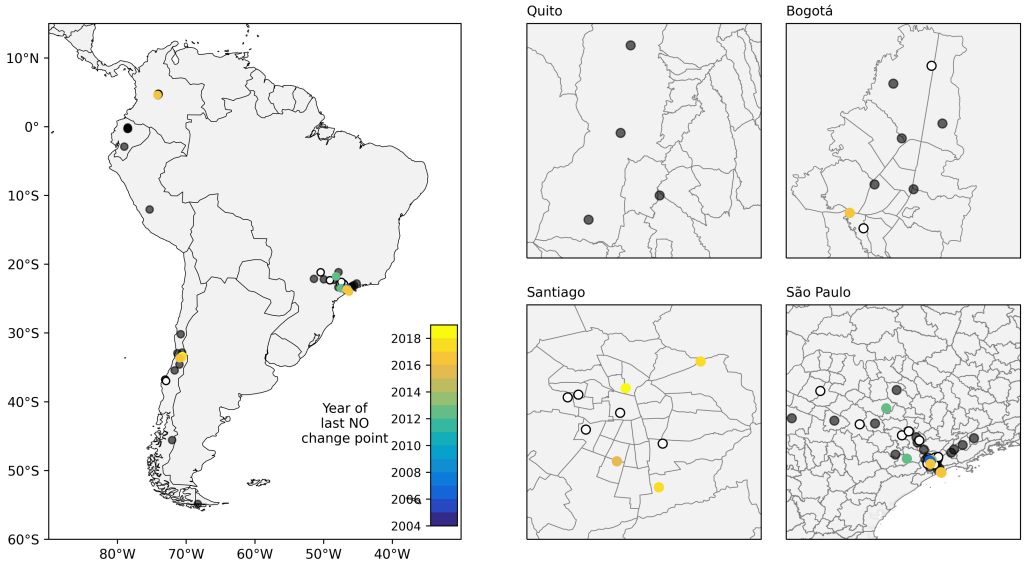

Figure S4: Year of the last detected nitric oxide trend change point in South American monitoring stations (left panel). The right panels focus on Bogotá, Quito, Santiago and São Paulo. The black dots denote stations with no change point detected or that did not meet data quality criteria and the white dots denote stations with no trend change point detected.

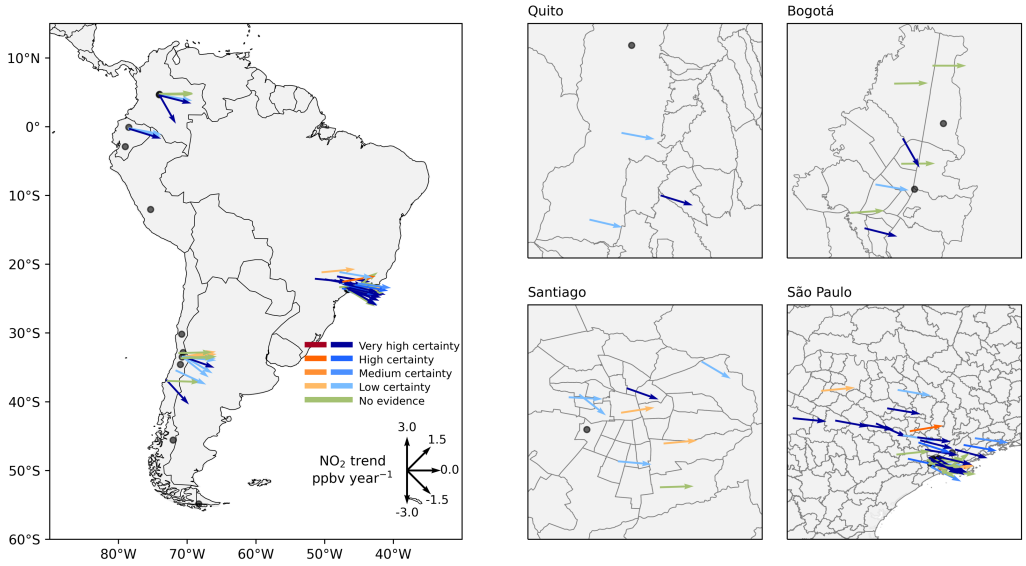

Figure S5: Ground-level nitrogen dioxide trends in ppbv year^{-1} and reliability levels calculated from available South American monitoring stations (left panel). When one or more change points are identified, the trend starts from the latest change point detected. The right panels focus on Bogotá, Quito, Santiago and São Paulo. The black dots denote stations with no nitrogen dioxide monitoring or that did not meet data quality criteria.

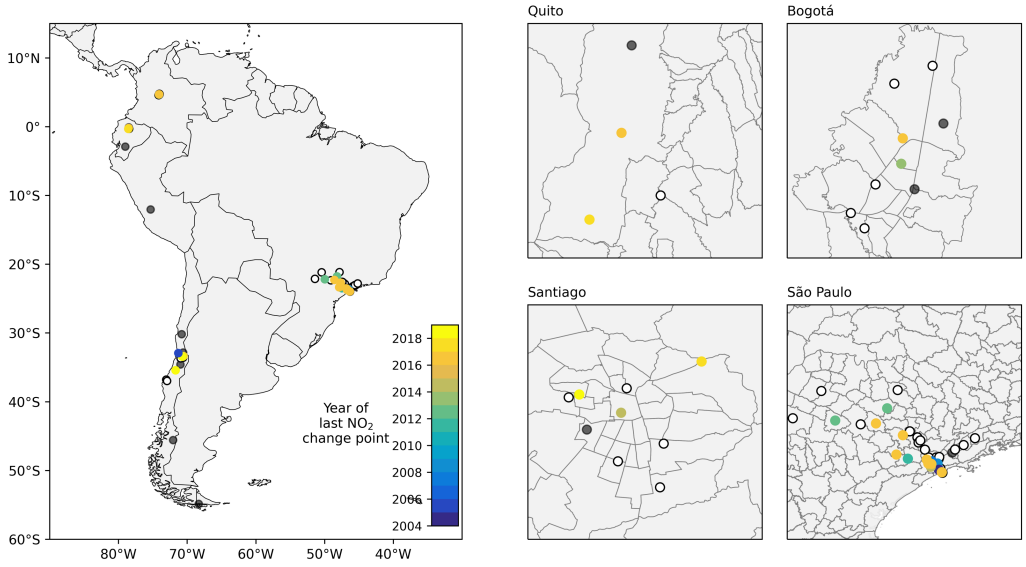

Figure S6: Year of the last detected nitrogen dioxide trend change point in South American monitoring stations (left panel). The right panels focus on Bogotá, Quito, Santiago and São Paulo. The black dots denote stations with no change point detected or that did not meet data quality criteria and the white dots denote stations with no trend change point detected.

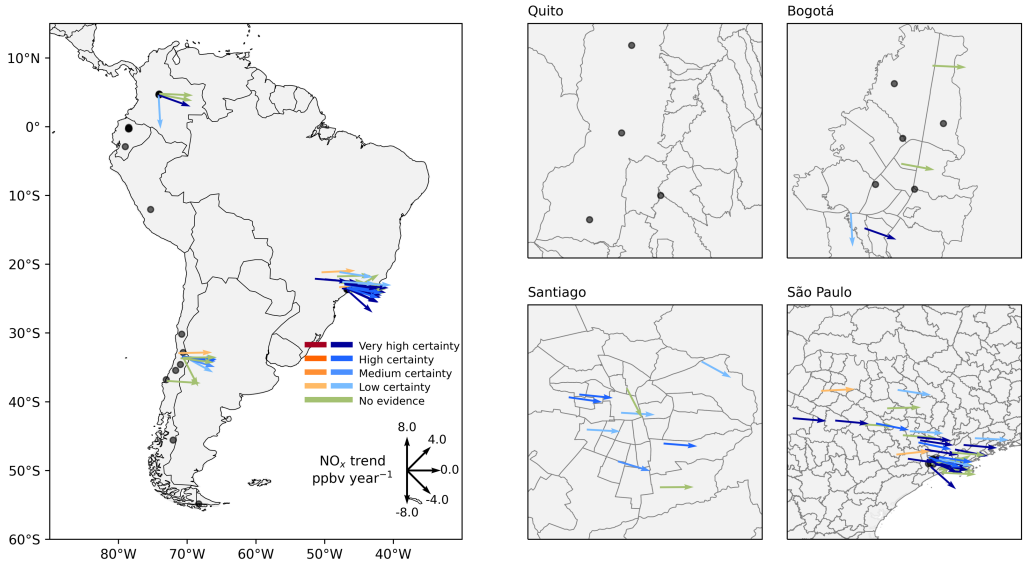

Figure S7: Ground-level nitrogen oxides trends in ppbv year^{-1} and reliability levels calculated from available South American monitoring stations (left panel). When one or more change points are identified, the trend starts from the latest change point detected. The right panels focus on Bogotá, Quito, Santiago and São Paulo. The black dots denote stations with no nitrogen oxides monitoring or that did not meet data quality criteria.

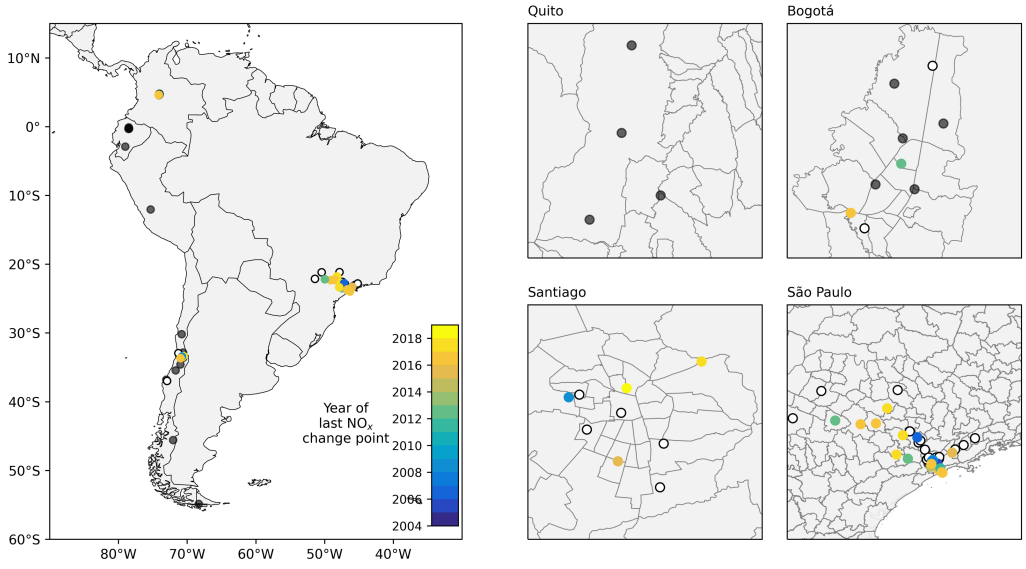

Figure S8: Year of the last detected nitrogen oxides trend change point in South American monitoring stations (left panel). The right panels focus on Bogotá, Quito, Santiago and São Paulo. The black dots denote stations with no change point detected or that did not meet data quality criteria and the white dots denote stations with no trend change point detected.