

VI Seminario Internacional sobre Comportamiento y Aplicaciones

Velocidad de Ajuste en Ambientes Dinámicos

José Luis Baroja

Arturo Bouzas

*Laboratorio 25
Facultad de Psicología, UNAM*

Universidad Autónoma de Tlaxcala
Noviembre 15, 2017

Antecedentes

Muchos ambientes aleatorios cambian sin aviso; detectar el cambio y ajustar el comportamiento puede ser crucial para sobrevivir.

*Las ratas y ratones parecen ajustarse rápidamente a cambios no señalados en programas concurrentes VI–VI
(Gallistel et al., 2001).*

*¿Qué tan rápido lo hacen las palomas?
¿Qué tan general es el efecto?*

Diseño experimental

6 palomas

Toda la comida en caja experimental

Concurrente VI – VI

*Distribución geométrica sobre segundos
(sin Flesher & Hoffman's)*

1 hr para comer

136 sesiones diarias, y contando...

Diseño experimental

2 tipos de sesión

Estables: los valores de los VI no cambian

*Dinámicas: en algún segundo aleatorio
la tecla rica se convierte en pobre*

2 fases

*Cambios esporádicos: sesiones dinámicas
separadas por muchas sesiones estables*

*Cambios frecuentes: sesiones dinámicas ocurren
con alta frecuencia*

Diseño experimental

Cambios esporádicos

VI izq VI der # Ses.

30 90 15

90 30 9

30 90 9

90 30 16

30 90 21

90 30 25

45 45 13

Cambios frecuentes

En cada sesión de cada paloma:

Decide si es sesión dinámica ($p=0.5$)

Altera entre estos programas:

Tecla rica Tecla pobre

24 360

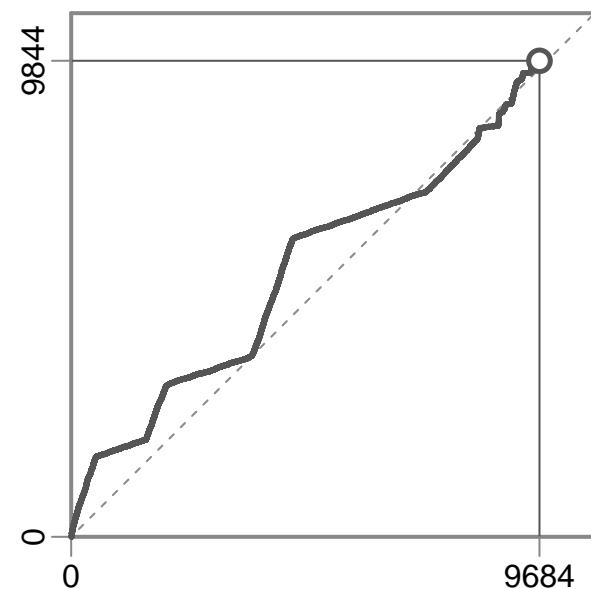
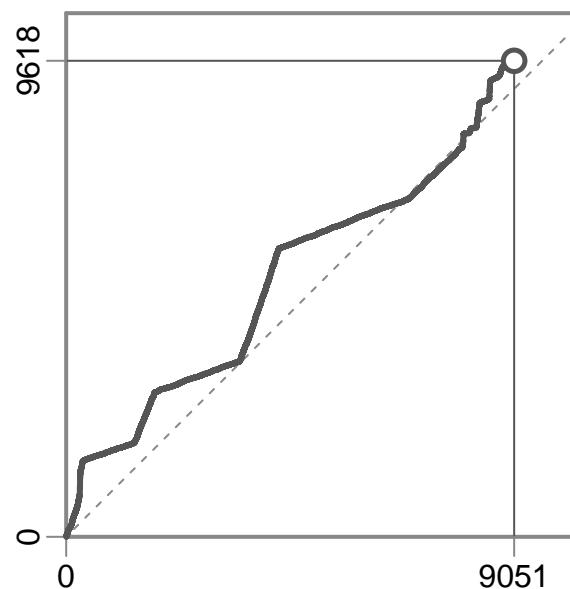
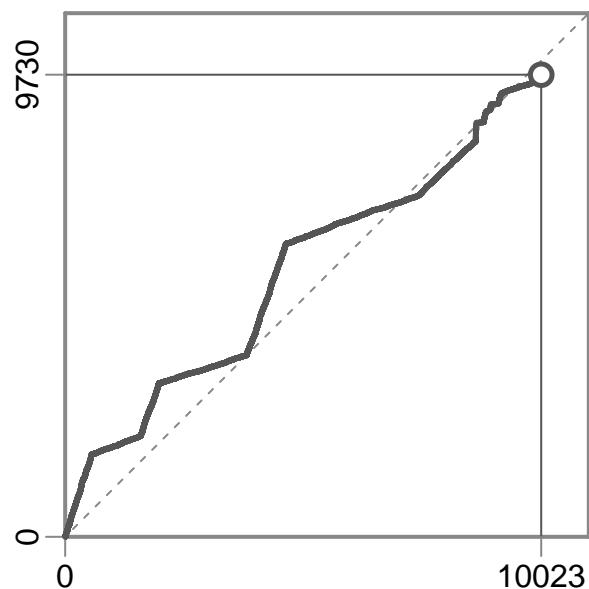
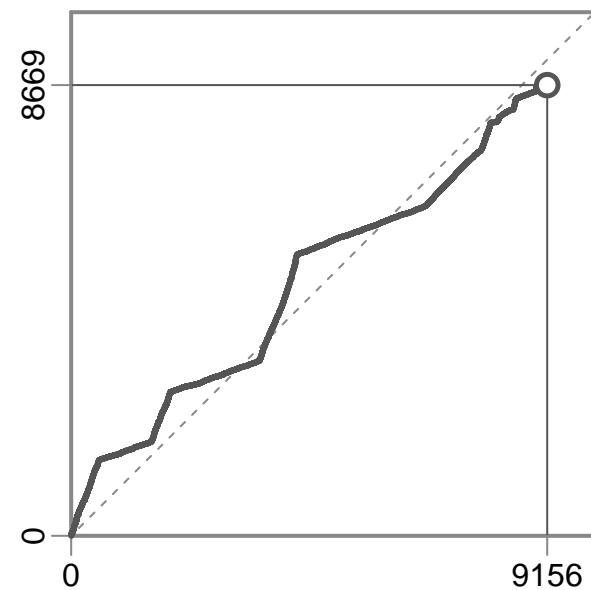
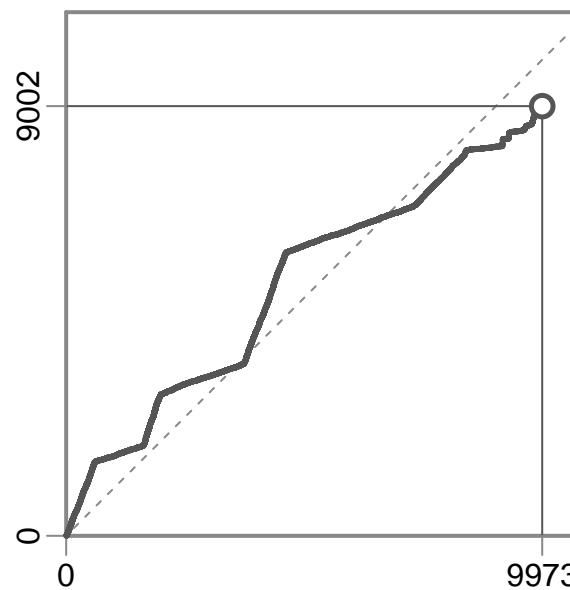
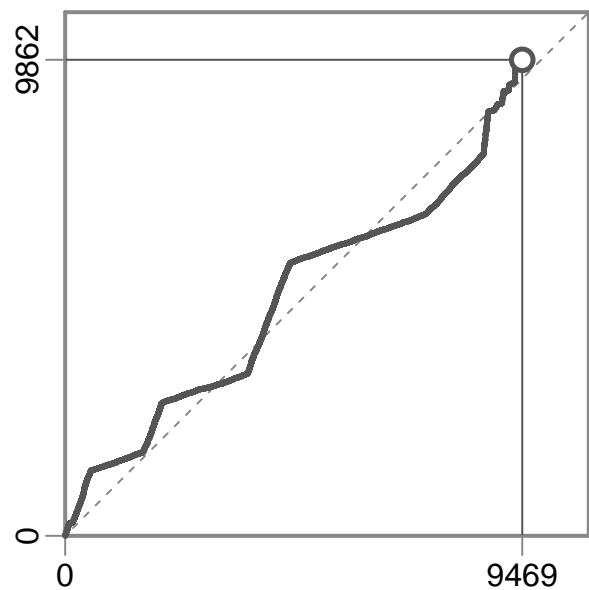
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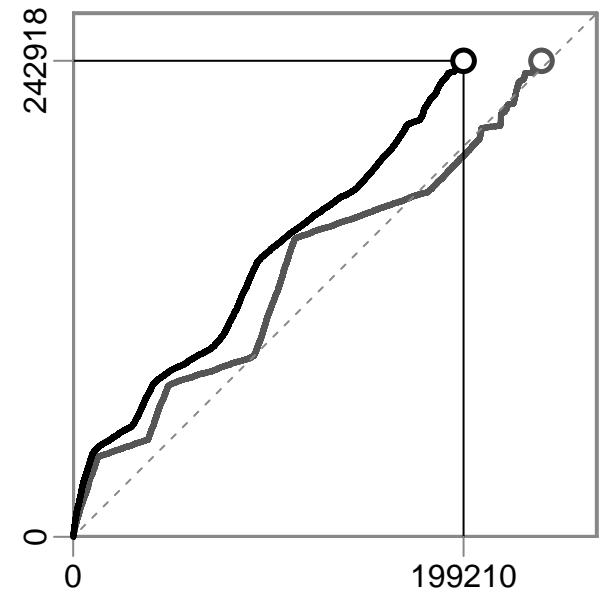
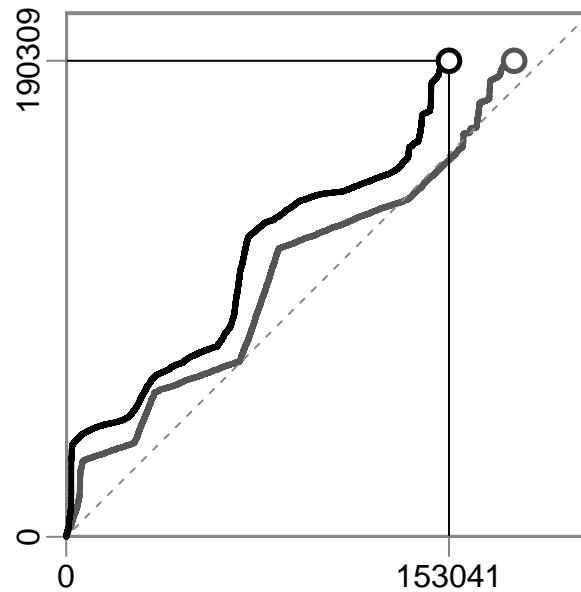
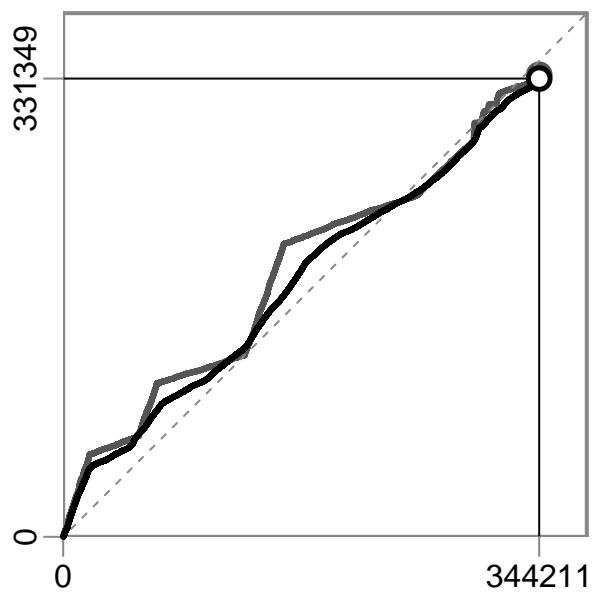
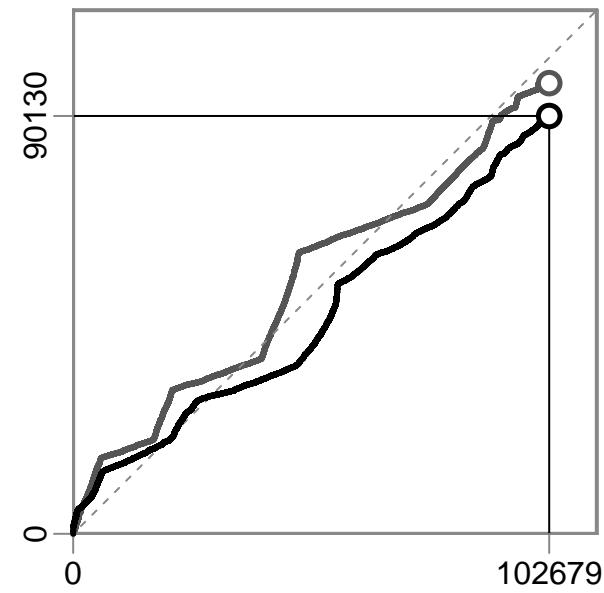
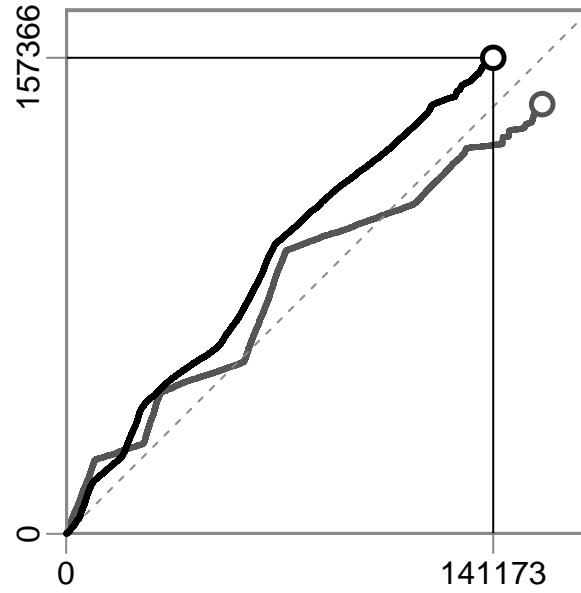
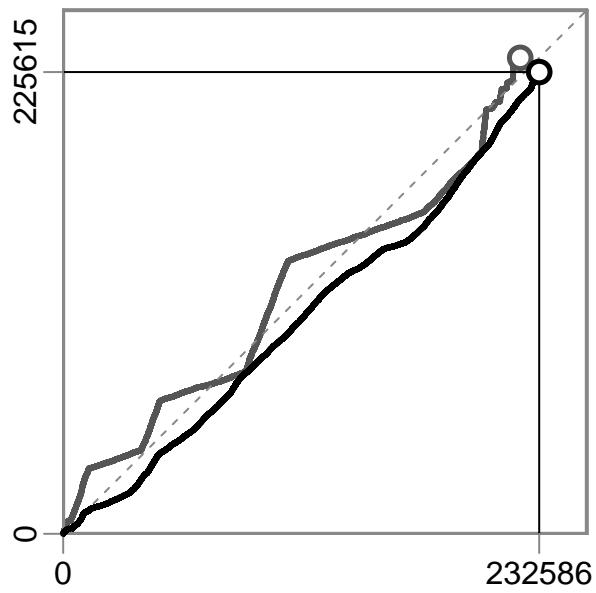
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35 63

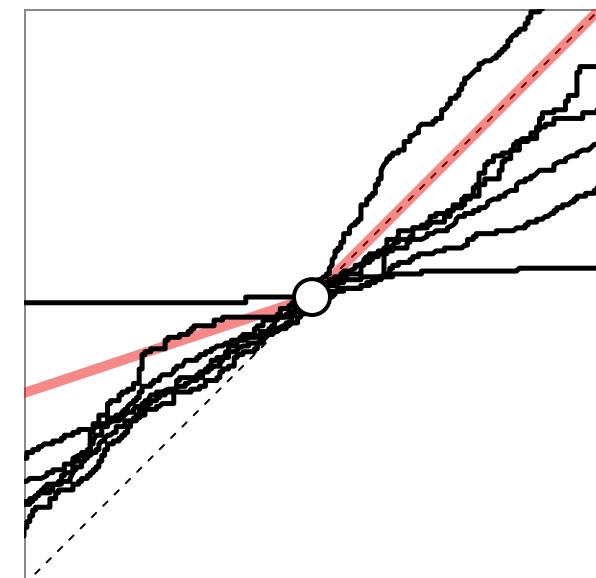
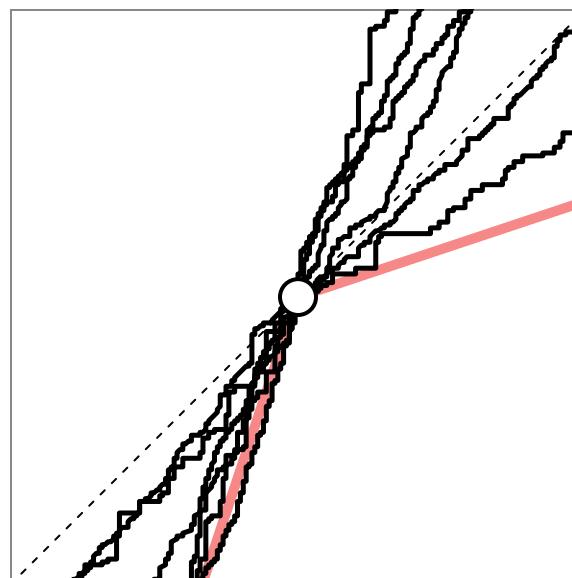
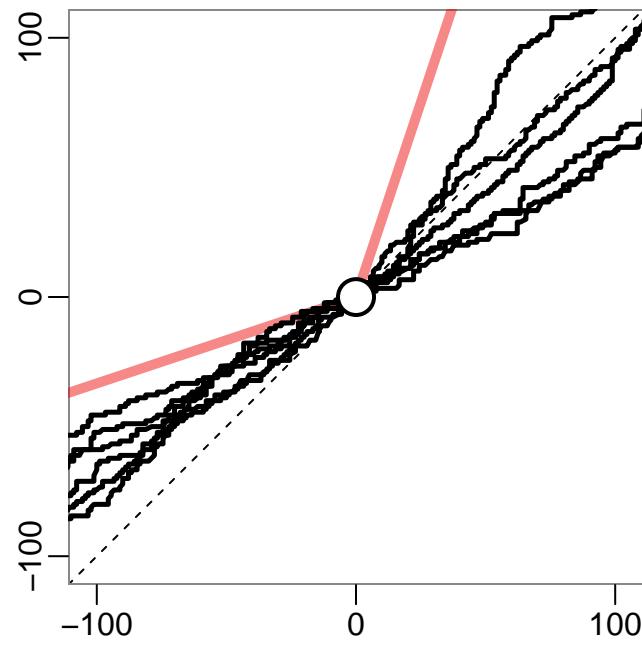
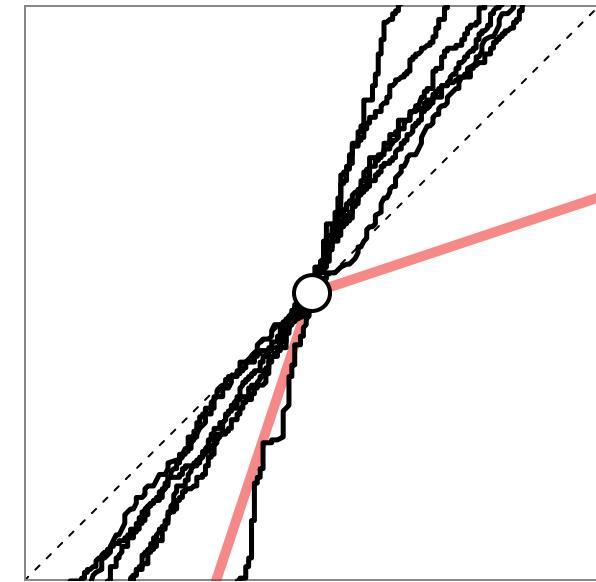
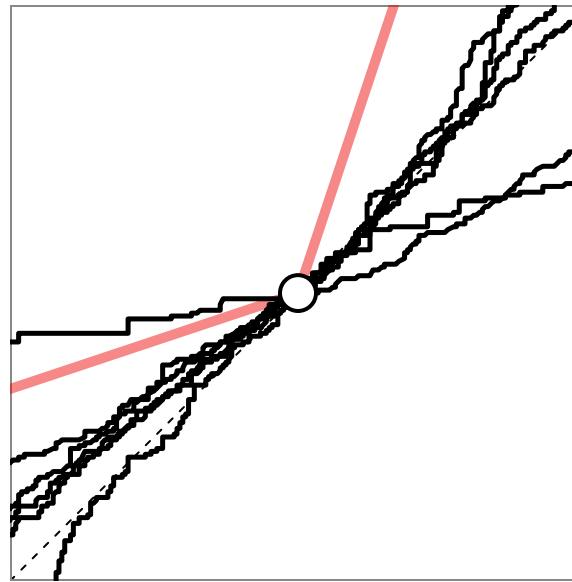
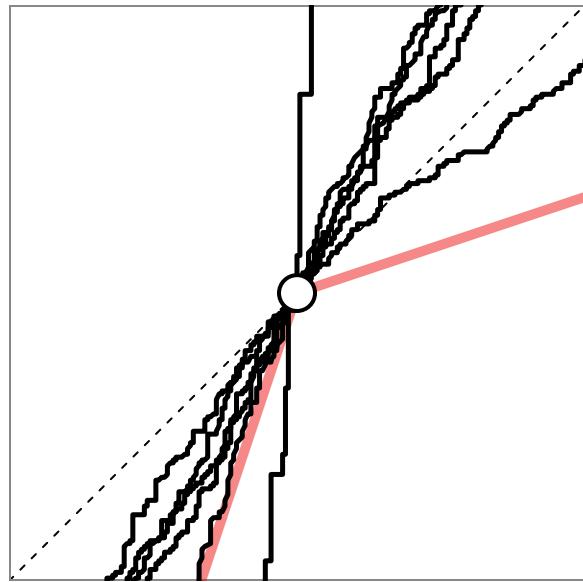
Reforzadores totales



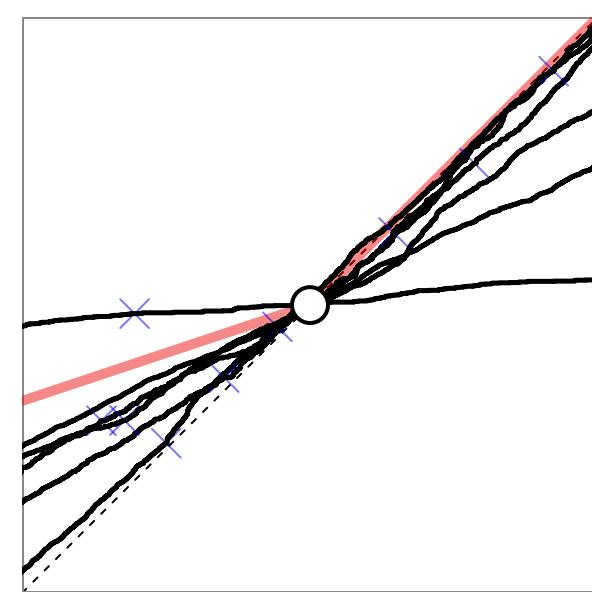
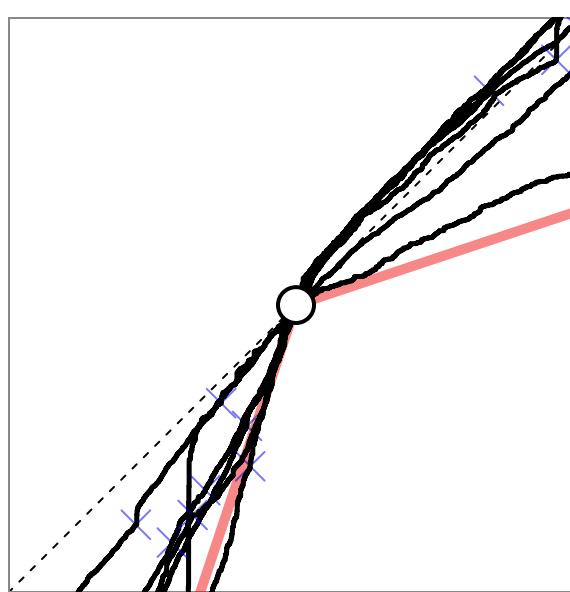
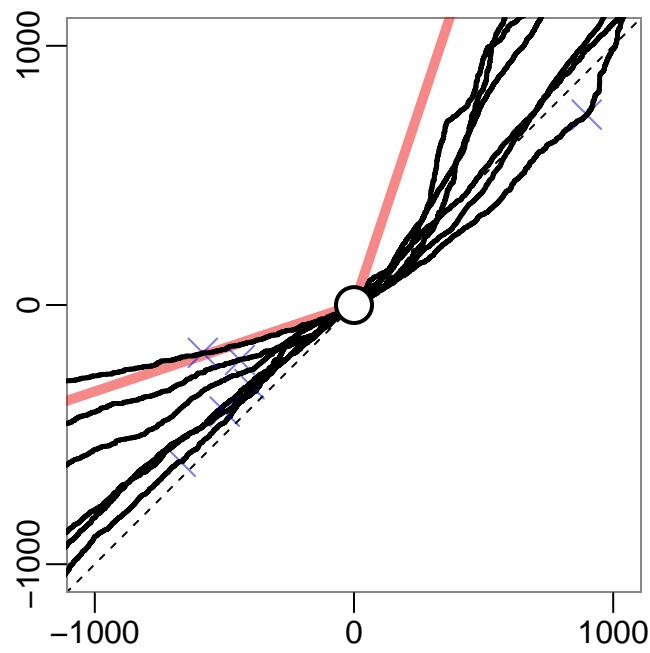
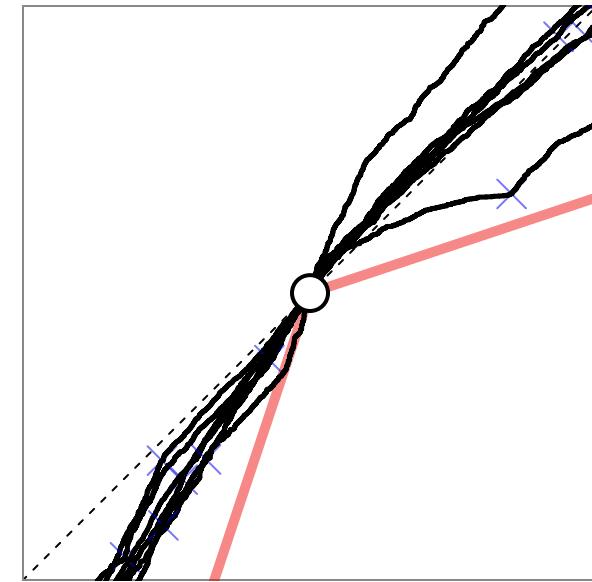
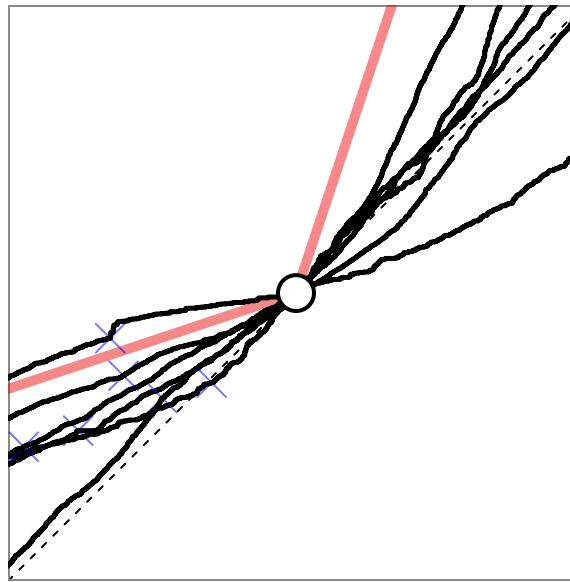
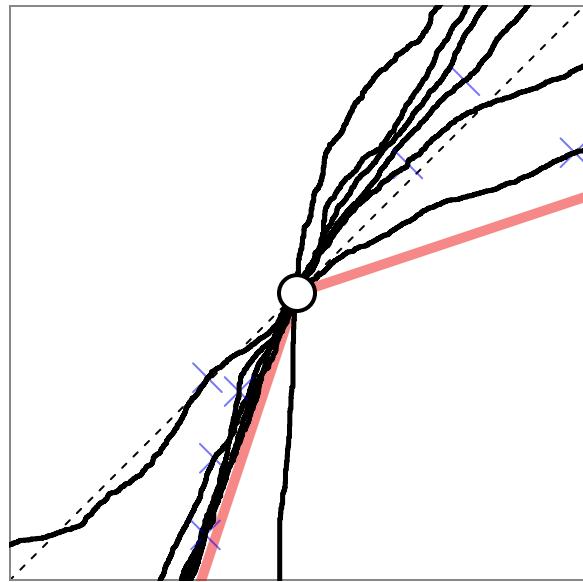
Respuestas totales



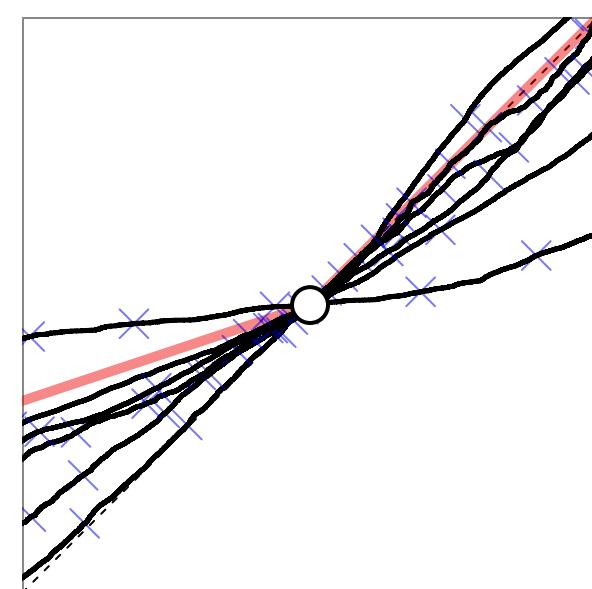
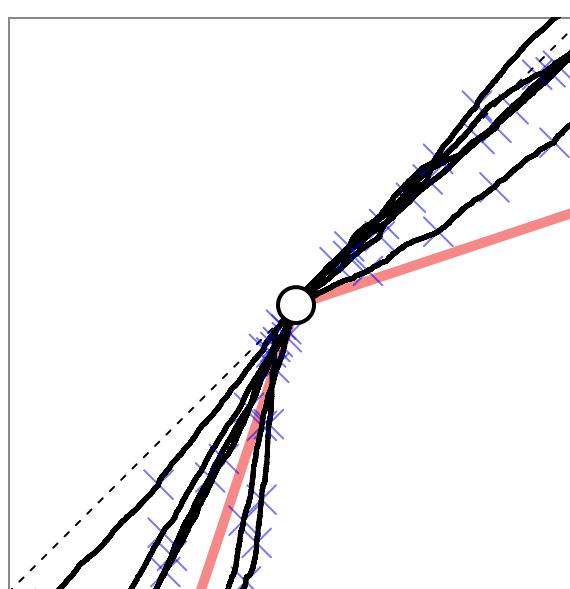
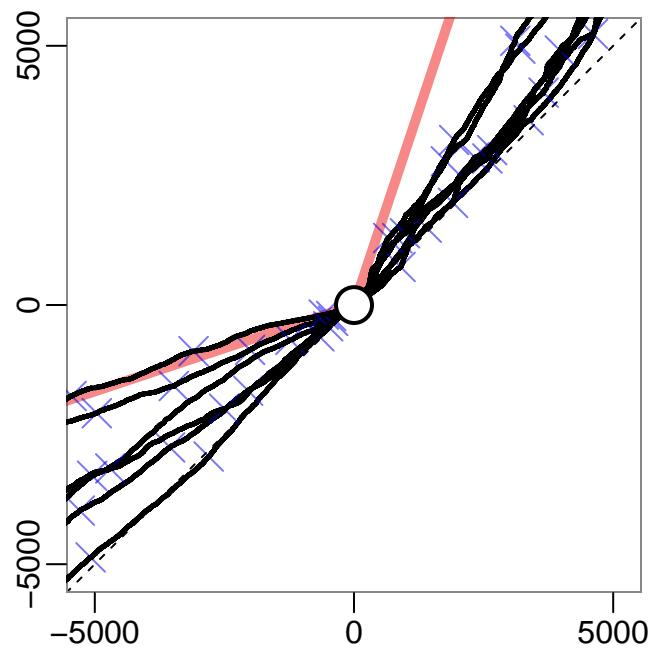
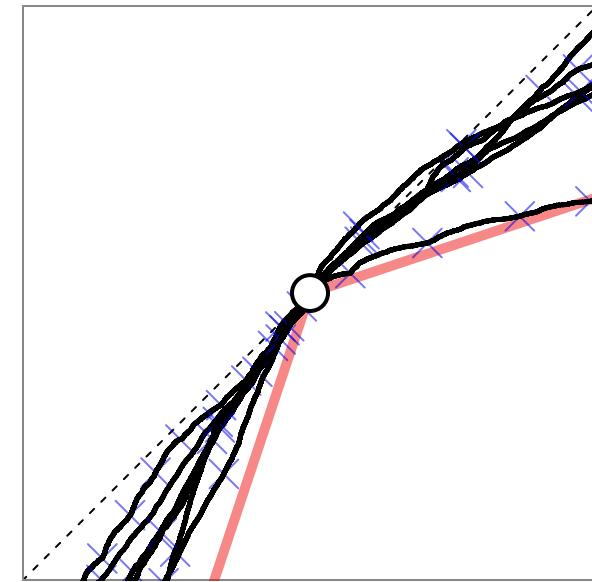
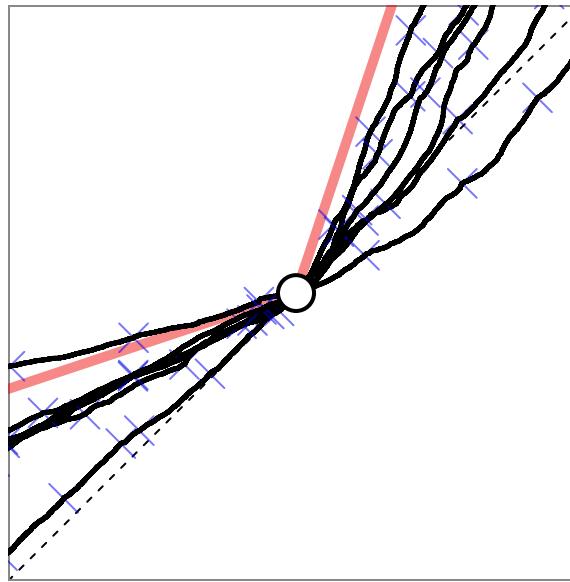
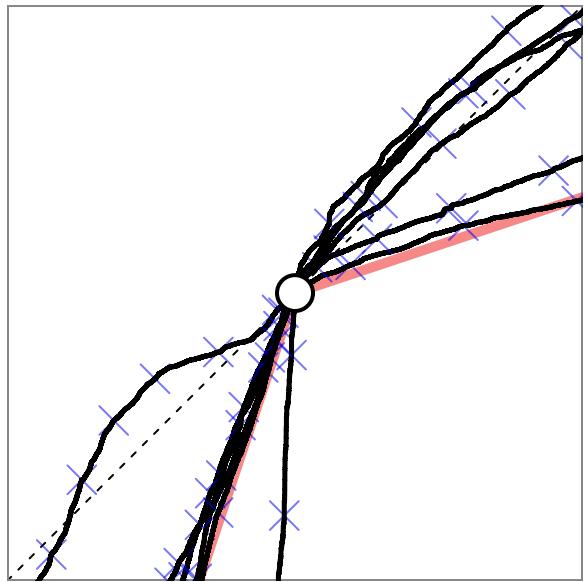
Cambios esporádicos



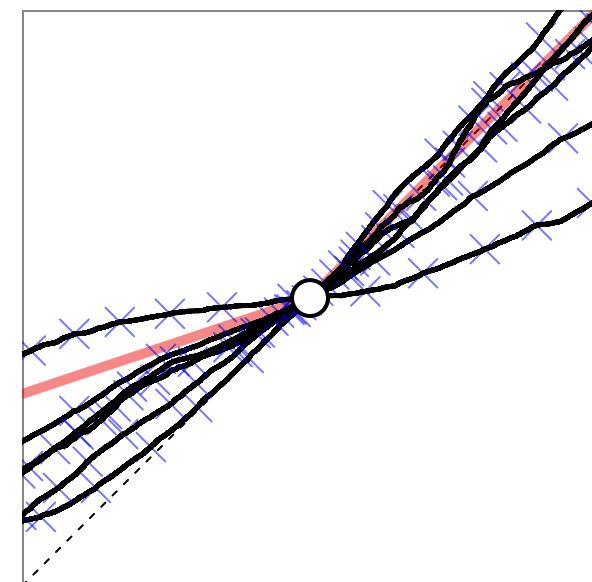
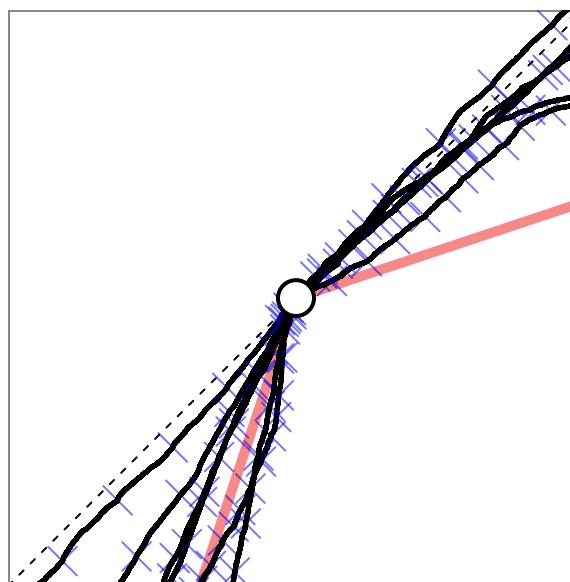
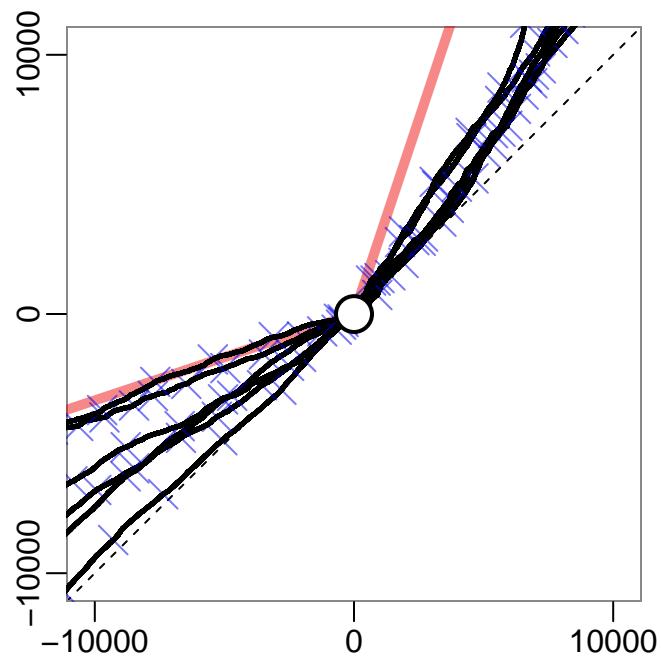
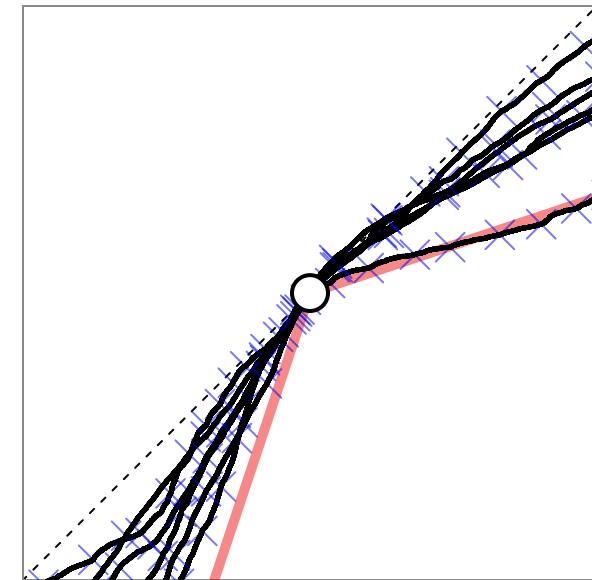
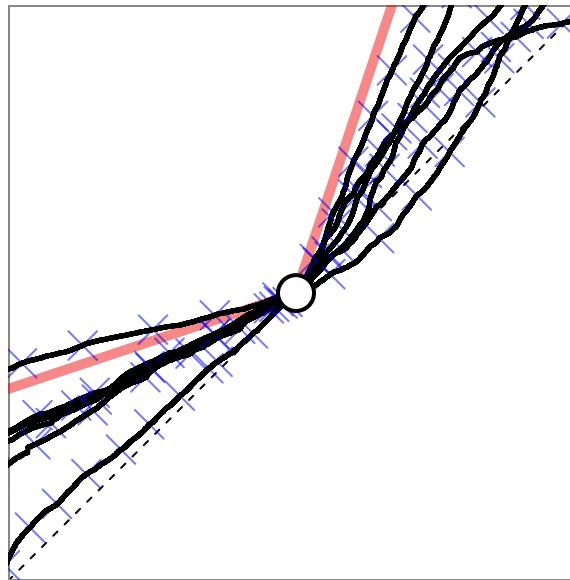
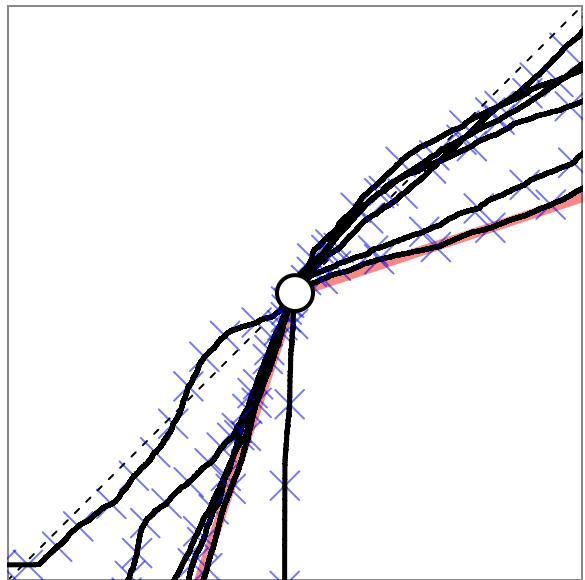
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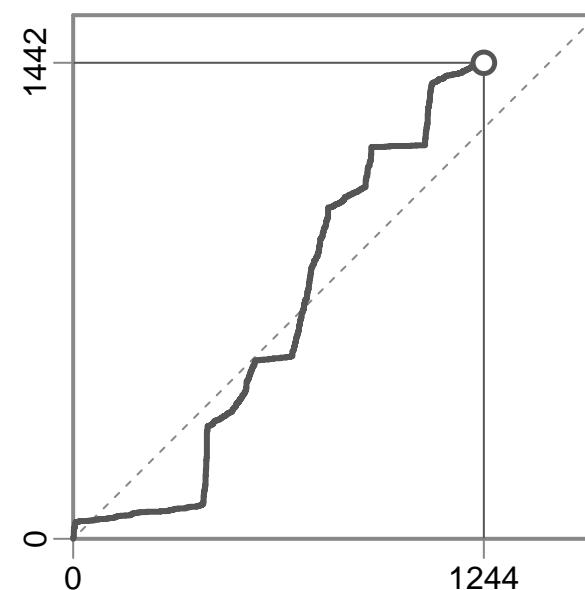
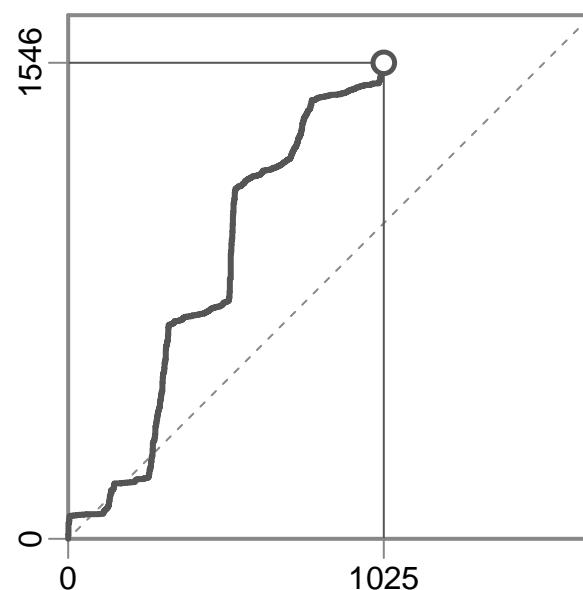
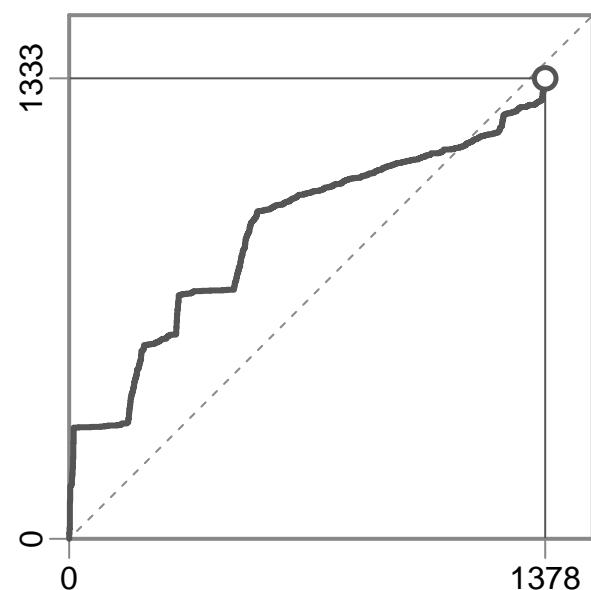
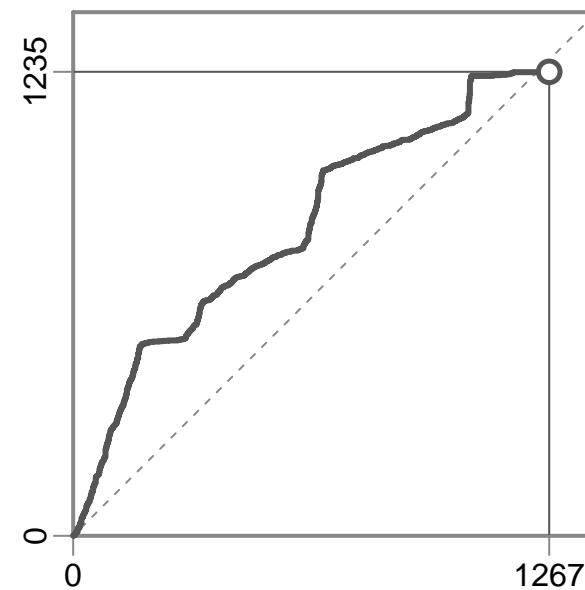
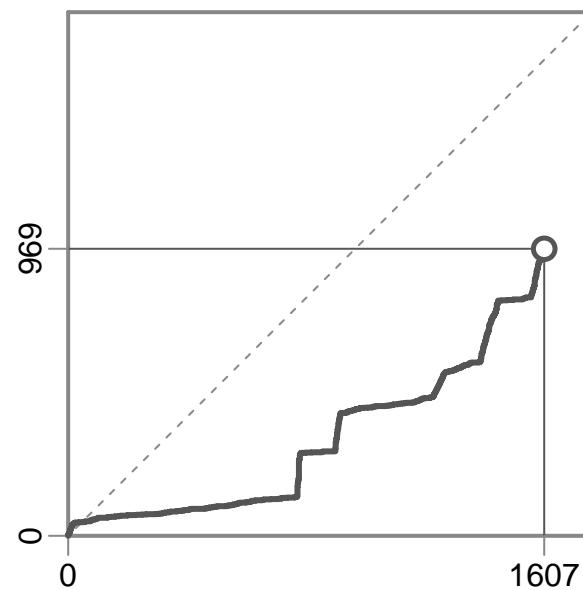
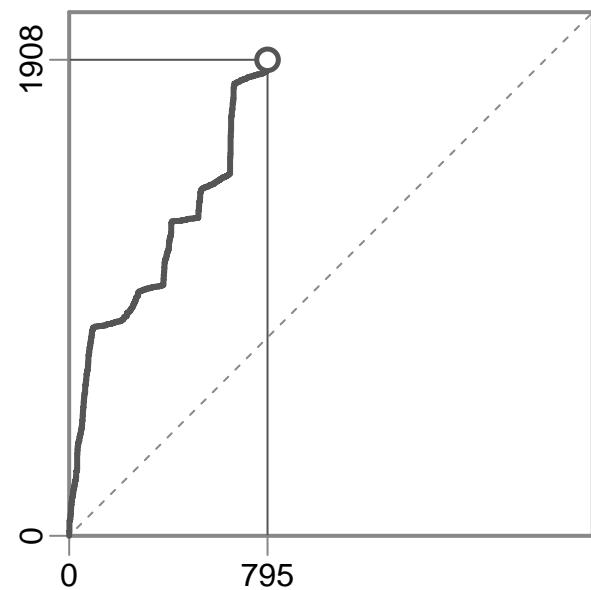
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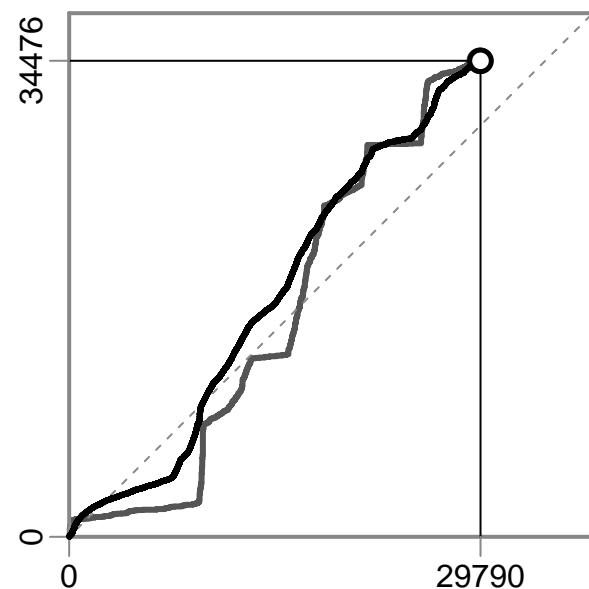
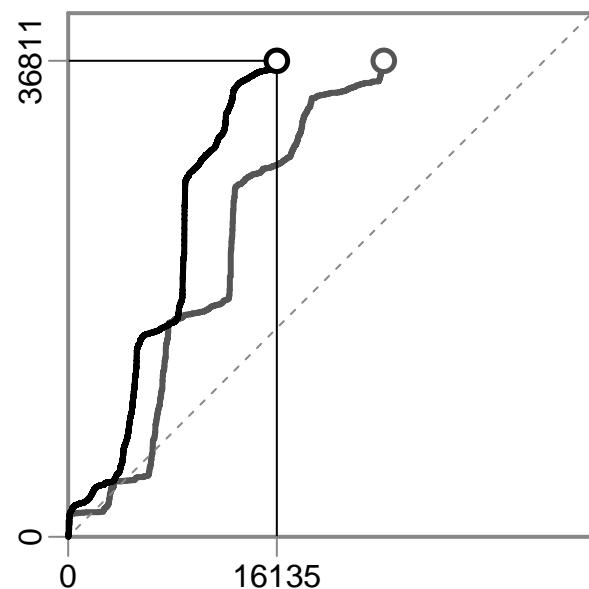
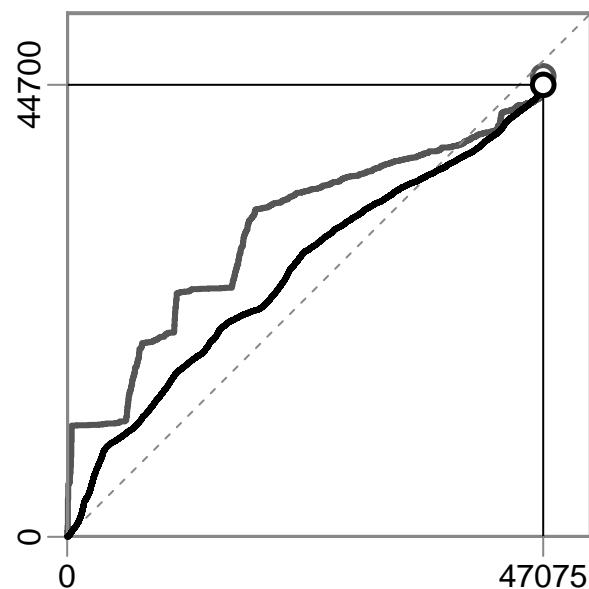
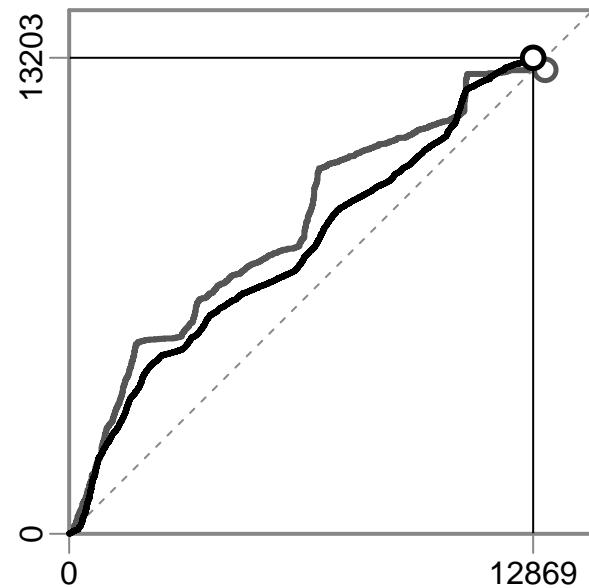
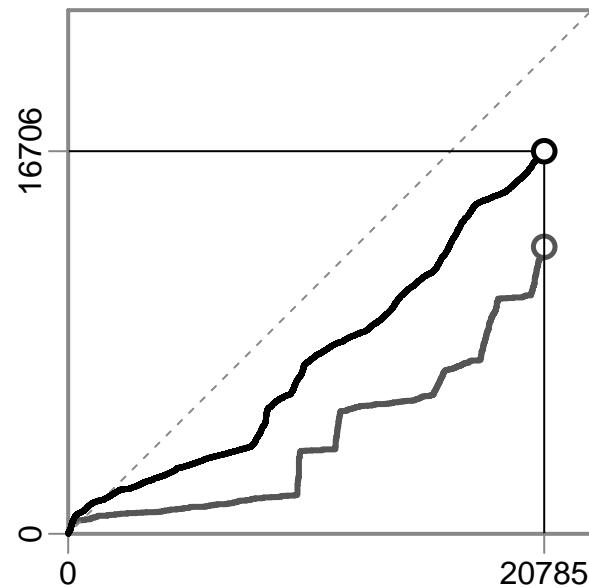
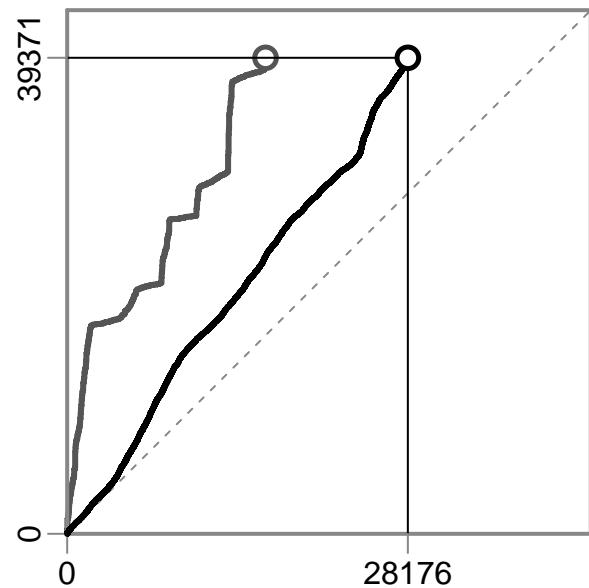
Cambios esporádicos



Cambios frecuentes



Cambios frecuentes



Conclusiones (hasta ahora)

*El ajuste "completo" toma varias sesiones
(cientos o miles de RESPUESTAS)...*

*...aunque parece que las palomas
comienzan a ajustar poco tiempo después
del cambio programado.*

*Parece que ni siquiera los cambios más
drásticos tienen el mismo efecto
entre palomas.*

Preguntas por resolver

¿Qué detectan los animales?

¿Cambios en tasas locales o globales?

*¿La distribución de tiempos cambia
de manera similar a la de
respuestas?*

*¿Qué ocurre bajo otro tipo
de contingencias ($VR-VR$, $VR-VI$)?*

¿Qué es diferente entre palomas?

¿Qué es igual?

Agradecimientos

Elena Villalobos

Uriel González

Karina Ruiz

Azul Meléndez

Enrique Estrada

Contacto

Repositorio del Proyecto

Datos, código y actualizaciones

<https://github.com/JLBaroja/JAPE>

Lab 25

<http://bouzaslab25.com/>

jlbm

j.luis.baroja@gmail.com