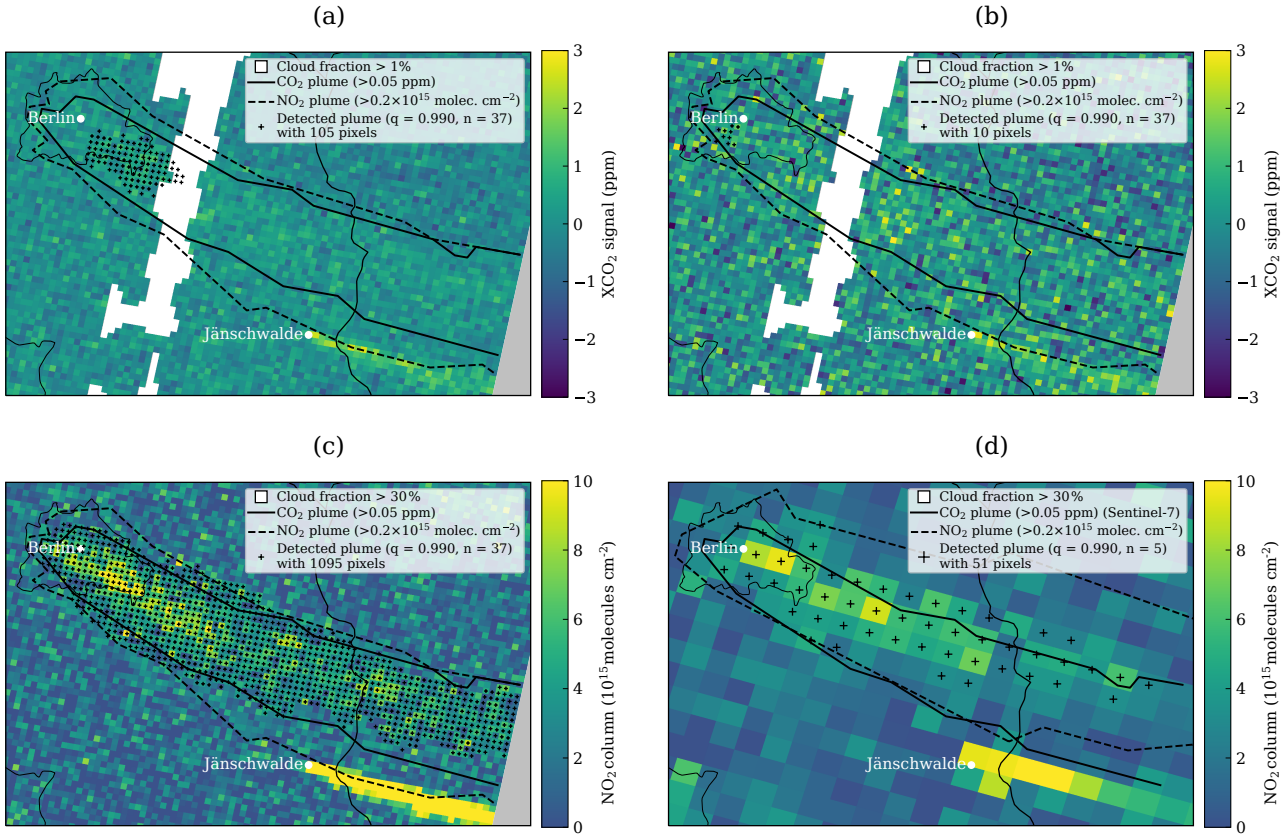
(a)
Cloud fraction > 1%
CO2 plume (>0.05 ppm)
NO2 plume (>0.2×10^15 molec. cm^−2)
Detected plume (q = 0.990, n = 37) with 105 pixels
Berlin
Jänschwalde
XCO2 signal (ppm)
3
2
1
0
−1
−2
−3
(b)
Cloud fraction > 1%
CO2 plume (>0.05 ppm)
NO2 plume (>0.2×10^15 molec. cm^−2)
Detected plume (q = 0.990, n = 37) with 10 pixels
Berlin
Jänschwalde
XCO2 signal (ppm)
3
2
1
0
−1
−2
−3
(c)
Cloud fraction > 30%
CO2 plume (>0.05 ppm)
NO2 plume (>0.2×10^15 molec. cm^−2)
Detected plume (q = 0.990, n = 37) with 1095 pixels
Berlin
Jänschwalde
NO2 column (10^15 molecules cm^−2)
10
8
6
4
2
0
(d)
Cloud fraction > 30%
CO2 plume (>0.05 ppm) (Sentinel-7)
NO2 plume (>0.2×10^15 molec. cm^−2)
Detected plume (q = 0.990, n = 5) with 51 pixels
Berlin
Jänschwalde
NO2 column (10^15 molecules cm^−2)
10
8
6
4
2
0