

Ministerio para la Transición Ecológica y el Reto Demográfico

Dirección General del Agua

Calculo de predicciones hidrológicas estacionales

Modelo simulación hidrológica: PATRICAL

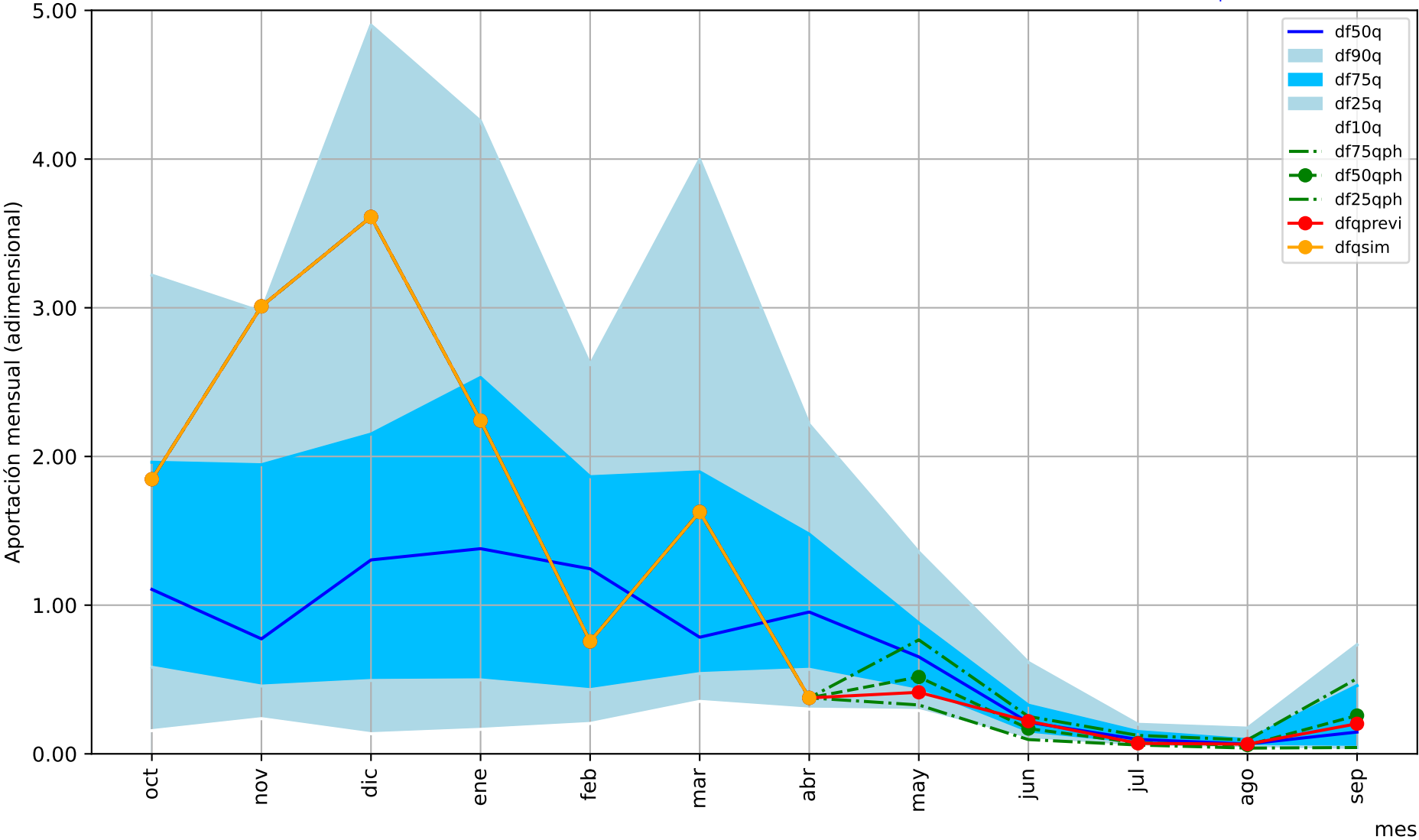
Variable analizada

Aportaciones hidrológicas en régimen natural

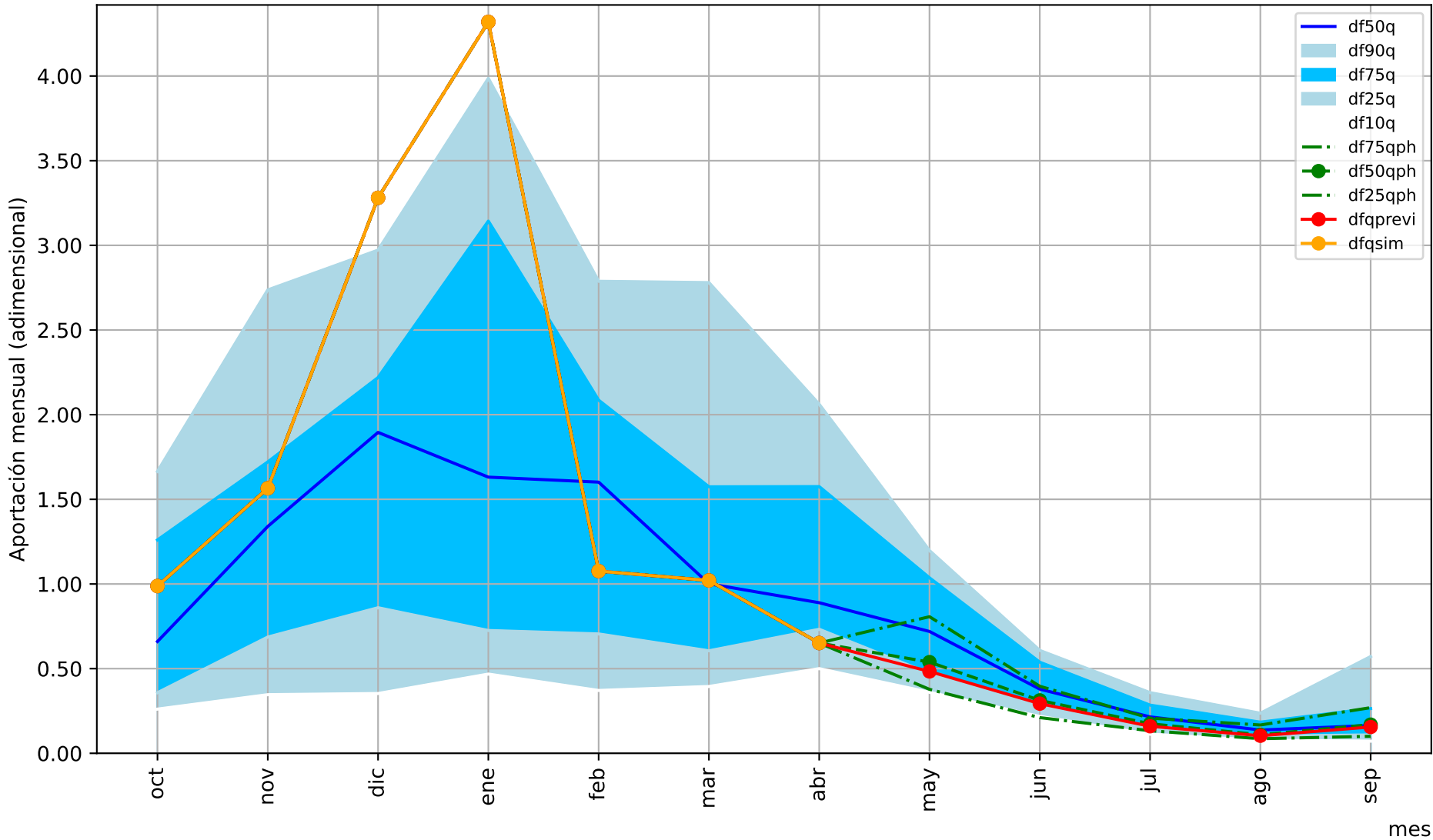
Predicción realizada en mayo 2023

Universitat Politècnica de València

IIAMA - Instituto de Ingeniería del Agua y Medio Ambiente

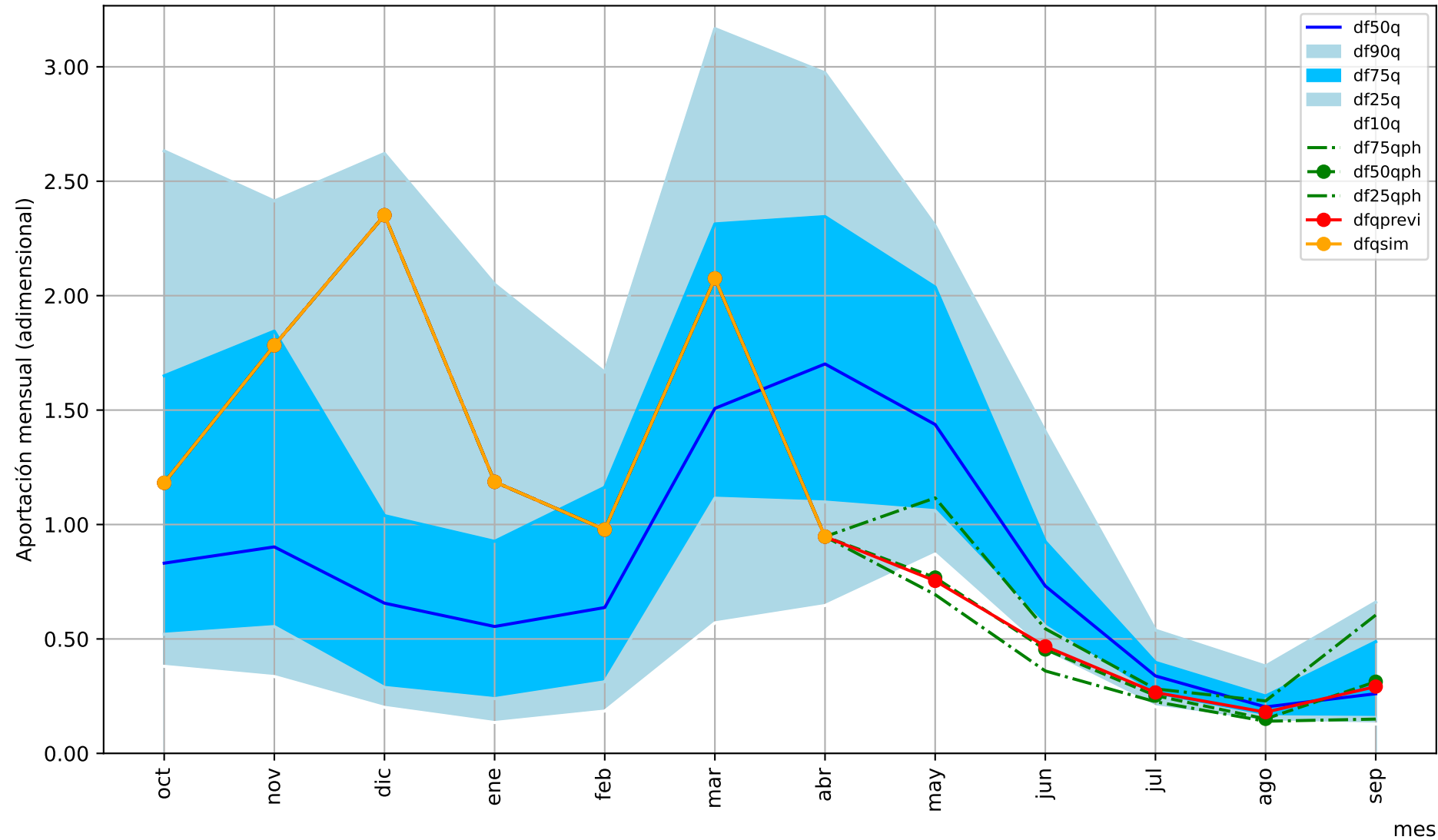


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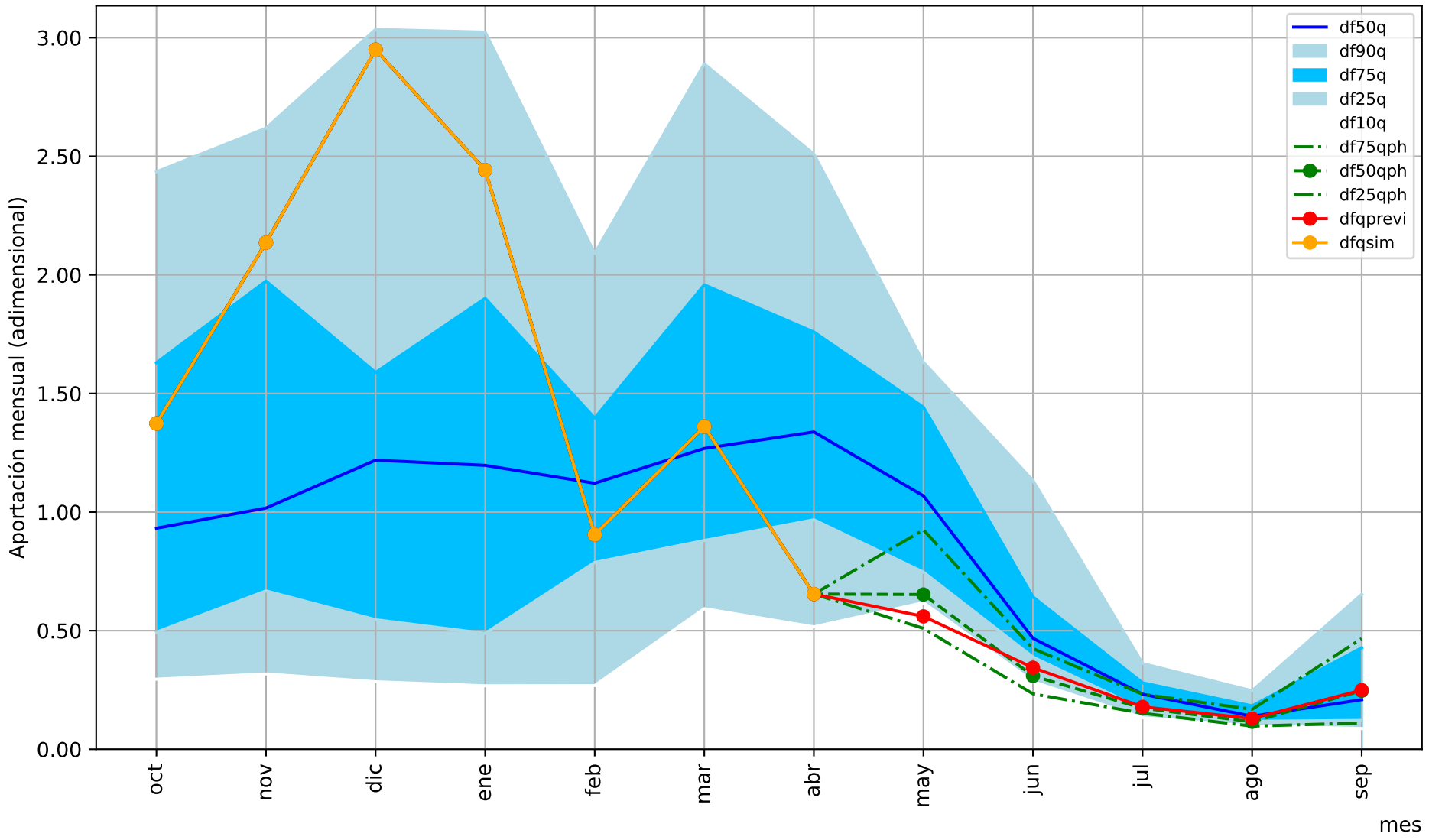


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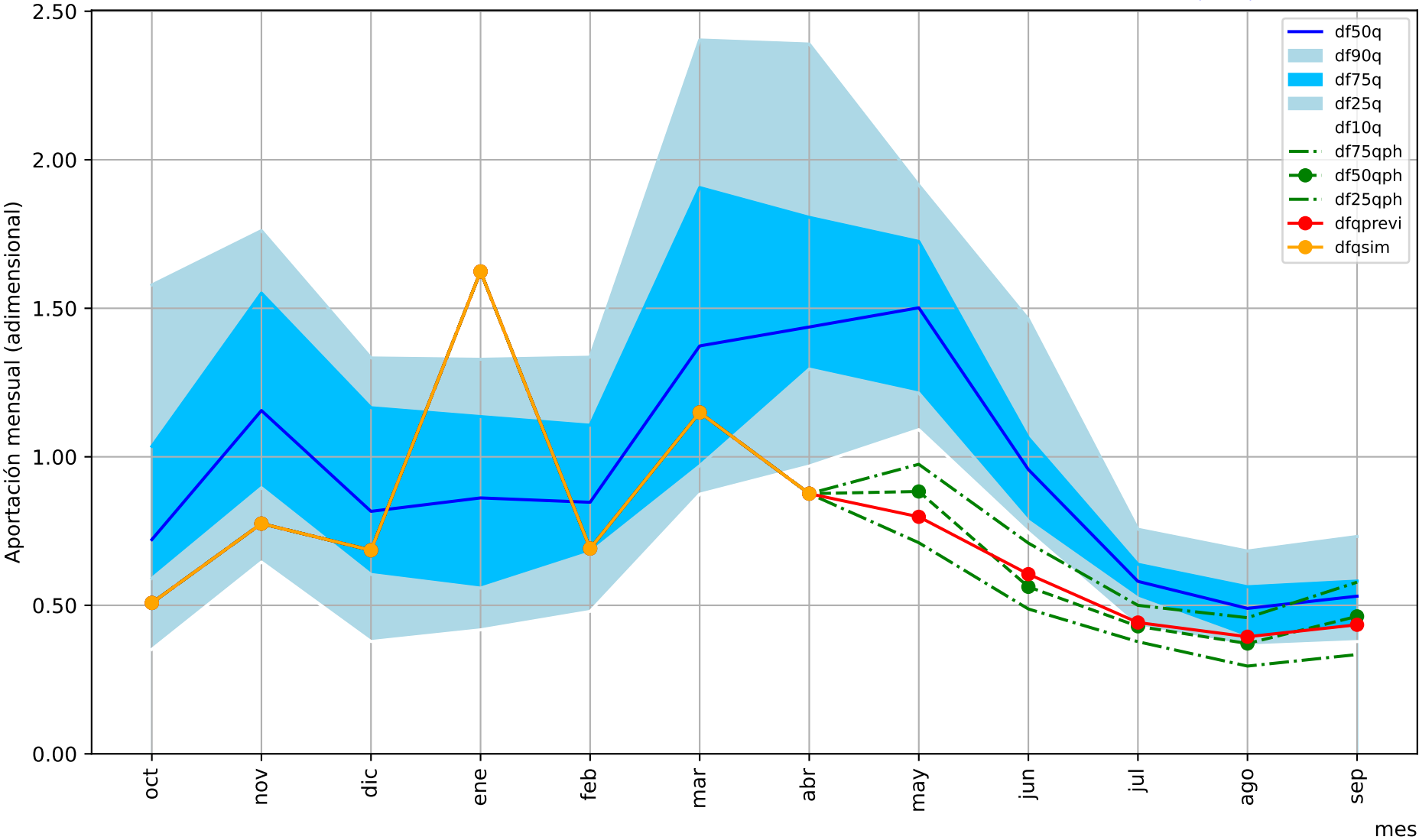
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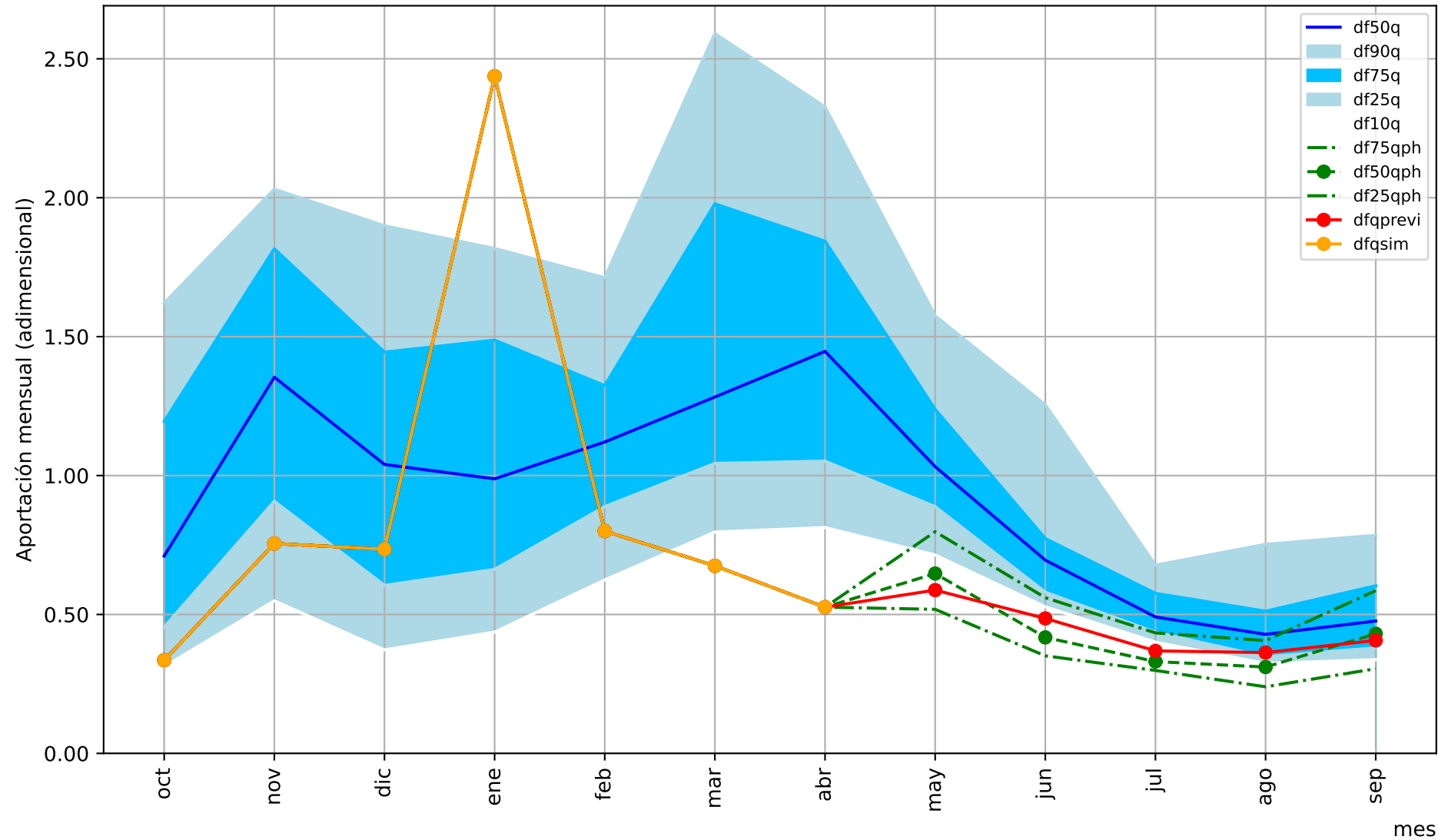
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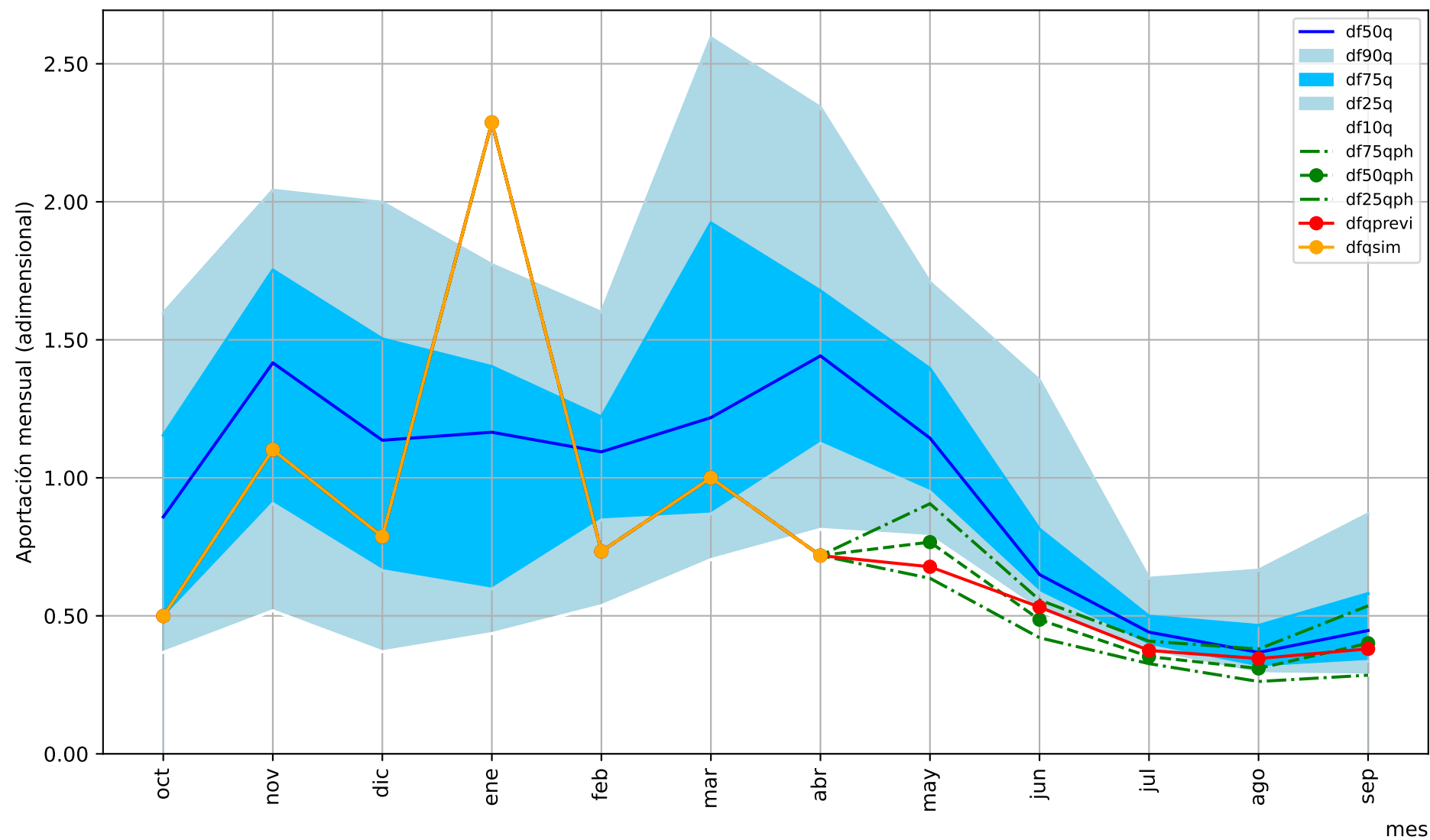
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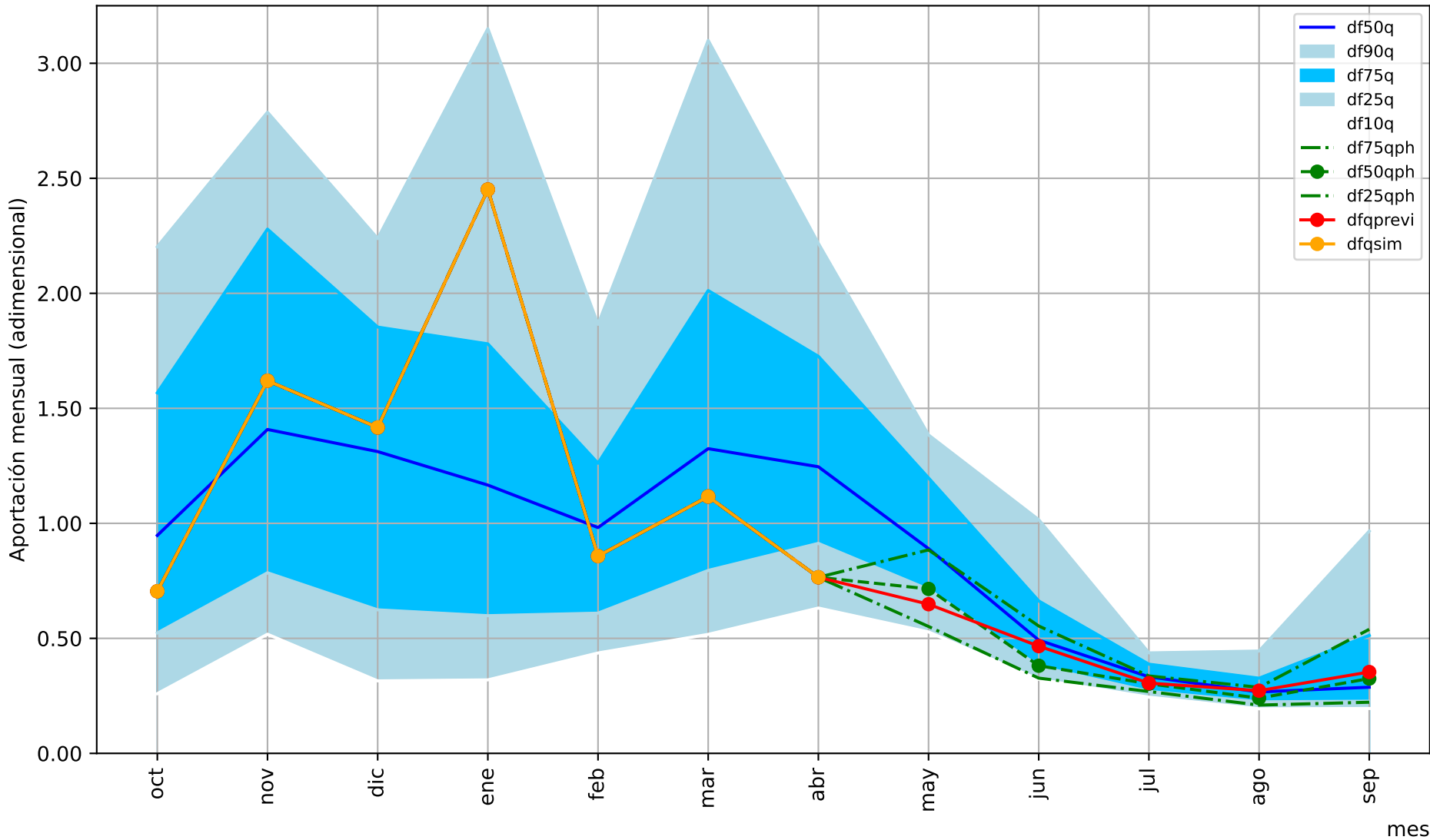


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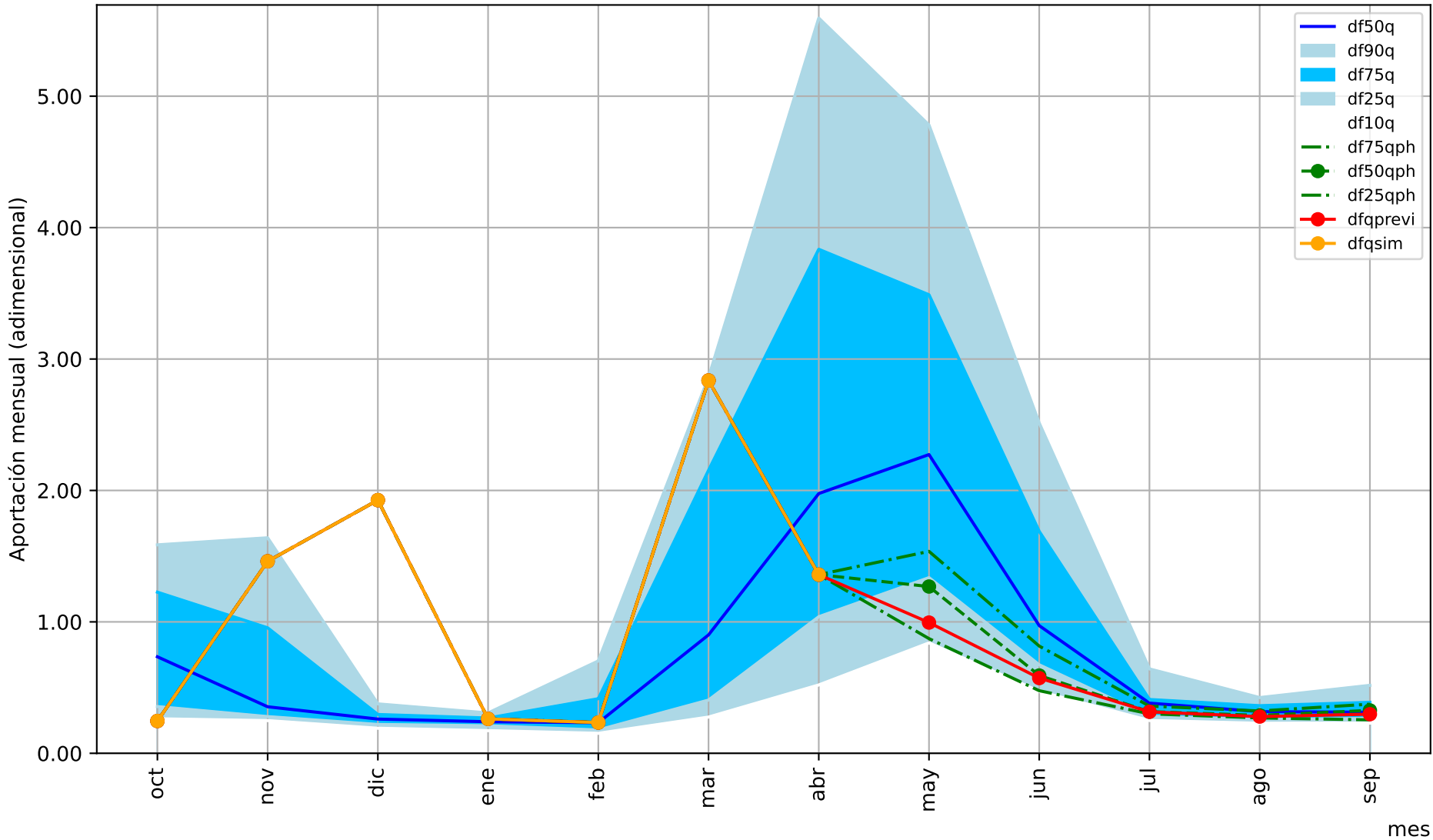
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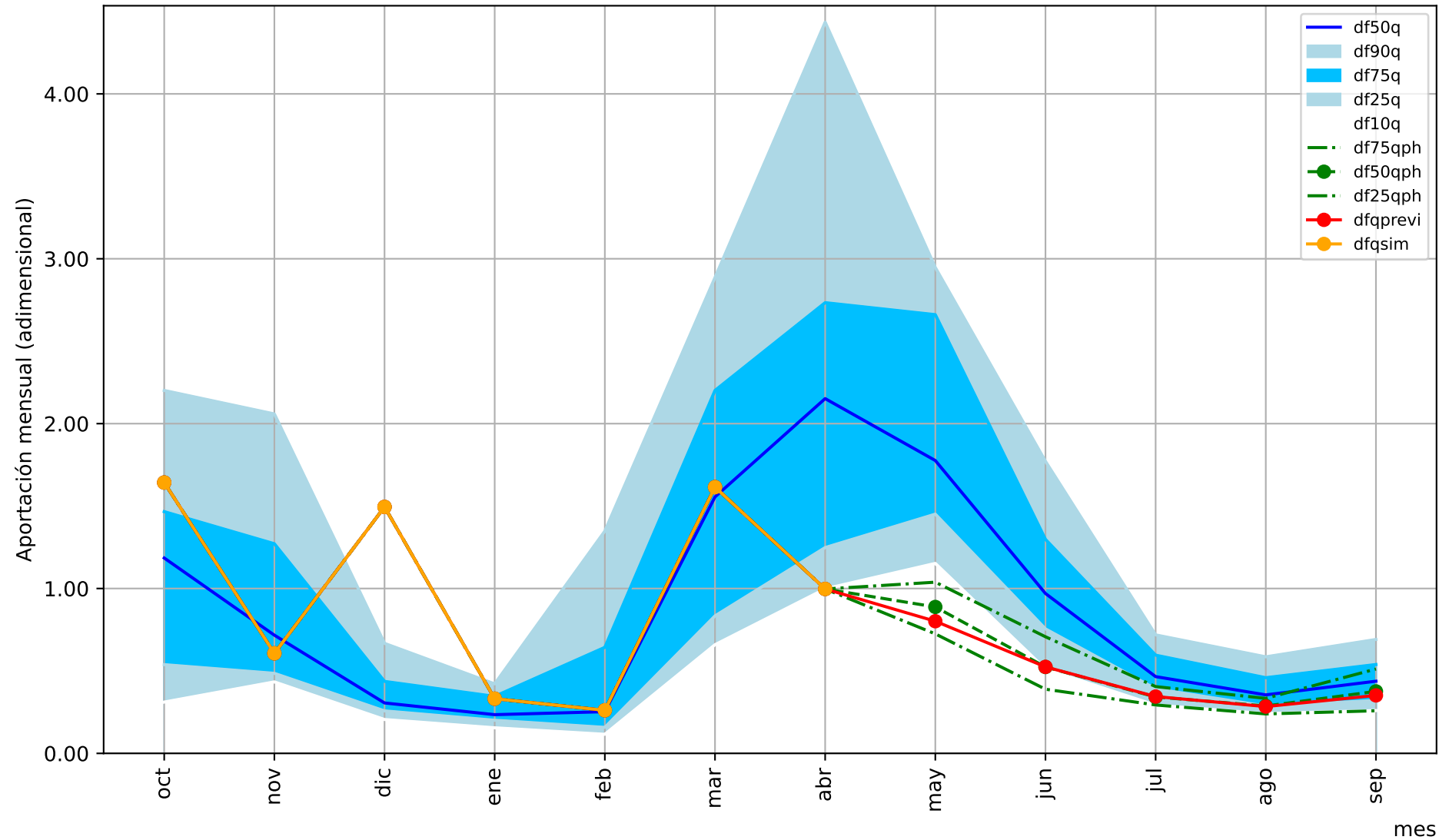
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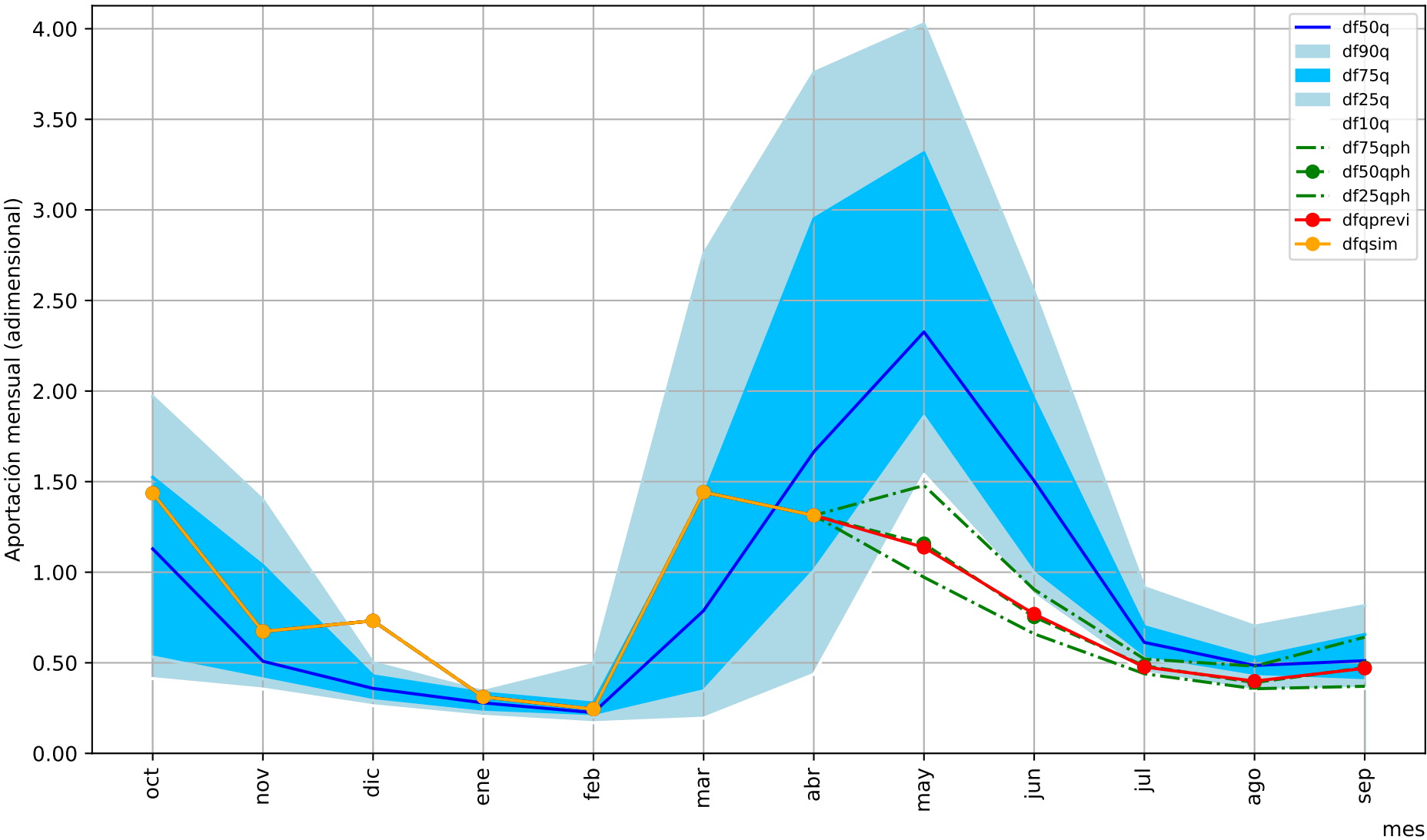


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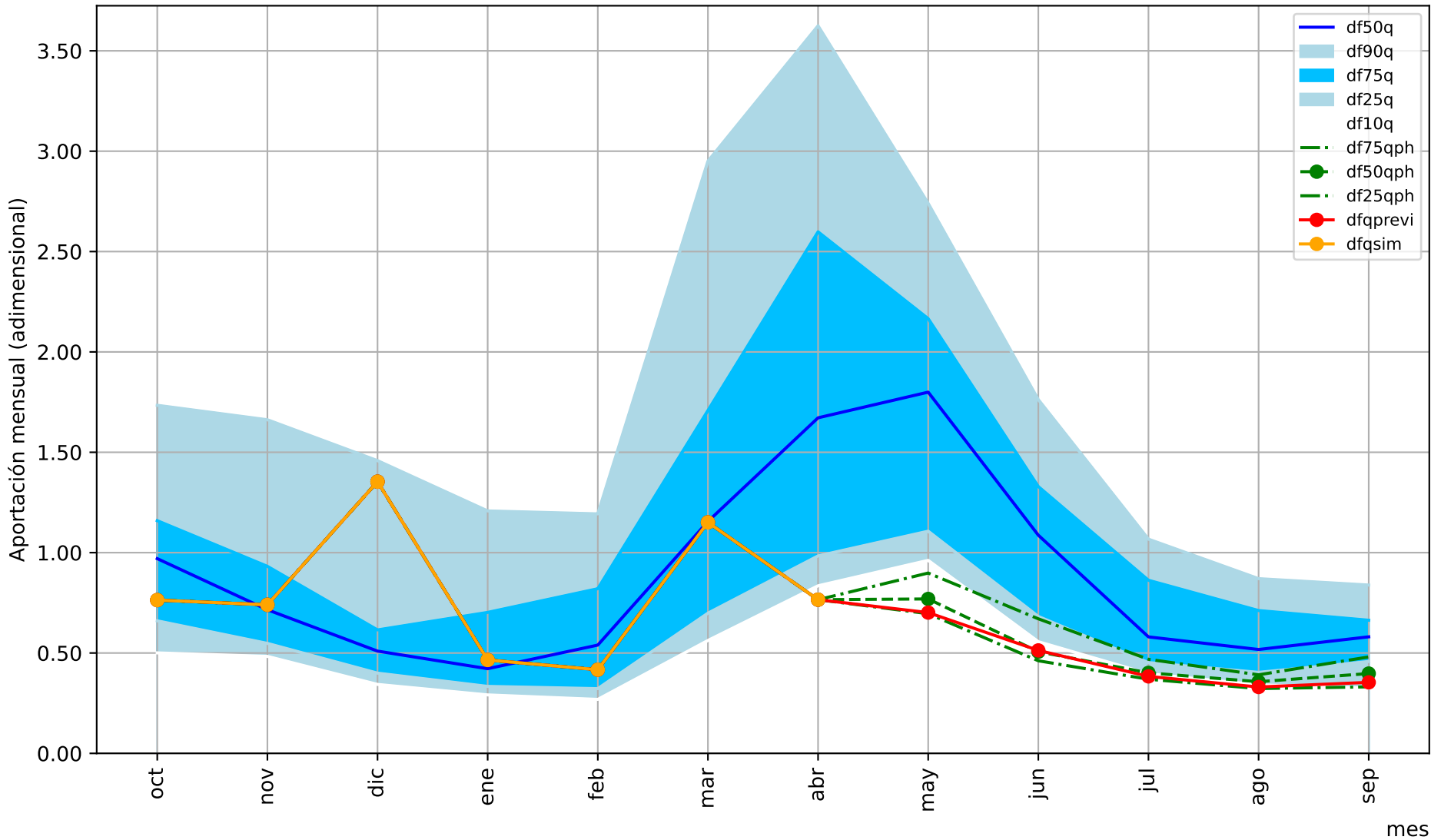
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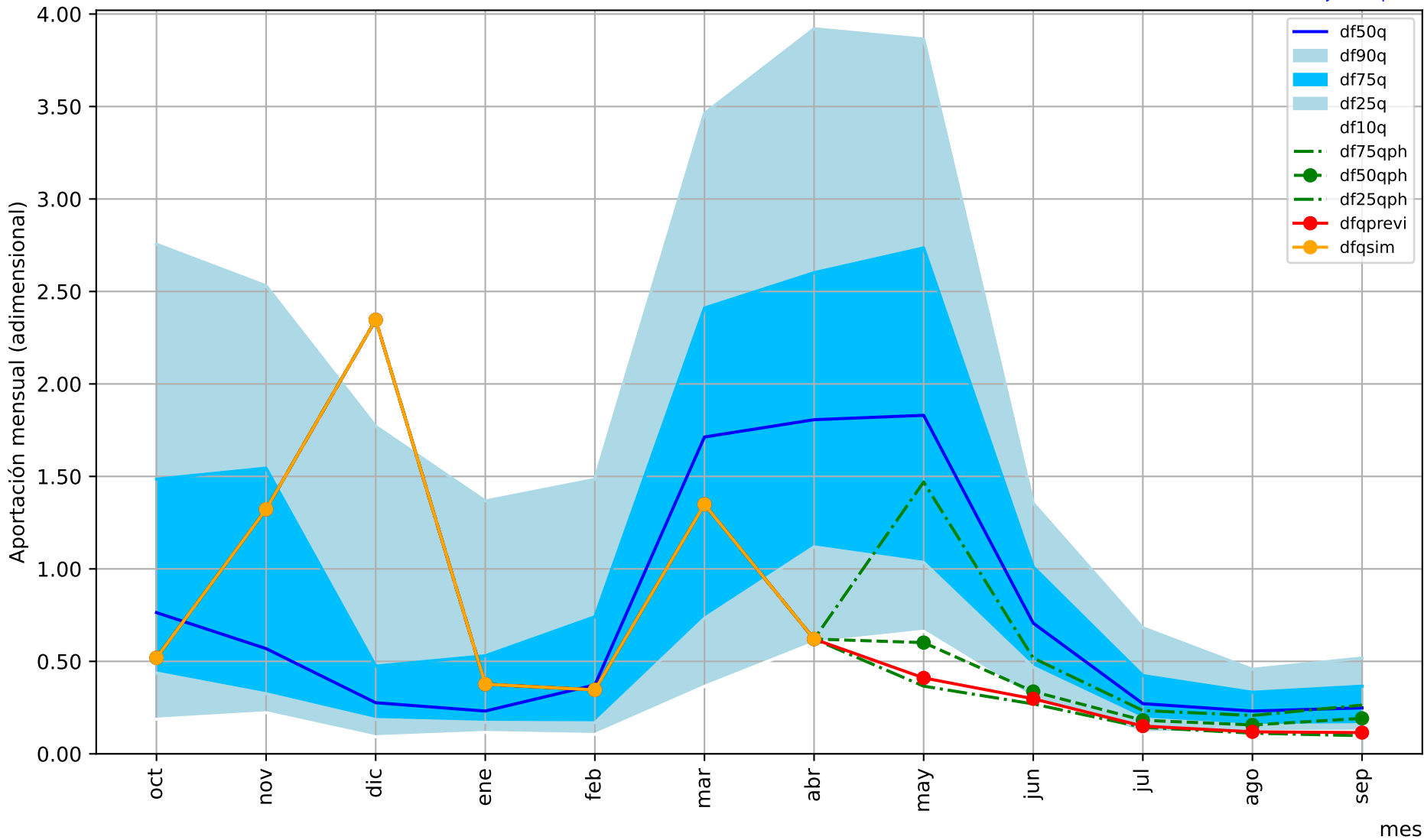
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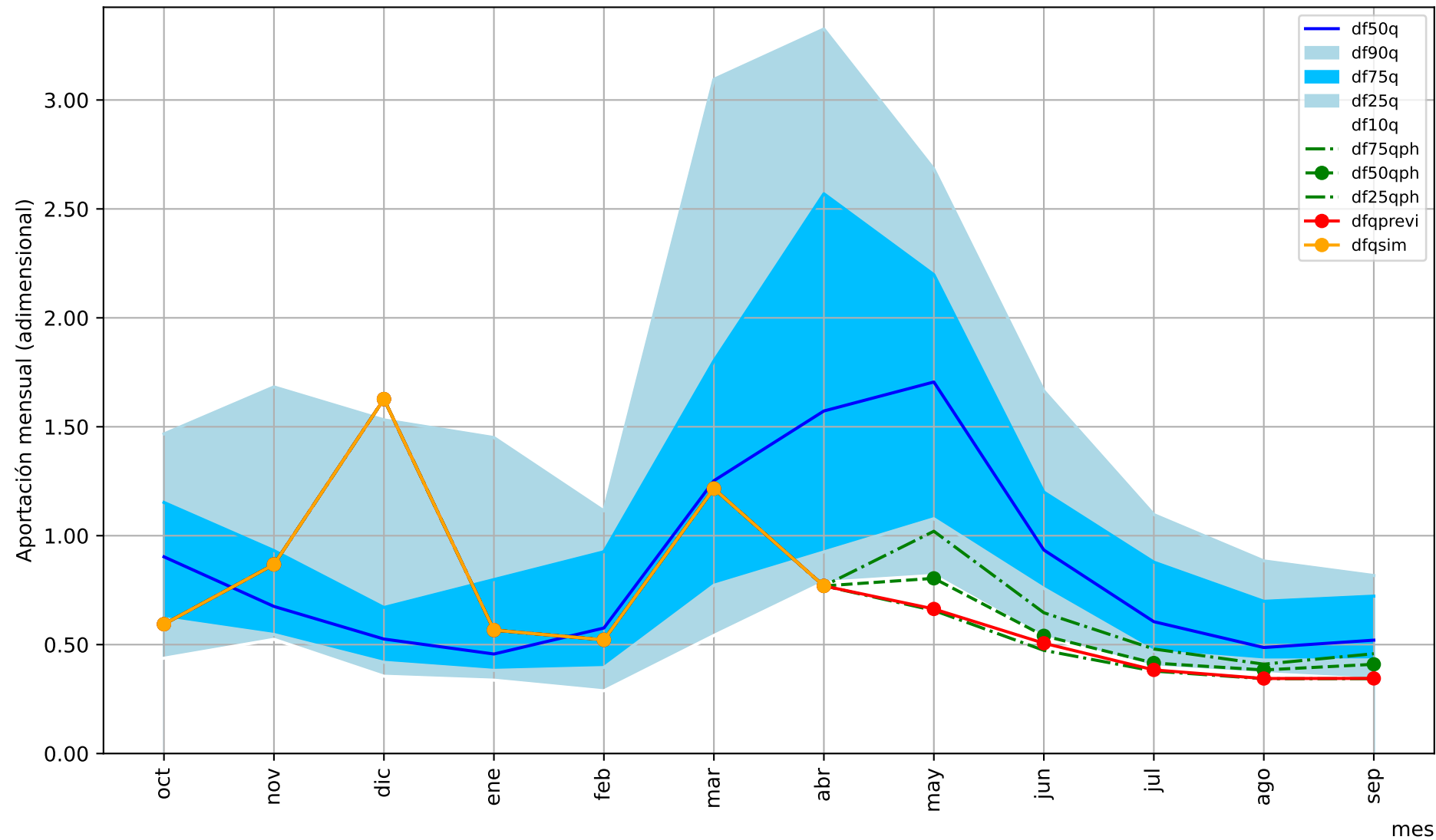


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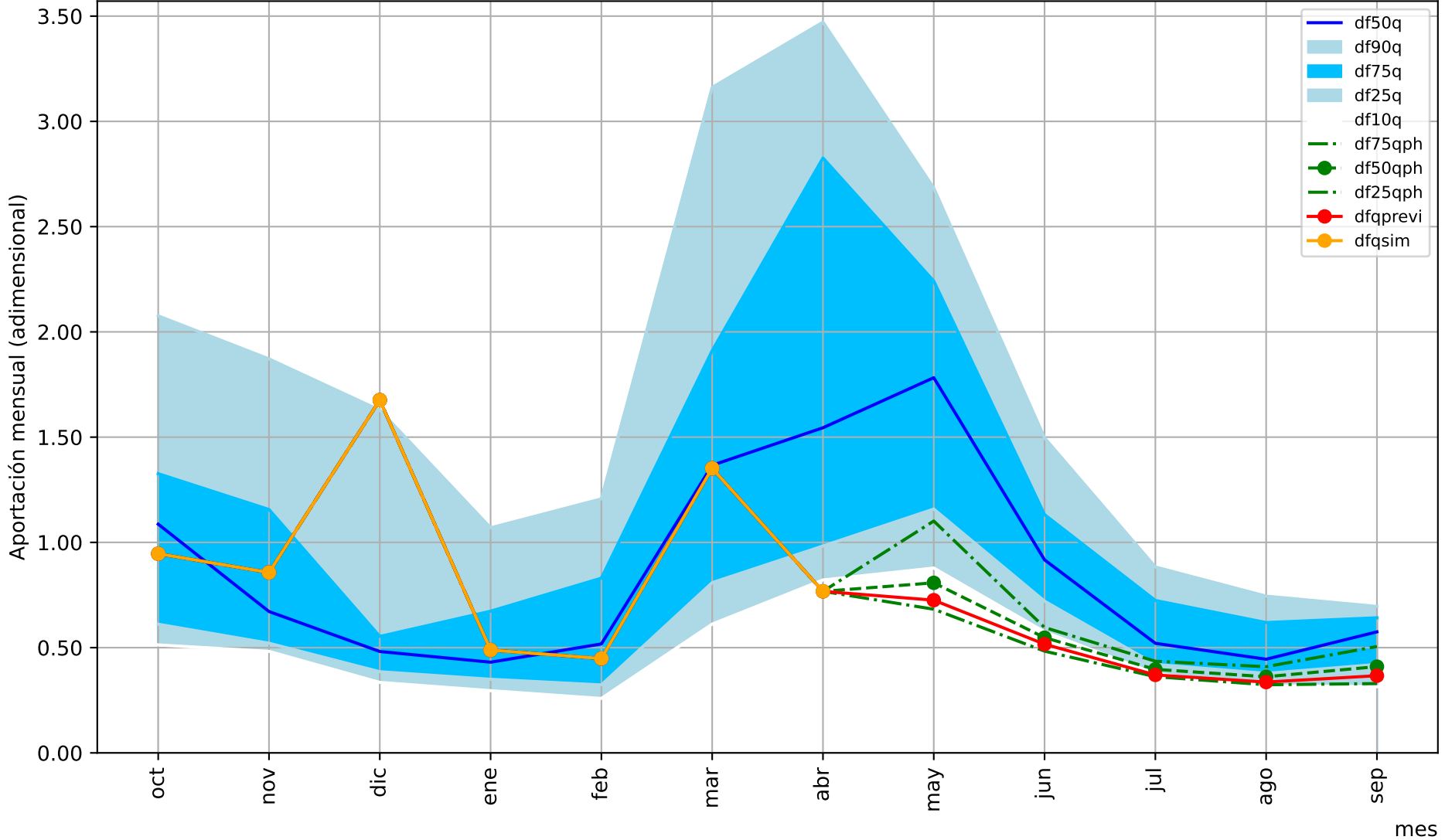


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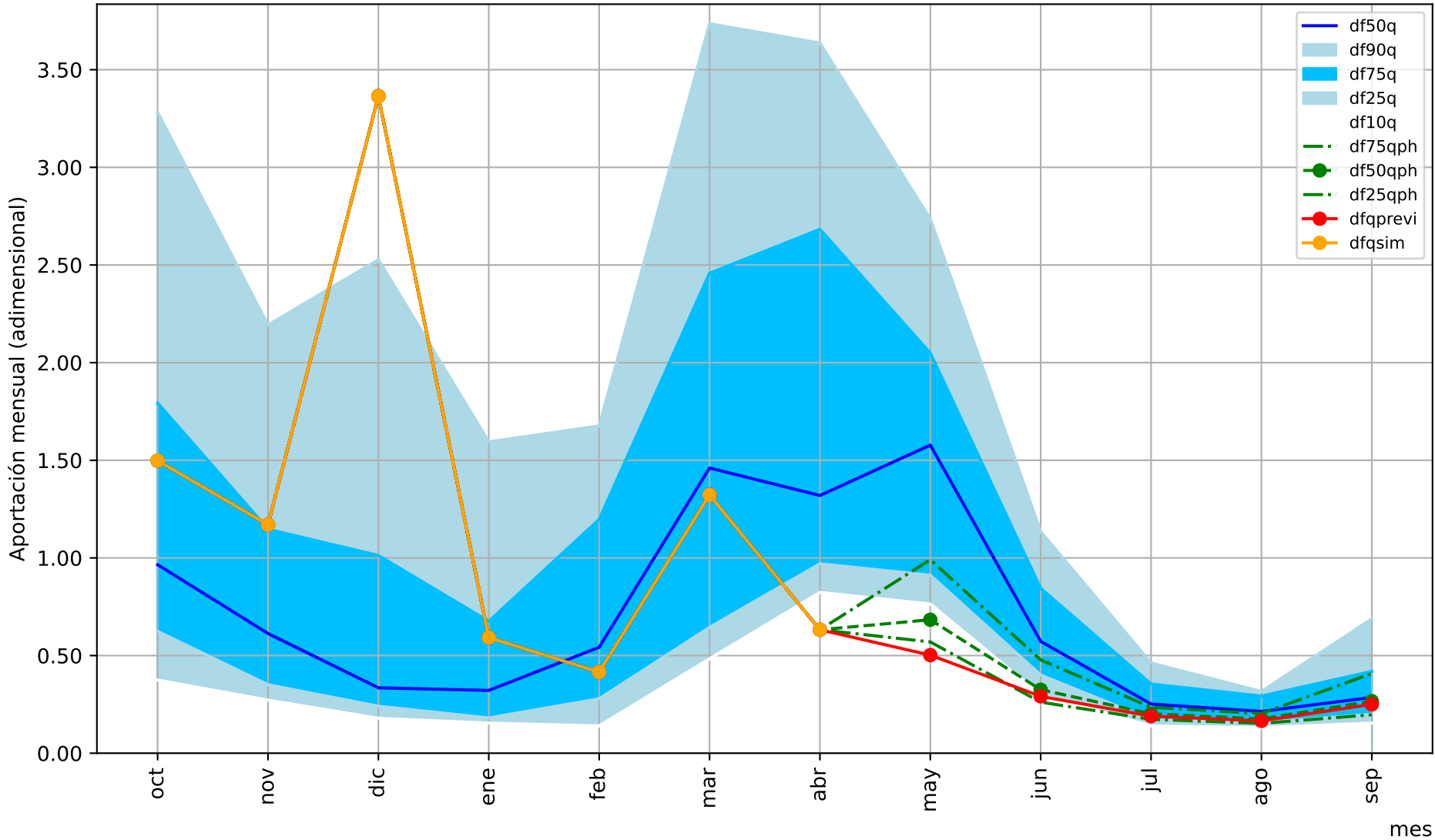
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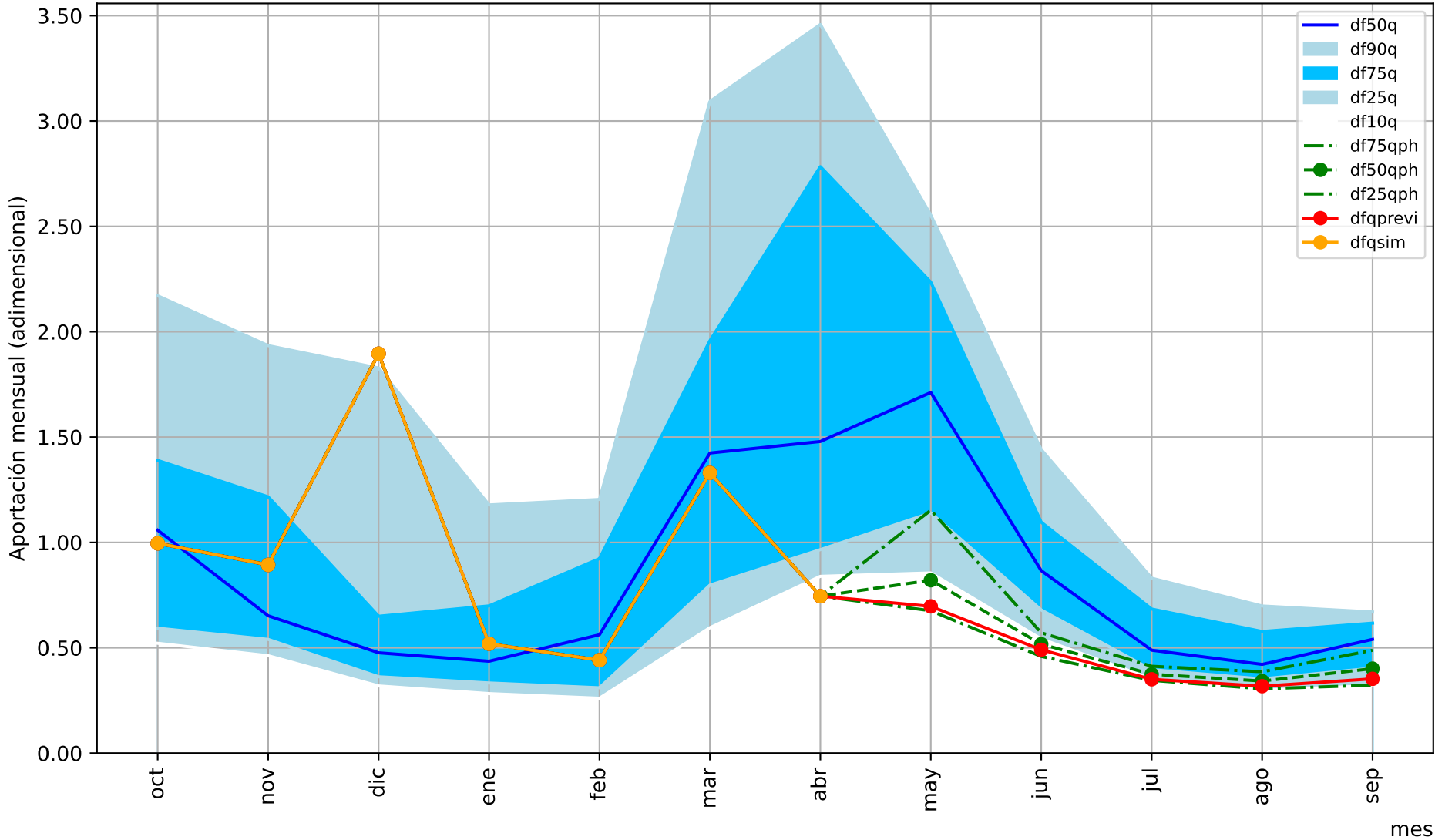
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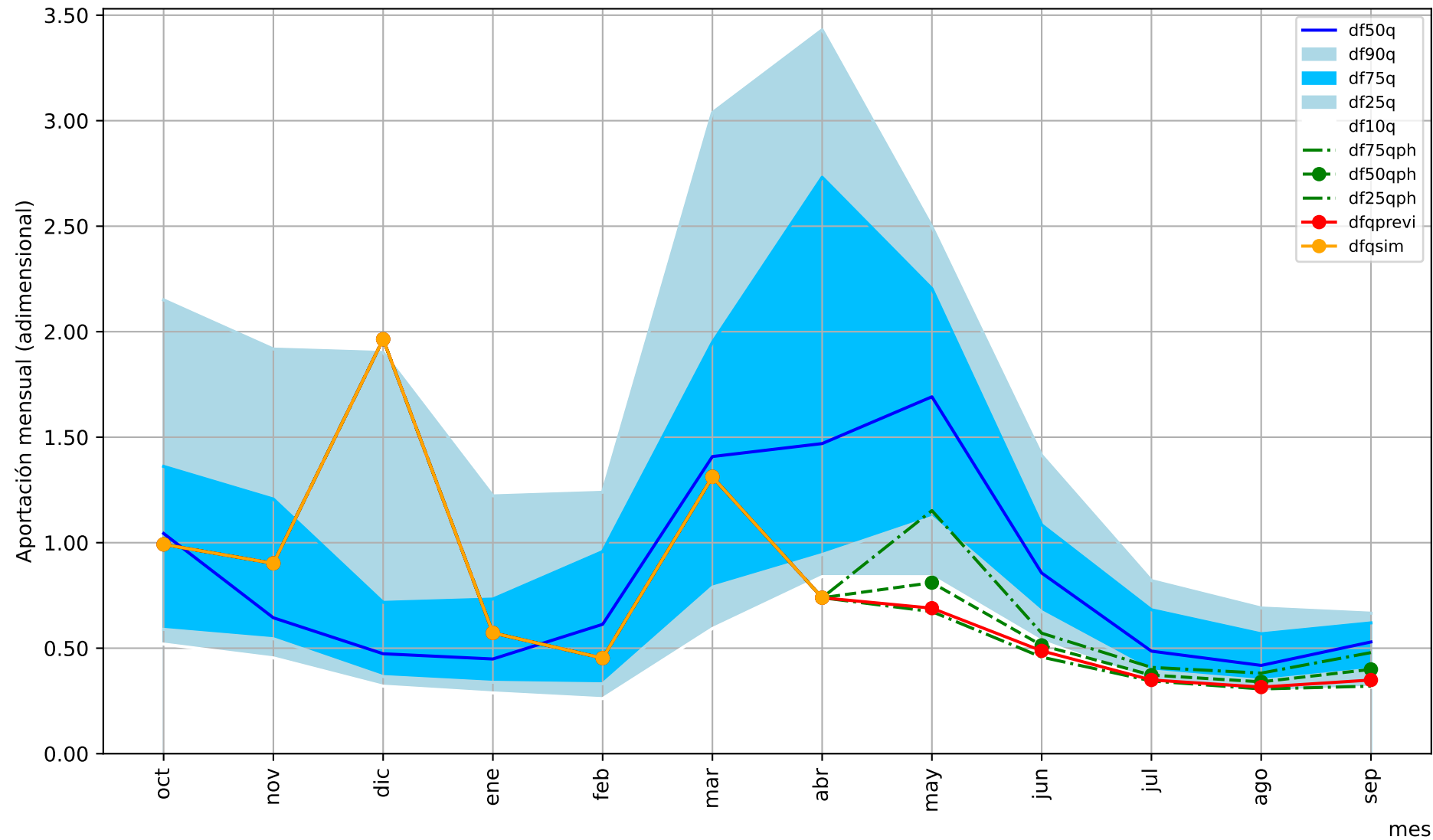
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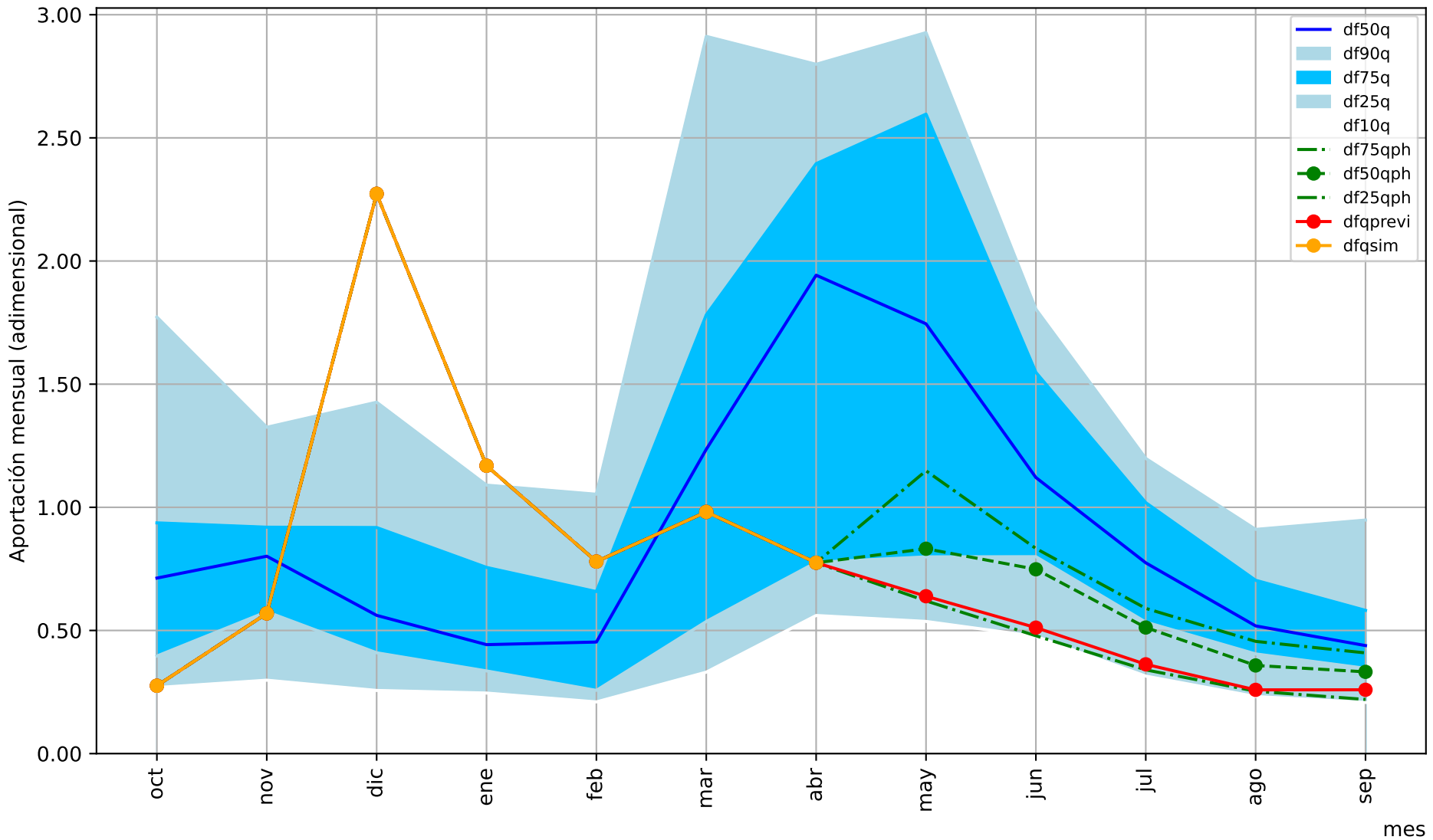
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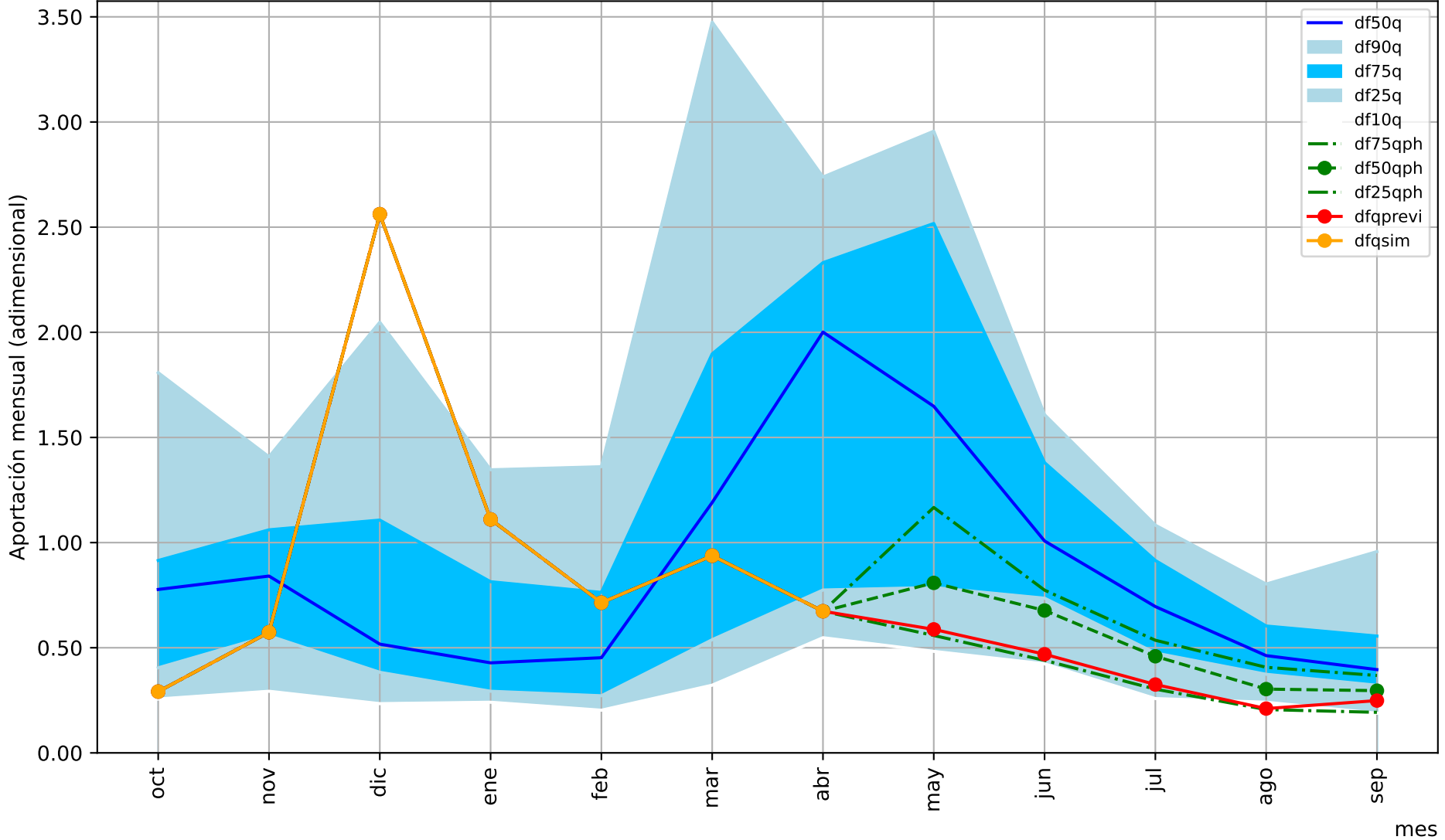
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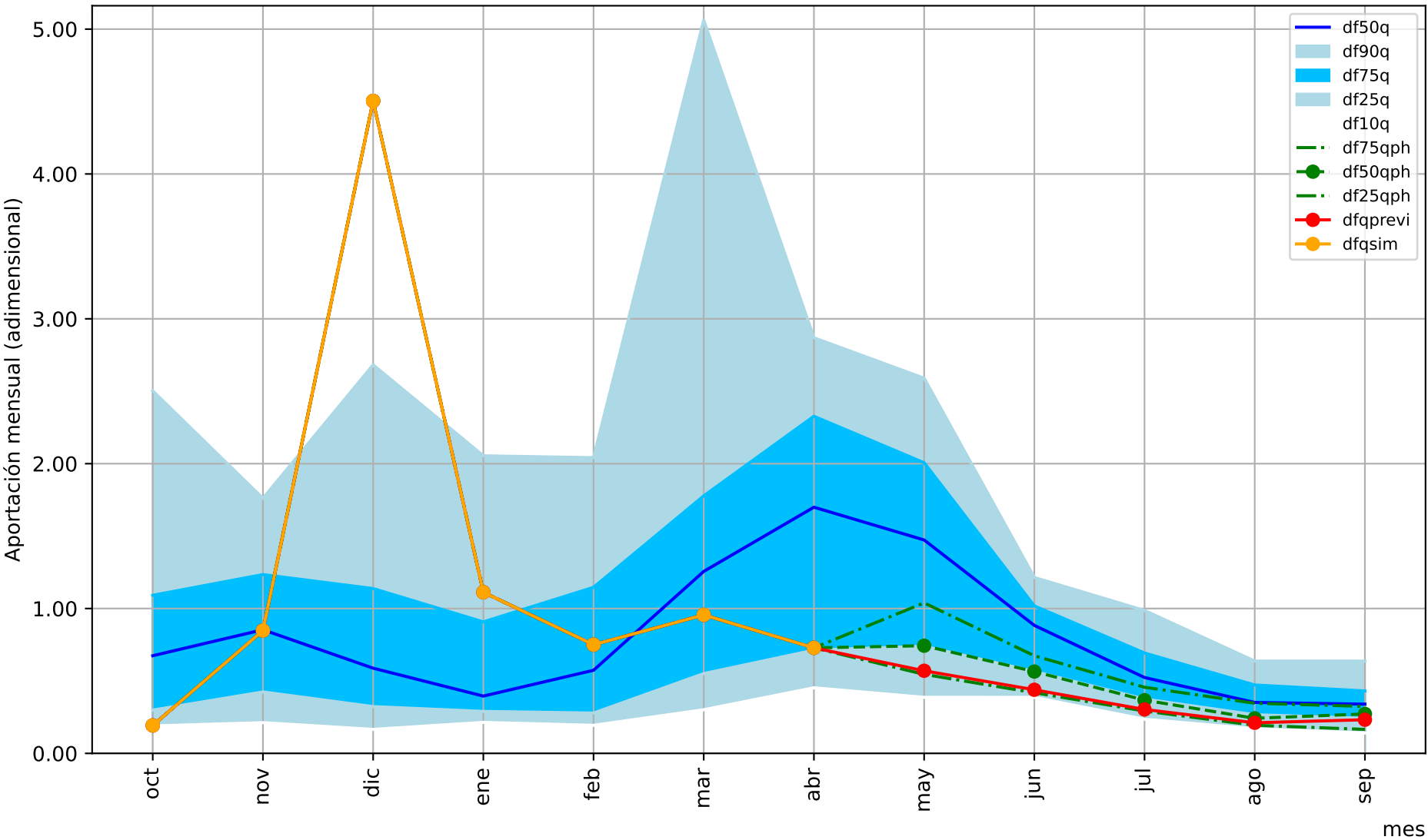


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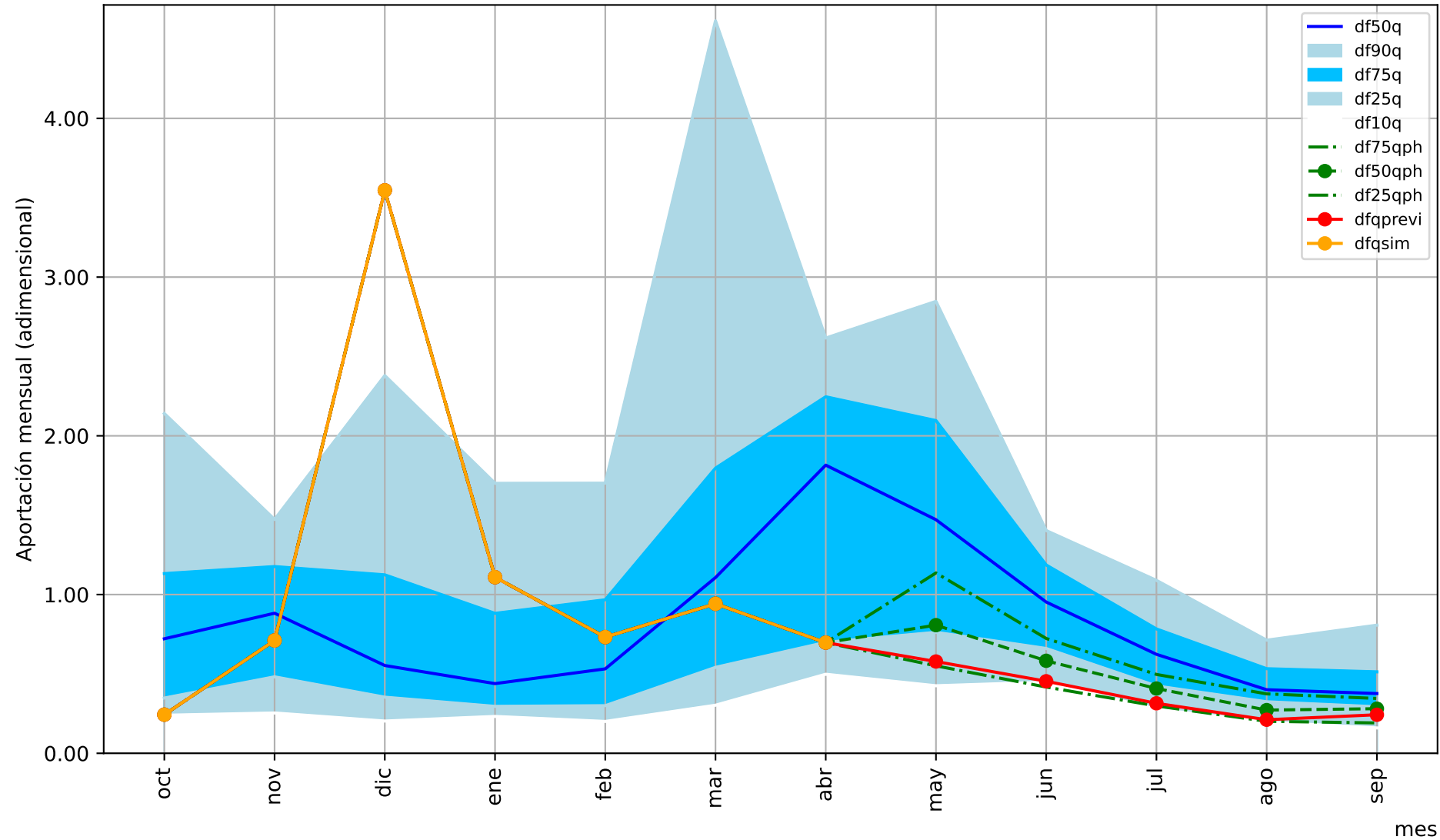


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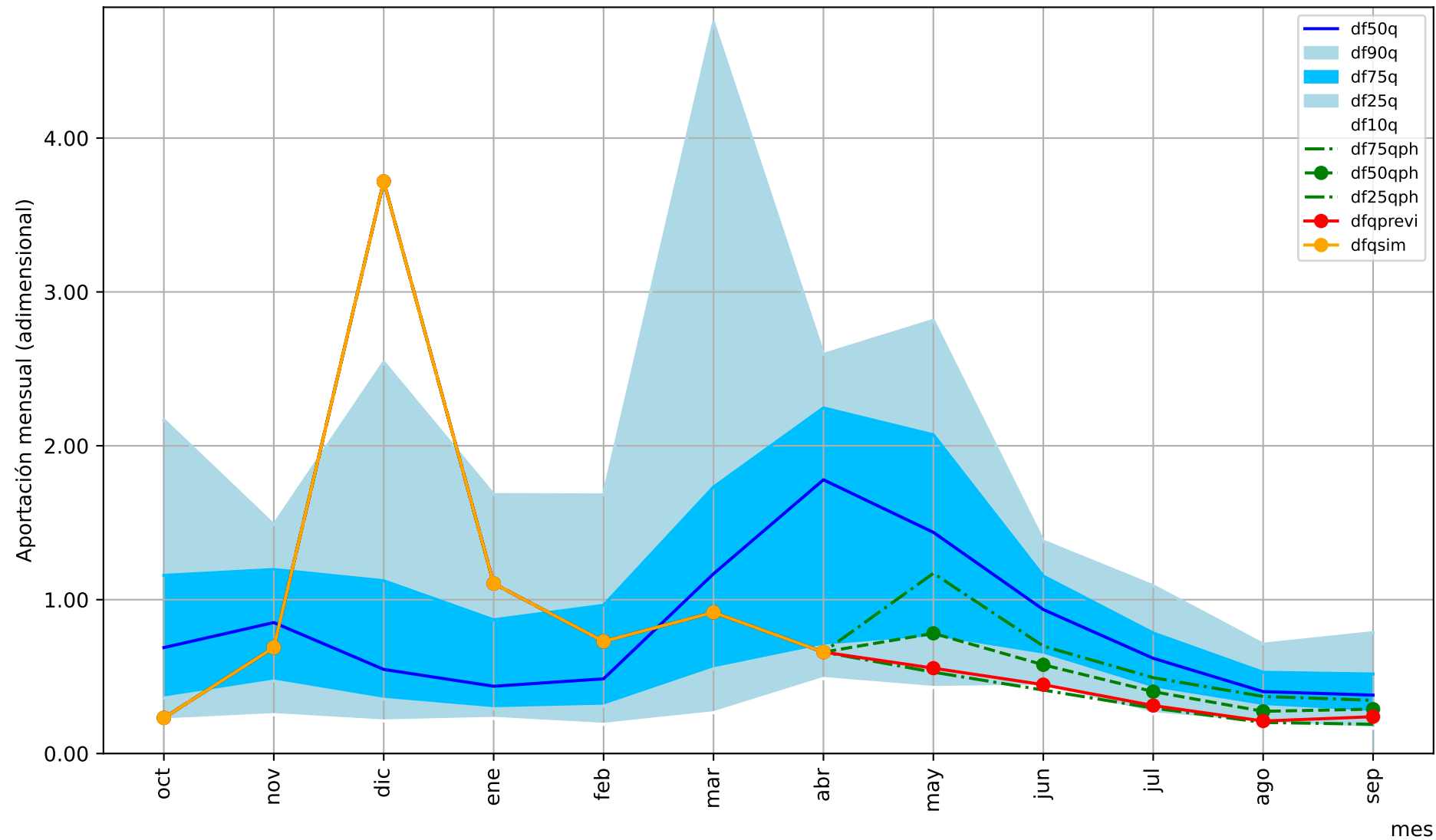
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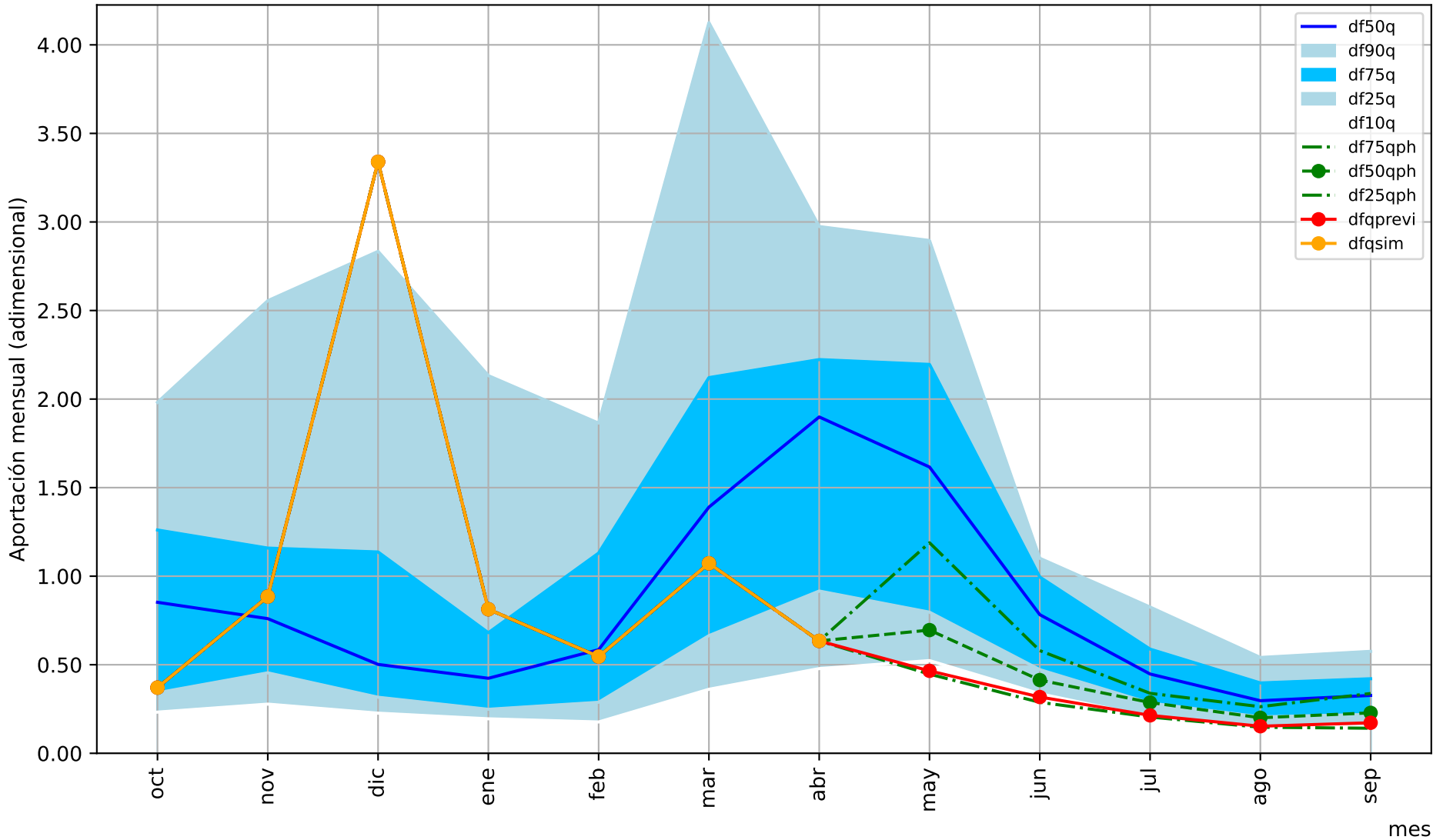


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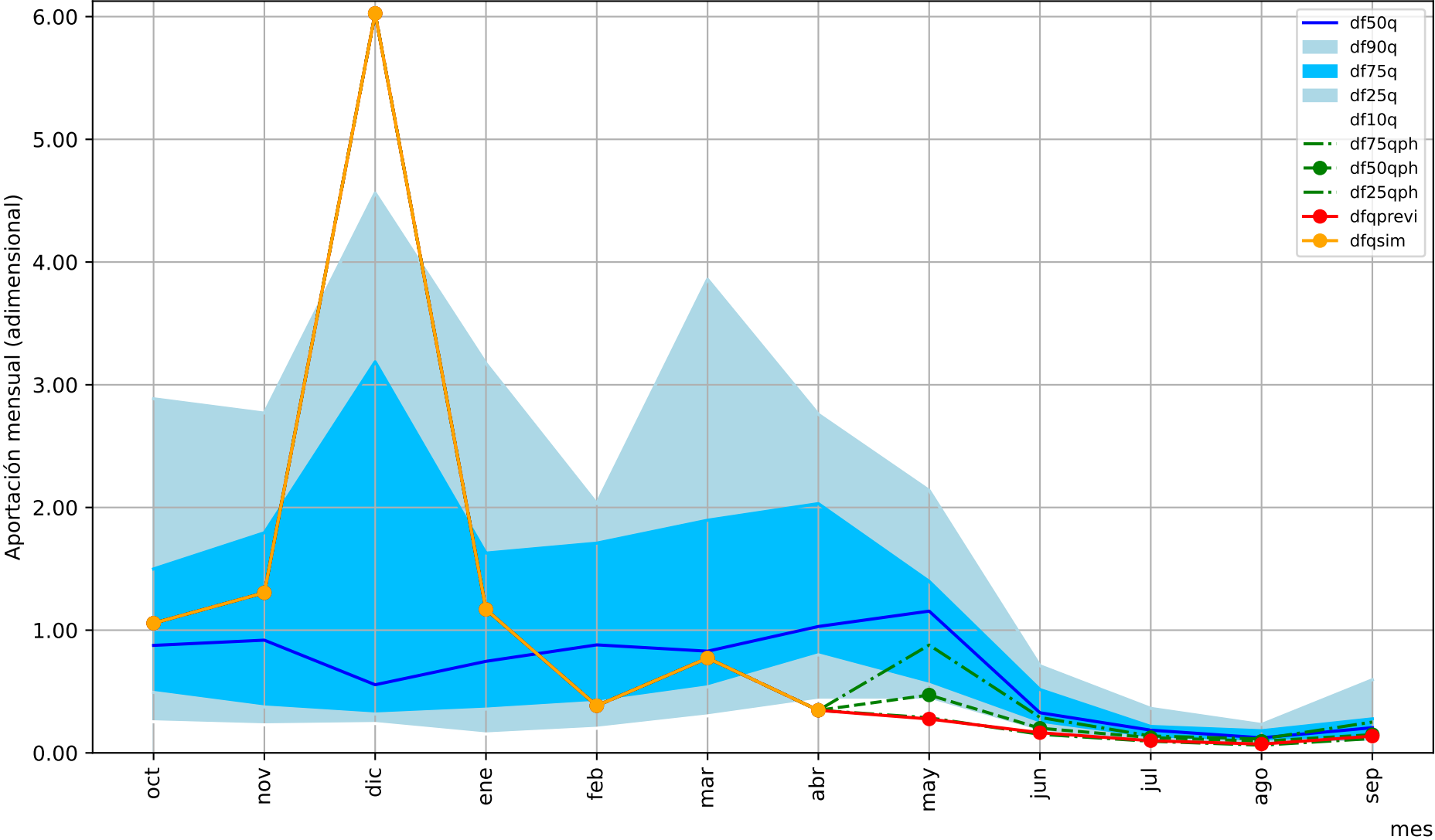


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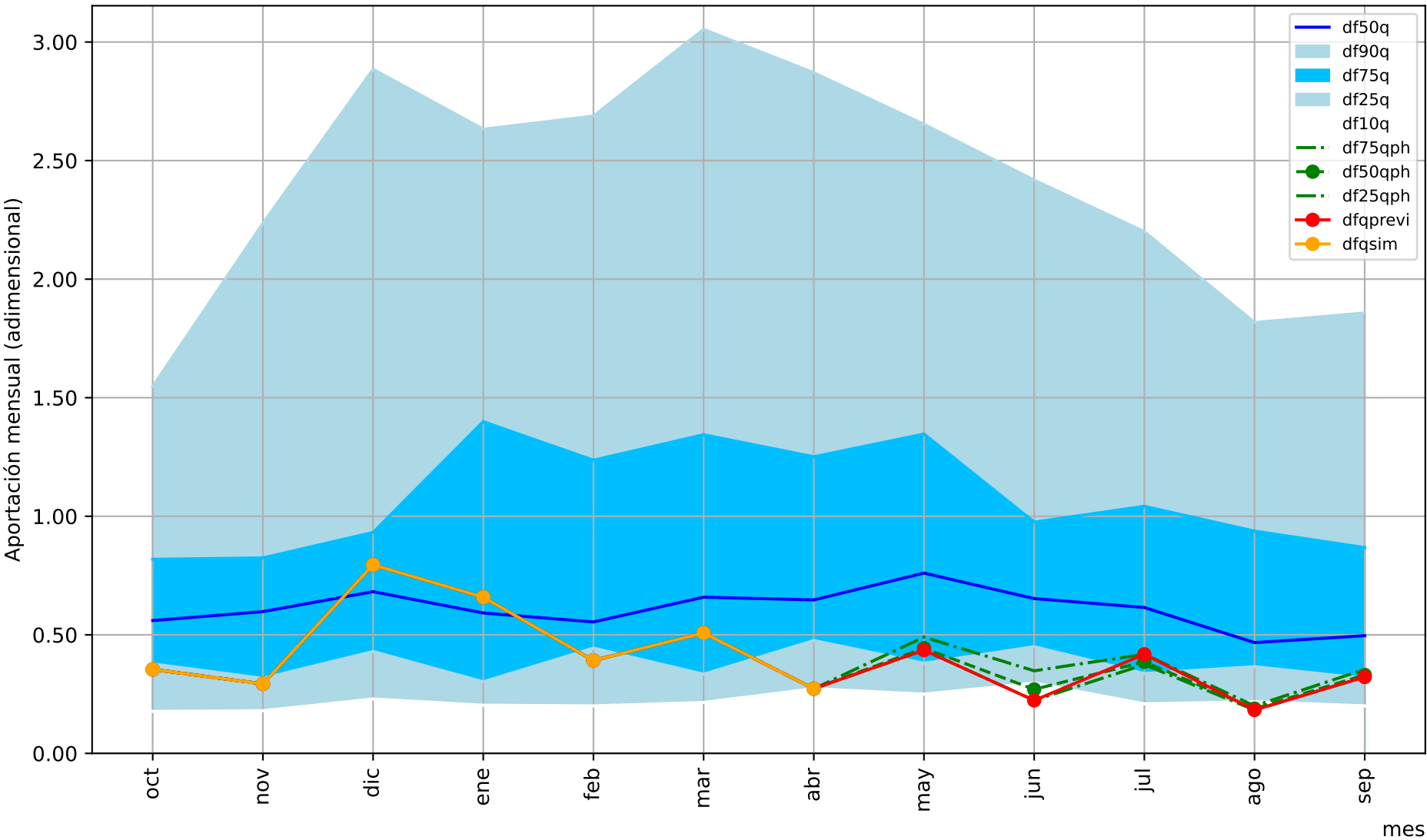
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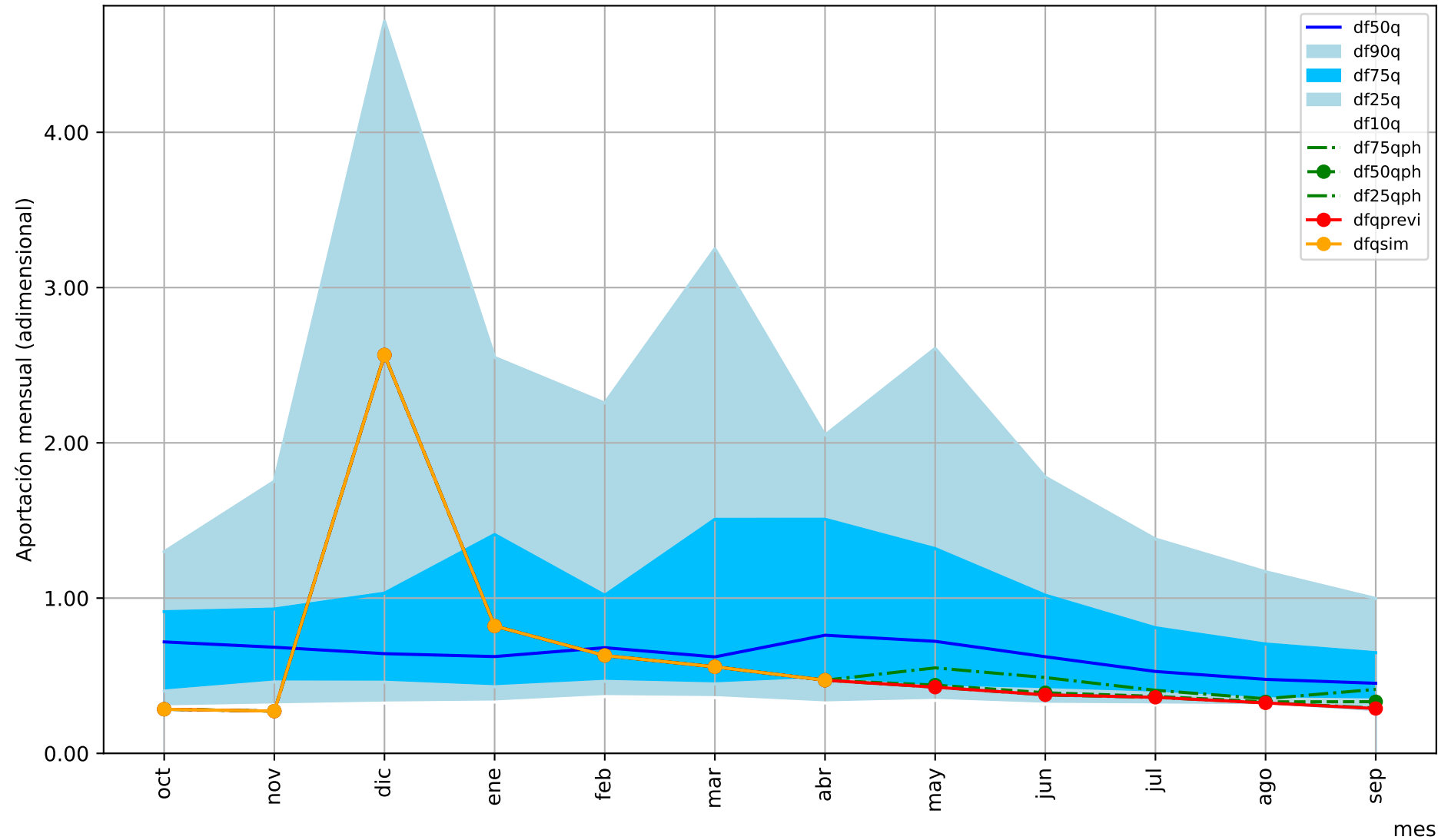
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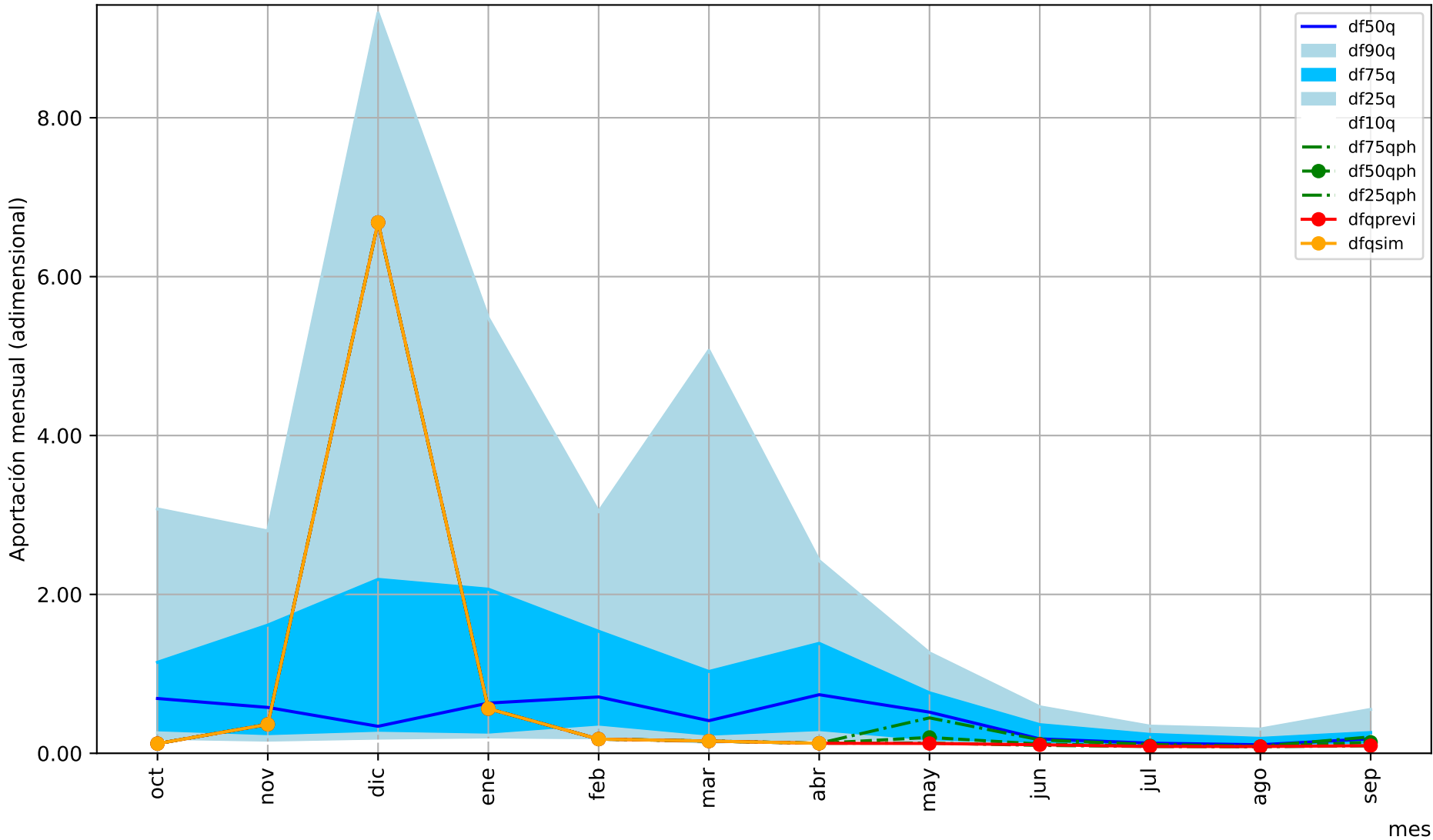
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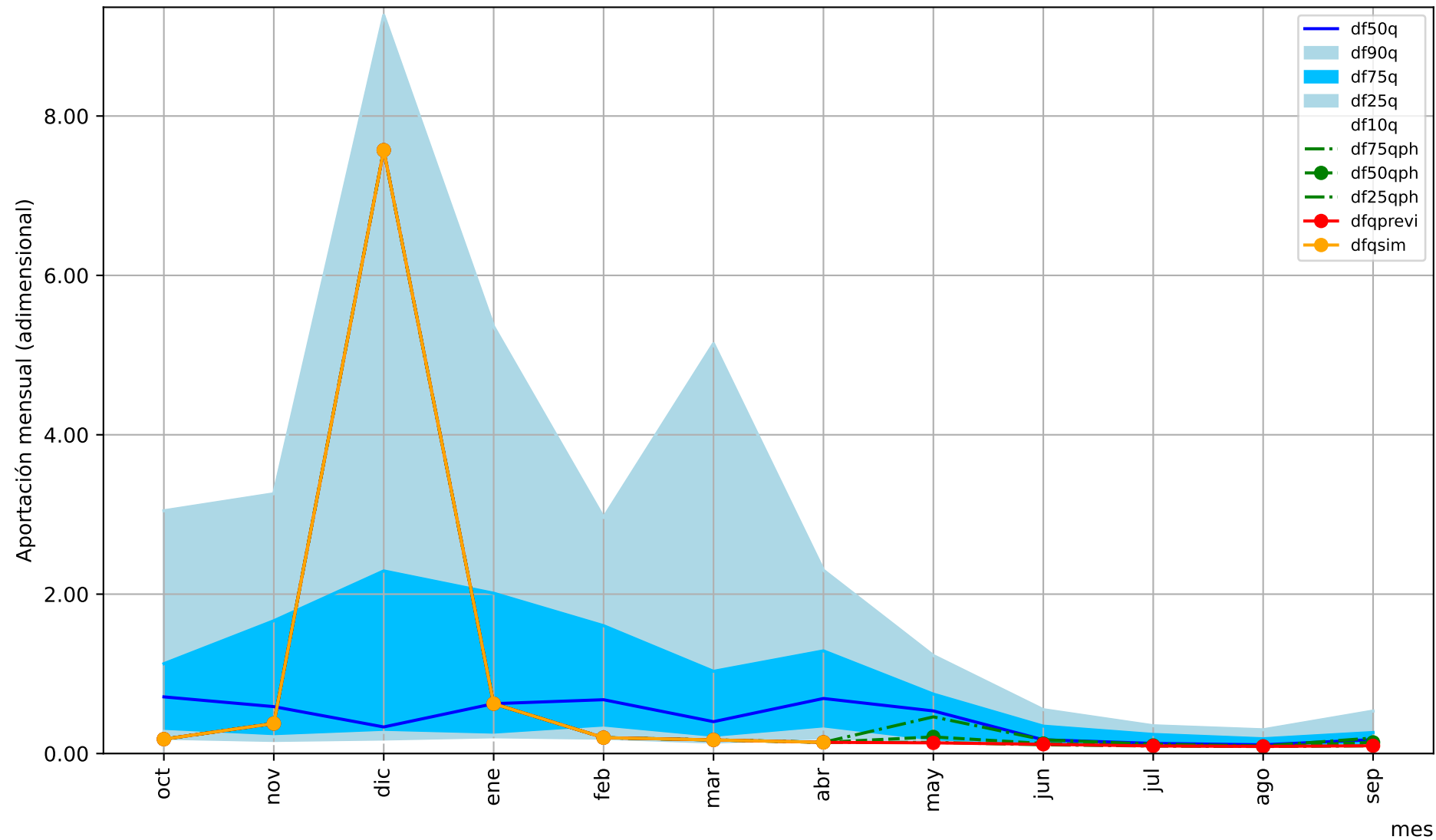


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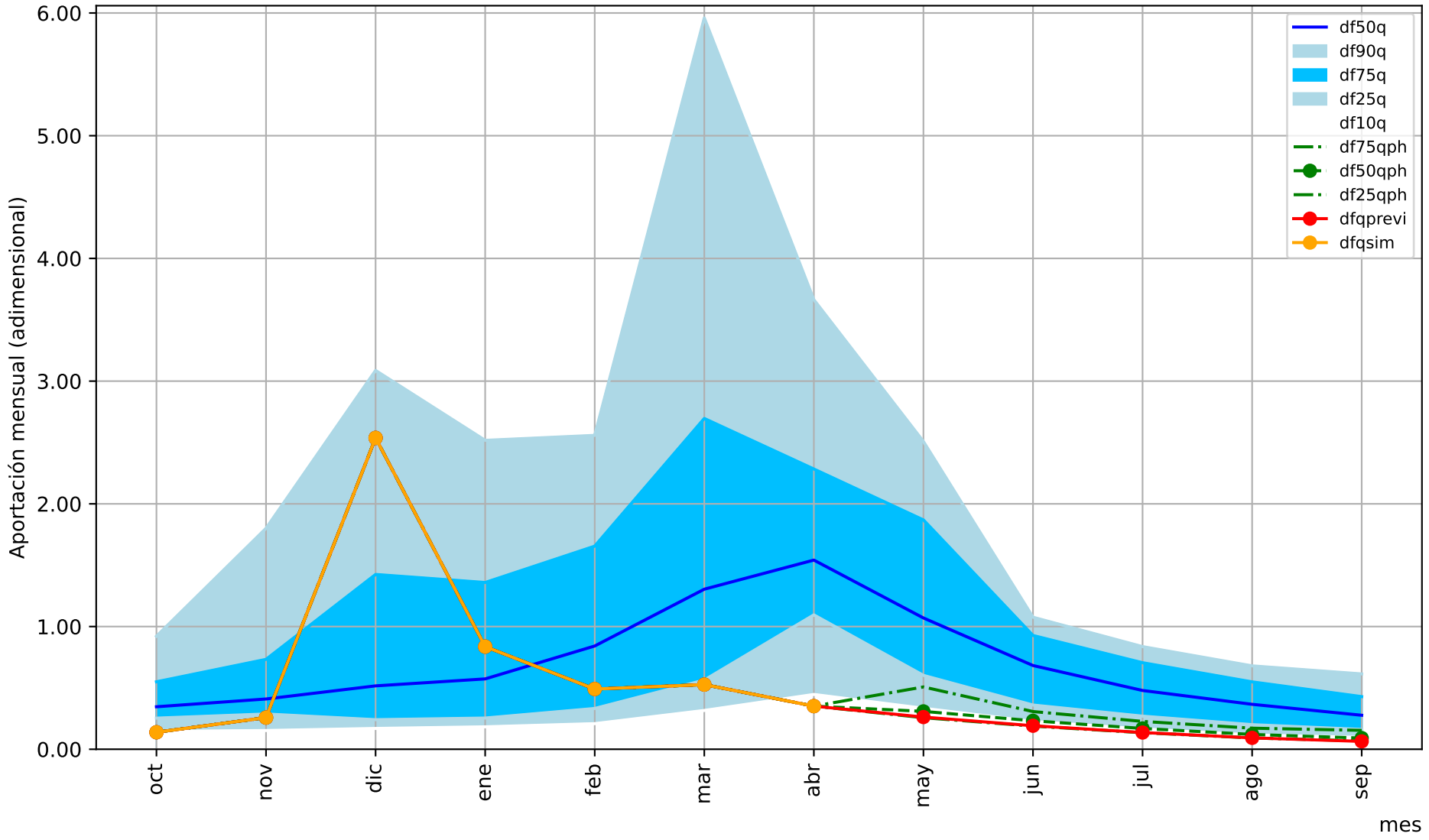


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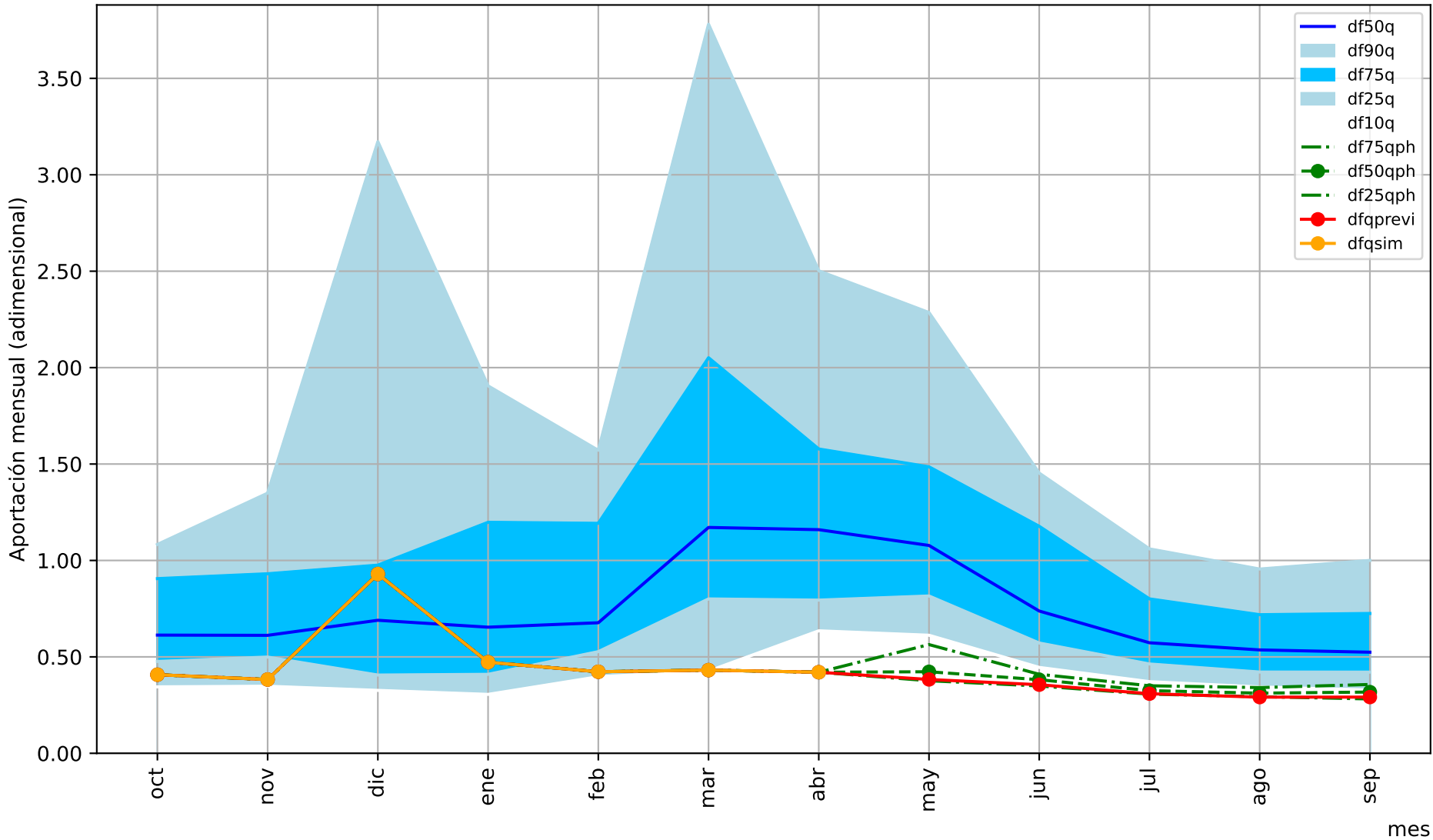
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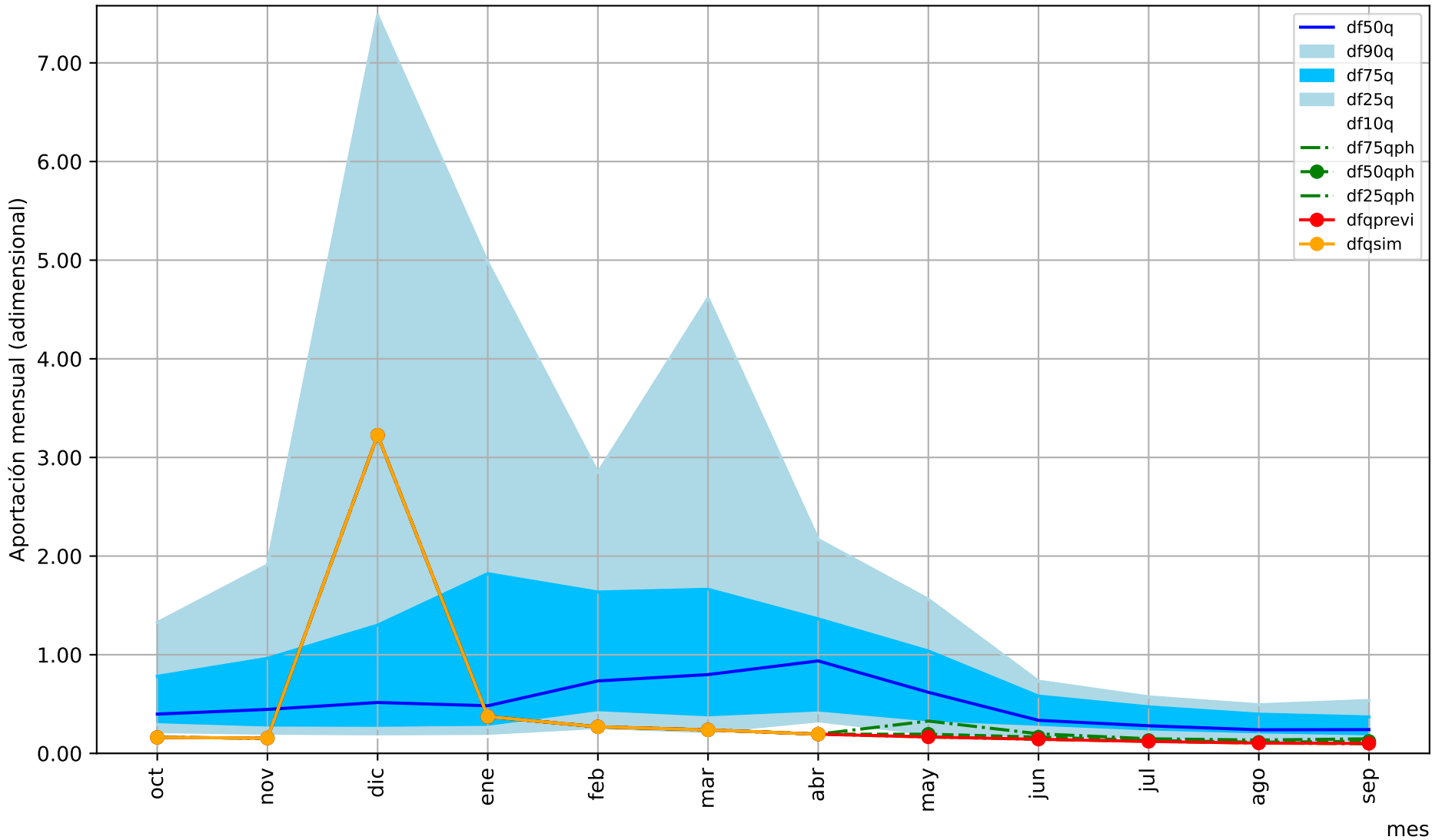
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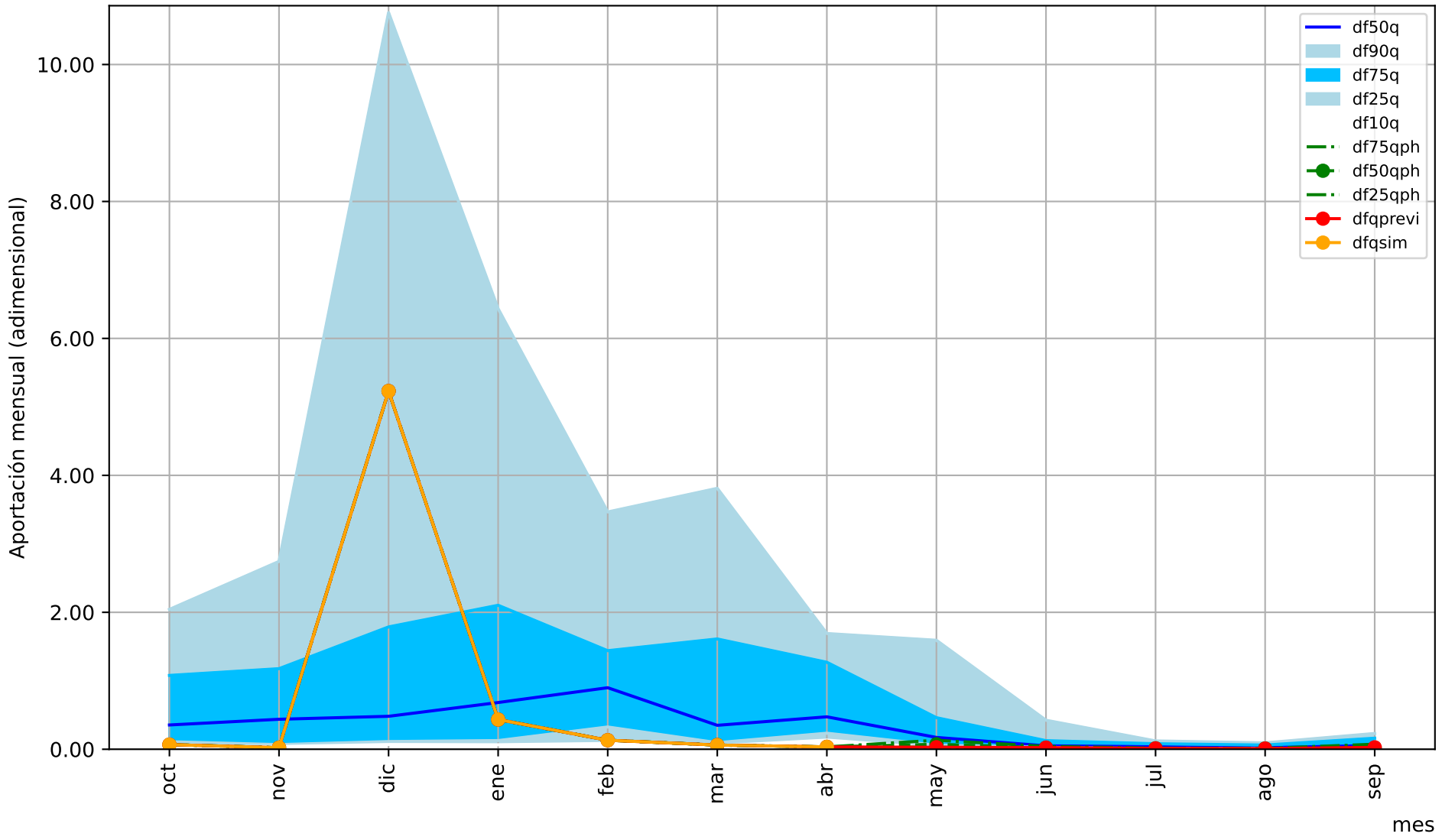


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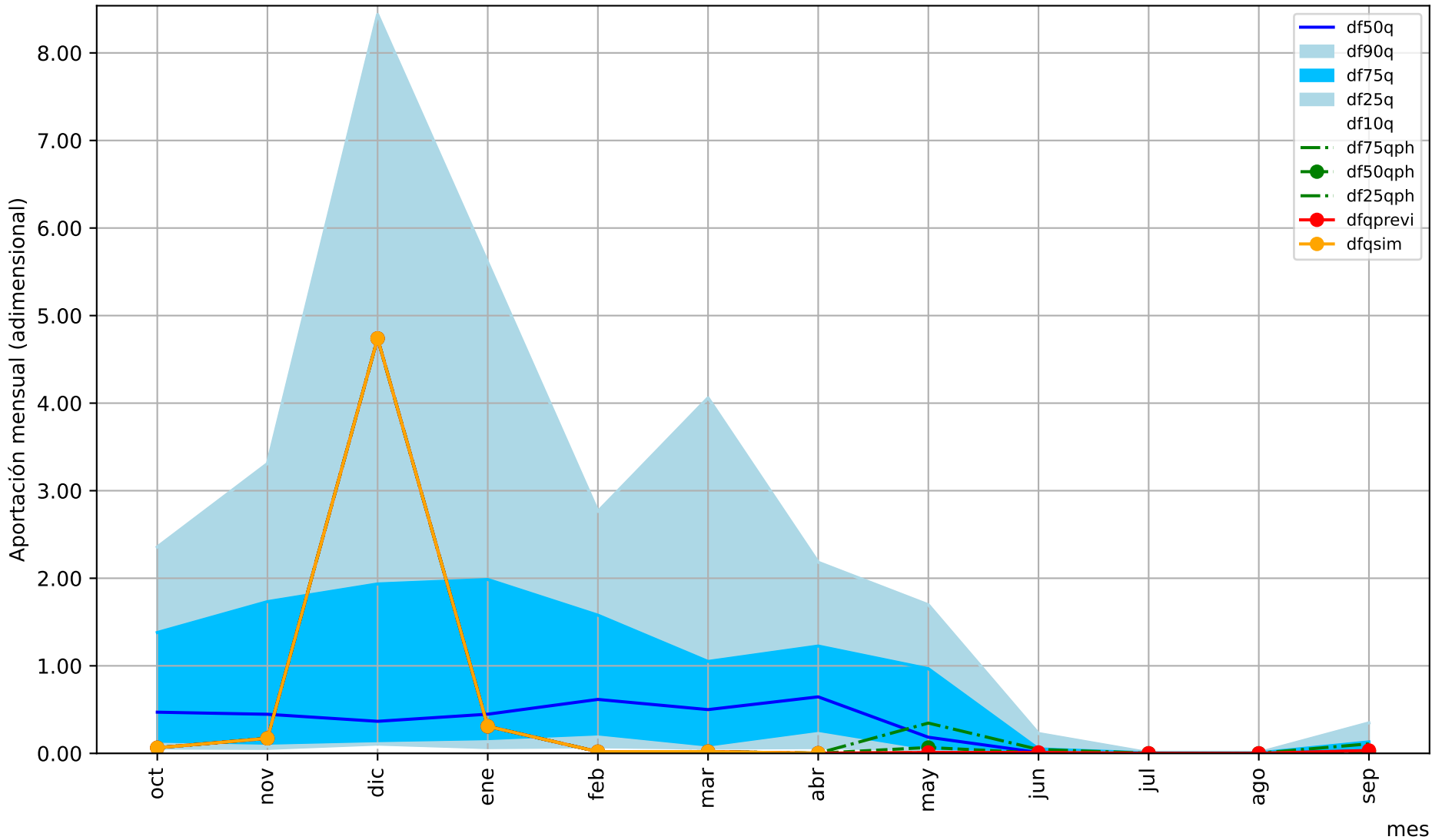


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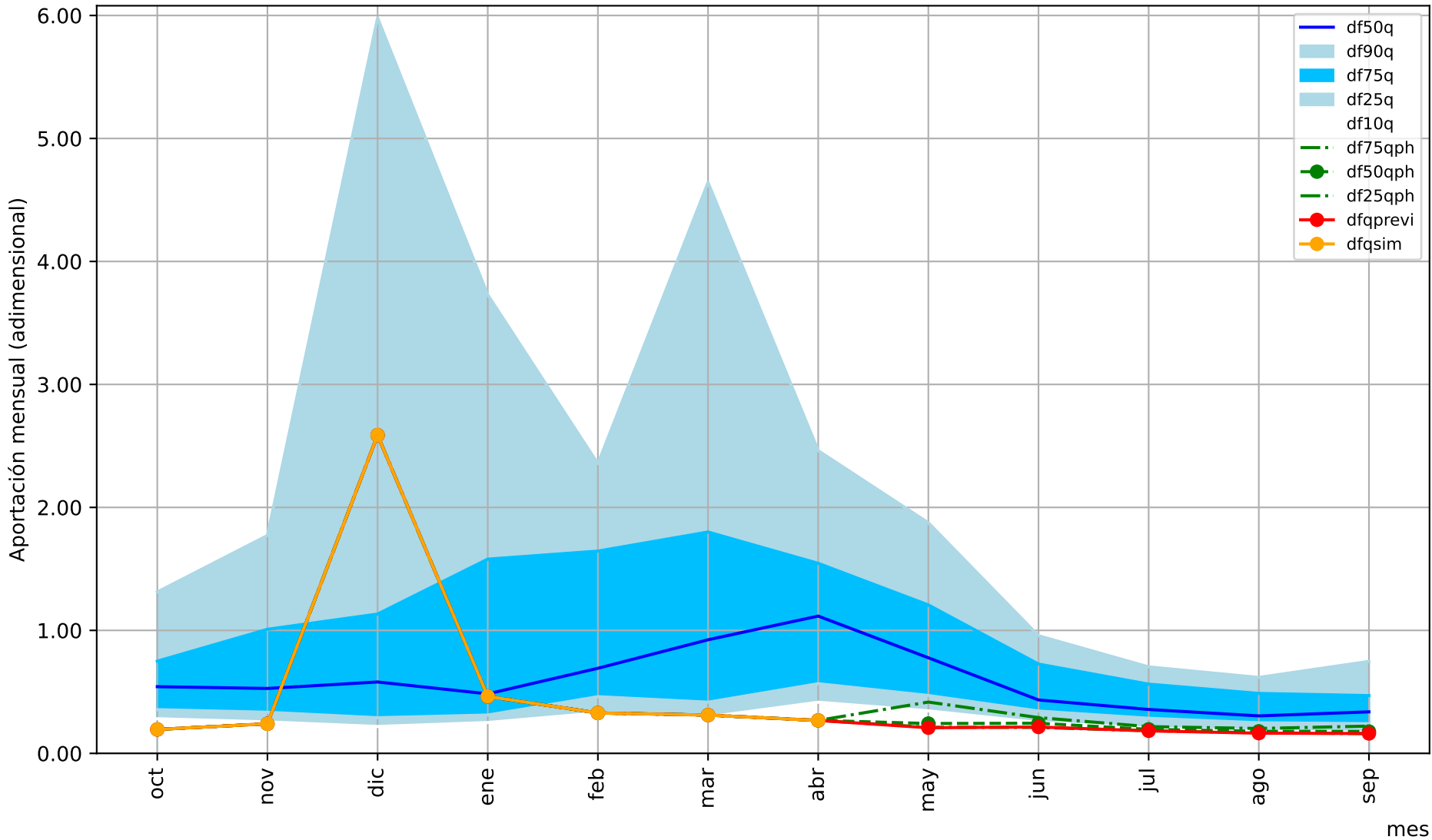
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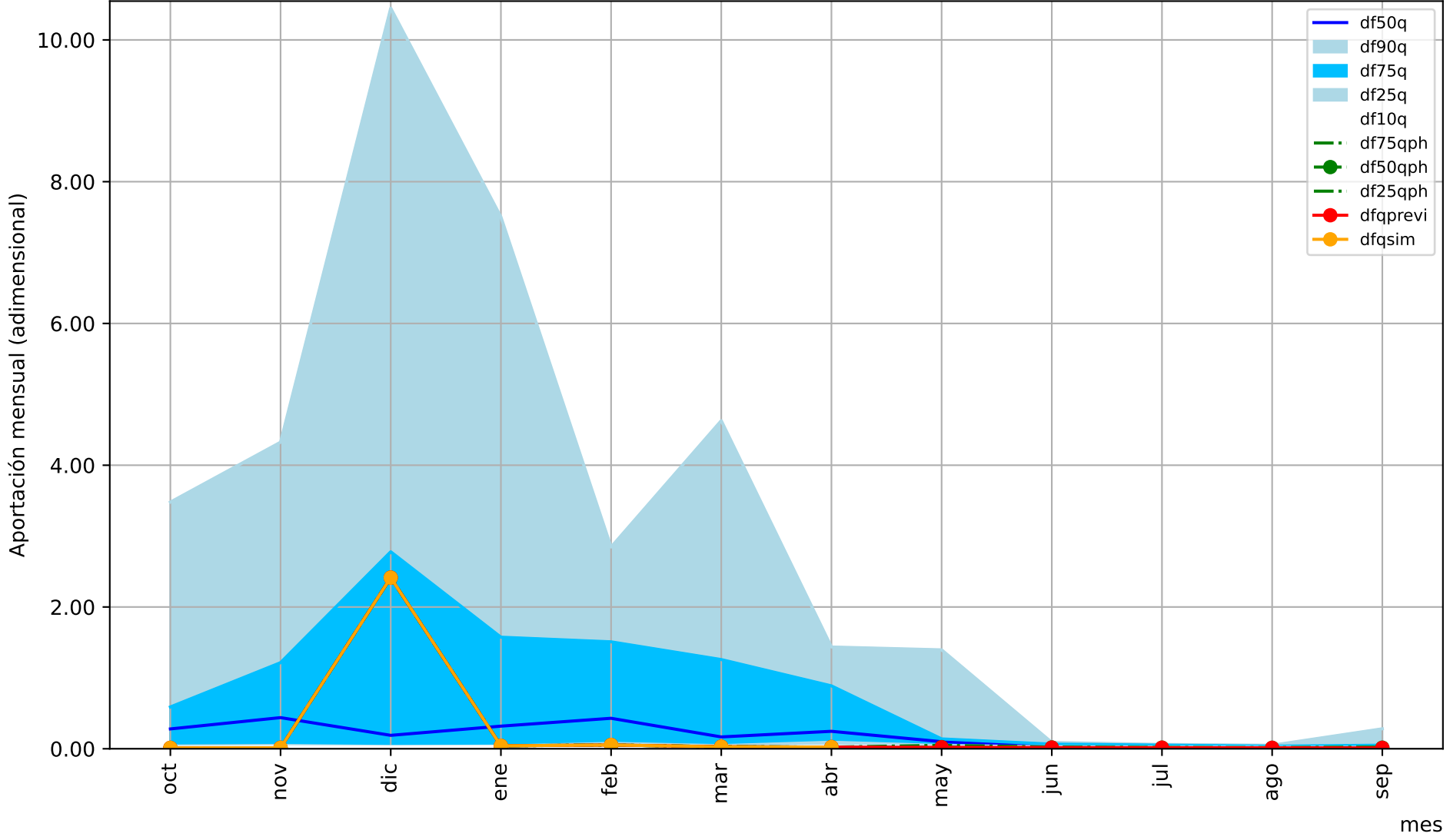
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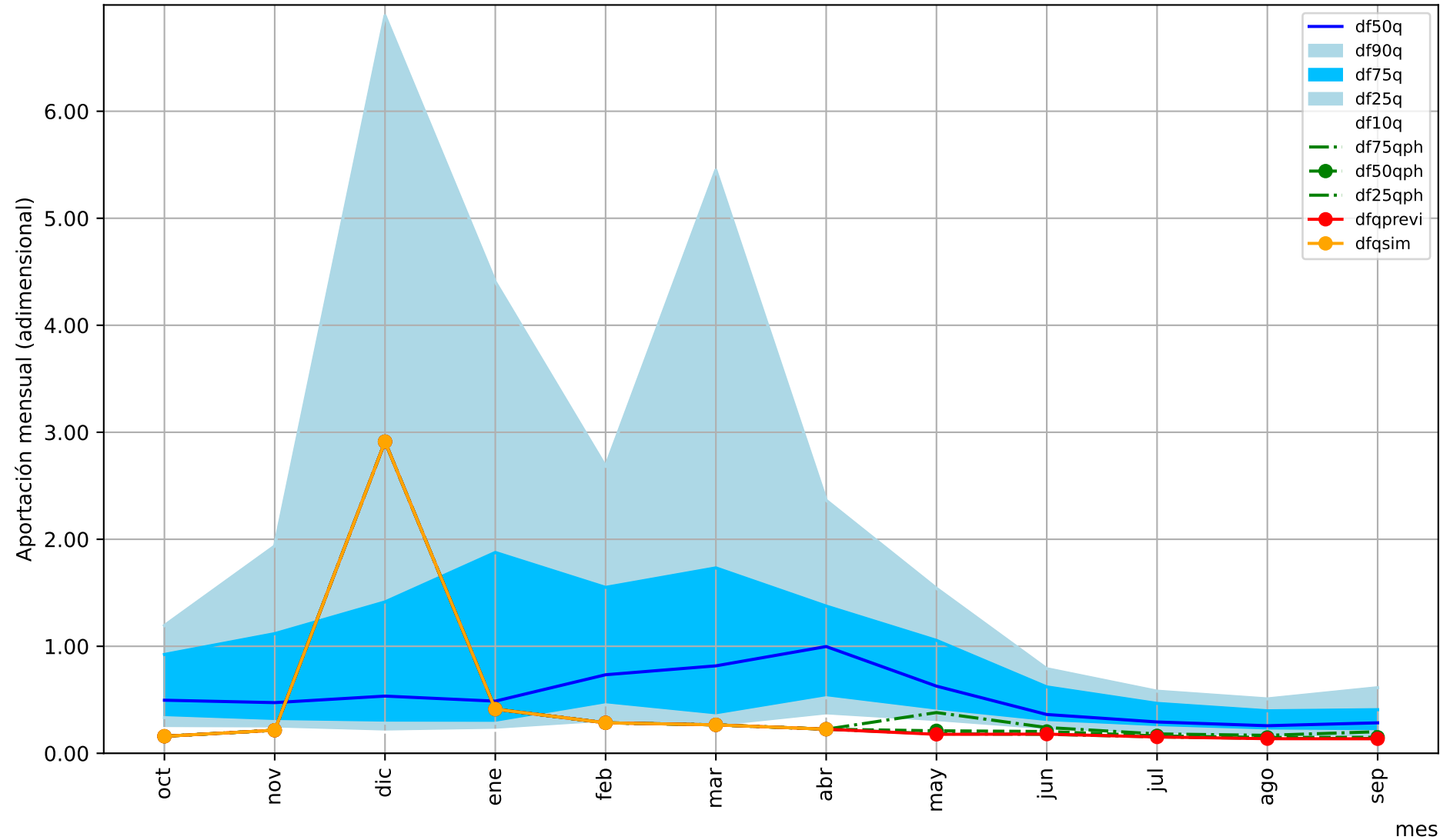
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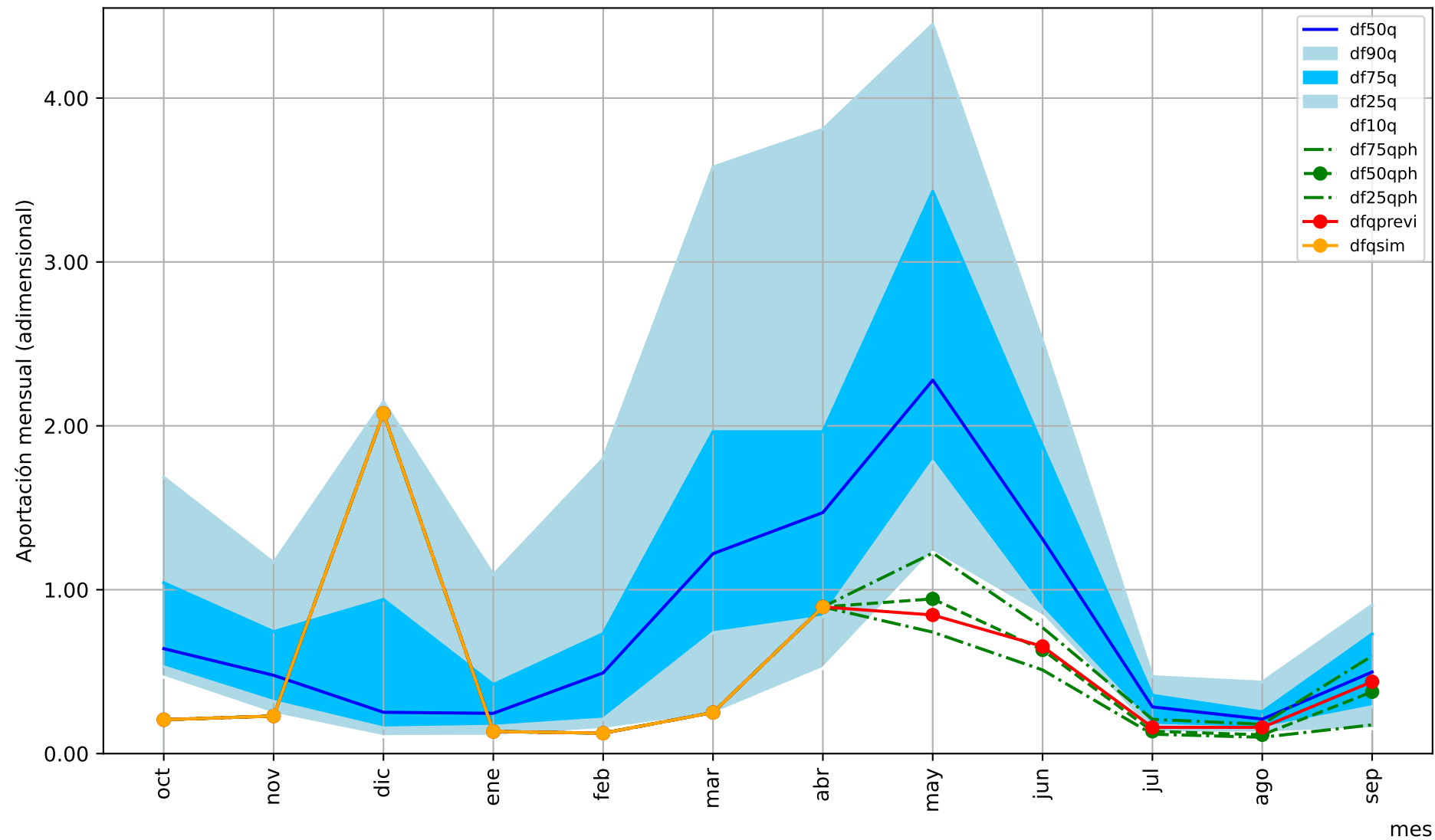
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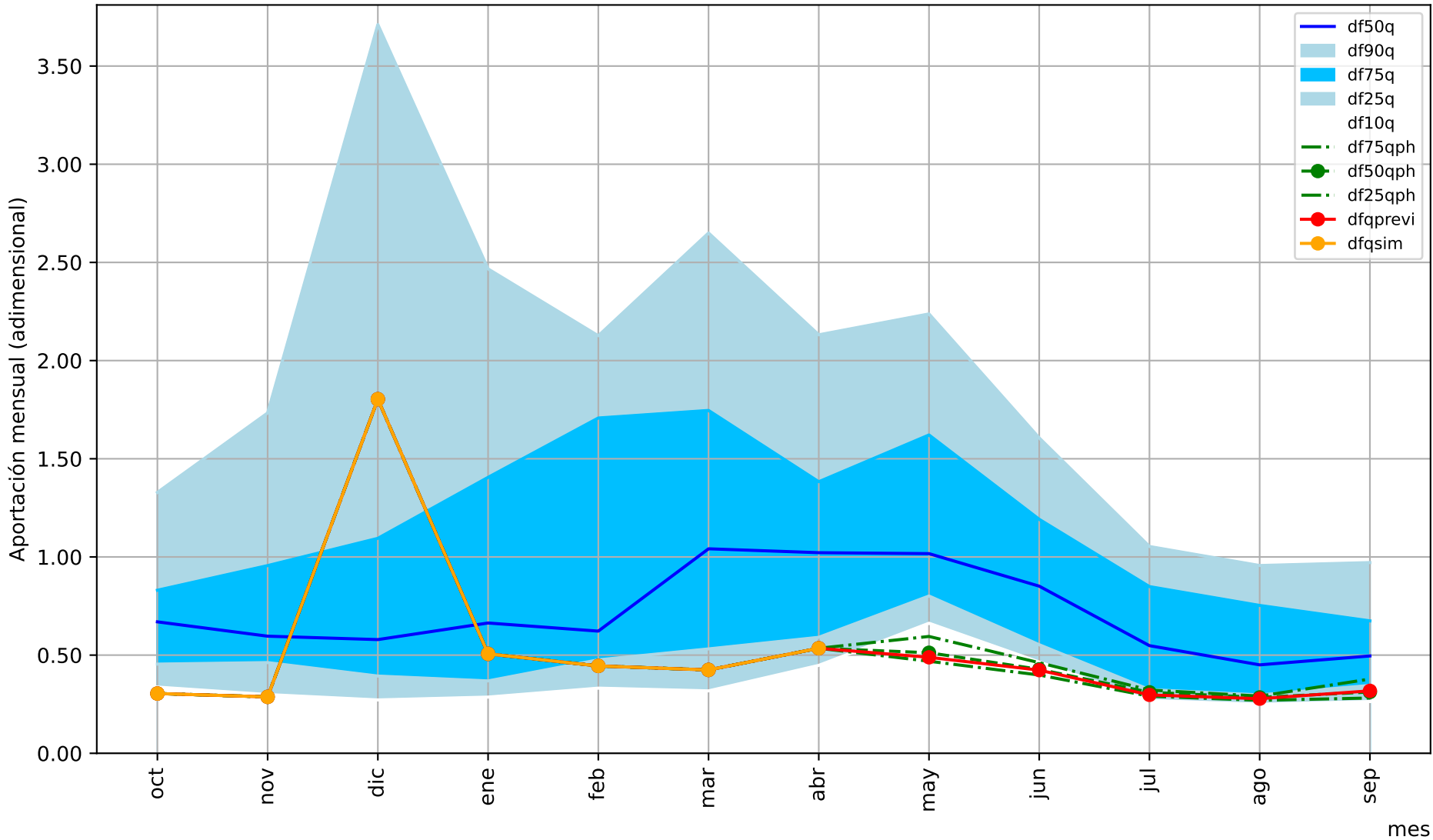


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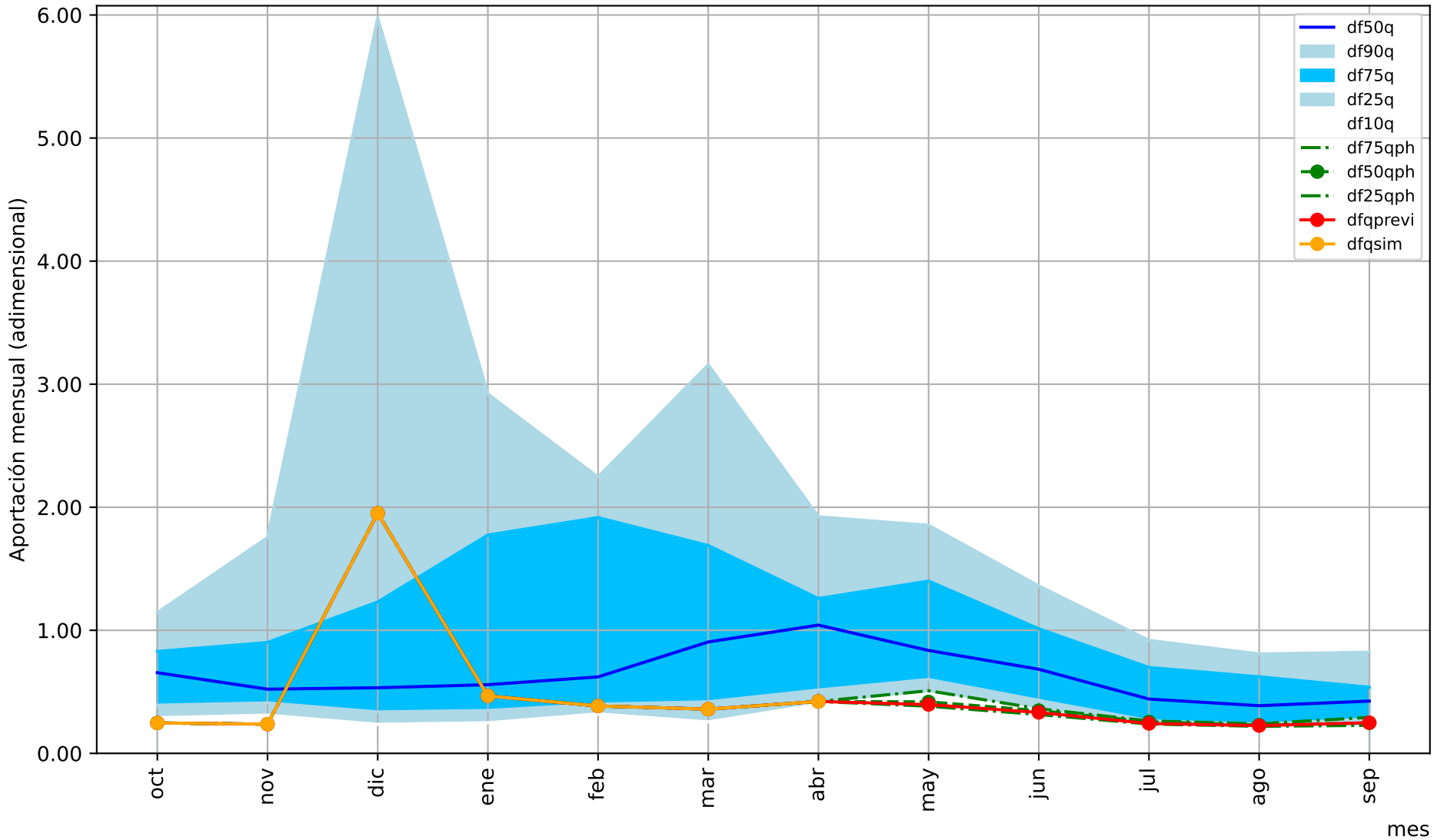


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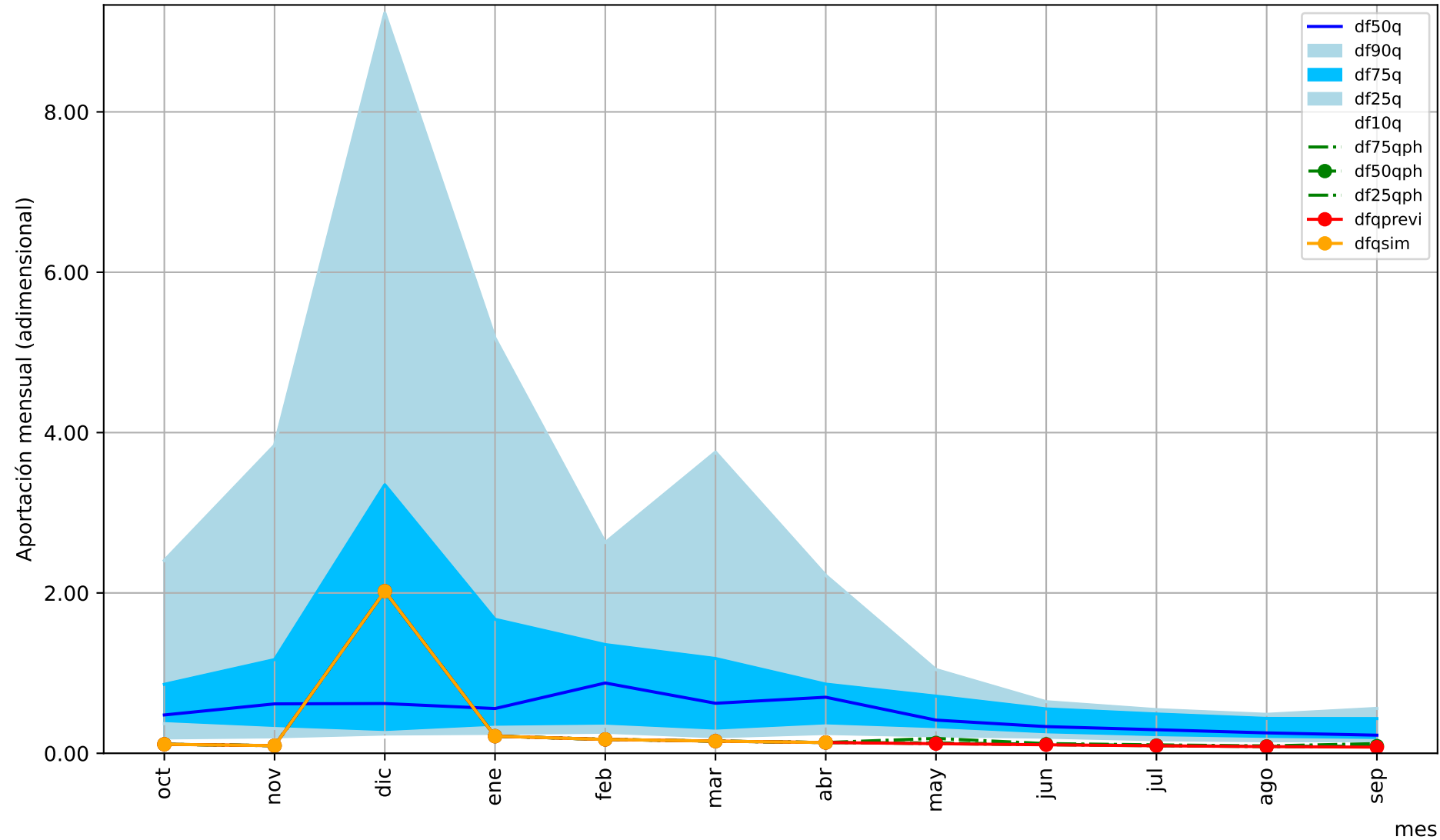


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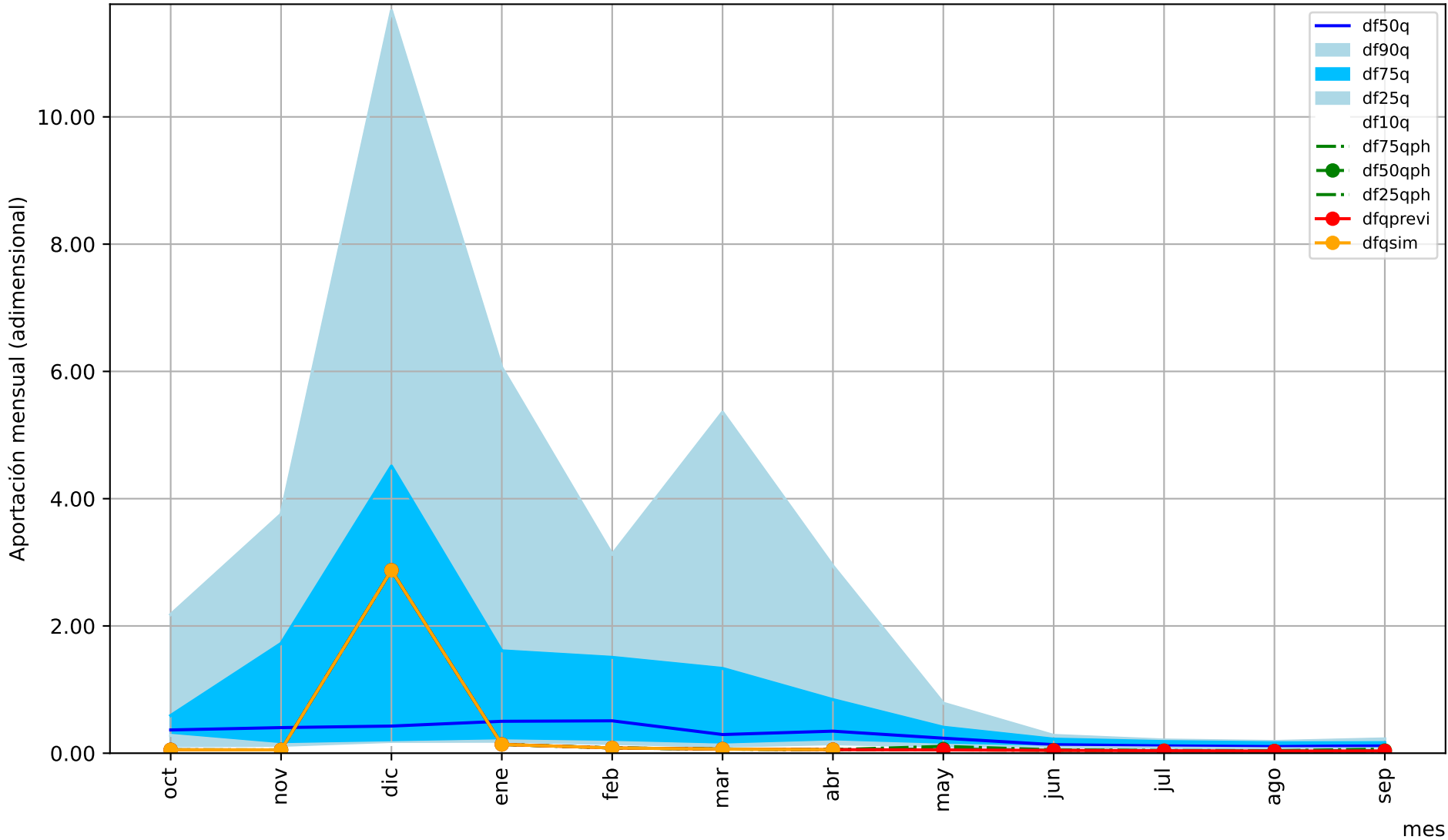


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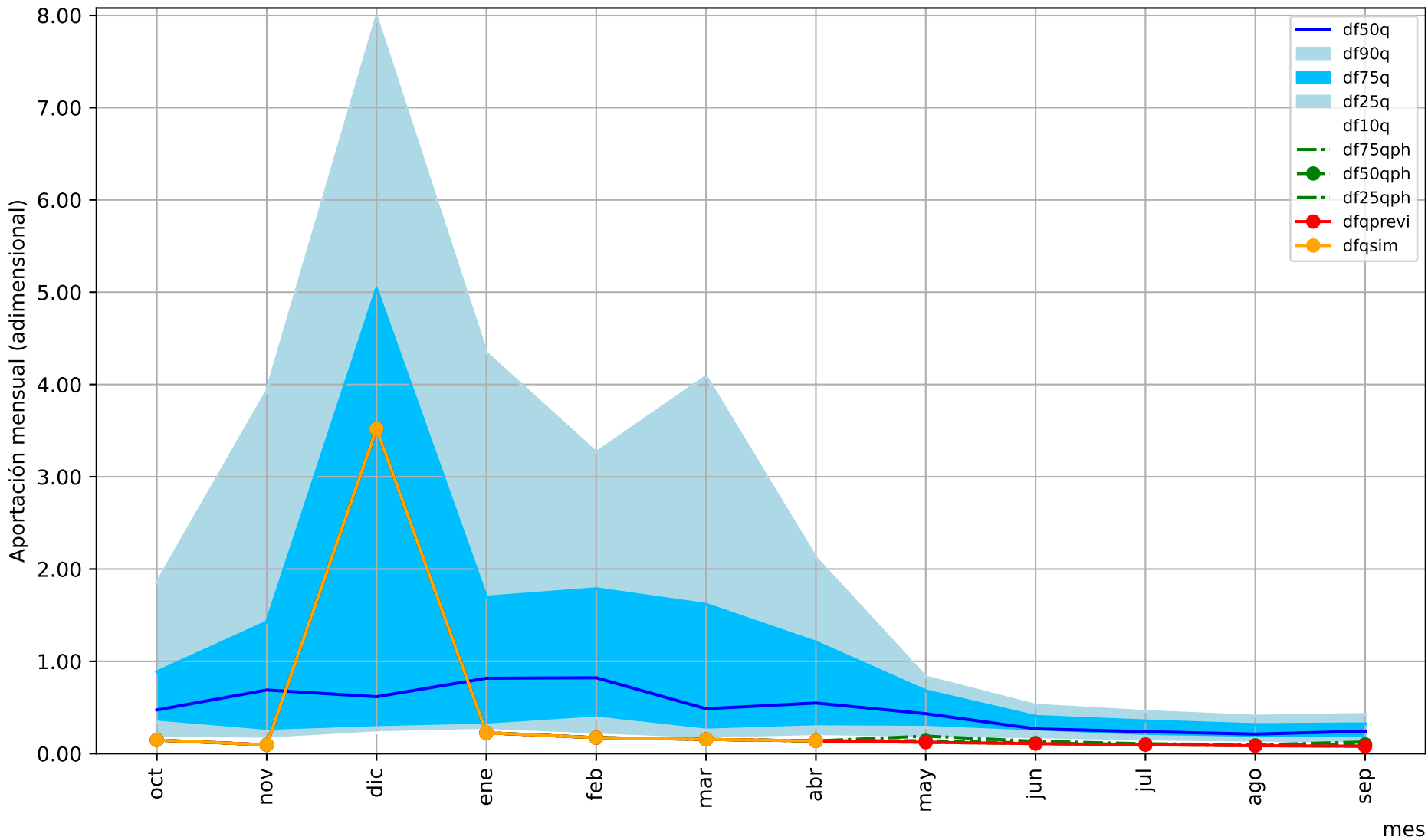
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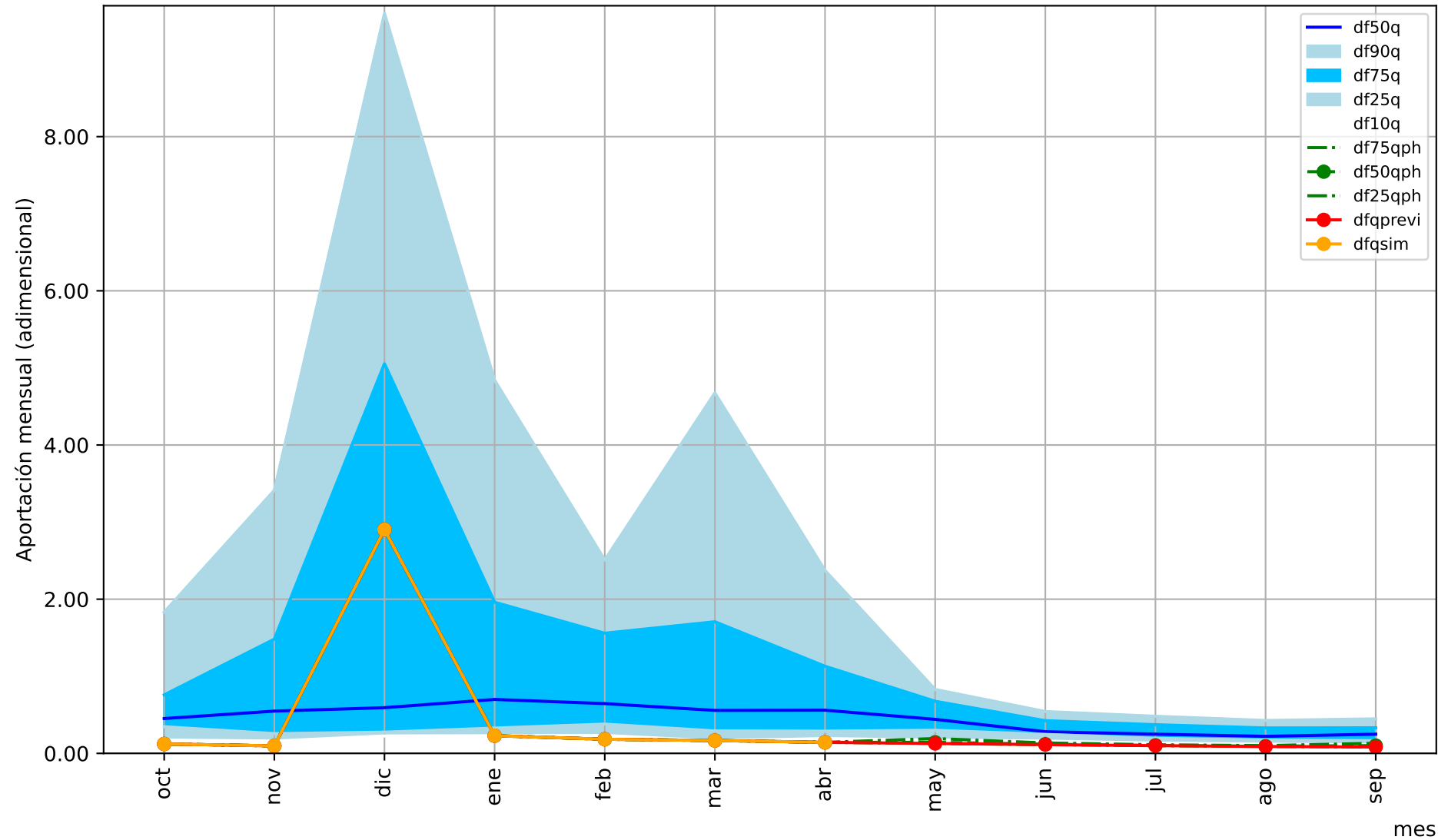
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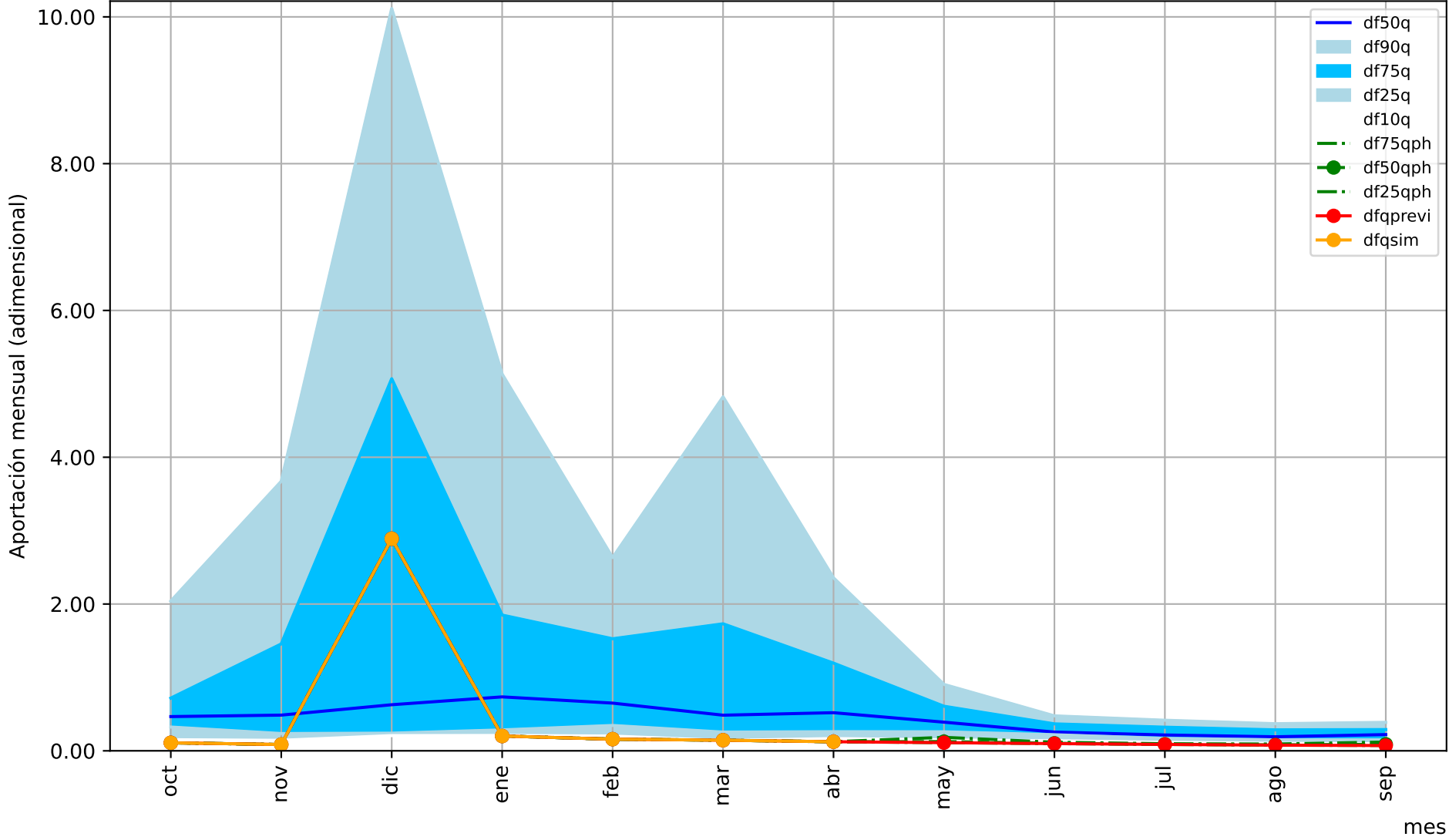
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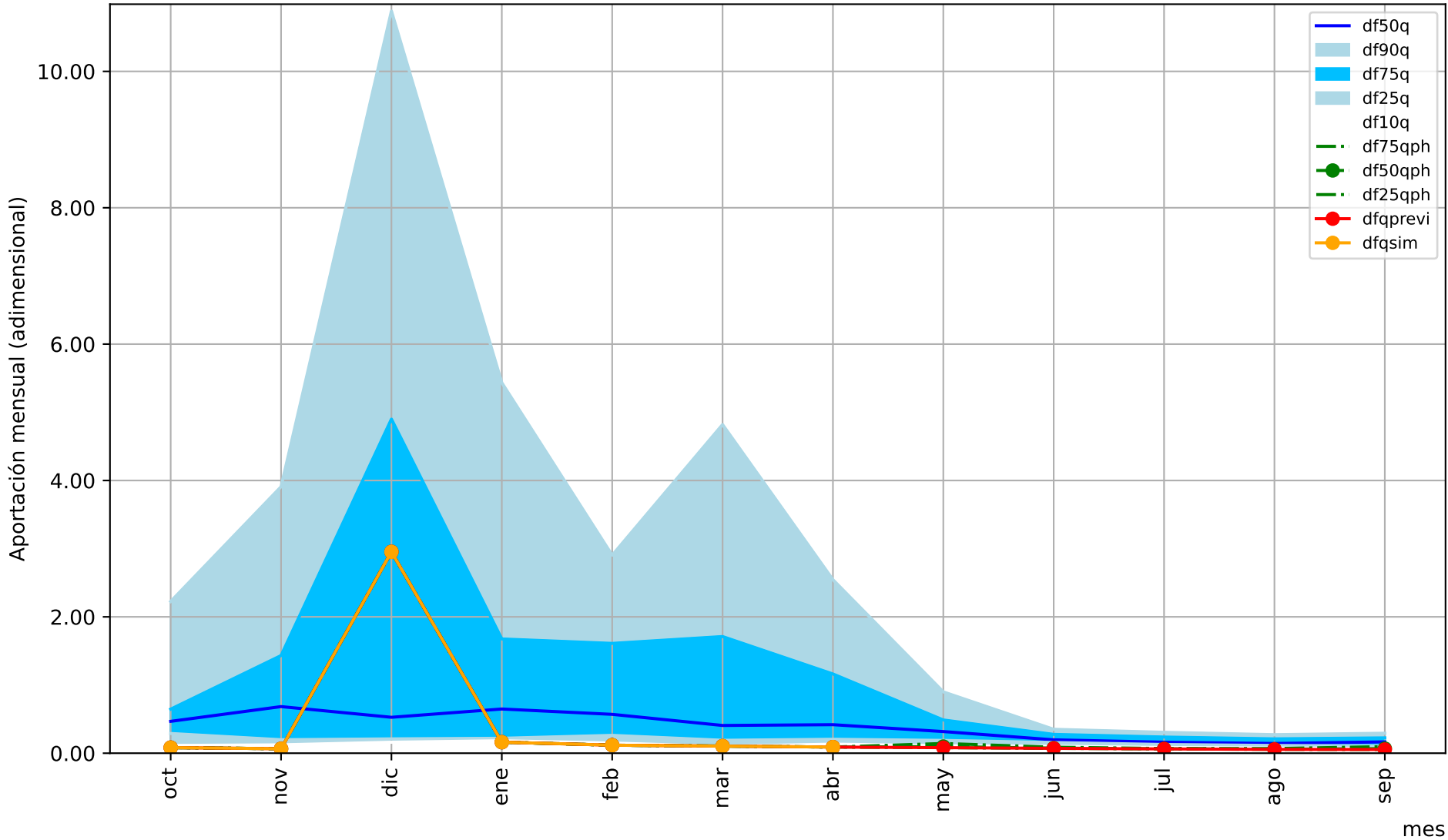
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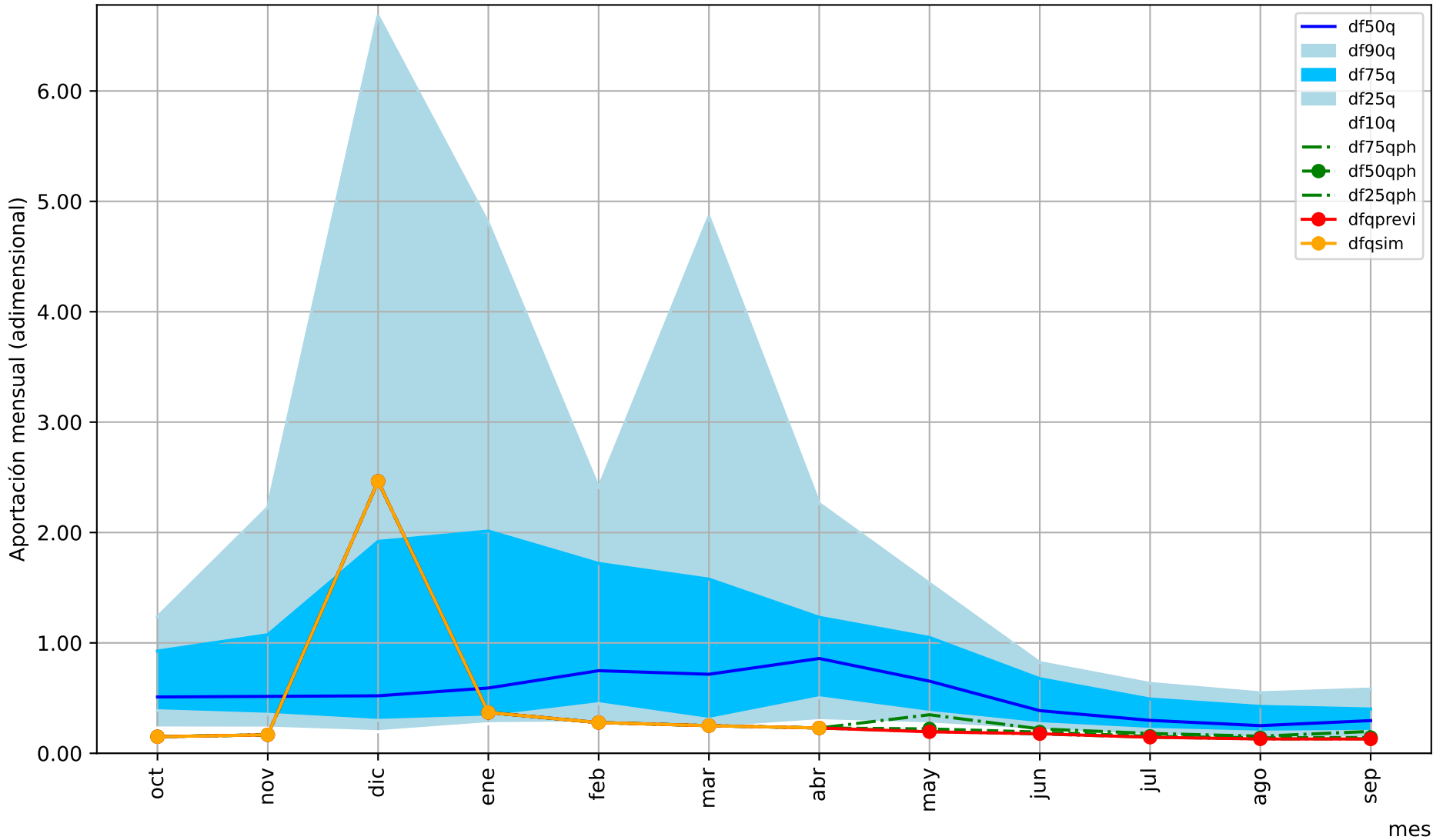
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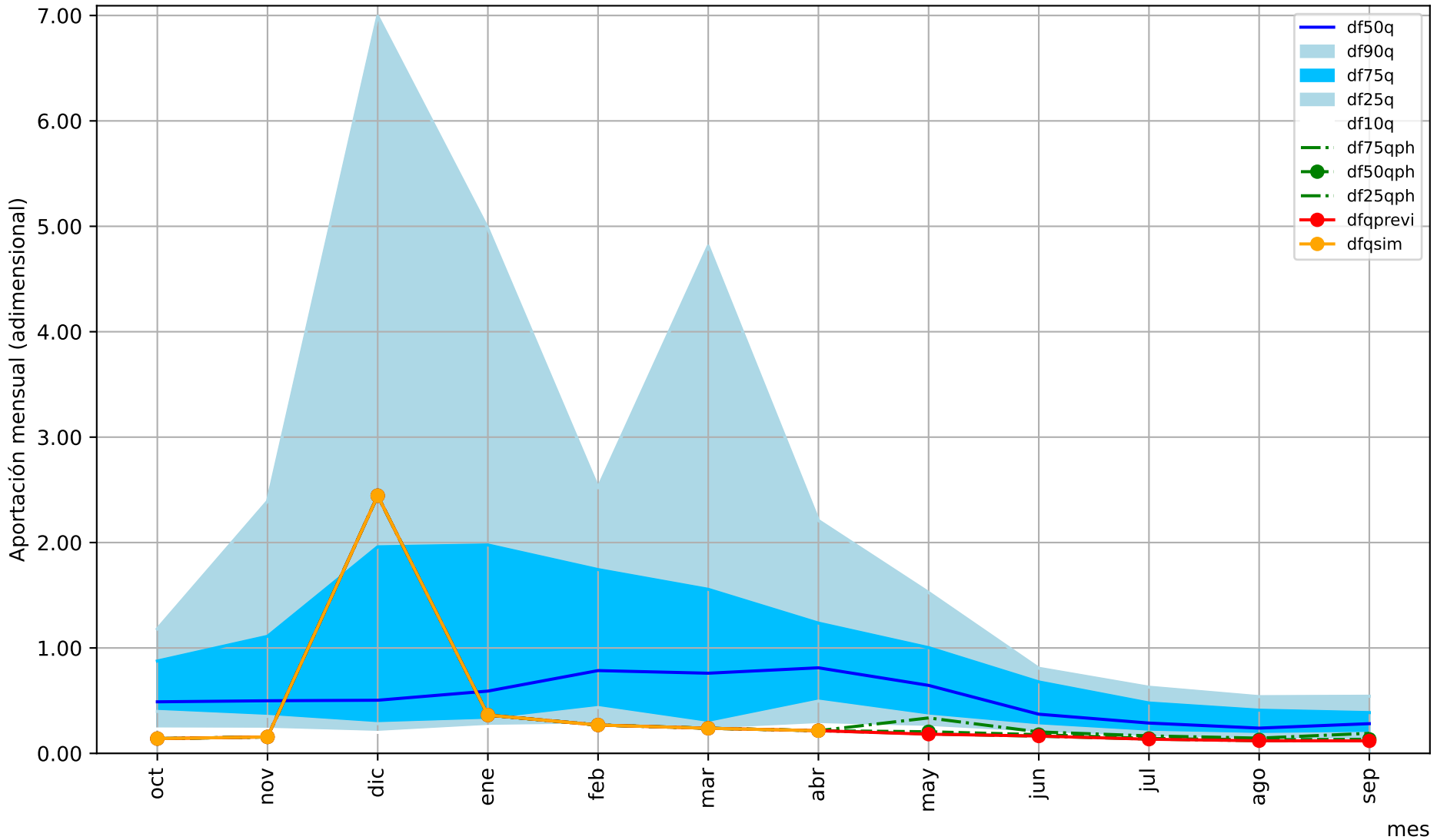
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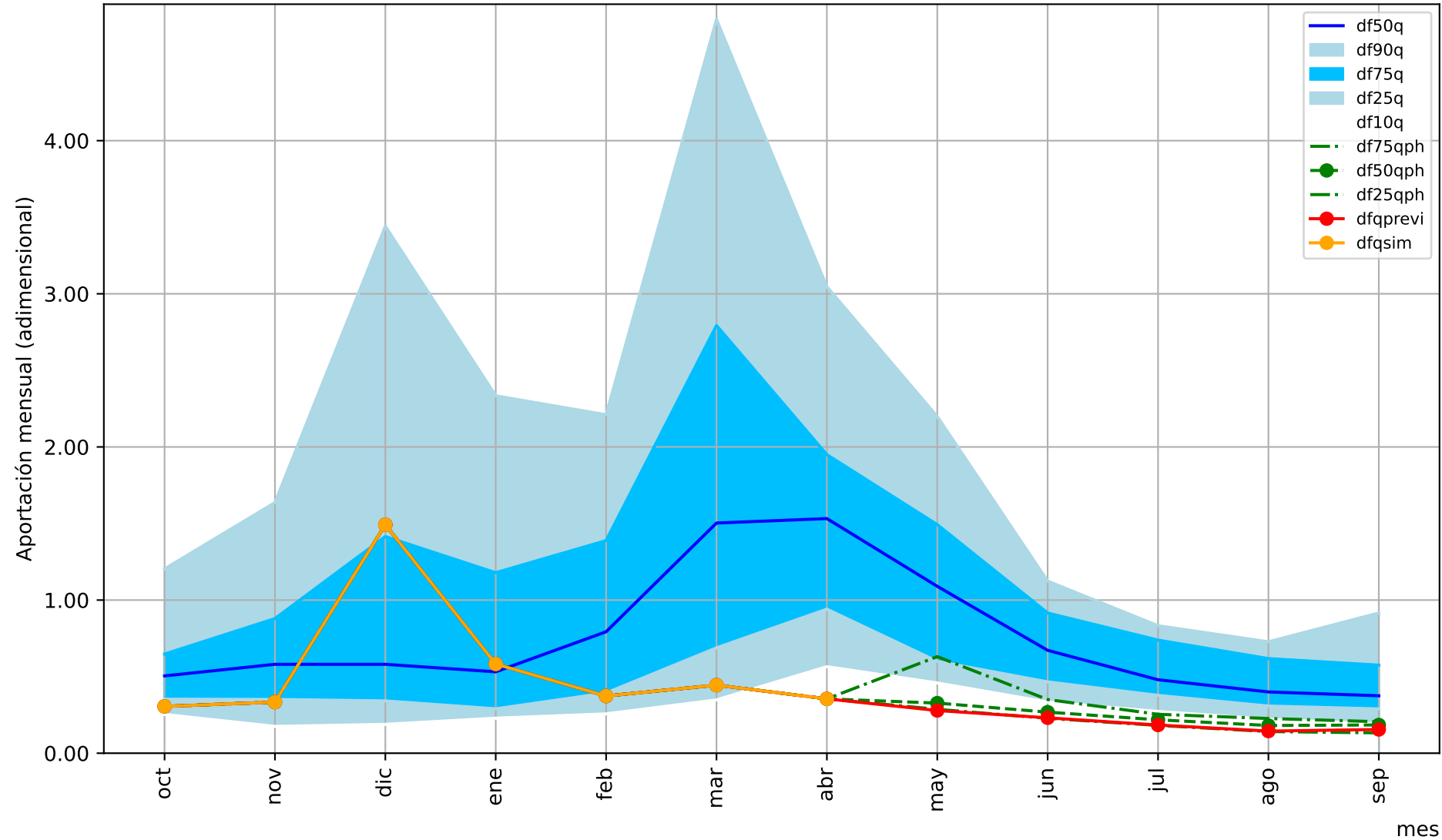
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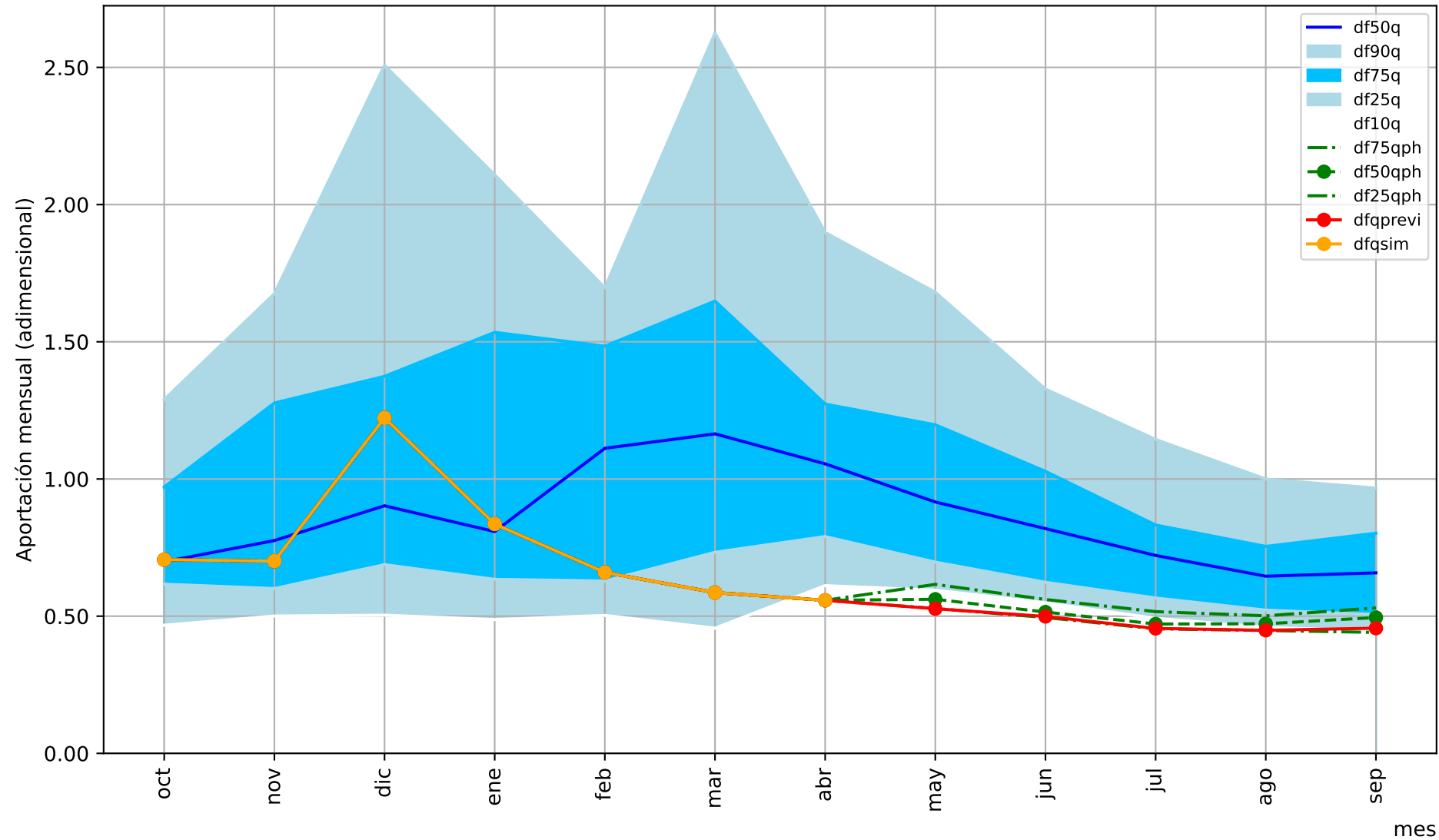
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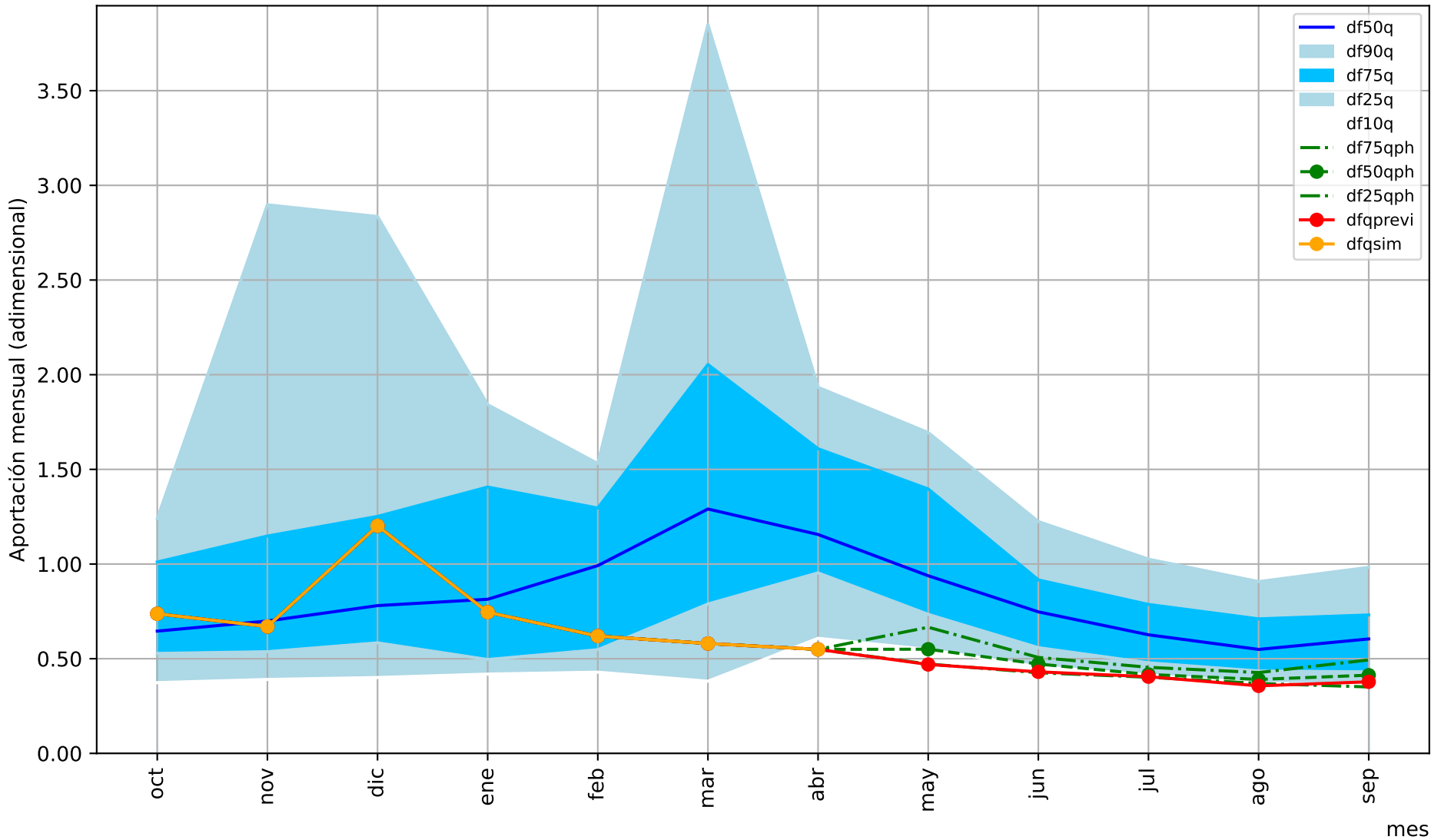
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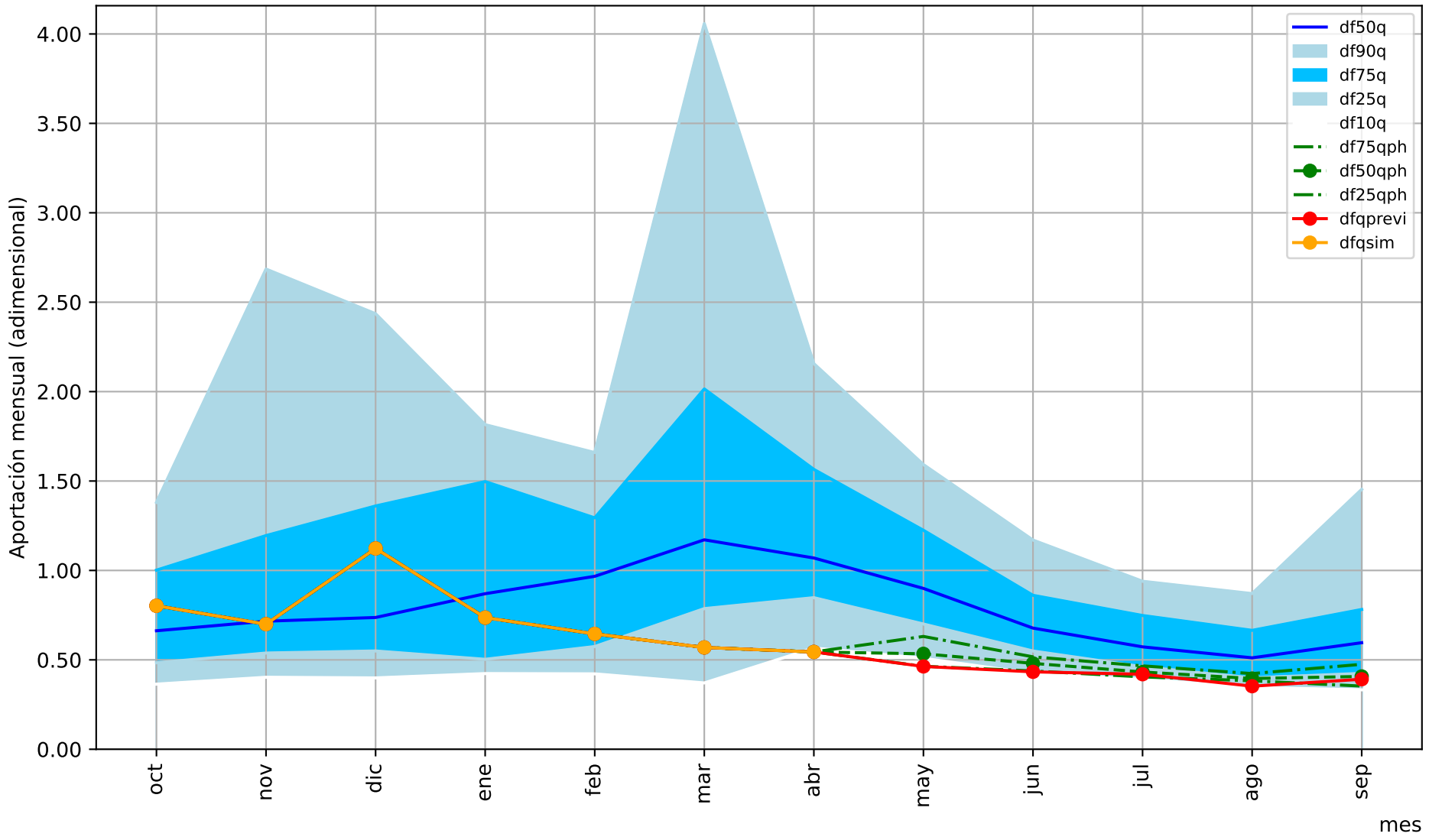
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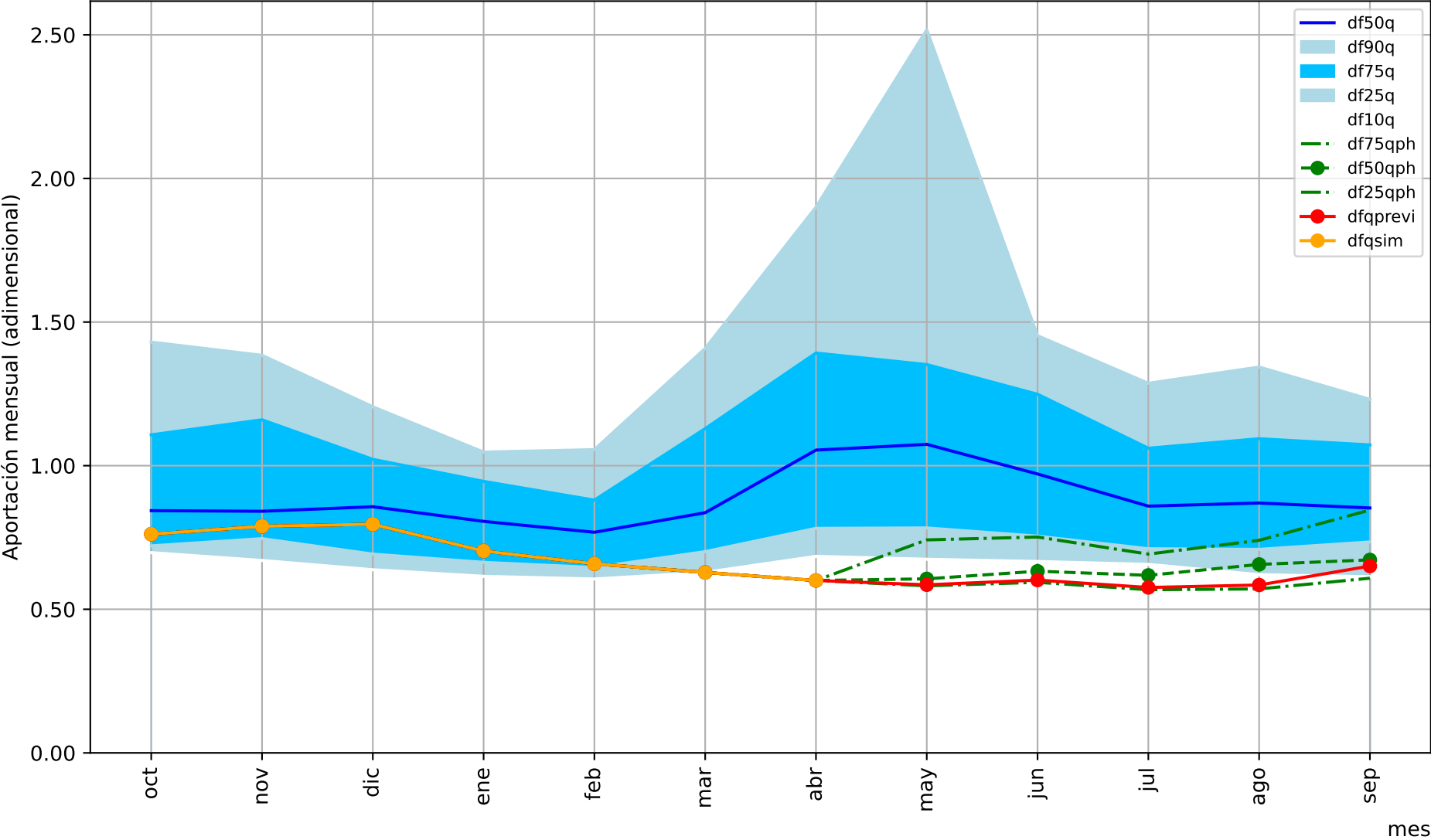
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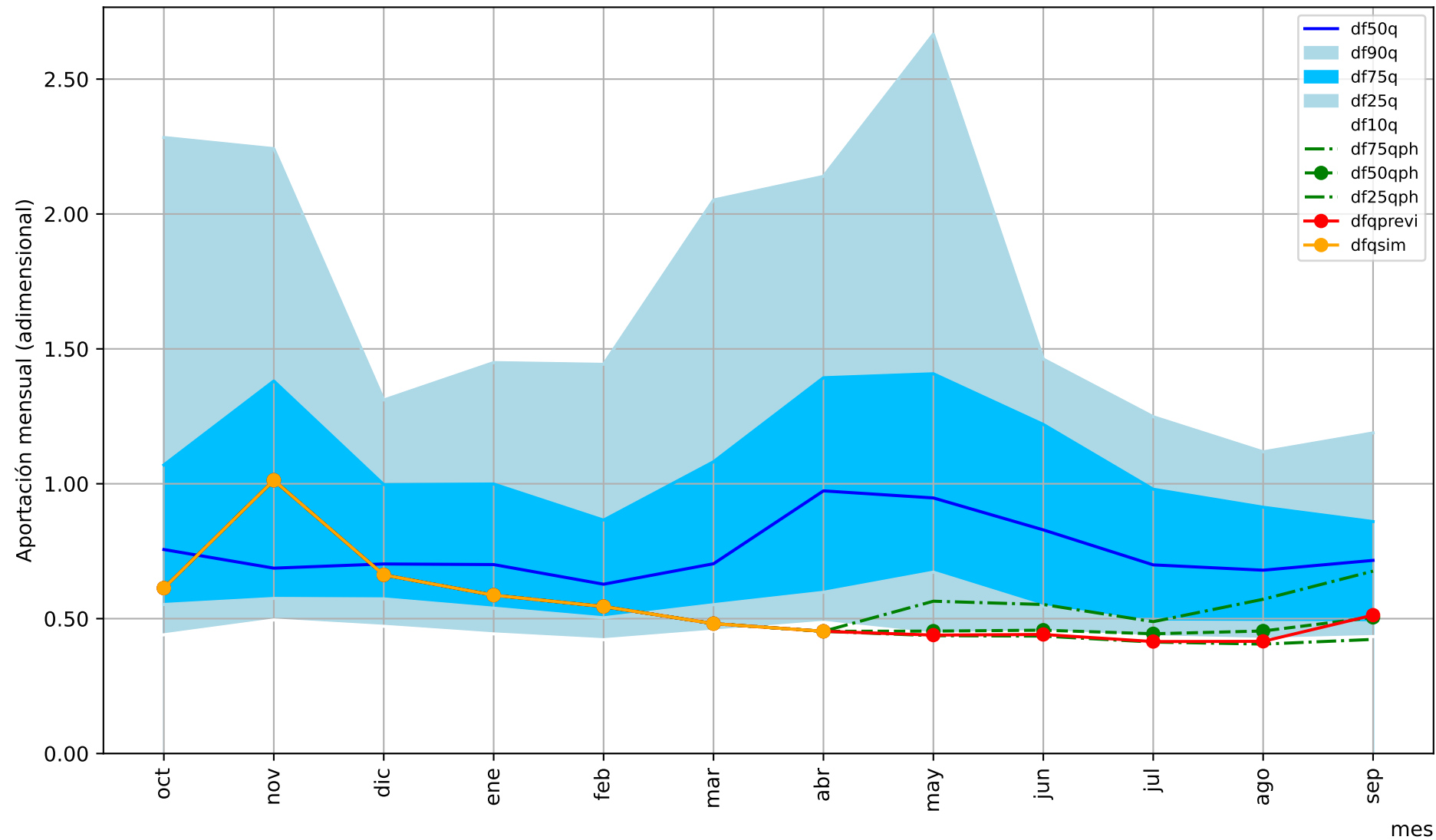
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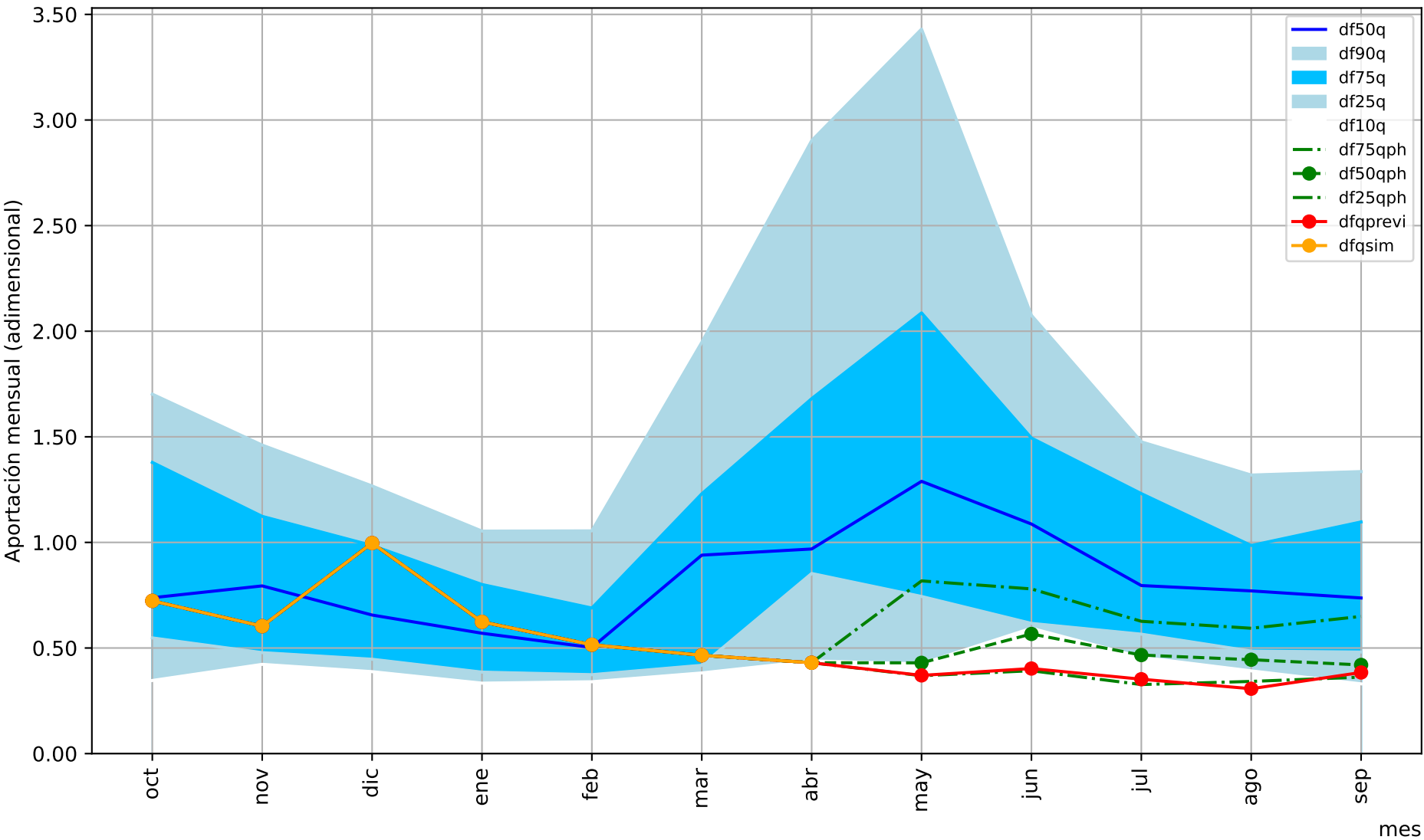
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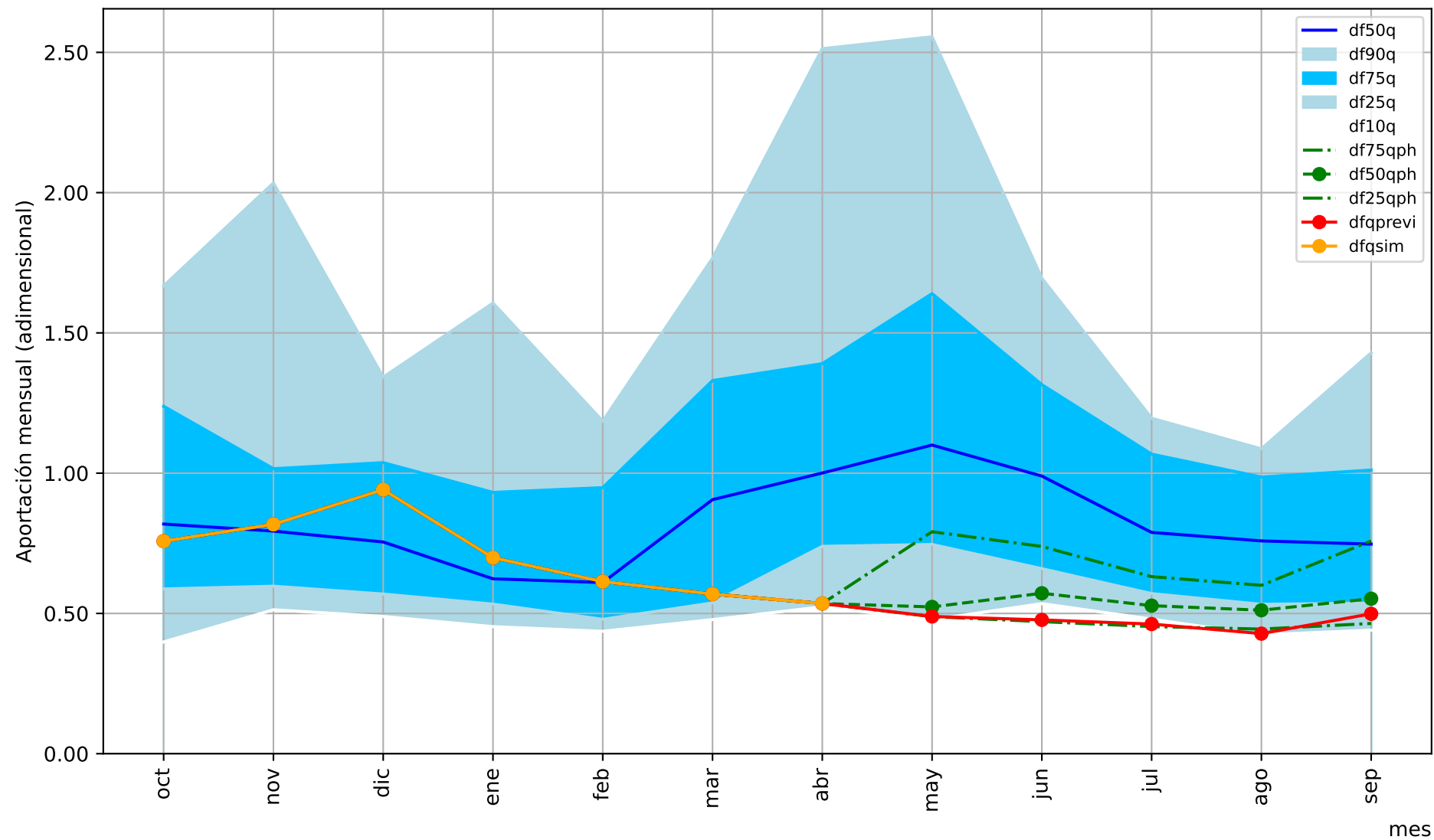


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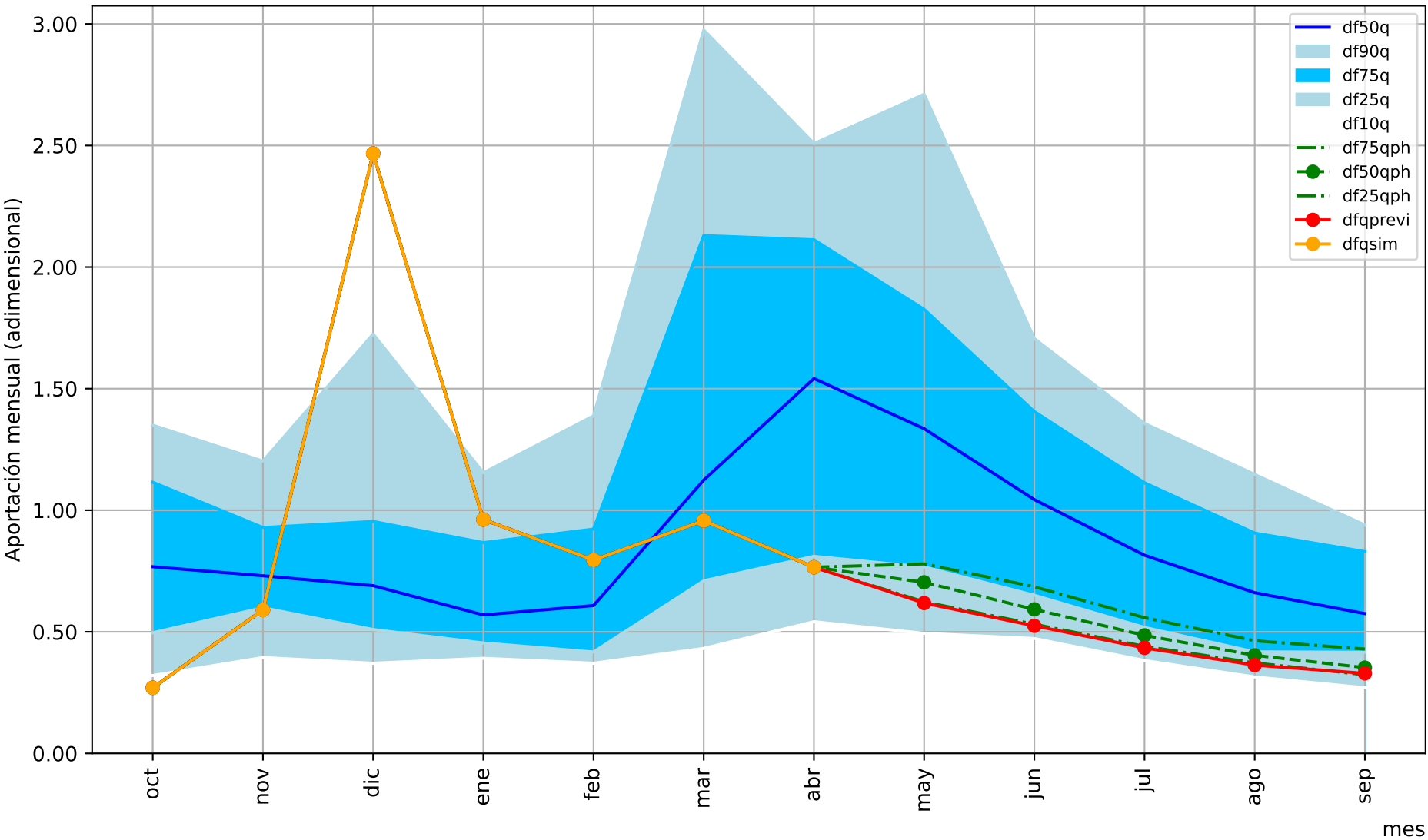


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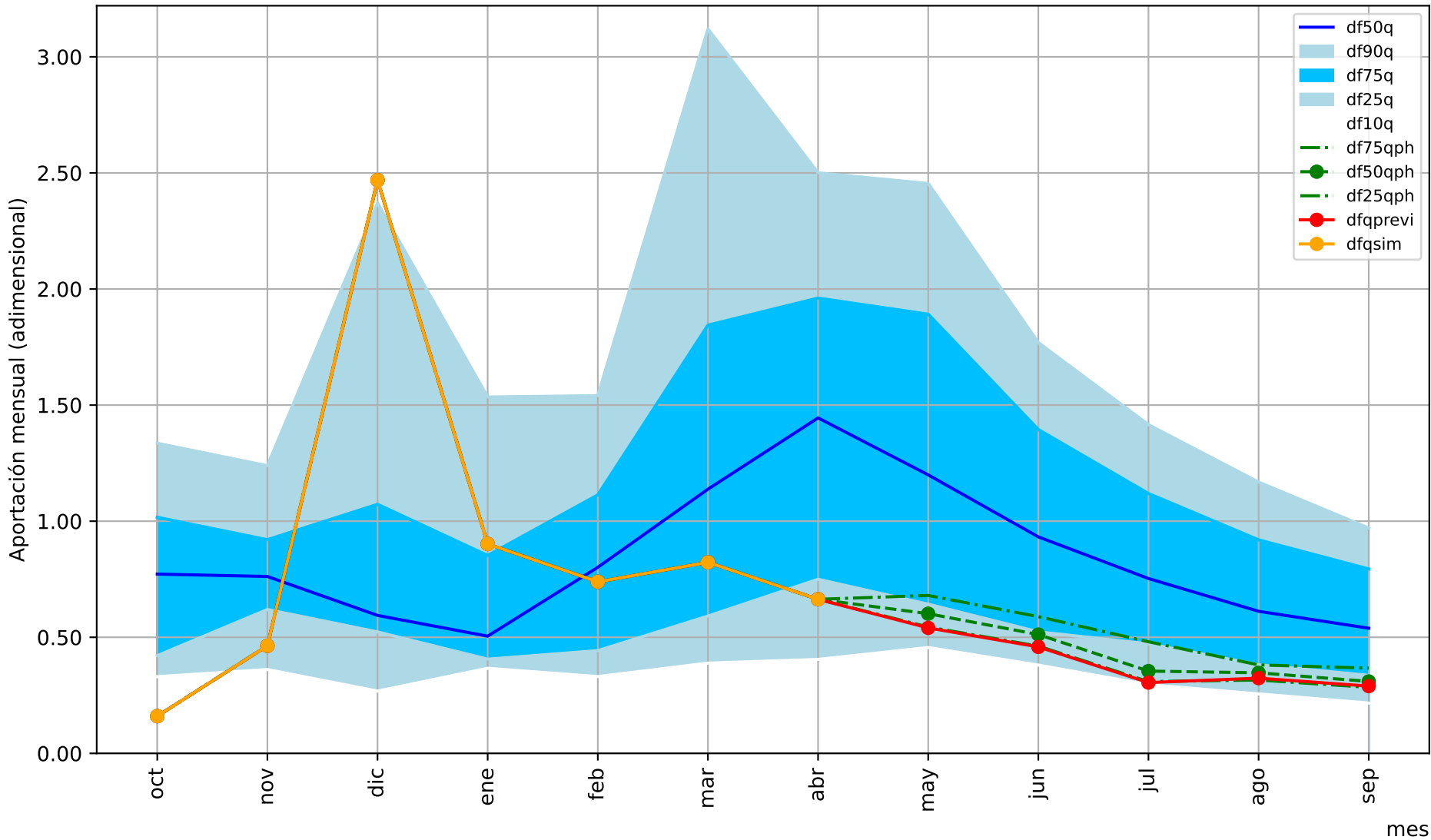
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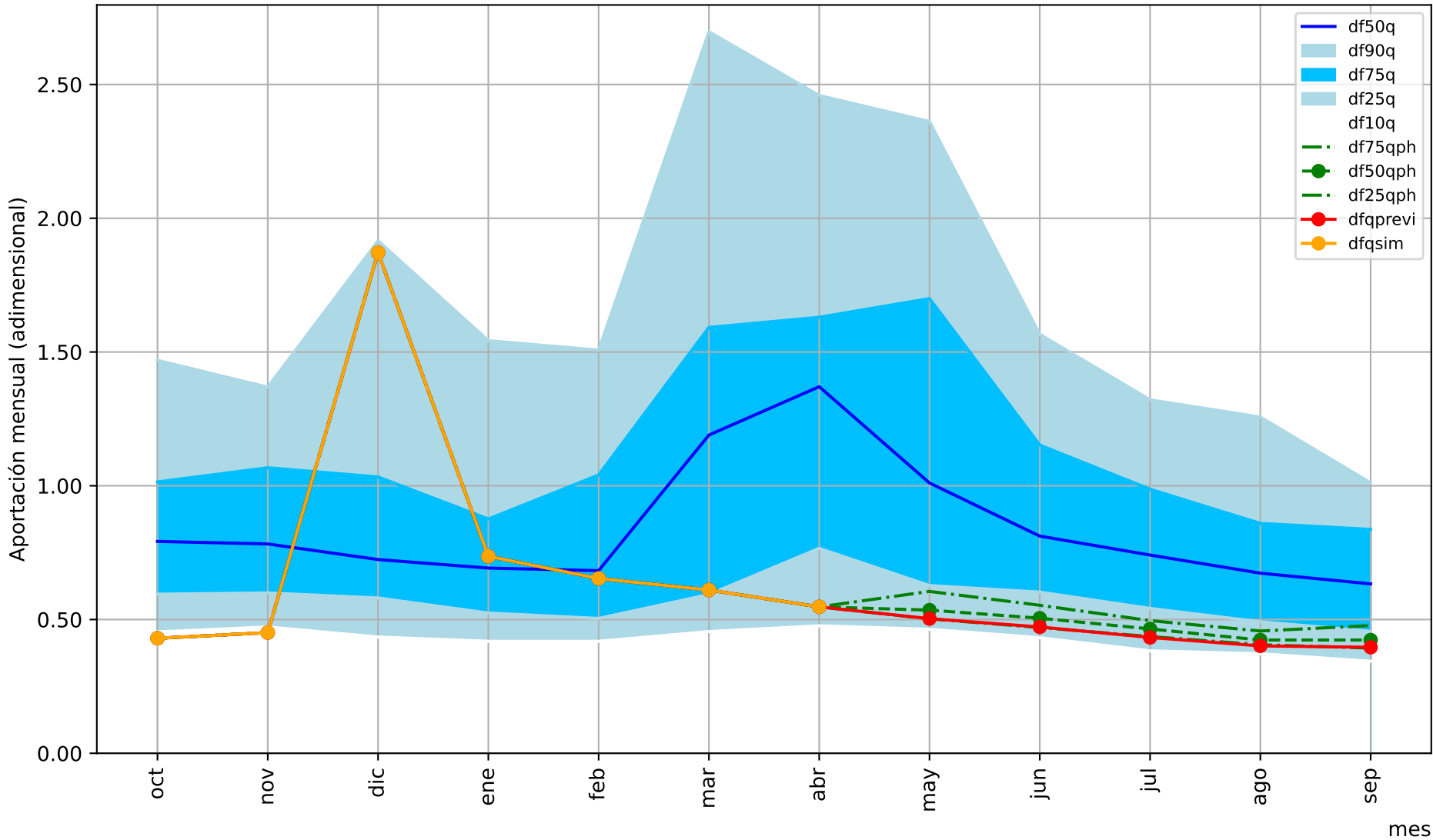
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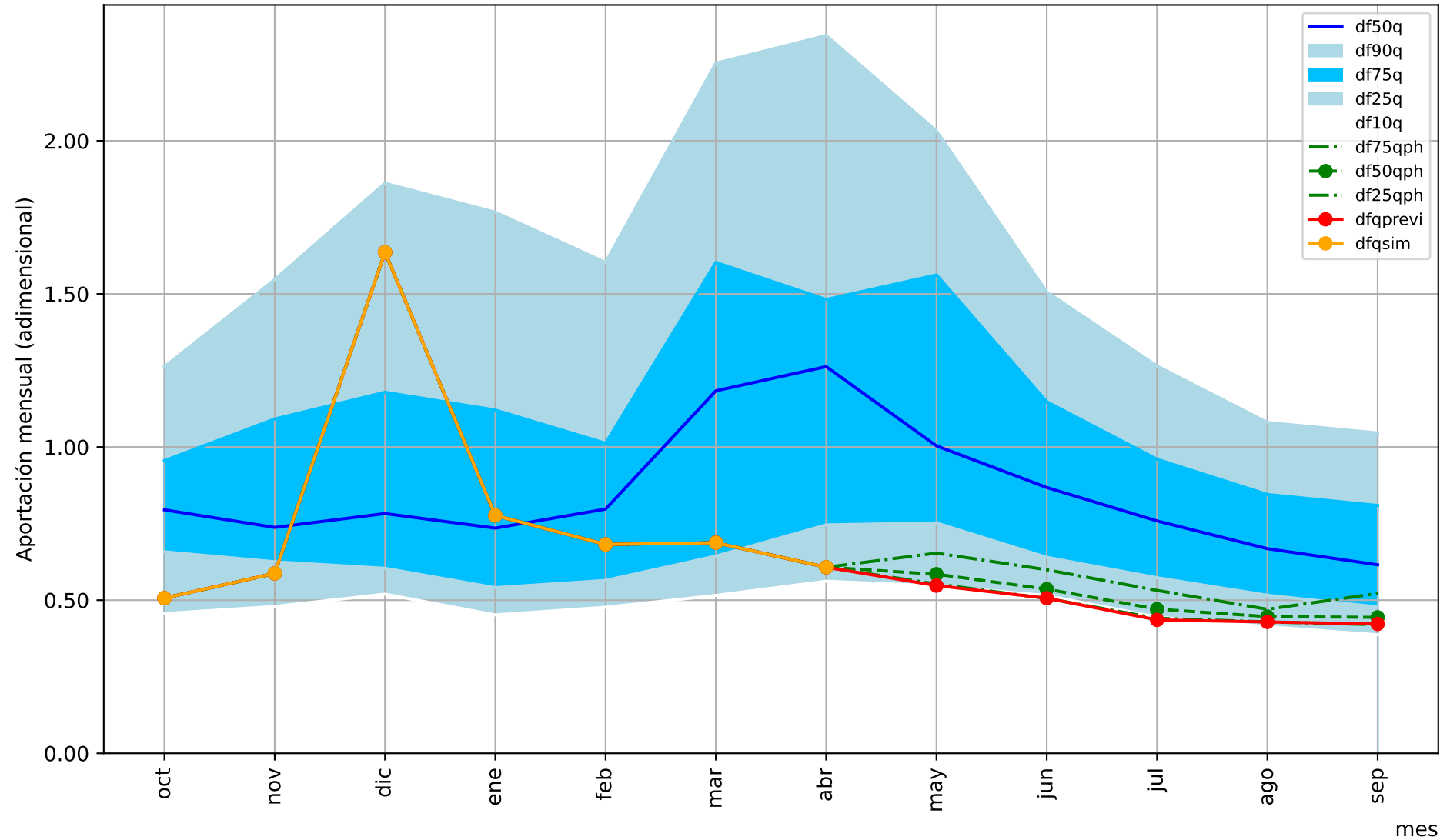
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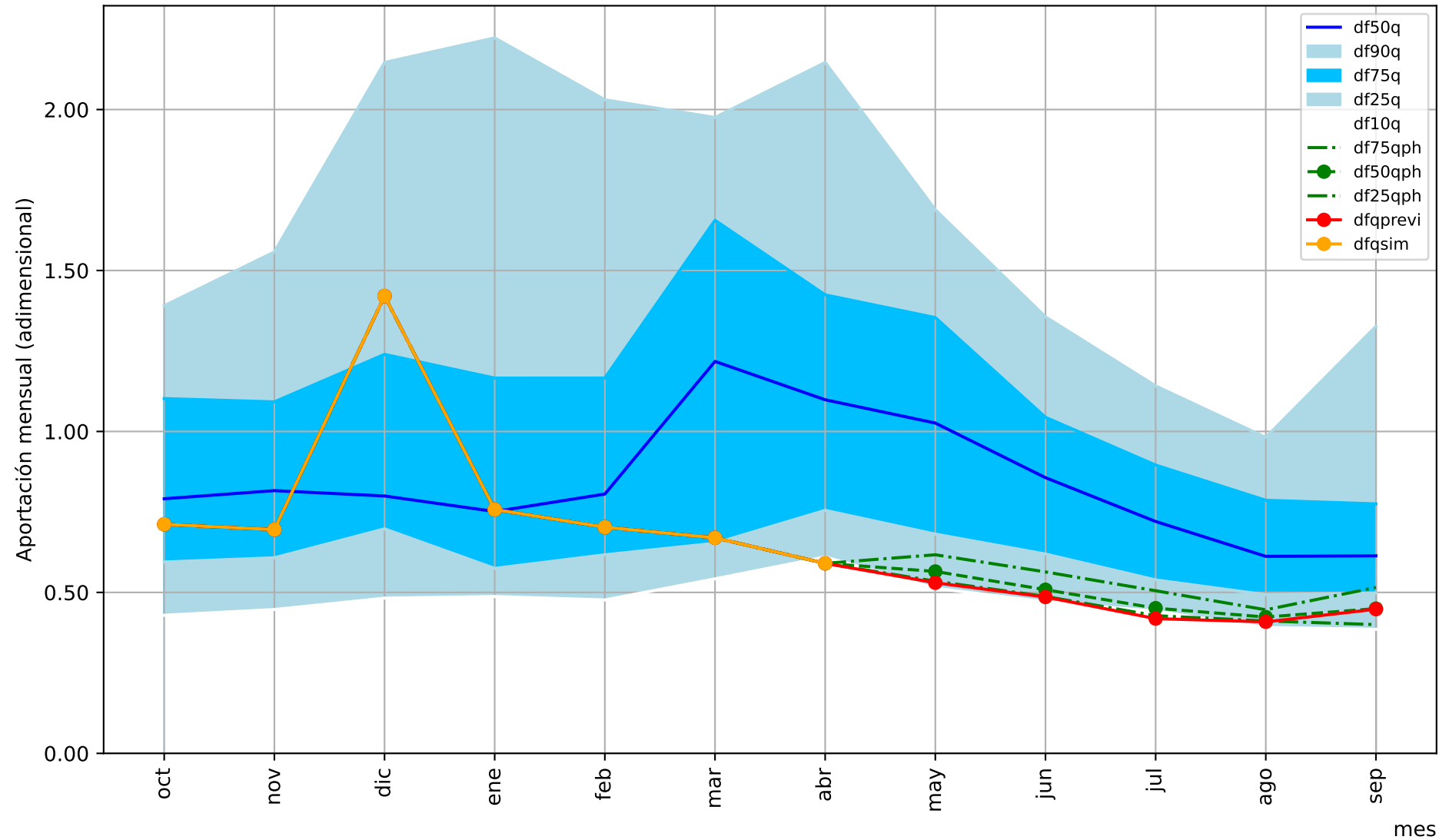
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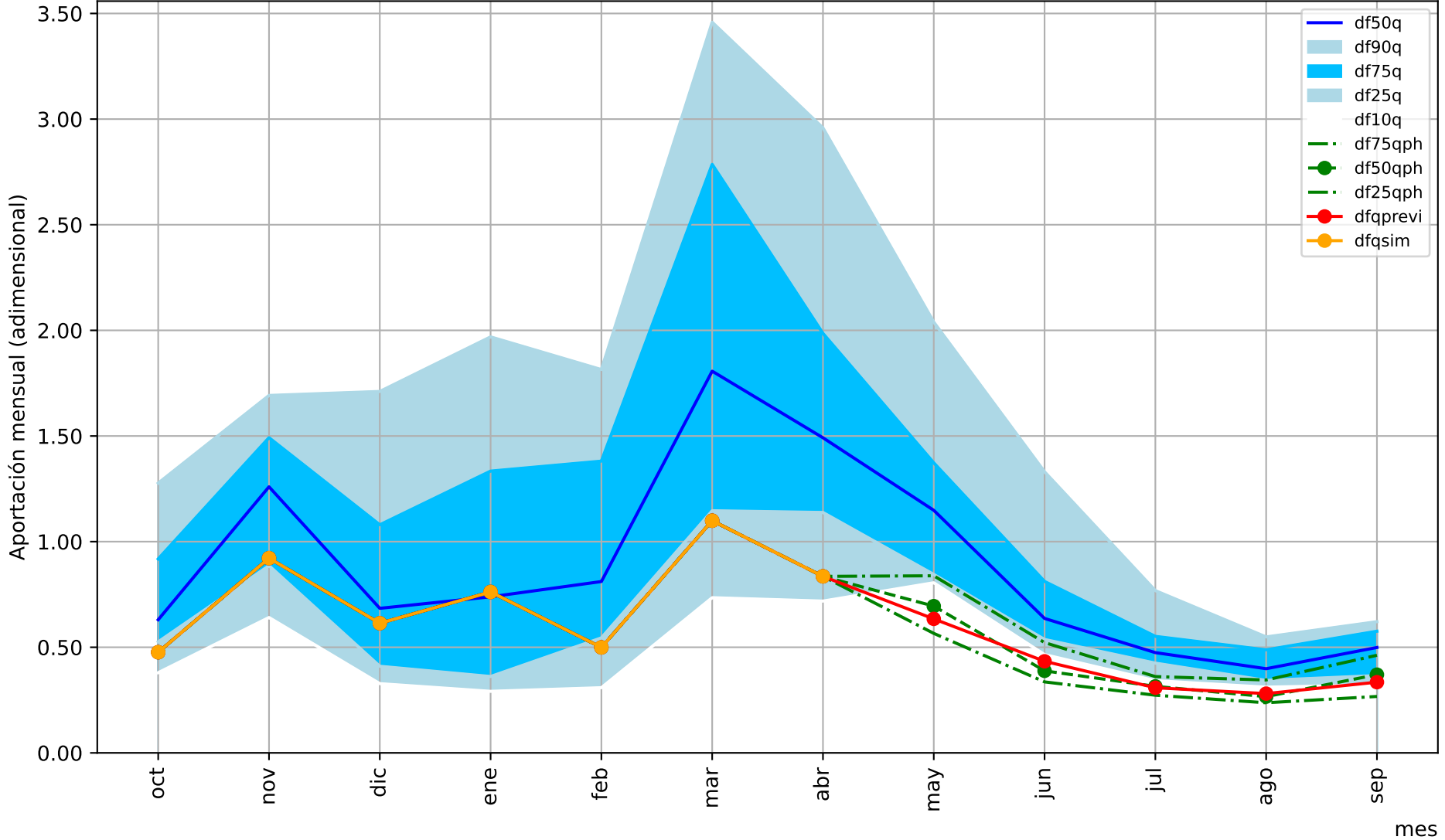
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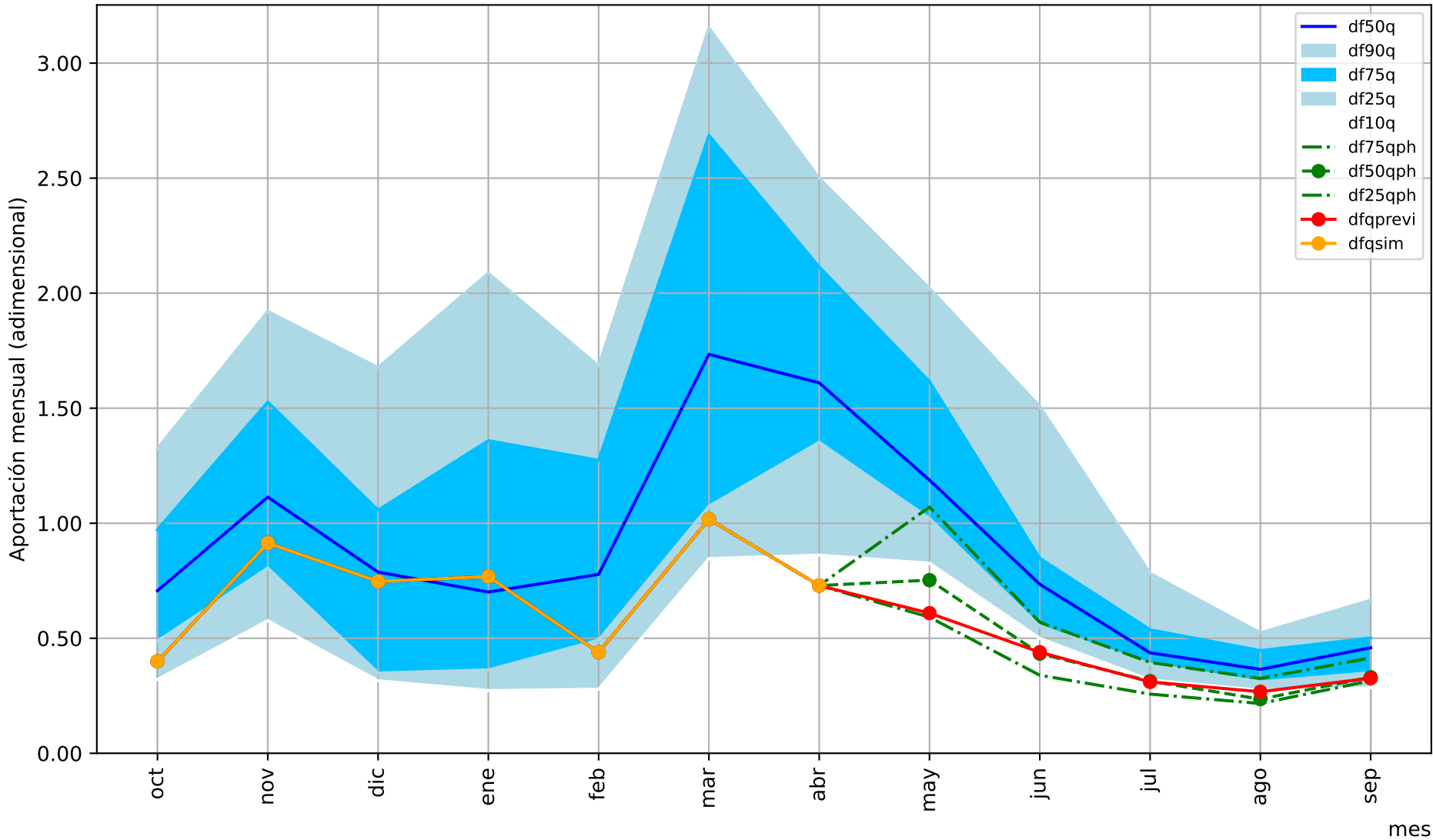
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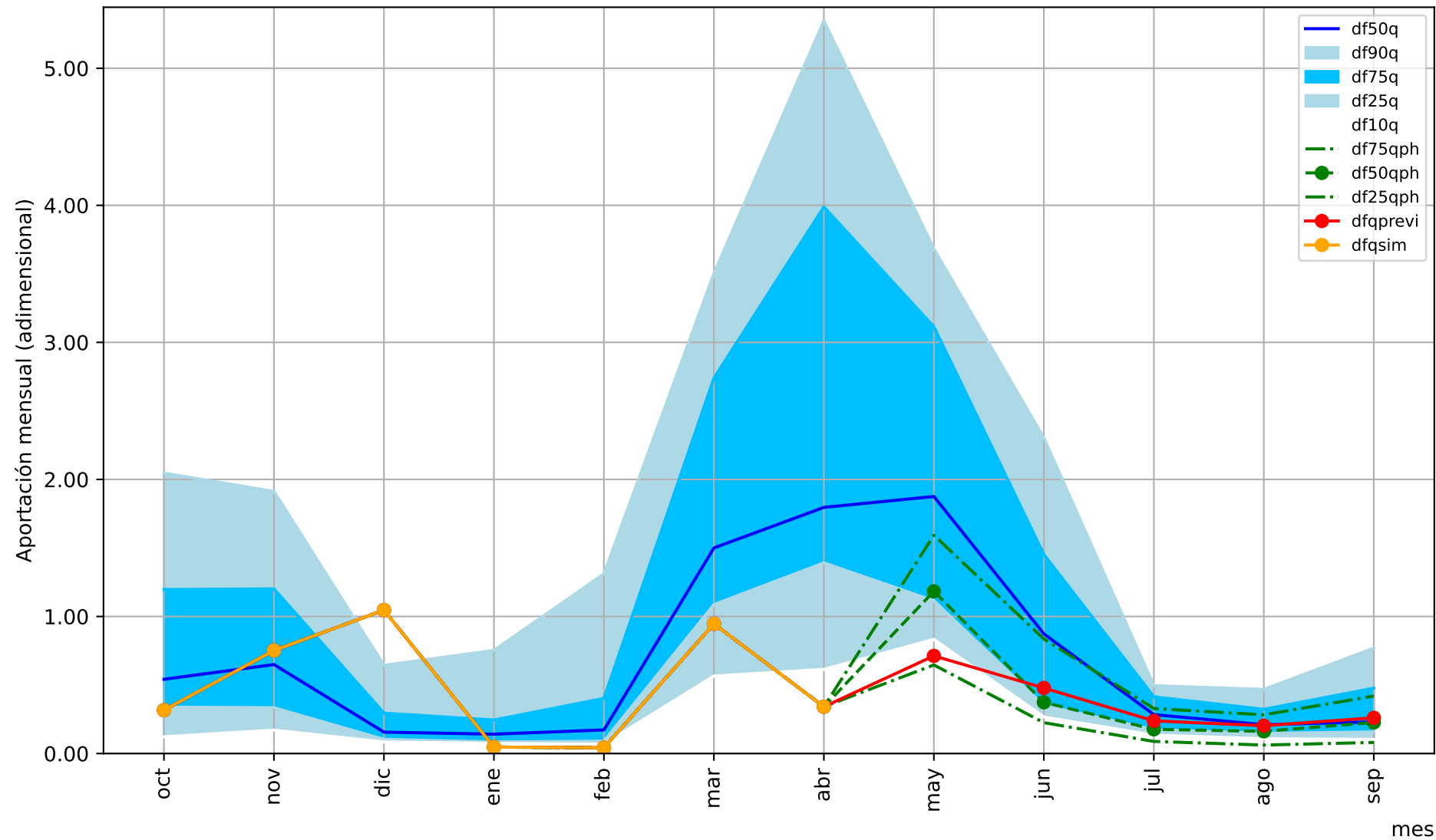
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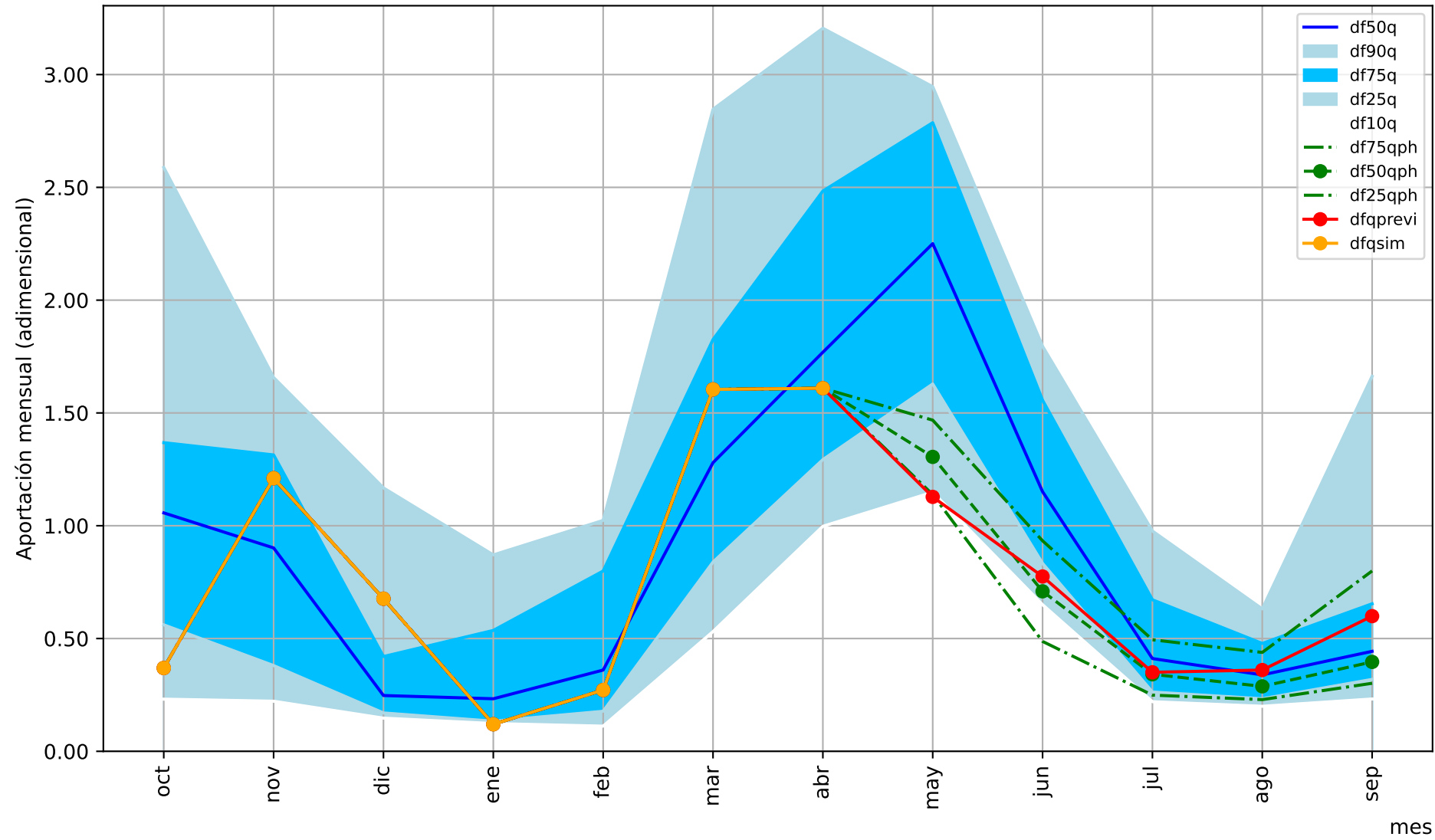
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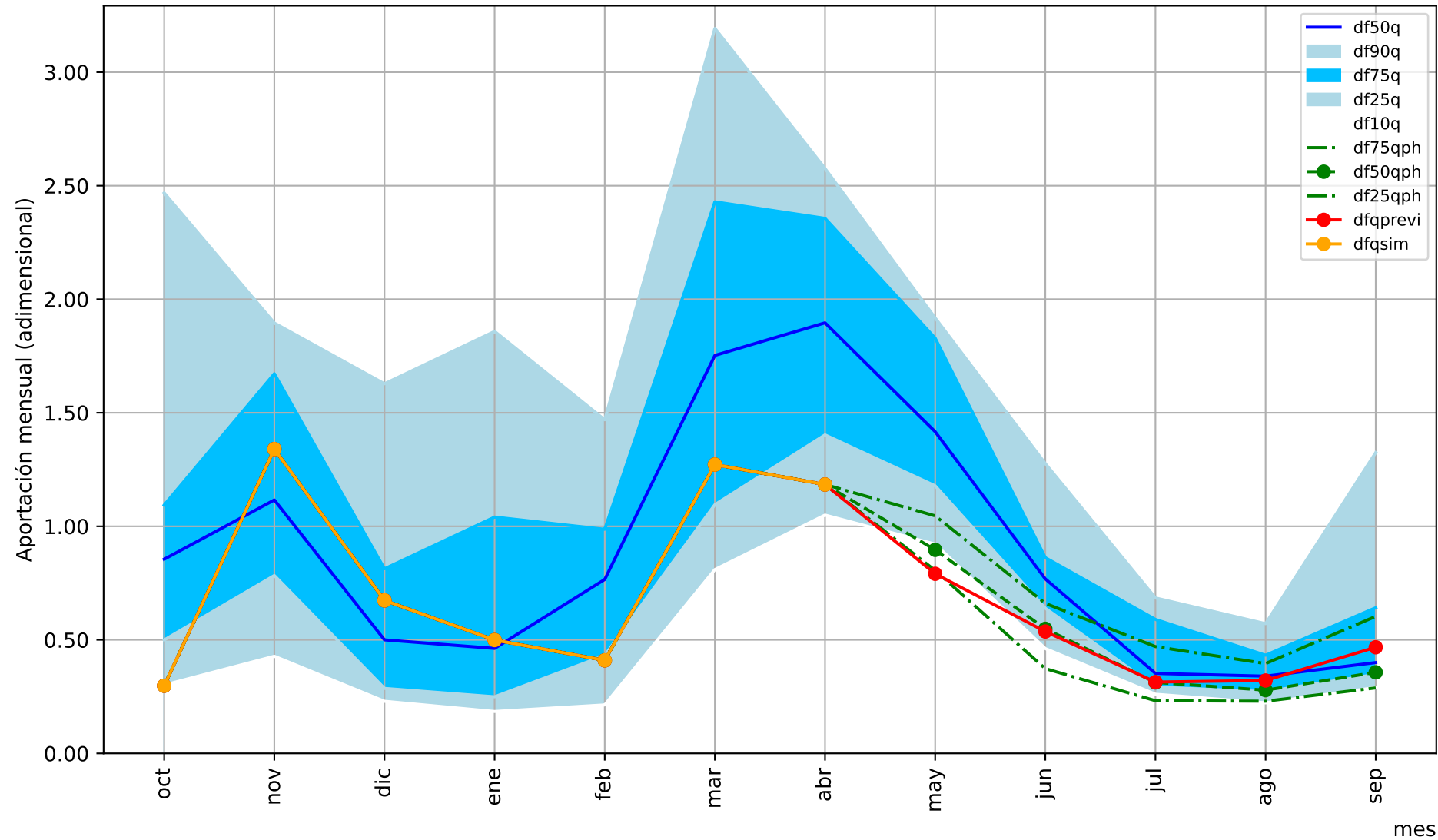
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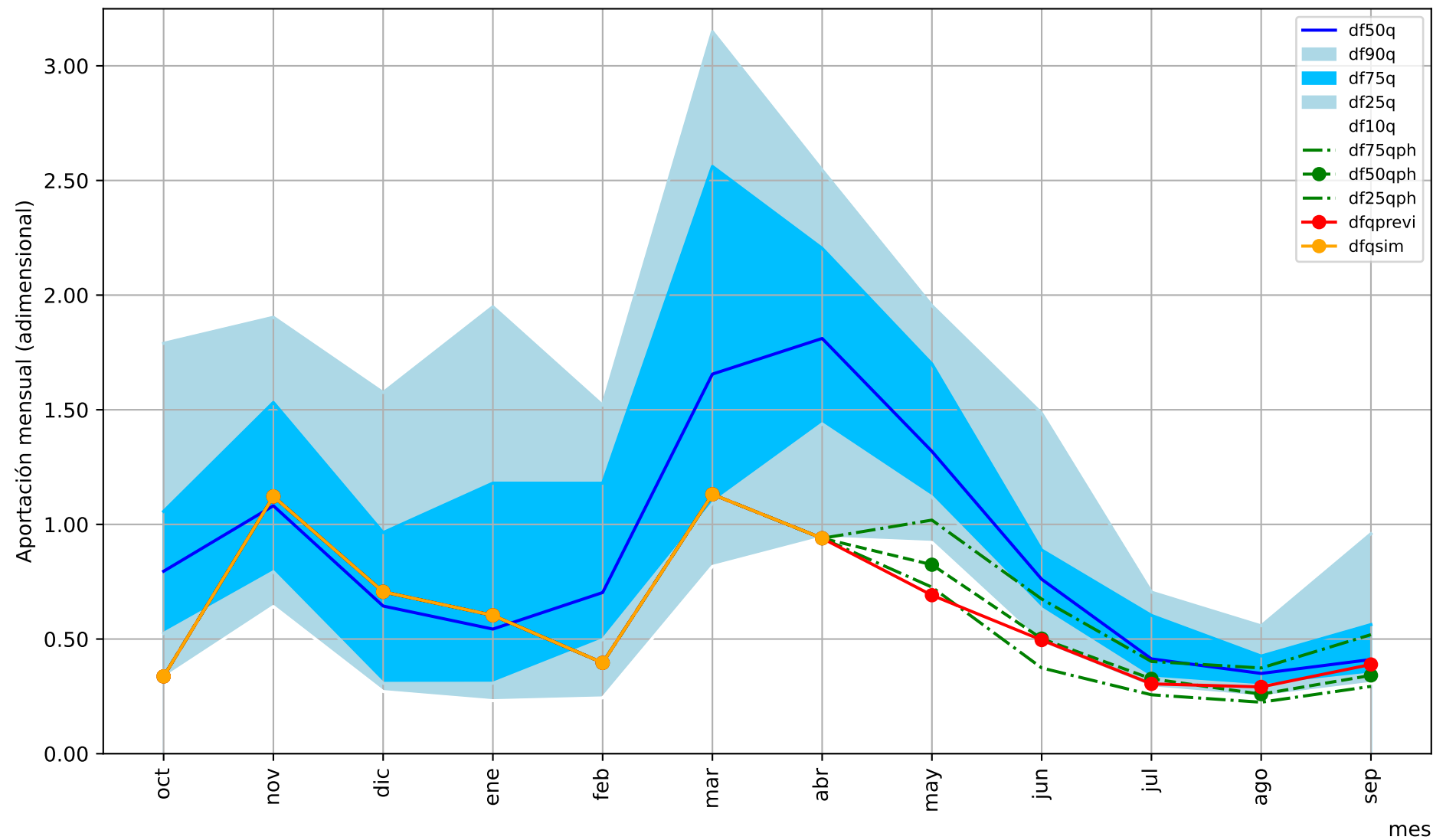
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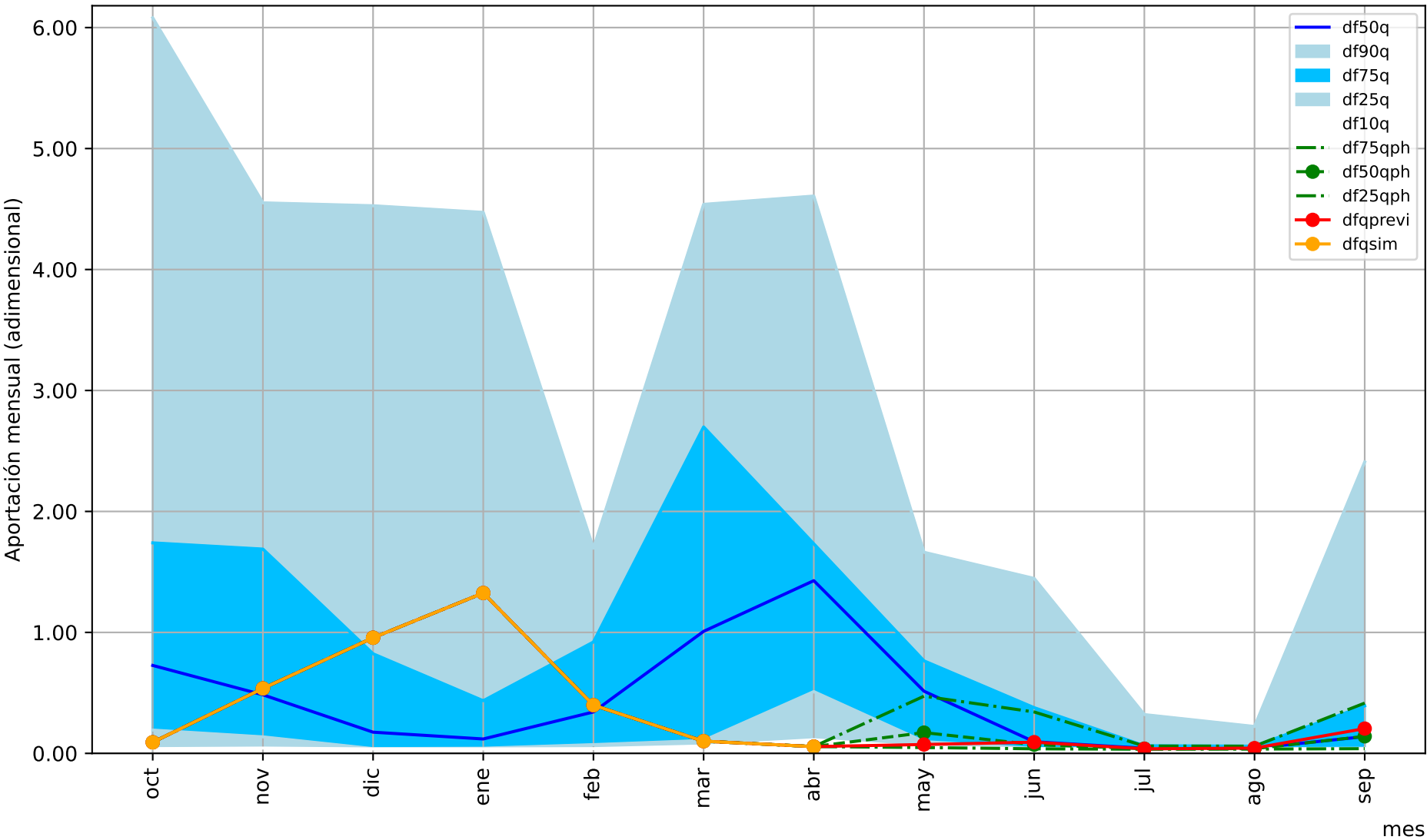
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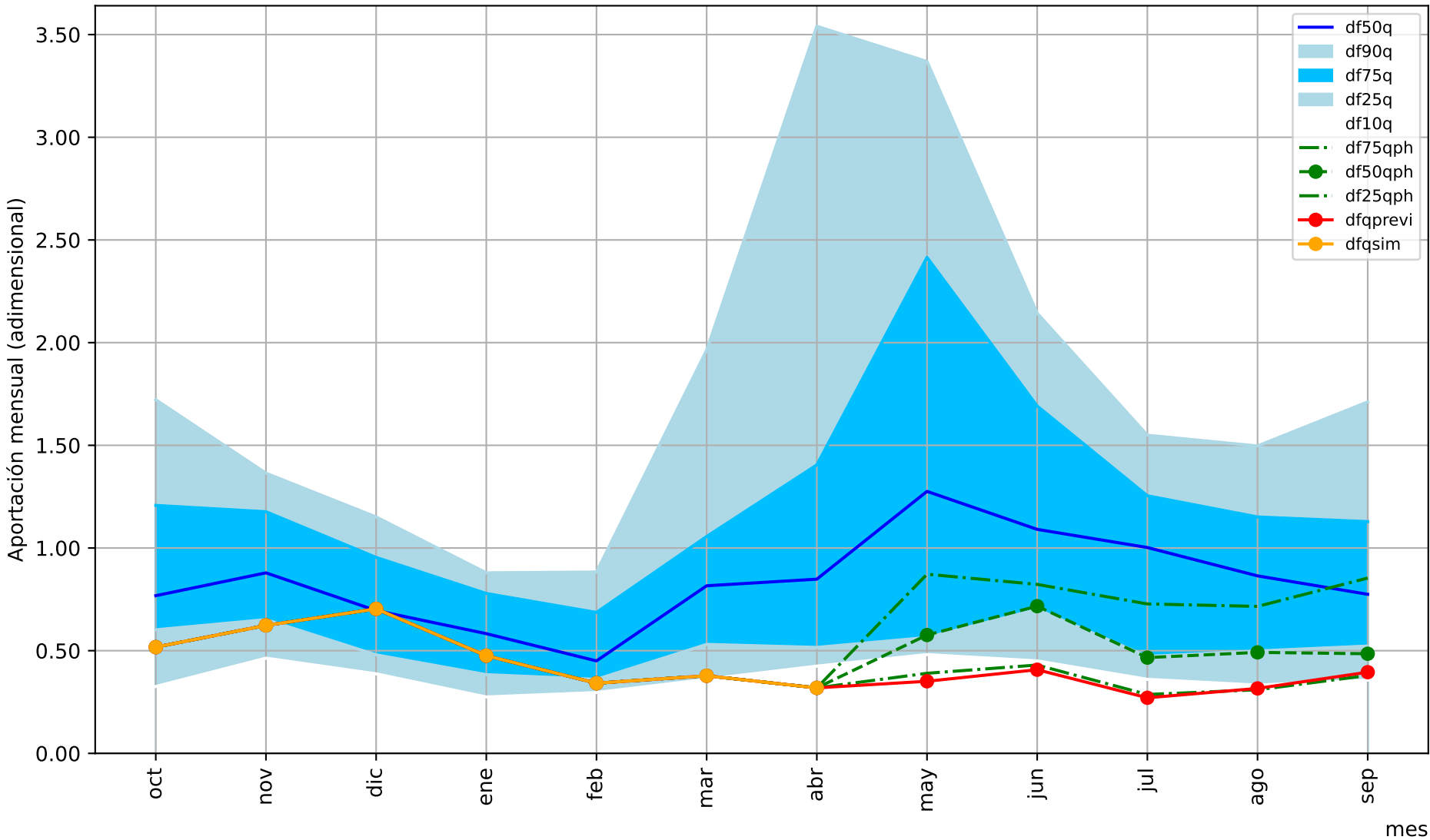
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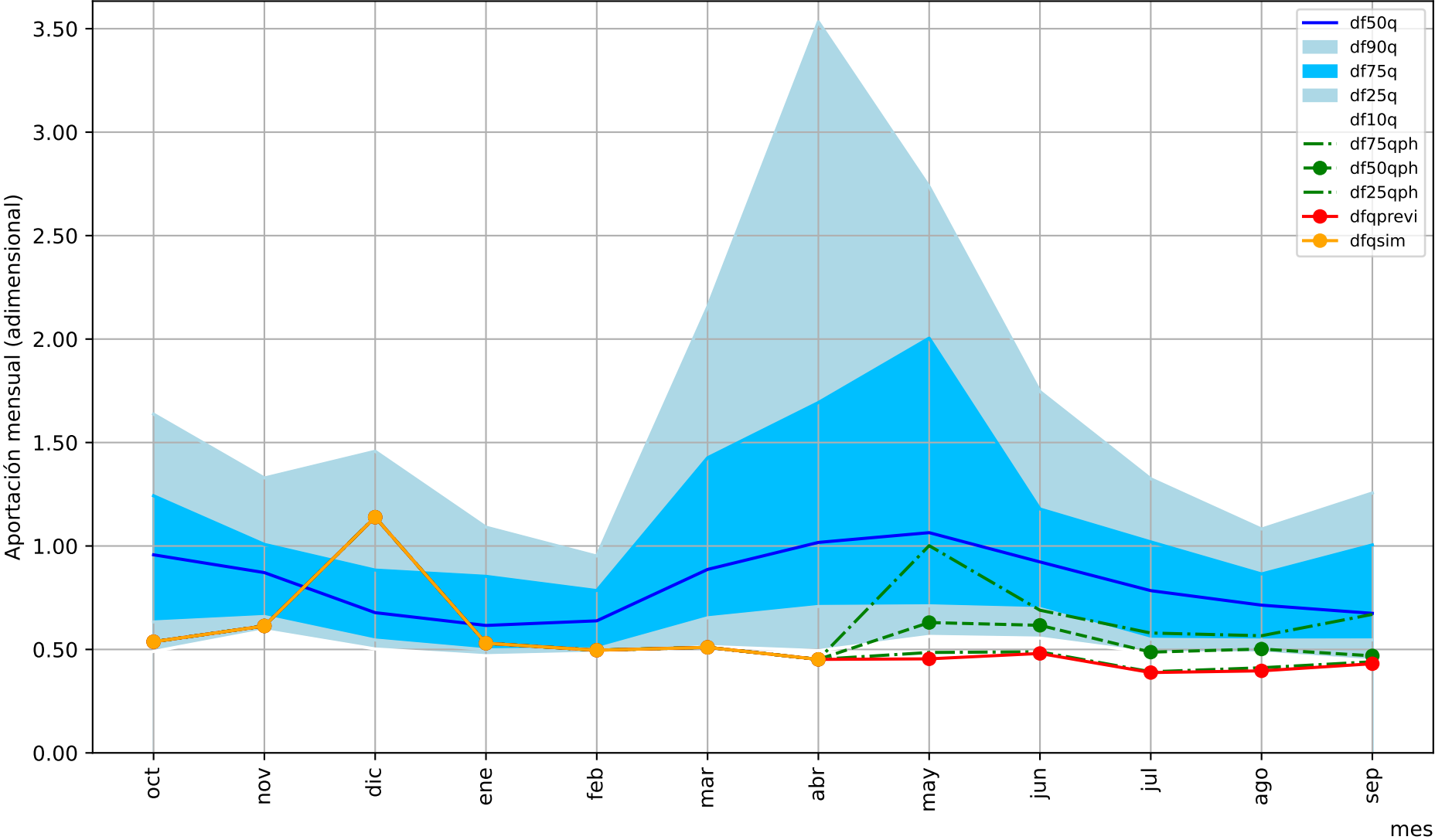


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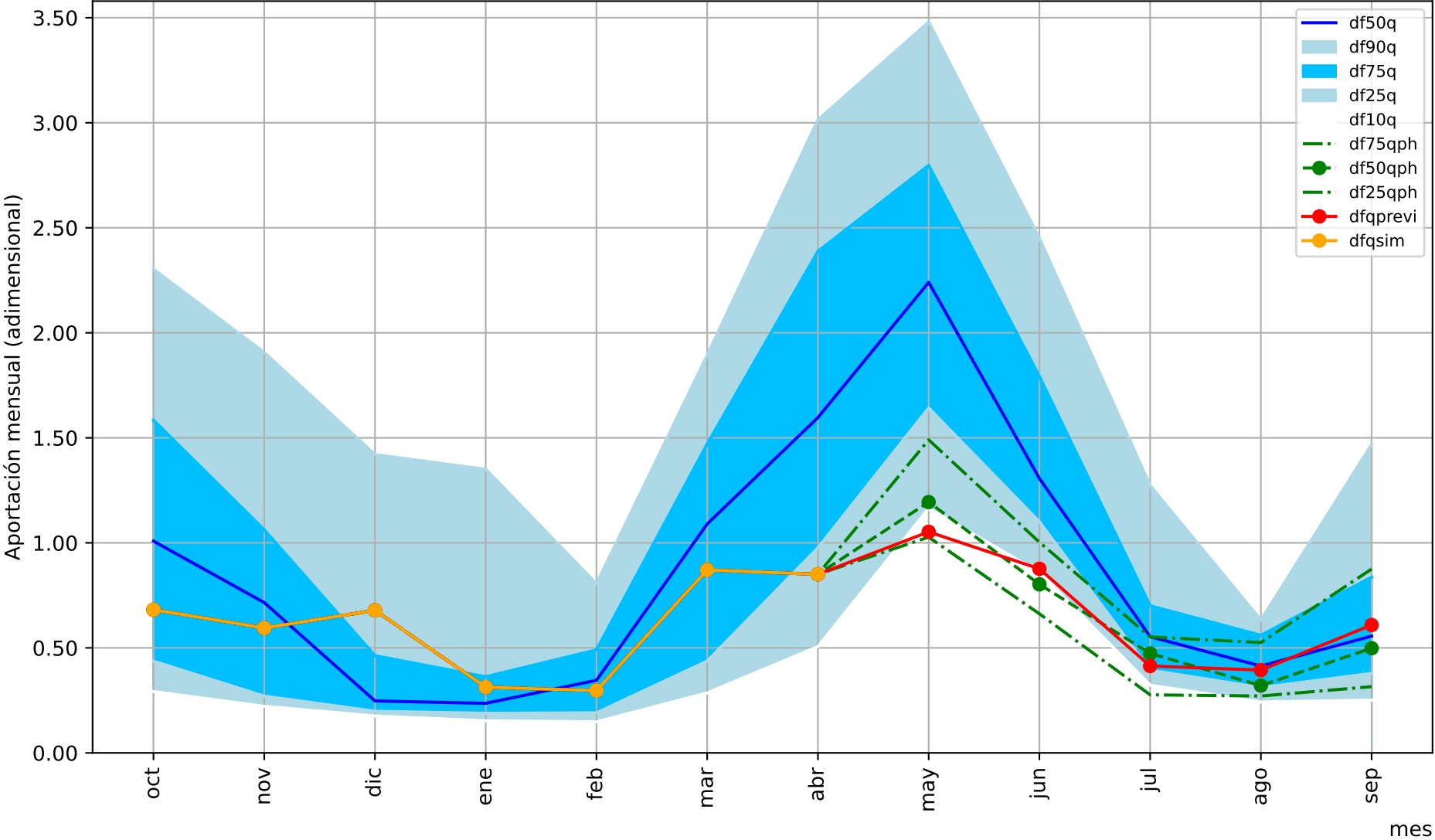


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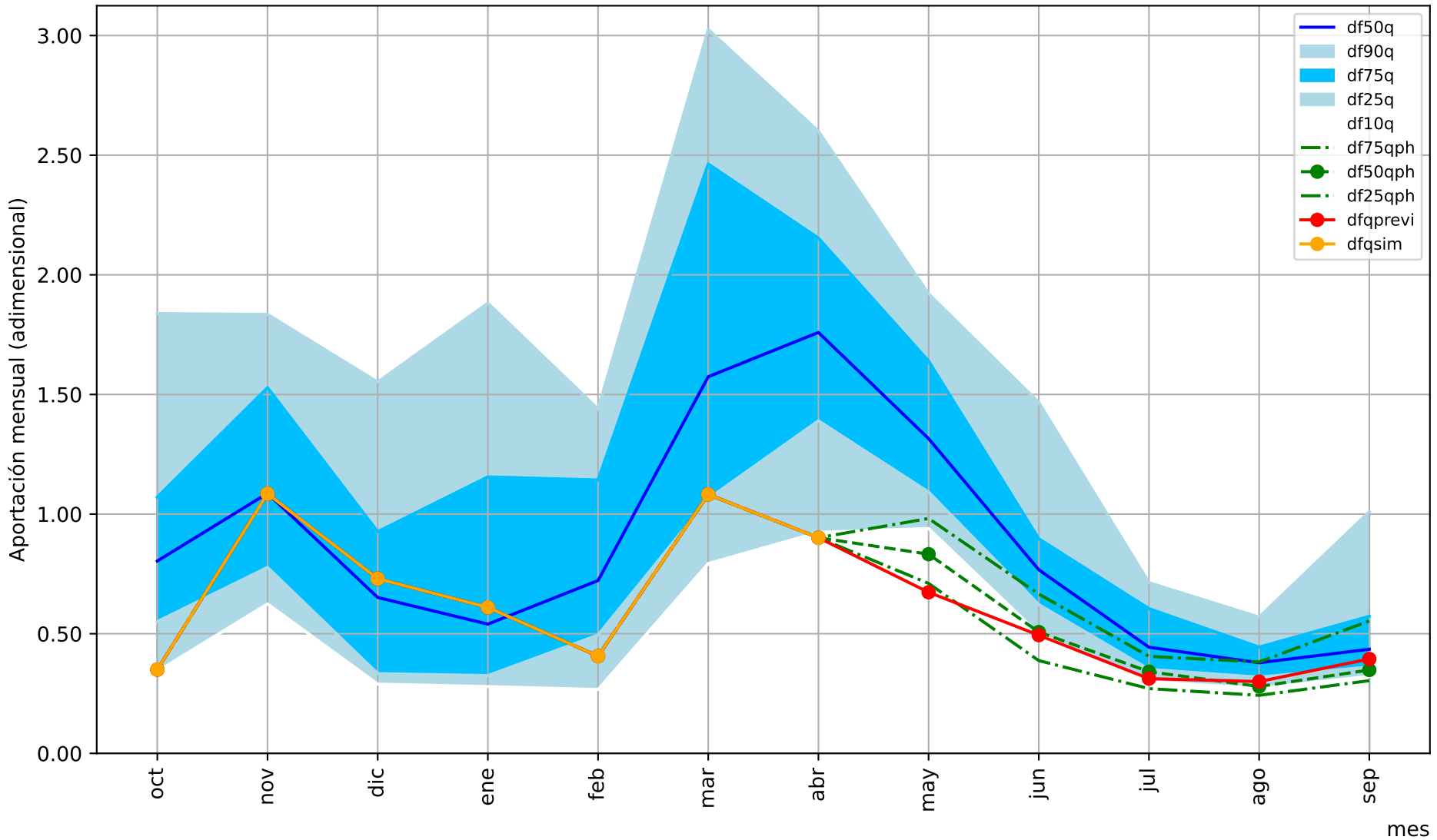
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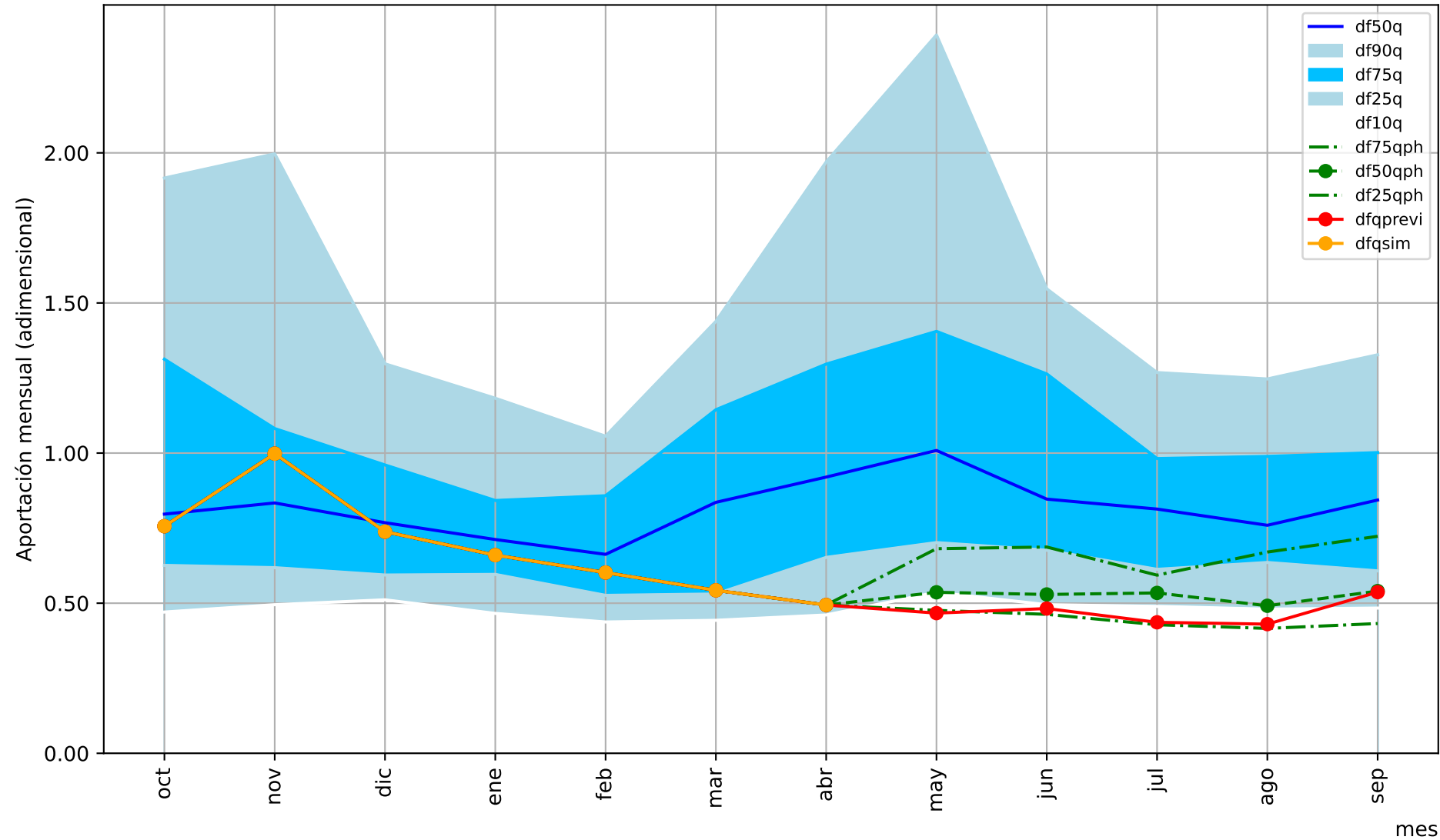
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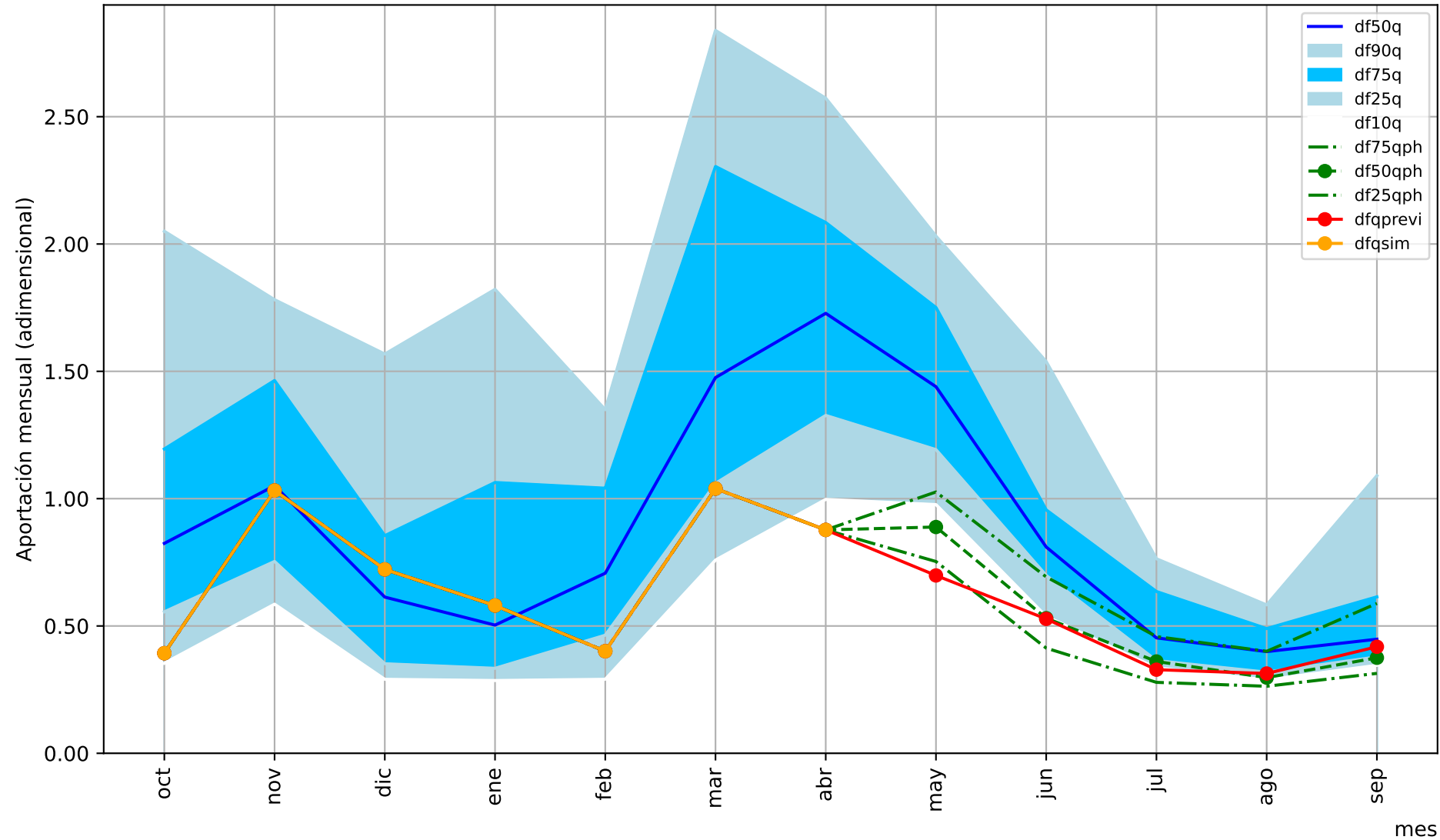
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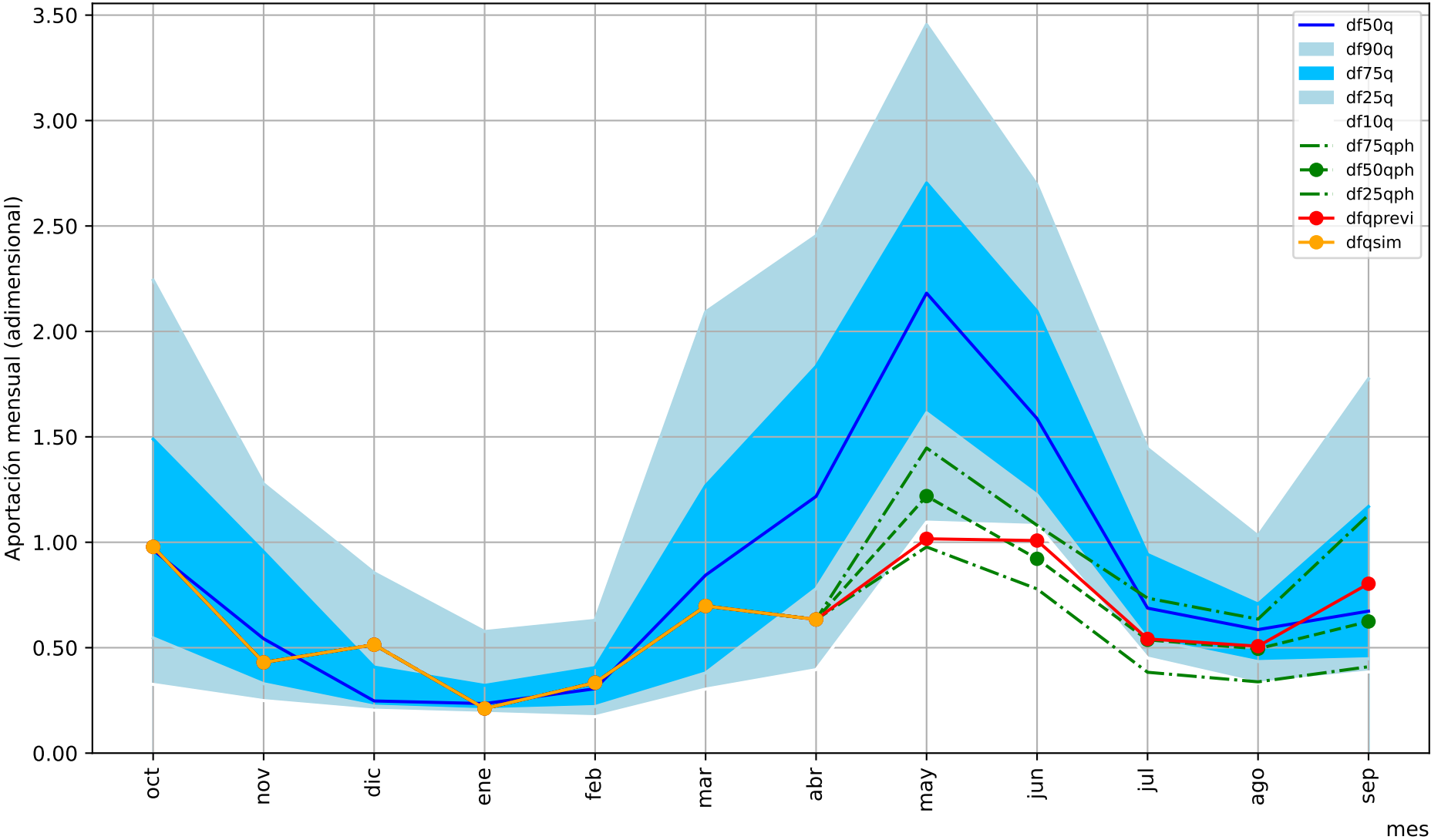
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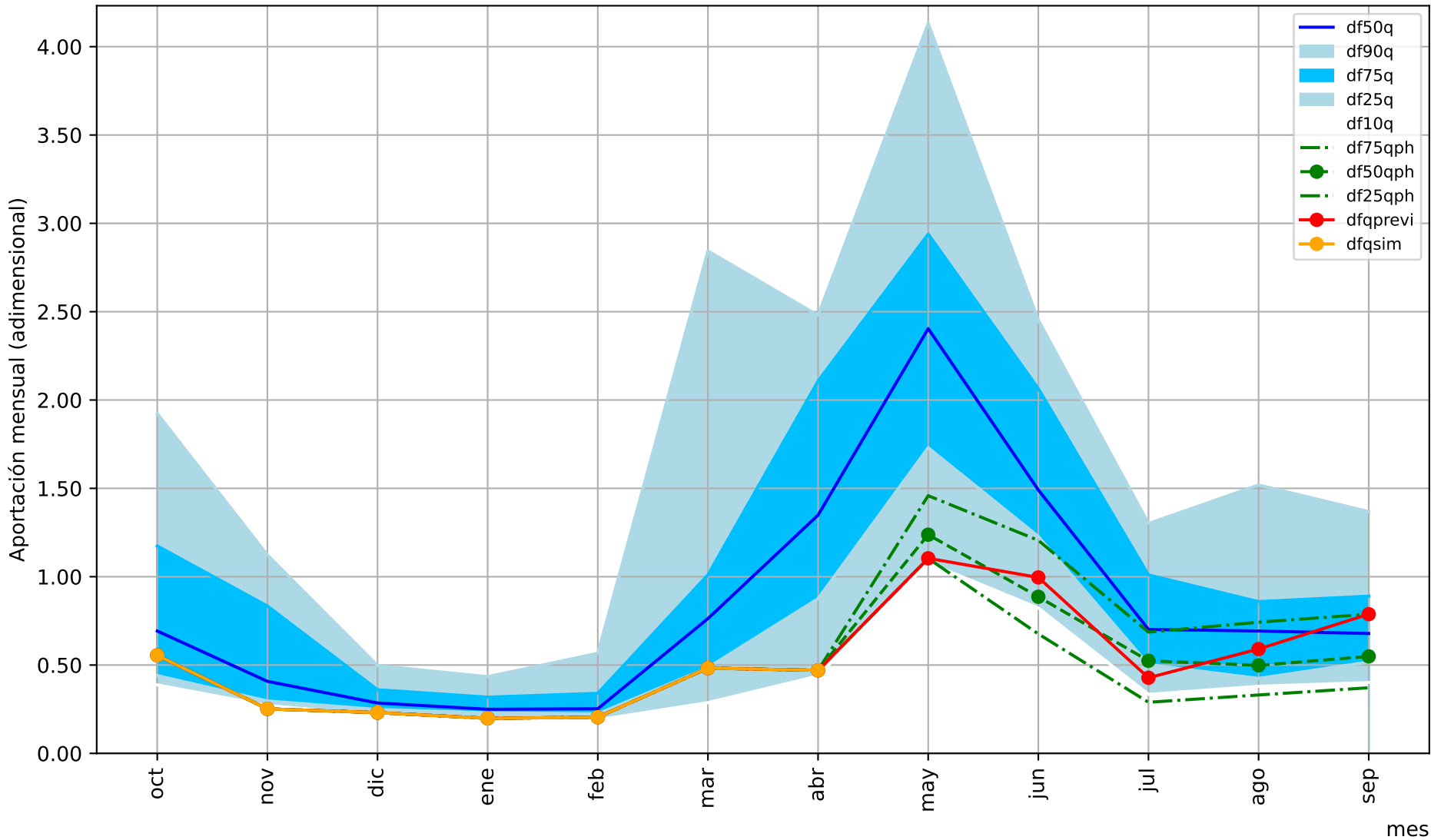
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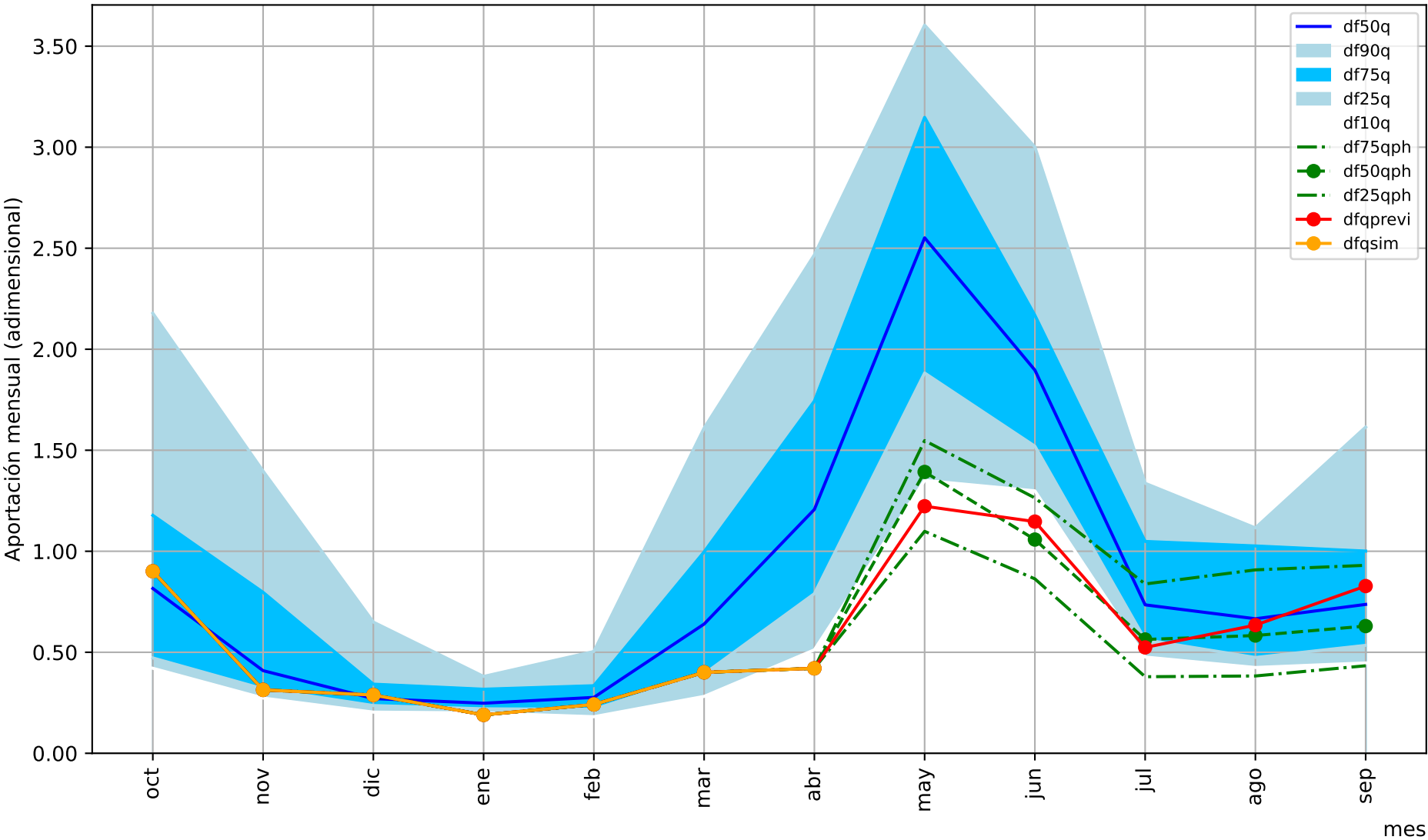
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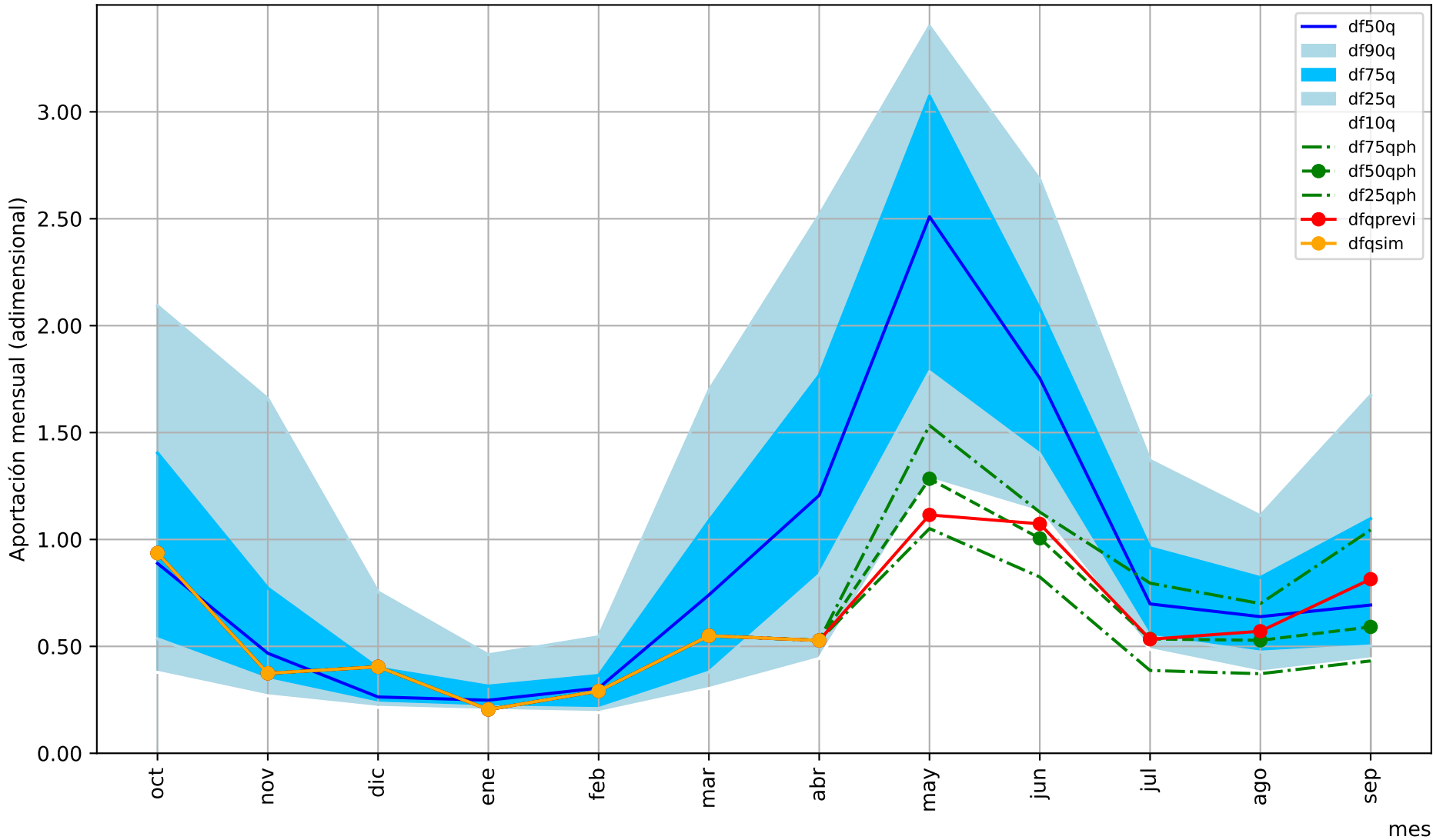
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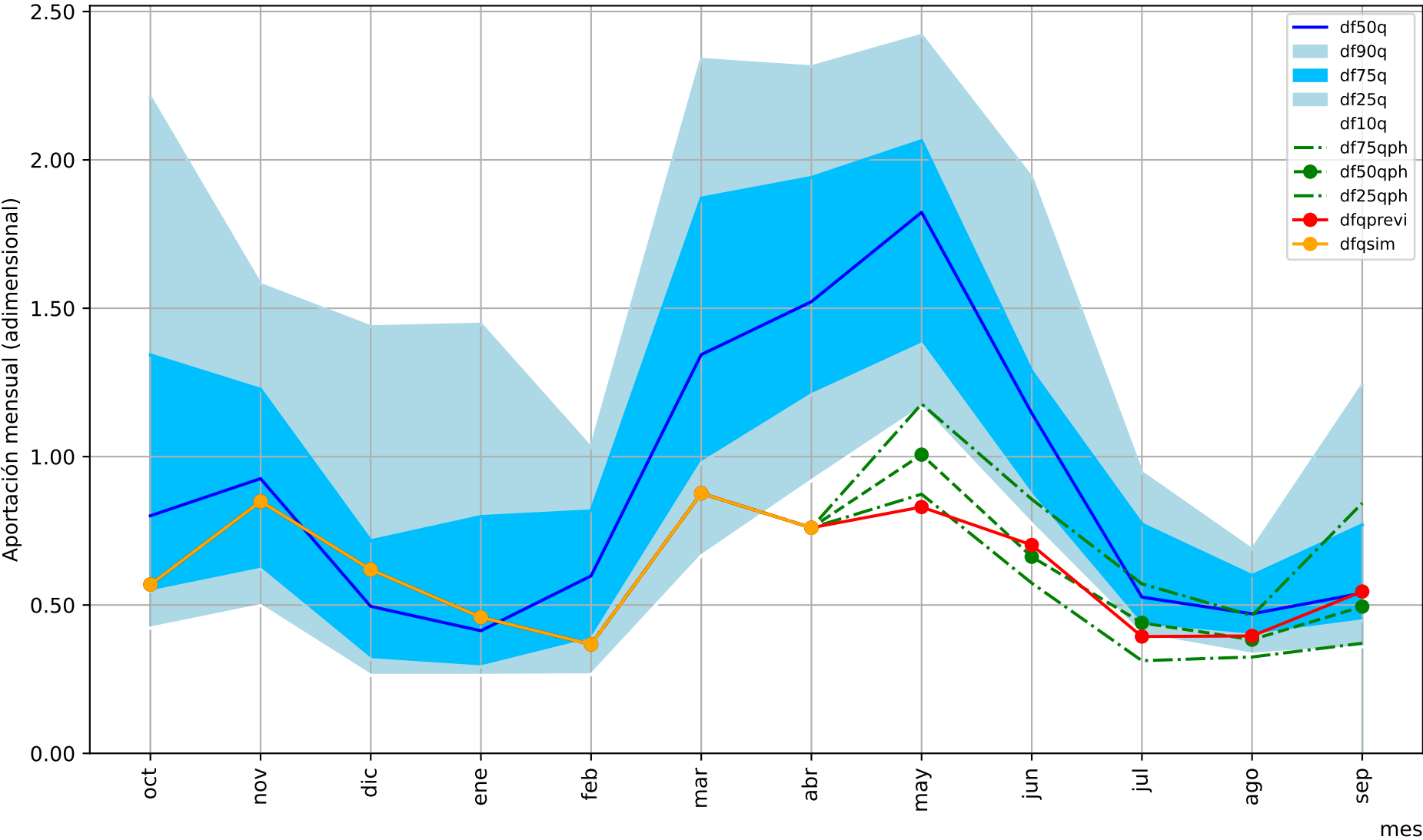
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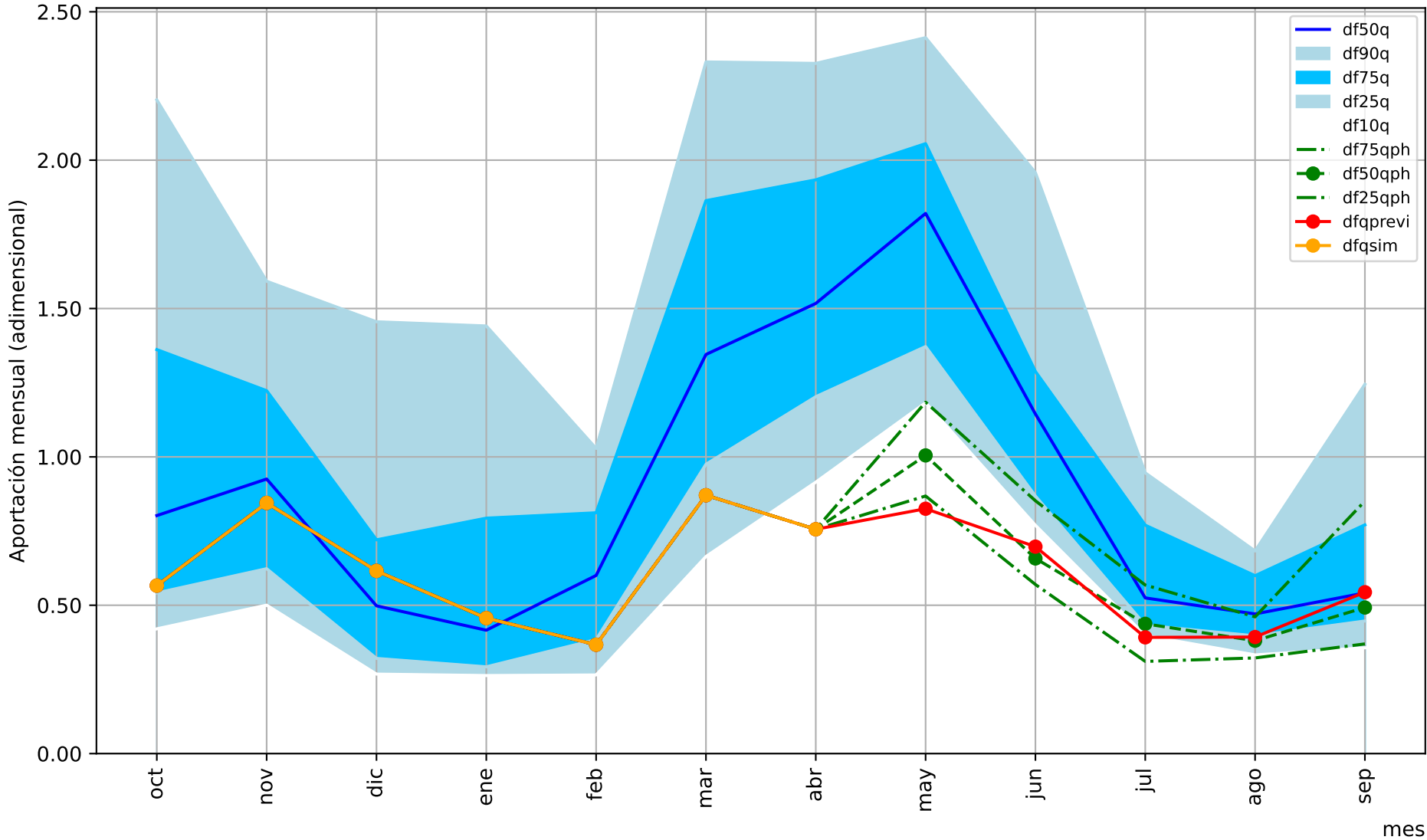
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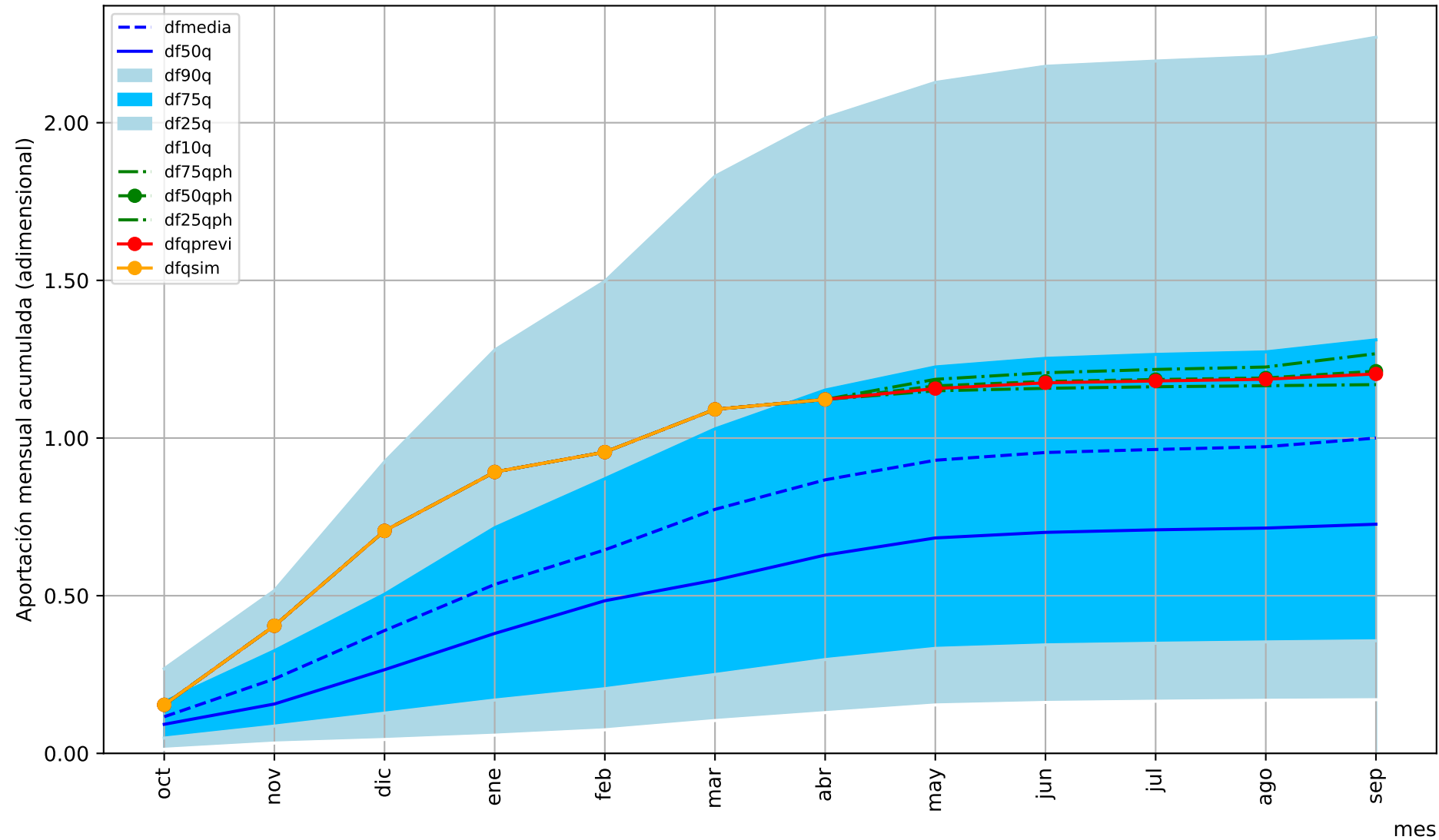
Variable analizada

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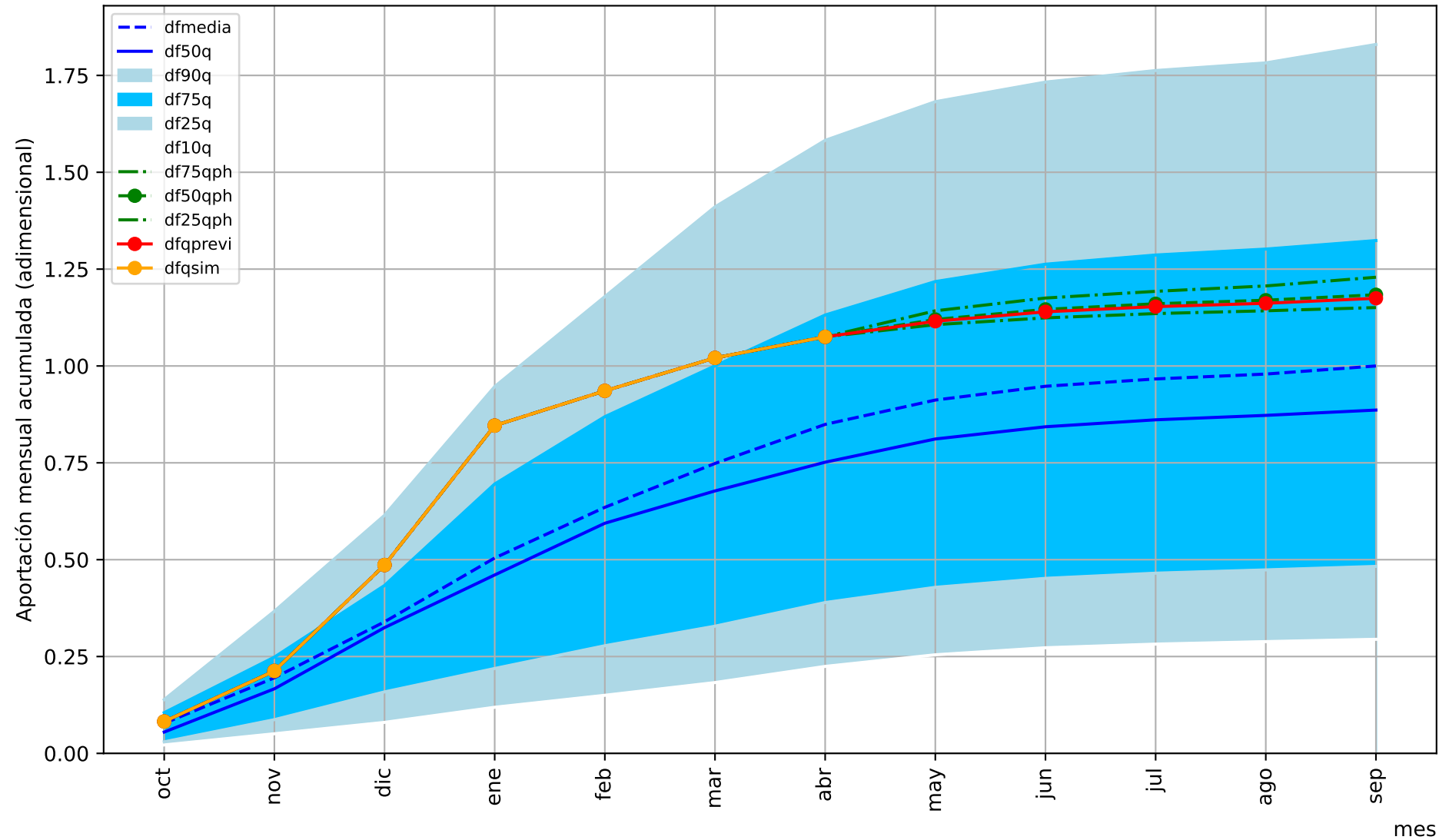
Predicción realizada en mayo 2023

Universitat Politècnica de València

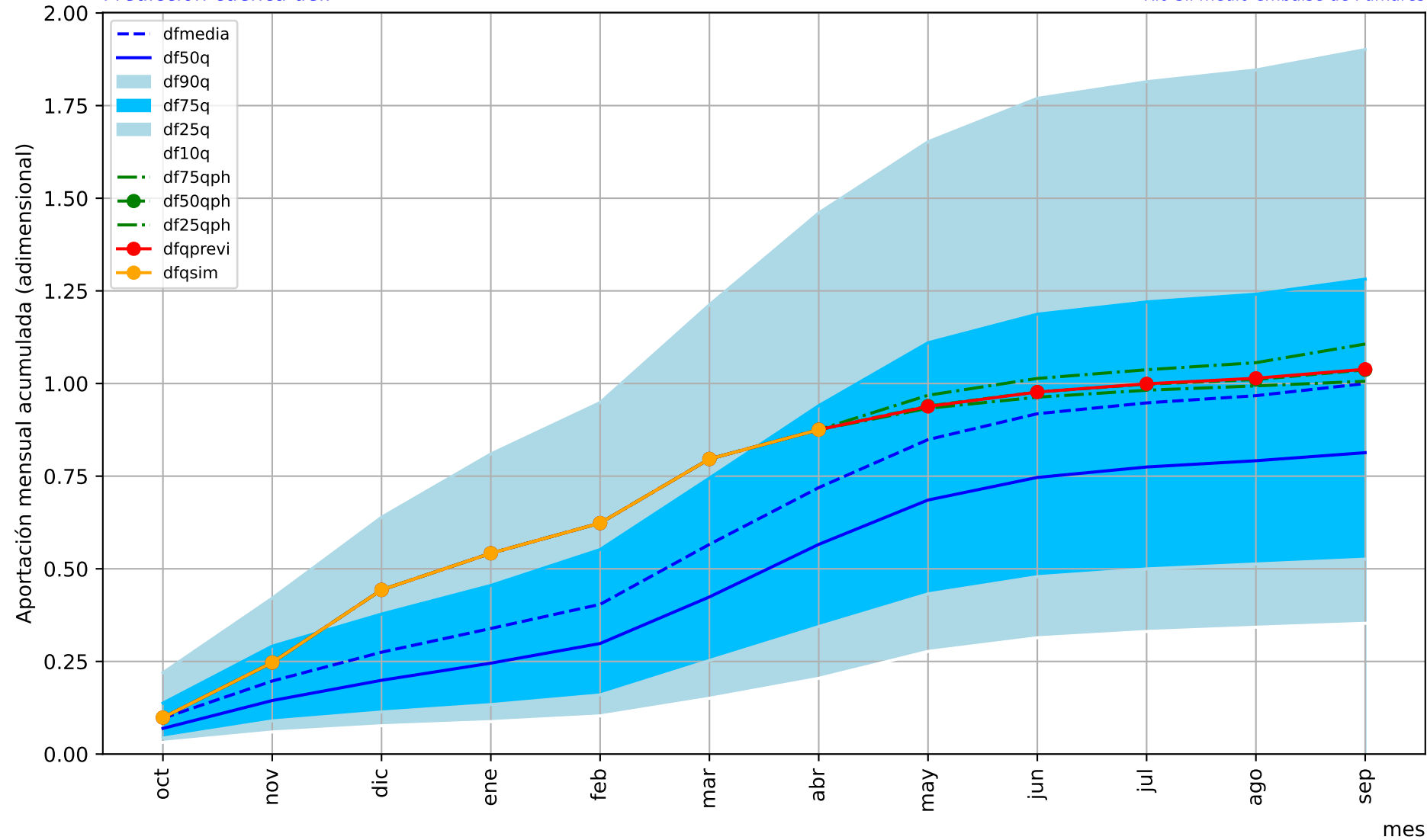
IIAMA - Instituto de Ingeniería del Agua y Medio Ambiente



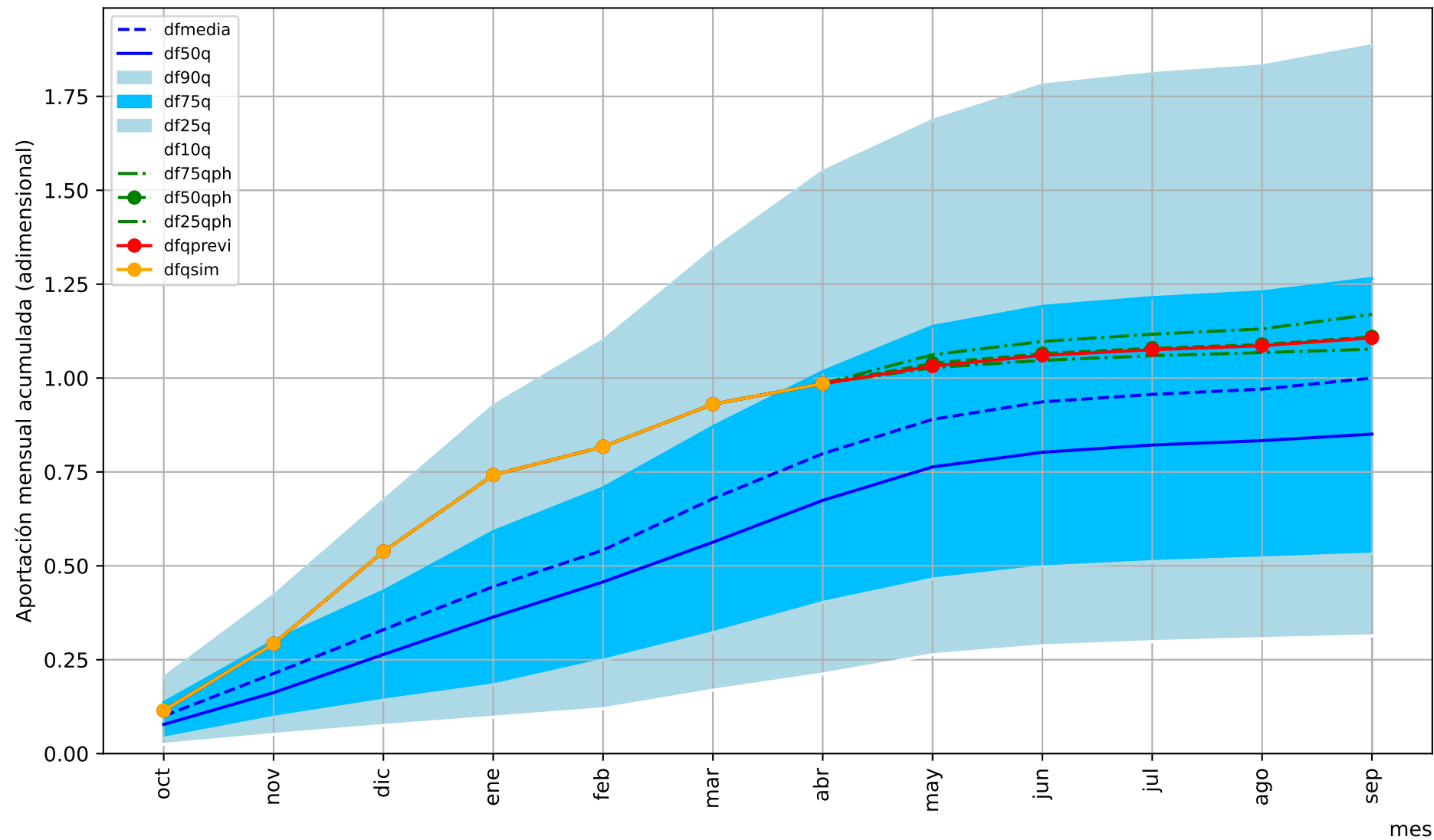
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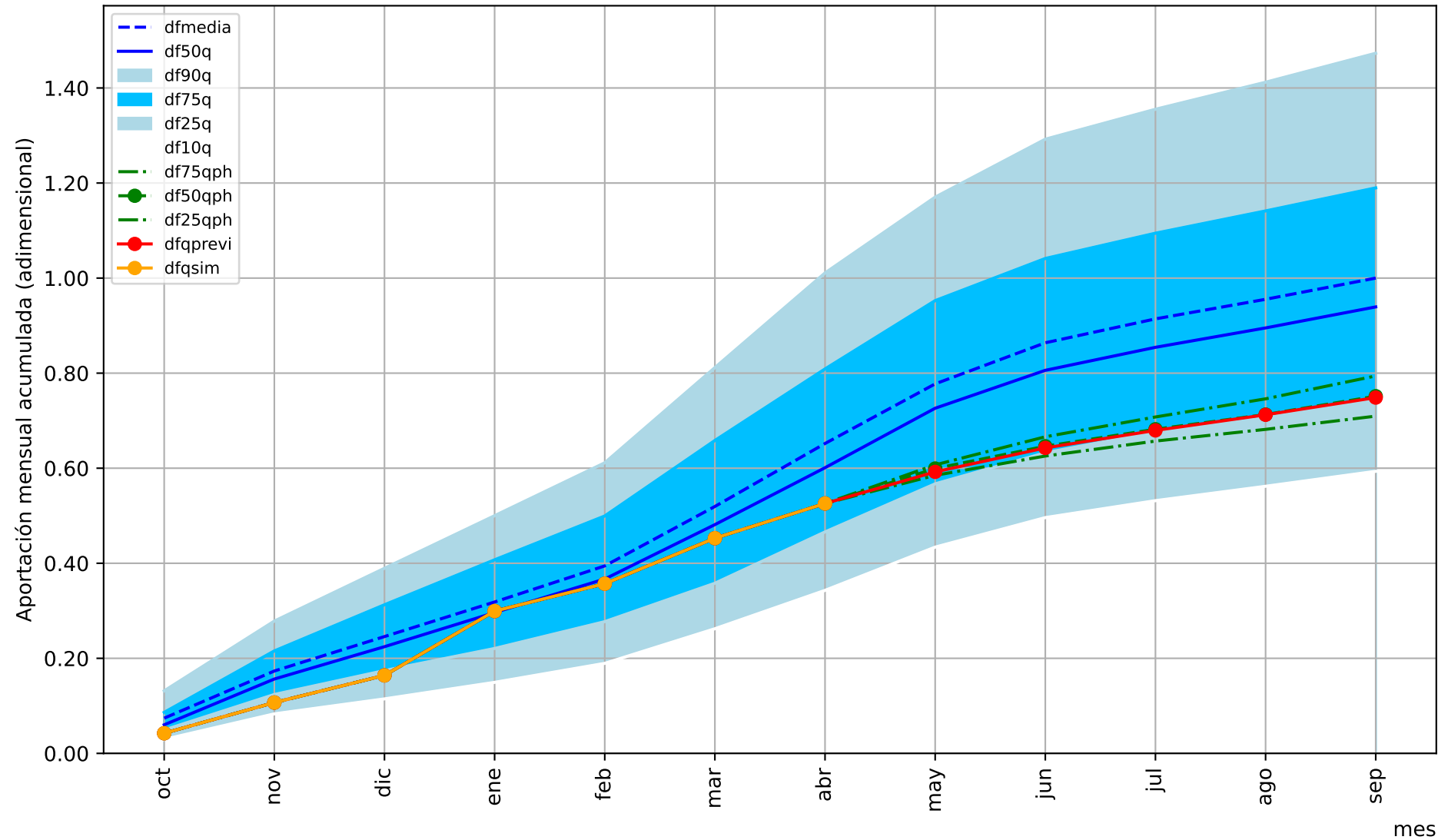


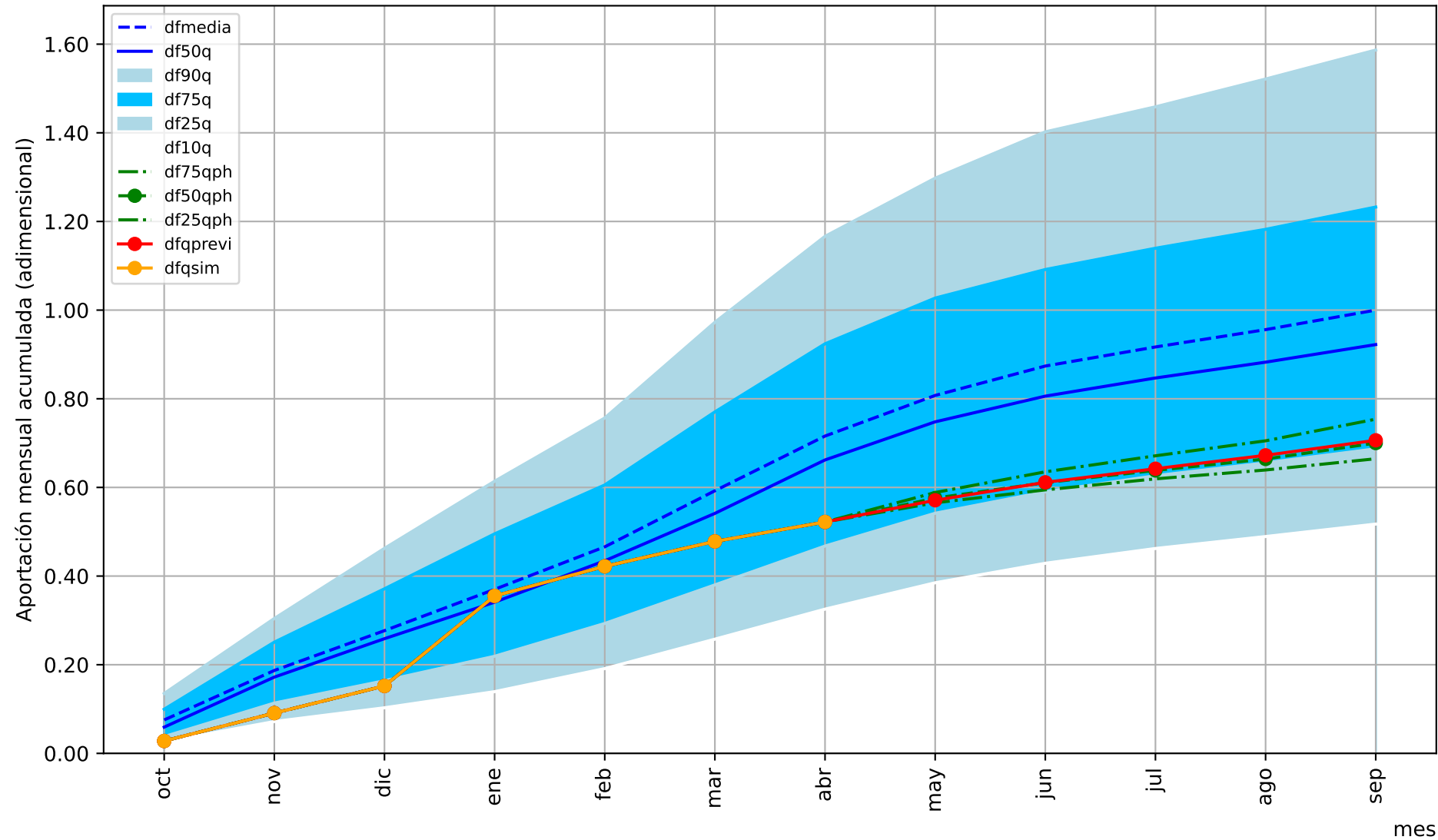
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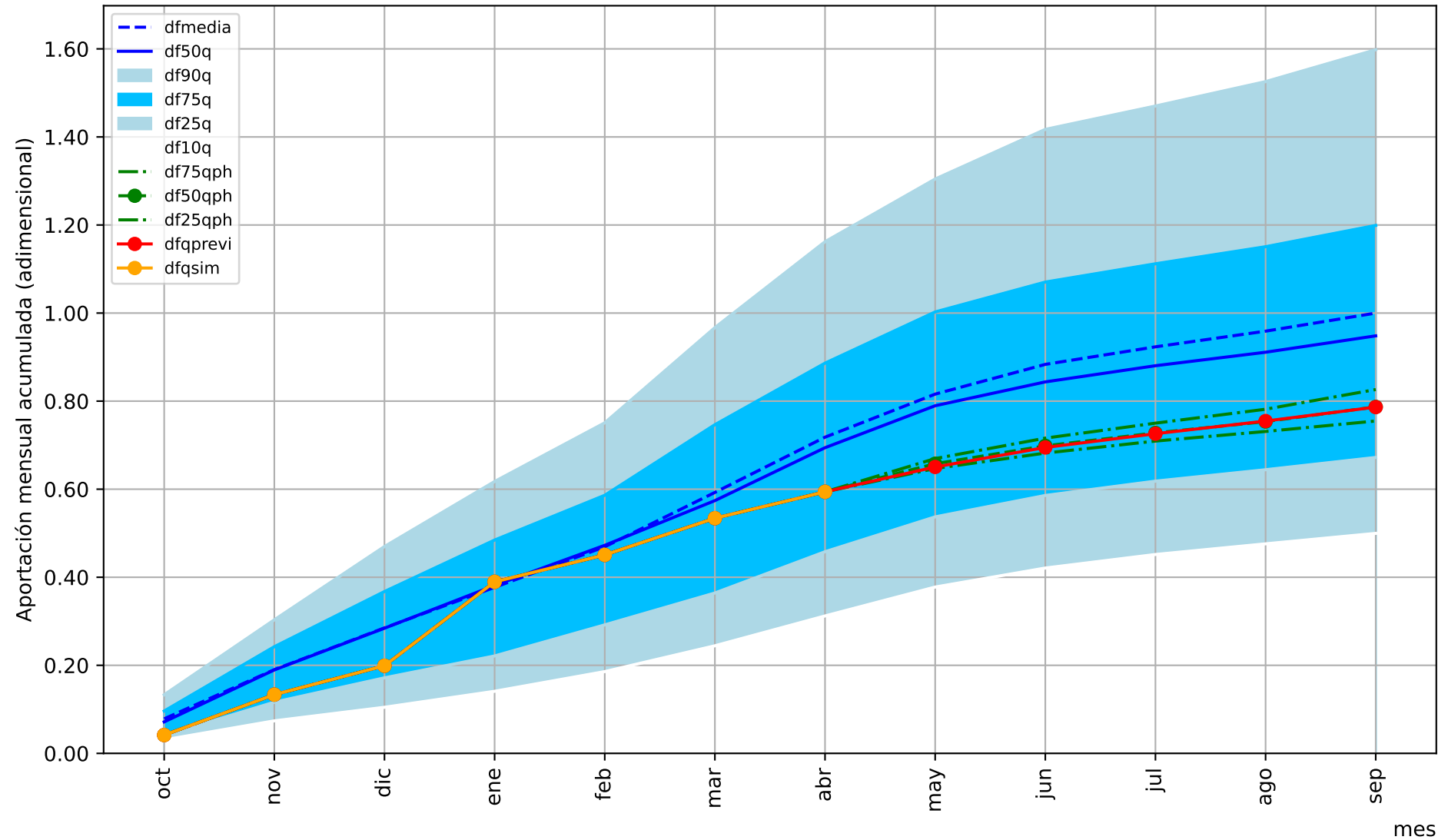
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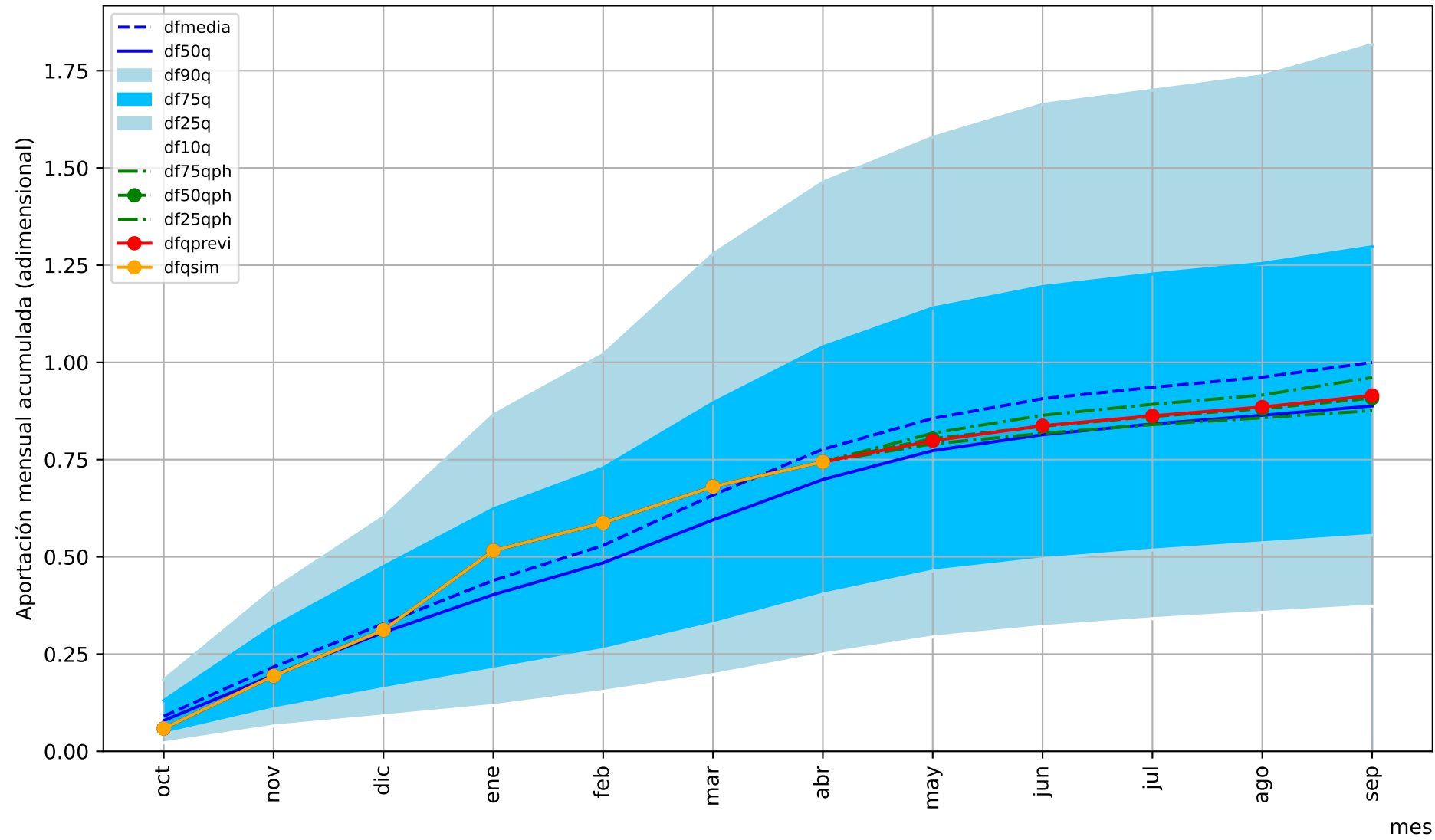


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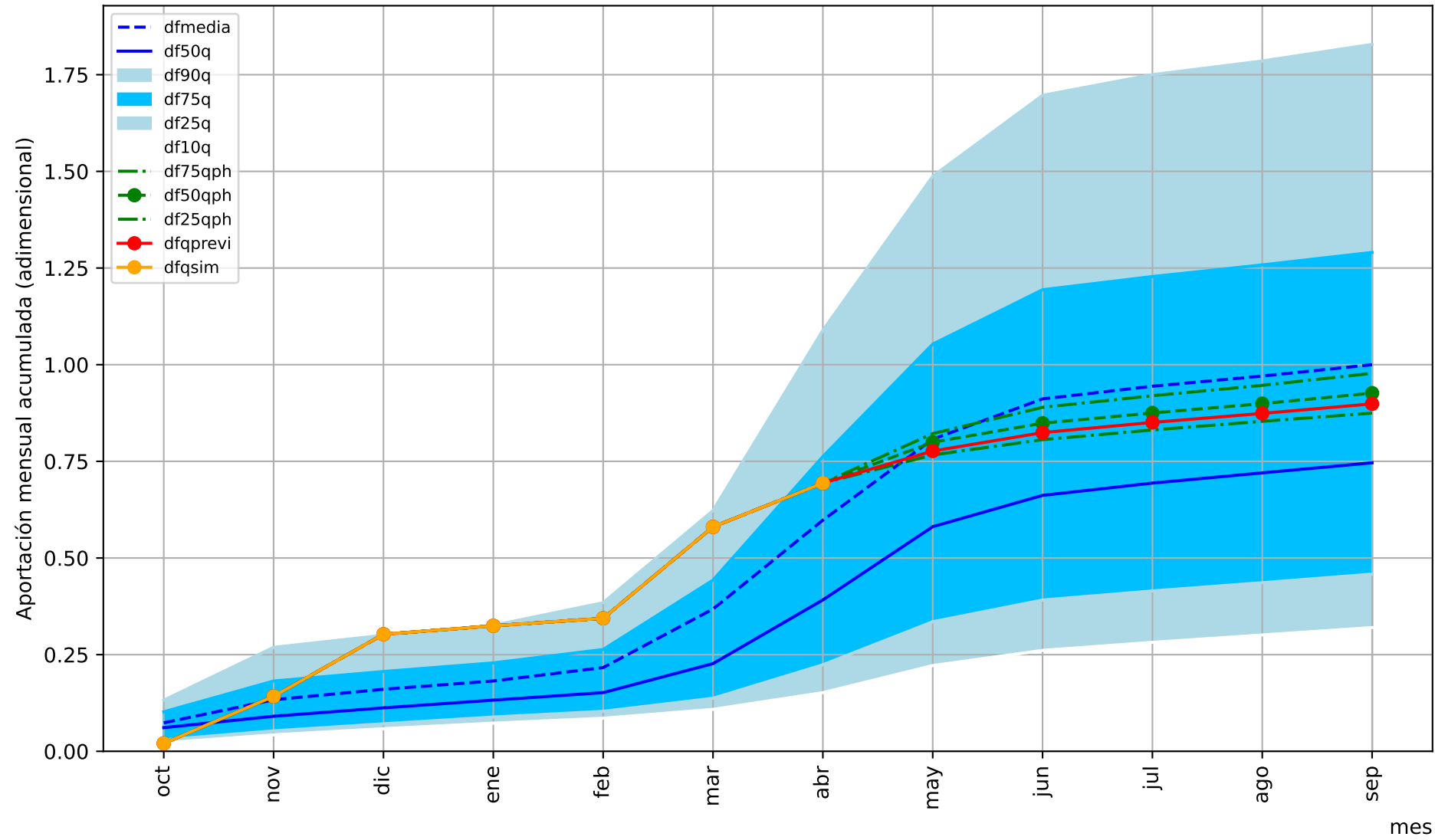


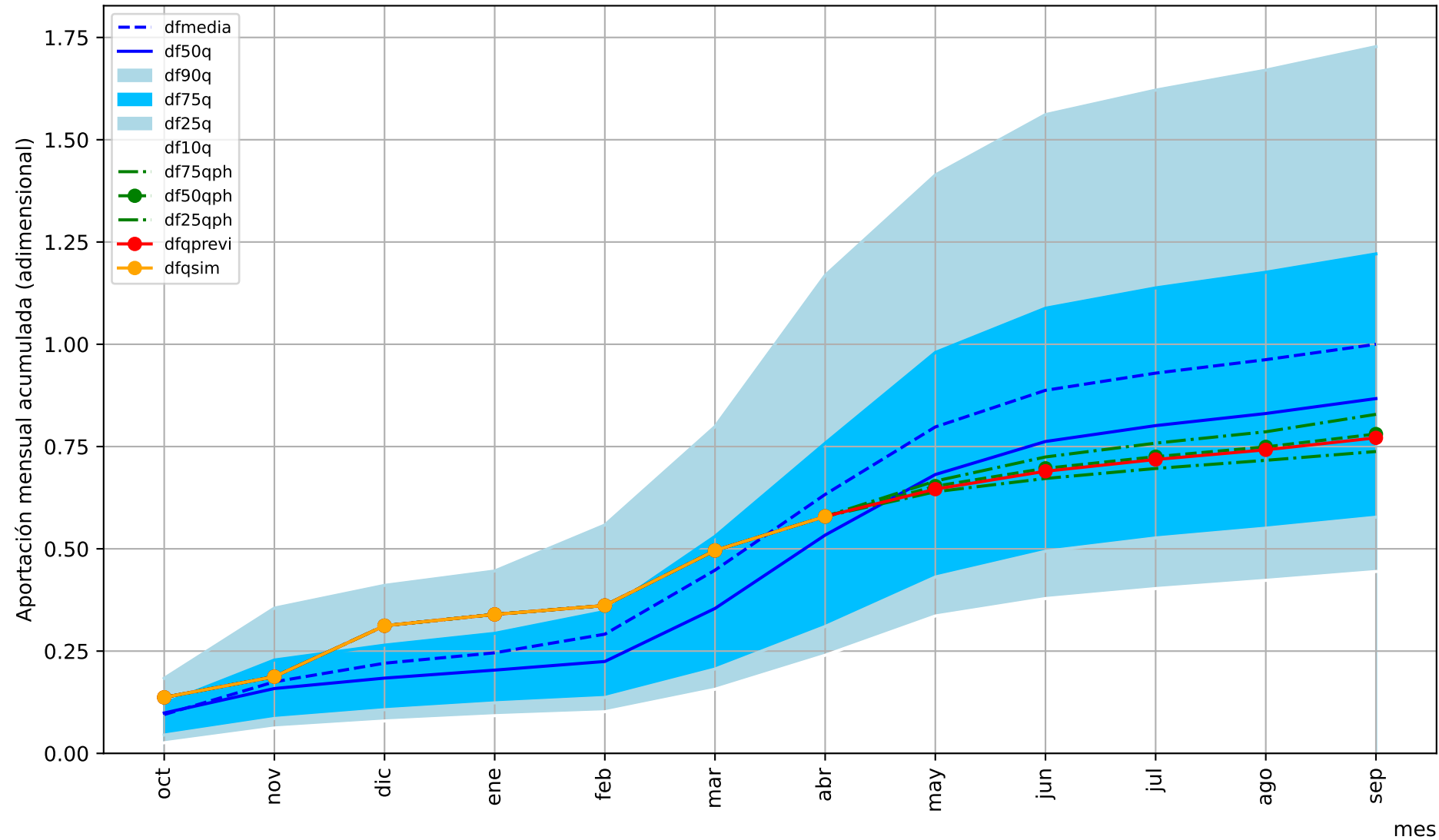
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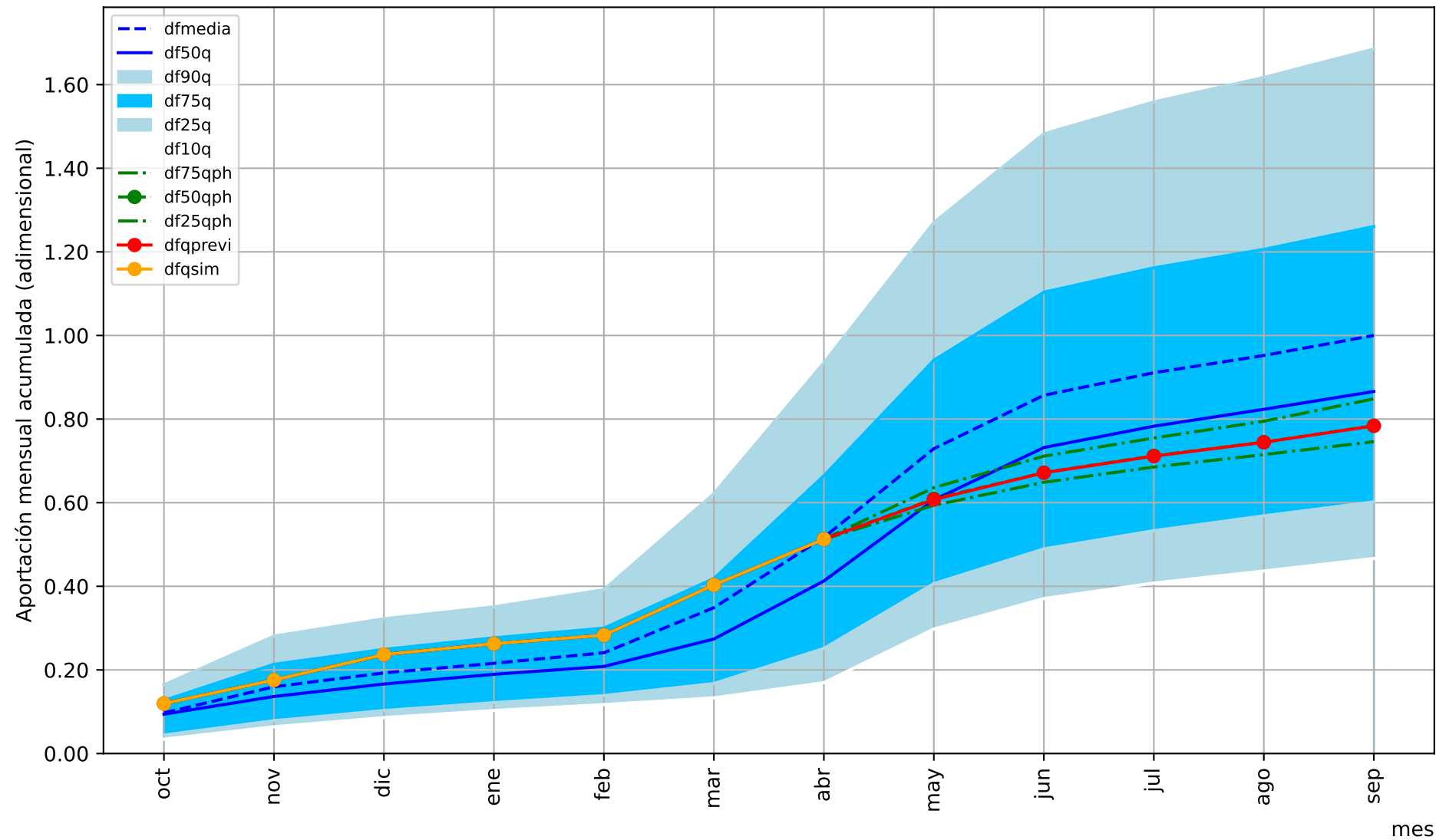


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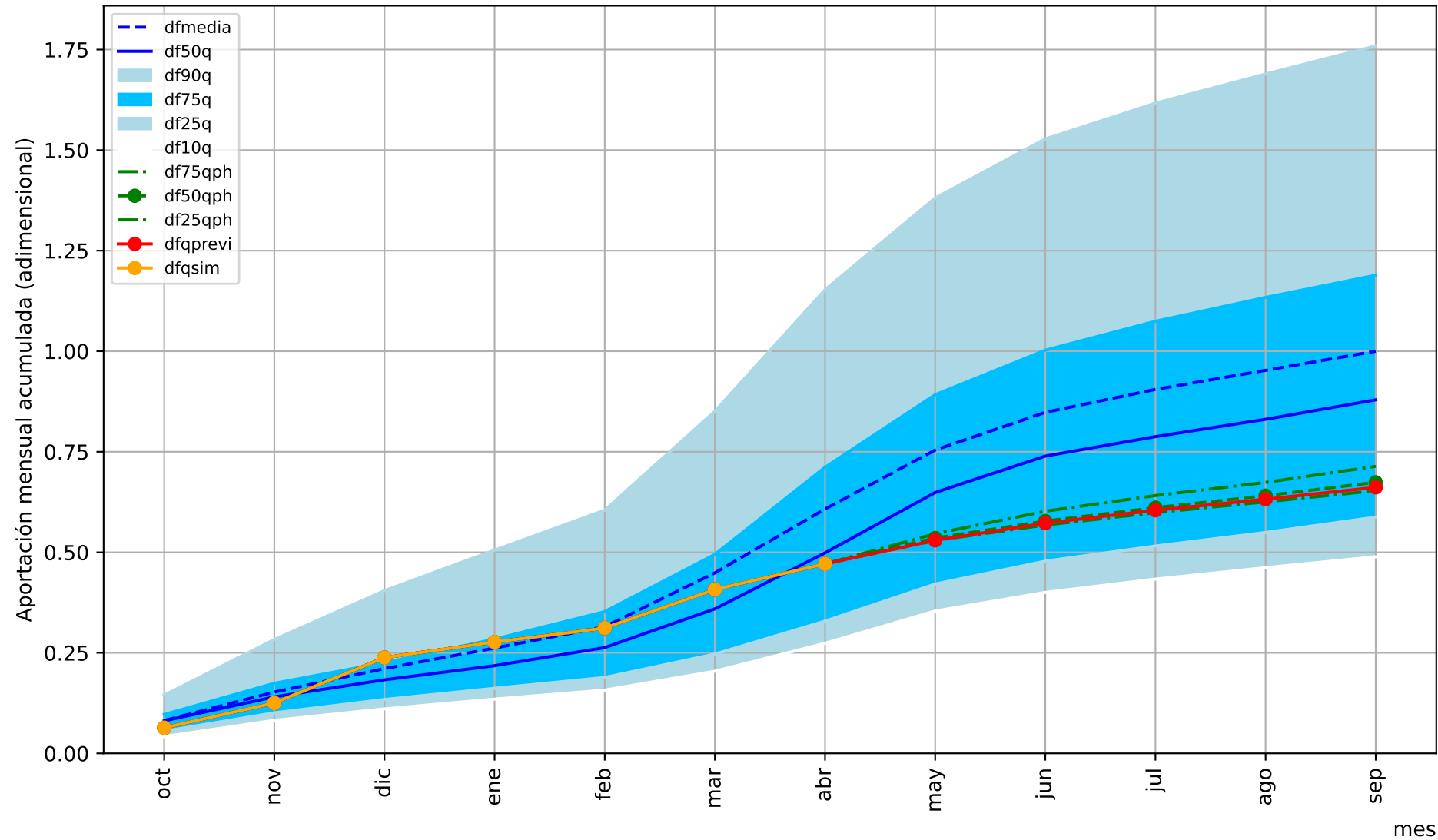


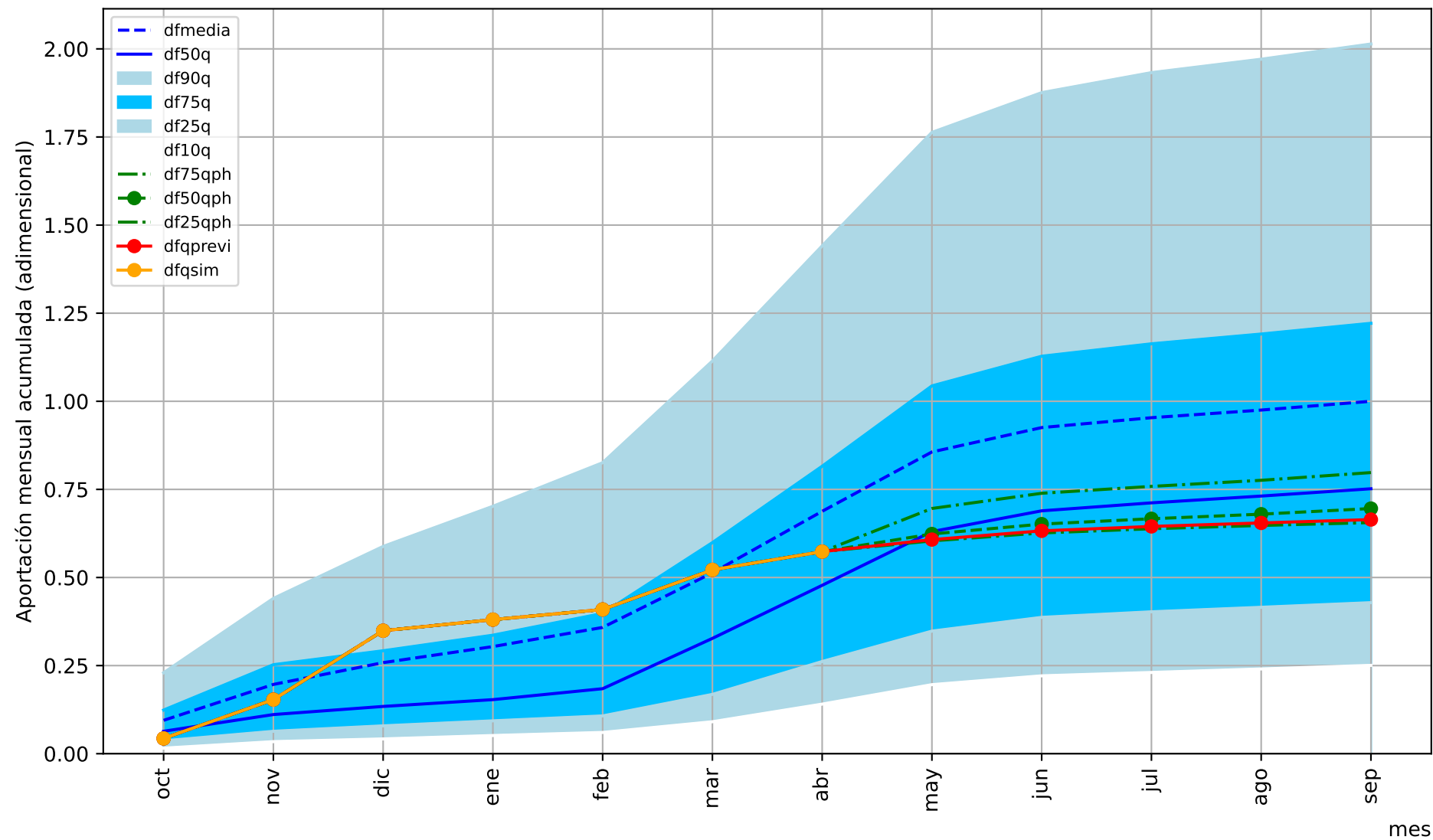


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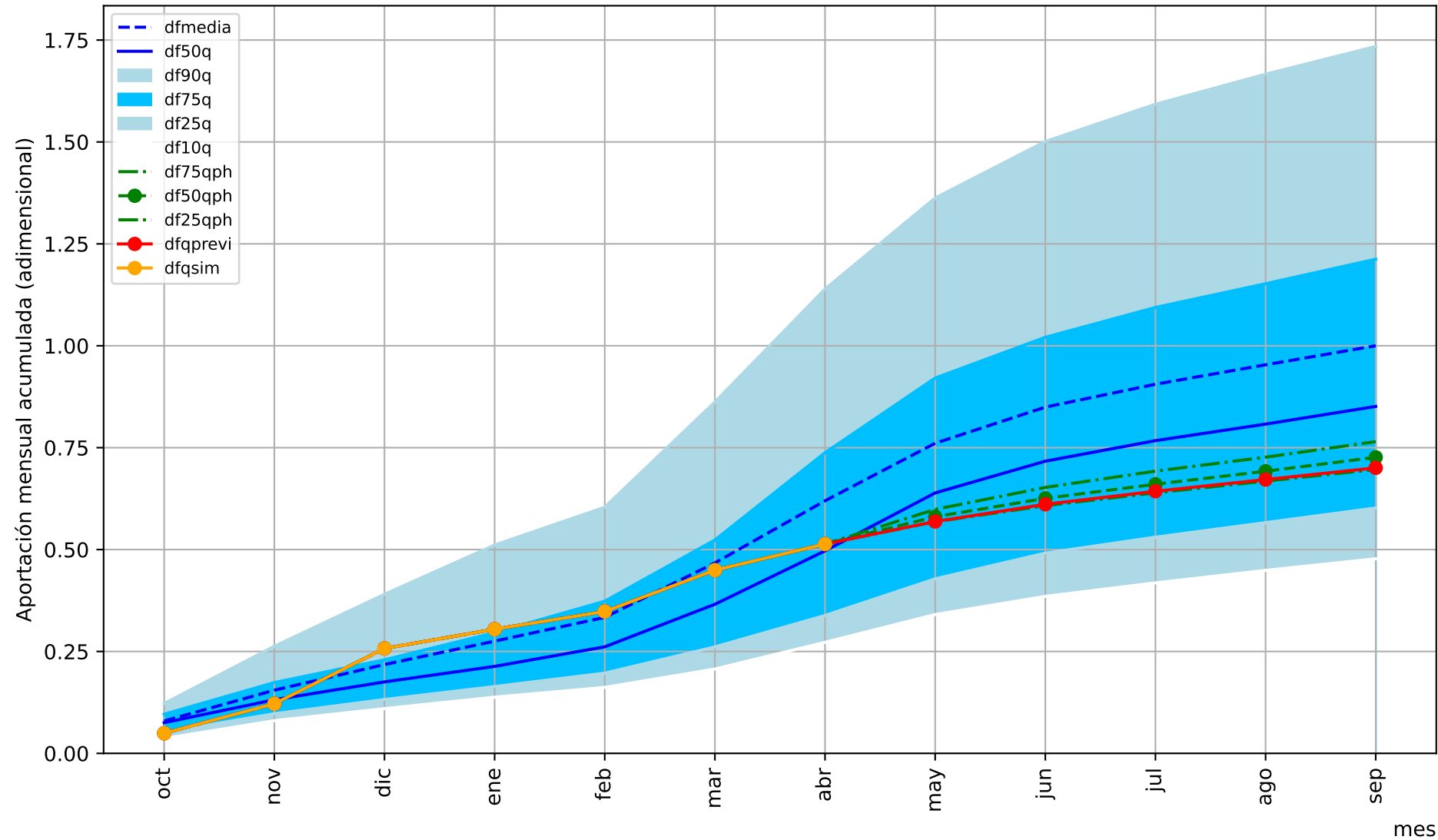


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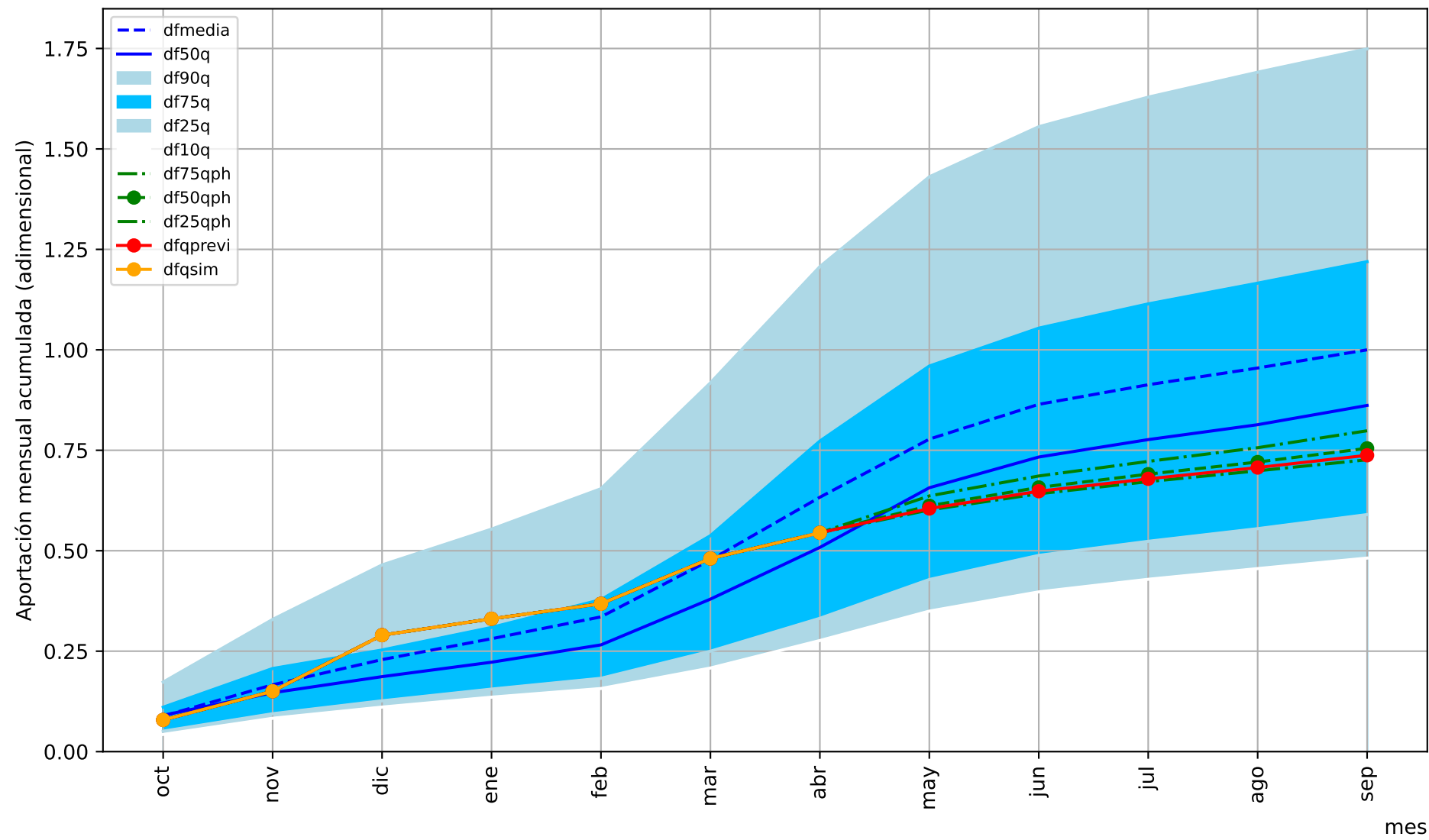




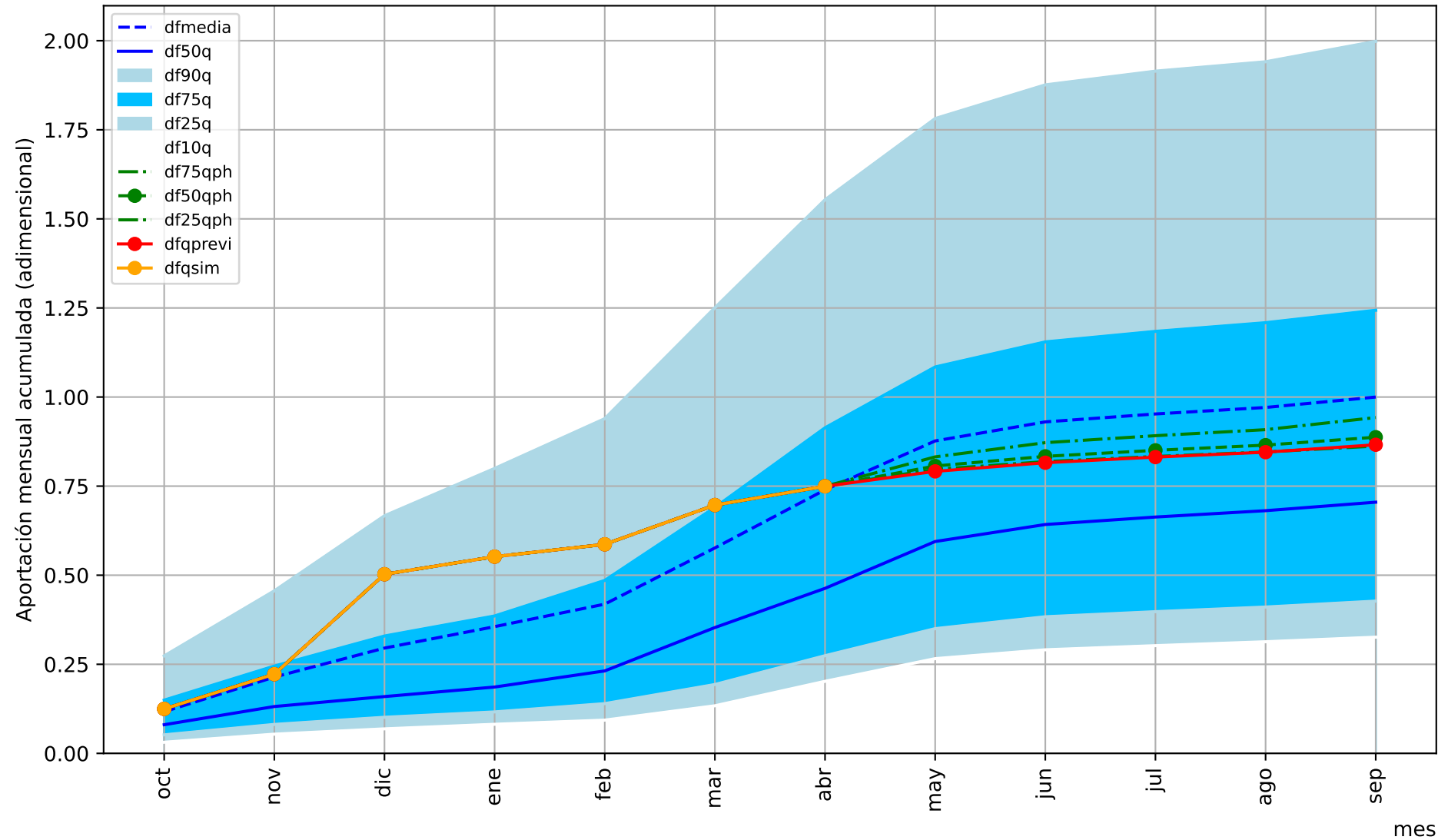
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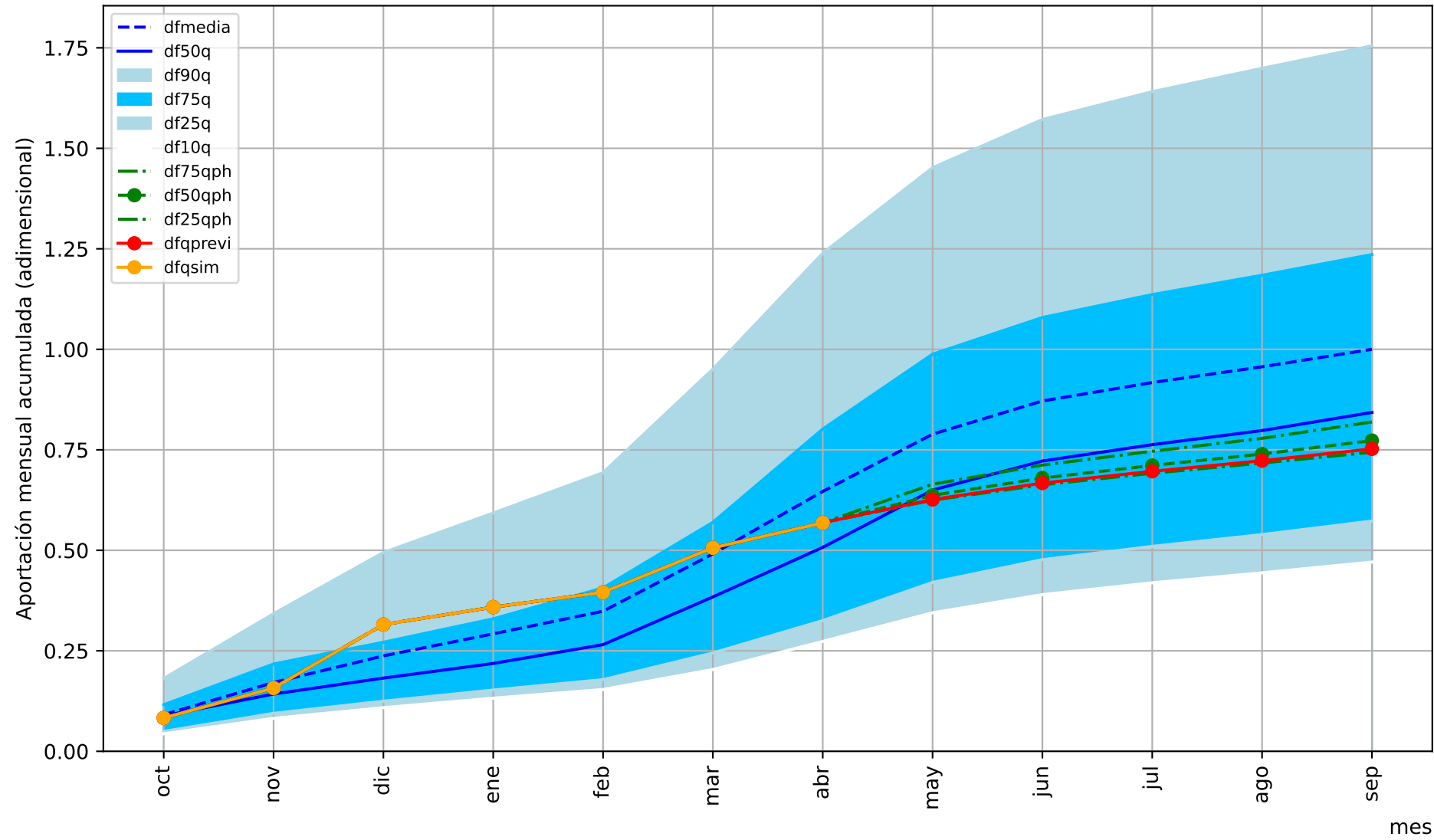


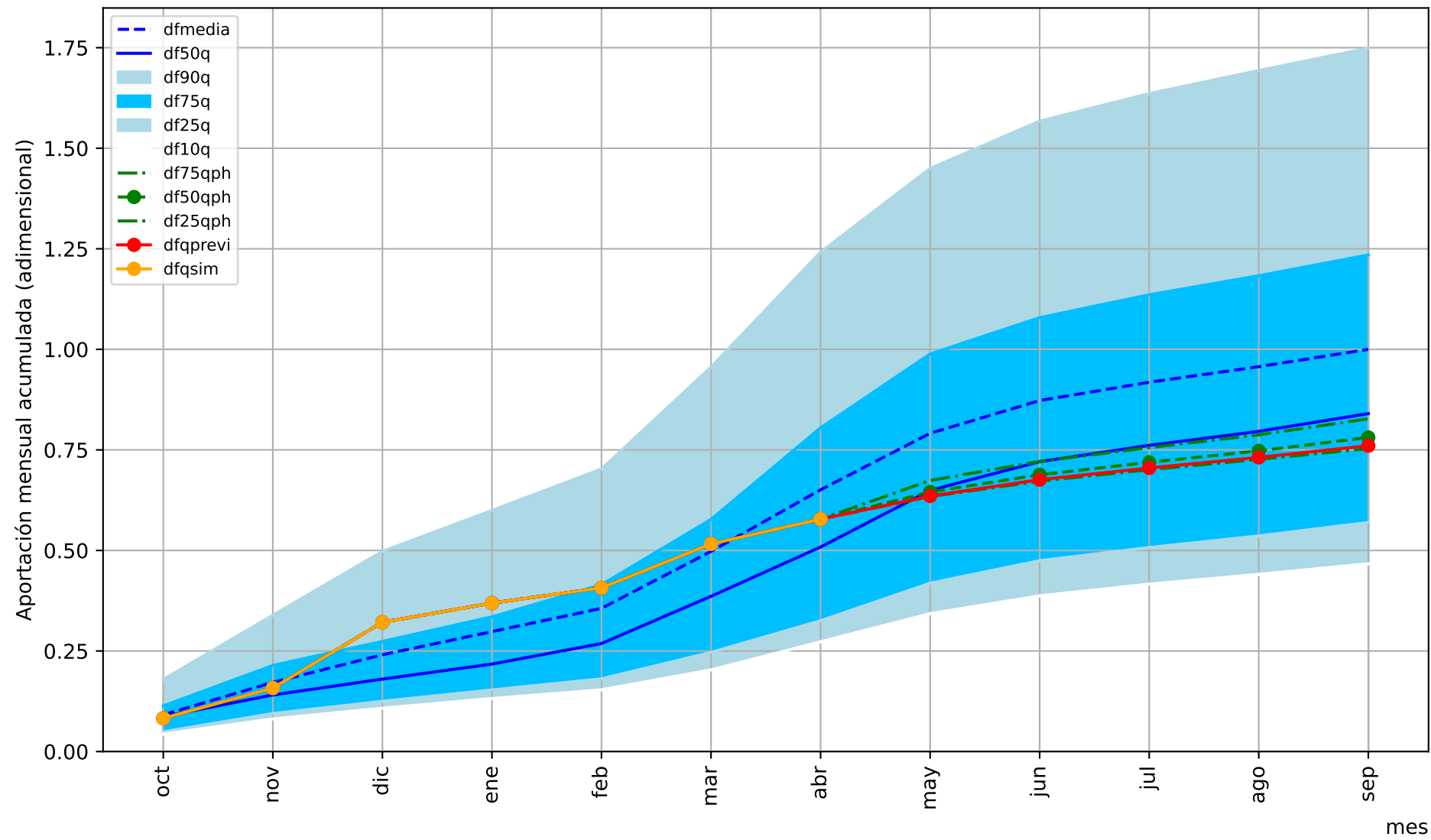
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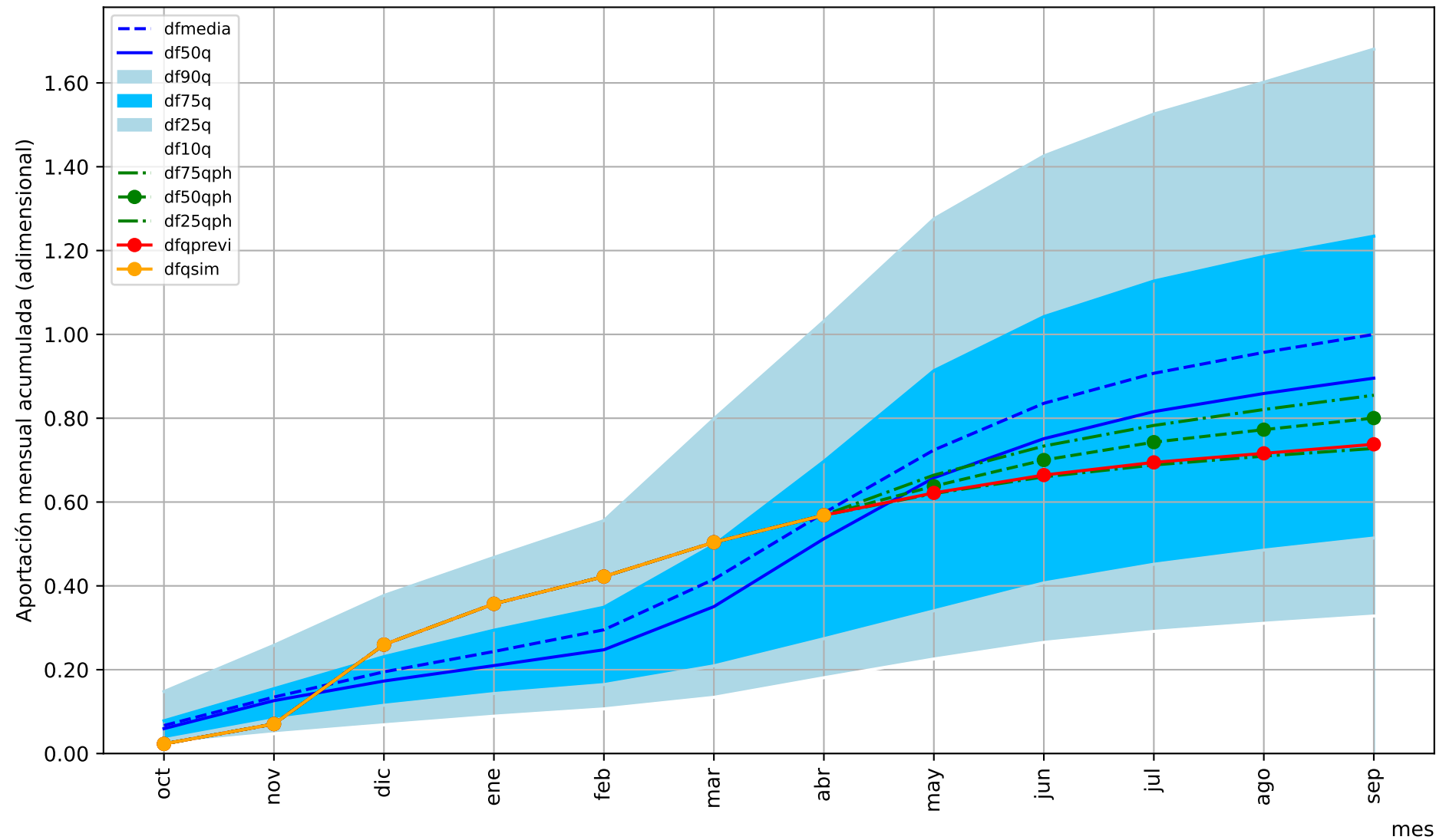


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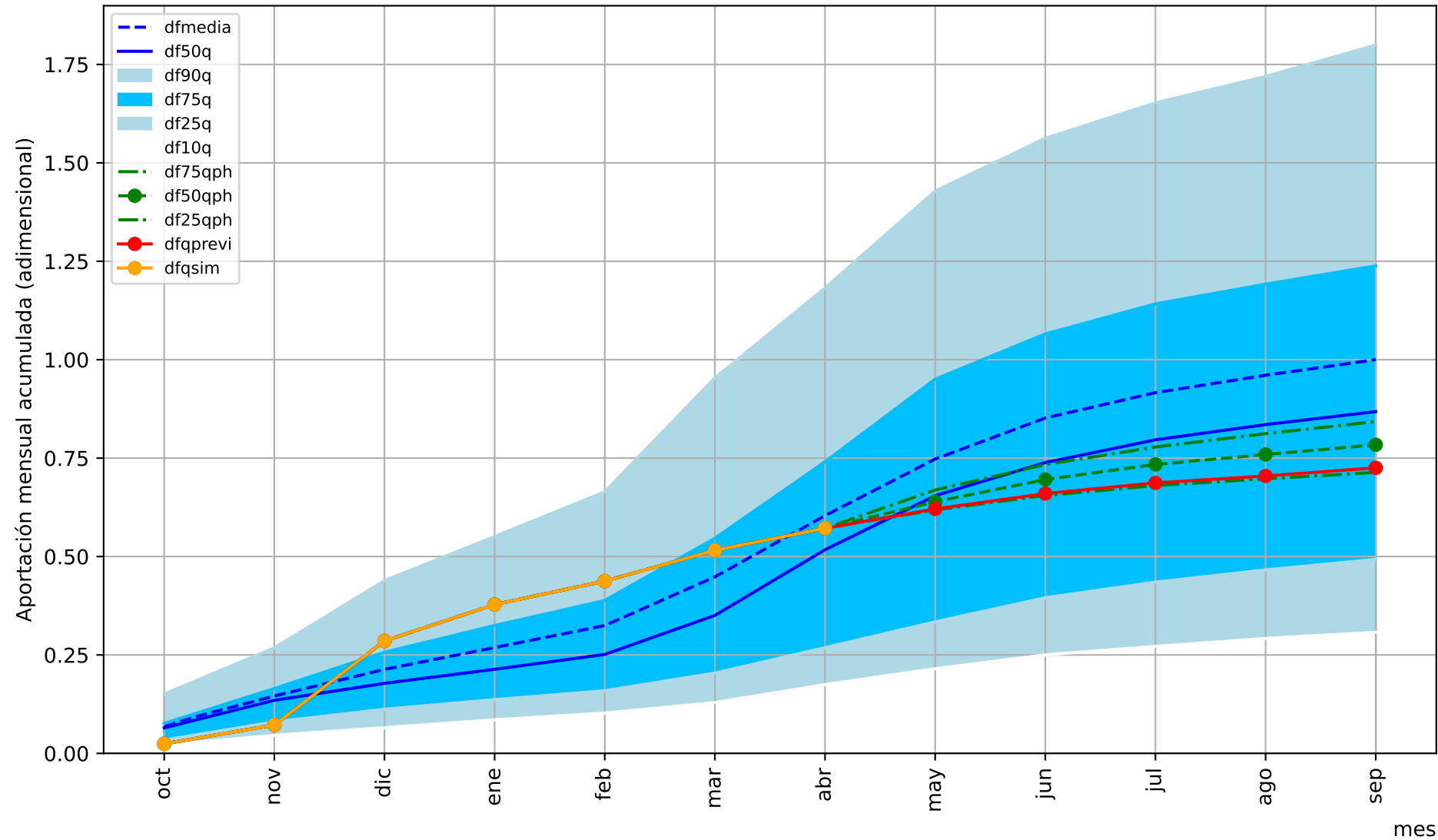
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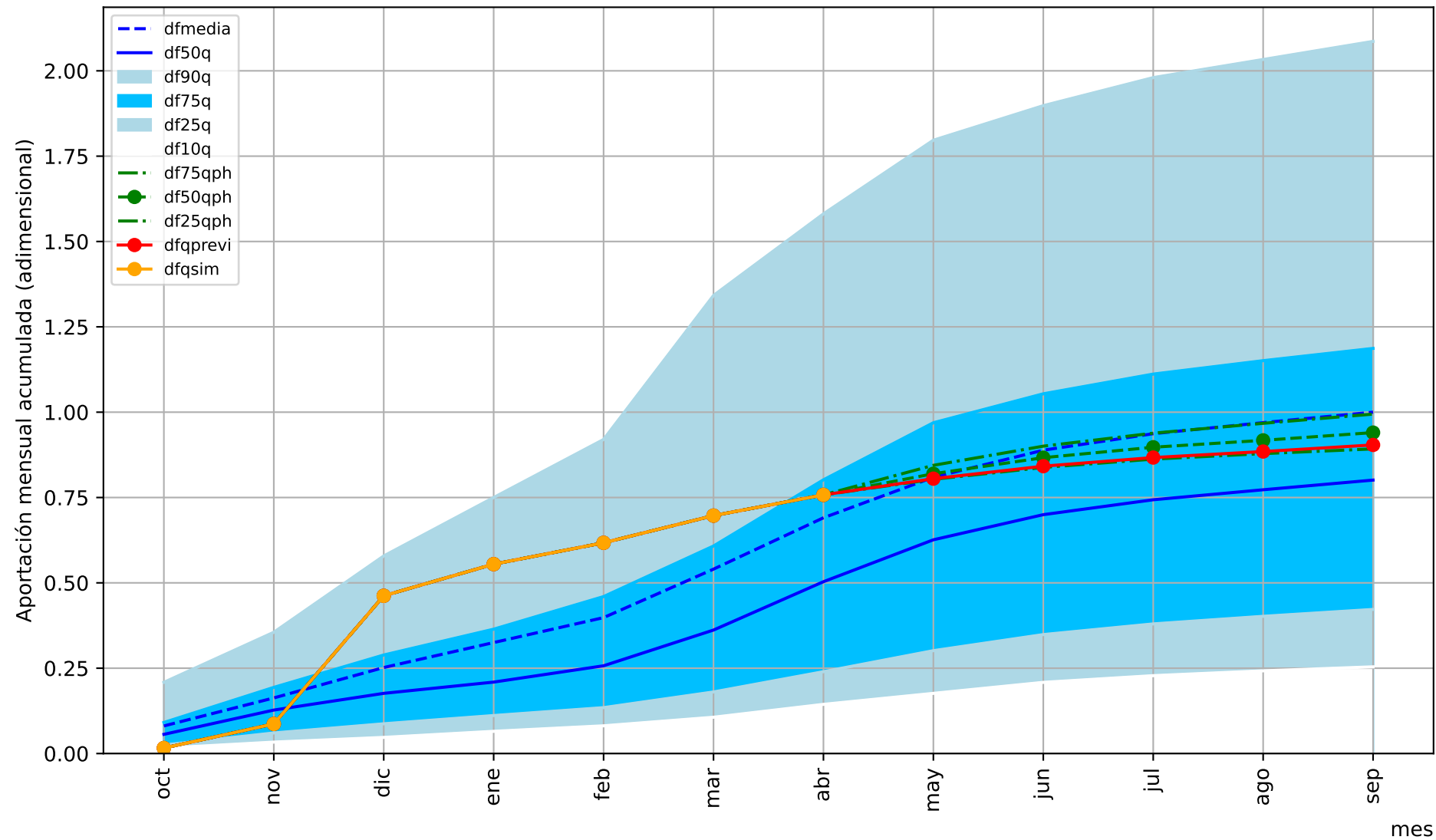


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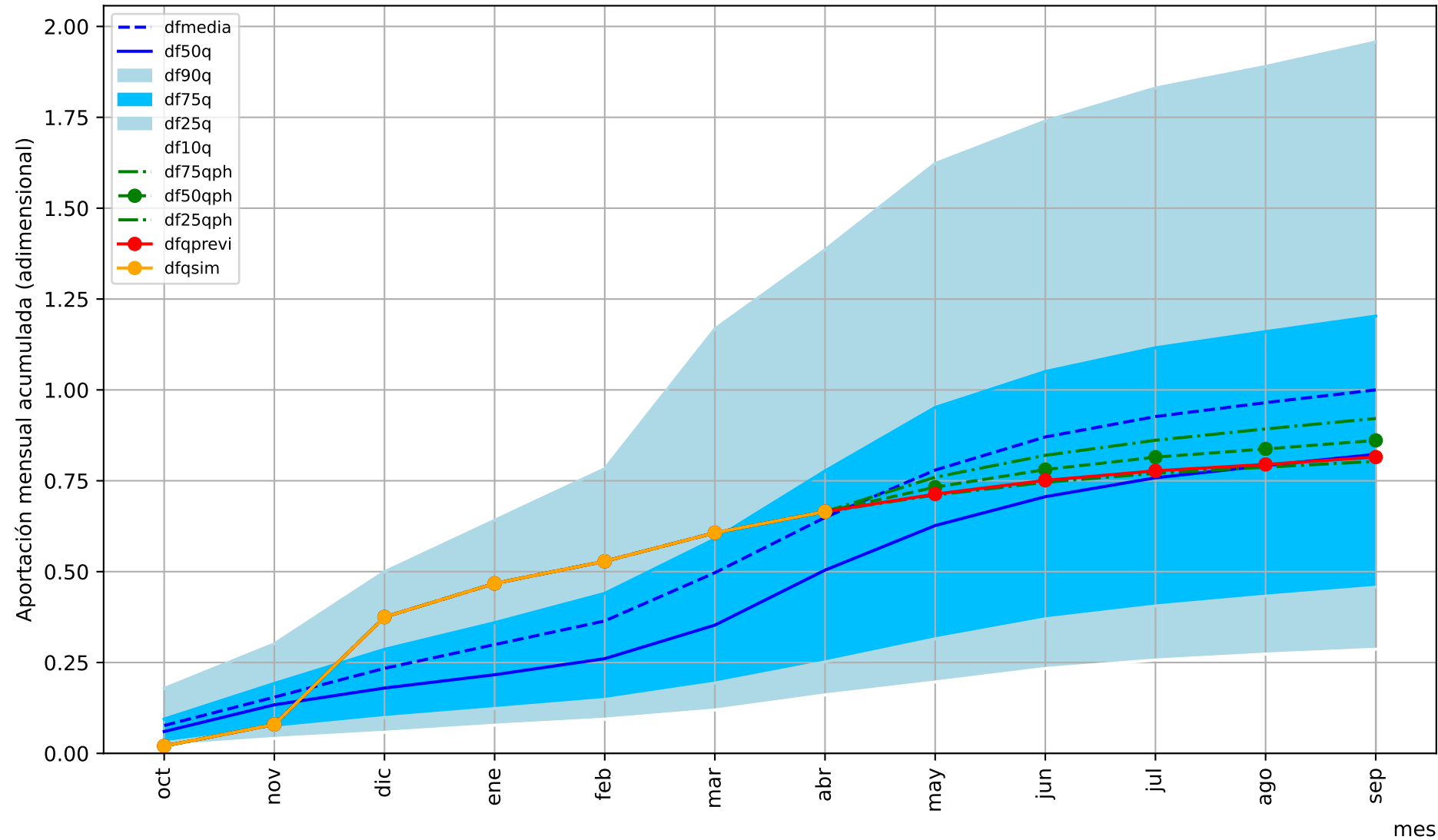


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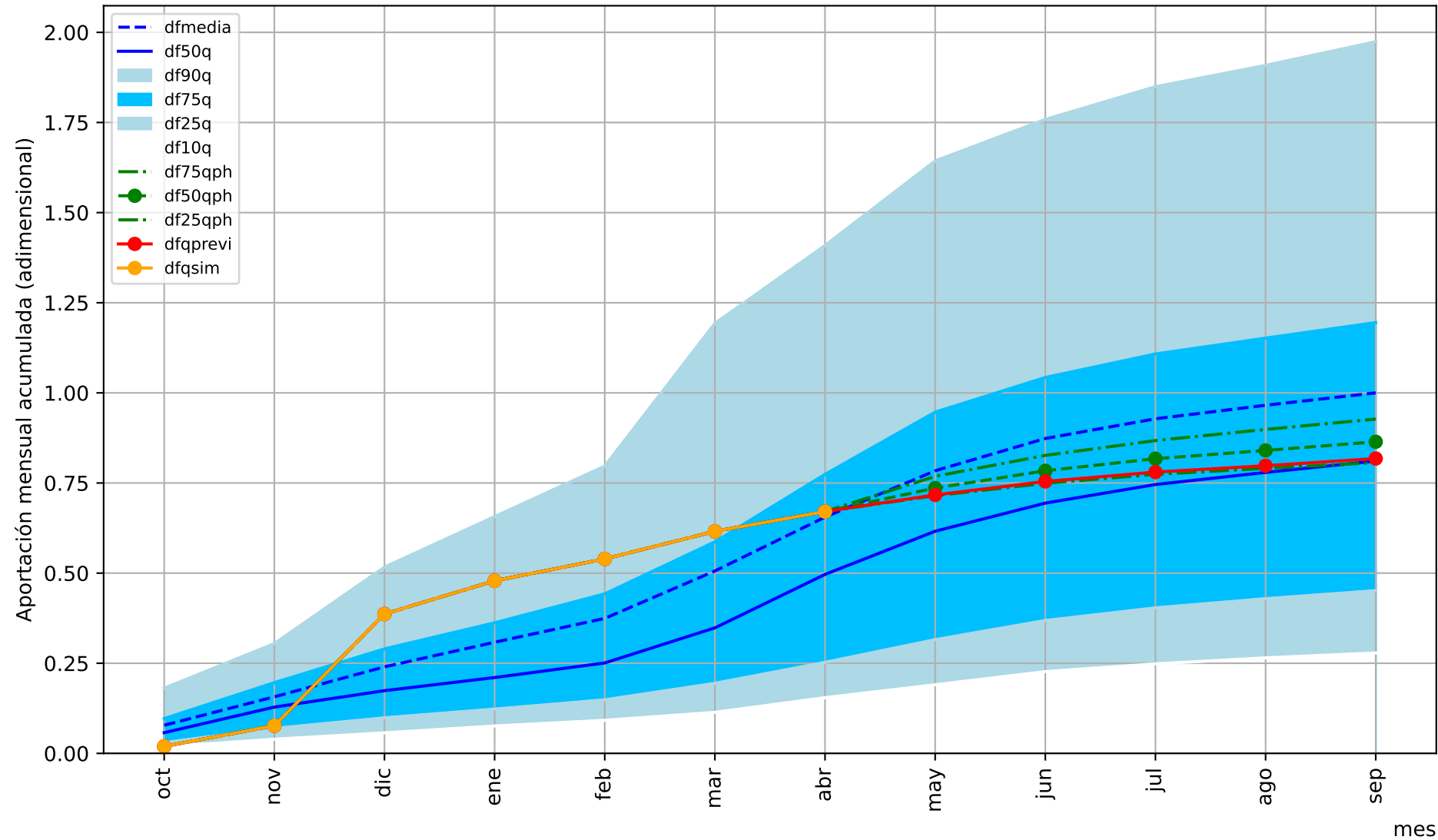
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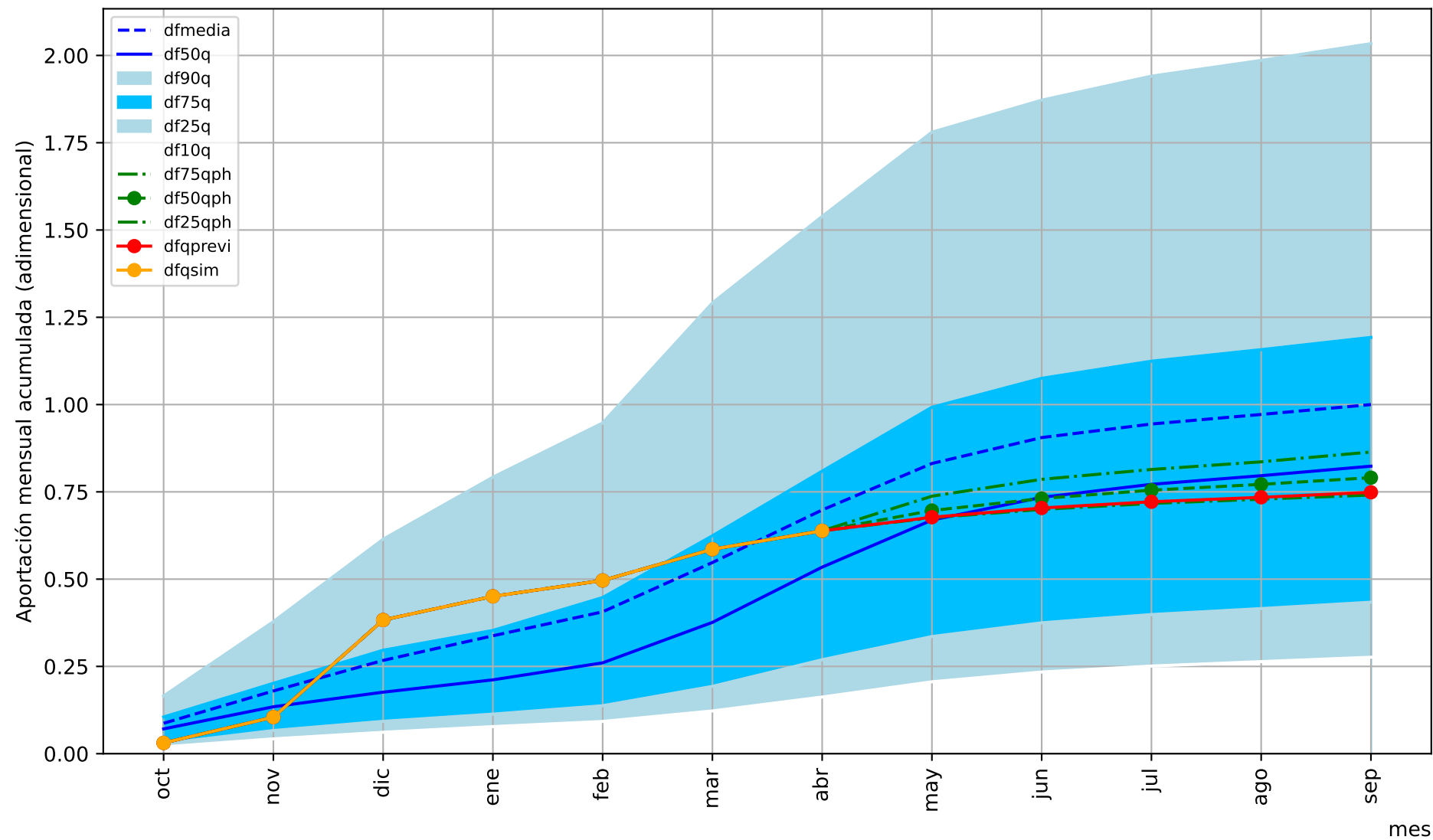
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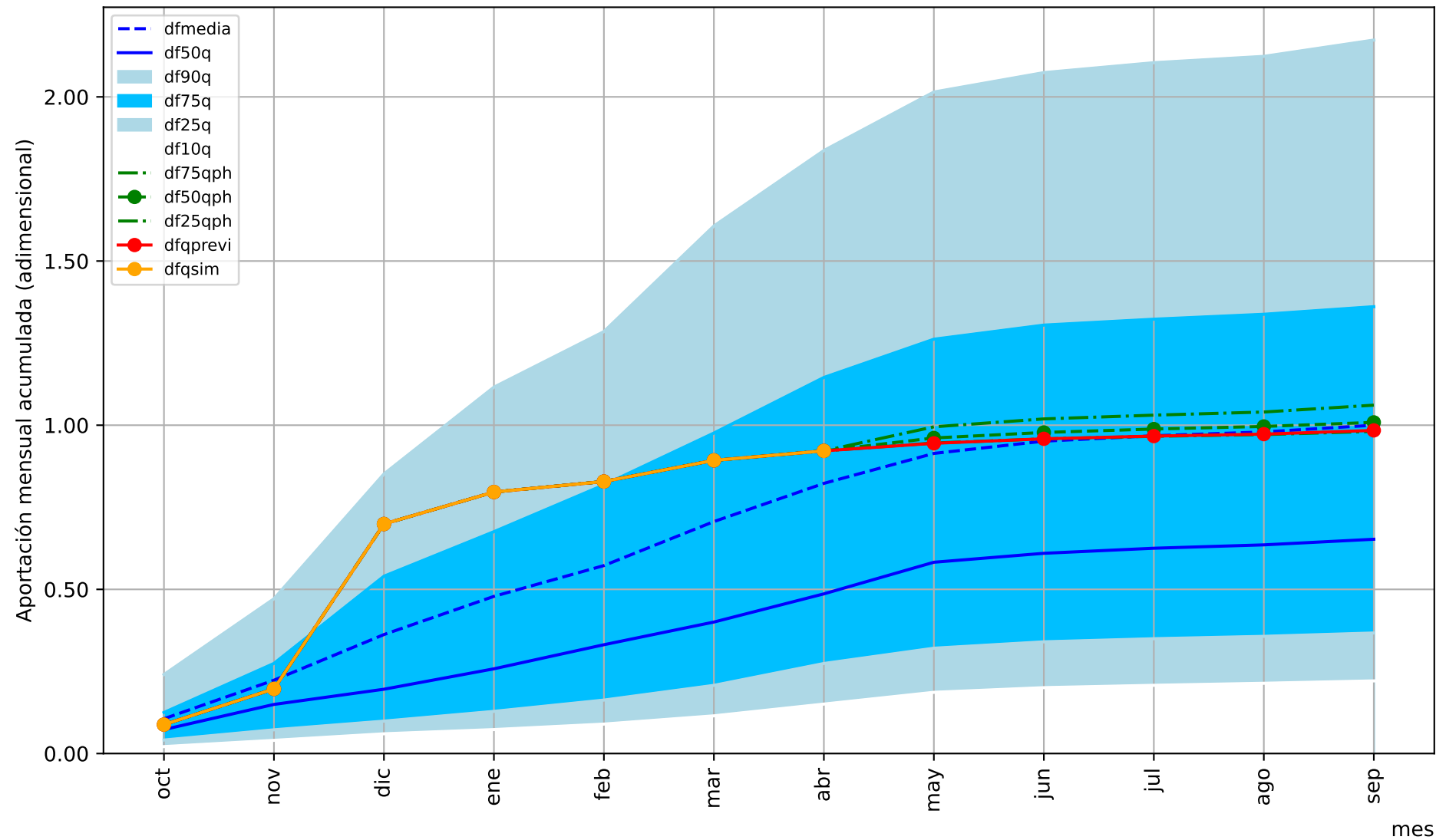
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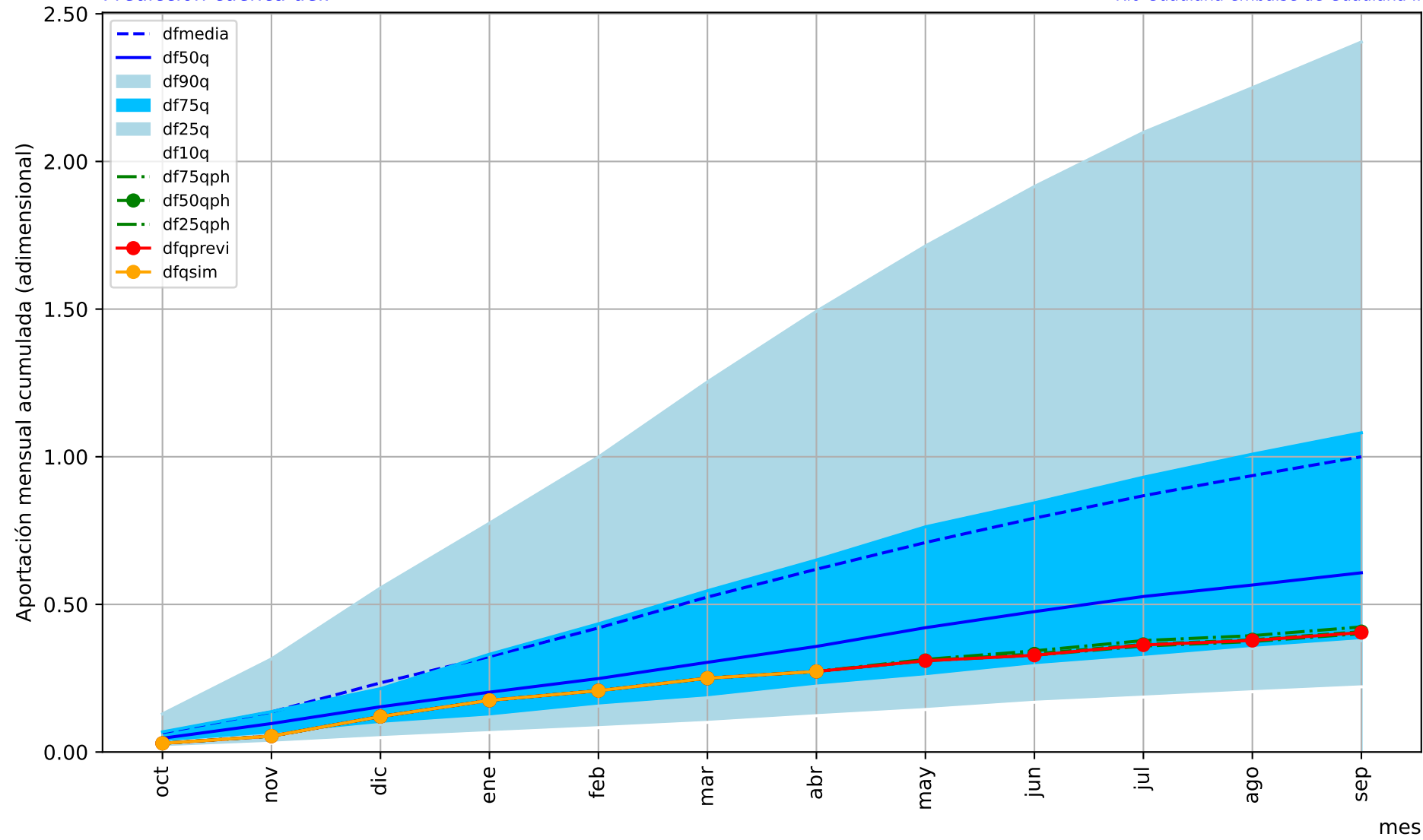
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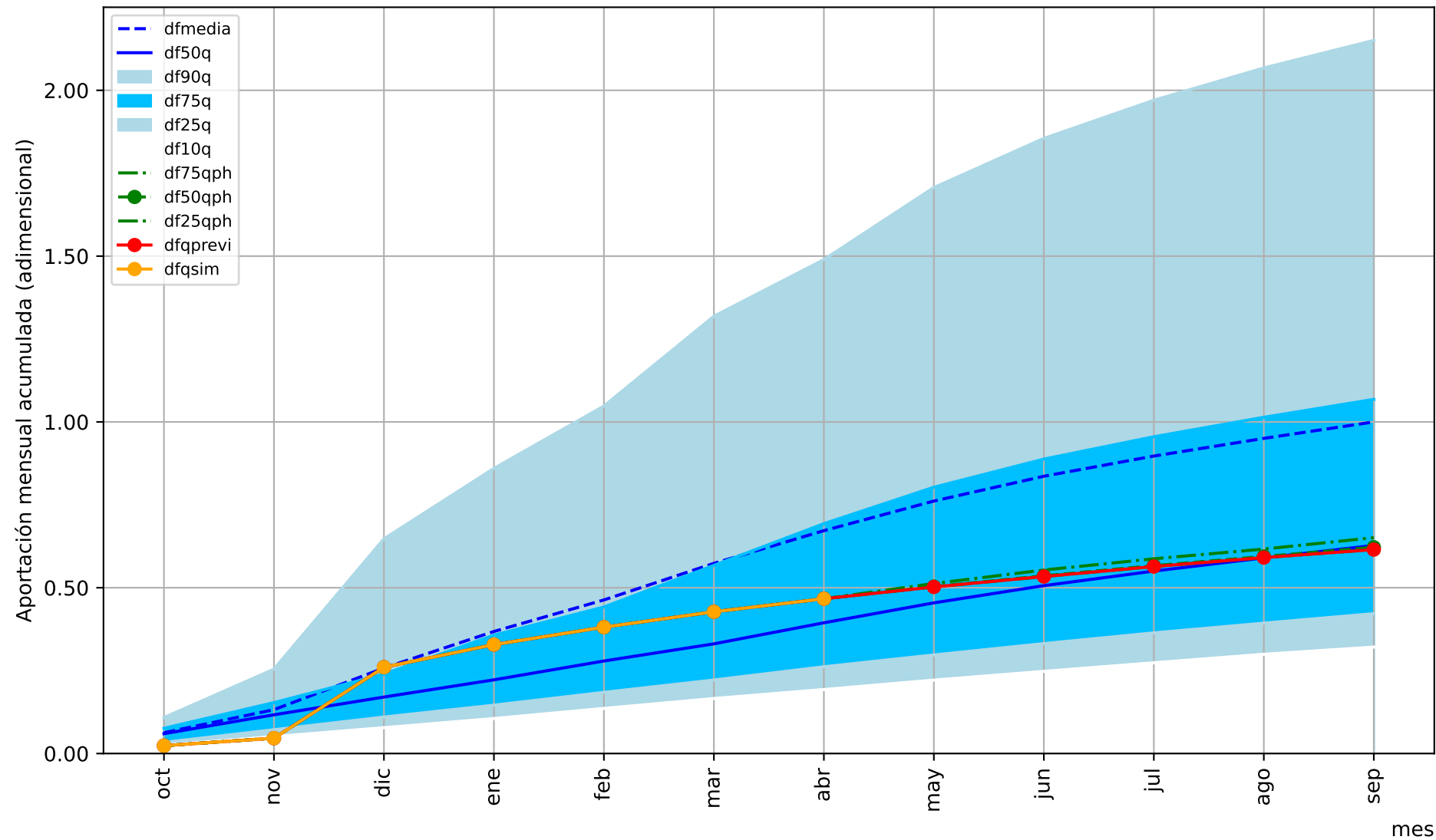
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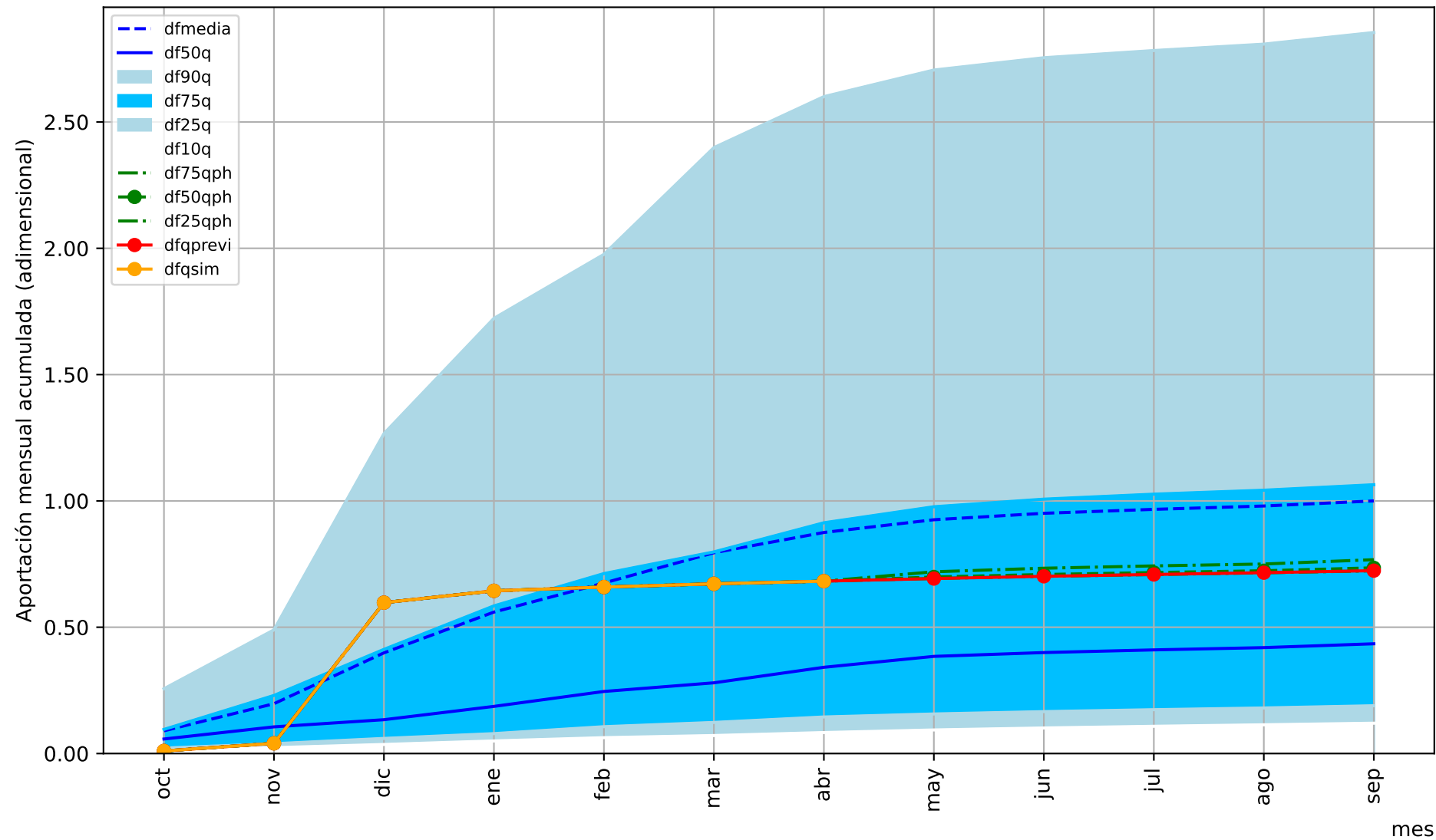
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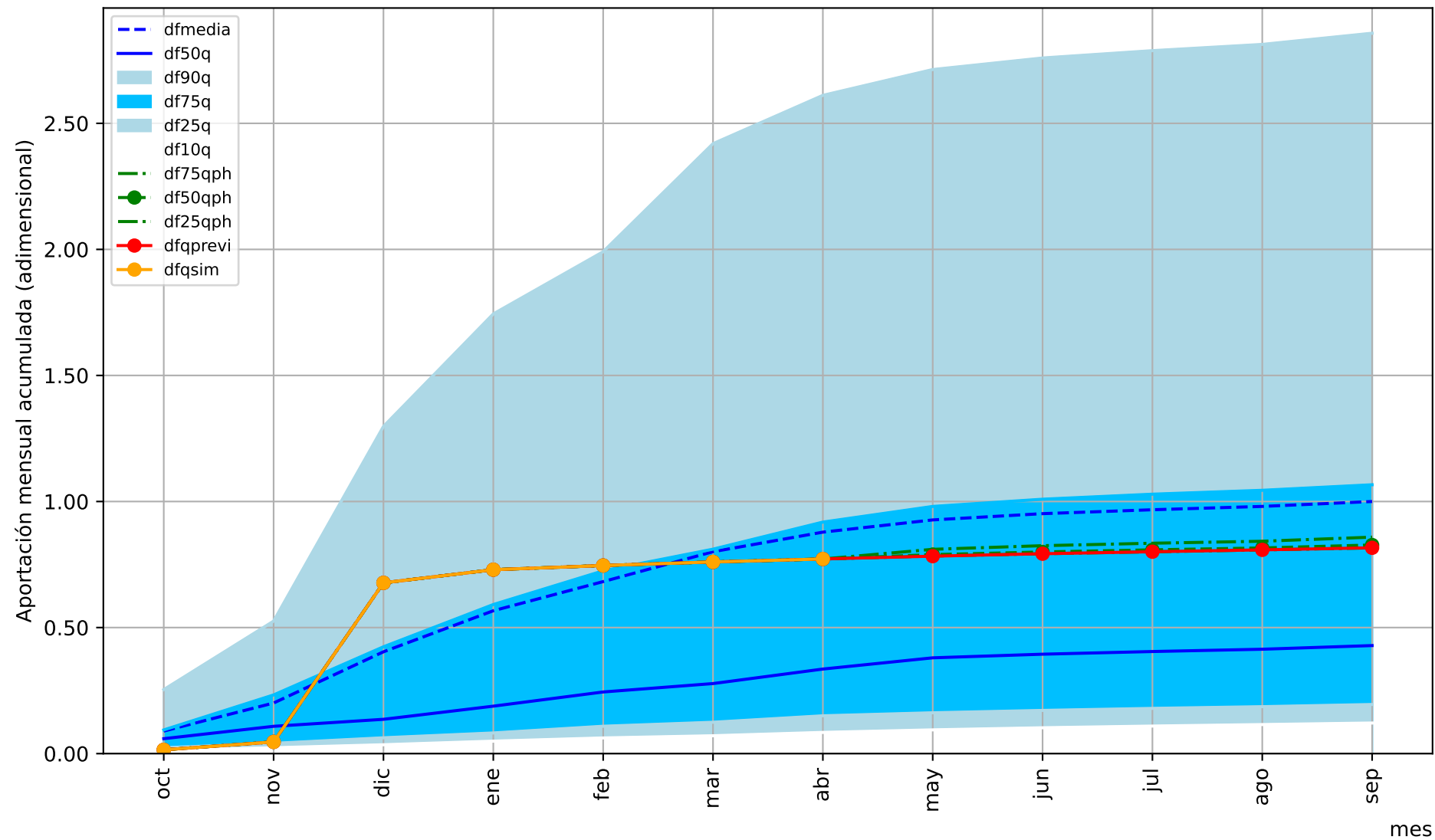
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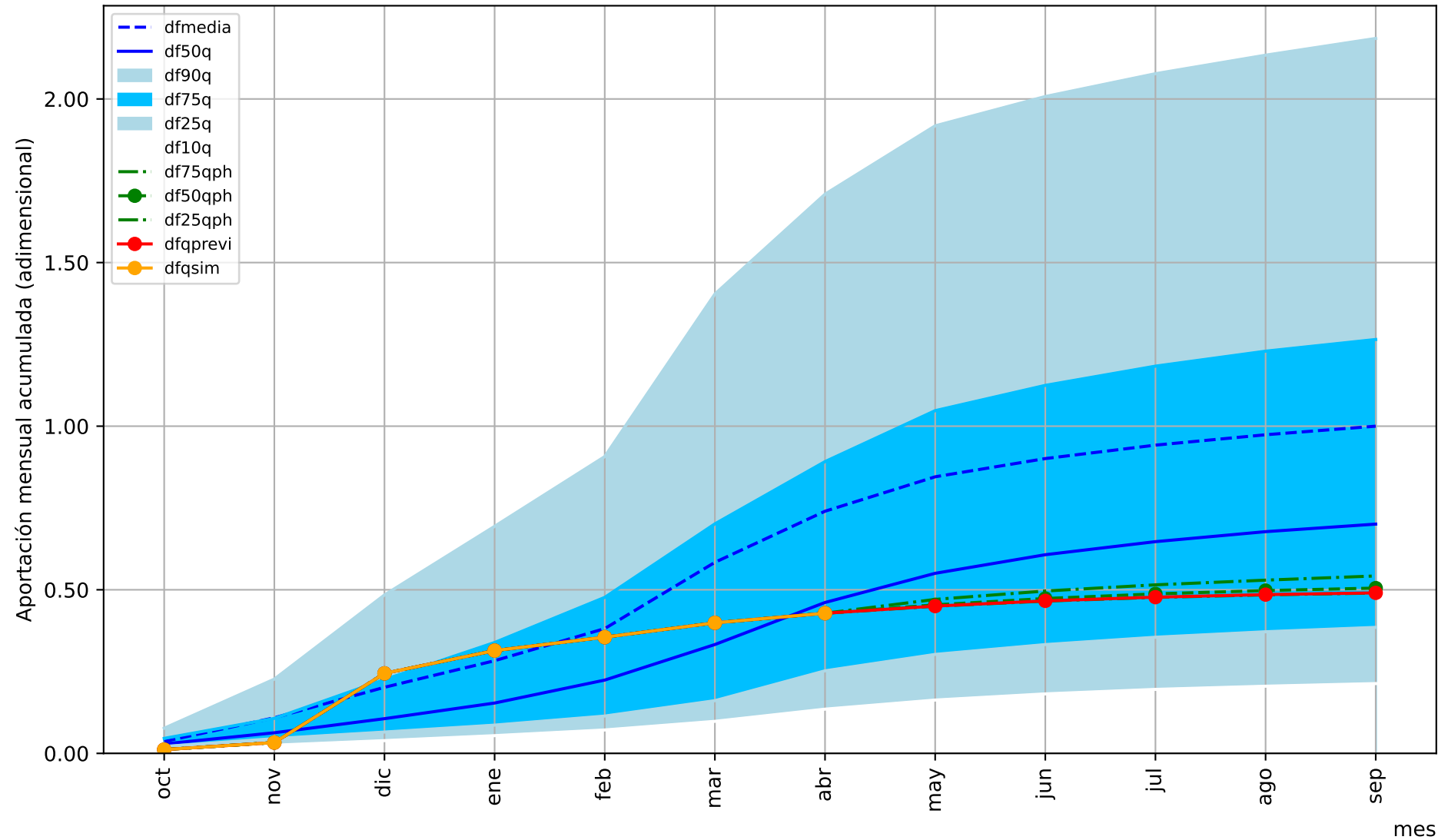


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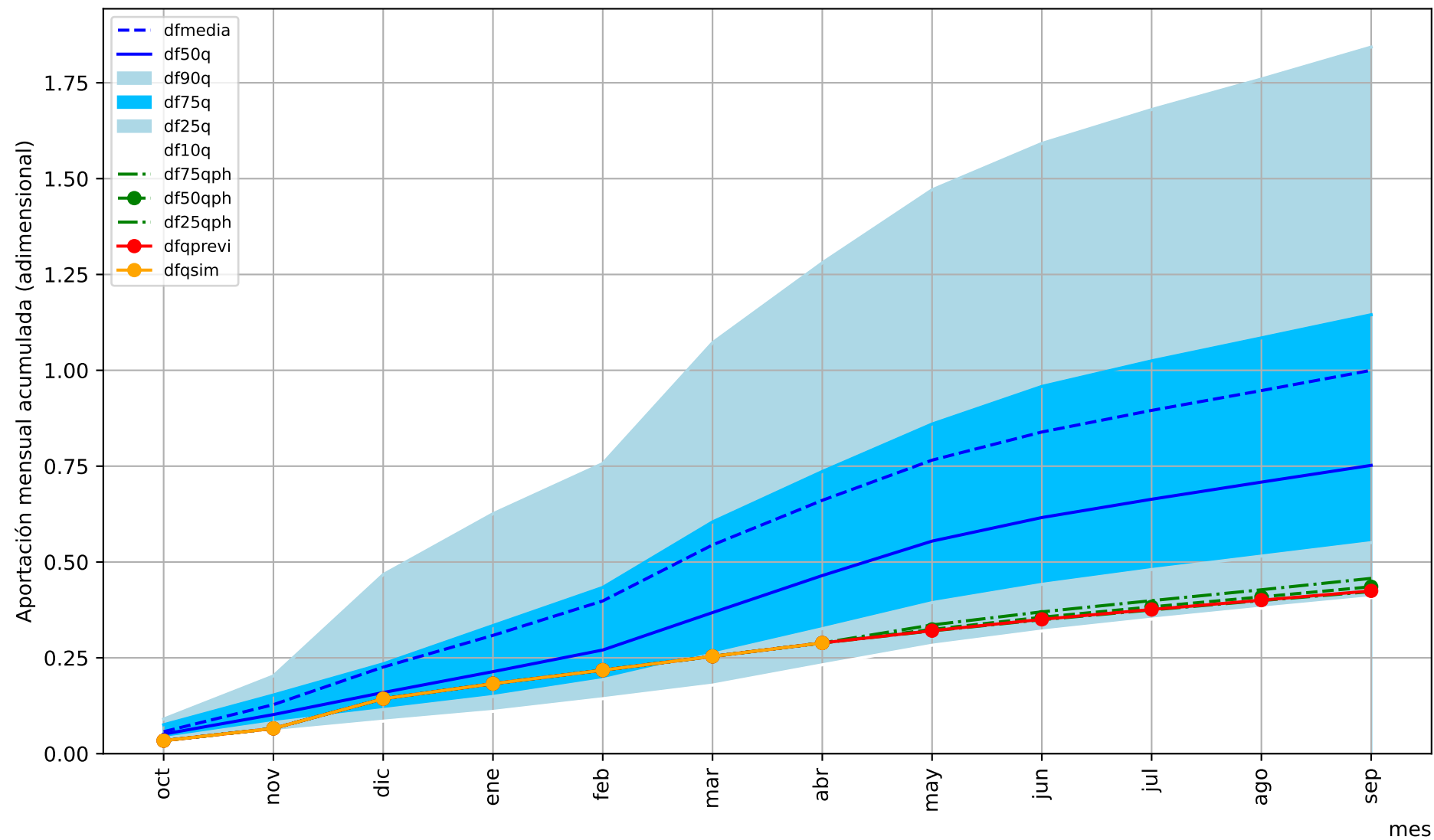


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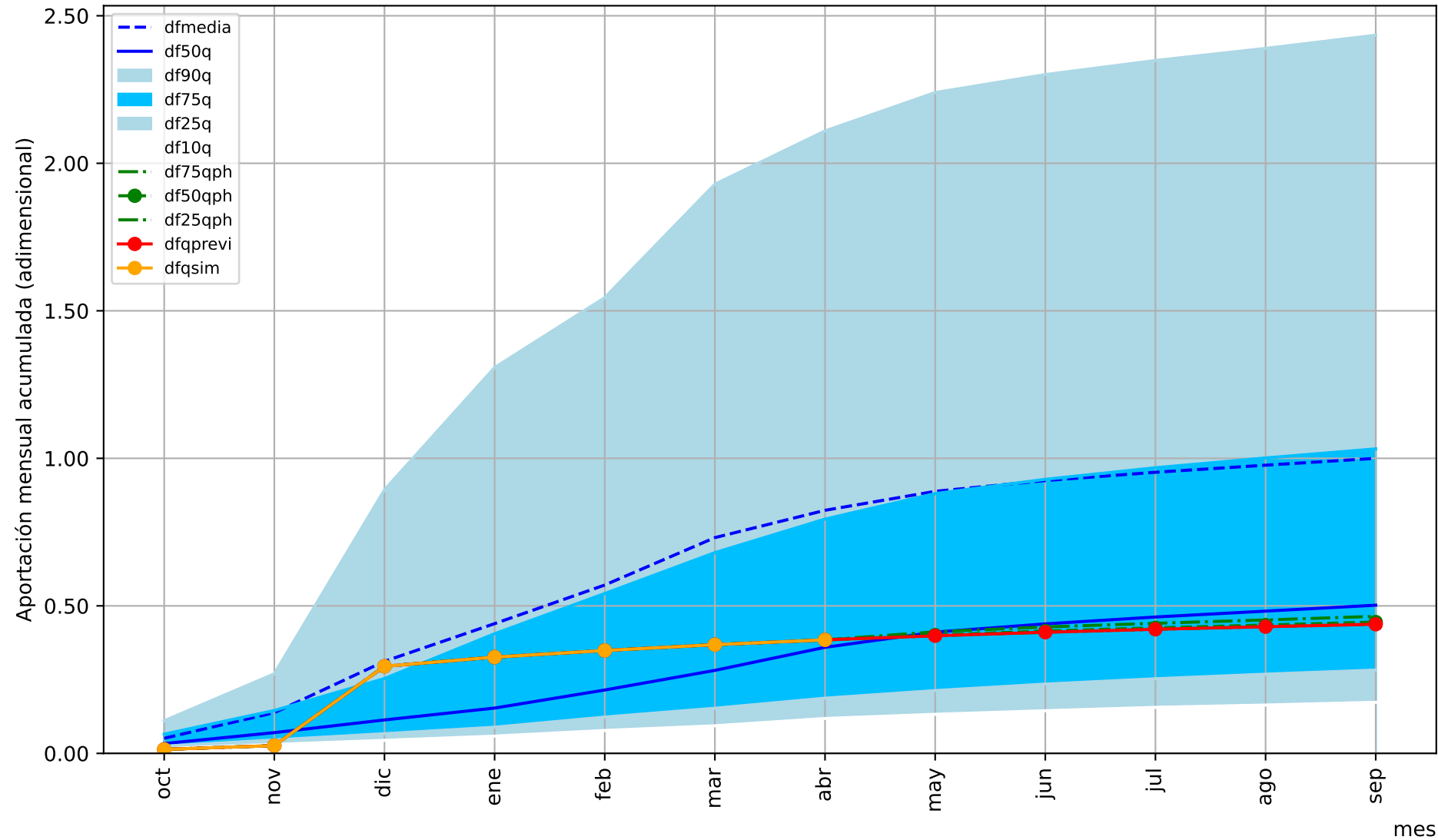
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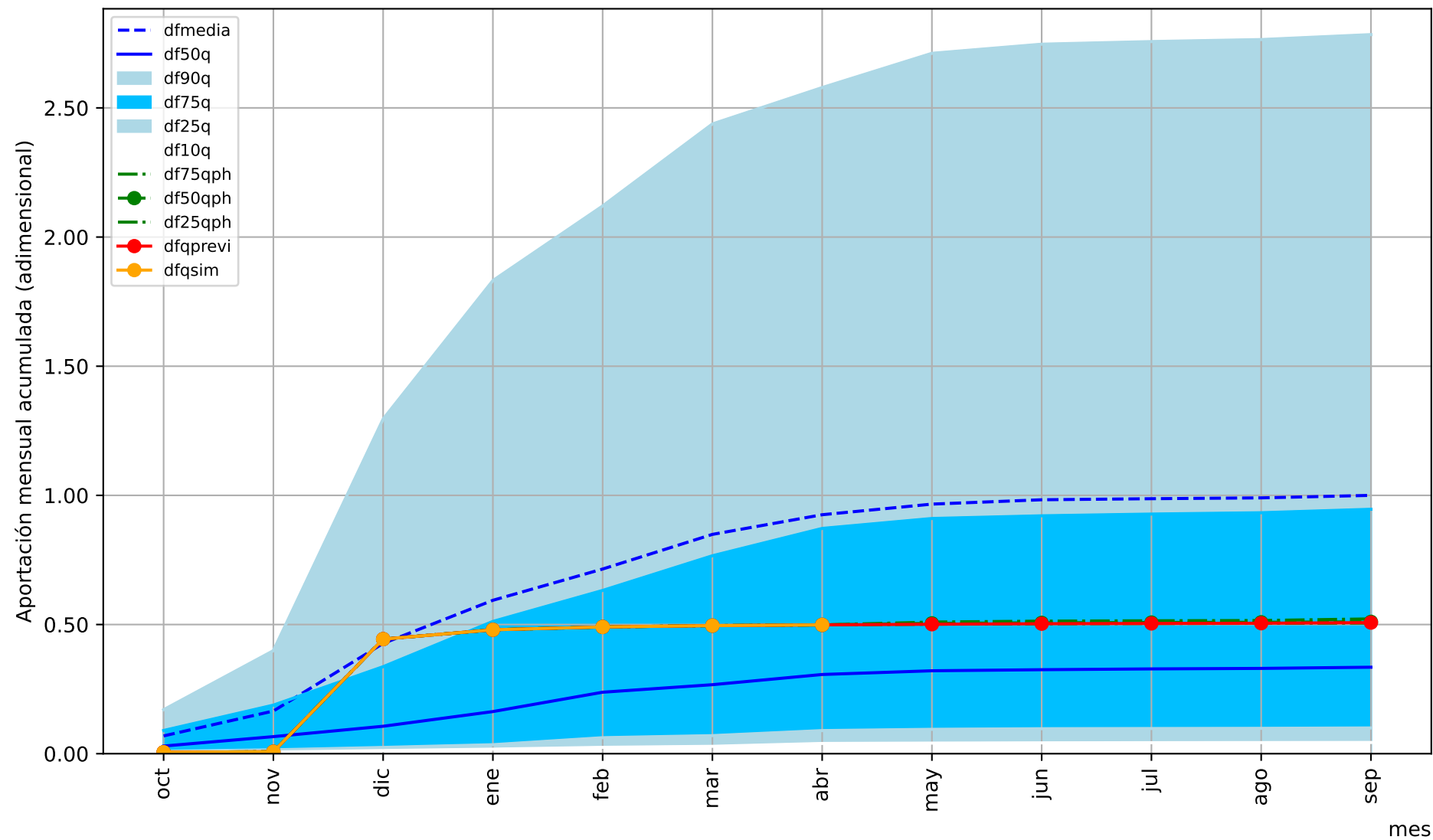
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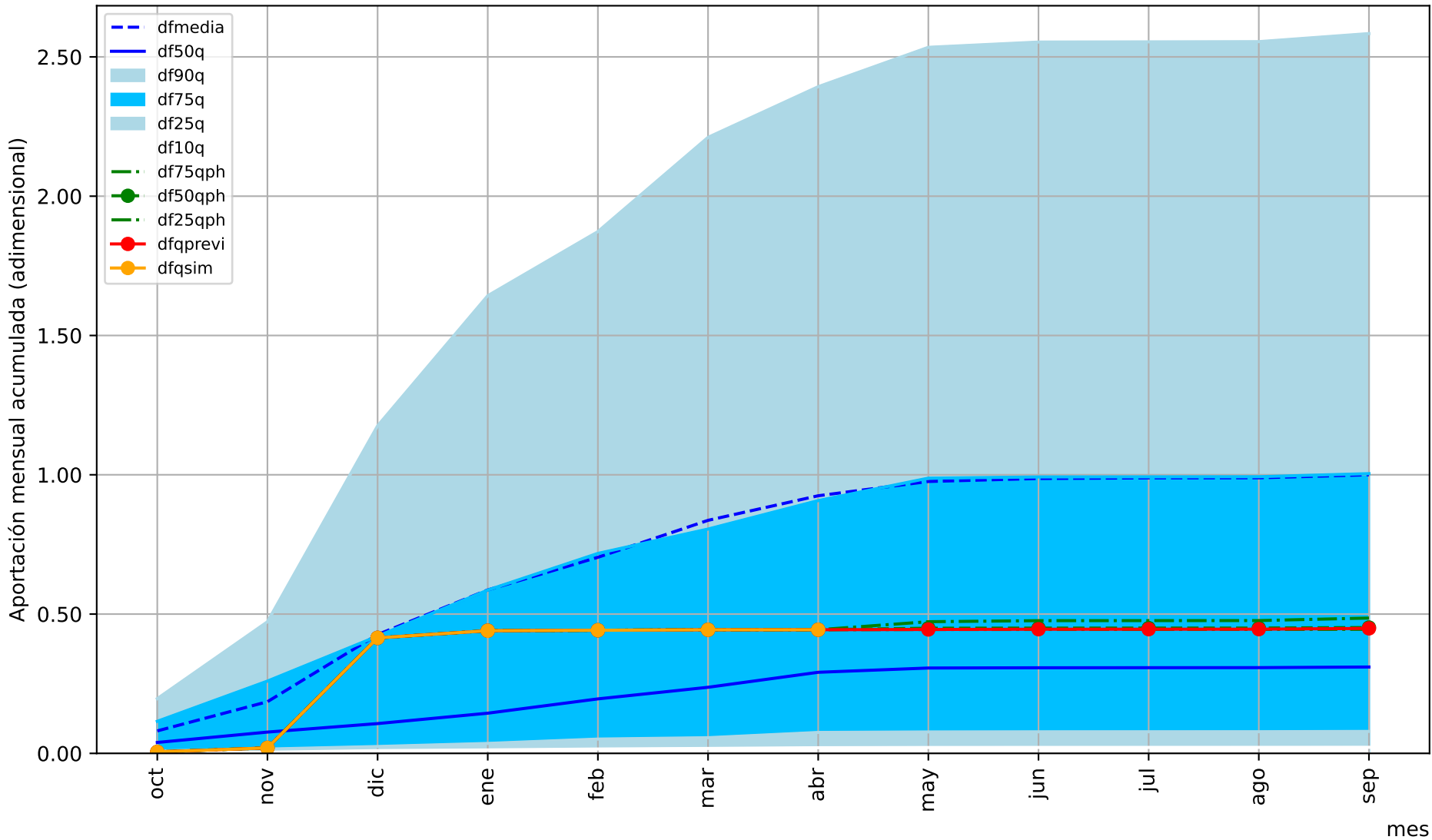
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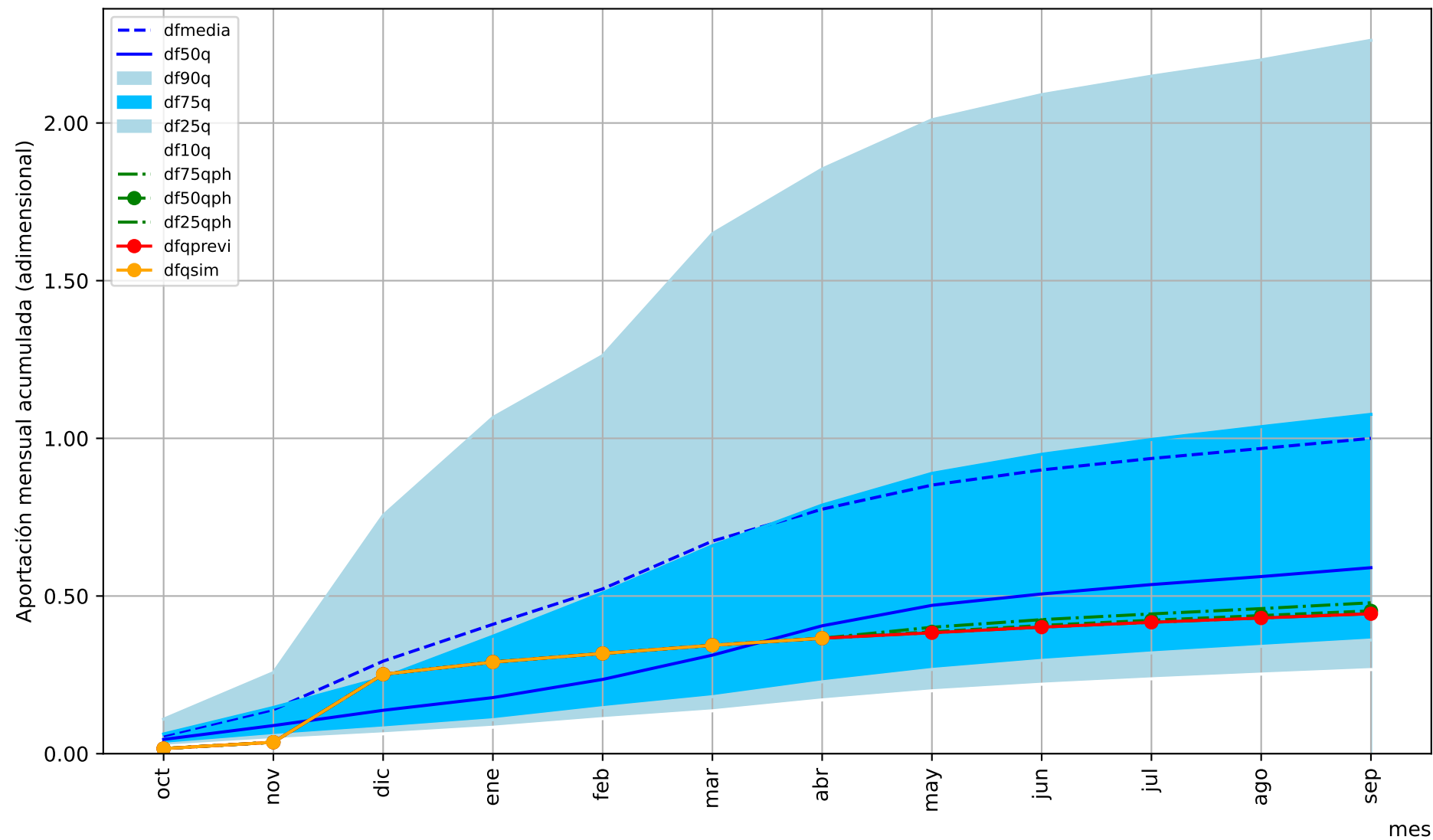
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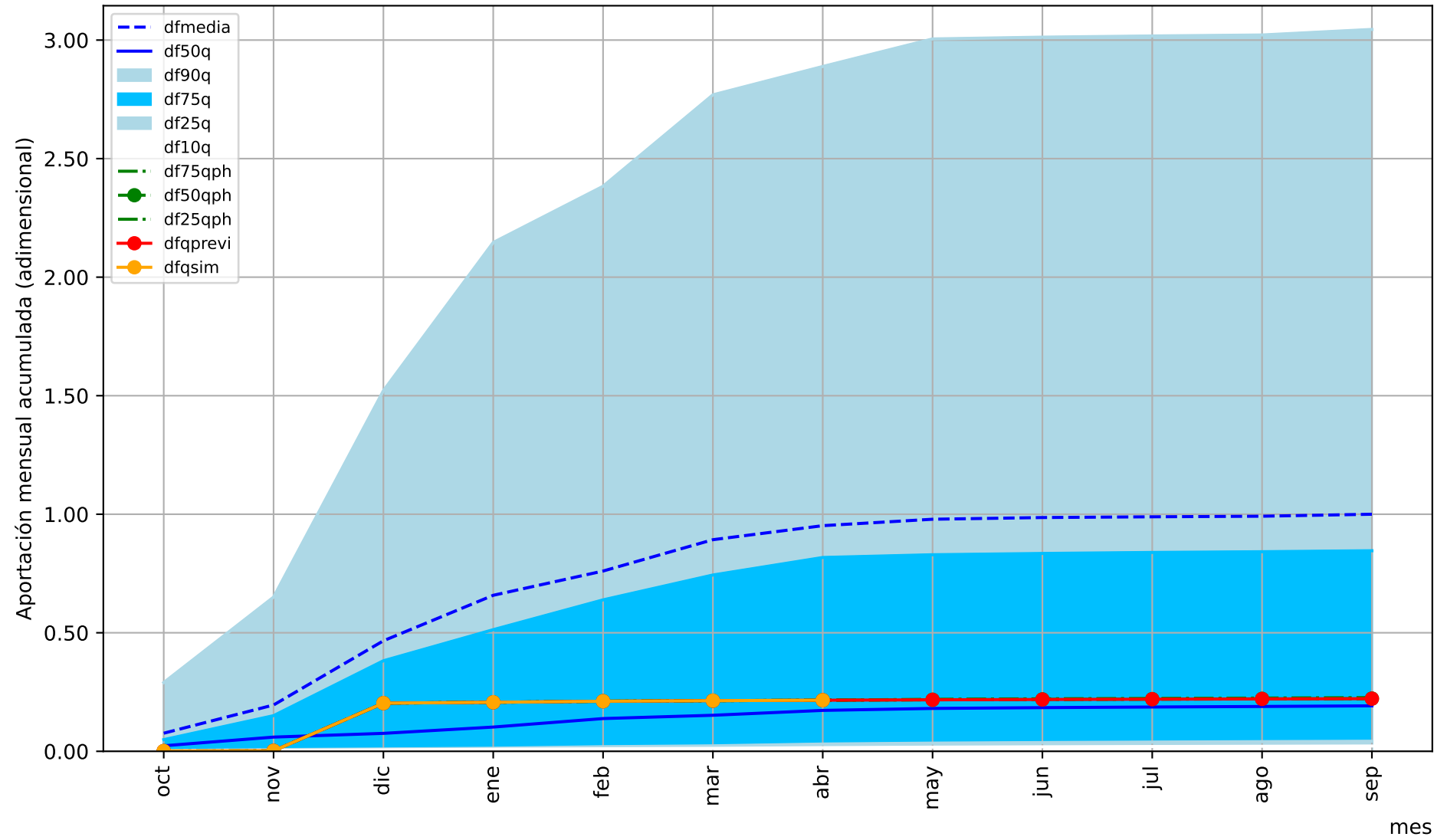
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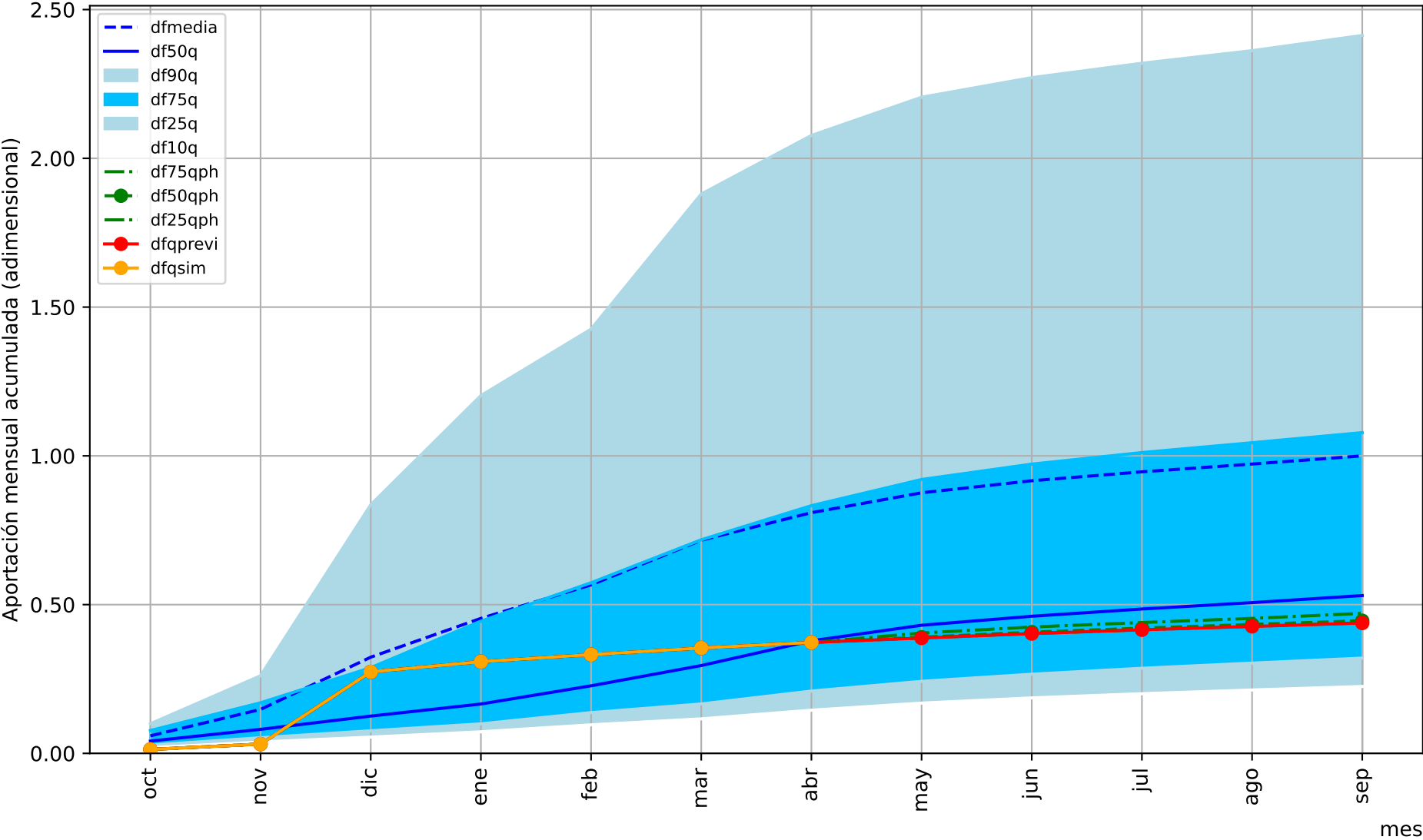
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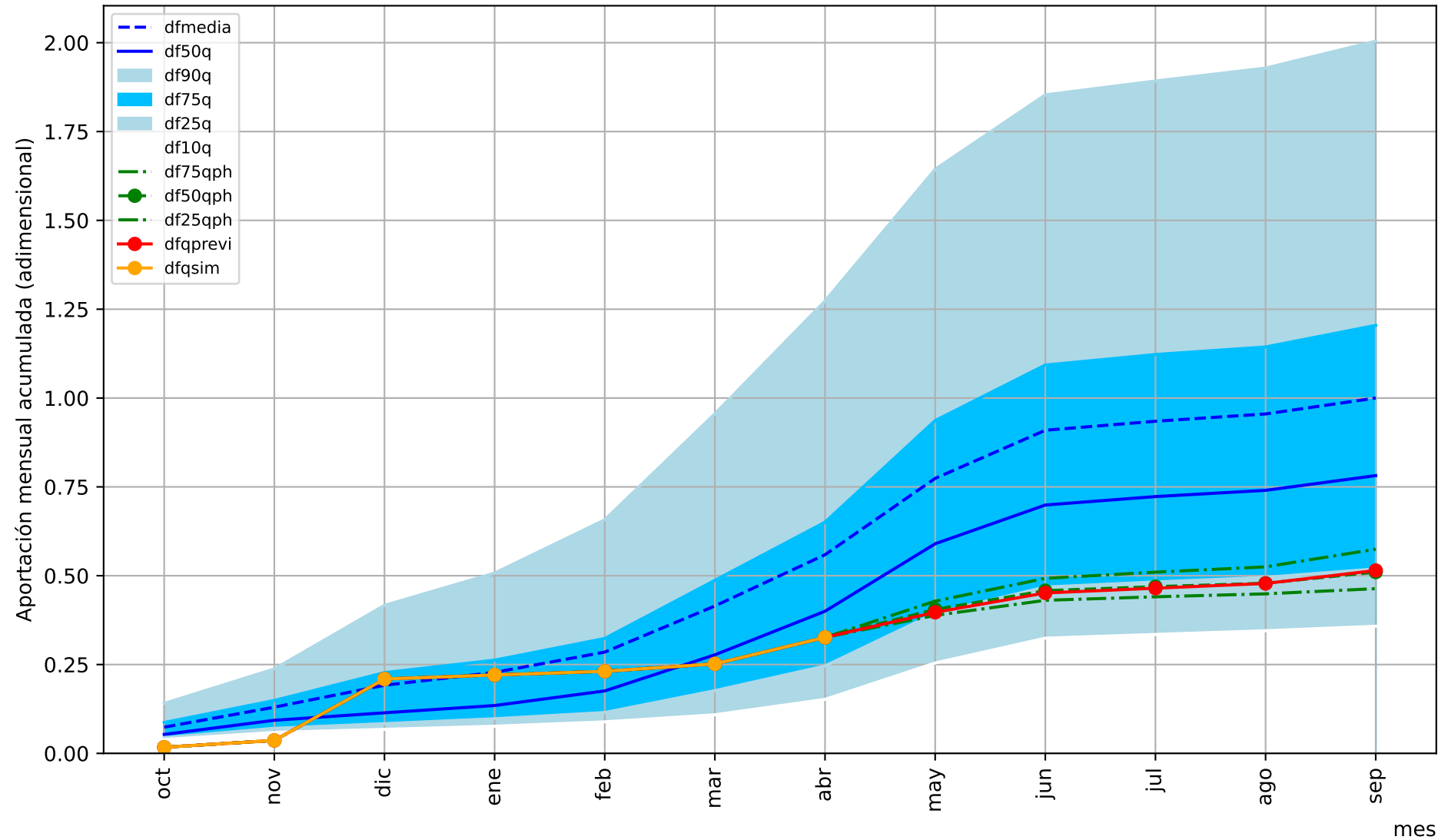
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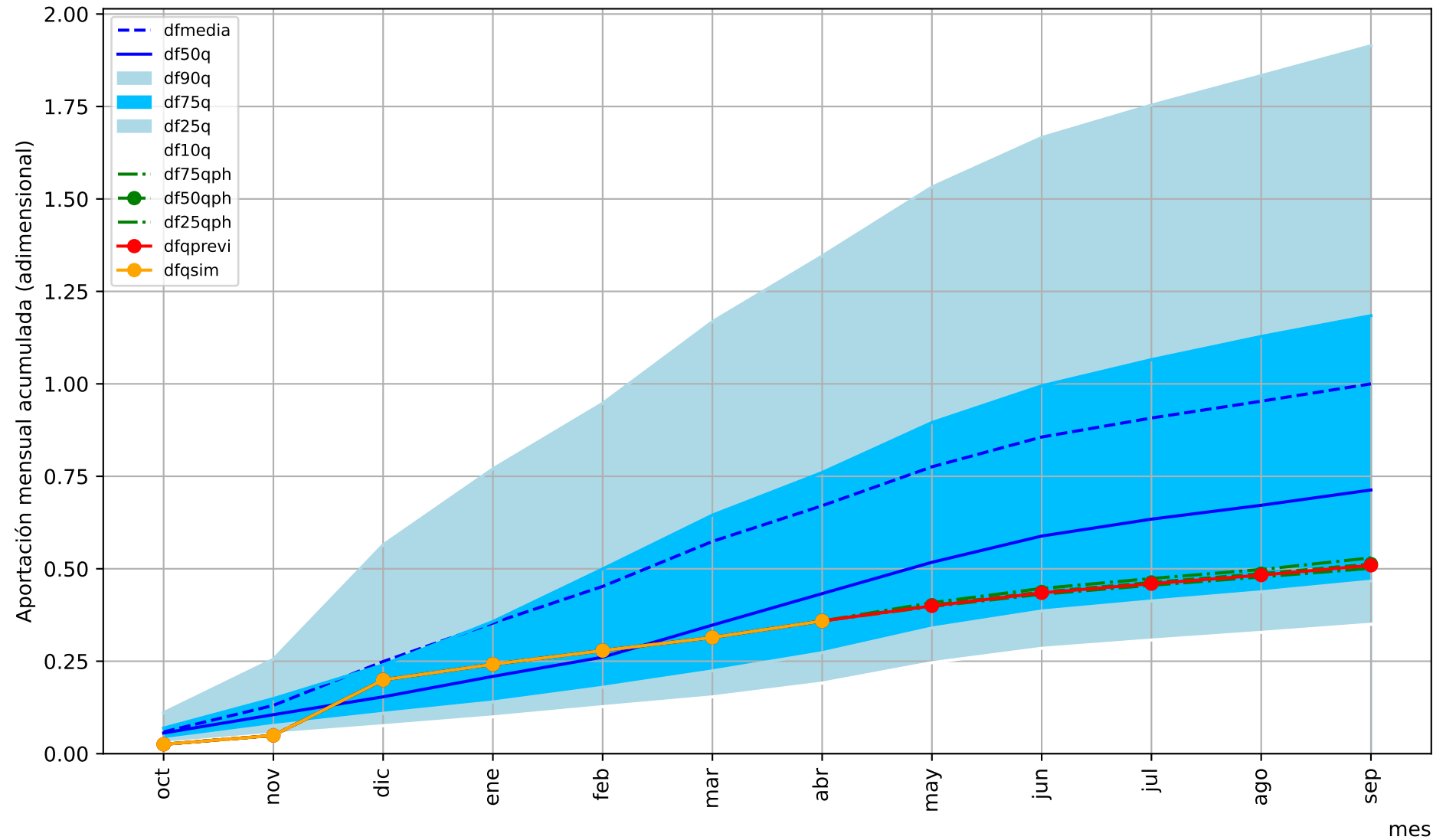
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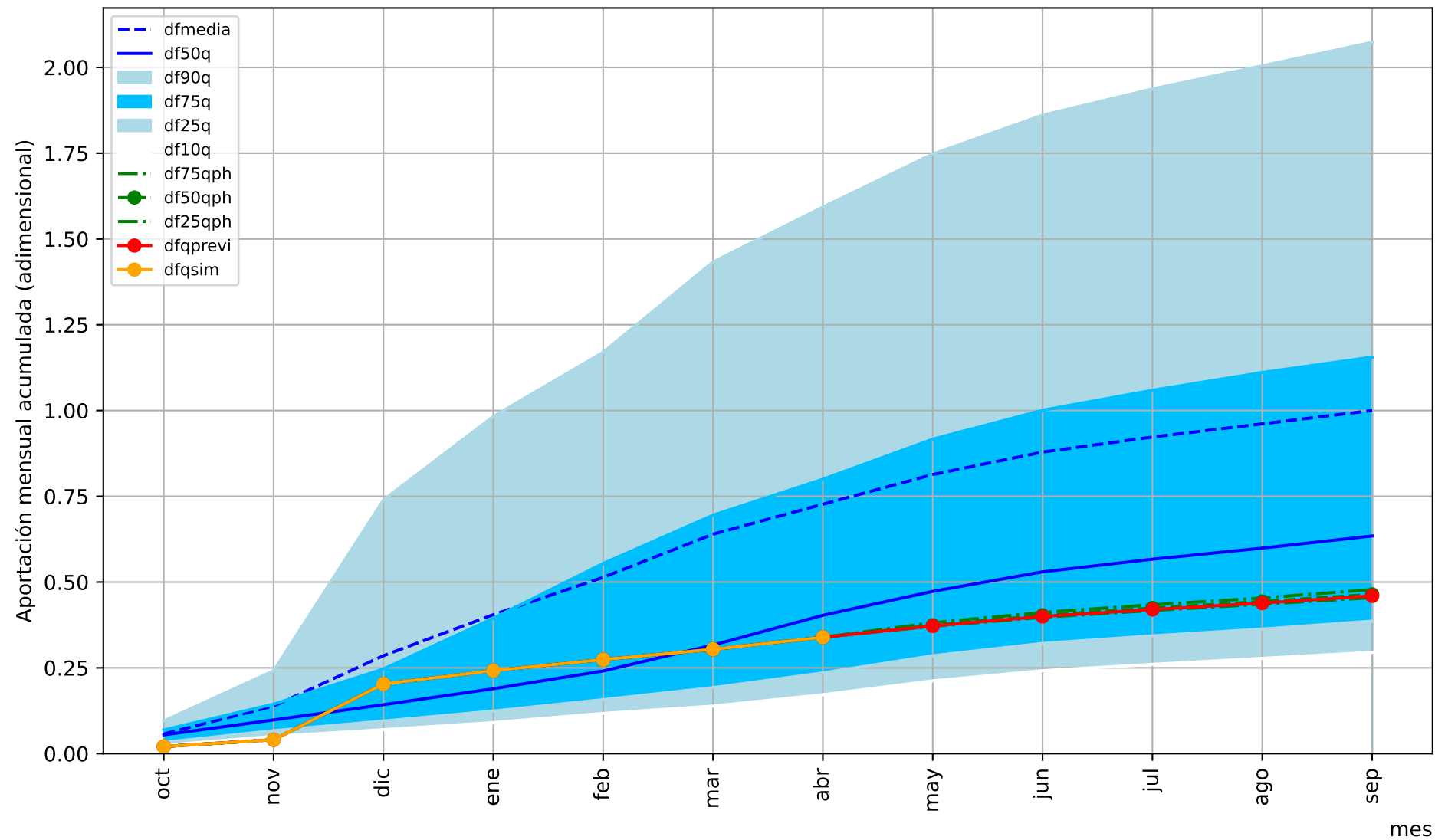
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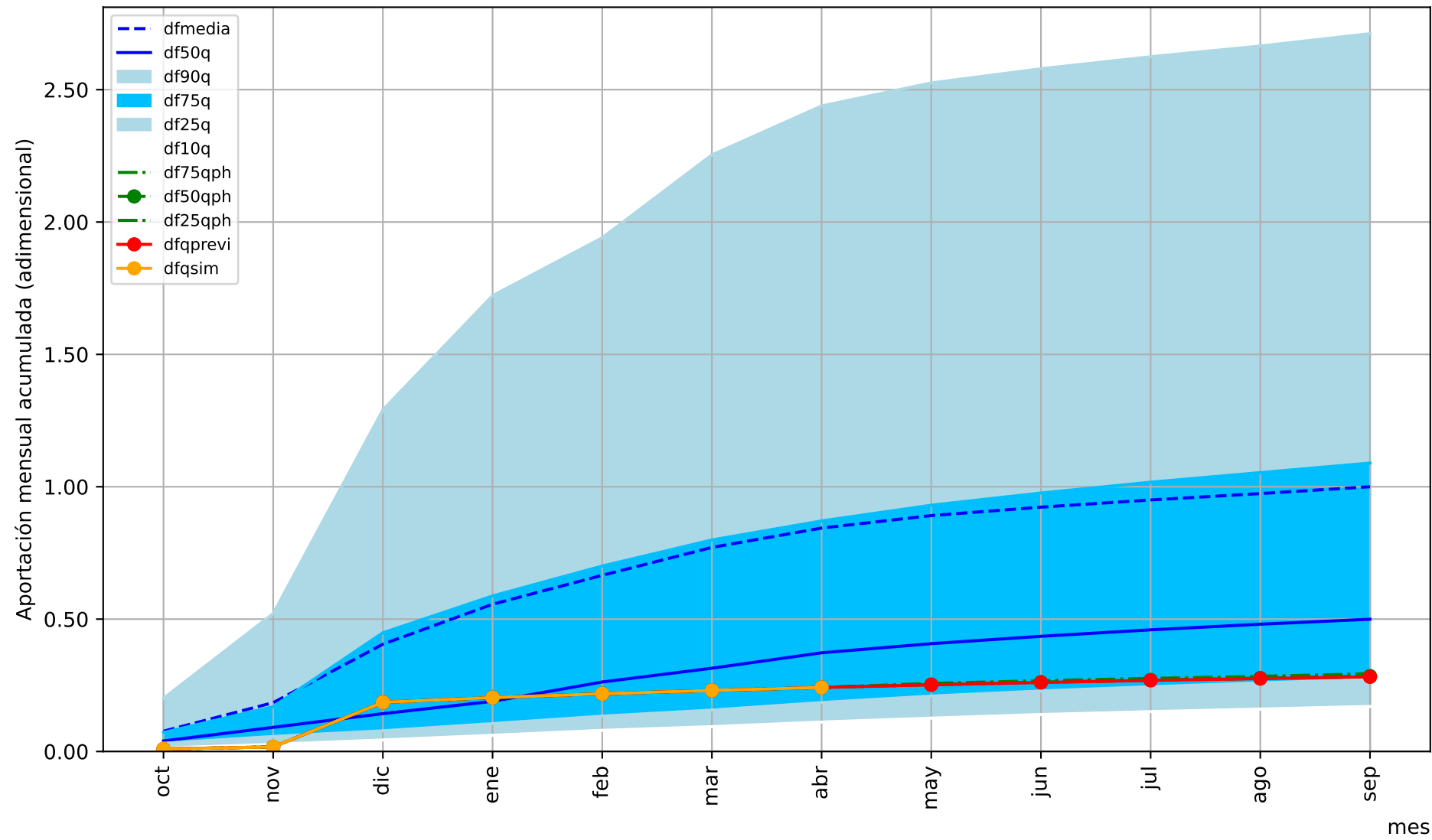
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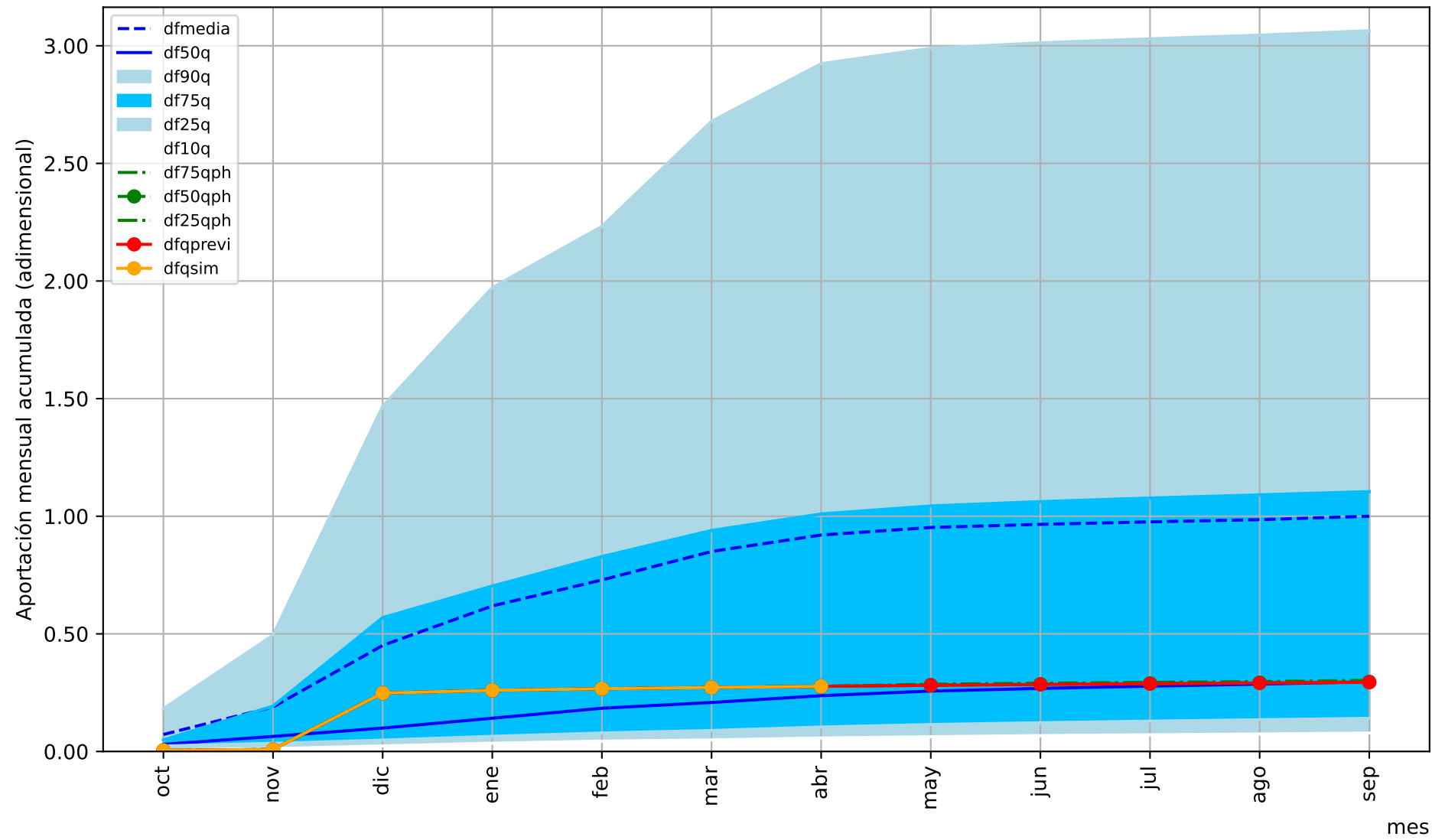
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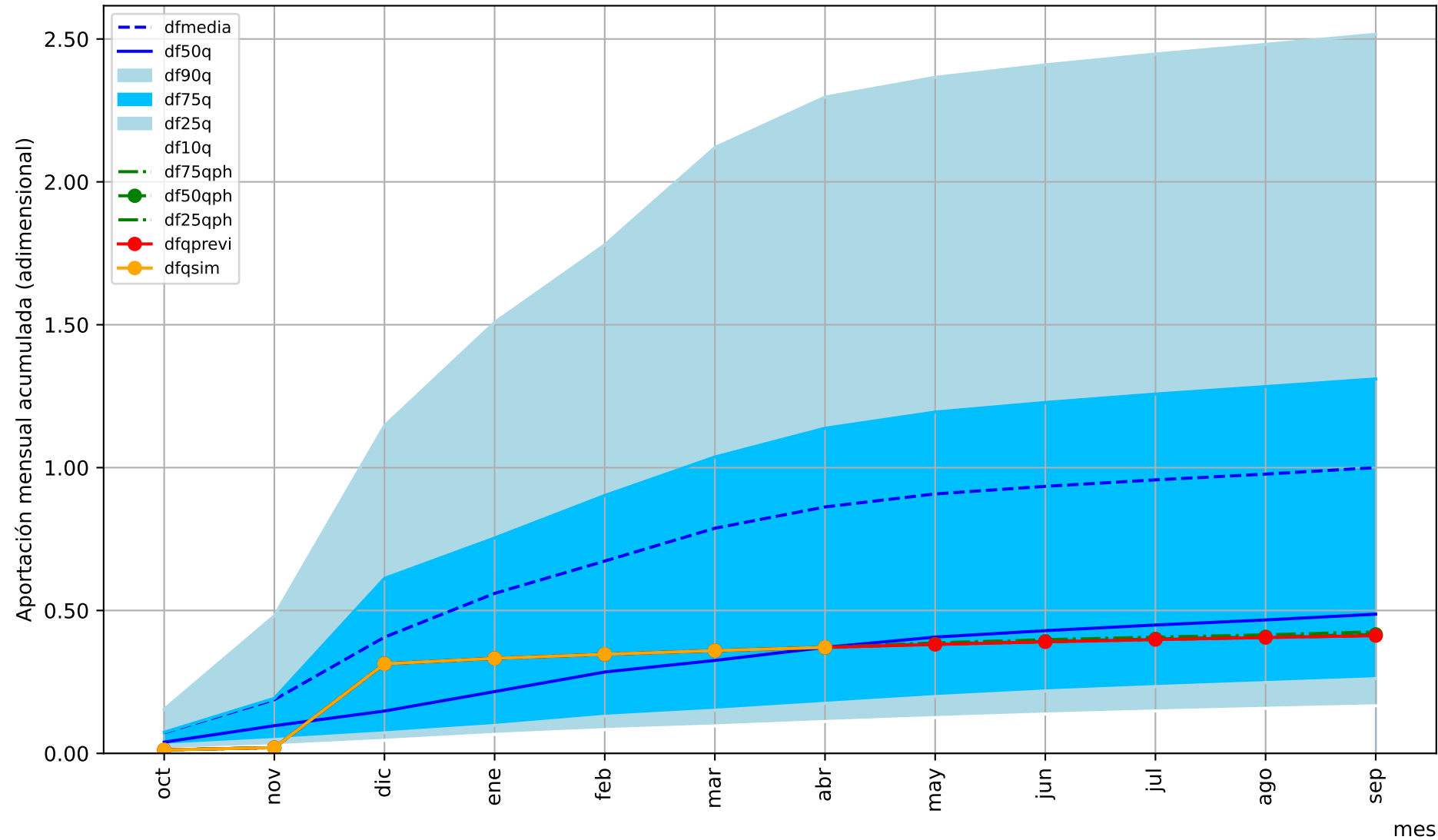
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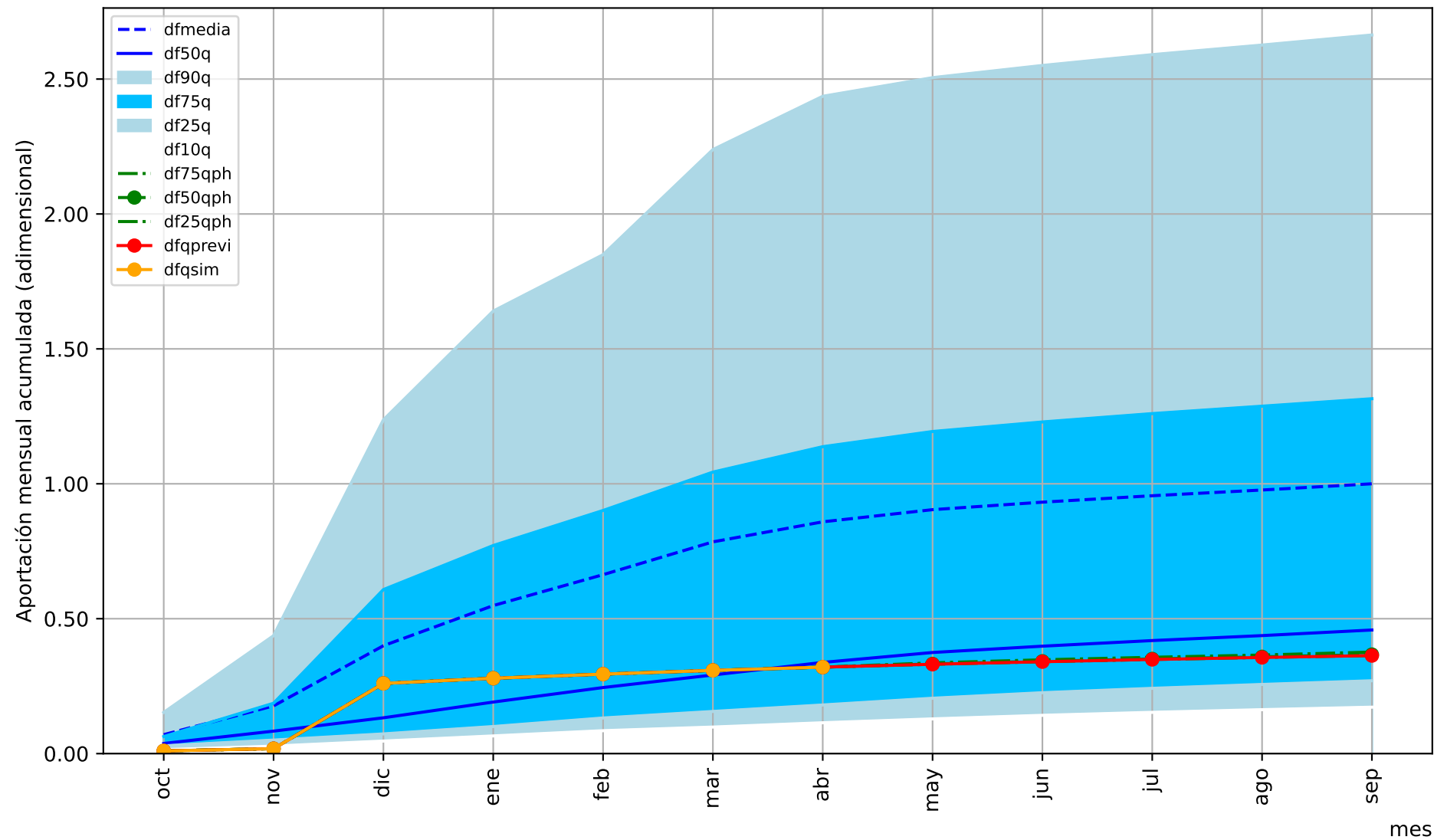
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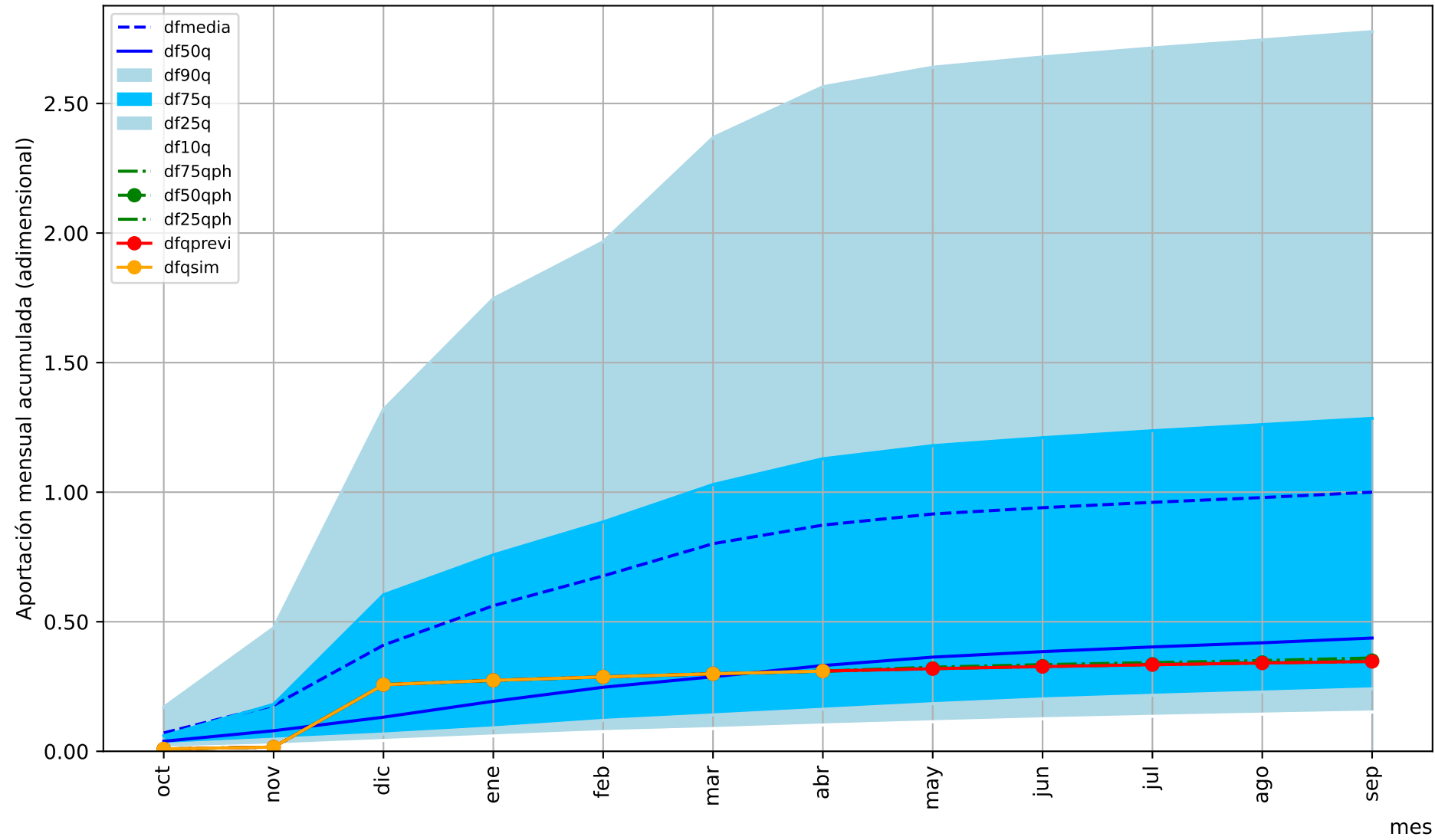
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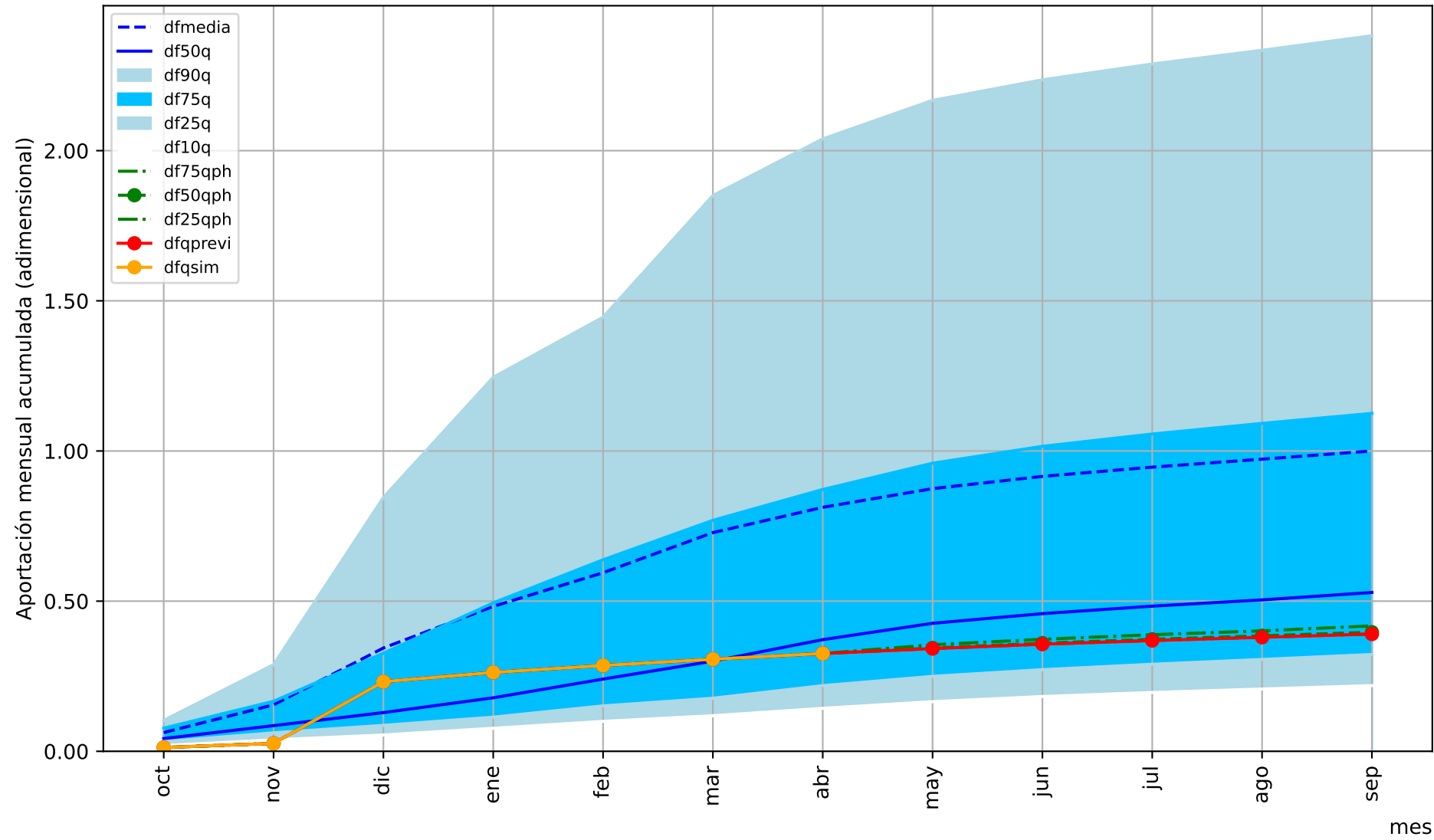
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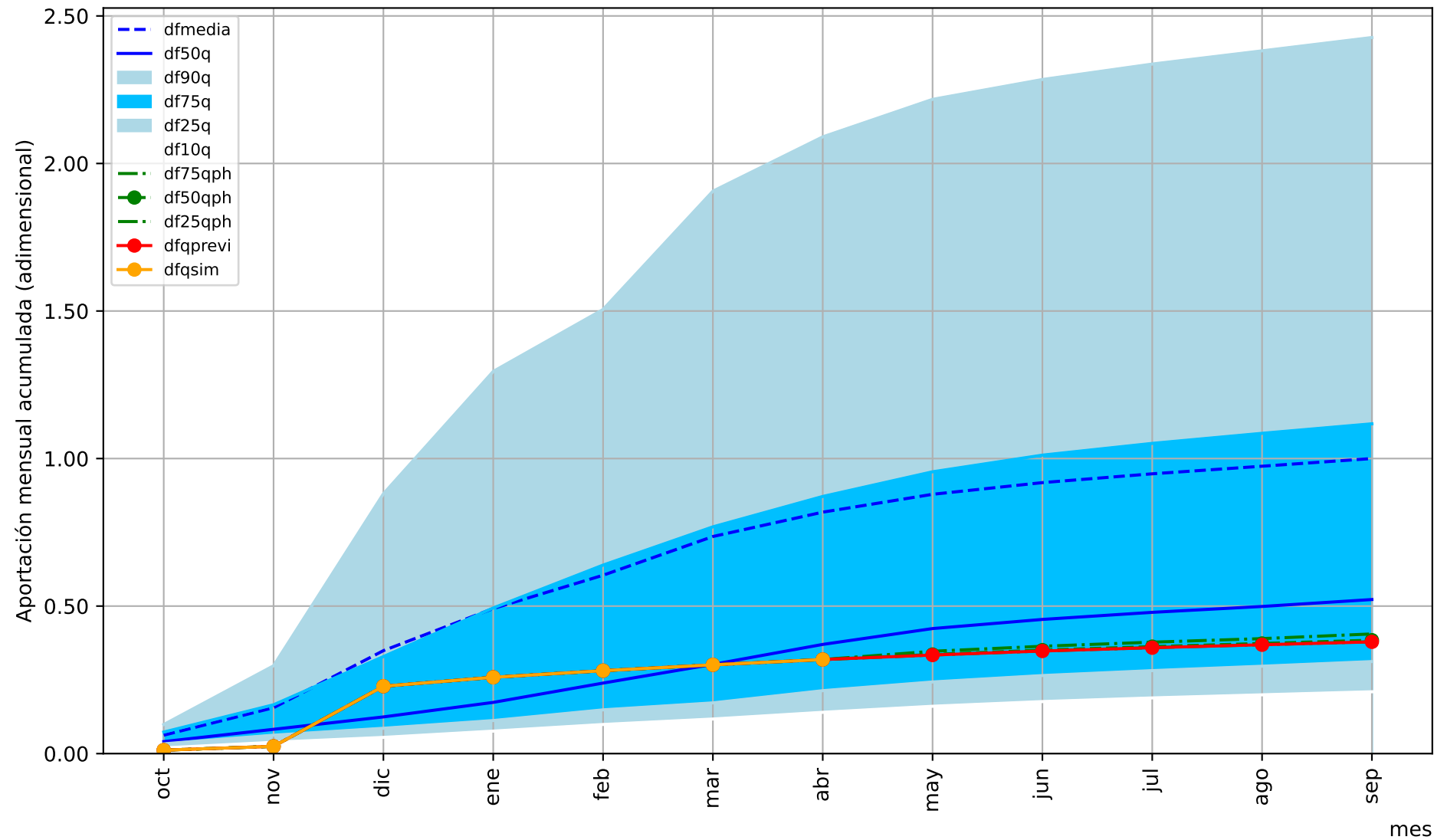
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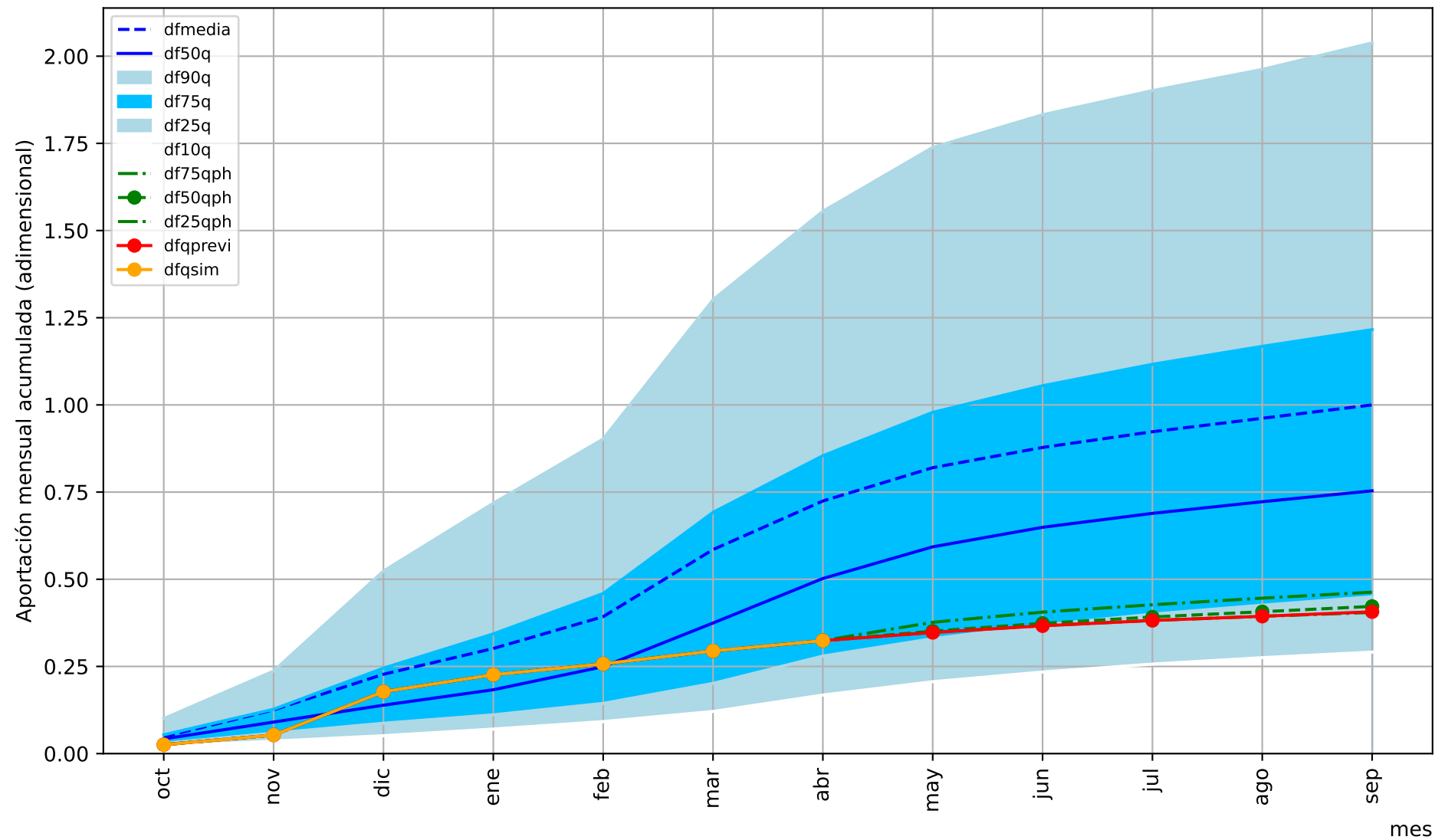
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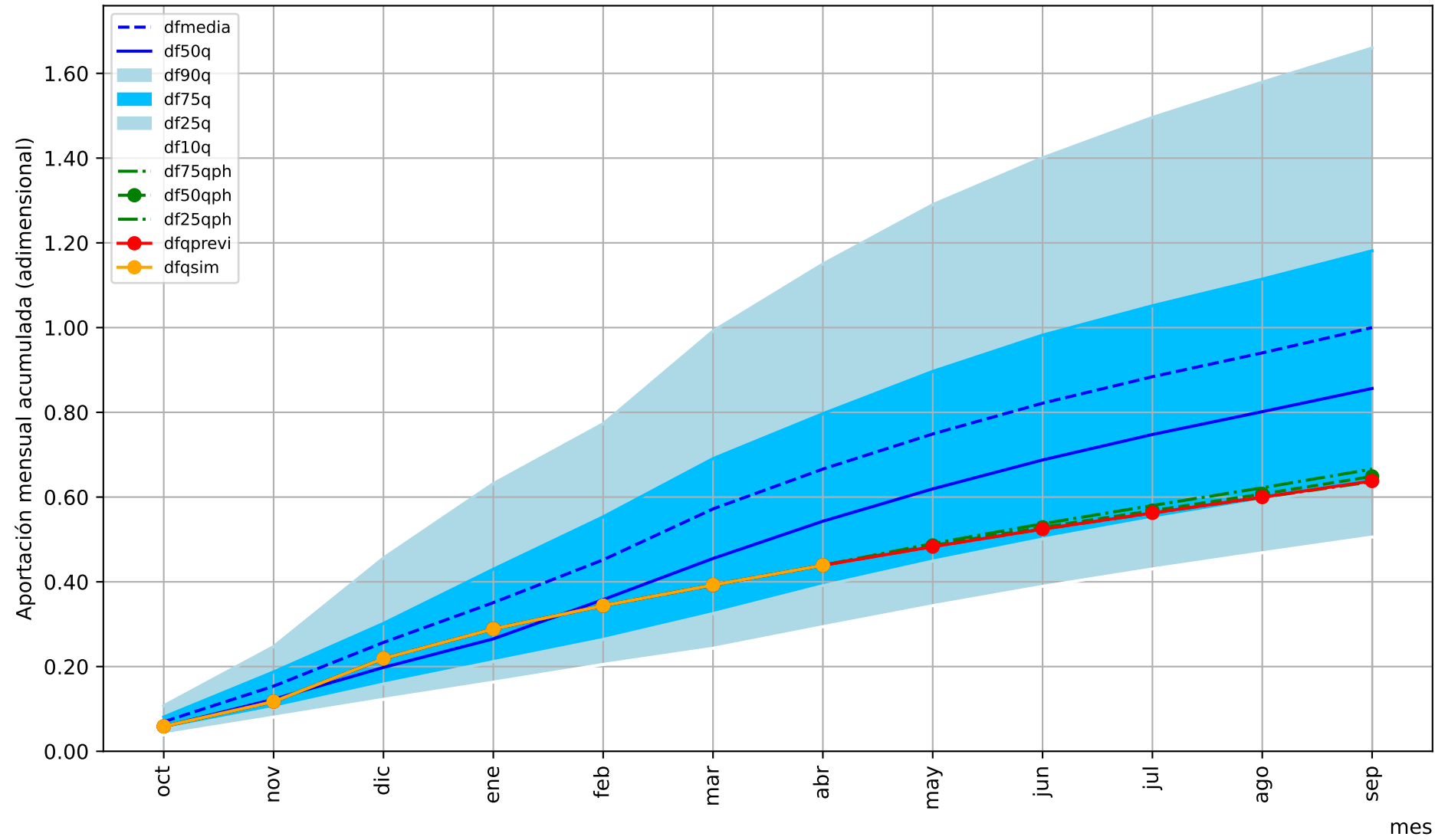
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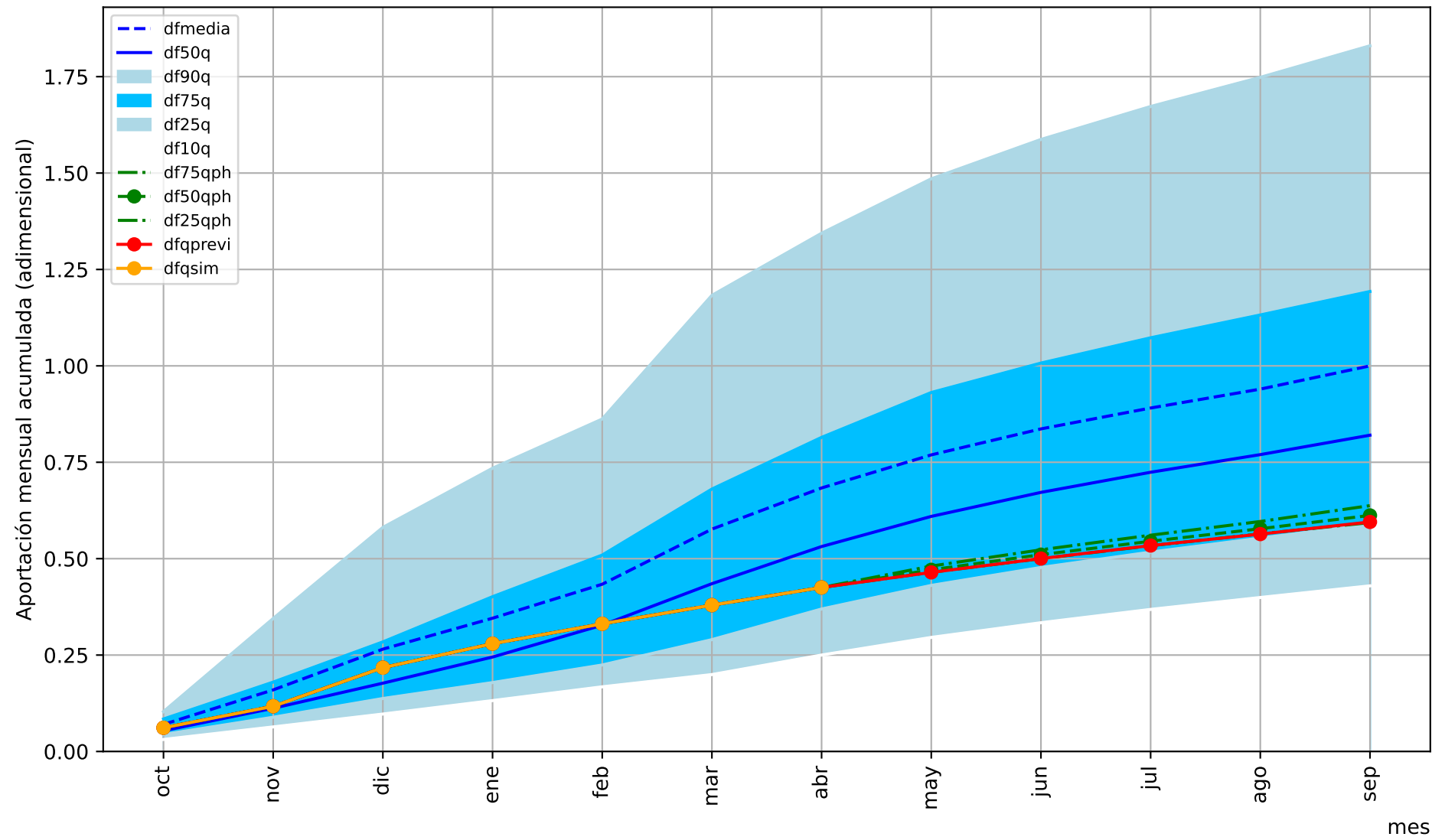
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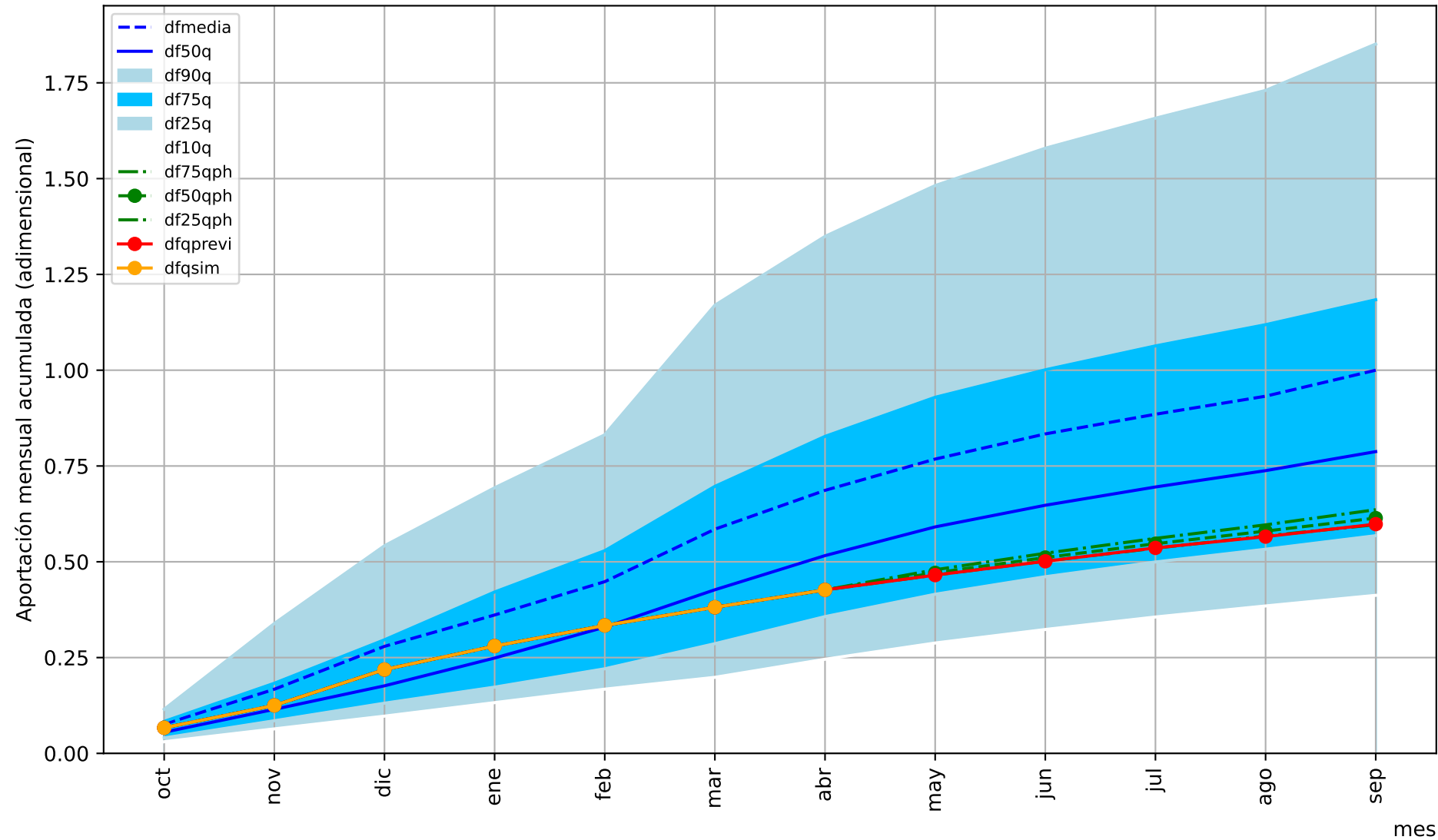
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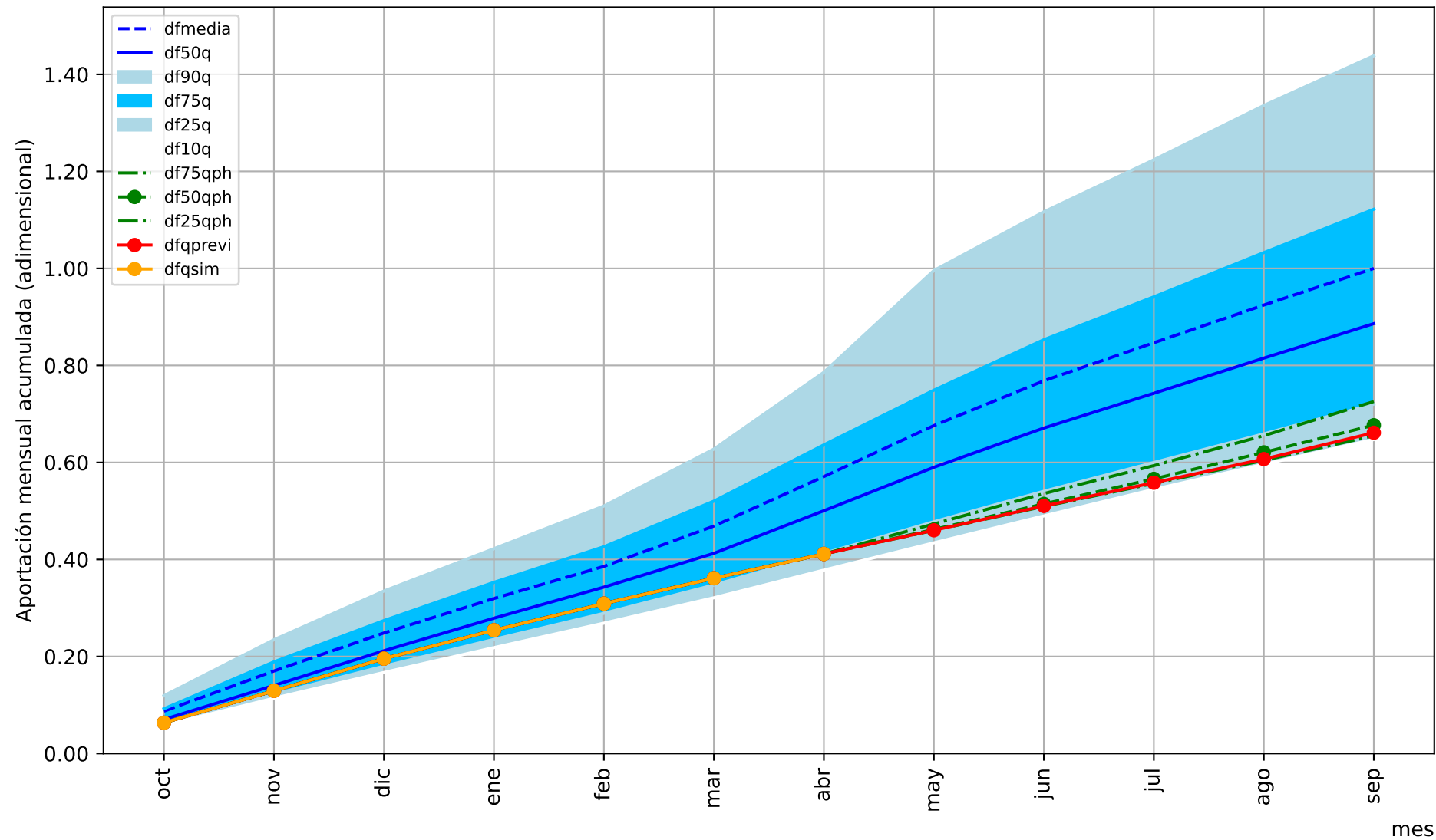


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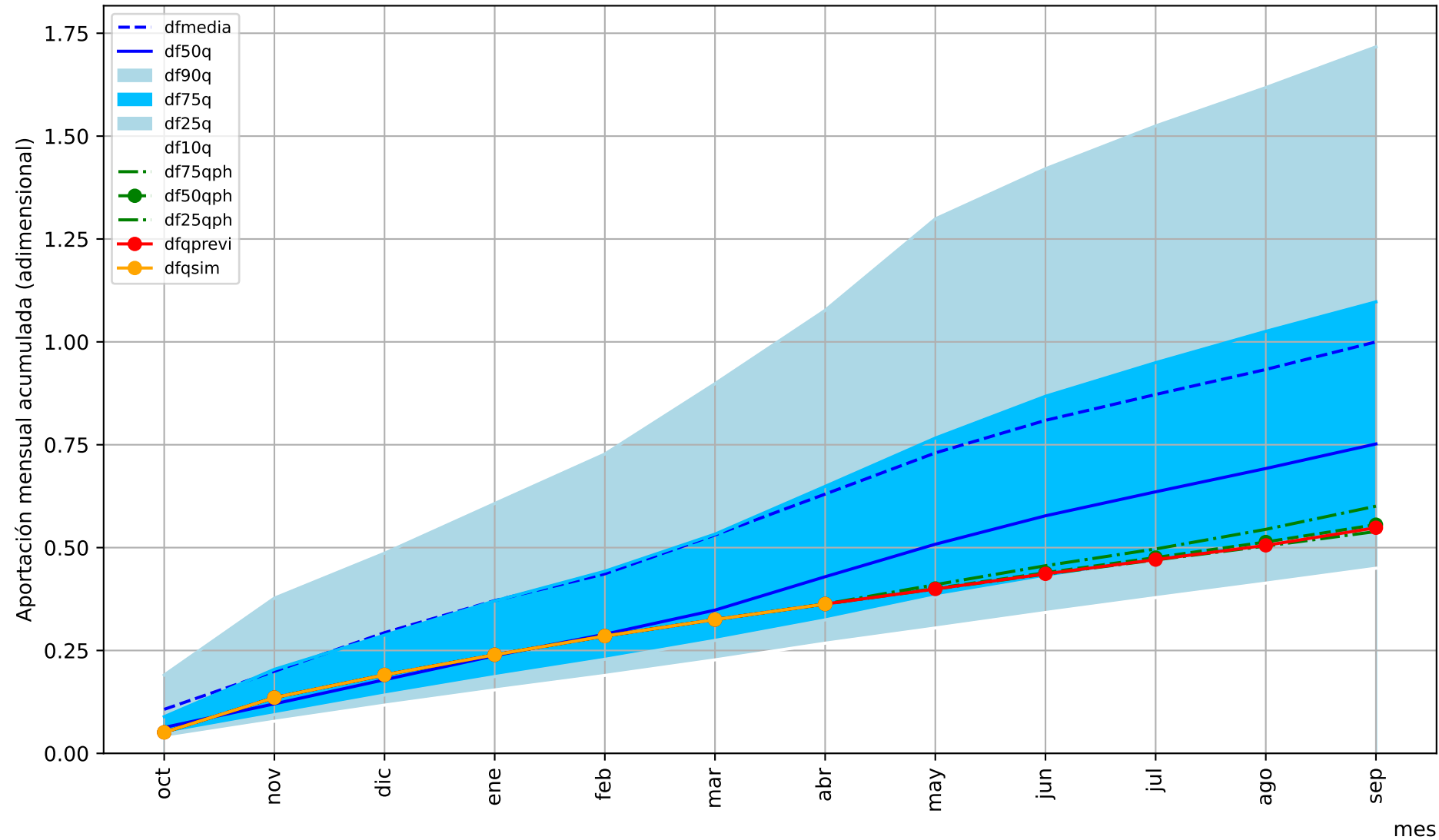
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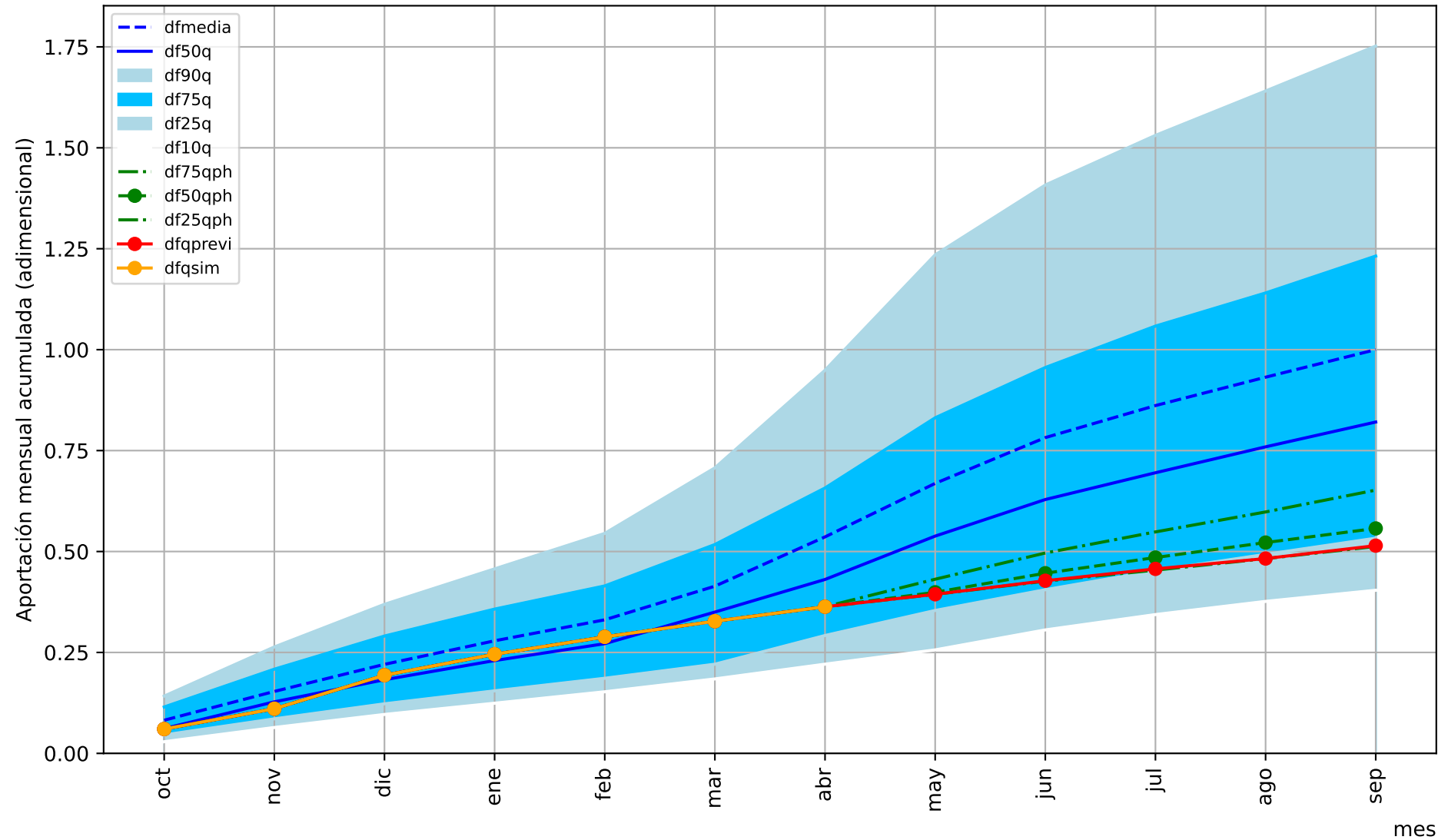


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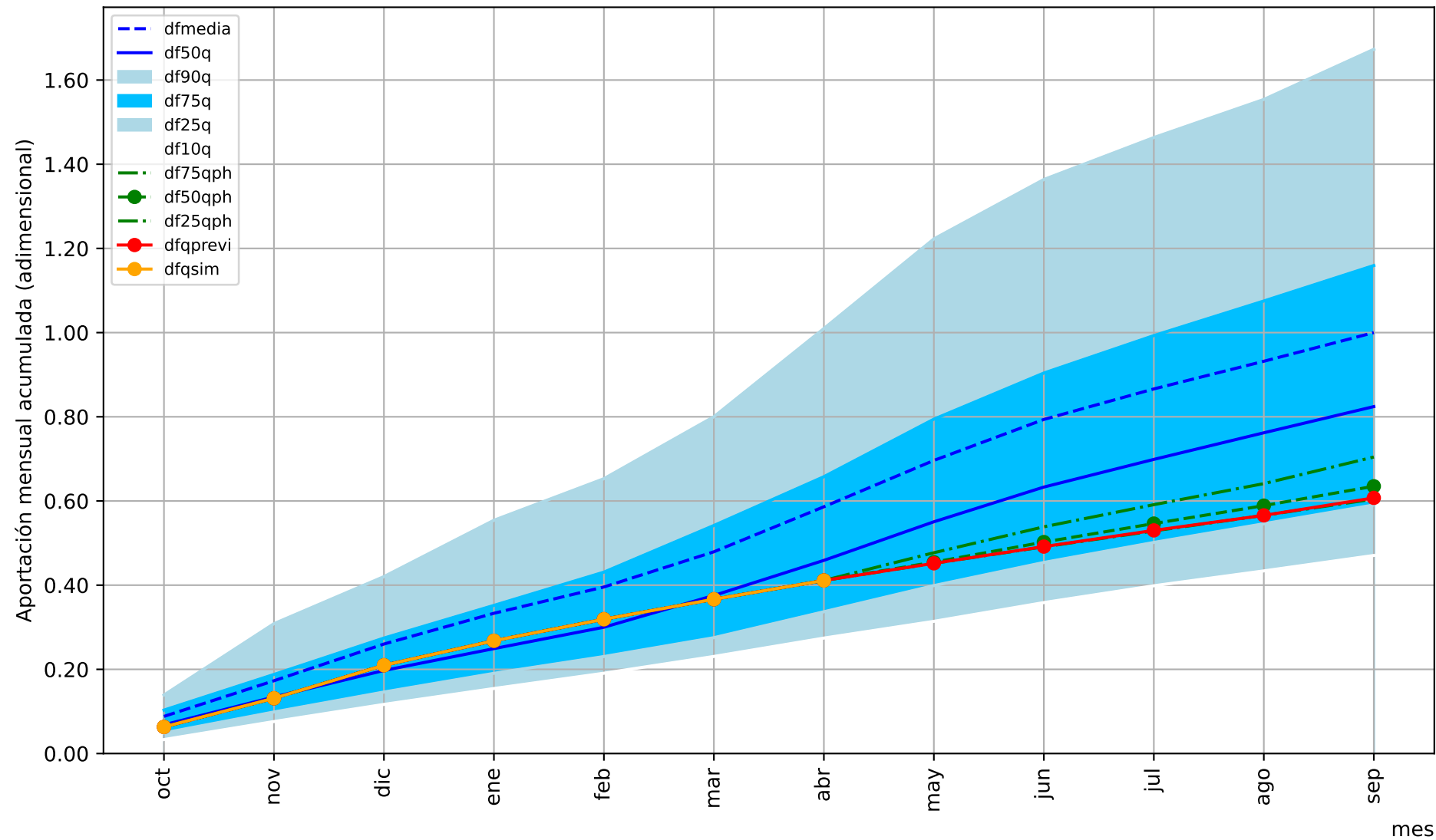


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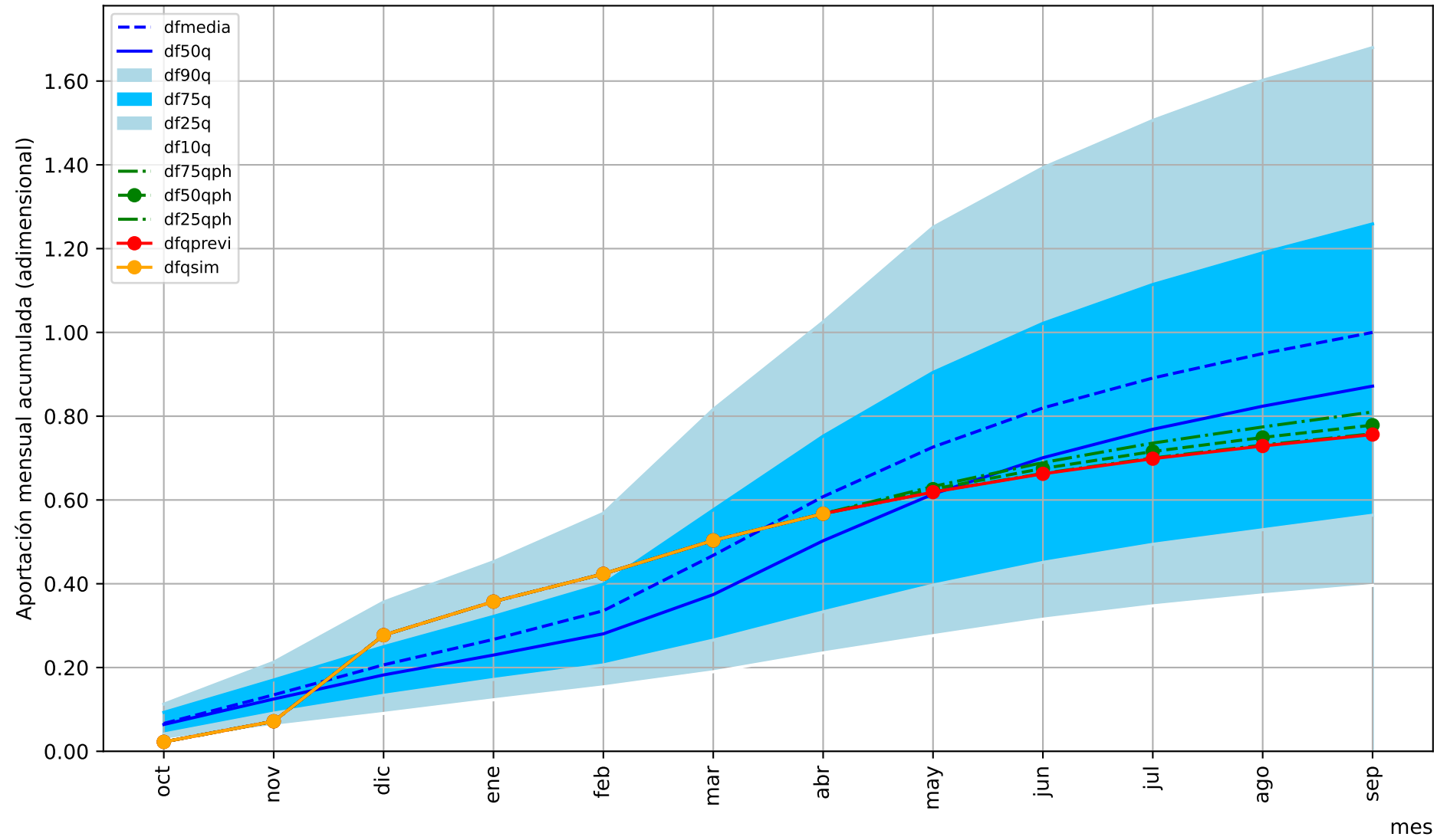


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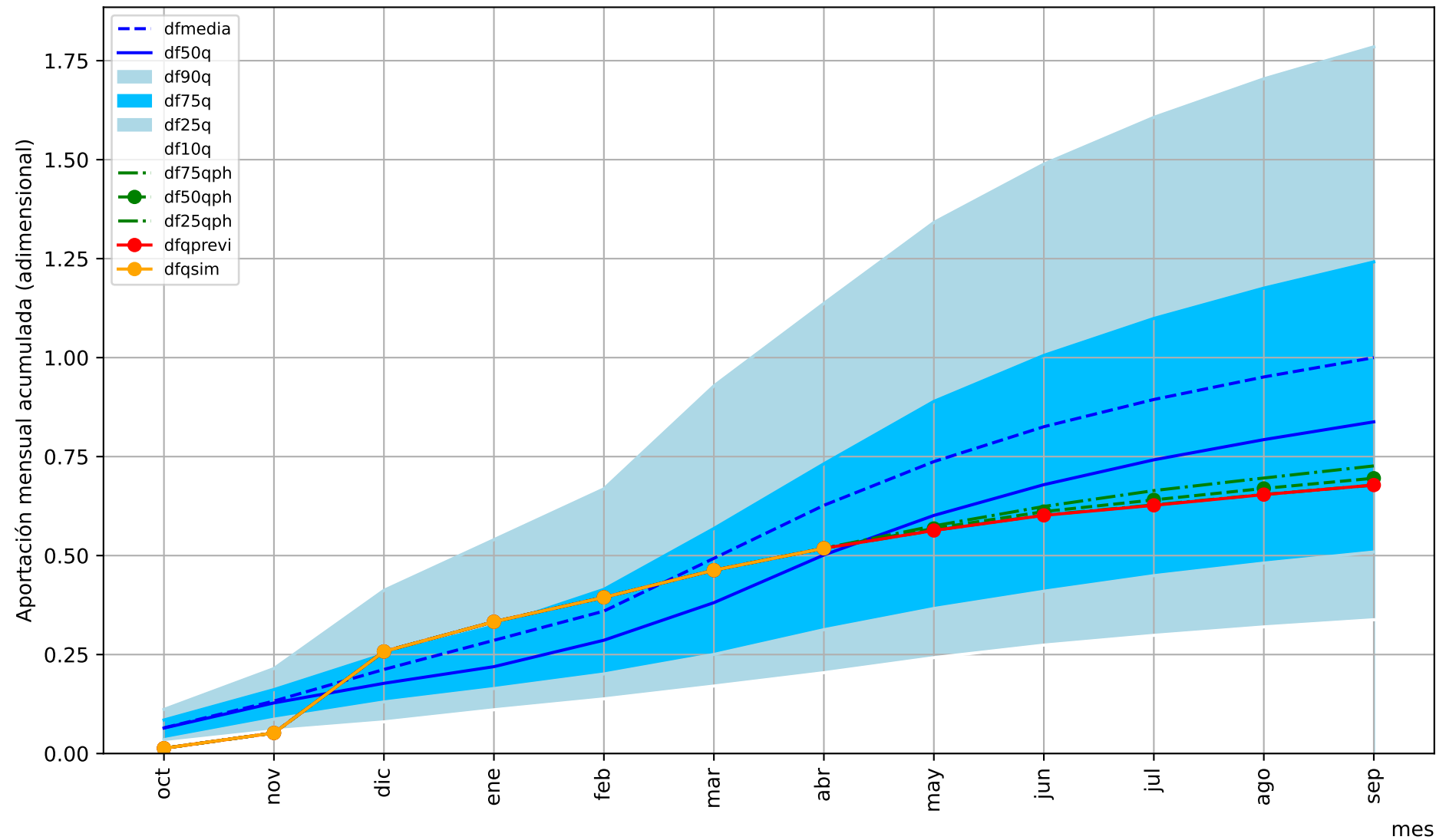
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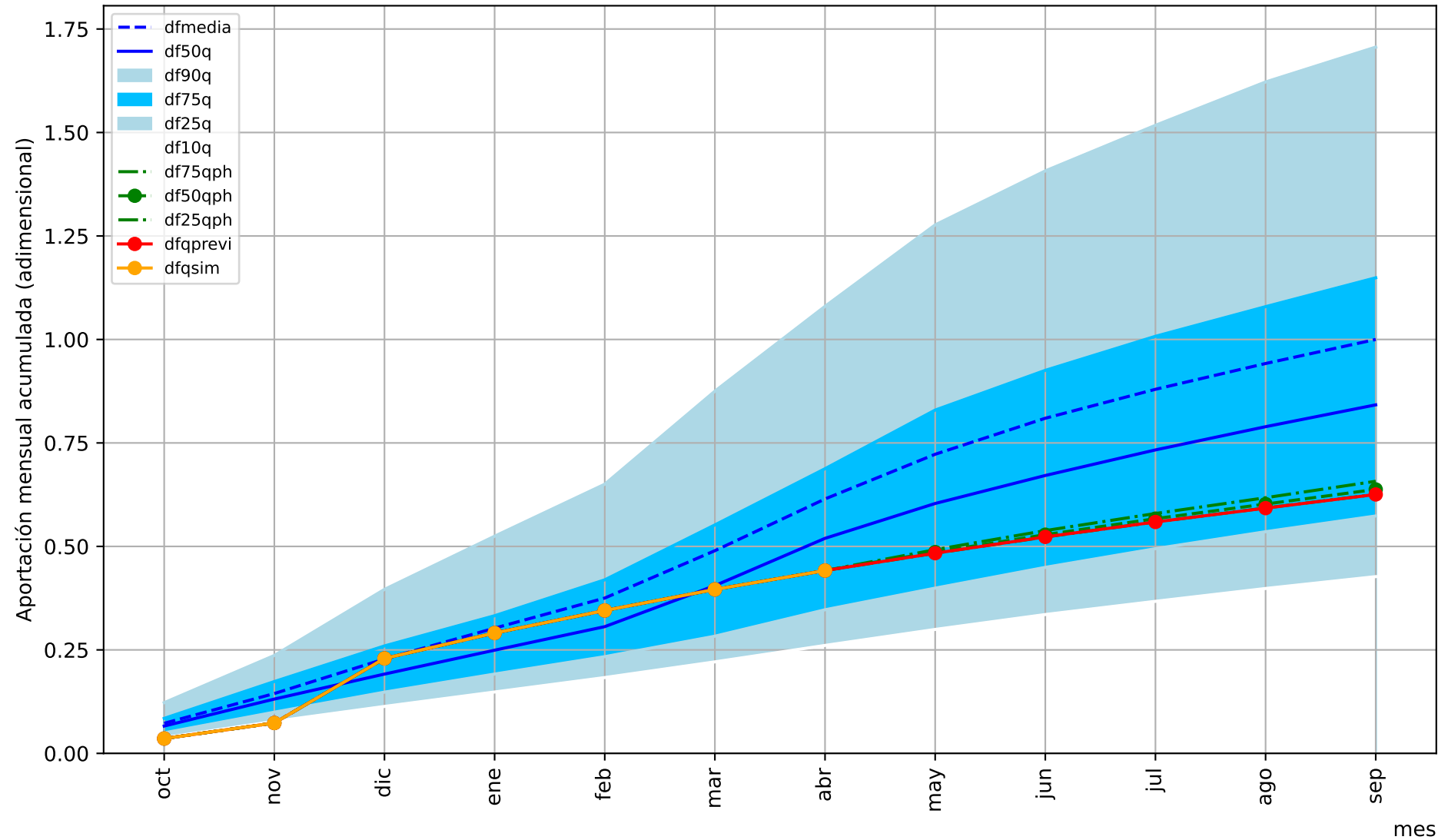
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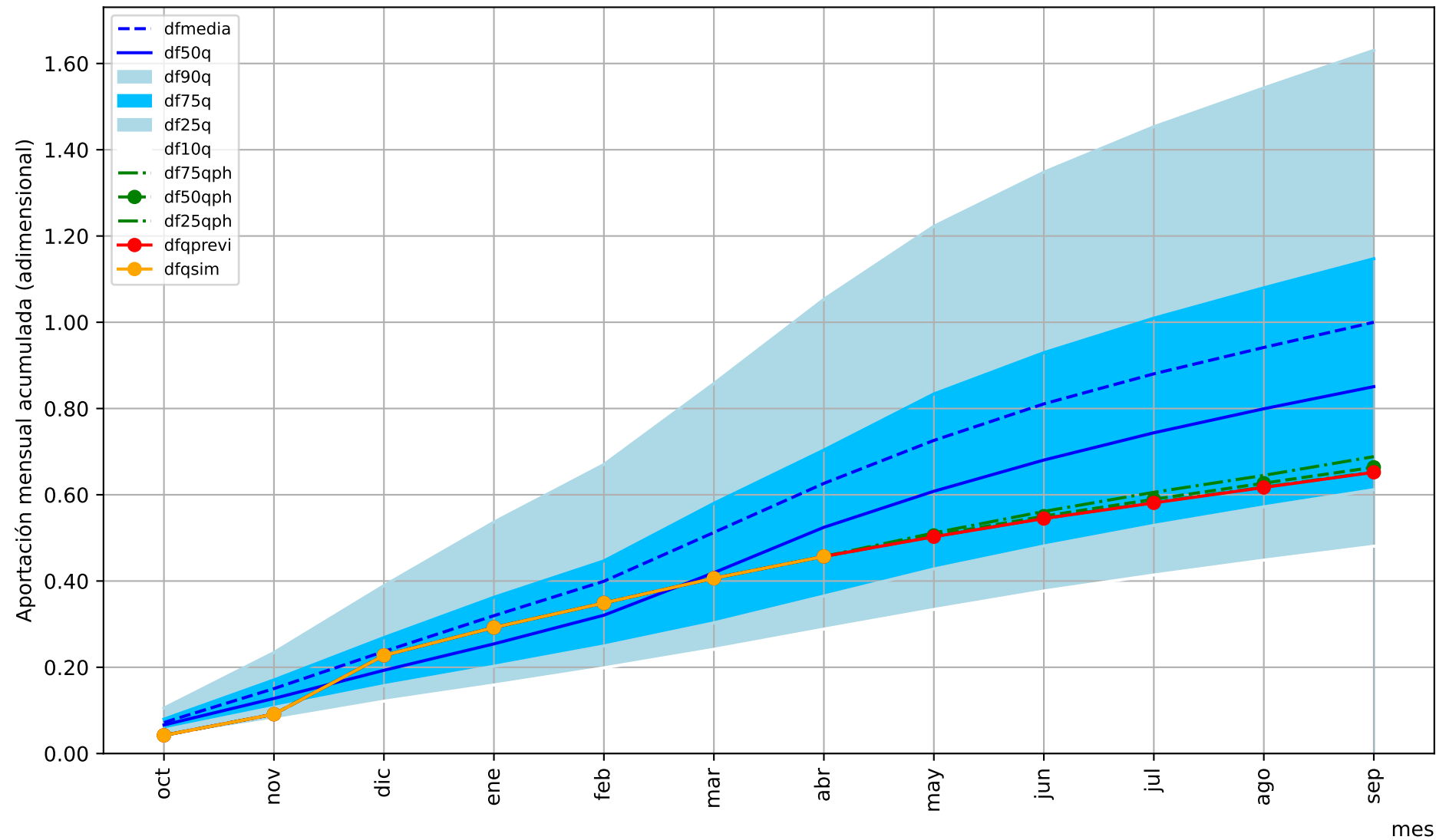
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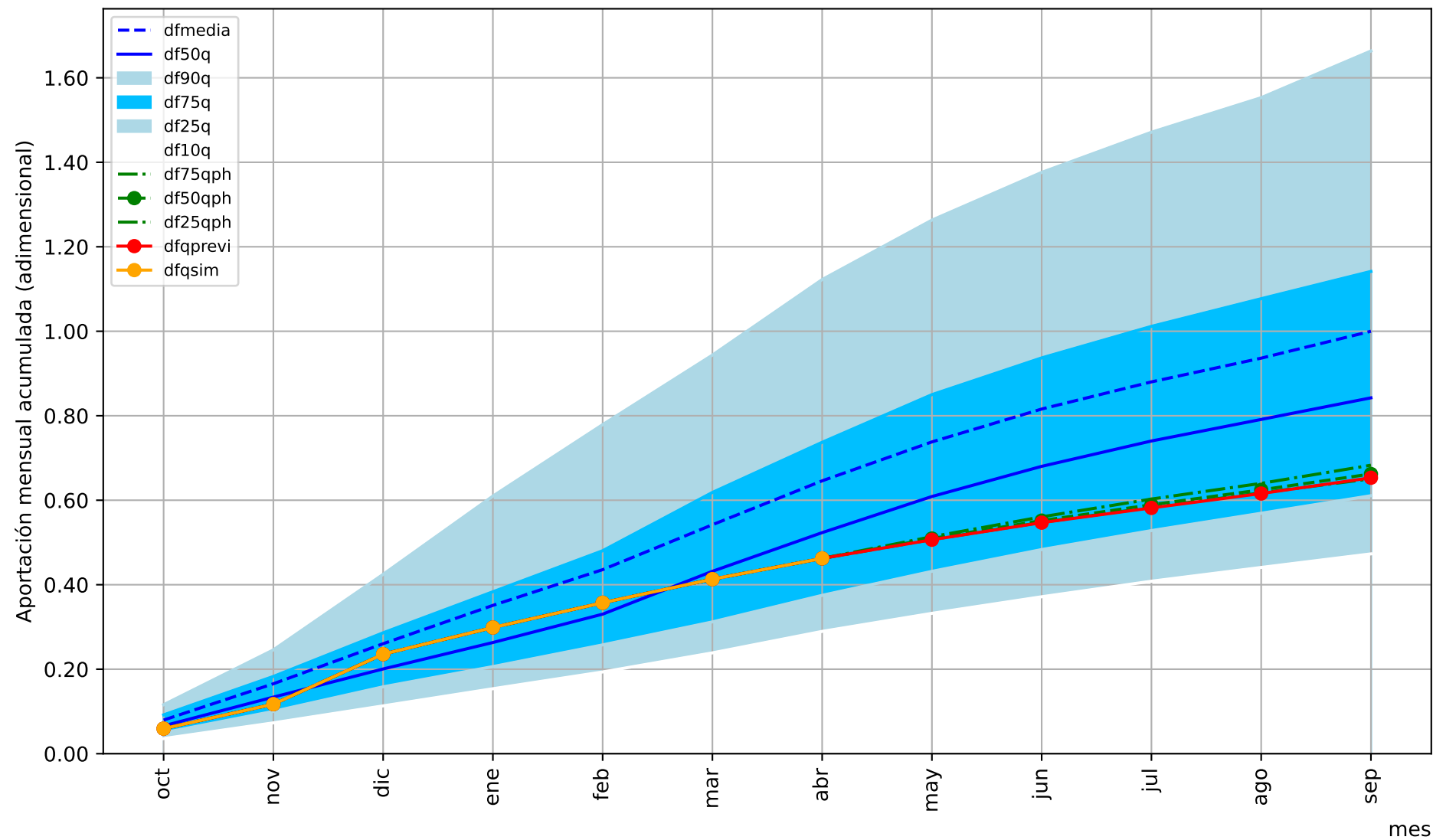


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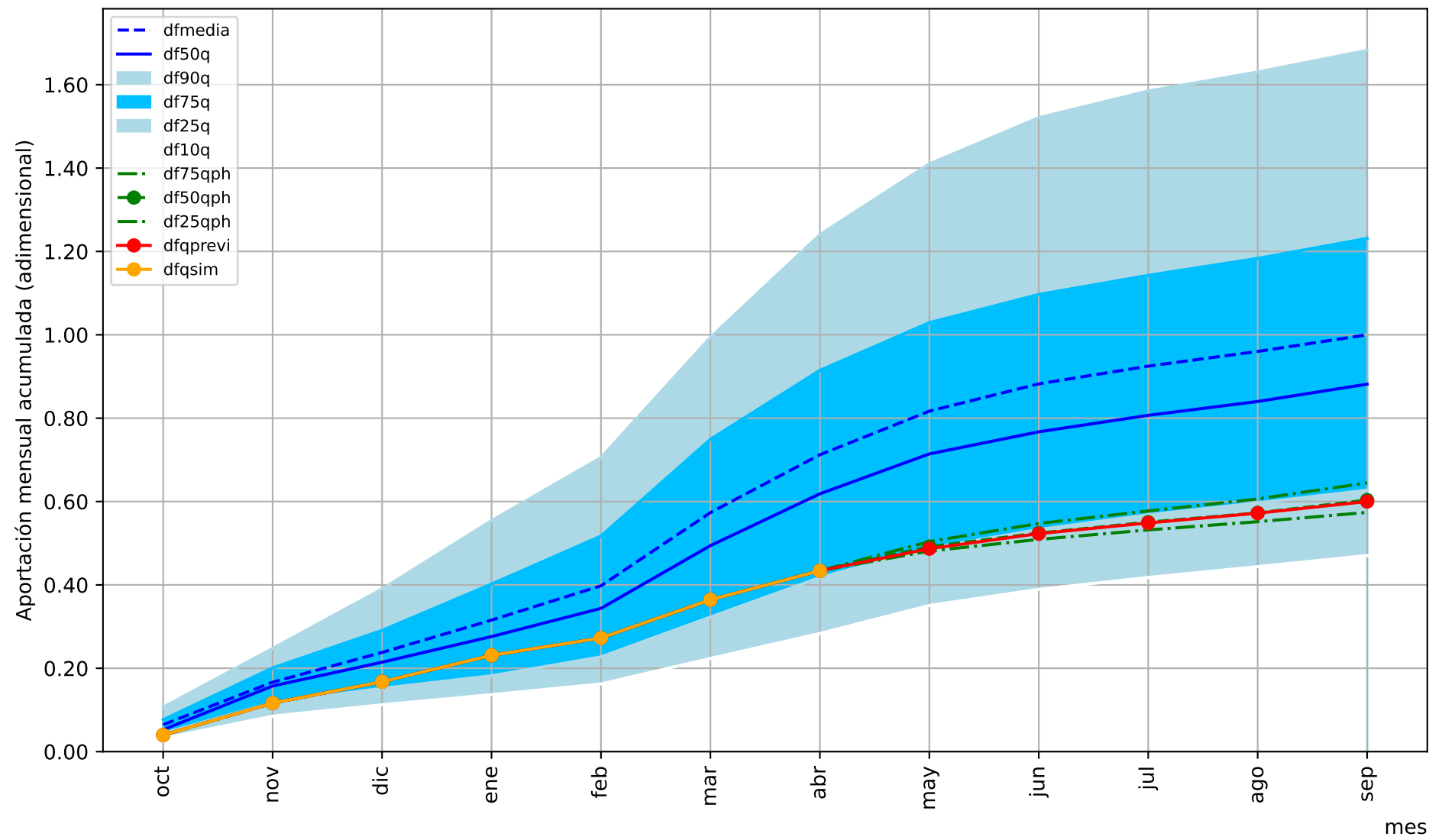


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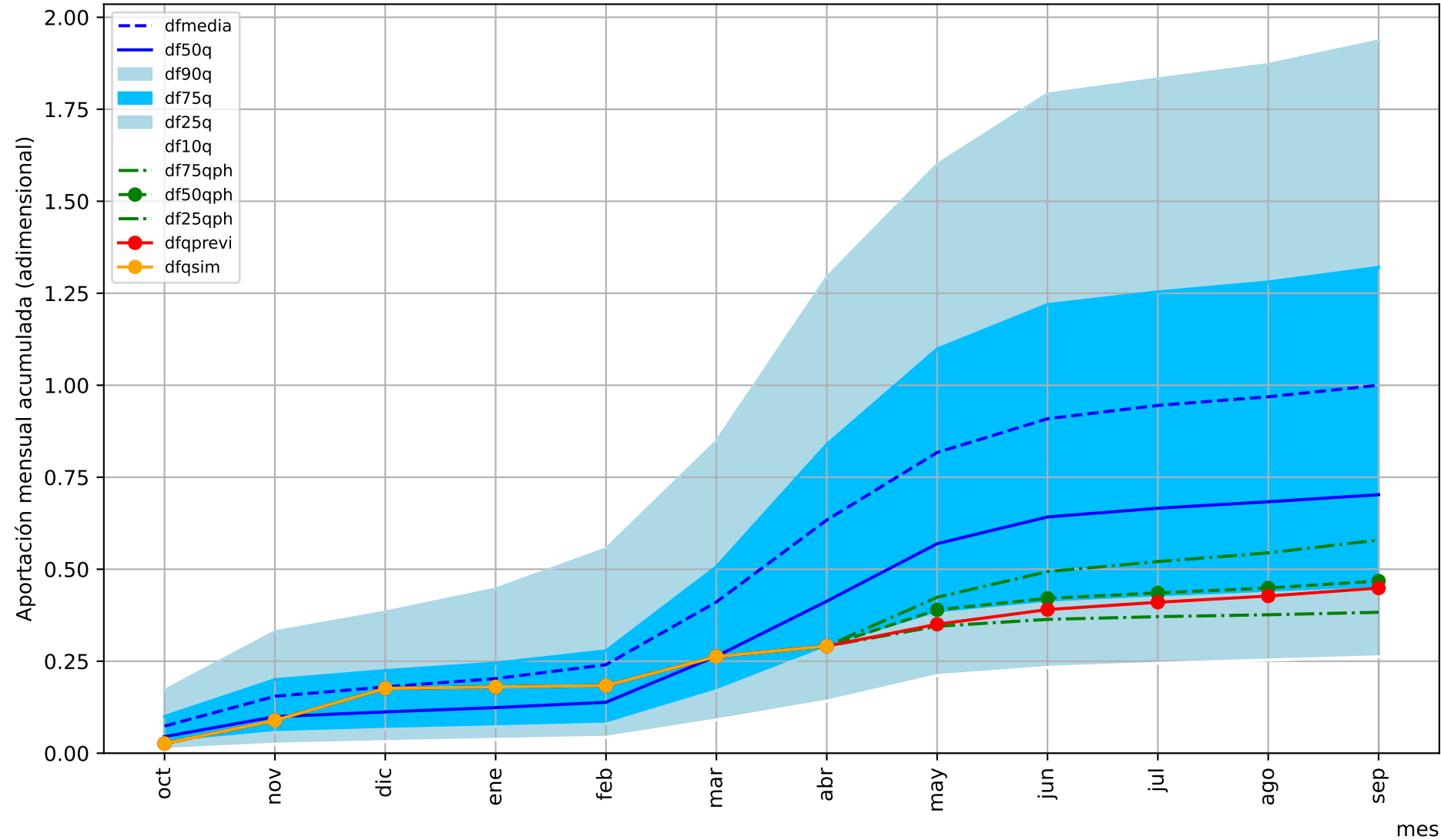
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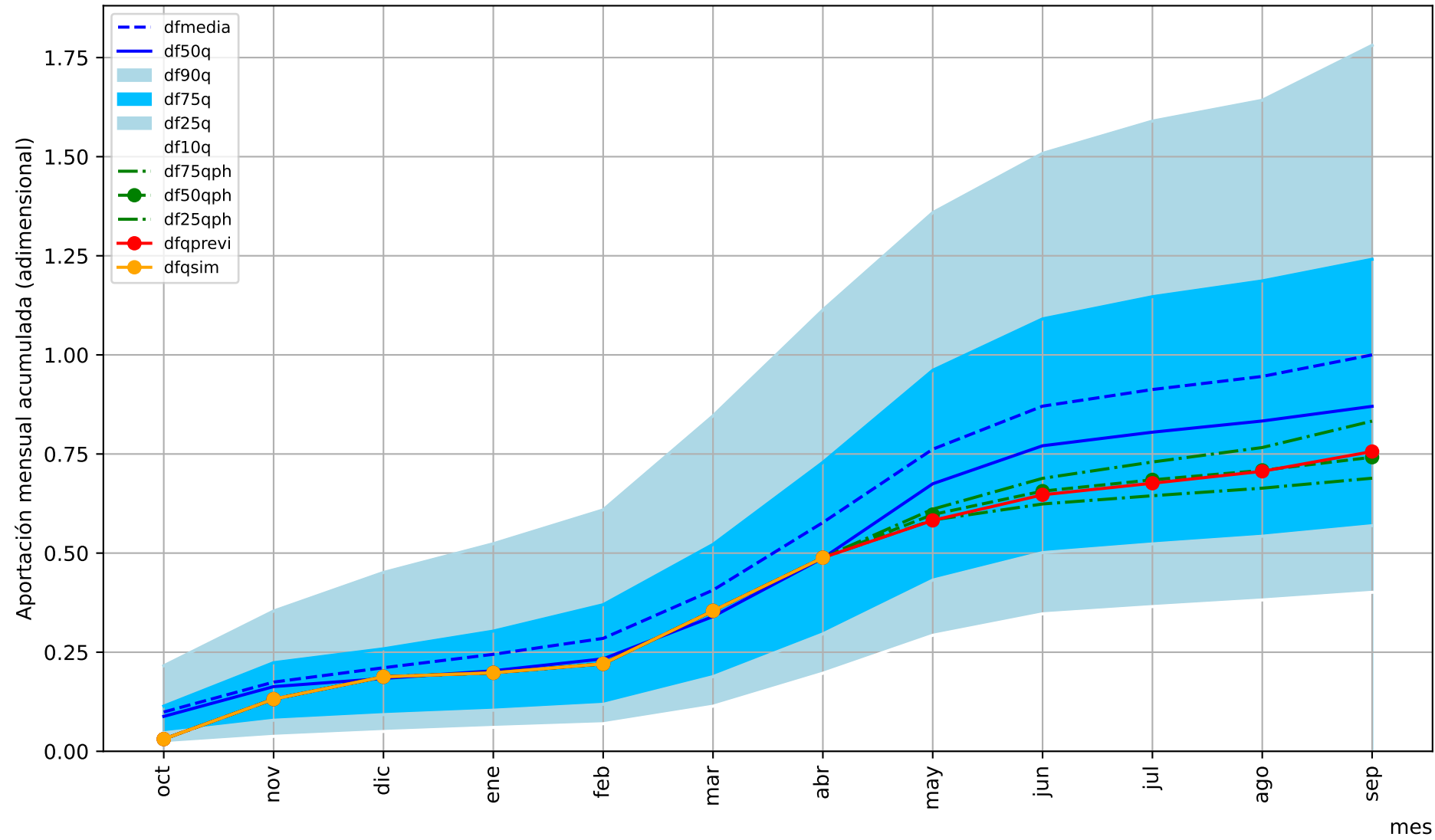
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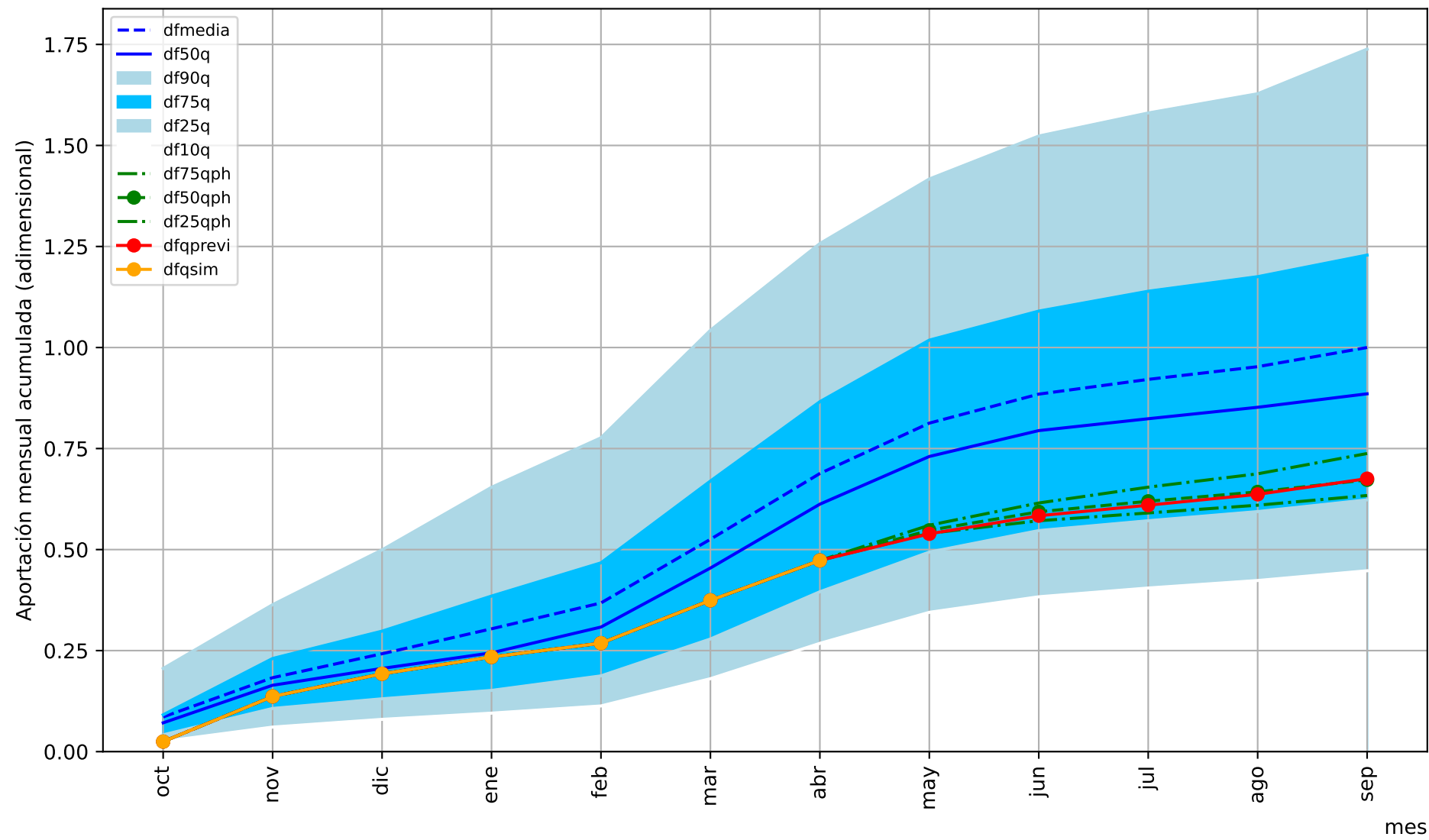
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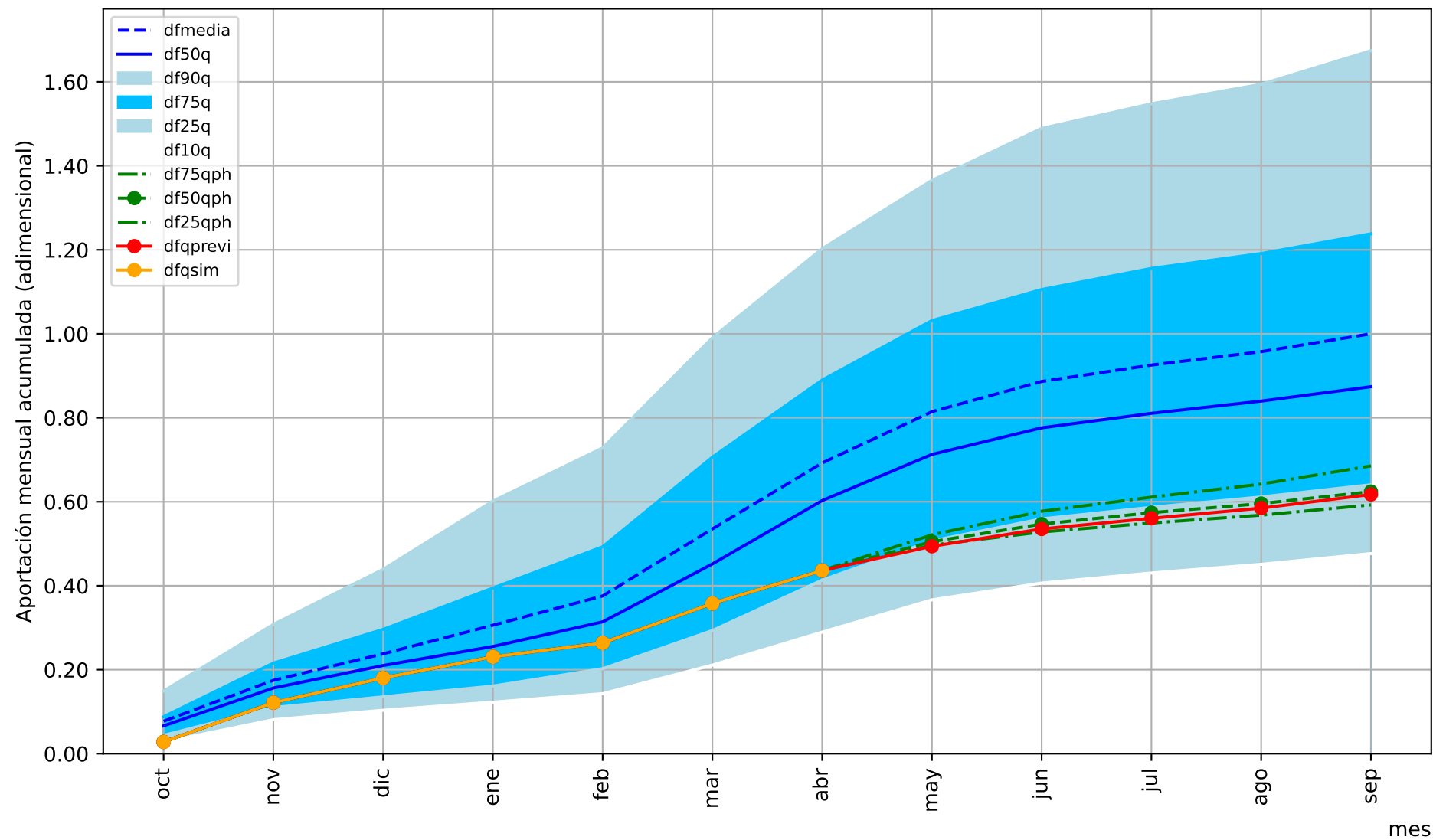


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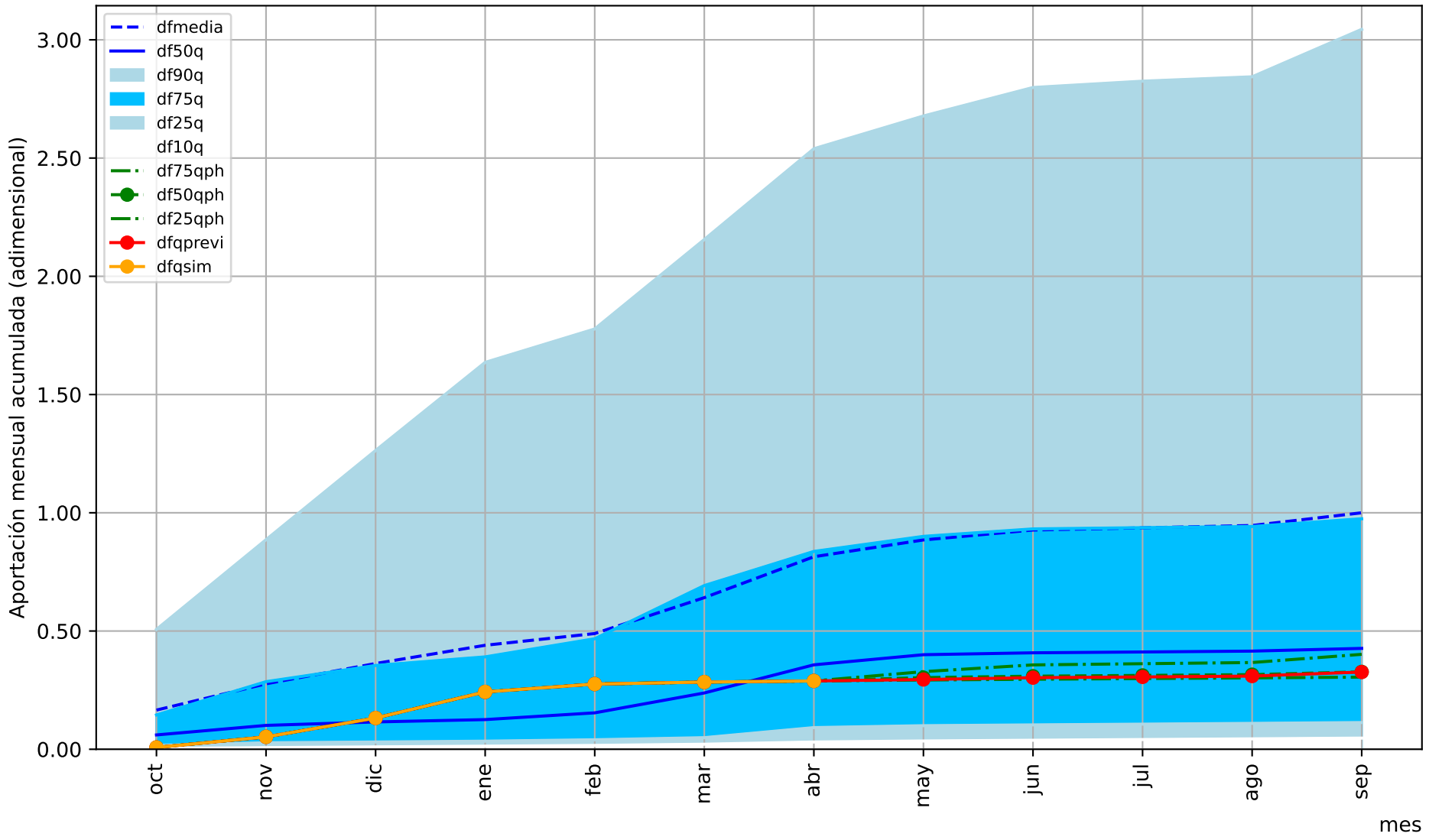
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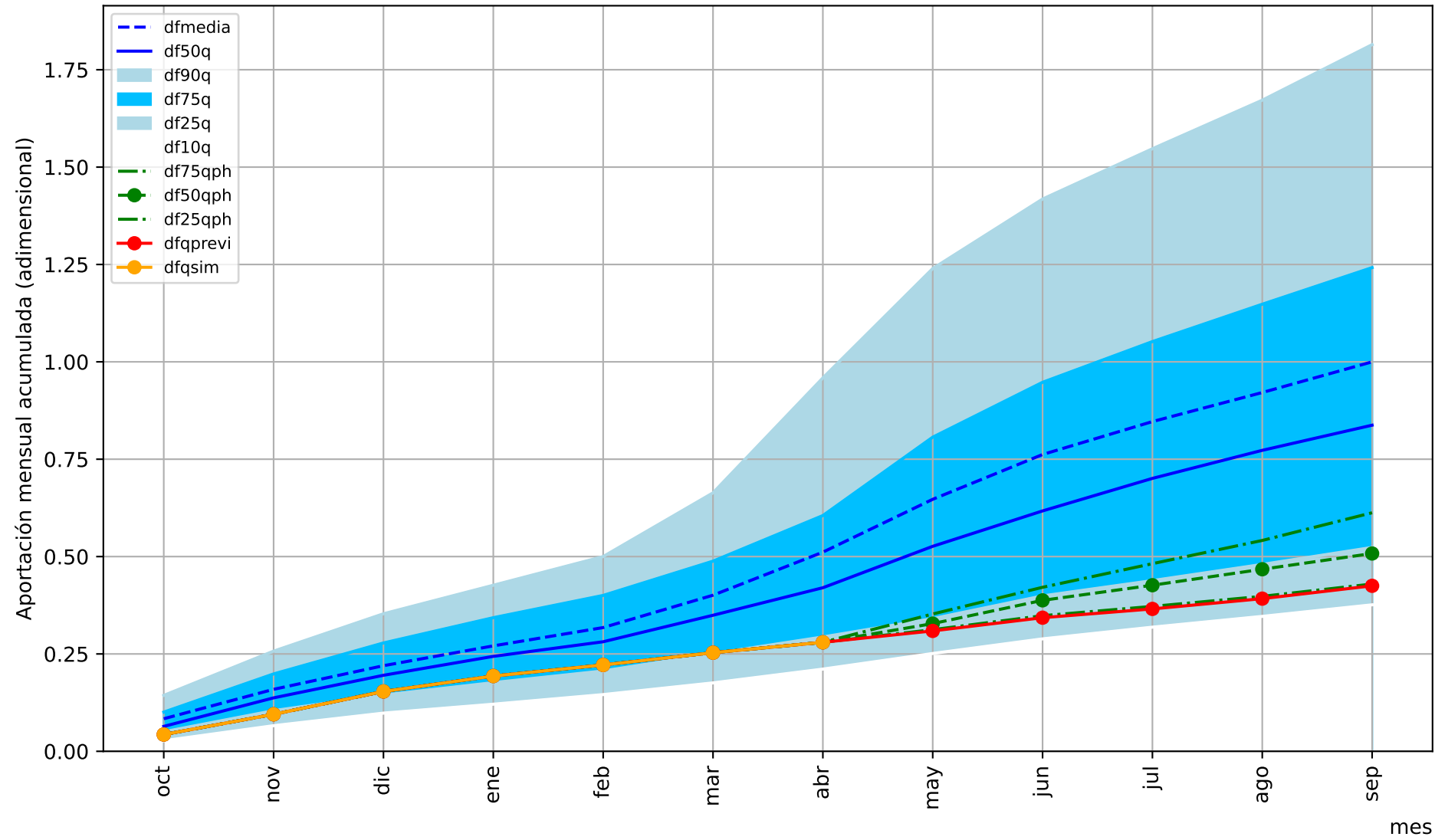


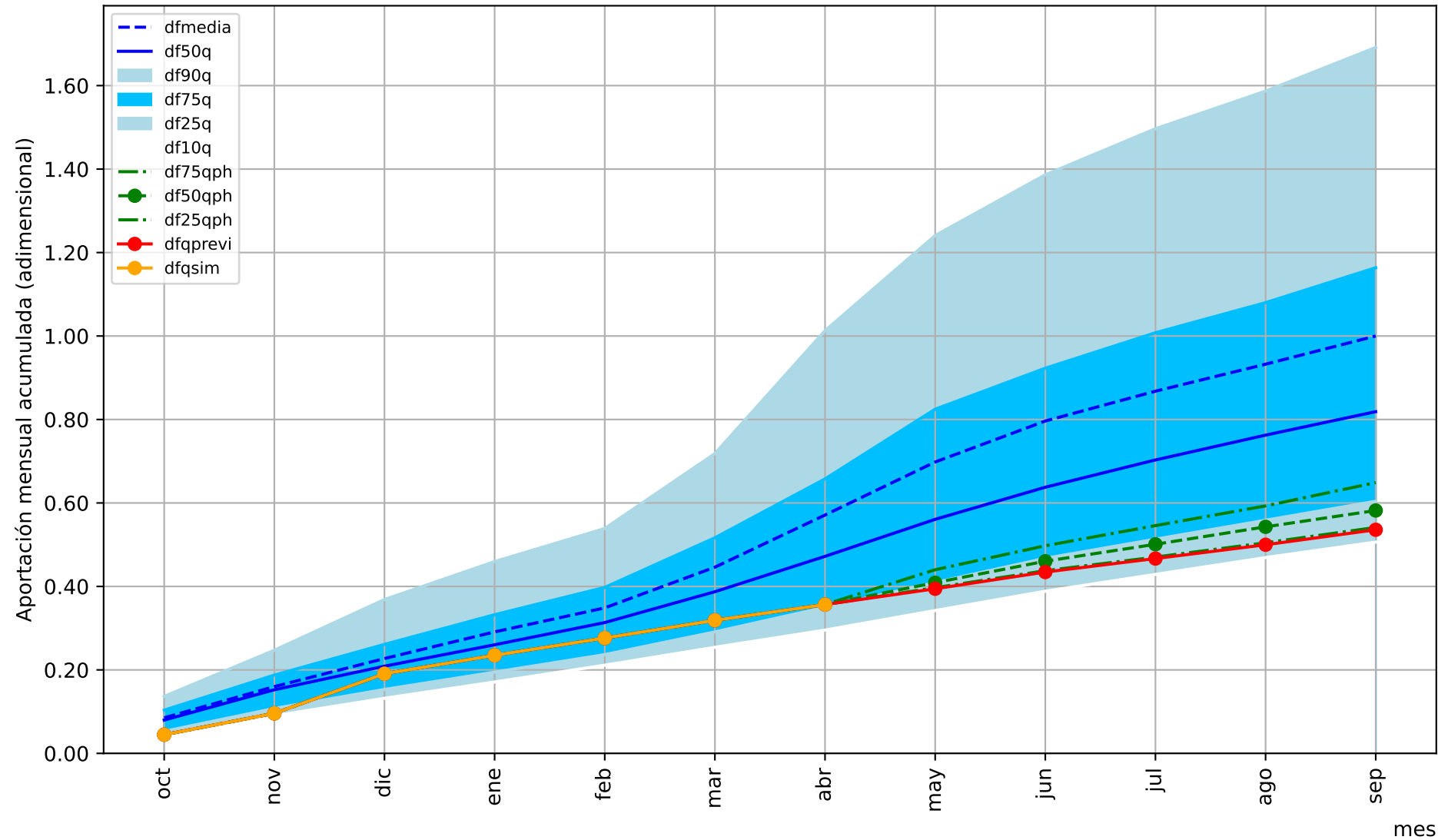
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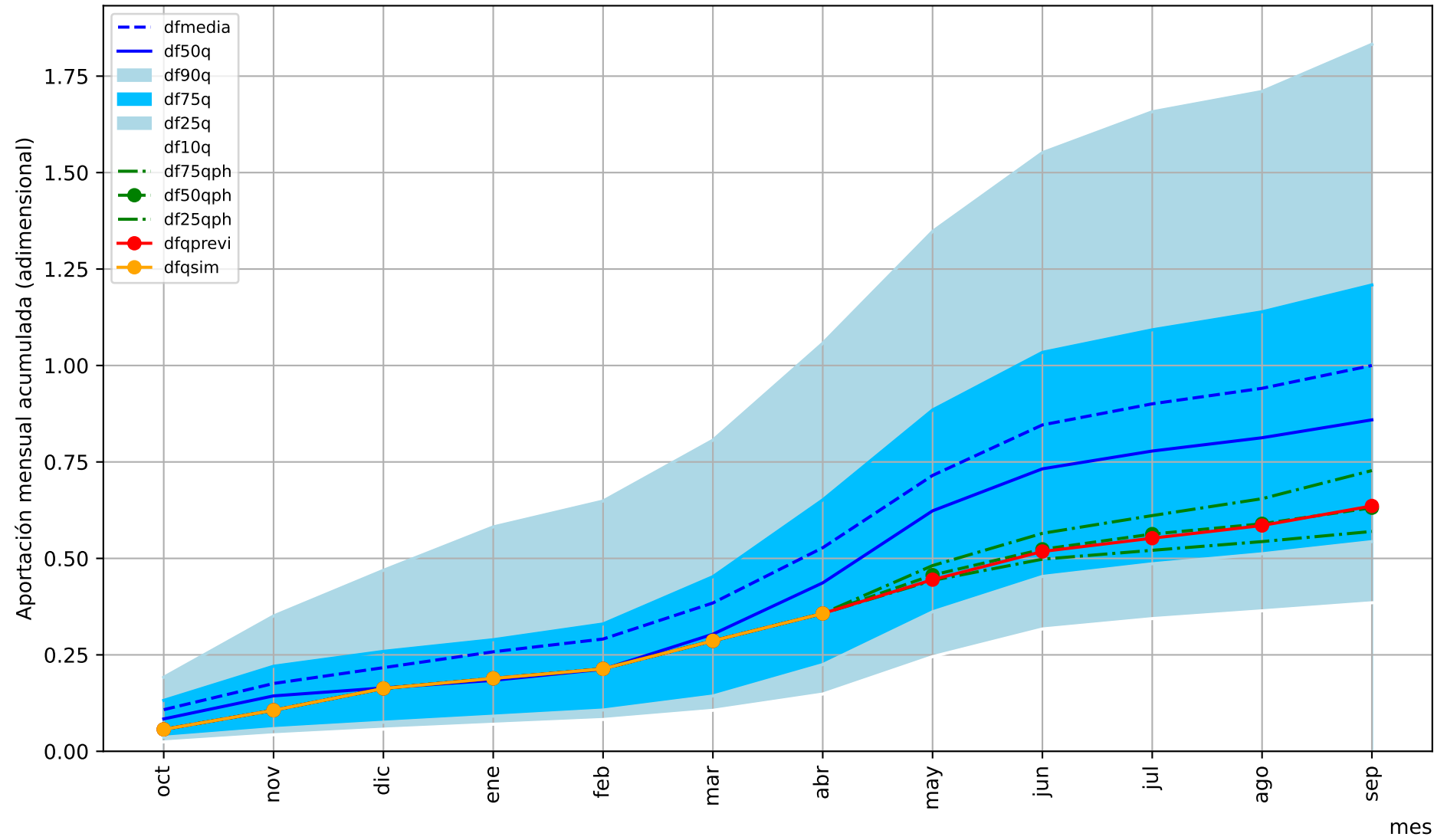


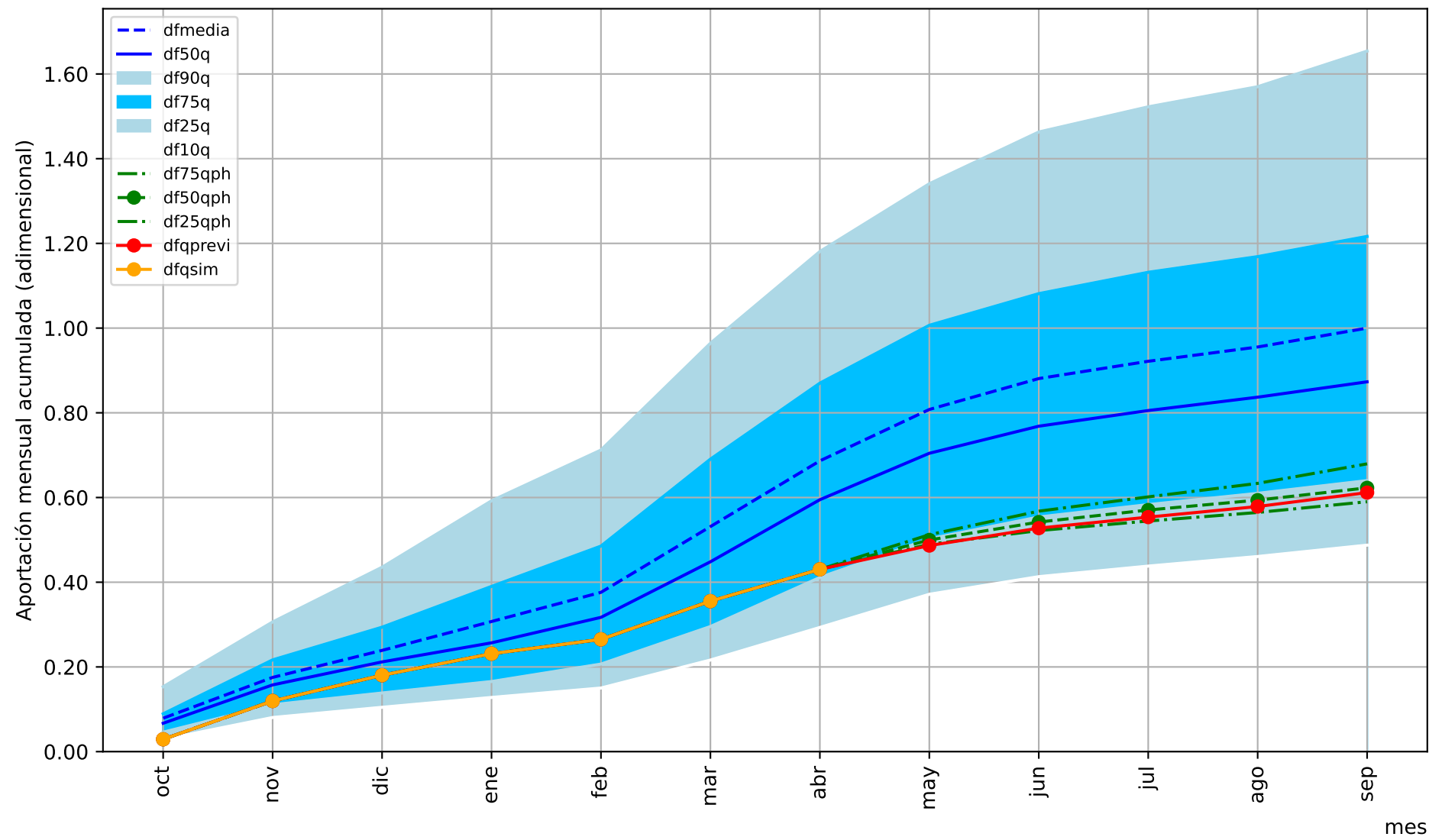
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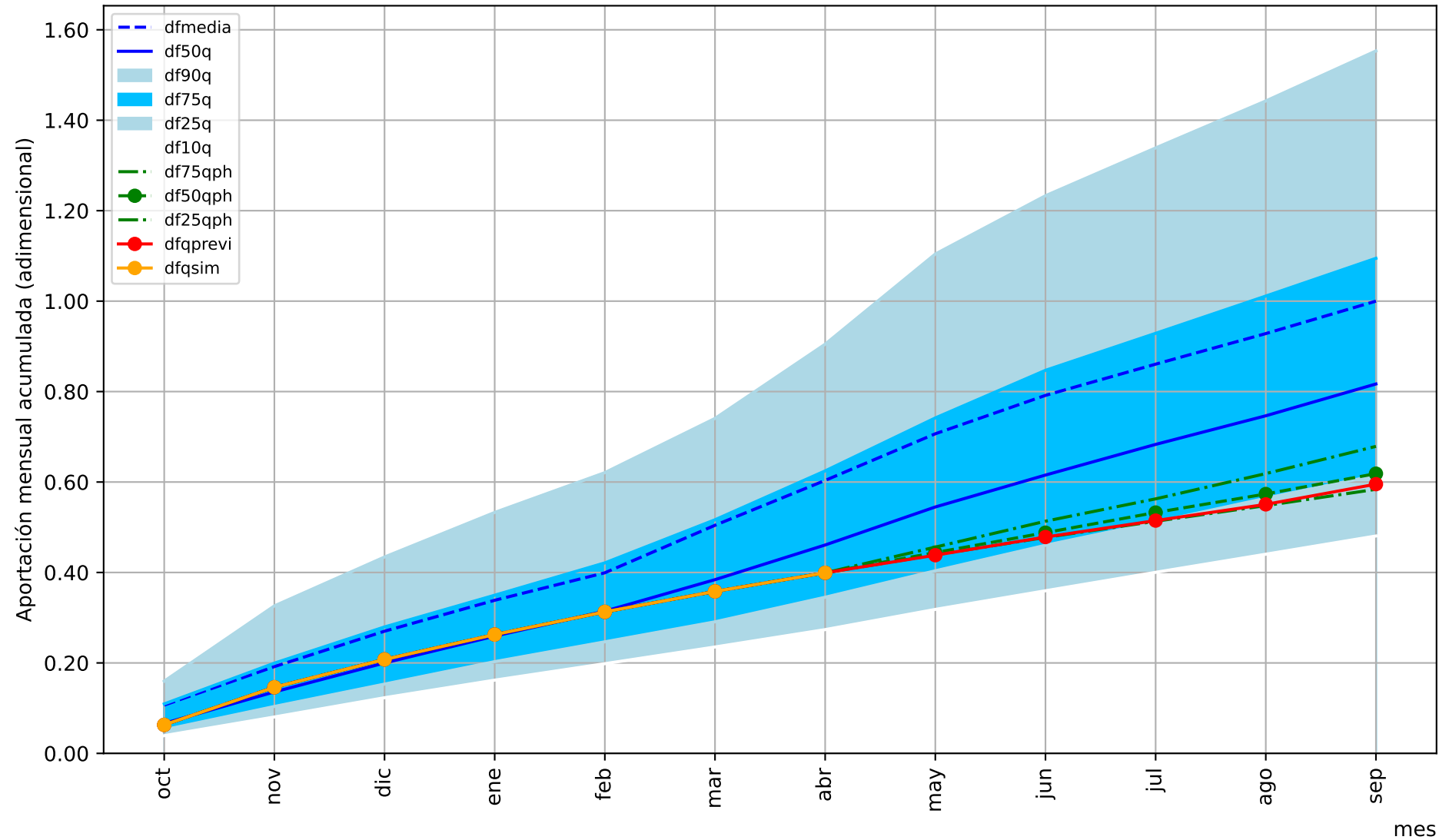




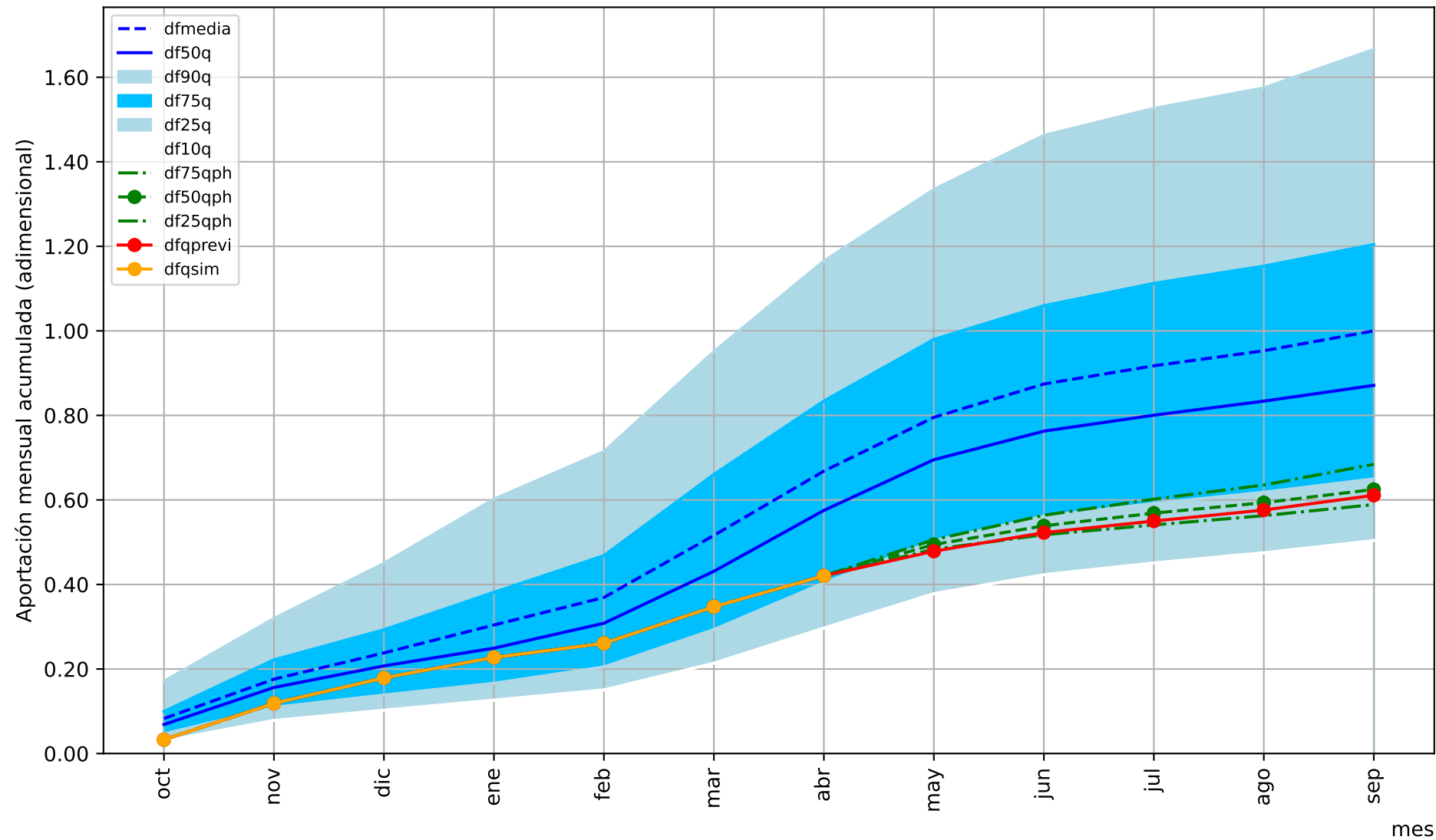
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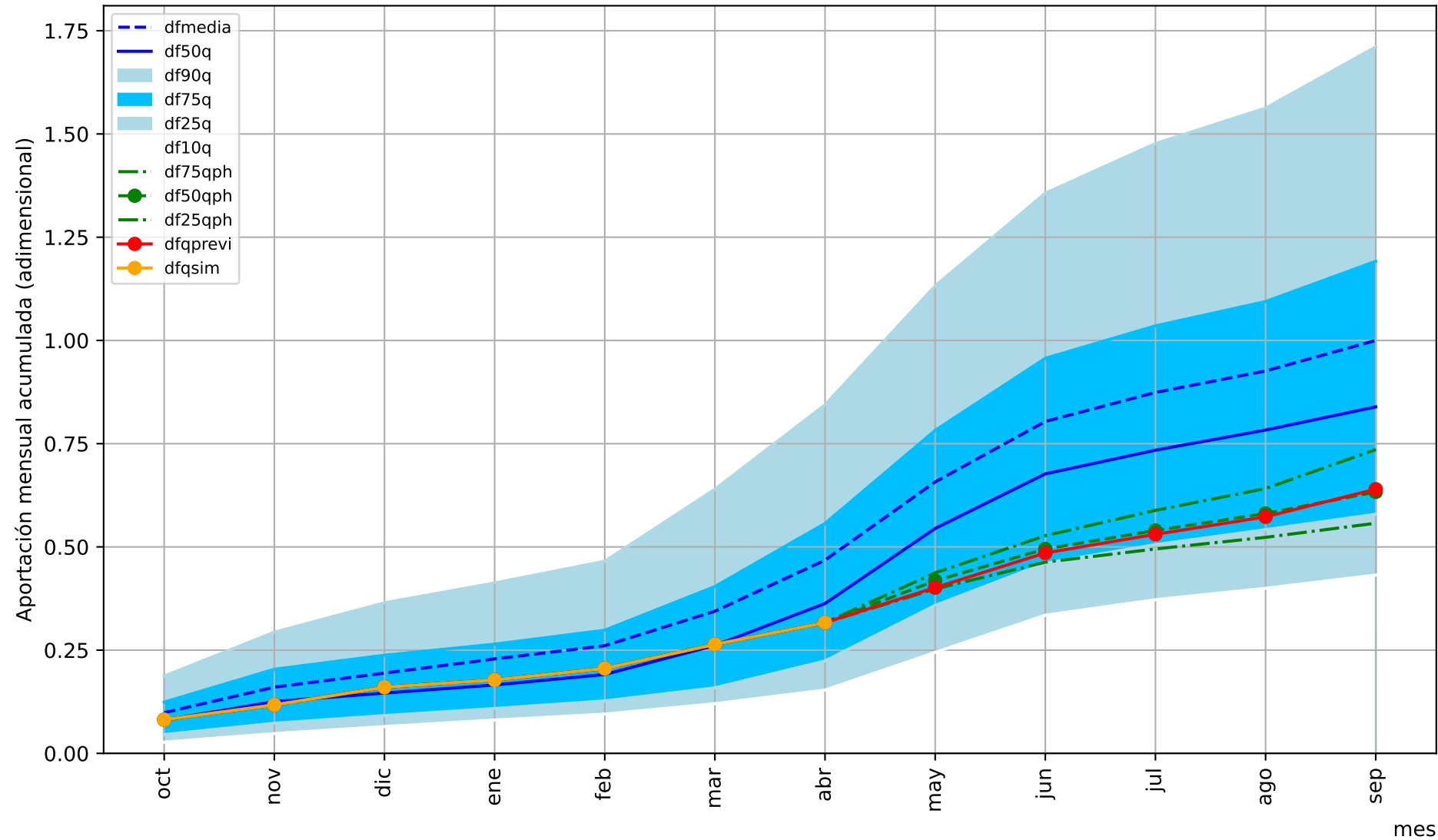




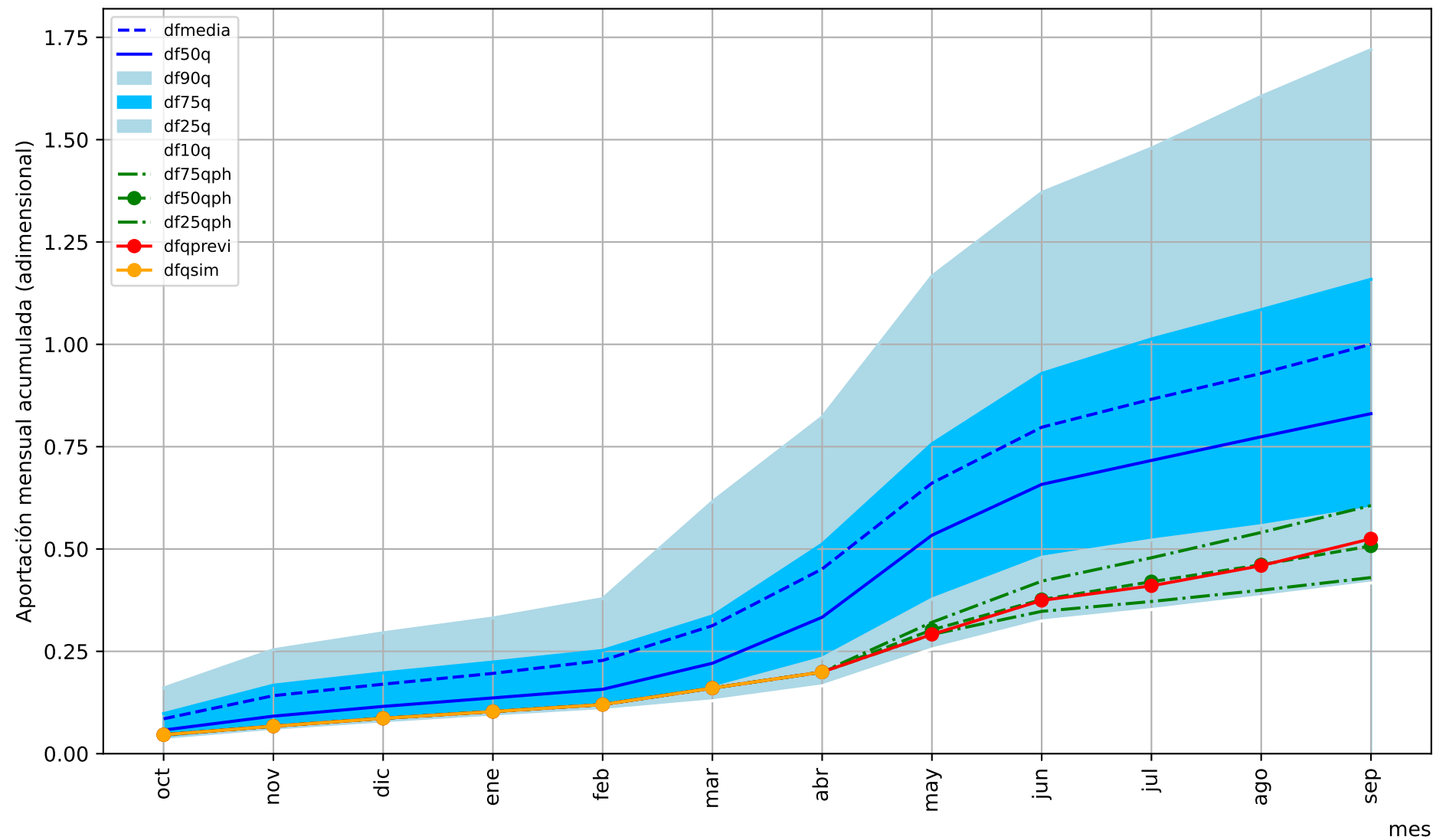
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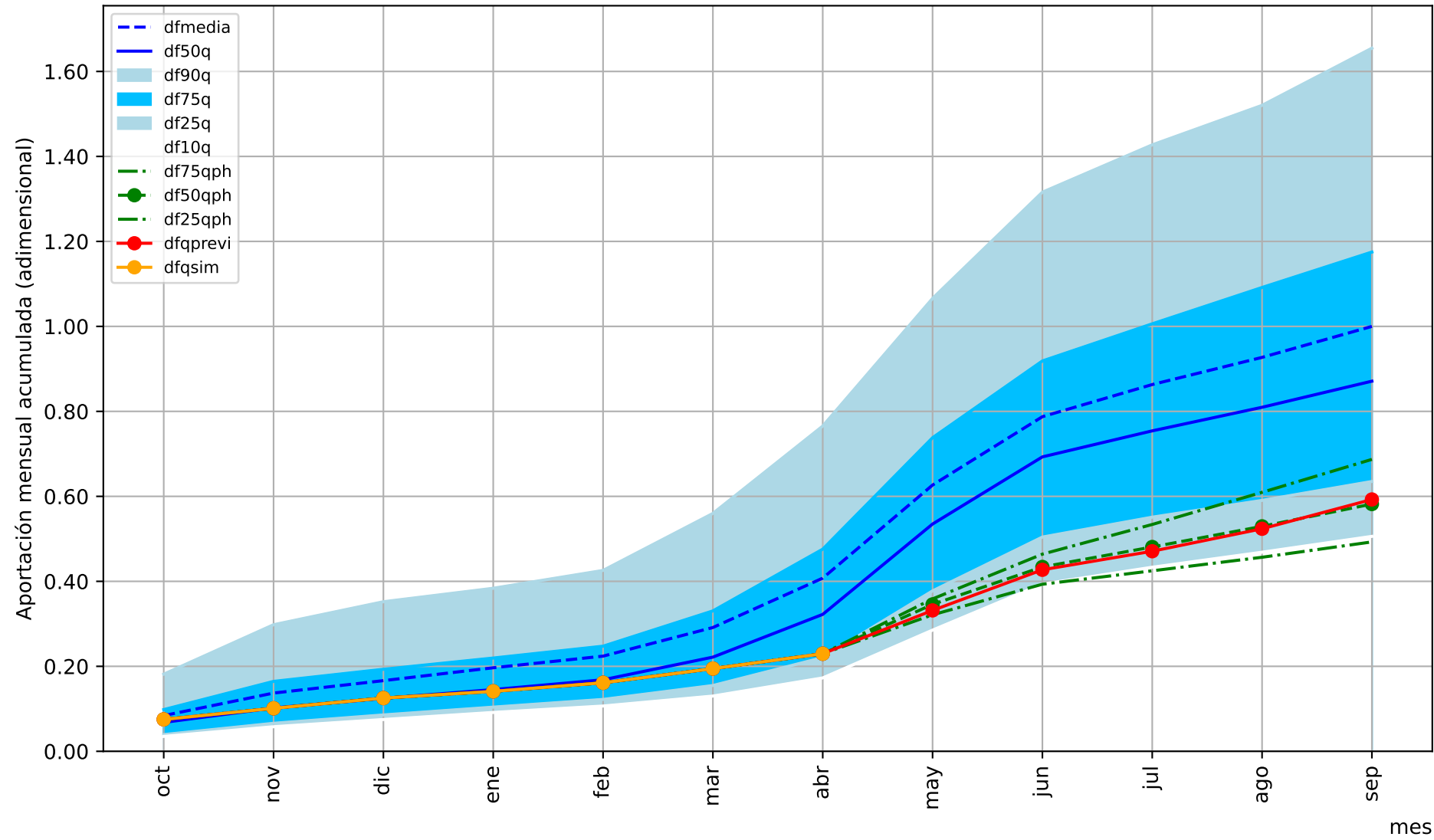
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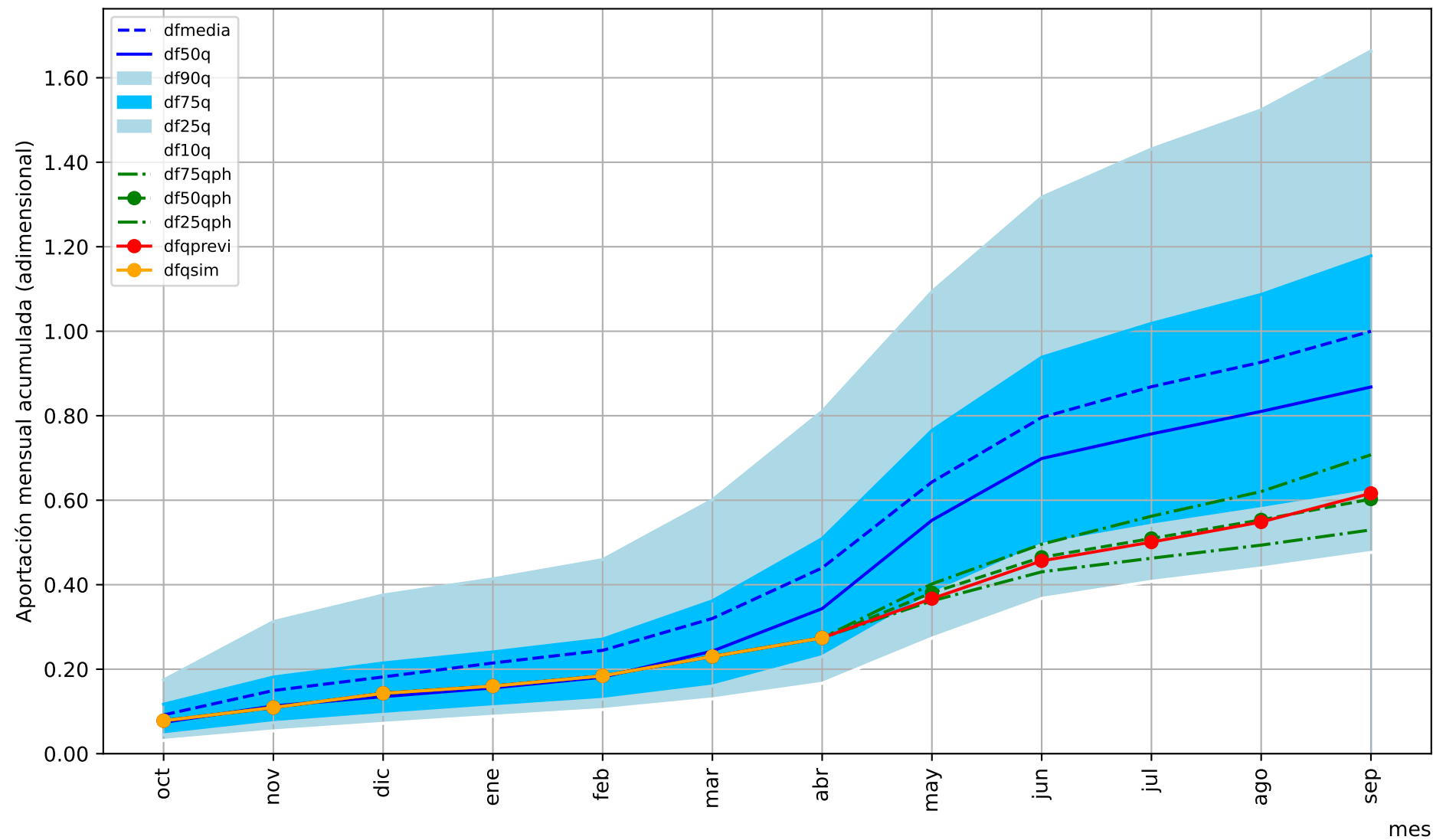
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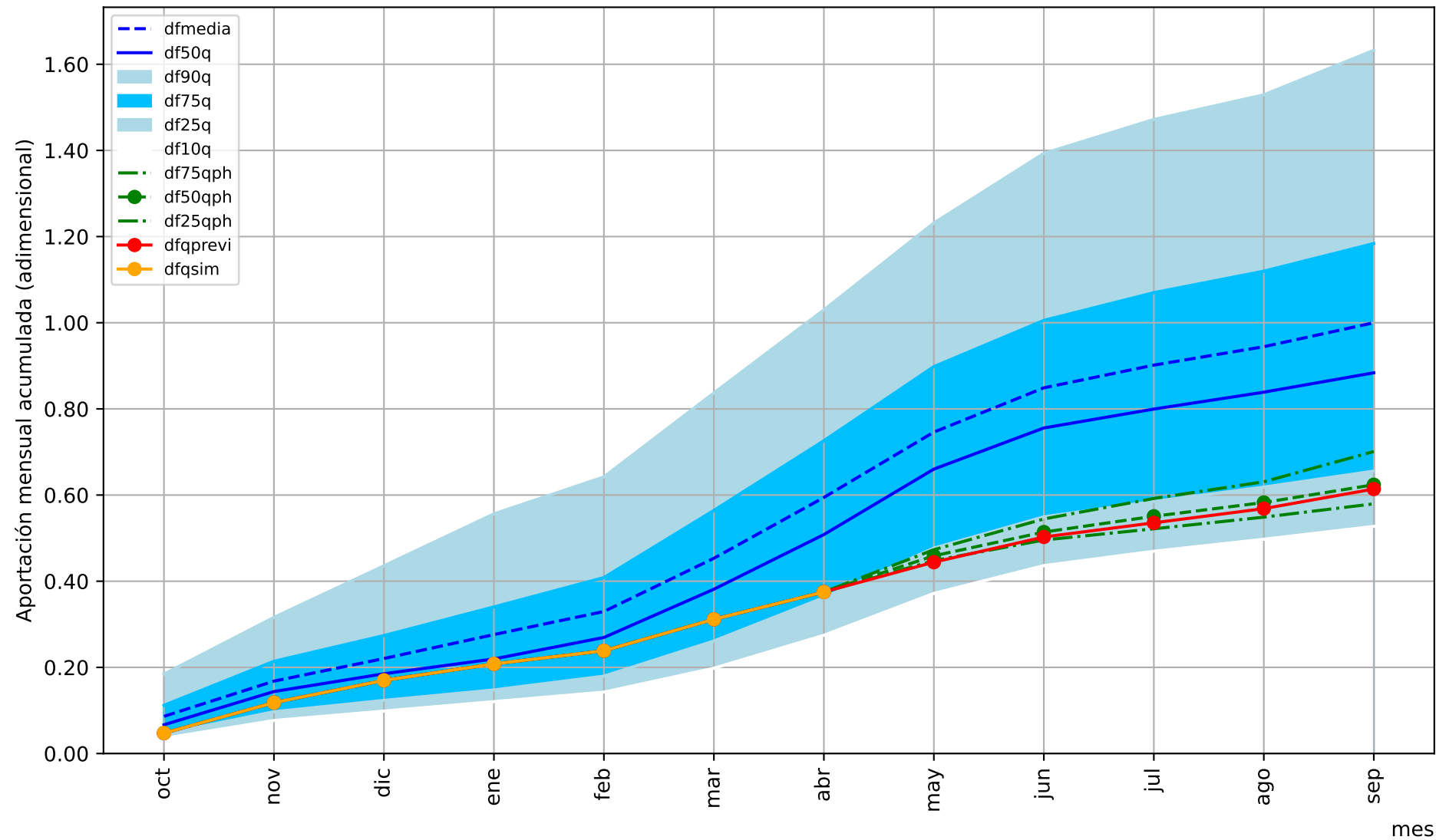


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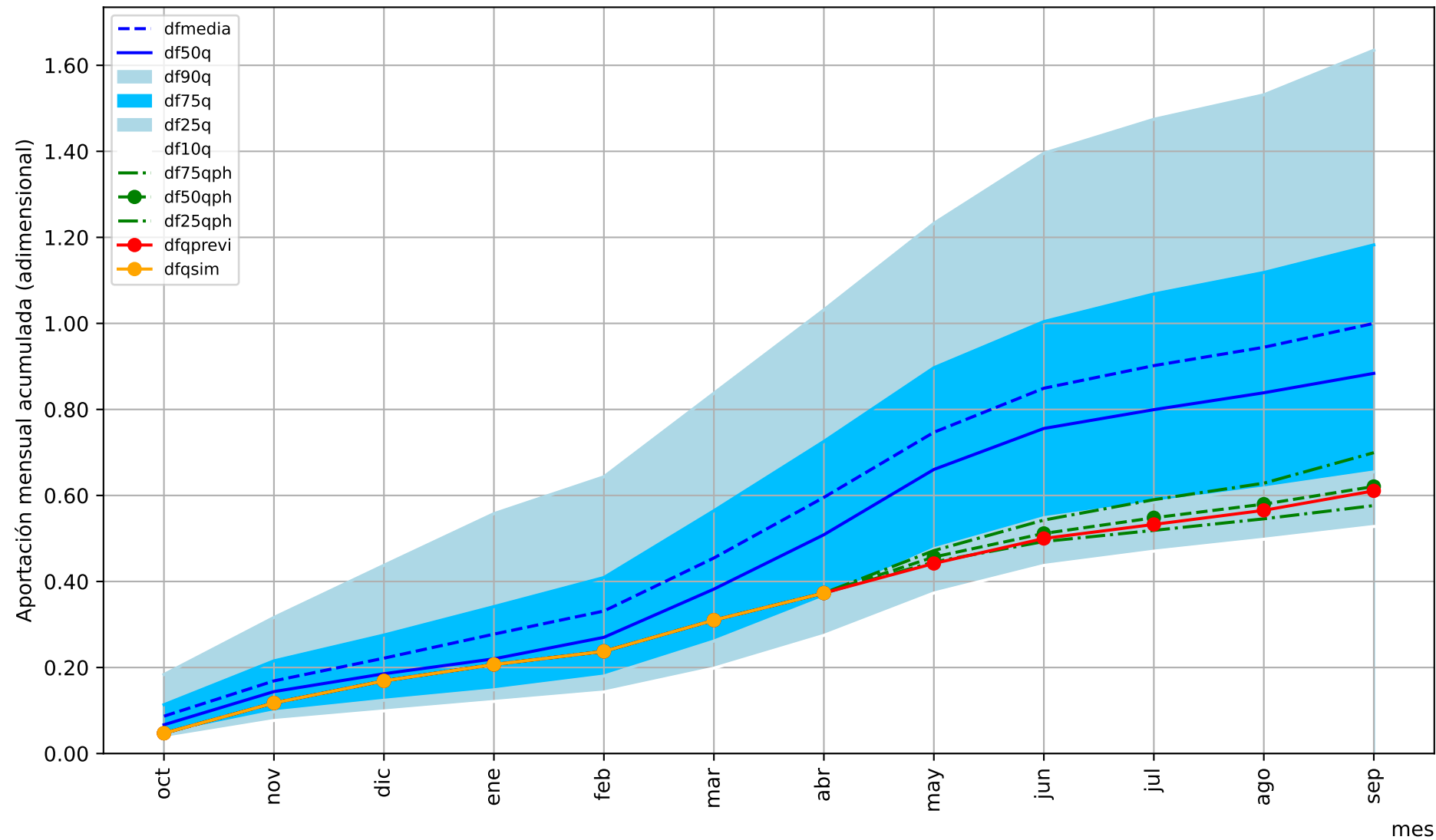


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Ministerio para la Transición Ecológica y el Reto Demográfico

Dirección General del Agua

Calculo de predicciones hidrológicas estacionales

Modelo simulación hidrológica: PATRICAL

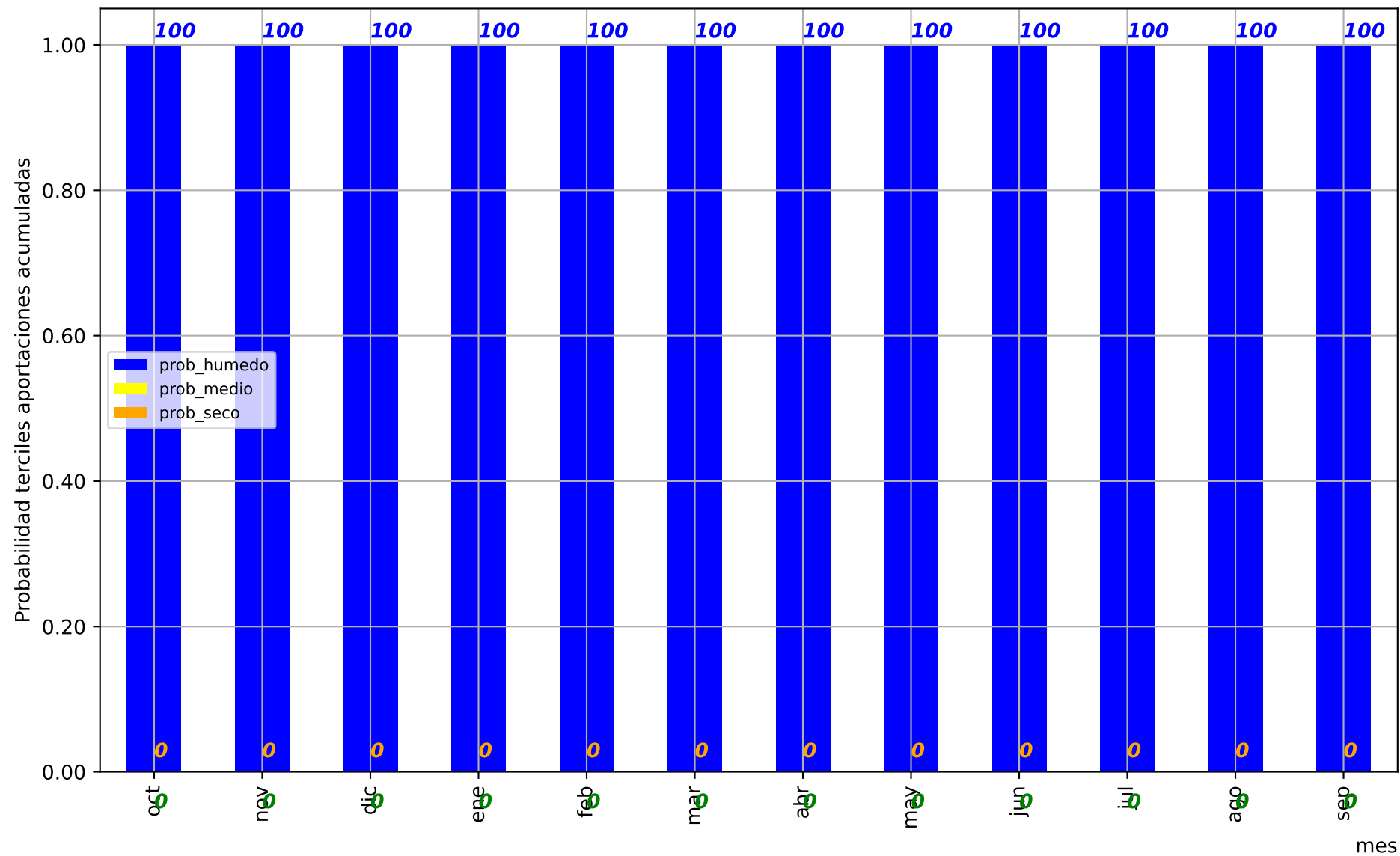
Variable analizada

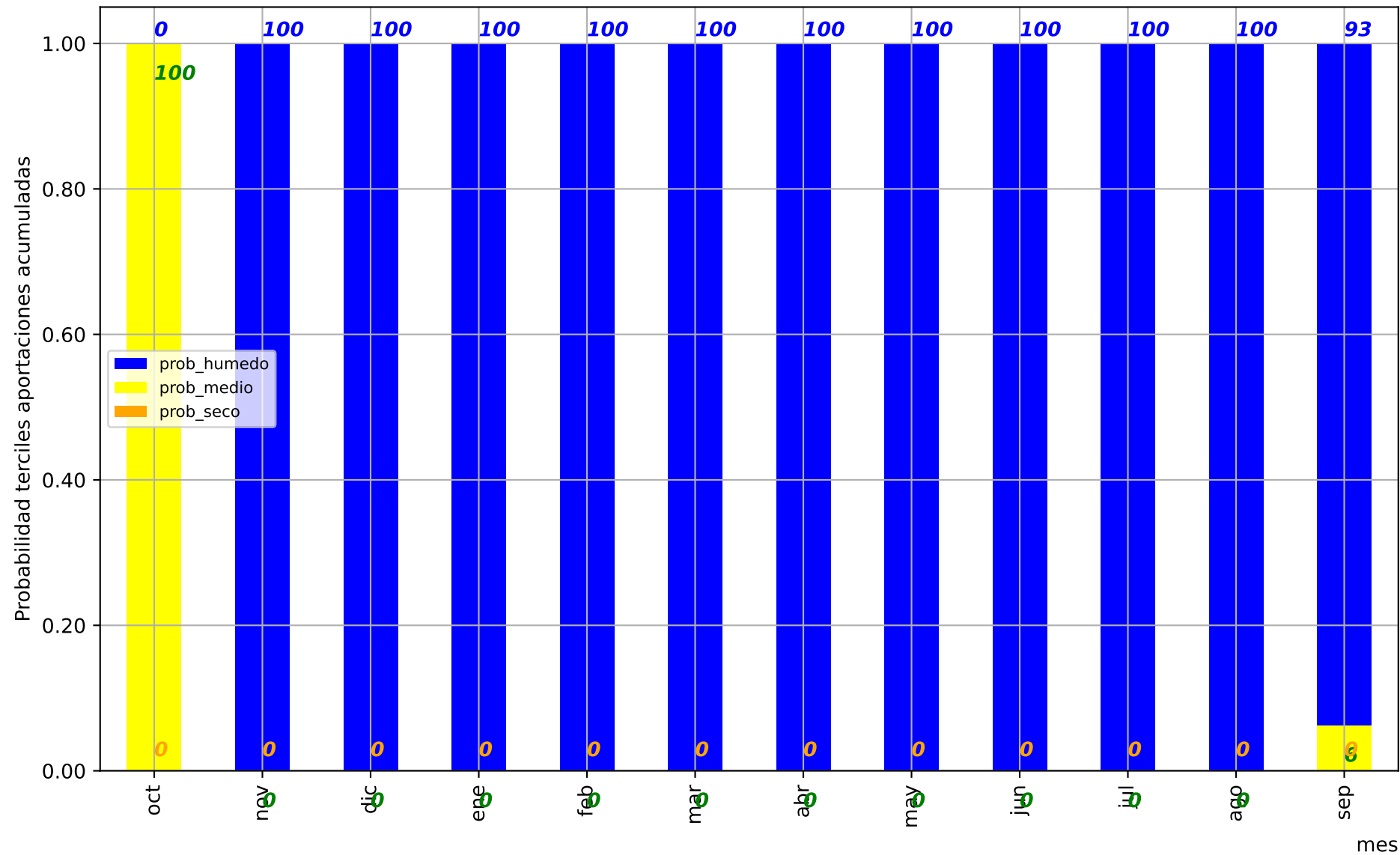
Aportaciones hidrológicas en régimen natural

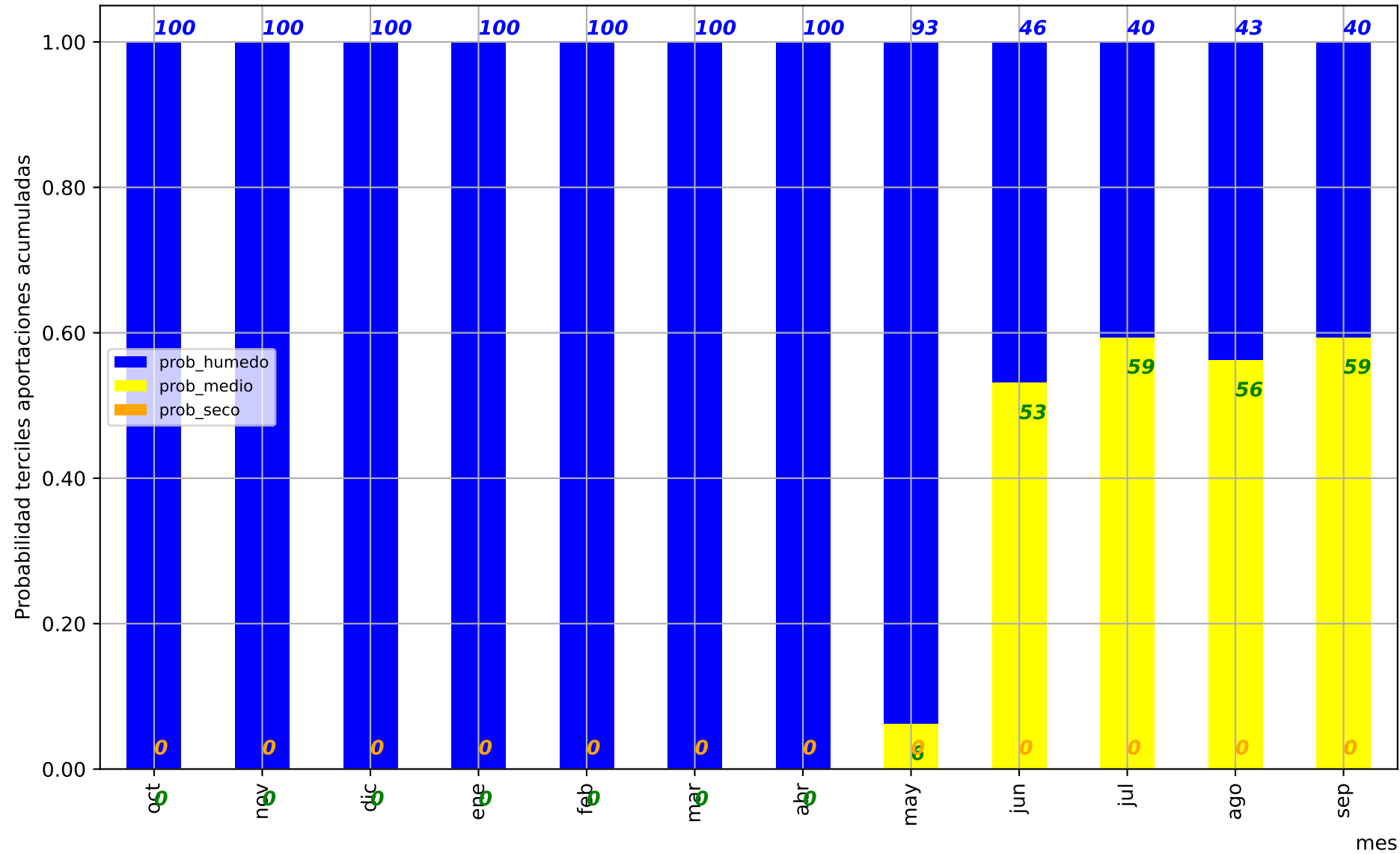
Predicción realizada en mayo 2023

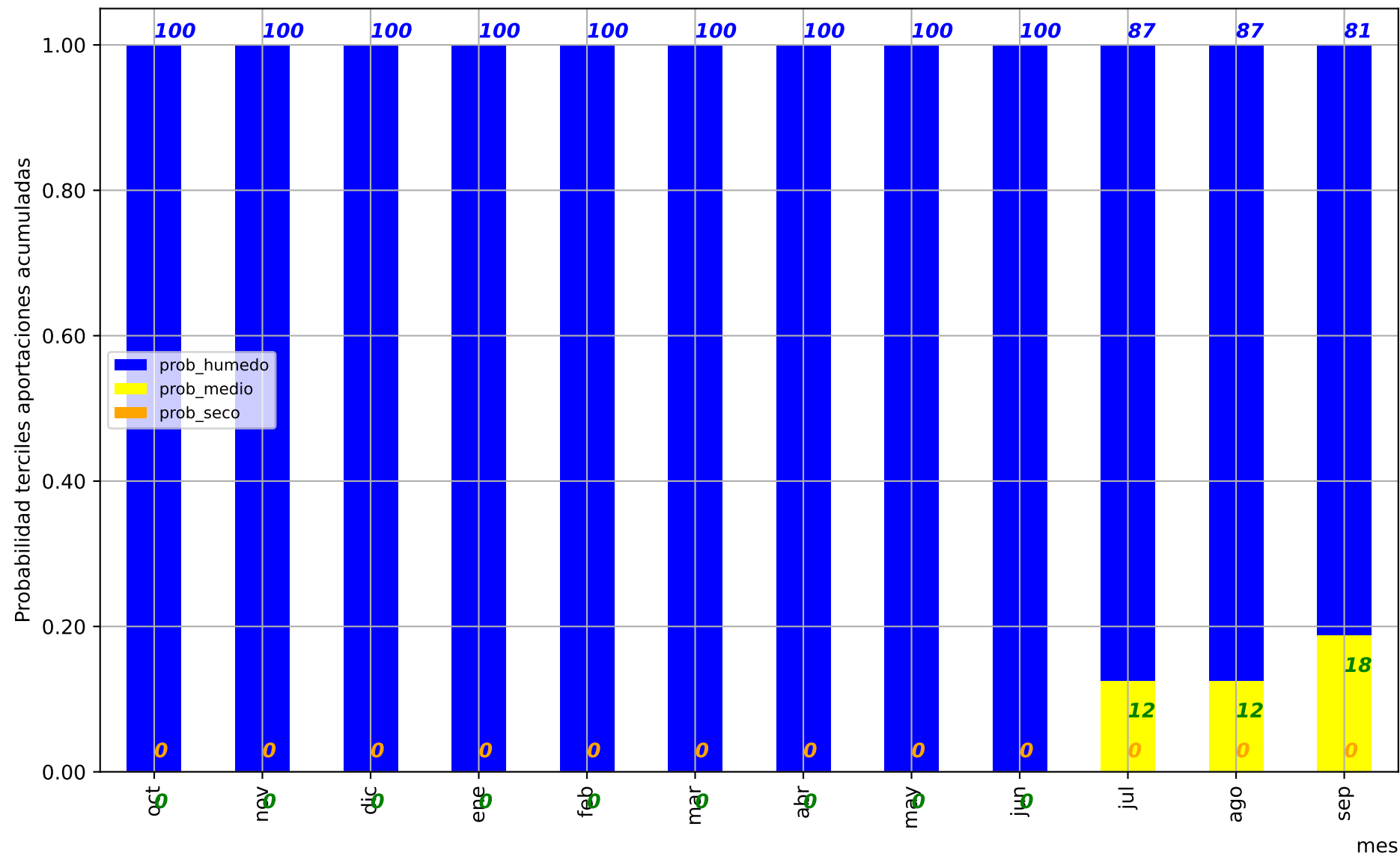
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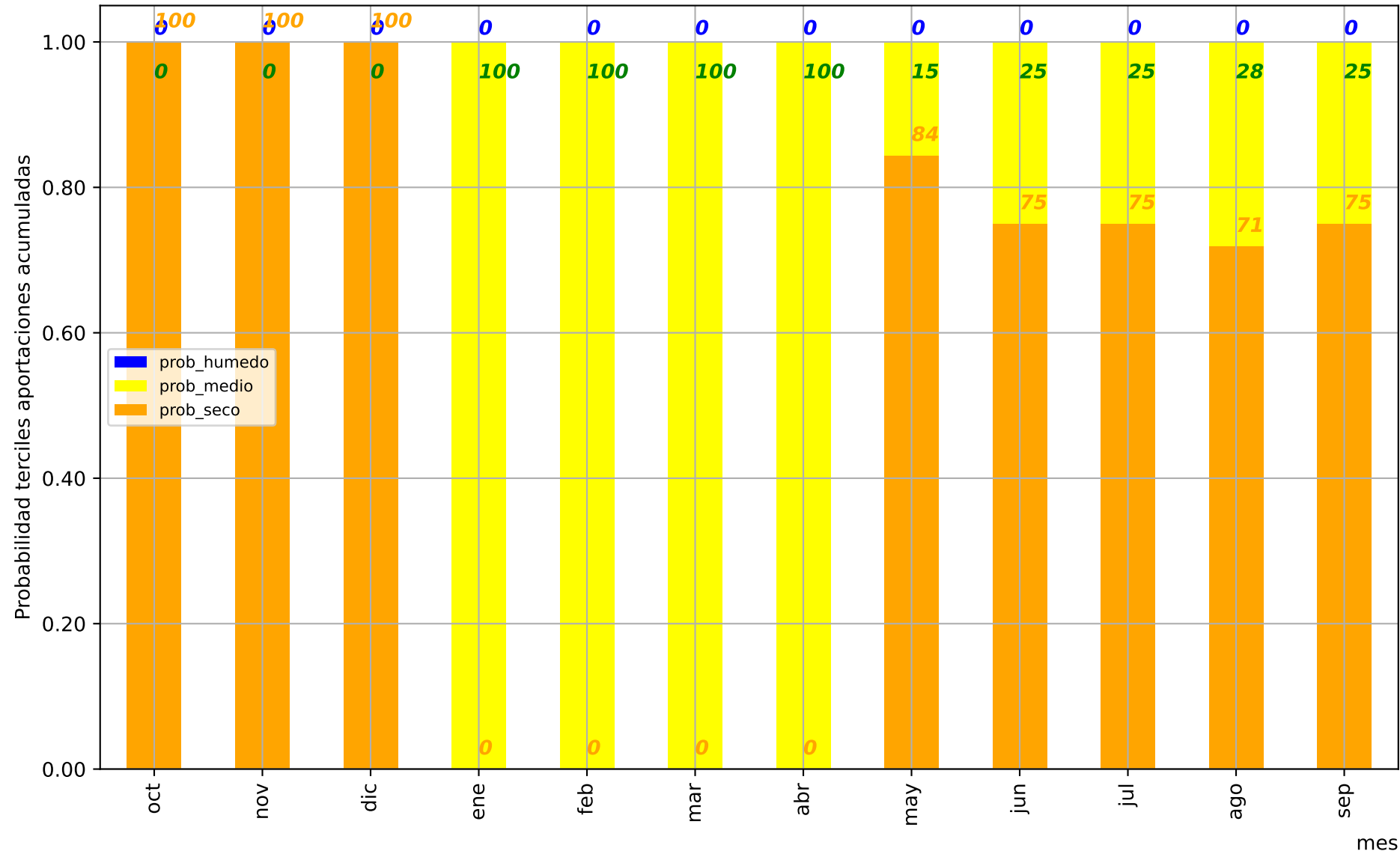


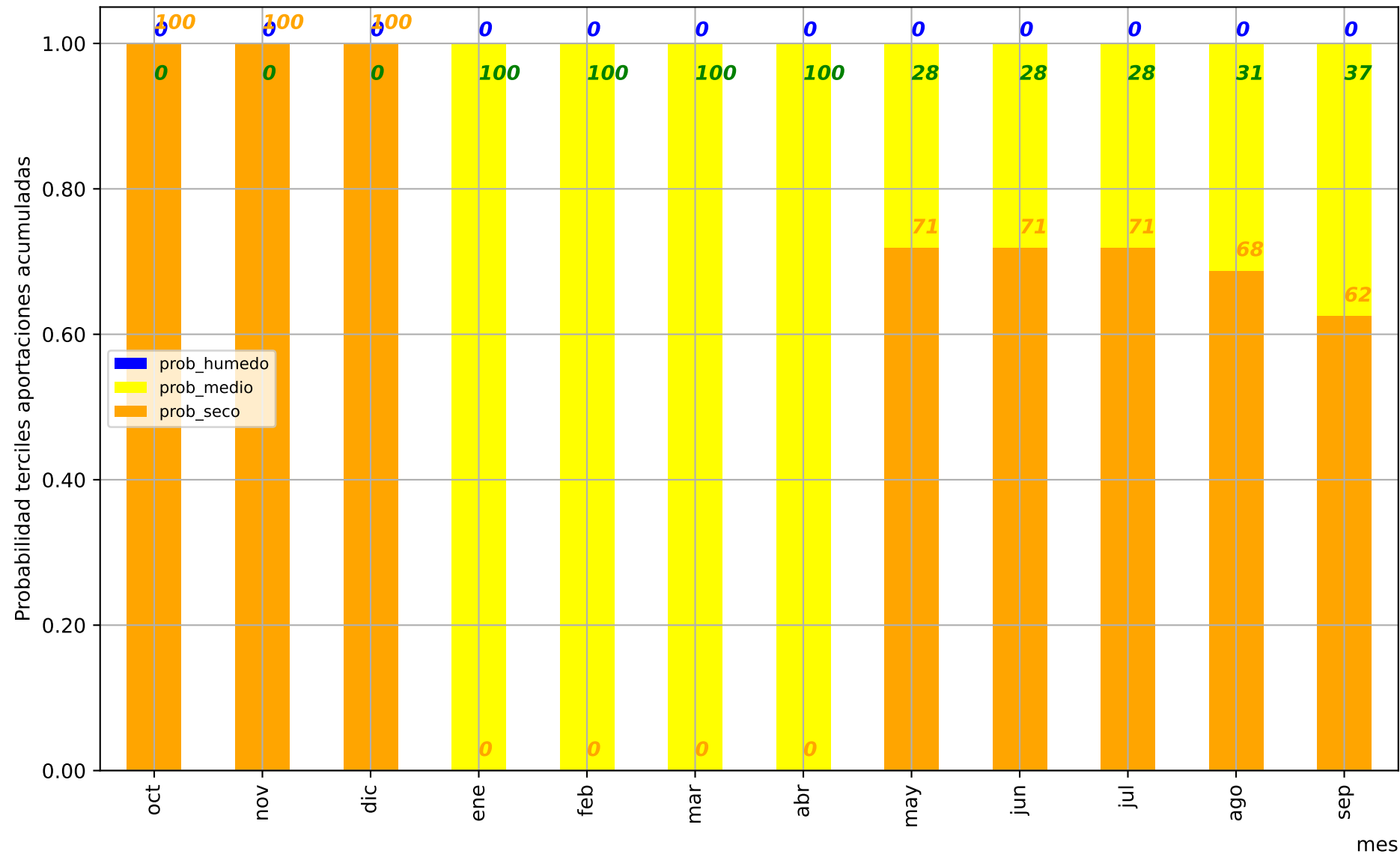




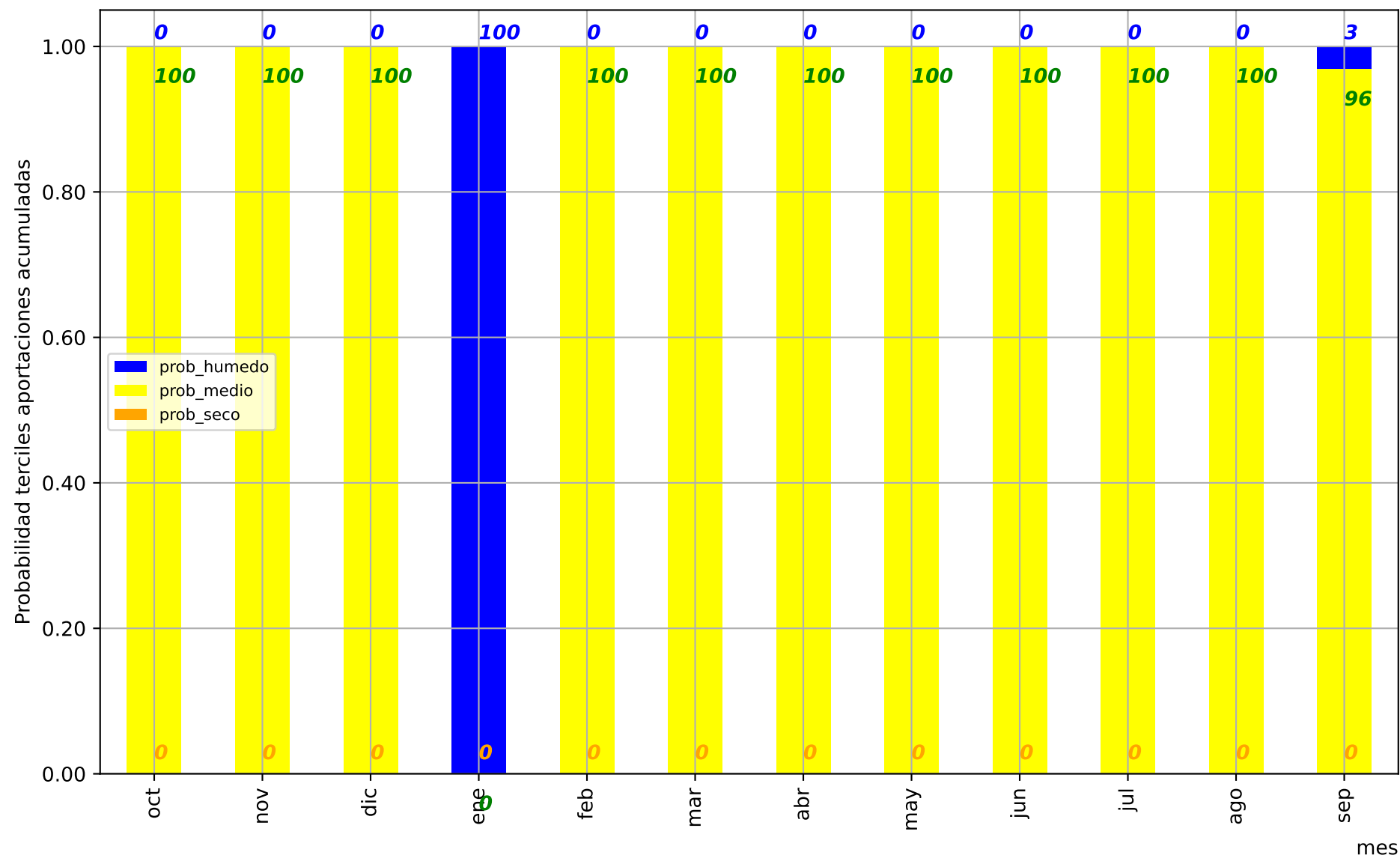
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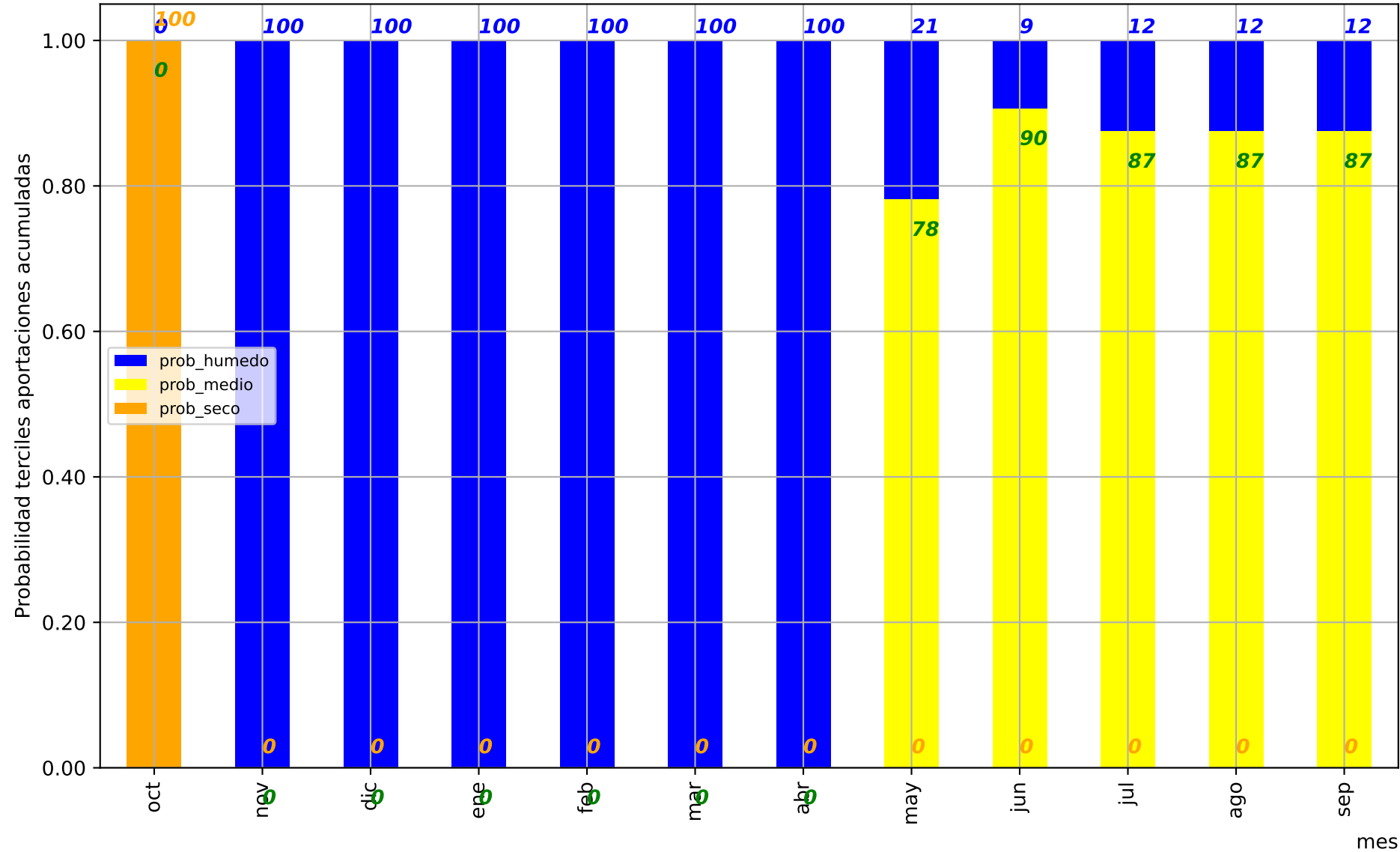
Río Deva (Cares) en desembocadura

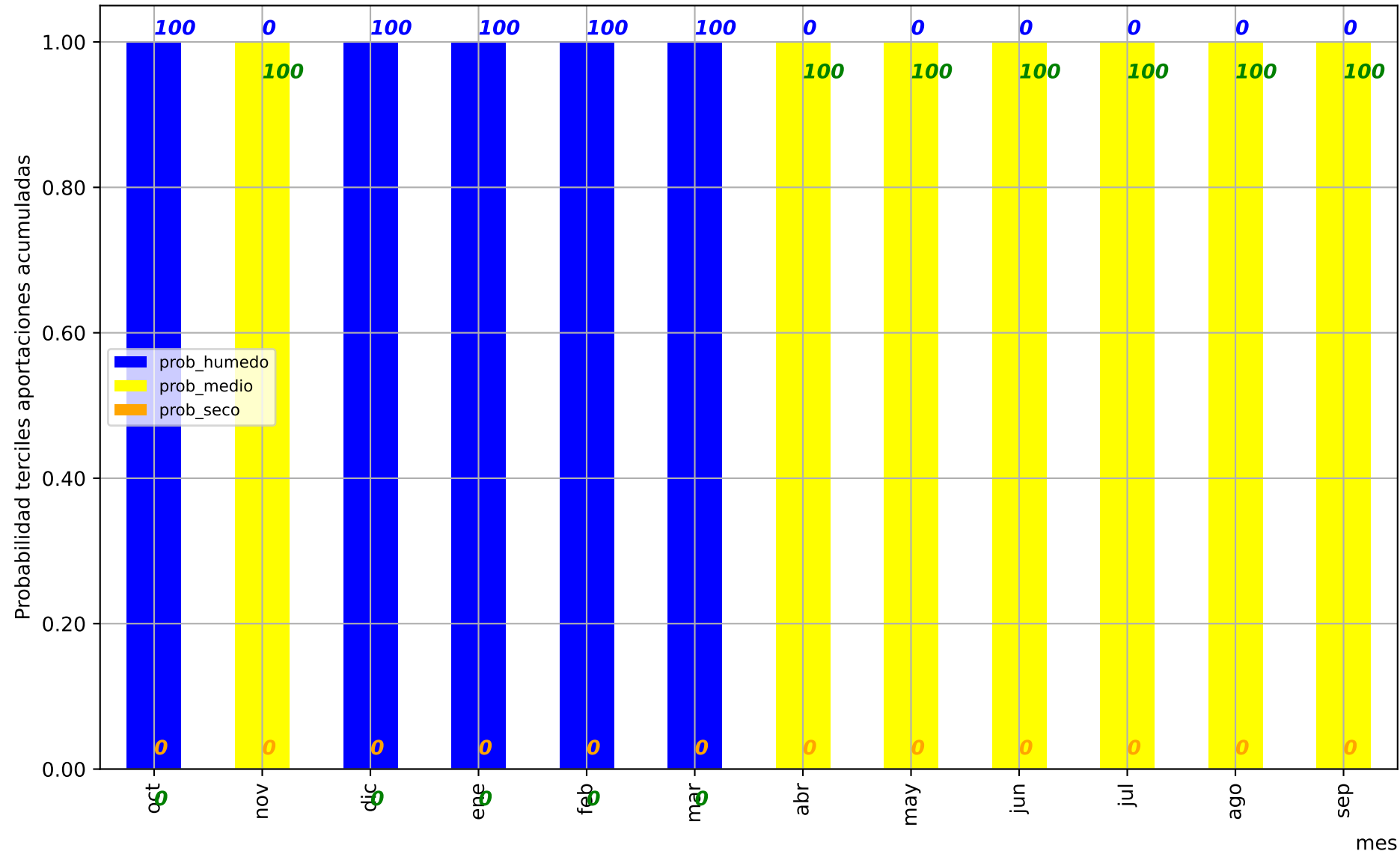


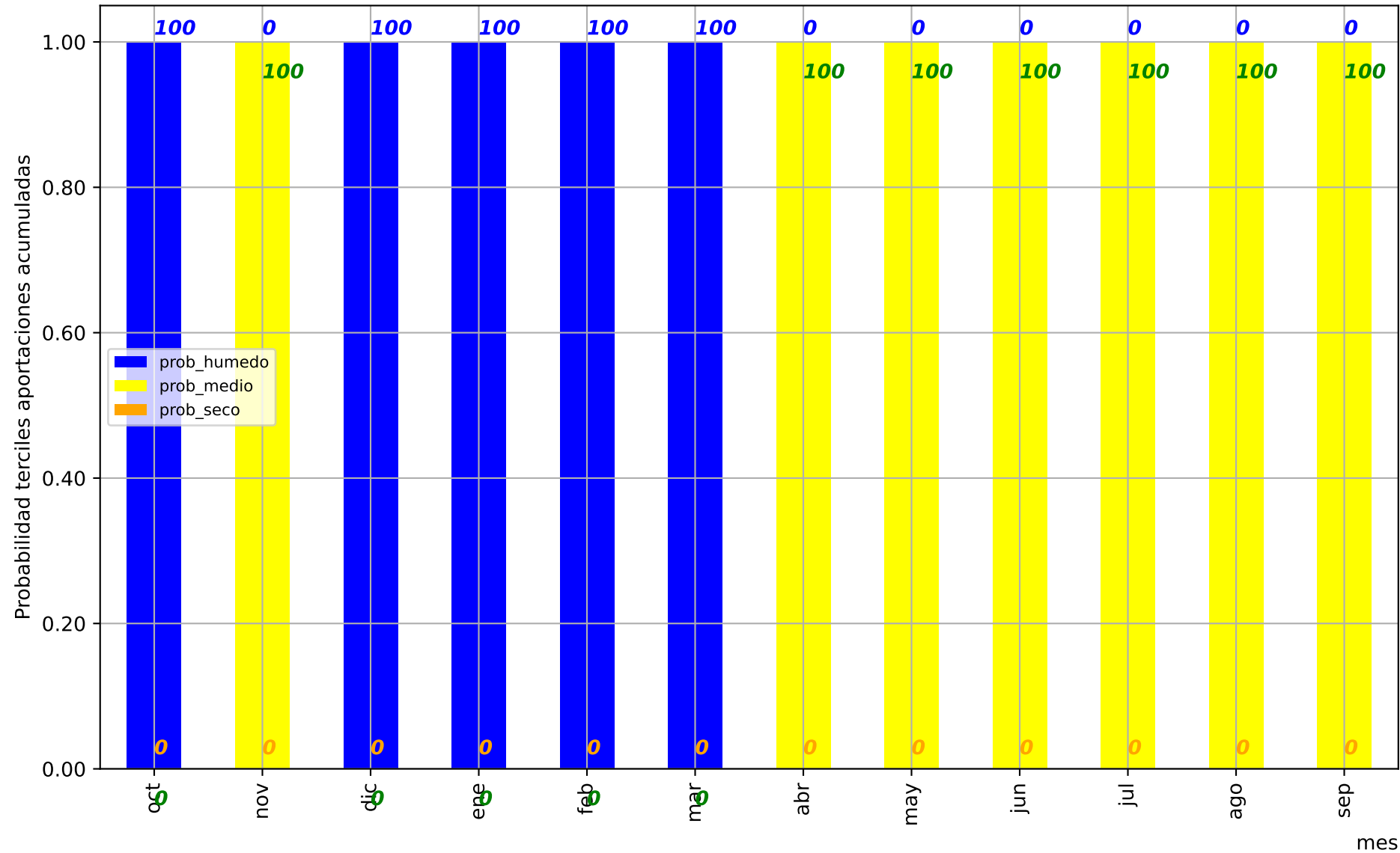


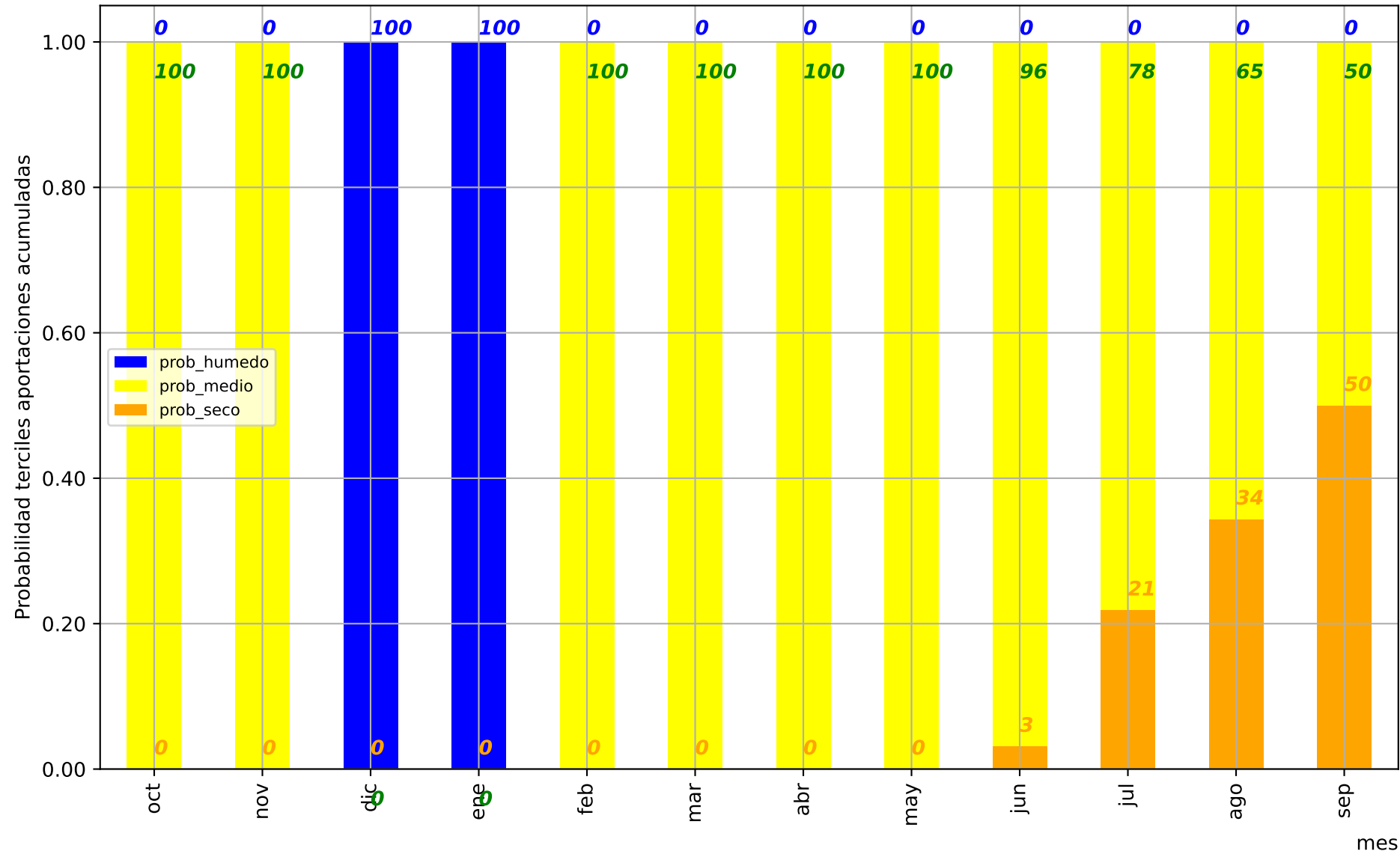


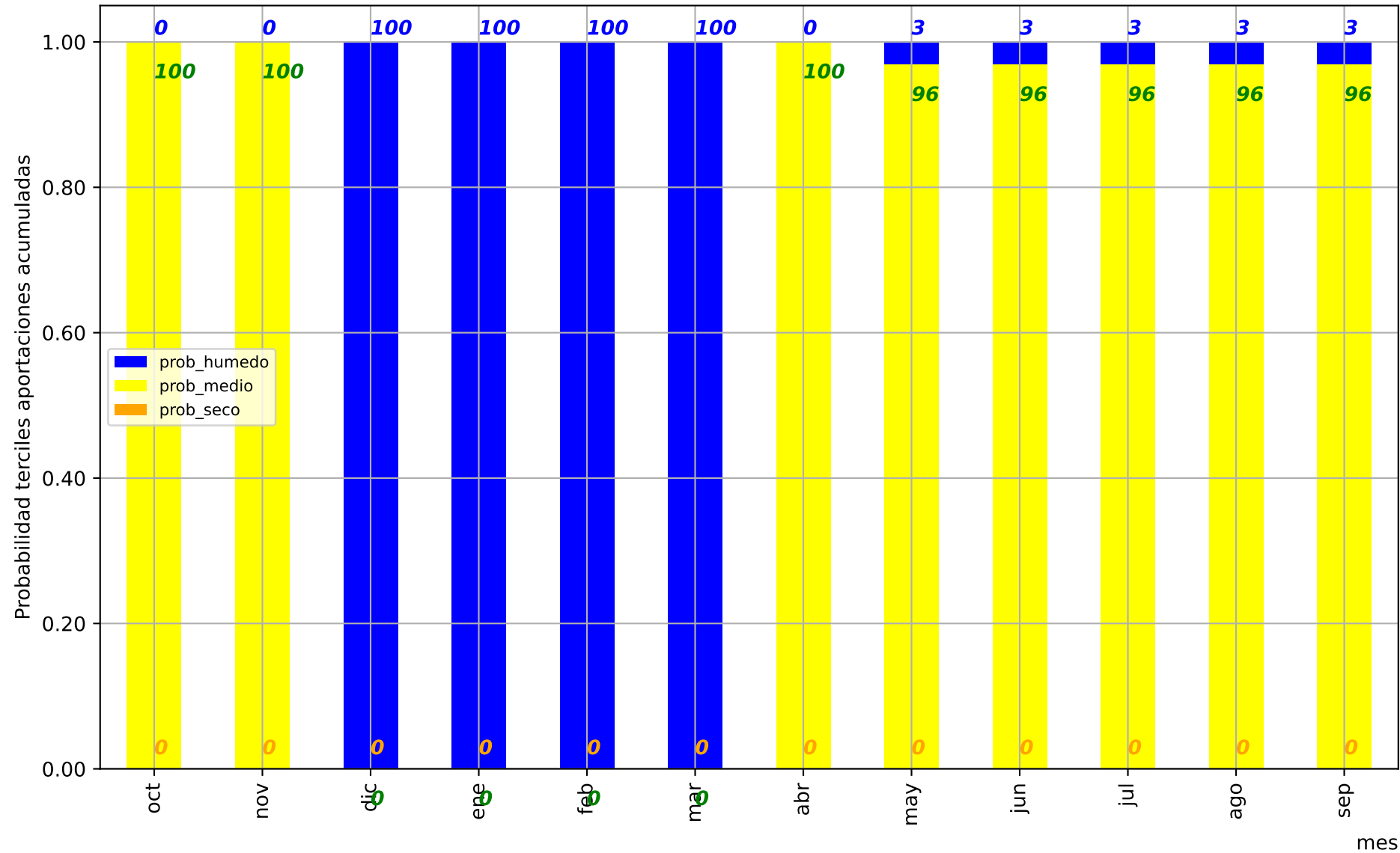


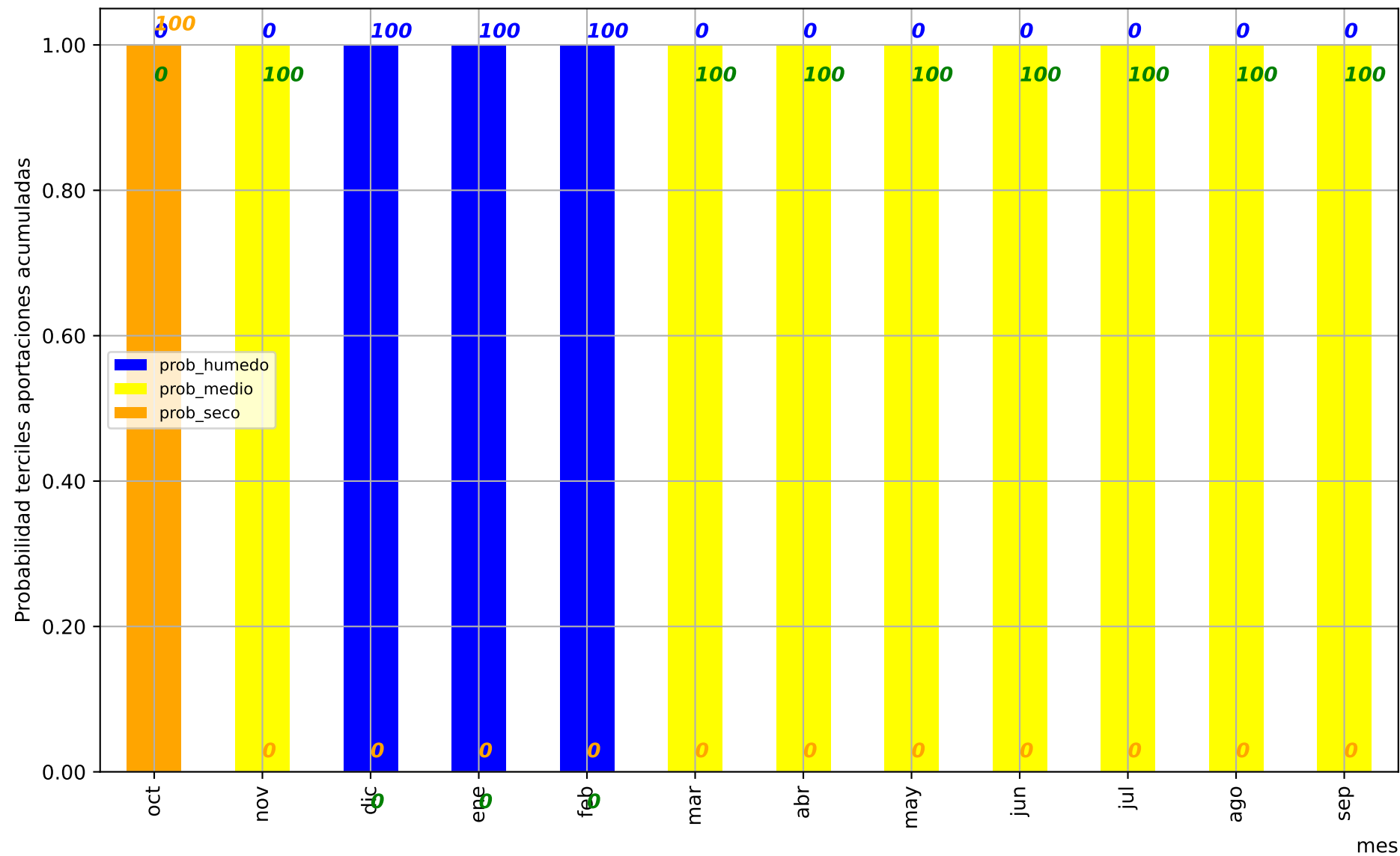






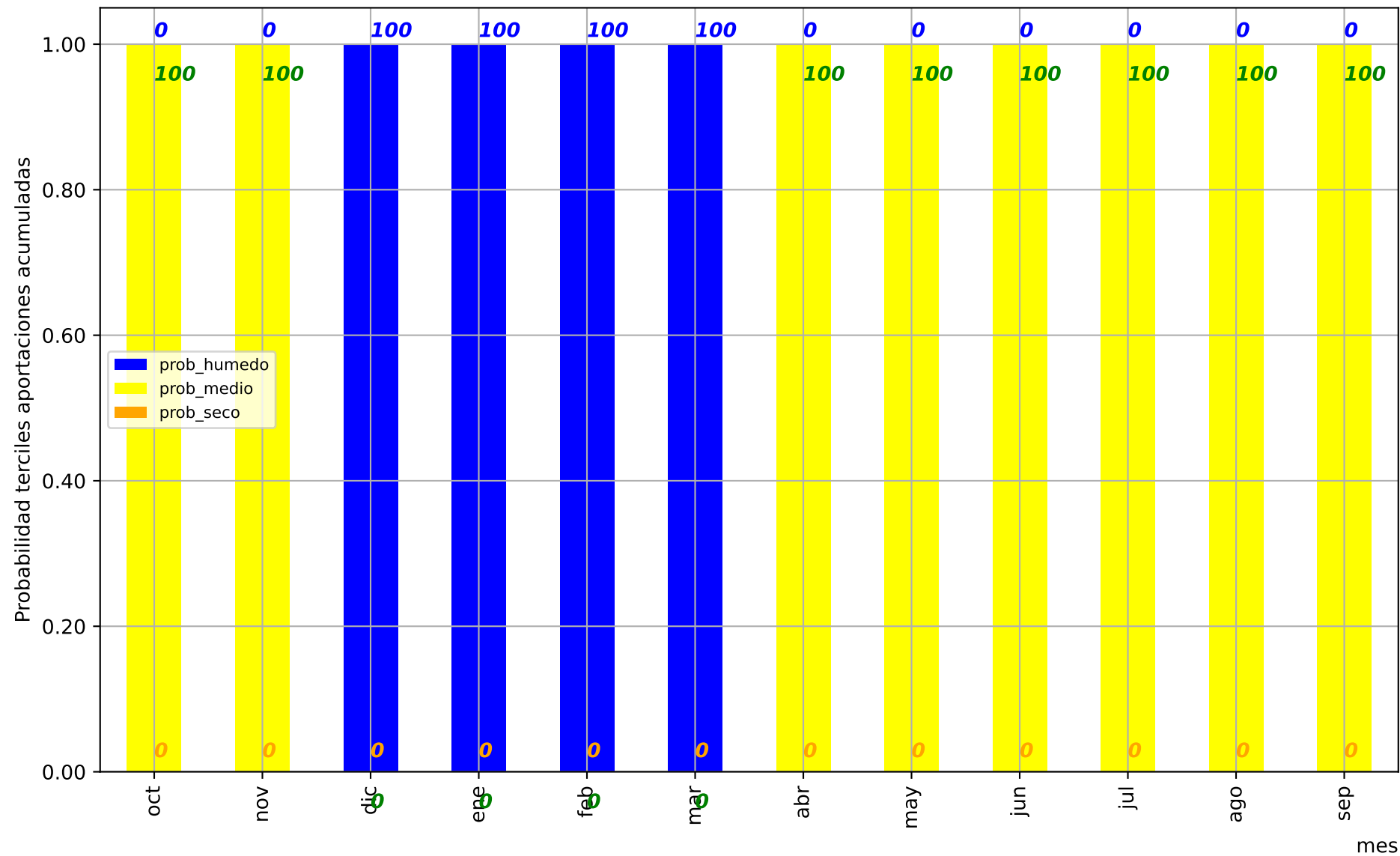


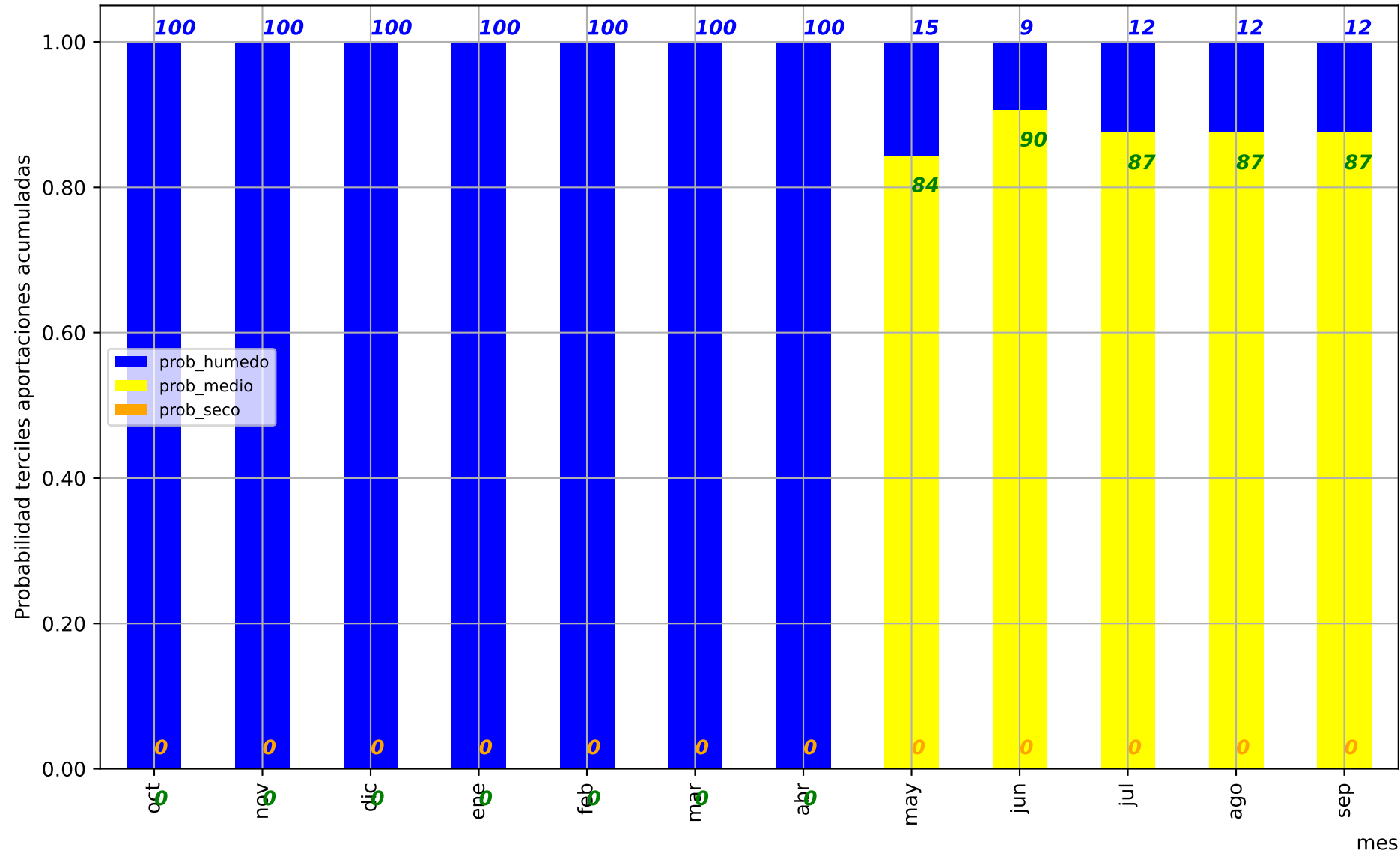


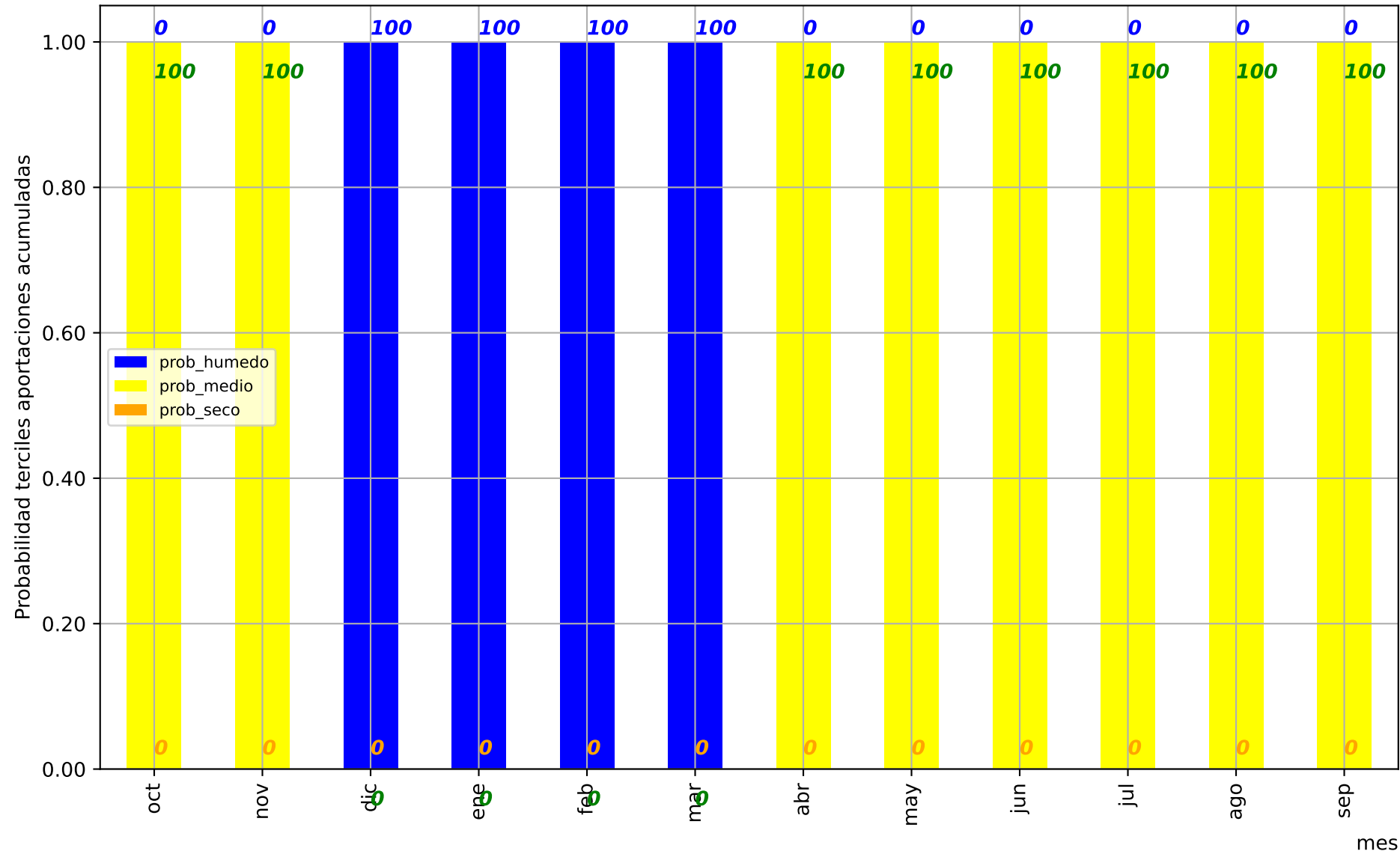


Predicción cuenca del:

Río Duero aguas arriba del Tormes (emb Castro, Villalcampo)

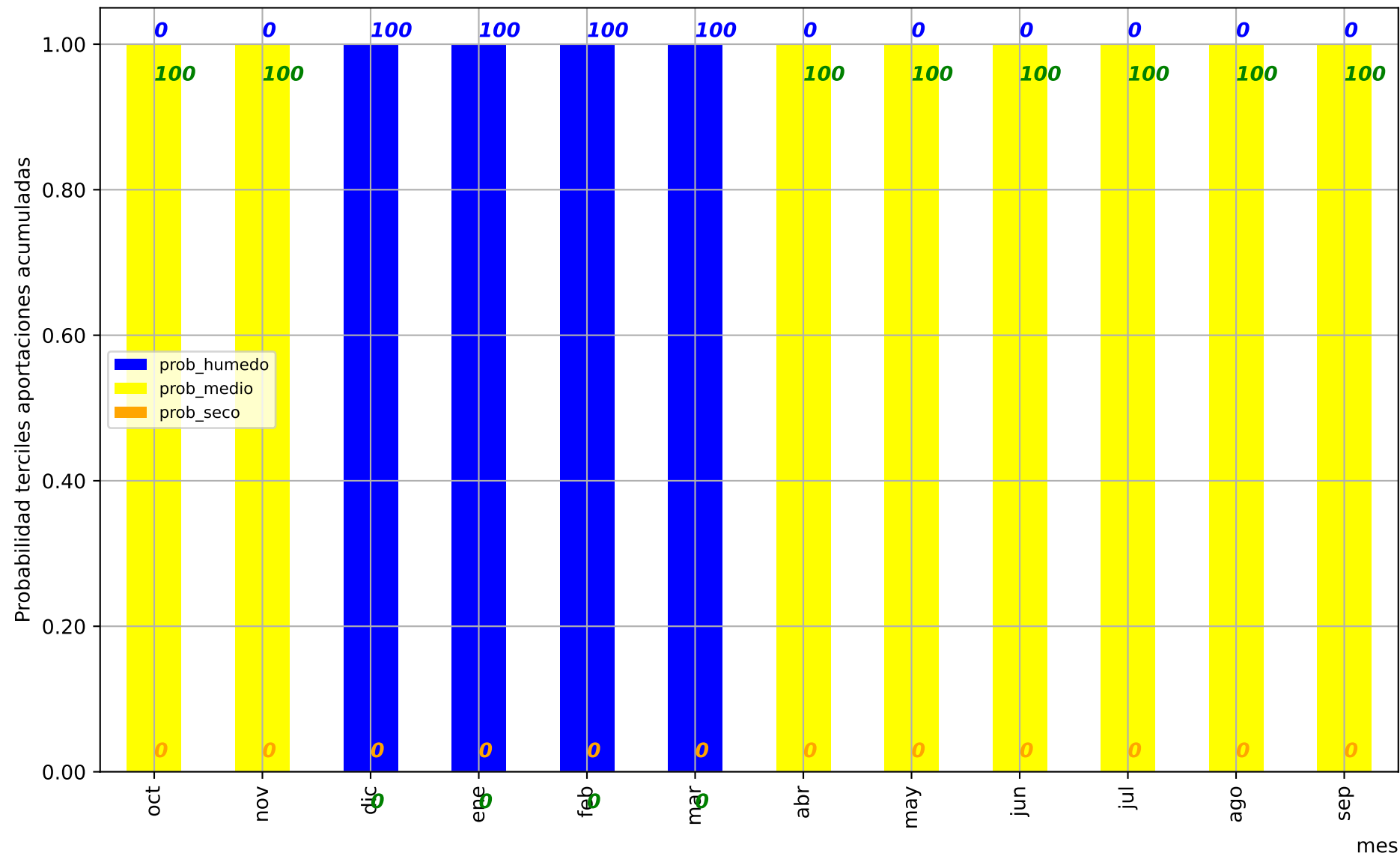


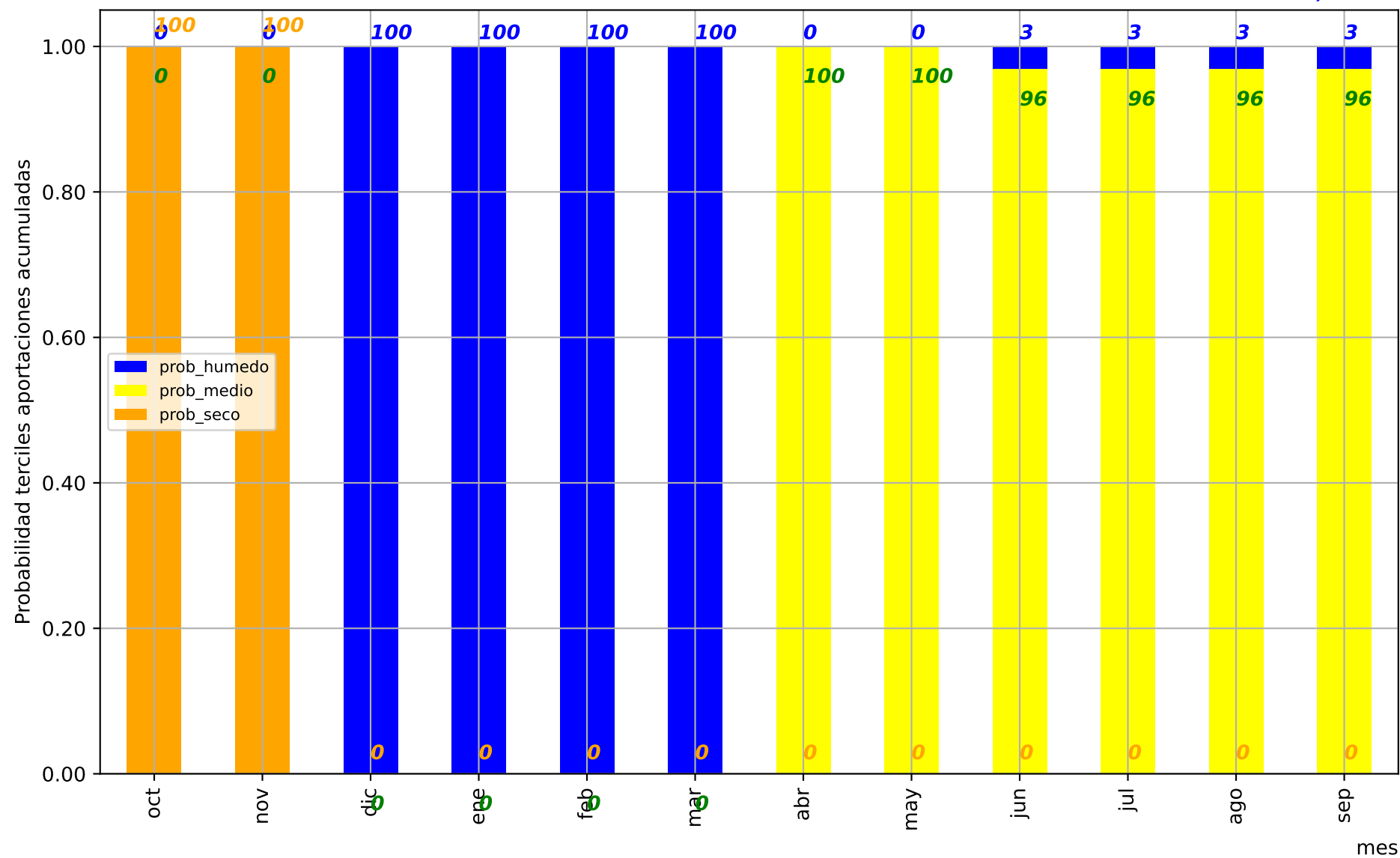


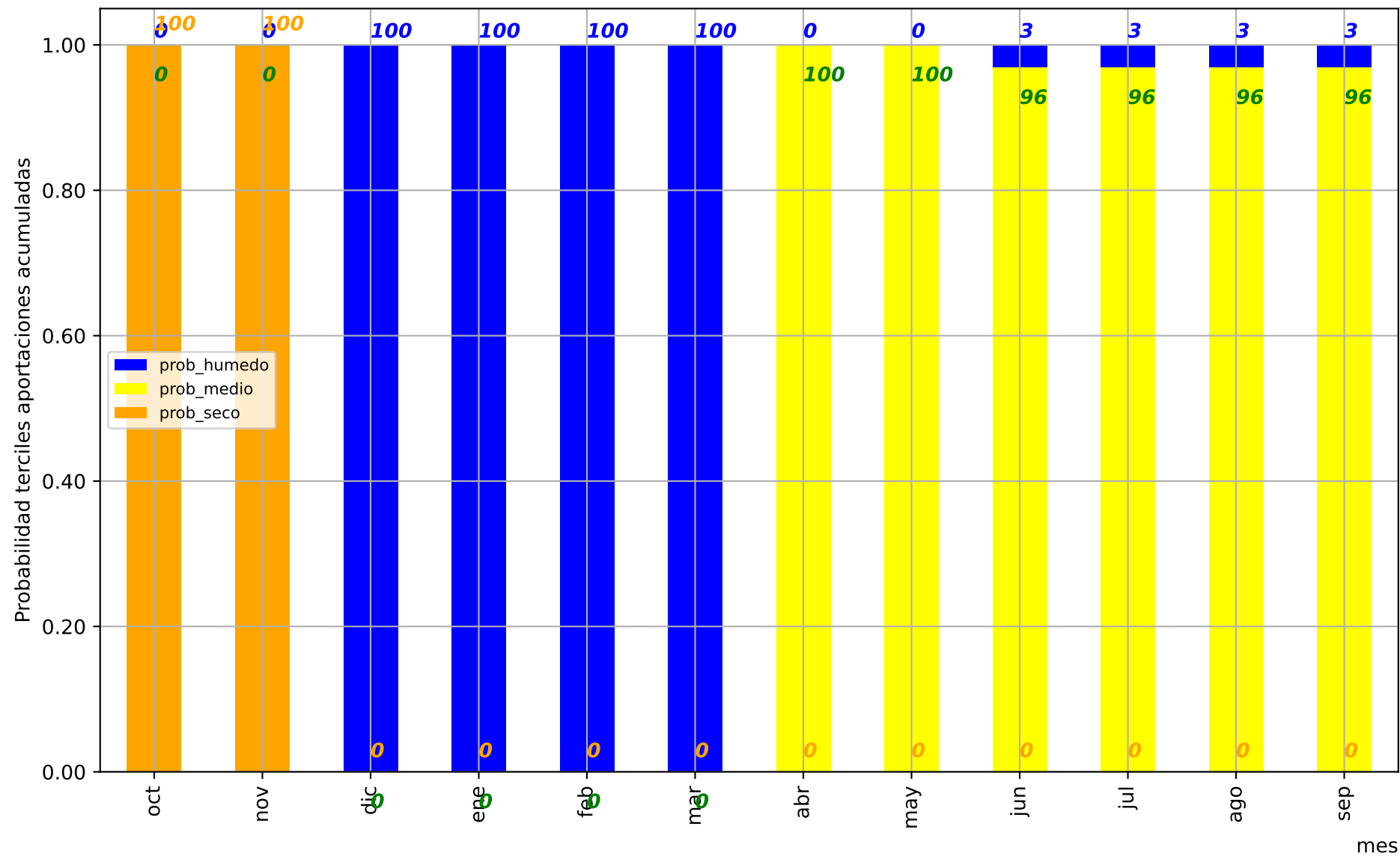


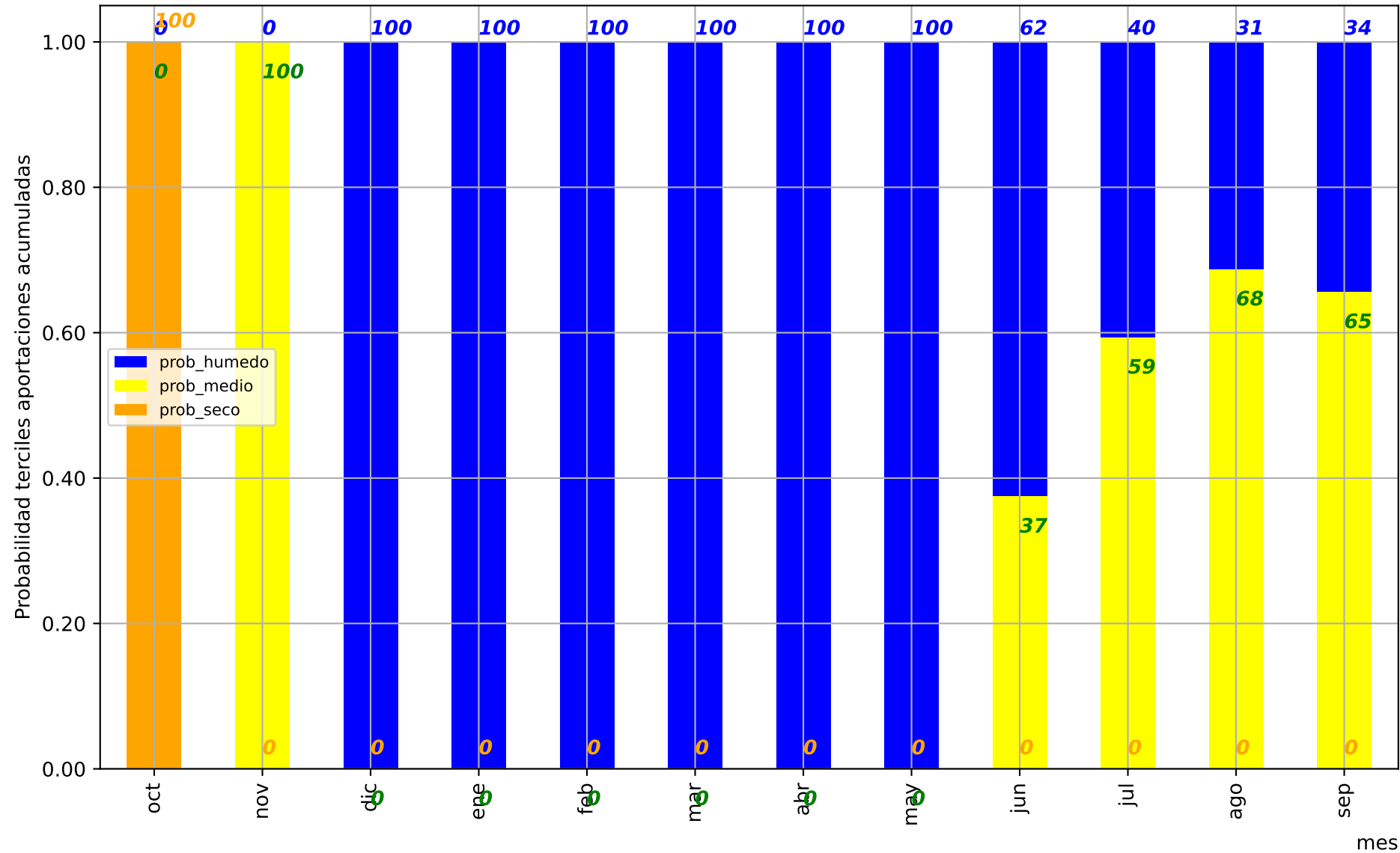
Predicción cuenca del:

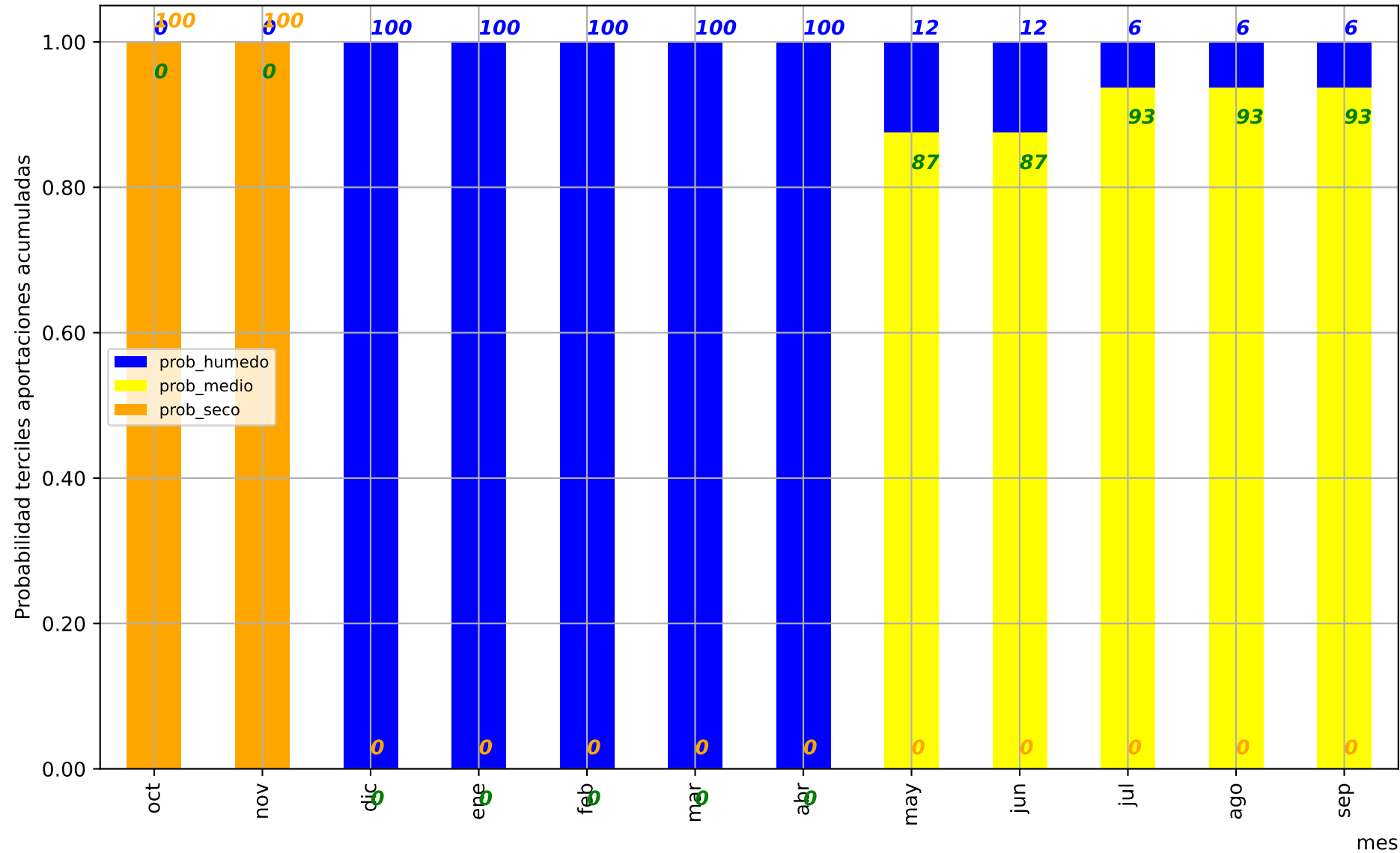
Río Duero en la frontera (San Martín)

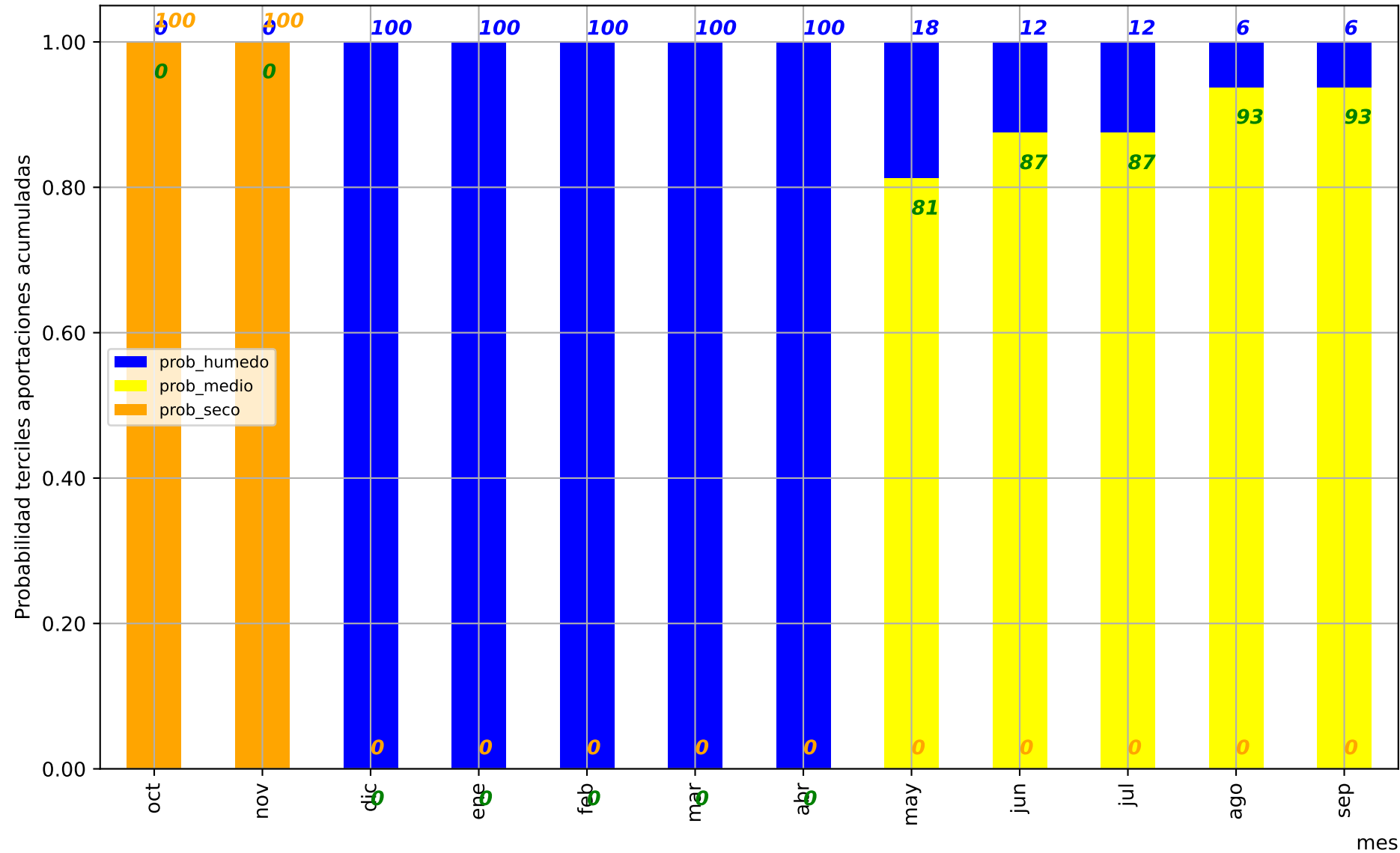


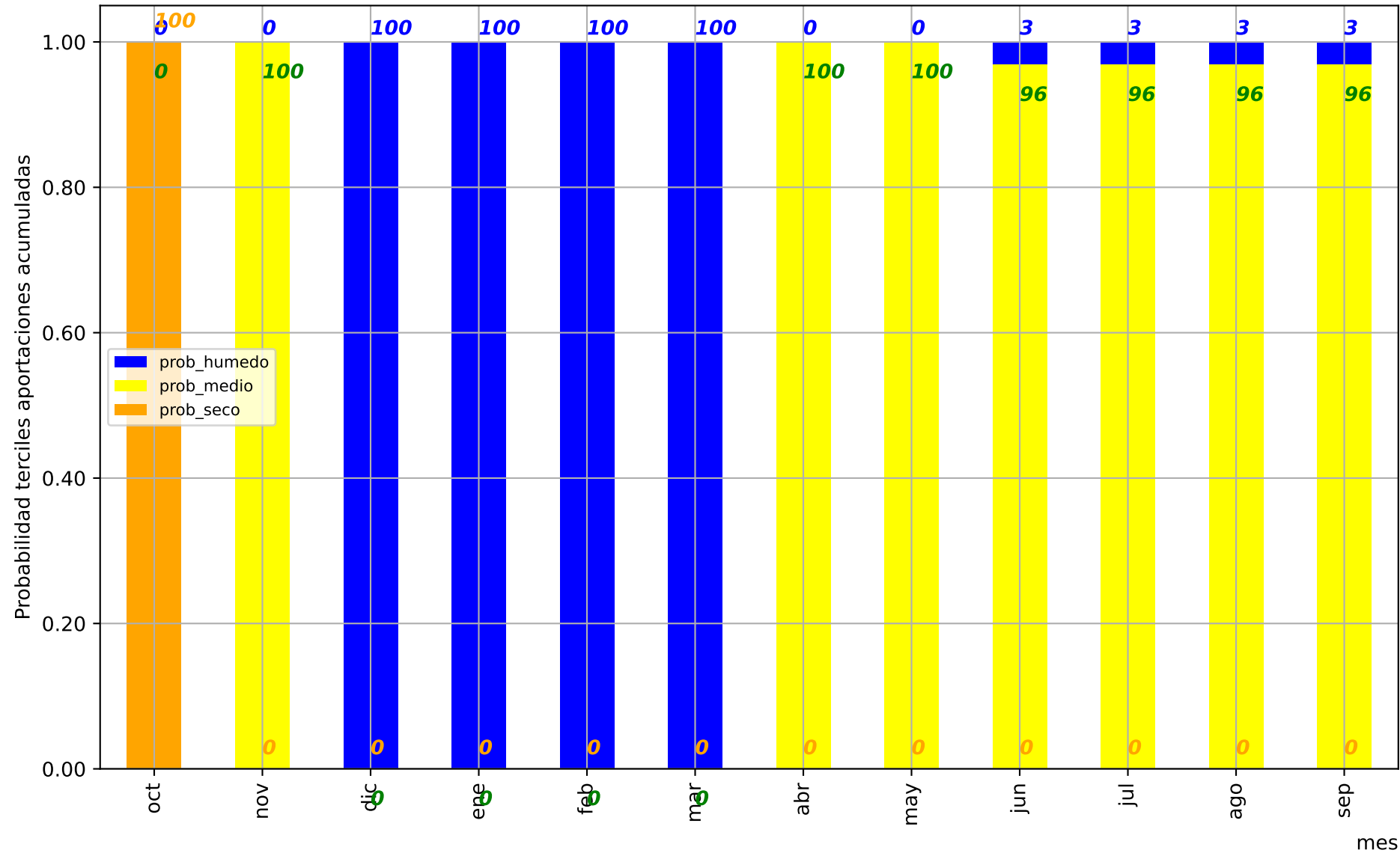


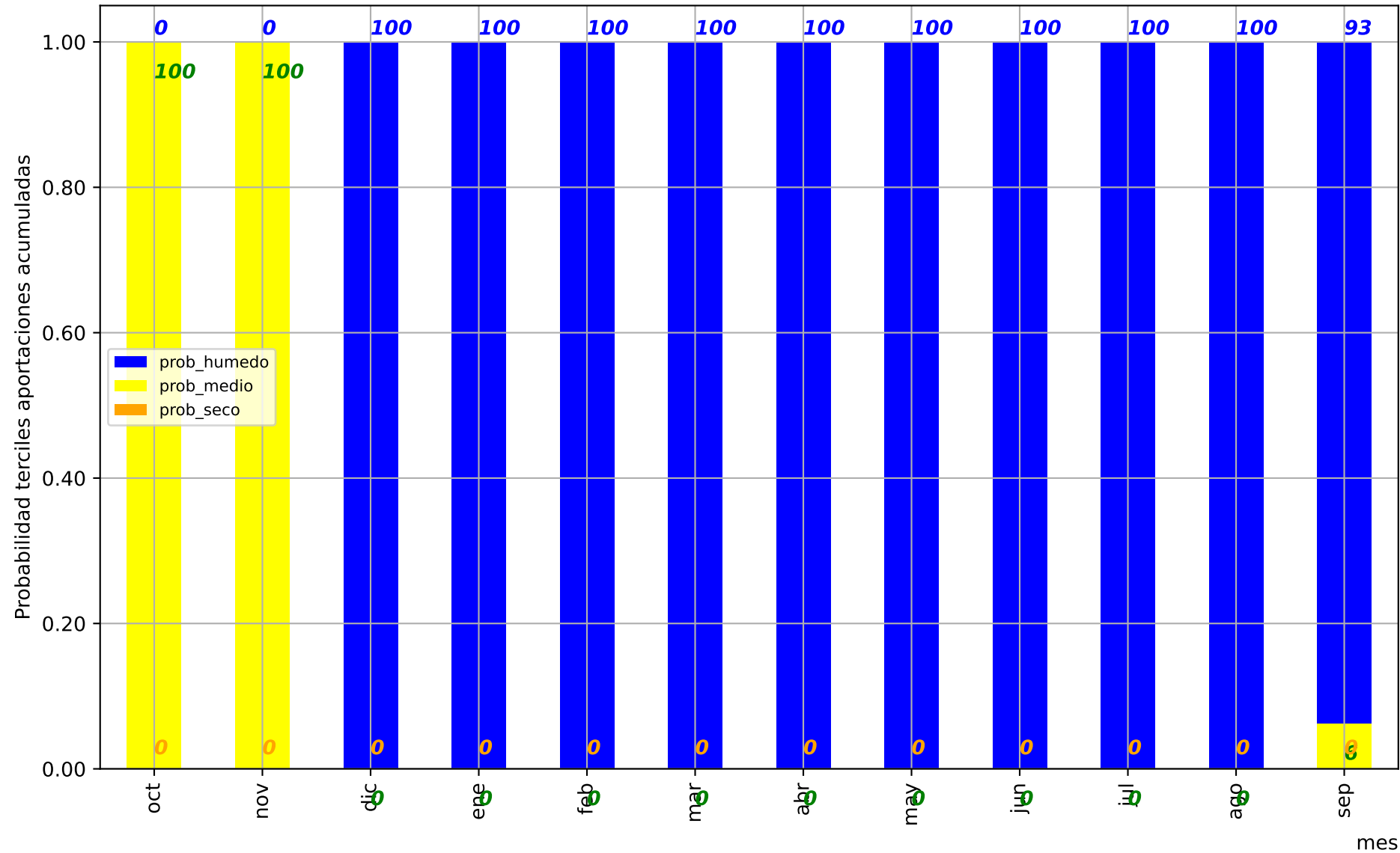


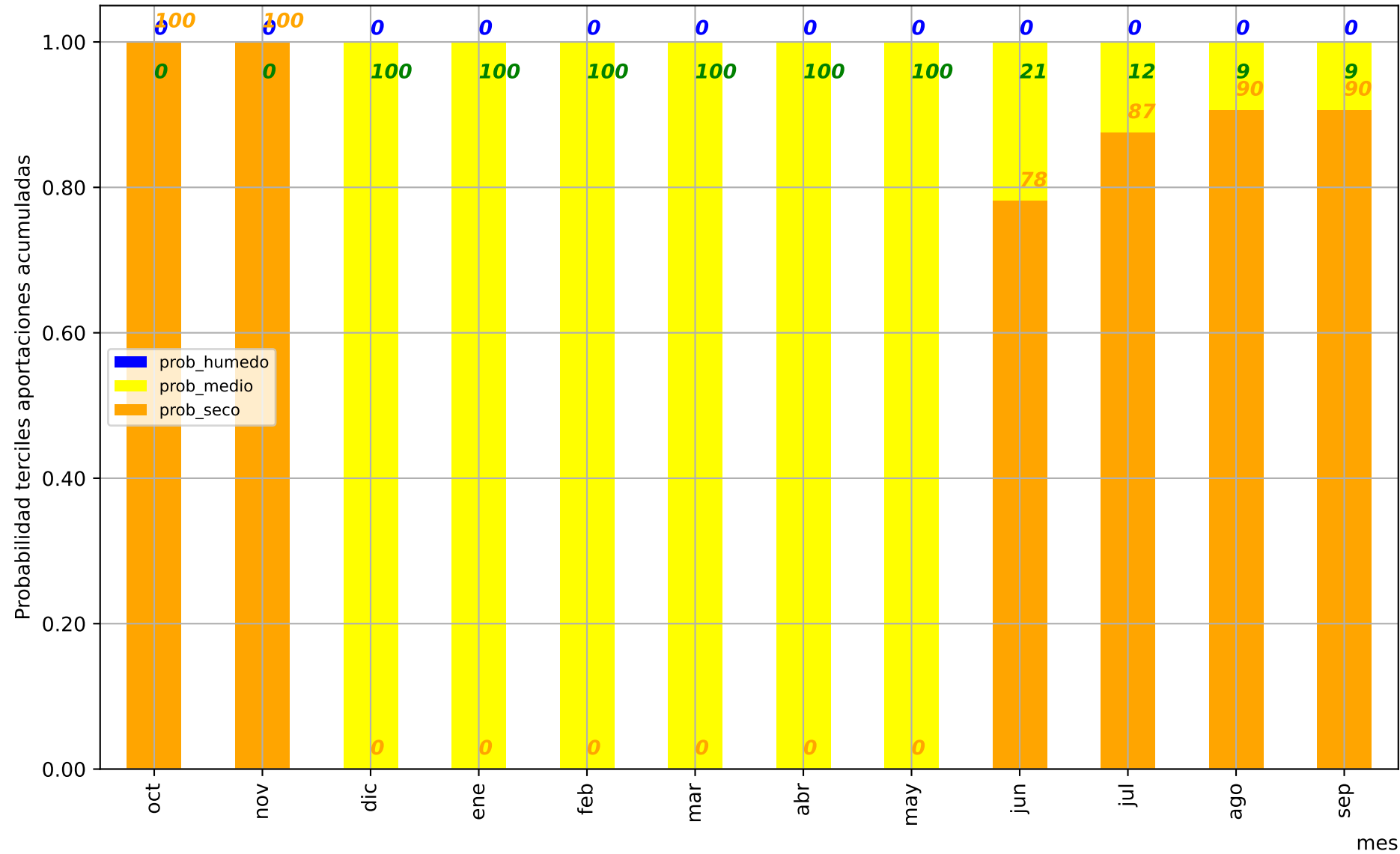


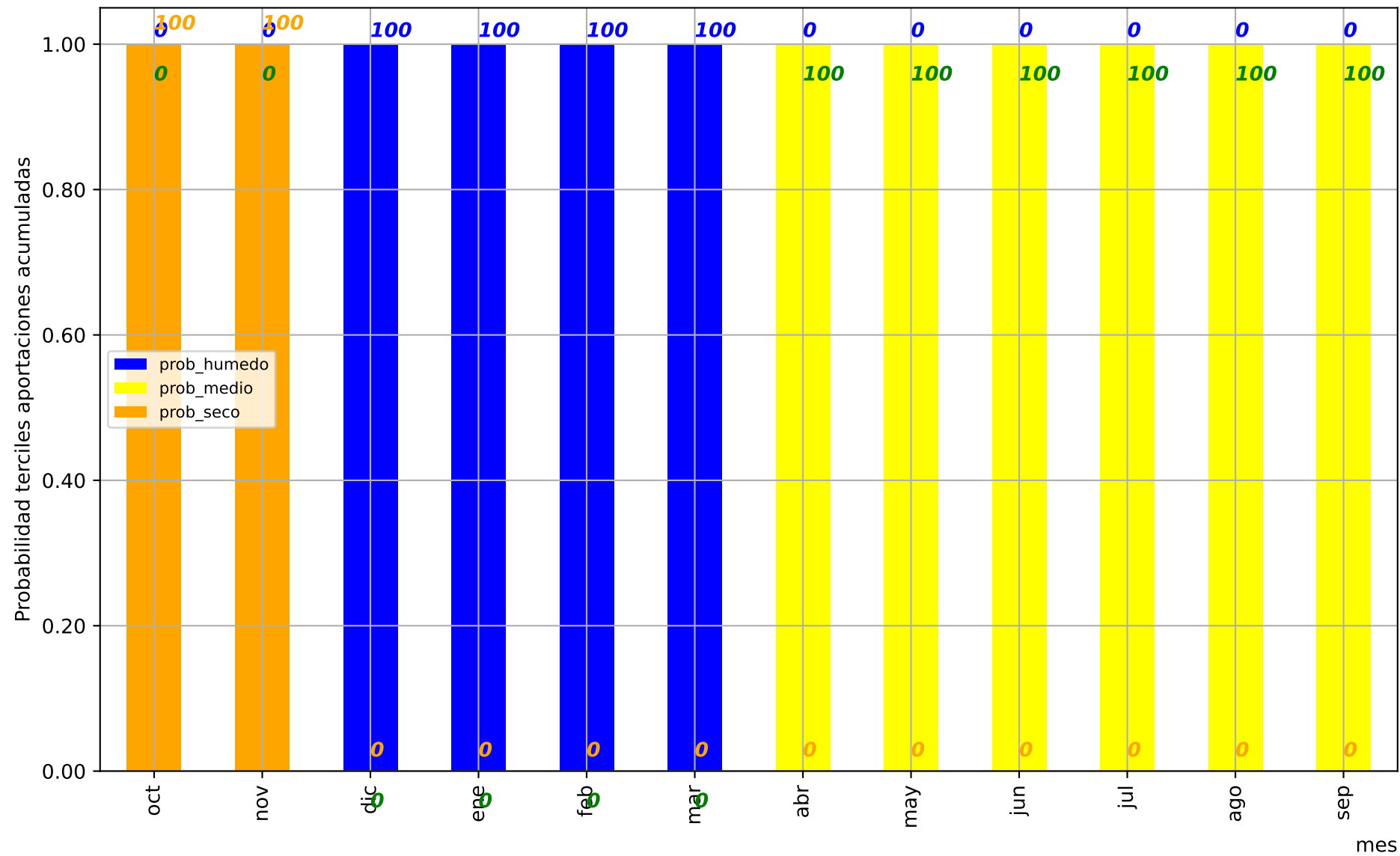


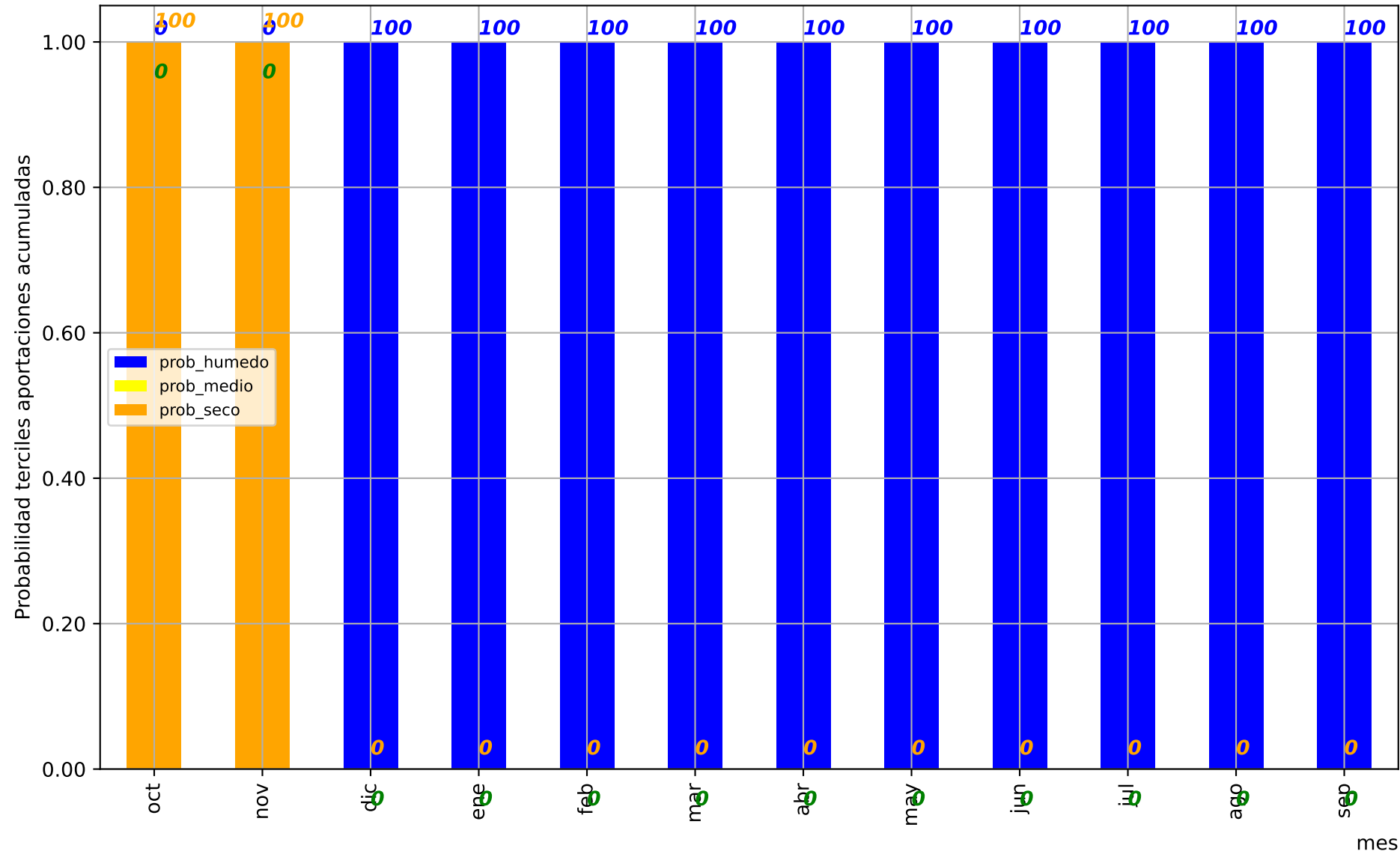


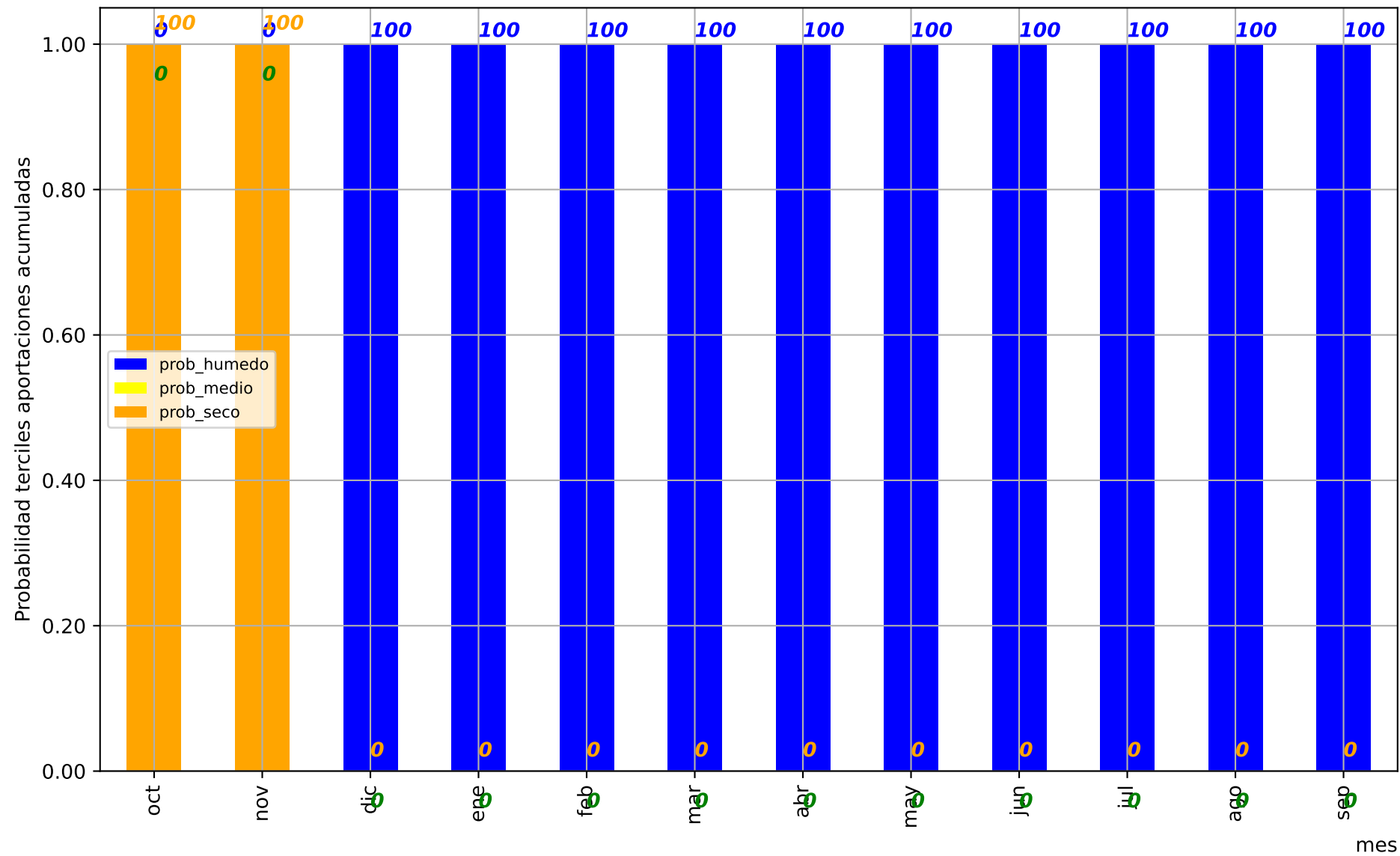


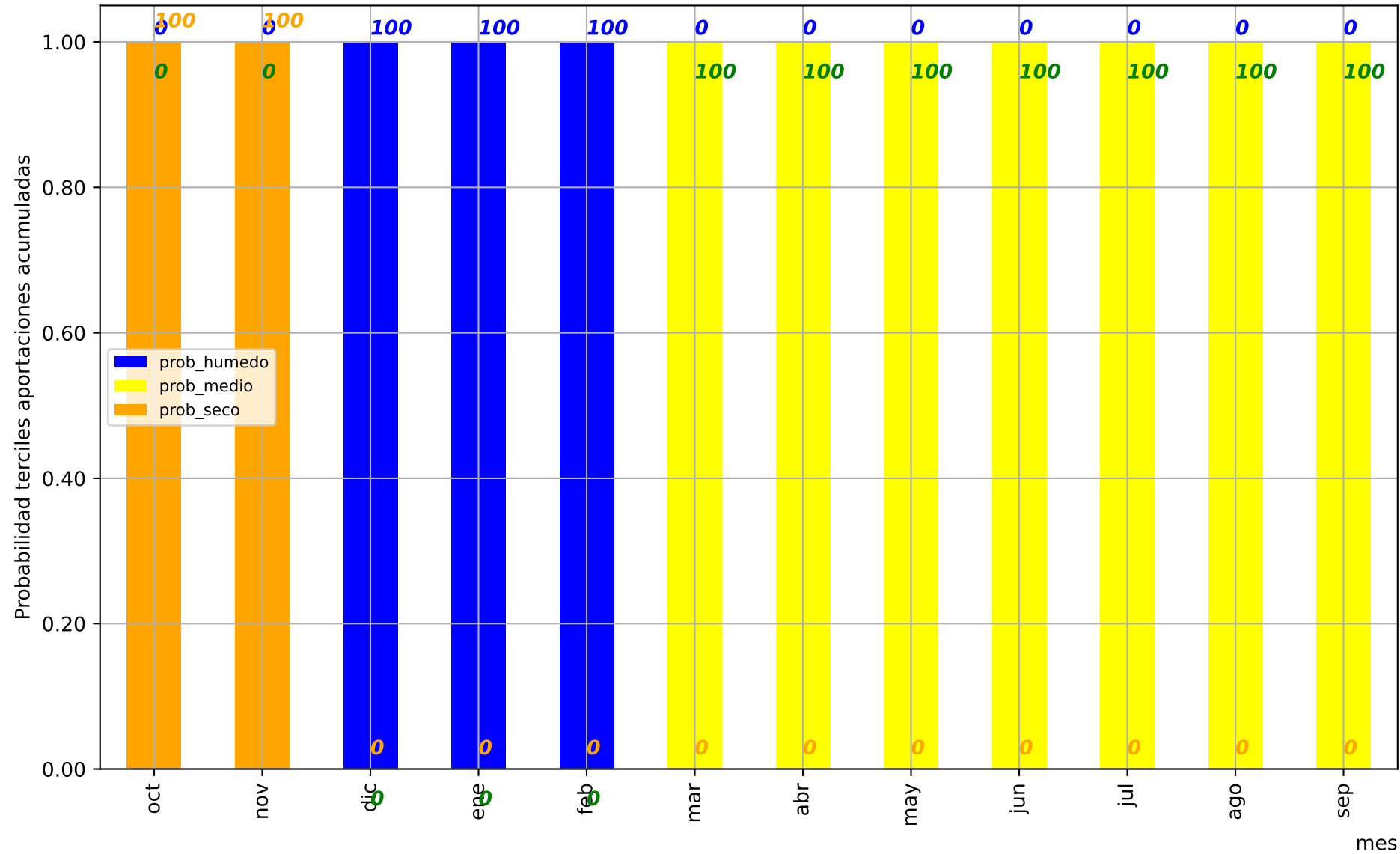












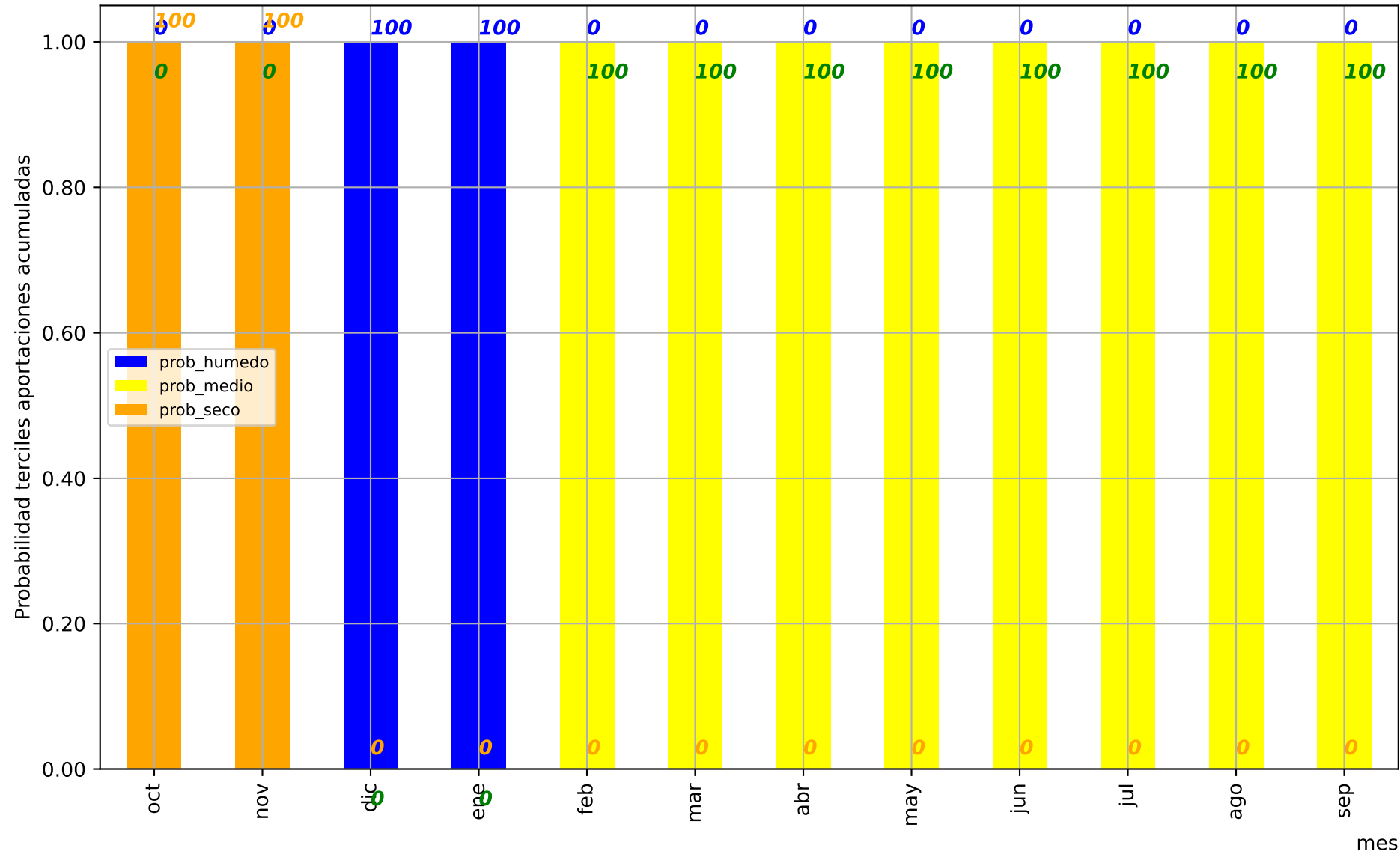
Predicción cuenca del:

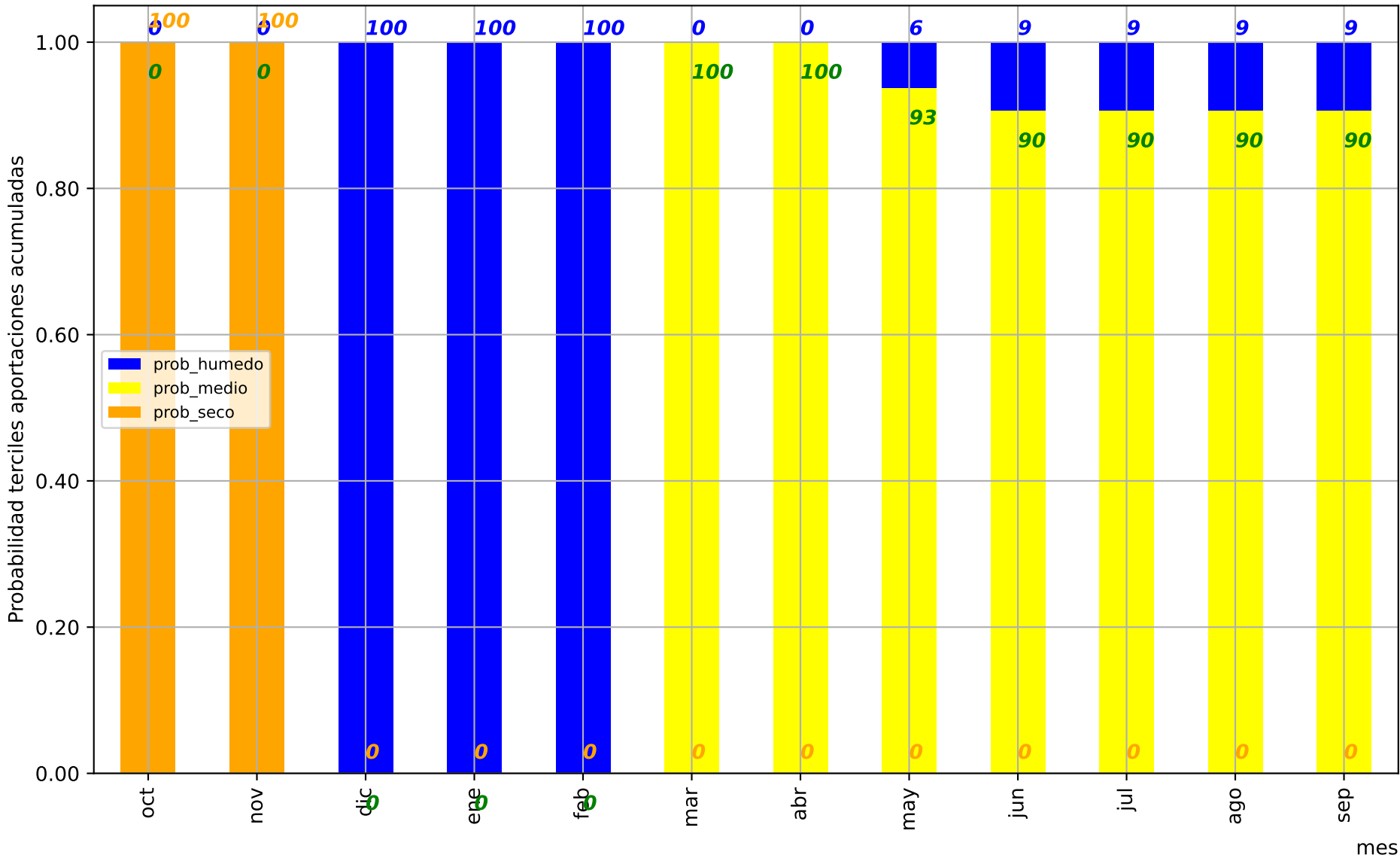
Río Guadiana Menor desembocadura en el Guadalquivir

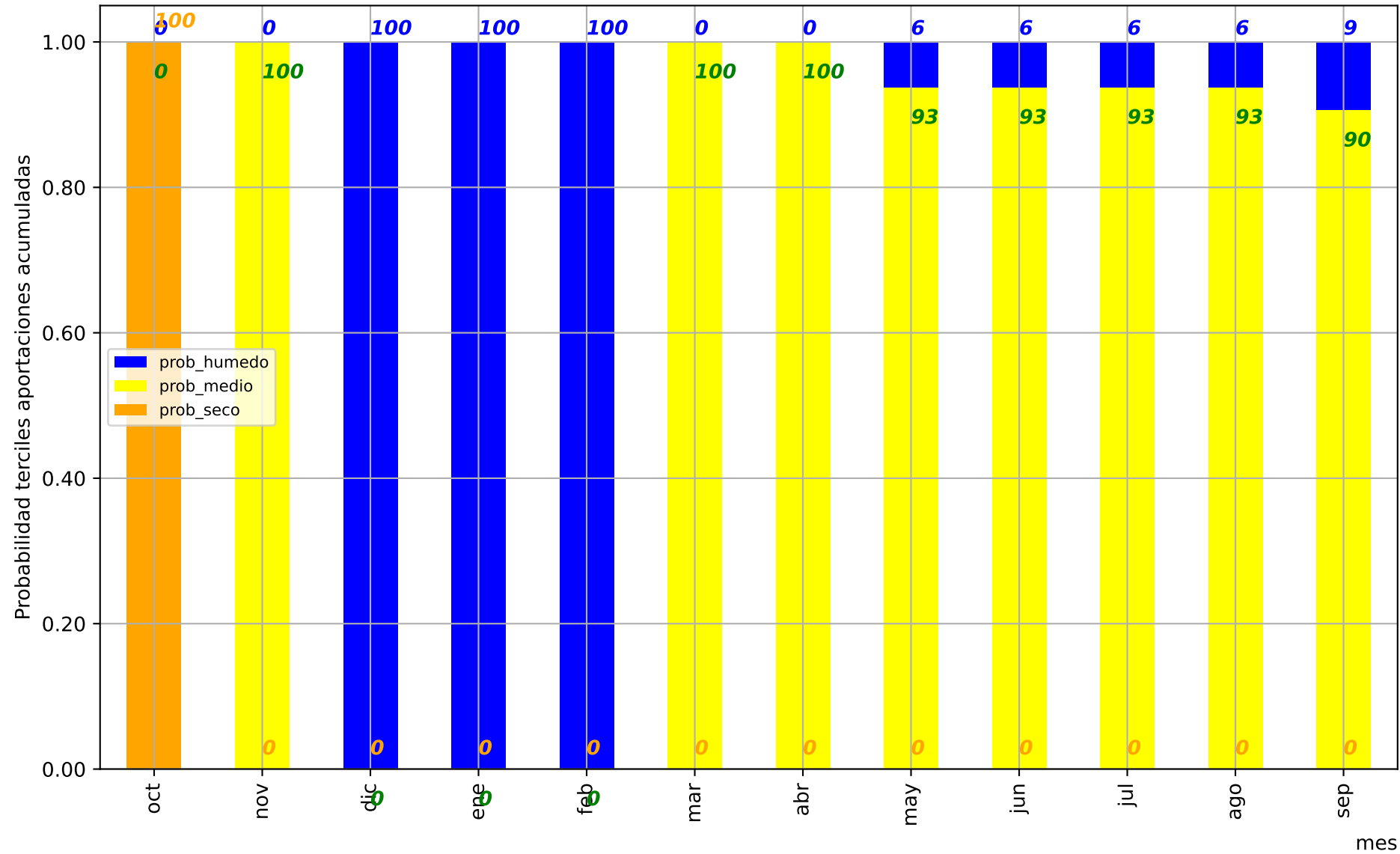


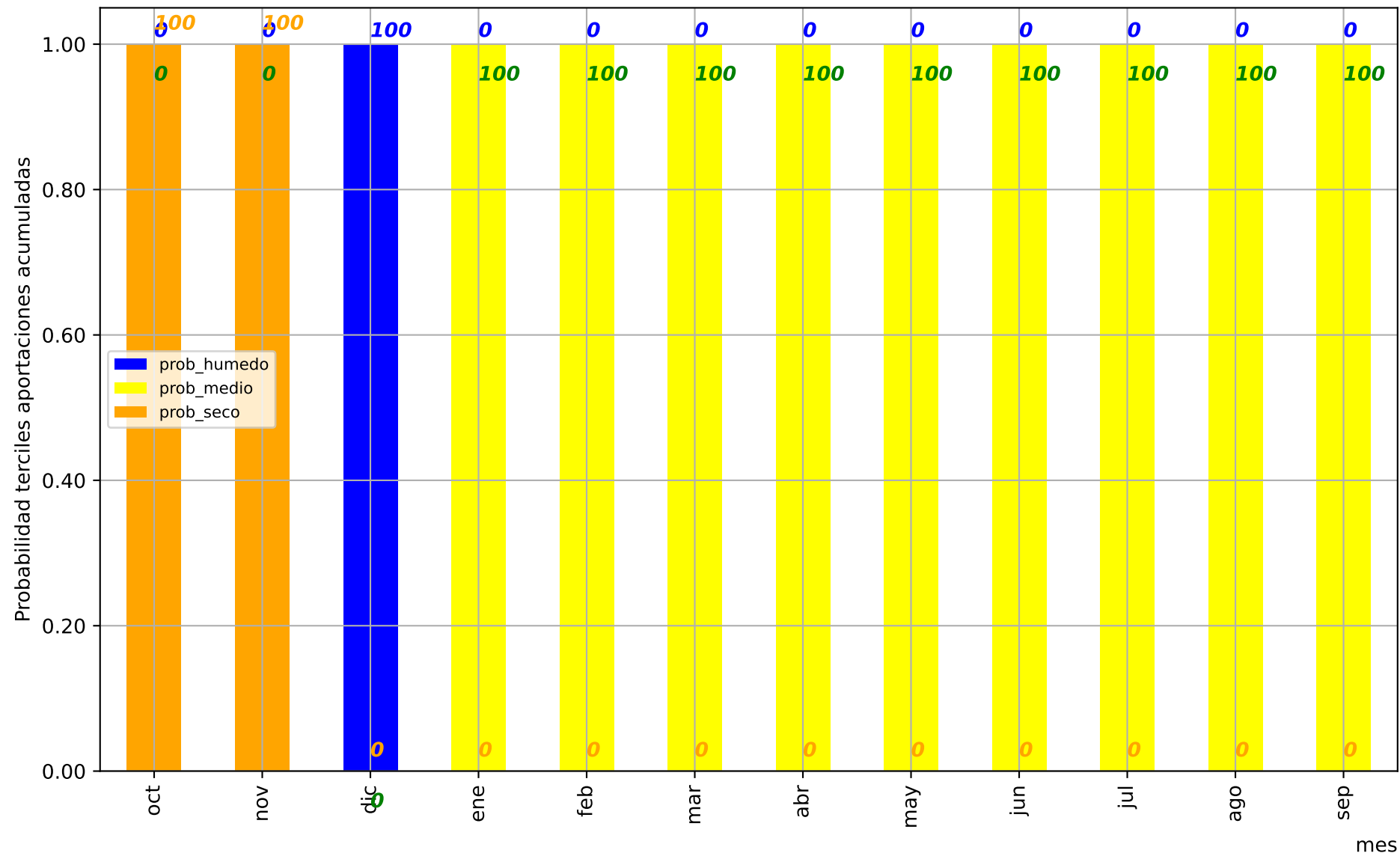
Predicción cuenca del:

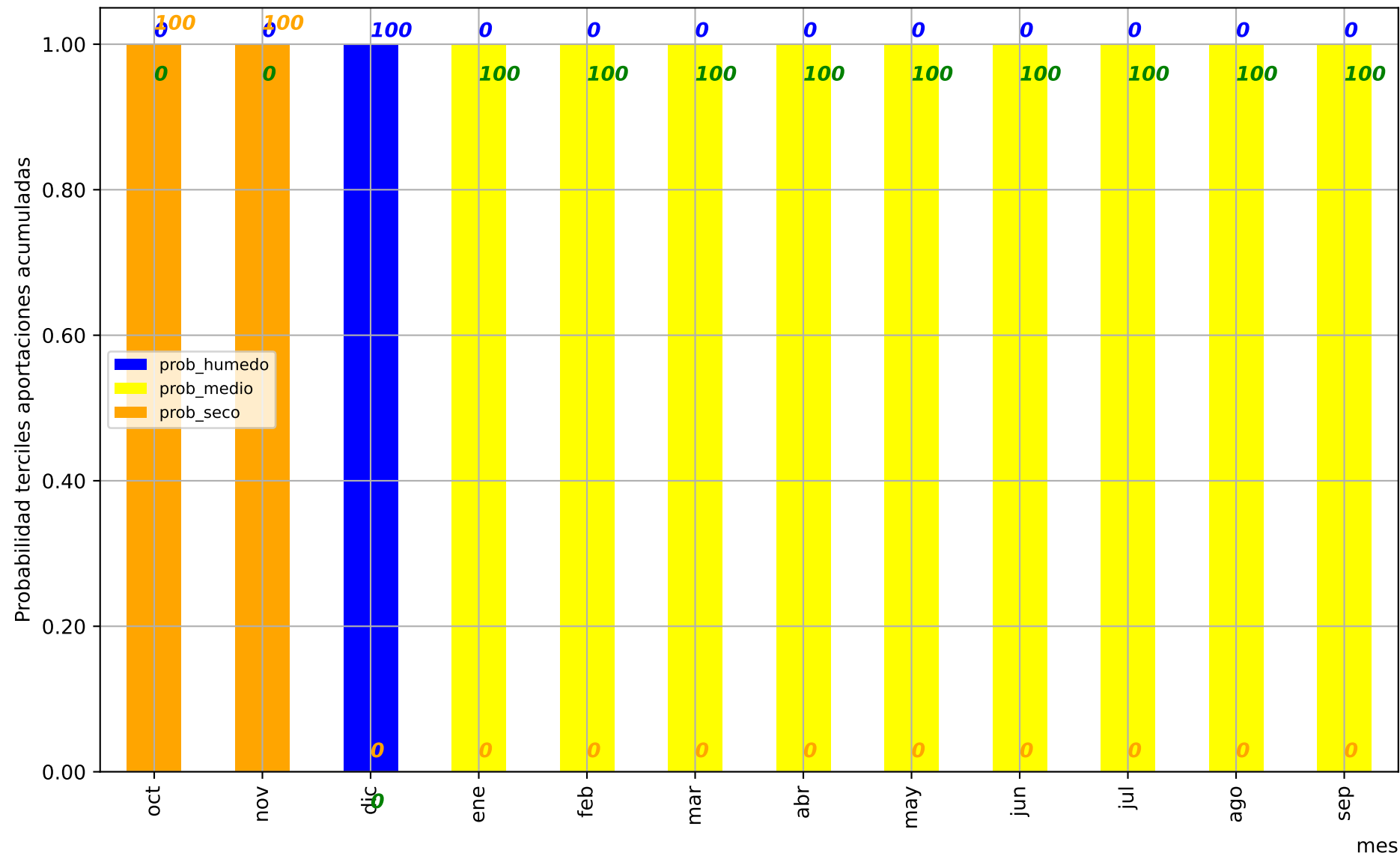
Río Guadalimar completo

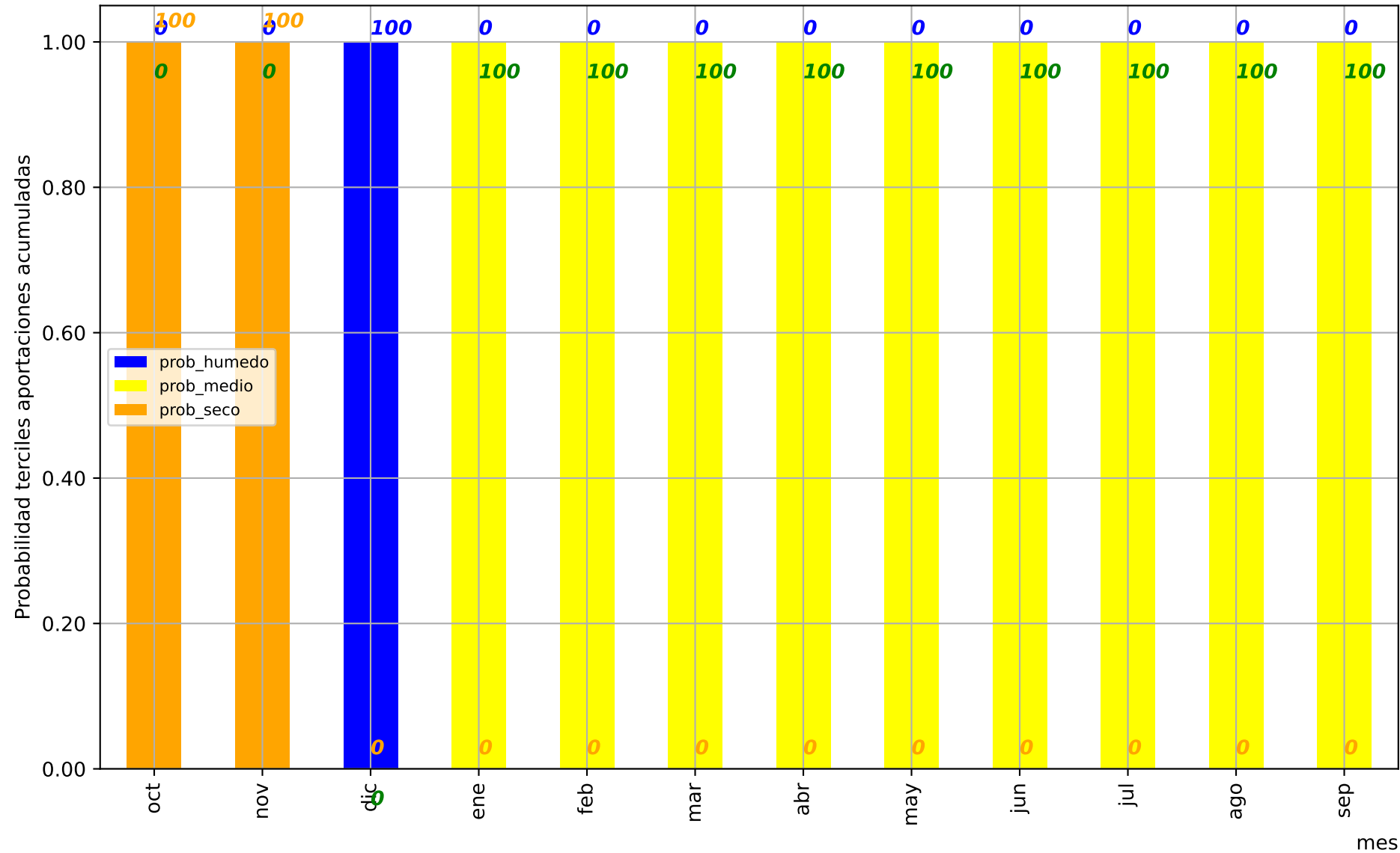


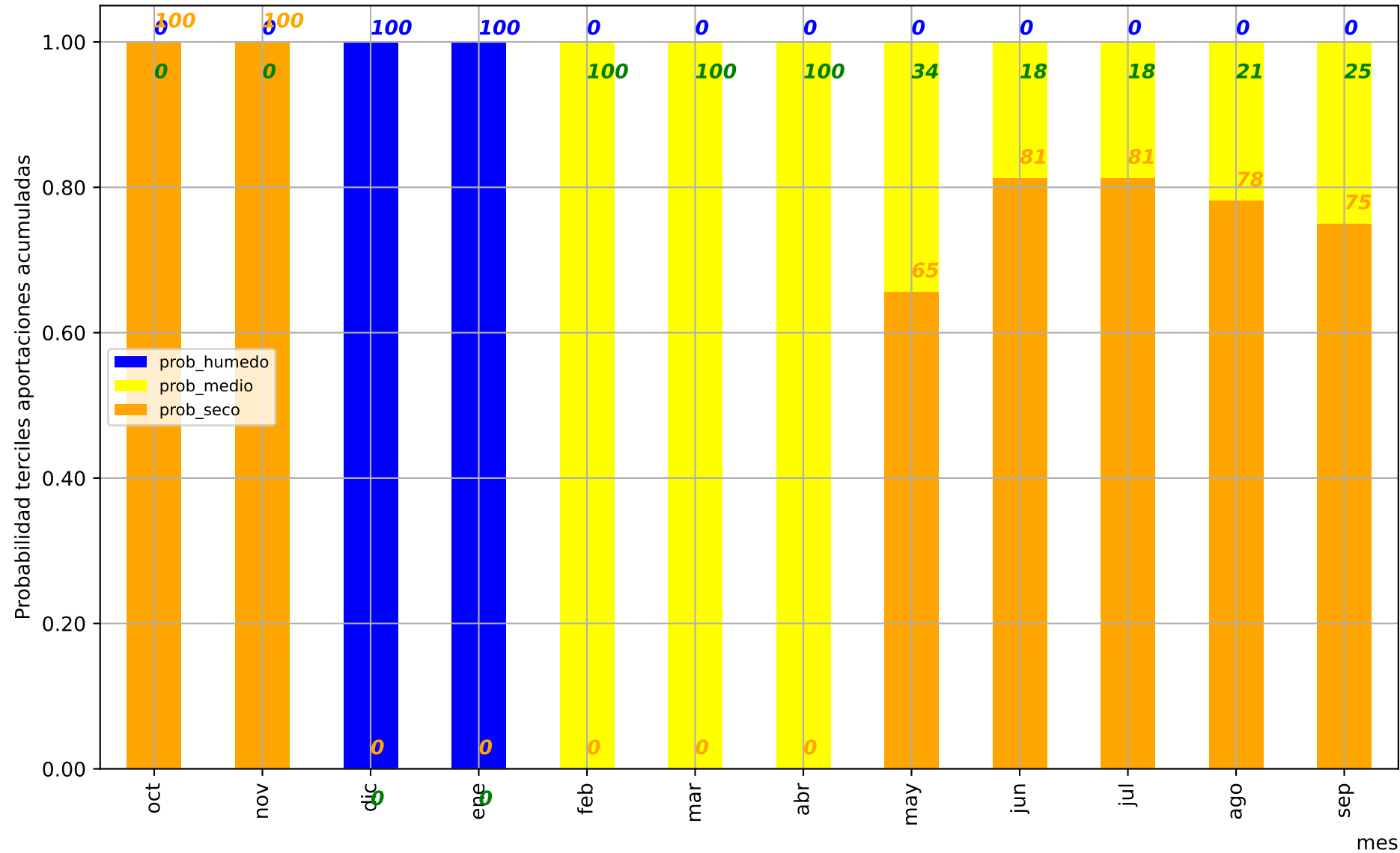








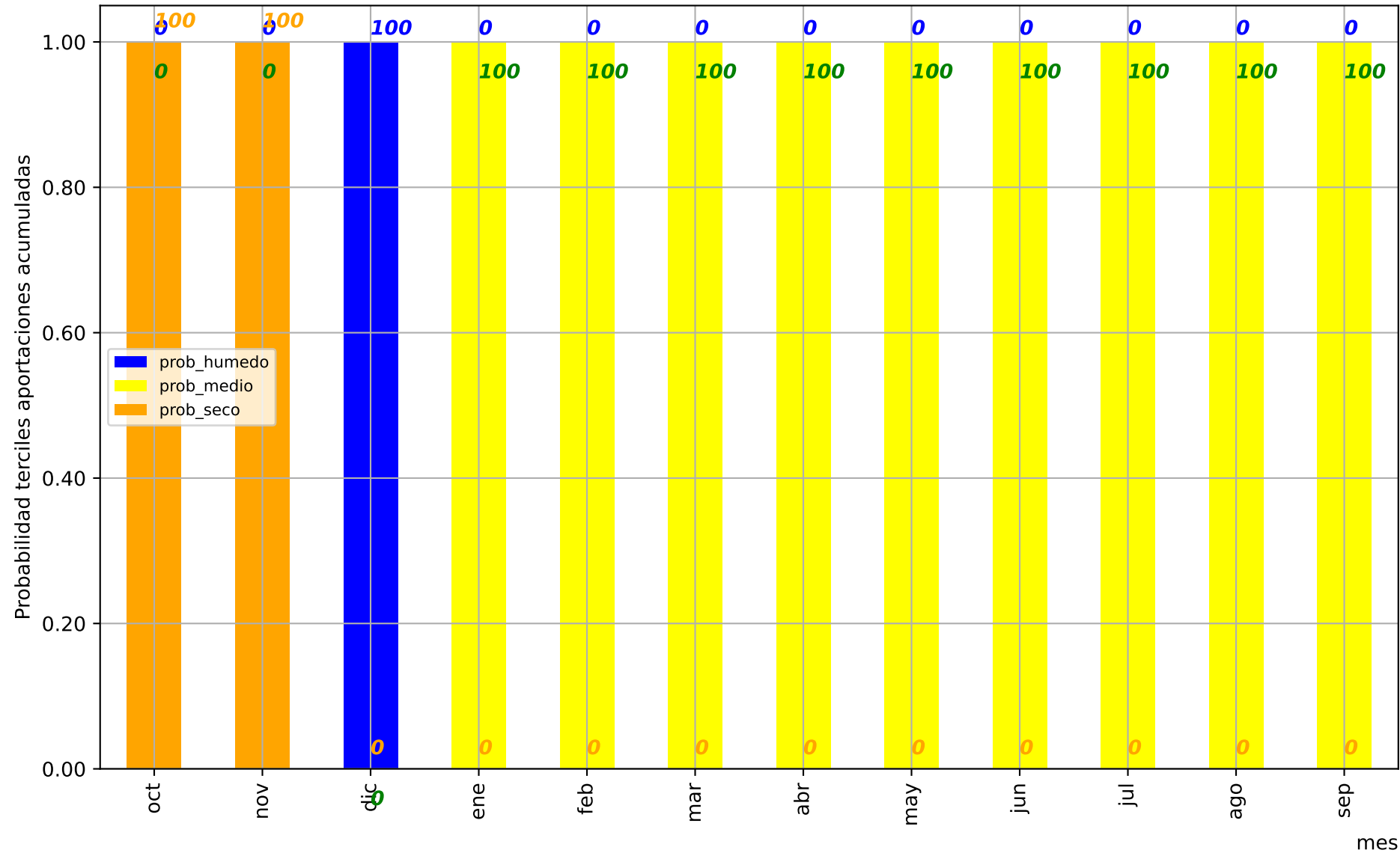


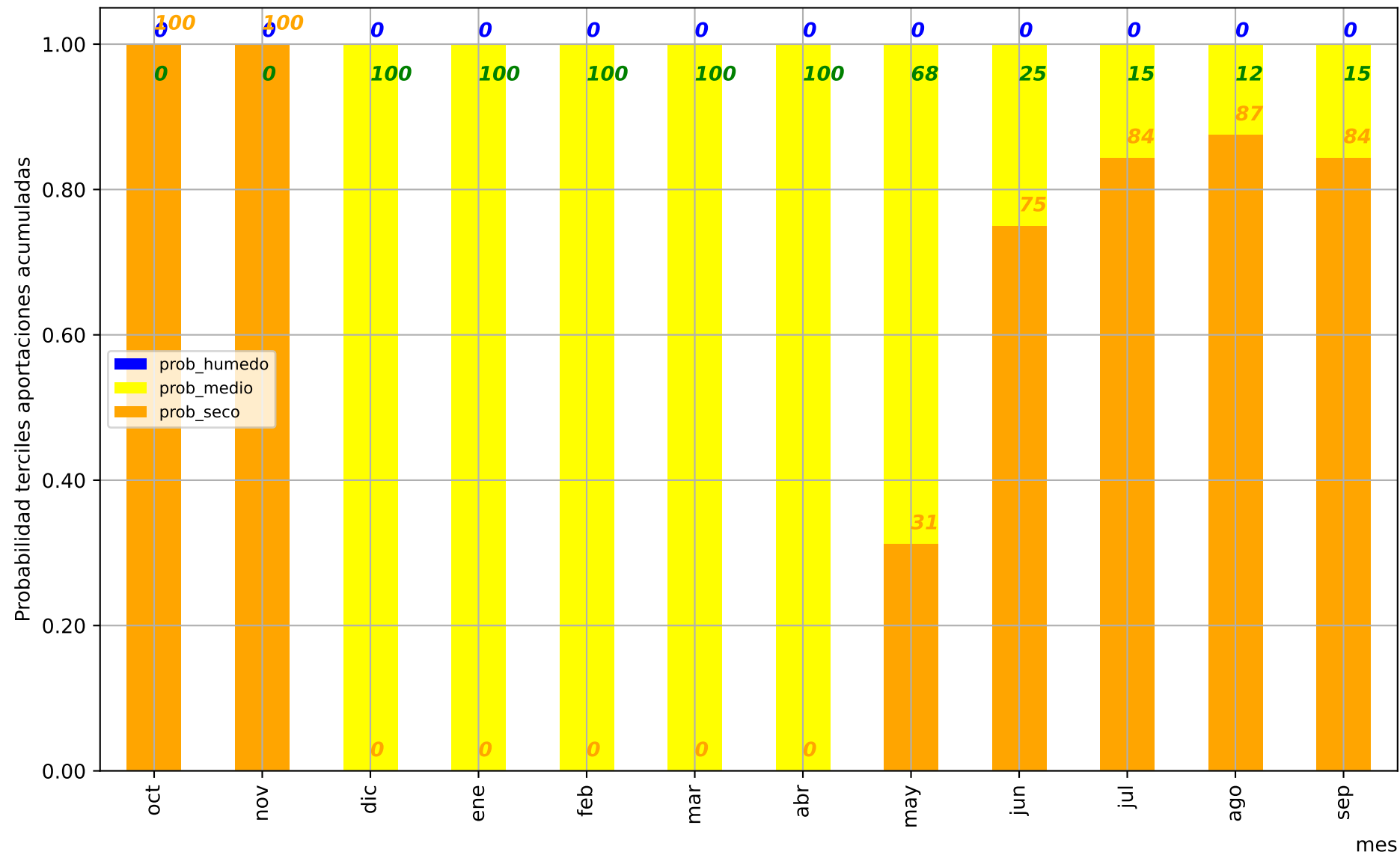


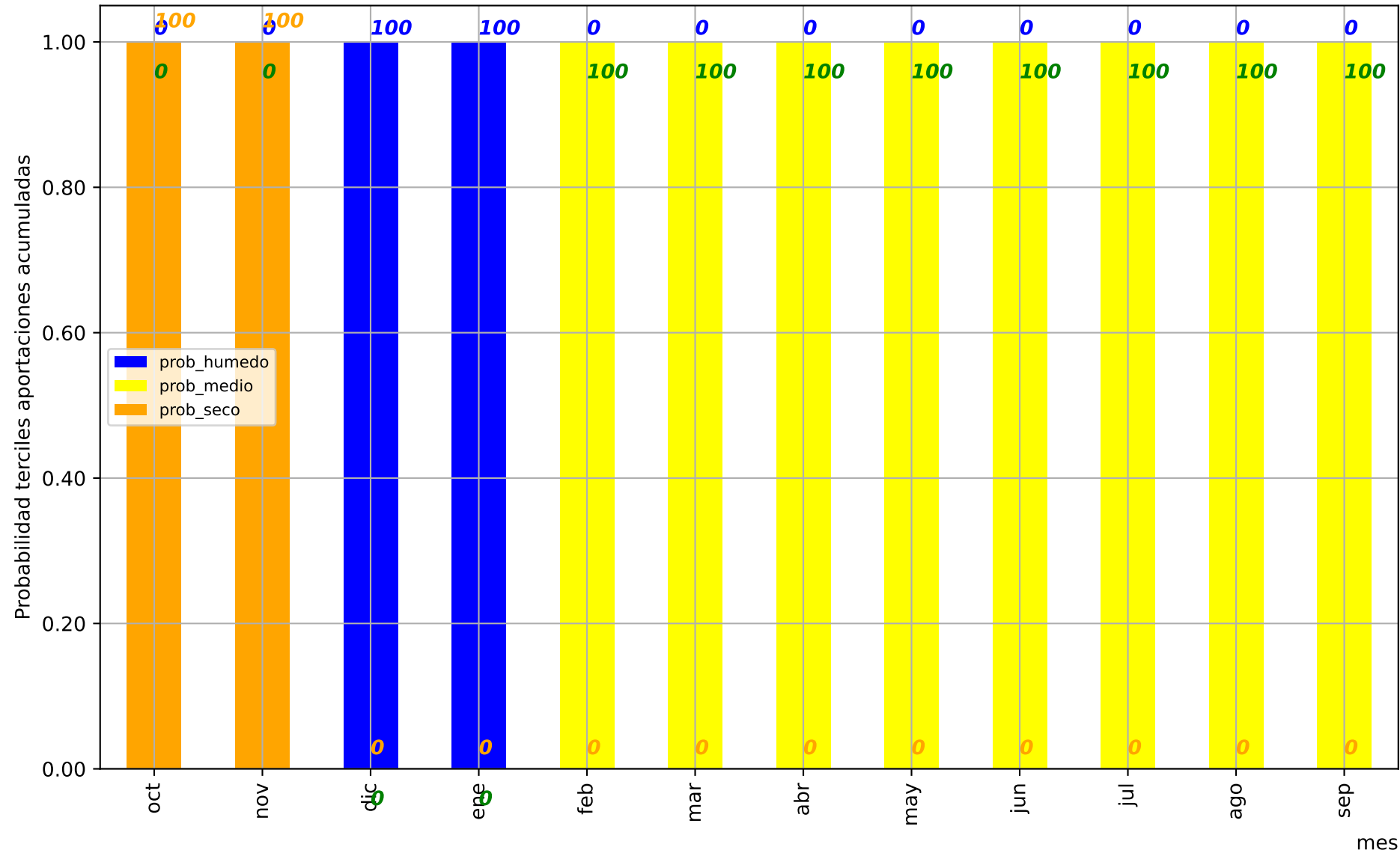


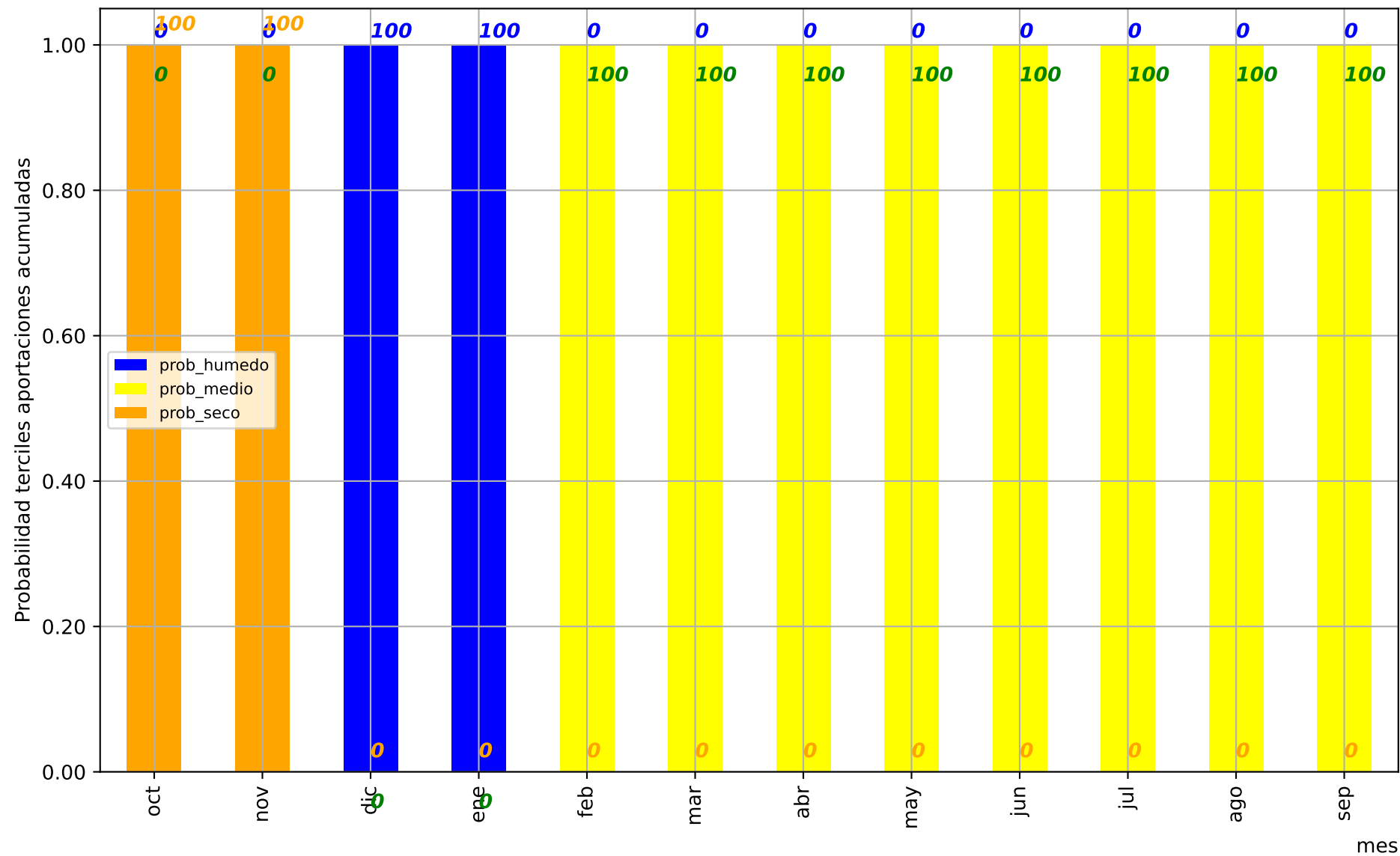
Predicción cuenca del:

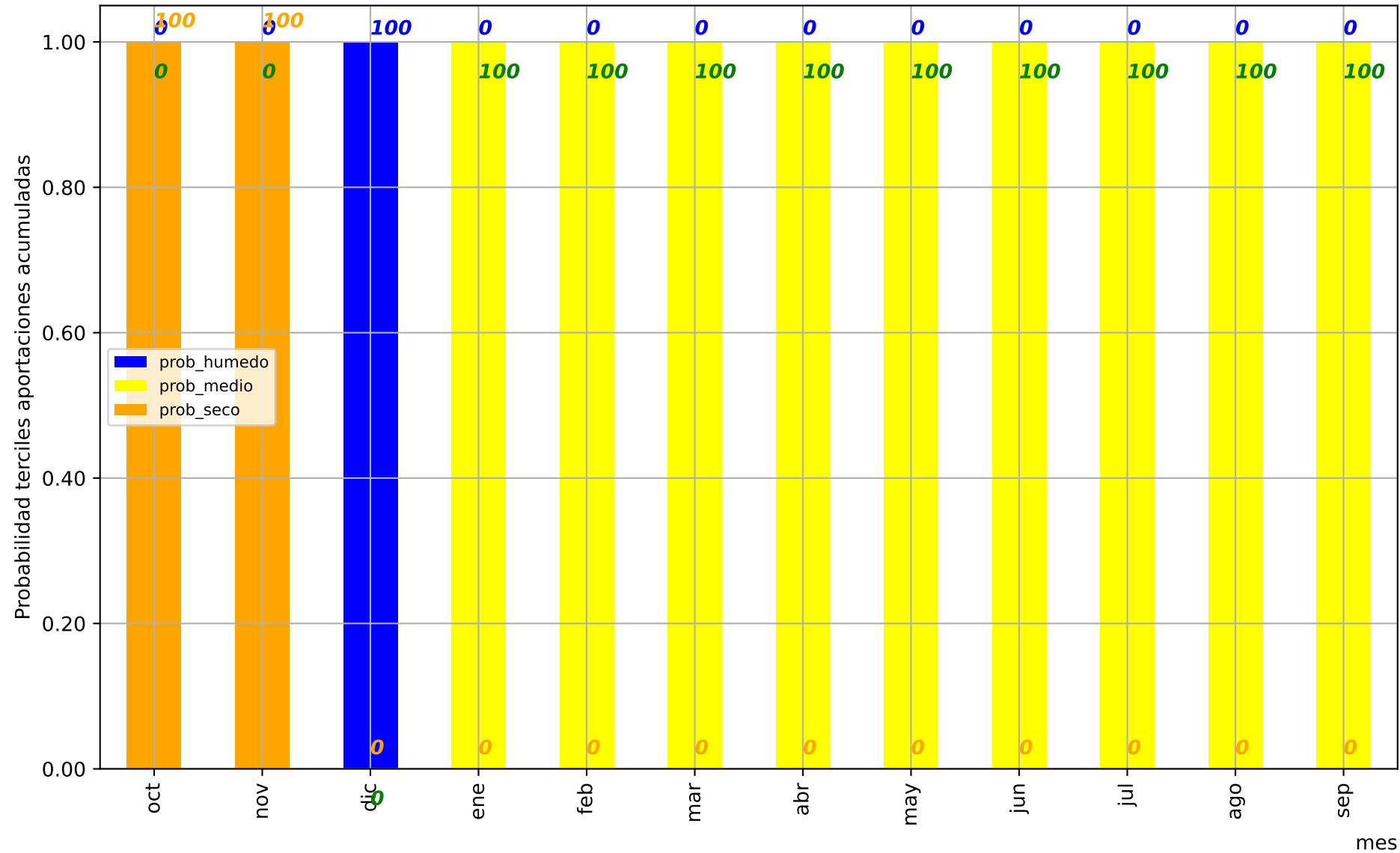
Río Genil completo (Presa del Judío)

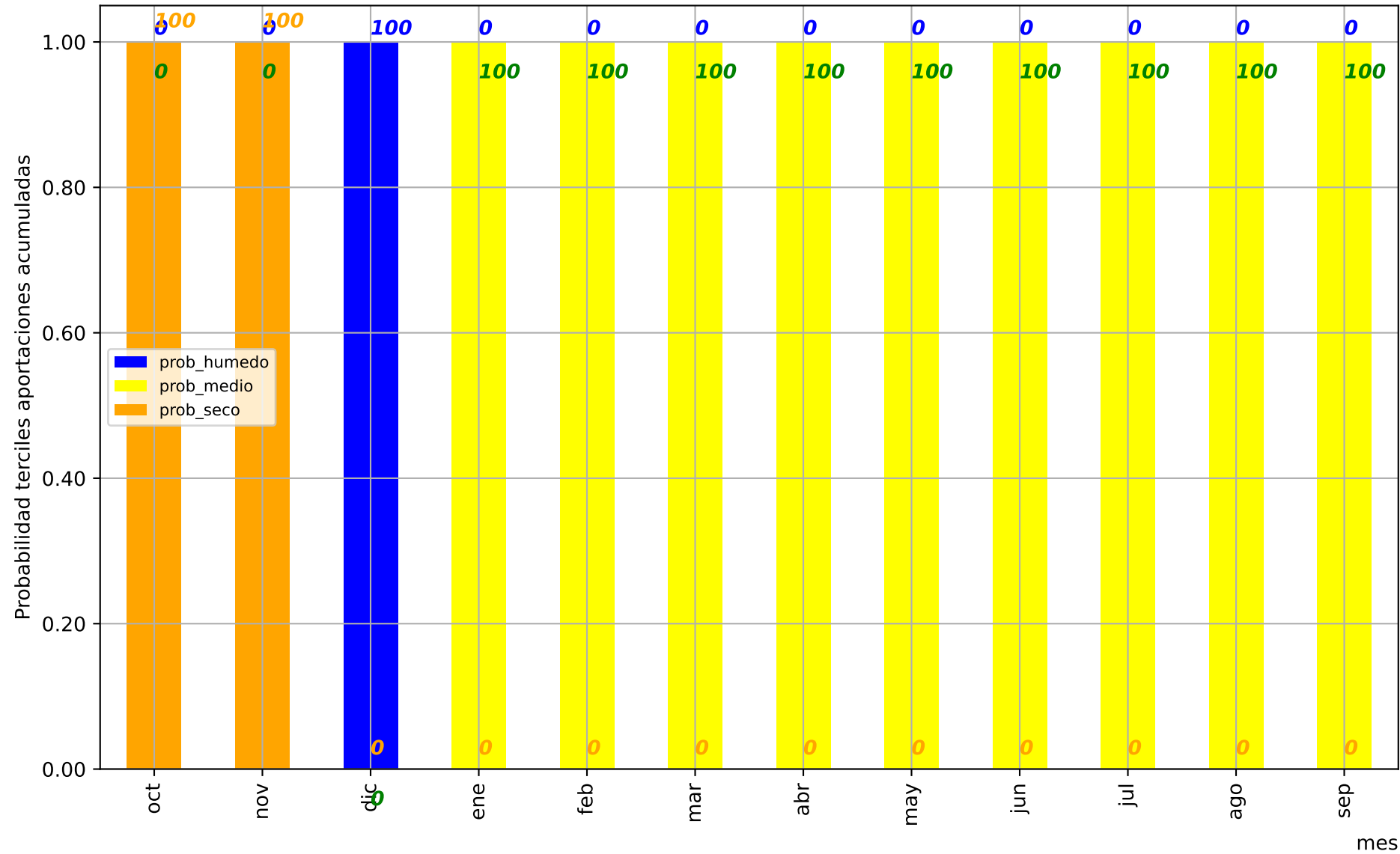


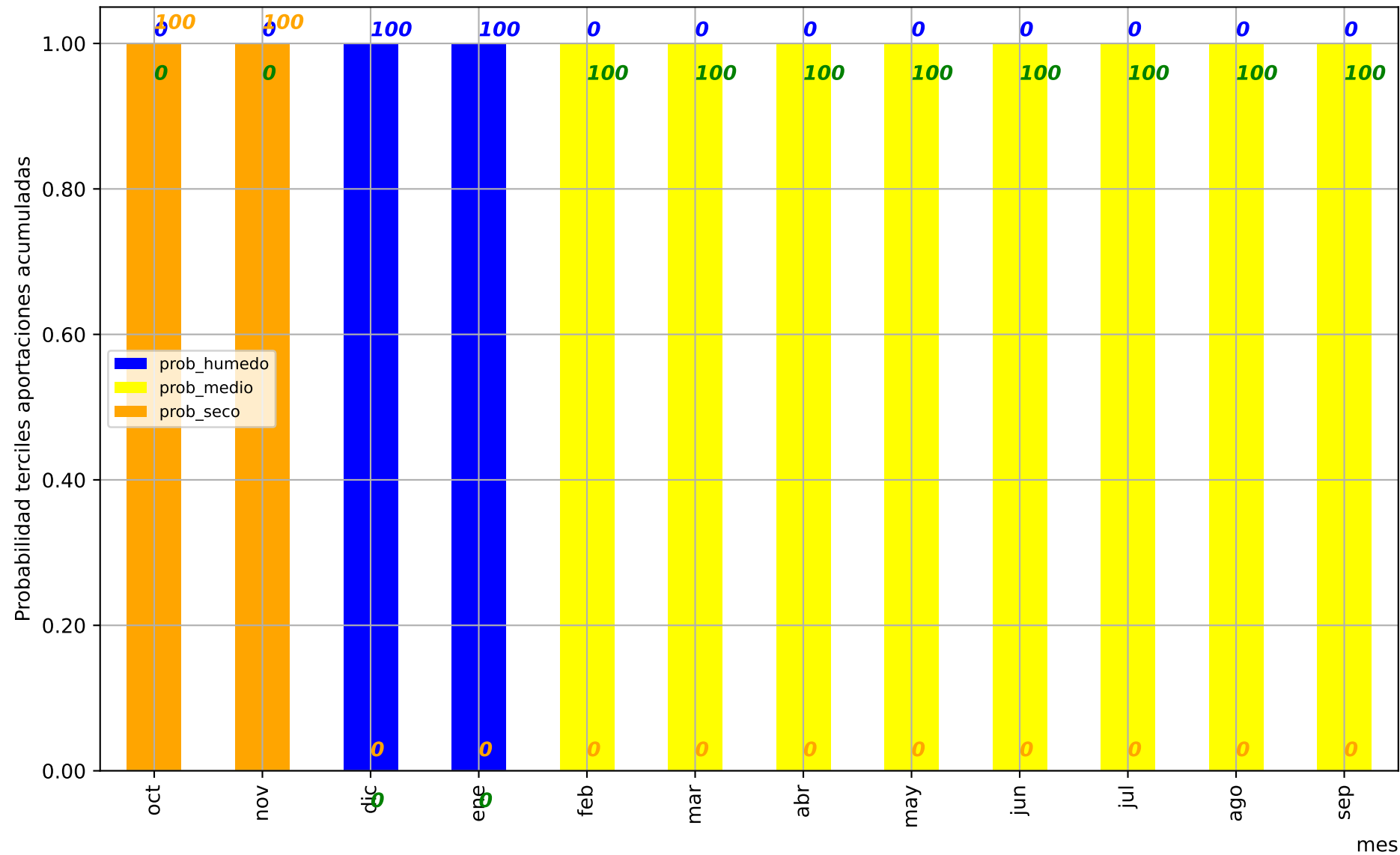






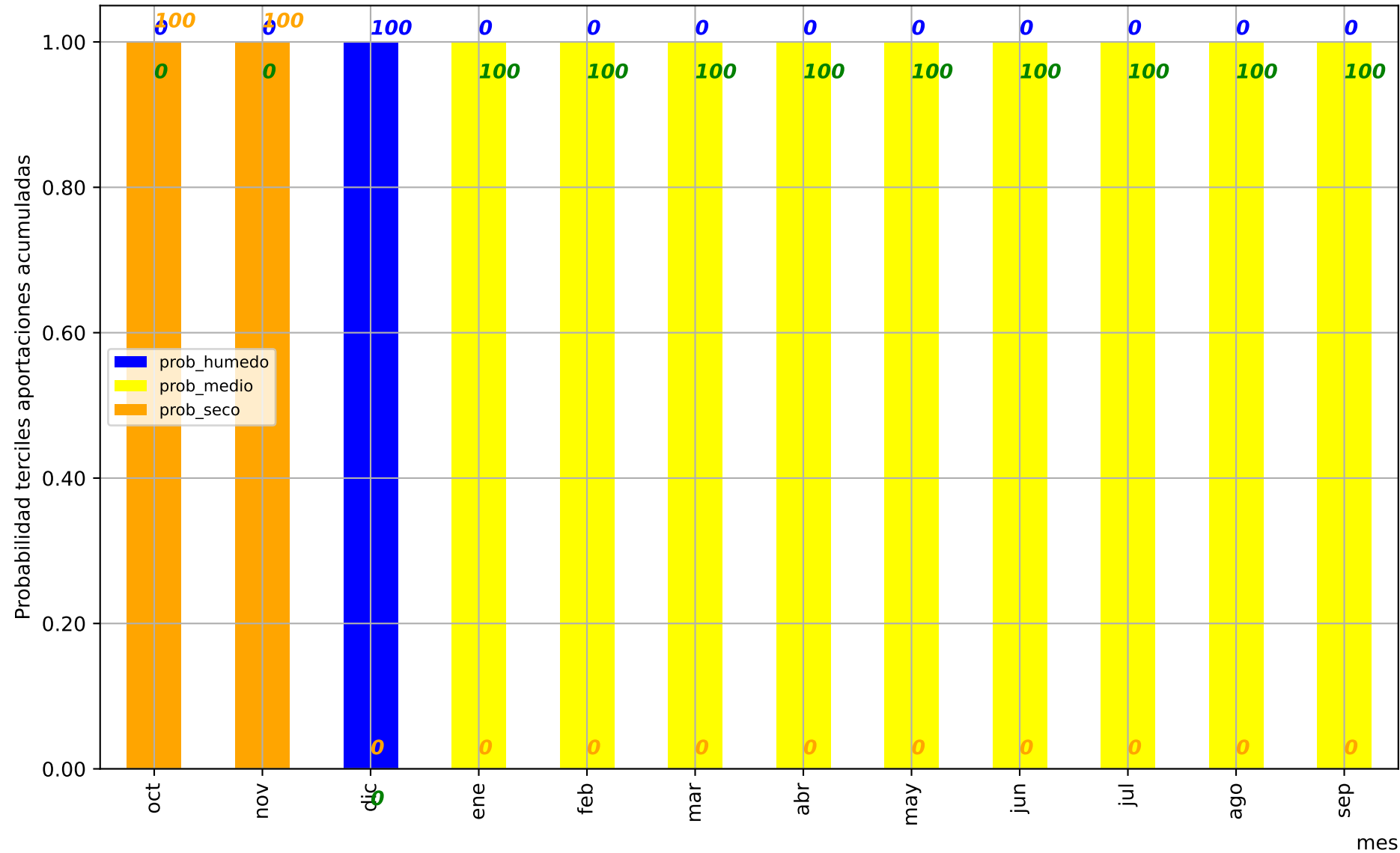






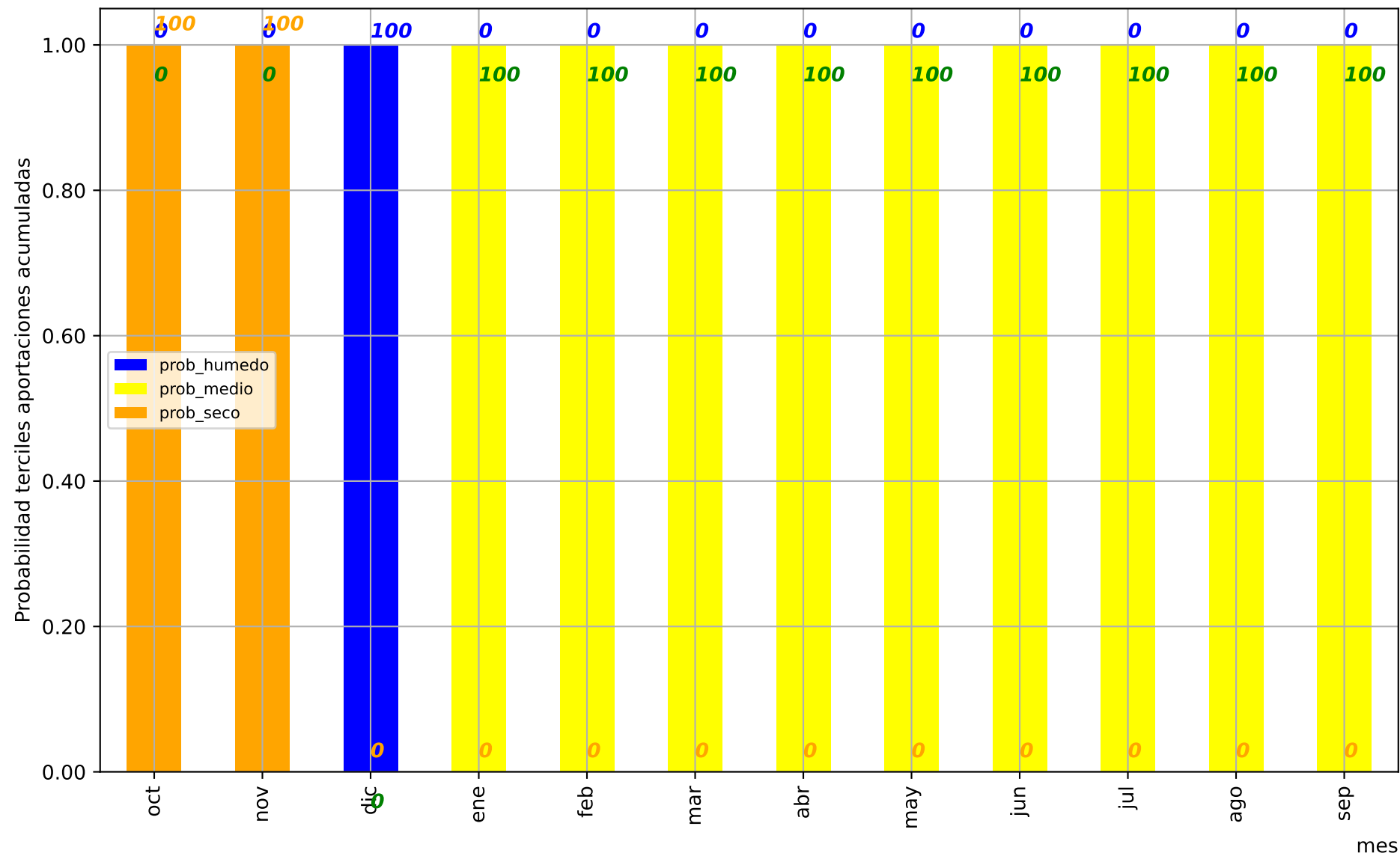
Predicción cuenca del:

Río Guadalquivir en Sevilla

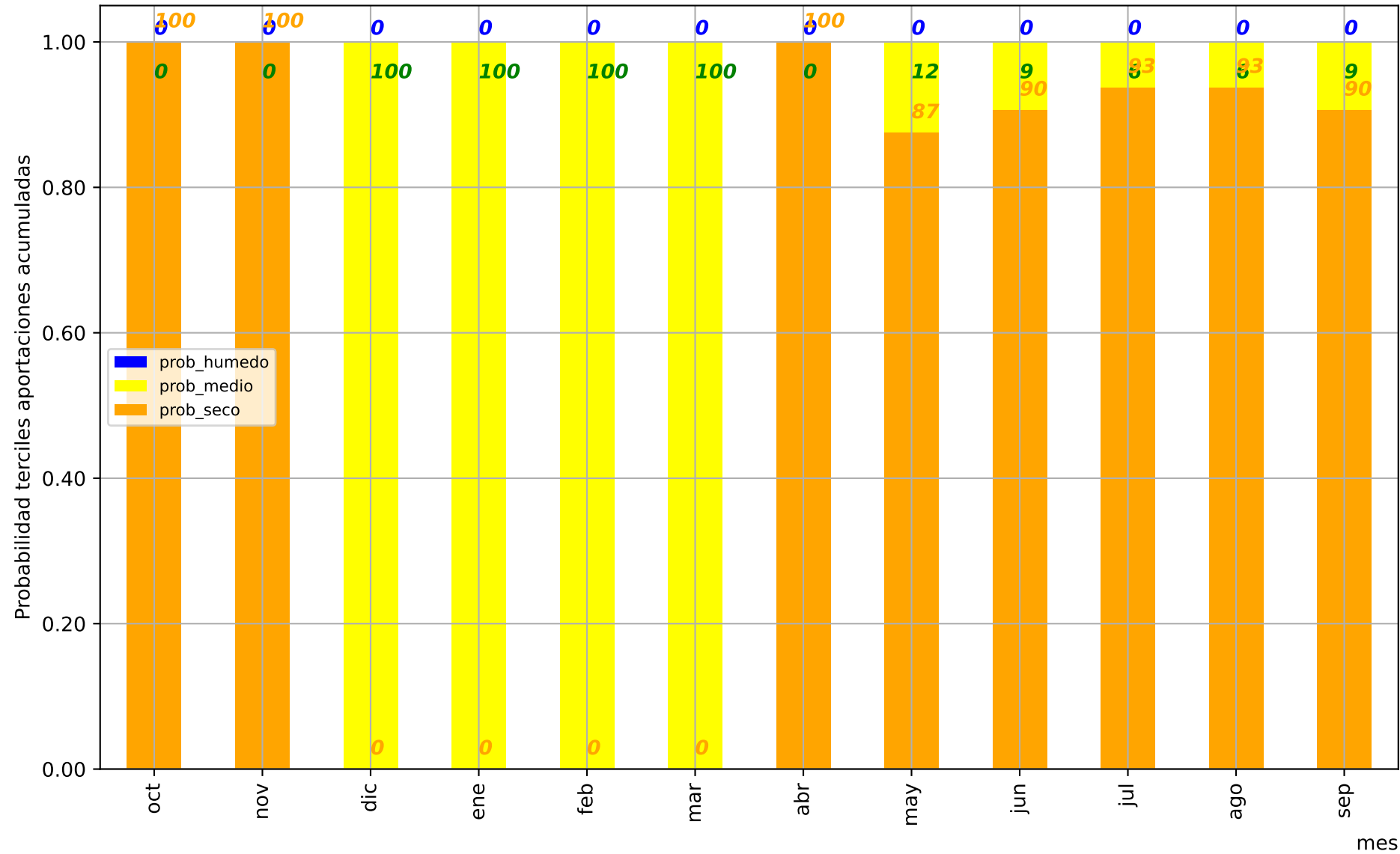


Predicción cuenca del:

Río Guadalquivir (Sanlúcar)

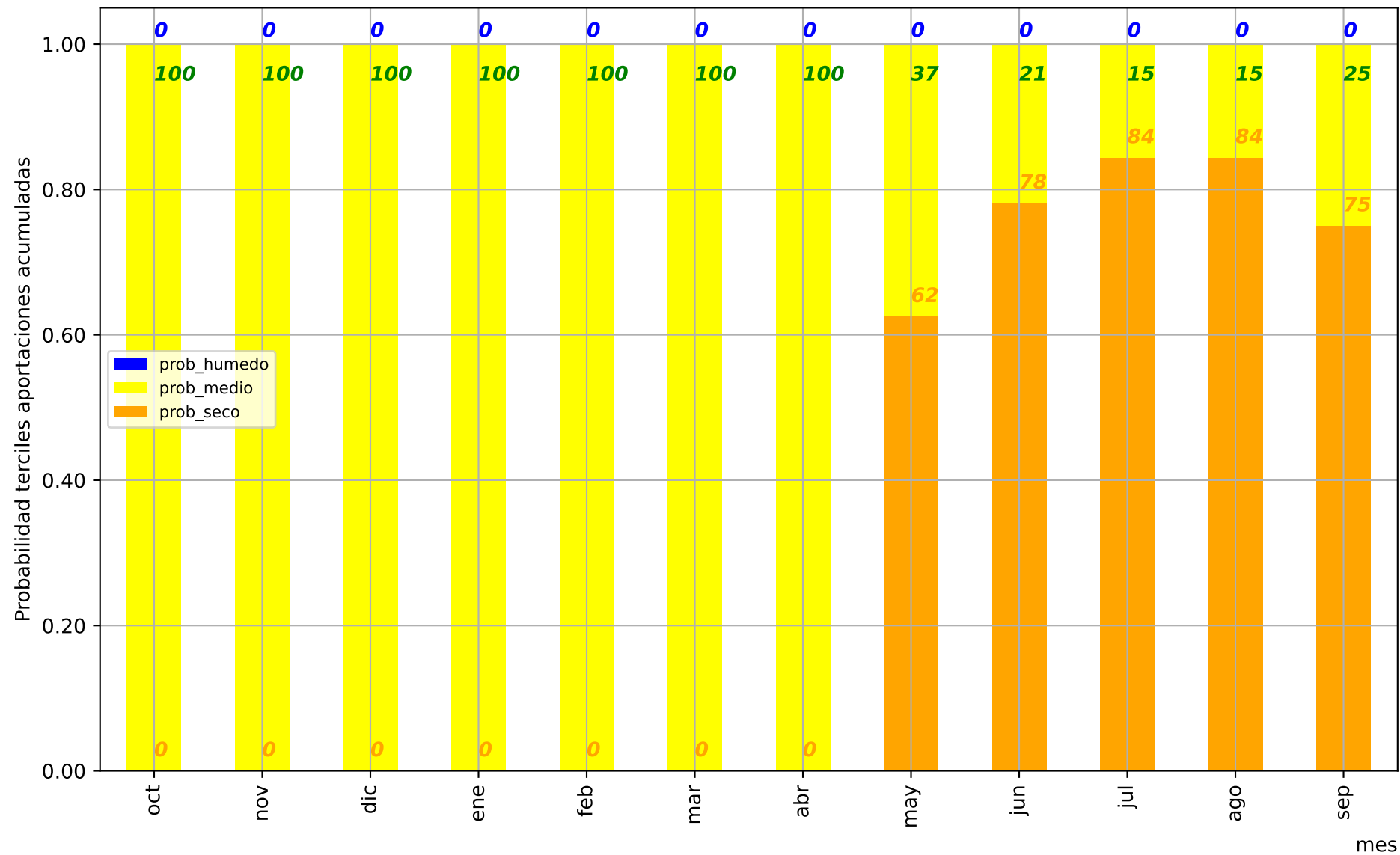


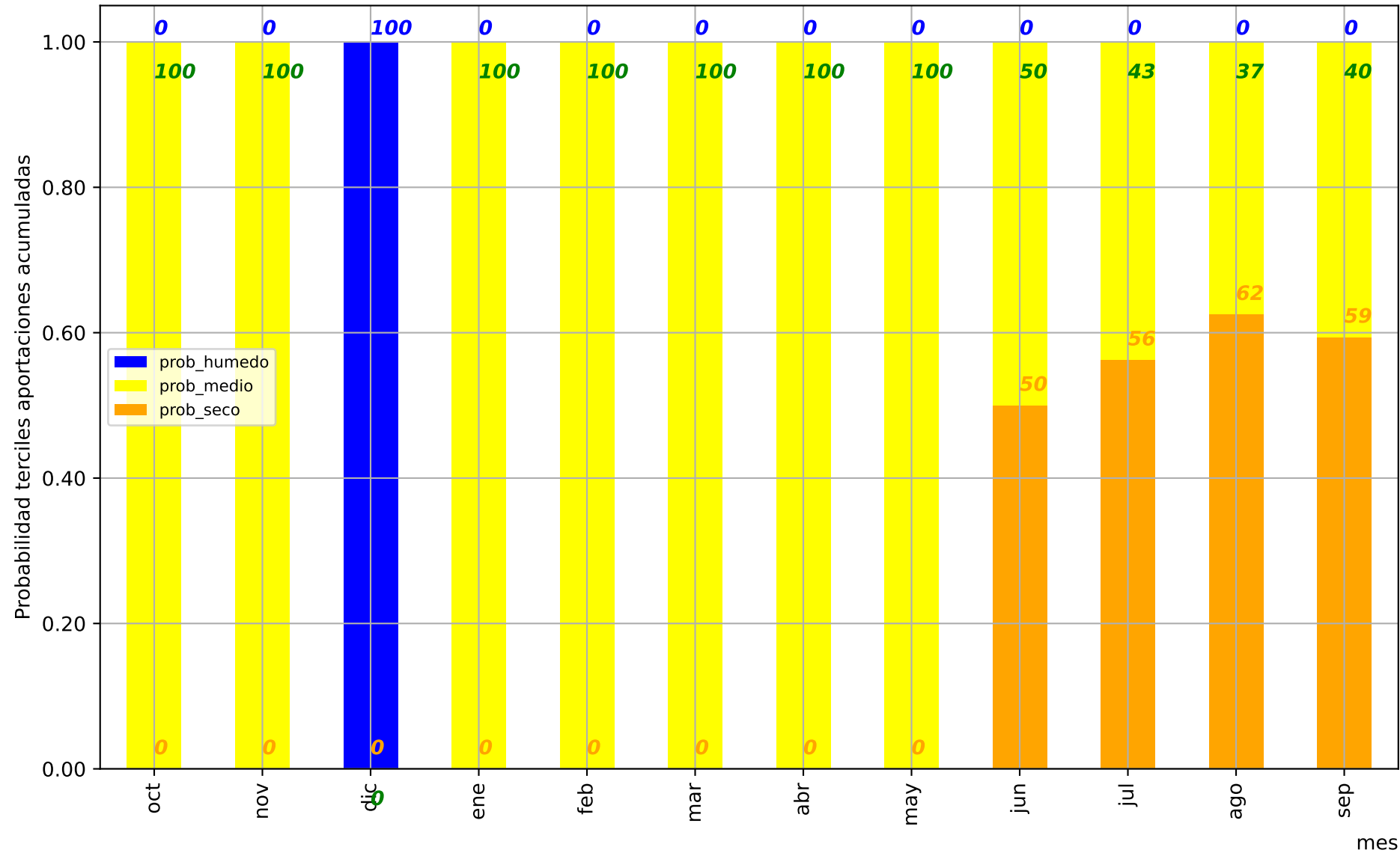
mes

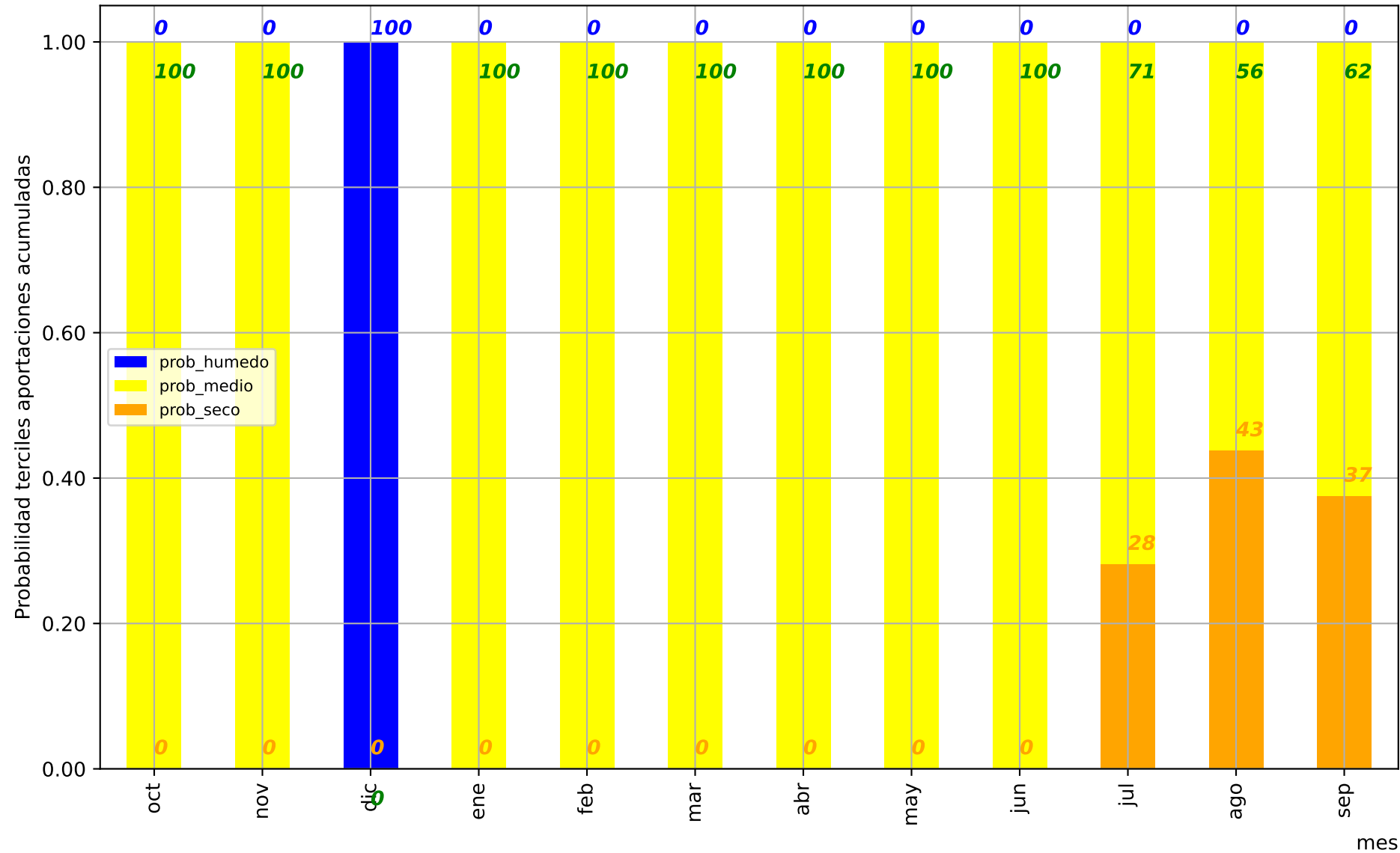


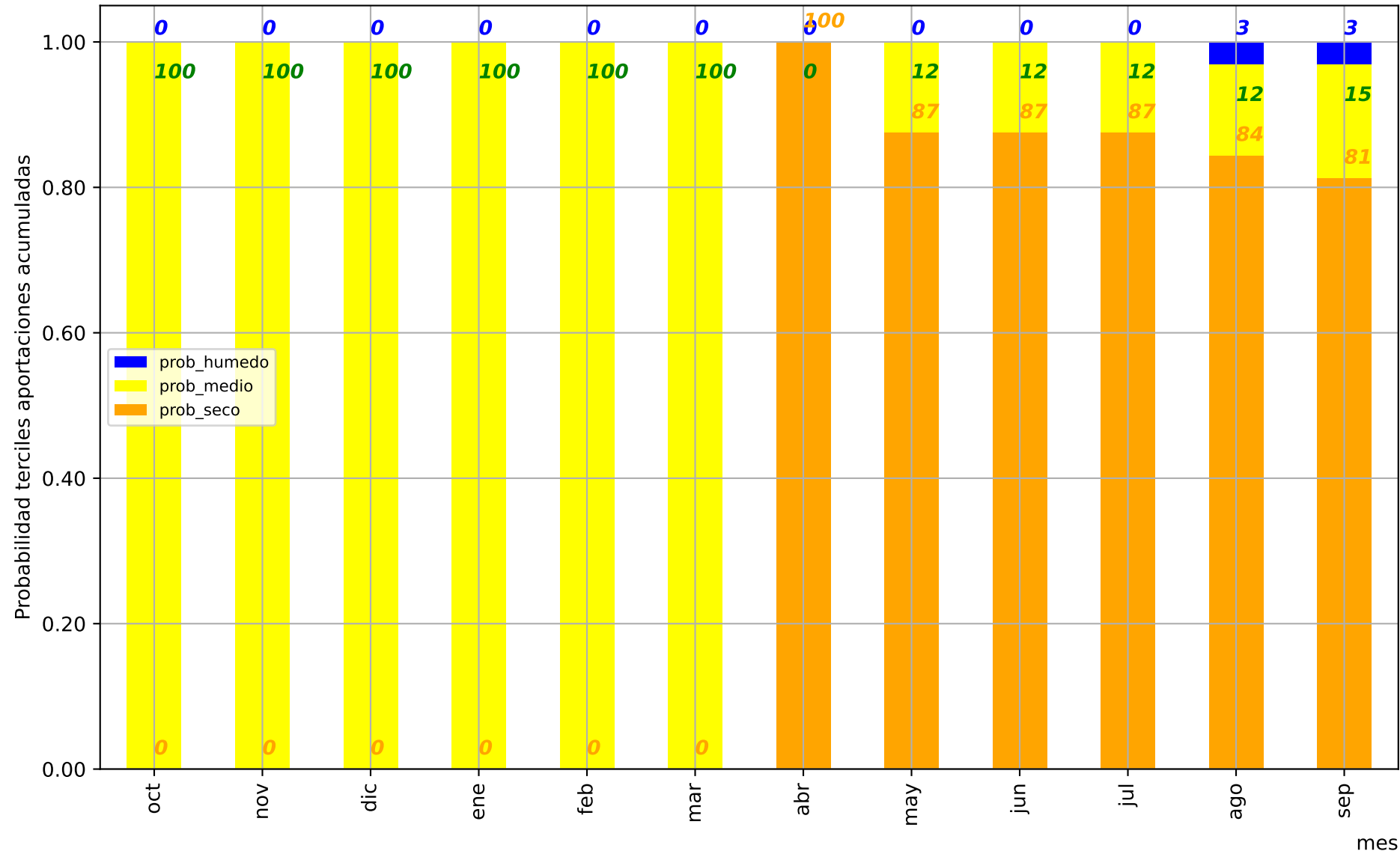
Predicción cuenca del:

Río Mundo embalse de Camarillas



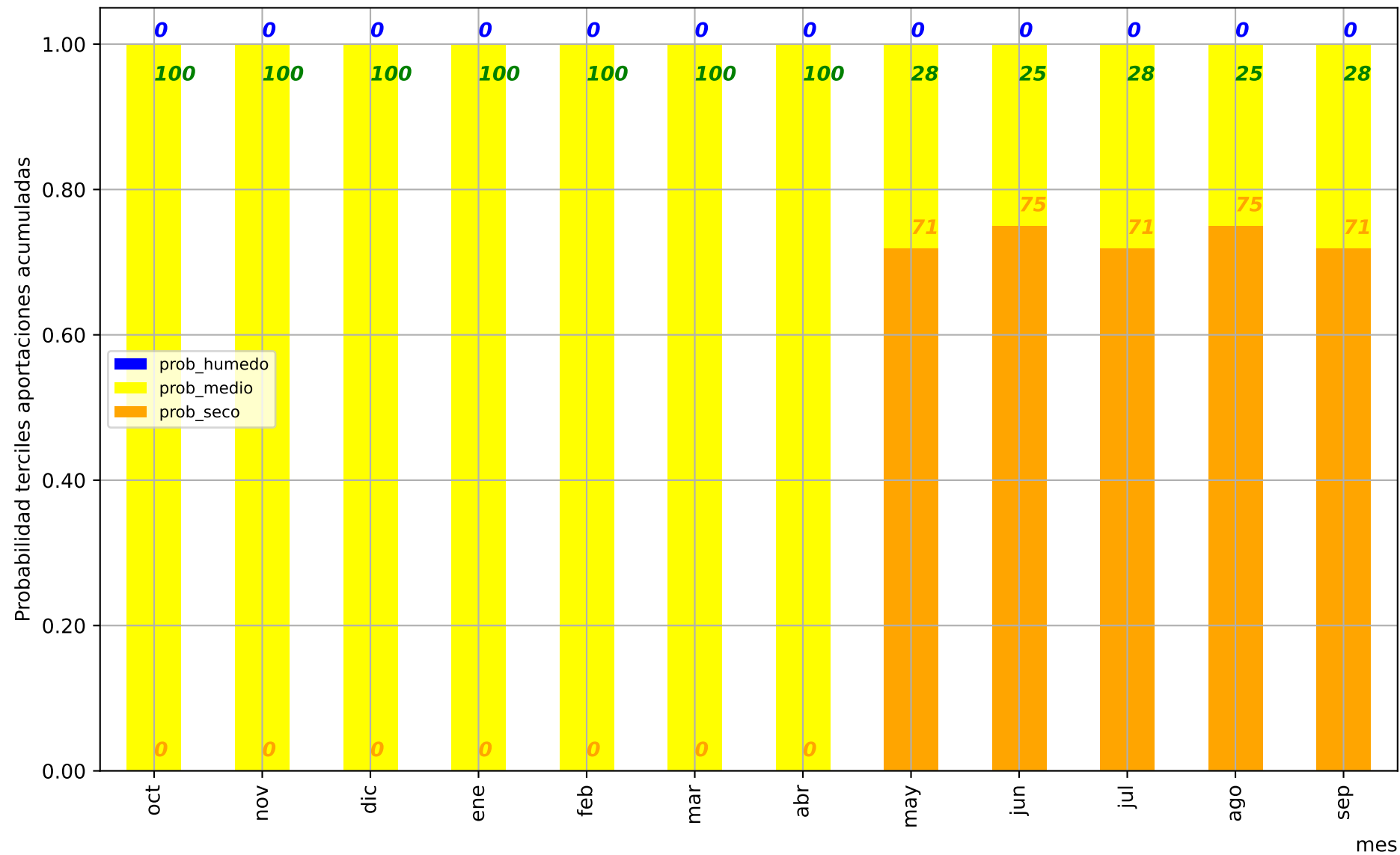


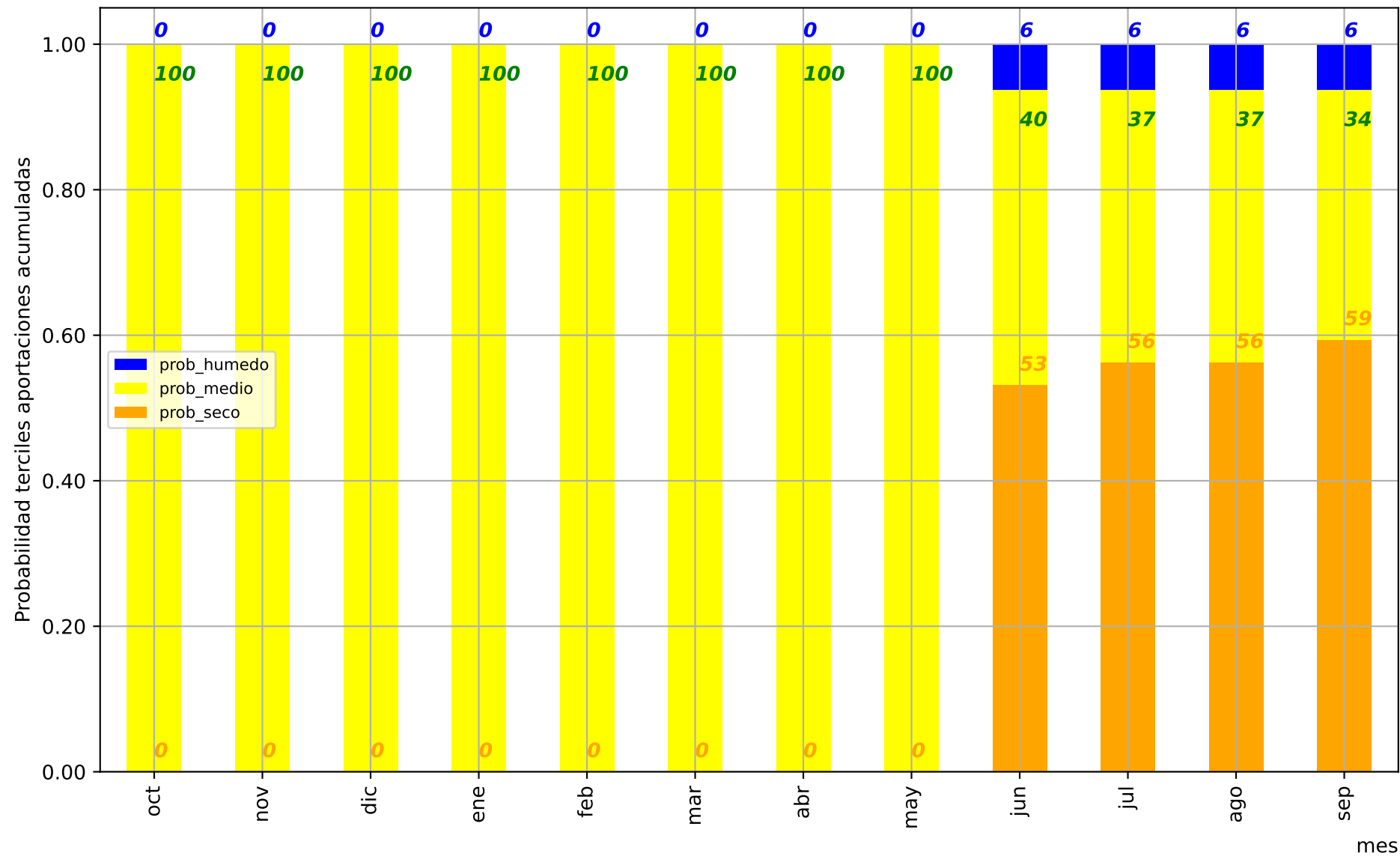


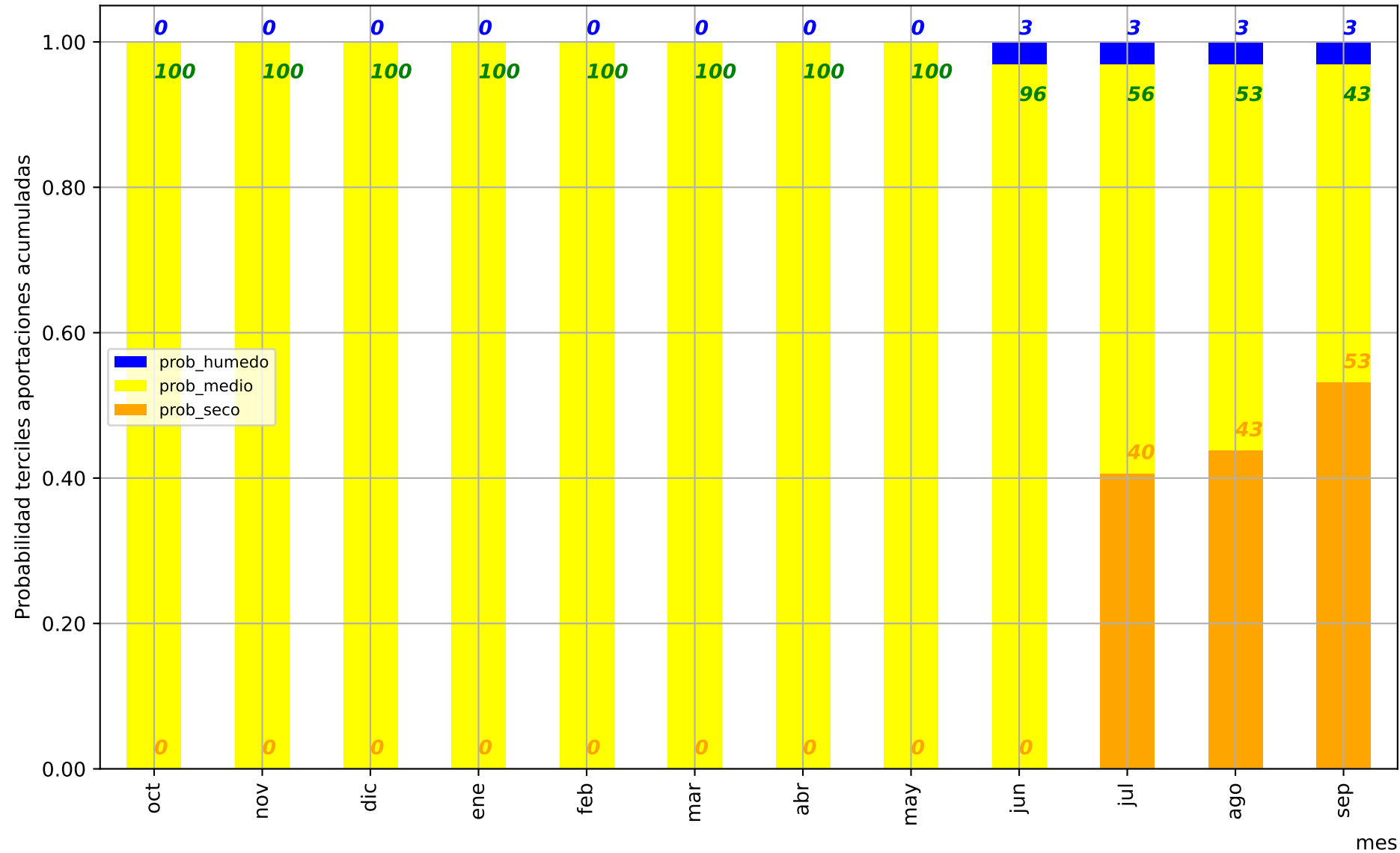


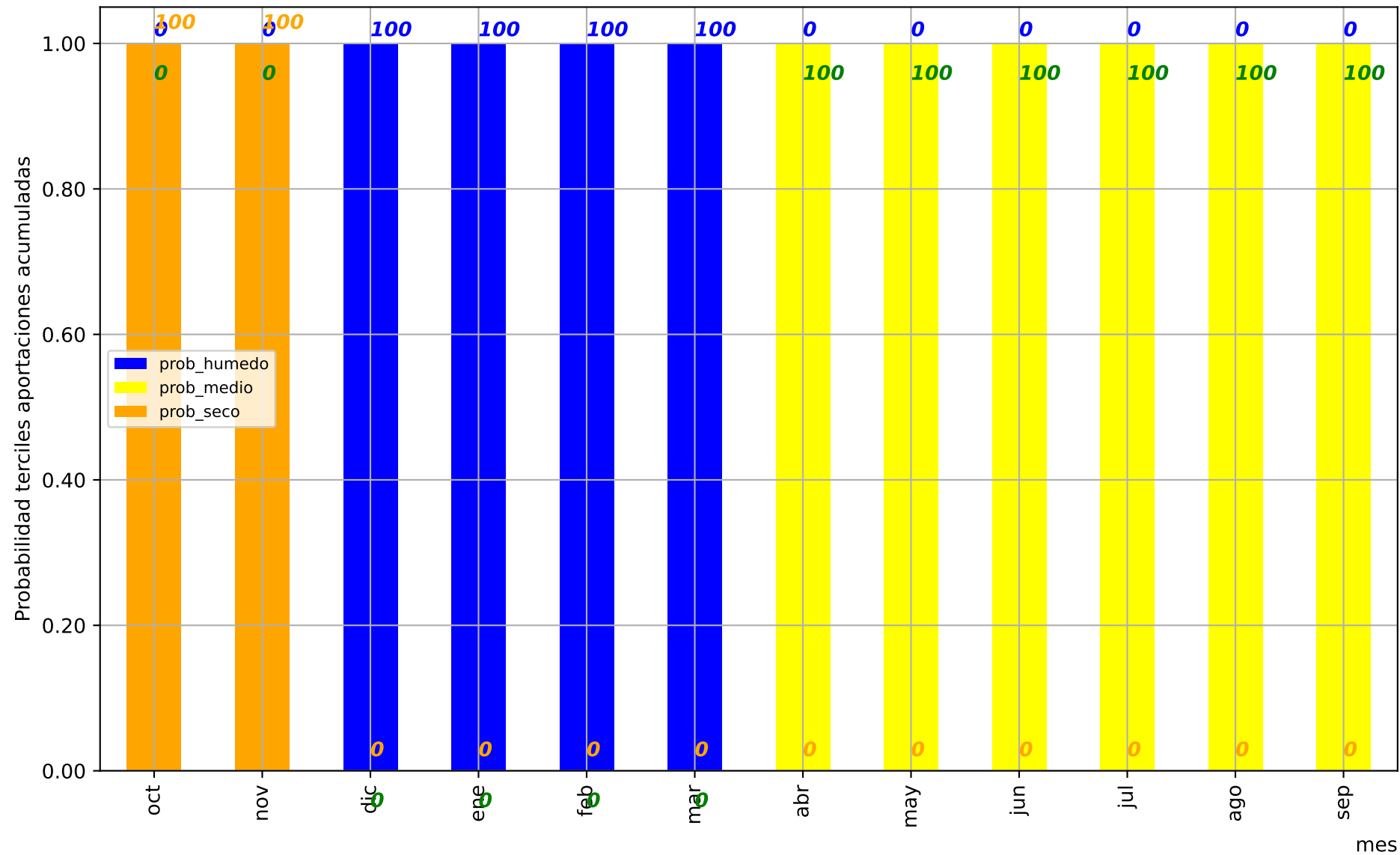
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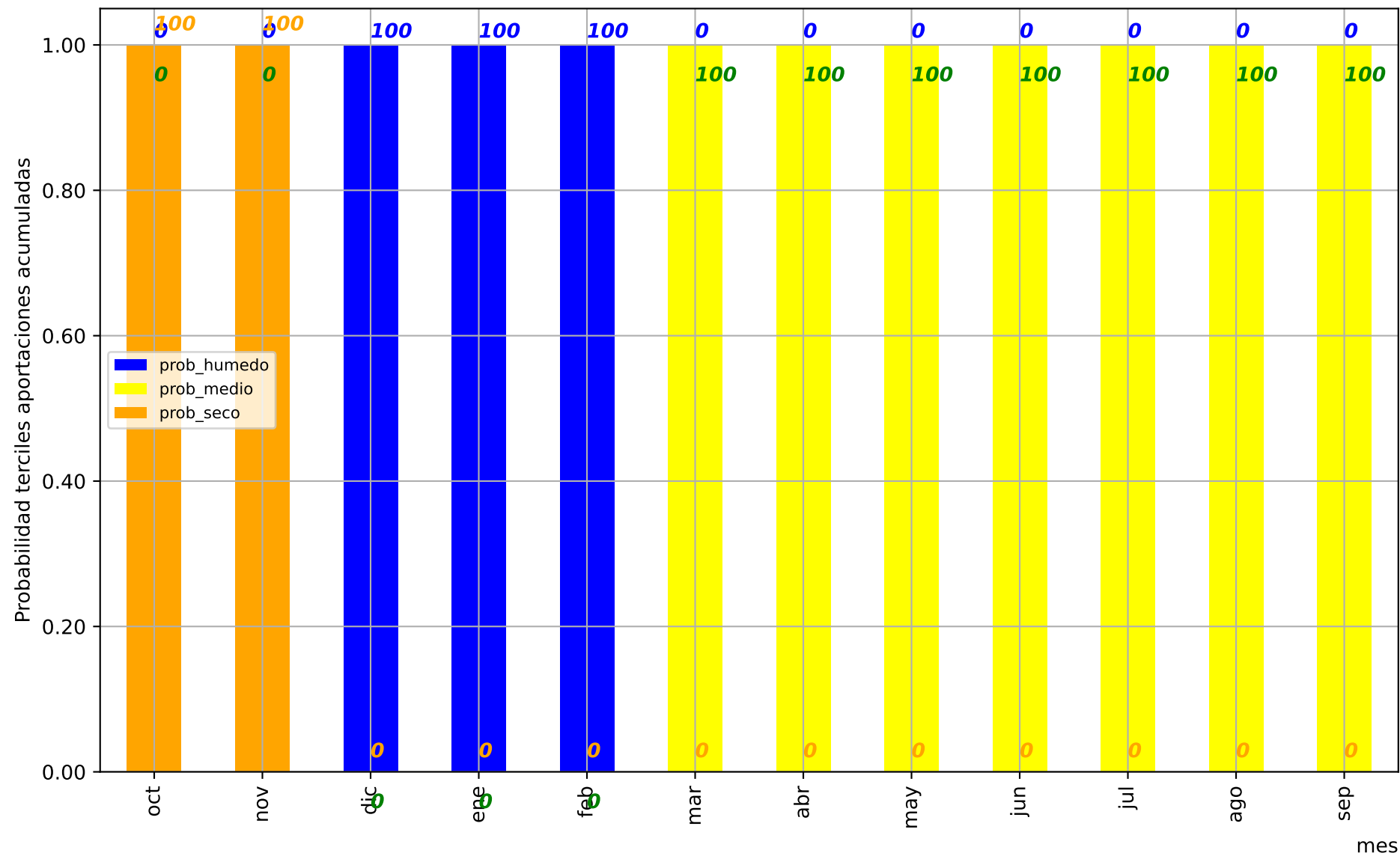
Río Mijares: delta del Mijares - mar

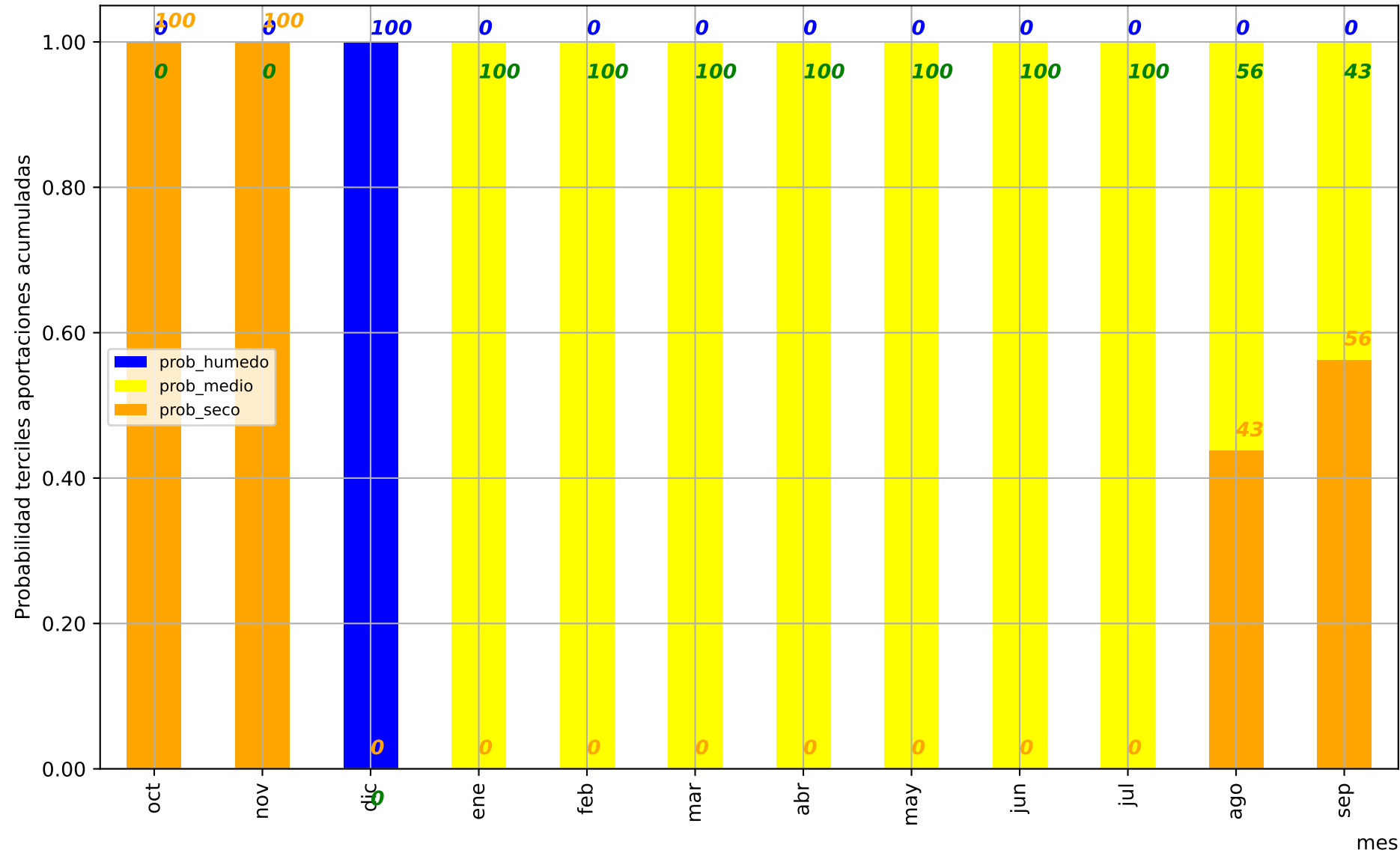


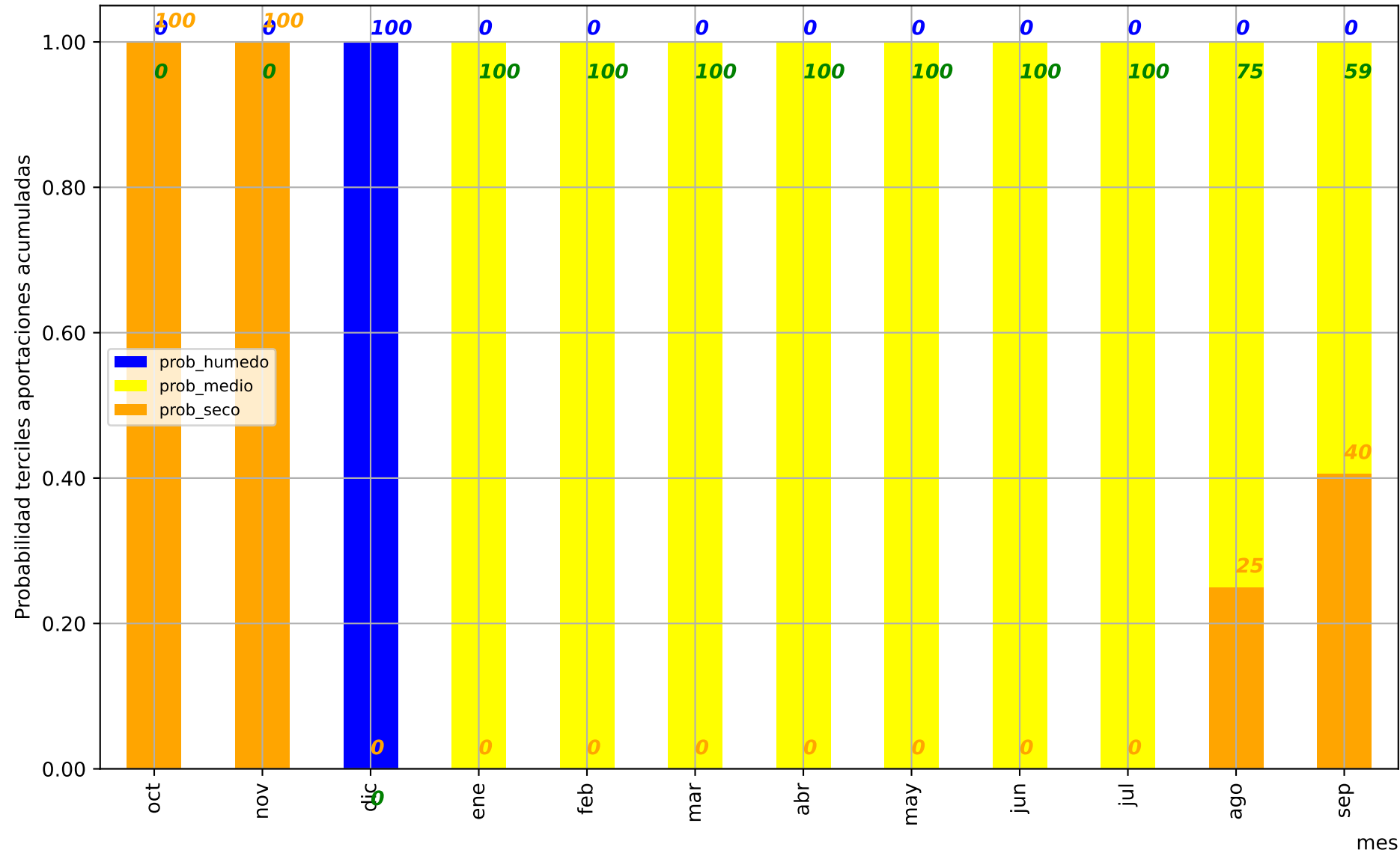






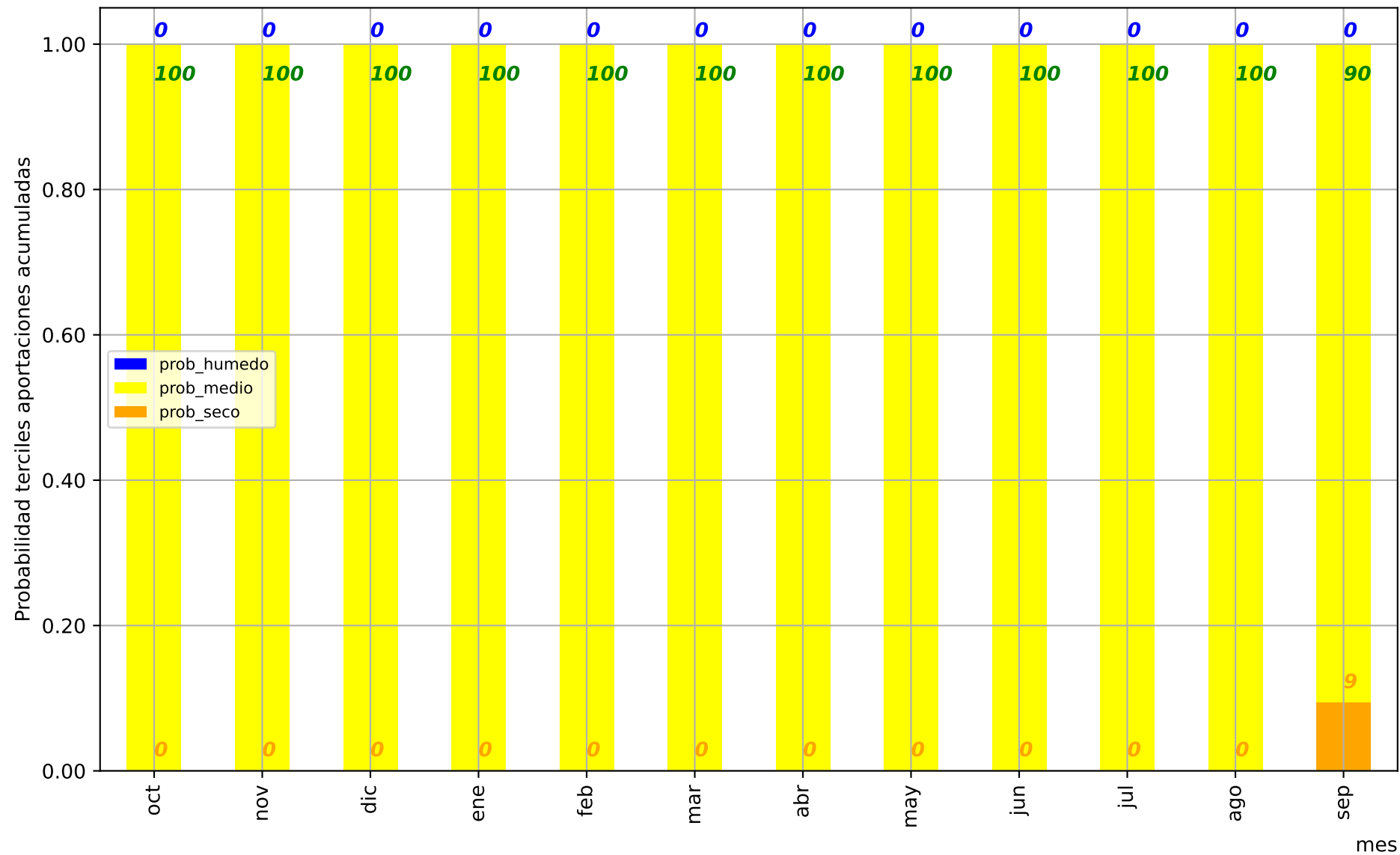






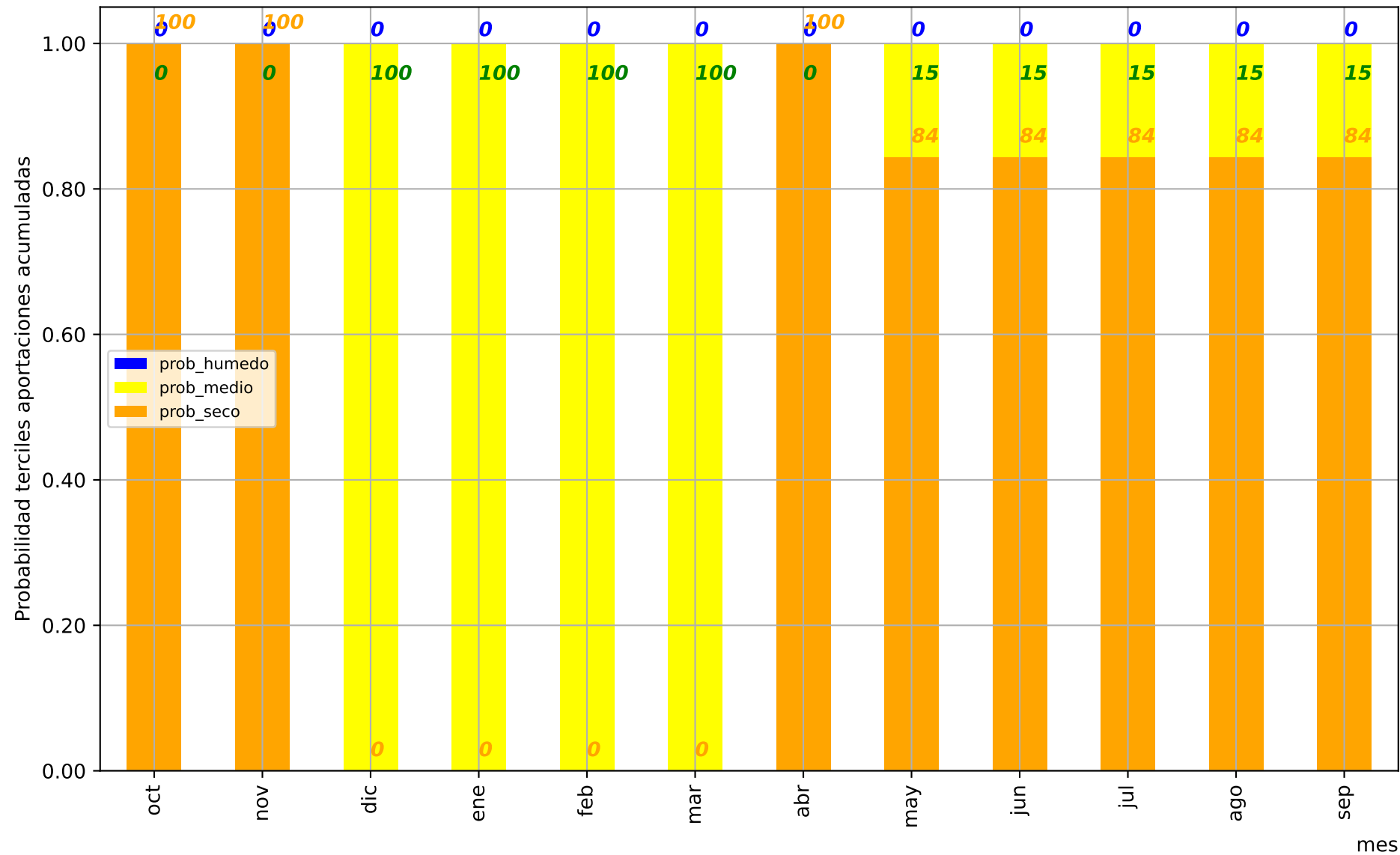
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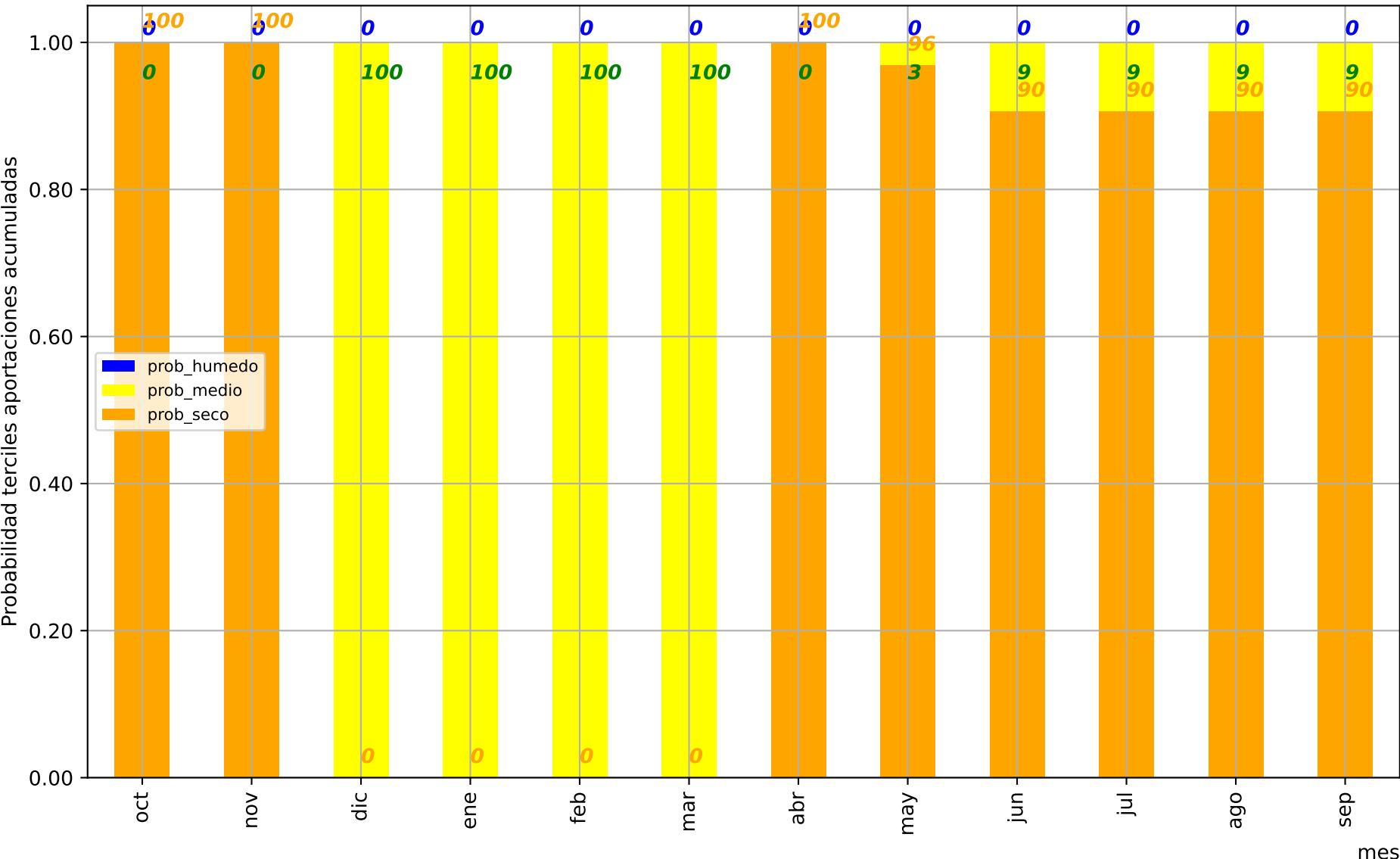
Desembocadura del Júcar



Predicción cuenca del:

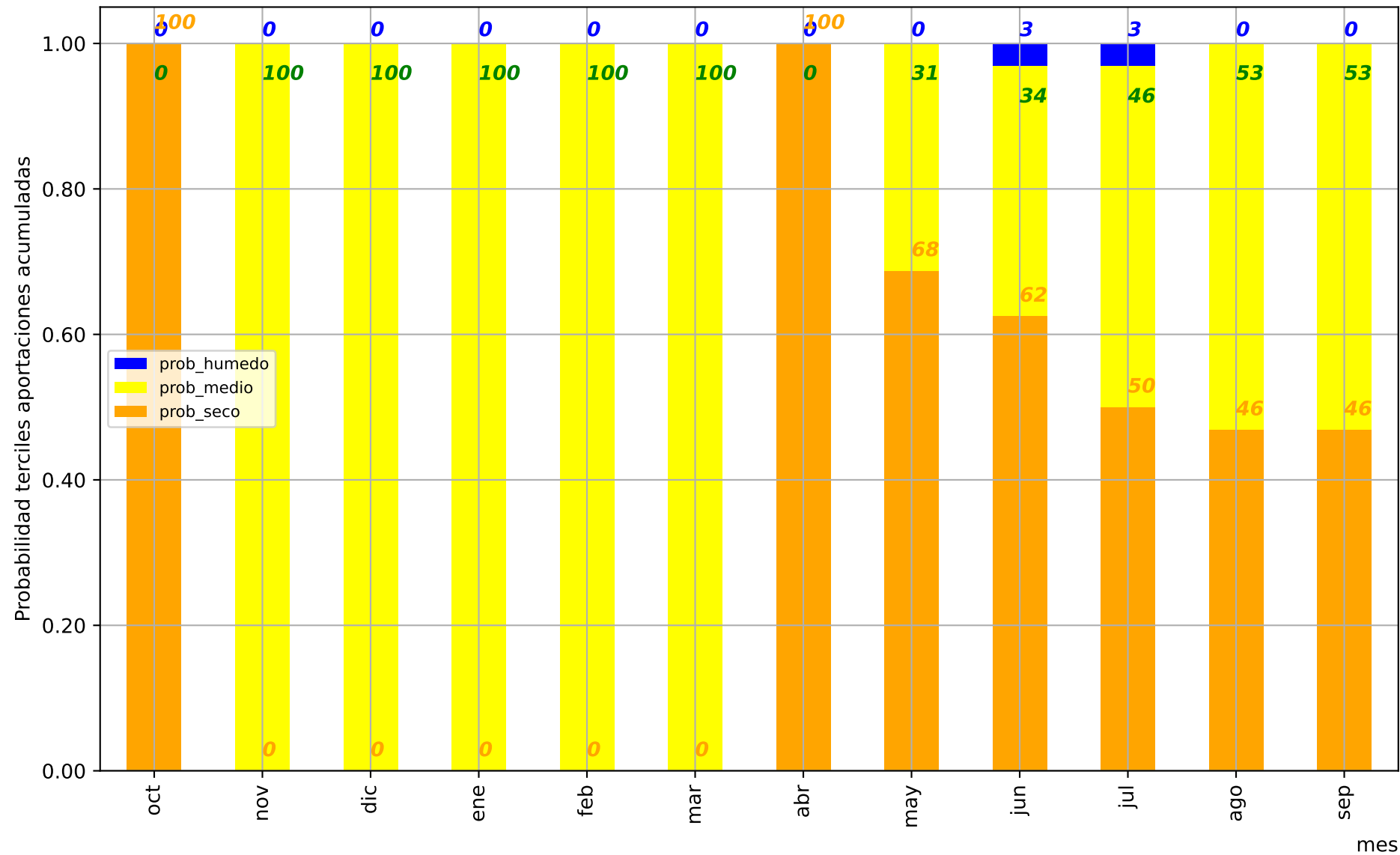
Río Ebro en Miranda de Ebro

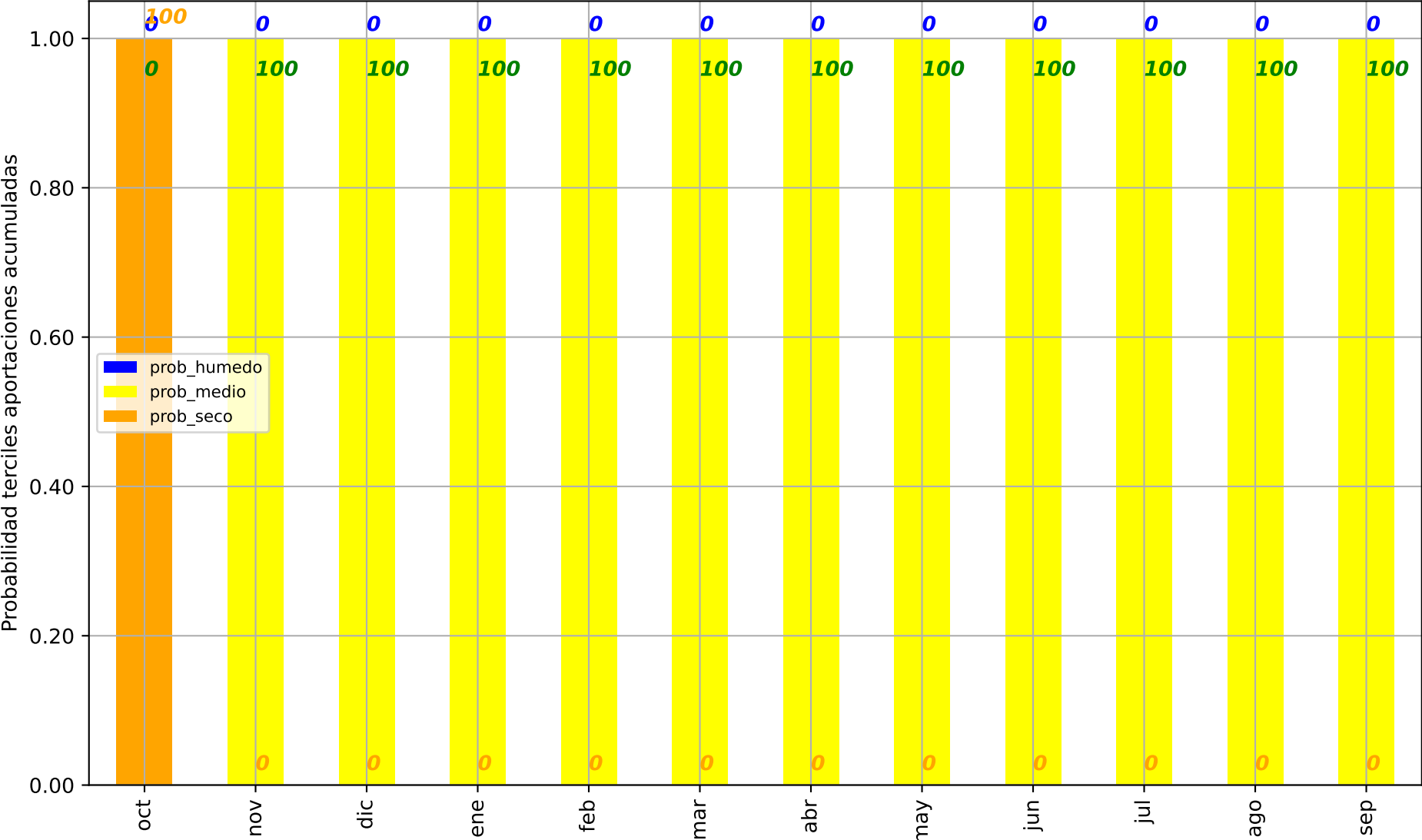




Predicción cuenca del:

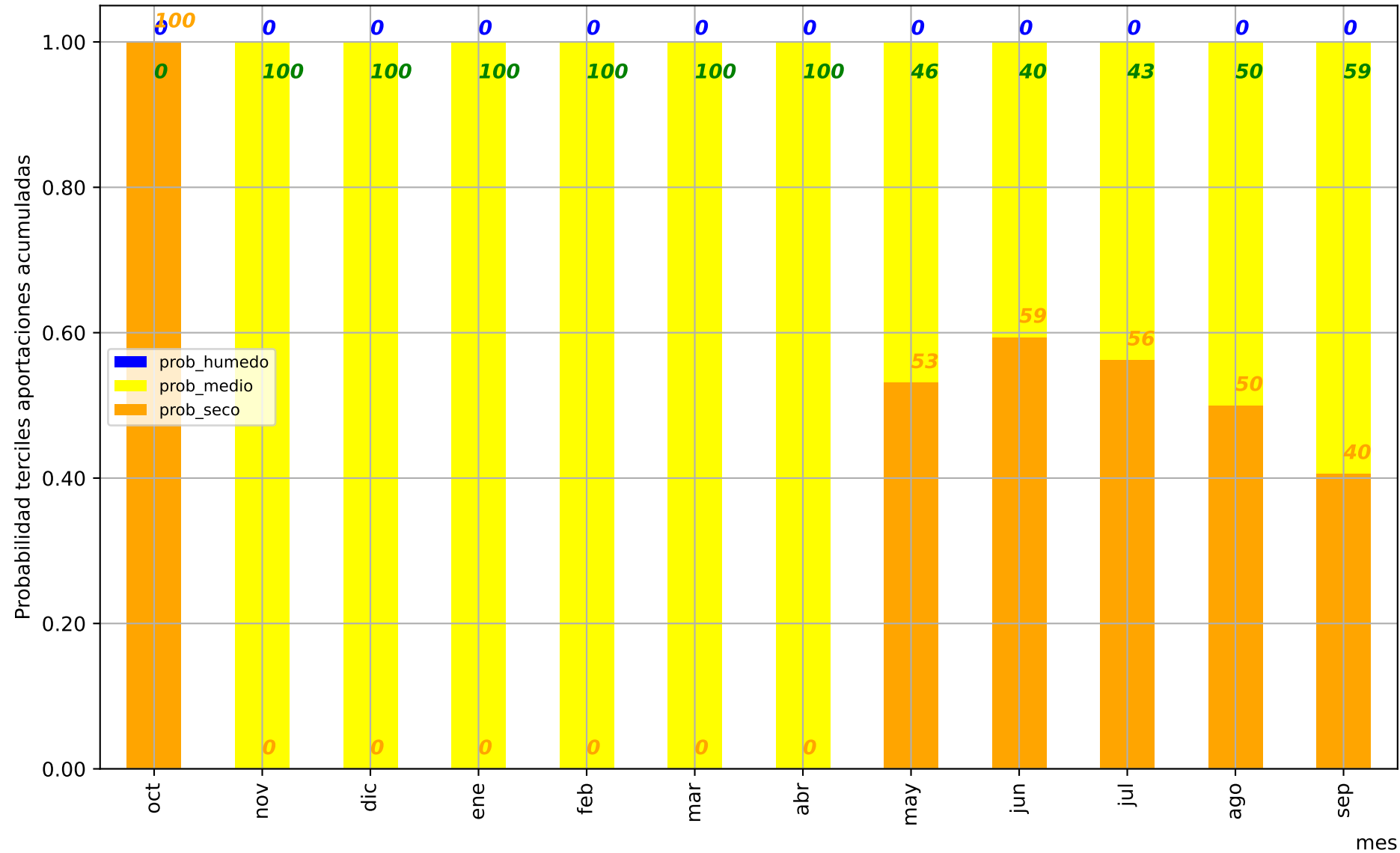
Río Cidacos en Arnedillo





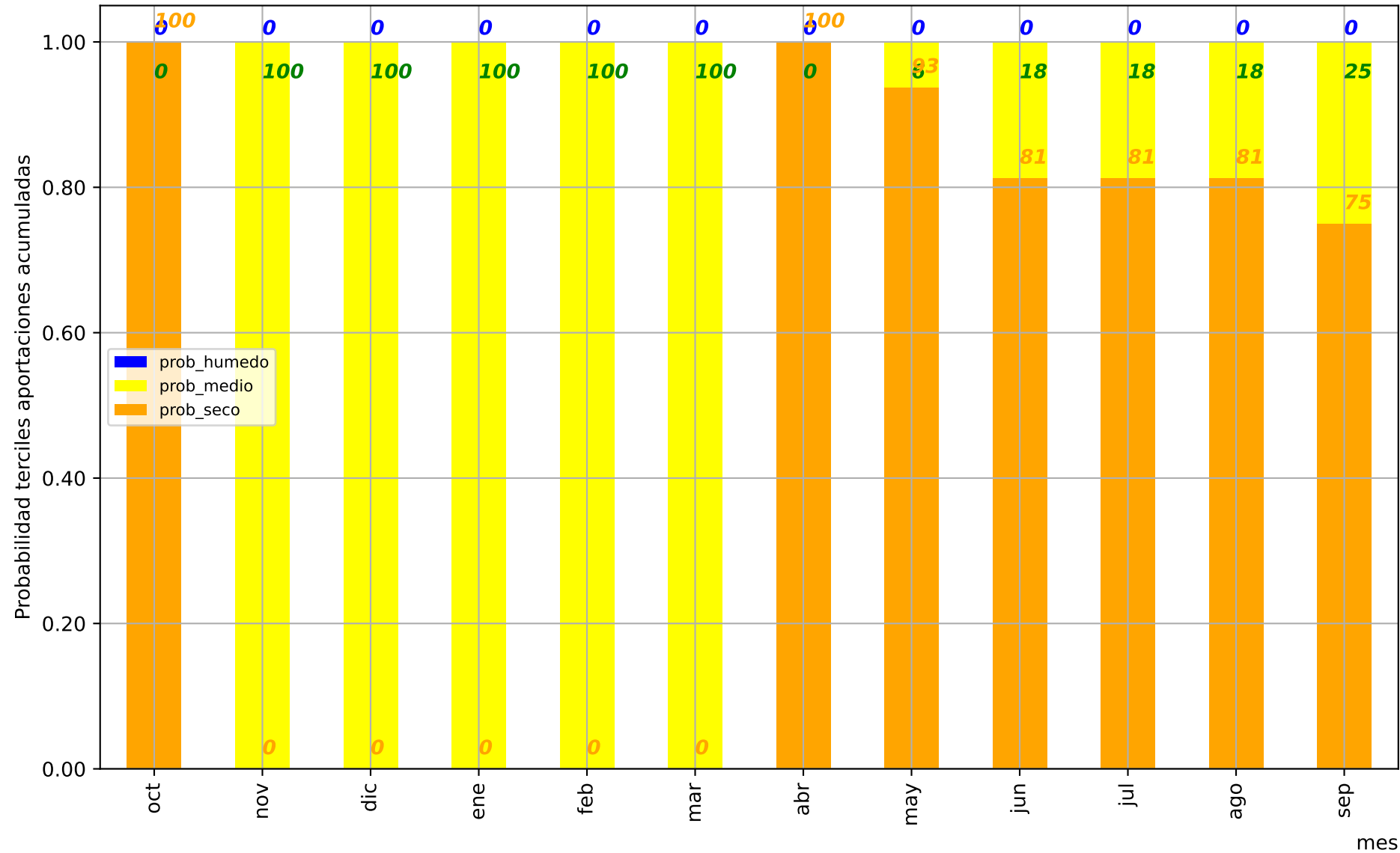
Predicción cuenca del:

Río Aragón desembocadura en el Ebro



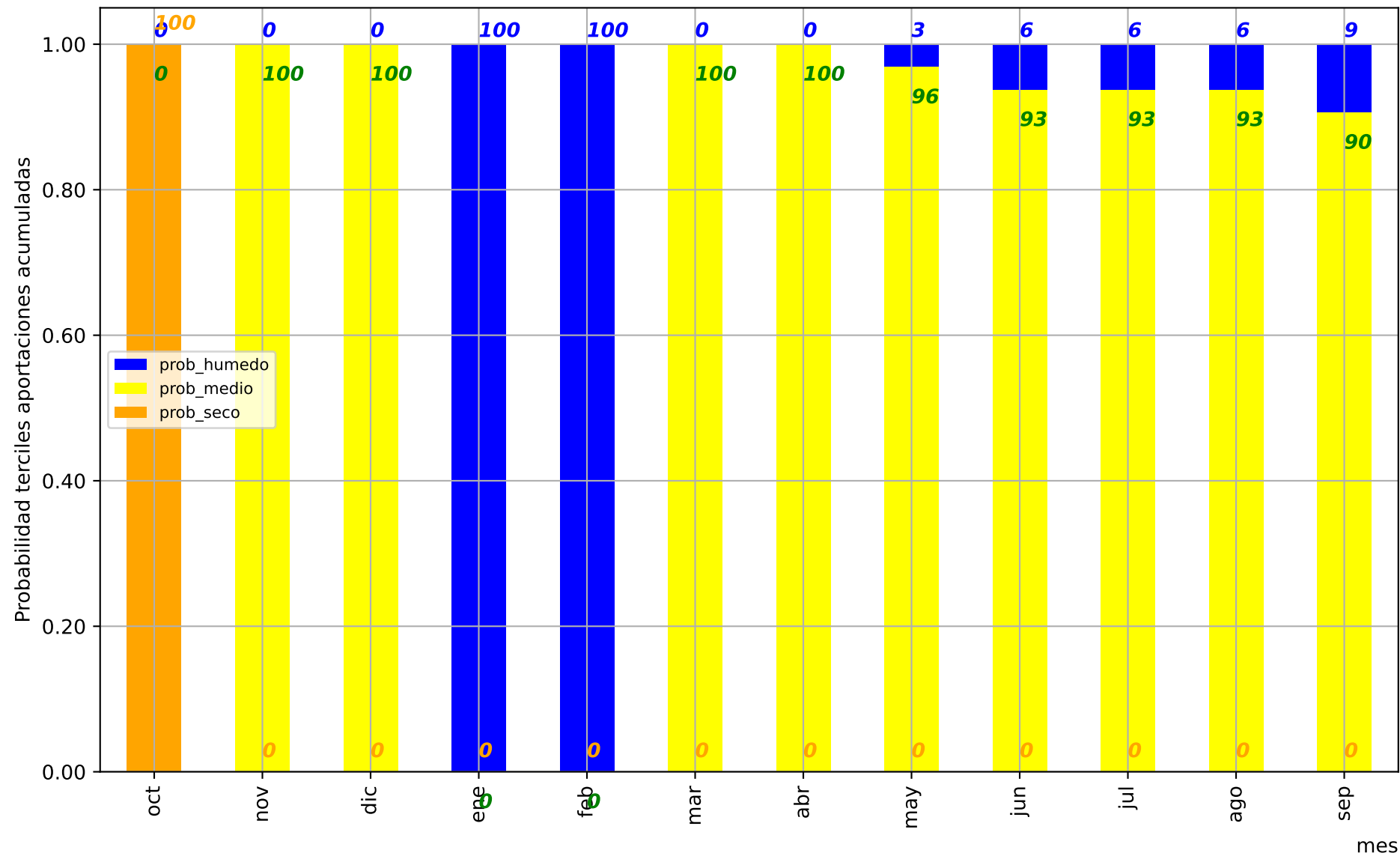
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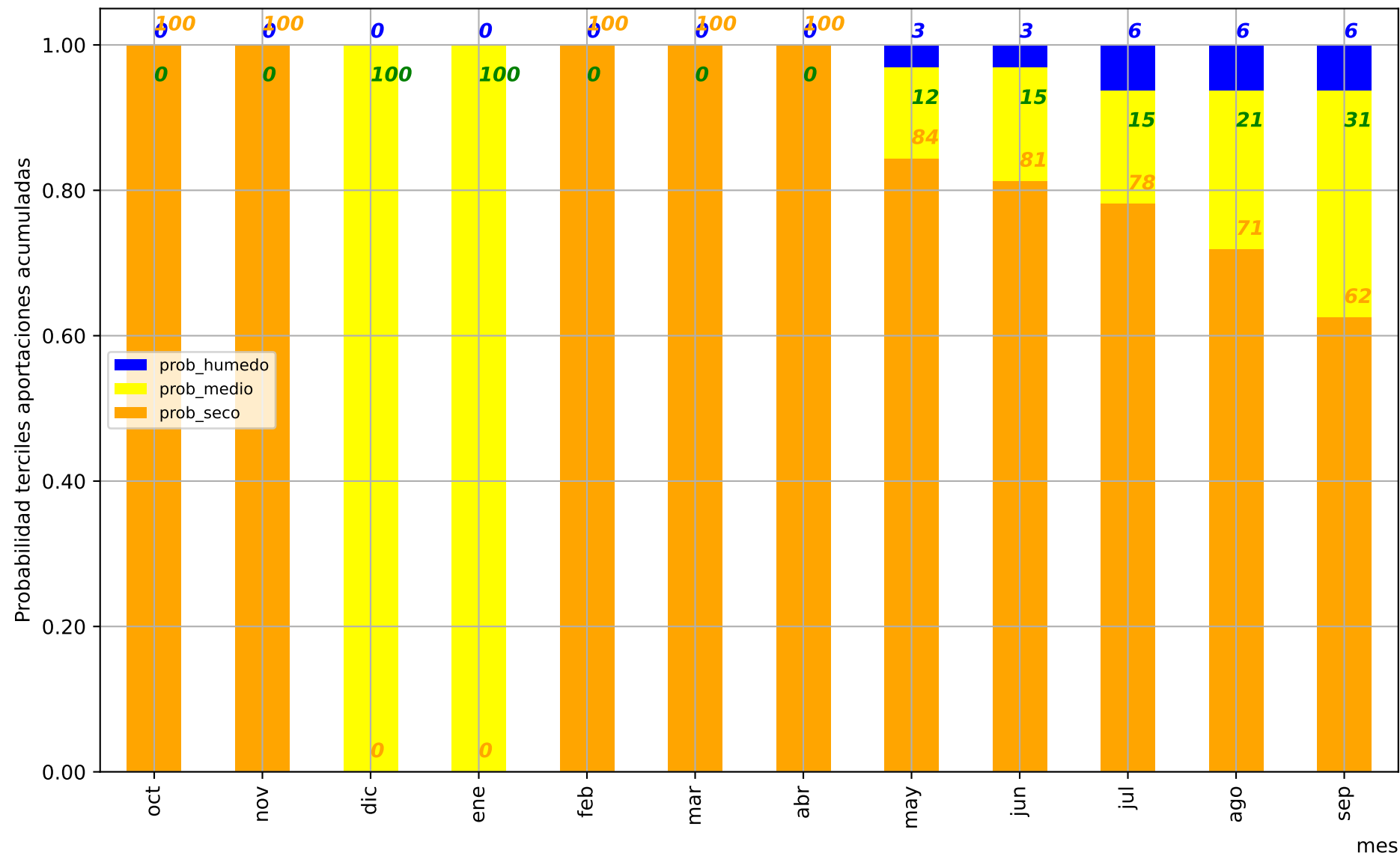
Río Ebro en Castejón



Predicción cuenca del:

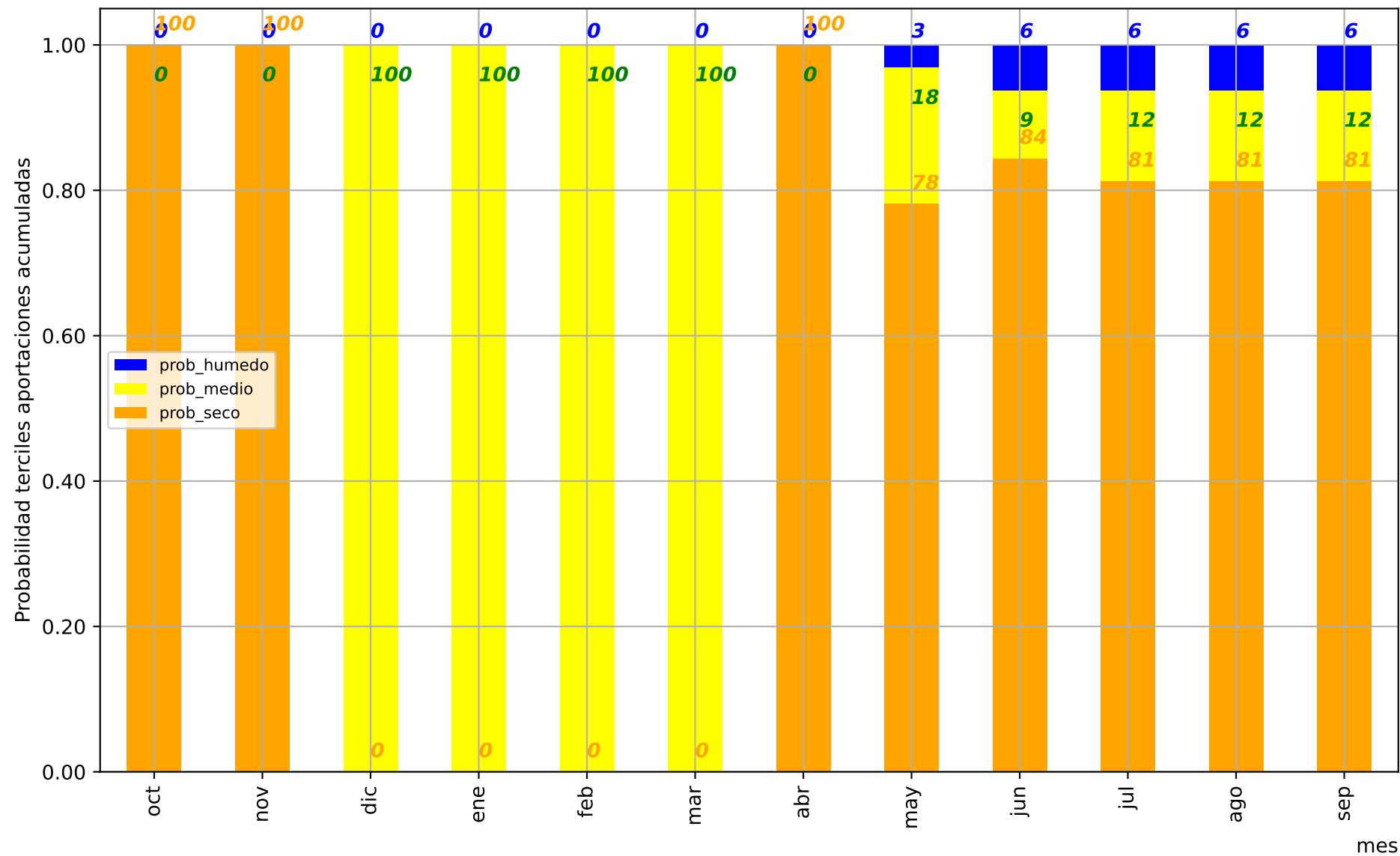
Río Arba completo desembocadura en el Ebro



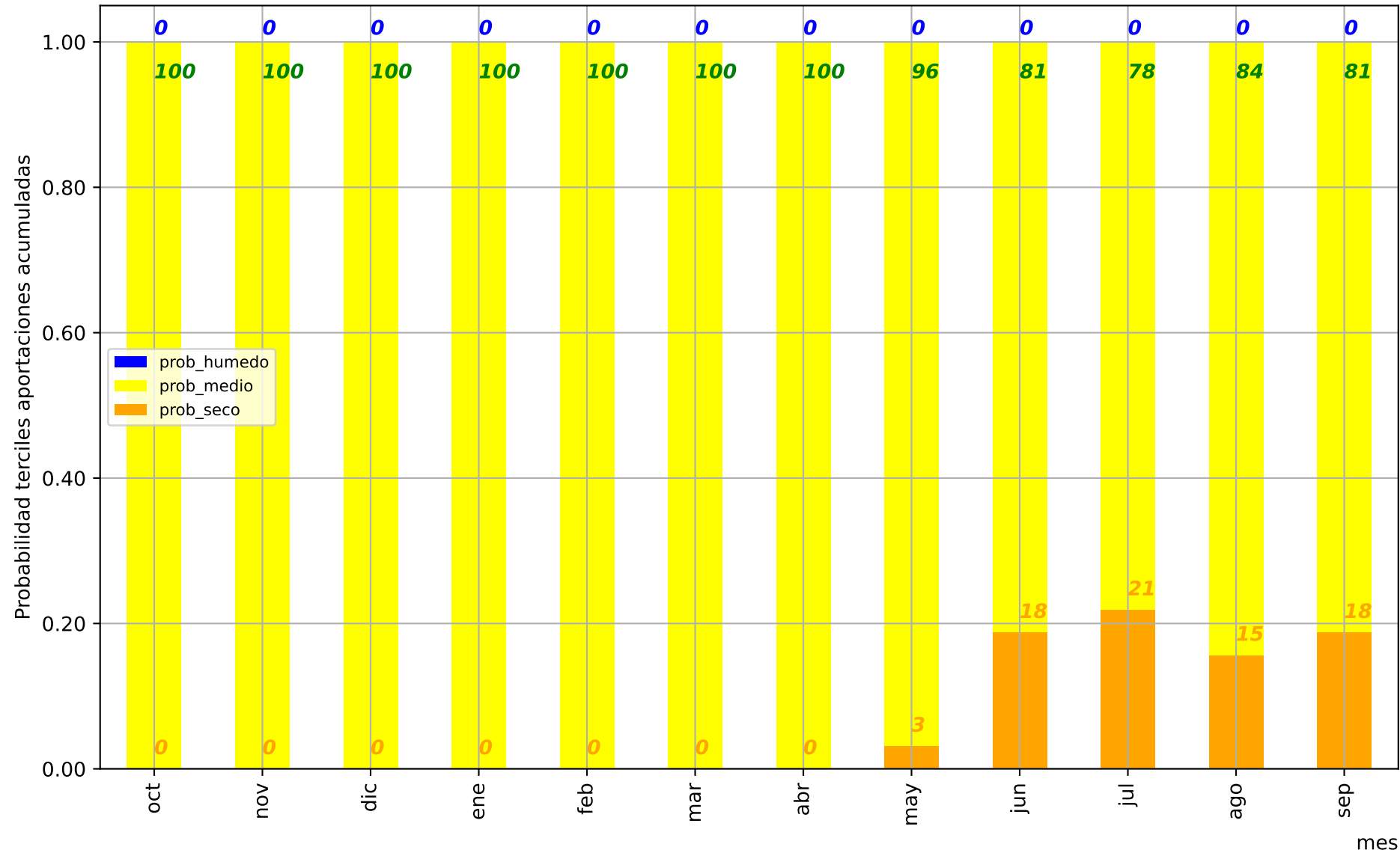


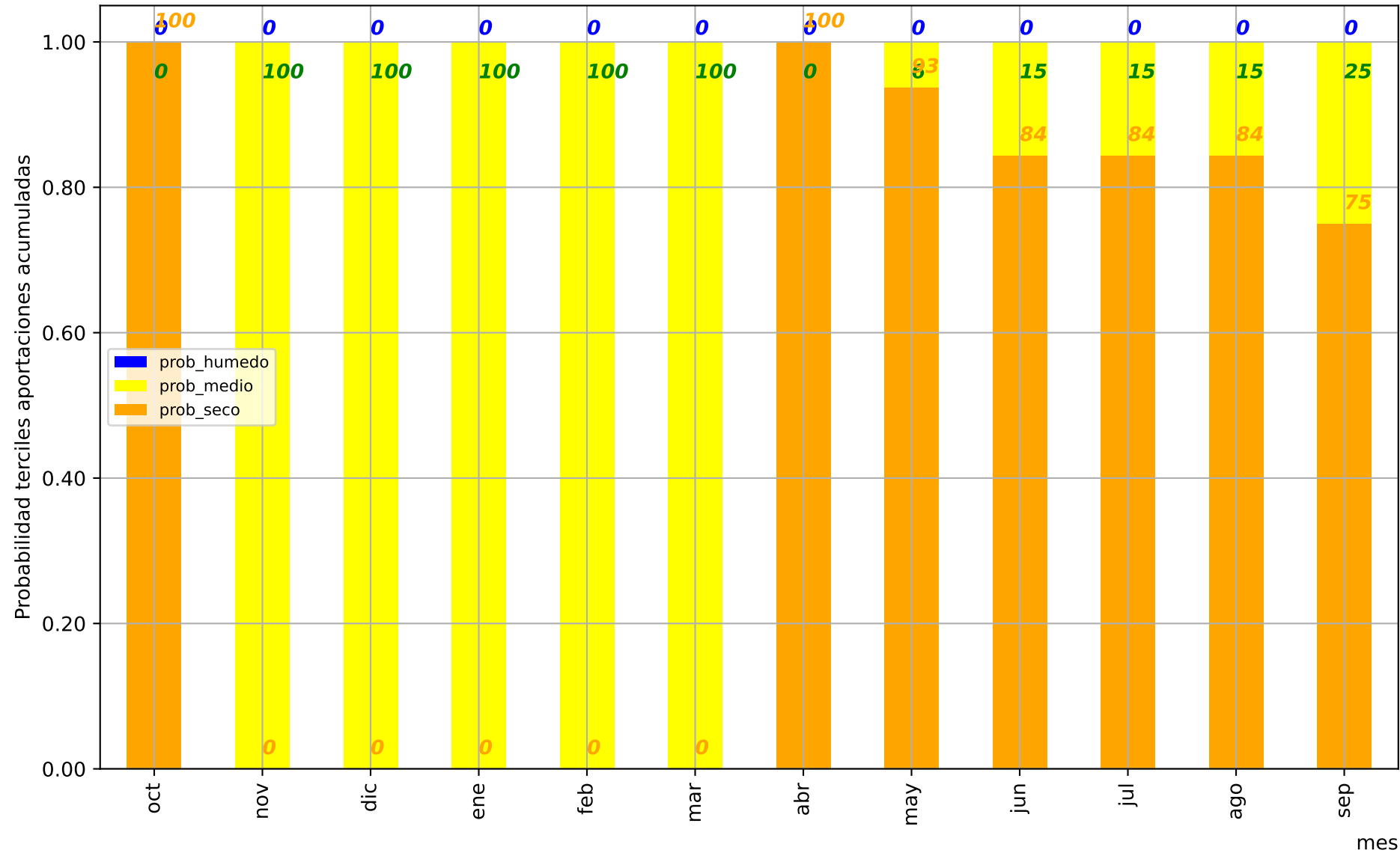
Predicción cuenca del:

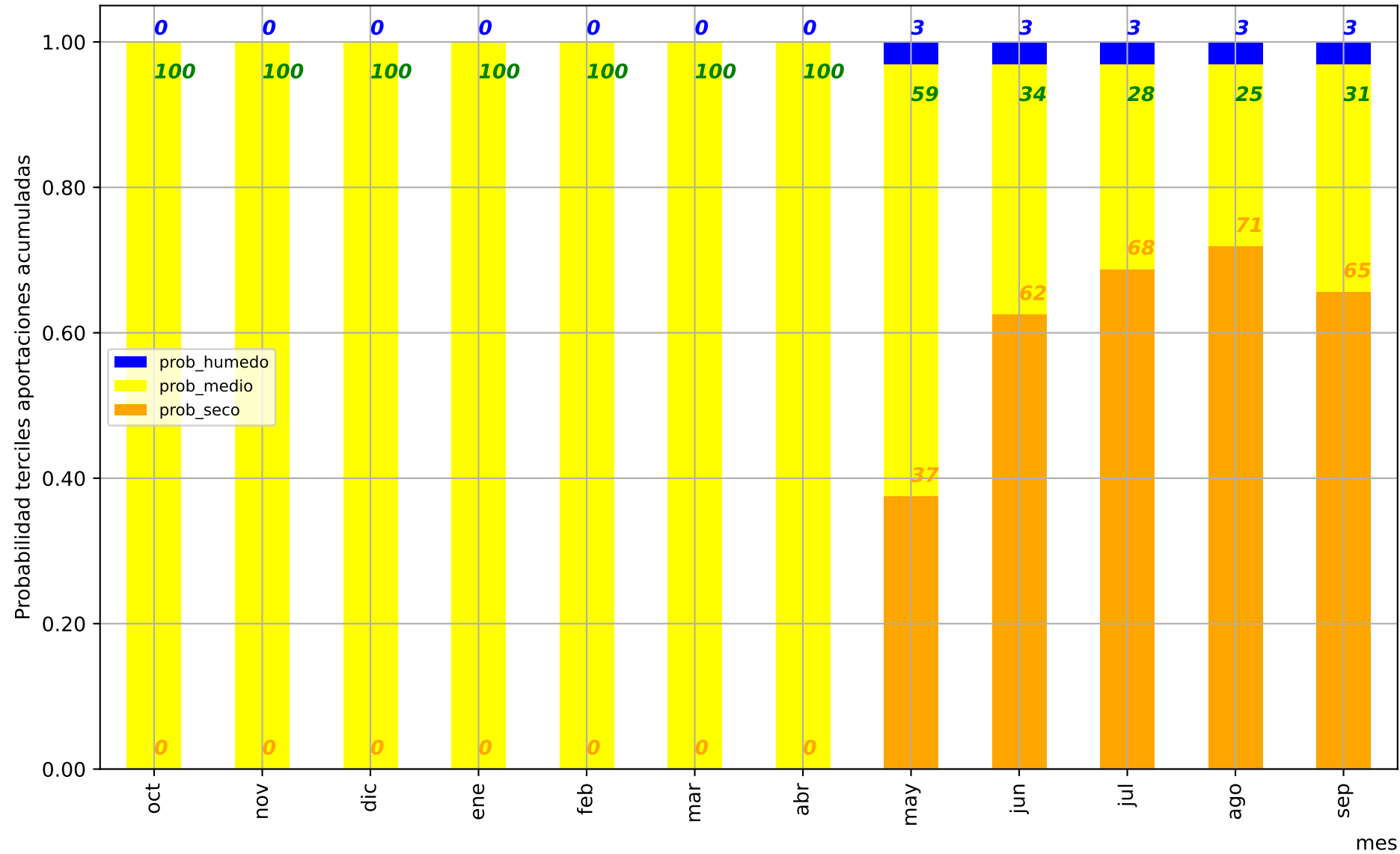
Río Jalón completo desembocadura en el Ebro



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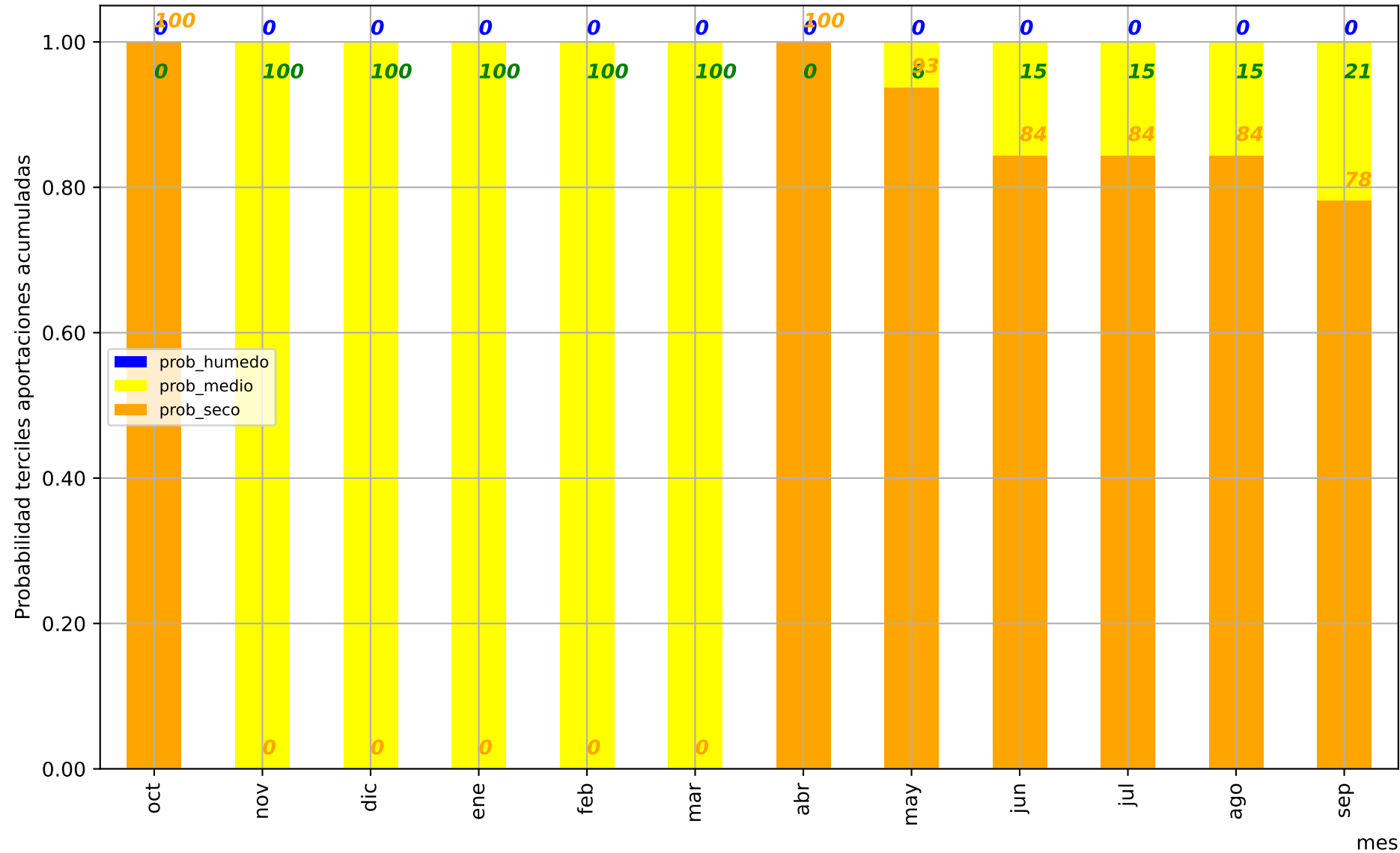






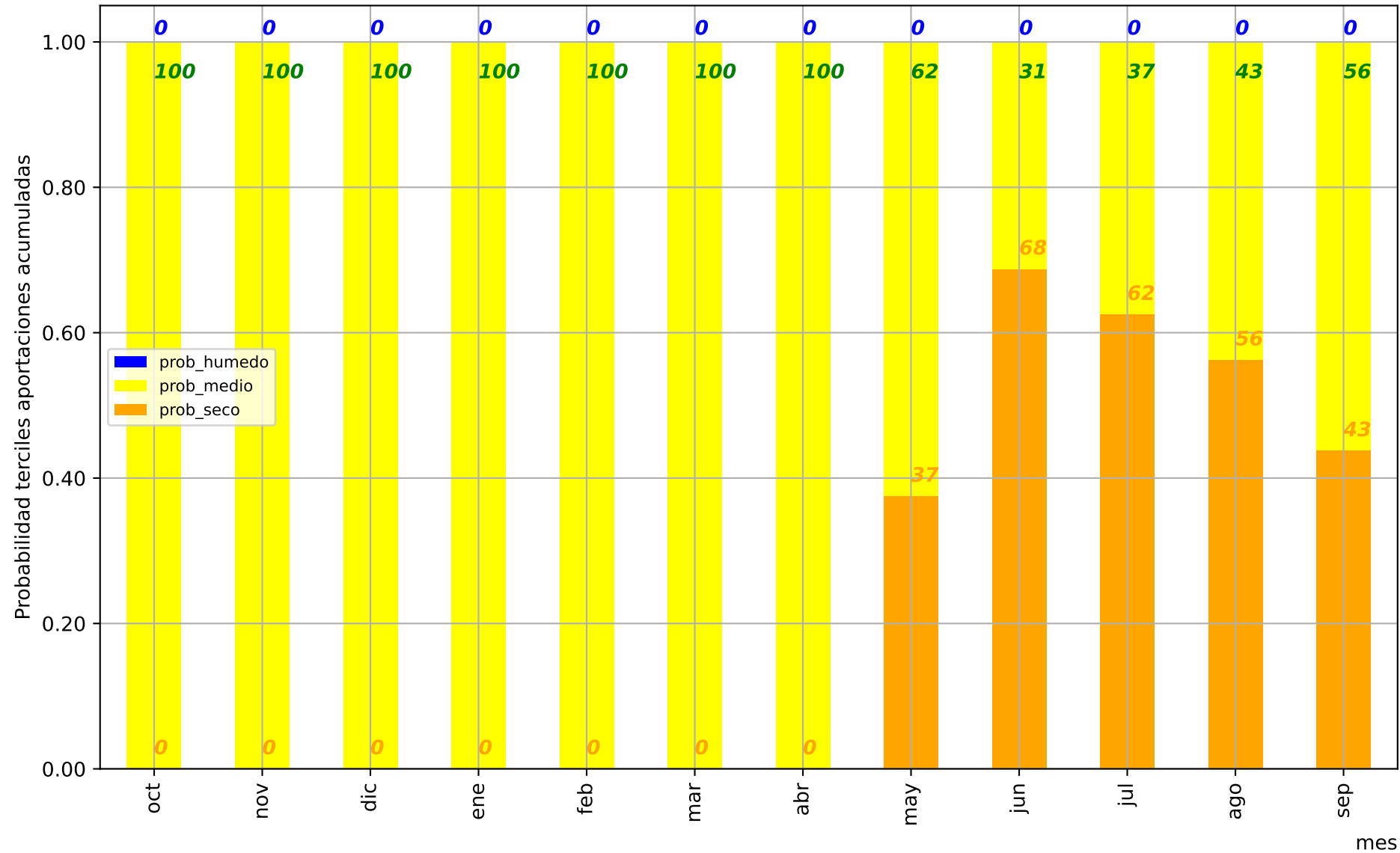
Predicción cuenca del:

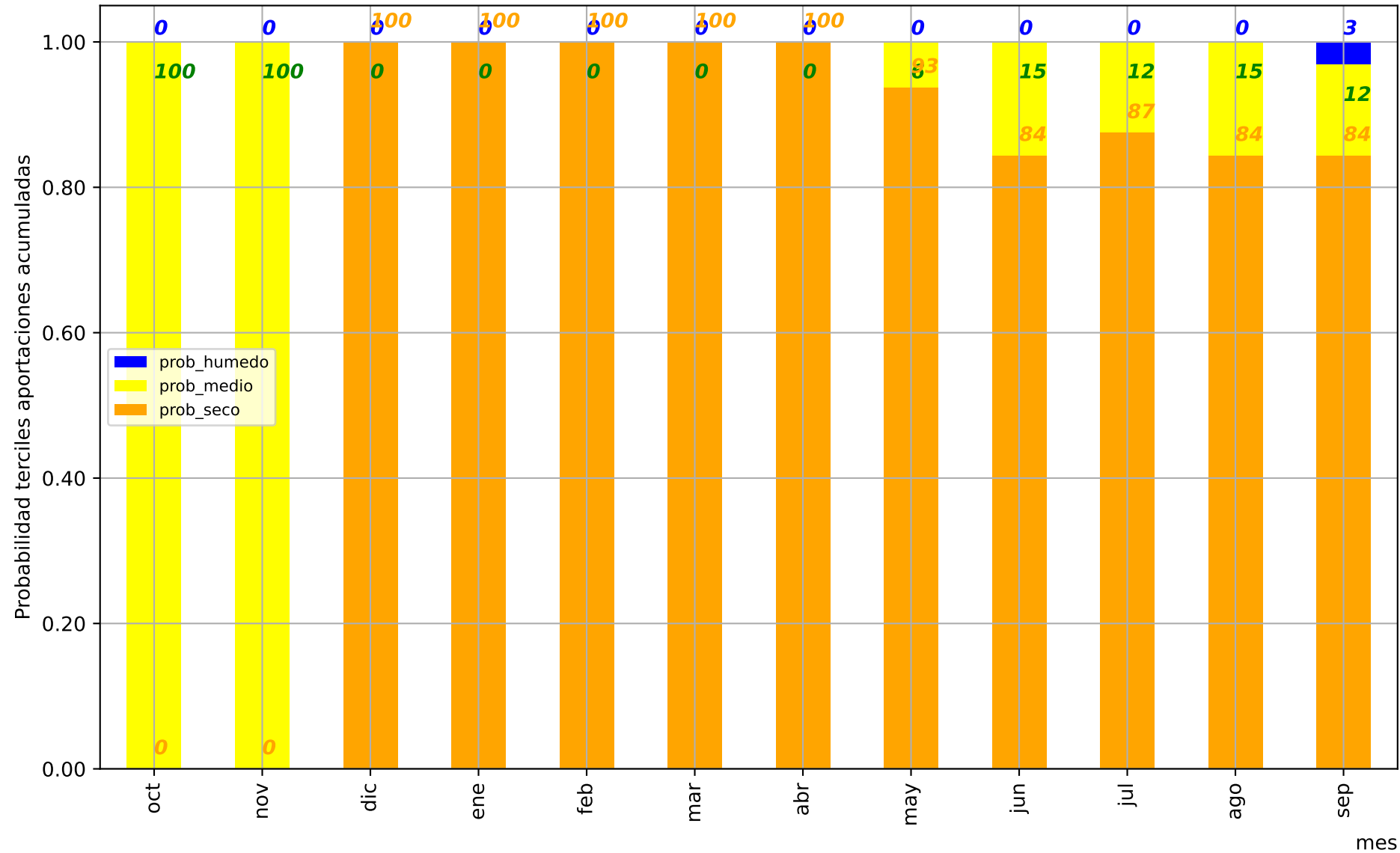
Río Ebro en el embalse de Mequínzenza

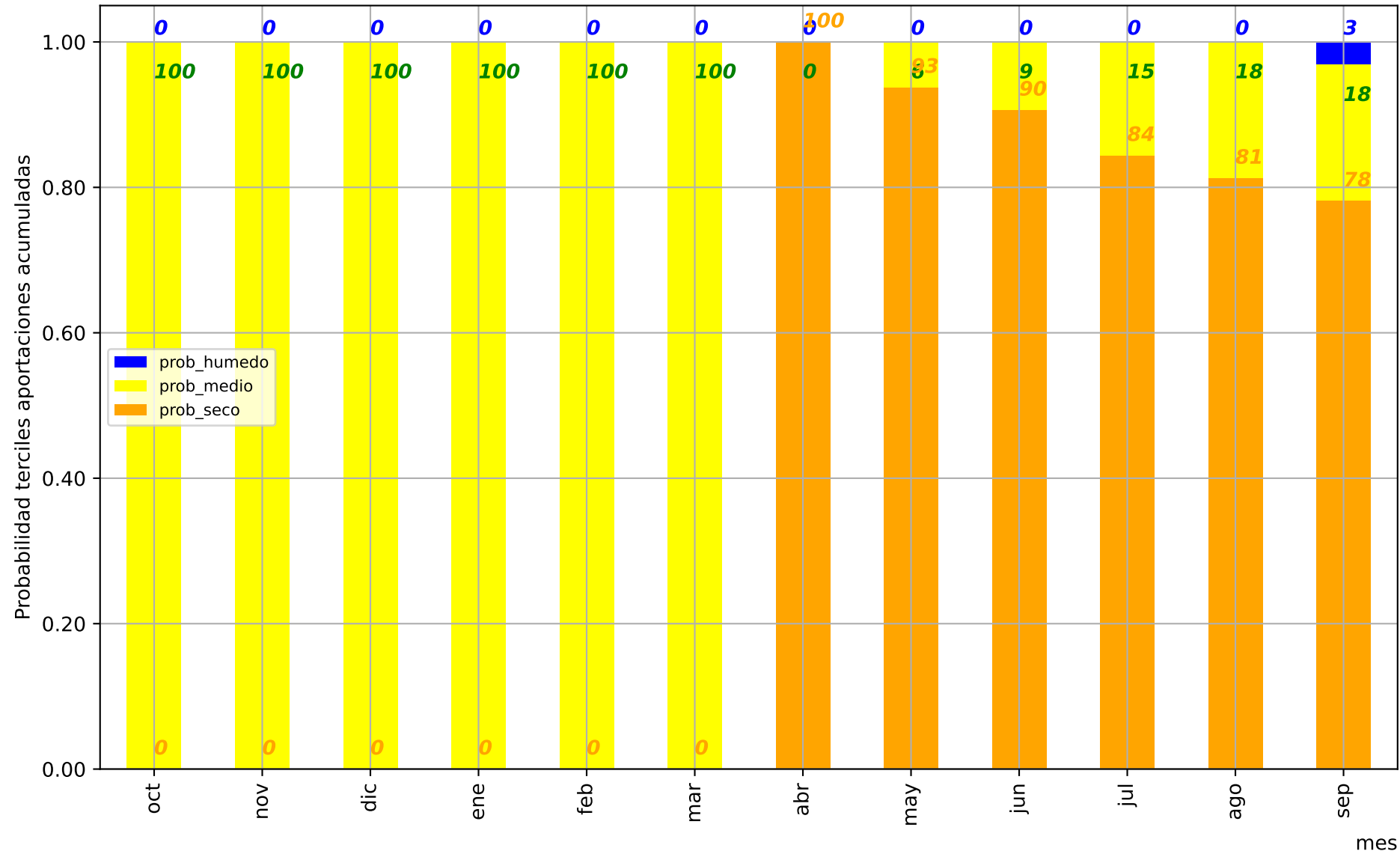


Predicción cuenca del:

Río Cinca completo desembocadura en el Segre

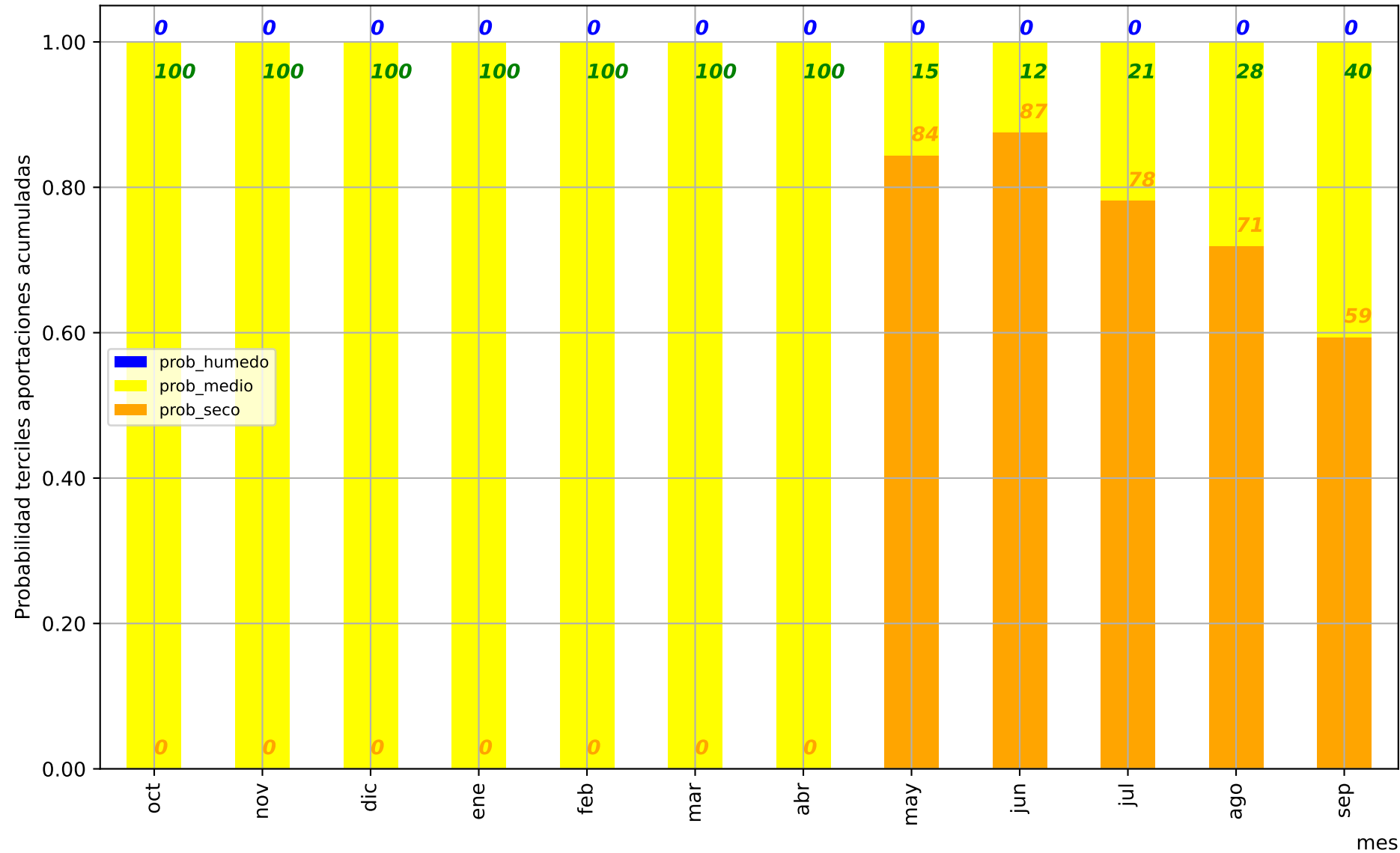


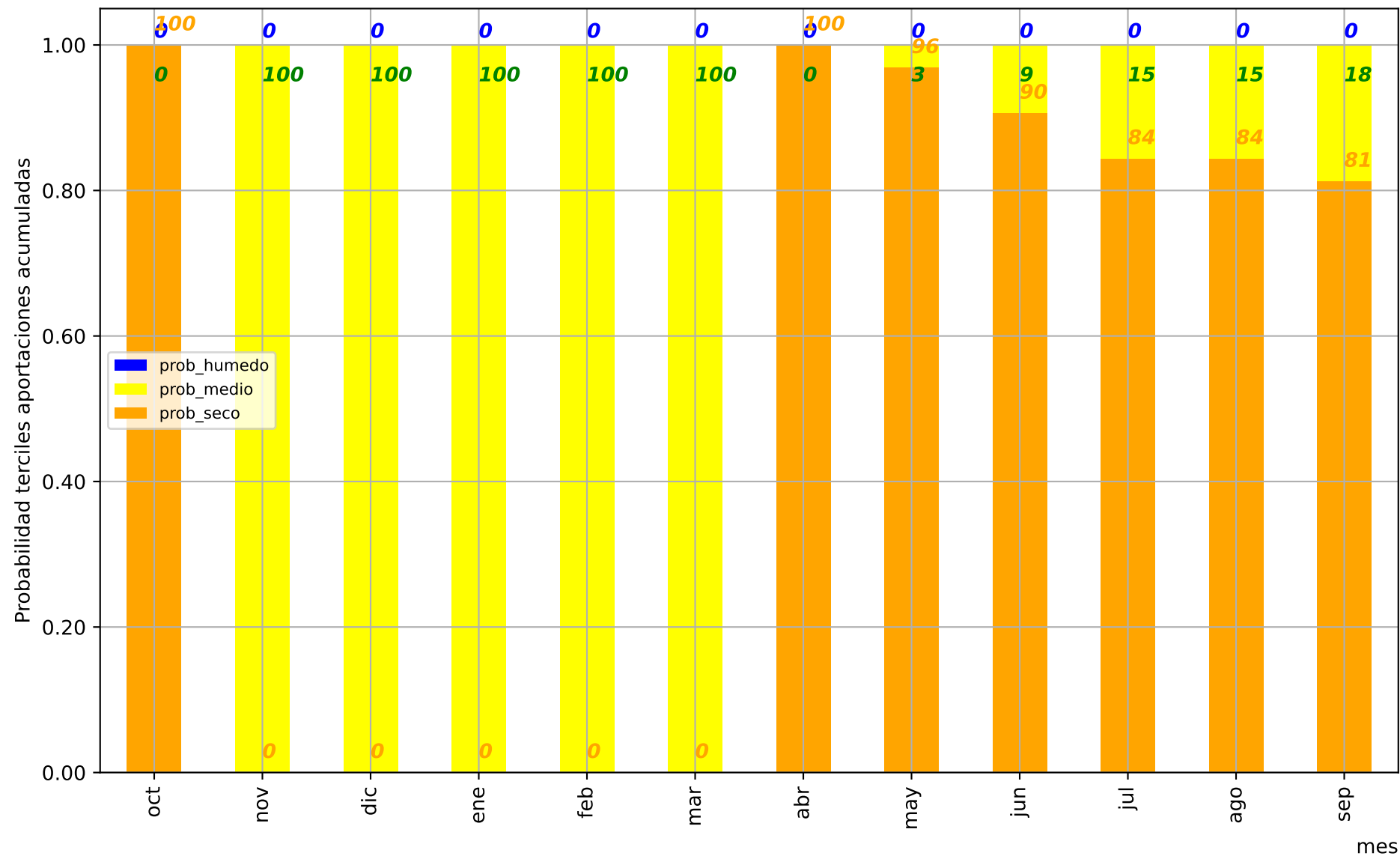




Predicción cuenca del:

Río Segre completo





Predicción cuenca del:

Río Ebro en el aforo E-27 Tortosa

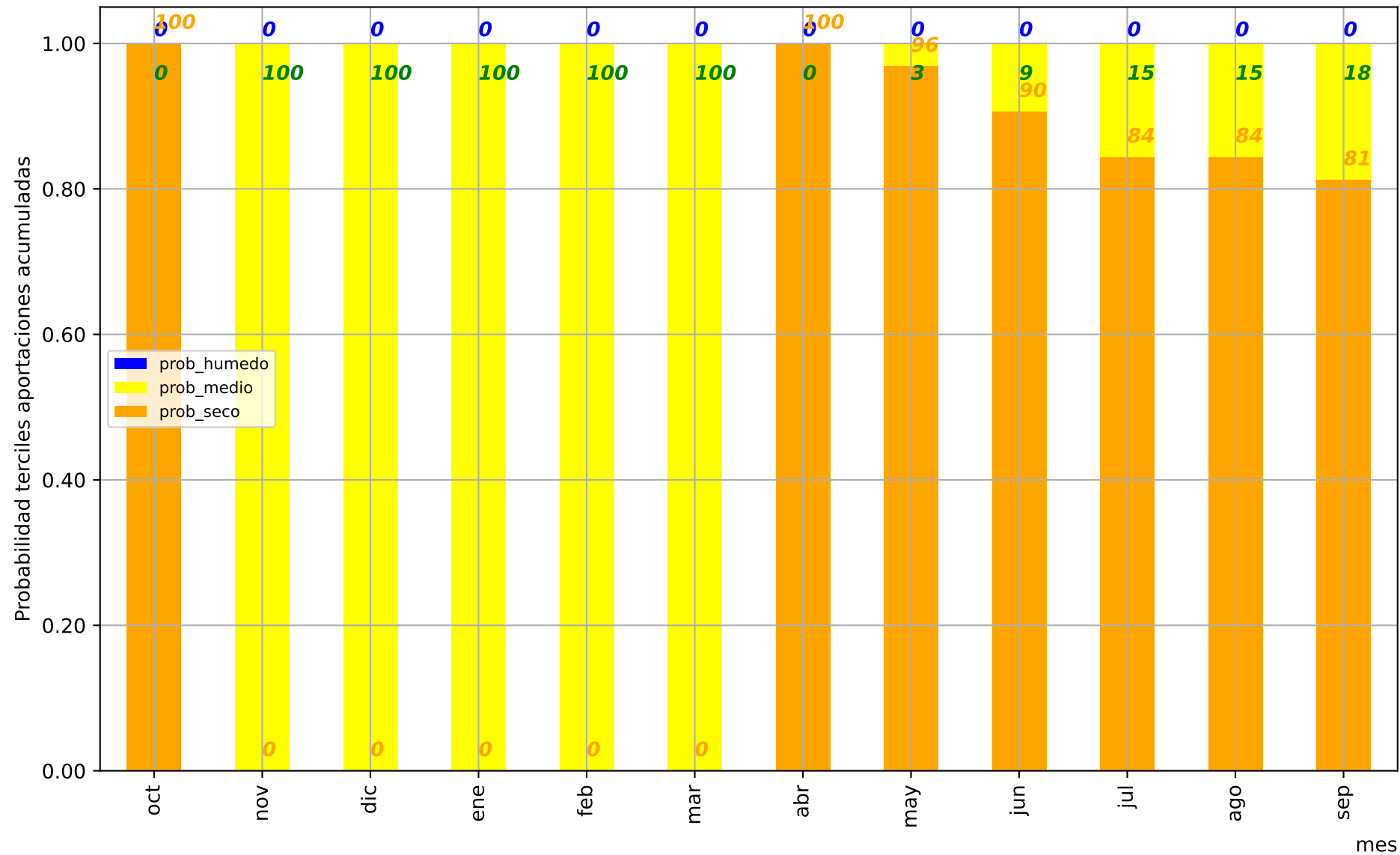


Tabla resumen aportaciones anuales naturales

Ratio respecto la aportación anual media en régimen natural

Valor = 1.00 => Predicción = Aportación anual media en régimen natural

Valor centrato y horquilla de variación

p50%Obs, p50%Resto. Ratio p50%, Horquilla: Ratio p25% - Ratio p75%, cXH30, cYH30, Nombre punto

1.12 0.09 1.21 1.17 1.27 1.20 71500 4649500 "Río Limia completo embalse de Linoso"

1.08 0.11 1.18 1.15 1.23 1.17 126500 4772500 "Río Miño en Lugo"

0.88 0.16 1.04 1.01 1.11 1.04 182500 4702500 "Río Sil medio embalse de Pumares"

0.99 0.12 1.11 1.08 1.17 1.11 68500 4678500 "Río Miño (embalse de Frieria)"

0.53 0.23 0.75 0.71 0.79 0.75 377500 4805500 "Río Deva (Cares) en desembocadura"

0.52 0.18 0.70 0.66 0.75 0.71 333500 4814500 "Río Sella en Ribadesella"

0.59 0.19 0.79 0.75 0.83 0.79 250500 4827500 "Río Nalón"

0.74 0.16 0.91 0.88 0.96 0.91 199500 4828500 "Río Navía"

0.69 0.23 0.93 0.87 0.98 0.90 524500 4636500 "Río Duero embalse de Cuerda del Pozo"

0.58 0.20 0.78 0.74 0.83 0.77 394500 4739500 "Río Pisuerga en el embalse de Aguilar de Campoo"

0.51 0.27 0.78 0.75 0.85 0.78 348500 4739500 "Río Carrión en Guardo"

0.47 0.20 0.67 0.65 0.71 0.66 352500 4609500 "Río Pisuerga en Valladolid"

0.57 0.12 0.70 0.66 0.80 0.66 346500 4599500 "Río Adaja completo"

0.51 0.21 0.73 0.70 0.76 0.70 269500 4597500 "Río Duero en Zamora"

0.54 0.21 0.75 0.73 0.80 0.74 234500 4607500 "Río Duero aguas arriba del Tormes (emb Castro, Villalcampo)"

0.75 0.14 0.89 0.86 0.94 0.87 221500 4574500 "Río Tormes embalse de La Almendra"

0.57 0.20 0.77 0.74 0.82 0.75 184500 4557500 "Río Duero en embalse Saucelle"

0.58 0.20 0.78 0.75 0.83 0.76 172500 4549500 "Río Duero en la frontera (San Martín)"

0.57 0.23 0.80 0.73 0.85 0.74 535500 4505500 "Río Tajo en Trillo"
0.57 0.21 0.78 0.71 0.84 0.73 521500 4483500 "Río Tajo embalse de Entrepeñas"
0.76 0.18 0.94 0.89 0.99 0.90 518500 4472500 "Río Guadiela-Tajo embalse de Buendía"
0.67 0.20 0.86 0.80 0.92 0.82 515500 4468500 "Río Tajo embalse de Bolarque"
0.67 0.19 0.86 0.81 0.93 0.82 448500 4432500 "Río Tajo en Aranjuez"
0.64 0.15 0.79 0.74 0.86 0.75 389500 4409500 "Río Tajo en Castrejón"
0.92 0.09 1.01 0.98 1.06 0.98 146510 4398500 "Río Tajo cola embalse del Cedillo"
0.27 0.13 0.41 0.40 0.42 0.40 485500 4348500 "Río Guadiana embalse de Guadiana II"
0.47 0.16 0.62 0.62 0.65 0.61 413500 4323500 "Río Guadiana embalse de El Vicario"
0.68 0.05 0.74 0.72 0.77 0.72 208500 4314500 "Río Guadiana en Merida"
0.77 0.06 0.83 0.82 0.86 0.82 151500 4309500 "Río Guadiana azud de Badajoz, zona española"
0.43 0.08 0.51 0.49 0.54 0.49 517500 4225500 "Río Guadalquivir embalse del Tranco de Beas"
0.29 0.15 0.44 0.42 0.46 0.42 479500 4197500 "Río Guadiana Menor desembocadura en el Guadalquivir"
0.38 0.06 0.45 0.44 0.46 0.44 443500 4207500 "Río Guadalimar completo"
0.50 0.01 0.51 0.51 0.52 0.51 424500 4212500 "Río Rumberal completo"
0.44 0.01 0.45 0.45 0.49 0.45 412500 4224500 "Río Jandula embalse de Encinarejo"
0.37 0.09 0.45 0.44 0.48 0.44 396500 4213500 "Río Guadalquivir embalse de El Marmolejo"
0.22 0.01 0.22 0.22 0.23 0.22 357500 4203500 "Río Guadalquivir embalse de San Rafael"
0.37 0.07 0.45 0.44 0.47 0.44 346500 4193500 "Río Guadalquivir en Córdoba"
0.33 0.18 0.51 0.46 0.57 0.51 447500 4113500 "Río Genil en Granada"
0.36 0.15 0.51 0.50 0.53 0.51 376500 4126500 "Río Genil embalse de Iznajar"
0.34 0.13 0.46 0.45 0.48 0.46 297500 4174500 "Río Genil completo (Presa del Judío)"
0.24 0.04 0.28 0.28 0.29 0.28 245500 4179500 "Río Viar embalse de Los Melonares"

0.28 0.02 0.30 0.29 0.30 0.29 225500 4179500 "Rivera de Cala embalse de Cala"
0.37 0.05 0.42 0.41 0.43 0.41 196500 4201500 "Rivera de Huelva embalse de la Aracena"
0.32 0.05 0.37 0.36 0.38 0.36 211500 4188500 "Rivera de Huelva embalse de Zufre"
0.31 0.04 0.35 0.35 0.36 0.35 219500 4174500 "Rivera de Huelva embalse de La Minilla"
0.30 0.03 0.33 0.33 0.34 0.33 230500 4162500 "Rivera de Huelva embalse de El Gergal"
0.33 0.07 0.40 0.39 0.42 0.39 234500 4138500 "Río Guadalquivir en Sevilla"
0.32 0.07 0.38 0.38 0.41 0.38 201500 4078500 "Río Guadalquivir (Sanlucar)"
0.32 0.10 0.42 0.40 0.46 0.41 570500 4250500 "Río Segura embalse de La Fuensanta"
0.44 0.21 0.65 0.64 0.67 0.64 617500 4243500 "Río Mundo embalse de Camarillas"
0.43 0.19 0.61 0.59 0.64 0.60 665500 4205500 "Río Segura en Murcia"
0.43 0.19 0.61 0.60 0.64 0.60 706500 4221500 "Río Segura desembocadura"
0.41 0.27 0.68 0.65 0.73 0.66 709500 4440500 "Embalse de Arenós"
0.36 0.19 0.56 0.54 0.60 0.55 755500 4422500 "Río Mijares: delta del Mijares - mar"
0.36 0.19 0.56 0.51 0.65 0.51 663500 4399500 "Embalse de Benagéber"
0.41 0.22 0.63 0.60 0.70 0.61 728500 4367500 "Río Turia: nuevo cauce - mar"
0.57 0.21 0.78 0.76 0.81 0.76 573500 4436500 "Río Júcar: azud de Villalba - río Huécar"
0.52 0.18 0.70 0.68 0.73 0.68 576500 4380500 "Embalse de Alarcón"
0.44 0.20 0.64 0.63 0.66 0.63 628500 4378500 "Embalse de Contreras"
0.46 0.21 0.66 0.65 0.69 0.65 703500 4334500 "Embalse de Tous"
0.46 0.20 0.66 0.65 0.68 0.65 737500 4338500 "Desembocadura del Júcar"
0.43 0.17 0.60 0.57 0.64 0.60 504500 4725500 "Río Ebro en Miranda de Ebro"
0.42 0.17 0.59 0.56 0.65 0.58 540500 4704500 "Río Ebro embalse de el Cortijo"
0.29 0.18 0.47 0.38 0.58 0.45 563500 4674500 "Río Cidacos en Arnedillo"

0.49 0.25 0.74 0.69 0.83 0.76 648500 4719500 "Río Aragón embalse de Yesa"
0.47 0.20 0.67 0.63 0.74 0.68 603500 4676500 "Río Aragón desembocadura en el Ebro"
0.44 0.19 0.62 0.59 0.69 0.62 607500 4670500 "Río Ebro en Castejón"
0.29 0.04 0.33 0.31 0.40 0.33 641500 4639500 "Río Arba completo desembocadura en el Ebro"
0.28 0.23 0.51 0.43 0.61 0.42 632500 4551500 "Río Jiloca en Daroca"
0.36 0.23 0.58 0.54 0.65 0.54 657500 4625500 "Río Jalón completo desembocadura en el Ebro"
0.36 0.27 0.63 0.57 0.73 0.64 679500 4614500 "Río Gállego completo desembocadura en el Ebro"
0.43 0.19 0.62 0.59 0.68 0.61 676500 4614500 "Río Ebro en Zaragoza"
0.40 0.22 0.62 0.58 0.68 0.60 751500 4558500 "Río Guadalope embalse de Caspe"
0.42 0.20 0.62 0.59 0.68 0.61 774500 4584500 "Río Ebro en el embalse de Mequinenza"
0.32 0.32 0.63 0.56 0.74 0.64 779500 4593500 "Río Cinca completo desembocadura en el Segre"
0.20 0.31 0.51 0.43 0.61 0.52 855500 4669500 "Río Segre en el embalse de Oliana"
0.23 0.35 0.58 0.49 0.69 0.59 803500 4614500 "Río Segre en el aforo de Lleida"
0.27 0.33 0.60 0.53 0.71 0.62 776500 4586500 "Río Segre completo"
0.38 0.25 0.62 0.58 0.70 0.61 797500 4569500 "Río Ebro en el embalse de Flix"
0.37 0.25 0.62 0.58 0.70 0.61 796500 4525500 "Río Ebro en el aforo E-27 Tortosa"