

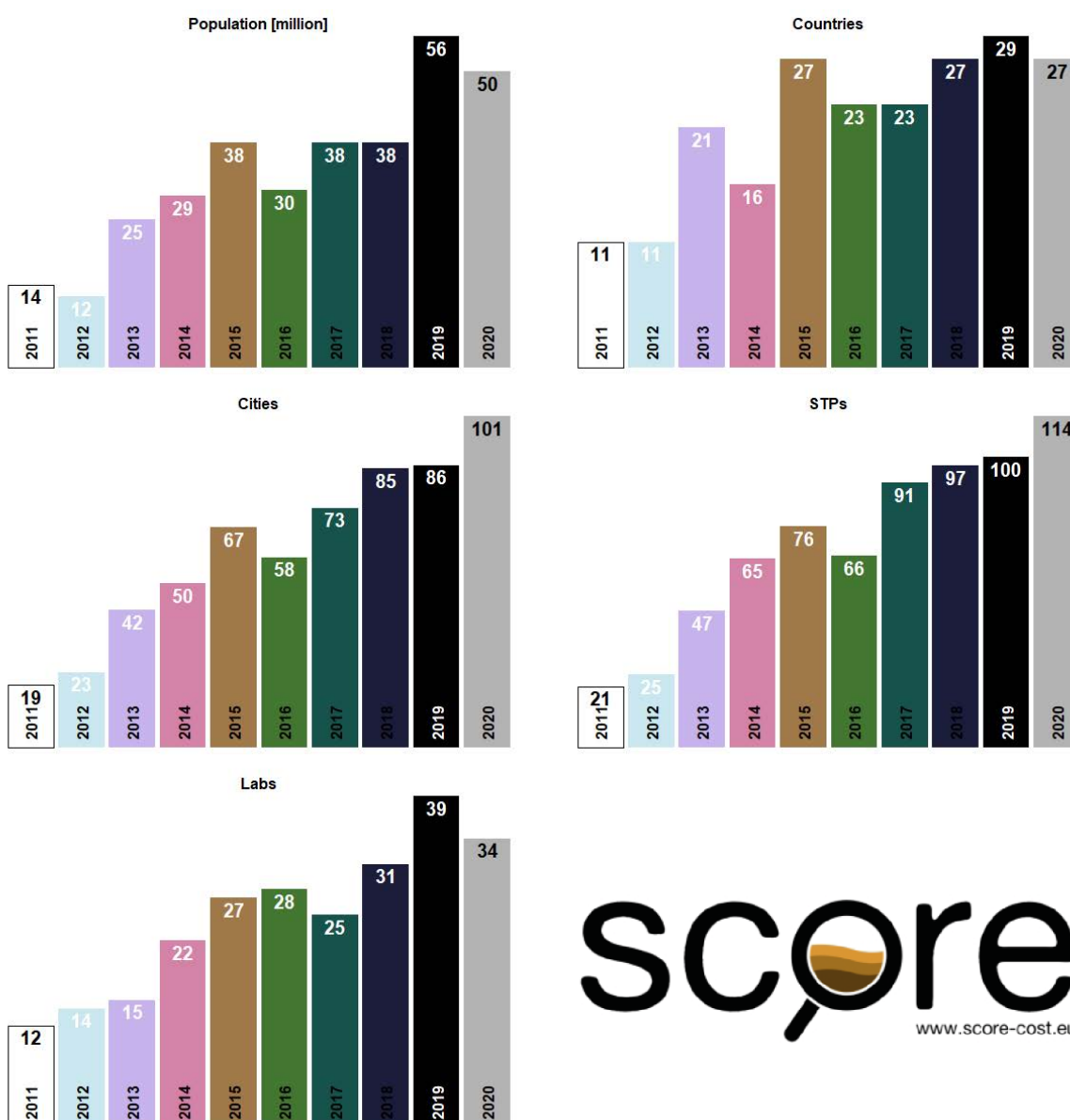
SCORE monitoring 2020

When referring to SCORE monitoring data, please use the following reference details (if you have any questions please contact us [here](#)):

Citation: Data source SCORE (2020)

Full reference: SCORE (2020) Wastewater monitoring data 2011-2020 Sewage analysis CORE group Europe, http://score-cost.eu/monitoring2020*

Caption (click for language selection):    



*please note that soon a new URL is already active www.score-network.eu > Networking Activities > Monitoring > 2020

Caption SCORE monitoring 2020

Graphs represent drug residue loads in wastewater in [mg 1000p⁻¹ d⁻¹].
Samples were collected over a one-week period in spring of each year.

font on x-axis

bold = cities that participated in at least 6 of 7 monitored years. These values were considered for the calculation of a population-weighted average (dotted line across the graph)

italic = cities with unexpected high or low values in at least one year (not used for any calculation of overall averages)

dotted lines

population-weighted average for cities that participated in at least 6 of 7 monitored years (bold font on x-axis)

dashed lines in right margin

population-weighted overall average for cities that participated in an individual year (without cities in italic font on x-axis)

number in brackets

this indicates the number of monitored sewage treatment plants (STPs) in cities with multiple STPs [the presented value is the population-weighted mean of all STPs monitored in the corresponding city; in few cases, a value of an individual STP is also presented, when it participated as the sole STP in previous years]

<LOQ

concentration values in all seven samples were below limit of quantification [for cities with multiple STPs both “<LOQ” and a mean value can be presented, if all concentration values were “<LOQ” in one STP; the mean value is then the mean of the other STP(s)]

fill color of dots

white: all concentration values were >LOQ; grey: one or more values were <LOQ and replaced with 0.5xLOQ (the darker the more values were <LOQ)

no dot

not participated or substance not analyzed

Acknowledgements

The 2020 monitoring was again facilitated by the EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) and the European results are accessible in their [interactive maps](#). We are very thankful for the continued support of local sewage treatment plant staff (sample collection, meta data, ...) and the enormous efforts all laboratories provide in-kind every year [i.e. participation in the interlaboratory test and analysis of wastewater samples]. In 2020 all laboratories together analyzed over 1000 wastewater and quality control samples!

Legende SCORE monitoring 2020

Drogenfrachten im Abwasser normiert pro 1000 Einwohner und Tag [$\text{mg } 1000\text{p}^{-1} \text{d}^{-1}$] untersucht über den Zeitraum einer Woche jeweils im Frühjahr.

Schriftart x-Achse

fett = hat in mindestens 6 von 7 Jahren teilgenommen und wurde für die Berechnung des Gesamtdurchschnittes verwendet (gepunktete Linie)

kursiv = zeigt unerwartet hohen/tiefen Wert in mindestens einem Jahr (nicht verwendet für Gesamtdurchschnitt)

Gepunktete Linien

bevölkerungsgewichteter Durchschnitt der Städte die in mindestens 6 von 7 Jahren mitgemacht hatten (Schriftart fett).

Gestrichelte Linien am Rand

bevölkerungsgewichteter Durchschnitt der Städte die in Jahr x teilgenommen hatten und auf der Grafik dargestellt sind (ohne die Städte in kursiver Schrift)

Zahl in Klammern

diese gibt an, wie viele Kläranlagen (KA) in Städten mit mehreren KA beprobt wurden [der Wert ist das bevölkerungsgewichtete Mittel der beprobten KA in dieser Stadt; in einzelnen Fällen sind auch Werte einer einzelnen KA angegeben, wenn diese in früheren Jahren als einzige KA mitgemacht hatte]

<LOQ

Konzentrationen waren in allen 7 Proben unter der Quantifizierungsgrenze [für Städte mit mehreren KA können sowohl “<LOQ” wie auch einen Wert angezeigt sein, wenn in einer KA alle Werte “<LOQ” waren; der Mittelwert ist dann das Mittel der anderen KA]

Füllfarbe der Punkte

Weiss: alle Konzentrationswerte waren >LOQ; Grauwert: einer oder mehrere Werte waren <LOQ und sind mit $0.5 \times \text{LOQ}$ ersetzt worden (je dunkler desto mehr Werte waren <LOQ)

Kein Punkt

nicht teilgenommen oder Substanz nicht analysiert

Danksagung

Das Monitoring 2020 wurde wieder durch EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) ermöglicht und die europäischen Resultate sind in [interaktiven Karten](#) auf der Website von EMCDDA verfügbar. Wir danken den lokalen Kläranlagenbetreibern für deren fortwährende Unterstützung (Probenahme, Metadaten, ...) und allen Labors für deren grossen Einsatz den sie jedes Jahr unentgeltlich leisten [Teilnahme am Interlabortest und Analyse von Abwasserproben]. 2020 haben alle Labors zusammen mehr als 1000 Abwasser- und Qualitätskontrollproben gemessen!

Leyenda SCORE monitoring 2020

Los gráficos presentan la carga de residuos de drogas estupefacientes presentes en las muestras de agua residual, expresadas en miligramos por día por 1000 habitantes [$\text{mg } 1000\text{p}^{-1} \text{d}^{-1}$].

Las muestras se tomaron cada año en primavera a lo largo de una semana.

Fuente del eje x

Negrita = ciudades que han participado en el estudio, al menos, seis de los siete años en que se ha llevado a cabo, y cuyos valores se han utilizado para calcular la carga media ponderada en función de la población (líneas de puntos en los gráficos)

Cursiva = ciudades que han presentado valores inesperadamente altos o bajos en al menos uno de los años de estudio (valores no utilizados en el cálculo de cargas media totales)

Líneas de puntos

Carga media ponderada en función de la población, calculada a partir de los valores encontrados en las ciudades que participaron en el estudio en, al menos, seis de los siete años en que se ha llevado a cabo (indicadas en negrita en el eje x)

Líneas discontinuas en el lado derecho del gráfico

Carga media ponderada en función de la población, calculada a partir de los valores encontrados en todas las ciudades participantes en un año específico (sin considerar los valores de las ciudades indicadas en cursiva en el eje x)

Números en paréntesis

Número de estaciones depuradoras de agua residual (EDAR) estudiadas en ciudades en las que prestan servicio varias EDAR [el valor presentado es la media ponderada en función de la población de todas las EDARs estudiadas en una ciudad determinada; en algunos casos, se presenta también el valor de una sola EDAR, cuando esta es la única EDAR estudiada en años previos]

<LOQ

Valores de concentración <LOQ en las siete muestras analizadas cada año [para ciudades con varias EDAR, se pueden mostrar “<LOQ” y el valor medio; en este caso, el primero indica que todos los valores encontrados fueron “<LOQ” en una EDAR, y el segundo, el valor medio observado en el resto de EDAR investigadas.

Color de relleno de los símbolos

Blanco: todos los valores de concentración fueron >LOQ; escala de grises: uno o más valores de concentración fueron <LOQ y en ese caso se sustituyeron por la mitad del valor del límite de cuantificación ($0.5 \times \text{LOQ}$) (un tono de gris más oscuro indica un mayor número de valores <LOQ).

Ausencia de símbolo

Indica que ese año la ciudad no participó en el estudio o que la sustancia no fue analizada.

Agradecimientos

La campaña de monitorización del 2020 se ha llevado a cabo, una vez más, con la colaboración del EMCDAA (Observatorio Europeo de las Drogas y las Toxicomanías) y los resultados de las diferentes ciudades europeas se pueden encontrar en su [mapa interactivo](#). Queremos agradecer el constante apoyo de las plantas de tratamiento de aguas residuales (por proporcionar tanto las muestras de agua como todos los datos necesarios del muestreo) y el esfuerzo de los laboratorios que participan año tras año sin ningún tipo de ayuda económica. Una prueba del gran trabajo realizado es el número total de muestras (inter-laboratorio y aguas residuales) analizadas por todos los participantes, que fue superior a 1000 en 2020.

Légende SCORE monitoring 2020

Les graphiques illustrent les charges en résidus de produits stupéfiants détectés dans les eaux usées. Ces charges sont indiquées en milligramme par jour et pour 1000 habitants [$\text{mg } 1000\text{p}^{-1} \text{d}^{-1}$]. Elles ont été mesurées sur la base d'échantillons collectés sur une durée d'une semaine au printemps de chaque année.

Caractères de l'axe x

gras = villes qui ont participé à au moins six des sept années de mesures. Ces valeurs ont servi de base au calcul d'une moyenne pondérée en fonction de la population (ligne pointillée traversant le graphique)

italique = villes avec des mesures inattendues (basses ou hautes) pour au moins une des années (valeurs non utilisées pour les calculs de valeurs moyennes).

Lignes pointillées

Moyenne pondérée en fonction de la population pour les villes qui ont participé à au moins six des sept années de mesures (indiquées en caractères gras sur l'axe x).

Lignes traitillées dans la marge de droite

Moyenne pondérée en fonction de la population pour les villes qui ont participé à une campagne annuelle de mesures (sans les villes indiquées en caractères italiques sur l'axe x).

Chiffres entre parenthèses

Indiquent le nombre de stations d'épurations (STEPS) considérées dans les villes ayant plusieurs STEPs [la valeur présentée est la moyenne normalisée par la population de l'ensemble des STEPs mesurées, dans certains cas, la valeur d'une STEP individuelle est également présentée, lorsqu'elle était la seule STEP à avoir participé dans les années précédentes].

<LOQ

Valeurs de concentration inférieures à la limite de quantification pour l'ensemble des sept échantillons [pour les villes ayant plusieurs STEPs, soit l'inscription "<LOQ", soit une valeur moyenne peut être indiquée, si toutes les valeurs de concentration ont été "<LOQ" pour une STEP, la valeur moyenne est alors la moyenne des autres STEP(s)].

Couleurs de remplissage des points

Blanc: toutes les concentrations mesurées sont > LOQ; gris: une ou plusieurs valeurs est <LOQ et a été remplacée par 0.5xLOQ (plus la couleur de remplissage est sombre, plus le nombre de concentrations <LOQ est important)

Absence de point

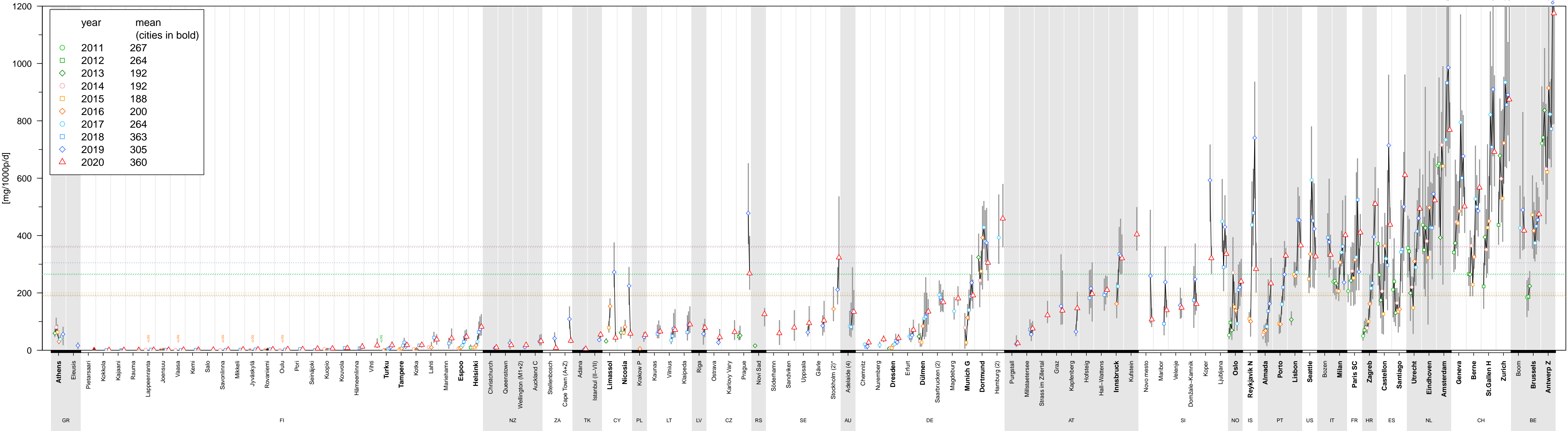
N'a pas participé à la campagne de mesure, ou cette substance n'a pas été mesurée.

Remerciements

La campagne de mesures 2020 a été encouragée par l'Observatoire européen des drogues et des toxicomanies (EMCDDA) et les résultats européens sont présentés sous la forme de [cartes interactives](#) sur le site de l'EMCDDA. Nous adressons nos vifs remerciements aux équipes des stations d'épuration pour leur participation répétée à cette démarche de monitoring (collecte d'échantillons, de métadonnées, ...) ainsi qu'à tous les laboratoires d'analyse pour les efforts conséquents qu'ils fournissent chaque année (participation aux tests interlaboratoires et analyses des échantillons d'eau usée). En 2020, ce sont plus de 1000 échantillons d'eau usée et de contrôle qualité qui ont été analysés par l'ensemble des laboratoires!

Benzoylcgonine (Cocaine)

[Population-normalized loads of one week per year]



Dots: weekly mean loads. **Grey bars:** min to max range of monitored week. **Black lines:** visual aid linking data of subsequent years.

Fill color of dots: Values <LOQ (limit of quantification) were replaced with 0.5xLOQ if at least one value of the week was >LOQ; white = no values <LOQ, light grey = 1–3 values <LOQ, dark grey = 4–6 values <LOQ.

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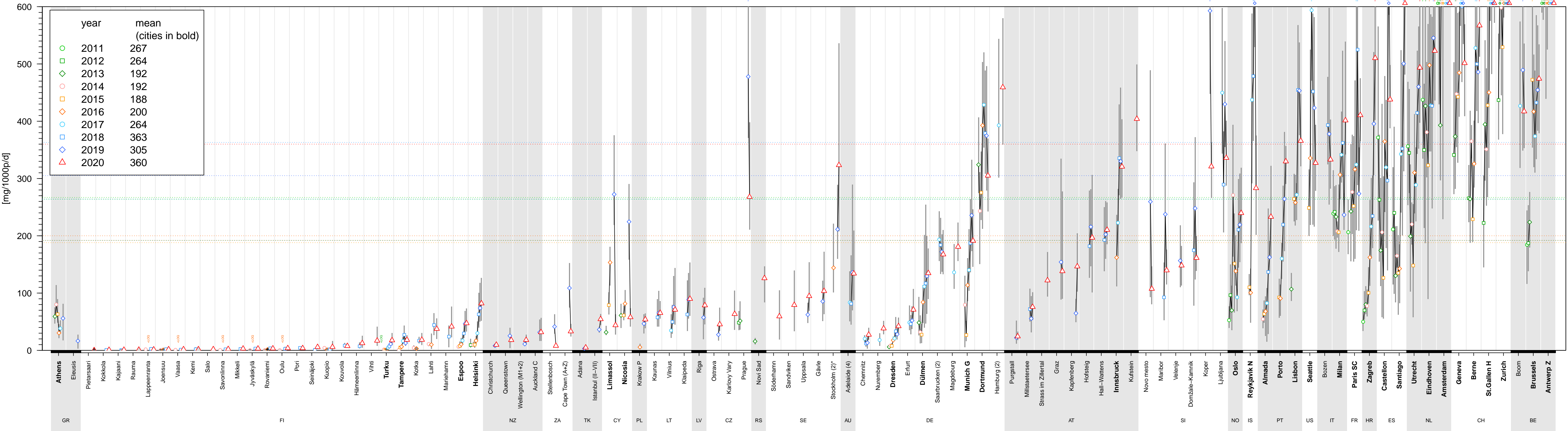
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Numbers in brackets: number of wastewater treatment plants monitored in the same city (weekly mean load is the population-weighted average of all wastewater treatment plants monitored in that city).

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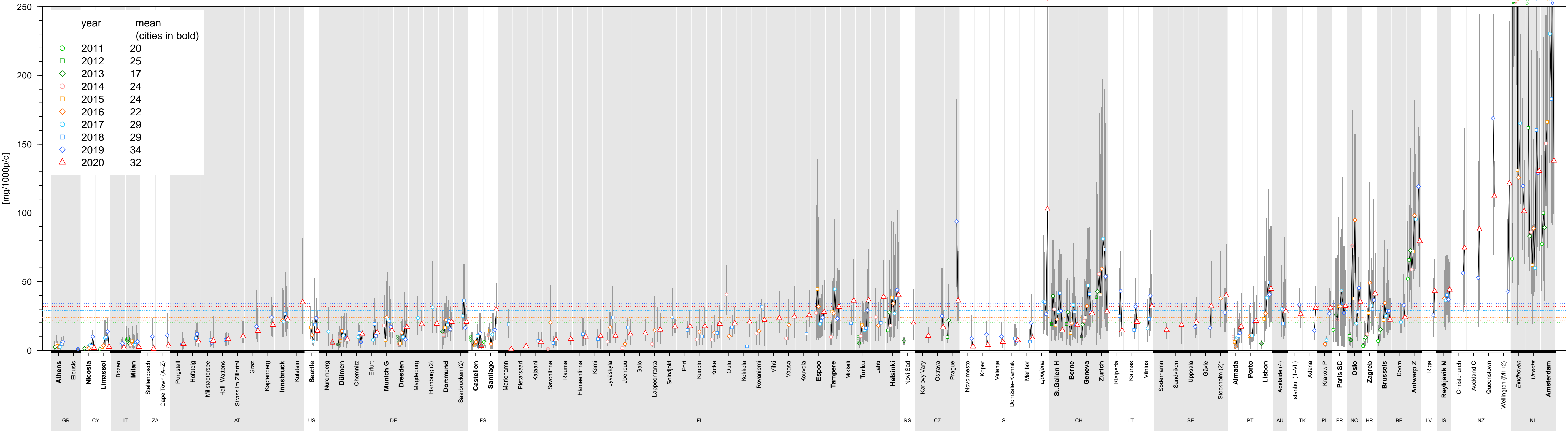
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MDMA

[Population-normalized loads of one week per year]



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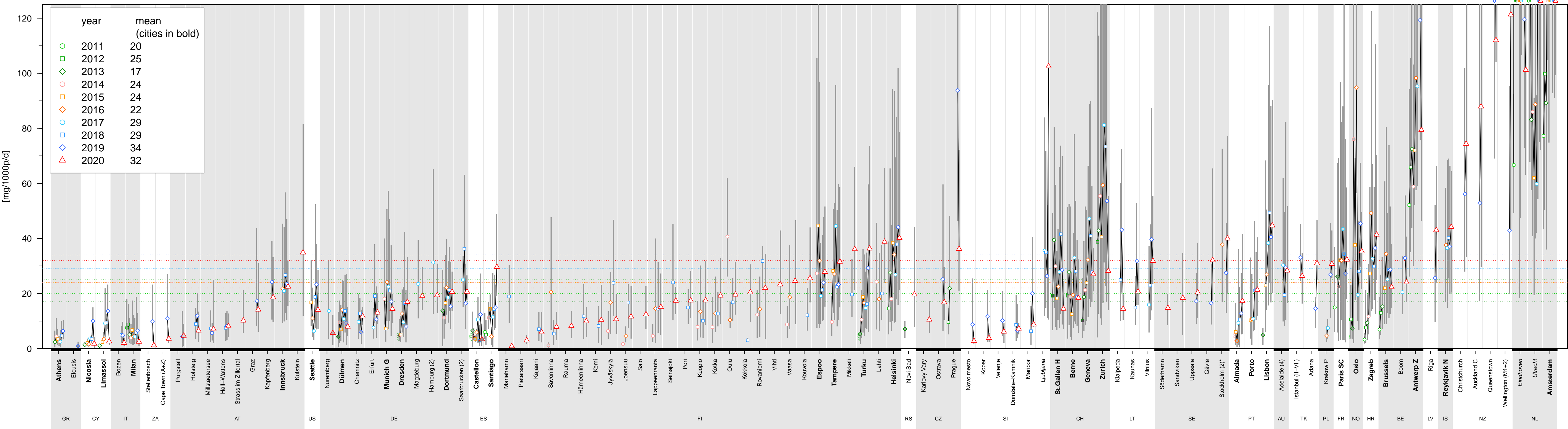
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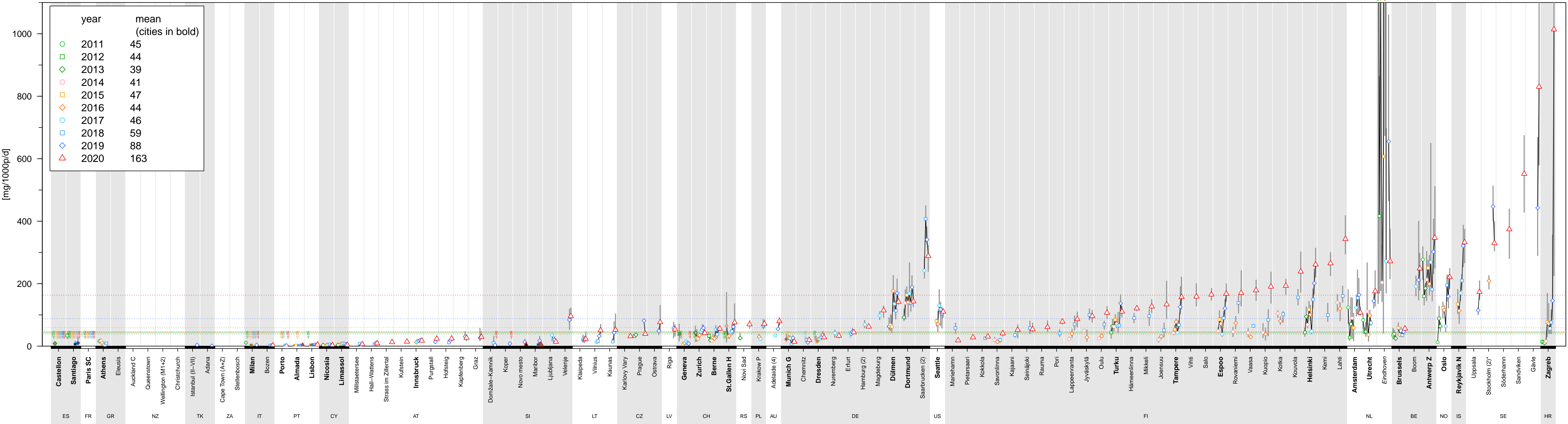
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Amphetamine

[Population-normalized loads of one week per year]



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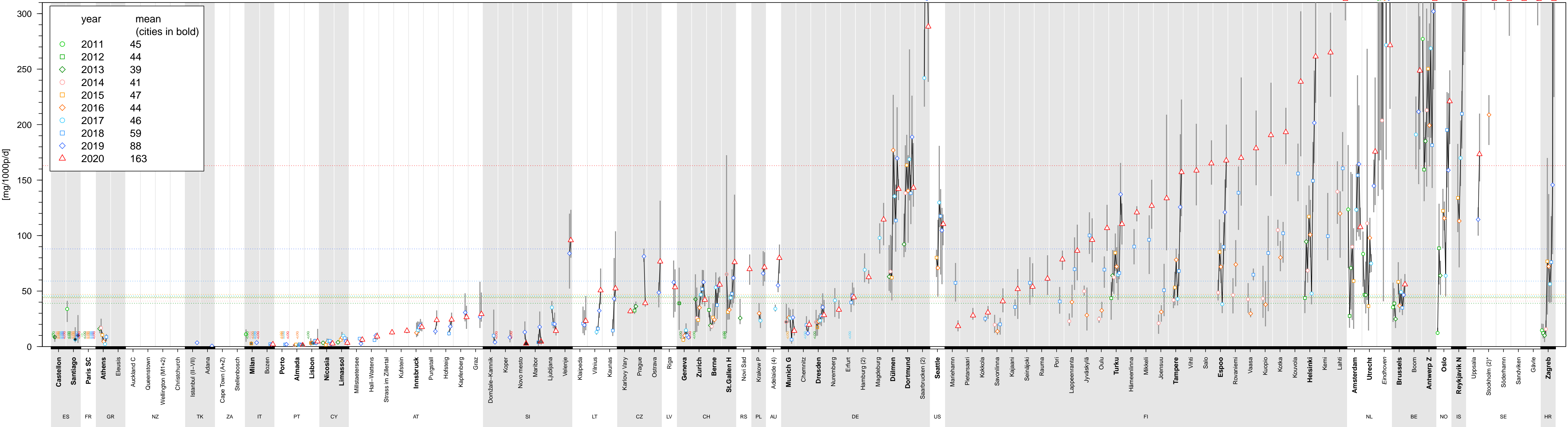
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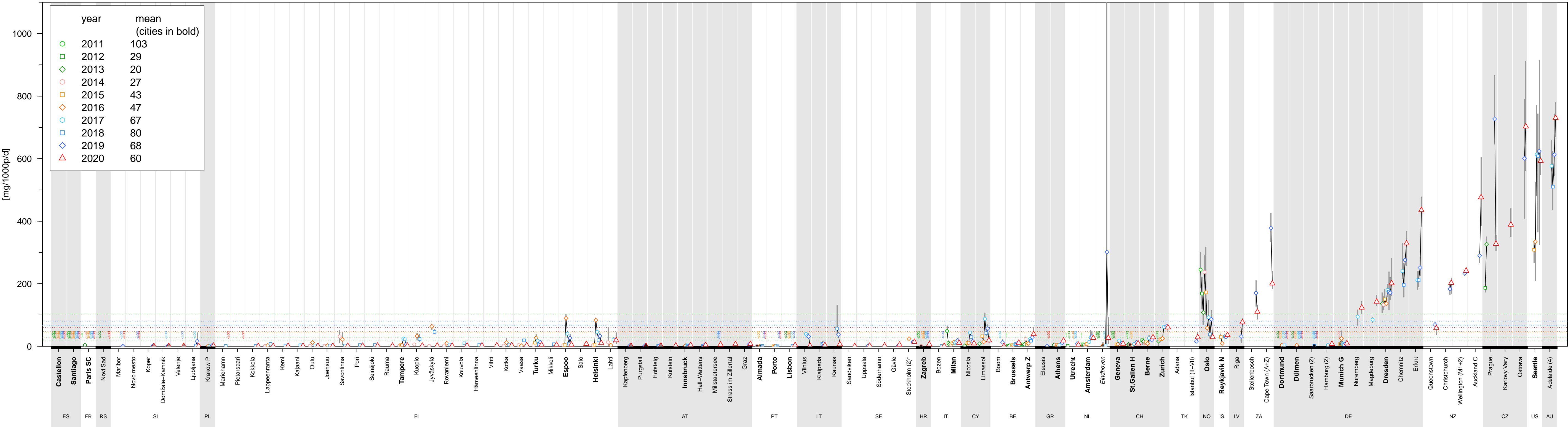
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Methamphetamine

[Population-normalized loads of one week per year]



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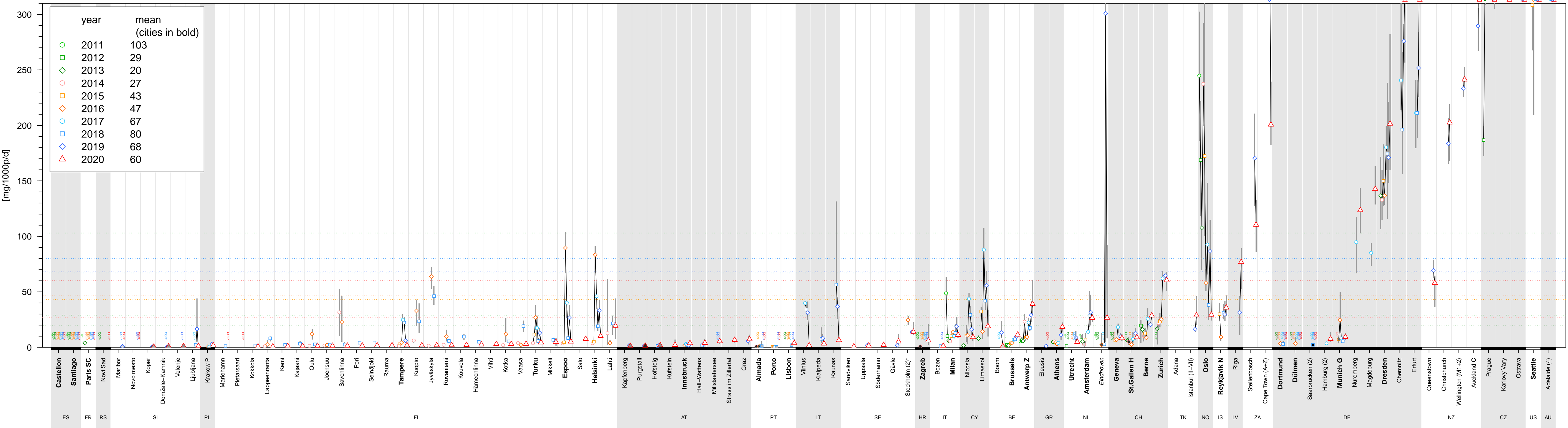
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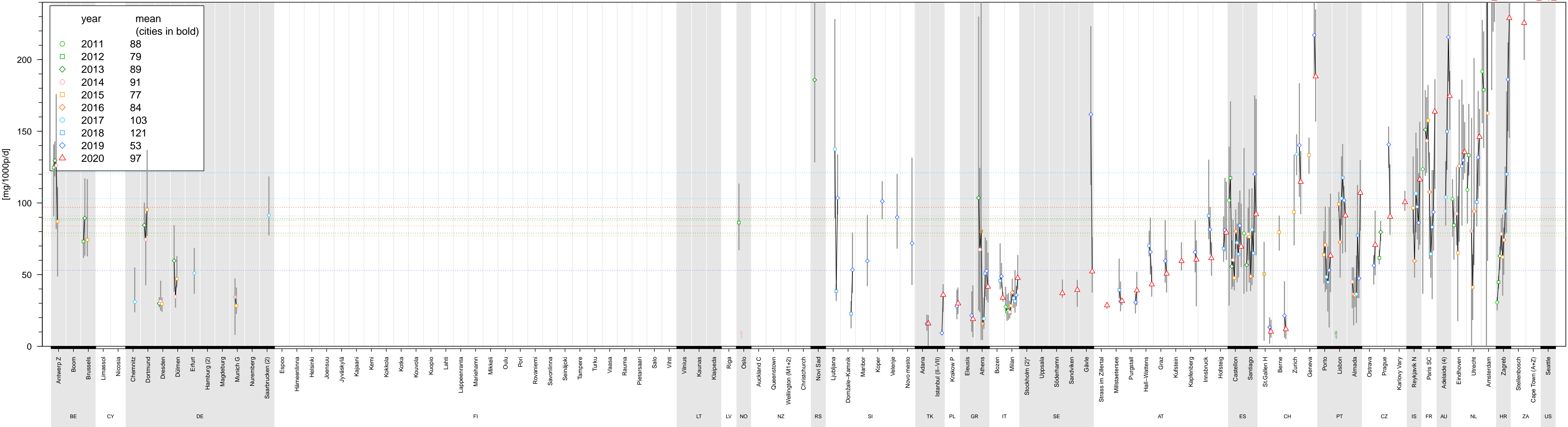
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THC-COOH (Cannabis)

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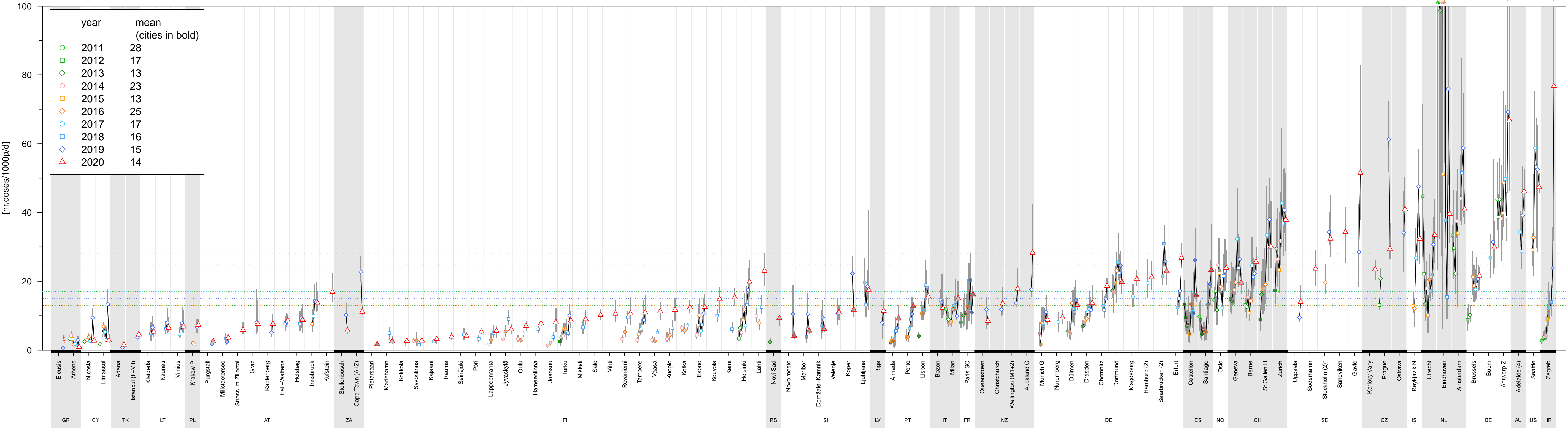
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combined doses

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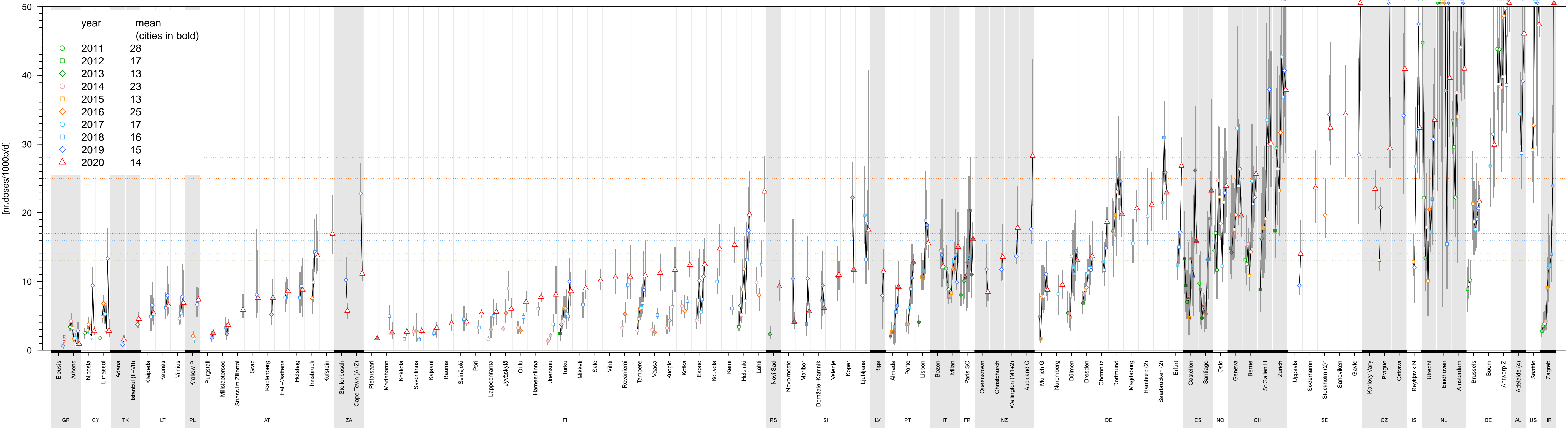
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