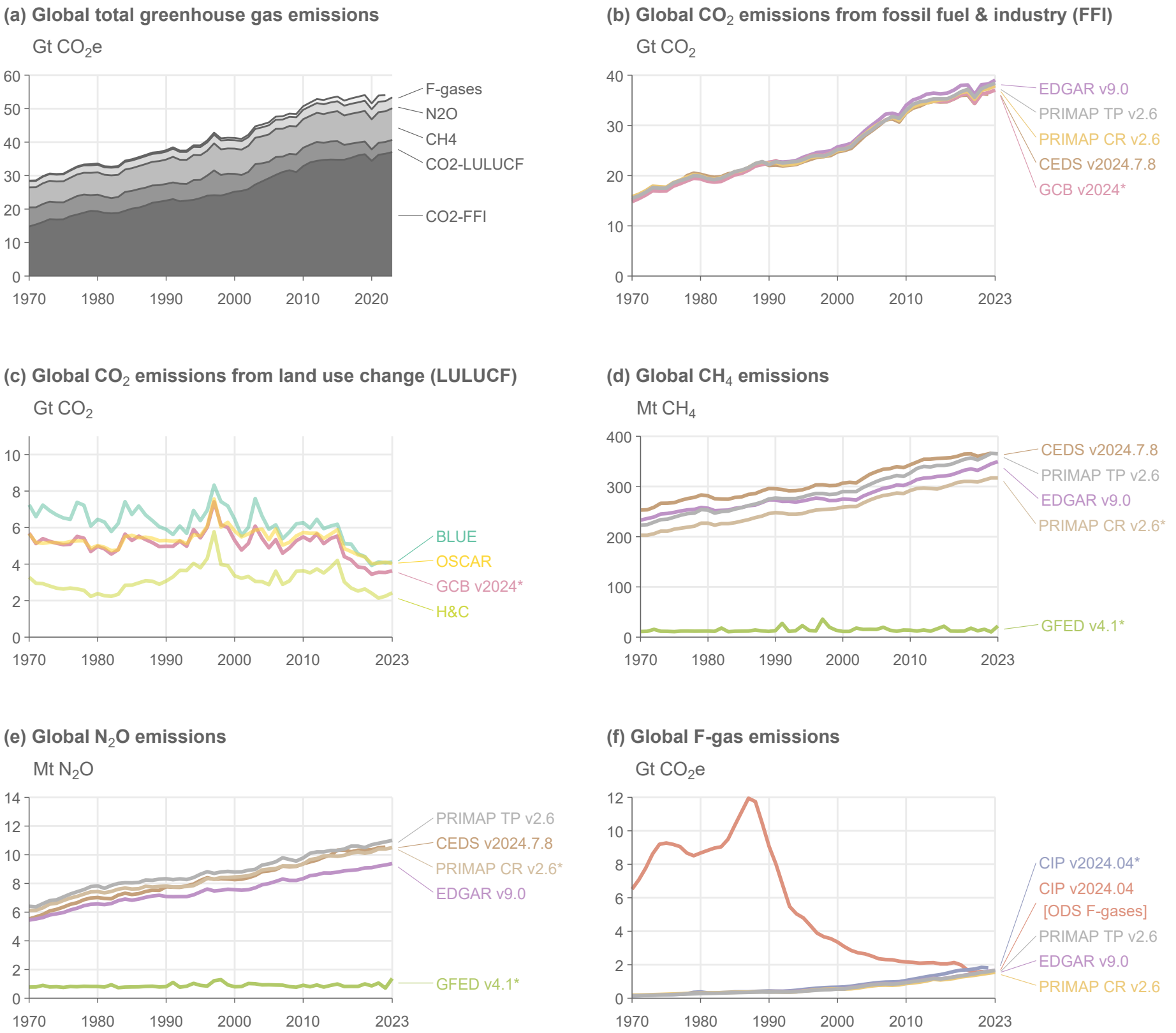
(a) Global total greenhouse gas emissions
Gt CO2e
60
50
40
30
20
10
0
1970
1980
1990
2000
2010
2020
F-gases
N2O
CH4
CO2-LULUCF
CO2-FFI
(b) Global CO2 emissions from fossil fuel & industry (FFI)
Gt CO2
40
30
20
10
0
1970
1980
1990
2000
2010
2023
EDGAR v9.0
PRIMAP TP v2.6
PRIMAP CR v2.6
CEDS v2024.7.8
GCB v2024*
(c) Global CO2 emissions from land use change (LULUCF)
Gt CO2
10
8
6
4
2
0
1970
1980
1990
2000
2010
2023
BLUE
OSCAR
GCB v2024*
H&C
(d) Global CH4 emissions
Mt CH4
400
300
200
100
0
1970
1980
1990
2000
2010
2023
CEDS v2024.7.8
PRIMAP TP v2.6
EDGAR v9.0
PRIMAP CR v2.6*
GFED v4.1*
(e) Global N2O emissions
Mt N2O
14
12
10
8
6
4
2
0
1970
1980
1990
2000
2010
2023
PRIMAP TP v2.6
CEDS v2024.7.8
PRIMAP CR v2.6*
EDGAR v9.0
GFED v4.1*
(f) Global F-gas emissions
Gt CO2e
12
10
8
6
4
2
0
1970
1980
1990
2000
2010
2023
CIP v2024.04*
CIP v2024.04
[ODS F-gases]
PRIMAP TP v2.6
EDGAR v9.0
PRIMAP CR v2.6