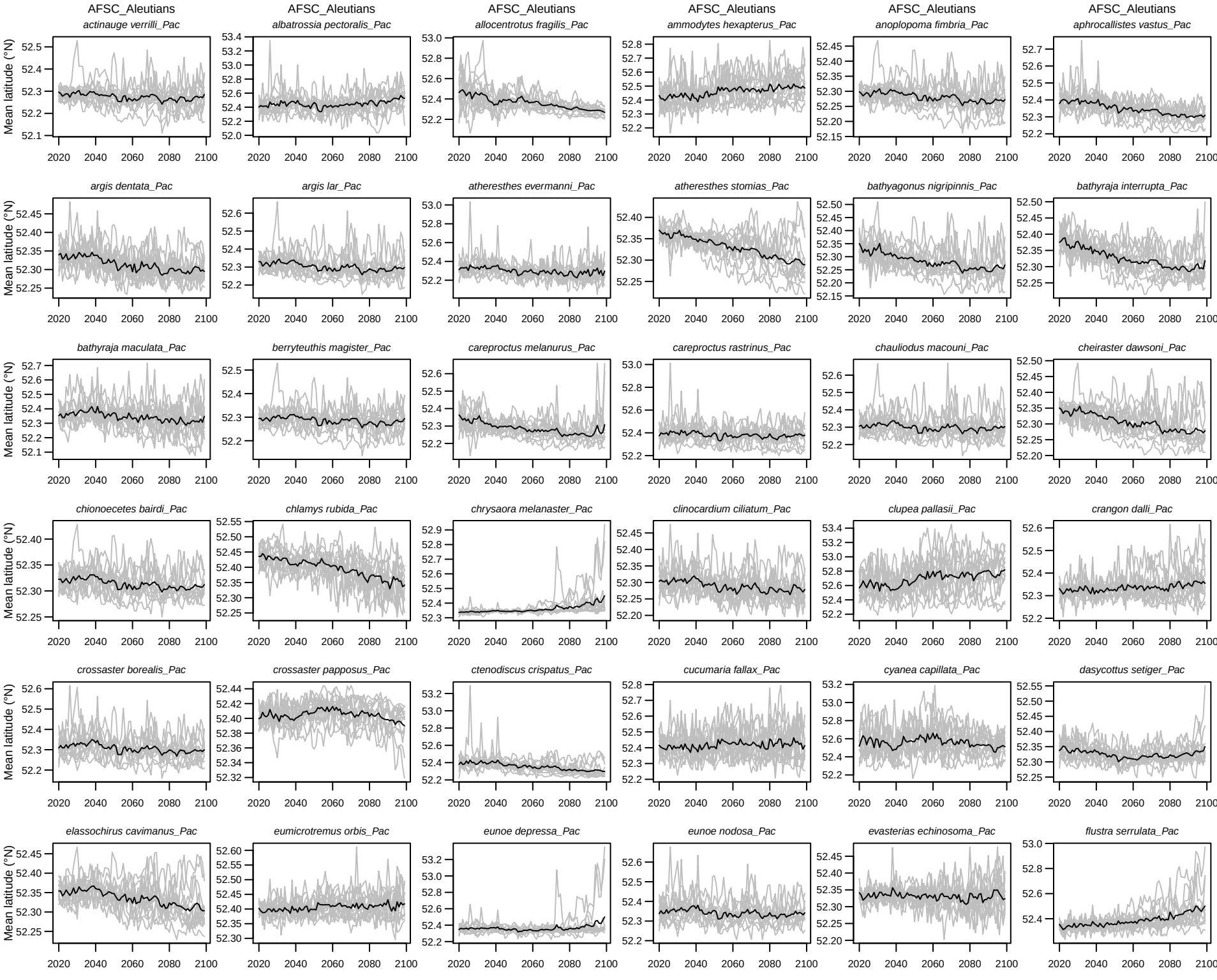
AFSC_Aleutians
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albatrossia pectoralis_Pac
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ammodytes hexapterus_Pac
anoplopoma fimbria_Pac
aphrocallistes vastus_Pac
argis dentata_Pac
argis lar_Pac
atheresthes evermanni_Pac
atheresthes stomias_Pac
bathyagonus nigripinnis_Pac
bathyraja interrupta_Pac
bathyraja maculata_Pac
berryteuthis magister_Pac
careproctus melanurus_Pac
careproctus rastrinus_Pac
chauliodus macouni_Pac
cheiraster dawsoni_Pac
chionoecetes bairdi_Pac
chlamys rubida_Pac
chrysaora melanaster_Pac
clinocardium ciliatum_Pac
clupea pallasii_Pac
crangon dalli_Pac
crossaster borealis_Pac
crossaster papposus_Pac
ctenodiscus crispatus_Pac
cucumaria fallax_Pac
cyanea capillata_Pac
dasycottus setiger_Pac
elassochirus cavimanus_Pac
eumicrotremus orbis_Pac
eunoe depressa_Pac
eunoe nodosa_Pac
evasterias echinosoma_Pac
flustra serrulata_Pac
Mean latitude (°N)
2020
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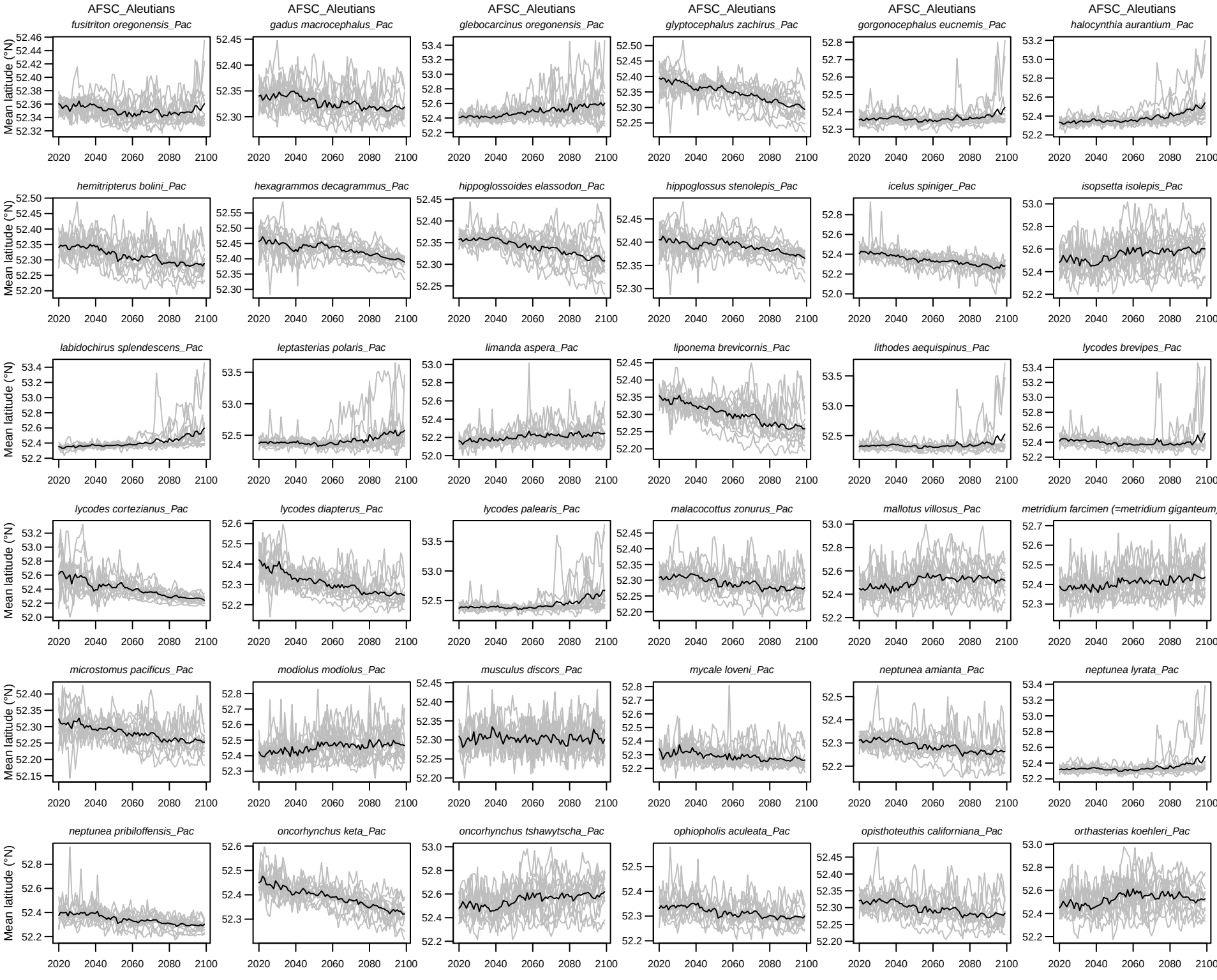
2060
2080
2100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glebocarcinus oregonensis_Pac
glyptocephalus zachirus_Pac
gorgonocephalus eucnemis_Pac
halocynthia aurantium_Pac
hemitripterus bolini_Pac
hexagrammos decagrammus_Pac
hippoglossoides elassodon_Pac
hippoglossus stenolepis_Pac
icelus spiniger_Pac
isopsetta isolepis_Pac
labidochirus splendescens_Pac
leptasterias polaris_Pac
limanda aspera_Pac
liponema brevicornis_Pac
lithodes aequispinus_Pac
lycodes brevipes_Pac
lycodes cortezianus_Pac
lycodes diapterus_Pac
lycodes palearis_Pac
malacocottus zonurus_Pac
mallotus villosus_Pac
metridium farcimen (=metridium giganteum)
microstomus pacificus_Pac
modiolus modiolus_Pac
musculus discors_Pac
mycale loveni_Pac
neptunea amianta_Pac
neptunea lyrata_Pac
neptunea pribiloffensis_Pac
oncorhynchus keta_Pac
oncorhynchus tshawytscha_Pac
ophiopholis aculeata_Pac
opisthoteuthis californiana_Pac
orthasterias koehleri_Pac
Mean latitude (°N)
2020
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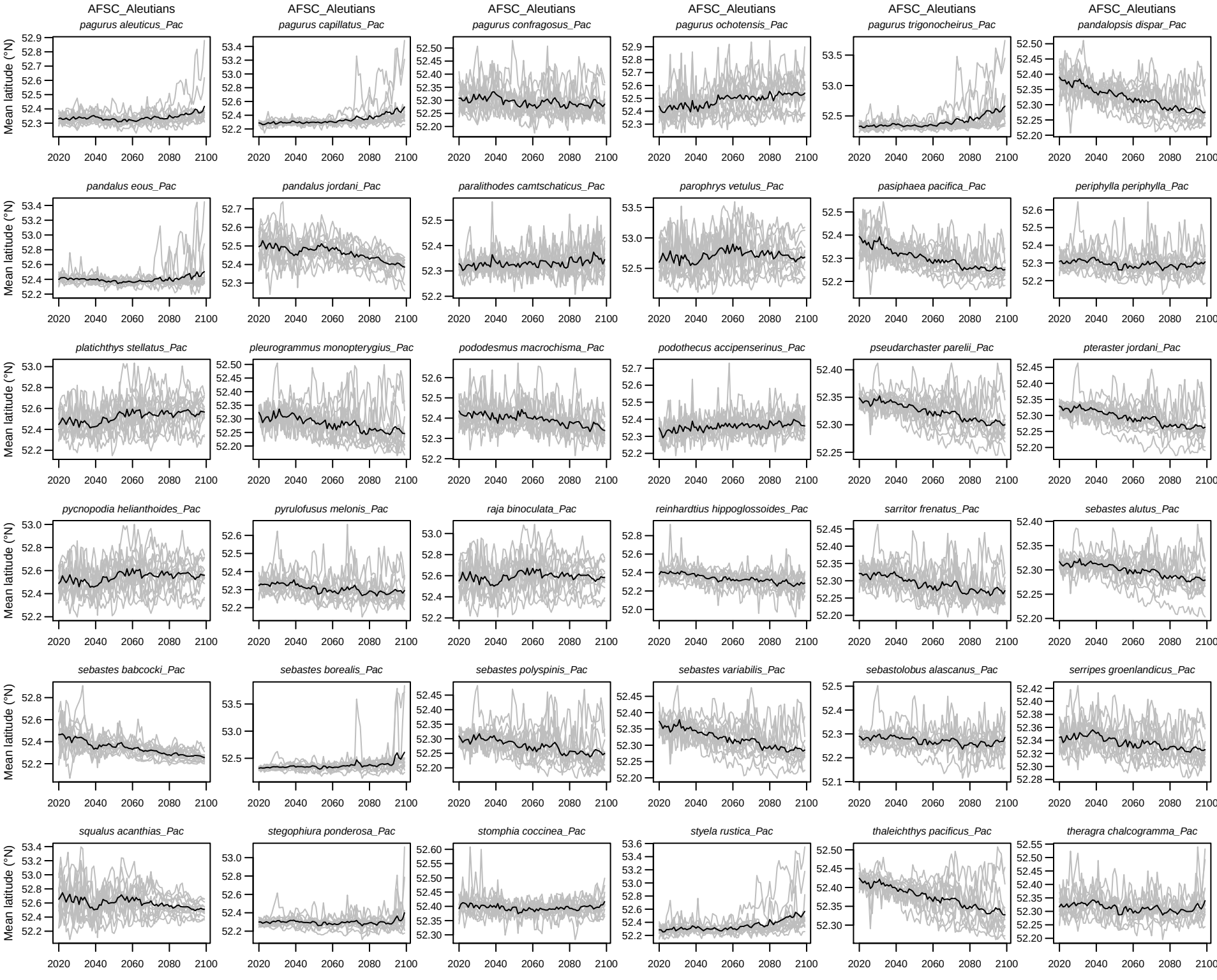
2060
2080
2100


AFSC_Aleutians
pagurus aleuticus_Pac
pagurus capillatus_Pac
pagurus confragosus_Pac
pagurus ochotensis_Pac
pagurus trigonocheirus_Pac
pandalopsis dispar_Pac
pandalus eous_Pac
pandalus jordani_Pac
paralithodes camtschaticus_Pac
parophrys vetulus_Pac
pasiphaea pacifica_Pac
periphylla periphylla_Pac
platichthys stellatus_Pac
pleurogrammus monopterygius_Pac
pododesmus macrochisma_Pac
podothecus accipenserinus_Pac
pseudarchaster parelii_Pac
pteraster jordani_Pac
pycnopodia helianthoides_Pac
pyrulofusus melonis_Pac
raja binoculata_Pac
reinhardtius hippoglossoides_Pac
sarritor frenatus_Pac
sebastes alutus_Pac
sebastes babcocki_Pac
sebastes borealis_Pac
sebastes polyspinis_Pac
sebastes variabilis_Pac
sebastolobus alascanus_Pac
serripes groenlandicus_Pac
squalus acanthias_Pac
stegophiura ponderosa_Pac
stomphia coccinea_Pac
styela rustica_Pac
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theragra chalcogramma_Pac
Mean latitude (°N)
2020
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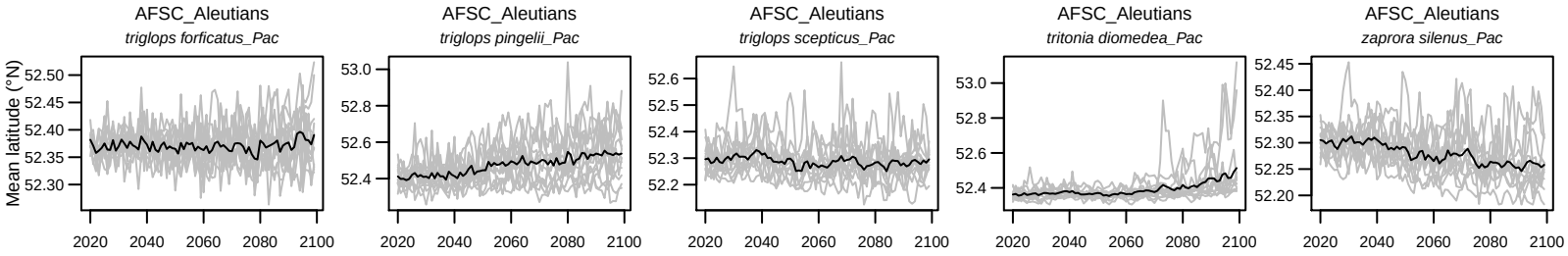
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triglops forficatus_Pac
AFSC_Aleutians
triglops pingelii_Pac
AFSC_Aleutians
triglops scepticus_Pac
AFSC_Aleutians
tritonia diomedea_Pac
AFSC_Aleutians
zaprora silenus_Pac
Mean latitude (°N)
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52.40
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52.8
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52.30
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52.20
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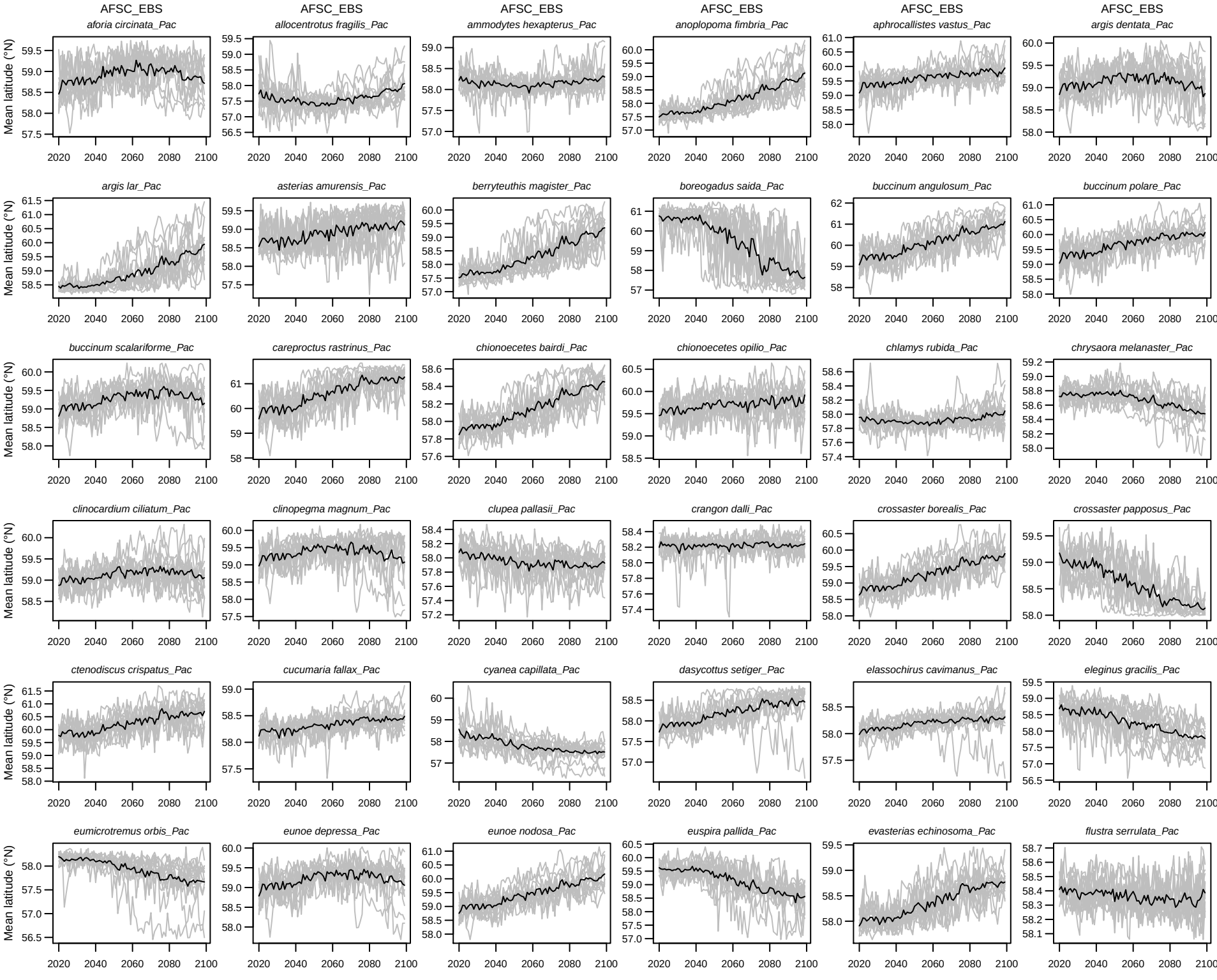
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allocentrotus fragilis_Pac
ammodytes hexapterus_Pac
anoplopoma fimbria_Pac
aphrocallistes vastus_Pac
argis dentata_Pac
argis lar_Pac
asterias amurensis_Pac
berryteuthis magister_Pac
boreogadus saida_Pac
buccinum angulosum_Pac
buccinum polare_Pac
buccinum scalariforme_Pac
careproctus rastrinus_Pac
chionoecetes bairdi_Pac
chionoecetes opilio_Pac
chlamys rubida_Pac
chrysaora melanaster_Pac
clinocardium ciliatum_Pac
clinopegma magnum_Pac
clupea pallasii_Pac
crangon dalli_Pac
crossaster borealis_Pac
crossaster papposus_Pac
ctenodiscus crispatus_Pac
cucumaria fallax_Pac
cyanea capillata_Pac
dasycottus setiger_Pac
elassochirus cavimanus_Pac
eleginus gracilis_Pac
eumicrotremus orbis_Pac
eunoe depressa_Pac
eunoe nodosa_Pac
euspira pallida_Pac
evasterias echinosoma_Pac
flustra serrulata_Pac
Mean latitude (°N)
2020
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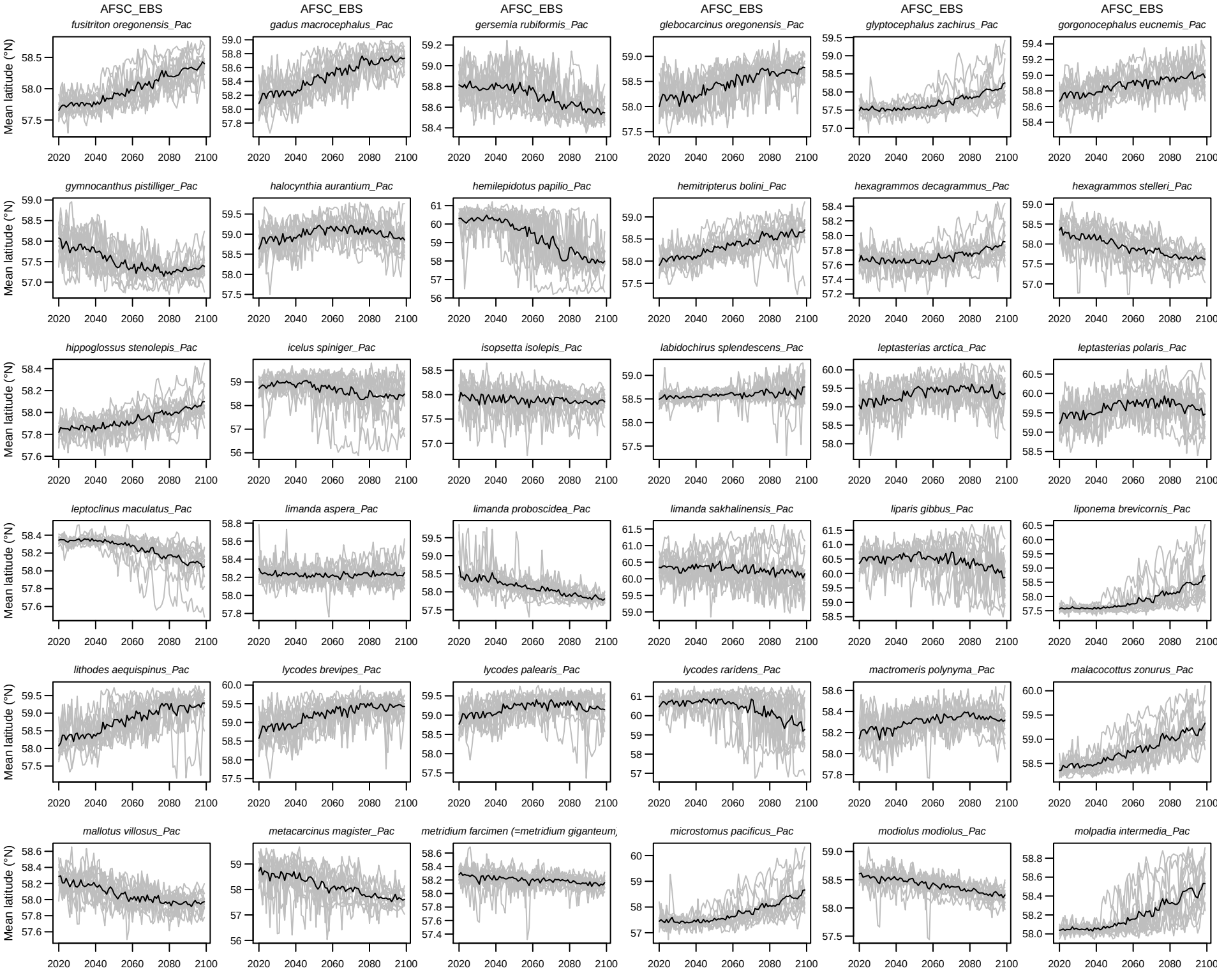
AFSC_EBS
fusitriton oregonensis_Pac
gadus macrocephalus_Pac
gersemia rubiformis_Pac
glebocarcinus oregonensis_Pac
glyptocephalus zachirus_Pac
gorgonocephalus eucnemis_Pac
gymnocanthus pistilliger_Pac
halocynthia aurantium_Pac
hemilepidotus papilio_Pac
hemitripterus bolini_Pac
hexagrammos decagrammus_Pac
hexagrammos stelleri_Pac
hippoglossus stenolepis_Pac
icelus spiniger_Pac
isopsetta isolepis_Pac
labidochirus splendescens_Pac
leptasterias arctica_Pac
leptasterias polaris_Pac
leptoclinus maculatus_Pac
limanda aspera_Pac
limanda proboscidea_Pac
limanda sakhalinensis_Pac
liparis gibbus_Pac
liponema brevicornis_Pac
lithodes aequispinus_Pac
lycodes brevipes_Pac
lycodes palearis_Pac
lycodes raridens_Pac
mactromeris polynyma_Pac
malacocottus zonurus_Pac
mallotus villosus_Pac
metacarcinus magister_Pac
metridium farcimen (=metridium giganteum)
microstomus pacificus_Pac
modiolus modiolus_Pac
molpadia intermedia_Pac
Mean latitude (°N)
2020
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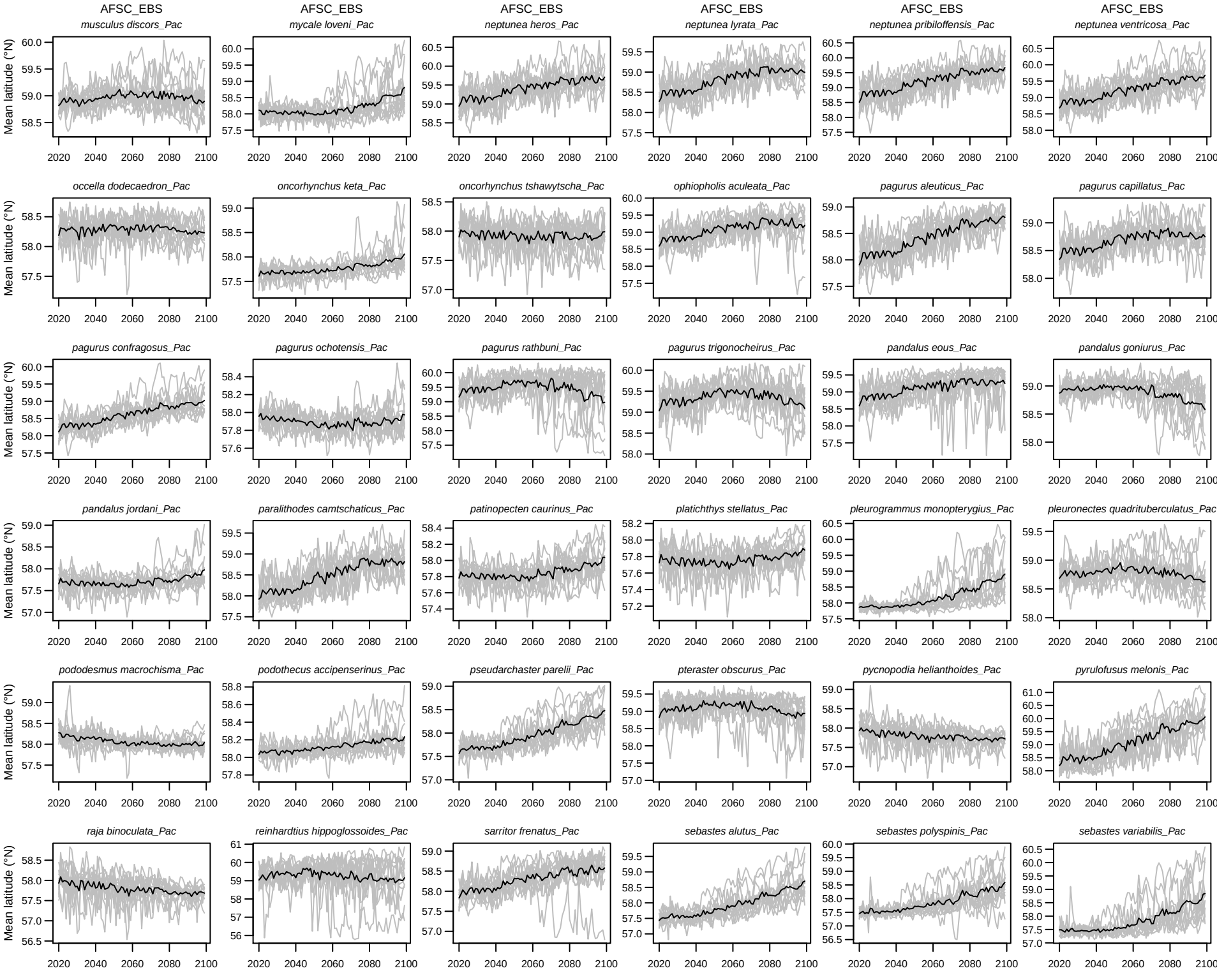
AFSC_EBS
musculus discors_Pac
mycale loveni_Pac
neptunea heros_Pac
neptunea lyrata_Pac
neptunea pribiloffensis_Pac
neptunea ventricosa_Pac
occella dodecaedron_Pac
oncorhynchus keta_Pac
oncorhynchus tshawytscha_Pac
ophiopholis aculeata_Pac
pagurus aleuticus_Pac
pagurus capillatus_Pac
pagurus confragosus_Pac
pagurus ochotensis_Pac
pagurus rathbuni_Pac
pagurus trigonocheirus_Pac
pandalus eous_Pac
pandalus goniurus_Pac
pandalus jordani_Pac
paralithodes camtschaticus_Pac
patinopecten caurinus_Pac
platichthys stellatus_Pac
pleurogrammus monopterygius_Pac
pleuronectes quadrituberculatus_Pac
pododesmus macrochisma_Pac
podothecus accipenserinus_Pac
pseudarchaster parelii_Pac
pteraster obscurus_Pac
pycnopodia helianthoides_Pac
pyrulofusus melonis_Pac
raja binoculata_Pac
reinhardtius hippoglossoides_Pac
sarritor frenatus_Pac
sebastes alutus_Pac
sebastes polyspinis_Pac
sebastes variabilis_Pac
Mean latitude (°N)
2020
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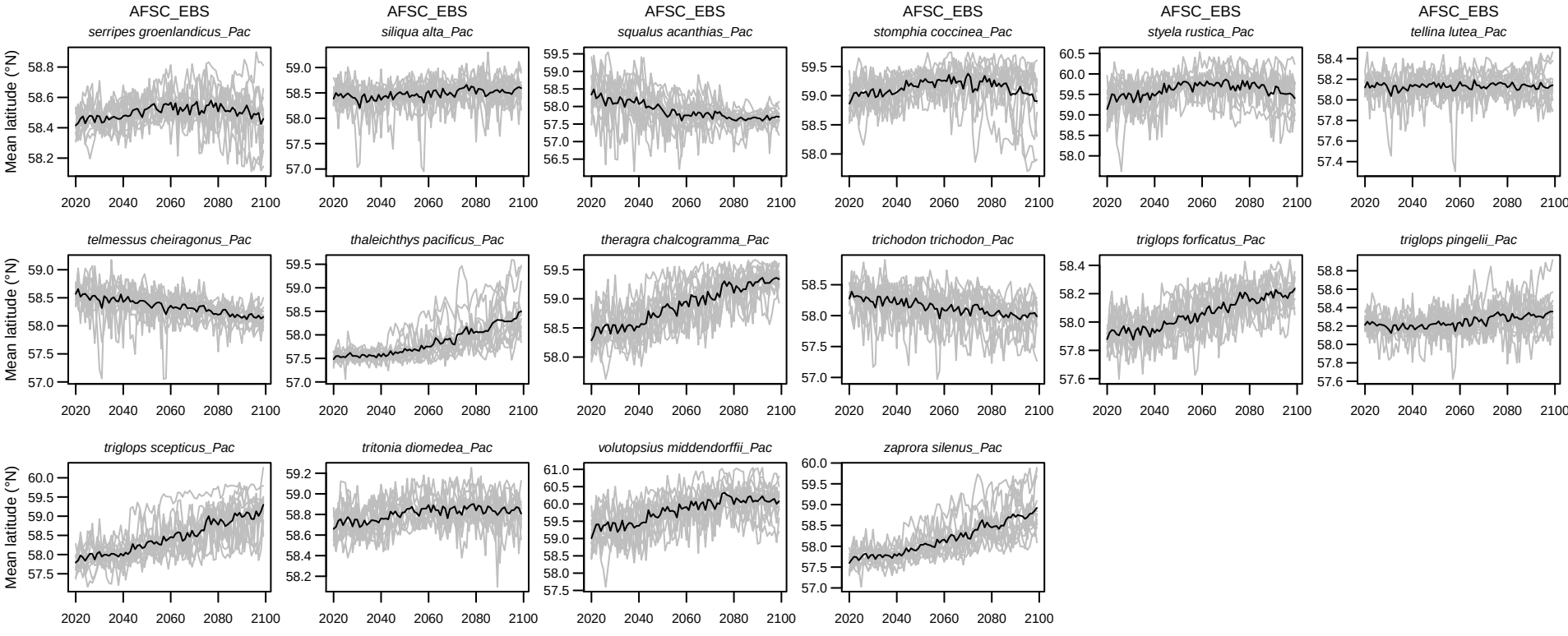
AFSC_EBS
serripes groenlandicus_Pac
siliqua alta_Pac
squalus acanthias_Pac
stomphia coccinea_Pac
styela rustica_Pac
tellina lutea_Pac
telmessus cheiragonus_Pac
thaleichthys pacificus_Pac
theragra chalcogramma_Pac
trichodon trichodon_Pac
triglops forficatus_Pac
triglops pingelii_Pac
triglops scepticus_Pac
tritonia diomedea_Pac
volutopsius middendorffii_Pac
zaprora silenus_Pac
Mean latitude (°N)
2020
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2060
2080
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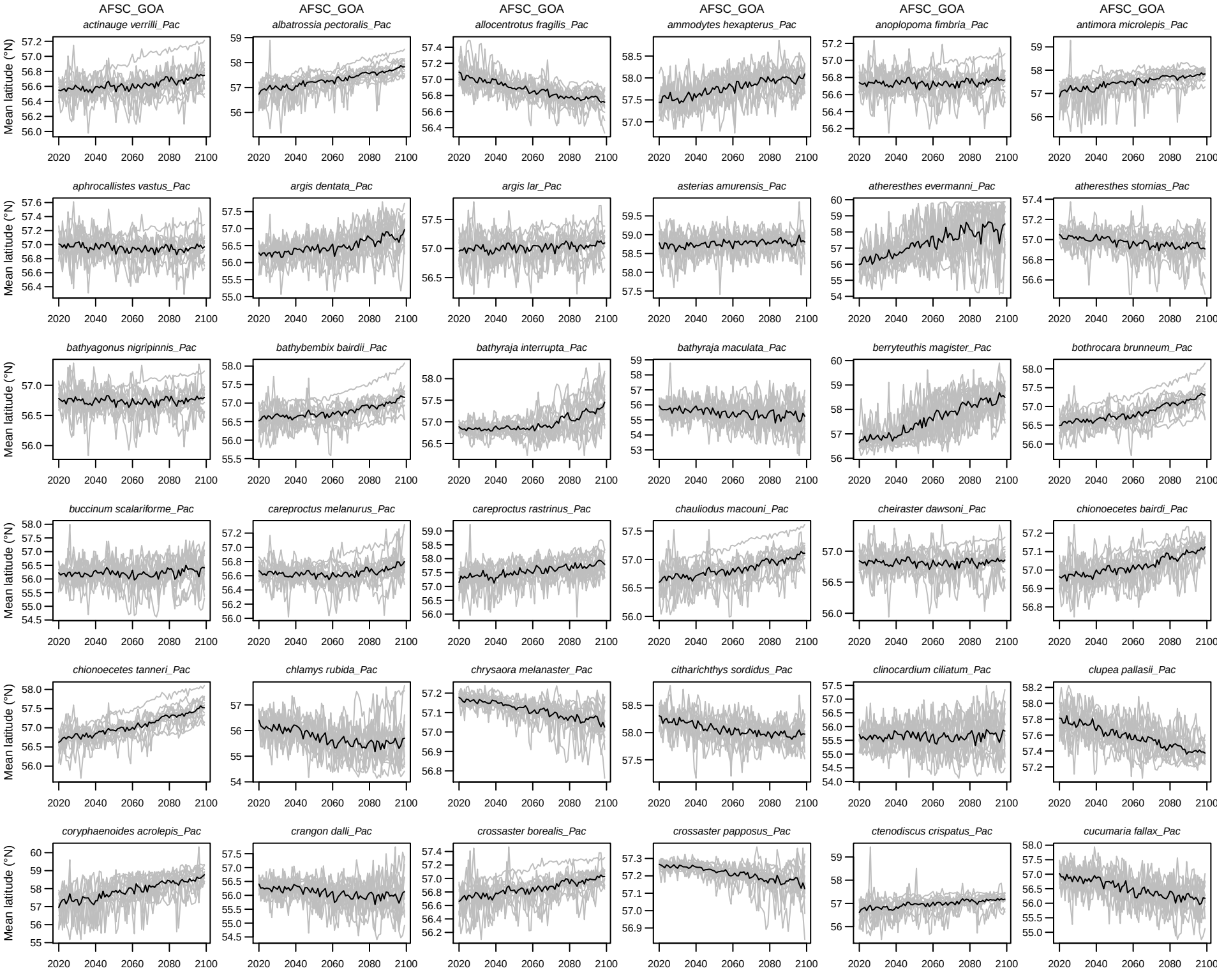
AFSC_GOA
actinauge verrilli_Pac
albatrossia pectoralis_Pac
allocentrotus fragilis_Pac
ammodytes hexapterus_Pac
anoplopoma fimbria_Pac
antimora microlepis_Pac
aphrocallistes vastus_Pac
argis dentata_Pac
argis lar_Pac
asterias amurensis_Pac
atheresthes evermanni_Pac
atheresthes stomias_Pac
bathyagonus nigripinnis_Pac
bathybembix bairdii_Pac
bathyraja interrupta_Pac
bathyraja maculata_Pac
berryteuthis magister_Pac
bothrocara brunneum_Pac
buccinum scalariforme_Pac
careproctus melanurus_Pac
careproctus rastrinus_Pac
chauliodus macouni_Pac
cheiraster dawsoni_Pac
chionoecetes bairdi_Pac
chionoecetes tanneri_Pac
chlamys rubida_Pac
chrysaora melanaster_Pac
citharichthys sordidus_Pac
clinocardium ciliatum_Pac
clupea pallasii_Pac
coryphaenoides acrolepis_Pac
crangon dalli_Pac
crossaster borealis_Pac
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ctenodiscus crispatus_Pac
cucumaria fallax_Pac
Mean latitude (°N)
2020
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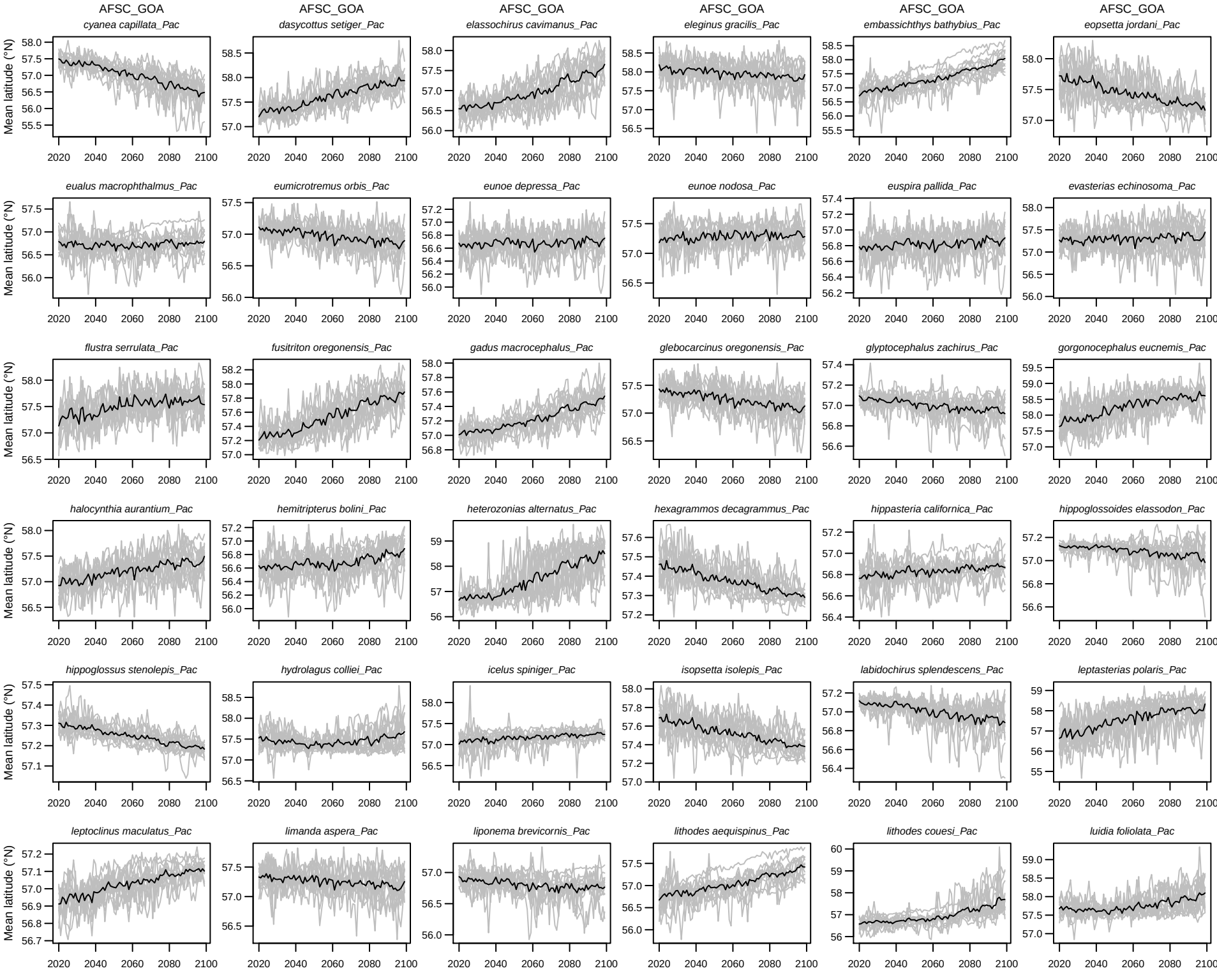
2060
2080
2100


AFSC_GOA
cyanea capillata_Pac
dasycottus setiger_Pac
elassochirus cavimanus_Pac
eleginus gracilis_Pac
embassichthys bathybius_Pac
eopsetta jordani_Pac
eualus macrophthalmus_Pac
eumicrotremus orbis_Pac
eunoe depressa_Pac
eunoe nodosa_Pac
euspira pallida_Pac
evasterias echinosoma_Pac
flustra serrulata_Pac
fusitriton oregonensis_Pac
gadus macrocephalus_Pac
glebocarcinus oregonensis_Pac
glyptocephalus zachirus_Pac
gorgonocephalus eucnemis_Pac
halocynthia aurantium_Pac
hemitripterus bolini_Pac
heterozonias alternatus_Pac
hexagrammos decagrammus_Pac
hippasteria californica_Pac
hippoglossoides elassodon_Pac
hippoglossus stenolepis_Pac
hydrolagus colliei_Pac
icelus spiniger_Pac
isopsetta isolepis_Pac
labidochirus splendescens_Pac
leptasterias polaris_Pac
leptoclinus maculatus_Pac
limanda aspera_Pac
liponema brevicornis_Pac
lithodes aequispinus_Pac
lithodes couesi_Pac
luidia foliolata_Pac
Mean latitude (°N)
2020
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2060
2080
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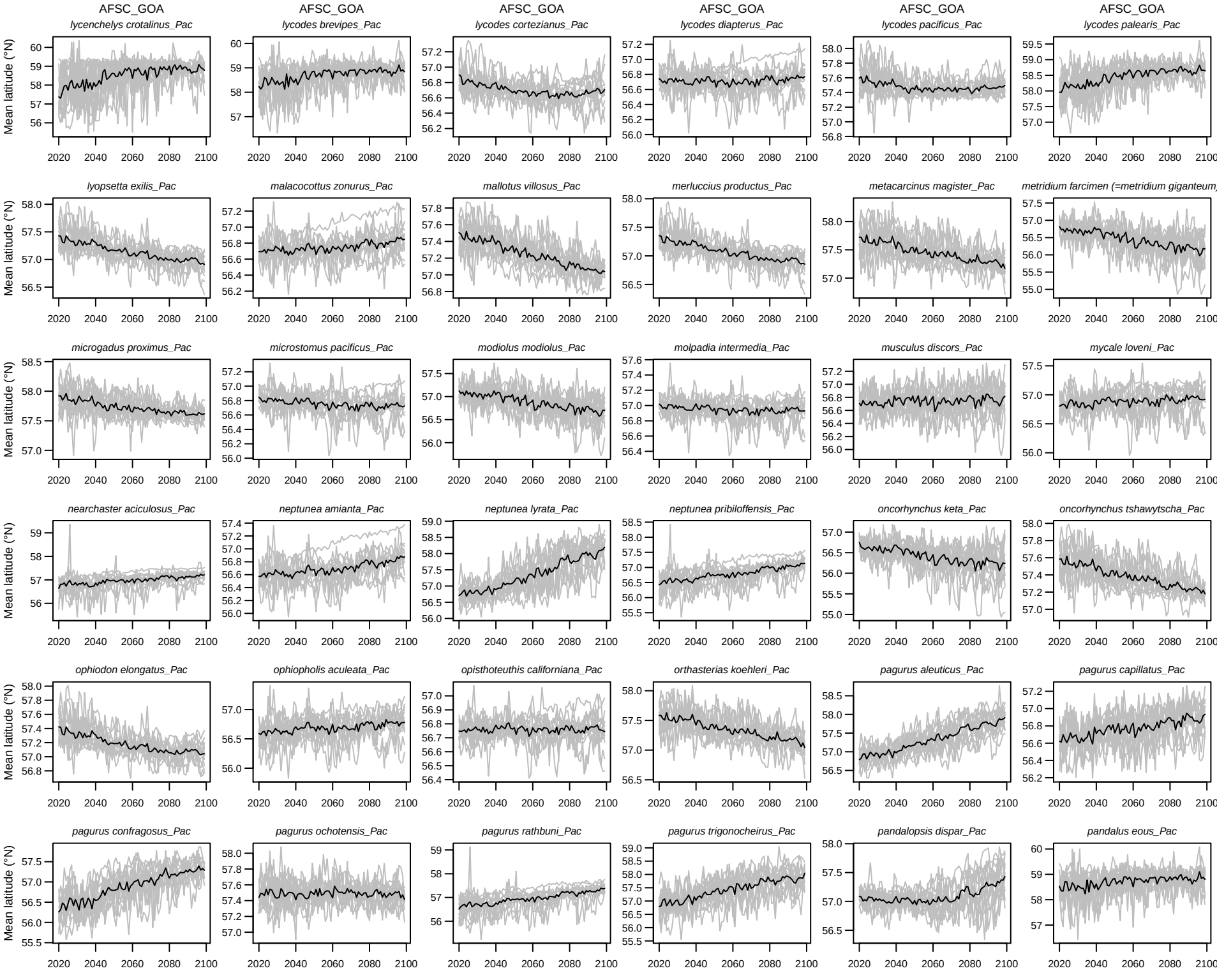
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lycodes cortezianus_Pac
lycodes diapterus_Pac
lycodes pacificus_Pac
lycodes palearis_Pac
lyopsetta exilis_Pac
malacocottus zonurus_Pac
mallotus villosus_Pac
merluccius productus_Pac
metacarcinus magister_Pac
metridium farcimen (=metridium giganteum)
microgadus proximus_Pac
microstomus pacificus_Pac
modiolus modiolus_Pac
molpadia intermedia_Pac
musculus discors_Pac
mycale loveni_Pac
nearchaster aciculosus_Pac
neptunea amianta_Pac
neptunea lyrata_Pac
neptunea pribiloffensis_Pac
oncorhynchus keta_Pac
oncorhynchus tshawytscha_Pac
ophiodon elongatus_Pac
ophiopholis aculeata_Pac
opisthoteuthis californiana_Pac
orthasterias koehleri_Pac
pagurus aleuticus_Pac
pagurus capillatus_Pac
pagurus confragosus_Pac
pagurus ochotensis_Pac
pagurus rathbuni_Pac
pagurus trigonocheirus_Pac
pandalopsis dispar_Pac
pandalus eous_Pac
Mean latitude (°N)
2020
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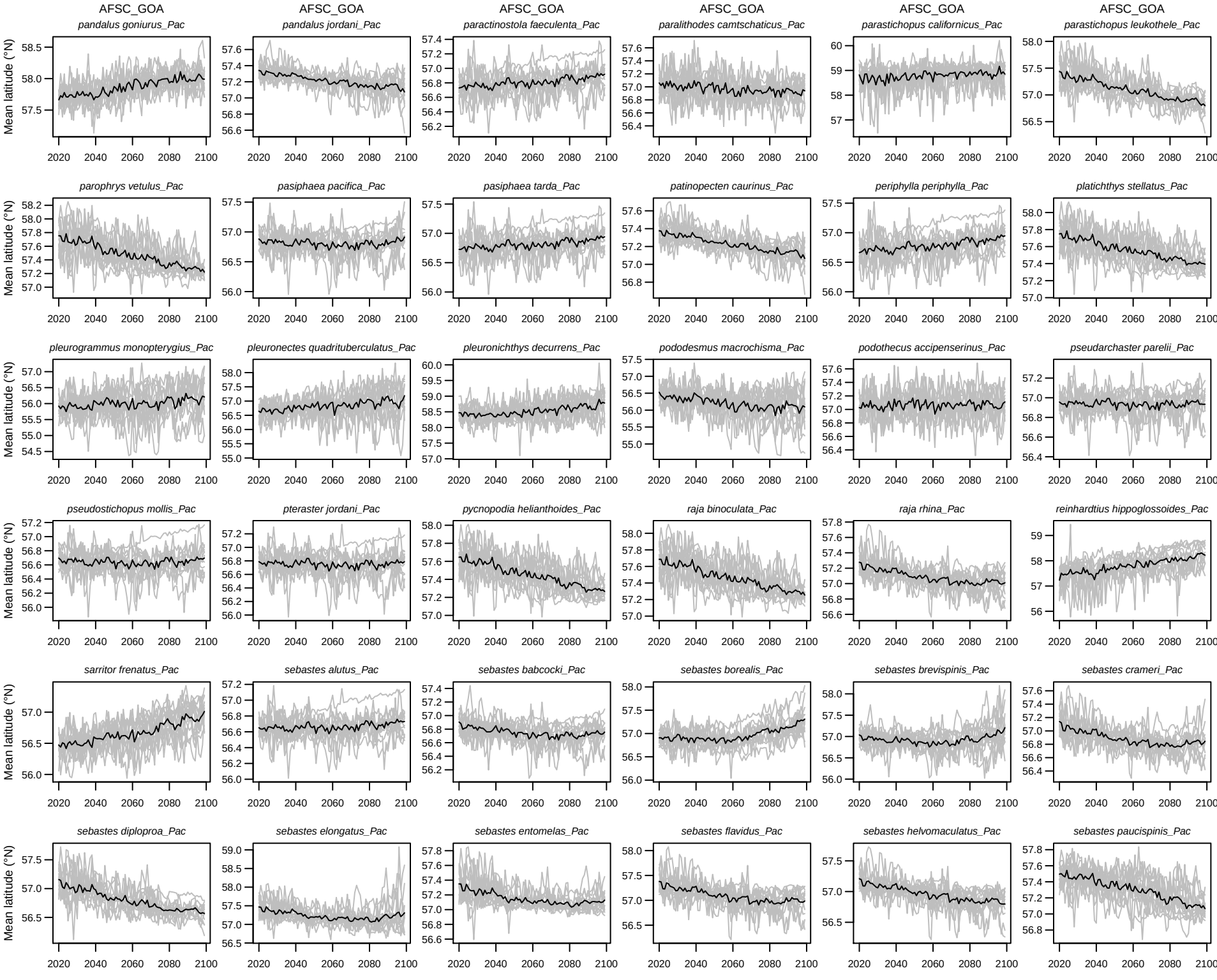
AFSC_GOA
pandalus goniurus_Pac
pandalus jordani_Pac
paractinostola faeculenta_Pac
paralithodes camtschaticus_Pac
parastichopus californicus_Pac
parastichopus leukothele_Pac
parophrys vetulus_Pac
pasiphaea pacifica_Pac
pasiphaea tarda_Pac
patinopecten caurinus_Pac
periphylla periphylla_Pac
platichthys stellatus_Pac
pleurogrammus monopterygius_Pac
pleuronectes quadrituberculatus_Pac
pleuronichthys decurrens_Pac
pododesmus macrochisma_Pac
podothecus accipenserinus_Pac
pseudarchaster parelii_Pac
pseudostichopus mollis_Pac
pteraster jordani_Pac
pycnopodia helianthoides_Pac
raja binoculata_Pac
raja rhina_Pac
reinhardtius hippoglossoides_Pac
sarritor frenatus_Pac
sebastes alutus_Pac
sebastes babcocki_Pac
sebastes borealis_Pac
sebastes brevispinis_Pac
sebastes crameri_Pac
sebastes diploproa_Pac
sebastes elongatus_Pac
sebastes entomelas_Pac
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sebastes paucispinis_Pac
Mean latitude (°N)
2020
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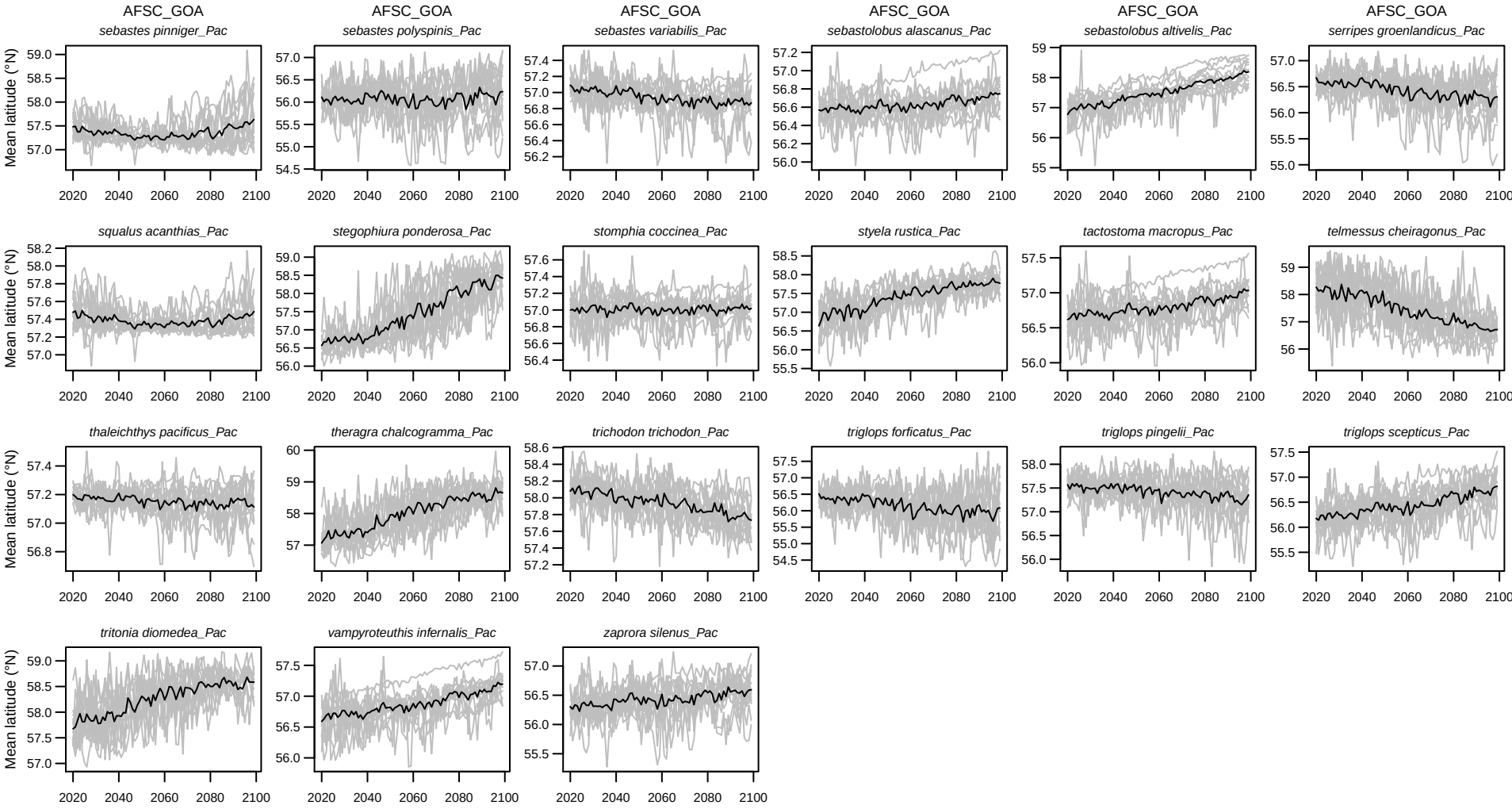
AFSC_GOA
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sebastes polyspinis_Pac
sebastes variabilis_Pac
sebastolobus alascanus_Pac
sebastolobus altivelis_Pac
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squalus acanthias_Pac
stegophiura ponderosa_Pac
stomphia coccinea_Pac
styela rustica_Pac
tactostoma macropus_Pac
telmessus cheiragonus_Pac
thaleichthys pacificus_Pac
theragra chalcogramma_Pac
trichodon trichodon_Pac
triglops forficatus_Pac
triglops pingelii_Pac
triglops scepticus_Pac
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zaprora silenus_Pac
Mean latitude (°N)
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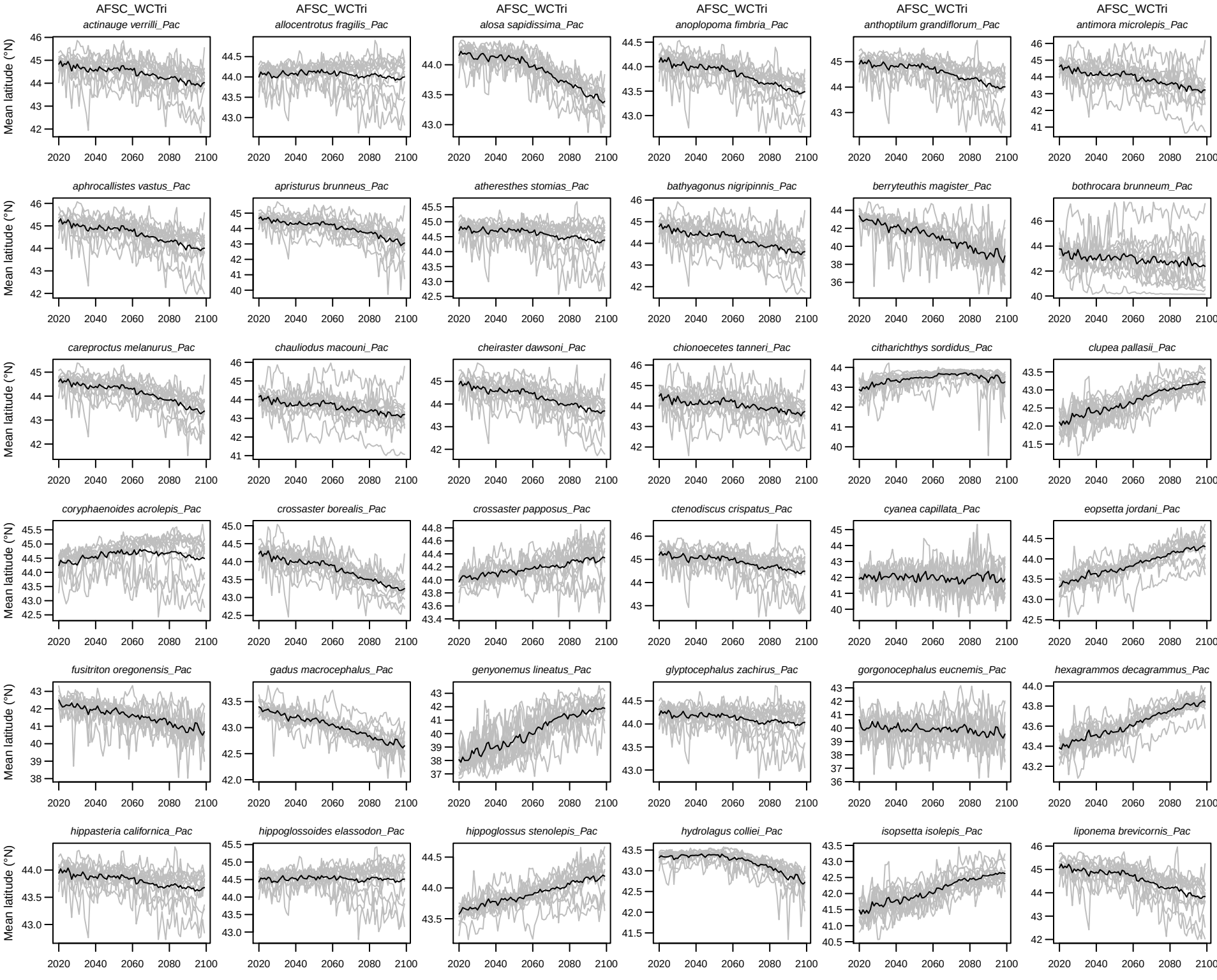
AFSC_WCTri
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allocentrotus fragilis_Pac
alosa sapidissima_Pac
anoplopoma fimbria_Pac
anthoptilum grandiflorum_Pac
antimora microlepis_Pac
aphrocallistes vastus_Pac
apristurus brunneus_Pac
atheresthes stomias_Pac
bathyagonus nigripinnis_Pac
berryteuthis magister_Pac
bothrocara brunneum_Pac
careproctus melanurus_Pac
chauliodus macouni_Pac
cheiraster dawsoni_Pac
chionoecetes tanneri_Pac
citharichthys sordidus_Pac
clupea pallasii_Pac
coryphaenoides acrolepis_Pac
crossaster borealis_Pac
crossaster papposus_Pac
ctenodiscus crispatus_Pac
cyanea capillata_Pac
eopsetta jordani_Pac
fusitriton oregonensis_Pac
gadus macrocephalus_Pac
genyonemus lineatus_Pac
glyptocephalus zachirus_Pac
gorgonocephalus eucnemis_Pac
hexagrammos decagrammus_Pac
hippasteria californica_Pac
hippoglossoides elassodon_Pac
hippoglossus stenolepis_Pac
hydrolagus colliei_Pac
isopsetta isolepis_Pac
liponema brevicornis_Pac
Mean latitude (°N)
2020
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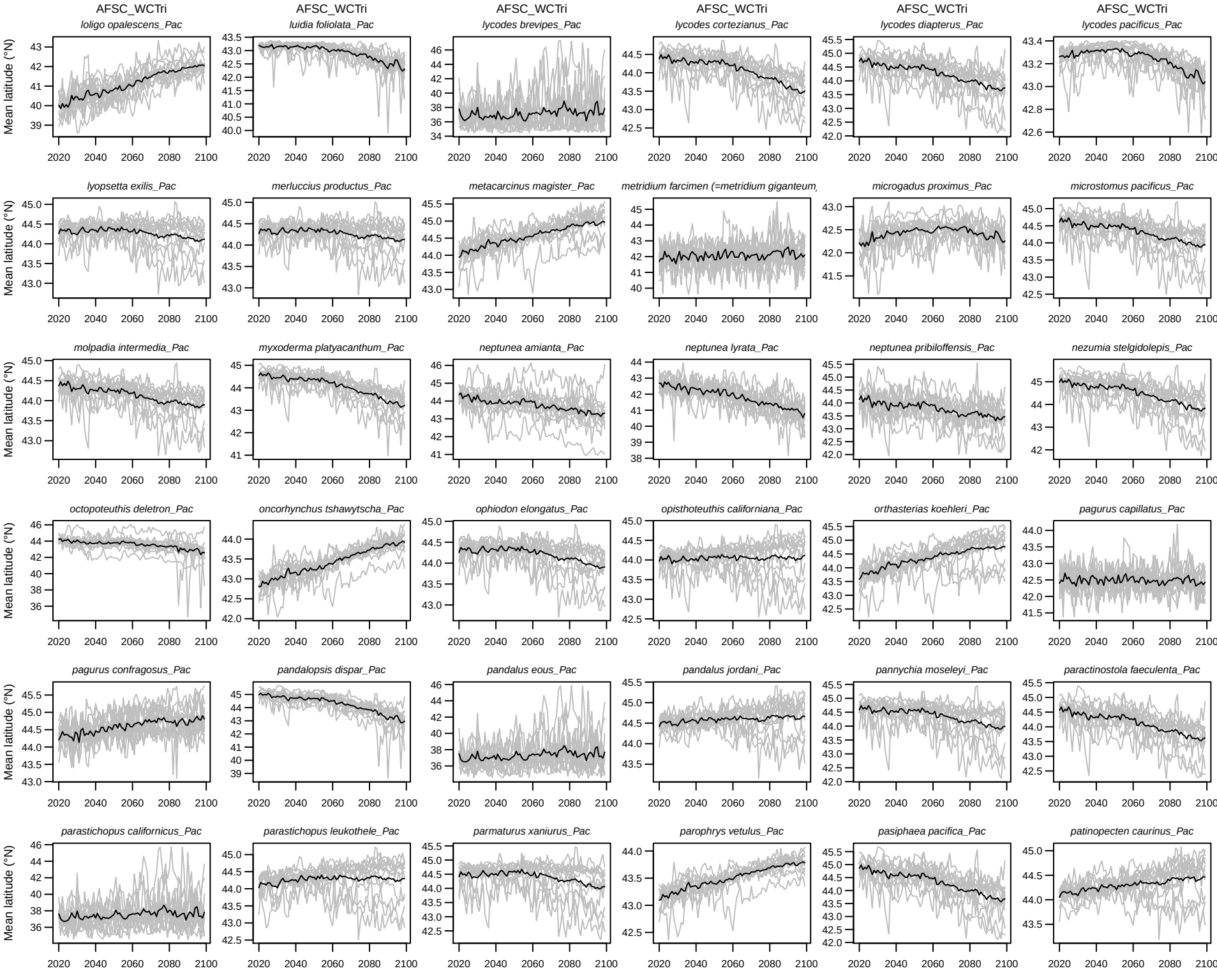
AFSC_WCTri
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luidia foliolata_Pac
lycodes brevipes_Pac
lycodes cortezianus_Pac
lycodes diapterus_Pac
lycodes pacificus_Pac
lyopsetta exilis_Pac
merluccius productus_Pac
metacarcinus magister_Pac
metridium farcimen (=metridium giganteum,
microgadus proximus_Pac
microstomus pacificus_Pac
molpadia intermedia_Pac
myxoderma platyacanthum_Pac
neptunea amianta_Pac
neptunea lyrata_Pac
neptunea pribiloffensis_Pac
nezumia stelgidolepis_Pac
octopoteuthis deletron_Pac
oncorhynchus tshawytscha_Pac
ophiodon elongatus_Pac
opisthoteuthis californiana_Pac
orthasterias koehleri_Pac
pagurus capillatus_Pac
pagurus confragosus_Pac
pandalopsis dispar_Pac
pandalus eous_Pac
pandalus jordani_Pac
pannychia moseleyi_Pac
paractinostola faeculenta_Pac
parastichopus californicus_Pac
parastichopus leukothele_Pac
parmaturus xaniurus_Pac
parophrys vetulus_Pac
pasiphaea pacifica_Pac
patinopecten caurinus_Pac
Mean latitude (°N)
2020
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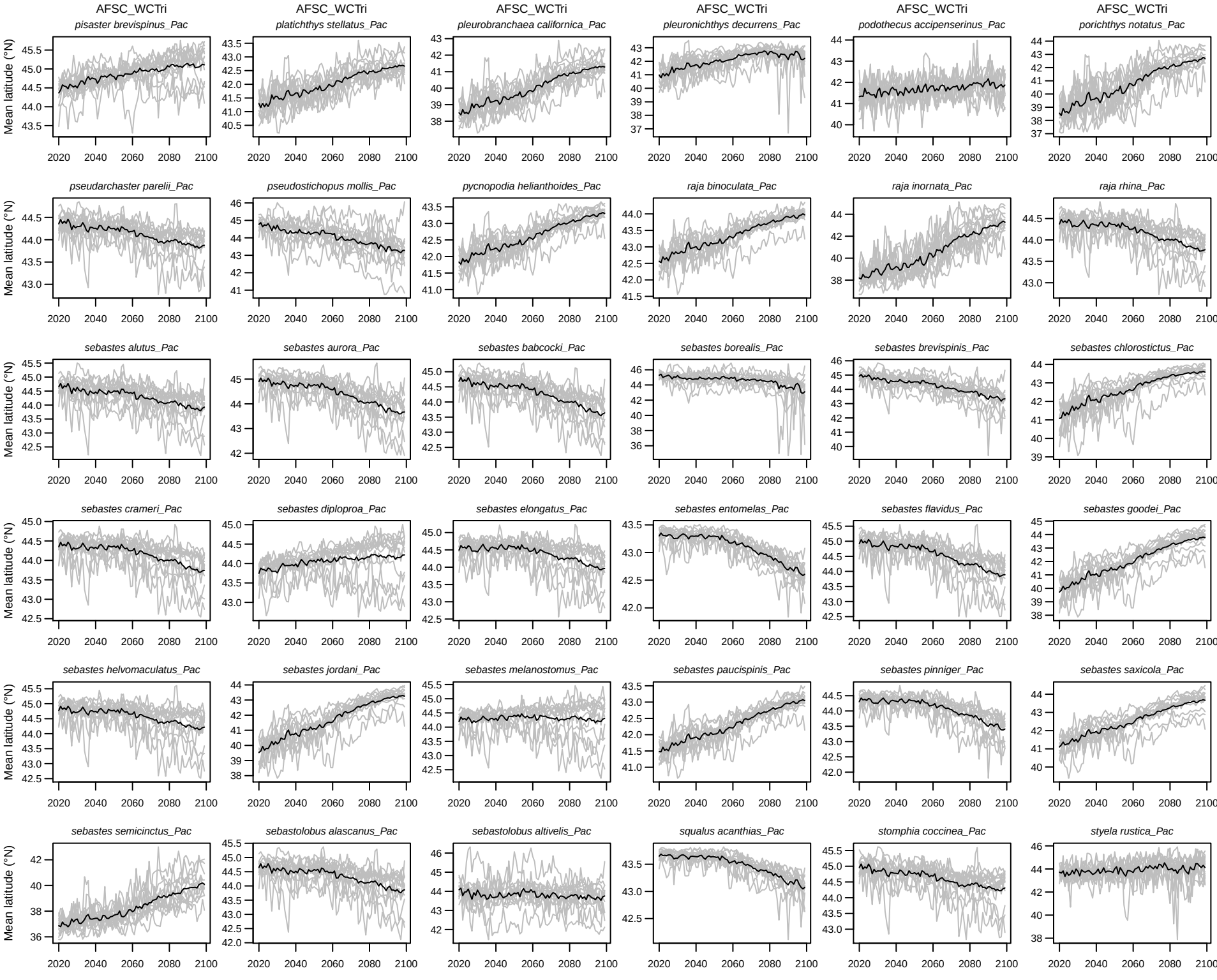
AFSC_WCTri
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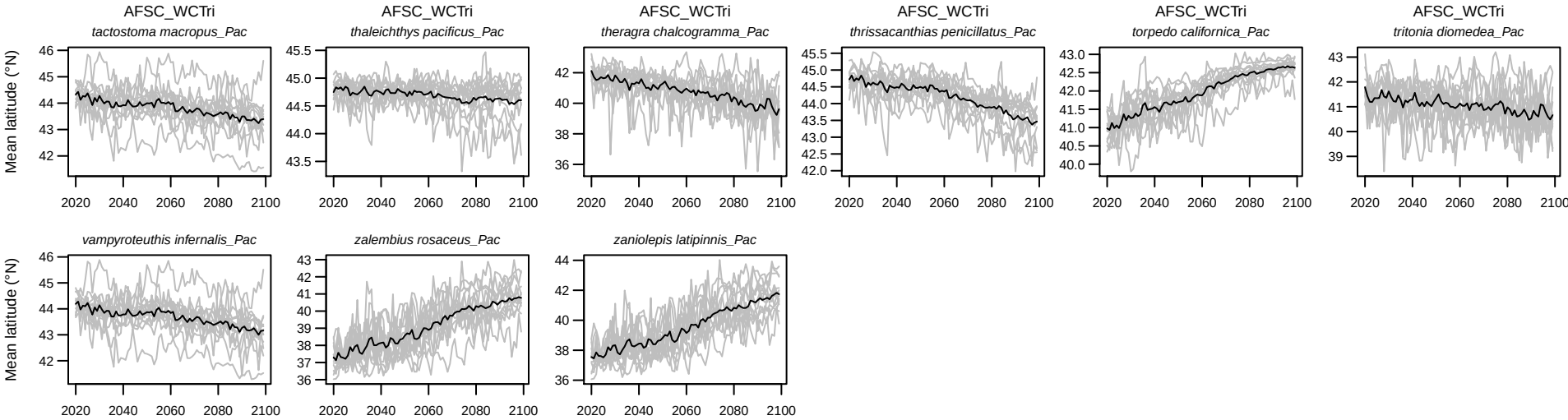
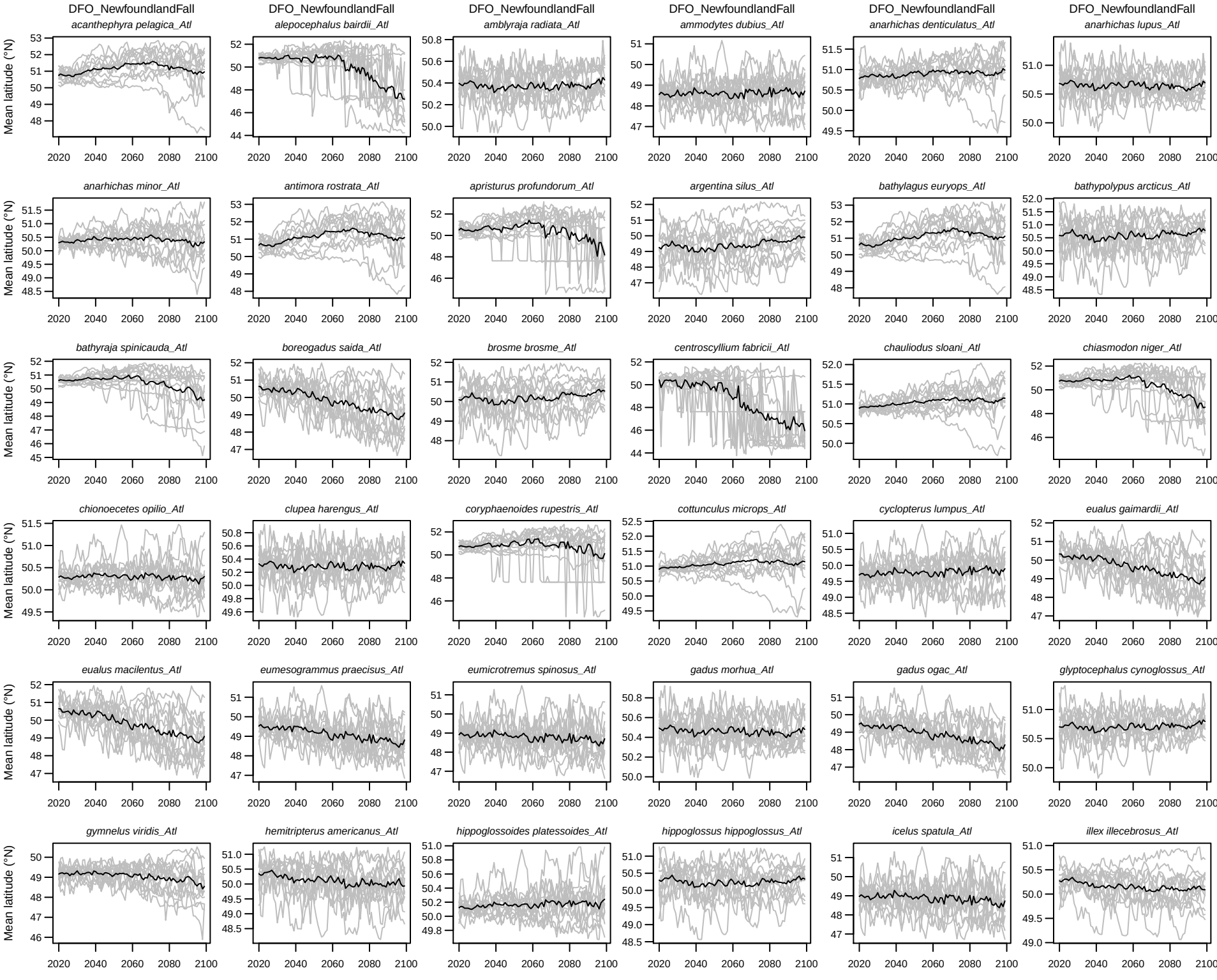
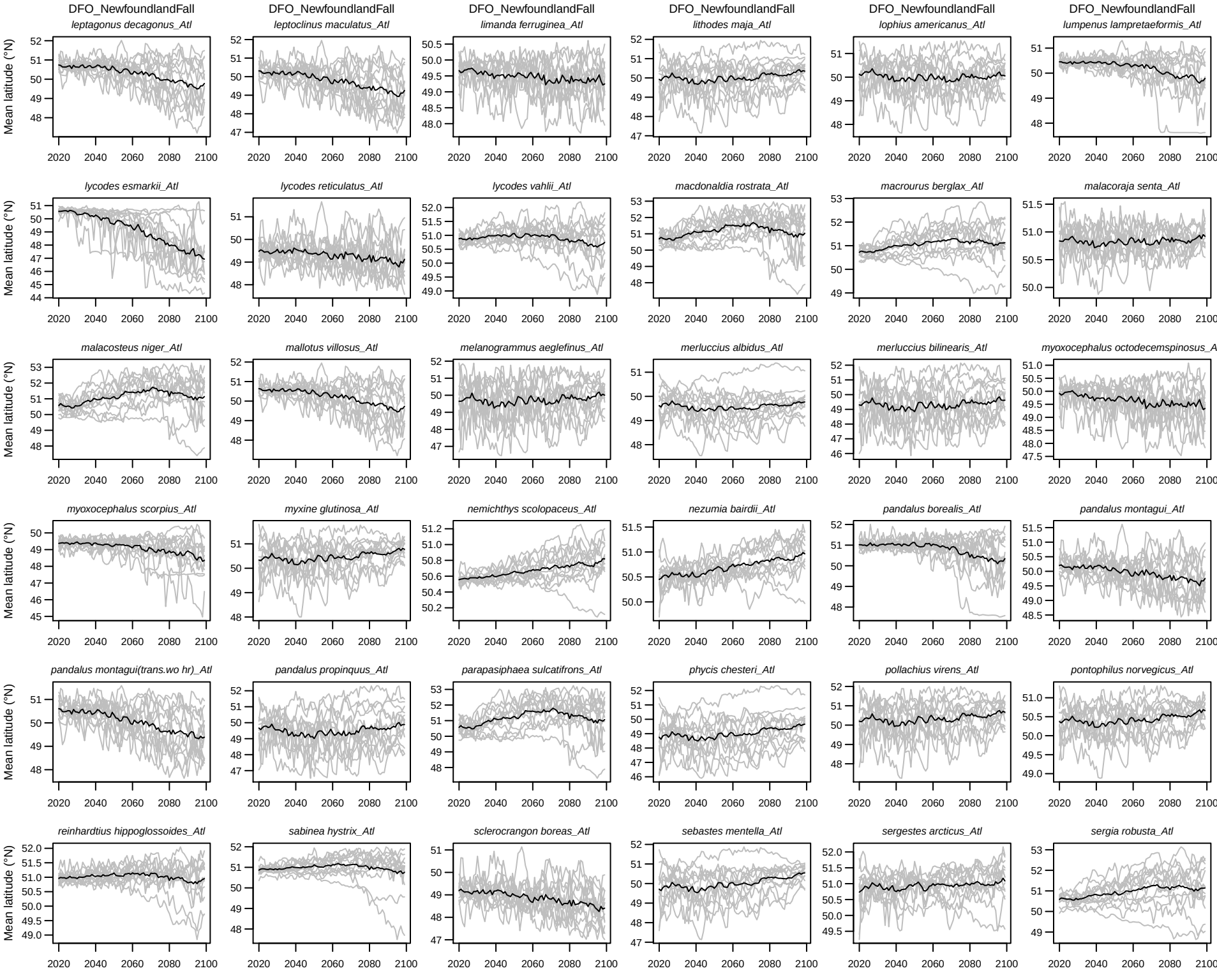
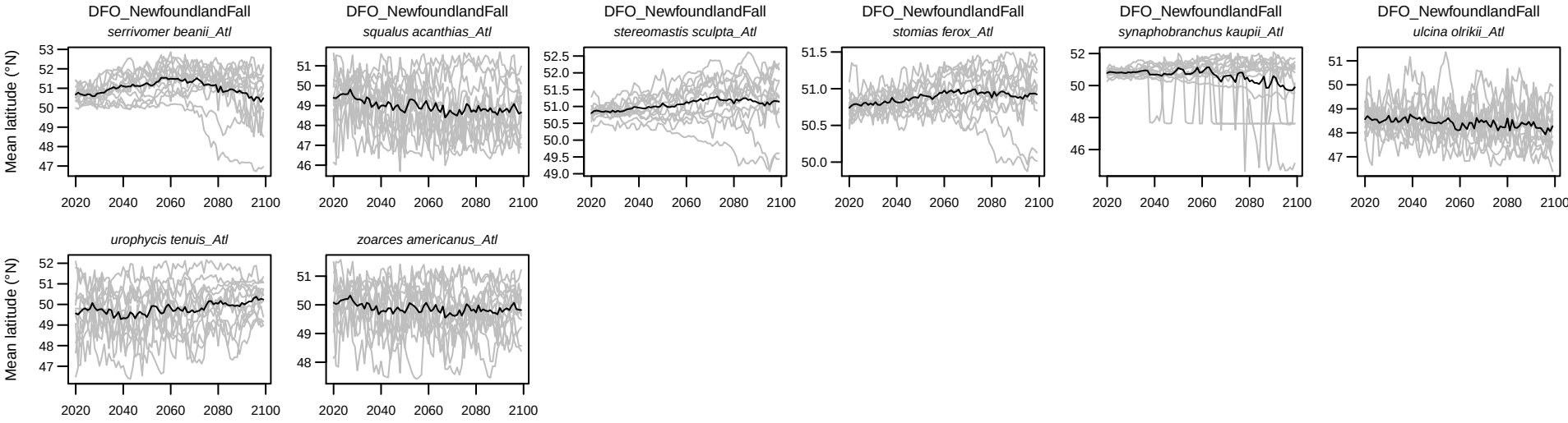
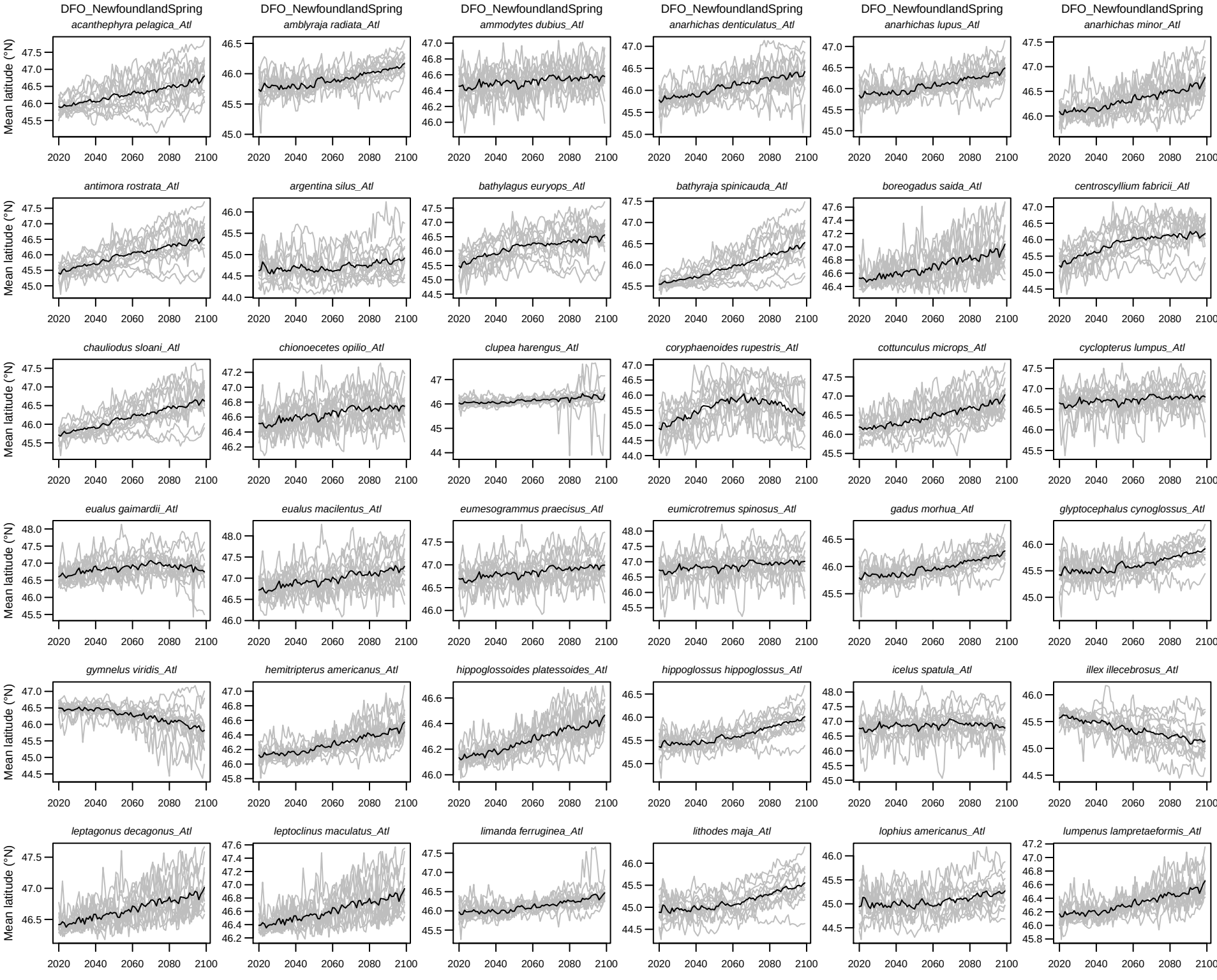
platichthys stellatus_Pac
pleurobranchaea californica_Pac
pleuronichthys decurrens_Pac
podothecus accipenserinus_Pac
porichthys notatus_Pac
pseudarchaster parelii_Pac
pseudostichopus mollis_Pac
pycnopodia helianthoides_Pac
raja binoculata_Pac
raja inornata_Pac
raja rhina_Pac
sebastes alutus_Pac
sebastes aurora_Pac
sebastes babcocki_Pac
sebastes borealis_Pac
sebastes brevispinis_Pac
sebastes chlorostictus_Pac
sebastes crameri_Pac
sebastes diploproa_Pac
sebastes elongatus_Pac
sebastes entomelas_Pac
sebastes flavidus_Pac
sebastes goodei_Pac
sebastes helvomaculatus_Pac
sebastes jordani_Pac
sebastes melanostomus_Pac
sebastes paucispinis_Pac
sebastes pinniger_Pac
sebastes saxicola_Pac
sebastes semicinctus_Pac
sebastolobus alascanus_Pac
sebastolobus altivelis_Pac
squalus acanthias_Pac
stomphia coccinea_Pac
styela rustica_Pac
Mean latitude (°N)
2020
2040
2060
2080
2100

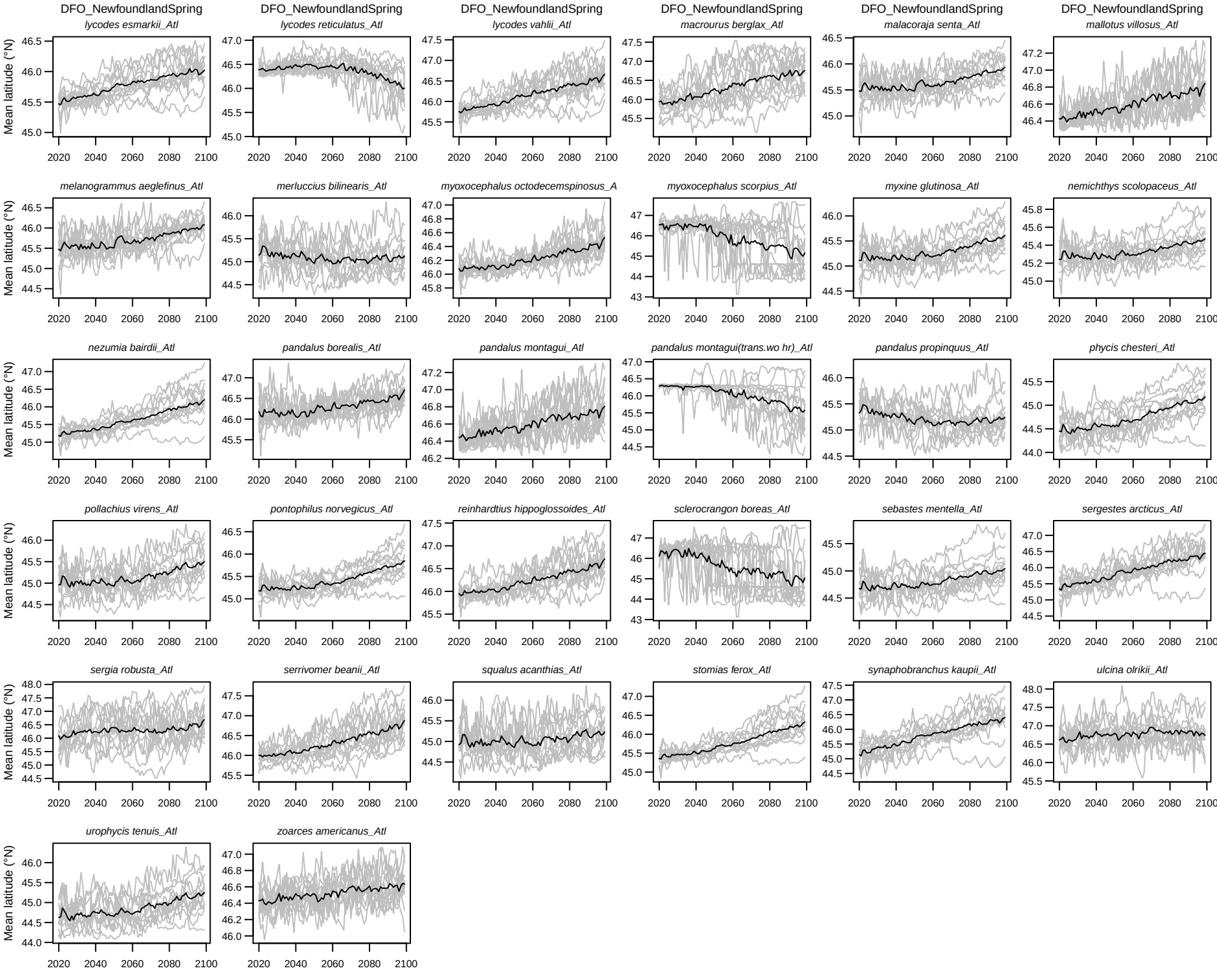

AFSC_WCTri
tactostoma macropus_Pac
thaleichthys pacificus_Pac
theragra chalcogramma_Pac
thrissacanthias penicillatus_Pac
torpedo californica_Pac
tritonia diomedea_Pac
vampyroteuthis infernalis_Pac
zalembius rosaceus_Pac
zaniolepis latipinnis_Pac
Mean latitude (°N)
2020
2040
2060
2080
2100

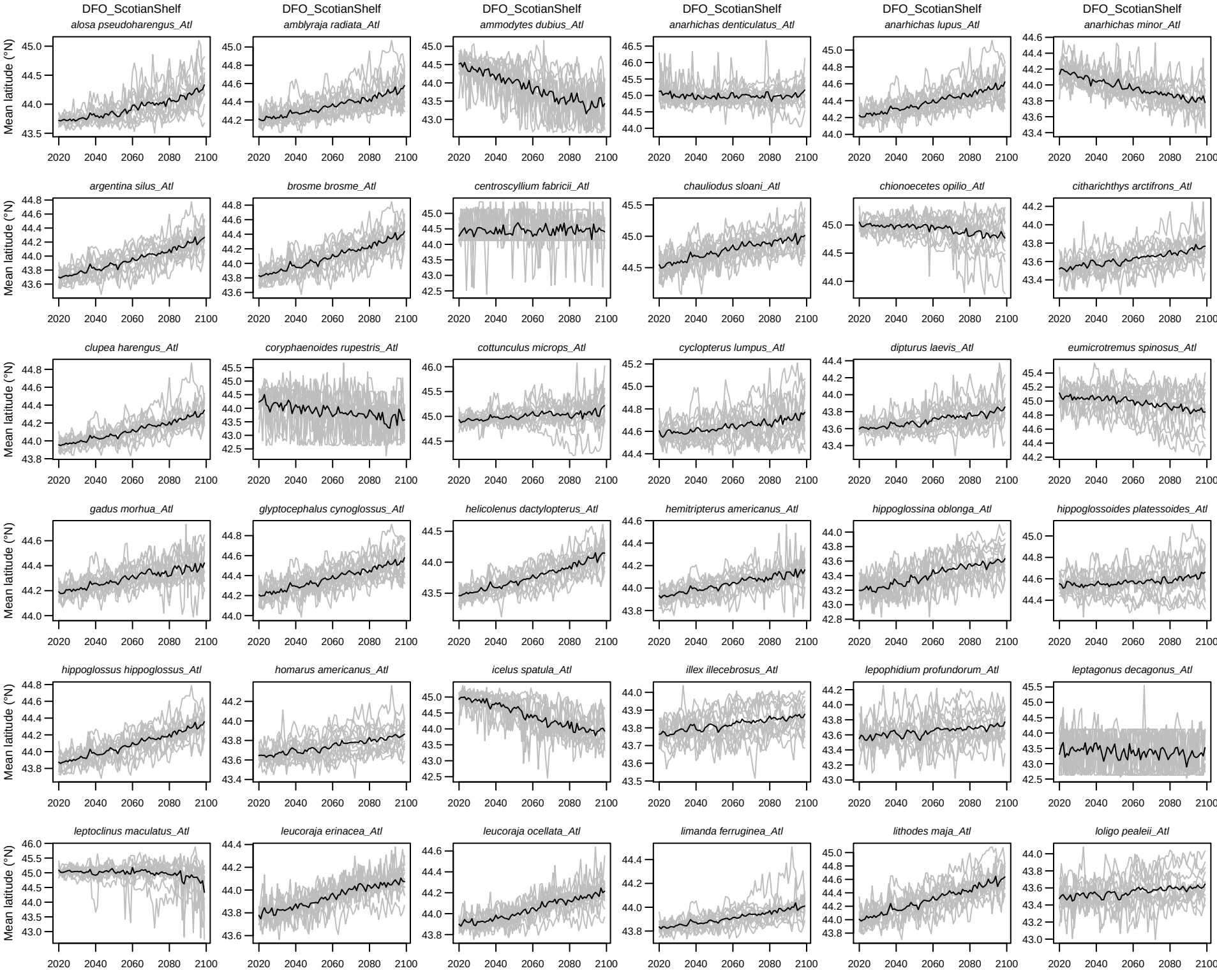

DFO_NewfoundlandFall
Mean latitude (°N)
acanthephyra pelagica_Atl
alepocephalus bairdii_Atl
amblyraja radiata_Atl
ammodytes dubius_Atl
anarhichas denticulatus_Atl
anarhichas lupus_Atl
anarhichas minor_Atl
antimora rostrata_Atl
apristurus profundorum_Atl
argentina silus_Atl
bathylagus euryops_Atl
bathypolypus arcticus_Atl
bathyraja spinicauda_Atl
boreogadus saida_Atl
brosme brosme_Atl
centroscyllium fabricii_Atl
chauliodus sloani_Atl
chiasmodon niger_Atl
chionoecetes opilio_Atl
clupea harengus_Atl
coryphaenoides rupestris_Atl
cottunculus microps_Atl
cyclopterus lumpus_Atl
eualus gaimardii_Atl
eualus macilentus_Atl
eumesogrammus praecisus_Atl
eumicrotremus spinosus_Atl
gadus morhua_Atl
gadus ogac_Atl
glyptocephalus cynoglossus_Atl
gymnelus viridis_Atl
hemitripterus americanus_Atl
hippoglossoides platessoides_Atl
hippoglossus hippoglossus_Atl
icelus spatula_Atl
illex illecebrosus_Atl
2020
2040
2060
2080
2100

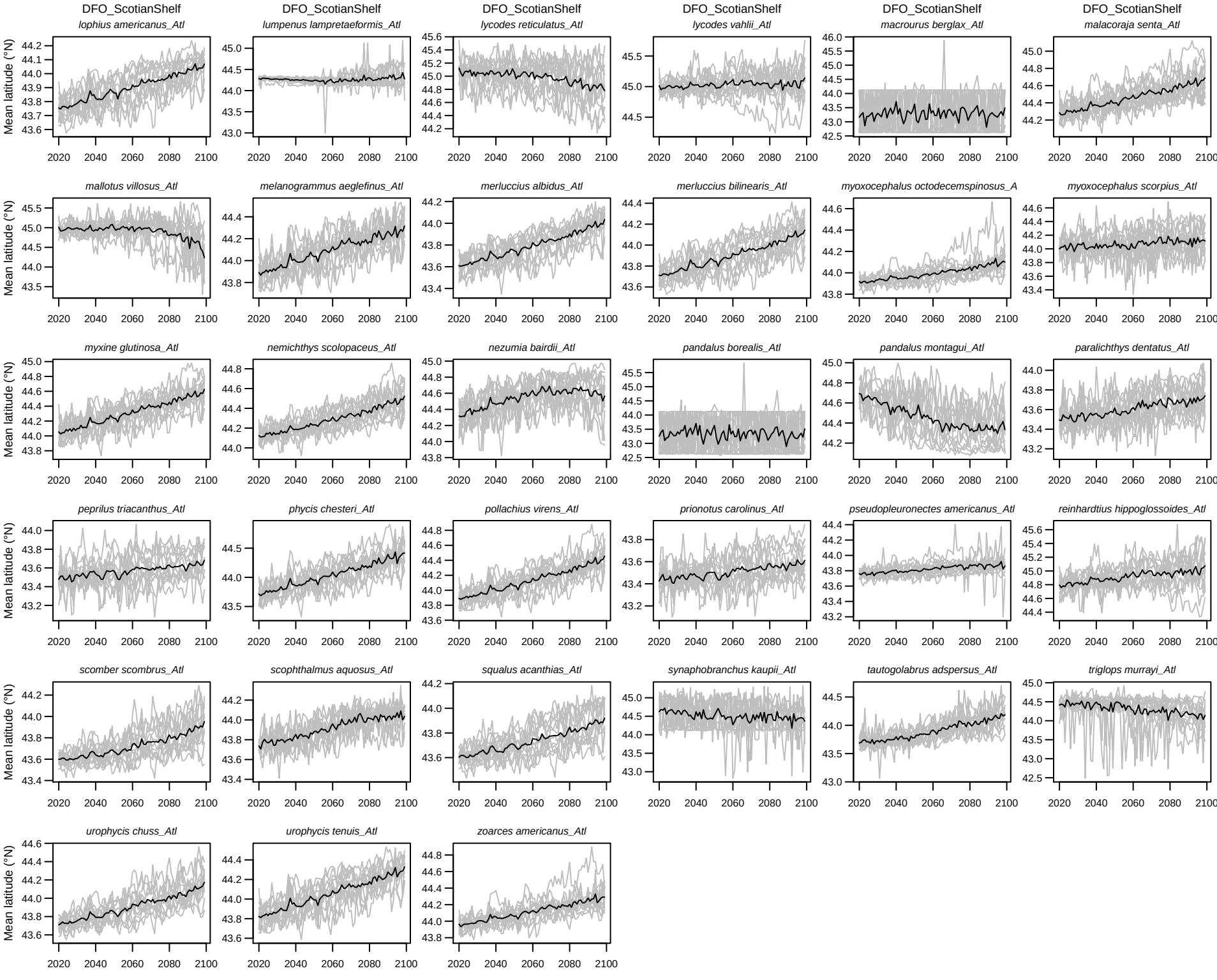

DFO_NewfoundlandFall
leptagonus decagonus_Atl
leptoclinus maculatus_Atl
limanda ferruginea_Atl
lithodes maja_Atl
lophius americanus_Atl
lumpenus lampretaeformis_Atl
lycodes esmarkii_Atl
lycodes reticulatus_Atl
lycodes vahlii_Atl
macdonaldia rostrata_Atl
macrourus berglax_Atl
malacoraja senta_Atl
malacosteus niger_Atl
mallotus villosus_Atl
melanogrammus aeglefinus_Atl
merluccius albidus_Atl
merluccius bilinearis_Atl
myoxocephalus octodecemspinosus_A
myoxocephalus scorpius_Atl
myxine glutinosa_Atl
nemichthys scolopaceus_Atl
nezumia bairdii_Atl
pandalus borealis_Atl
pandalus montagui_Atl
pandalus montagui(trans.wo hr)_Atl
pandalus propinquus_Atl
parapasiphaea sulcatifrons_Atl
phycis chesteri_Atl
pollachius virens_Atl
pontophilus norvegicus_Atl
reinhardtius hippoglossoides_Atl
sabinea hystrix_Atl
sclerocrangon boreas_Atl
sebastes mentella_Atl
sergestes arcticus_Atl
sergia robusta_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100

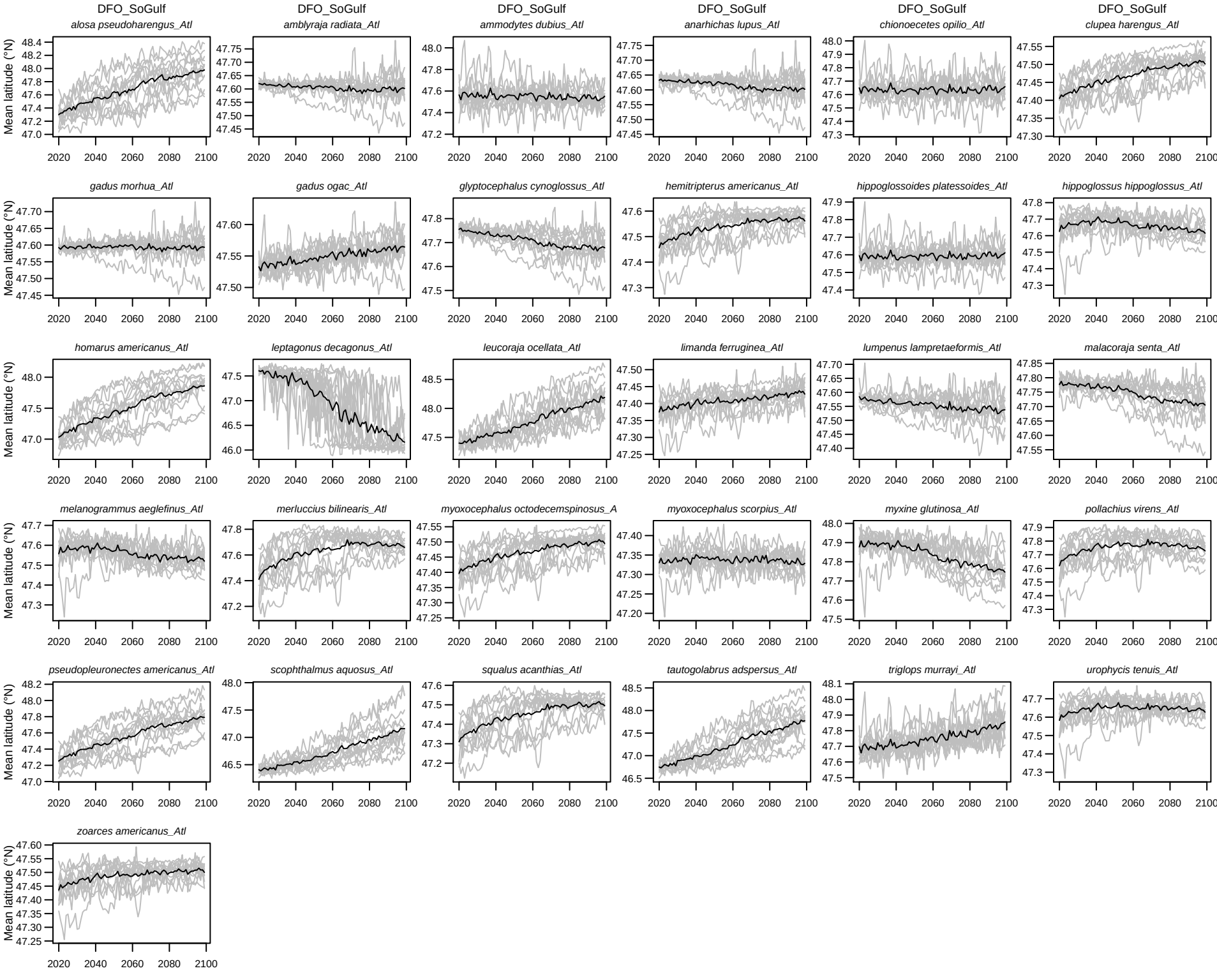

DFO_NewfoundlandFall
serrivomer beanii_Atl
squalus acanthias_Atl
stereomastis sculpta_Atl
stomias ferox_Atl
synaphobranchus kaupii_Atl
ulcina olrikii_Atl
urophycis tenuis_Atl
zoarces americanus_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100

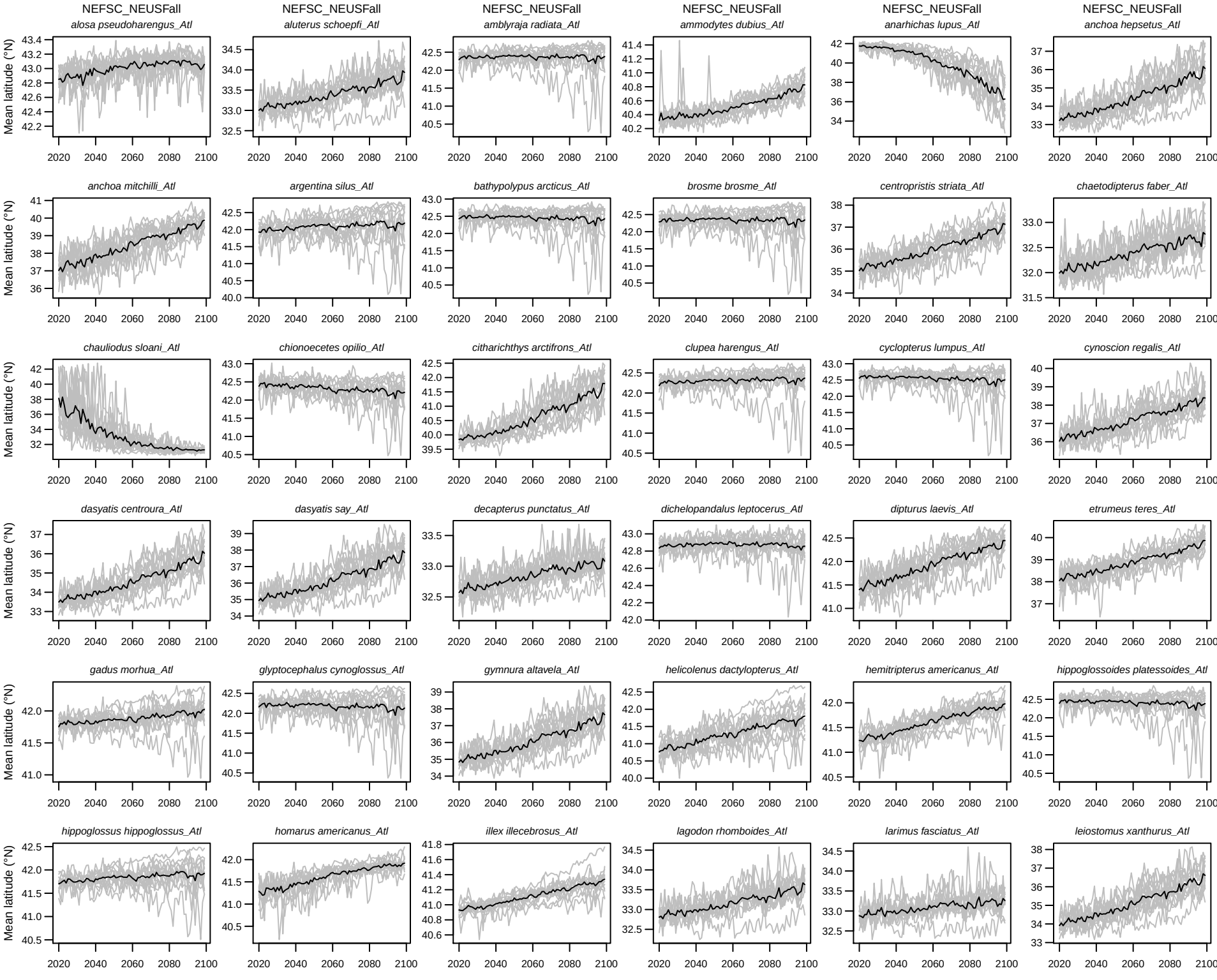

DFO_NewfoundlandSpring
acanthephyra pelagica_Atl
amblyraja radiata_Atl
ammodytes dubius_Atl
anarhichas denticulatus_Atl
anarhichas lupus_Atl
anarhichas minor_Atl
antimora rostrata_Atl
argentina silus_Atl
bathylagus euryops_Atl
bathyraja spinicauda_Atl
boreogadus saida_Atl
centroscyllium fabricii_Atl
chauliodus sloani_Atl
chionoecetes opilio_Atl
clupea harengus_Atl
coryphaenoides rupestris_Atl
cottunculus microps_Atl
cyclopterus lumpus_Atl
eualus gaimardii_Atl
eualus macilentus_Atl
eumesogrammus praecisus_Atl
eumicrotremus spinosus_Atl
gadus morhua_Atl
glyptocephalus cynoglossus_Atl
gymnelus viridis_Atl
hemitripterus americanus_Atl
hippoglossoides platessoides_Atl
hippoglossus hippoglossus_Atl
icelus spatula_Atl
illex illecebrosus_Atl
leptagonus decagonus_Atl
leptoclinus maculatus_Atl
limanda ferruginea_Atl
lithodes maja_Atl
lophius americanus_Atl
lumpenus lampretaeformis_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100

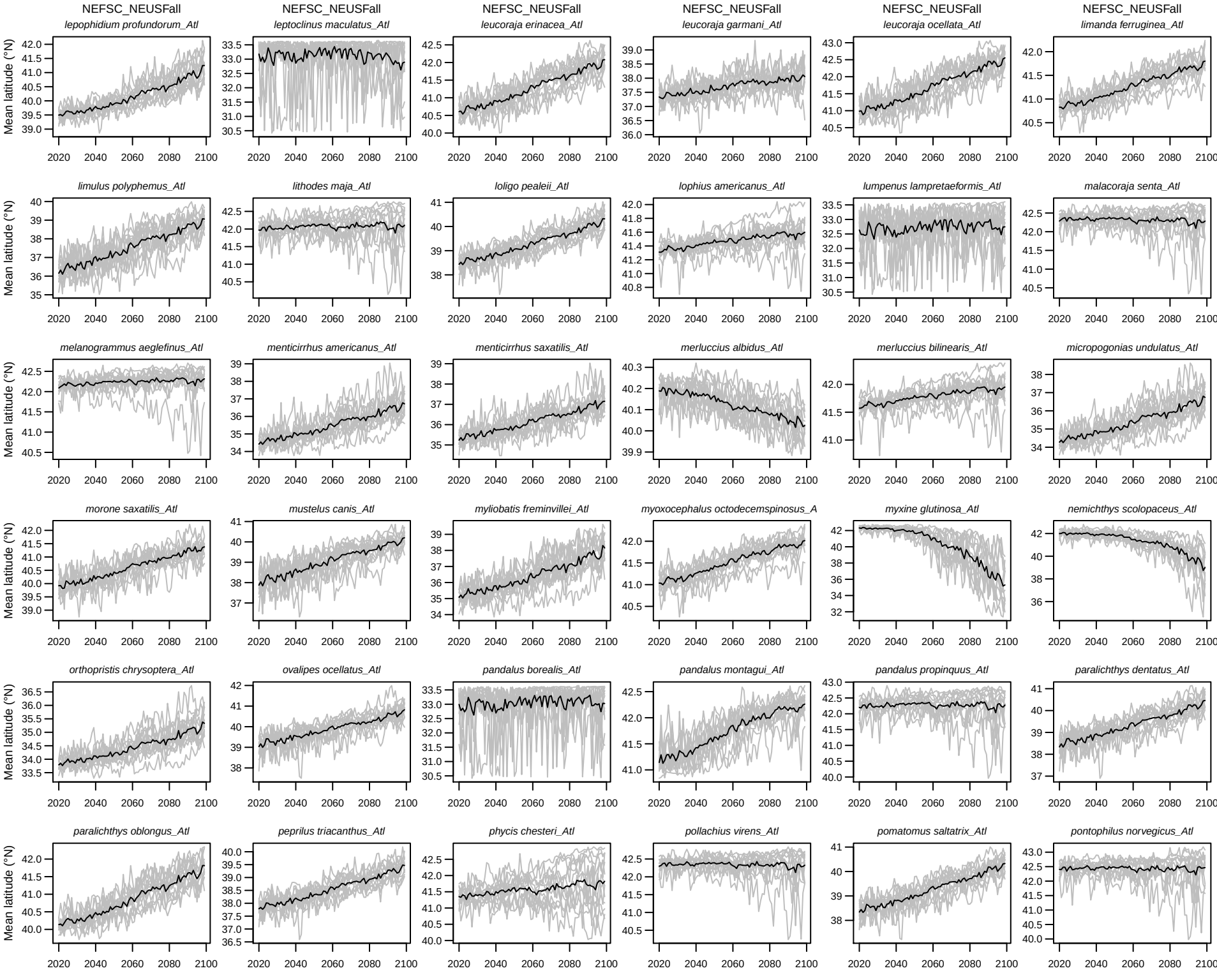

DFO_NewfoundlandSpring
lycodes esmarkii_Atl
lycodes reticulatus_Atl
lycodes vahlii_Atl
macrourus berglax_Atl
malacoraja senta_Atl
mallotus villosus_Atl
melanogrammus aeglefinus_Atl
merluccius bilinearis_Atl
myoxocephalus octodecemspinosus_A
myoxocephalus scorpius_Atl
myxine glutinosa_Atl
nemichthys scolopaceus_Atl
nezumia bairdii_Atl
pandalus borealis_Atl
pandalus montagui_Atl
pandalus montagui(trans.wo hr)_Atl
pandalus propinquus_Atl
phycis chesteri_Atl
pollachius virens_Atl
pontophilus norvegicus_Atl
reinhardtius hippoglossoides_Atl
sclerocrangon boreas_Atl
sebastes mentella_Atl
sergestes arcticus_Atl
sergia robusta_Atl
serrivomer beanii_Atl
squalus acanthias_Atl
stomias ferox_Atl
synaphobranchus kaupii_Atl
ulcina olrikii_Atl
urophycis tenuis_Atl
zoarces americanus_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100

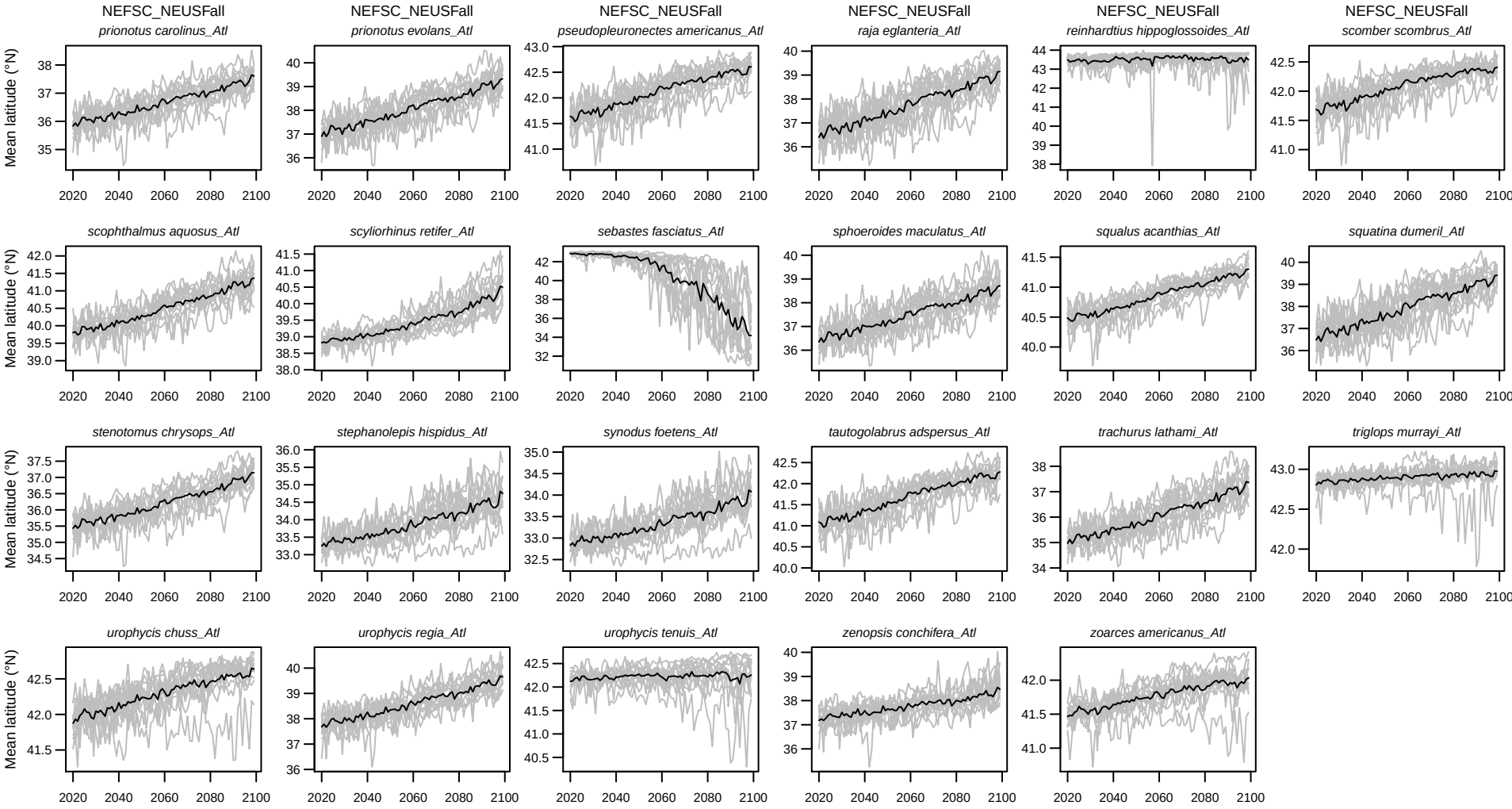

DFO_ScotianShelf
alosa pseudoharengus_Atl
amblyraja radiata_Atl
ammodytes dubius_Atl
anarhichas denticulatus_Atl
anarhichas lupus_Atl
anarhichas minor_Atl
argentina silus_Atl
brosme brosme_Atl
centroscyllium fabricii_Atl
chauliodus sloani_Atl
chionoecetes opilio_Atl
citharichthys arctifrons_Atl
clupea harengus_Atl
coryphaenoides rupestris_Atl
cottunculus microps_Atl
cyclopterus lumpus_Atl
dipturus laevis_Atl
eumicrotremus spinosus_Atl
gadus morhua_Atl
glyptocephalus cynoglossus_Atl
helicolenus dactylopterus_Atl
hemitripterus americanus_Atl
hippoglossina oblonga_Atl
hippoglossoides platessoides_Atl
hippoglossus hippoglossus_Atl
homarus americanus_Atl
icelus spatula_Atl
illex illecebrosus_Atl
lepophidium profundorum_Atl
leptagonus decagonus_Atl
leptoclinus maculatus_Atl
leucoraja erinacea_Atl
leucoraja ocellata_Atl
limanda ferruginea_Atl
lithodes maja_Atl
loligo pealeii_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100

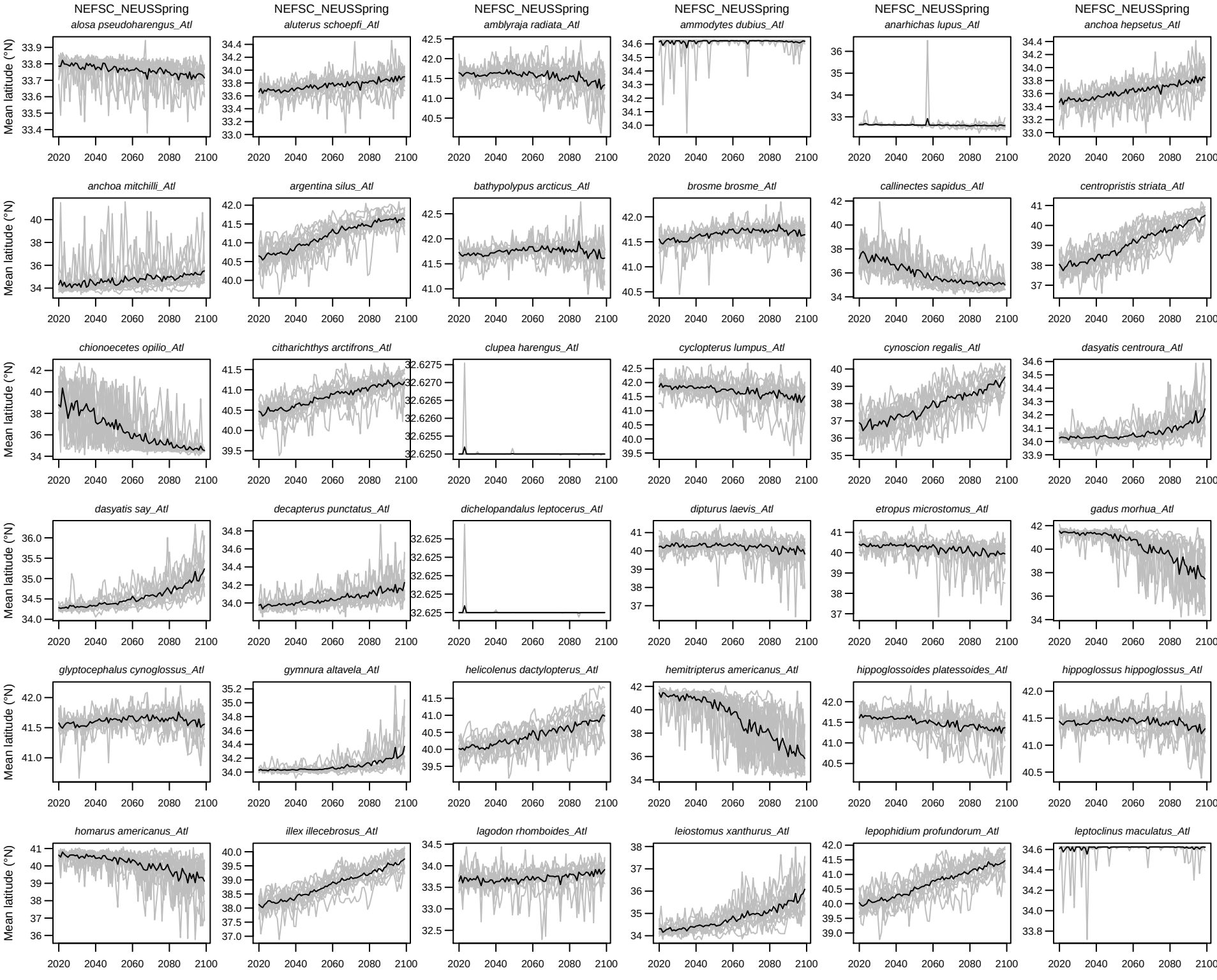

DFO_ScotianShelf
lophius americanus_Atl
lumpenus lampretaeformis_Atl
lycodes reticulatus_Atl
lycodes vahlii_Atl
macrourus berglax_Atl
malacoraja senta_Atl
mallotus villosus_Atl
melanogrammus aeglefinus_Atl
merluccius albidus_Atl
merluccius bilinearis_Atl
myoxocephalus octodecemspinosus_A
myoxocephalus scorpius_Atl
myxine glutinosa_Atl
nemichthys scolopaceus_Atl
nezumia bairdii_Atl
pandalus borealis_Atl
pandalus montagui_Atl
paralichthys dentatus_Atl
peprilus triacanthus_Atl
phycis chesteri_Atl
pollachius virens_Atl
prionotus carolinus_Atl
pseudopleuronectes americanus_Atl
reinhardtius hippoglossoides_Atl
scomber scombrus_Atl
scophthalmus aquosus_Atl
squalus acanthias_Atl
synaphobranchus kaupii_Atl
tautogolabrus adspersus_Atl
triglops murrayi_Atl
urophycis chuss_Atl
urophycis tenuis_Atl
zoarces americanus_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100

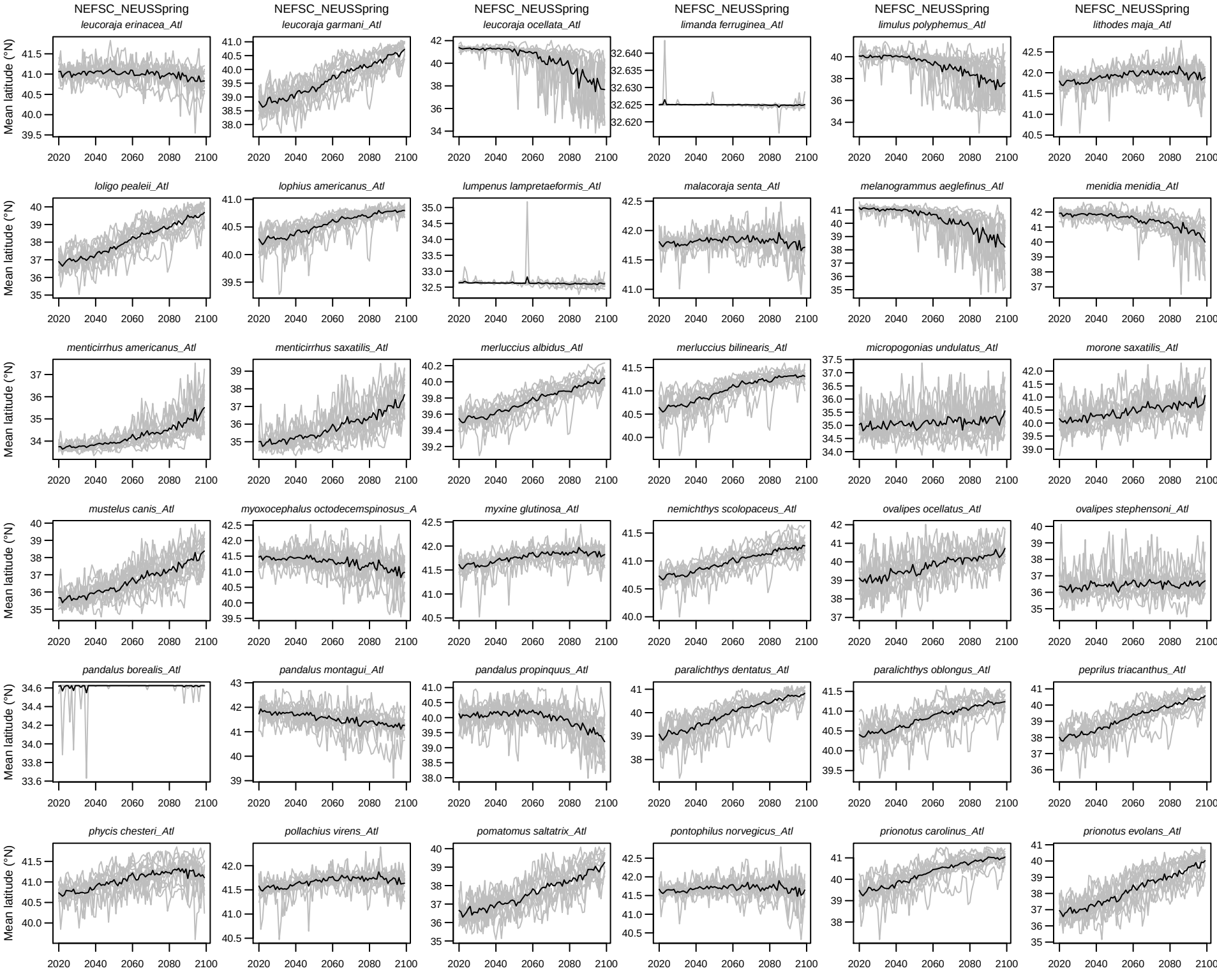

DFO_SoGulf
alosa pseudoharengus_Atl
amblyraja radiata_Atl
ammodytes dubius_Atl
anarhichas lupus_Atl
chionoecetes opilio_Atl
clupea harengus_Atl
gadus morhua_Atl
gadus ogac_Atl
glyptocephalus cynoglossus_Atl
hemitripterus americanus_Atl
hippoglossoides platessoides_Atl
hippoglossus hippoglossus_Atl
homarus americanus_Atl
leptagonus decagonus_Atl
leucoraja ocellata_Atl
limanda ferruginea_Atl
lumpenus lampretaeformis_Atl
malacoraja senta_Atl
melanogrammus aeglefinus_Atl
merluccius bilinearis_Atl
myoxocephalus octodecemspinosus_A
myoxocephalus scorpius_Atl
myxine glutinosa_Atl
pollachius virens_Atl
pseudopleuronectes americanus_Atl
scophthalmus aquosus_Atl
squalus acanthias_Atl
tautogolabrus adspersus_Atl
triglops murrayi_Atl
urophycis tenuis_Atl
zoarces americanus_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100

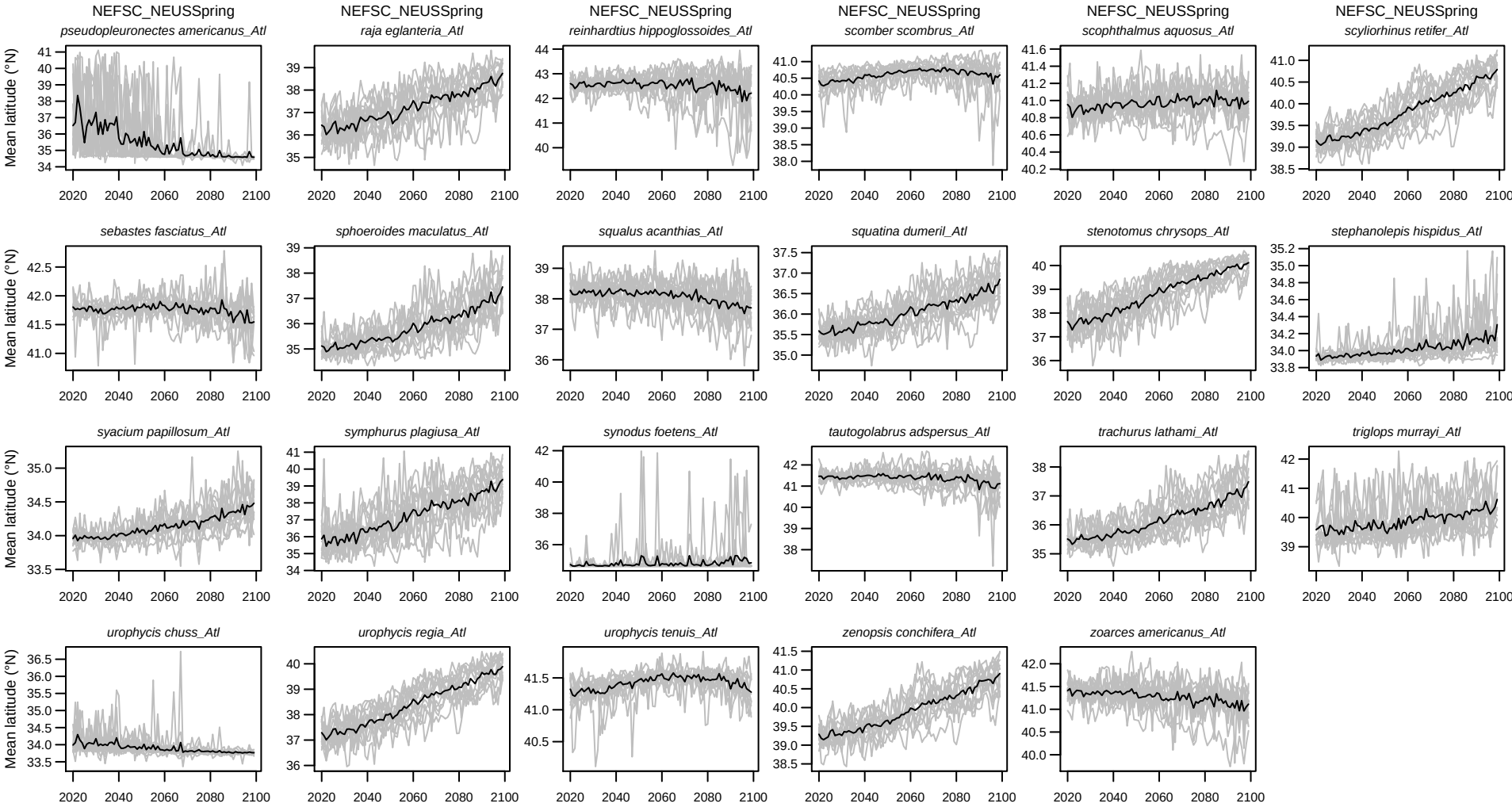

NEFSC_NEUSFall
alosa pseudoharengus_Atl
aluterus schoepfi_Atl
amblyraja radiata_Atl
ammodytes dubius_Atl
anarhichas lupus_Atl
anchoa hepsetus_Atl
anchoa mitchilli_Atl
argentina silus_Atl
bathypolypus arcticus_Atl
brosme brosme_Atl
centropristis striata_Atl
chaetodipterus faber_Atl
chauliodus sloani_Atl
chionoecetes opilio_Atl
citharichthys arctifrons_Atl
clupea harengus_Atl
cyclopterus lumpus_Atl
cynoscion regalis_Atl
dasyatis centroura_Atl
dasyatis say_Atl
decapterus punctatus_Atl
dichelopandalus leptocerus_Atl
dipturus laevis_Atl
etrumeus teres_Atl
gadus morhua_Atl
glyptocephalus cynoglossus_Atl
gymnura altavela_Atl
helicolenus dactylopterus_Atl
hemitripterus americanus_Atl
hippoglossoides platessoides_Atl
hippoglossus hippoglossus_Atl
homarus americanus_Atl
illex illecebrosus_Atl
lagodon rhomboides_Atl
larimus fasciatus_Atl
leiostomus xanthurus_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100

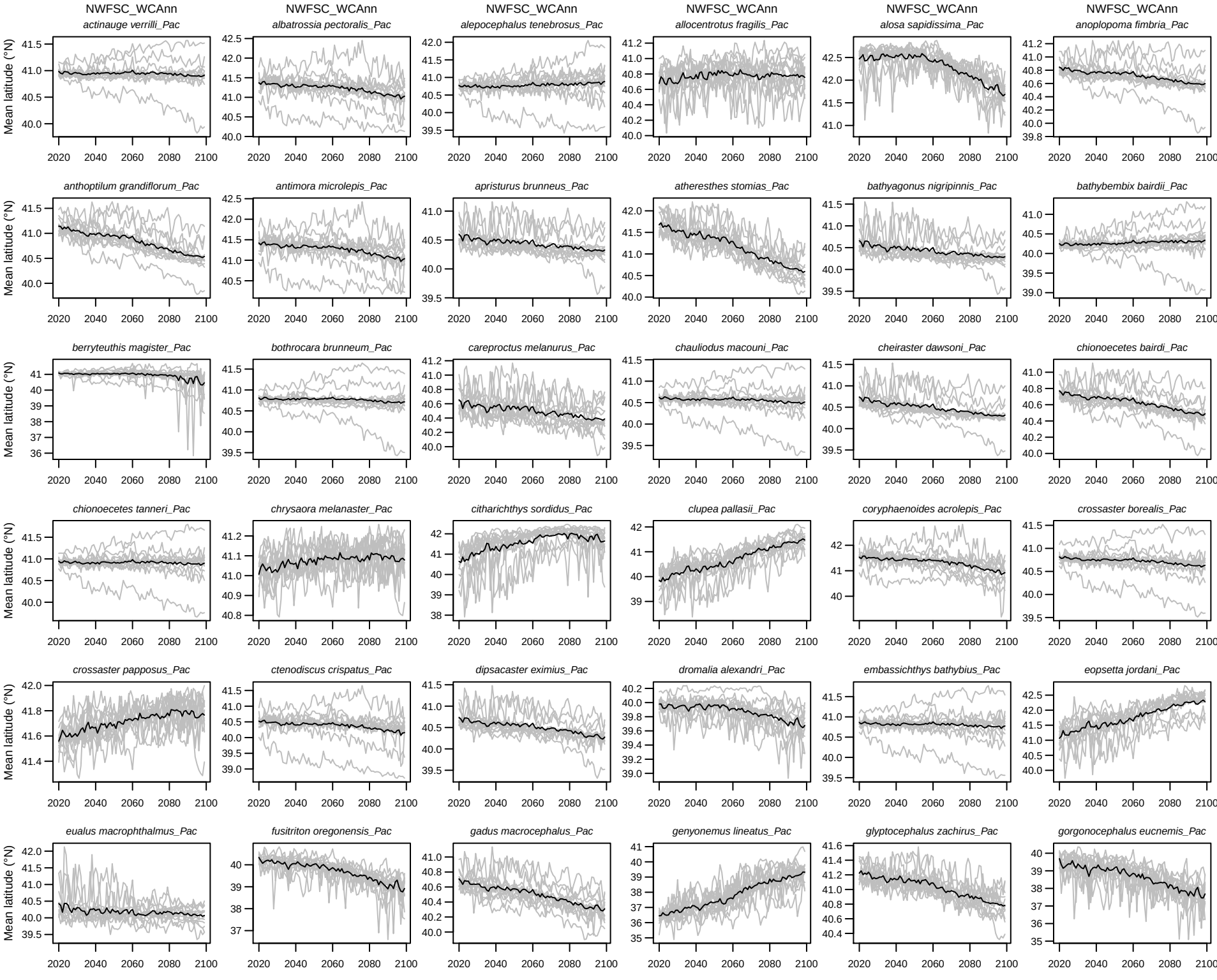

NEFSC_NEUSFall
lepophidium profundorum_Atl
leptoclinus maculatus_Atl
leucoraja erinacea_Atl
leucoraja garmani_Atl
leucoraja ocellata_Atl
limanda ferruginea_Atl
limulus polyphemus_Atl
lithodes maja_Atl
loligo pealeii_Atl
lophius americanus_Atl
lumpenus lampretaeformis_Atl
malacoraja senta_Atl
melanogrammus aeglefinus_Atl
menticirrhus americanus_Atl
menticirrhus saxatilis_Atl
merluccius albidus_Atl
merluccius bilinearis_Atl
micropogonias undulatus_Atl
morone saxatilis_Atl
mustelus canis_Atl
myliobatis freminvillei_Atl
myoxocephalus octodecemspinosus_A
myxine glutinosa_Atl
nemichthys scolopaceus_Atl
orthopristis chrysoptera_Atl
ovalipes ocellatus_Atl
pandalus borealis_Atl
pandalus montagui_Atl
pandalus propinquus_Atl
paralichthys dentatus_Atl
paralichthys oblongus_Atl
peprilus triacanthus_Atl
phycis chesteri_Atl
pollachius virens_Atl
pomatomus saltatrix_Atl
pontophilus norvegicus_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100

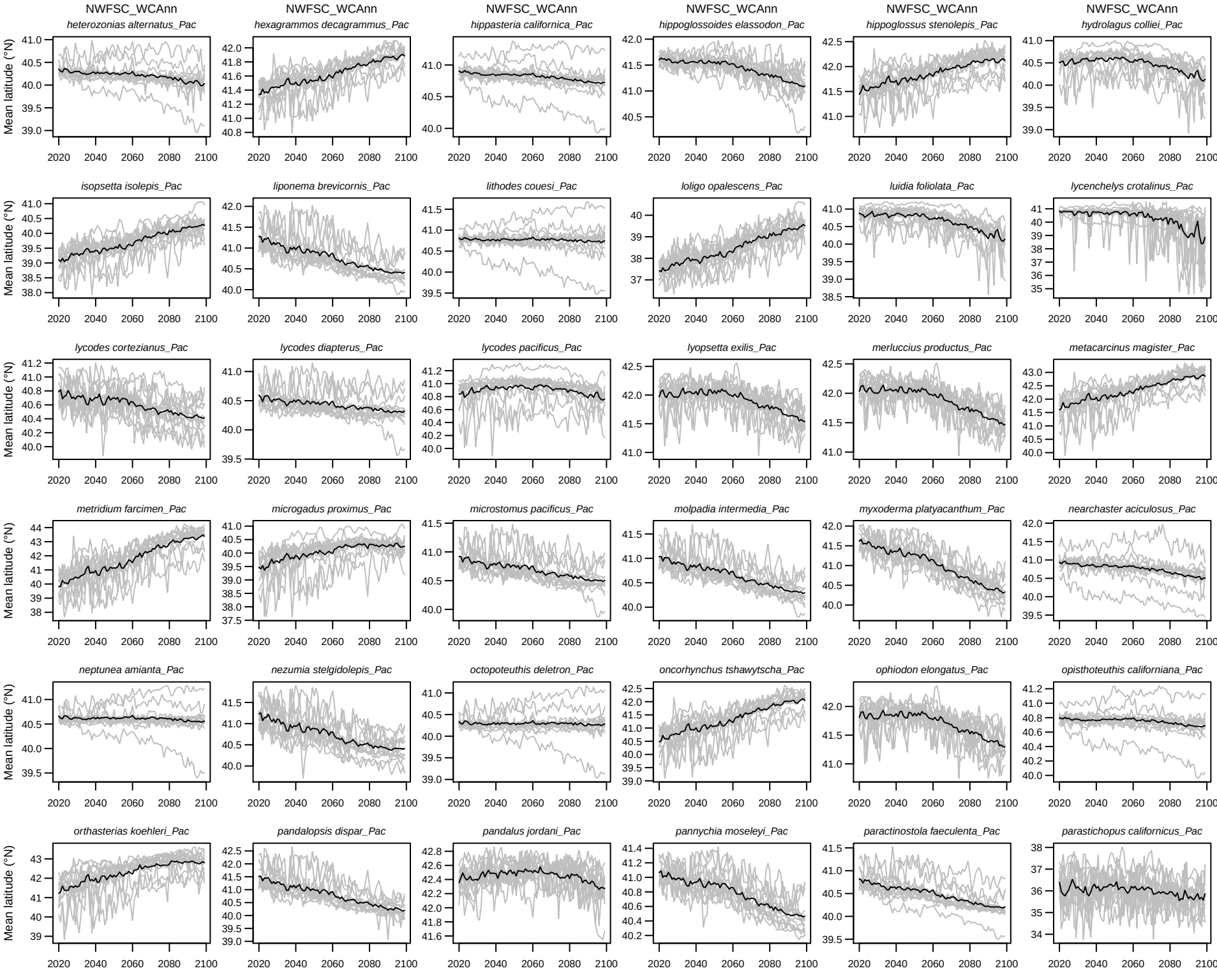

NEFSC_NEUSFall
prionotus carolinus_Atl
prionotus evolans_Atl
pseudopleuronectes americanus_Atl
raja eglanteria_Atl
reinhardtius hippoglossoides_Atl
scomber scombrus_Atl
scophthalmus aquosus_Atl
scyliorhinus retifer_Atl
sebastes fasciatus_Atl
sphoeroides maculatus_Atl
squalus acanthias_Atl
squatina dumeril_Atl
stenotomus chrysops_Atl
stephanolepis hispidus_Atl
synodus foetens_Atl
tautogolabrus adspersus_Atl
trachurus lathami_Atl
triglops murrayi_Atl
urophycis chuss_Atl
urophycis regia_Atl
urophycis tenuis_Atl
zenopsis conchifera_Atl
zoarces americanus_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100

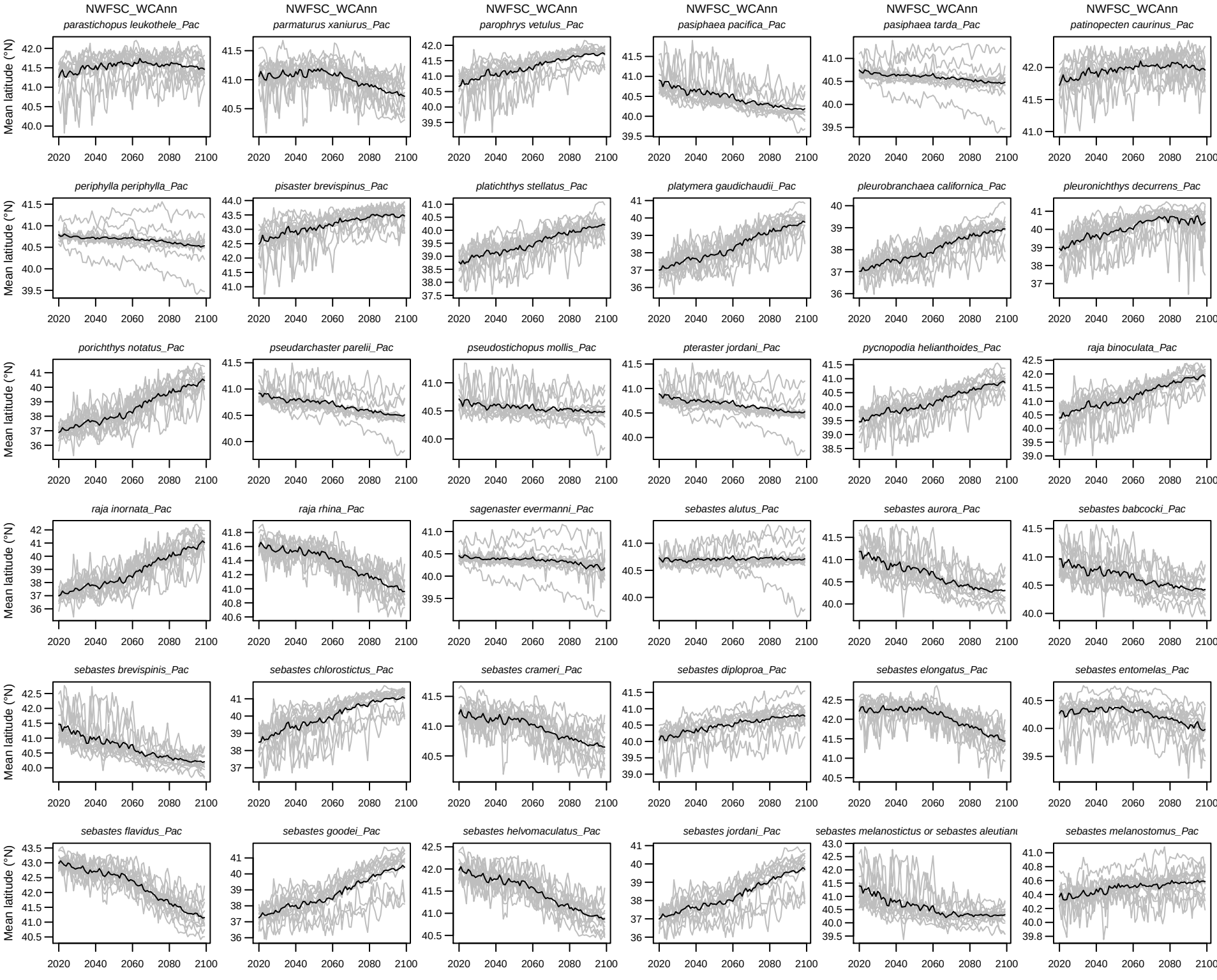

NEFSC_NEUSSpring
alosa pseudoharengus_Atl
aluterus schoepfi_Atl
amblyraja radiata_Atl
ammodytes dubius_Atl
anarhichas lupus_Atl
anchoa hepsetus_Atl
anchoa mitchilli_Atl
argentina silus_Atl
bathypolypus arcticus_Atl
brosme brosme_Atl
callinectes sapidus_Atl
centropristis striata_Atl
chionoecetes opilio_Atl
citharichthys arctifrons_Atl
clupea harengus_Atl
cyclopterus lumpus_Atl
cynoscion regalis_Atl
dasyatis centroura_Atl
dasyatis say_Atl
decapterus punctatus_Atl
dichelopandalus leptocerus_Atl
dipturus laevis_Atl
etropus microstomus_Atl
gadus morhua_Atl
glyptocephalus cynoglossus_Atl
gymnura altavela_Atl
helicolenus dactylopterus_Atl
hemitripterus americanus_Atl
hippoglossoides platessoides_Atl
hippoglossus hippoglossus_Atl
homarus americanus_Atl
illex illecebrosus_Atl
lagodon rhomboides_Atl
leiostomus xanthurus_Atl
lepophidium profundorum_Atl
leptoclinus maculatus_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100

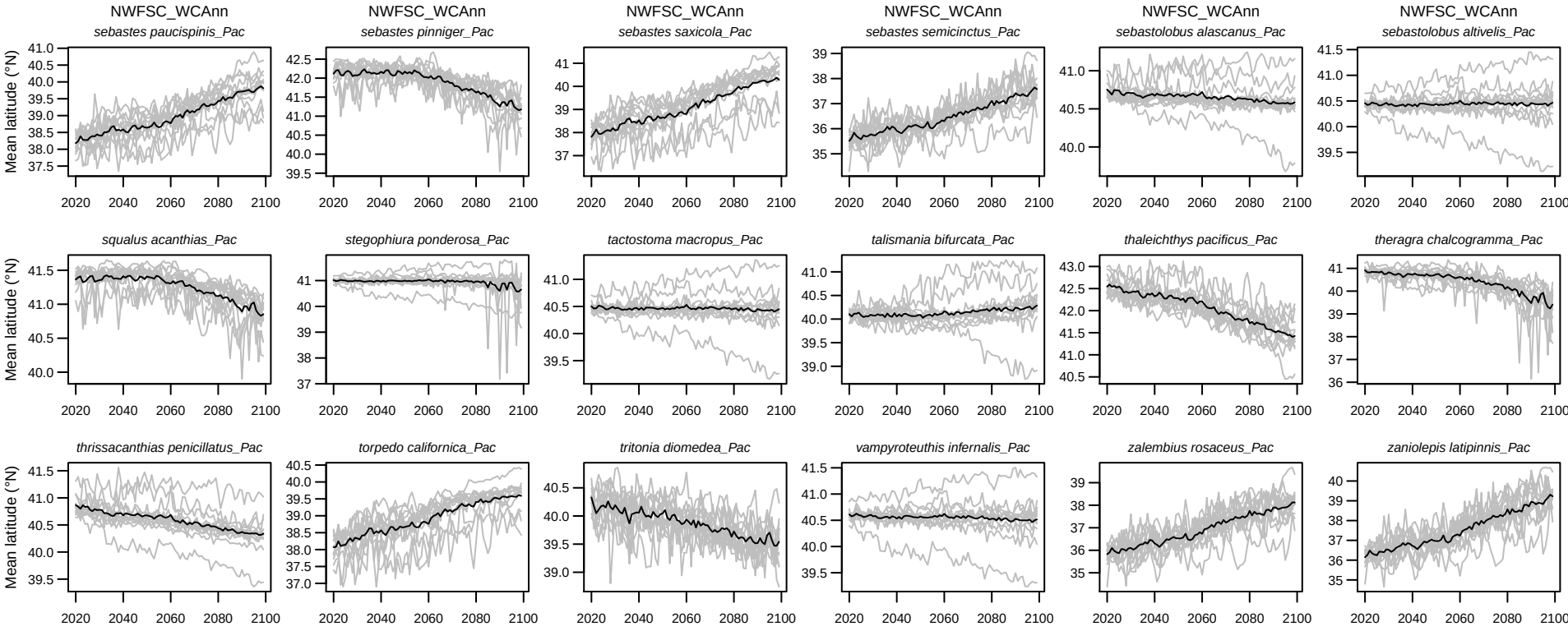

NEFSC_NEUSSpring
leucoraja erinacea_Atl
leucoraja garmani_Atl
leucoraja ocellata_Atl
limanda ferruginea_Atl
limulus polyphemus_Atl
lithodes maja_Atl
loligo pealeii_Atl
lophius americanus_Atl
lumpenus lampretaeformis_Atl
malacoraja senta_Atl
melanogrammus aeglefinus_Atl
menidia menidia_Atl
menticirrhus americanus_Atl
menticirrhus saxatilis_Atl
merluccius albidus_Atl
merluccius bilinearis_Atl
micropogonias undulatus_Atl
morone saxatilis_Atl
mustelus canis_Atl
myoxocephalus octodecemspinosus_A
myxine glutinosa_Atl
nemichthys scolopaceus_Atl
ovalipes ocellatus_Atl
ovalipes stephensoni_Atl
pandalus borealis_Atl
pandalus montagui_Atl
pandalus propinquus_Atl
paralichthys dentatus_Atl
paralichthys oblongus_Atl
peprilus triacanthus_Atl
phycis chesteri_Atl
pollachius virens_Atl
pomatomus saltatrix_Atl
pontophilus norvegicus_Atl
prionotus carolinus_Atl
prionotus evolans_Atl
Mean latitude (°N)

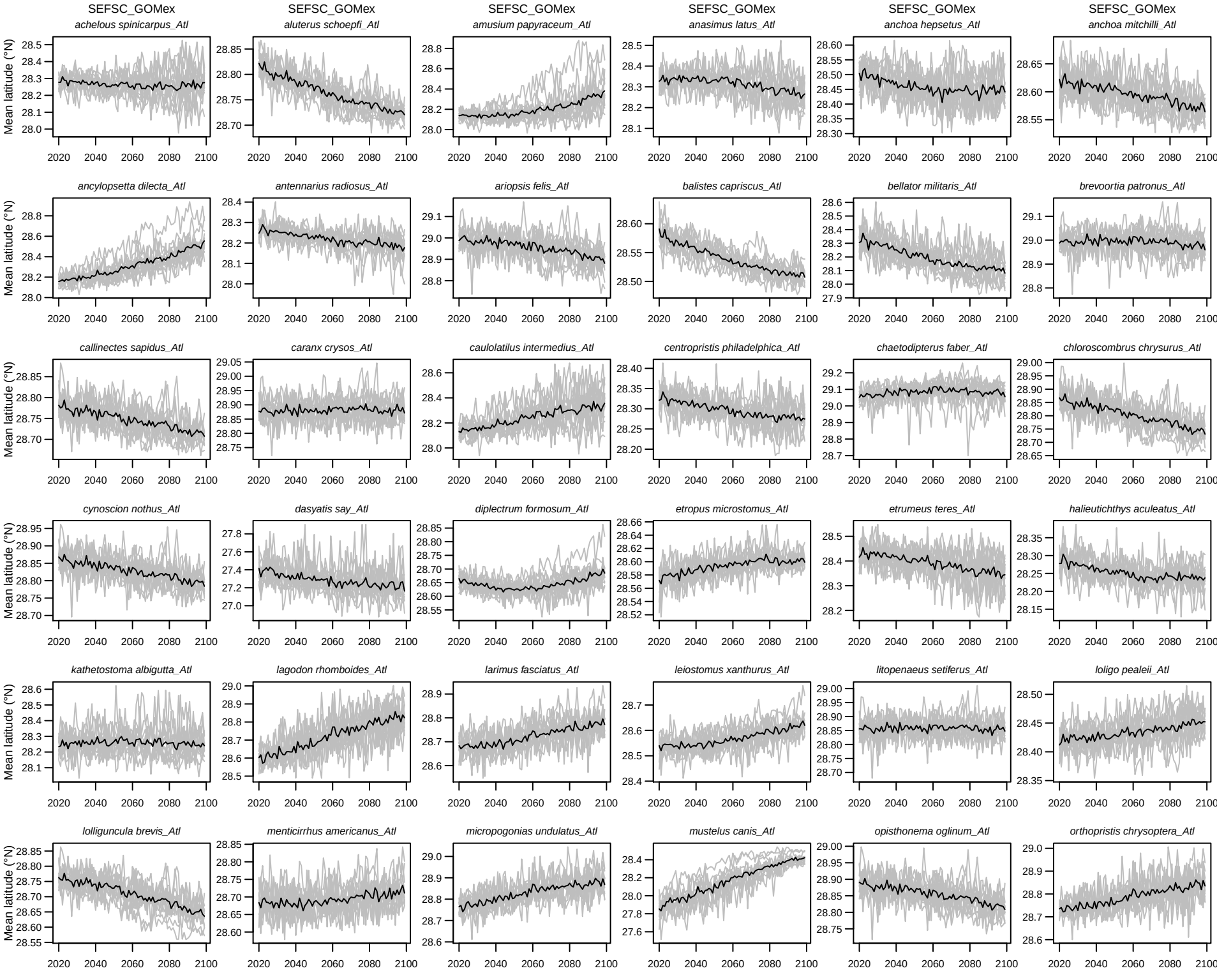

NEFSC_NEUSSpring
pseudopleuronectes americanus_Atl
raja eglanteria_Atl
reinhardtius hippoglossoides_Atl
scomber scombrus_Atl
scophthalmus aquosus_Atl
scyliorhinus retifer_Atl
sebastes fasciatus_Atl
sphoeroides maculatus_Atl
squalus acanthias_Atl
squatina dumeril_Atl
stenotomus chrysops_Atl
stephanolepis hispidus_Atl
syacium papillosum_Atl
symphurus plagiusa_Atl
synodus foetens_Atl
tautogolabrus adspersus_Atl
trachurus lathami_Atl
triglops murrayi_Atl
urophycis chuss_Atl
urophycis regia_Atl
urophycis tenuis_Atl
zenopsis conchifera_Atl
zoarces americanus_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100

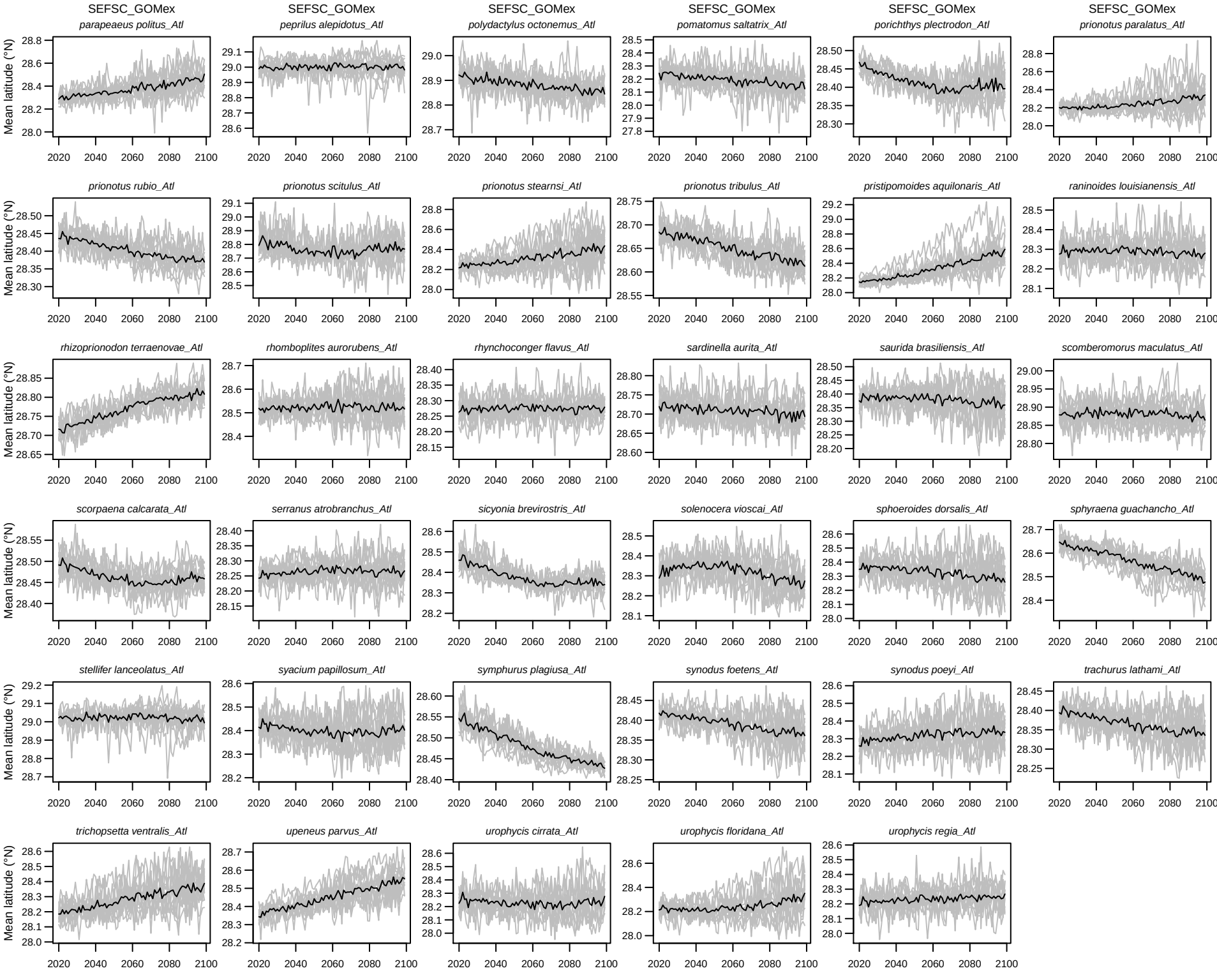

NWFSC_WCAnn
actinauge verrilli_Pac
albatrossia pectoralis_Pac
alepocephalus tenebrosus_Pac
allocentrotus fragilis_Pac
alosa sapidissima_Pac
anoplopoma fimbria_Pac
anthoptilum grandiflorum_Pac
antimora microlepis_Pac
apristurus brunneus_Pac
atheresthes stomias_Pac
bathyagonus nigripinnis_Pac
bathybembix bairdii_Pac
berryteuthis magister_Pac
bothrocara brunneum_Pac
careproctus melanurus_Pac
chauliodus macouni_Pac
cheiraster dawsoni_Pac
chionoecetes bairdi_Pac
chionoecetes tanneri_Pac
chrysaora melanaster_Pac
citharichthys sordidus_Pac
clupea pallasii_Pac
coryphaenoides acrolepis_Pac
crossaster borealis_Pac
crossaster papposus_Pac
ctenodiscus crispatus_Pac
dipsacaster eximius_Pac
dromalia alexandri_Pac
embassichthys bathybius_Pac
eopsetta jordani_Pac
eualus macrophthalmus_Pac
fusitriton oregonensis_Pac
gadus macrocephalus_Pac
genyonemus lineatus_Pac
glyptocephalus zachirus_Pac
gorgonocephalus eucnemis_Pac
Mean latitude (°N)
2020
2040
2060
2080
2100


NWFSC_WCAnn
heterozonias alternatus_Pac
hexagrammos decagrammus_Pac
hippasteria californica_Pac
hippoglossoides elassodon_Pac
hippoglossus stenolepis_Pac
hydrolagus colliei_Pac
isopsetta isolepis_Pac
liponema brevicornis_Pac
lithodes couesi_Pac
loligo opalescens_Pac
luidia foliolata_Pac
lycenchelys crotalinus_Pac
lycodes cortezianus_Pac
lycodes diapterus_Pac
lycodes pacificus_Pac
lyopsetta exilis_Pac
merluccius productus_Pac
metacarcinus magister_Pac
metridium farcimen_Pac
microgadus proximus_Pac
microstomus pacificus_Pac
molpadia intermedia_Pac
myxoderma platyacanthum_Pac
nearchaster aciculosus_Pac
neptunea amianta_Pac
nezumia stelgidolepis_Pac
octopoteuthis deletron_Pac
oncorhynchus tshawytscha_Pac
ophiodon elongatus_Pac
opisthoteuthis californiana_Pac
orthasterias koehleri_Pac
pandalopsis dispar_Pac
pandalus jordani_Pac
pannychia moseleyi_Pac
paractinostola faeculenta_Pac
parastichopus californicus_Pac
Mean latitude (°N)
2020
2040
2060
2080
2100


NWFSC_WCAnn
parastichopus leukothele_Pac
parmaturus xaniurus_Pac
parophrys vetulus_Pac
pasiphaea pacifica_Pac
pasiphaea tarda_Pac
patinopecten caurinus_Pac
periphylla periphylla_Pac
pisaster brevispinus_Pac
platichthys stellatus_Pac
platymera gaudichaudii_Pac
pleurobranchaea californica_Pac
pleuronichthys decurrens_Pac
porichthys notatus_Pac
pseudarchaster parelii_Pac
pseudostichopus mollis_Pac
pteraster jordani_Pac
pycnopodia helianthoides_Pac
raja binoculata_Pac
raja inornata_Pac
raja rhina_Pac
sagenaster evermanni_Pac
sebastes alutus_Pac
sebastes aurora_Pac
sebastes babcocki_Pac
sebastes brevispinis_Pac
sebastes chlorostictus_Pac
sebastes crameri_Pac
sebastes diploproa_Pac
sebastes elongatus_Pac
sebastes entomelas_Pac
sebastes flavidus_Pac
sebastes goodei_Pac
sebastes helvomaculatus_Pac
sebastes jordani_Pac
sebastes melanostictus or sebastes aleutian
sebastes melanostomus_Pac
Mean latitude (°N)
2020
2040
2060
2080
2100


NWFSC_WCAnn
sebastes paucispinis_Pac
sebastes pinniger_Pac
sebastes saxicola_Pac
sebastes semicinctus_Pac
sebastolobus alascanus_Pac
sebastolobus altivelis_Pac
squalus acanthias_Pac
stegophiura ponderosa_Pac
tactostoma macropus_Pac
talismania bifurcata_Pac
thaleichthys pacificus_Pac
theragra chalcogramma_Pac
thrissacanthias penicillatus_Pac
torpedo californica_Pac
tritonia diomedea_Pac
vampyroteuthis infernalis_Pac
zalembius rosaceus_Pac
zaniolepis latipinnis_Pac
Mean latitude (°N)
2020
2040
2060
2080
2100


SEFSC_GOMex
achelous spinicarpus_Atl
aluterus schoepfi_Atl
amusium papyraceum_Atl
anasimus latus_Atl
anchoa hepsetus_Atl
anchoa mitchilli_Atl
ancylopsetta dilecta_Atl
antennarius radiosus_Atl
ariopsis felis_Atl
balistes capriscus_Atl
bellator militaris_Atl
brevoortia patronus_Atl
callinectes sapidus_Atl
caranx crysos_Atl
caulolatilus intermedius_Atl
centropristis philadelphica_Atl
chaetodipterus faber_Atl
chloroscombrus chrysurus_Atl
cynoscion nothus_Atl
dasyatis say_Atl
diplectrum formosum_Atl
etropus microstomus_Atl
etrumeus teres_Atl
halieutichthys aculeatus_Atl
kathetostoma albigutta_Atl
lagodon rhomboides_Atl
larimus fasciatus_Atl
leiostomus xanthurus_Atl
litopenaeus setiferus_Atl
loligo pealeii_Atl
lolliguncula brevis_Atl
menticirrhus americanus_Atl
micropogonias undulatus_Atl
mustelus canis_Atl
opisthonema oglinum_Atl
orthopristis chrysoptera_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100


SEFSC_GOMex
parapeaeus politus_Atl
peprilus alepidotus_Atl
polydactylus octonemus_Atl
pomatomus saltatrix_Atl
porichthys plectrodon_Atl
prionotus paralatus_Atl
prionotus rubio_Atl
prionotus scitulus_Atl
prionotus stearnsi_Atl
prionotus tribulus_Atl
pristipomoides aquilonaris_Atl
raninoides louisianensis_Atl
rhizoprionodon terraenovae_Atl
rhomboplites aurorubens_Atl
rhynchoconger flavus_Atl
sardinella aurita_Atl
saurida brasiliensis_Atl
scomberomorus maculatus_Atl
scorpaena calcarata_Atl
serranus atrobranchus_Atl
sicyonia brevirostris_Atl
solenocera vioscai_Atl
sphoeroides dorsalis_Atl
sphyraena guachancho_Atl
stellifer lanceolatus_Atl
syacium papillosum_Atl
symphurus plagiusa_Atl
synodus foetens_Atl
synodus poeyi_Atl
trachurus lathami_Atl
trichopsetta ventralis_Atl
upeneus parvus_Atl
urophycis cirrata_Atl
urophycis floridana_Atl
urophycis regia_Atl
Mean latitude (°N)
2020
2040
2060
2080
2100