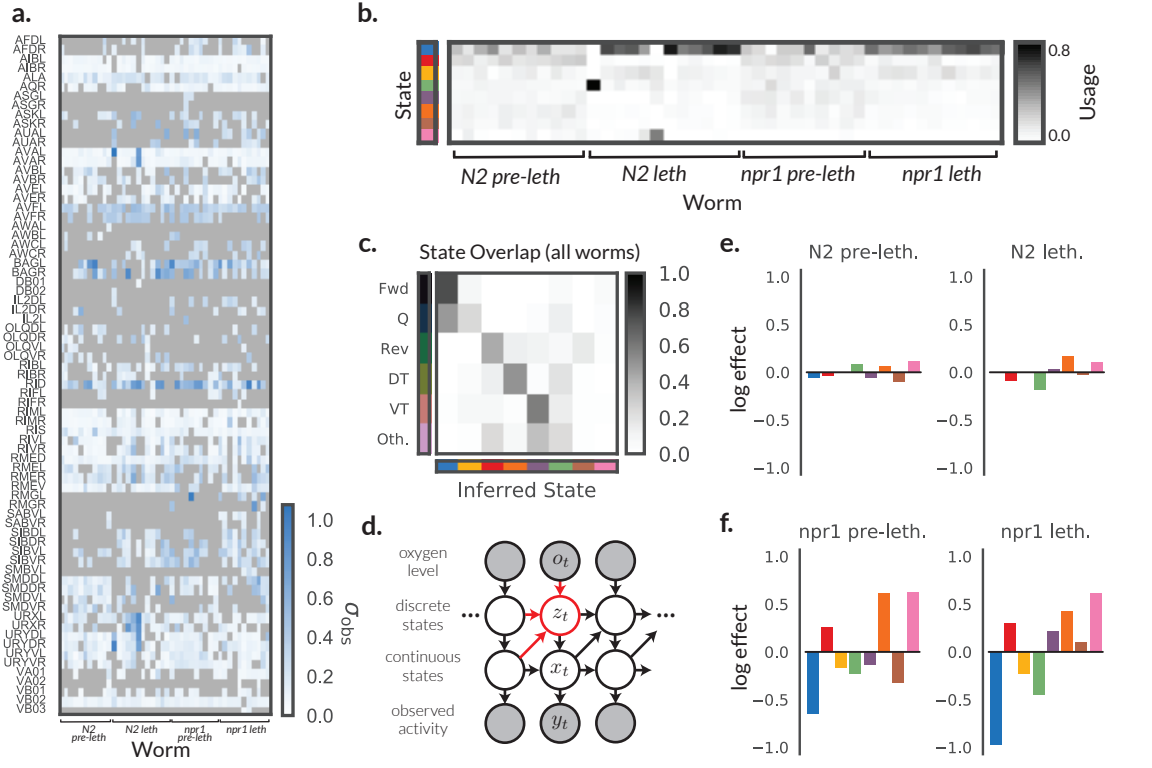
a.
AFDL
AFDR
AIBL
AIBR
ALA
AQR
ASGL
ASGR
ASKL
ASKR
AUAL
AUAR
AVAL
AVAR
AVBL
AVBR
AVEL
AVER
AVFL
AVFR
AWAL
AWBL
AWCL
AWCR
BAGL
BAGR
DB01
DB02
IL2DL
IL2DR
IL2L
OLQDL
OLQDR
OLQVL
OLQVR
RIBL
RIBR
RID
RIML
RIMR
RIS
RIVL
RIVR
RMED
RMEL
RMER
RMEV
RMGL
RMGR
SAAVL
SAAVR
SIBD
SIBDR
SIBVL
SIBVR
SMBVL
SMDDL
SMDDR
SMDVL
SMDVR
URA
URXR
URYDL
URYDR
URYVL
URYVR
VA01
VA02
VB01
VB02
VB03
N2 pre-leth
N2 leth
npr1 pre-leth
npr1 leth
Worm
1.0
0.8
0.6
0.4
0.2
0.0
σ_{obs}
b.
State
Usage
0.8
0.0
N2 pre-leth
N2 leth
npr1 pre-leth
npr1 leth
Worm
c.
State Overlap (all worms)
Fwd
Q
Rev
DT
VT
Oth.
1.0
0.8
0.6
0.4
0.2
0.0
Inferred State
d.
oxygen level
discrete states
continuous states
observed activity
o_t
z_t
x_t
y_t
e.
N2 pre-leth.
N2 leth.
log effect
1.0
0.5
0.0
−0.5
−1.0
f.
npr1 pre-leth.
npr1 leth.
log effect
1.0
0.5
0.0
−0.5
−1.0