mds02\_neg PetFal HanXRQChr01 HanXRQChr02 HanXRQChr03 HanXRQChr04 HanXRQChr05 0.6 0.4 0.2 0.0 50 50 50 50 100 150 100 150 50 100 150 200 100 150 0 100 150 0 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 0.6 0.4 Fst Window = 1 MB0.2 25 25 75 100 0 50 75 100 0 50 100 150 50 100 150 200 50 100150200250 0 0 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 0.6 0.4 0.2 0.0 50 150 50 100 150 0 100 50 100 150 200 0 0 100 150 50 100 HanXRQChr16 HanXRQChr17 0.6 0.4 0.2 0.0 50 100 150 0 50 100 150 200 MB

mds04\_pos PetFal HanXRQChr01 HanXRQChr02 HanXRQChr03 HanXRQChr04 HanXRQChr05 0.6 -0.4 0.2 0.0 50 0 50 100 150 50 100 150 50 100 150 50 100 150 200 100 150 0 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 0.6 -0.4 -Fst Window = 1 MB25 75 100 0 25 50 75 100 0 50 100 150 50 100 150 200 50 100150200250 0 0 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 0.6 -0.4 0.2 0.0 50 150 50 100 150 0 100 50 100 150 200 0 50 100 150 0 50 100 HanXRQChr16 HanXRQChr17 0.6 0.4 0.0 50 100 150 0 50 100 150 200 MB

## mds07\_neg PetFal HanXRQChr01 HanXRQChr03 HanXRQChr04 HanXRQChr02 HanXRQChr05 0.4 0.2 0.0 50 100 150 50 100 150 0 50 100 150 50 100 150 50 100 150 200 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 0.4 0.2 Fst Window = 1 MB 75 100 0 50 150 0 50 100 150 200 50 100150200250 25 100 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 0.4 0.2 0.0 150 0 50 50 100 150 200 0 150 100 100 150 0 50 100 50 100 HanXRQChr16 HanXRQChr17 0.4 0.2 0.0 50 100 150 0 50 100 150 200 MB

mds13\_neg PetFal HanXRQChr01 HanXRQChr03 HanXRQChr04 HanXRQChr02 HanXRQChr05 0.4 0.2 0.0 50 100 150 0 50 100 150 50 100 150 50 100 150 50 100 150 200 0 0 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 0.4 0.2 Fst Window = 1 MB0.0 75 100 0 25 50 75 100 0 50 100 150 0 50 100 150 200 50 100150200250 0 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 0.4 -0.0 50 150 0 50 150 50 100 150 200 0 100 100 0 50 100 150 100 0 HanXRQChr16 HanXRQChr17 0.4 0.2 0.0 50 100 150 0 50 100 150 200

MB

mds13\_pos PetFal HanXRQChr01 HanXRQChr02 HanXRQChr03 HanXRQChr04 HanXRQChr05 0.4 -0.3 0.2 0.1 0.0 50 100 150 0 50 100 150 100 150 50 100 150 50 0 50 100 150 200 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 0.4 -0.3 0.2 Fst Window = 1 MB0.1 0.0 25 75 100 0 25 50 75 100 0 50 100 150 0 50 100 150 200 50 100150200250 0 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 0.4 -0.3 0.2 0.1 0.0 50 50 100 150 0 100 150 50 100 150 200 0 50 150 0 100 50 100 HanXRQChr16 HanXRQChr17 0.4 -0.3 0.2 0.1 0.0 100 150 50 0 50 100 150 200 MB

## mds14\_pos PetFal HanXRQChr01 HanXRQChr02 HanXRQChr03 HanXRQChr04 HanXRQChr05 0.4 -0.2 -0.0 150 0 50 100 150 100 150 50 100 150 50 100 150 200 50 100 50 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 0.4 0.2 -Fst Window = 1 MB 75 100 0 75 100 0 150 0 50 100 150 200 50 100150200250 25 25 50 50 100 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 0.4 -0.2 100 150 50 100 150 200 0 50 100 150 50 100 150 0 50 100 150 HanXRQChr16 HanXRQChr17 0.4 -0.2 -0.0 -50 100 150 50 100 150 200

MB

mds15\_neg PetFal HanXRQChr01 HanXRQChr03 HanXRQChr04 HanXRQChr05 HanXRQChr02 8.0 0.6 0.4 0.2 0.0 50 100 150 0 50 100 150 50 100 150 50 100 150 50 100 150 200 0 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 8.0 0.6 0.4 MB0.2 Fst Window = 1 0.0 50 75 100 0 25 50 75 100 0 100 150 50 100 150 200 50 100150200250 0 0 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 8.0 0.6 0.4 0.2 0.0 -50 100 150 0 50 100 150 100 150 200 0 50 0 50 100 150 50 100 0 HanXRQChr16 HanXRQChr17 8.0 0.6 -0.4

MB

0.0

100 150

0

50 100 150 200

50

mds16\_neg PetFal HanXRQChr01 HanXRQChr03 HanXRQChr04 HanXRQChr02 HanXRQChr05 0.5 -0.4 -0.3 0.2 0.1 0.0 50 150 0 50 100 150 50 100 150 50 100 150 50 100 150 200 100 0 0 0 0 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 0.5 -0.4 0.3 0.2 MB Fst Window = 1 0.0 50 75 100 0 25 50 75 100 0 100 150 50 100 150 200 50 100150200250 0 0 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 0.5 -0.4 0.3 0.2 0.1 0.0 150 50 150 100 150 200 0 0 50 100 0 100 0 50 50 100 150 50 100 0 HanXRQChr16 HanXRQChr17 0.5 -0.4 -0.3 0.2 0.1 0.0 50 100 150 50 100 150 200

MB

0

0

mds16\_pos PetFal HanXRQChr01 HanXRQChr02 HanXRQChr03 HanXRQChr04 HanXRQChr05 0.4 0.2 50 50 100 150 100 150 50 100 150 50 100 150 200 100 150 0 50 0 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 0.4 -0.2 Fst Window = 1 MB75 100 0 25 50 75 100 0 50 100 150 50 100 150 200 50 100150200250 25 0 0 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 0.4 -0.0 150 50 50 100 0 100 150 50 100 150 200 0 50 100 0 150 50 100 HanXRQChr16 HanXRQChr17 0.4 0.2 0.0 50 100 150 0 50 100 150 200 MB

mds19\_neg PetFal HanXRQChr01 HanXRQChr03 HanXRQChr04 HanXRQChr05 HanXRQChr02 0.8 0.6 0.4 0.2 0.0 50 100 150 0 50 100 150 100 150 50 100 150 50 100 150 200 50 0 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 8.0 0.6 0.4 MB 0.2 Fst Window = 1 25 75 100 0 25 50 75 100 0 50 100 150 50 100 150 200 0 0 50 100150200250 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 8.0 0.6 0.4 0.2 0.0 50 50 150 0 50 100 150 100 150 200 0 50 100 0 100 150 50 100 0 HanXRQChr16 HanXRQChr17 0.8 0.6 -0.4 0.2 0.0 50 100 150 0 50 100 150 200 MB

mds21\_neg PetFal HanXRQChr01 HanXRQChr02 HanXRQChr03 HanXRQChr04 HanXRQChr05 0.4 -0.3 0.2 0.1 0.0 50 150 0 50 100 150 100 150 50 100 150 50 100 150 200 0 100 50 0 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 0.4 -0.3 -0.2 Fst Window = 1 MB0.1 0.0 75 100 25 75 100 0 25 50 0 50 100 150 0 50 100 150 200 50 100150200250 0 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 0.4 -0.3 -0.2 0.1 0.0 -50 50 100 150 0 100 150 50 100 150 200 0 0 100 150 50 100 HanXRQChr16 HanXRQChr17 0.4 -0.3 0.2 0.1 0.0 50 100 150 0 50 100 150 200 MB

mds22\_neg PetFal HanXRQChr01 HanXRQChr03 HanXRQChr04 HanXRQChr05 HanXRQChr02 0.8 0.6 -0.4 0.2 0.0 50 150 0 50 100 150 100 150 50 100 150 50 100 150 200 100 50 0 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 8.0 0.6 0.4 MB 0.2 Fst Window = 125 75 100 0 25 75 100 0 50 100 150 50 100 150 200 50 0 0 50 100150200250 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 8.0 0.6 0.4 0.2 0.0 -50 150 0 50 100 150 100 150 200 0 50 100 0 50 100 150 50 100 HanXRQChr16 HanXRQChr17 0.8 0.6 0.4 0.0 50 100 150

MB

0

50 100 150 200

mds24\_neg PetFal HanXRQChr01 HanXRQChr03 HanXRQChr04 HanXRQChr05 HanXRQChr02 0.6 0.4 0.2 0.0 50 50 100 150 50 100 150 50 100 150 200 100 150 0 100 150 50 0 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 0.6 0.4 -0.2 Fst Window = 1 MB50 75 100 0 25 50 75 100 0 100 150 50 100 150 200 50 100150200250 25 0 0 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 0.6 0.4 0.0 50 100 150 0 100 150 50 100 150 200 0 50 100 0 150 50 100 HanXRQChr16 HanXRQChr17 0.6 0.4

MB

0.0

50

100 150

0

50 100 150 200

mds27\_neg PetFal HanXRQChr01 HanXRQChr03 HanXRQChr04 HanXRQChr05 HanXRQChr02 0.8 0.6 0.4 0.2 0.0 50 100 150 0 50 100 150 50 100 150 50 100 150 50 100 150 200 0 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 8.0 0.6 0.4 MB 0.2 Fst Window = 1 0.0 25 75 100 0 25 50 75 100 0 50 100 150 50 100 150 200 0 50 100150200250 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 8.0 0.6 0.4 0.2 0.0 50 150 0 50 100 150 100 150 200 0 50 100 0 50 100 150 50 100 0 HanXRQChr16 HanXRQChr17 0.8 0.6 0.4 0.0 50 100 150 0 50 100 150 200 MB

mds39\_pos PetFal HanXRQChr01 HanXRQChr03 HanXRQChr04 HanXRQChr05 HanXRQChr02 0.8 0.6 -0.4 0.2 0.0 50 0 50 100 150 100 150 50 100 150 50 100 150 200 100 150 50 0 HanXRQChr06 HanXRQChr07 HanXRQChr08 HanXRQChr09 HanXRQChr10 8.0 0.6 0.4 Fst Window = 1 MB0.2 75 100 0 25 50 75 100 0 50 100 150 50 100 150 200 50 100150200250 25 0 0 HanXRQChr11 HanXRQChr12 HanXRQChr13 HanXRQChr14 HanXRQChr15 8.0 0.6 0.4 0.2 0.0 50 50 50 100 150 0 100 150 50 100 150 200 0 0 100 150 50 100 HanXRQChr16 HanXRQChr17 0.8 0.6 0.4 0.2 0.0 50 100 150 0 50 100 150 200 MB