

**Figure S4.** Detailed analysis of piRNAs in Oregon R and *ago3*/TM6B ovaries.

The figure presents the 95 transposon families for which we tallied > 500 piRNA reads in *ago3*/TM6B, plus the tandem repeat *mst40*.

(A, B) Sequence-bias plot (“sequence-excess logo”) for all piRNAs mapping to the transposon family (A) or for piRNAs with ping-pong partners (B). The graphs report only nucleotide biases significantly different from the intrinsic bias of the transposon family itself (see Supplemental Experimental Procedures). The gray bars indicate the maximum possible value for each position.

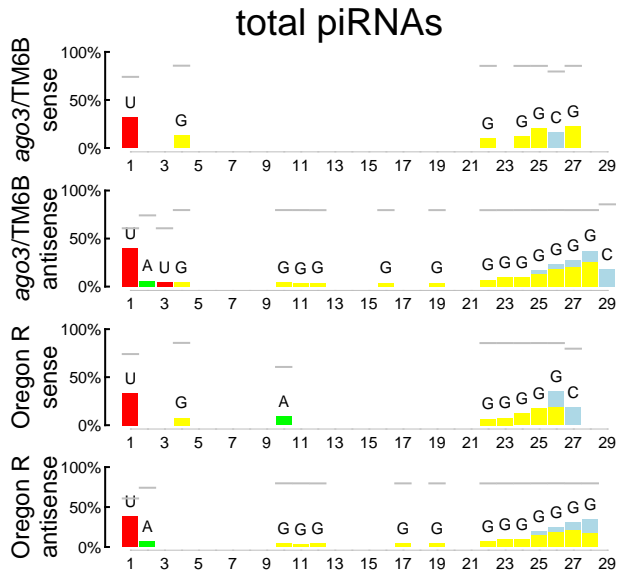
(C, D) The abundance (per million) of piRNAs (23–29 nt) in Oregon R (C) and *ago3*/TM6B ovaries (D) for each base-pair position of the transposon consensus sequence. Abundance was both normalized by the number of times a piRNA mapped to the genome and calibrated to the total abundance of sequences corresponding to non-coding RNAs in the sample. For each base, the total normalized abundance of piRNAs that fall on that position is reported. Here and below, blue denotes sense strand-mapping piRNAs; red, antisense-strand mapping piRNAs.

(E, F) Length distribution of 19–29 nt RNAs mapping to the transposon family for Oregon R (E) and *ago3*/TM6B ovaries (F). The number of reads was normalized as in (C) and (D).

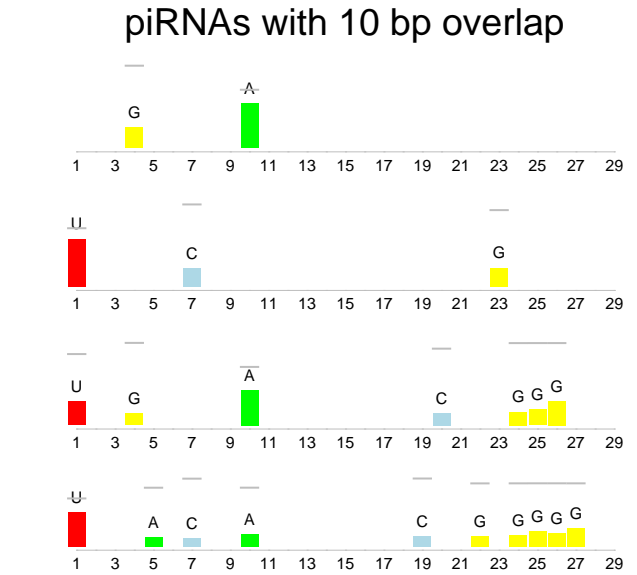
(G, H) Distribution of the length of 5′ overlaps between sense and antisense piRNAs mapped to the transposon family for Oregon R (G) and *ago3*/TM6B (H) ovaries. Only pairs that overlapped at their 5′ ends were included. A peak at 10 bp indicates ping-pong pairing.

# 17.6

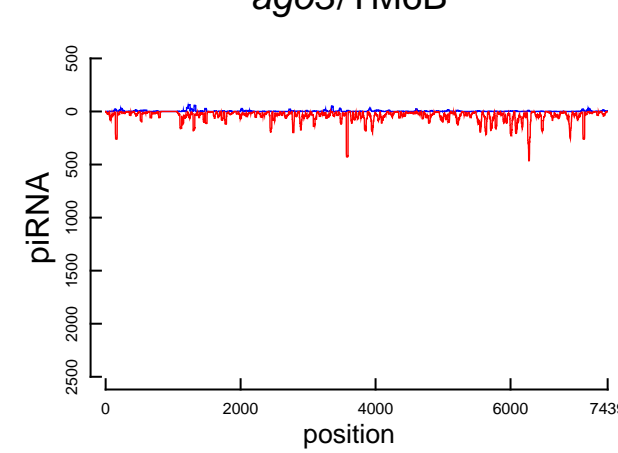
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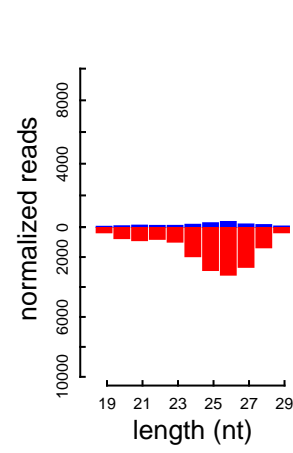
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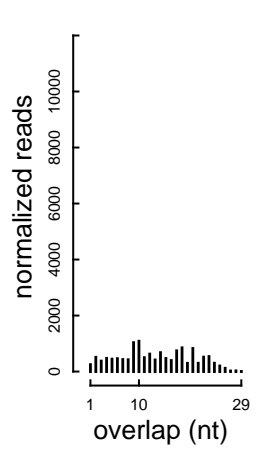
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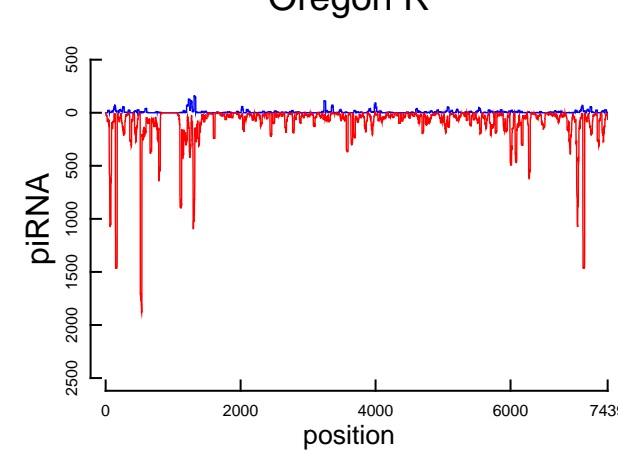
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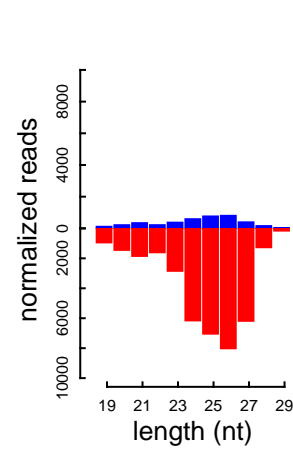
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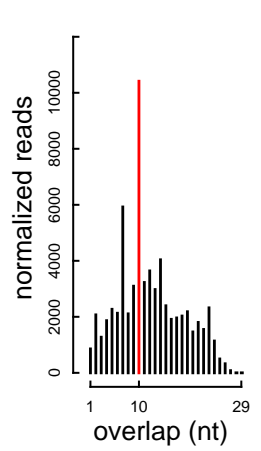
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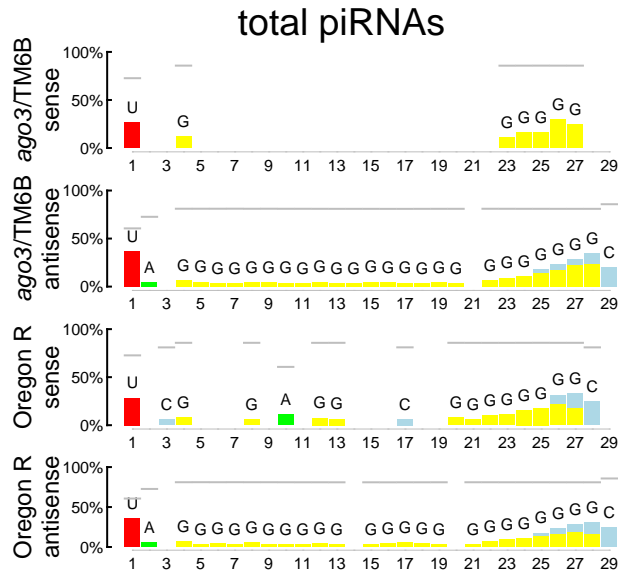
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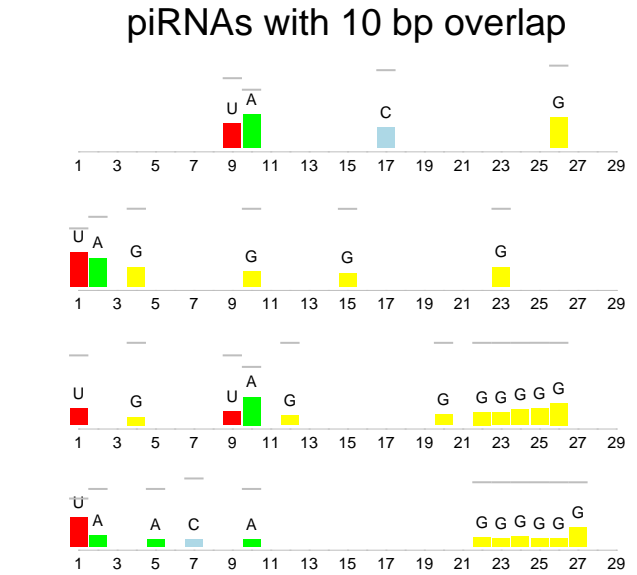
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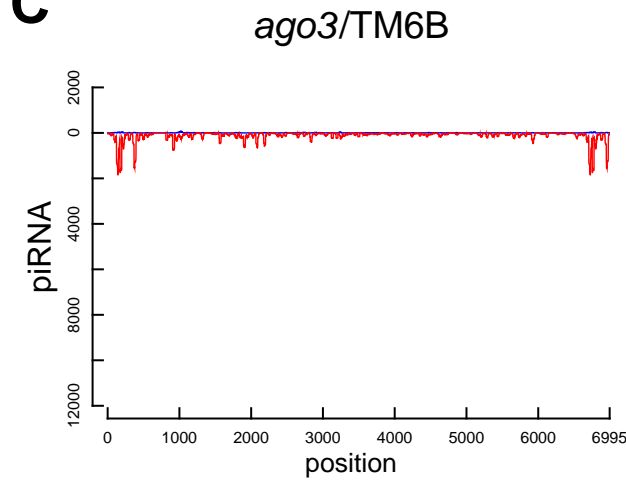
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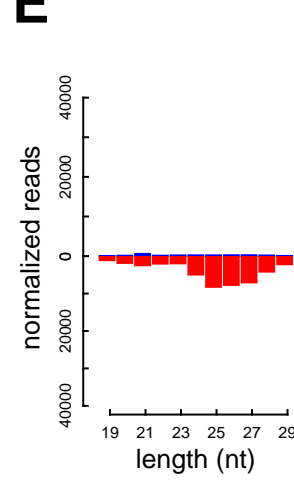
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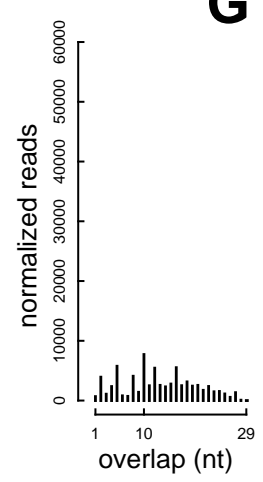
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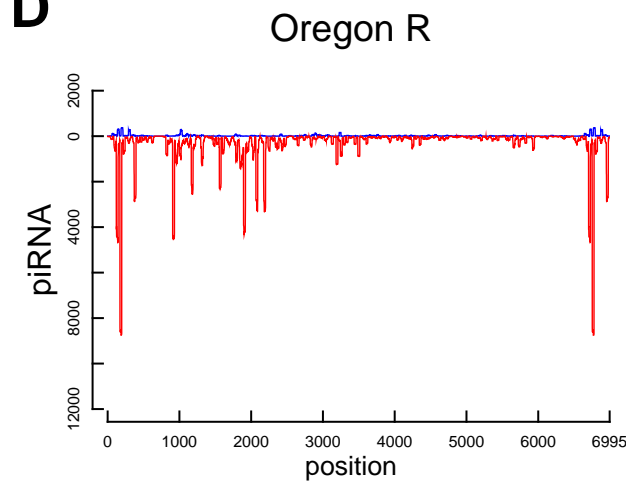
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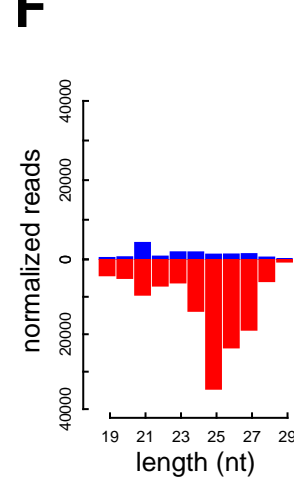
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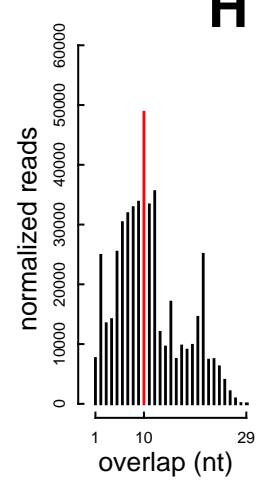
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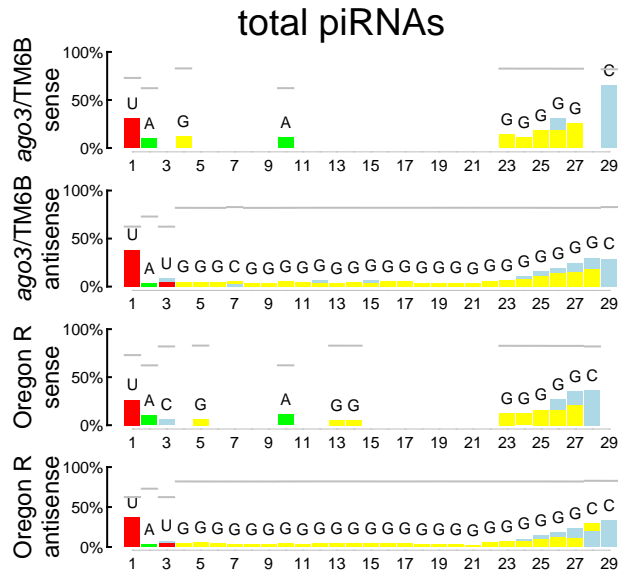
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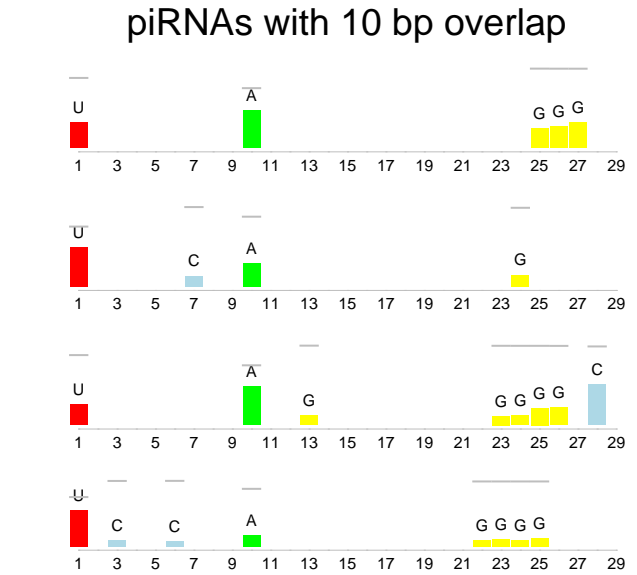
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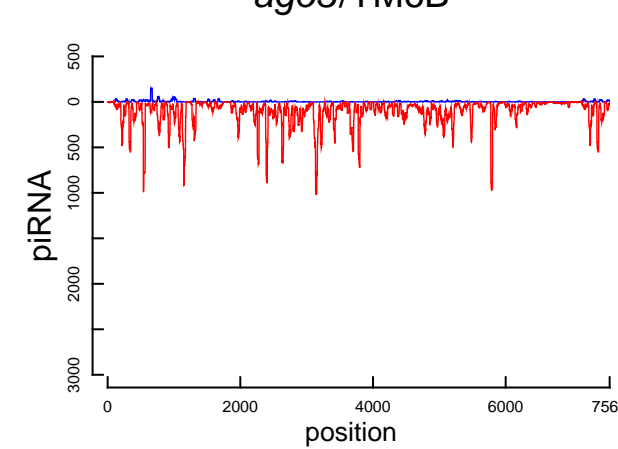
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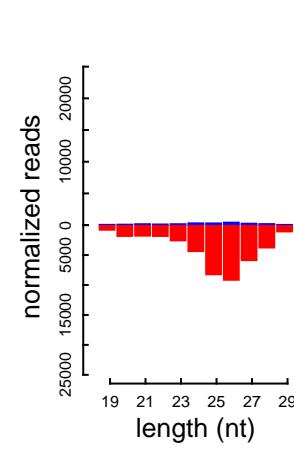
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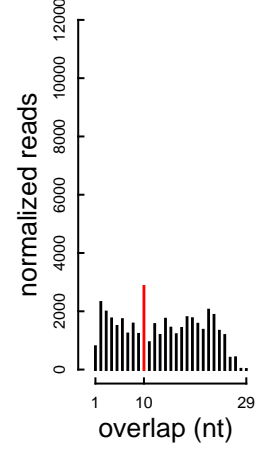
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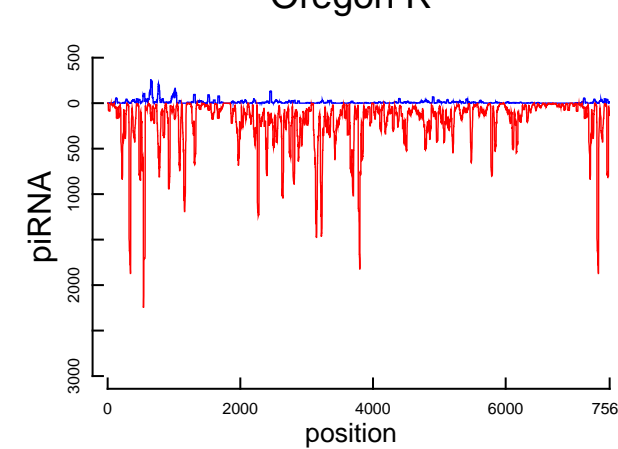
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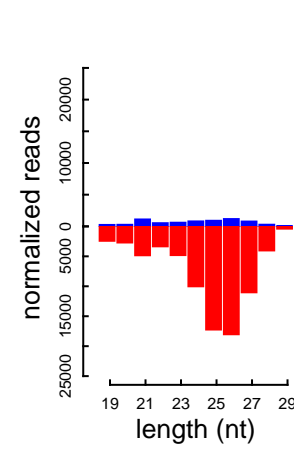
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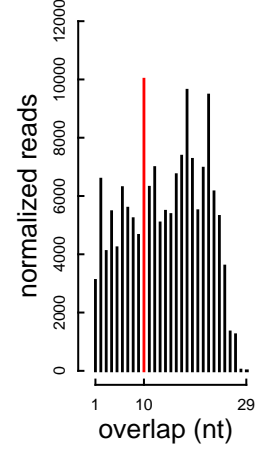
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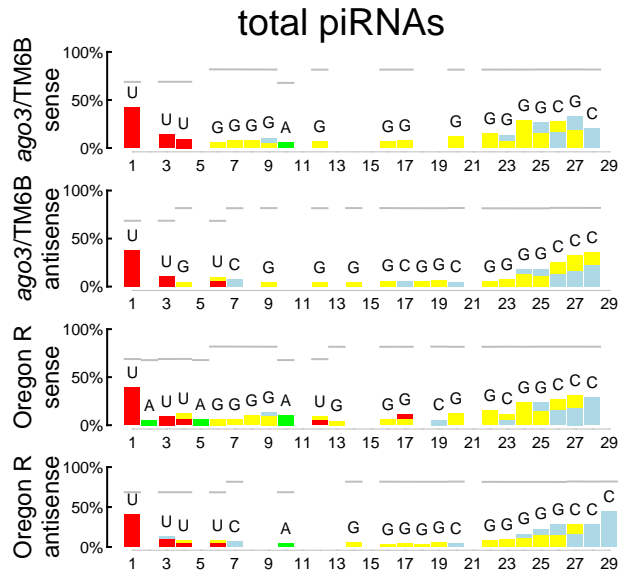
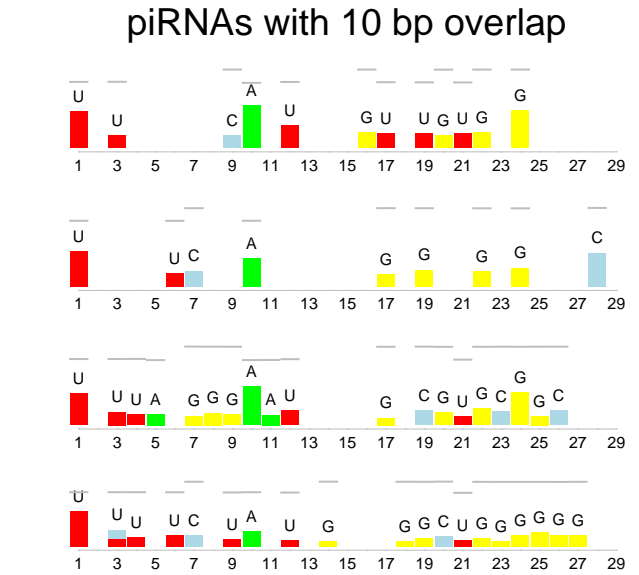
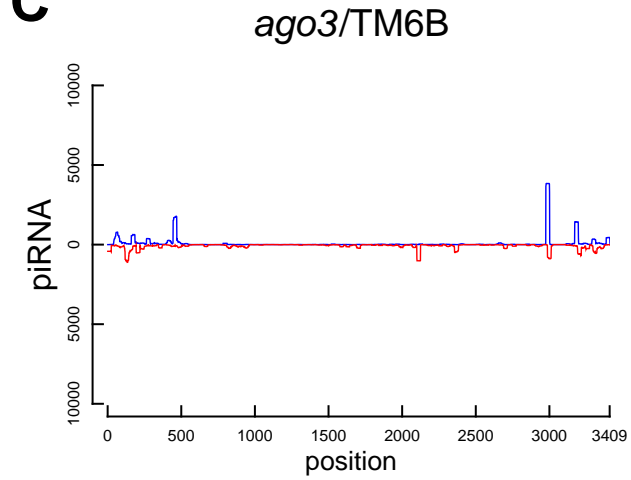
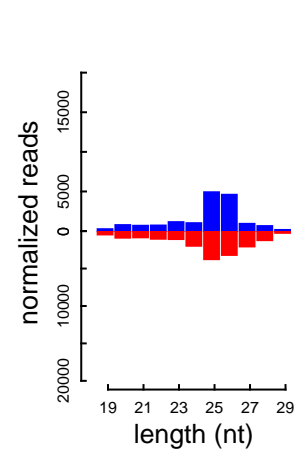
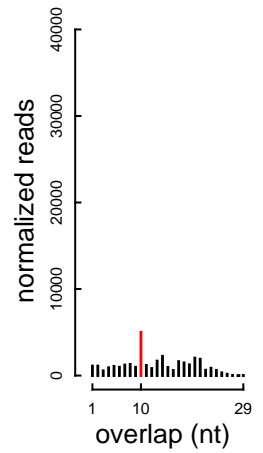
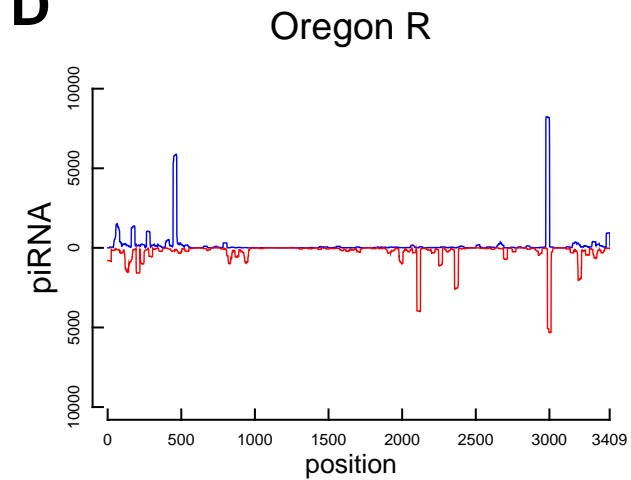
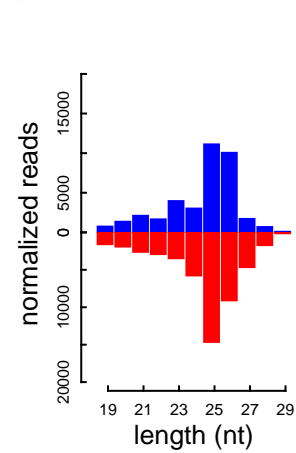
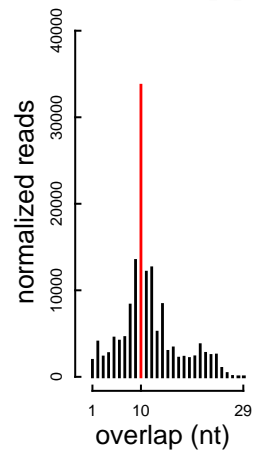
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**H**

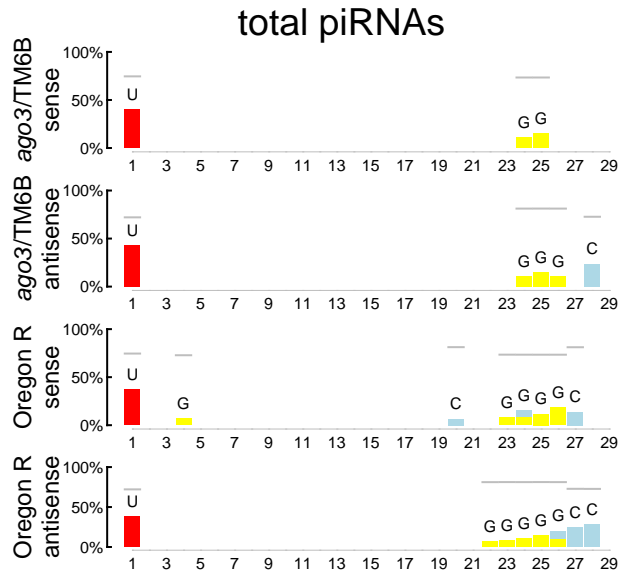


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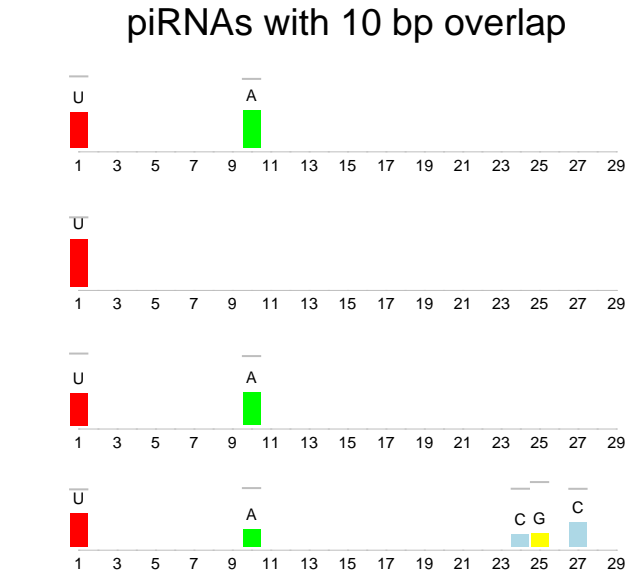
**A****B****C****E****G****D****F****H**

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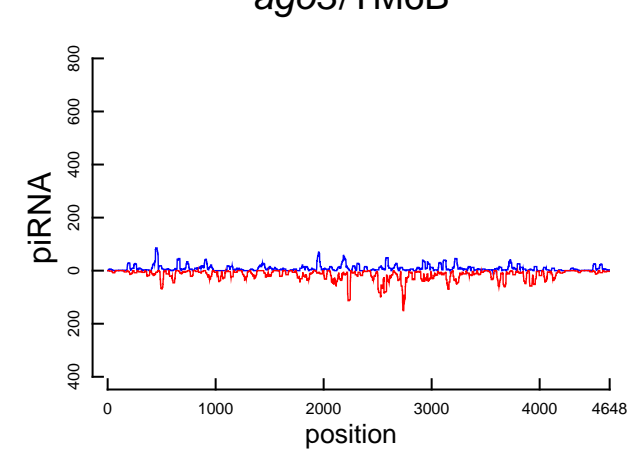
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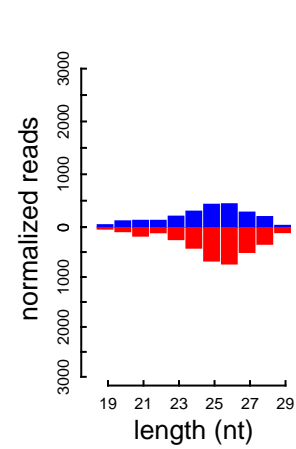
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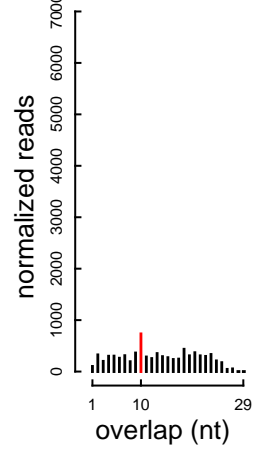
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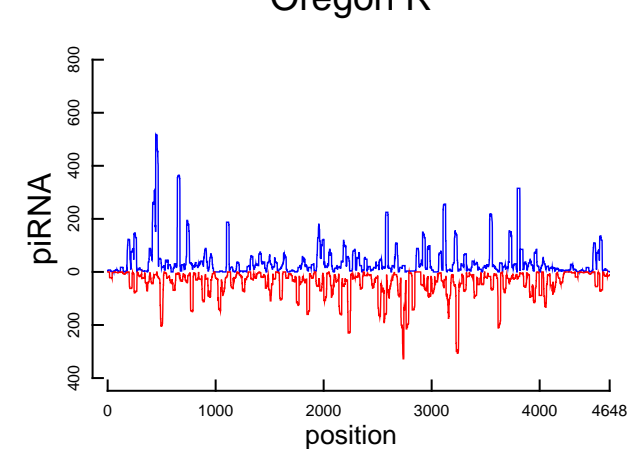
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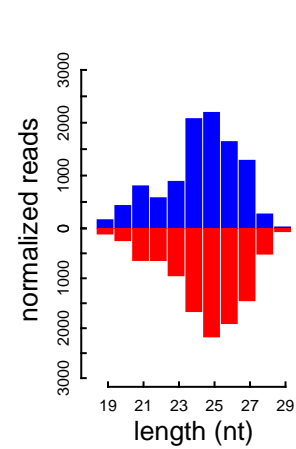
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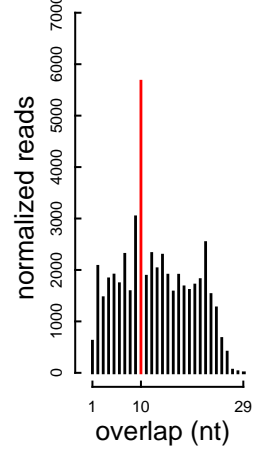
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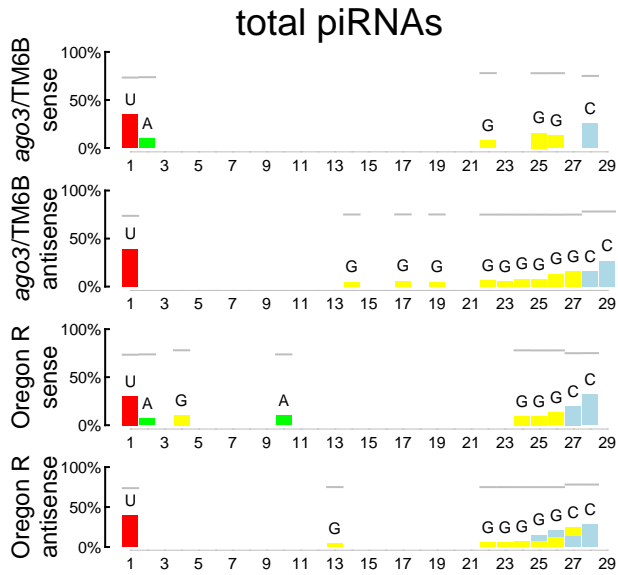
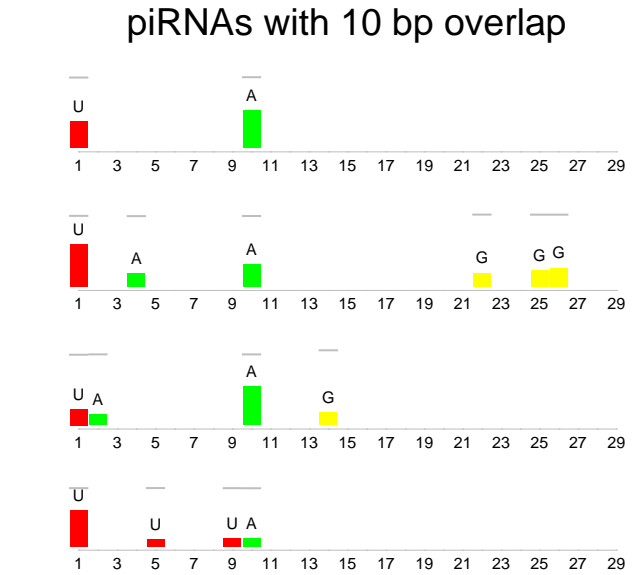
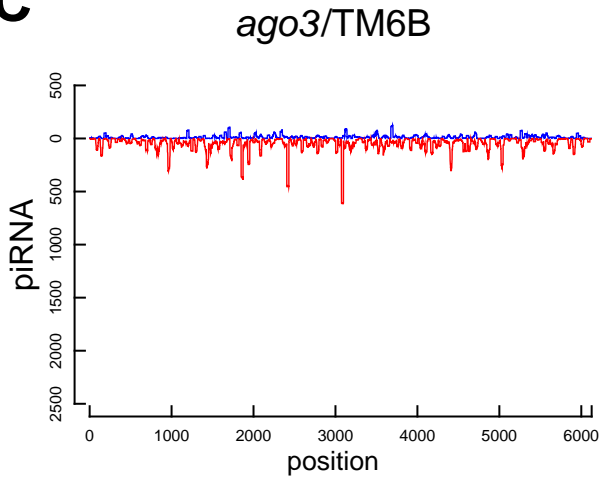
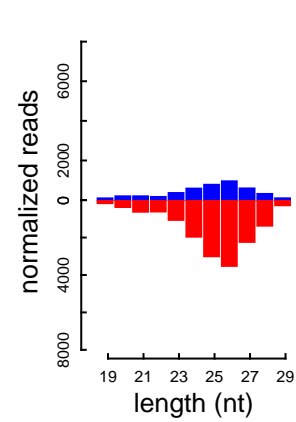
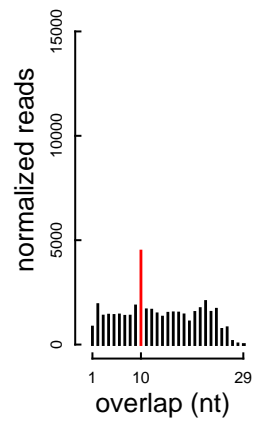
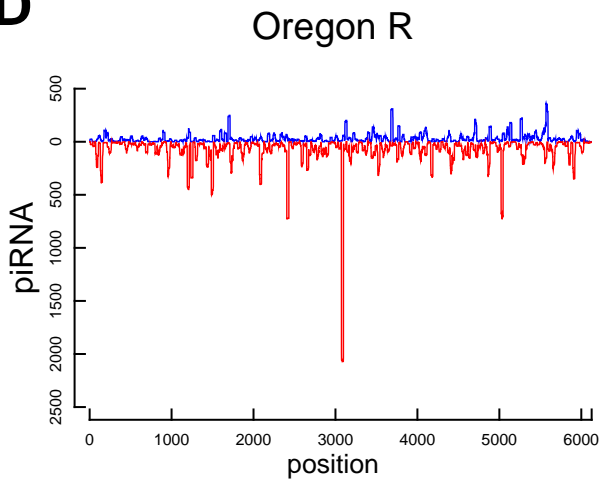
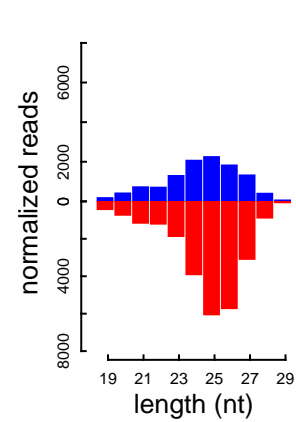
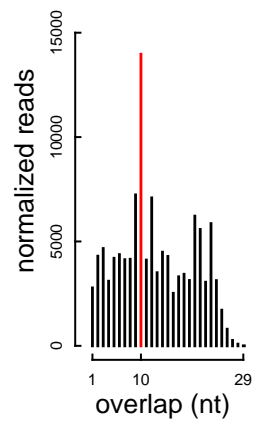
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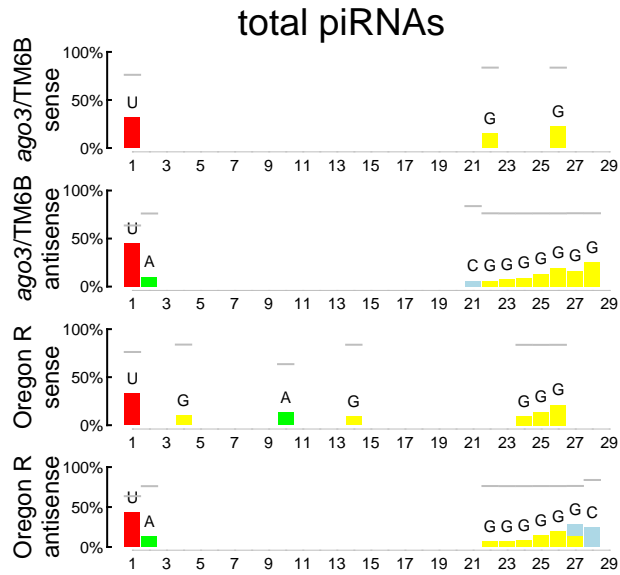
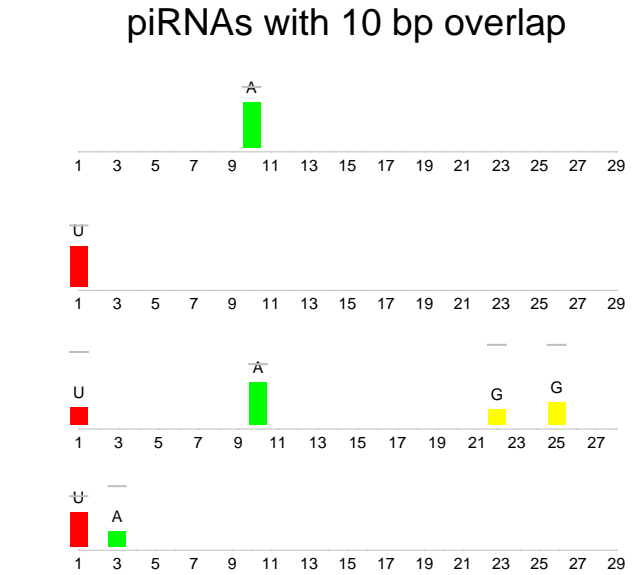
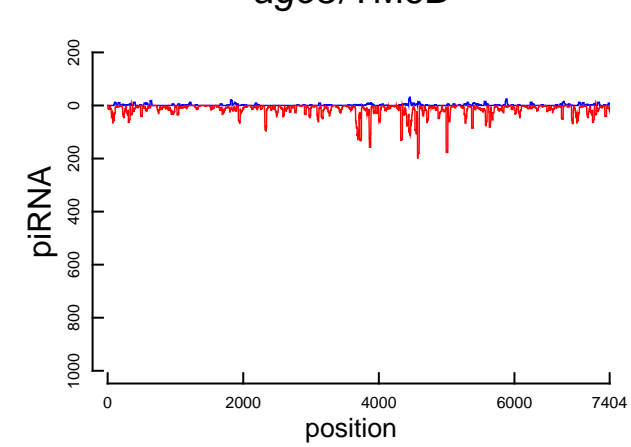
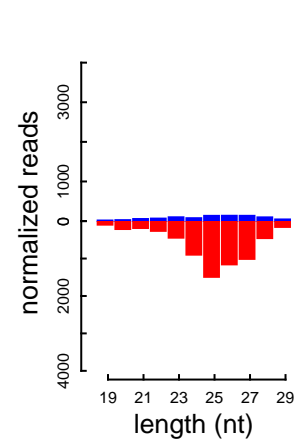
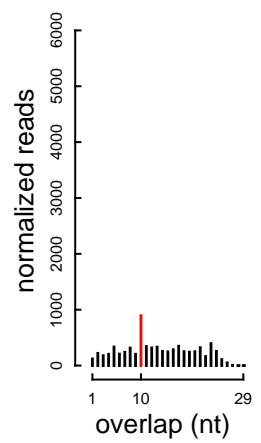
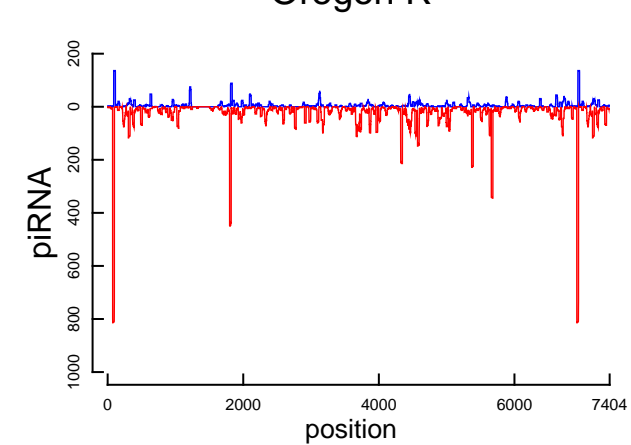
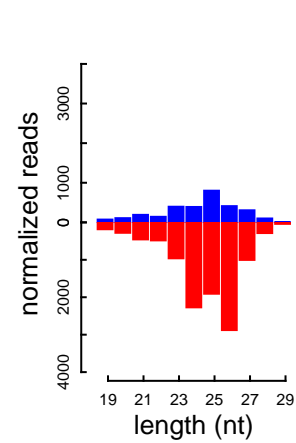
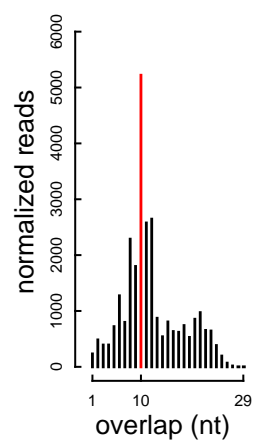
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# 3S18

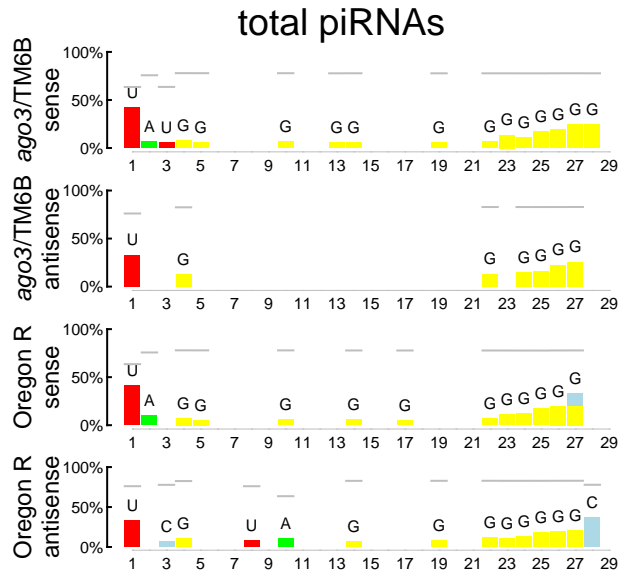
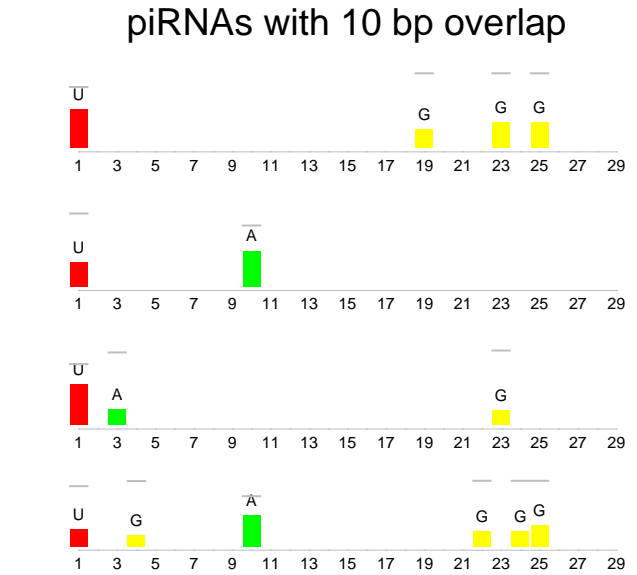
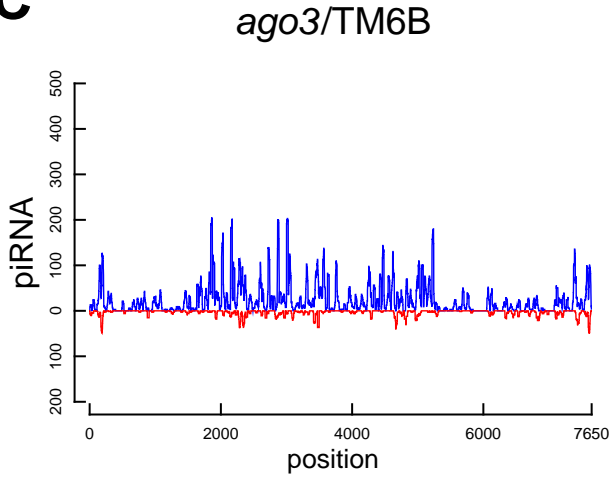
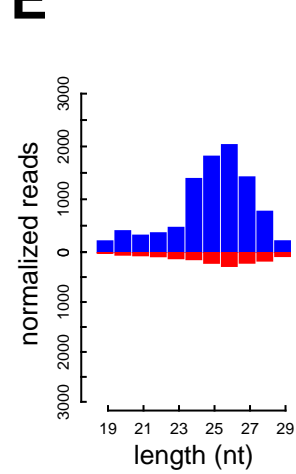
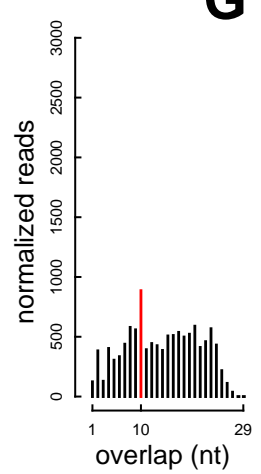
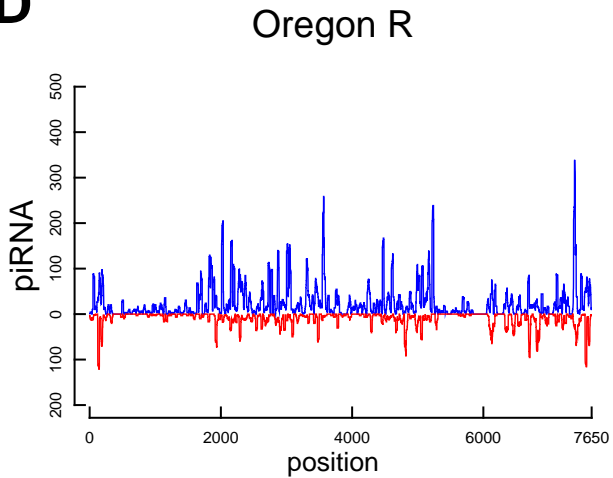
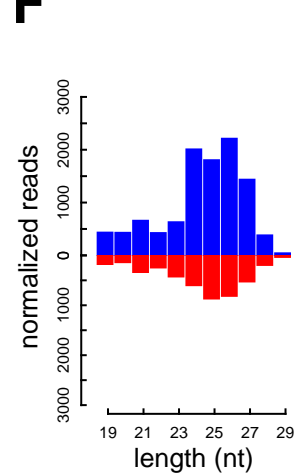
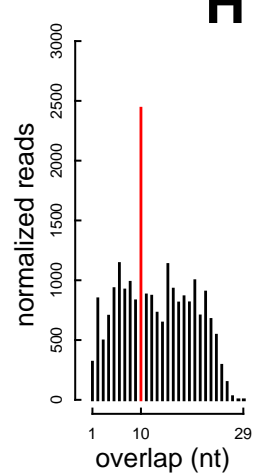
**A****B****C****E****G****D****F****H**

# accord

**A****B****C****E****G****D****F****H**

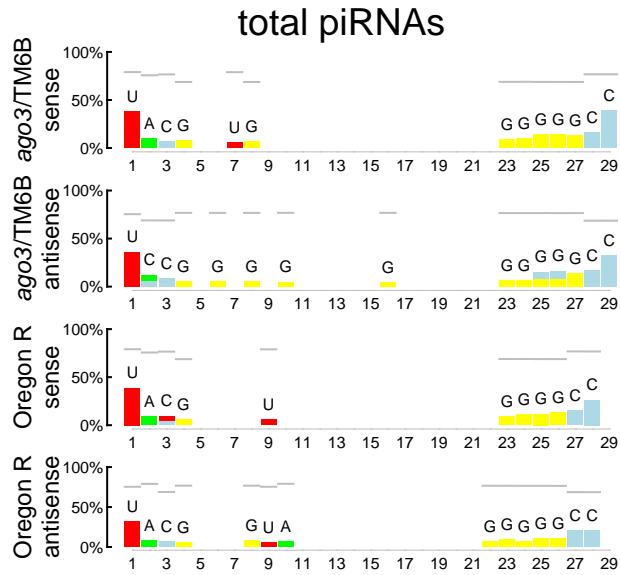


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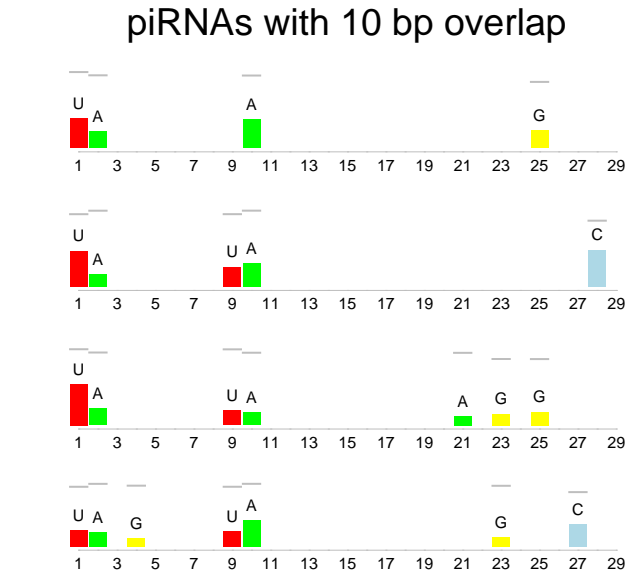
**A****B****C****E****G****D****F****H**

# aurora element

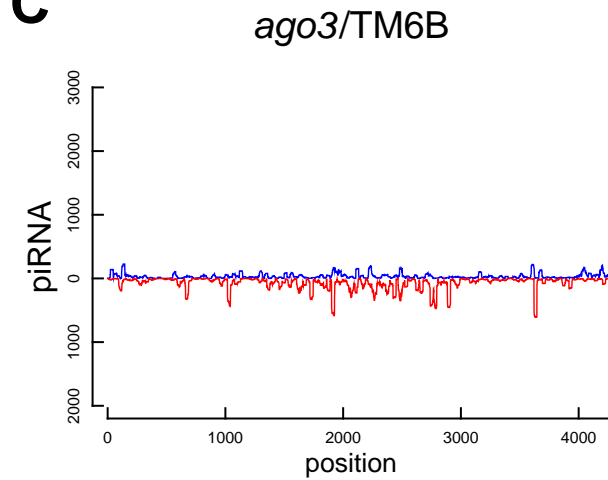
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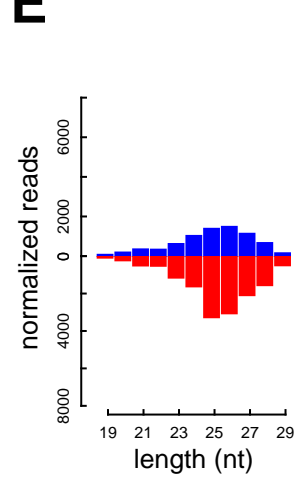
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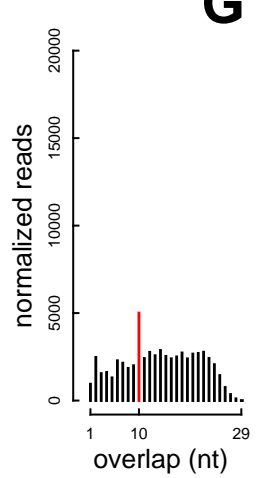
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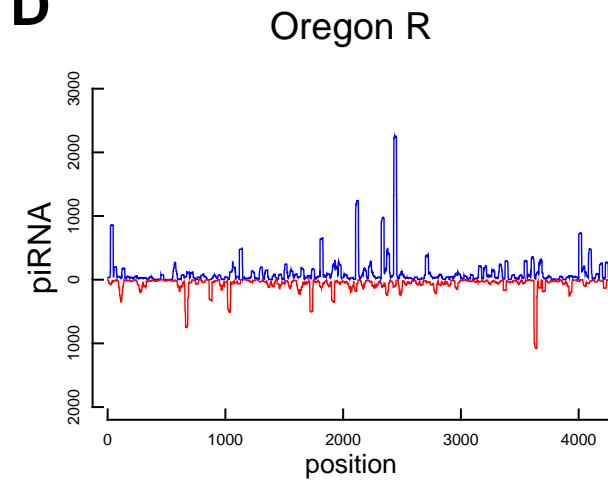
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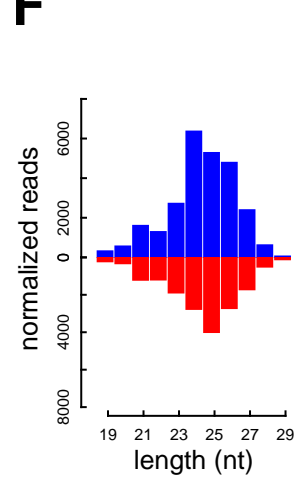
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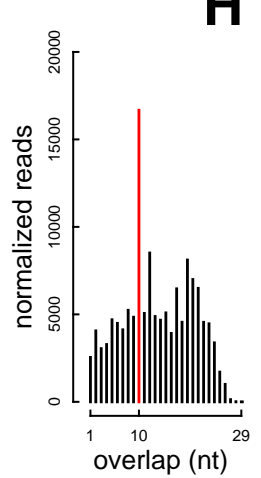
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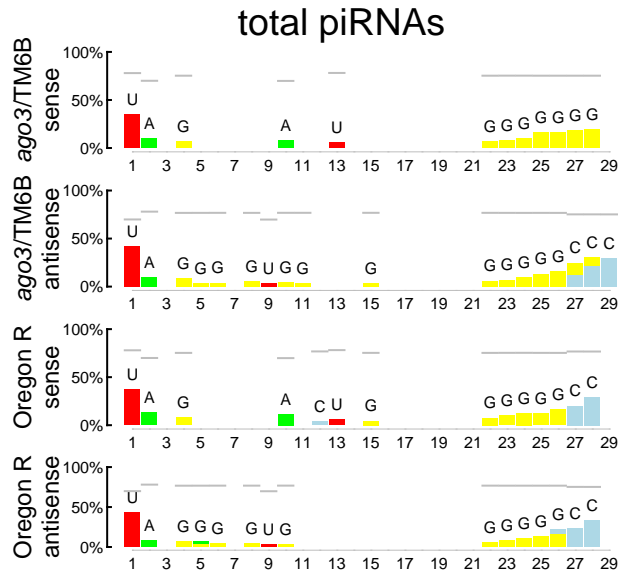
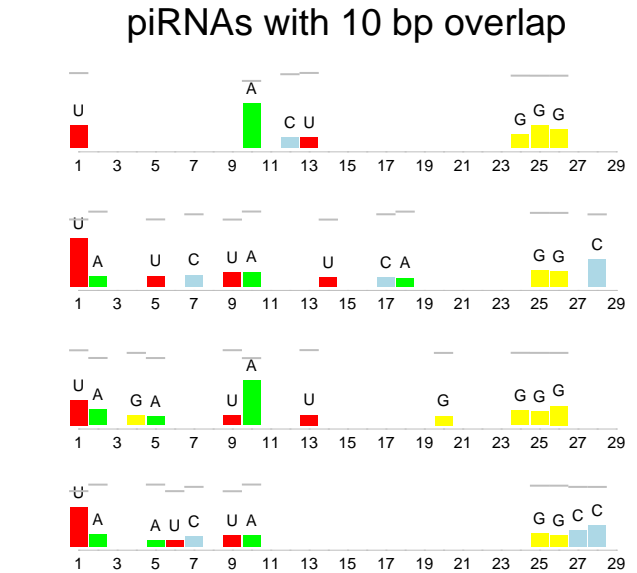
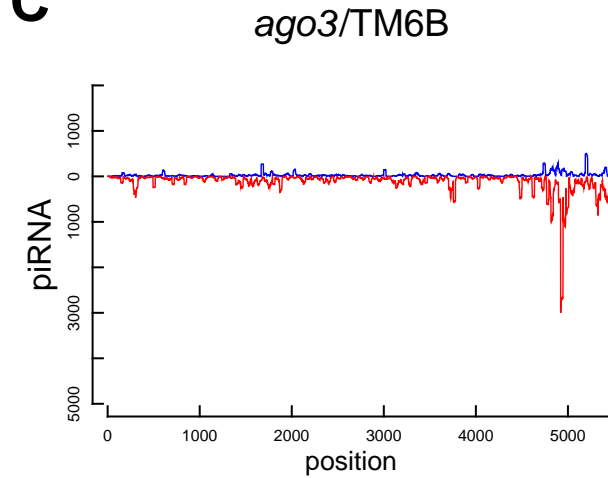
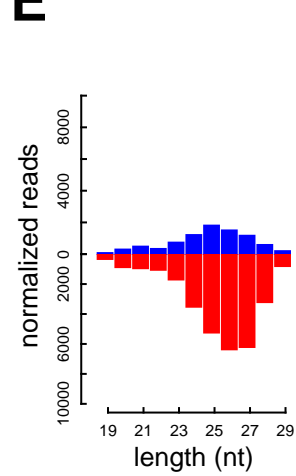
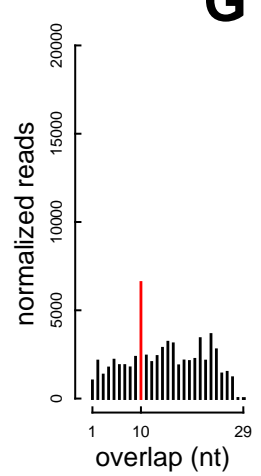
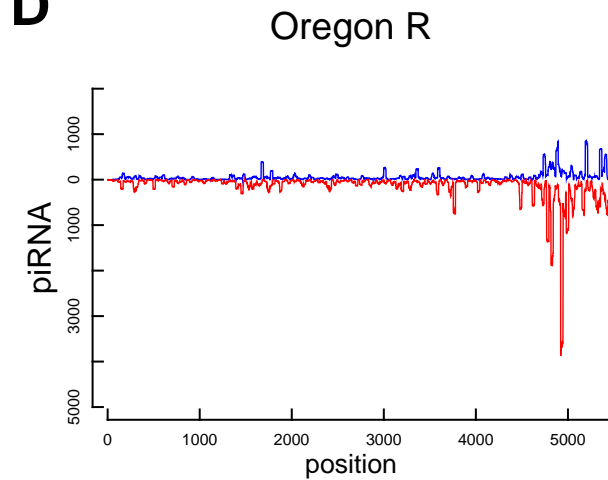
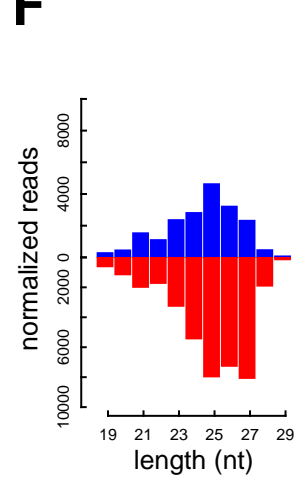
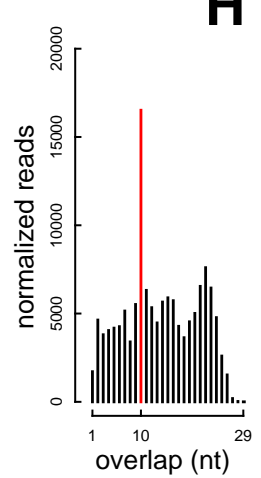
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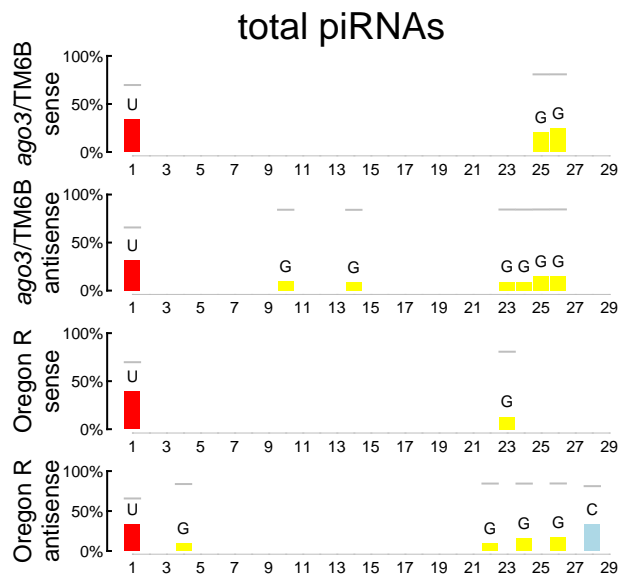
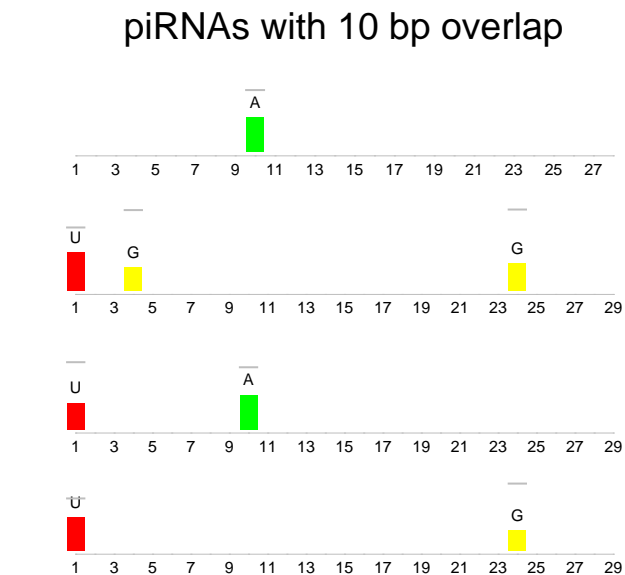
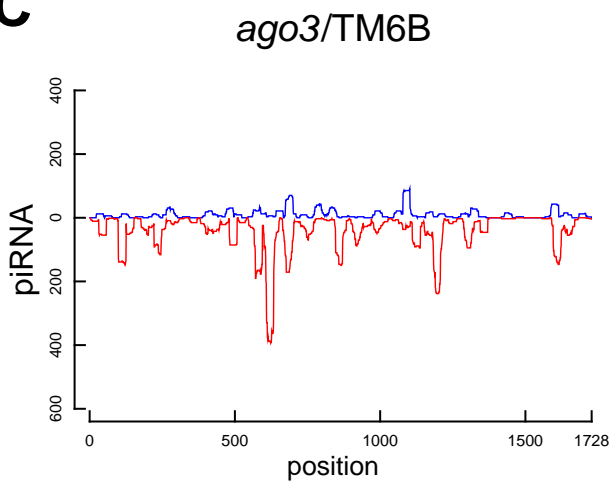
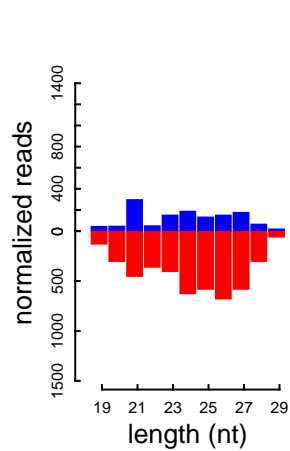
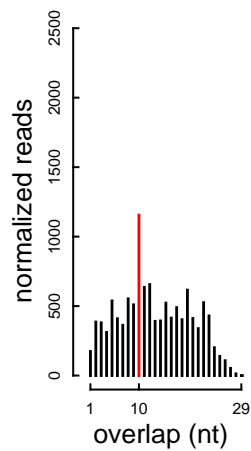
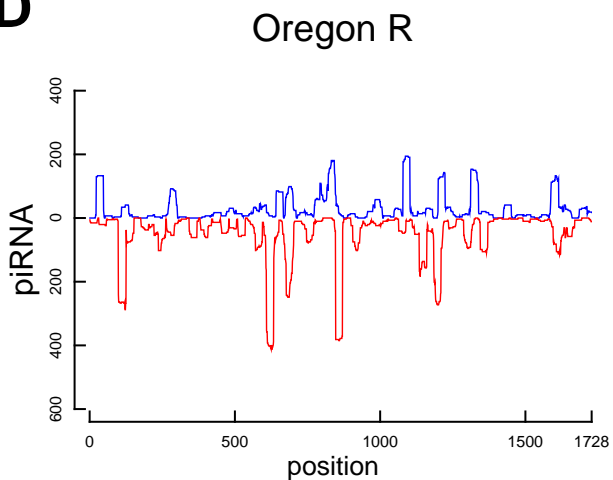
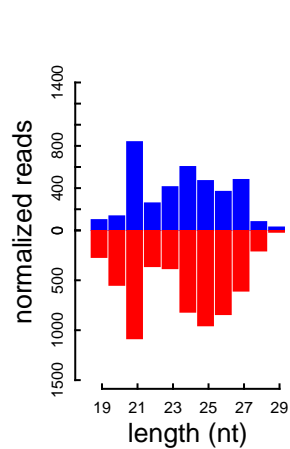
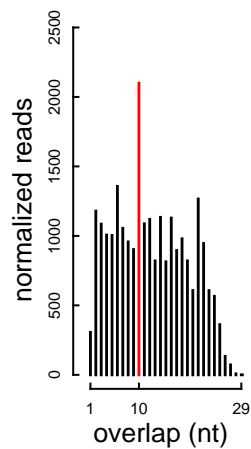
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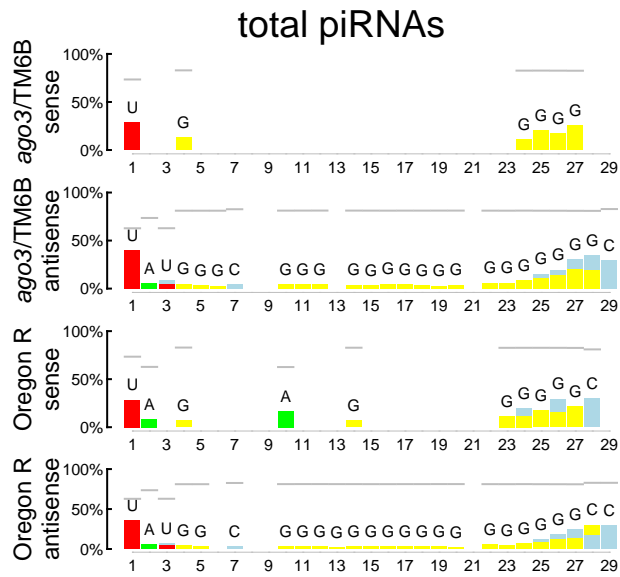
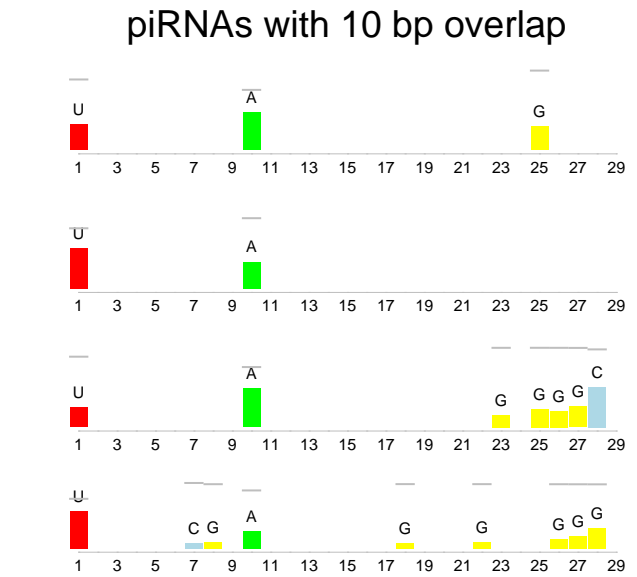
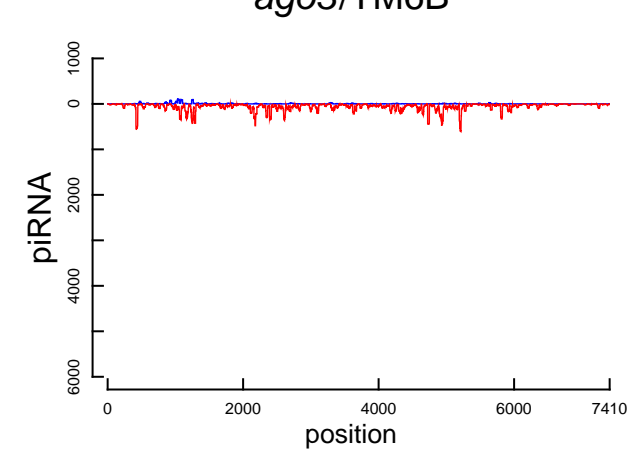
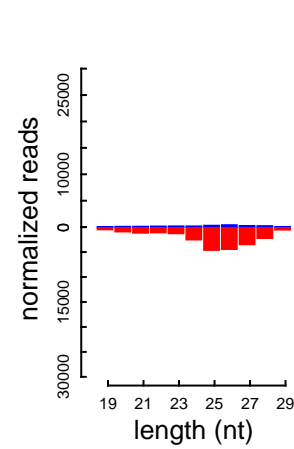
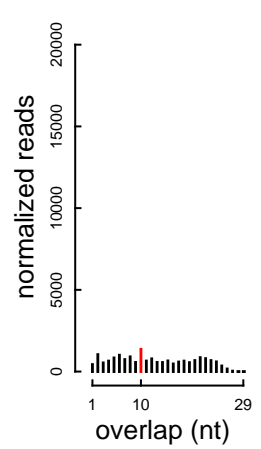
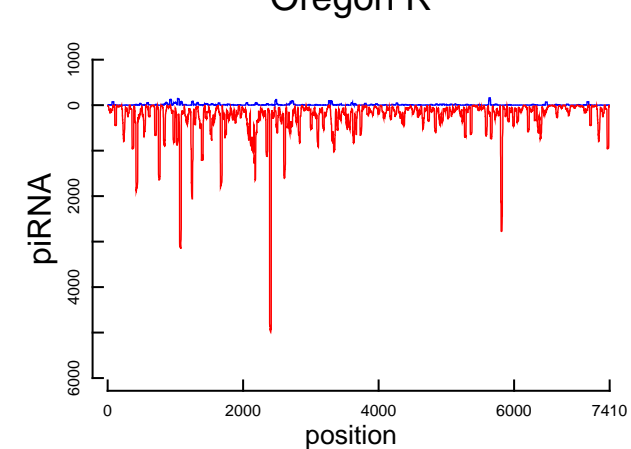
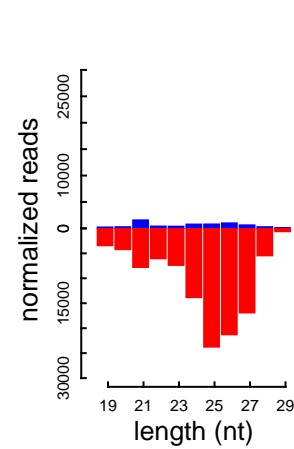
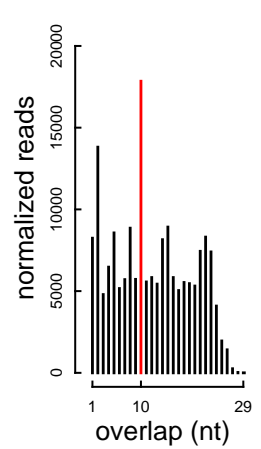
# baggins

**A****B****C****E****G****D****F****H**

# Bari1

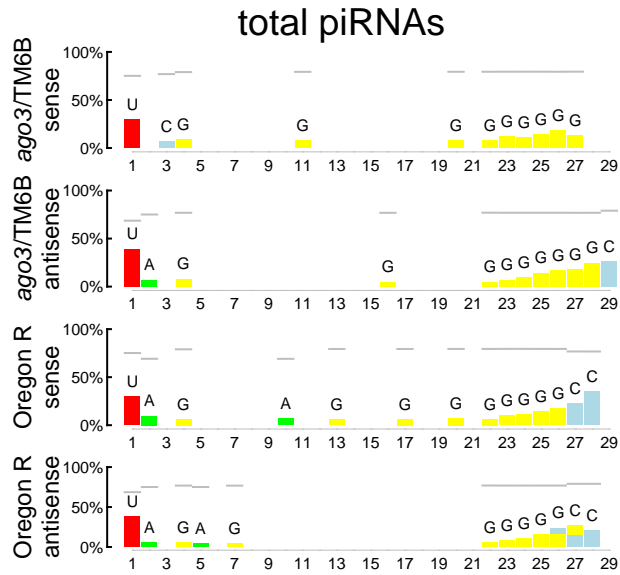
**A****B****C****E****G****D****F****H**

# blood

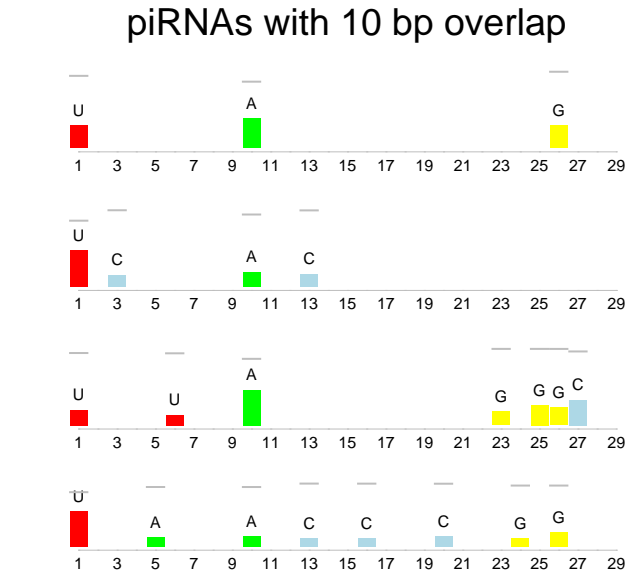
**A****B****C****E****G****D****F****H**

# BS

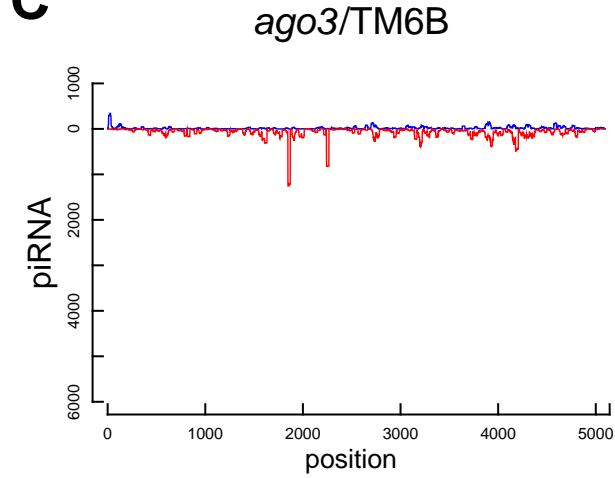
## A



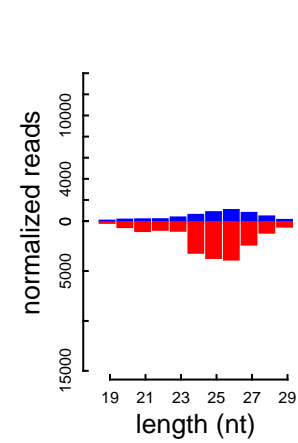
## B



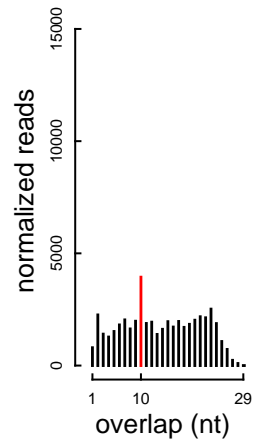
## C



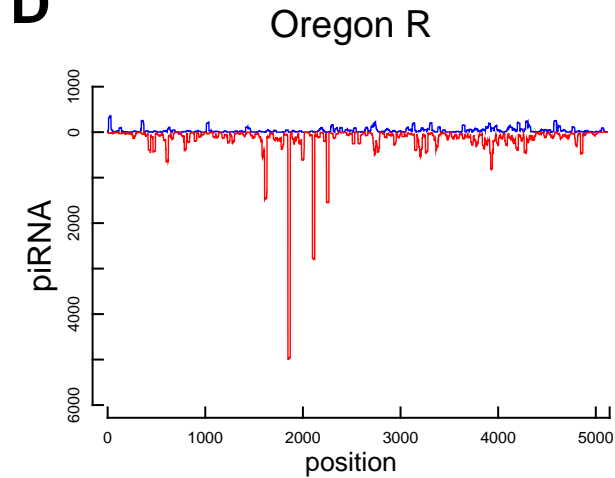
## E



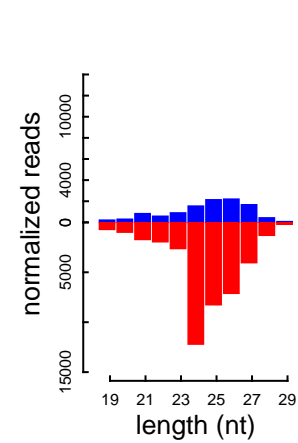
## G



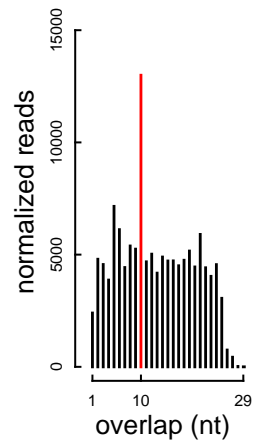
## D



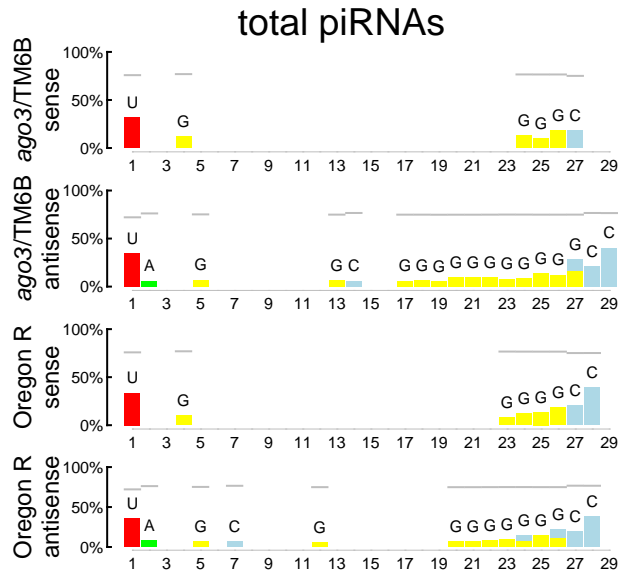
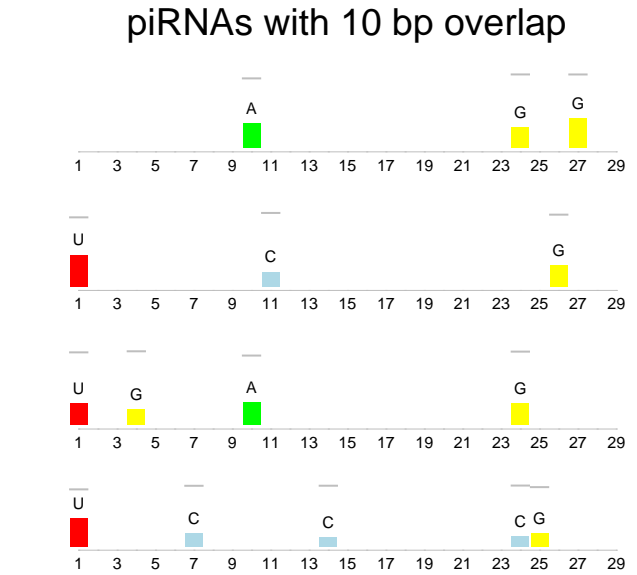
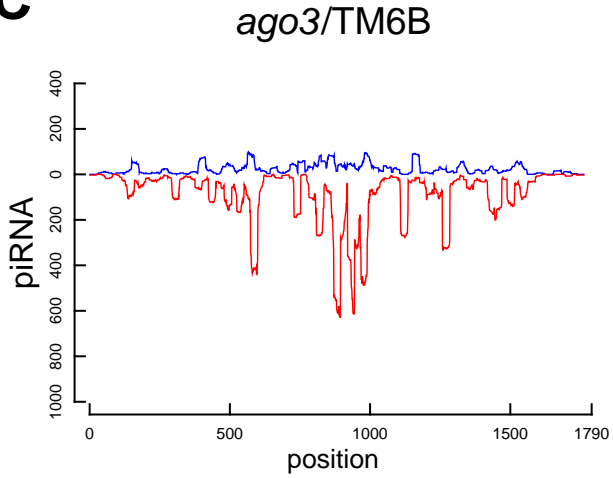
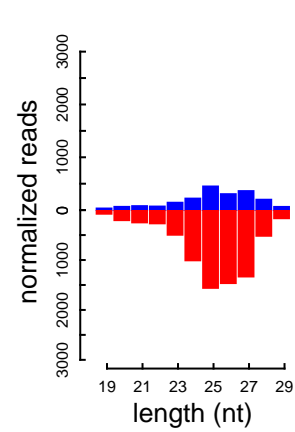
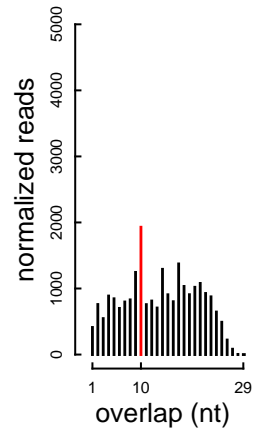
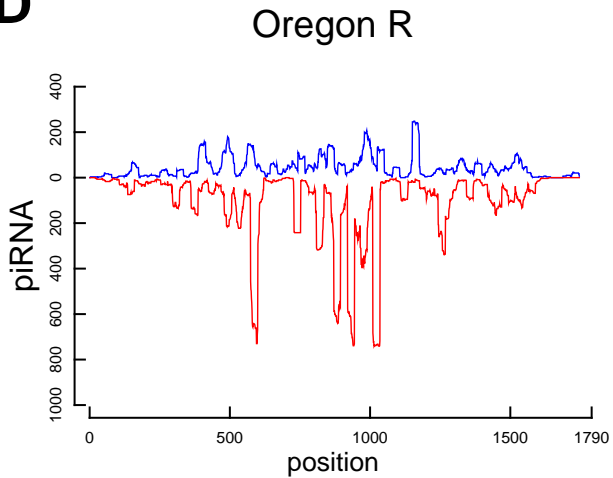
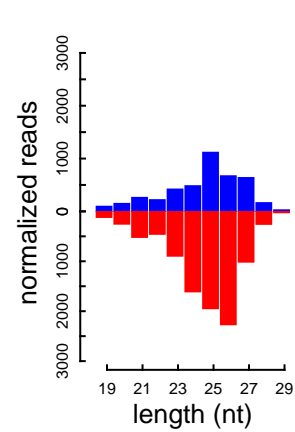
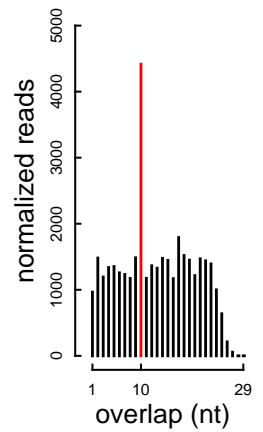
## F



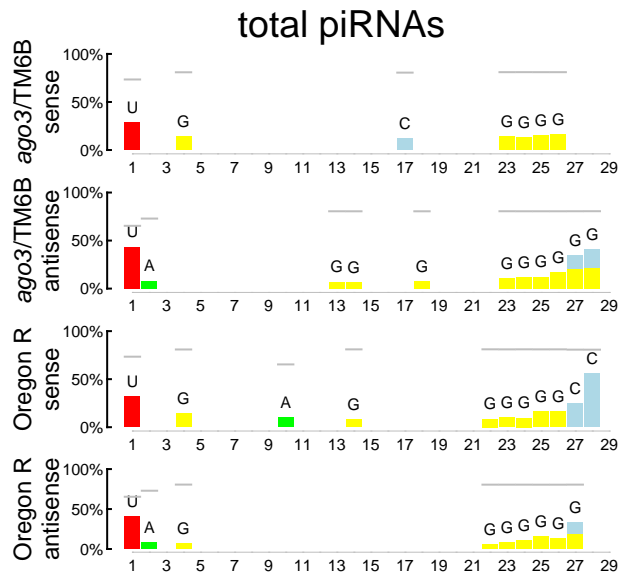
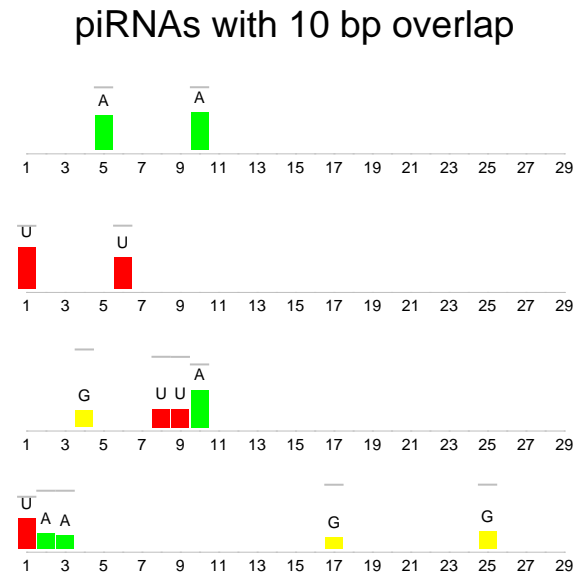
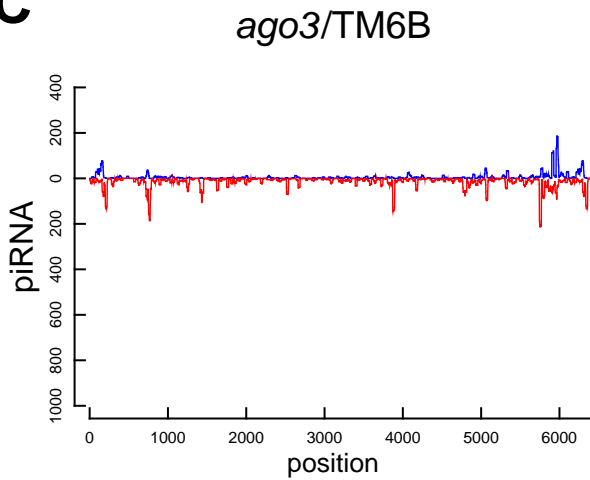
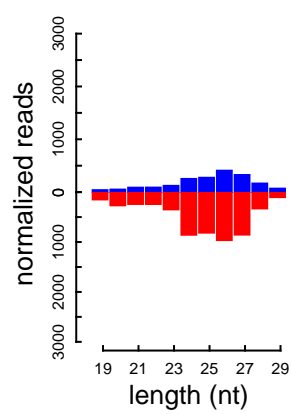
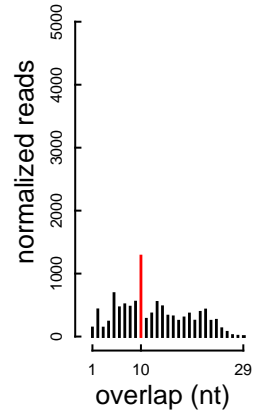
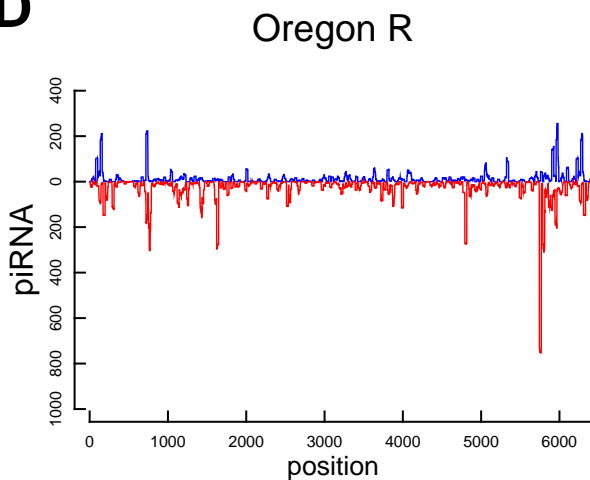
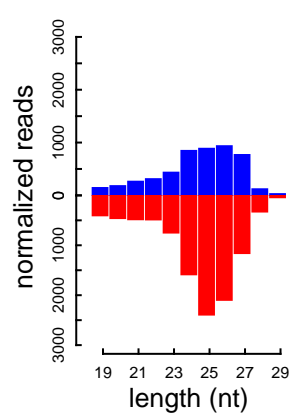
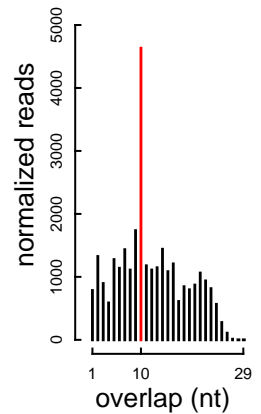
## H



# BS3

**A****B****C****E****G****D****F****H**

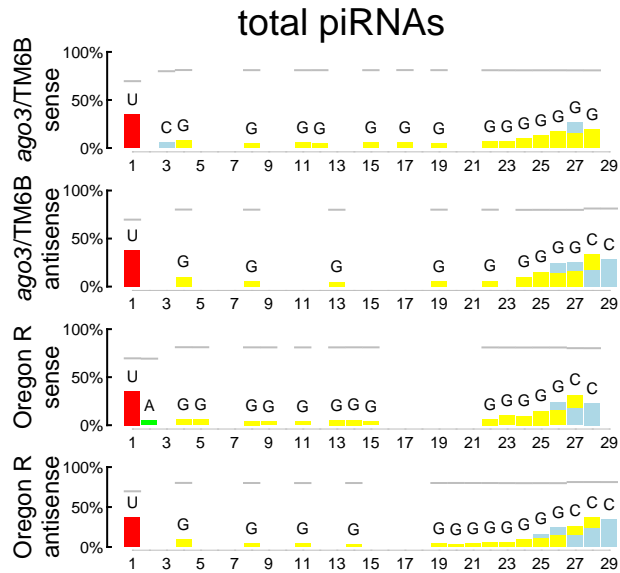
# Burdock

**A****B****C****E****G****D****F****H**

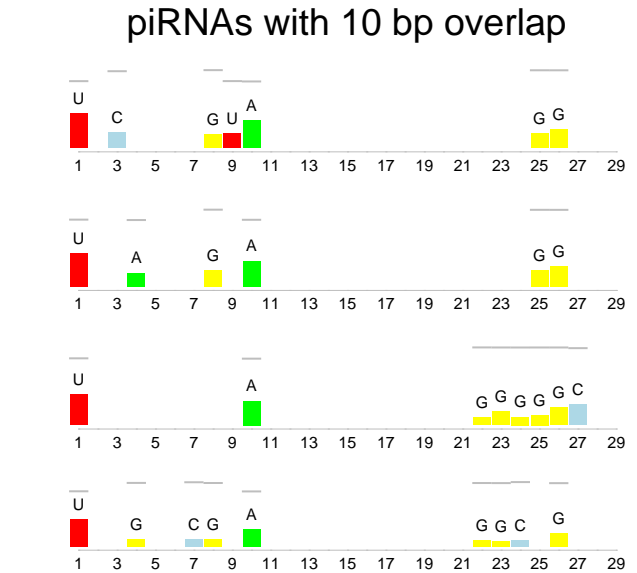


# Circe

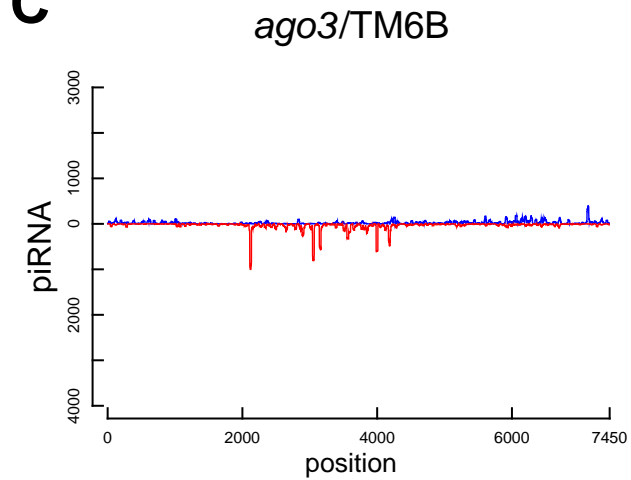
**A**



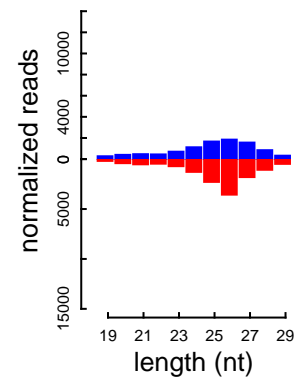
**B**



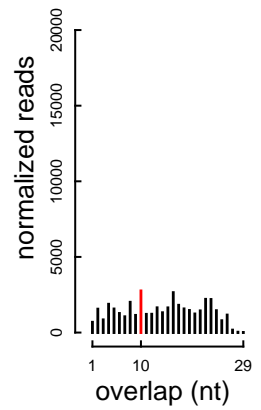
**C**



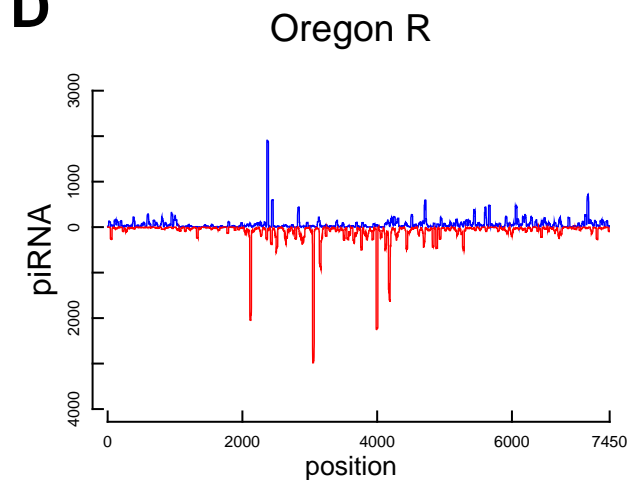
**E**



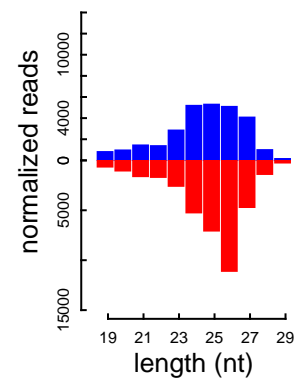
**G**



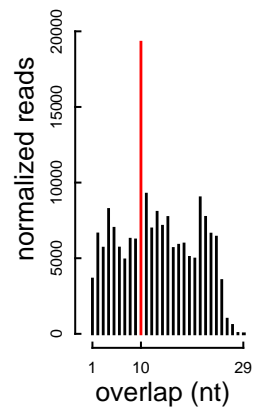
**D**



**F**

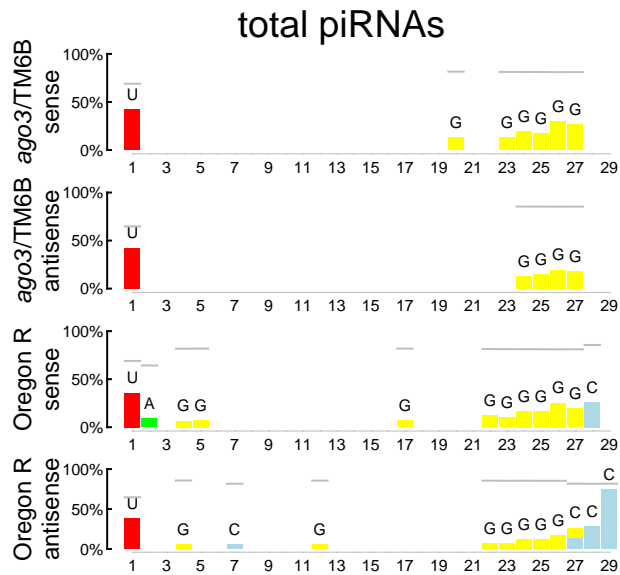


**H**

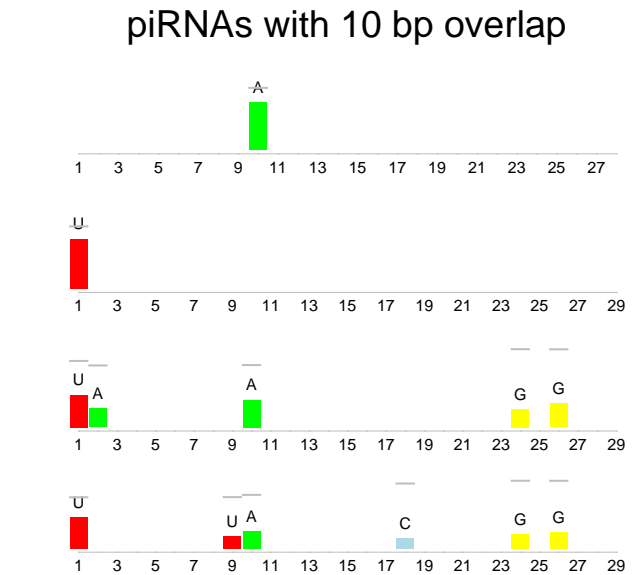


# *copia*

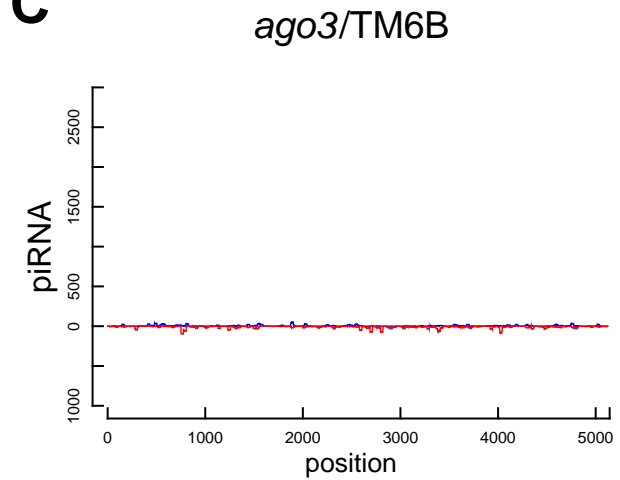
**A**



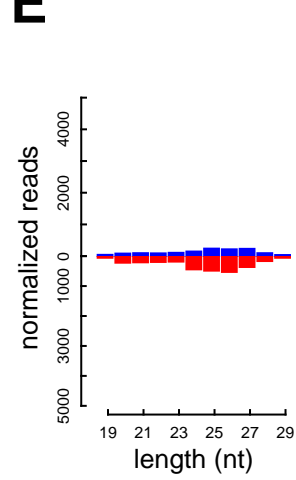
**B**



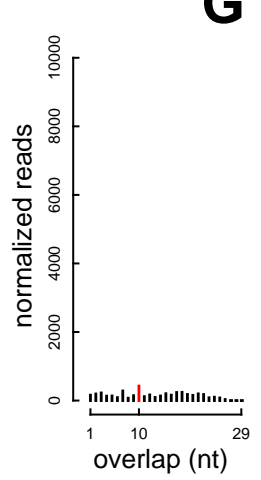
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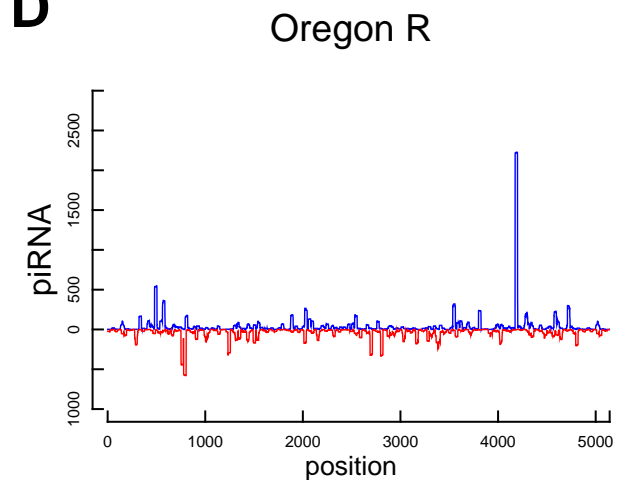
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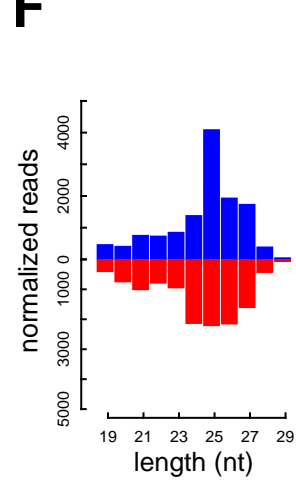
**G**



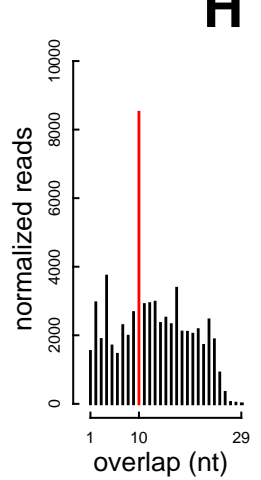
**D**



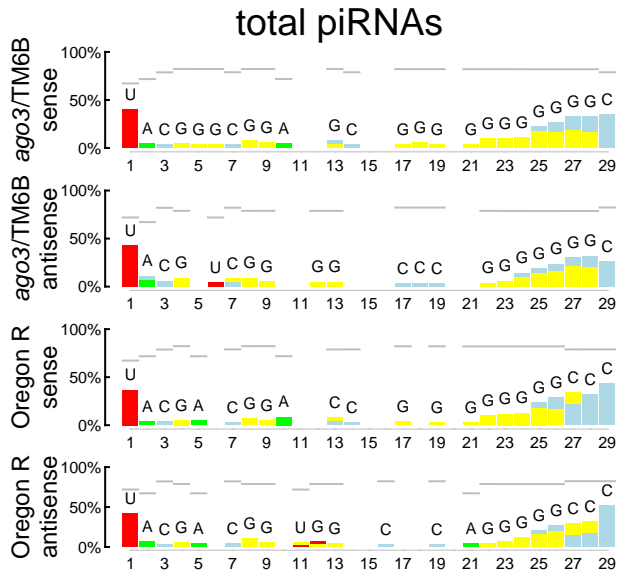
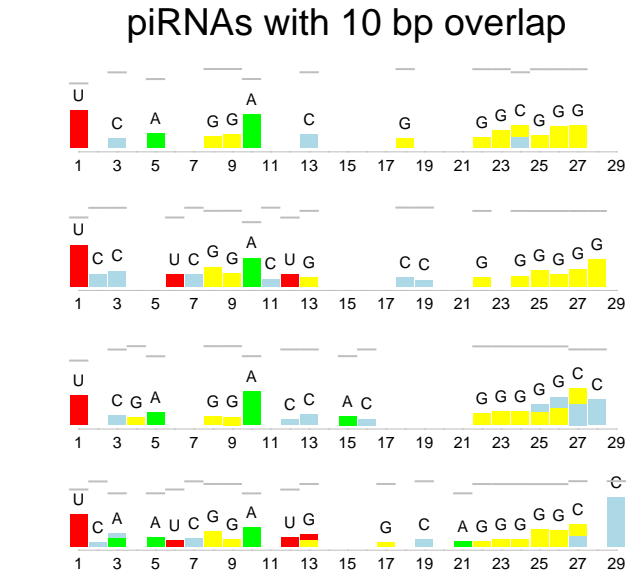
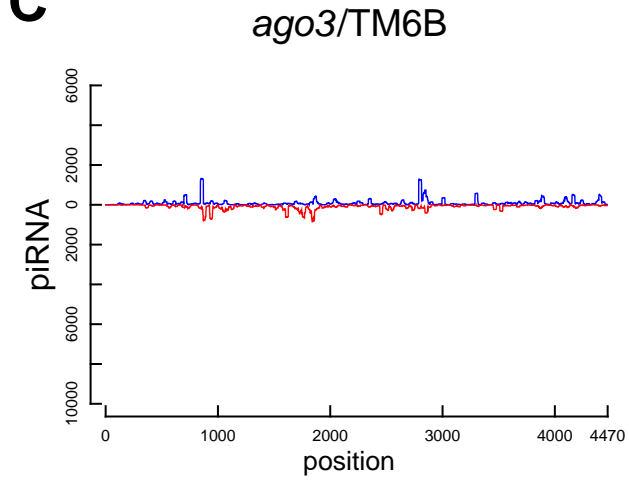
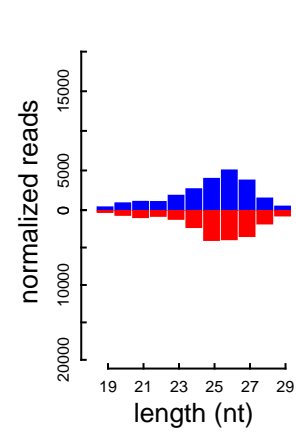
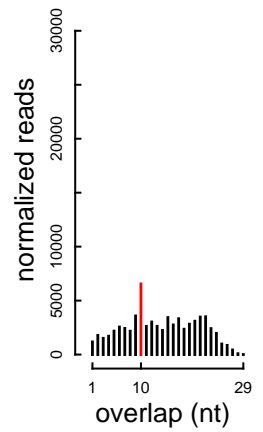
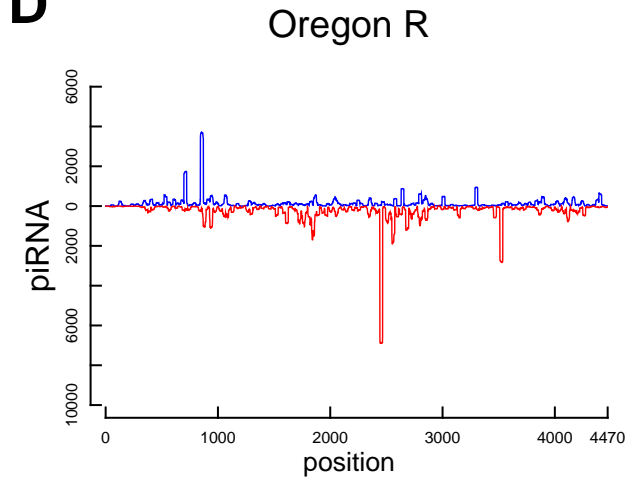
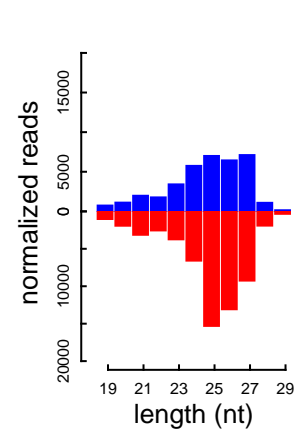
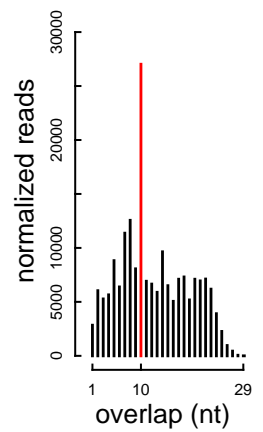
**F**



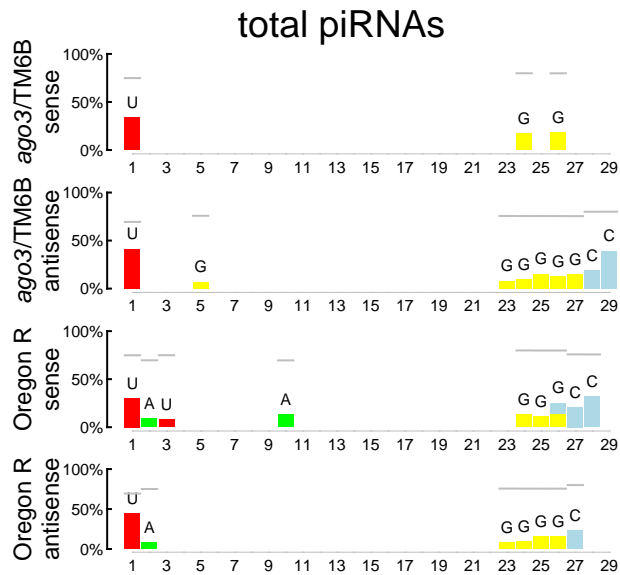
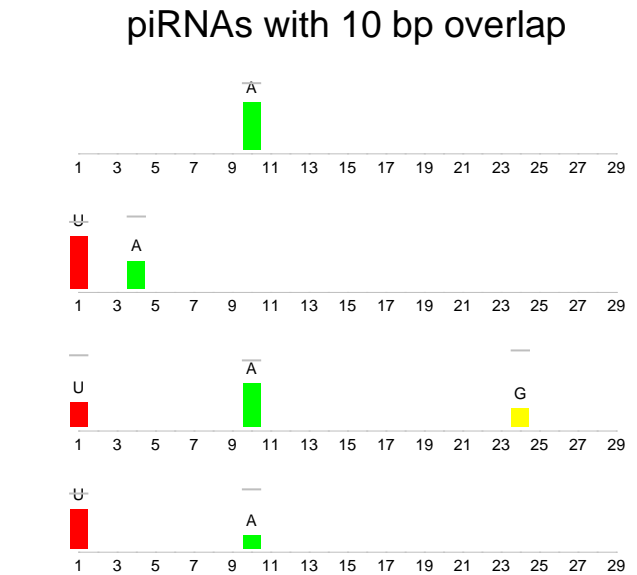
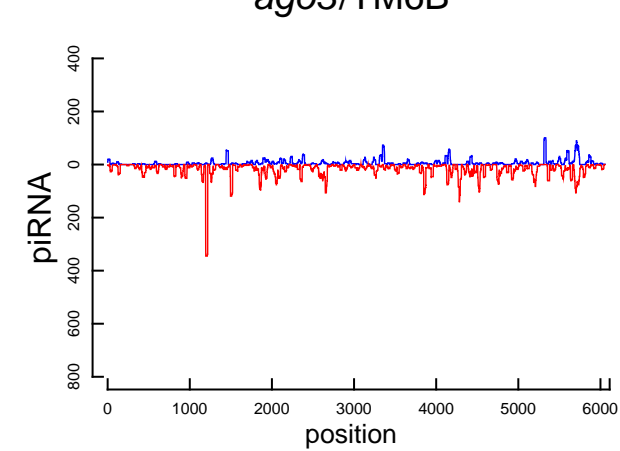
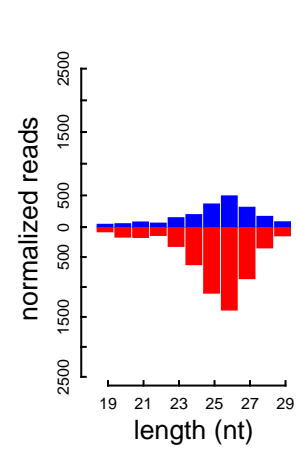
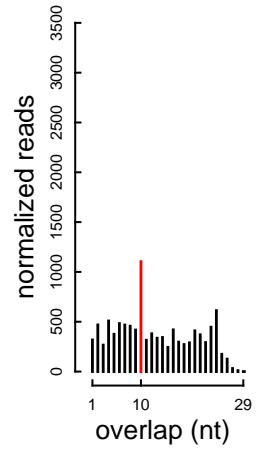
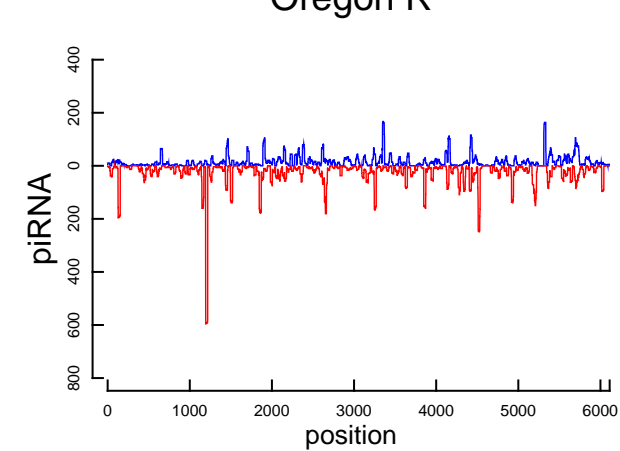
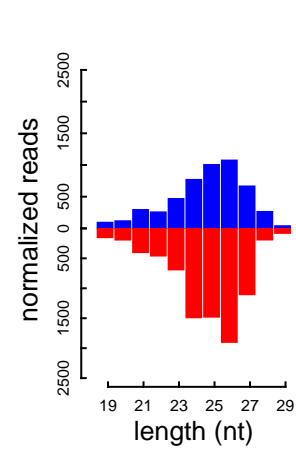
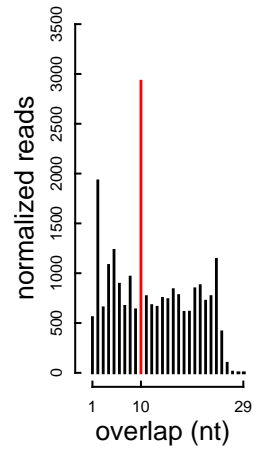
**H**



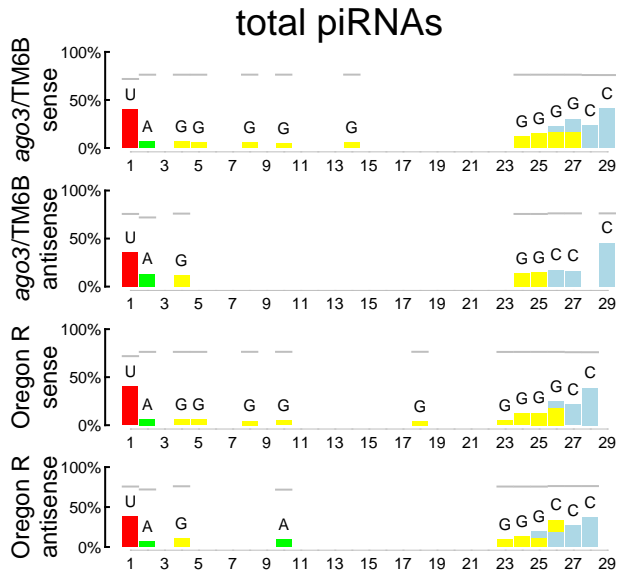
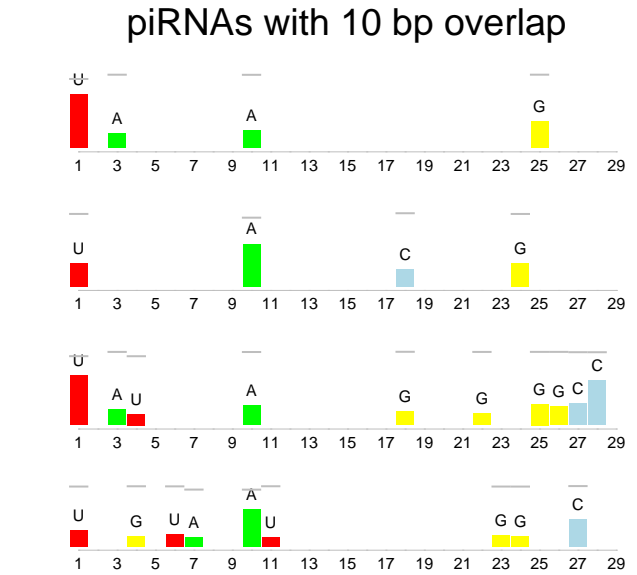
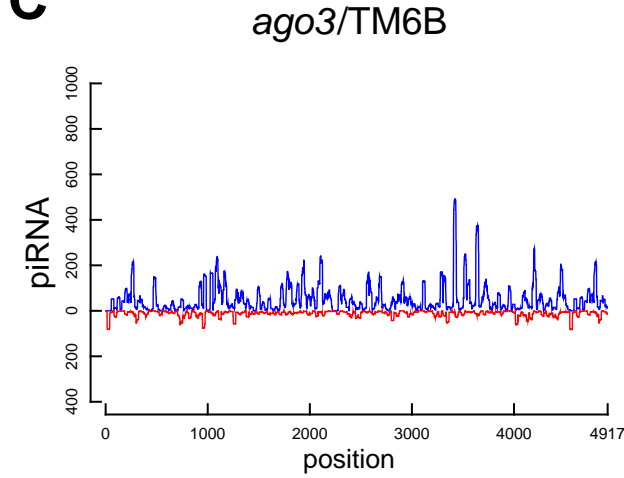
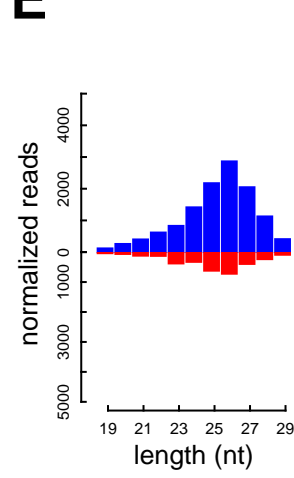
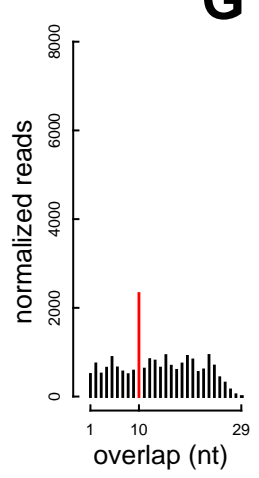
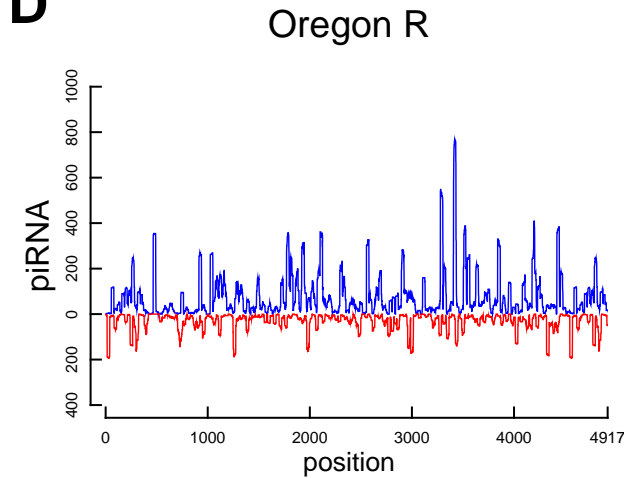
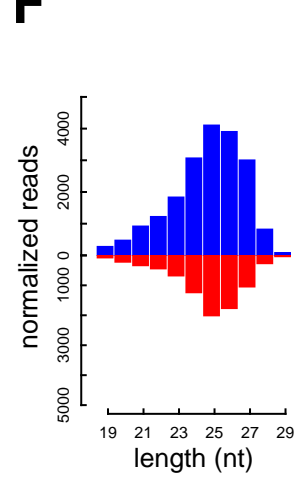
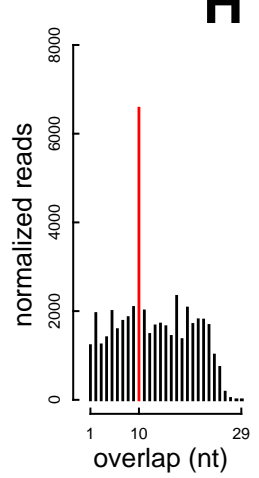
# Cr1a

**A****B****C****E****G****D****F****H**

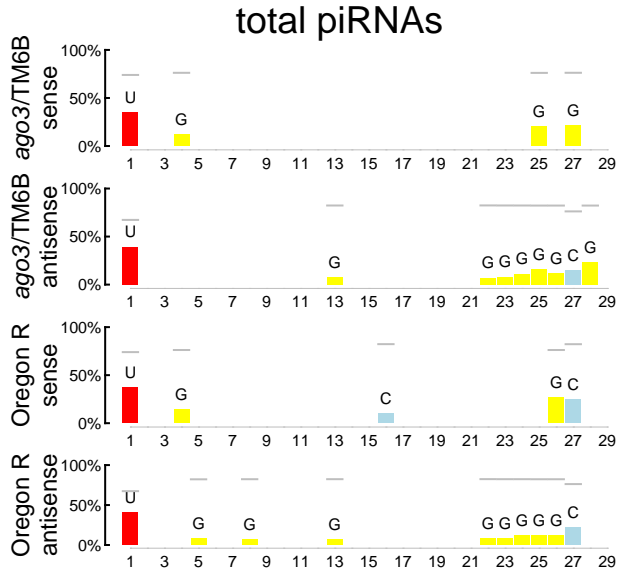
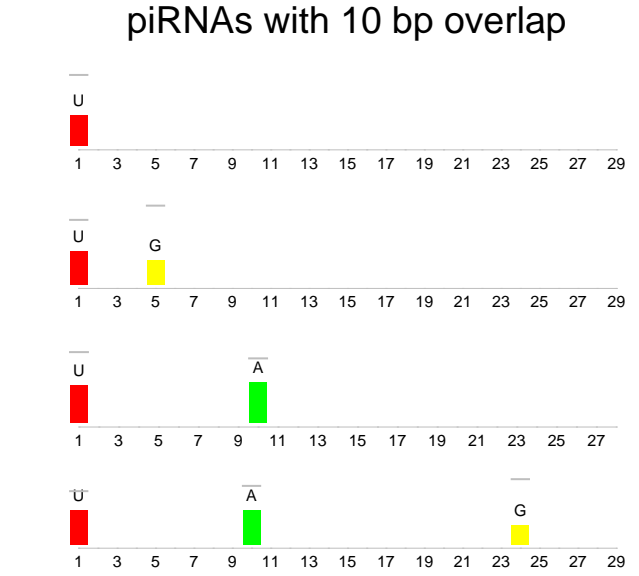
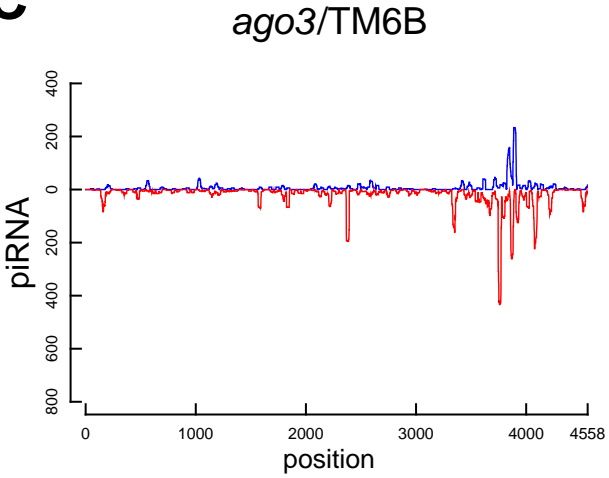
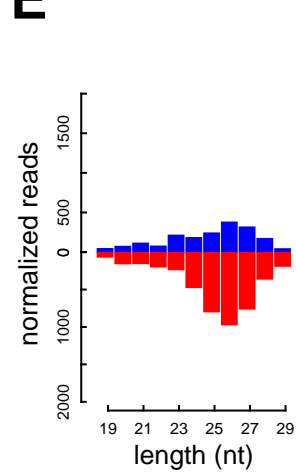
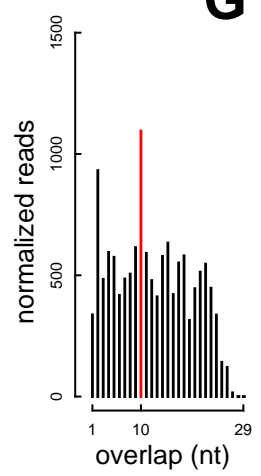
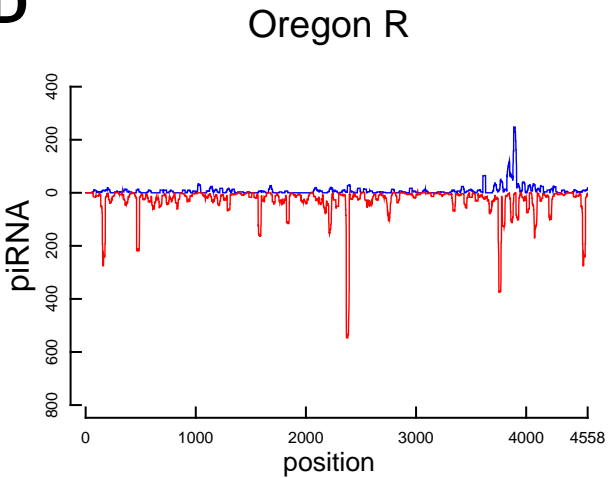
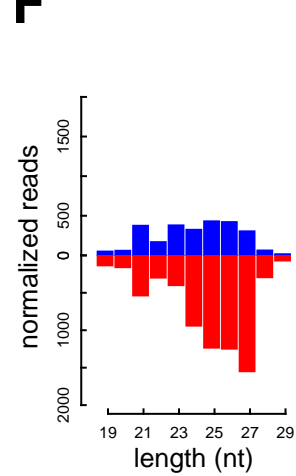
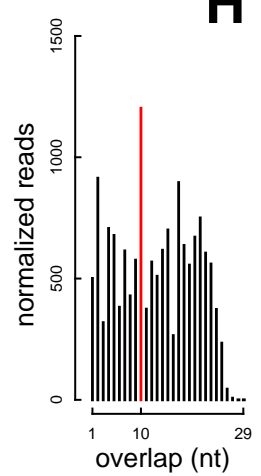
# *diver*

**A****B****C****E****G****D****F****H**

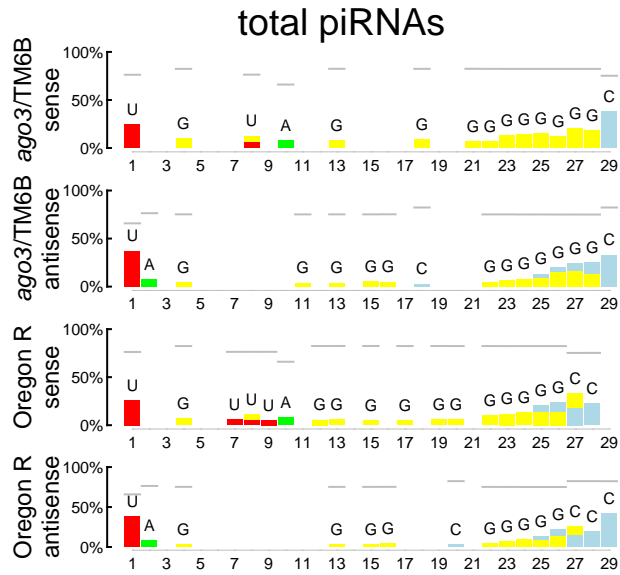
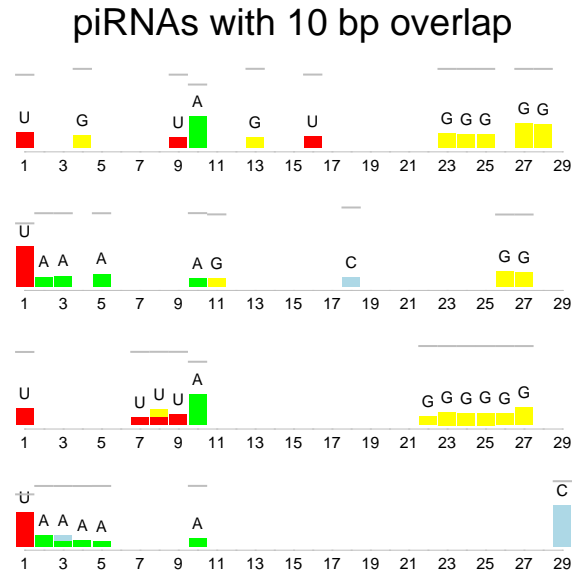
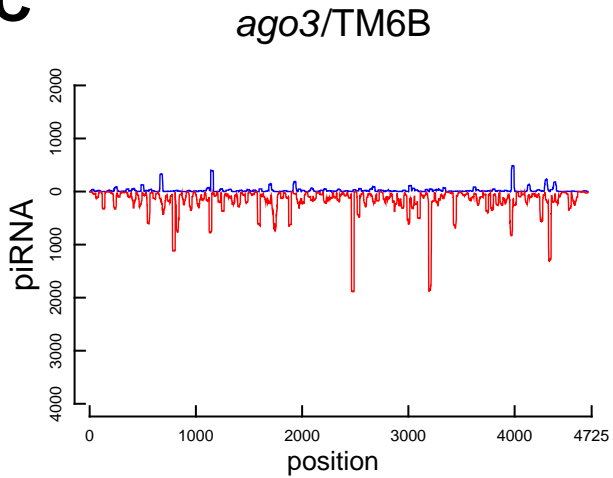
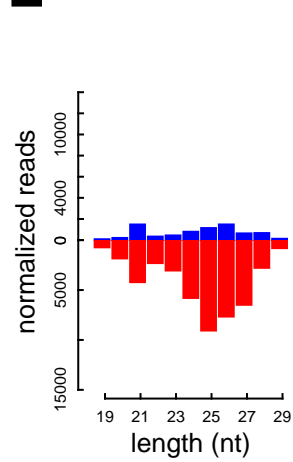
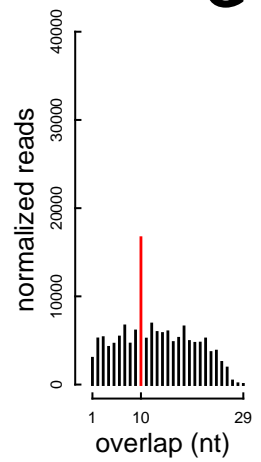
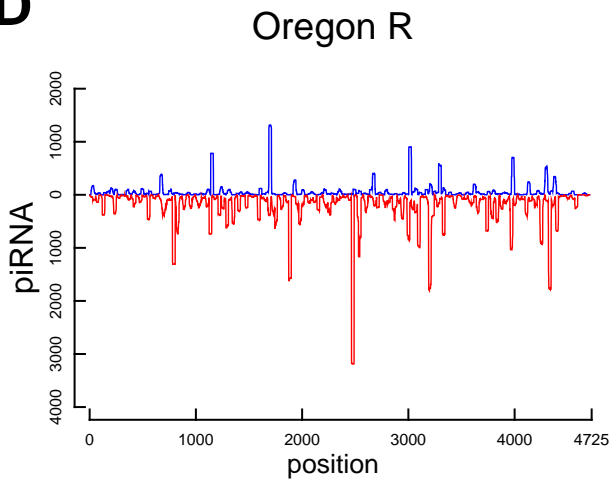
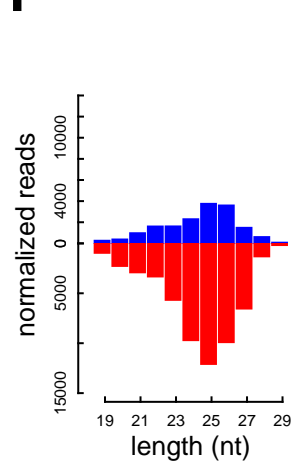
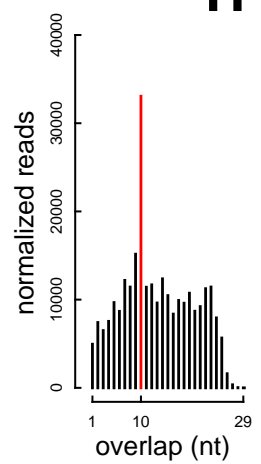
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**A****B****C****E****G****D****F****H**

# Dm88

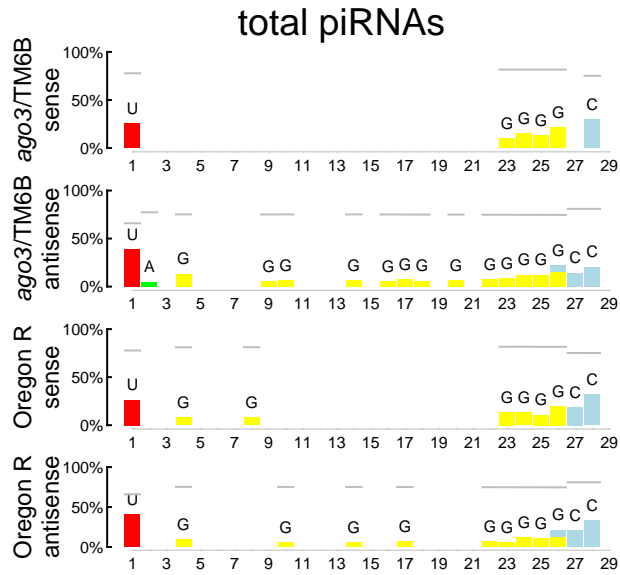
**A****B****C****E****G****D****F****H**

# Doc

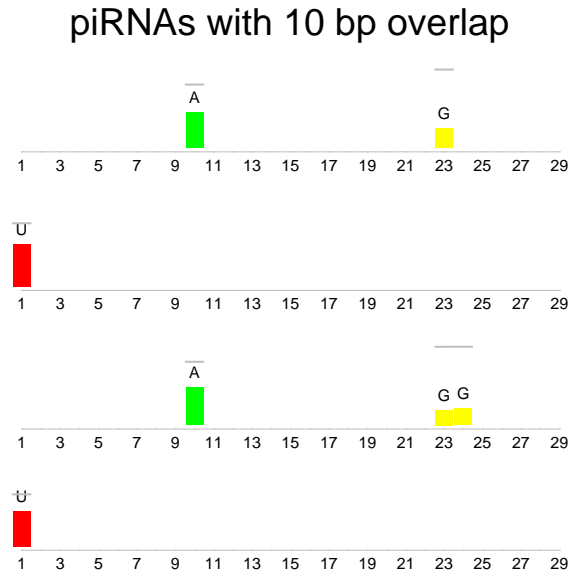
**A****B****C****E****G****D****F****H**

# Doc2 element

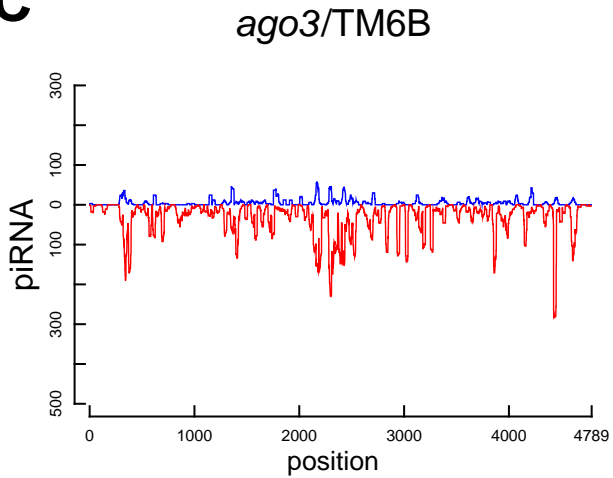
**A**



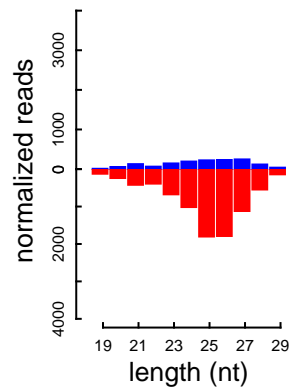
**B**



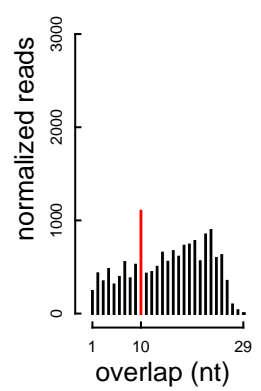
**C**



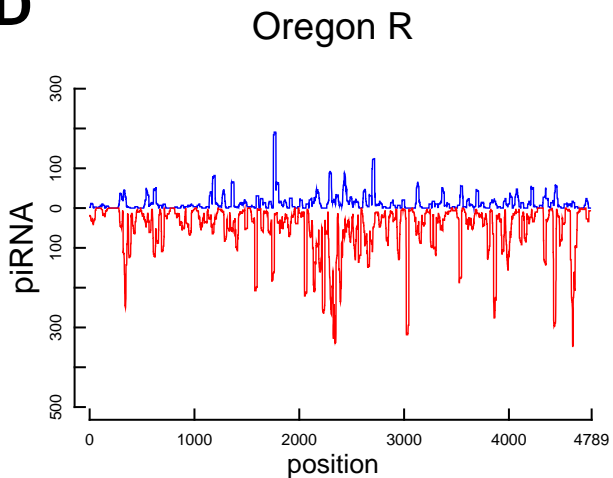
**E**



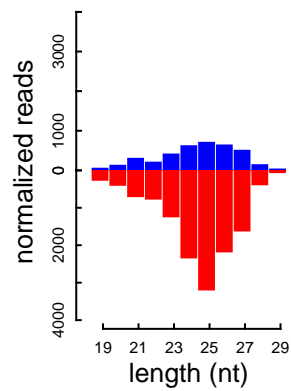
**G**



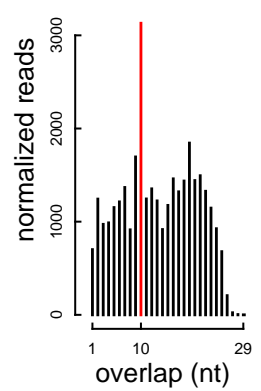
**D**



**F**



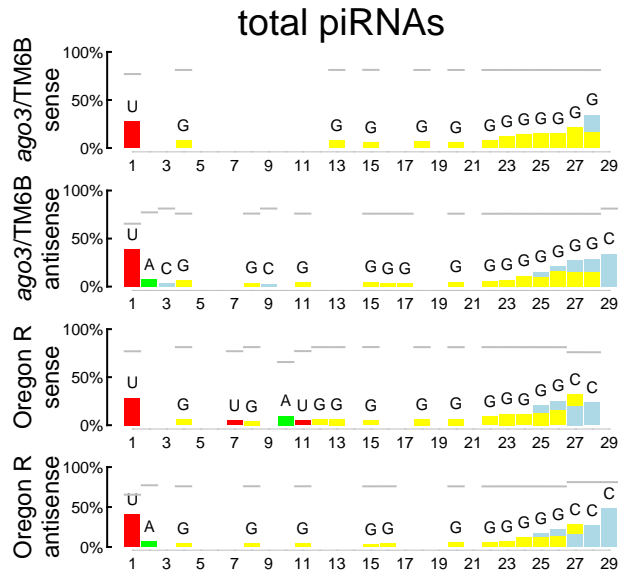
**H**



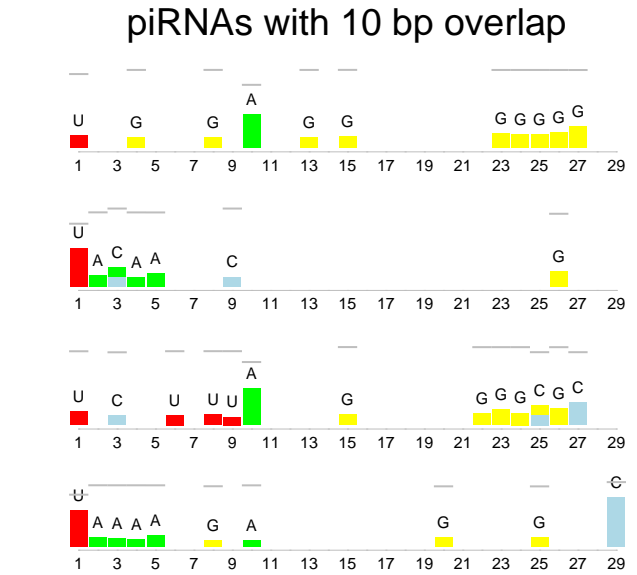


# Doc3 element

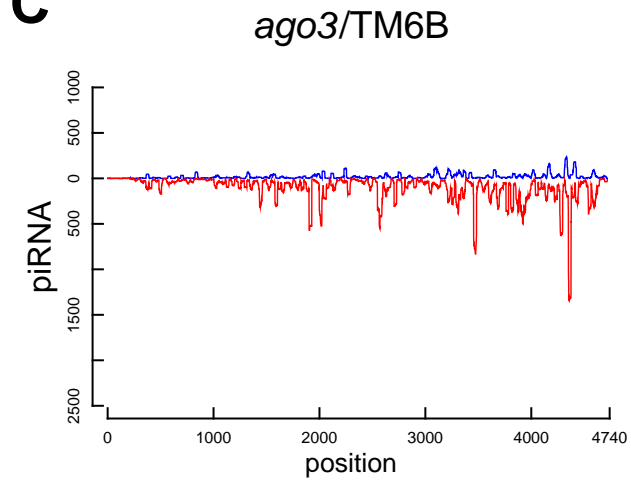
**A**



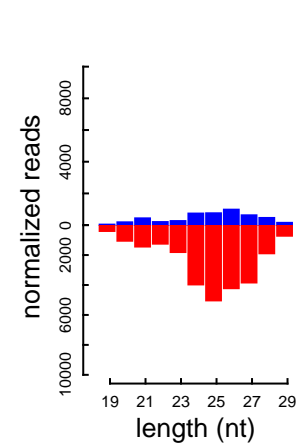
**B**



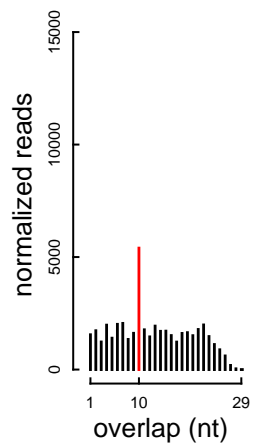
**C**



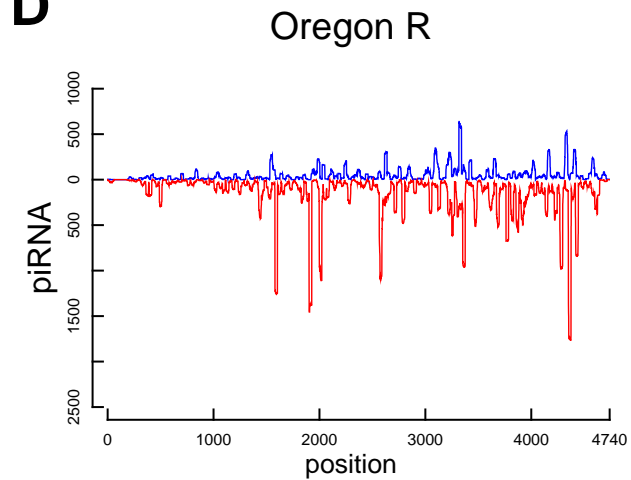
**E**



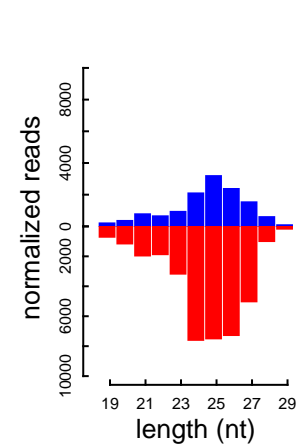
**G**



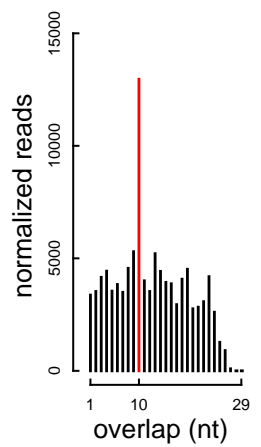
**D**



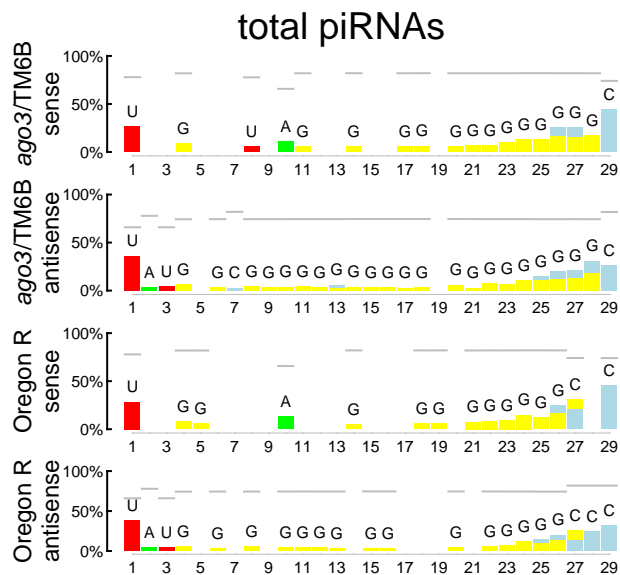
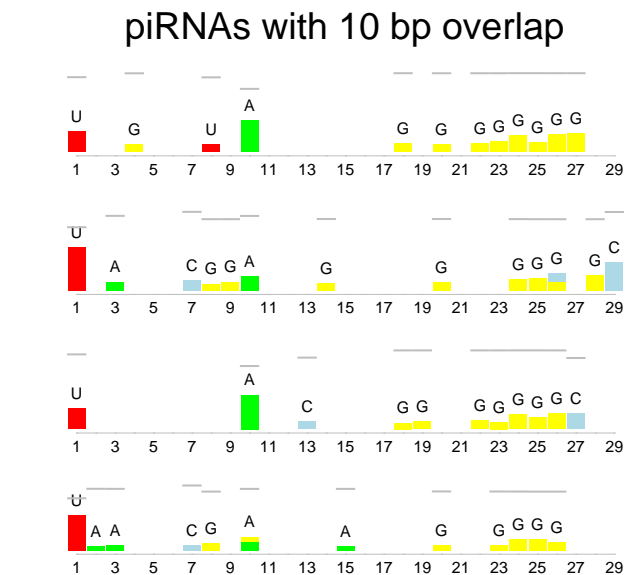
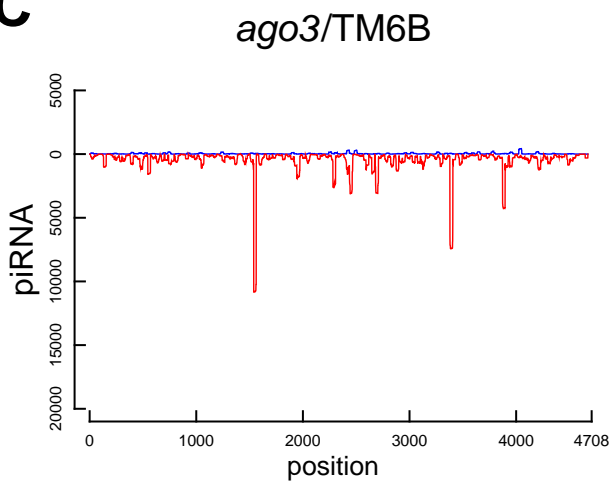
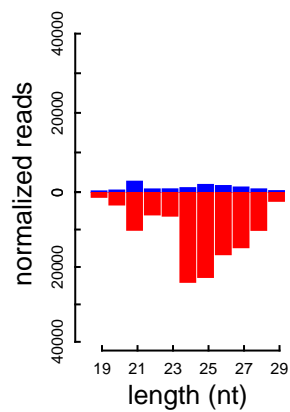
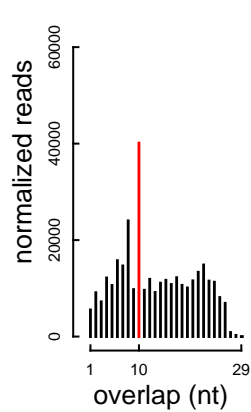
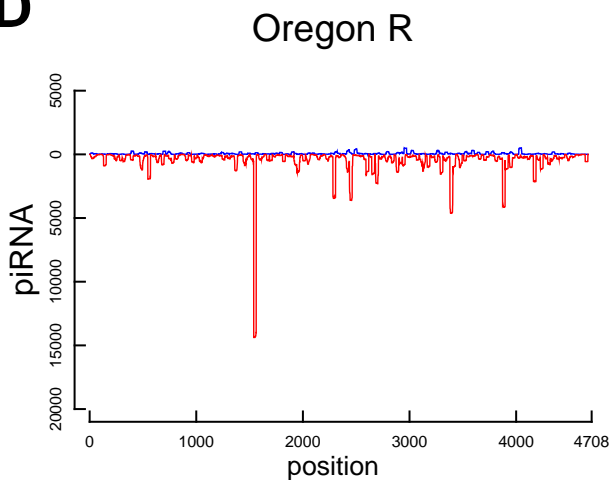
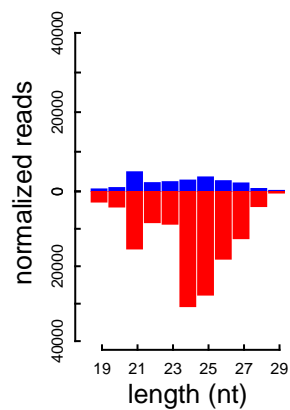
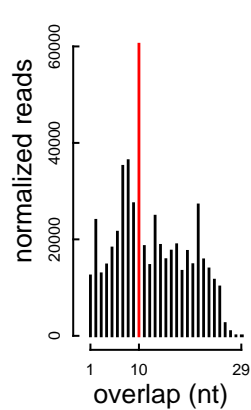
**F**



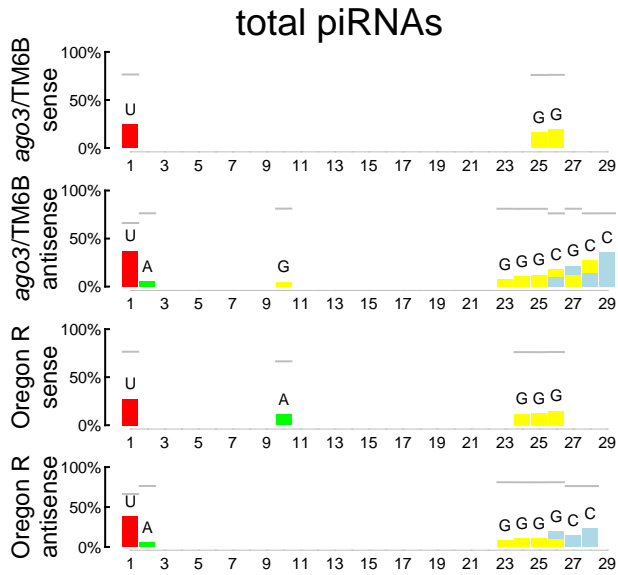
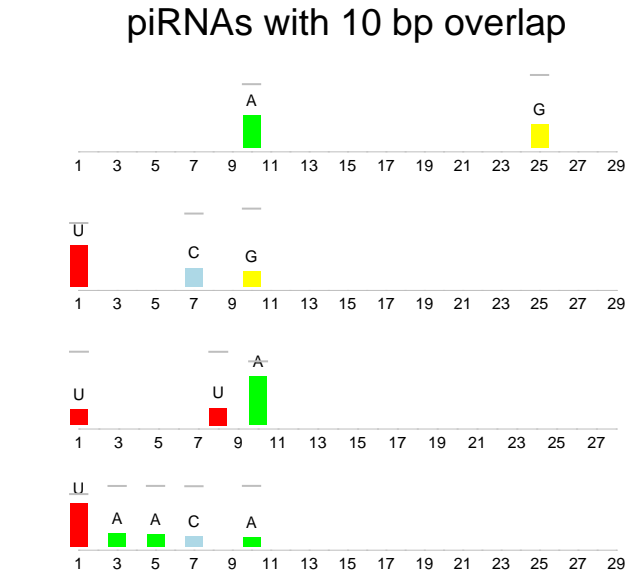
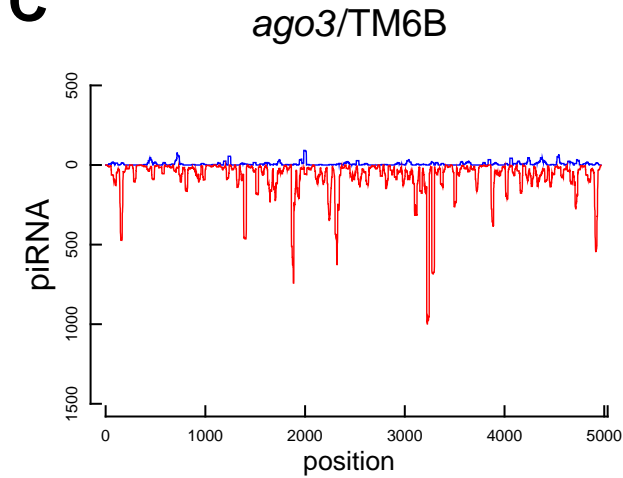
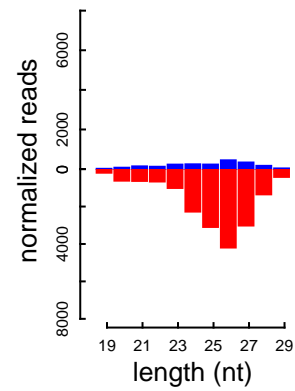
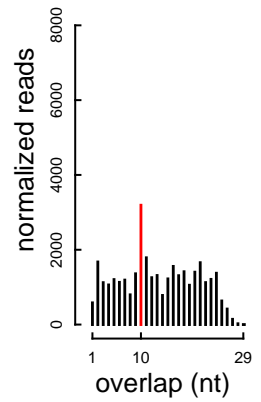
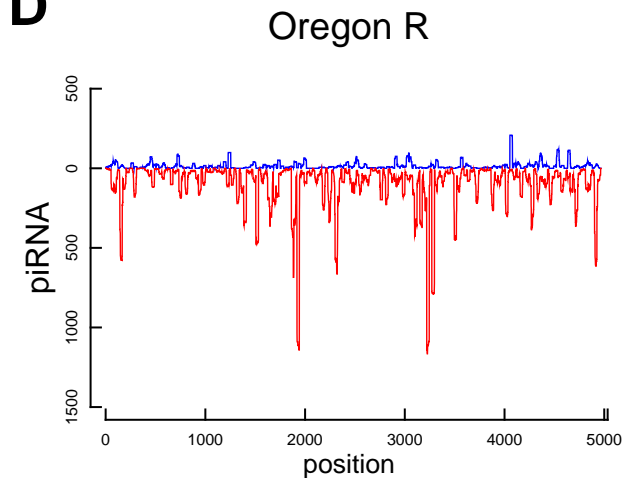
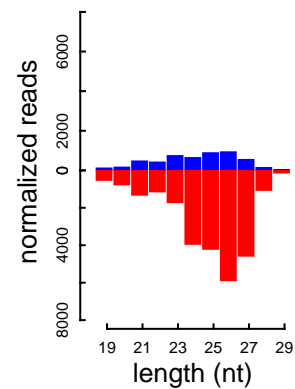
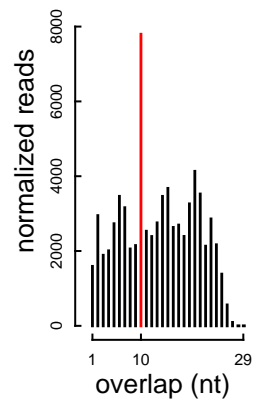
**H**



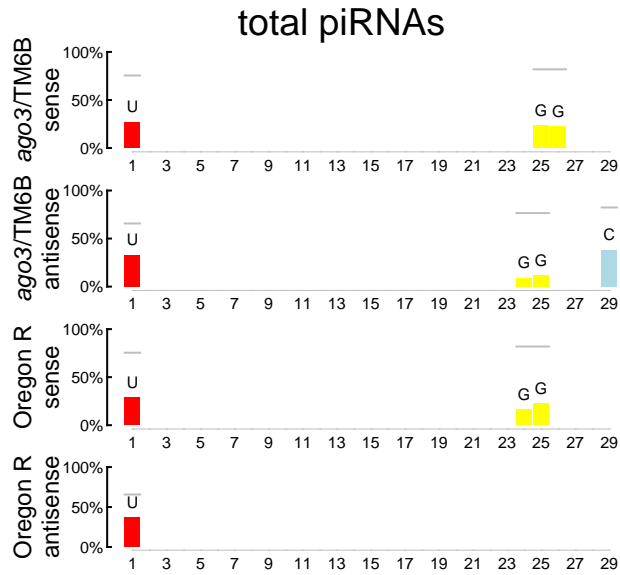
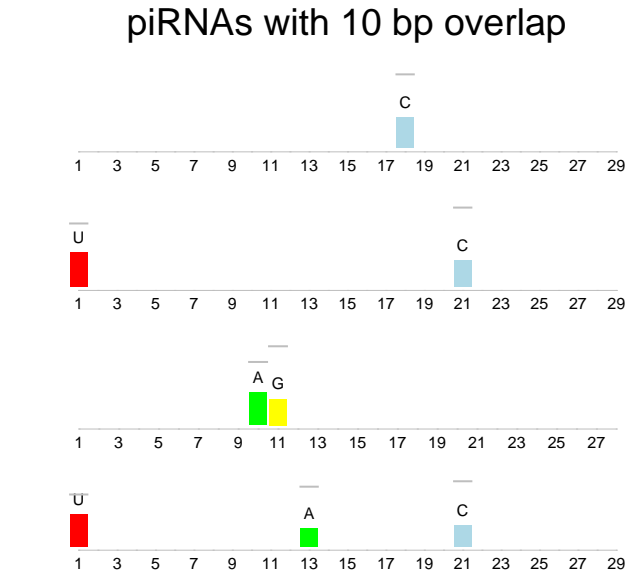
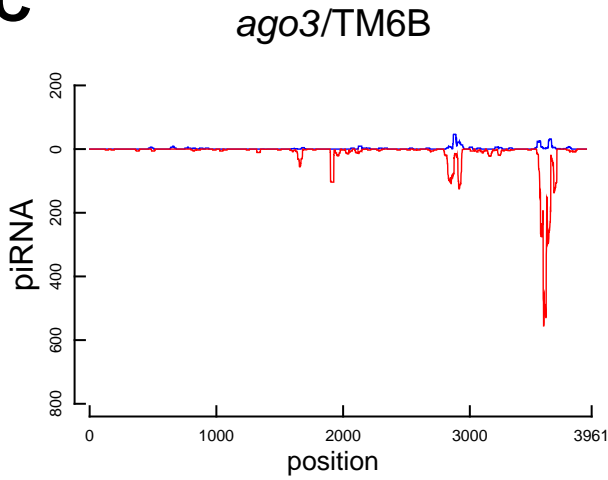
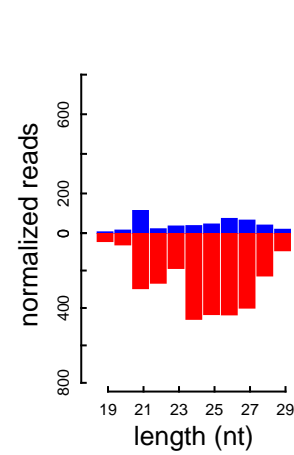
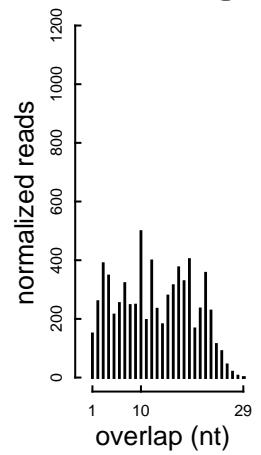
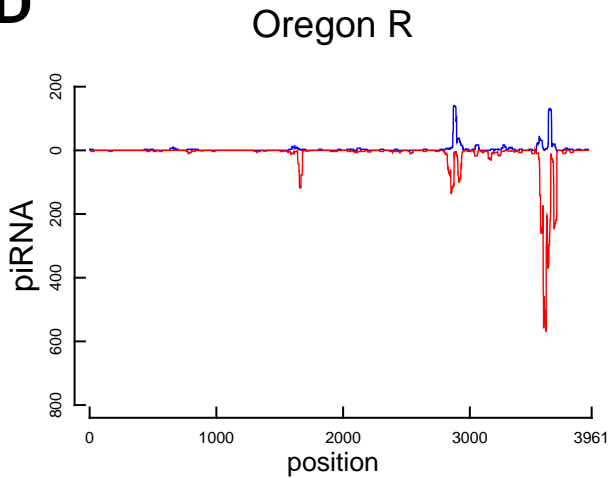
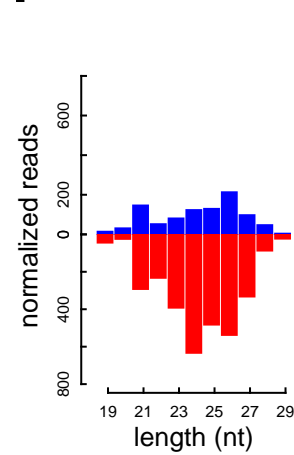
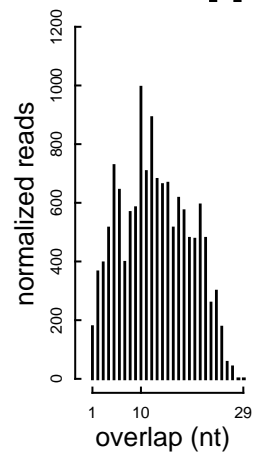
# F element

**A****B****C****E****G****D****F****H**

# flea

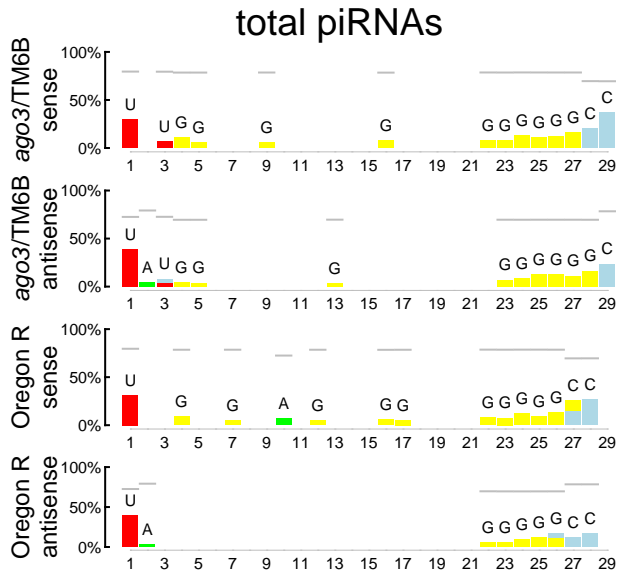
**A****B****C****E****G****D****F****H**

# FW2

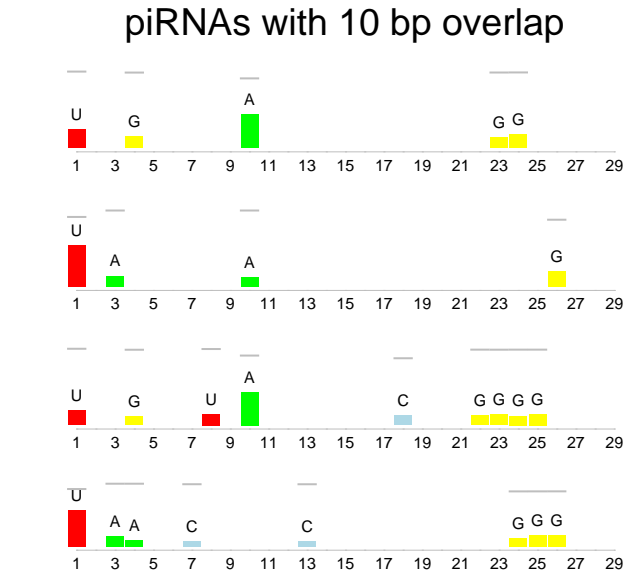
**A****B****C****E****G****D****F****H**

# G element

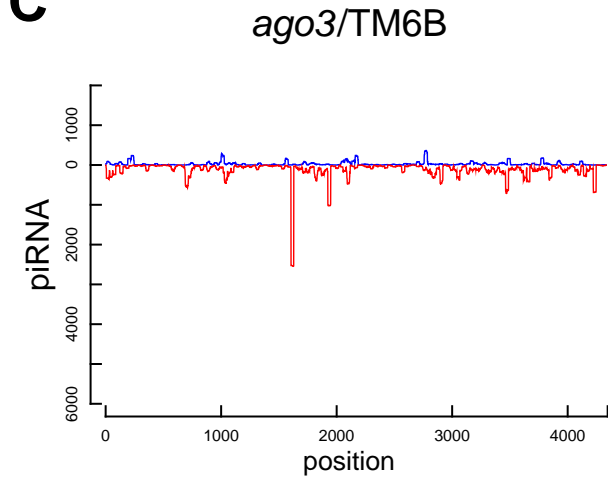
**A**



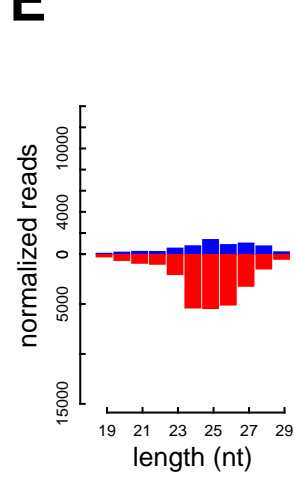
**B**



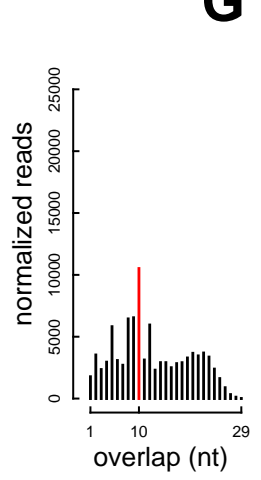
**C**



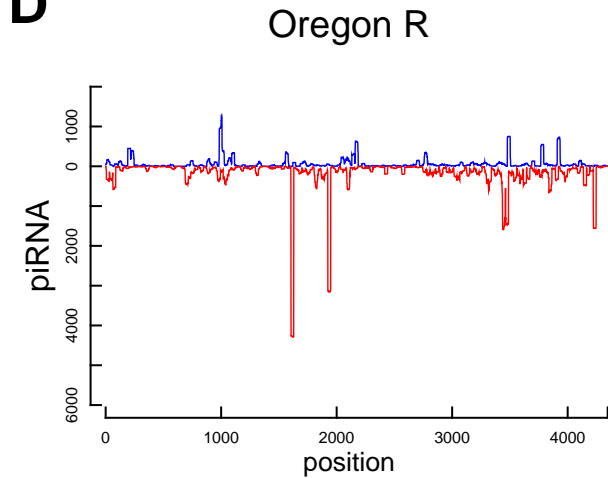
**E**



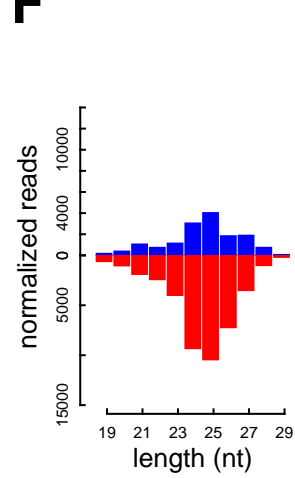
**G**



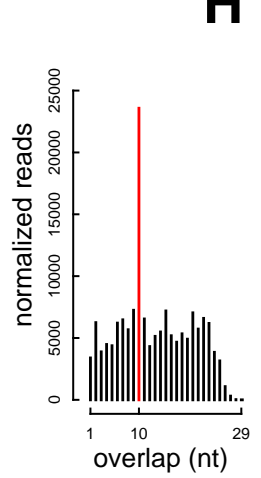
**D**



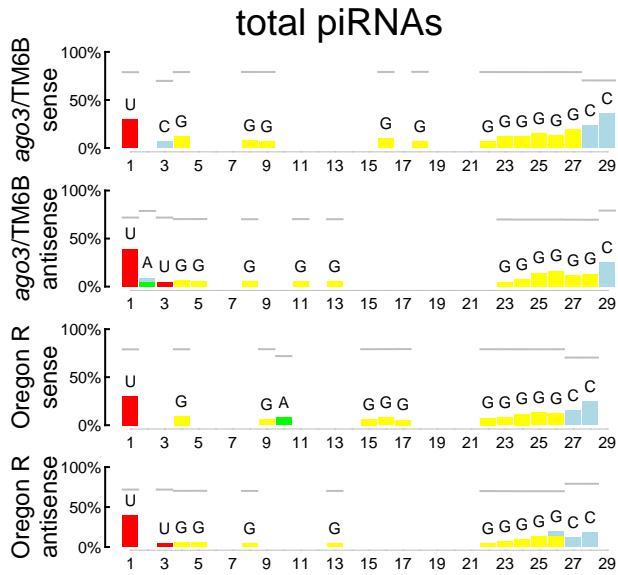
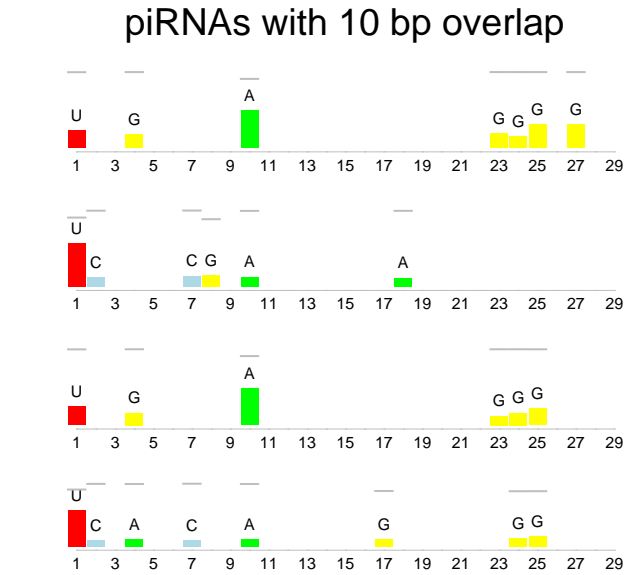
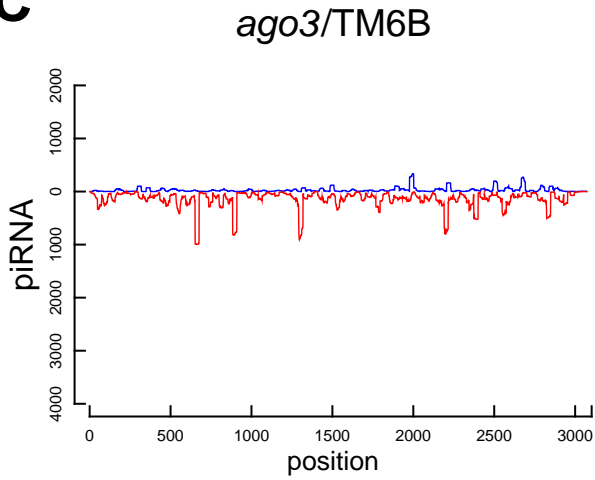
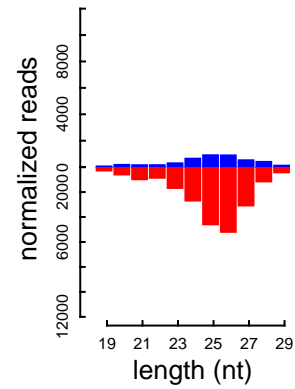
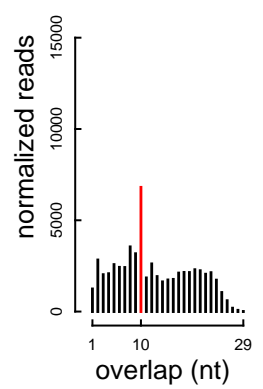
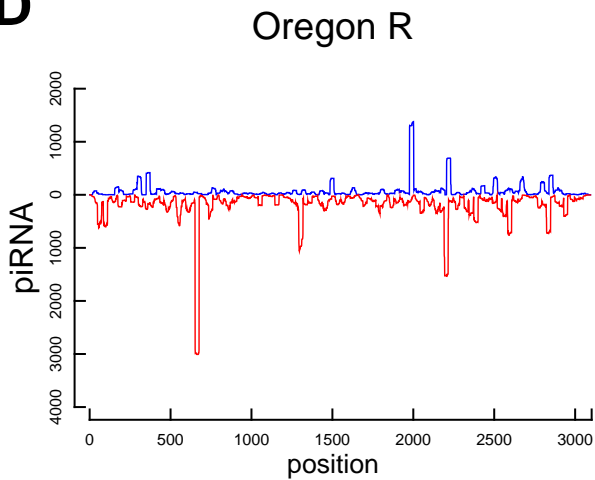
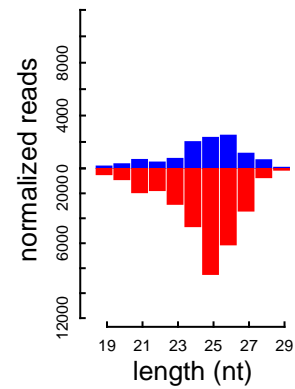
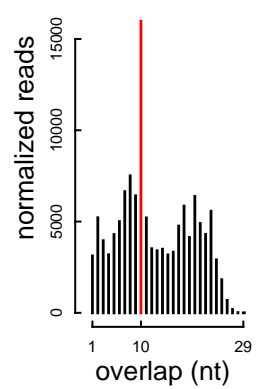
**F**



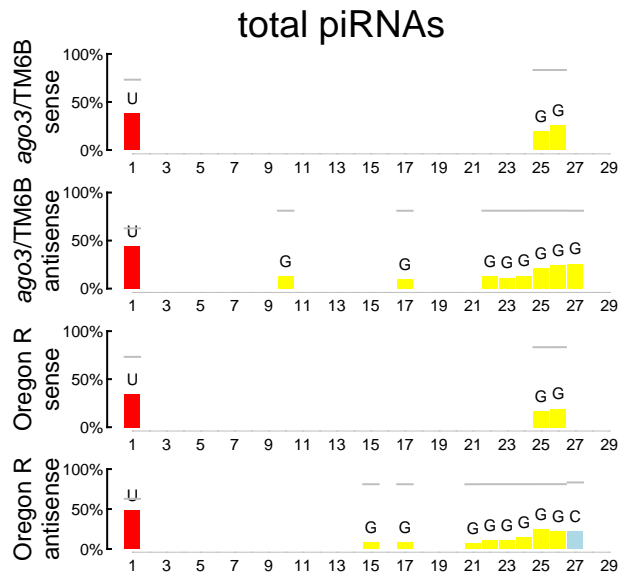
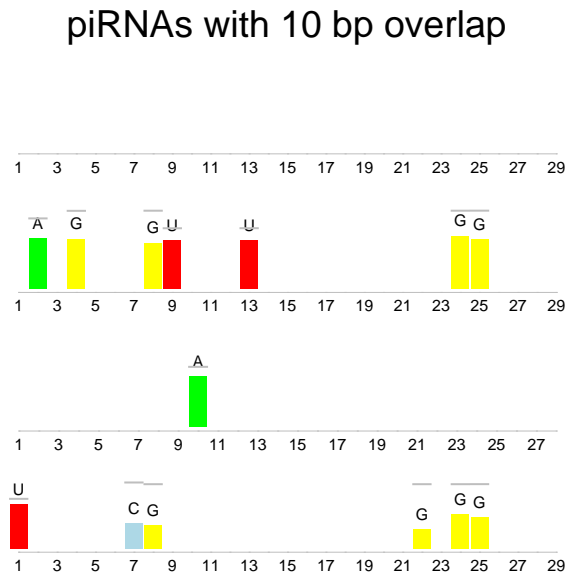
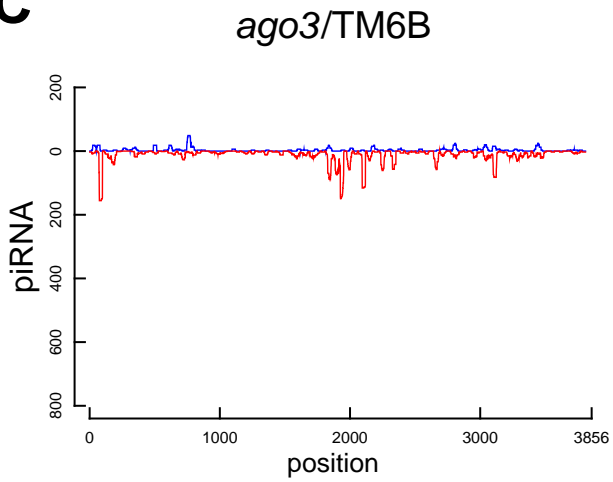
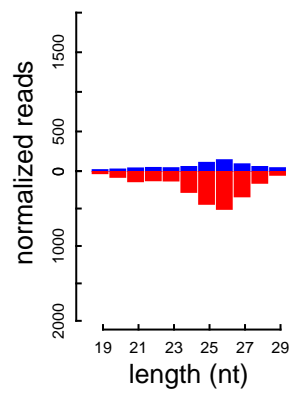
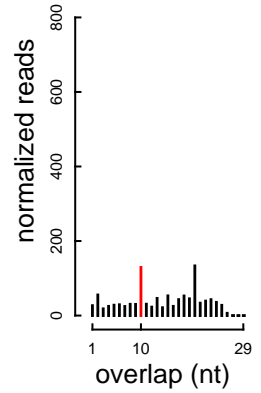
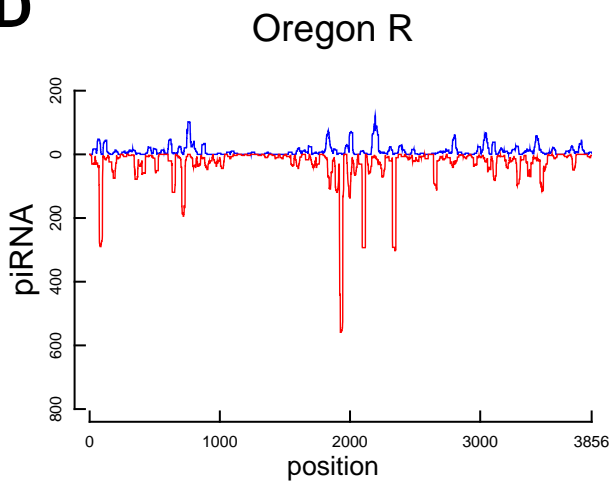
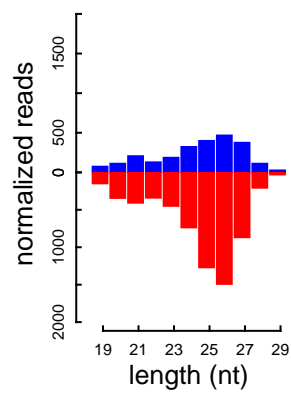
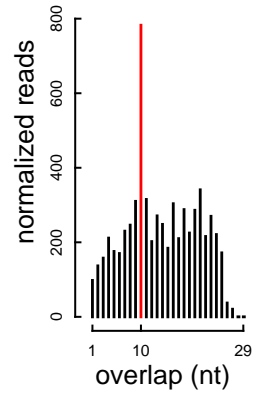
**H**



# G2

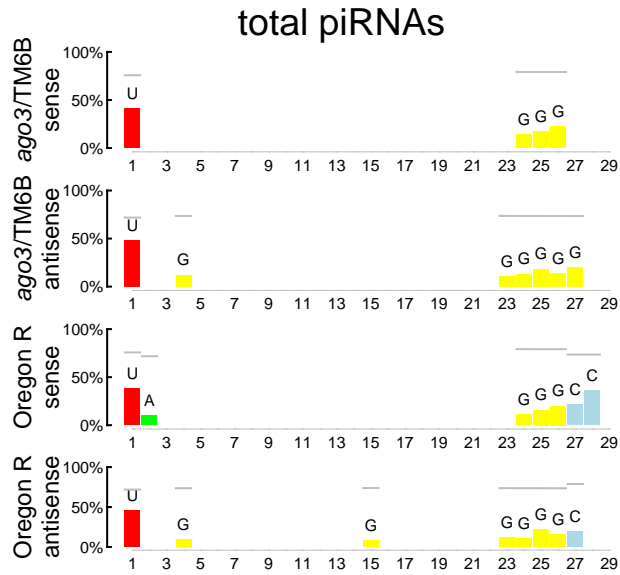
**A****B****C****E****G****D****F****H**

# G4

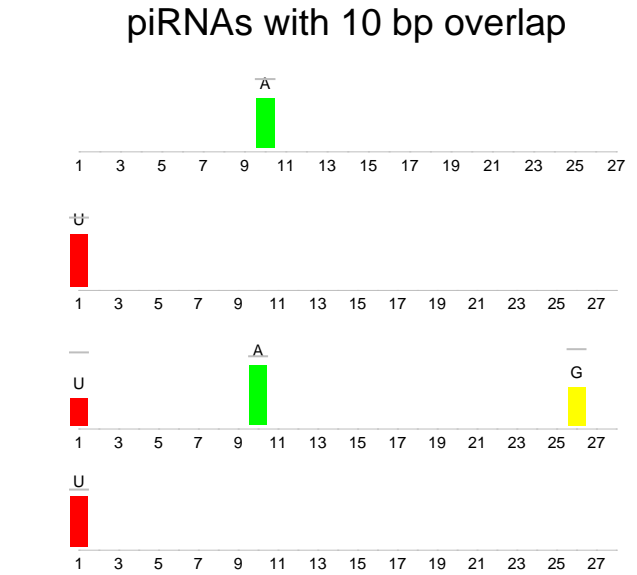
**A****B****C****E****G****D****F****H**

# G5

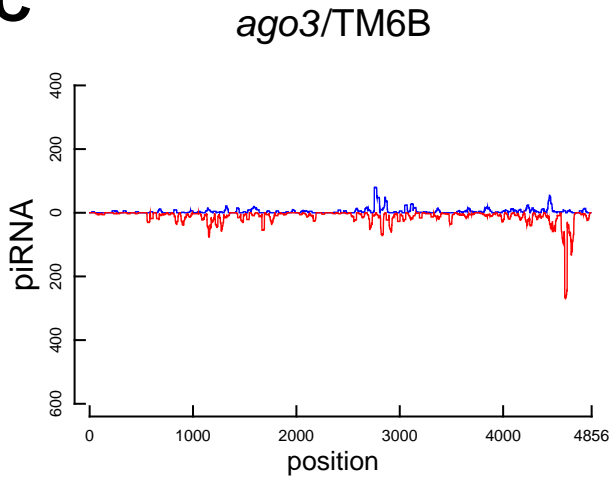
## A



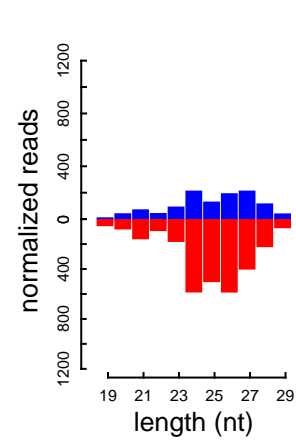
## B



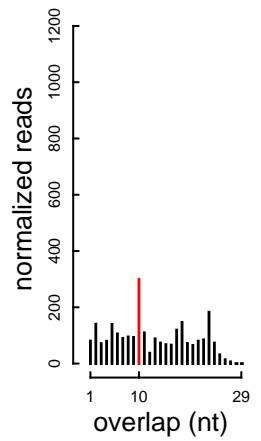
## C



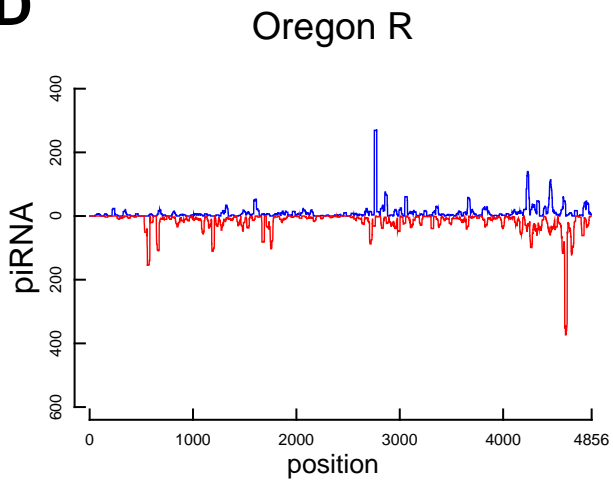
## E



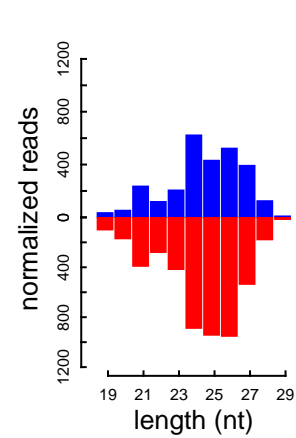
## G



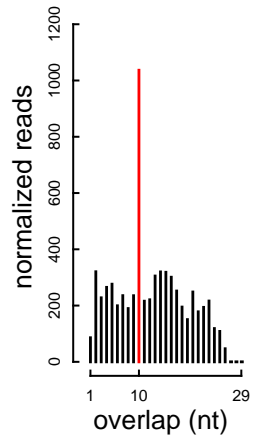
## D



## F



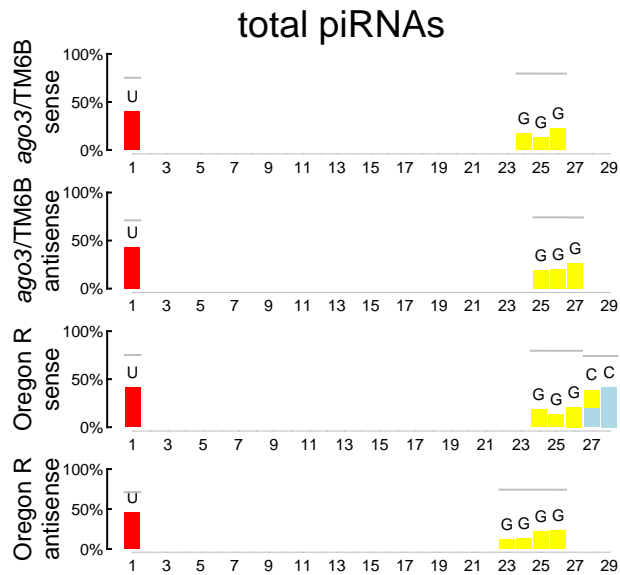
## H



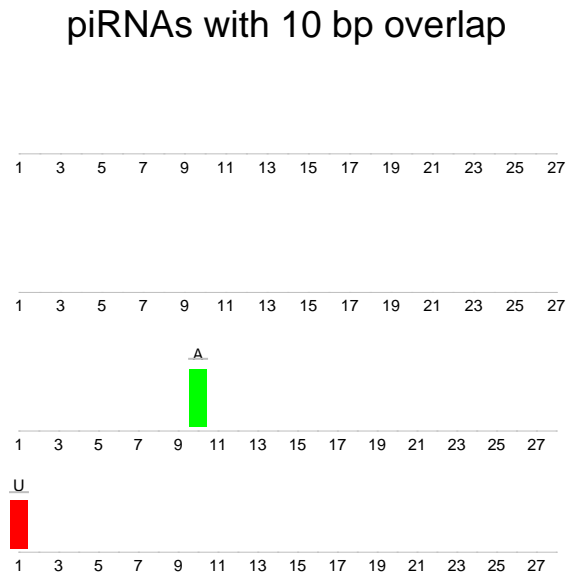


# G5A

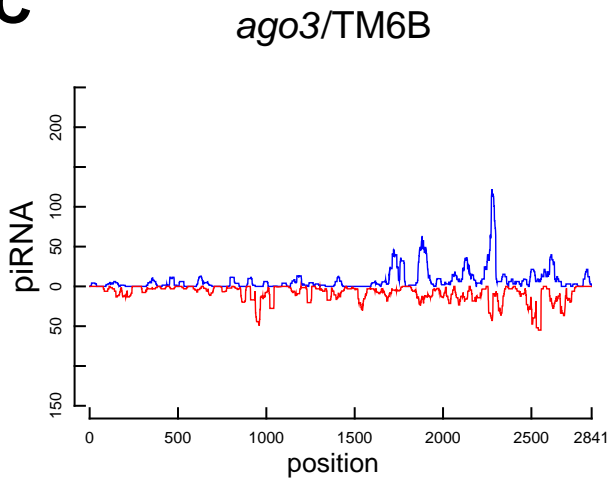
**A**



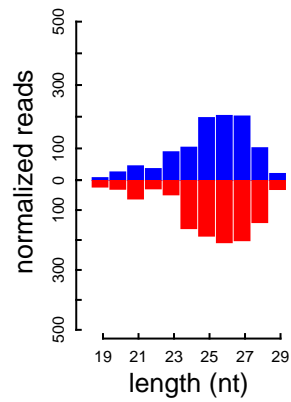
**B**



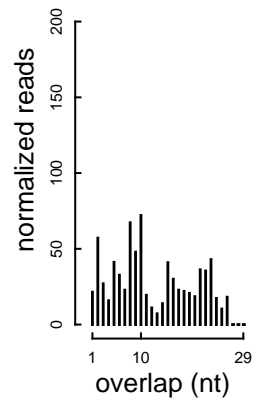
**C**



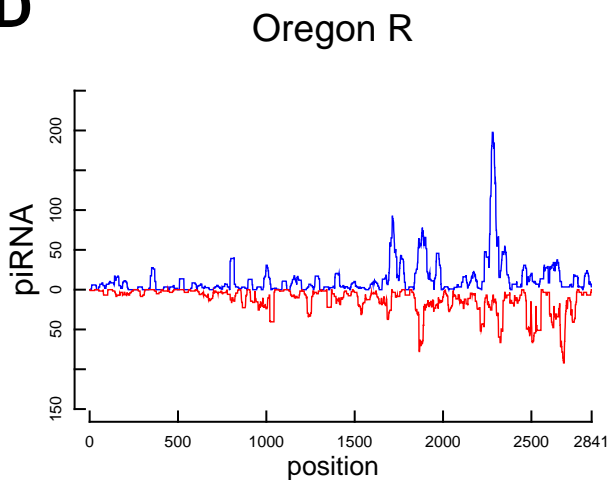
**E**



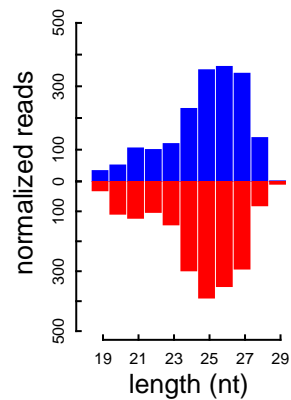
**G**



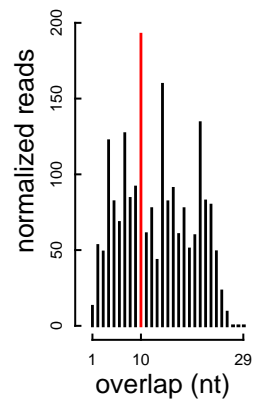
**D**



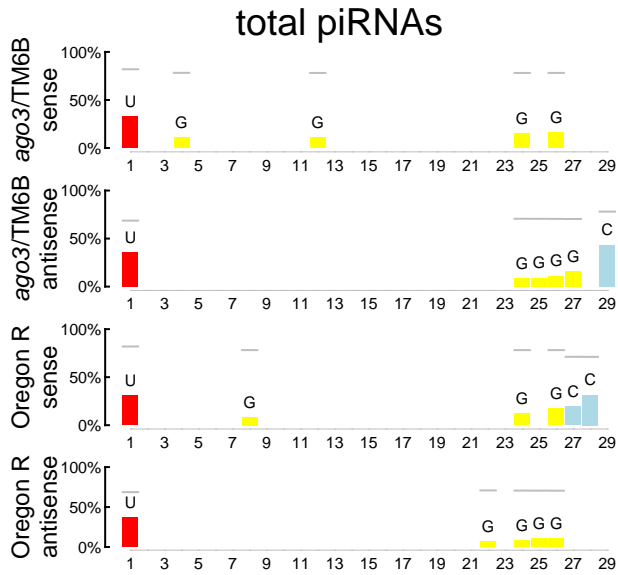
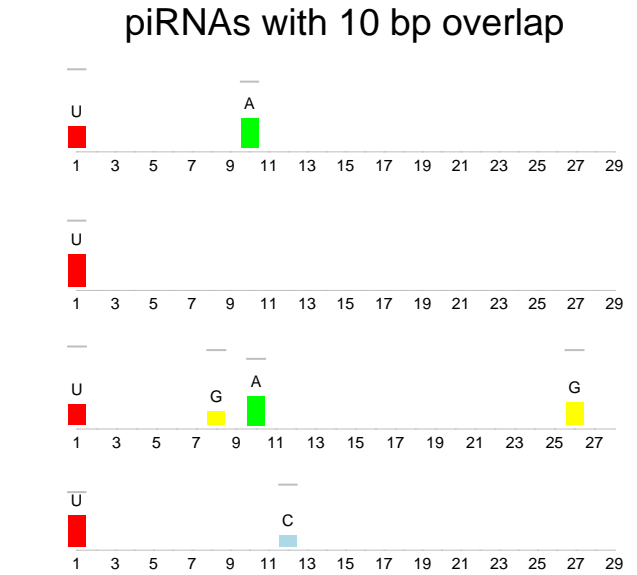
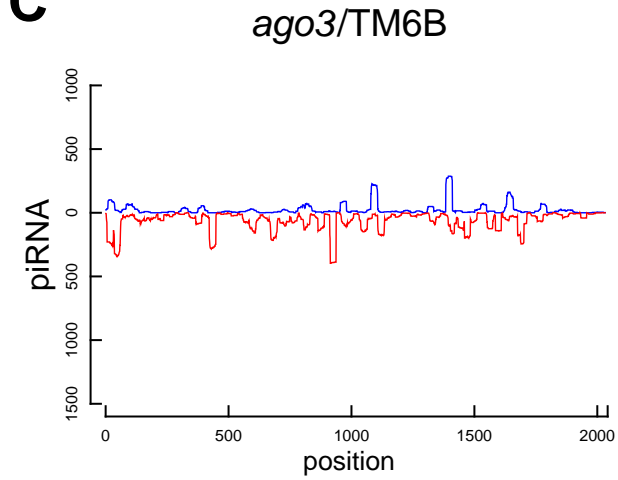
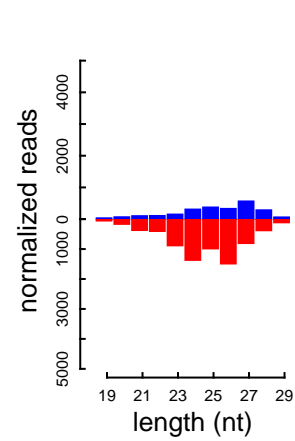
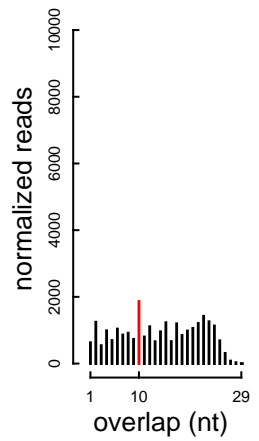
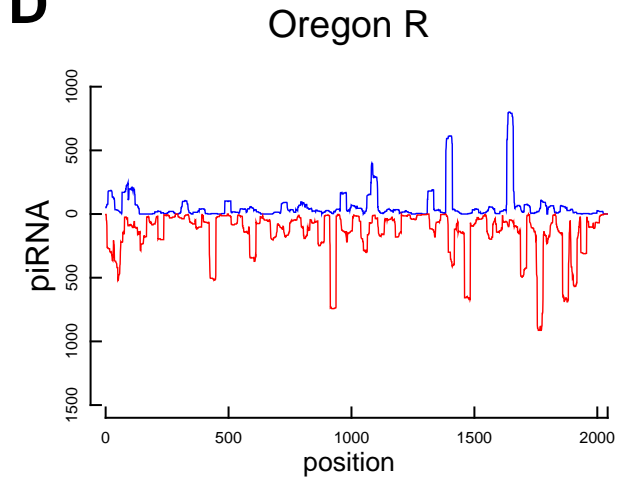
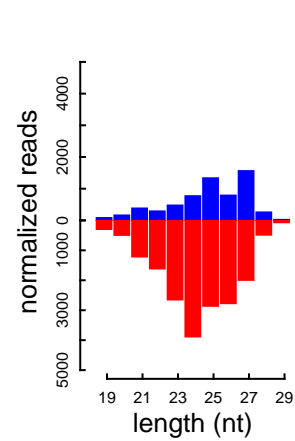
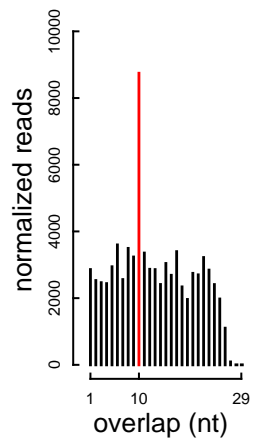
**F**



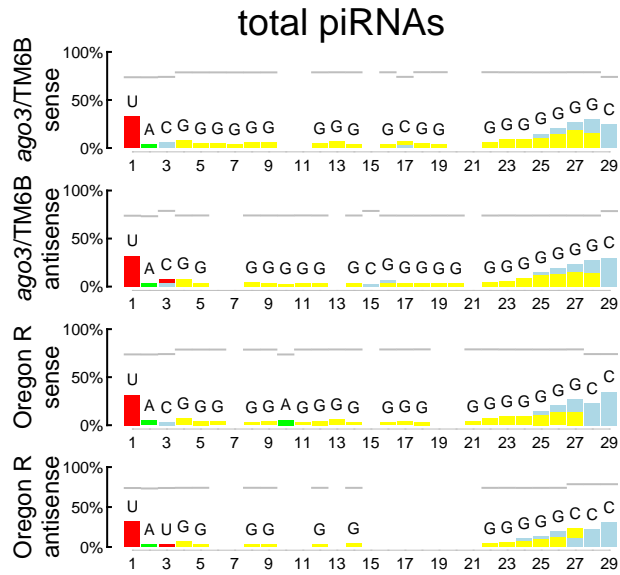
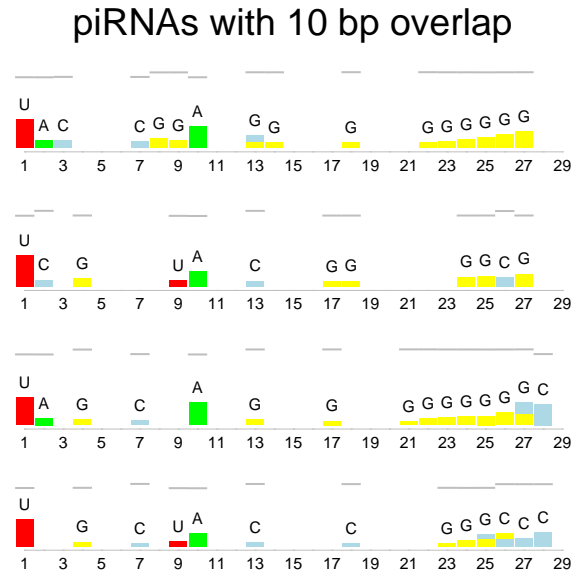
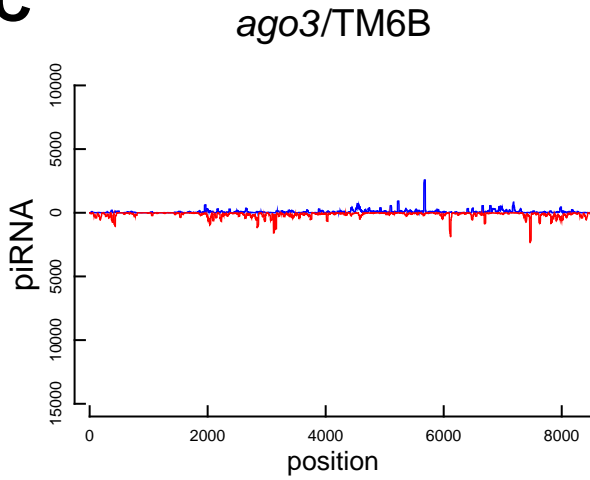
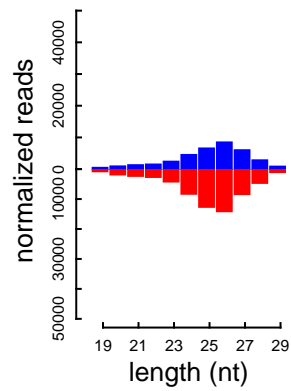
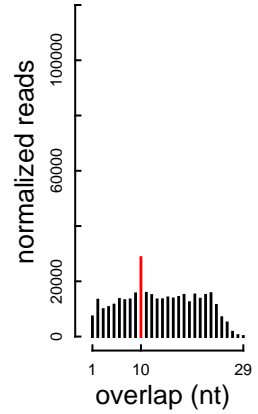
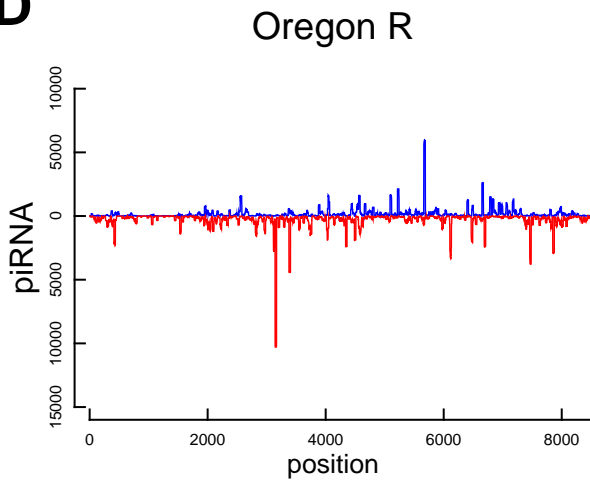
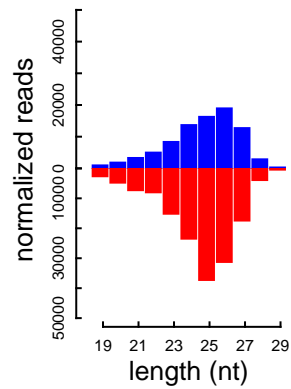
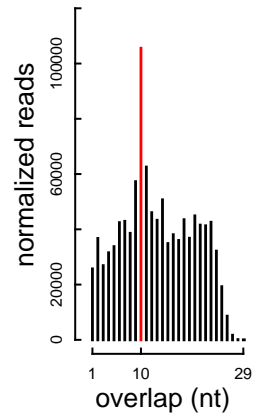
**H**



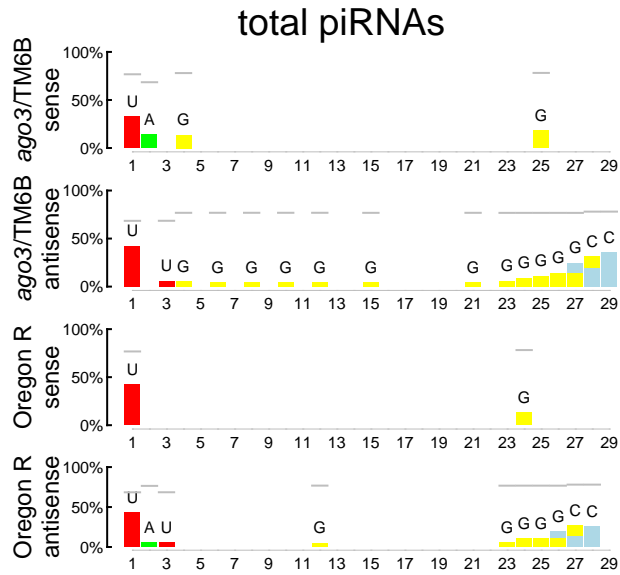
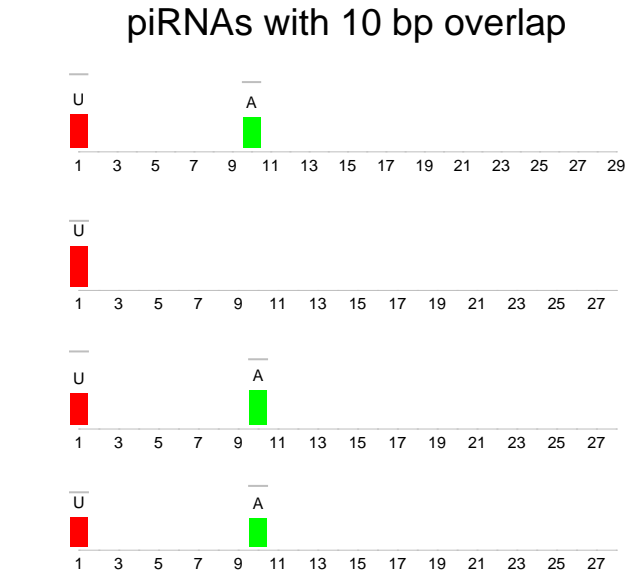
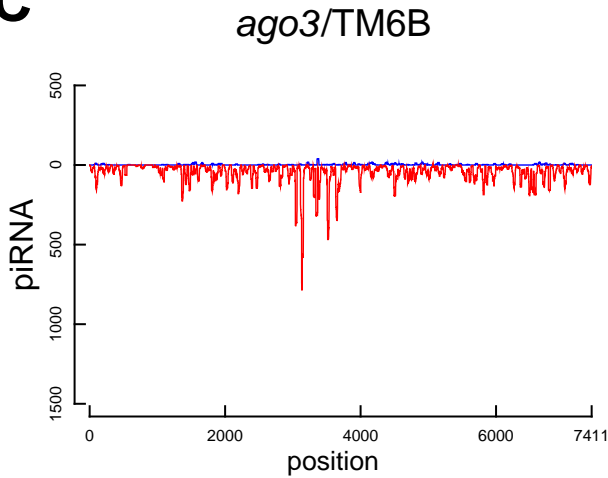
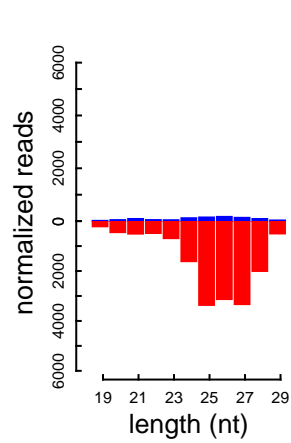
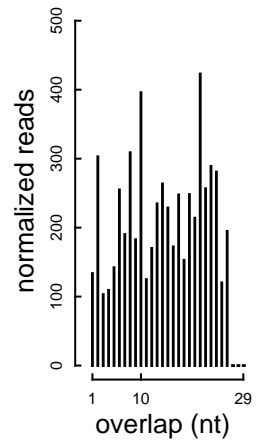
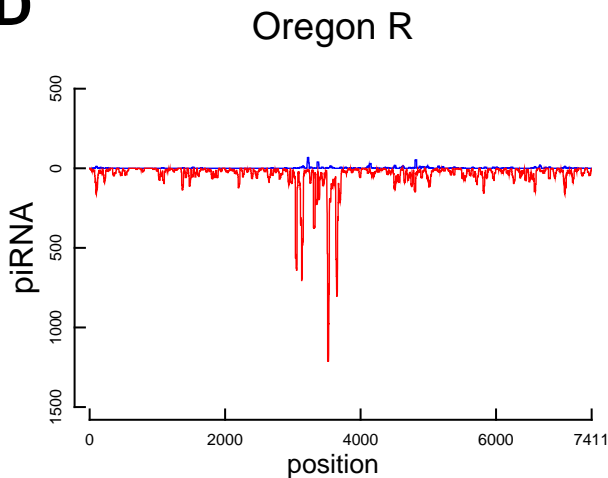
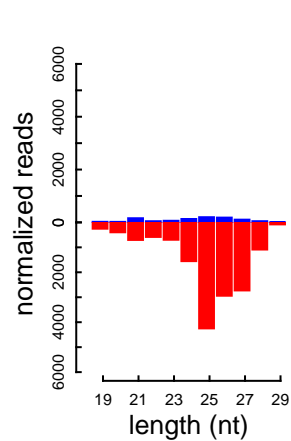
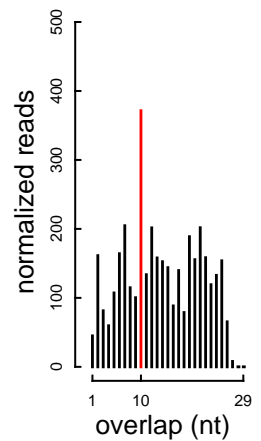
# G6

**A****B****C****E****G****D****F****H**

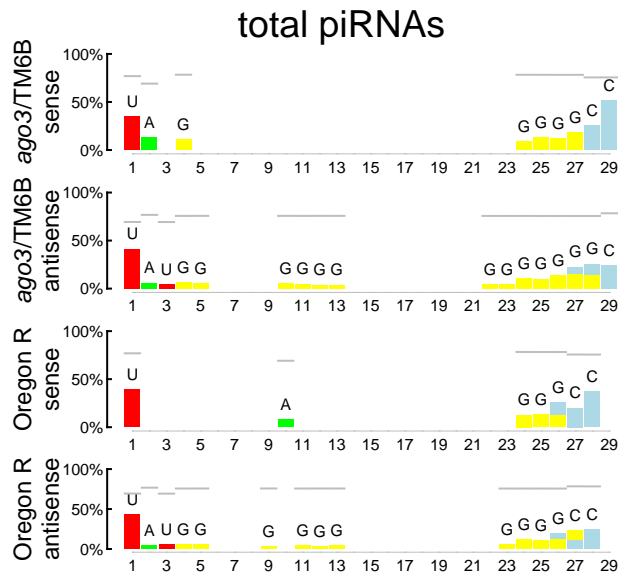
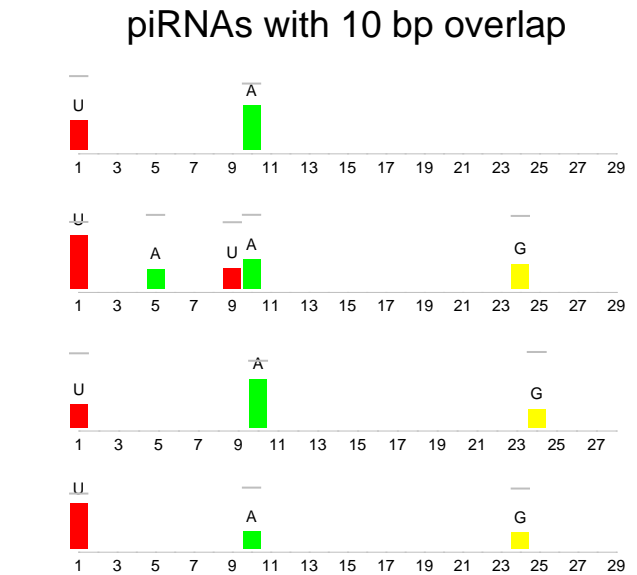
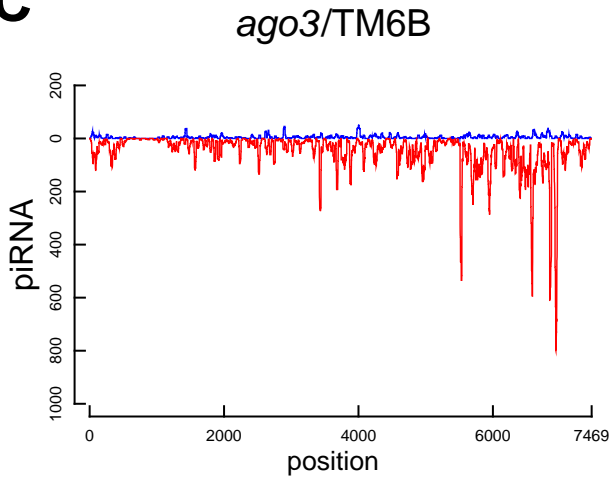
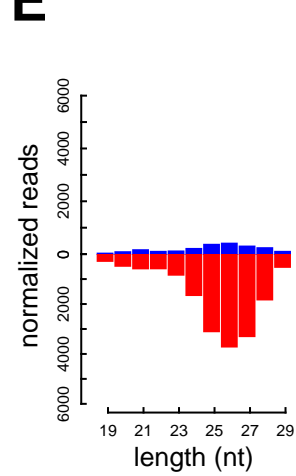
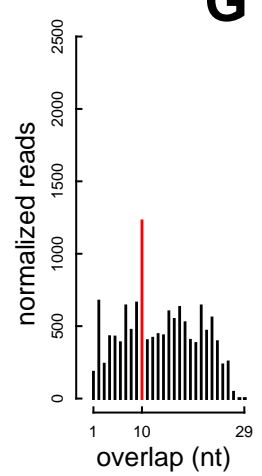
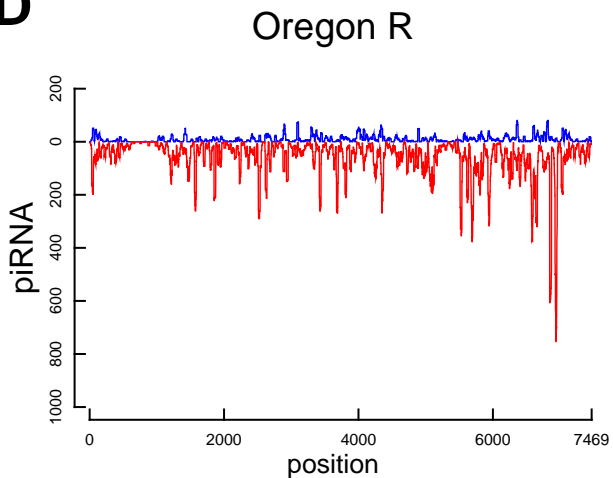
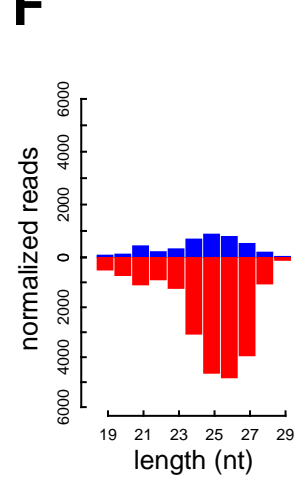
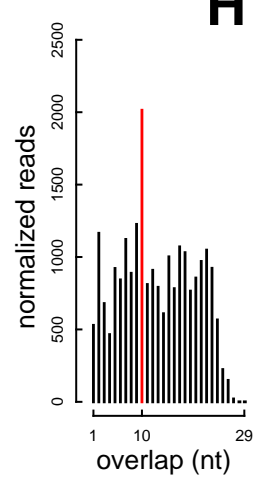
# GATE

**A****B****C****E****G****D****F****H**

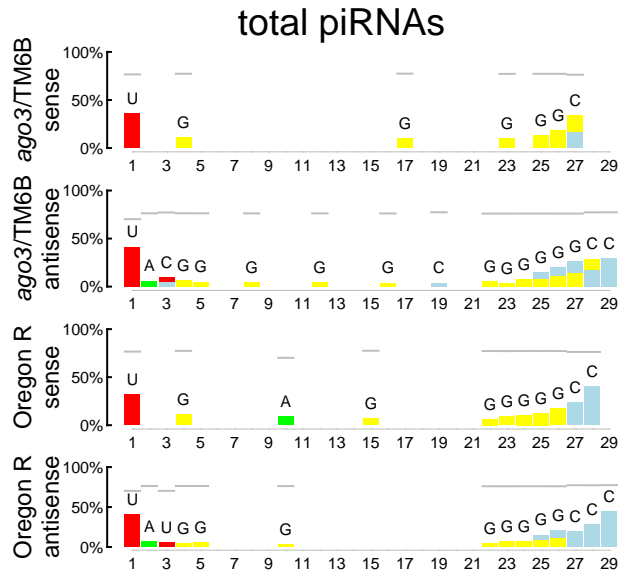
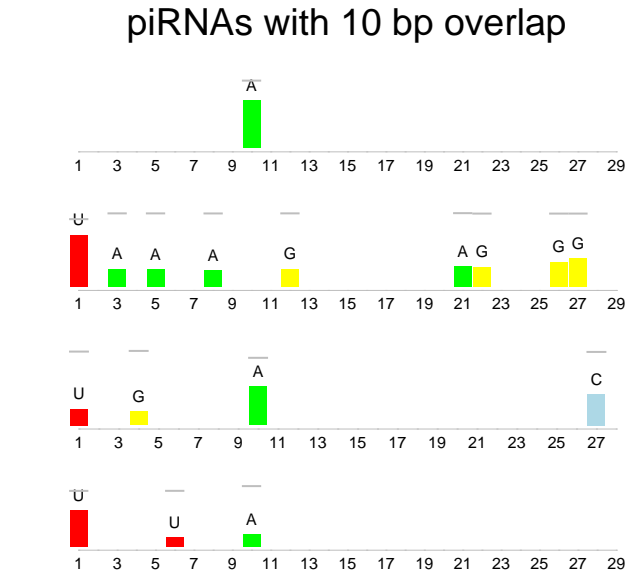
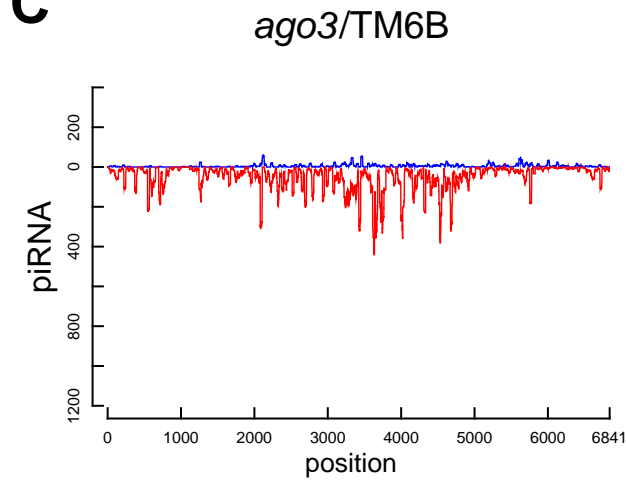
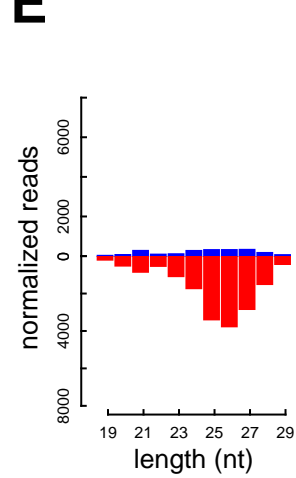
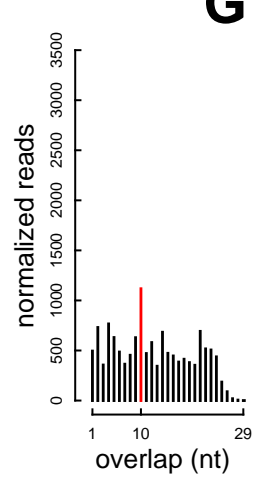
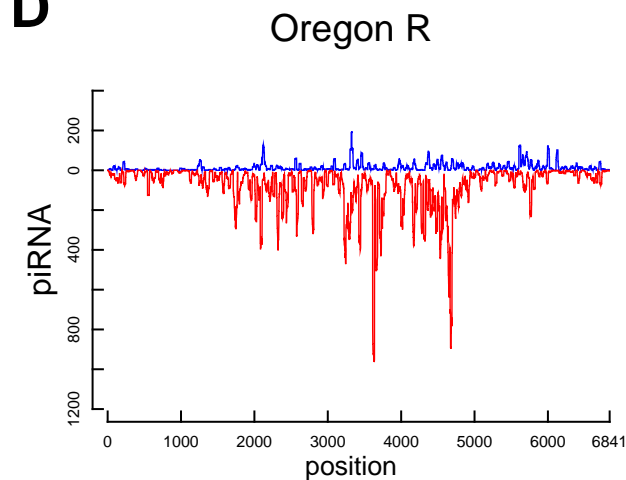
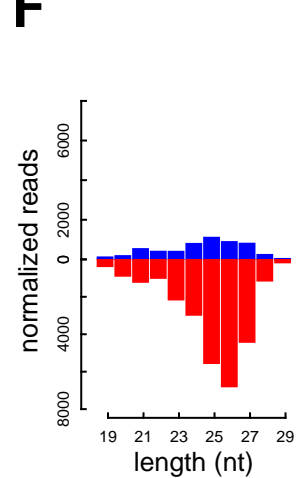
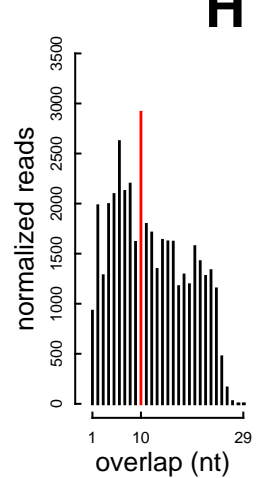
# gtwin

**A****B****C****E****G****D****F****H**

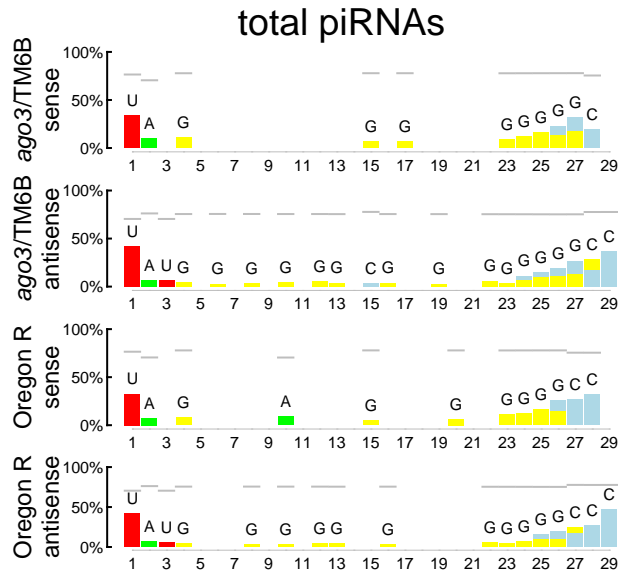
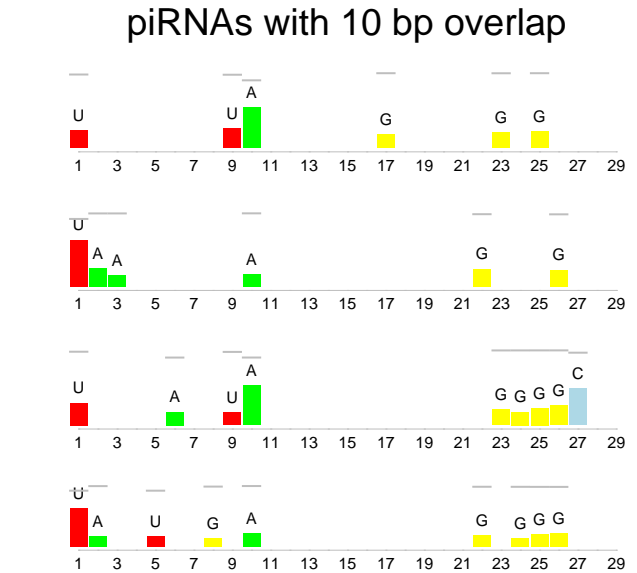
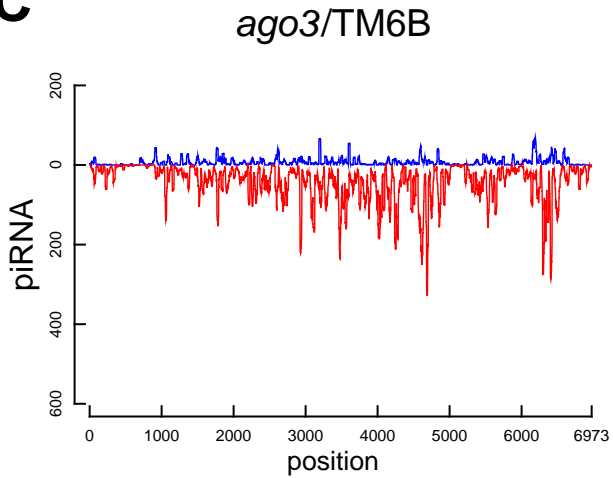
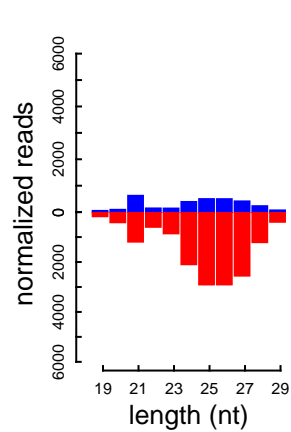
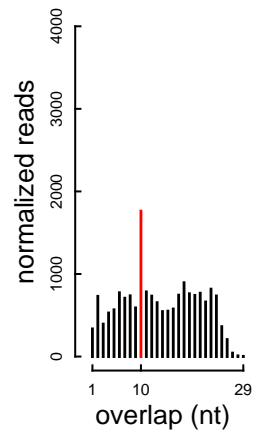
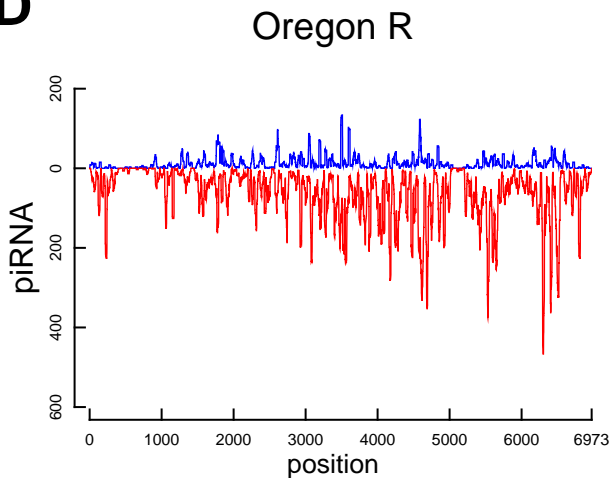
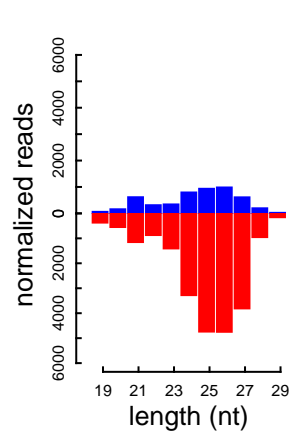
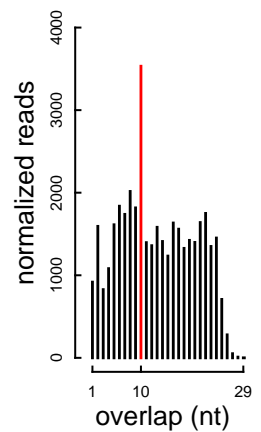
# gypsy

**A****B****C****E****G****D****F****H**

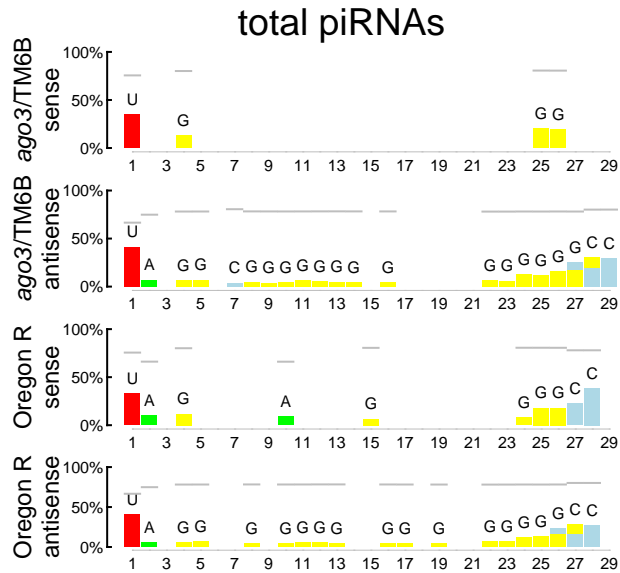
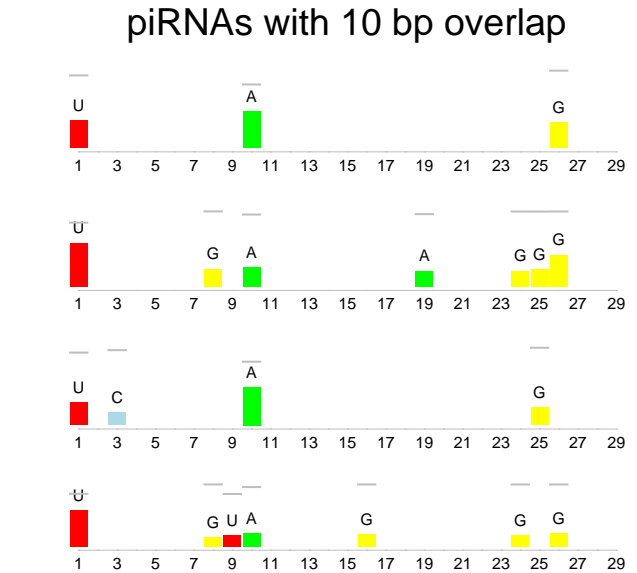
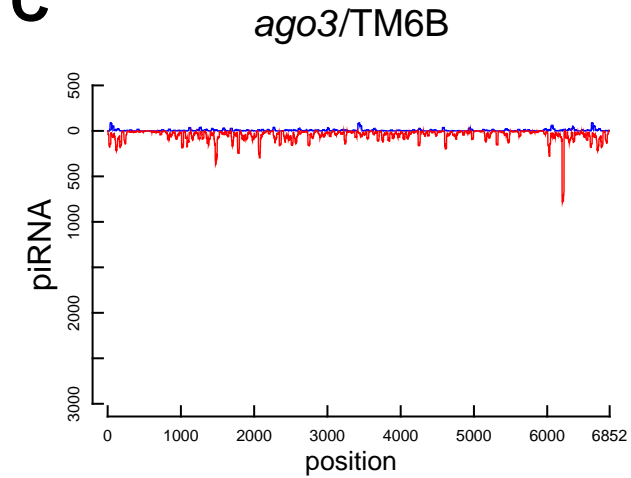
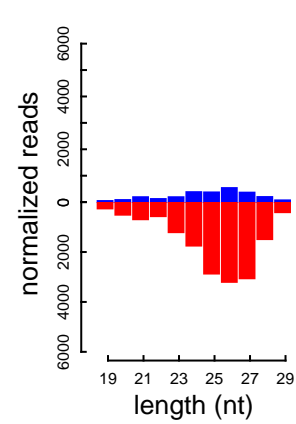
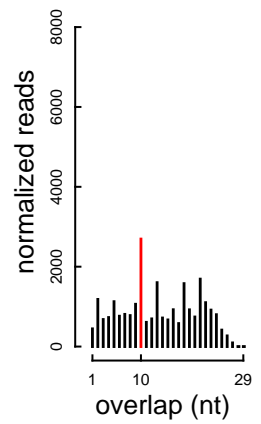
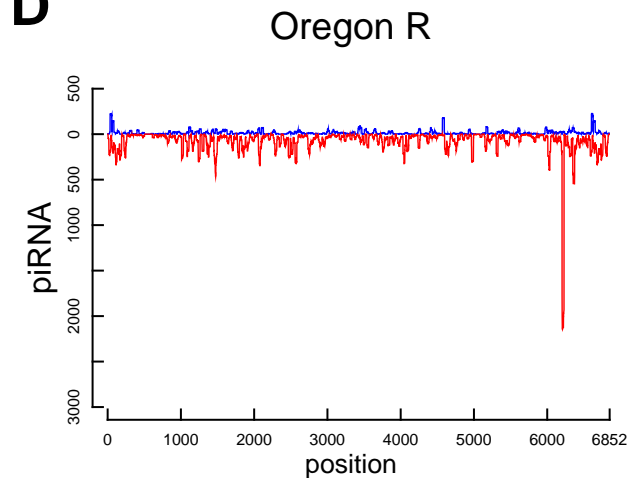
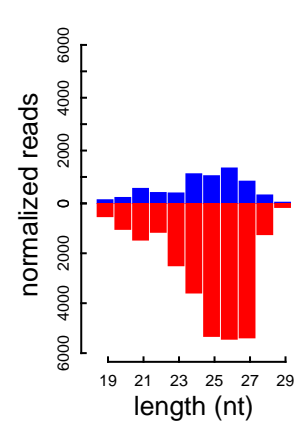
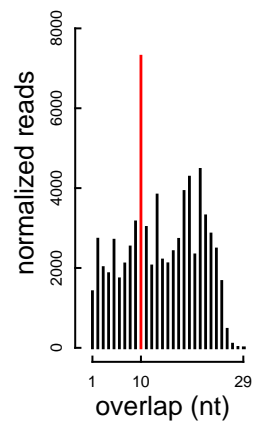
# *gypsy2*

**A****B****C****E****G****D****F****H**

# *gypsy3*

**A****B****C****E****G****D****F****H**

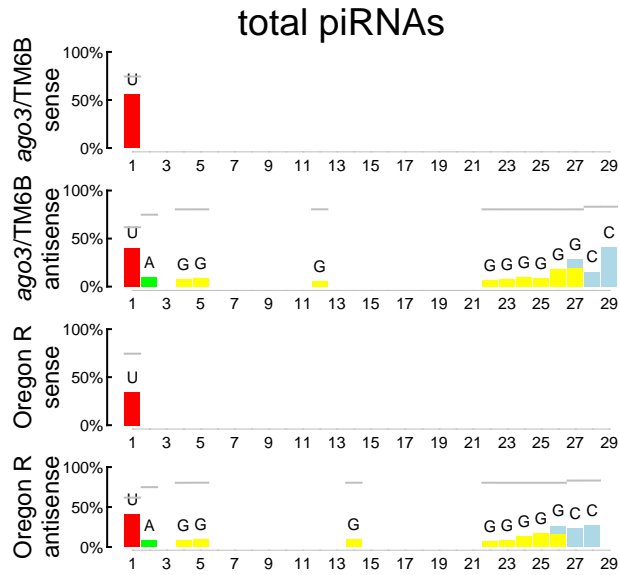
# *gypsy4*

**A****B****C****E****G****D****F****H**

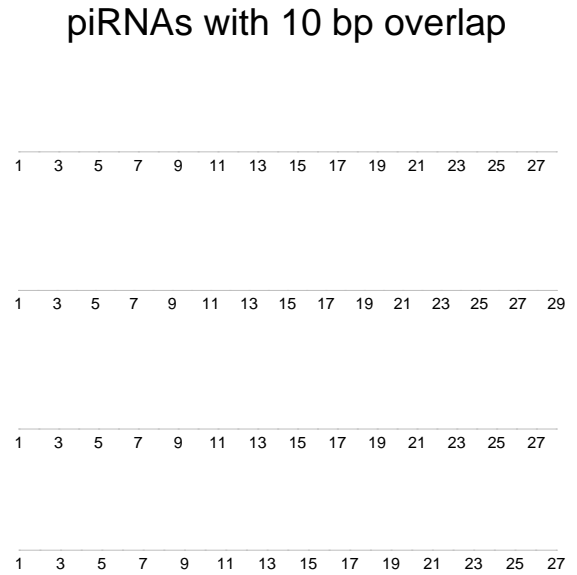


# *gypsy5*

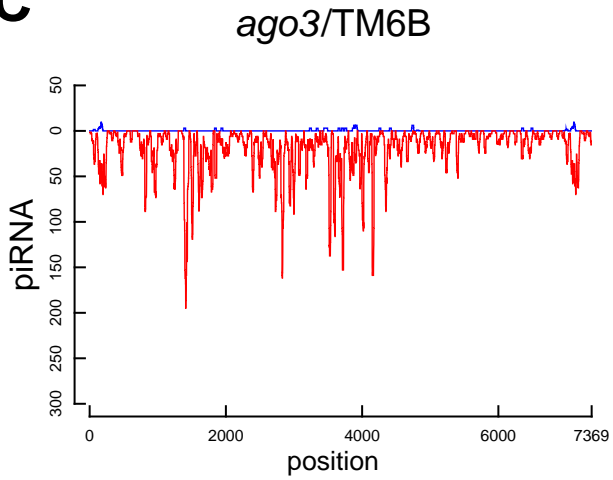
**A**



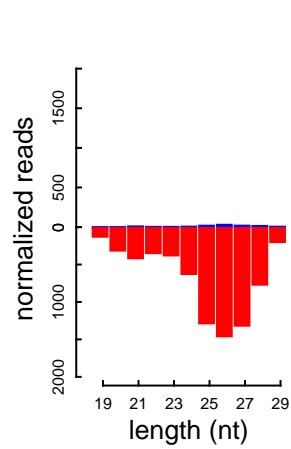
**B**



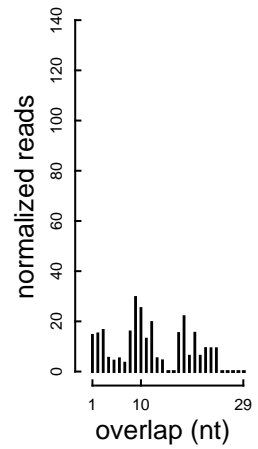
**C**



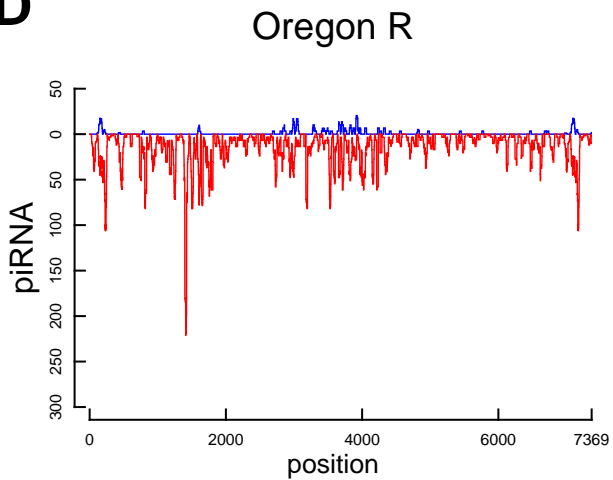
**E**



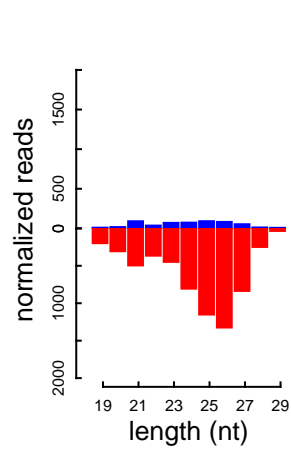
**G**



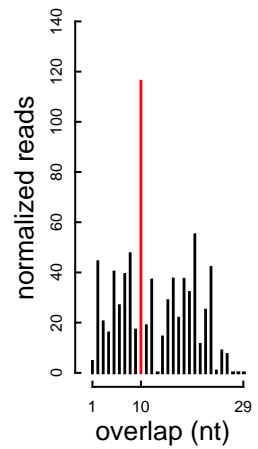
**D**



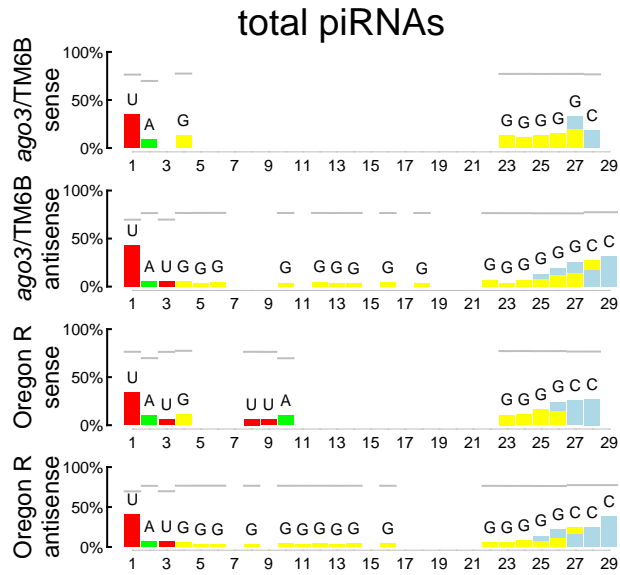
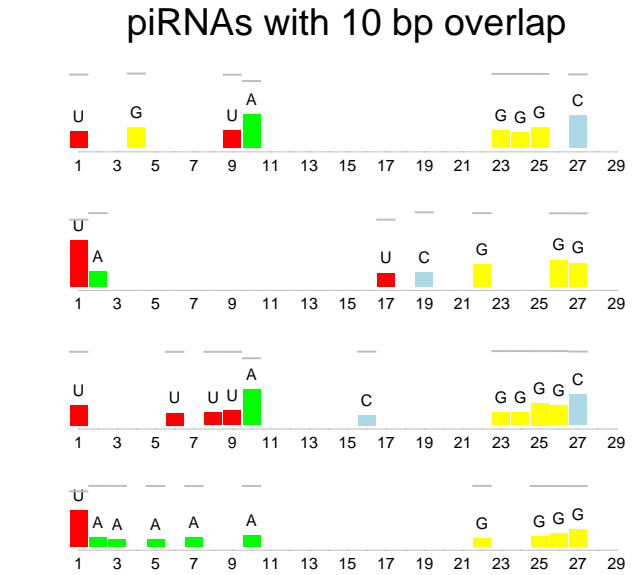
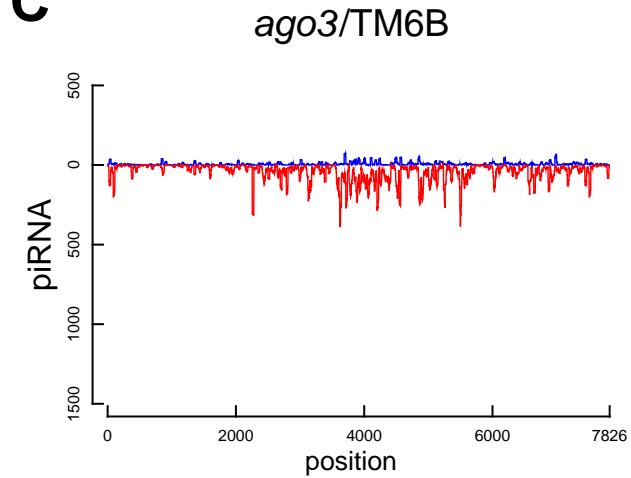
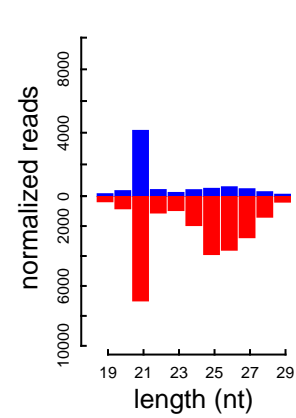
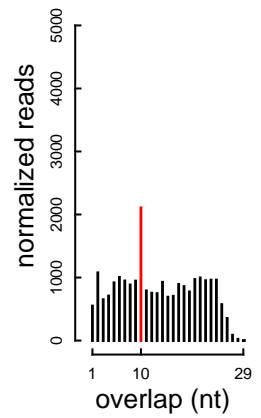
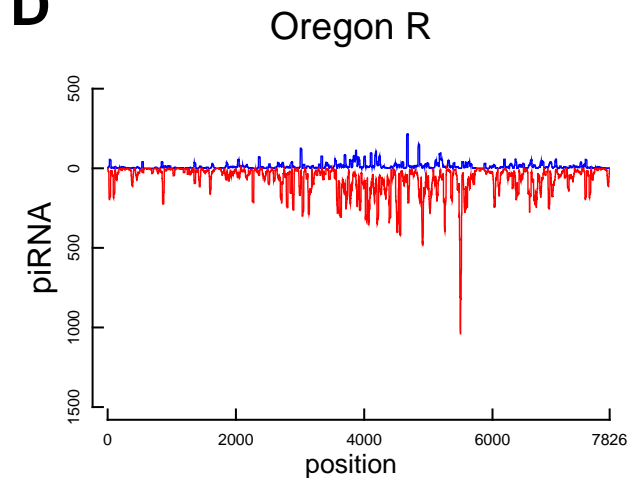
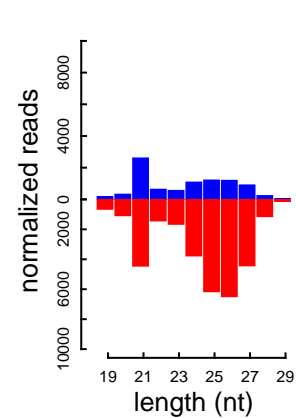
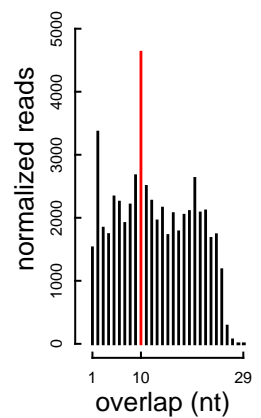
**F**



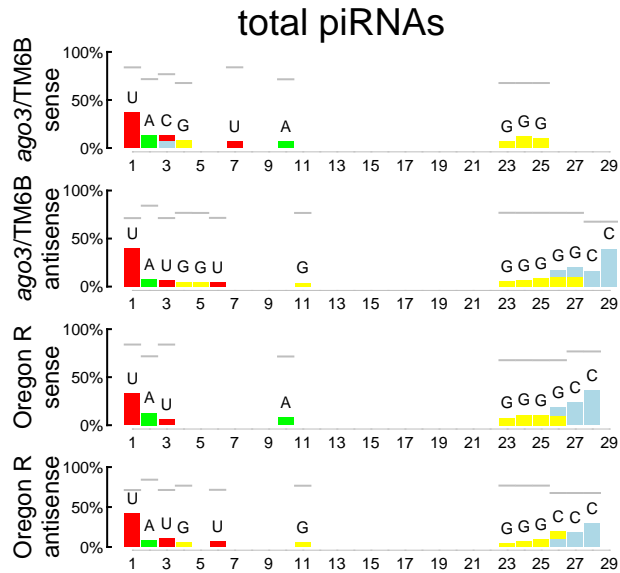
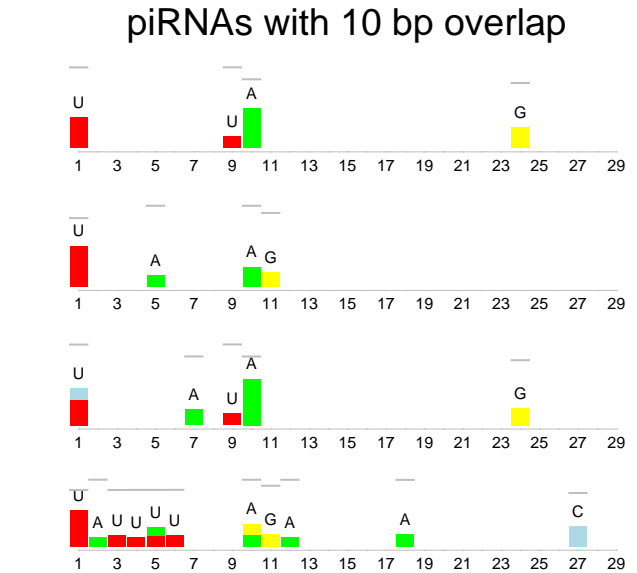
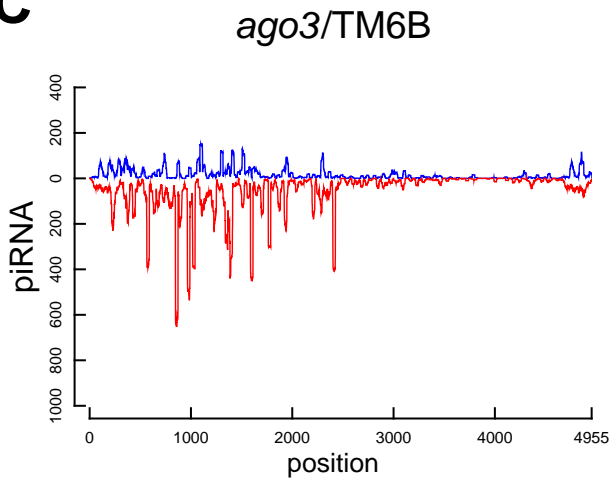
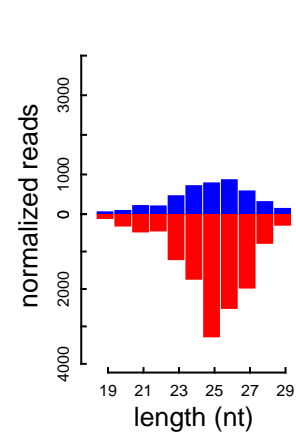
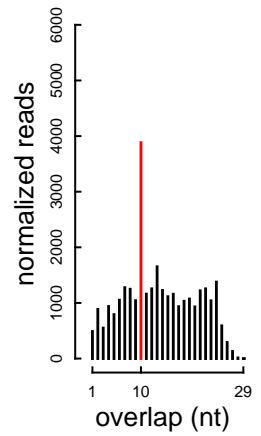
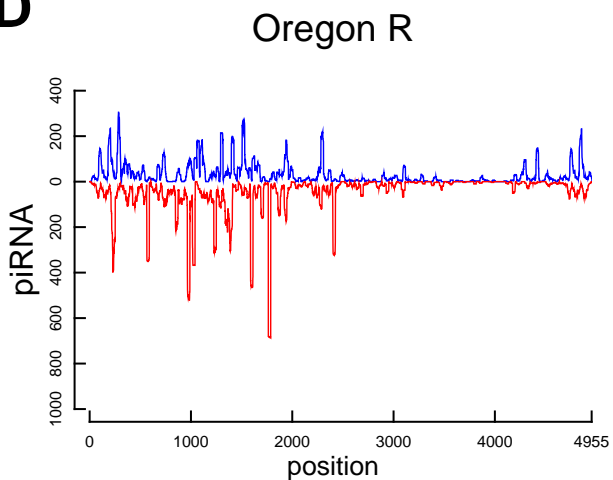
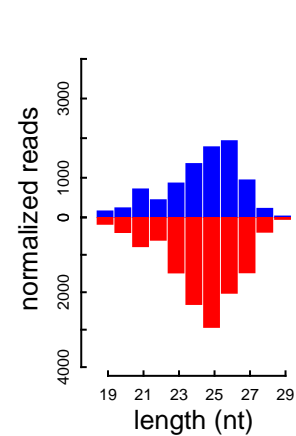
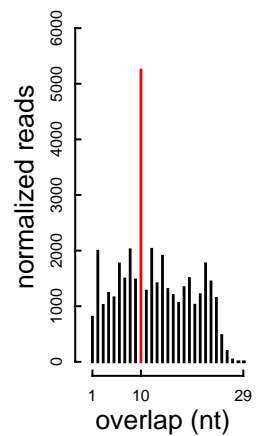
**H**



# *gypsy6*

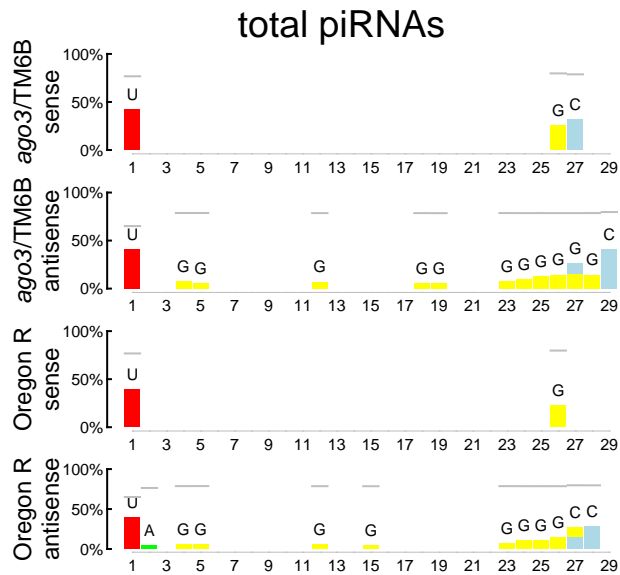
**A****B****C****E****G****D****F****H**

# *gypsy8*

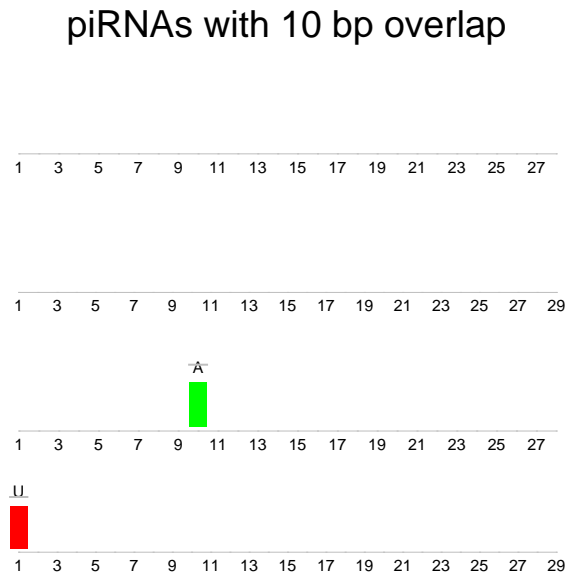
**A****B****C****E****G****D****F****H**

# *gypsy10*

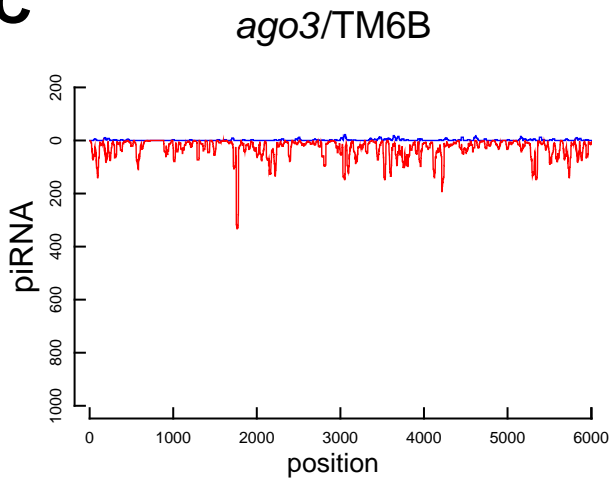
**A**



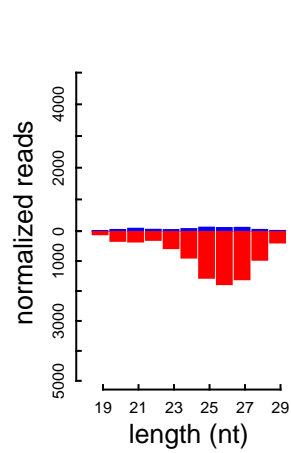
**B**



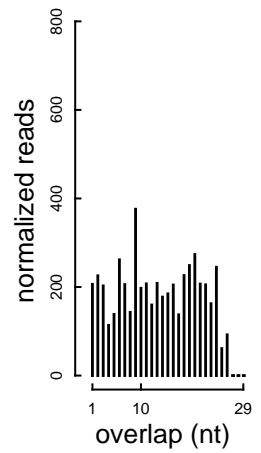
**C**



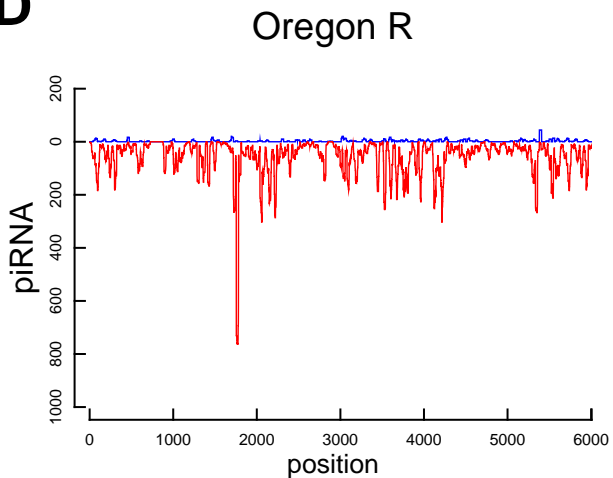
**E**



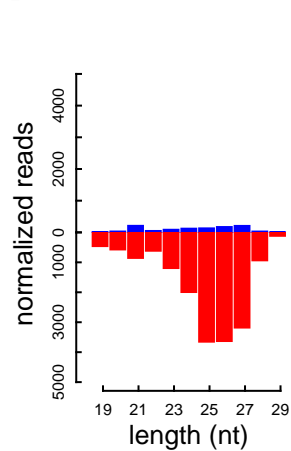
**G**



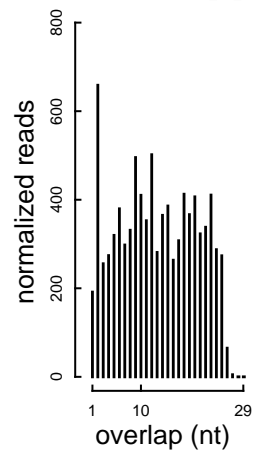
**D**



**F**

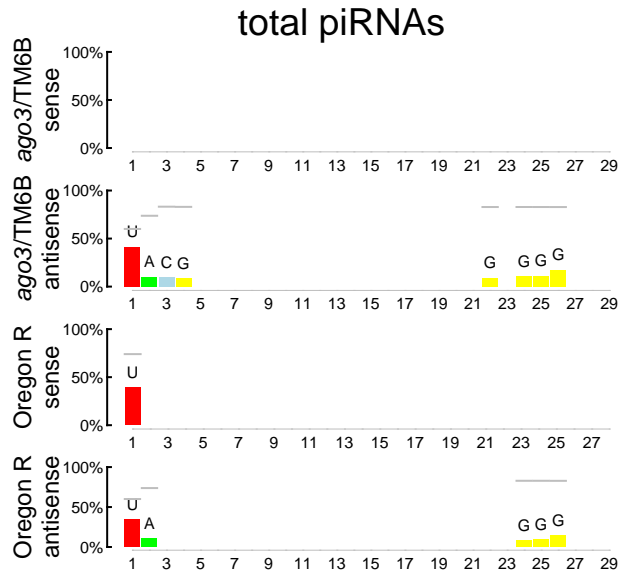


**H**

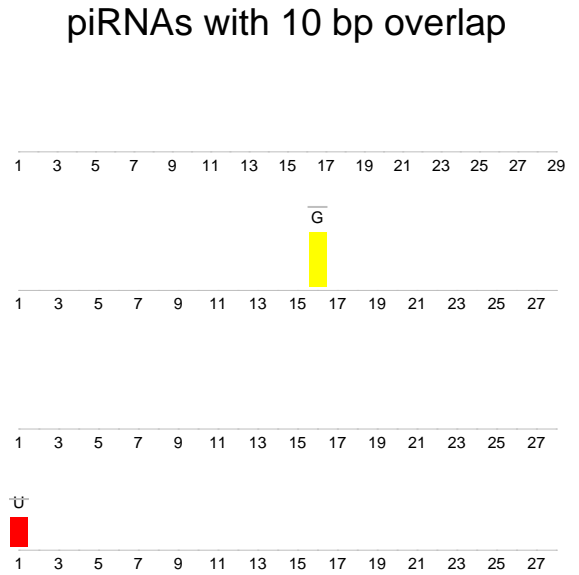


# *gypsy11*

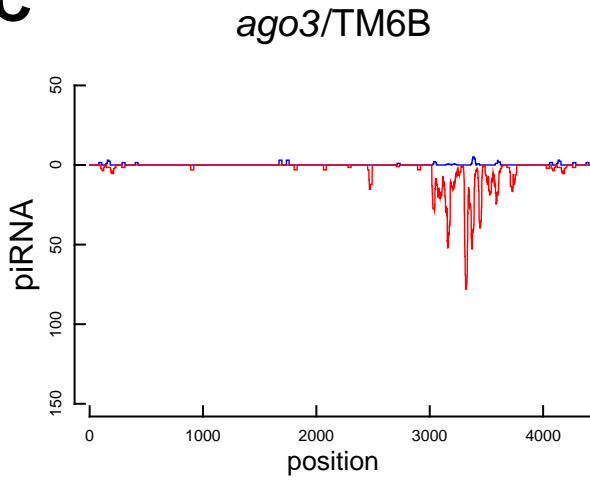
**A**



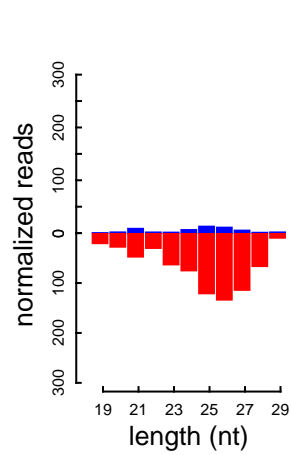
**B**



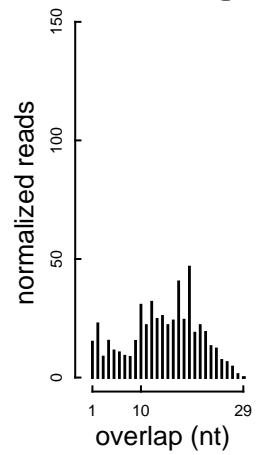
**C**



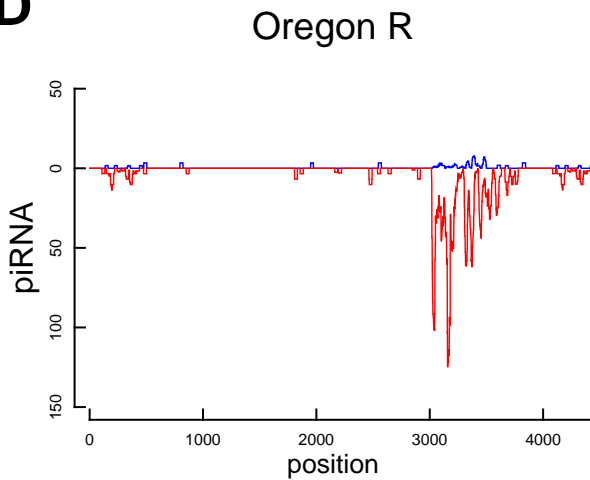
**E**



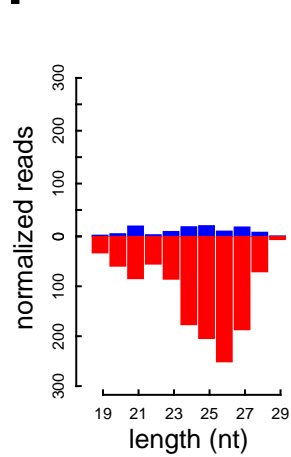
**G**



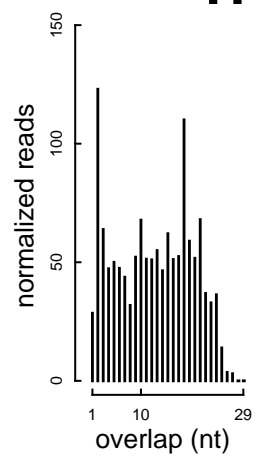
**D**



**F**

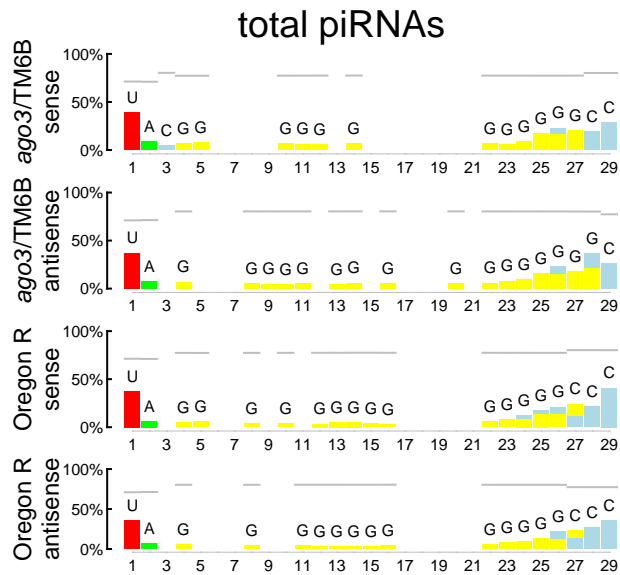


**H**

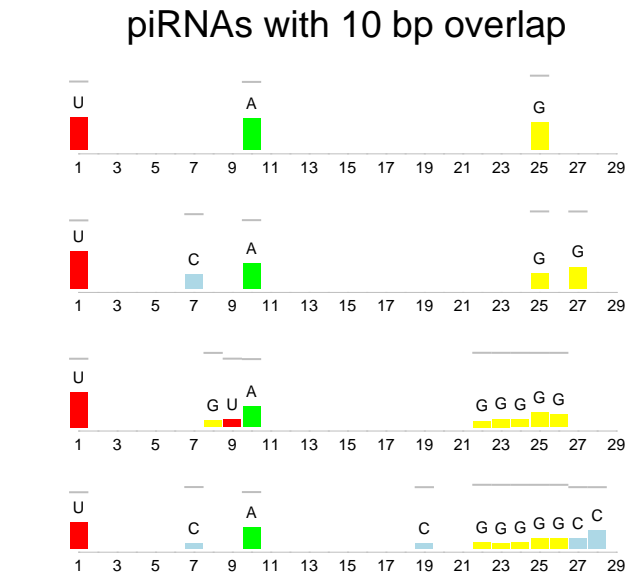


# *gypsy12*

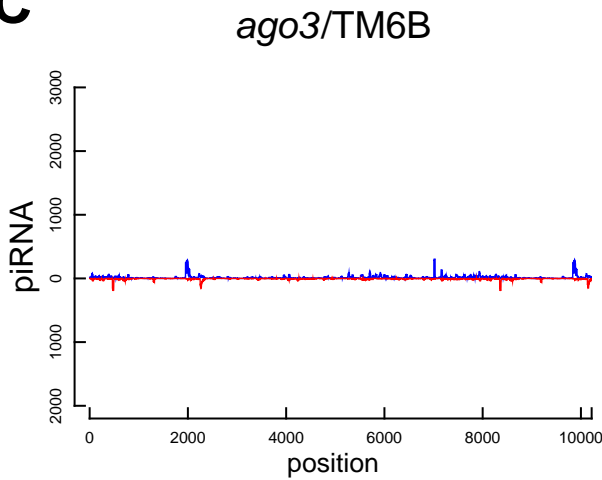
**A**



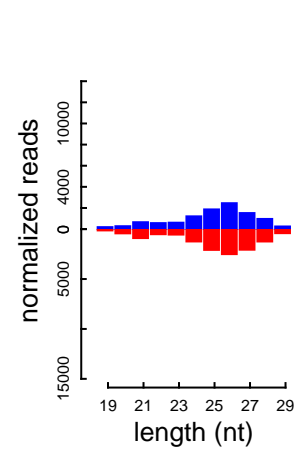
**B**



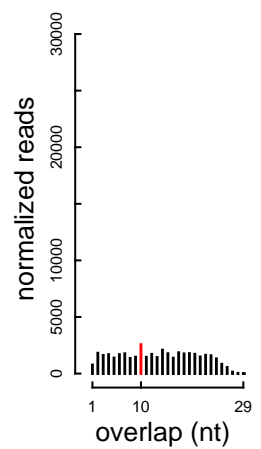
**C**



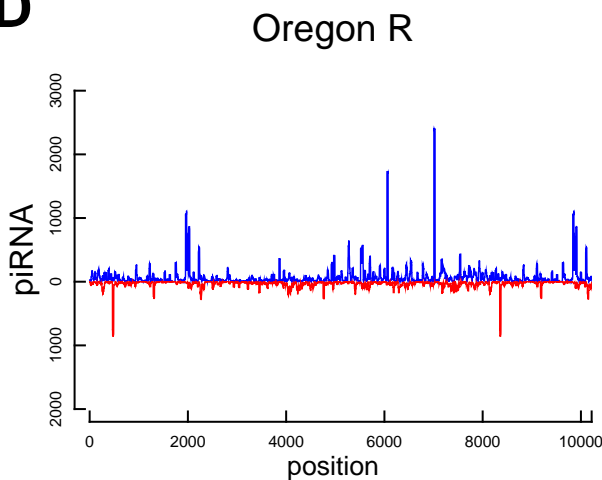
**E**



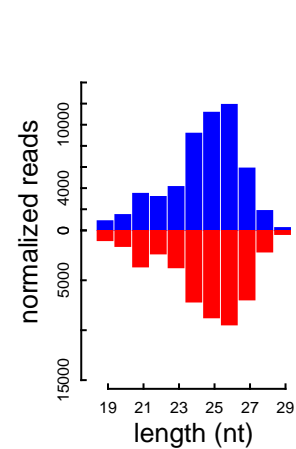
**G**



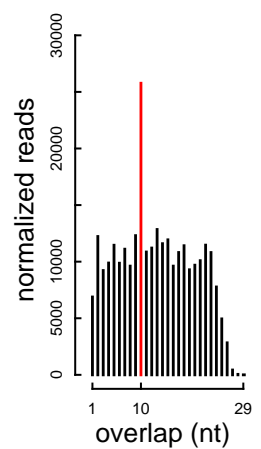
**D**



**F**

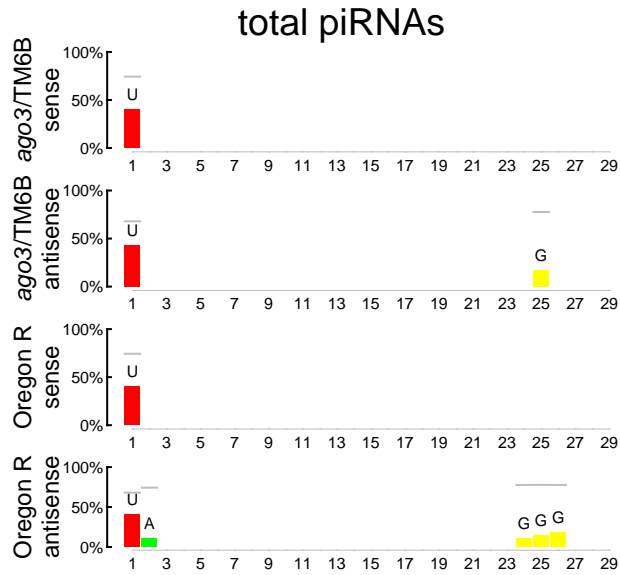


**H**

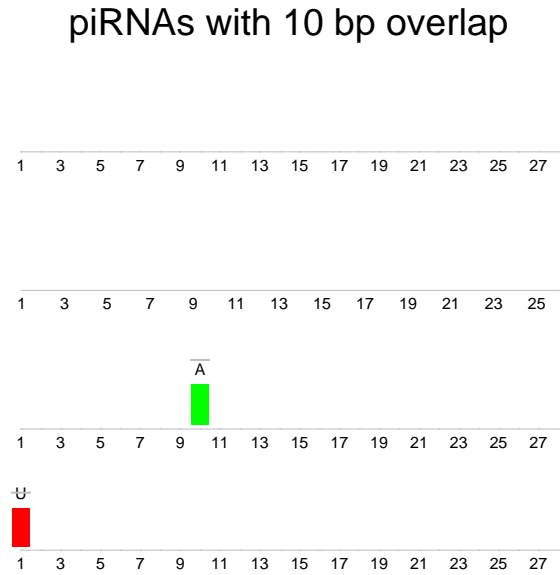


# Helena

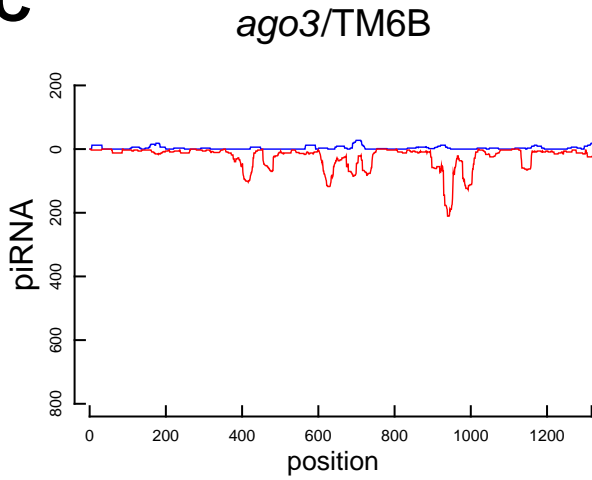
**A**



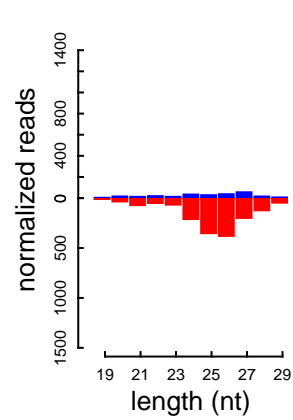
**B**



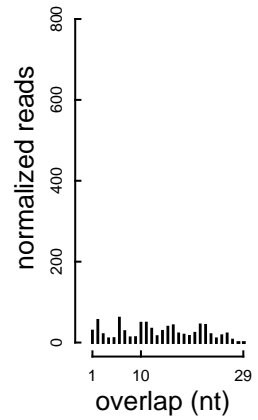
**C**



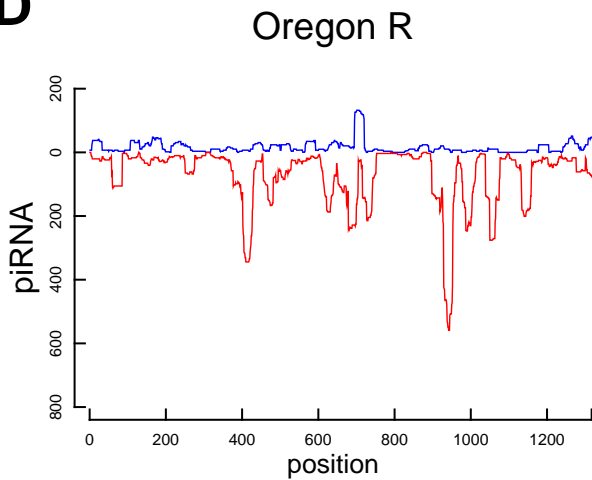
**E**



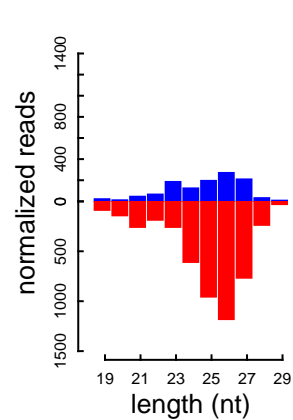
**G**



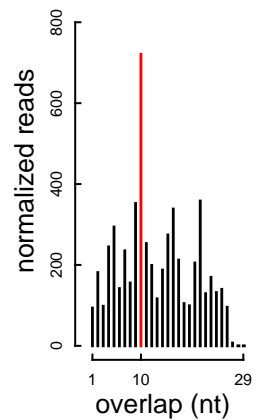
**D**



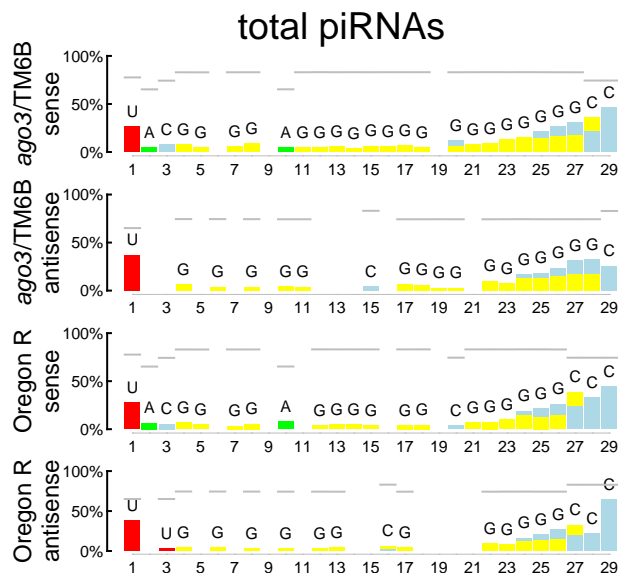
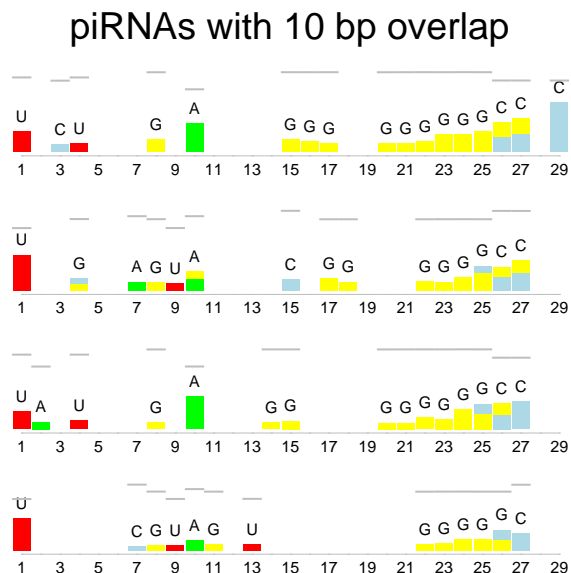
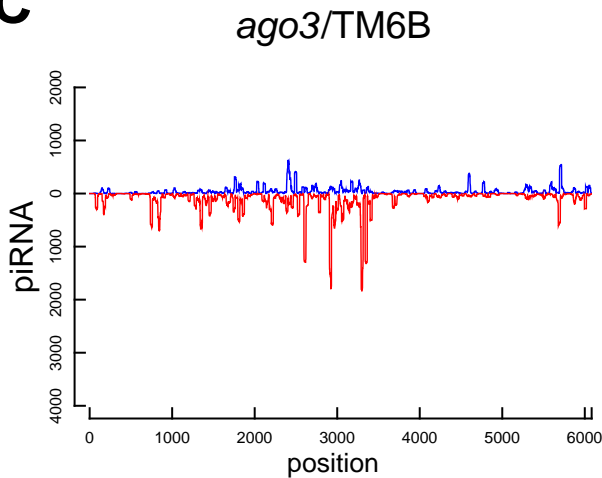
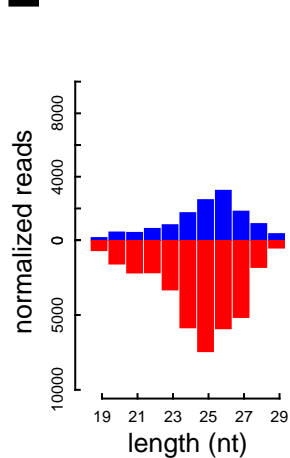
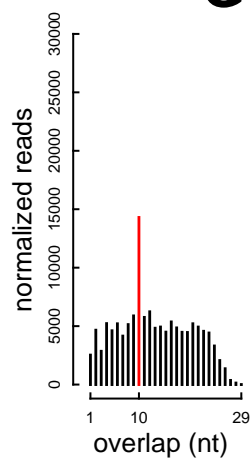
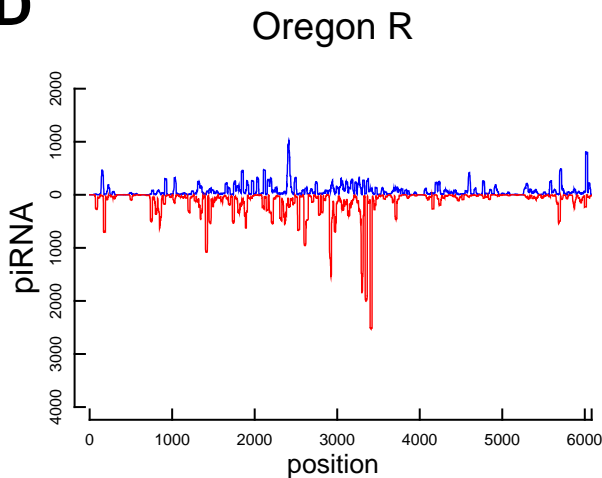
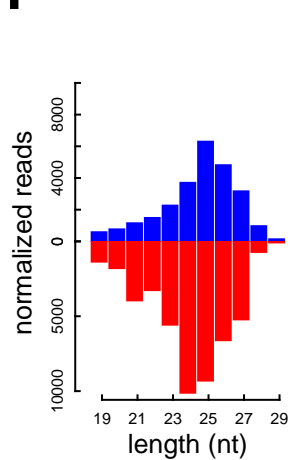
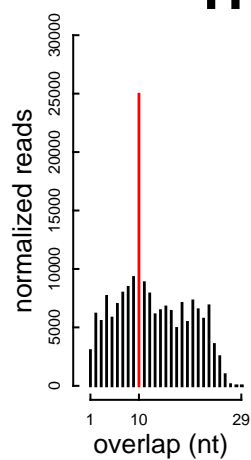
**F**



**H**



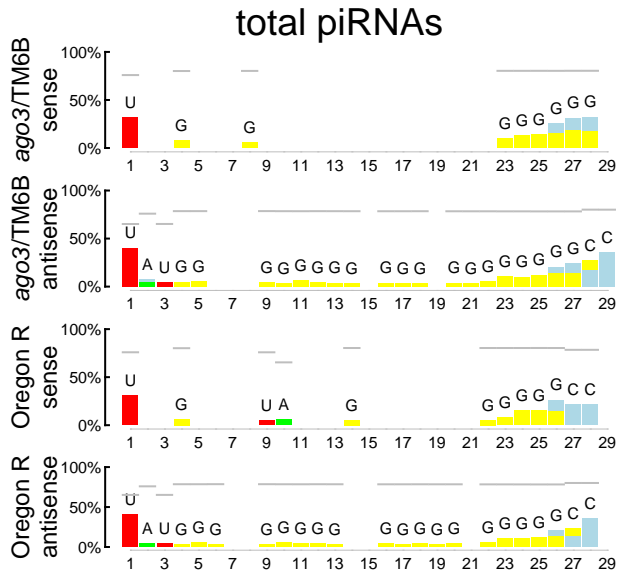
# HeT A

**A****B****C****E****G****D****F****H**

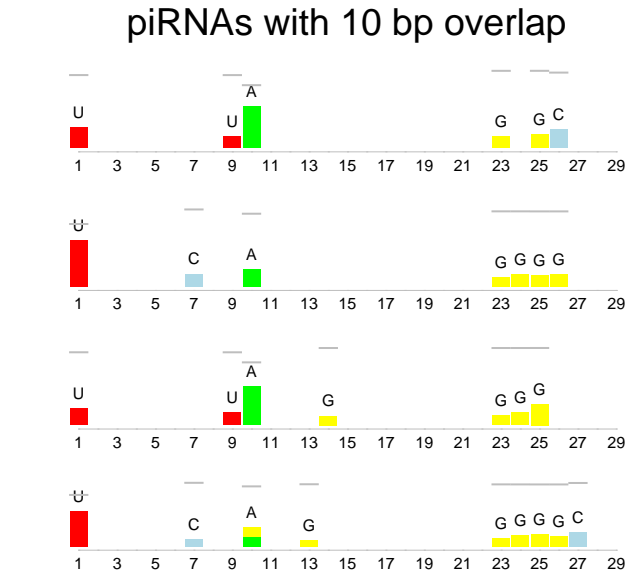


# HMS Beagle

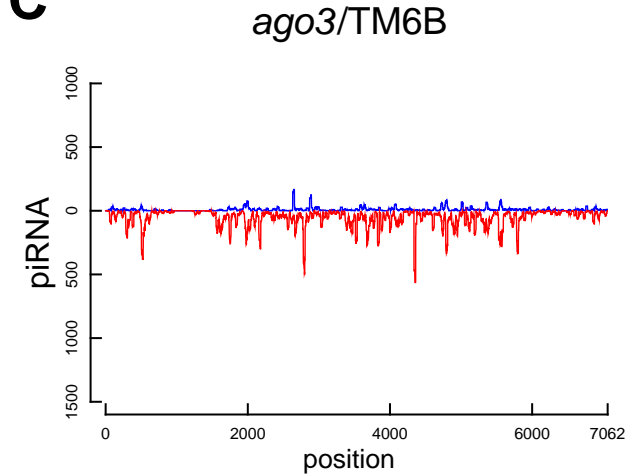
**A**



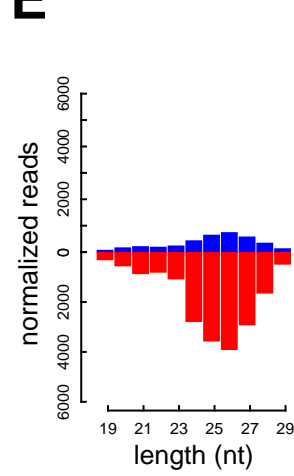
**B**



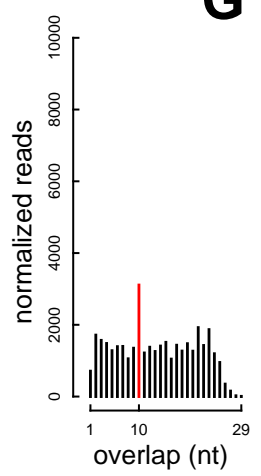
**C**



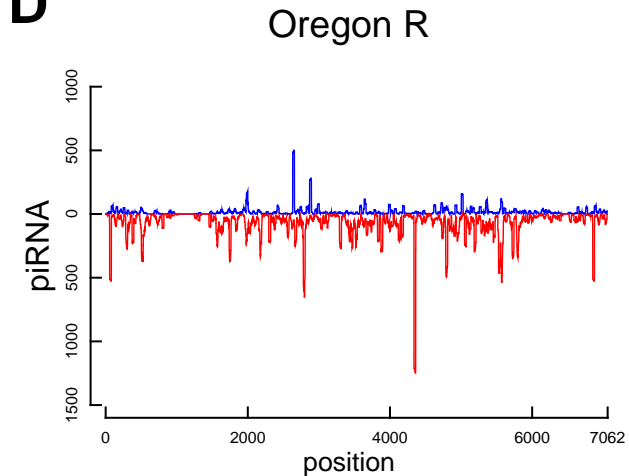
**E**



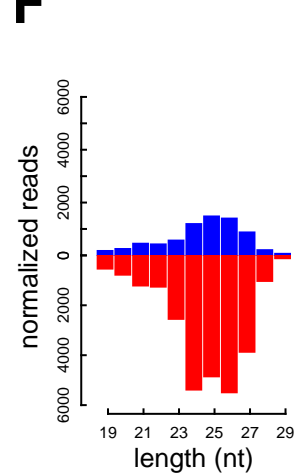
**G**



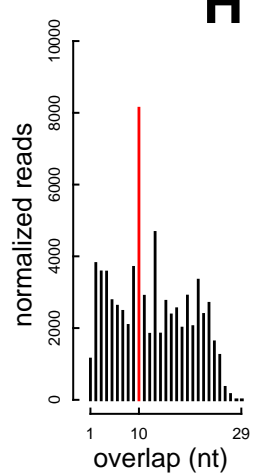
**D**



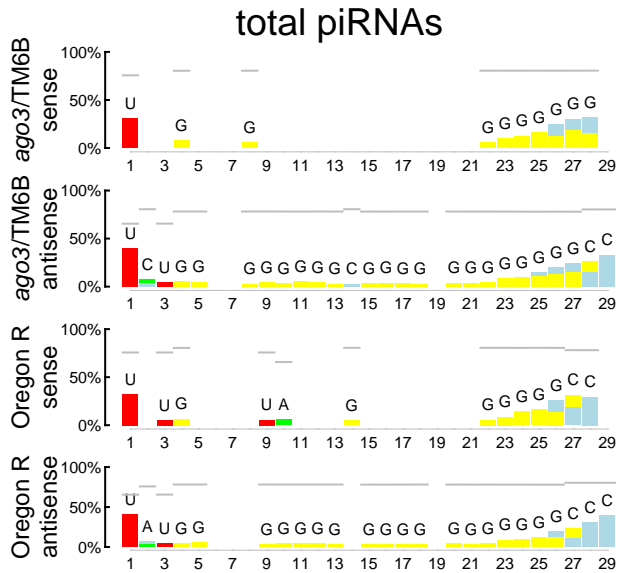
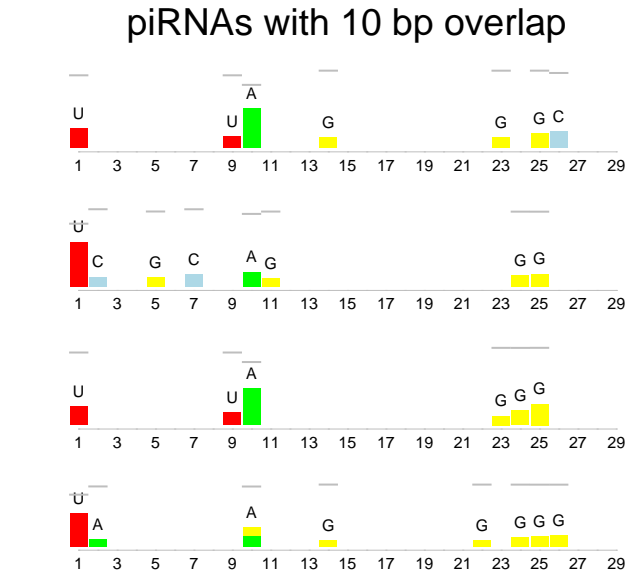
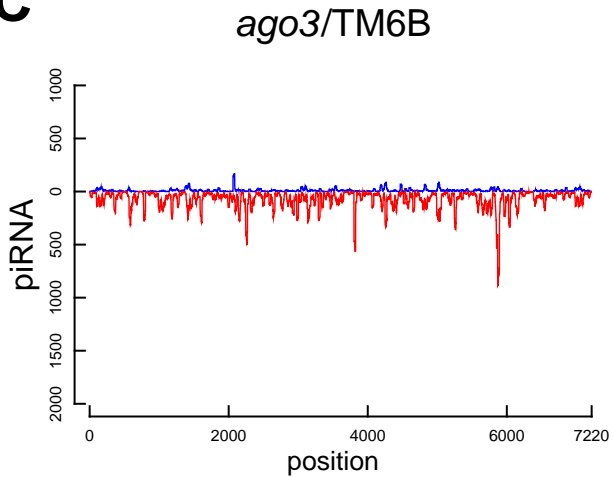
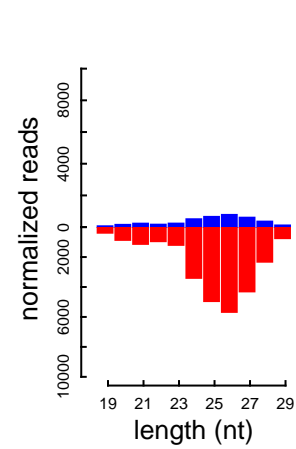
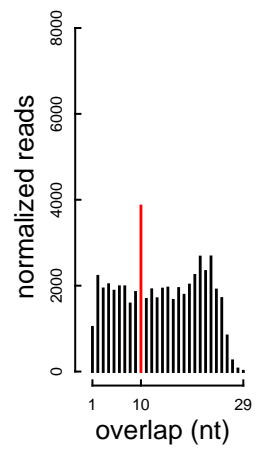
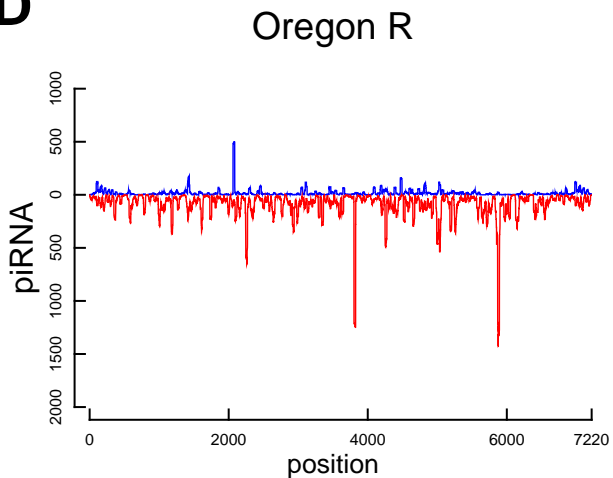
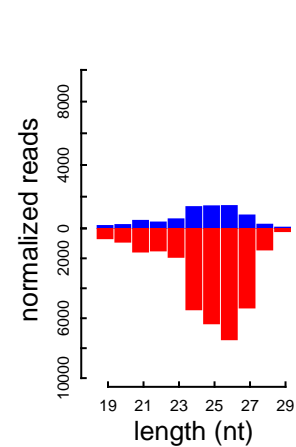
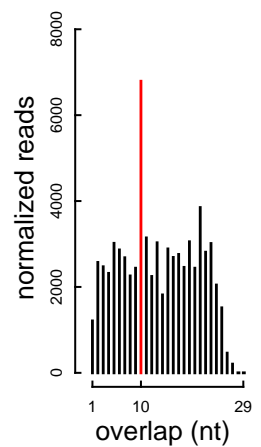
**F**



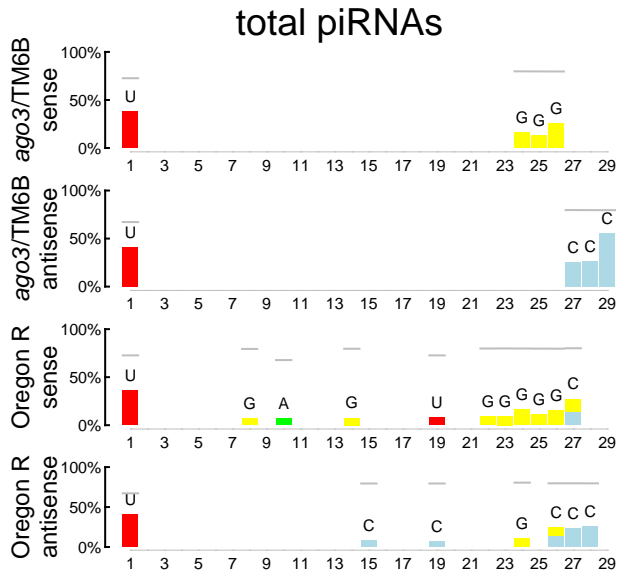
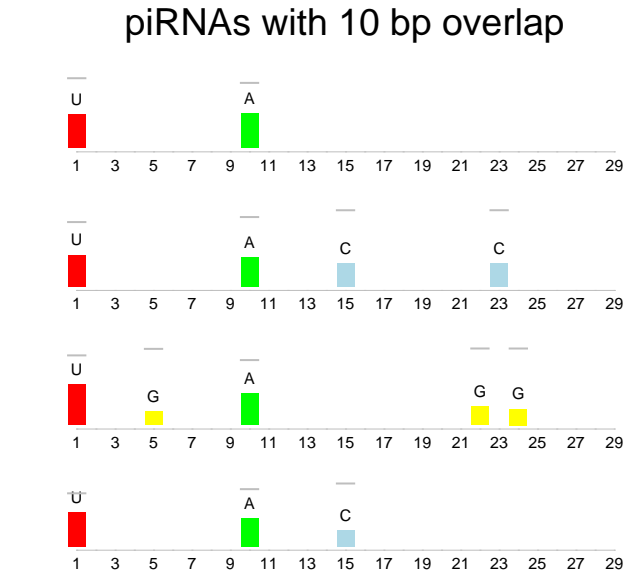
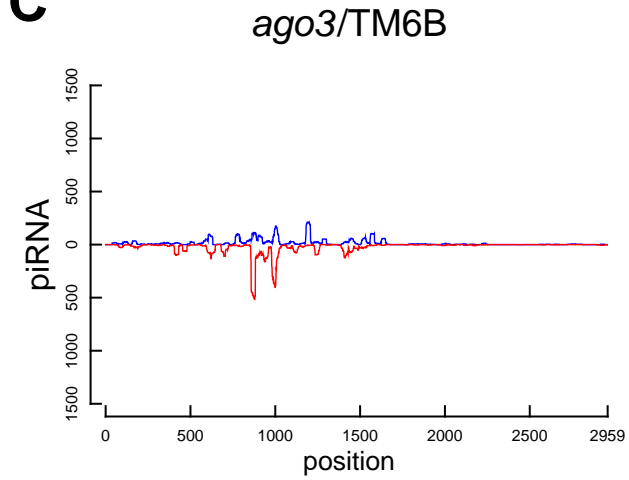
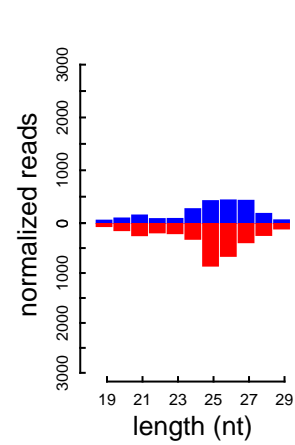
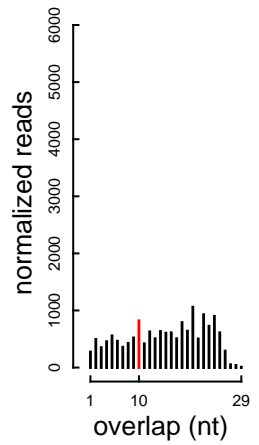
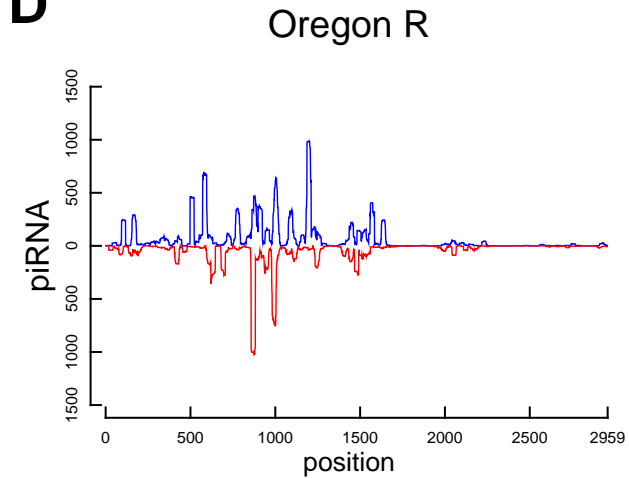
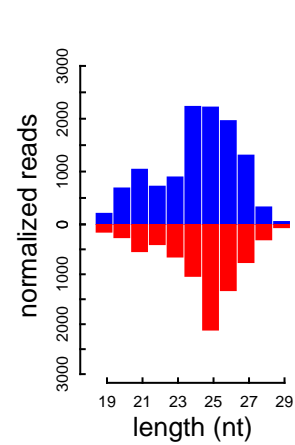
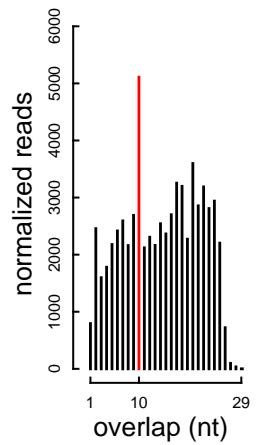
**H**



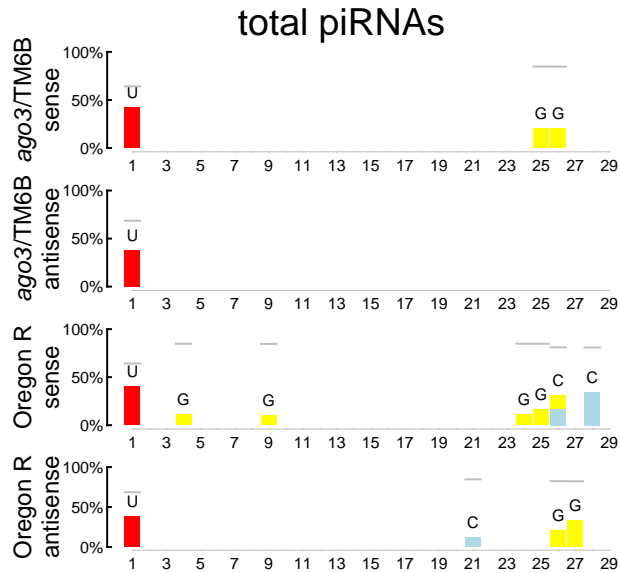
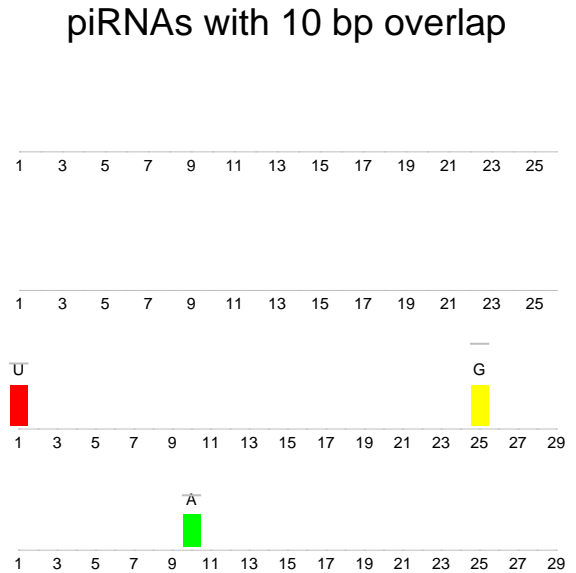
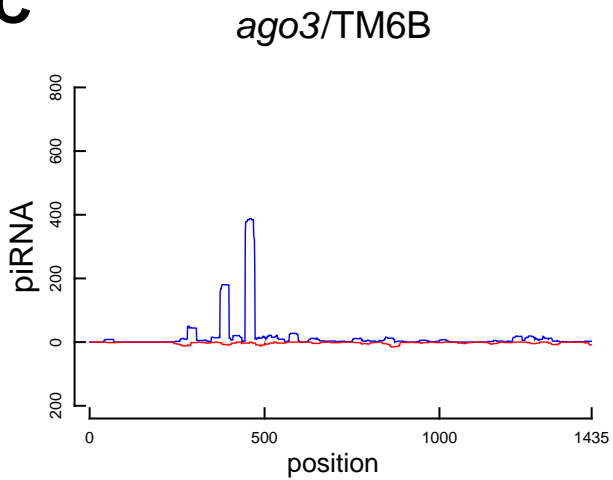
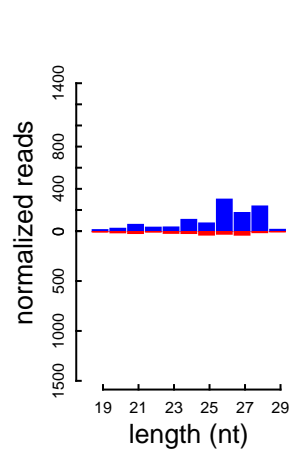
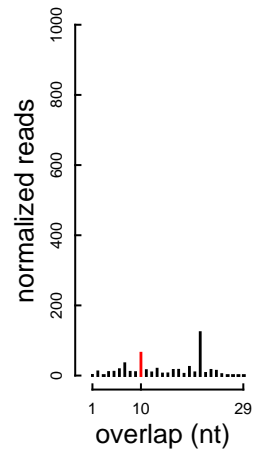
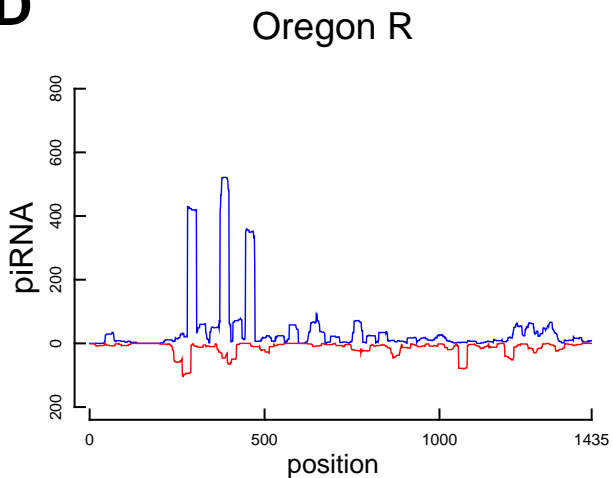
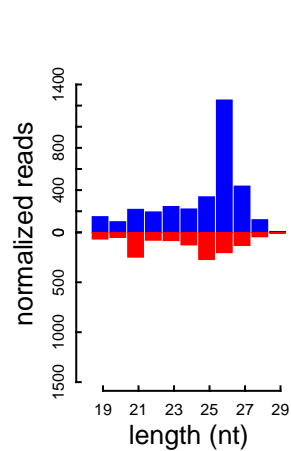
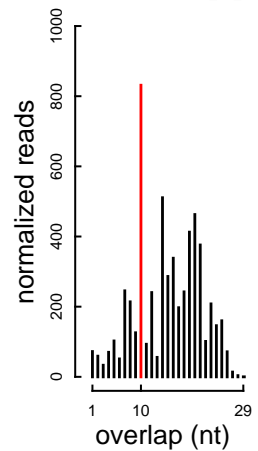
# HMS Beagle2

**A****B****C****E****G****D****F****H**

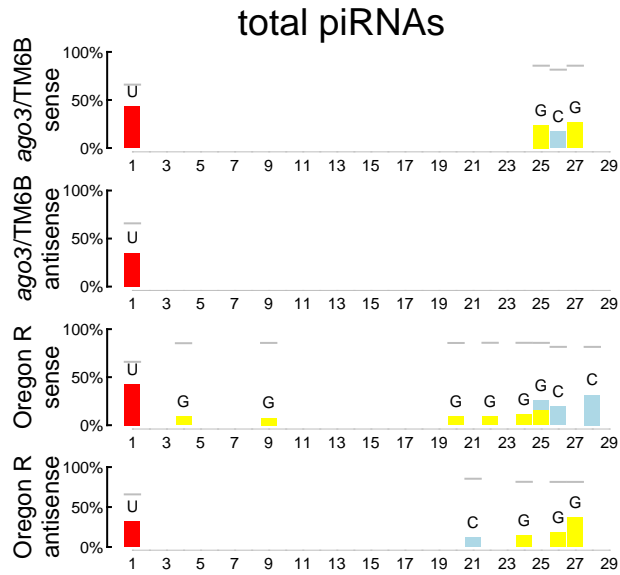
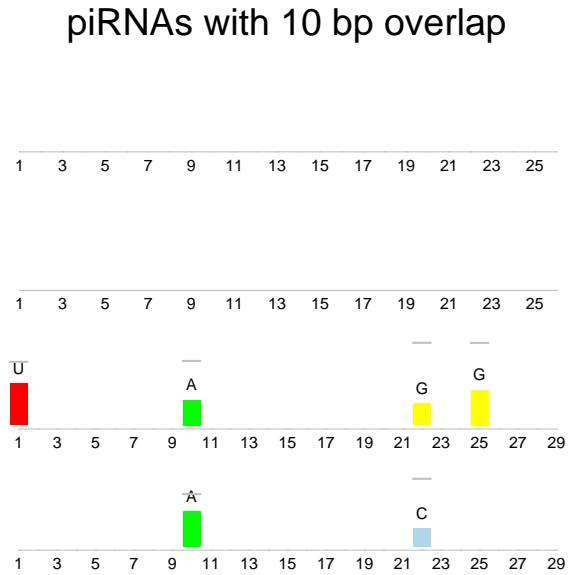
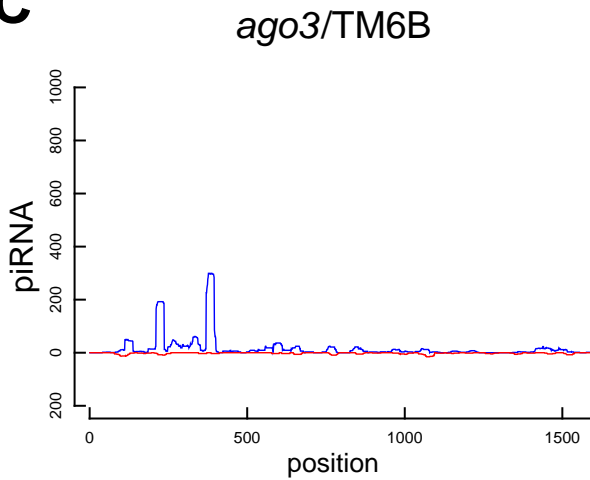
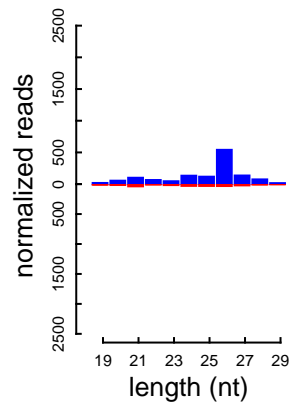
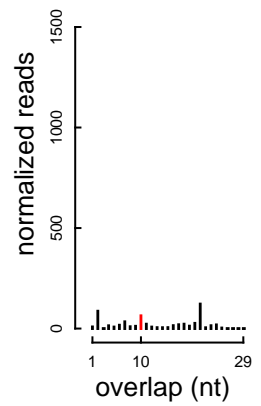
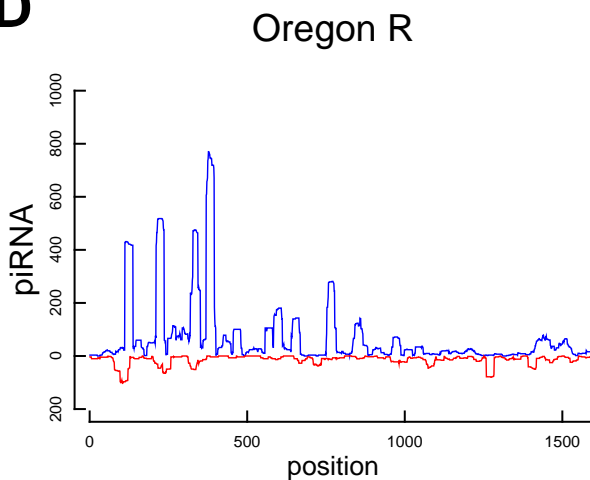
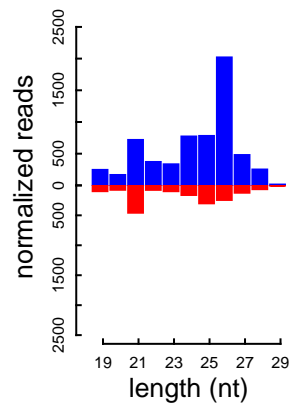
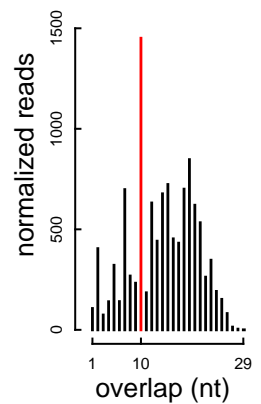
# *hobo*

**A****B****C****E****G****D****F****H**

# *hopper*

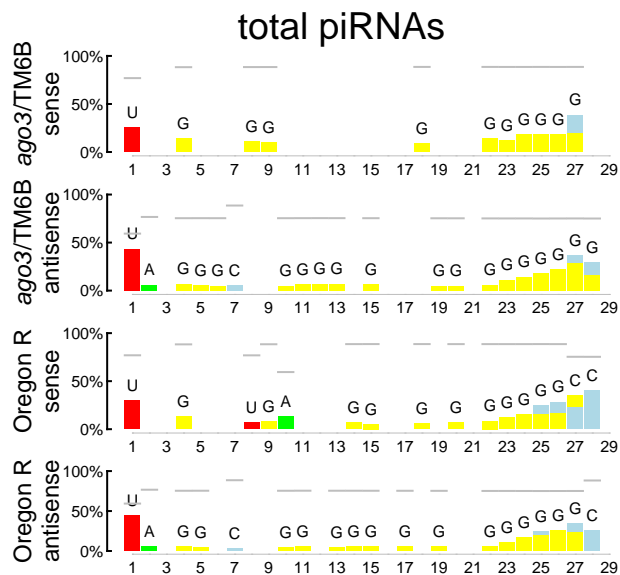
**A****B****C****E****G****D****F****H**

# *hopper2*

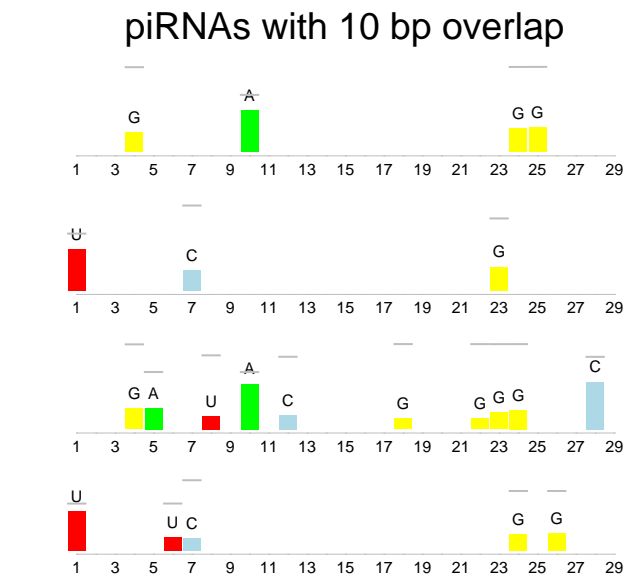
**A****B****C****E****G****D****F****H**

# *I* element

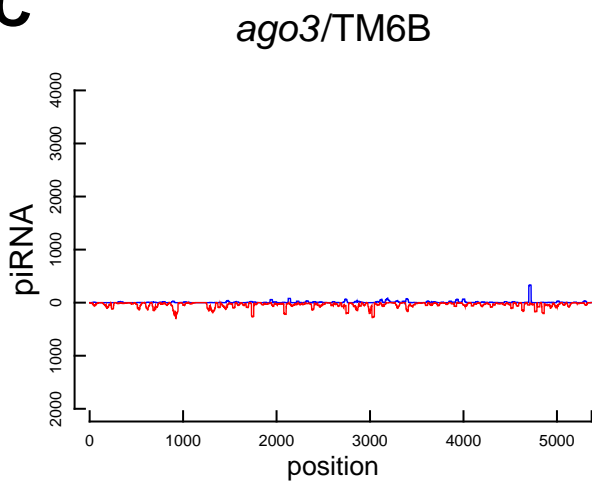
**A**



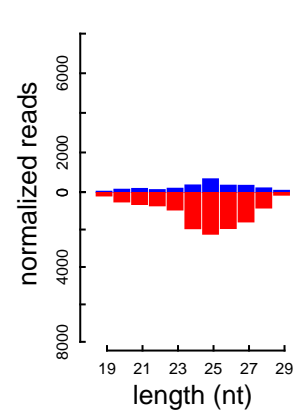
**B**



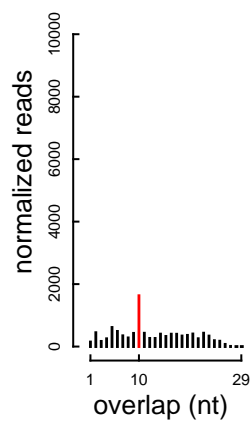
**C**



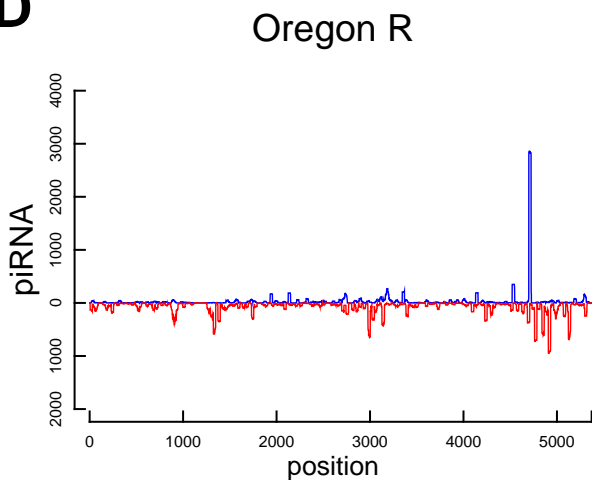
**E**



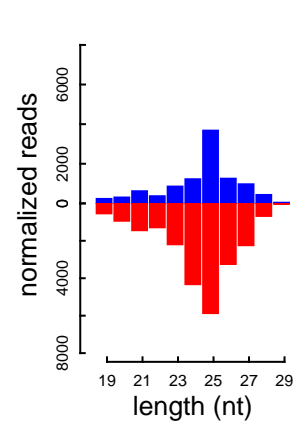
**G**



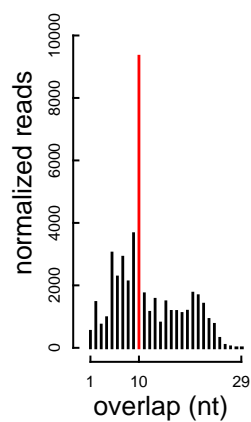
**D**



**F**

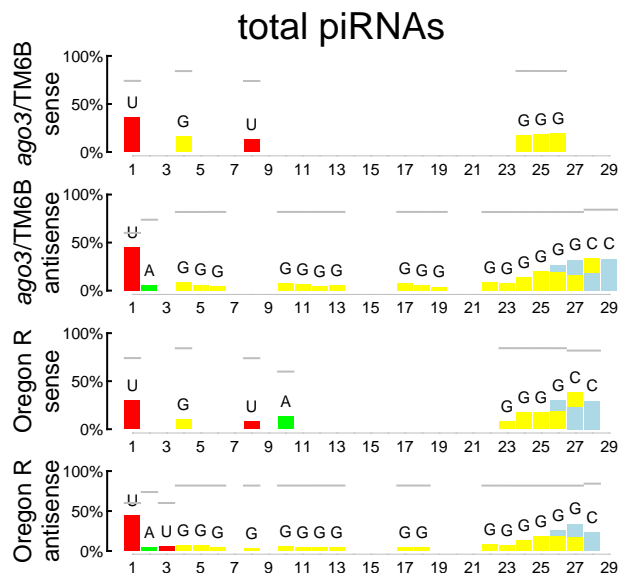


**H**

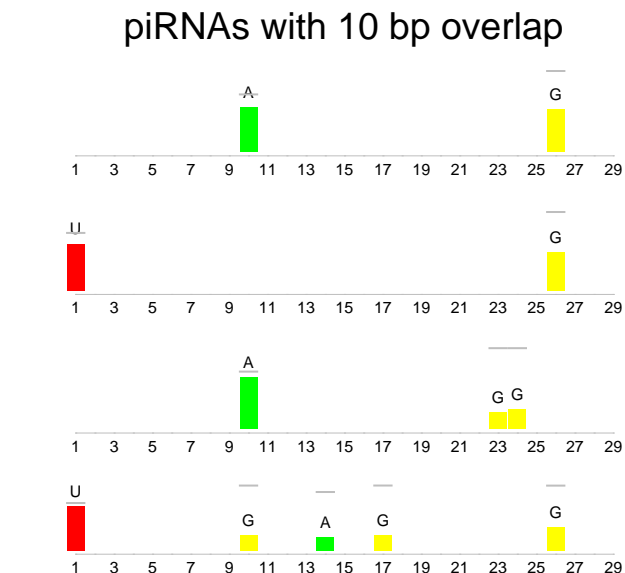


# Idefix

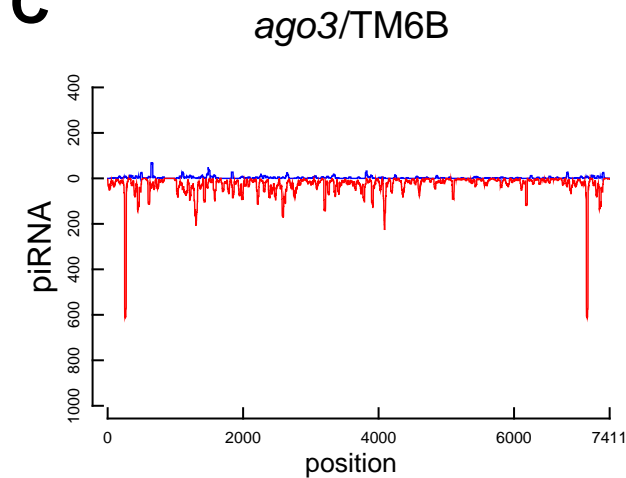
**A**



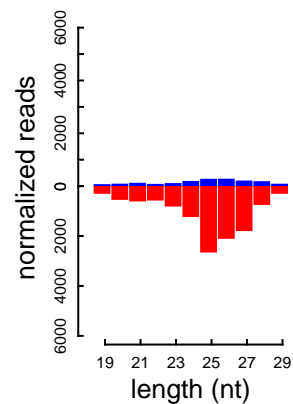
**B**



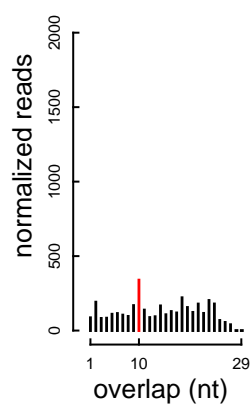
**C**



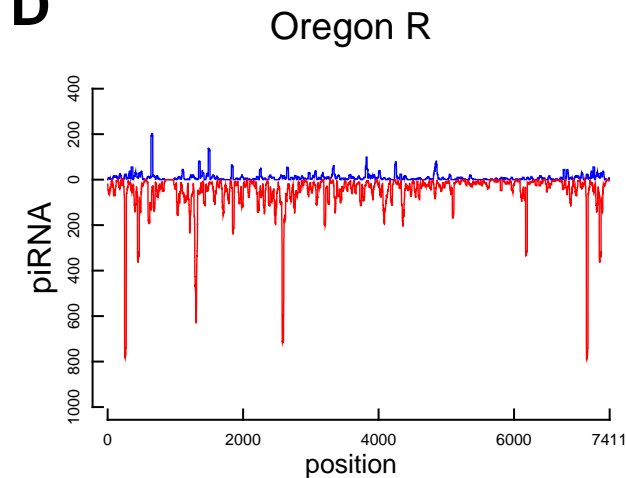
**E**



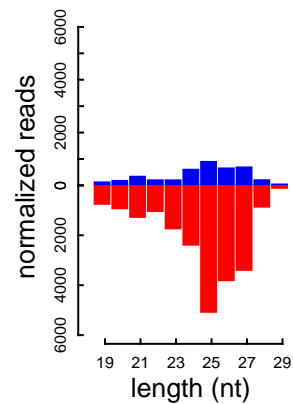
**G**



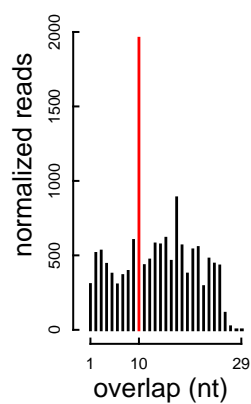
**D**



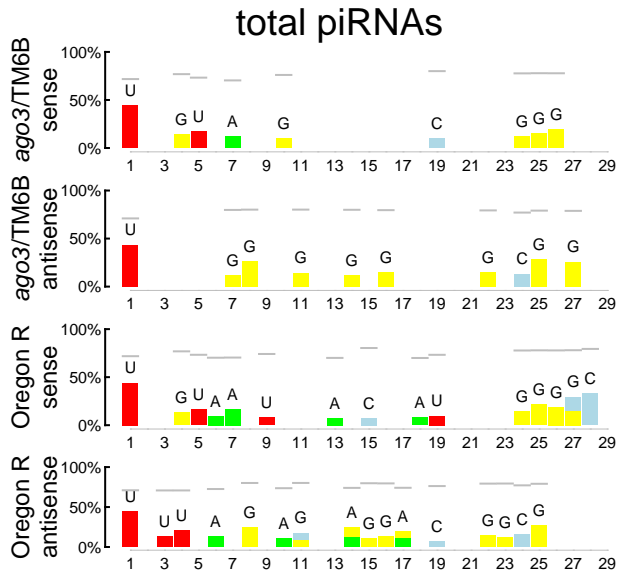
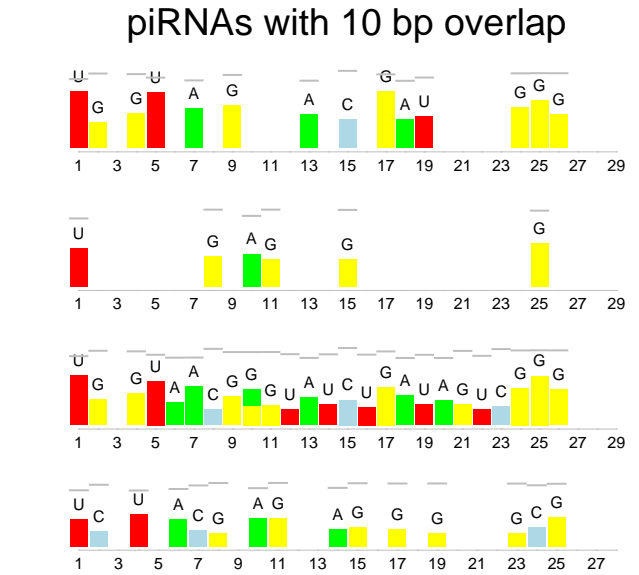
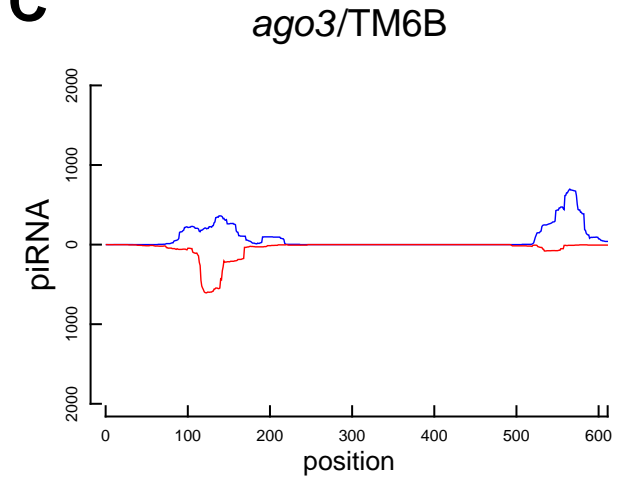
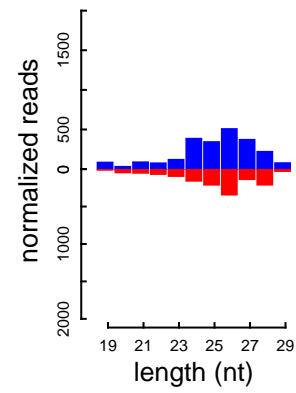
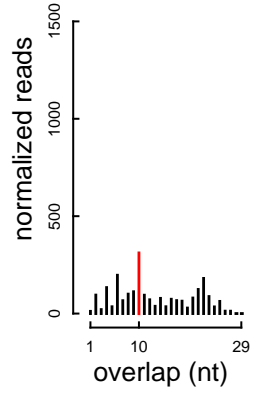
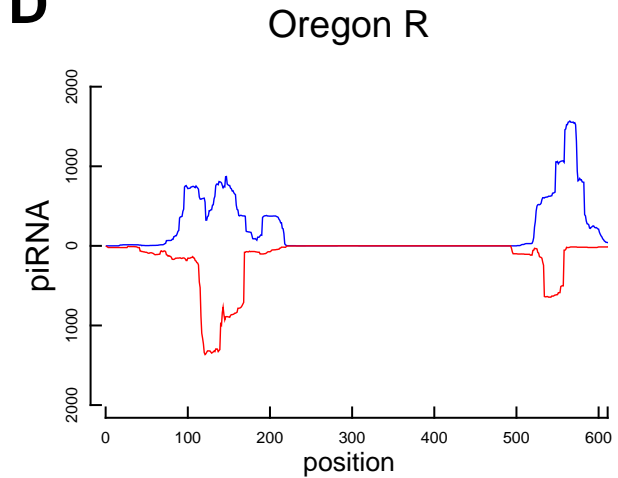
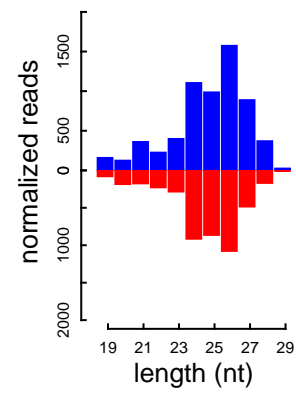
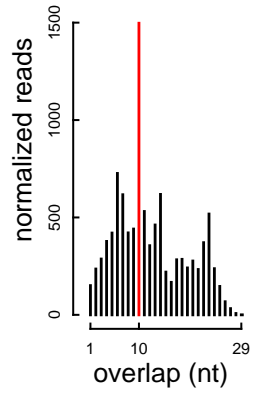
**F**



**H**

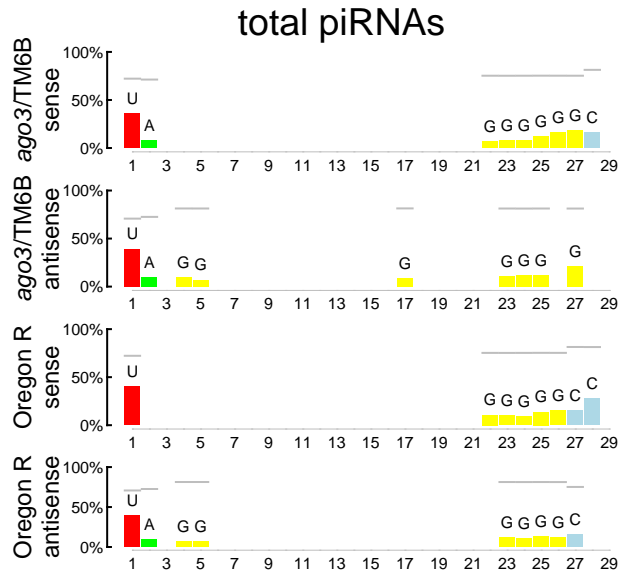
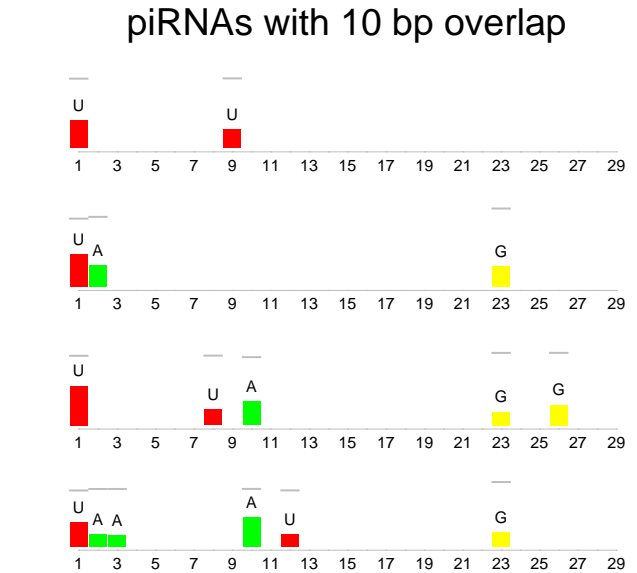
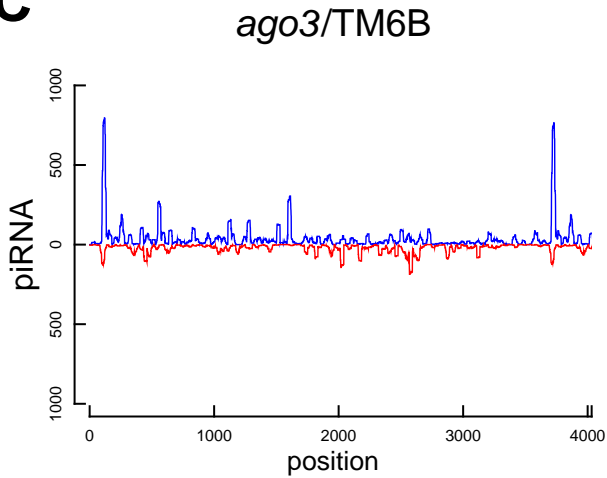
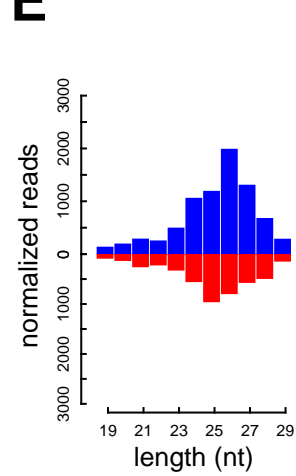
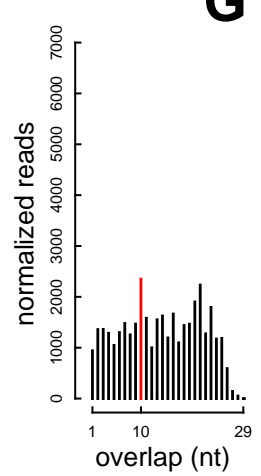
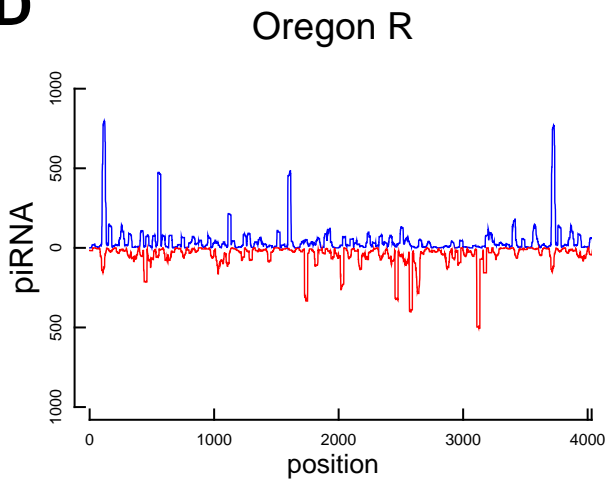
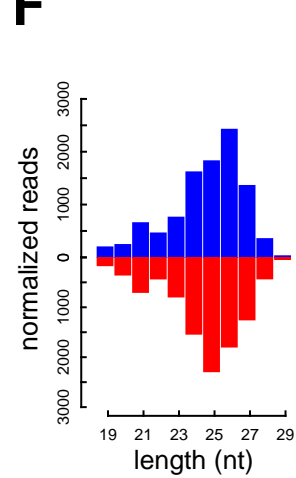
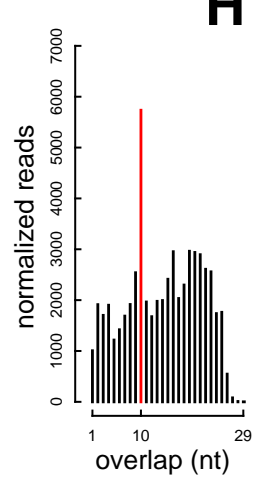


# INE 1

**A****B****C****E****G****D****F****H**

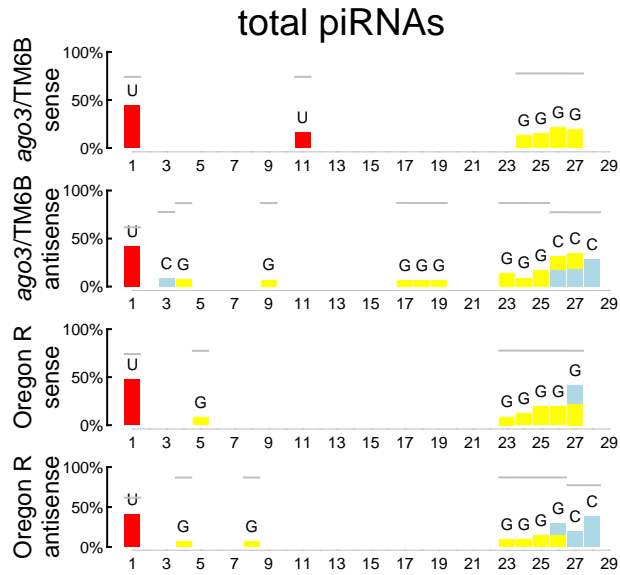


# *invader1*

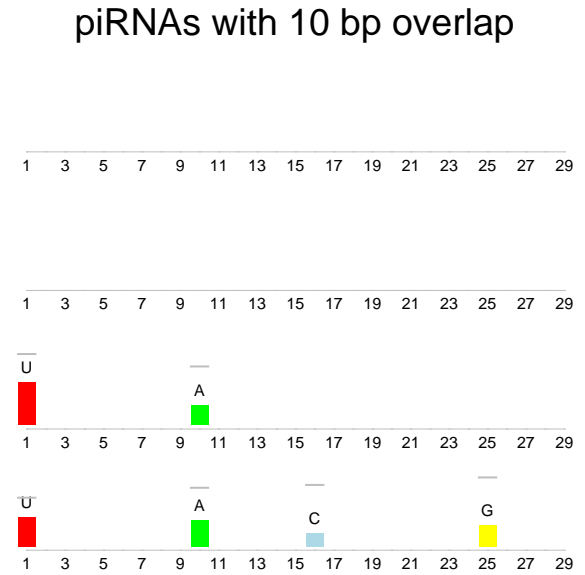
**A****B****C****E****G****D****F****H**

# invader2

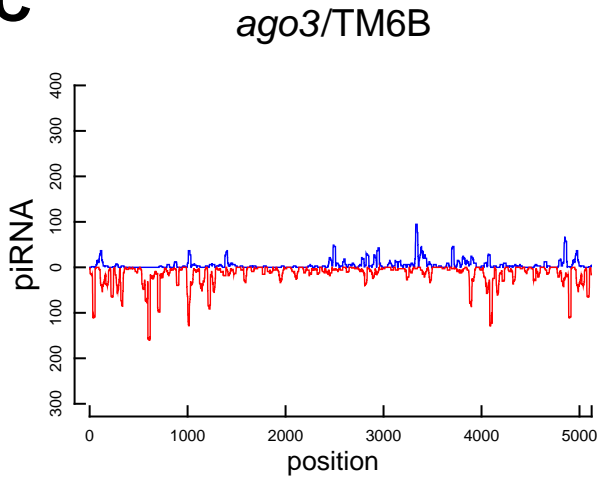
**A**



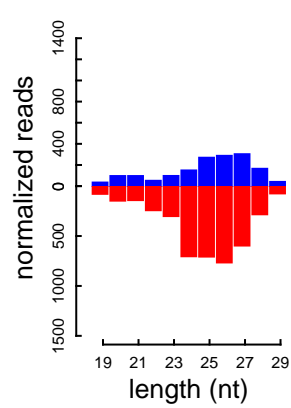
**B**



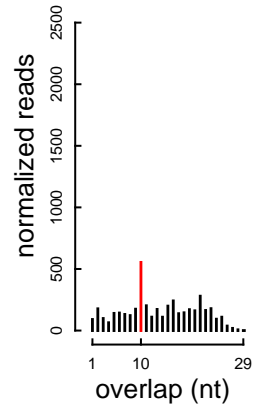
**C**



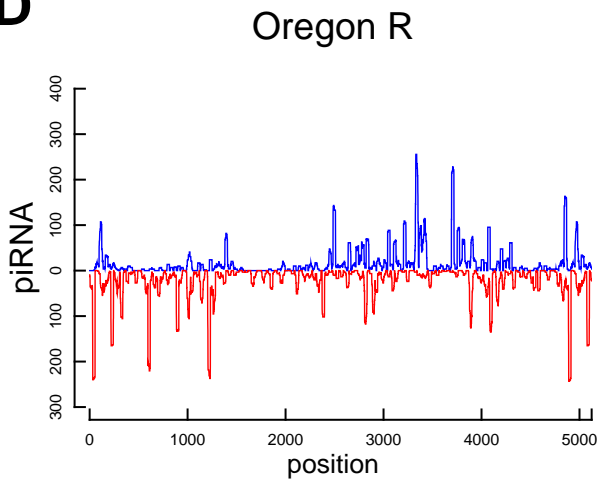
**E**



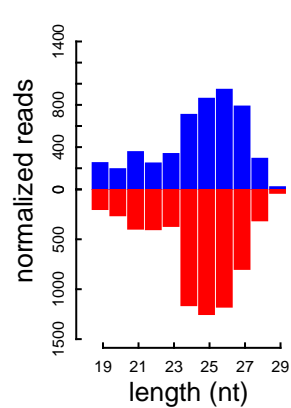
**G**



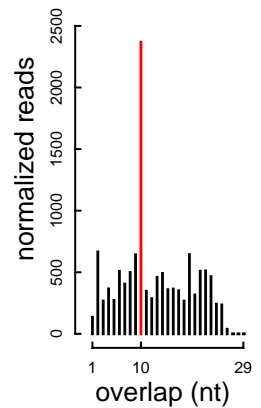
**D**



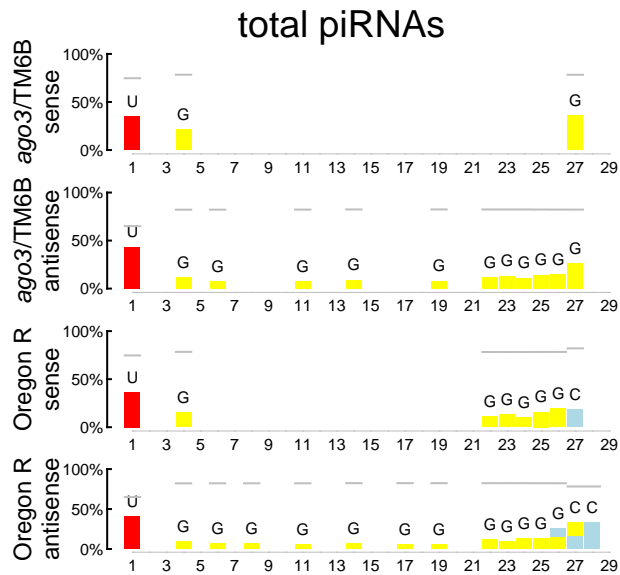
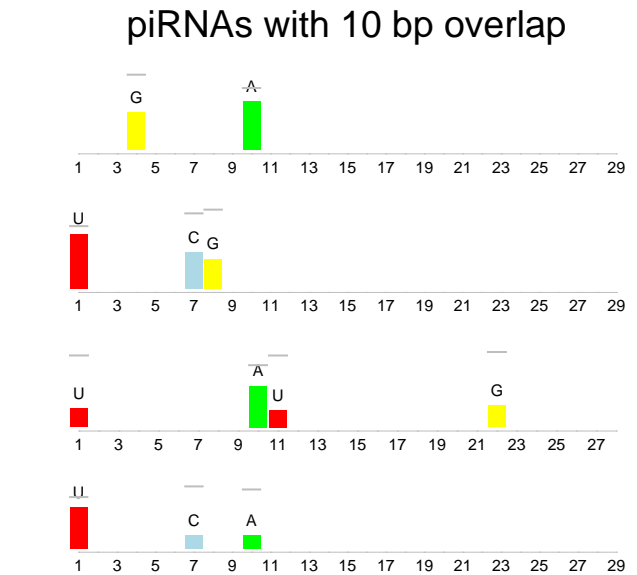
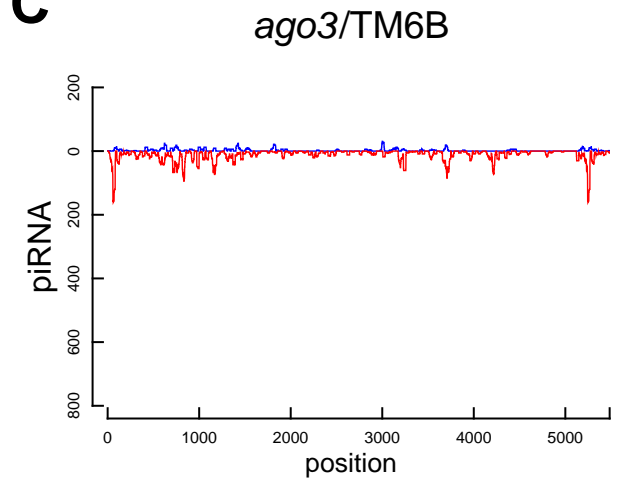
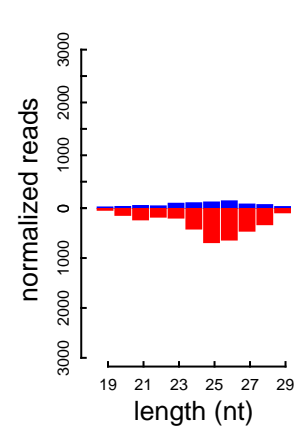
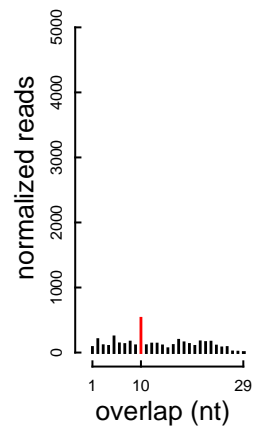
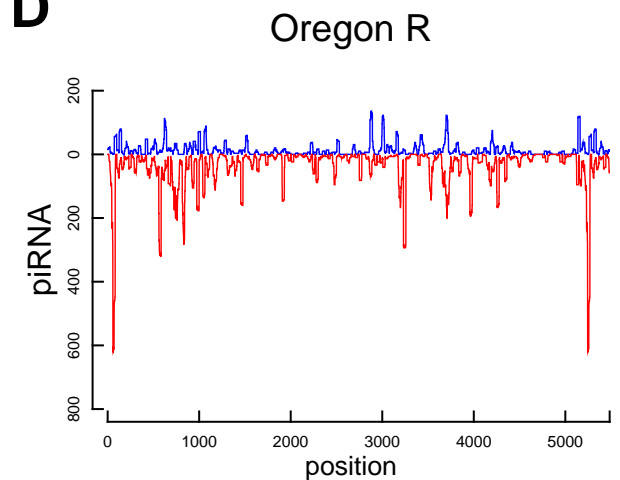
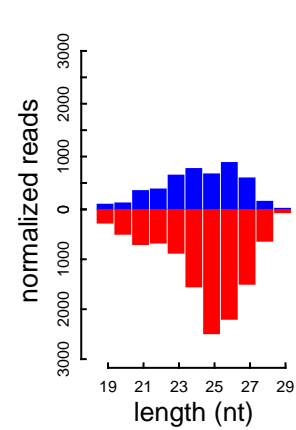
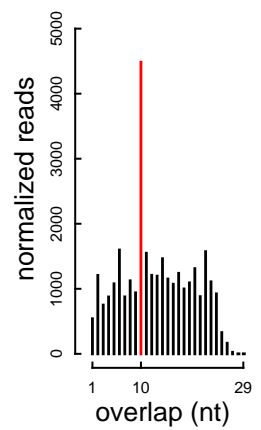
**F**



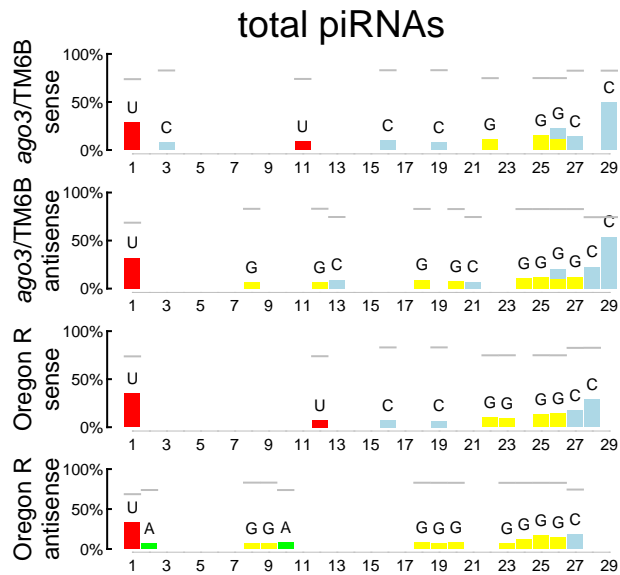
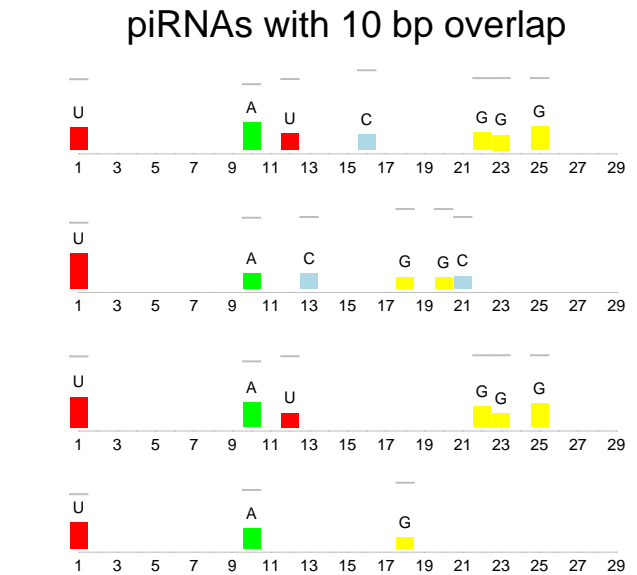
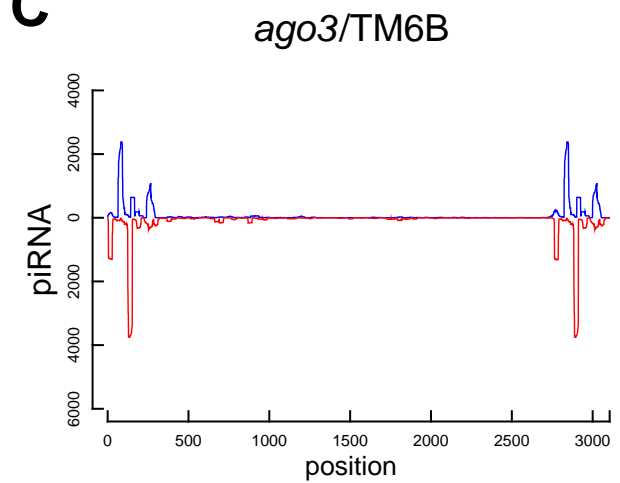
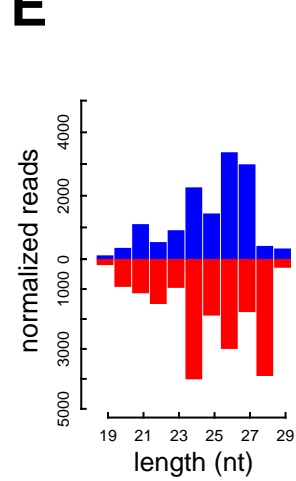
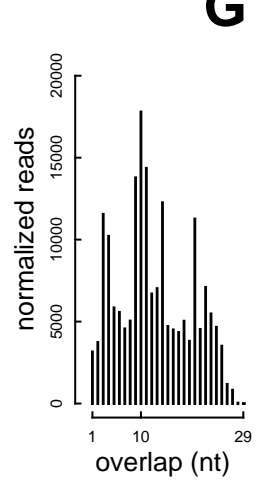
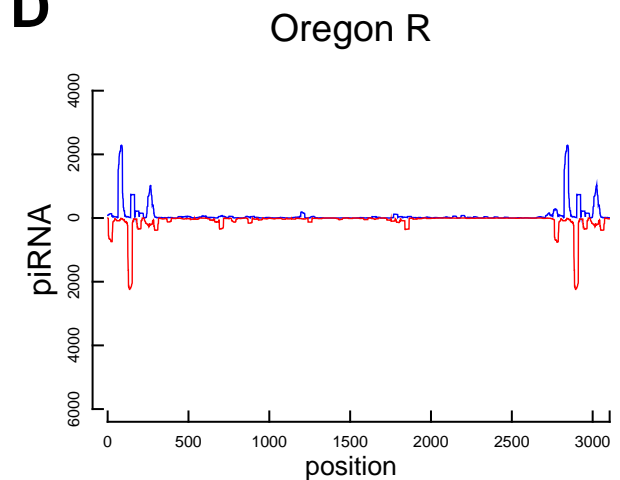
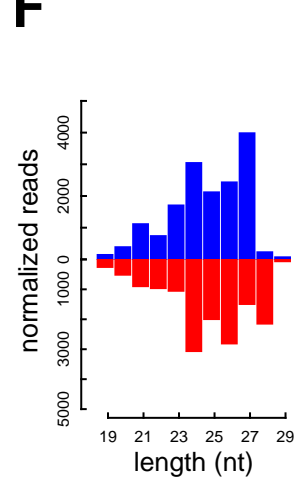
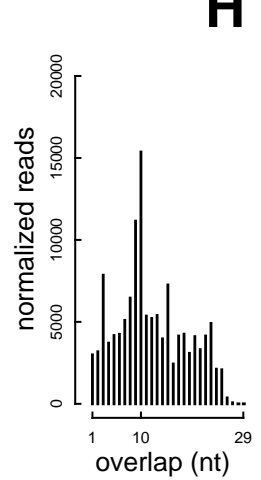
**H**



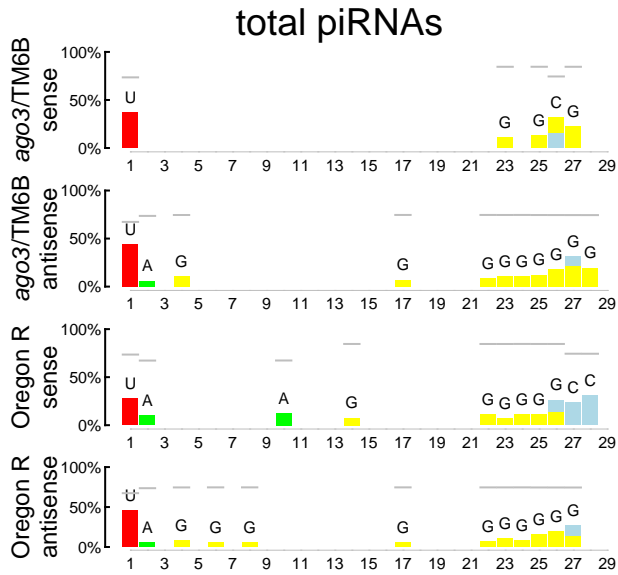
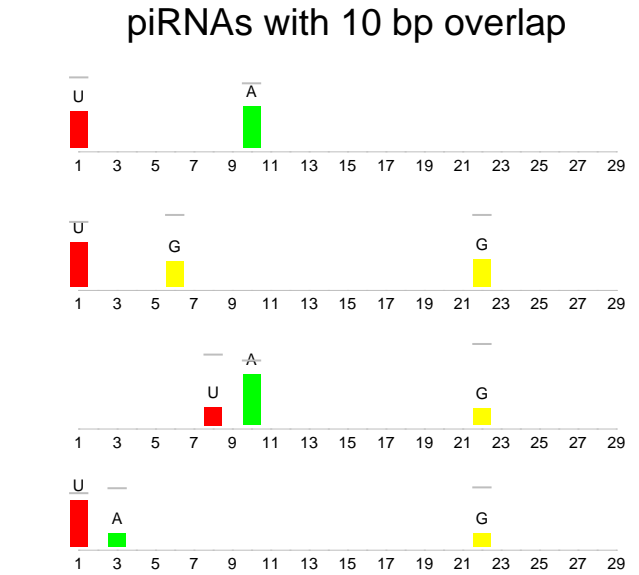
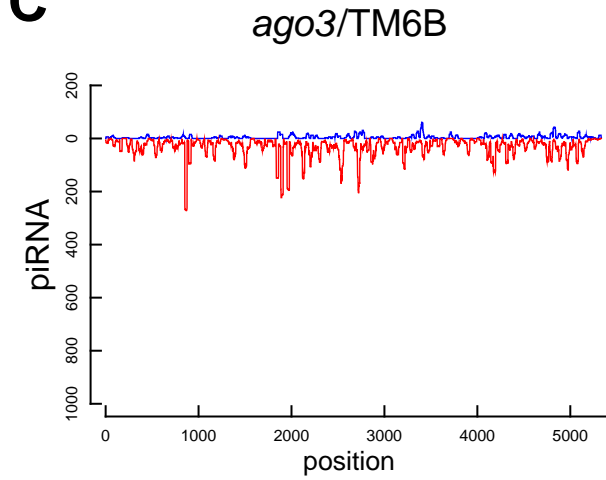
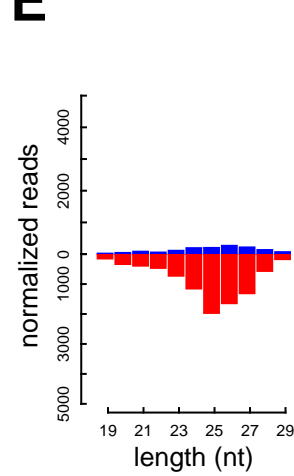
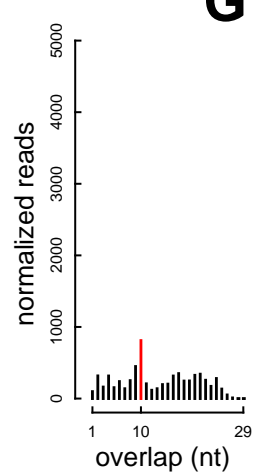
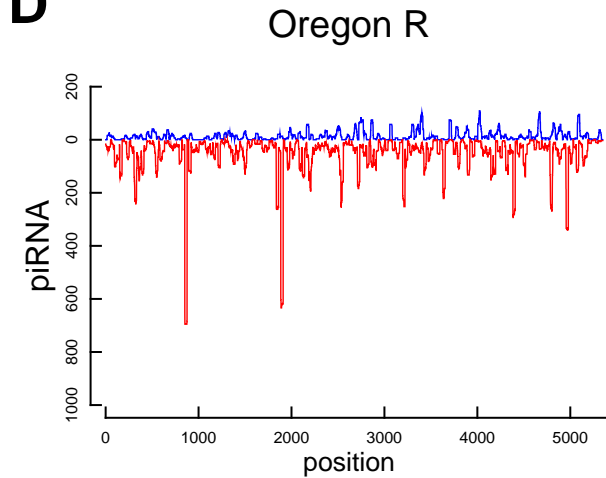
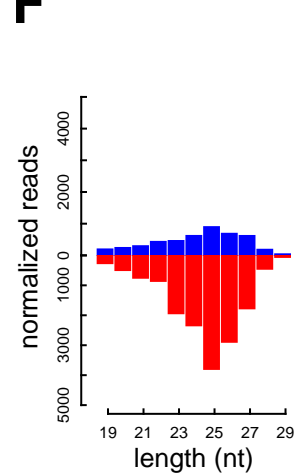
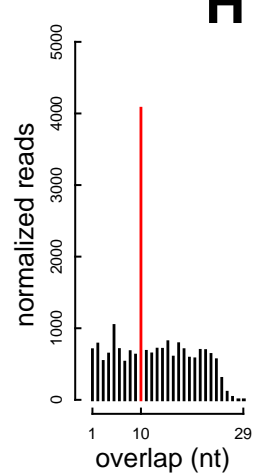
# invader3

**A****B****C****E****G****D****F****H**

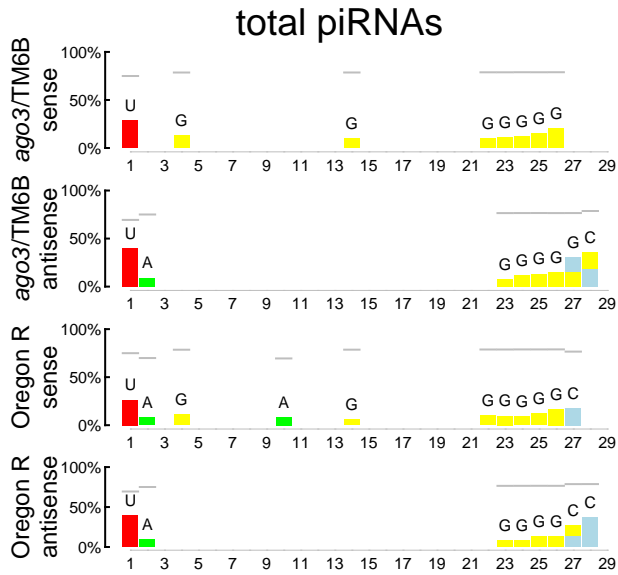
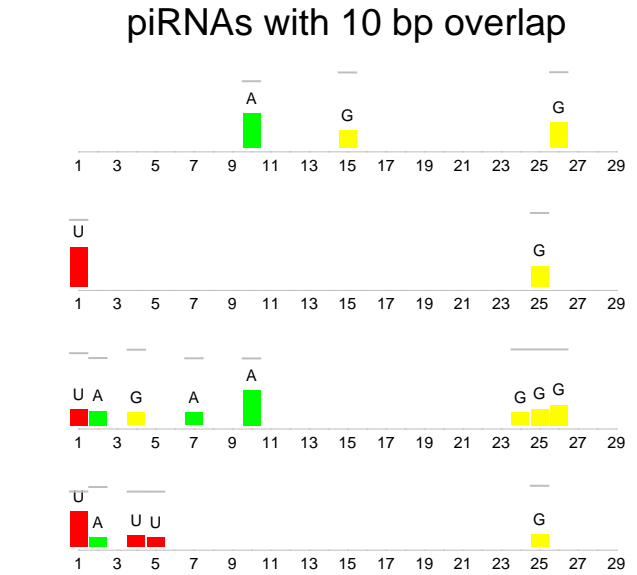
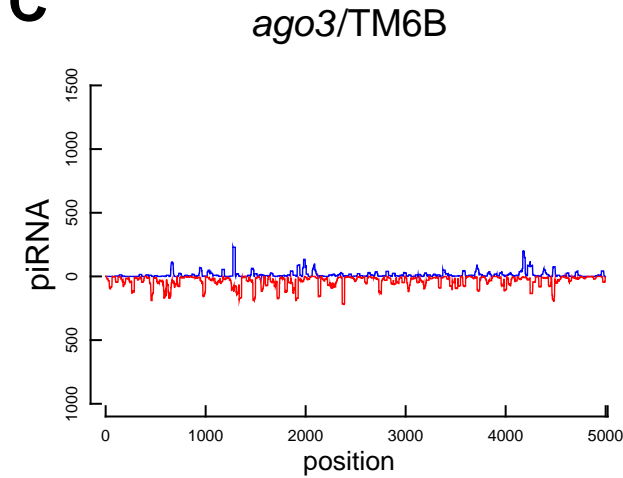
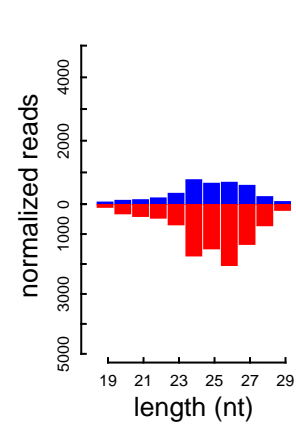
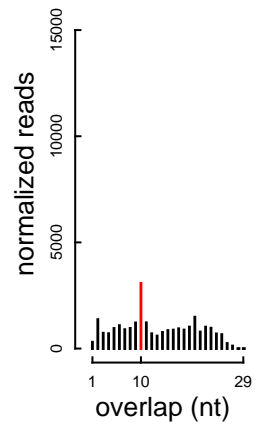
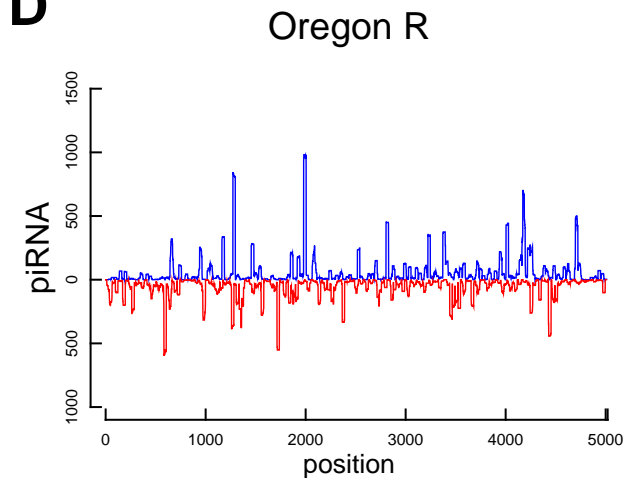
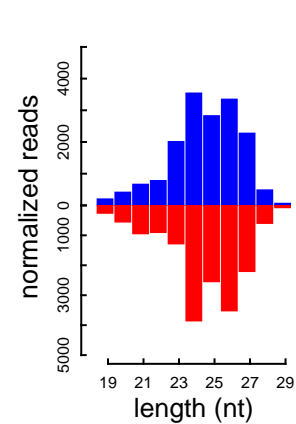
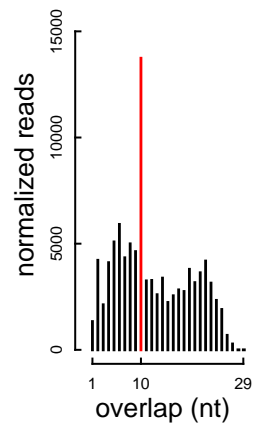
# invader4

**A****B****C****E****G****D****F****H**

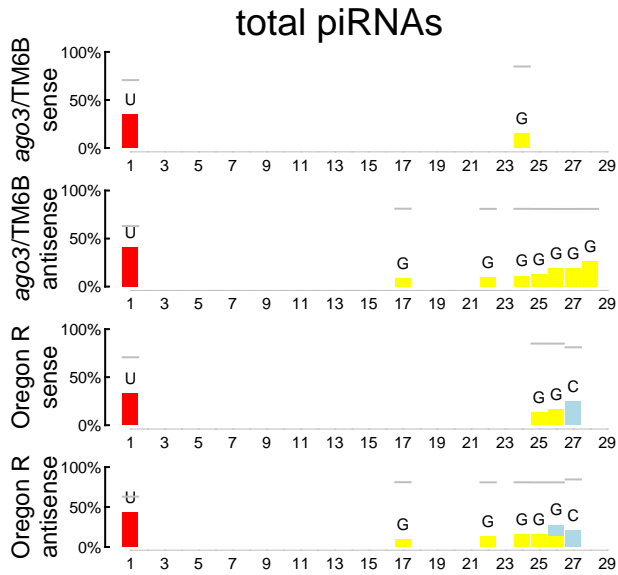
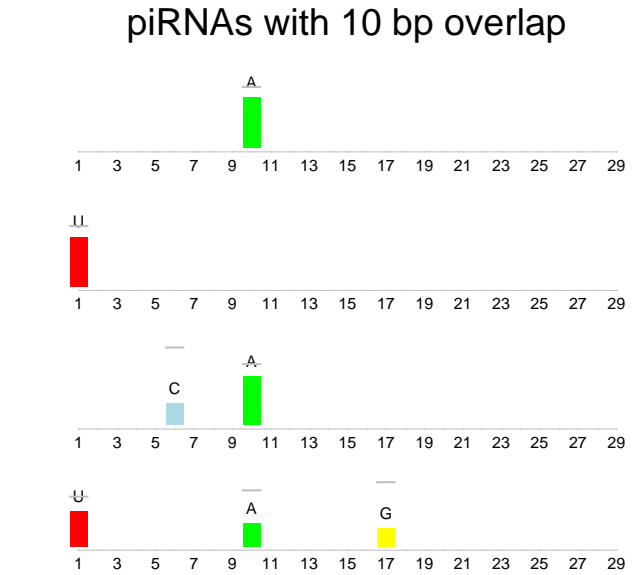
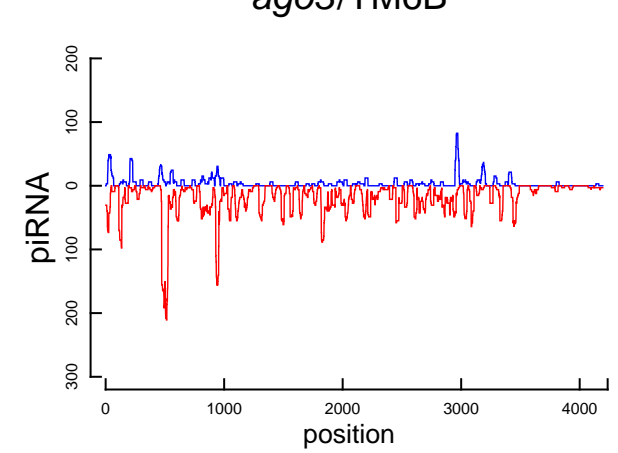
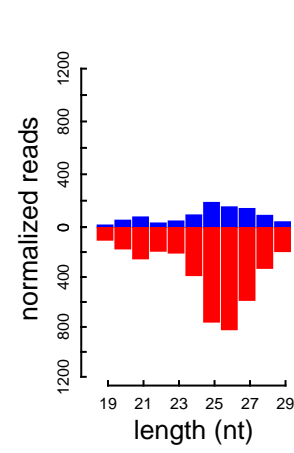
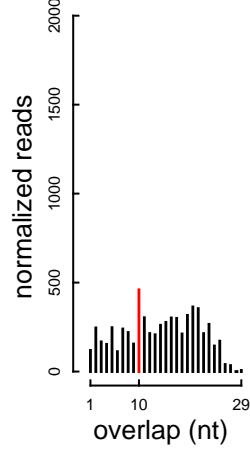
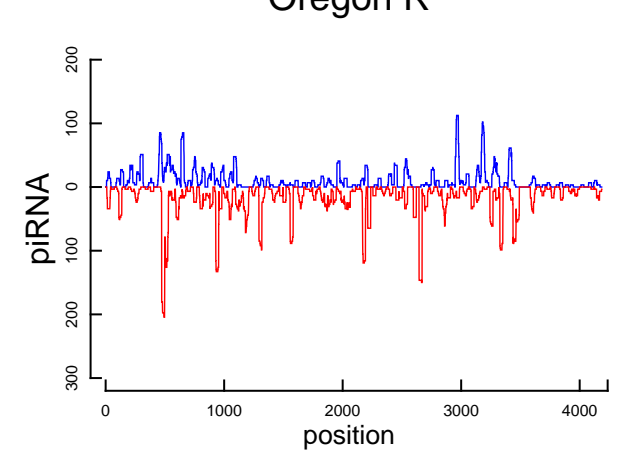
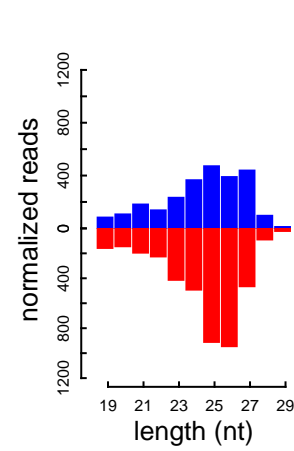
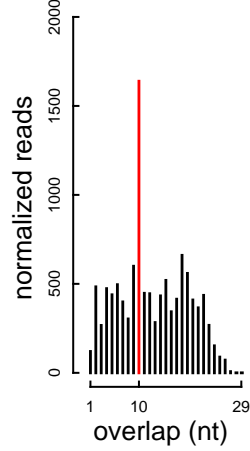
# *lvk*

**A****B****C****E****G****D****F****H**

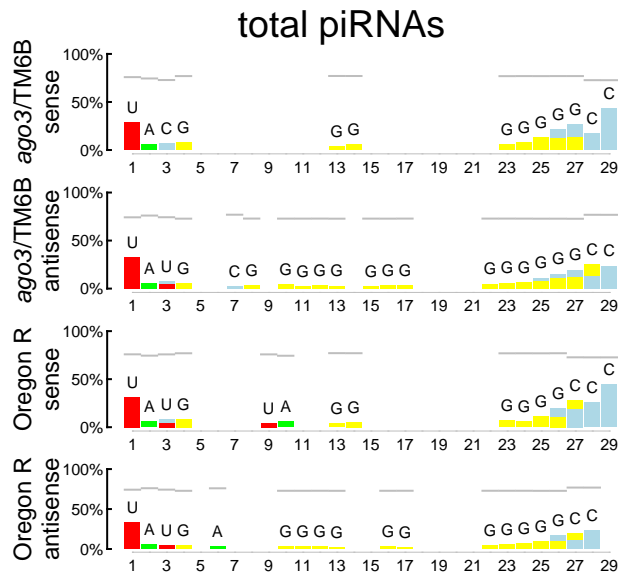
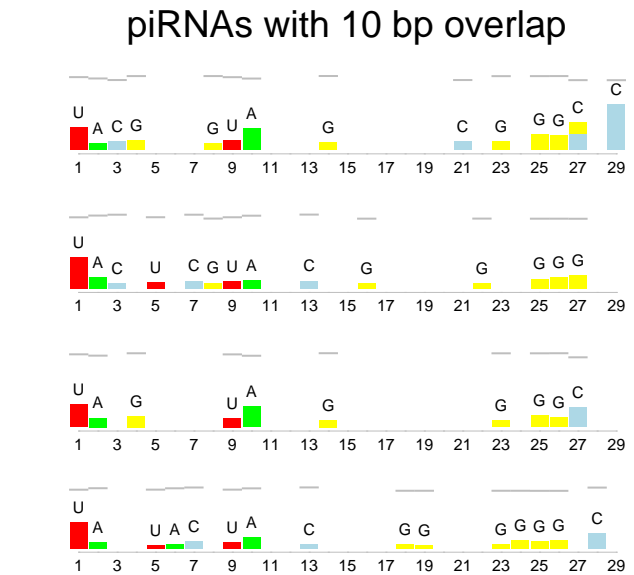
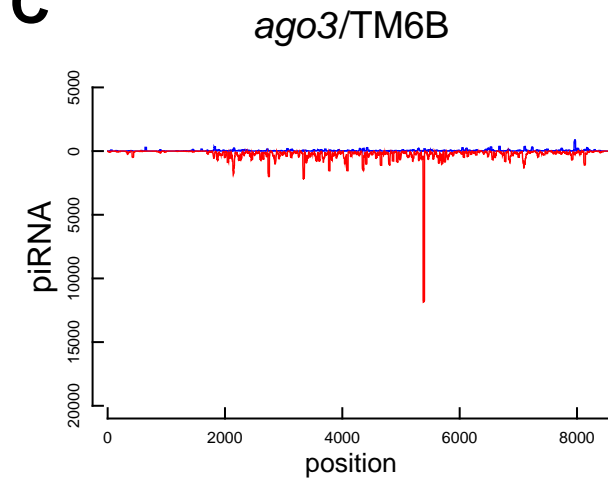
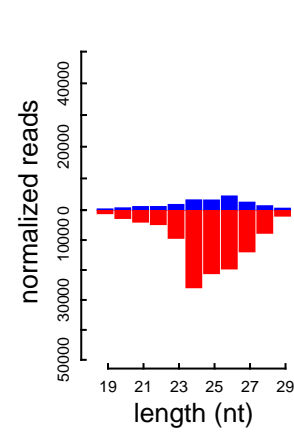
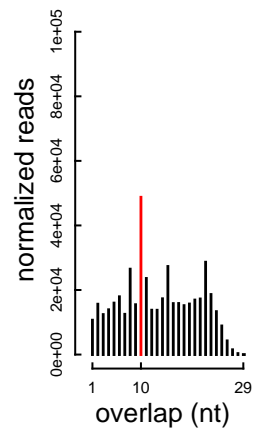
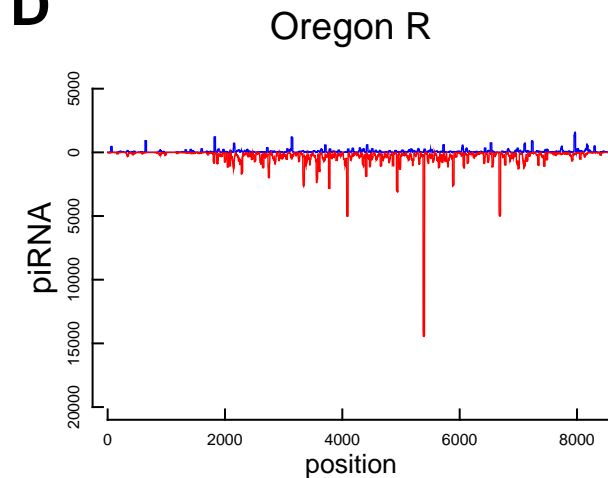
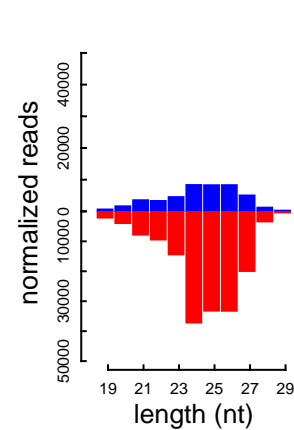
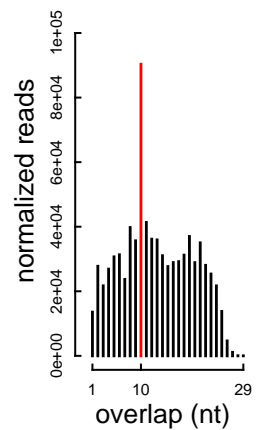
# jockey

**A****B****C****E****G****D****F****H**

# Juan

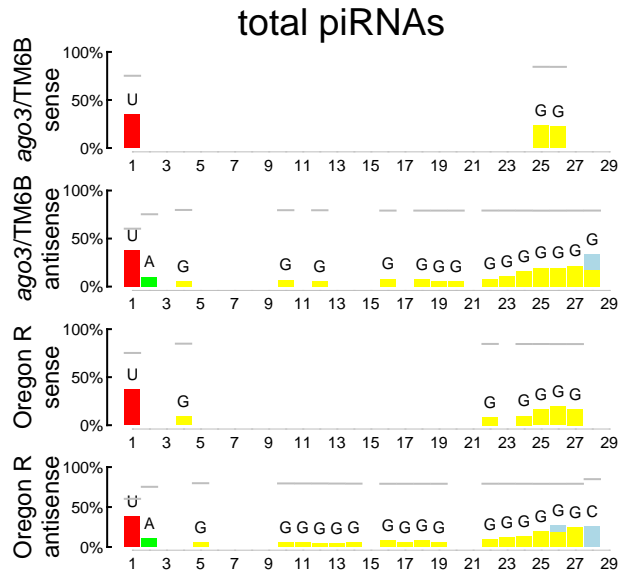
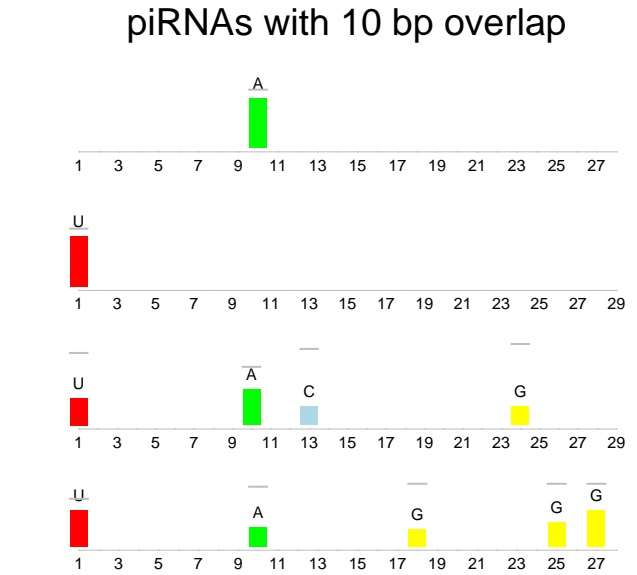
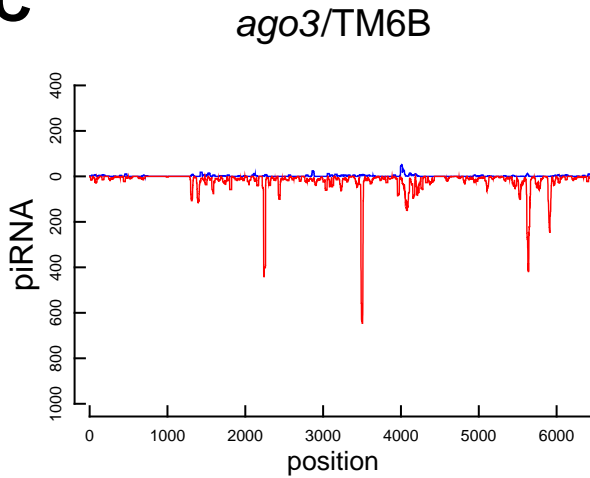
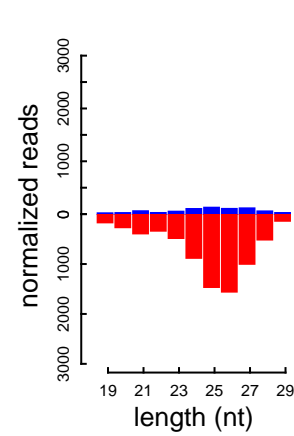
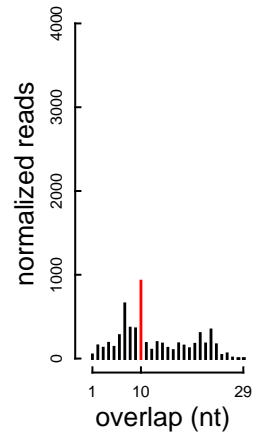
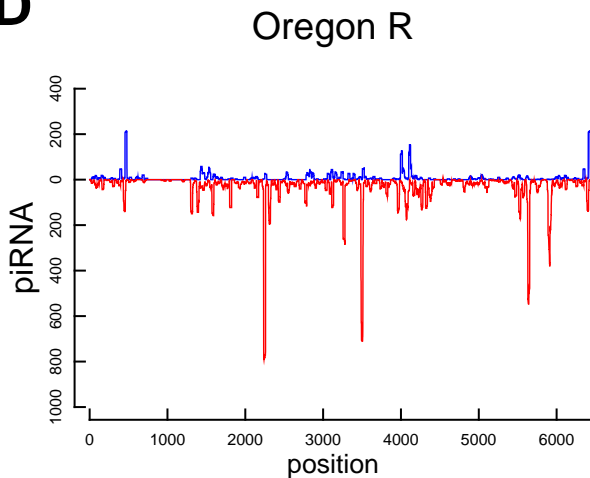
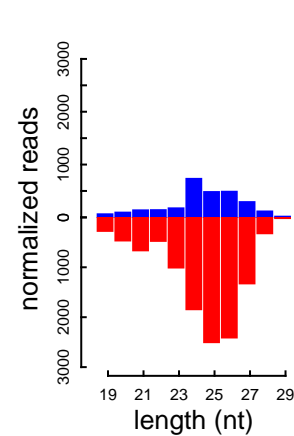
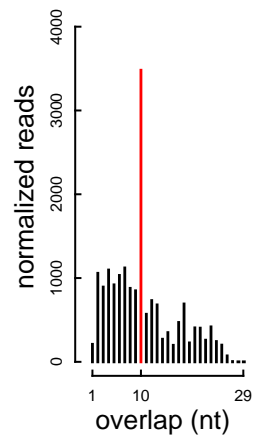
**A****B****C****E****G****D****F****H**

# Max element

**A****B****C****E****G****D****F****H**

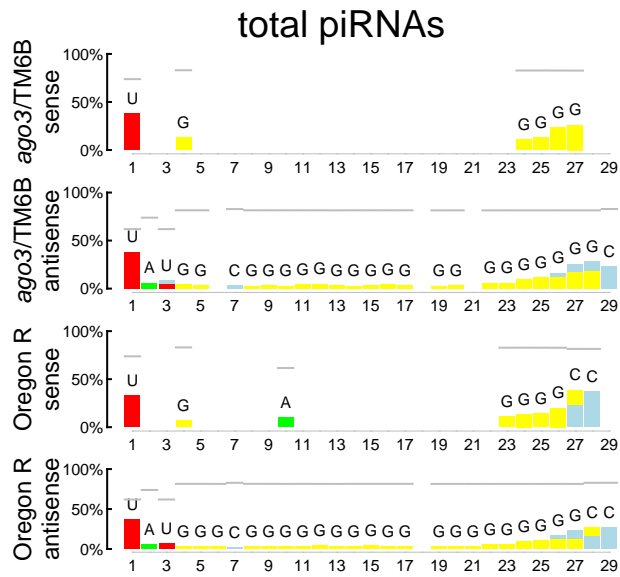


# McClintock

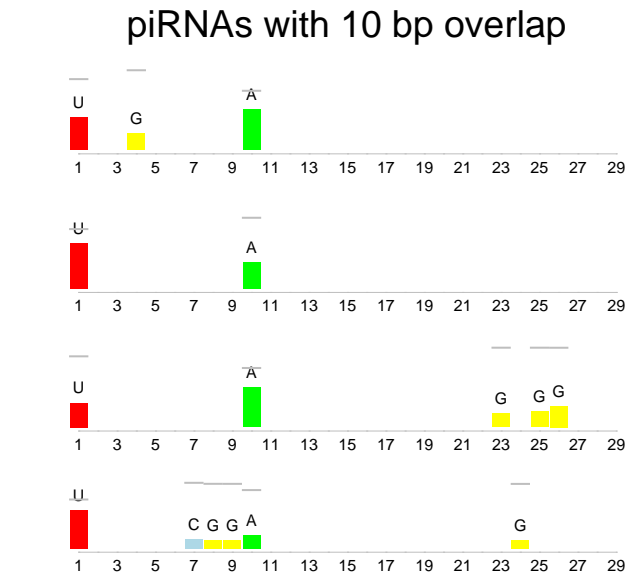
**A****B****C****E****G****D****F****H**

# *mdg1*

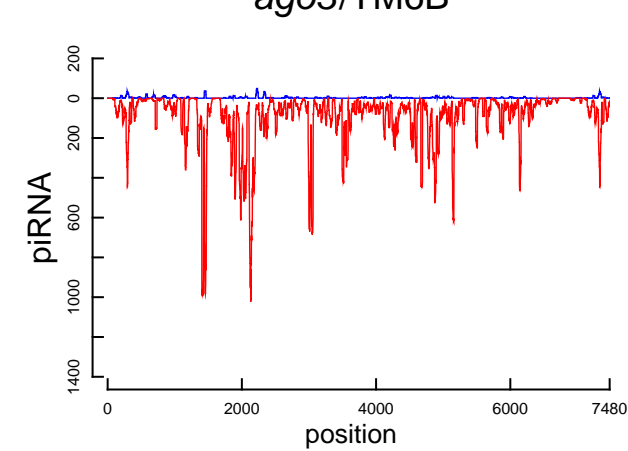
**A**



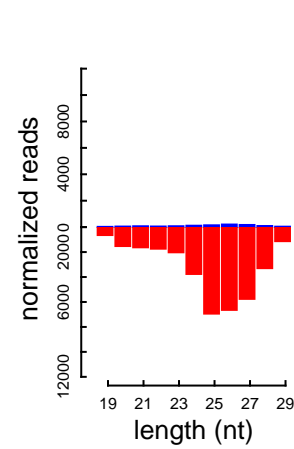
**B**



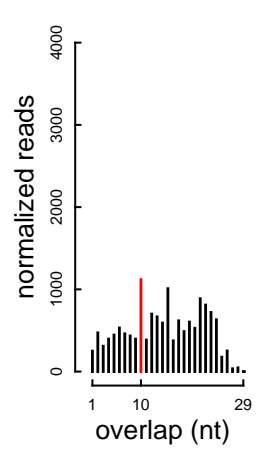
**C**



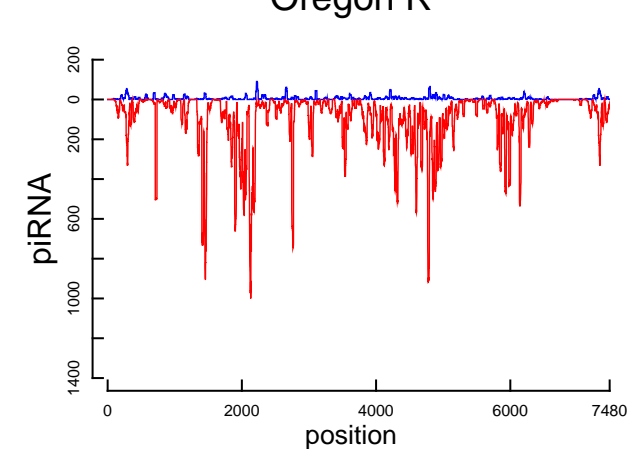
**E**



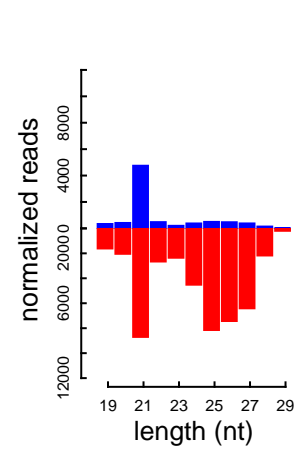
**G**



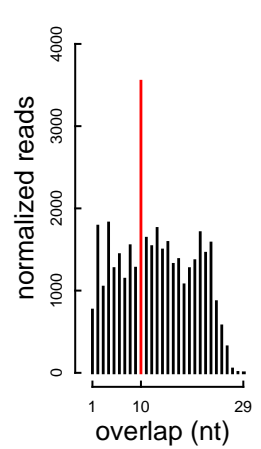
**D**



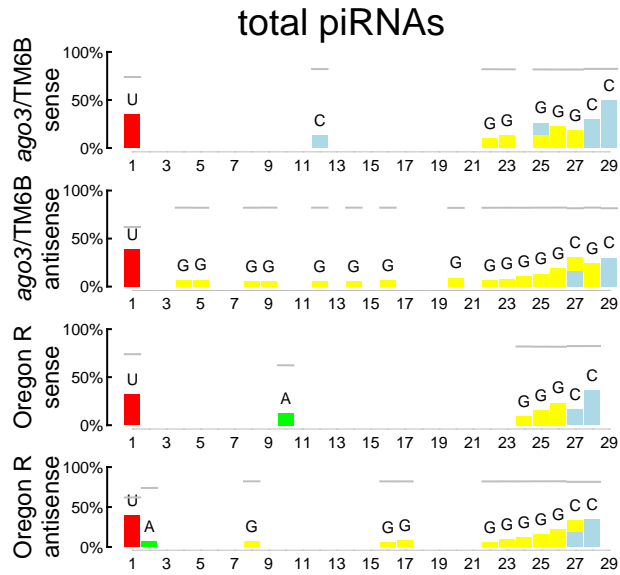
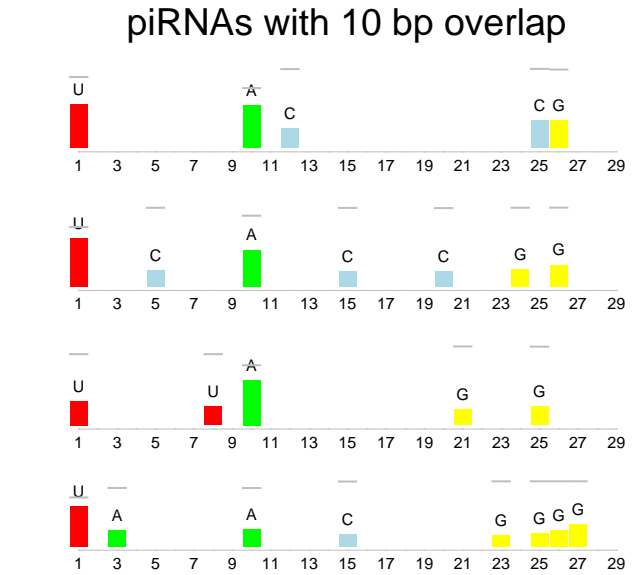
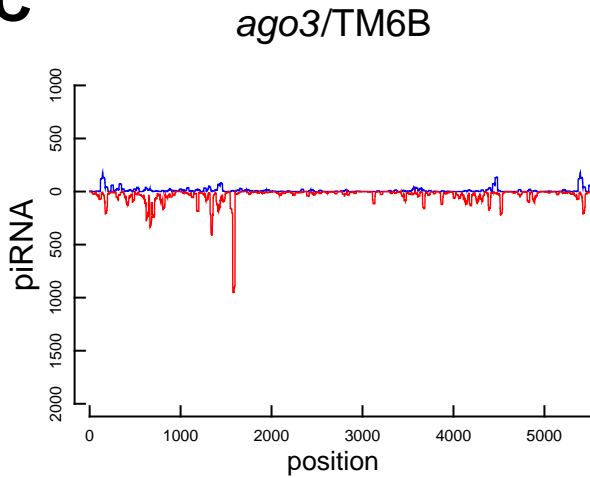
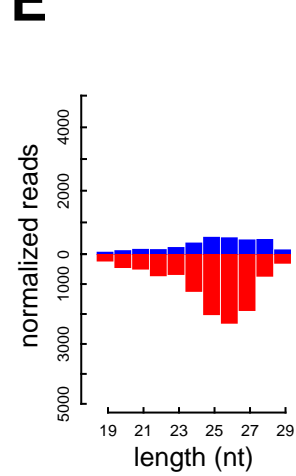
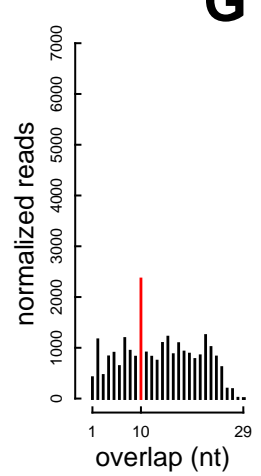
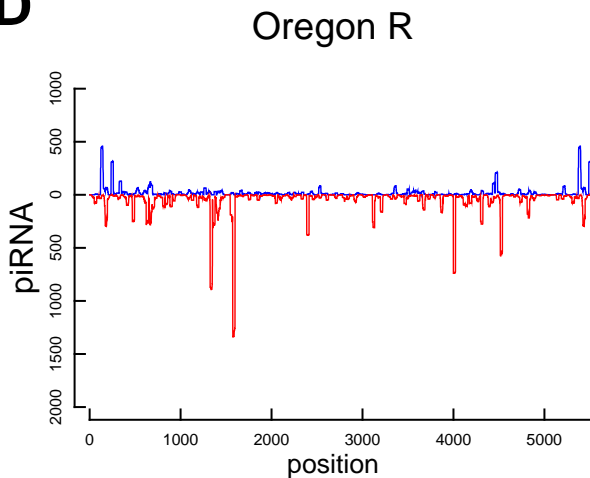
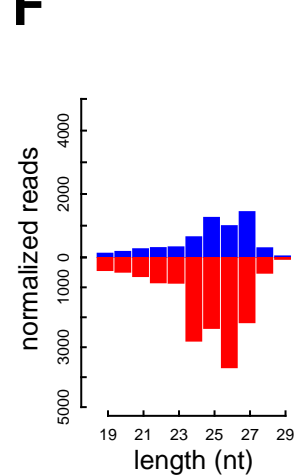
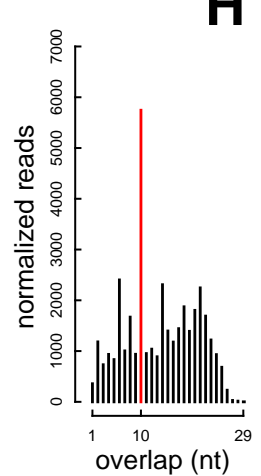
**F**



**H**

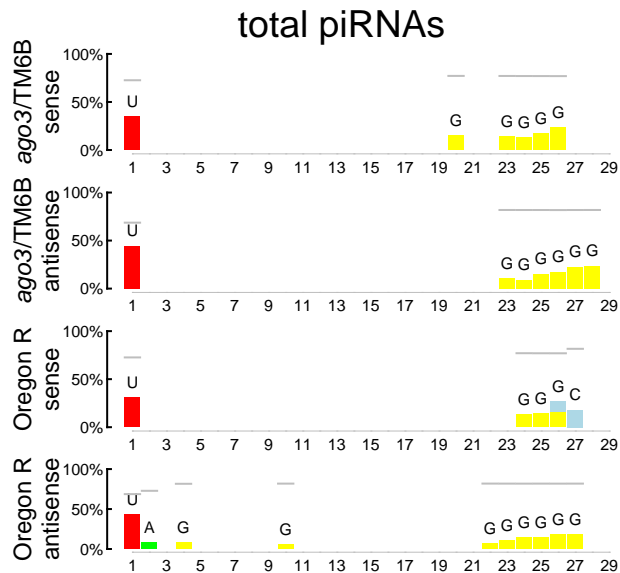


# mdg3

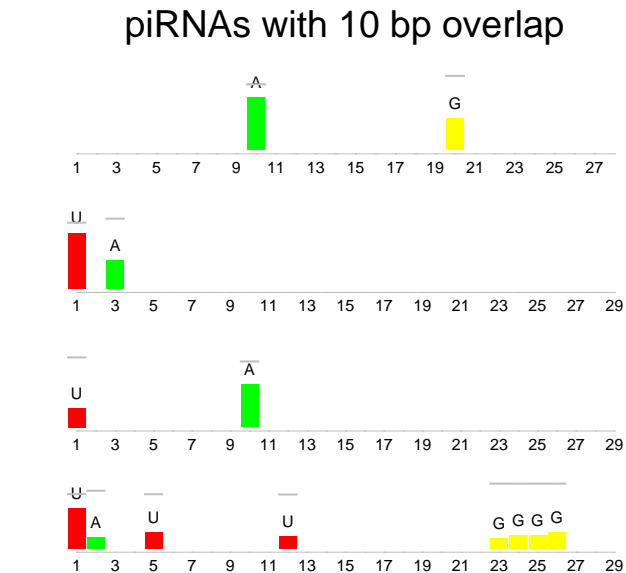
**A****B****C****E****G****D****F****H**

# *micropia*

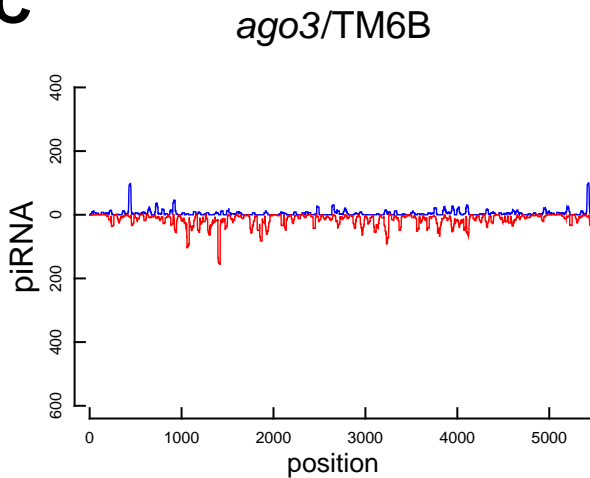
**A**



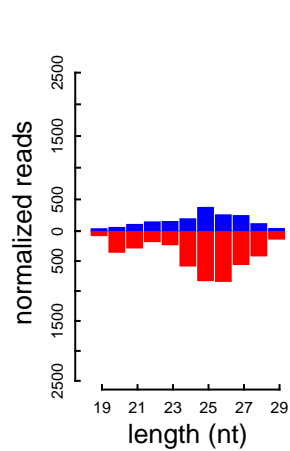
**B**



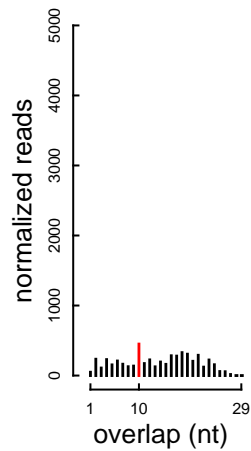
**C**



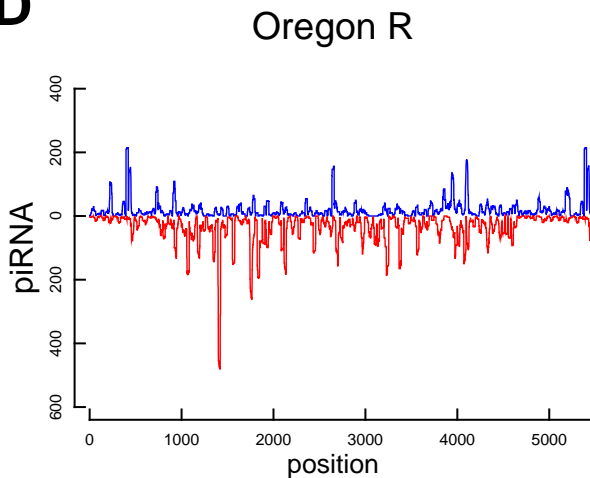
**E**



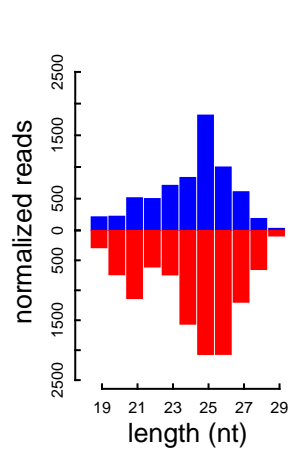
**G**



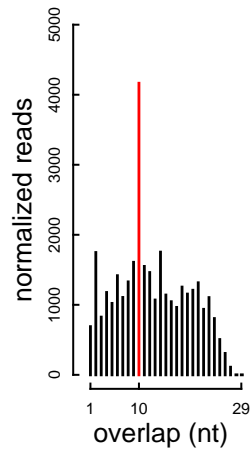
**D**



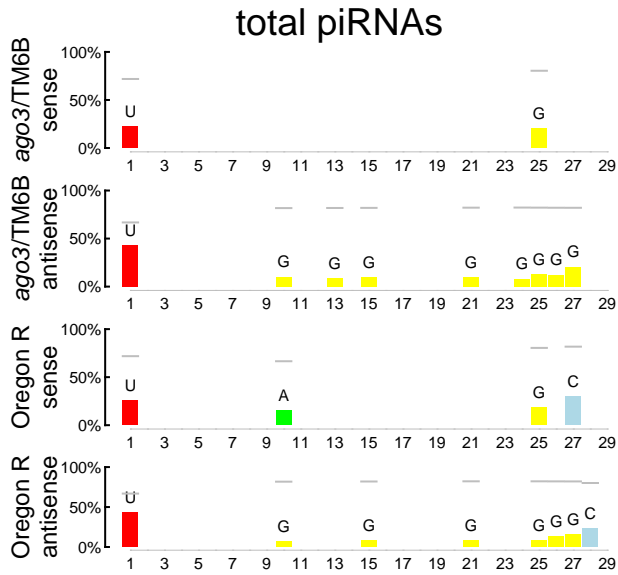
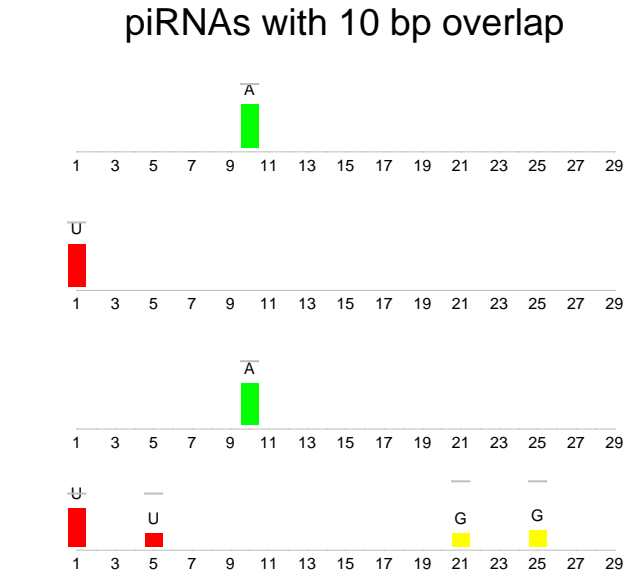
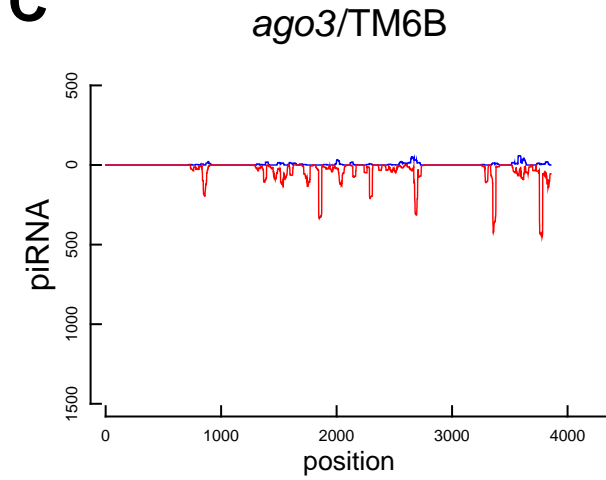
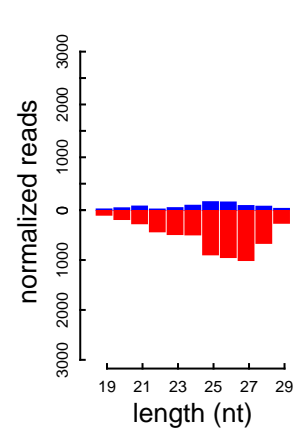
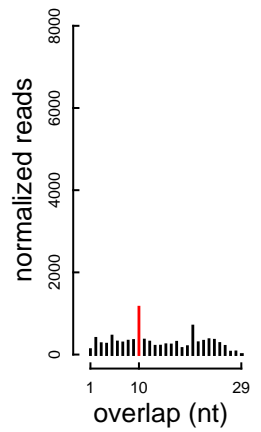
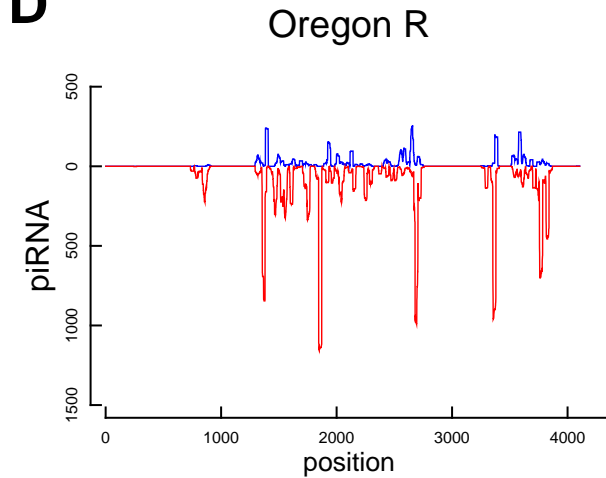
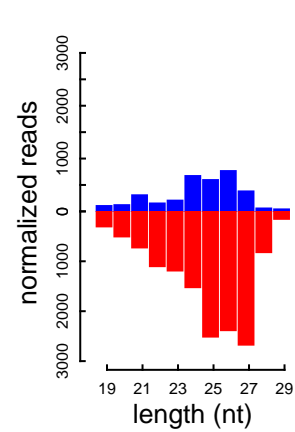
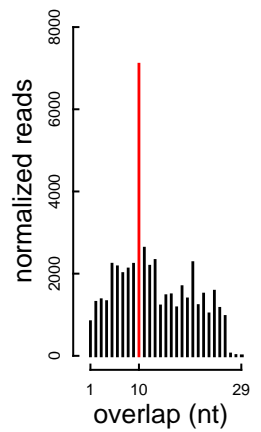
**F**



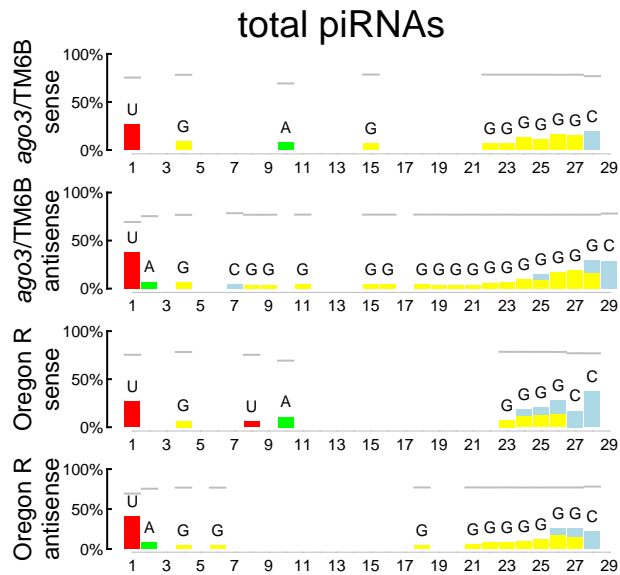
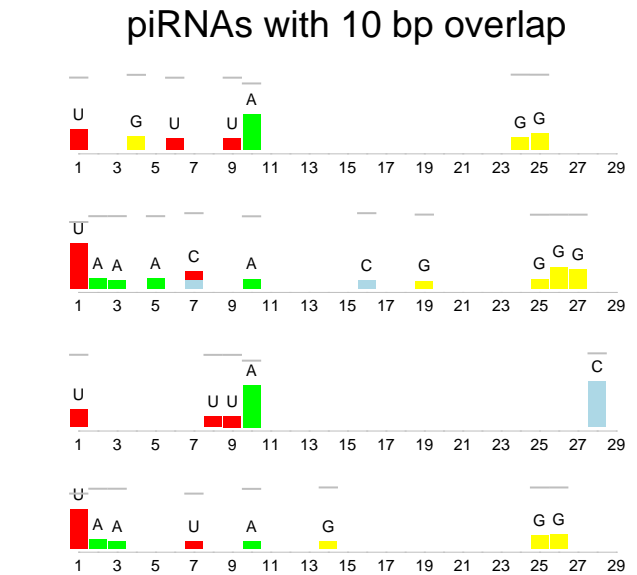
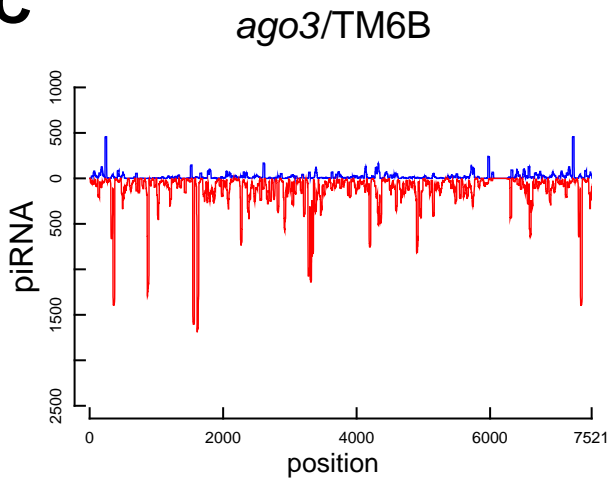
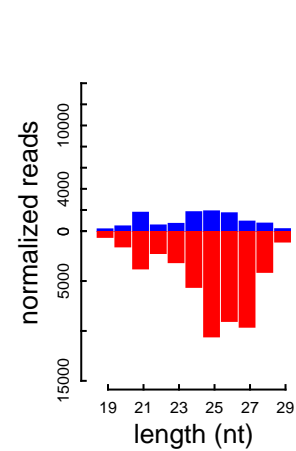
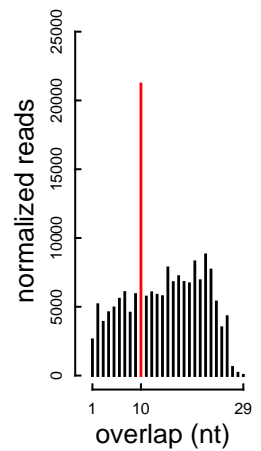
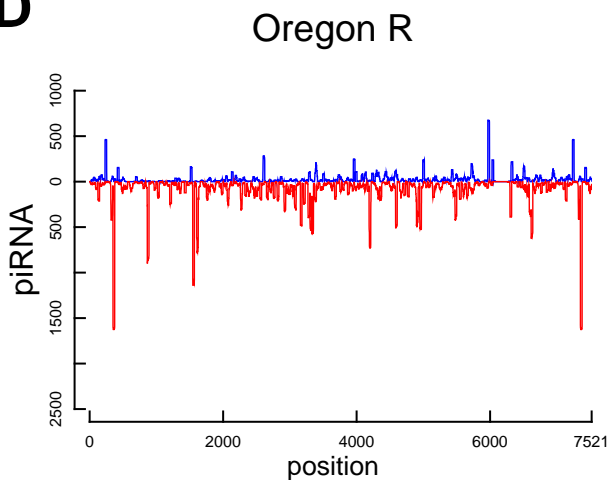
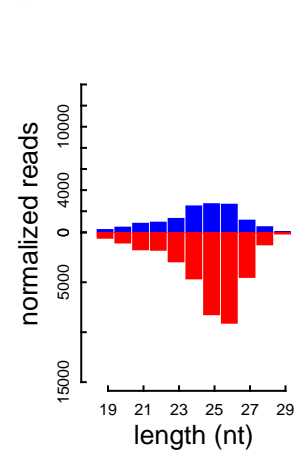
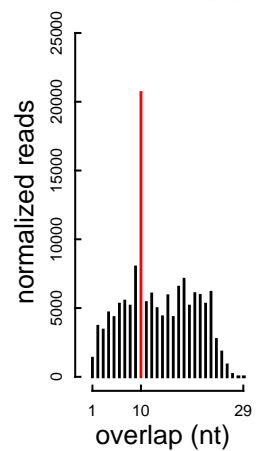
**H**



# NOF

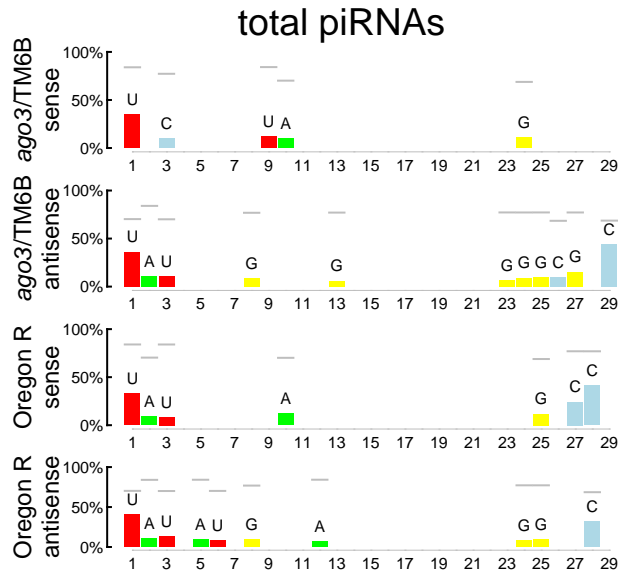
**A****B****C****E****G****D****F****H**

# opus

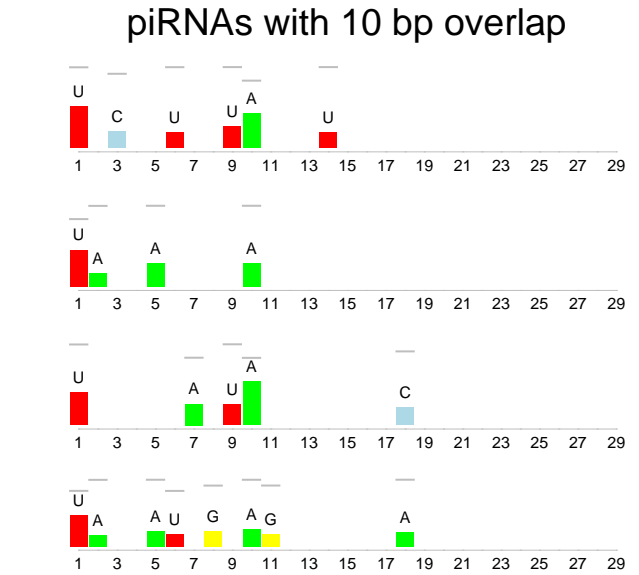
**A****B****C****E****G****D****F****H**

# Osvaldo

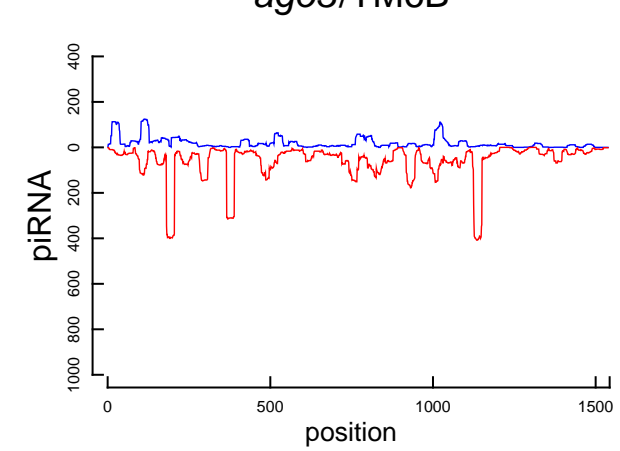
**A**



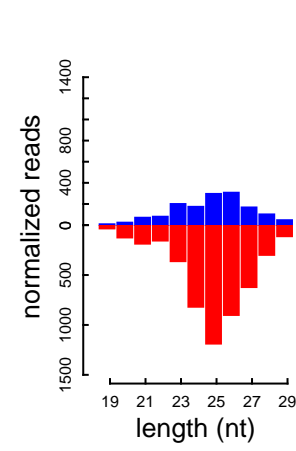
**B**



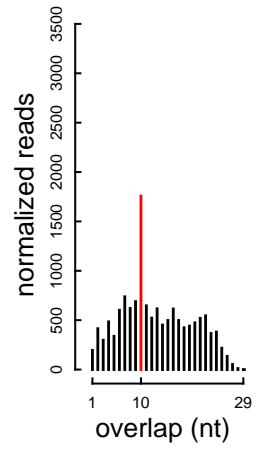
**C**



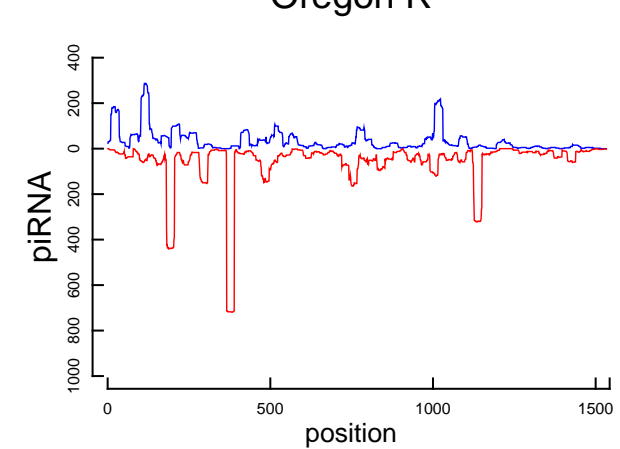
**E**



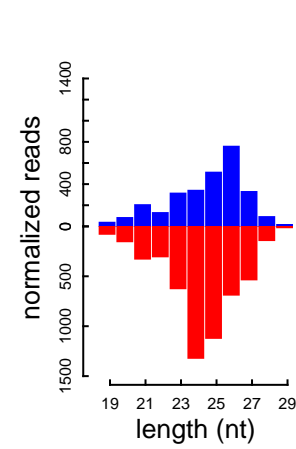
**G**



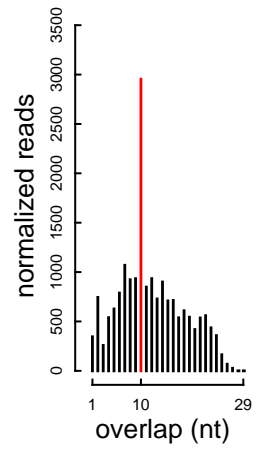
**D**



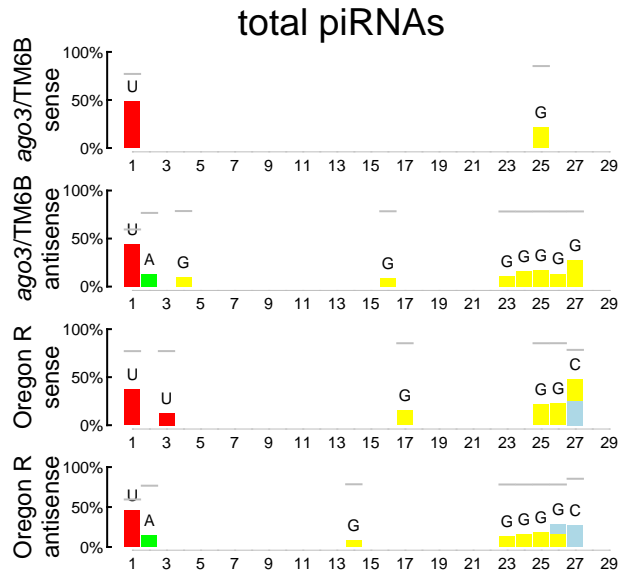
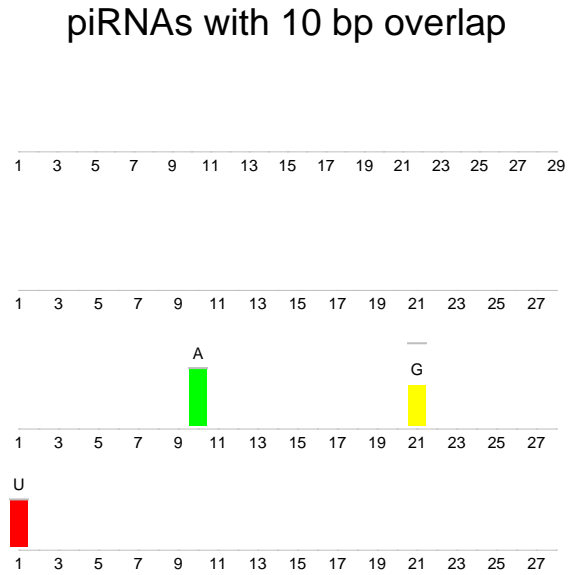
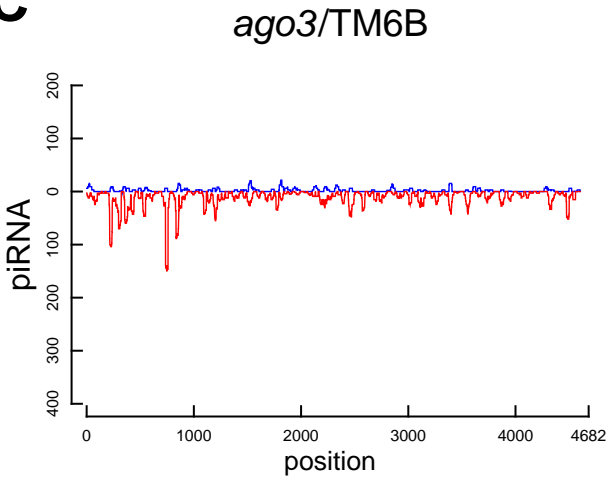
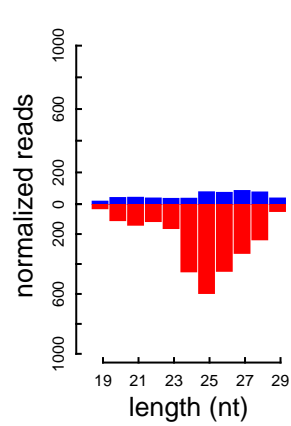
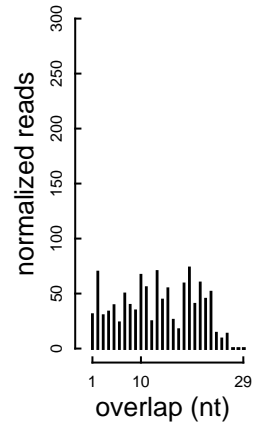
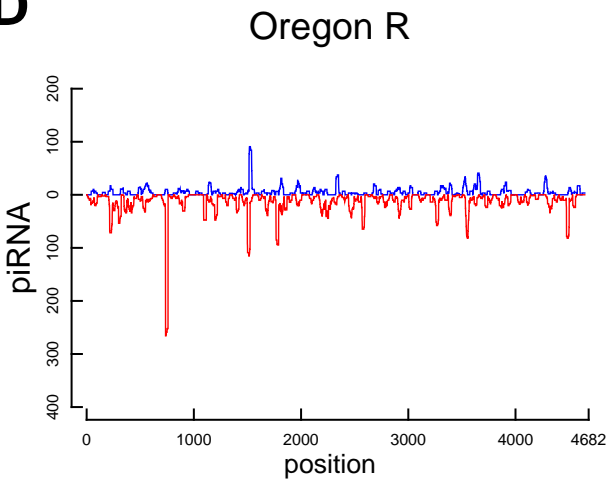
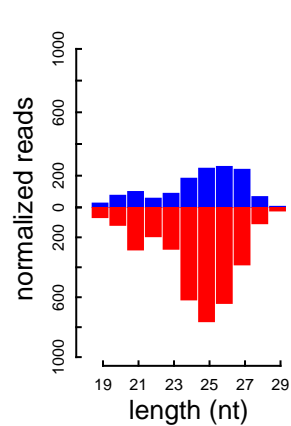
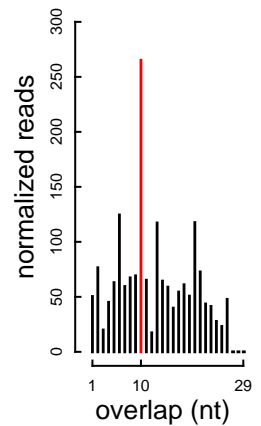
**F**



**H**

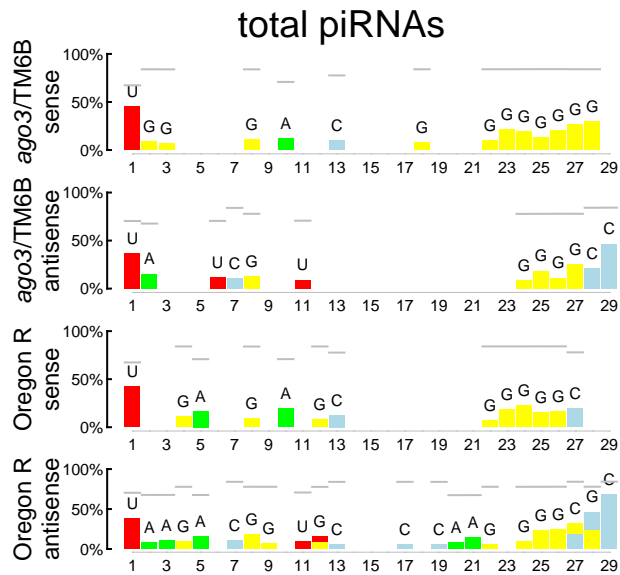
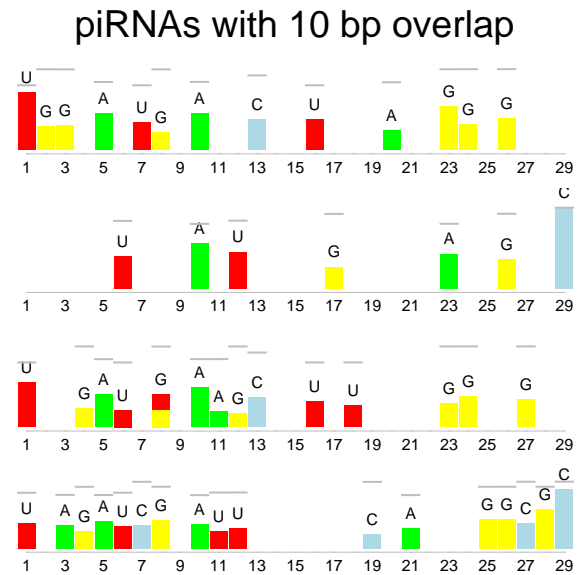
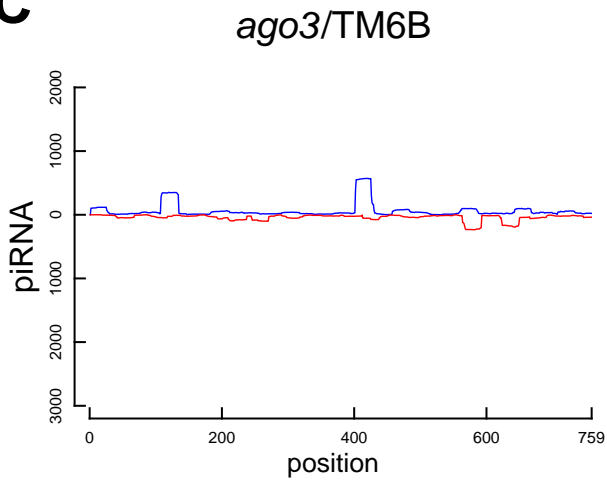
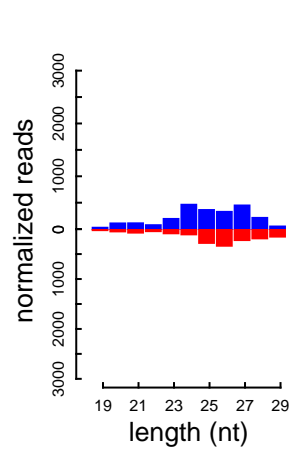
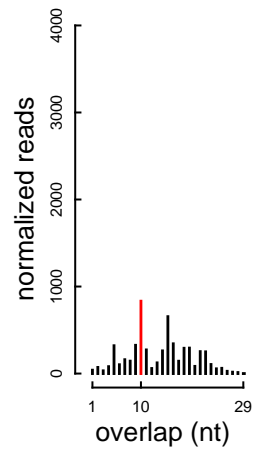
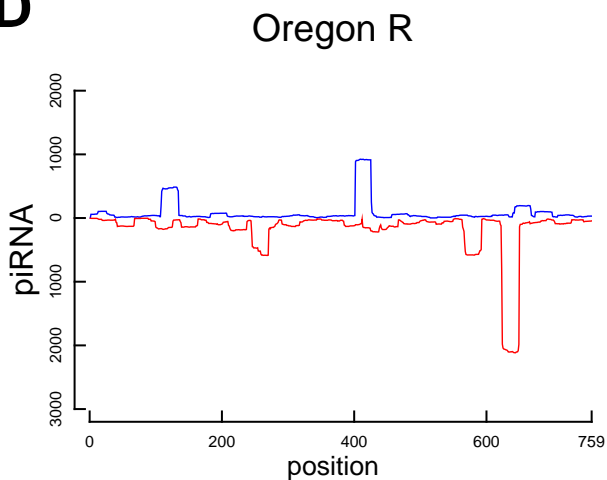
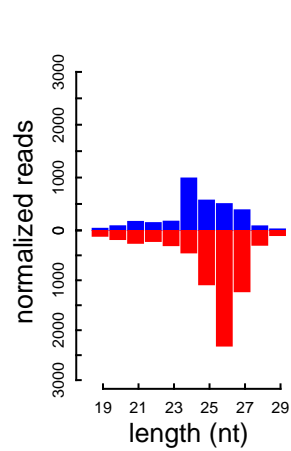
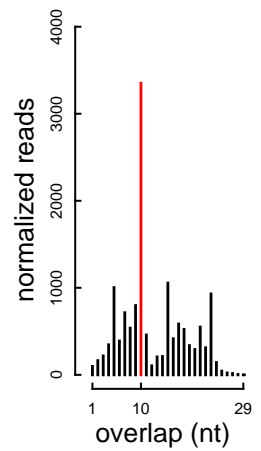


# Porto1

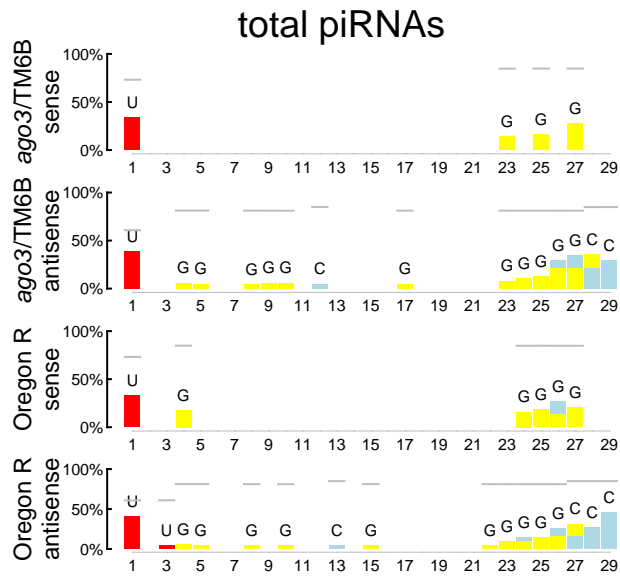
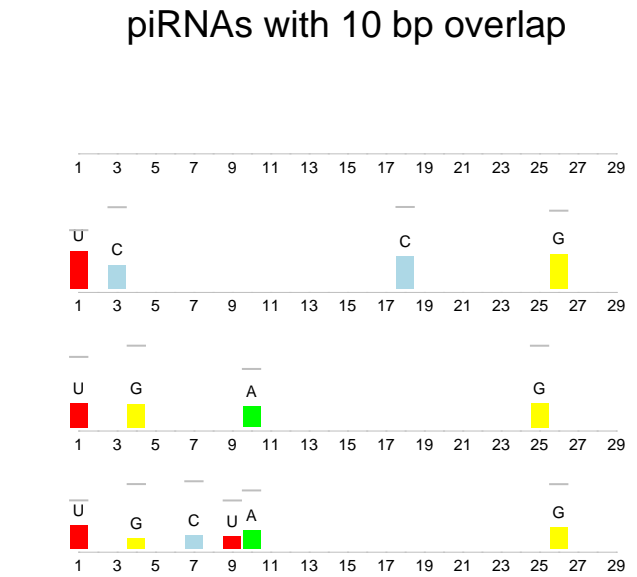
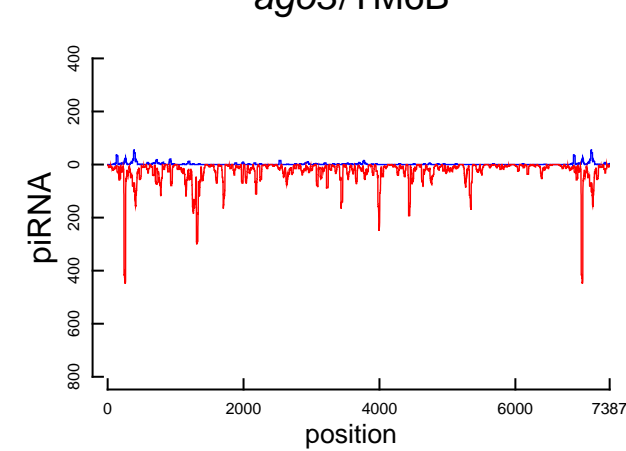
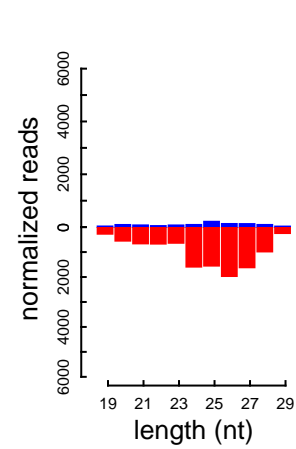
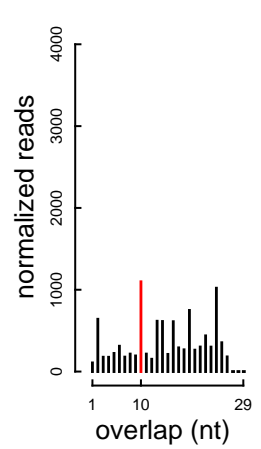
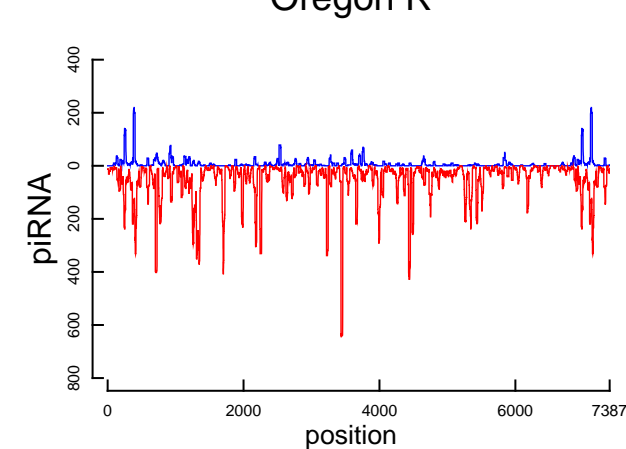
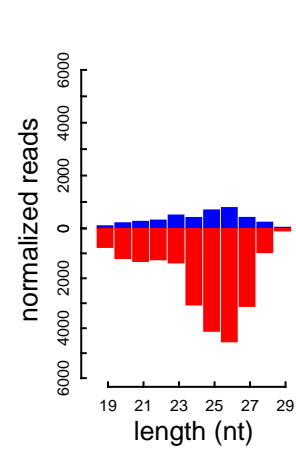
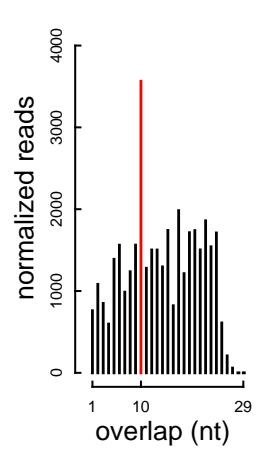
**A****B****C****E****G****D****F****H**



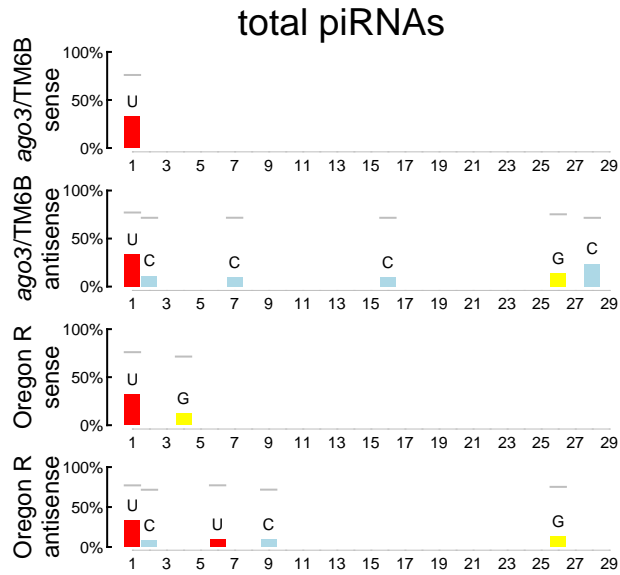
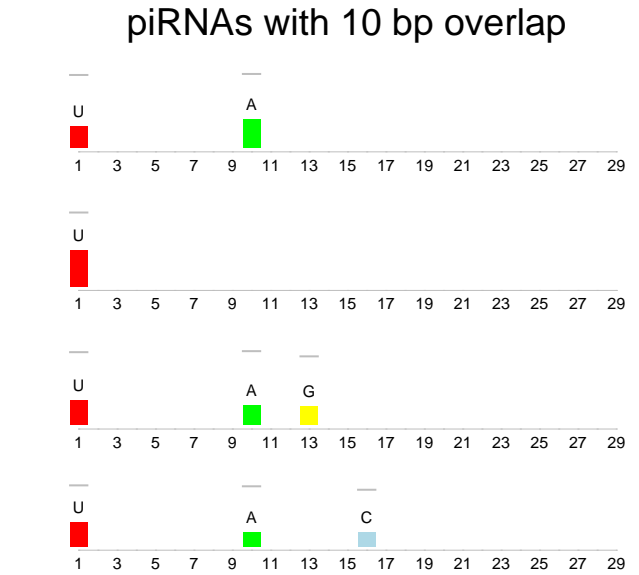
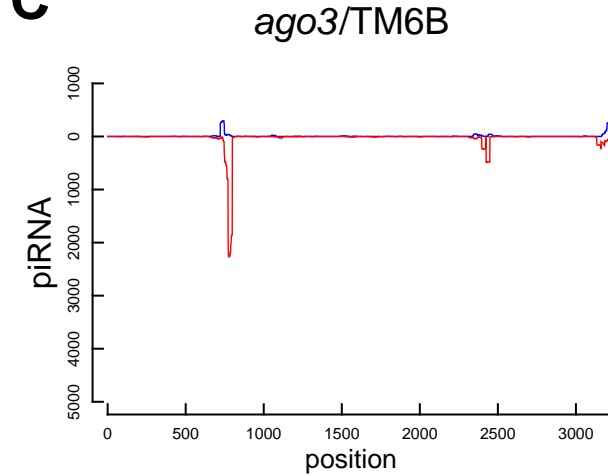
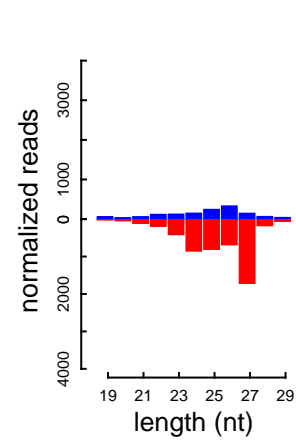
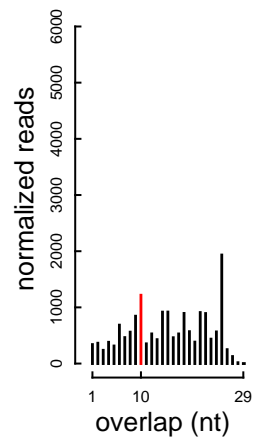
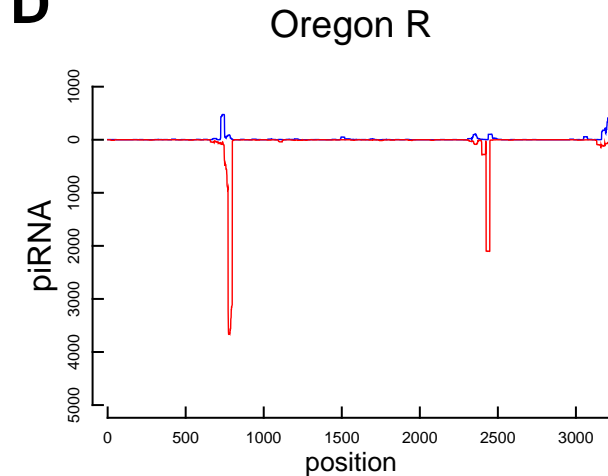
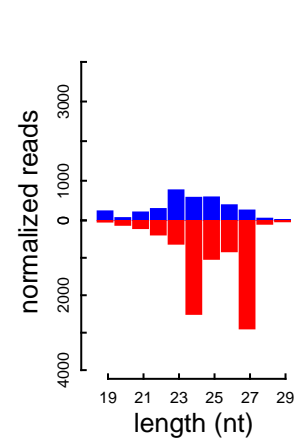
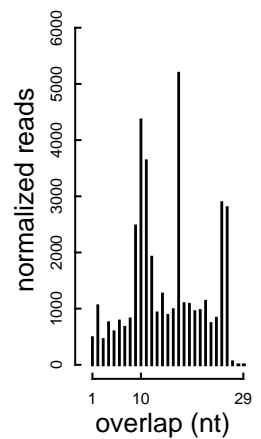
# Q element

**A****B****C****E****G****D****F****H**

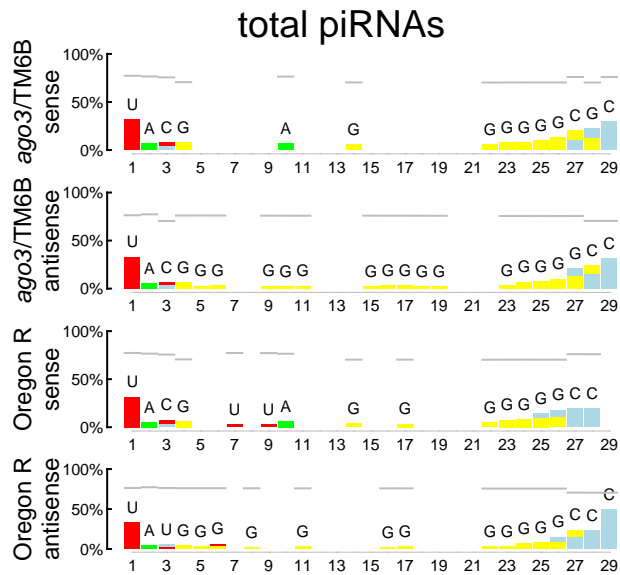
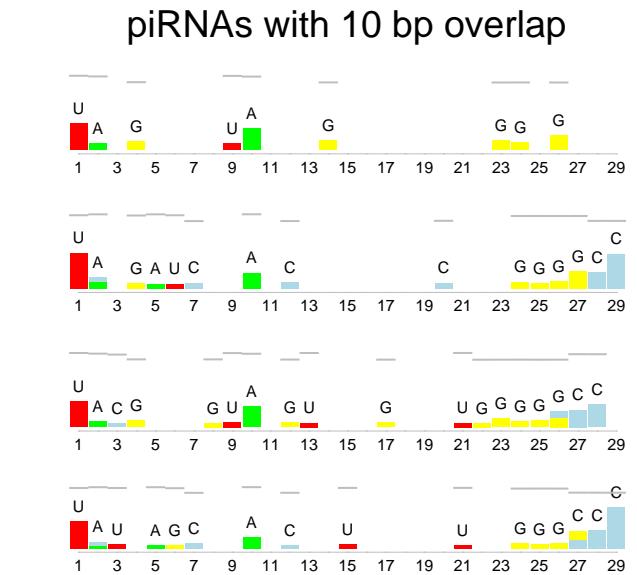
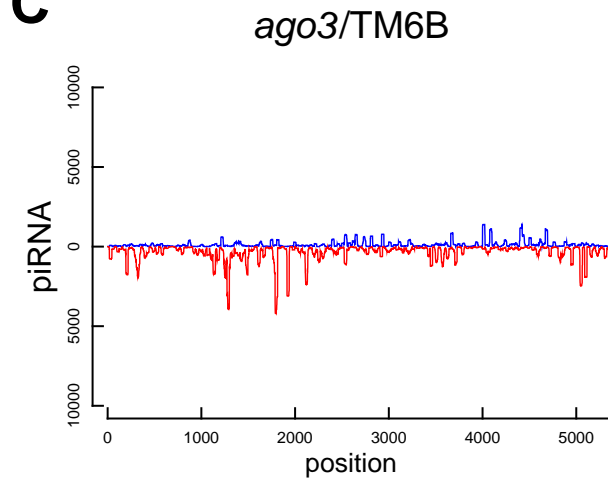
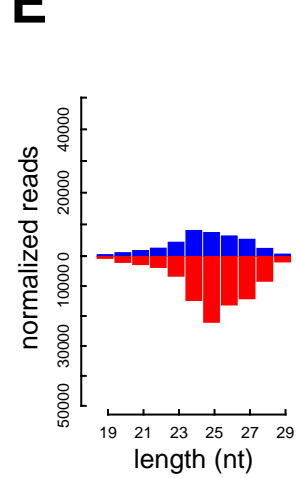
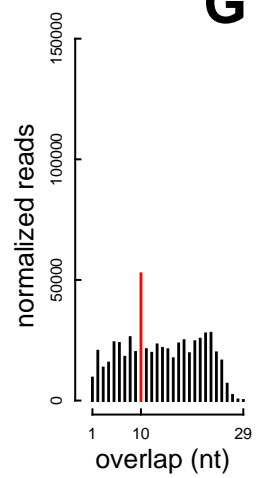
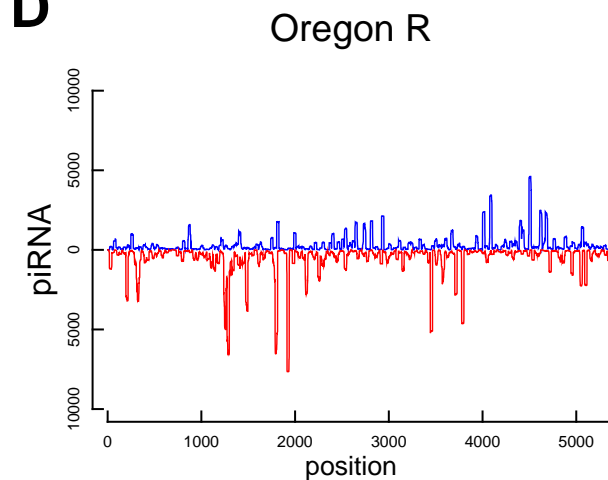
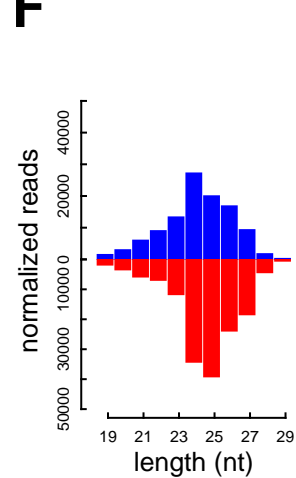
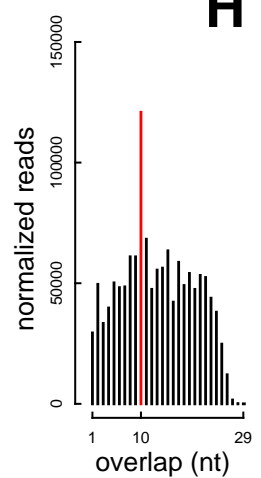
# Quasimodo

**A****B****C****E****G****D****F****H**

# R1 2

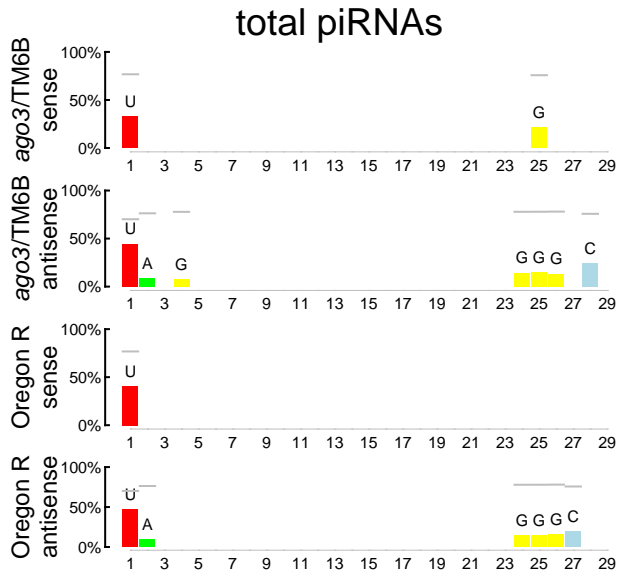
**A****B****C****E****G****D****F****H**

# R1A1 element

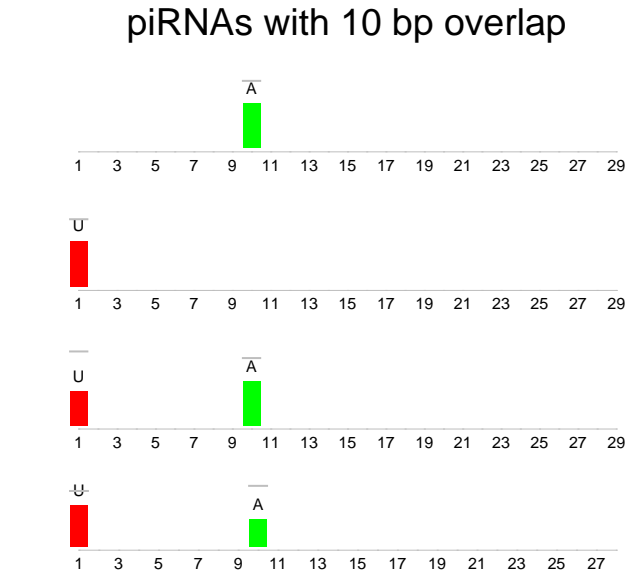
**A****B****C****E****G****D****F****H**

# R2 element

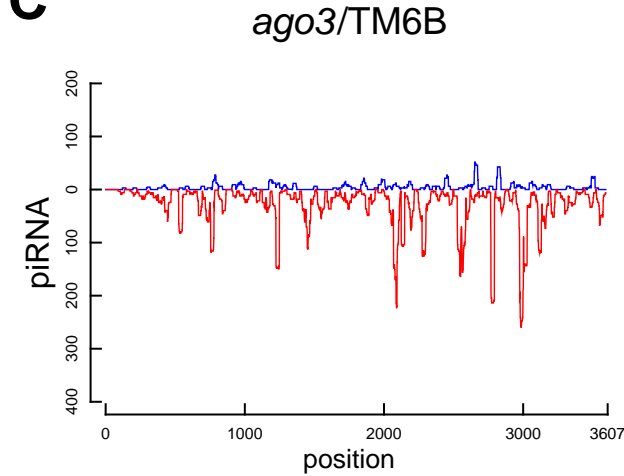
**A**



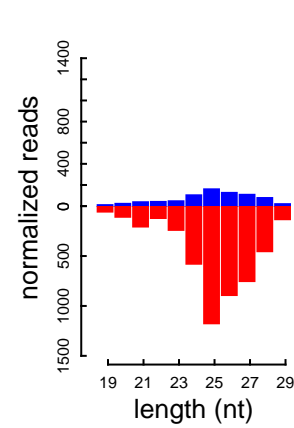
**B**



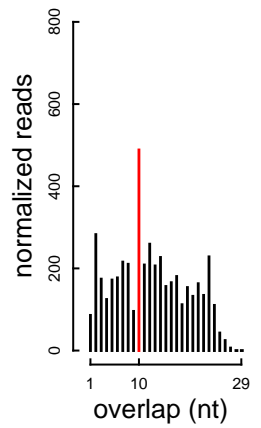
**C**



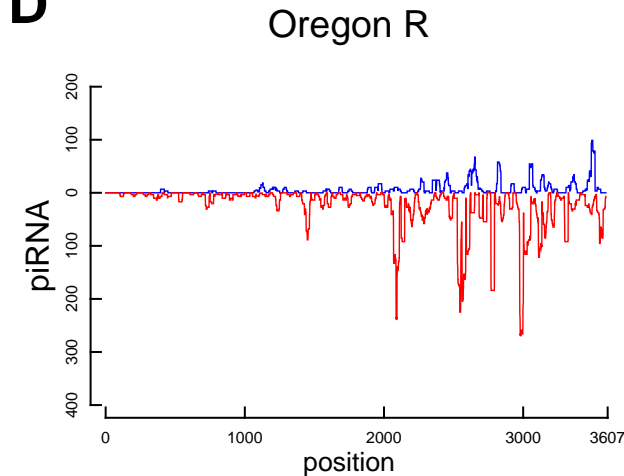
**E**



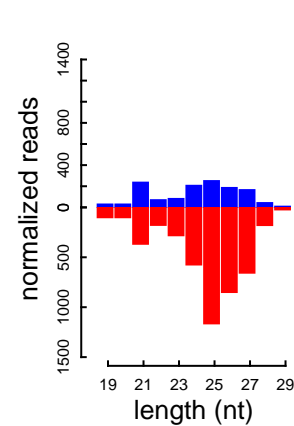
**G**



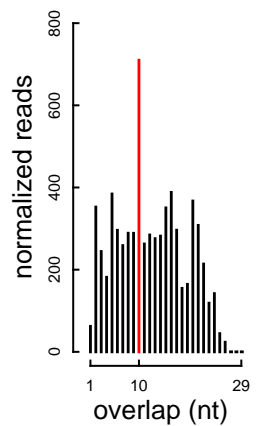
**D**



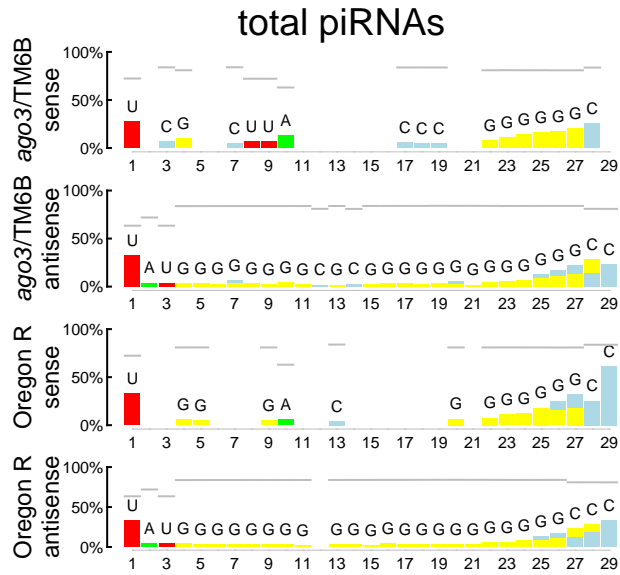
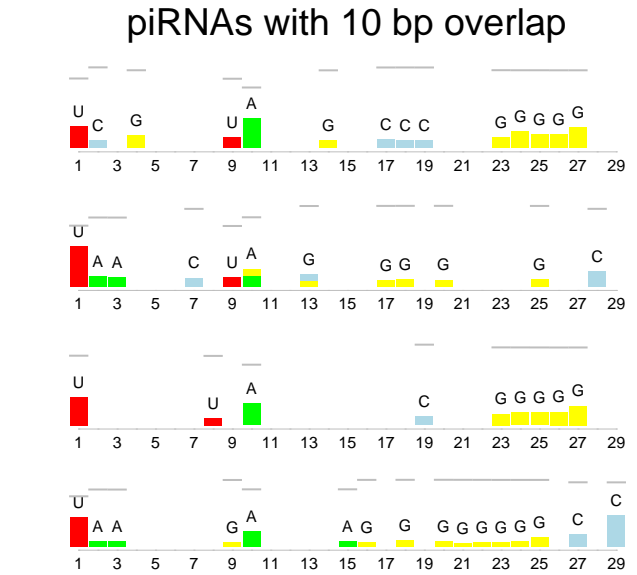
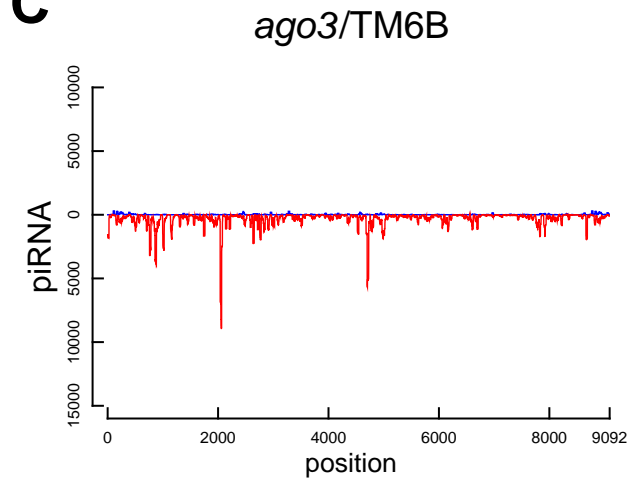
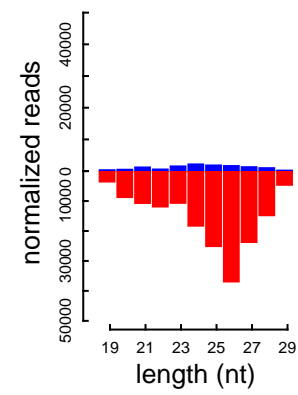
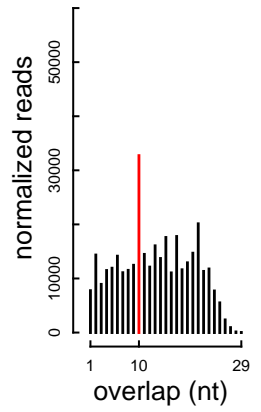
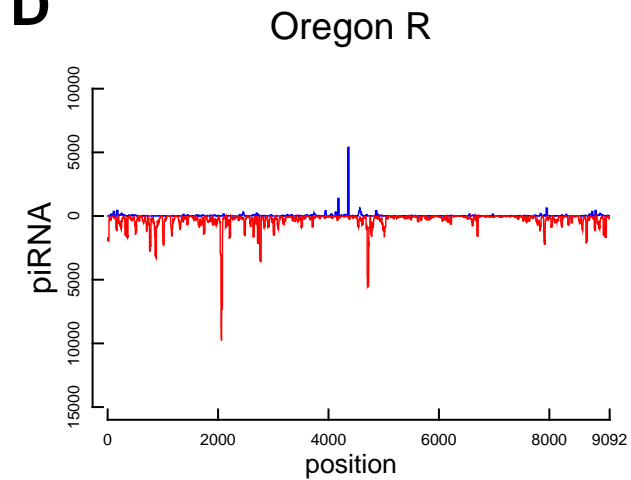
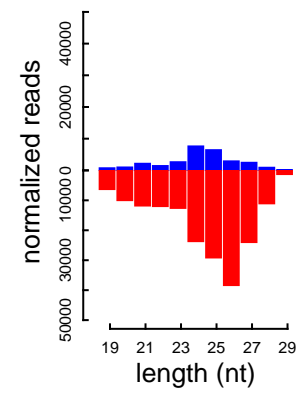
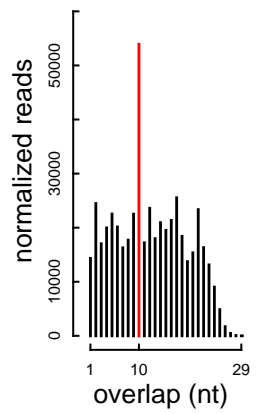
**F**



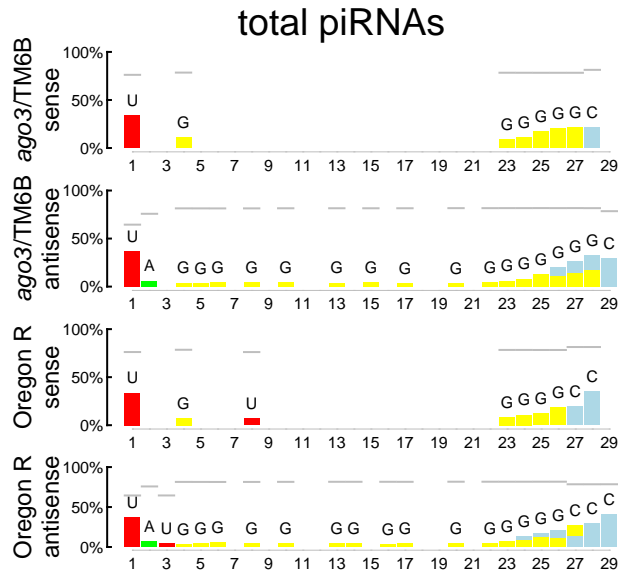
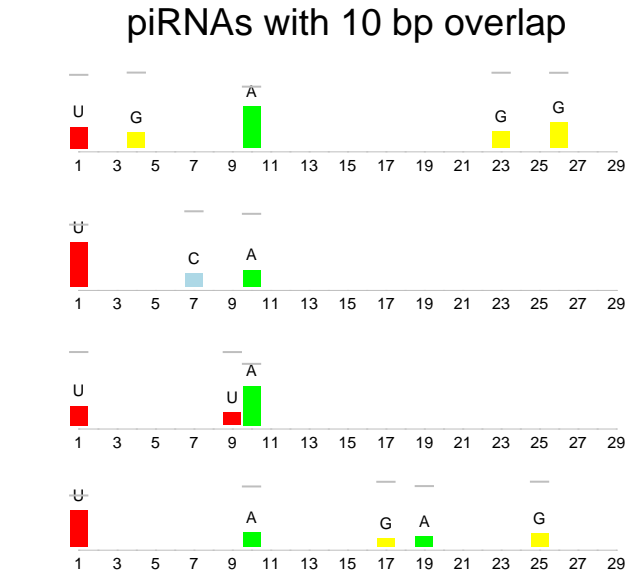
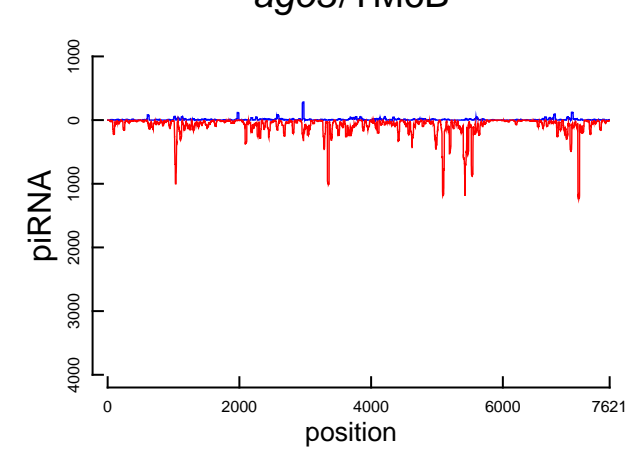
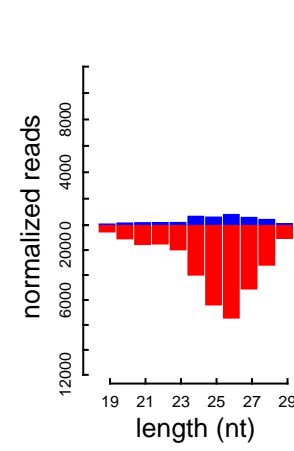
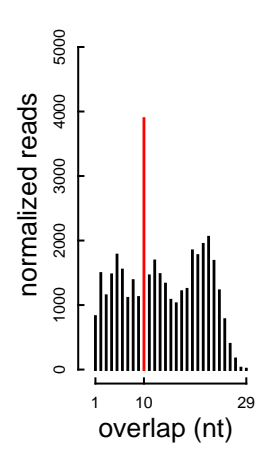
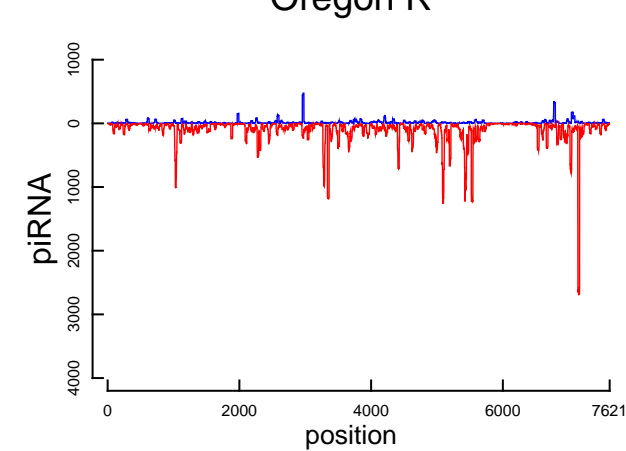
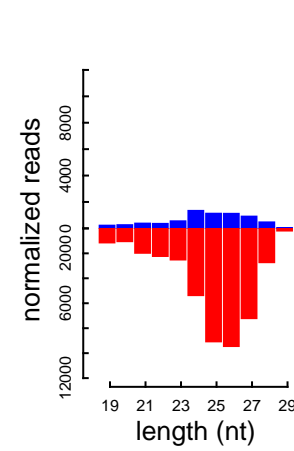
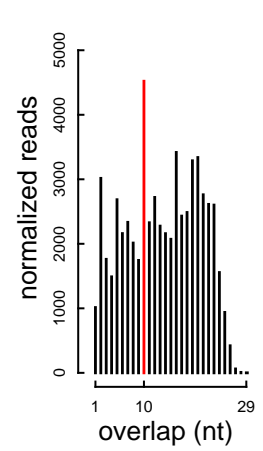
**H**



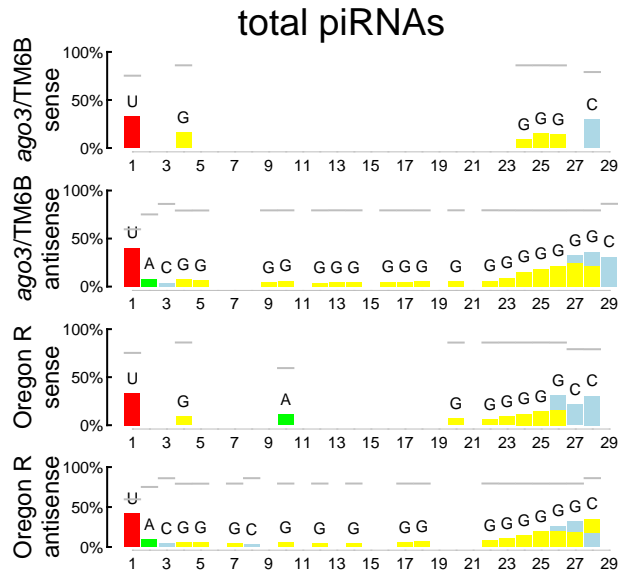
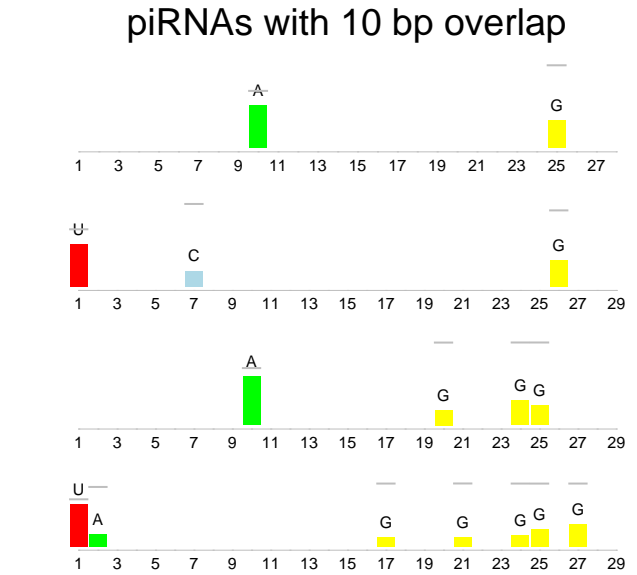
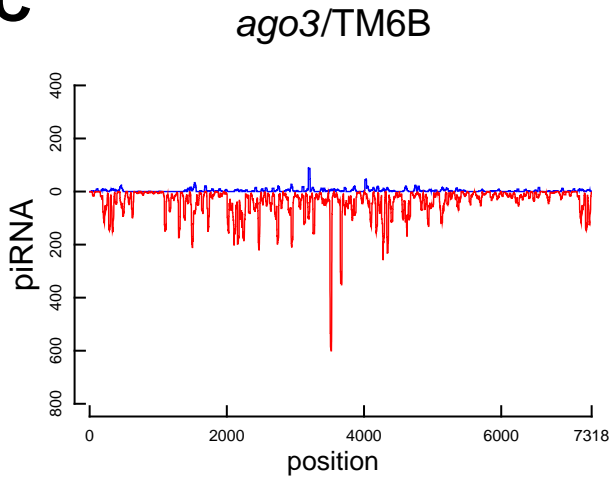
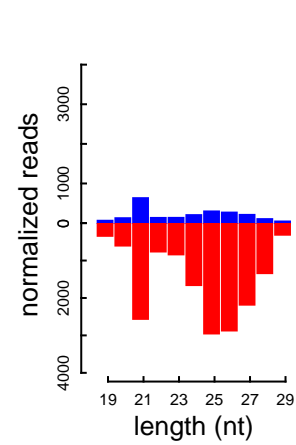
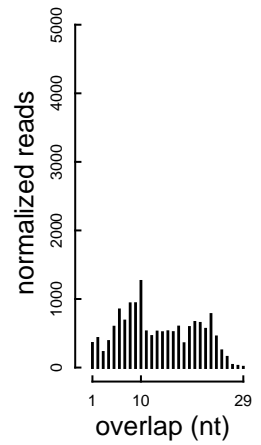
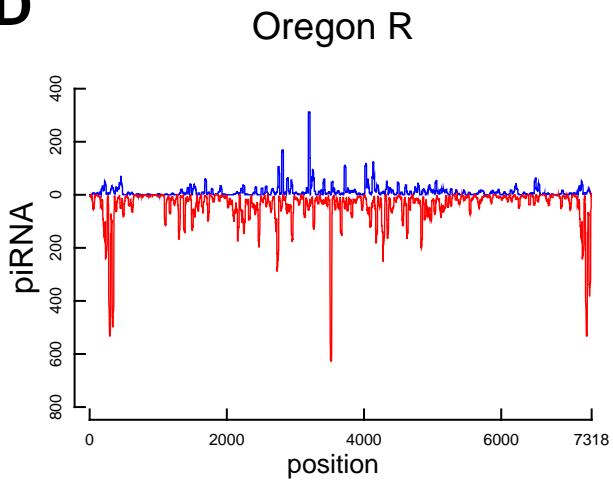
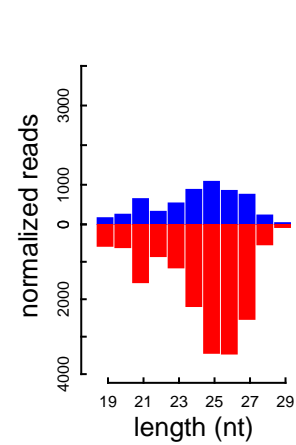
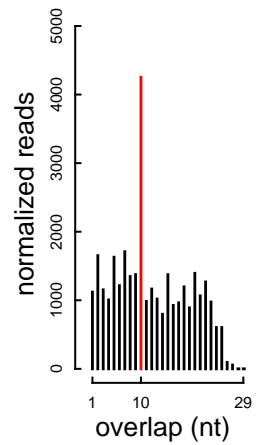
# roo

**A****B****C****E****G****D****F****H**

# rooA

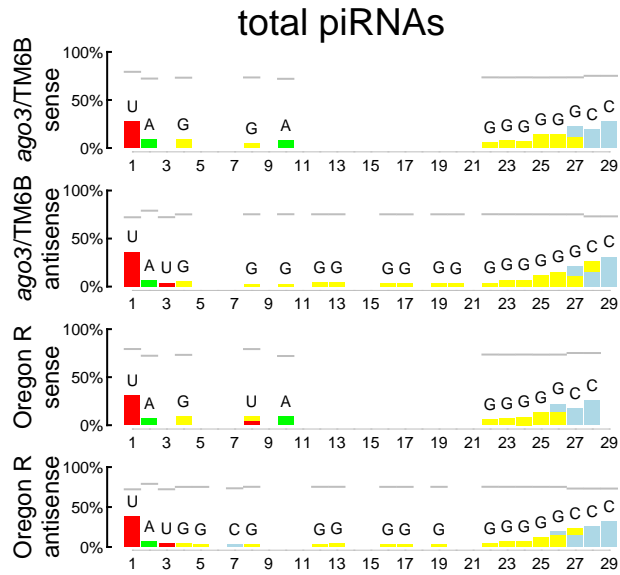
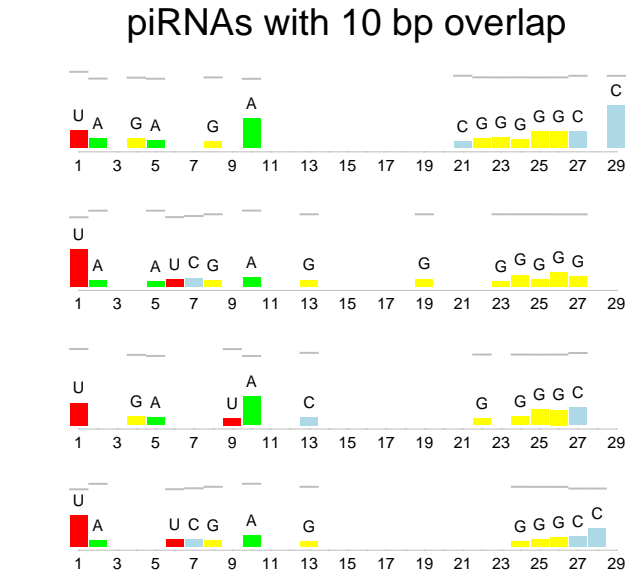
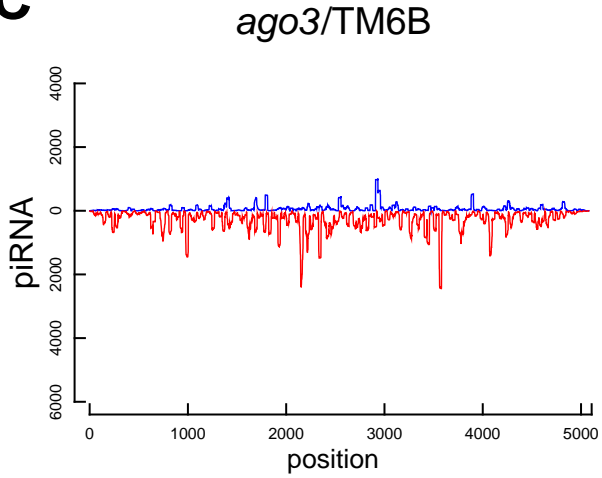
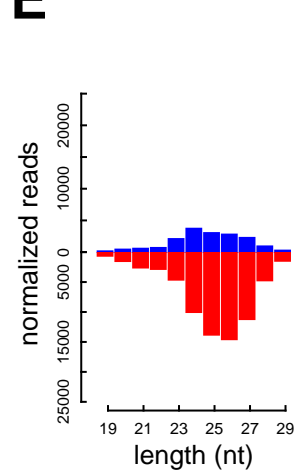
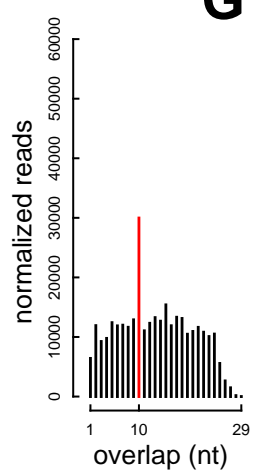
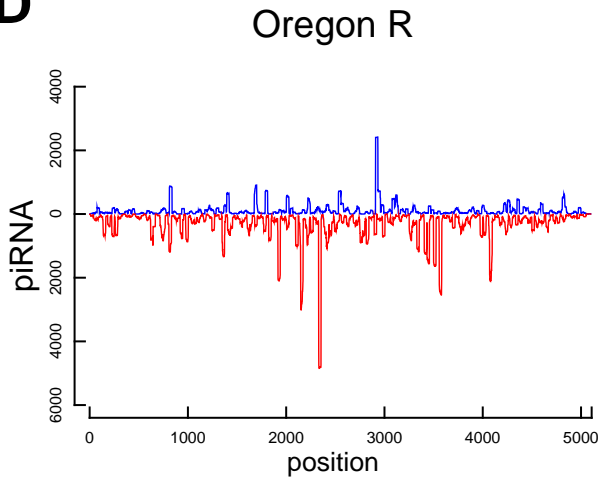
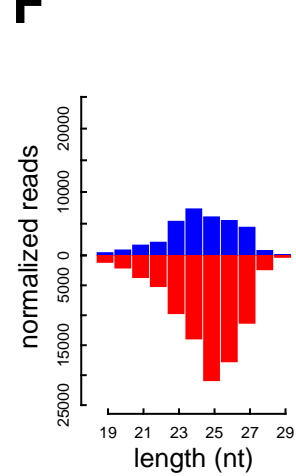
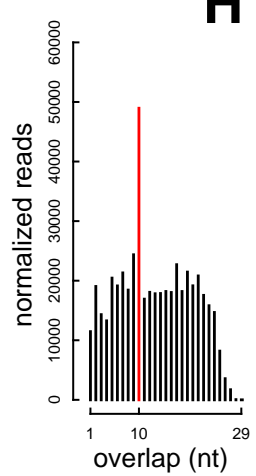
**A****B****C****E****G****D****F****H**

# rover

**A****B****C****E****G****D****F****H**

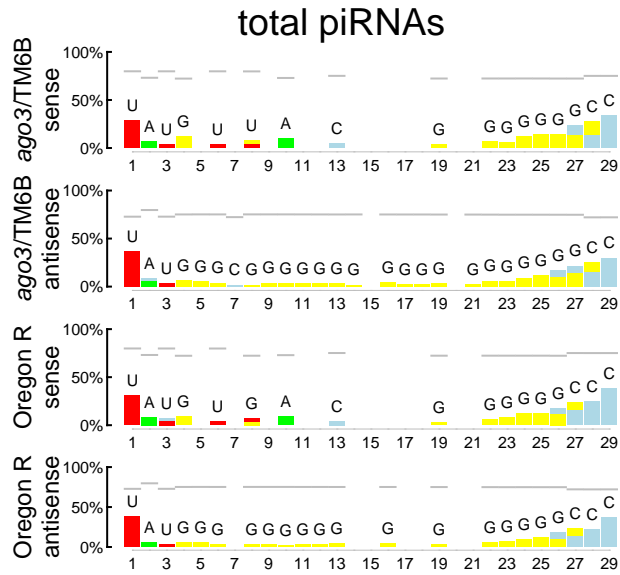


# Rt1a

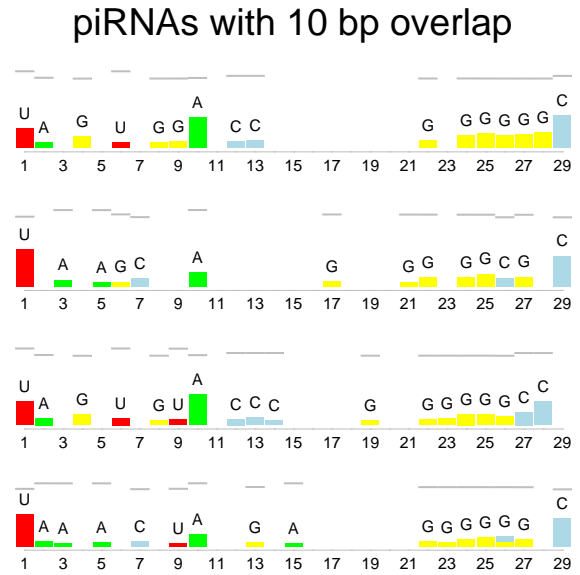
**A****B****C****E****G****D****F****H**

# Rt1b

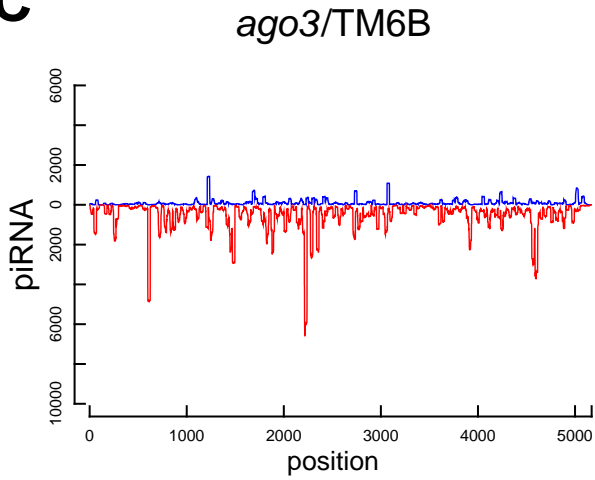
**A**



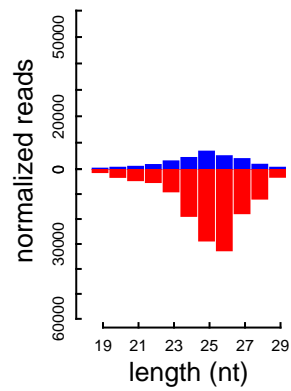
**B**



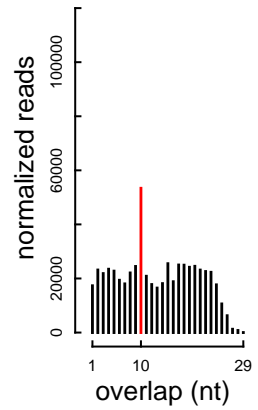
**C**



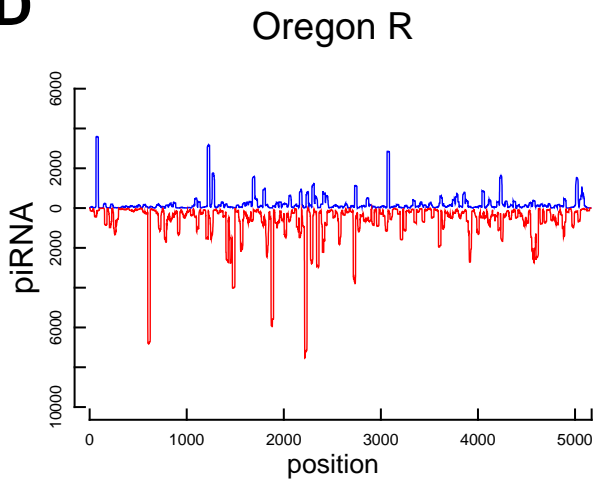
**E**



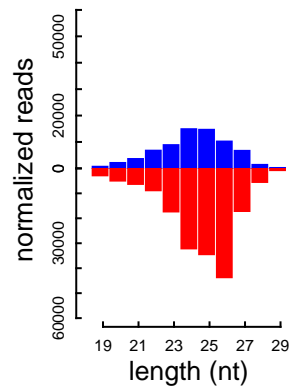
**G**



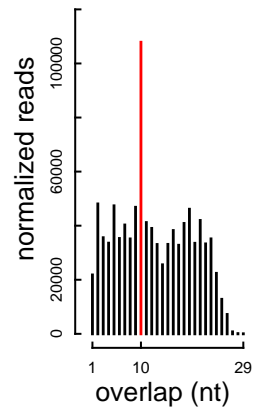
**D**



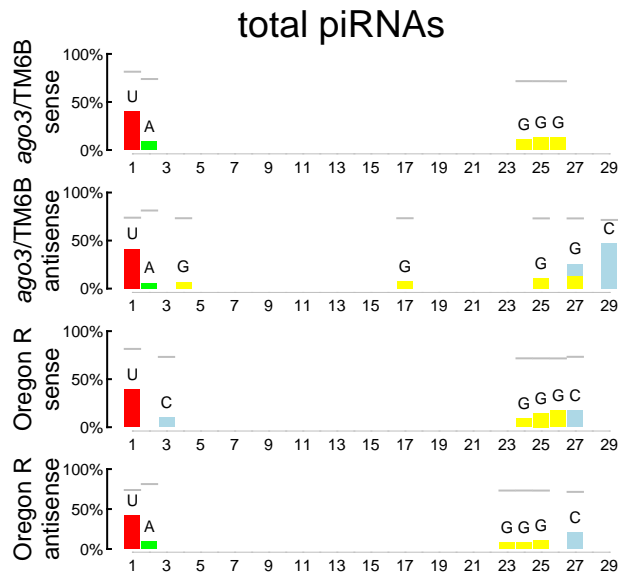
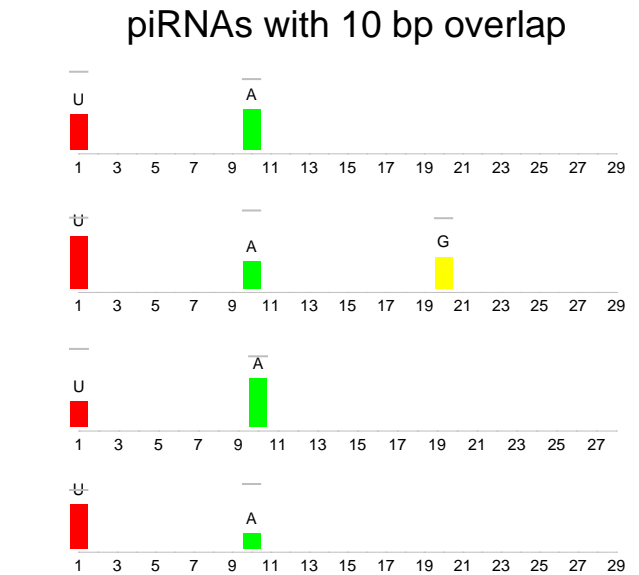
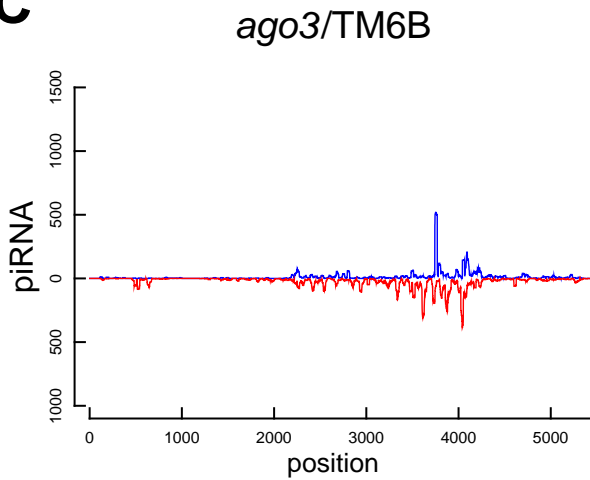
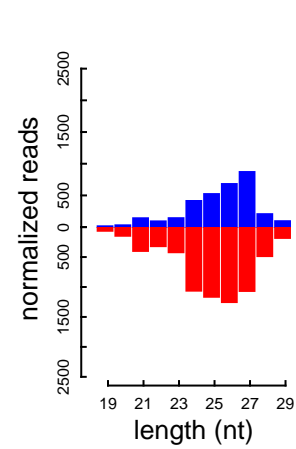
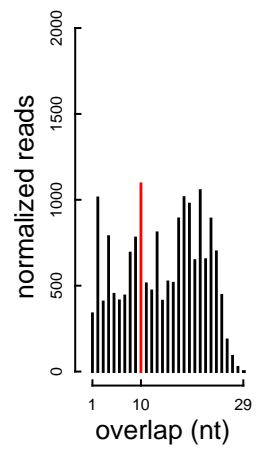
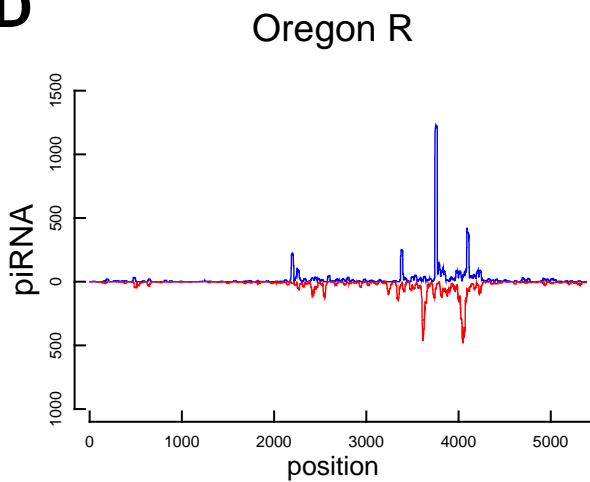
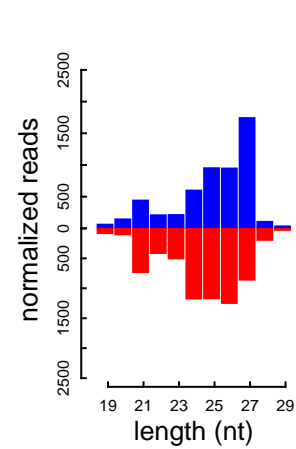
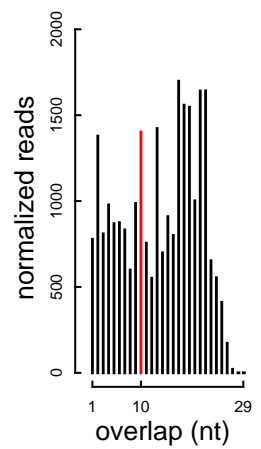
**F**



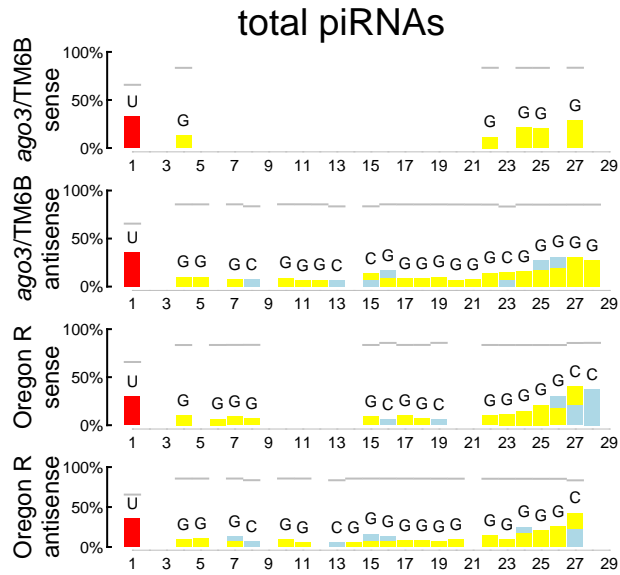
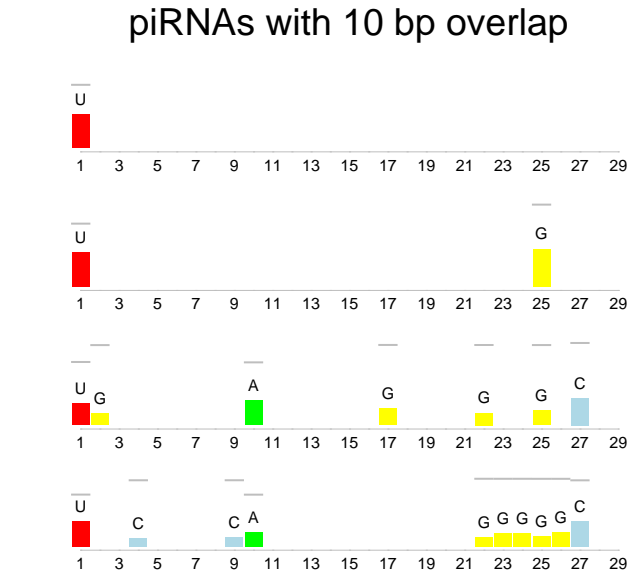
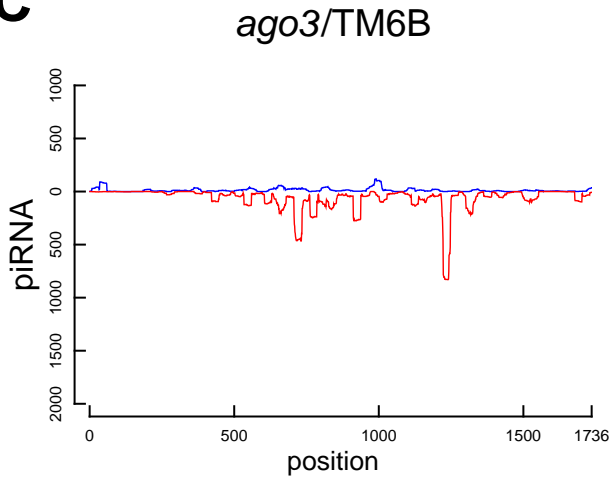
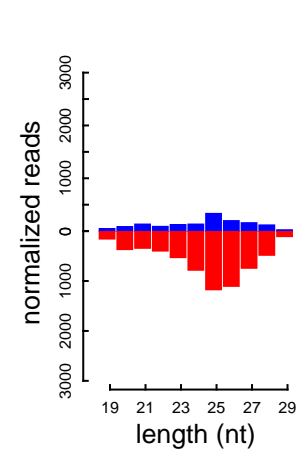
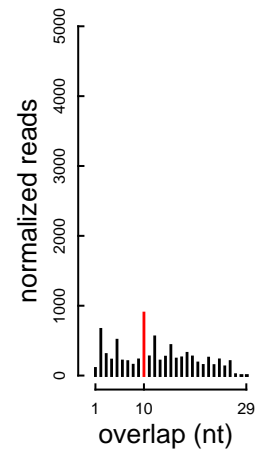
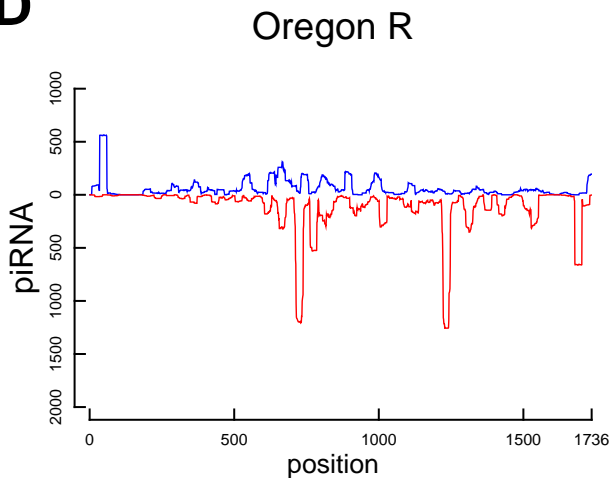
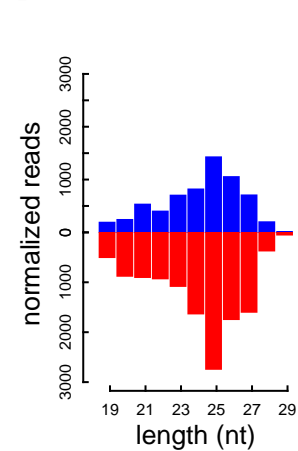
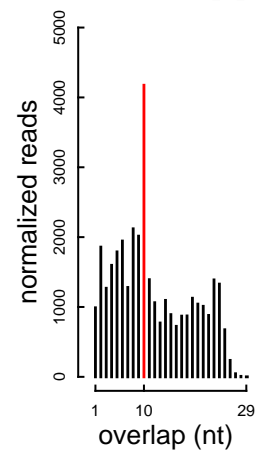
**H**



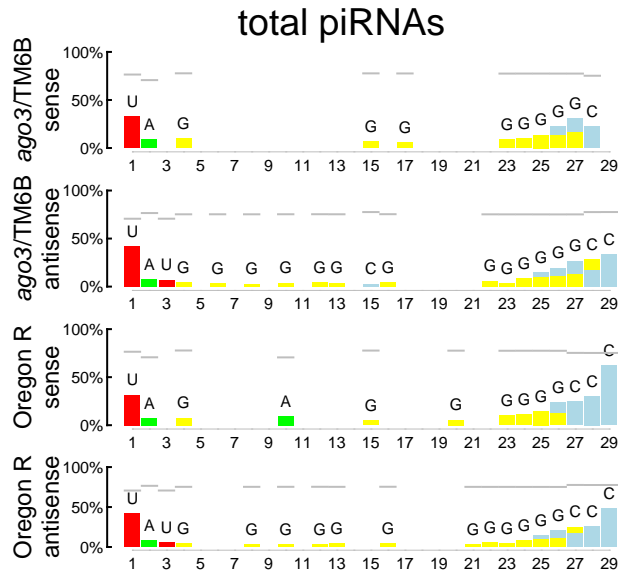
# Rt1c

**A****B****C****E****G****D****F****H**

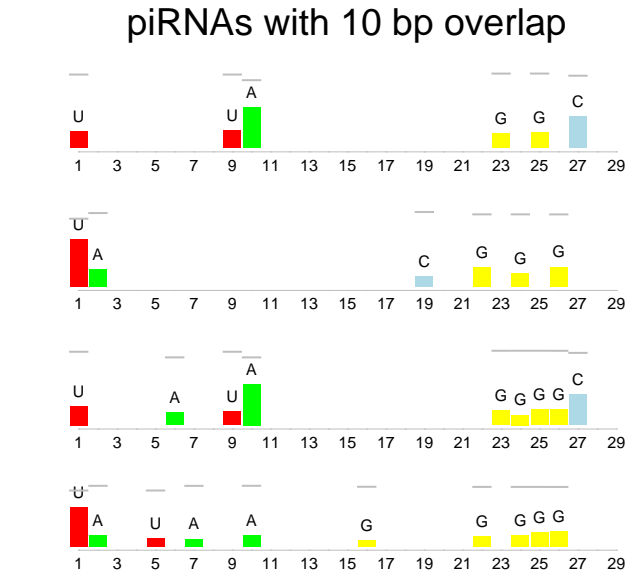
# S element

**A****B****C****E****G****D****F****H**

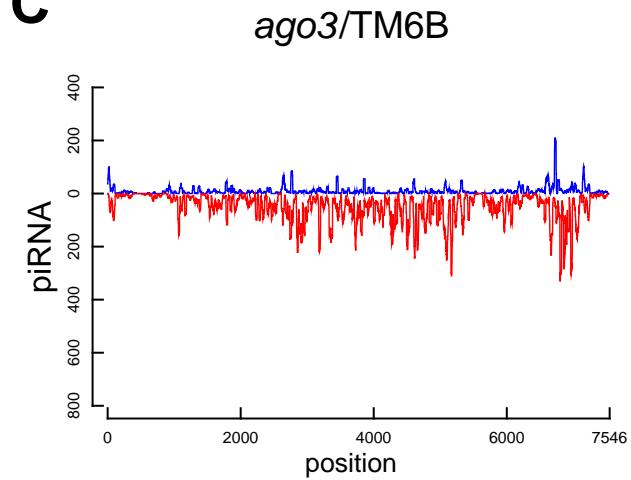
**A**



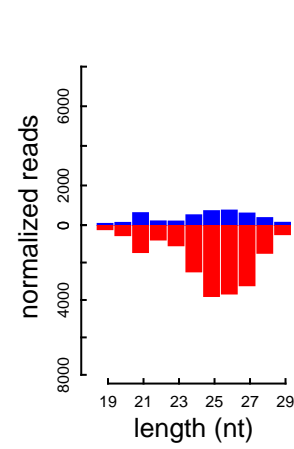
**B**



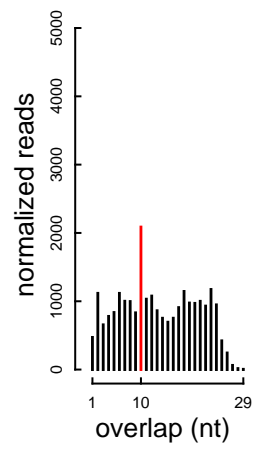
**C**



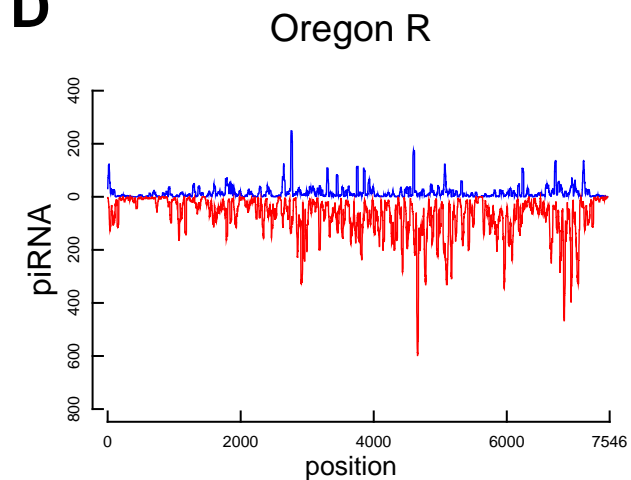
**E**



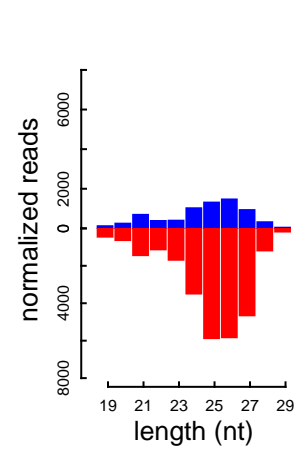
**G**



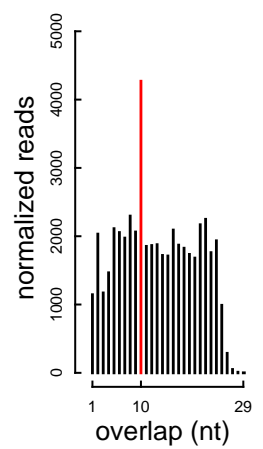
**D**



**F**

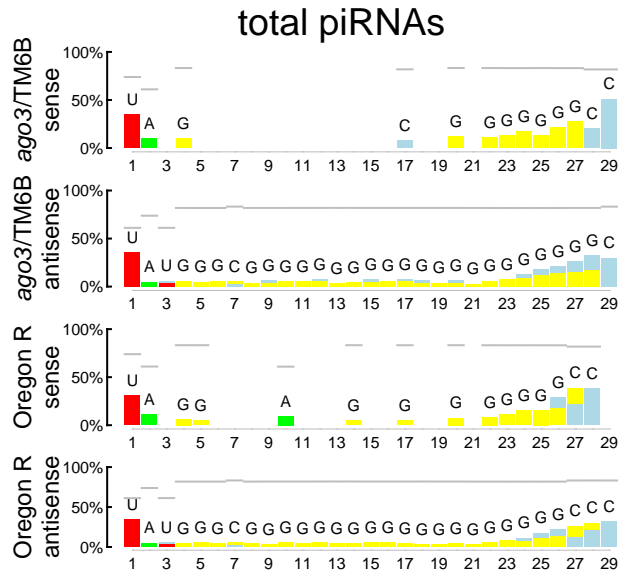


**H**

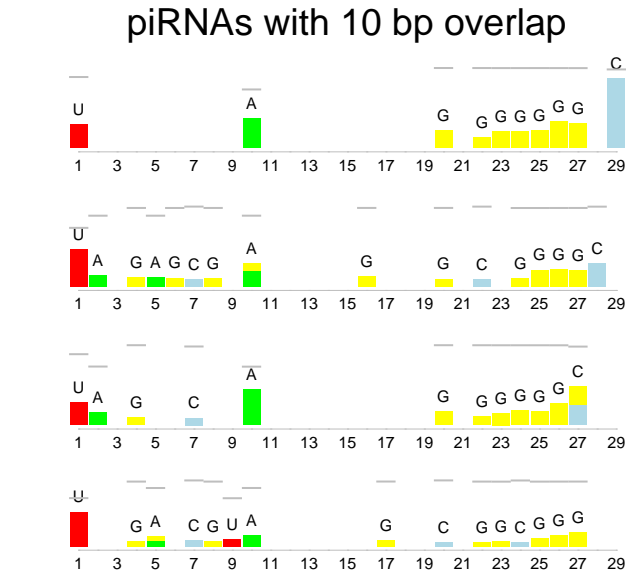


# Stalker

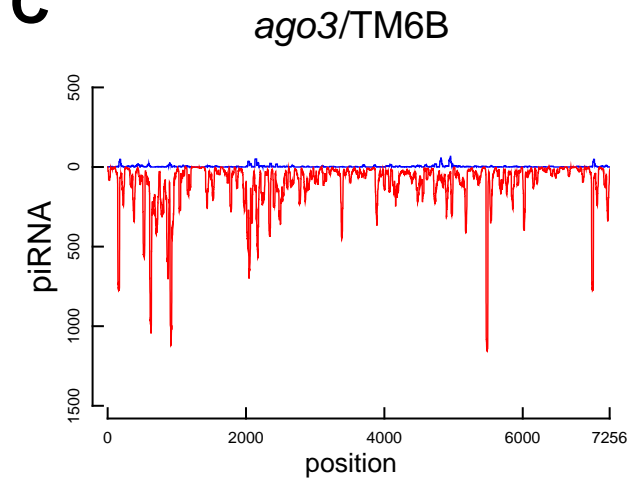
**A**



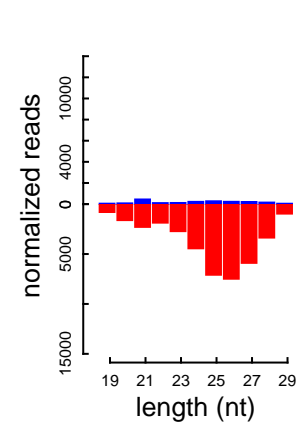
**B**



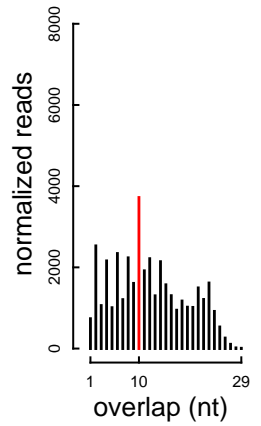
**C**



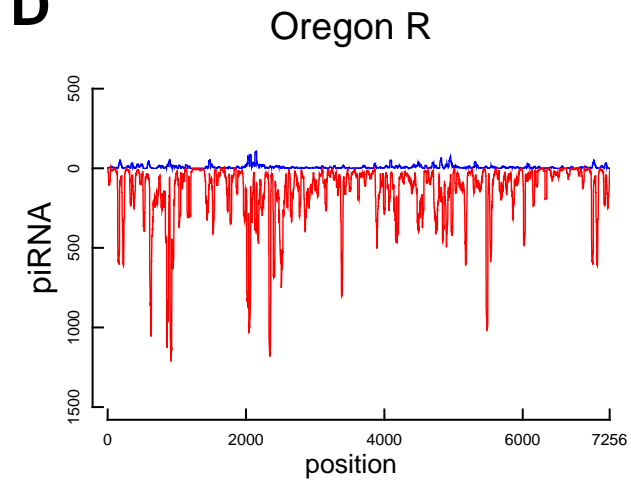
**E**



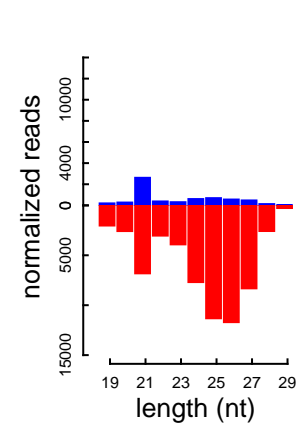
**G**



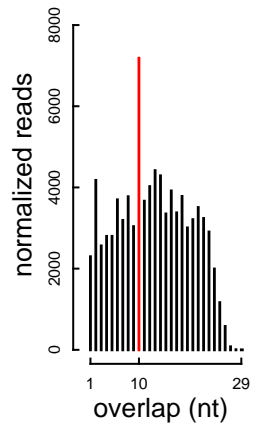
**D**



**F**

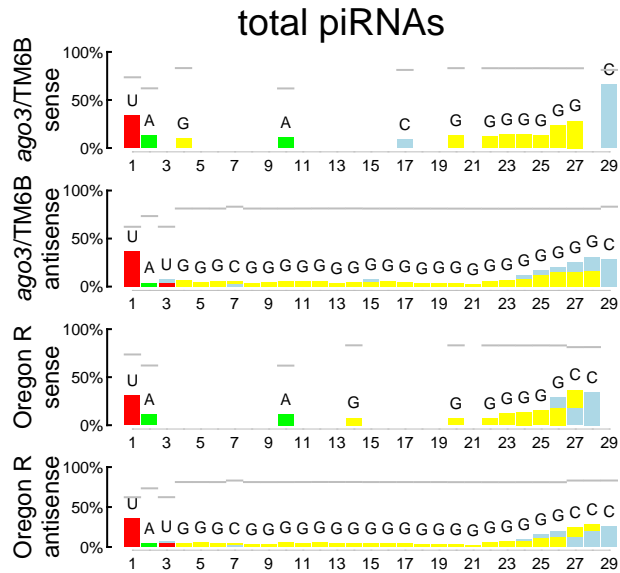


**H**

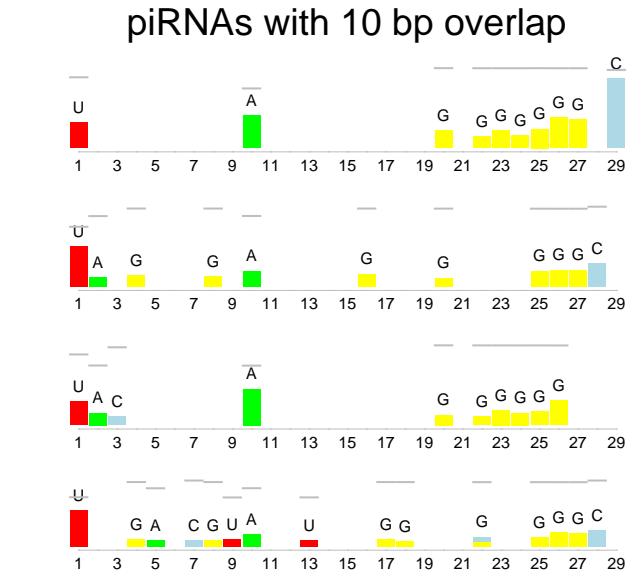


# Stalker2

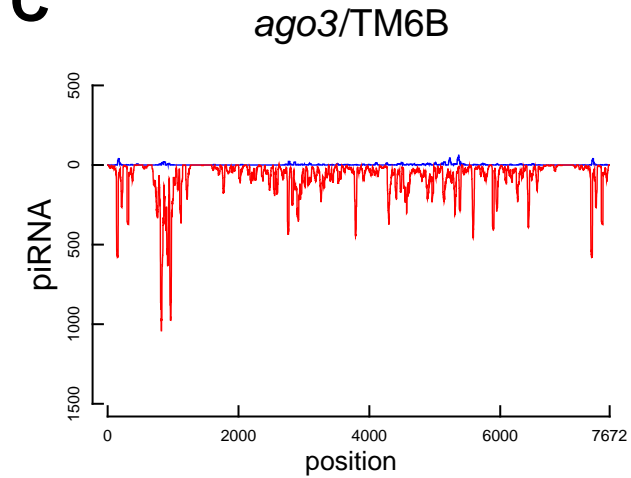
**A**



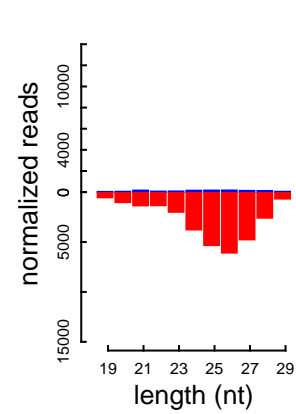
**B**



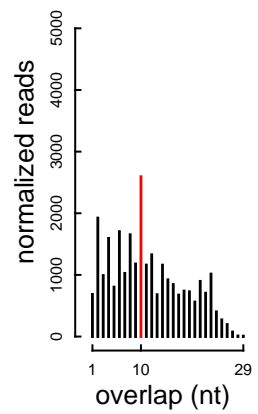
**C**



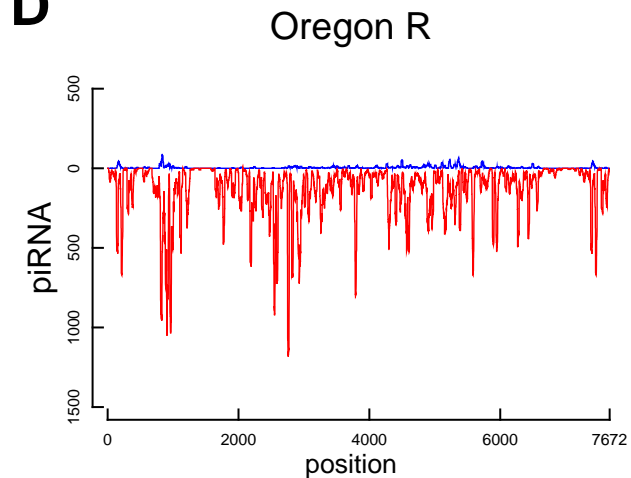
**E**



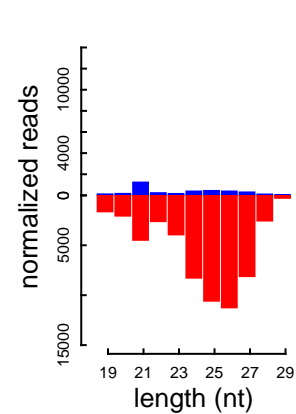
**G**



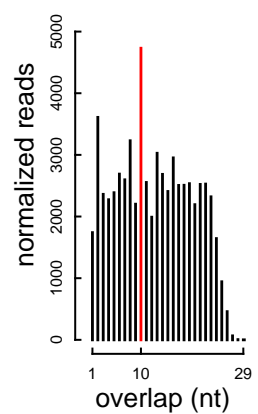
**D**



**F**

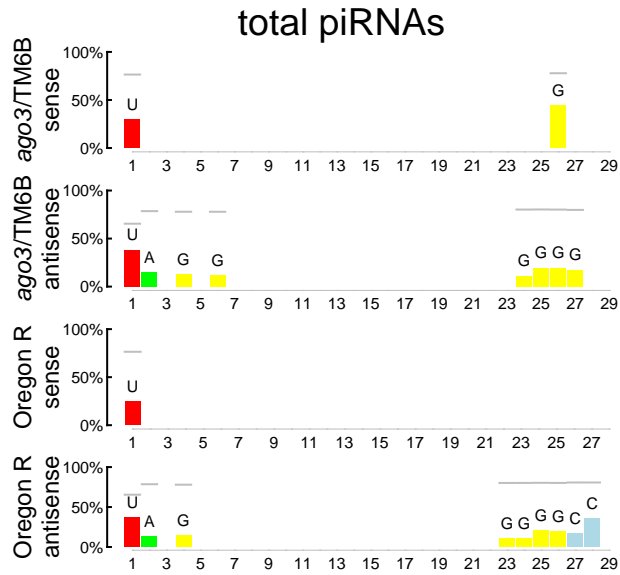


**H**

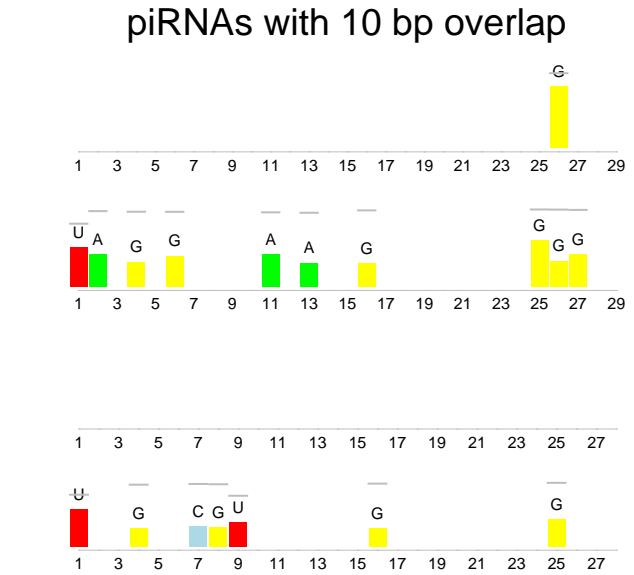


# Stalker3

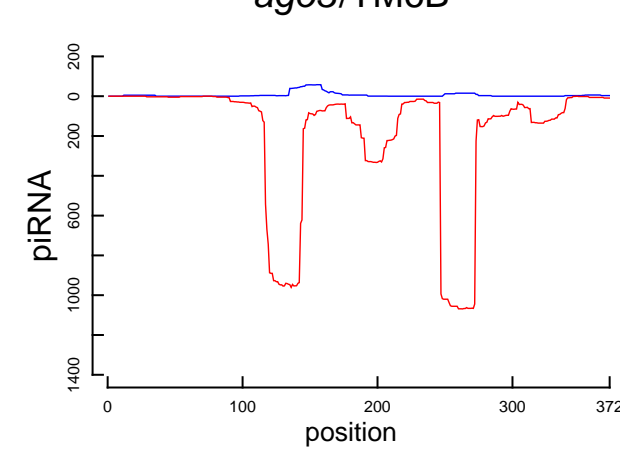
**A**



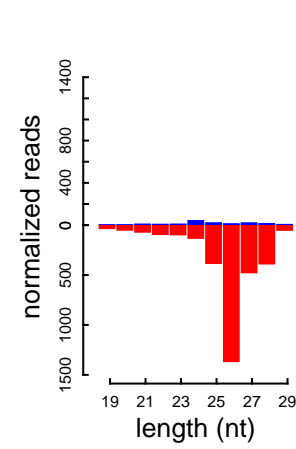
**B**



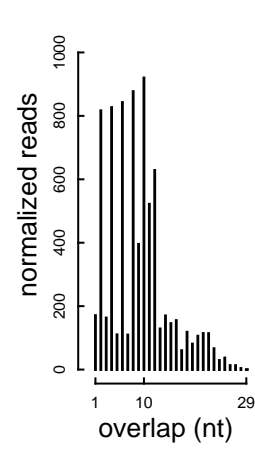
**C**



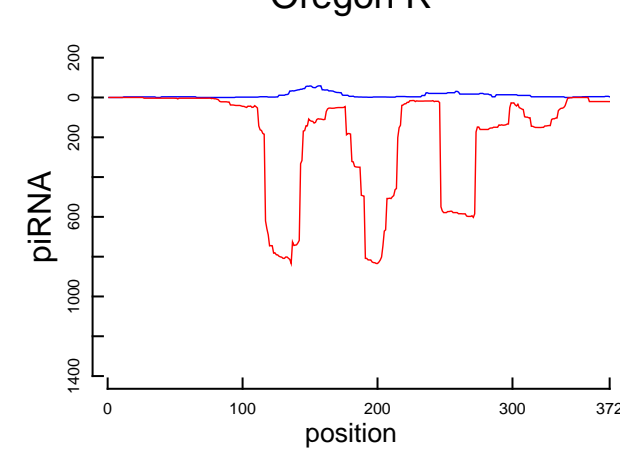
**E**



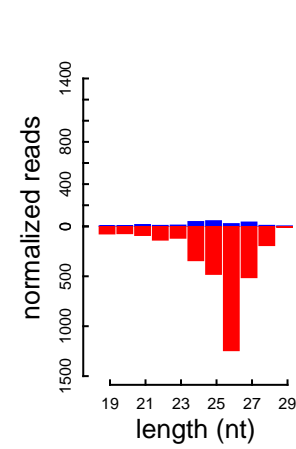
**G**



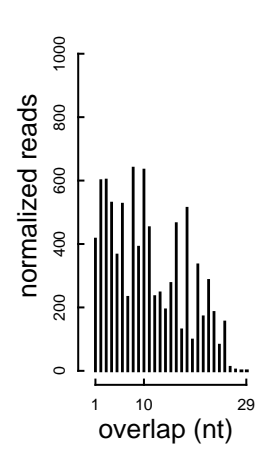
**D**



**F**



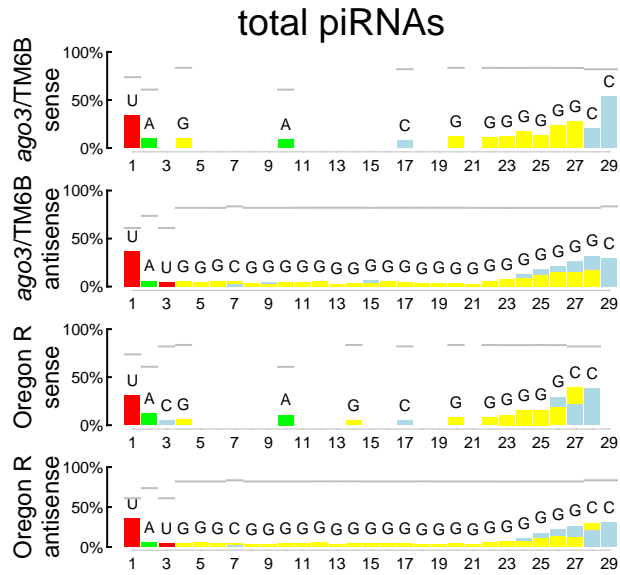
**H**



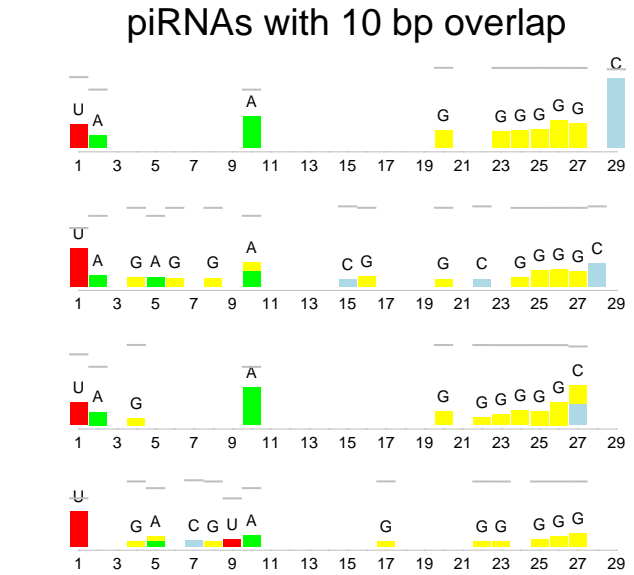


# Stalker4

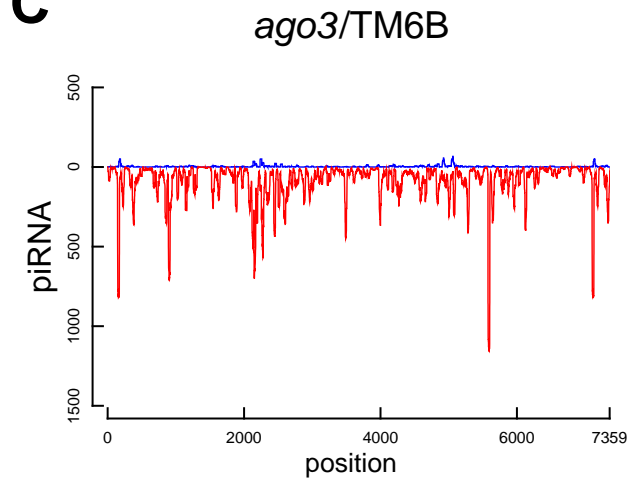
**A**



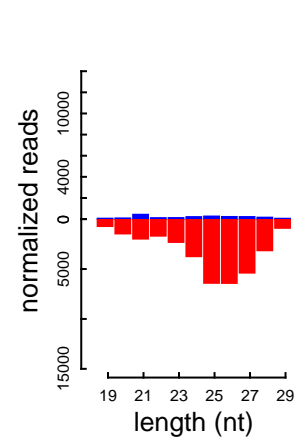
**B**



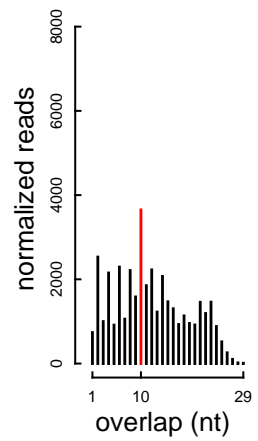
**C**



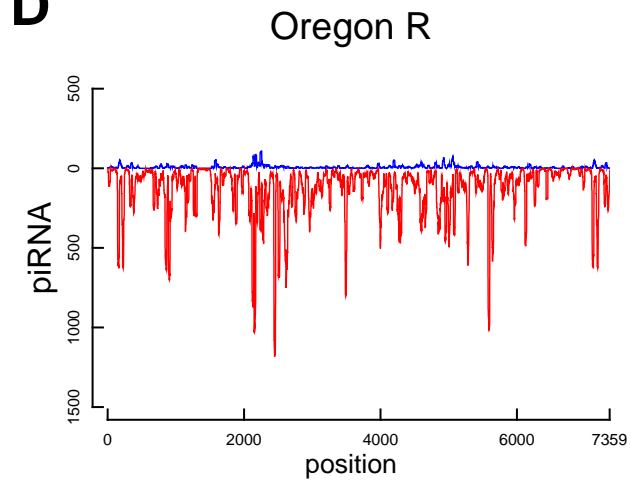
**E**



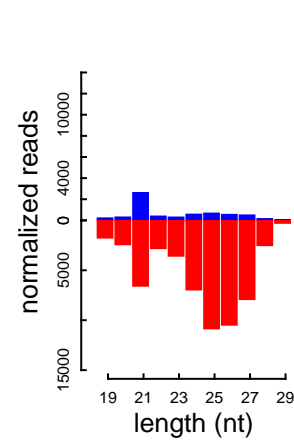
**G**



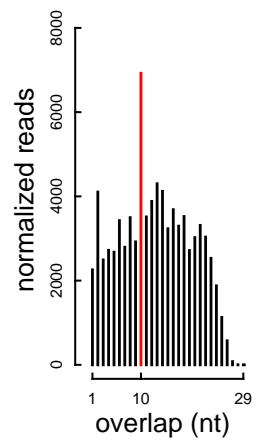
**D**



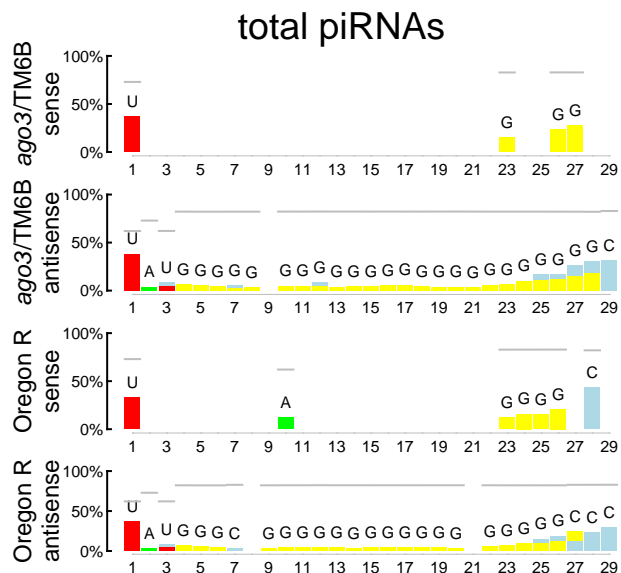
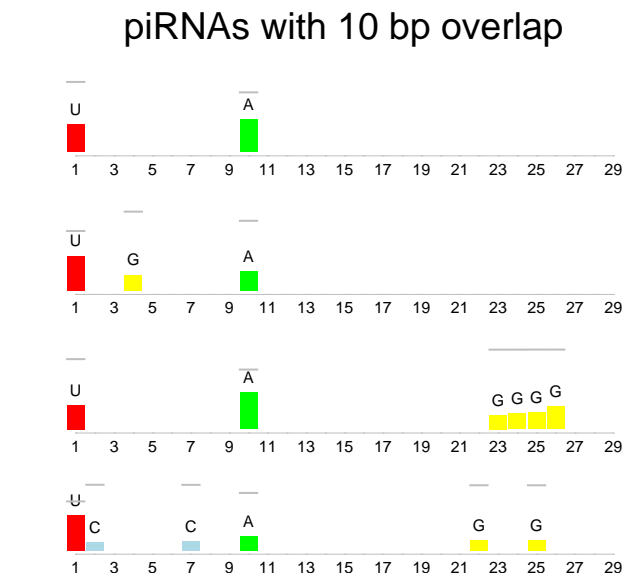
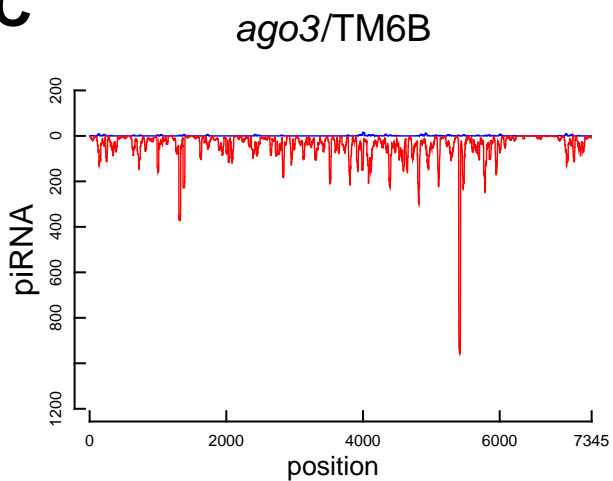
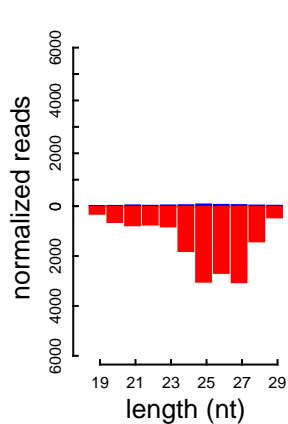
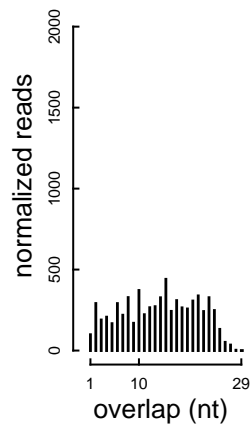
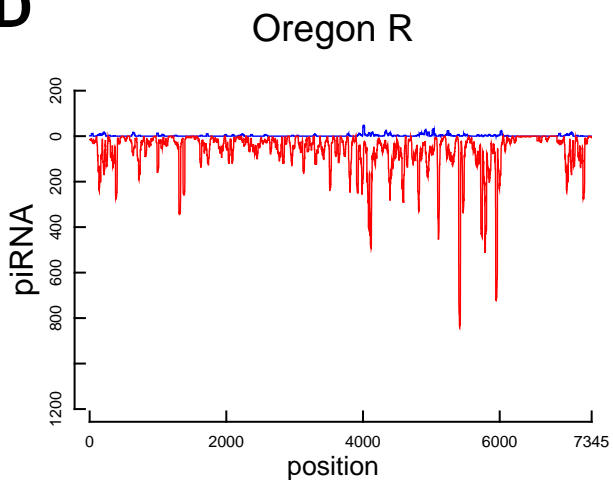
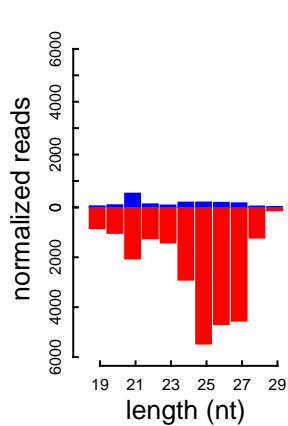
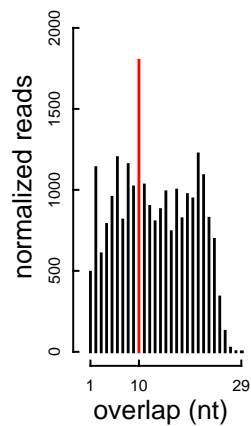
**F**



**H**

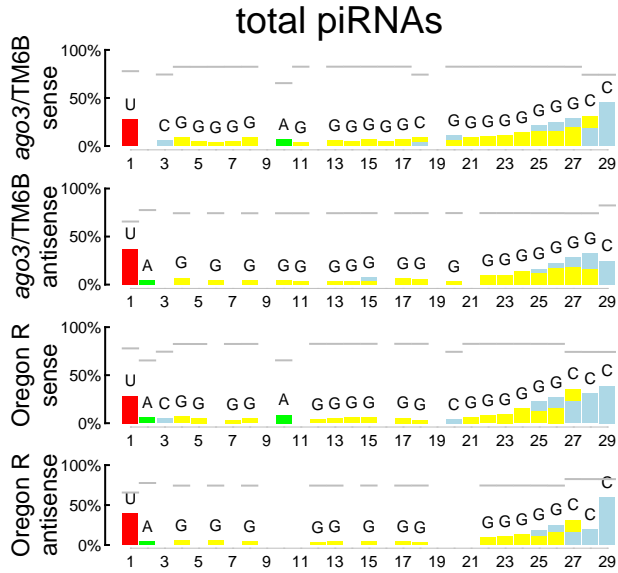


# Tabor

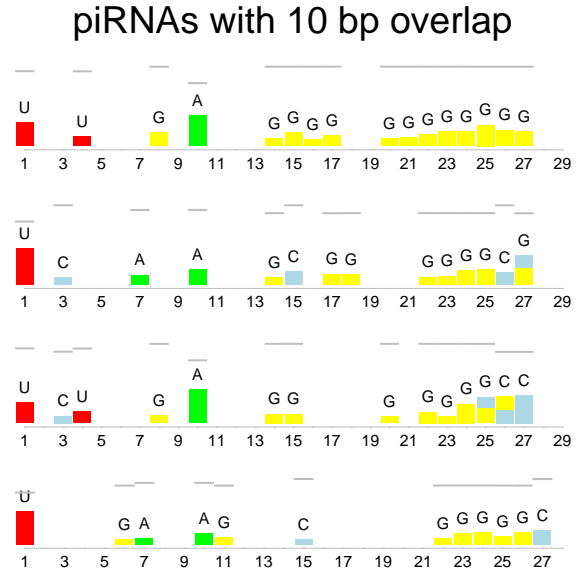
**A****B****C****E****G****D****F****H**

# TAHRE

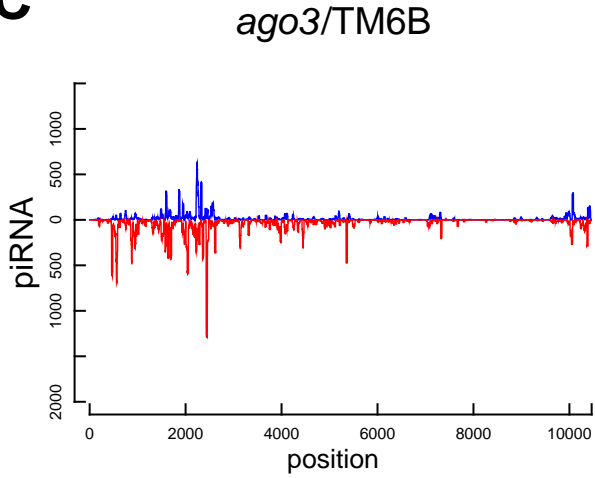
**A**



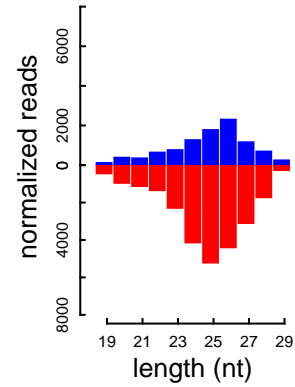
**B**



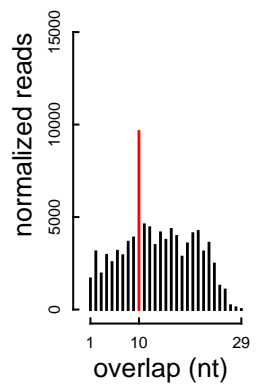
**C**



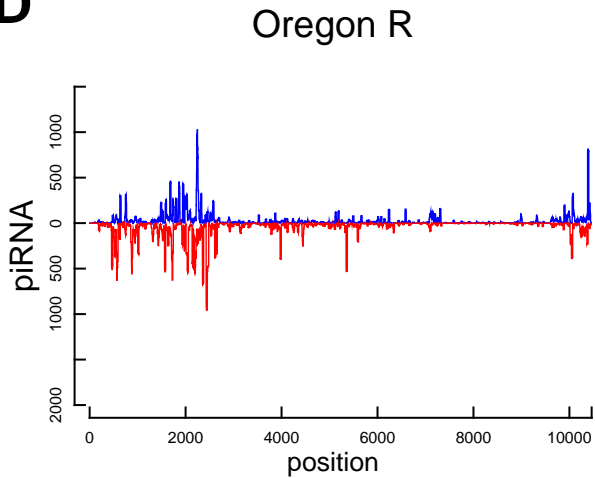
**E**



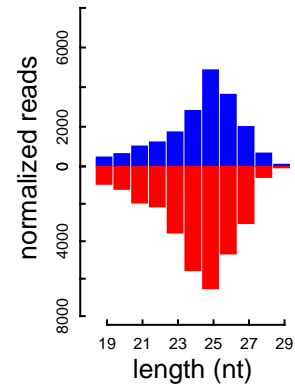
**G**



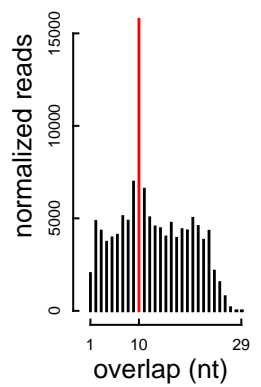
**D**



**F**

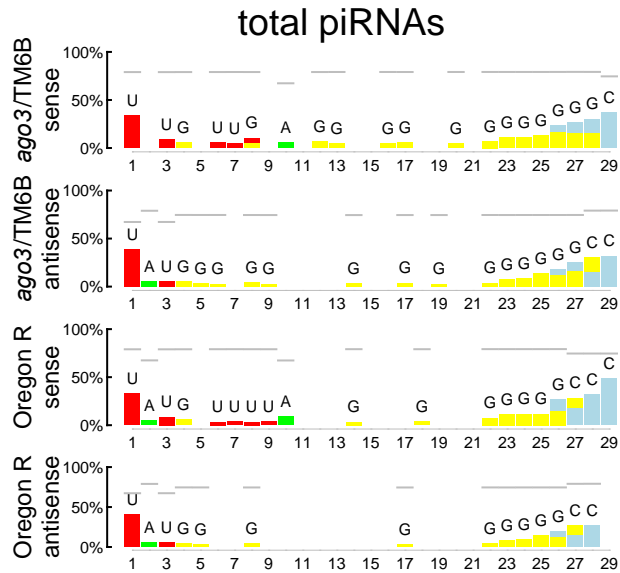


**H**

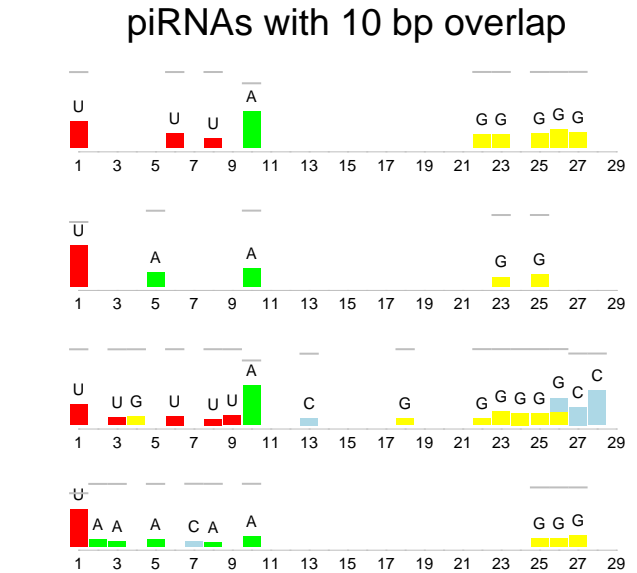


# TART A, B, and C

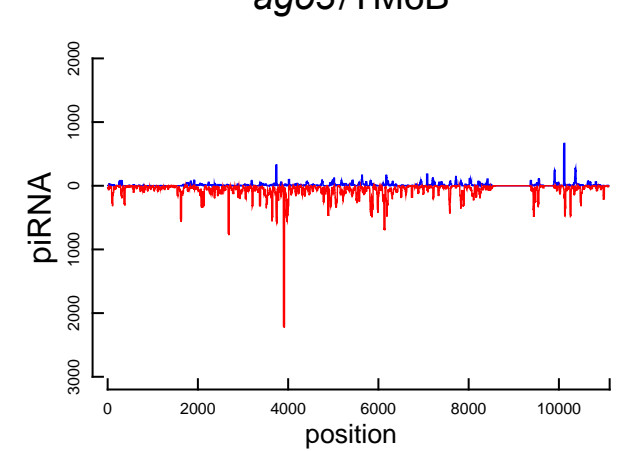
**A**



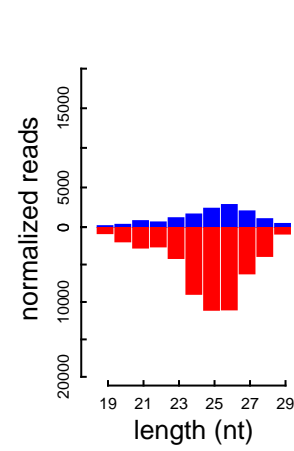
**B**



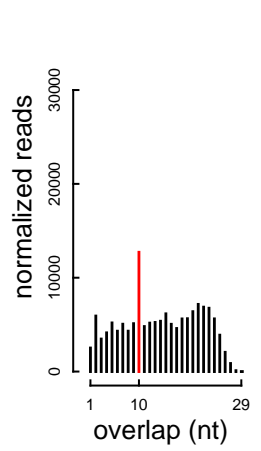
**C**



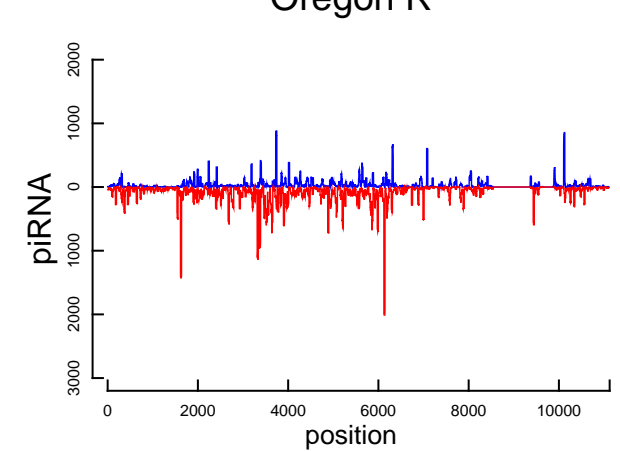
**E**



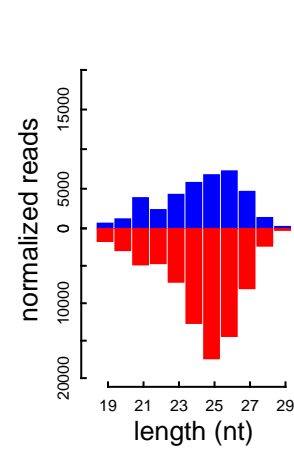
**G**



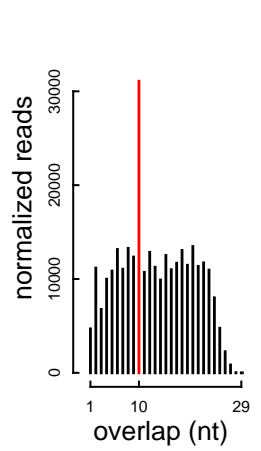
**D**



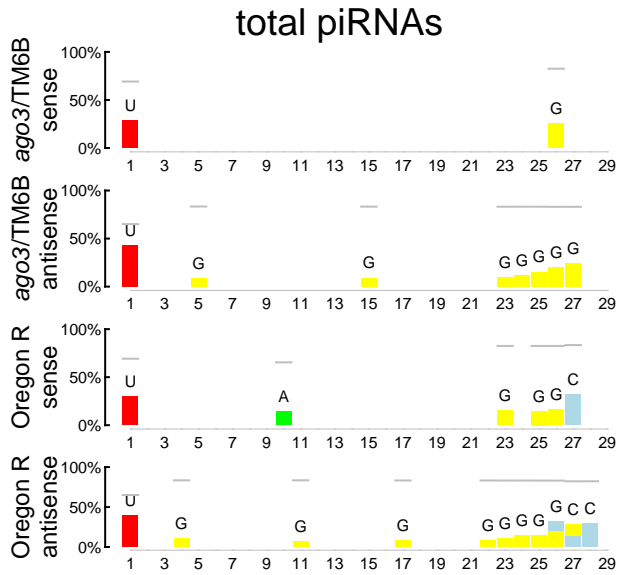
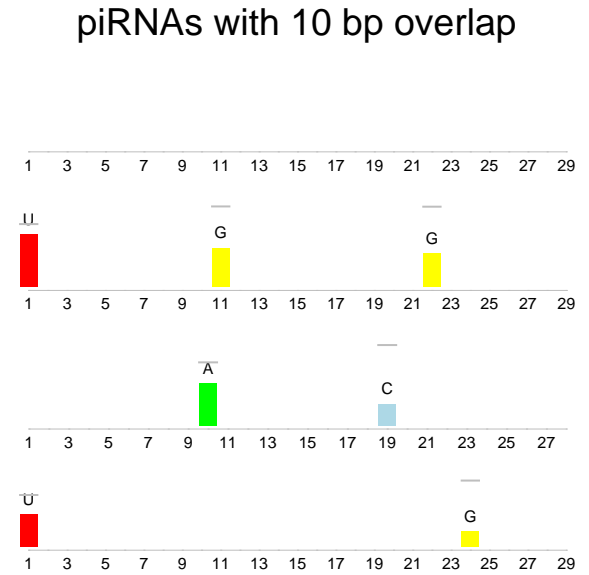
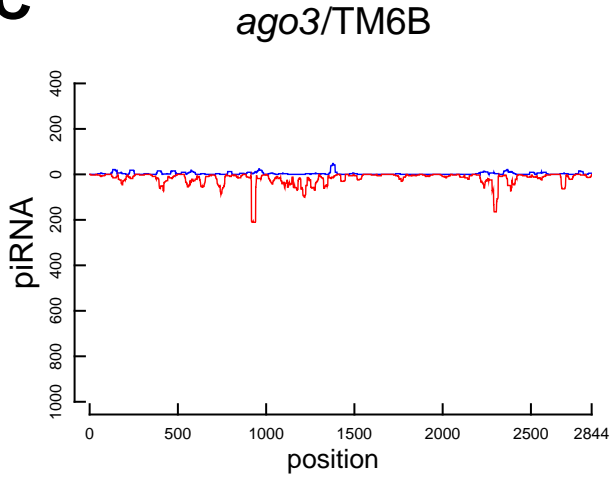
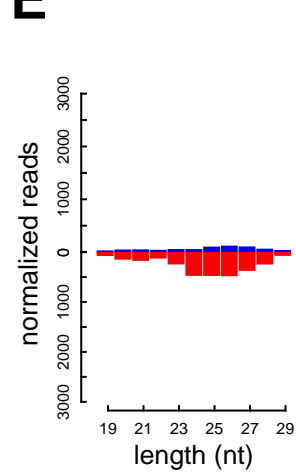
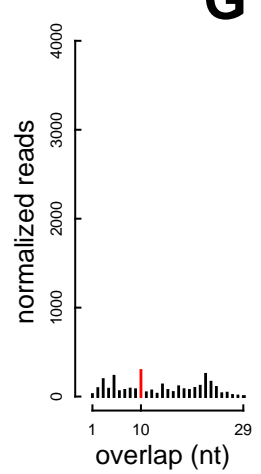
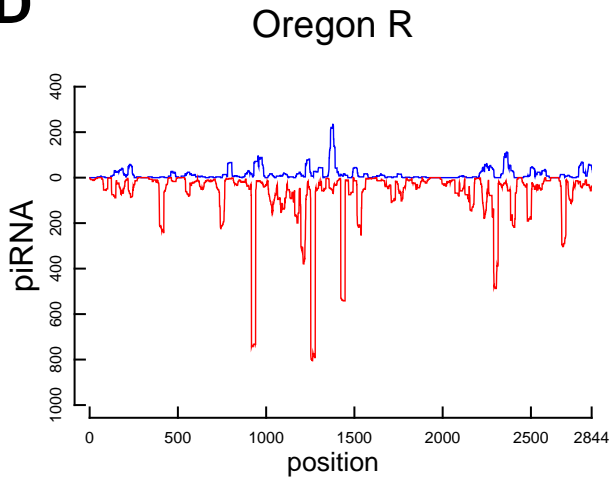
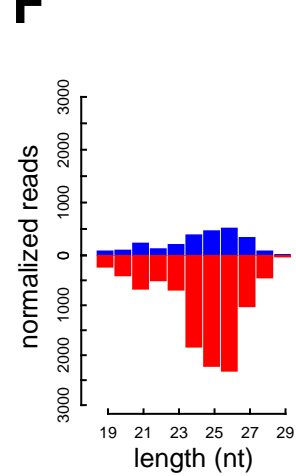
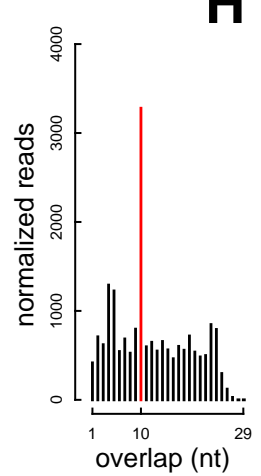
**F**



**H**

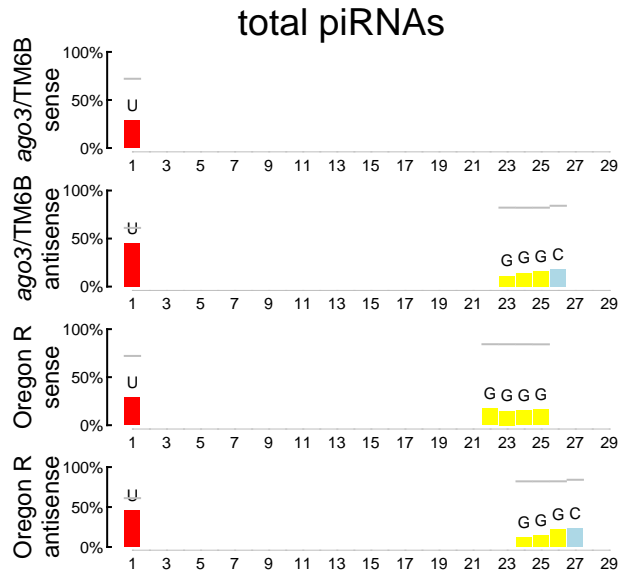


# *transib2*

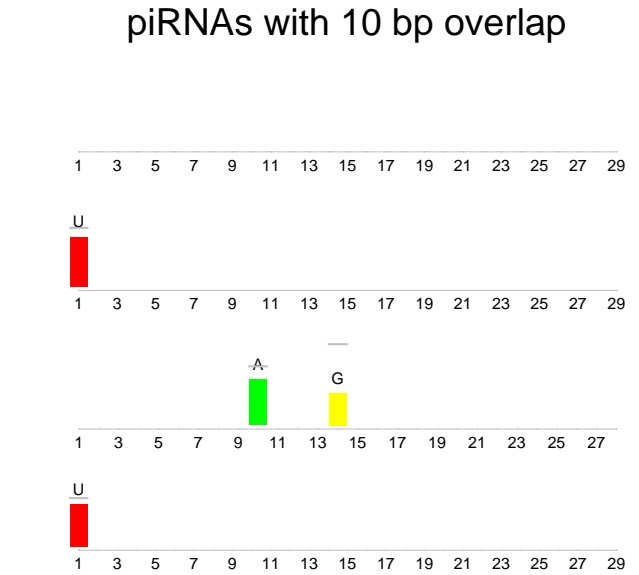
**A****B****C****E****G****D****F****H**

# Transpac

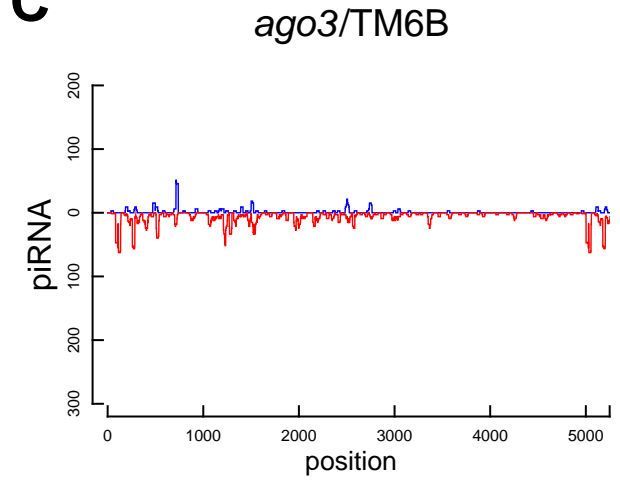
**A**



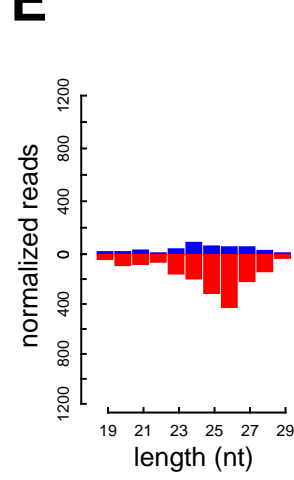
**B**



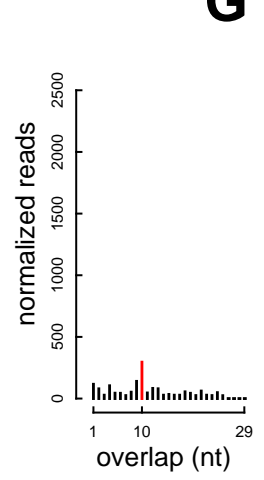
**C**



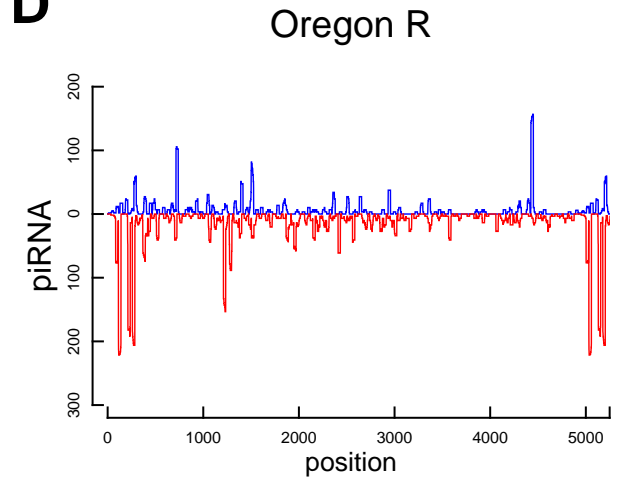
**E**



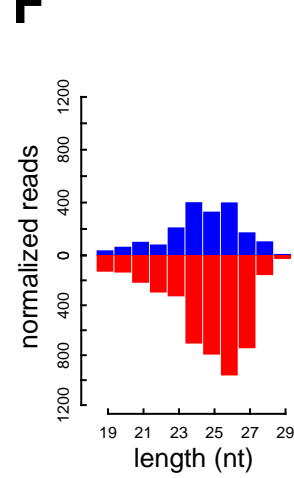
**G**



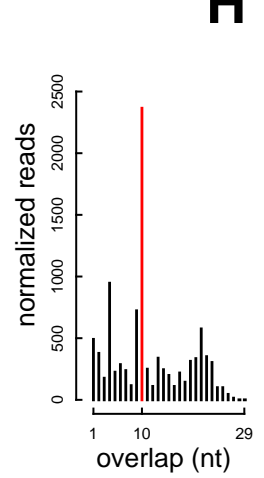
**D**



**F**

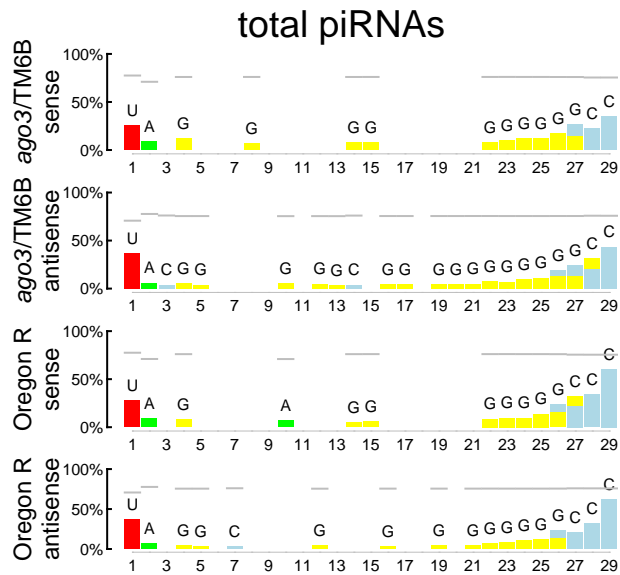


**H**

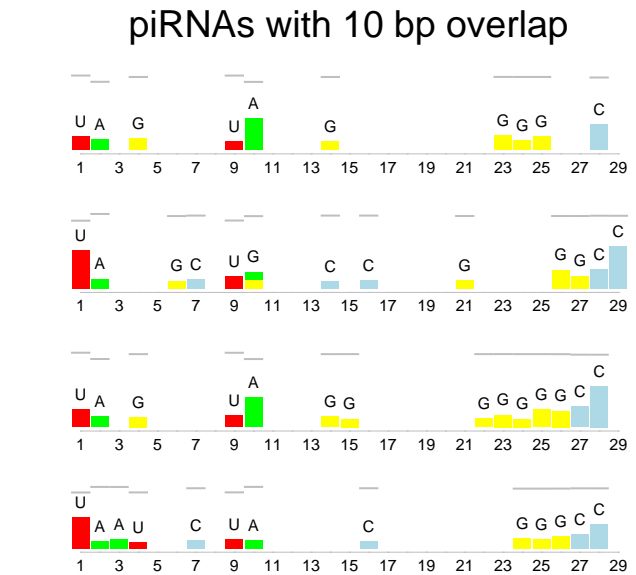


# X element

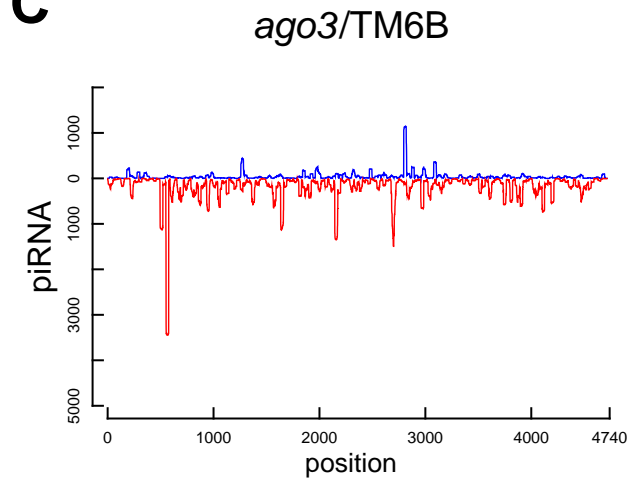
**A**



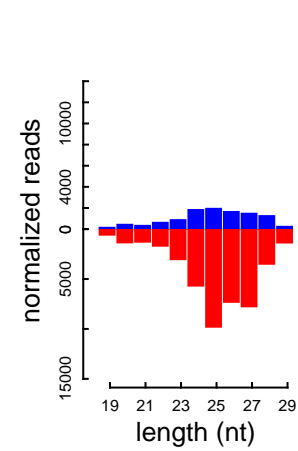
**B**



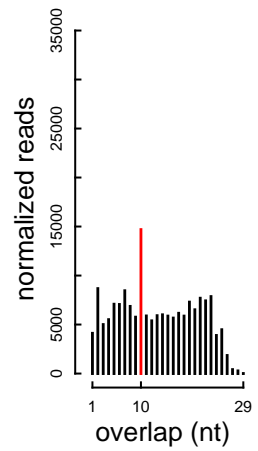
**C**



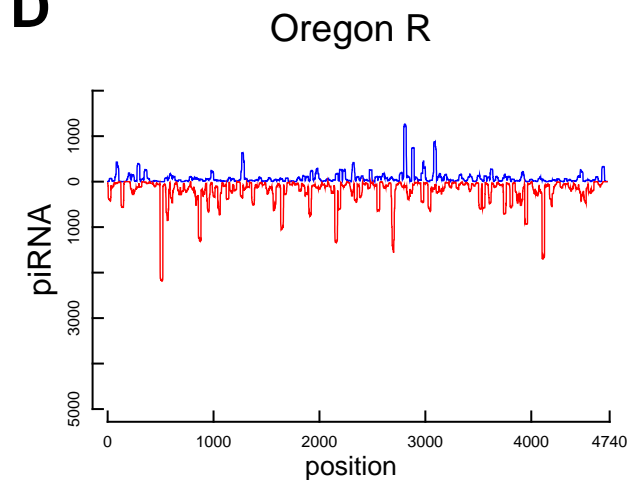
**E**



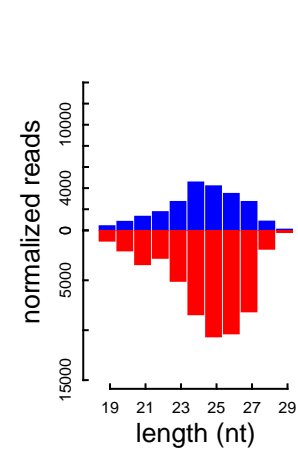
**G**



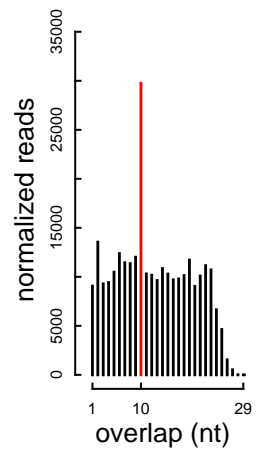
**D**



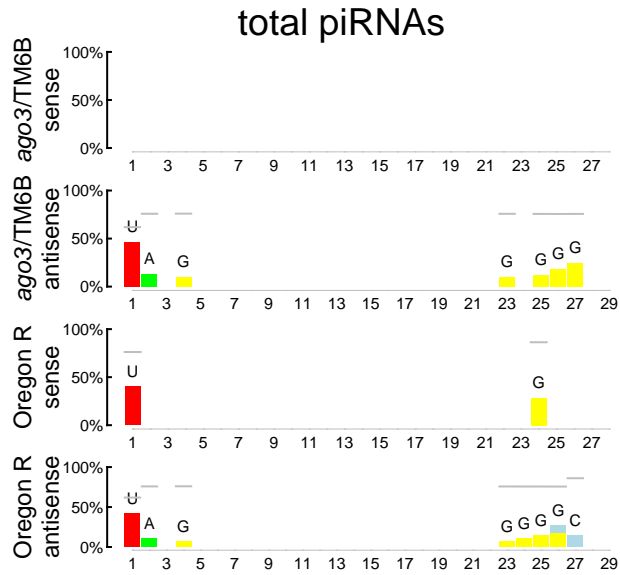
**F**



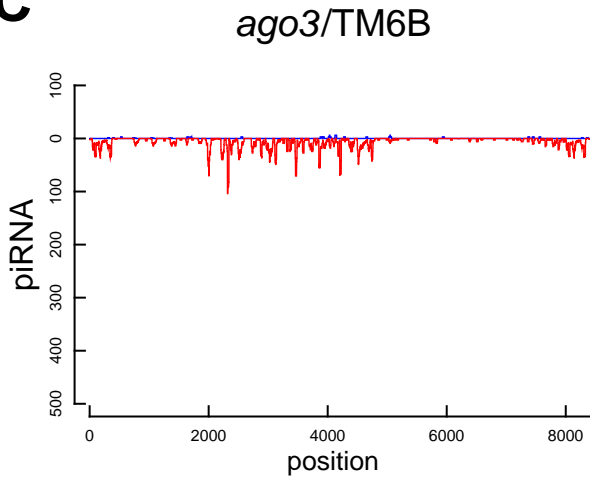
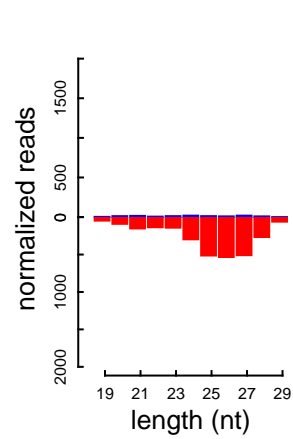
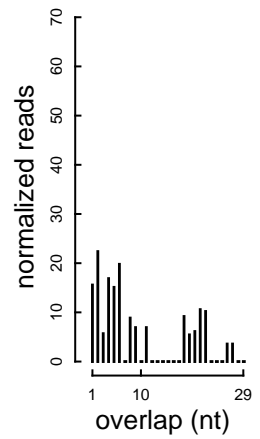
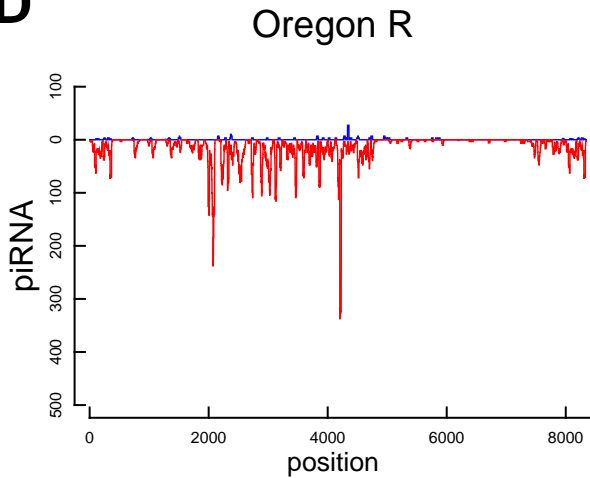
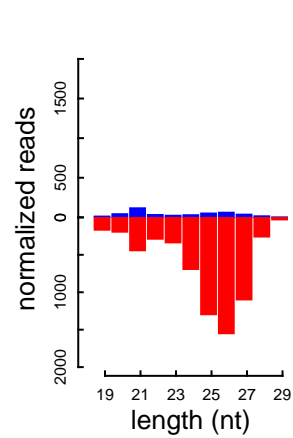
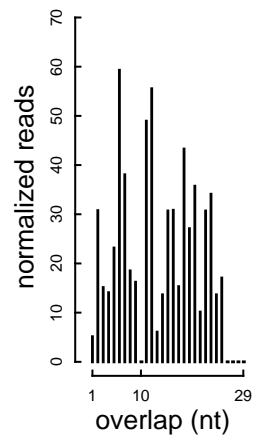
**H**



# ZAM

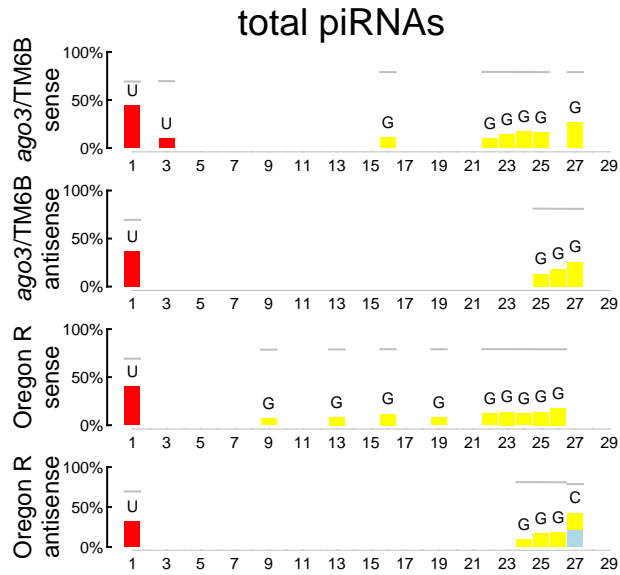
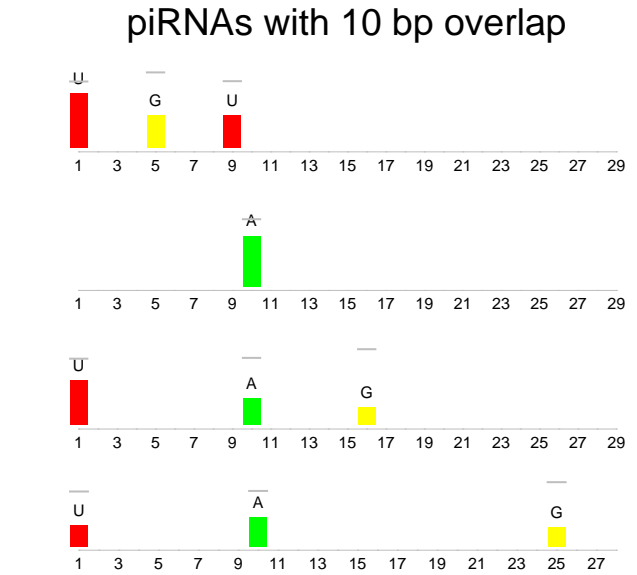
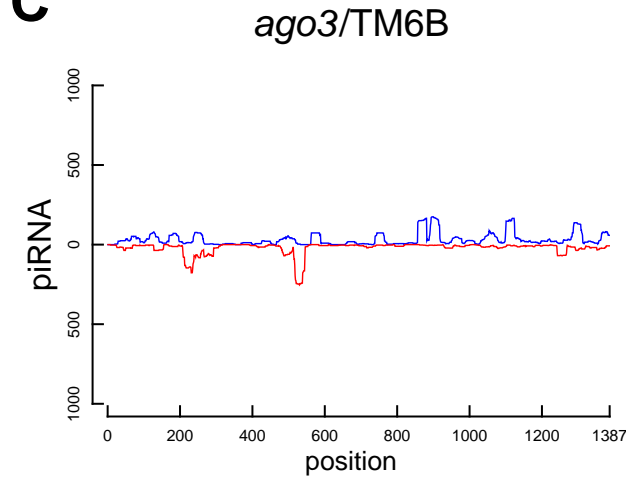
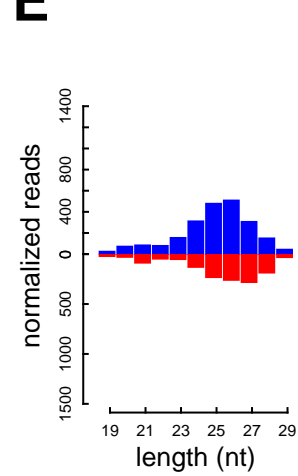
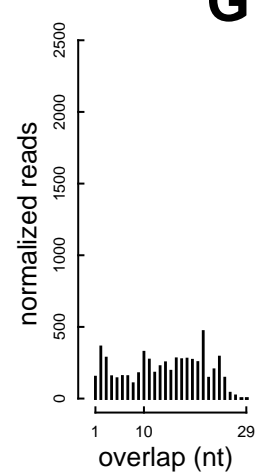
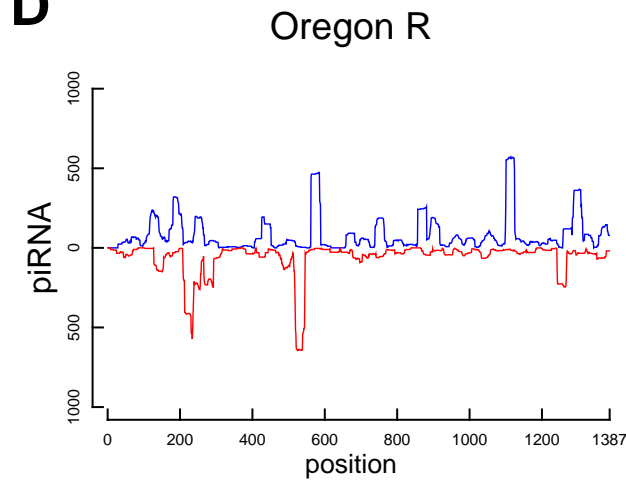
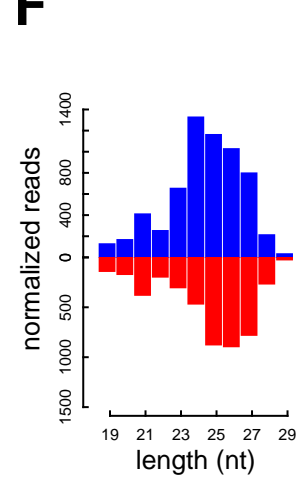
**A****B**

piRNAs with 10 bp overlap

**C****E****G****D****F****H**



# mst40

**A****B****C****E****G****D****F****H**