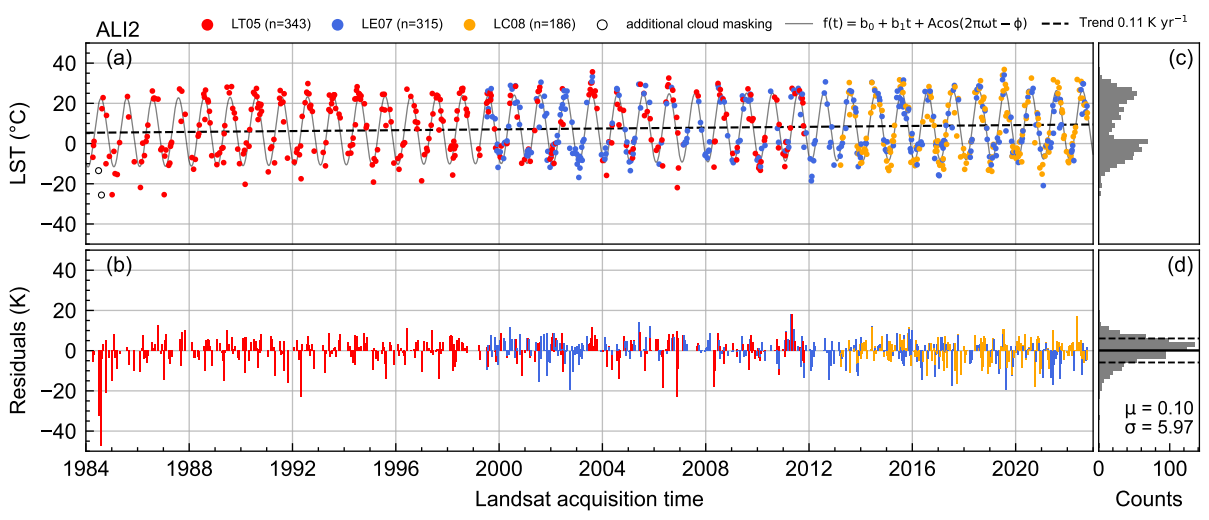
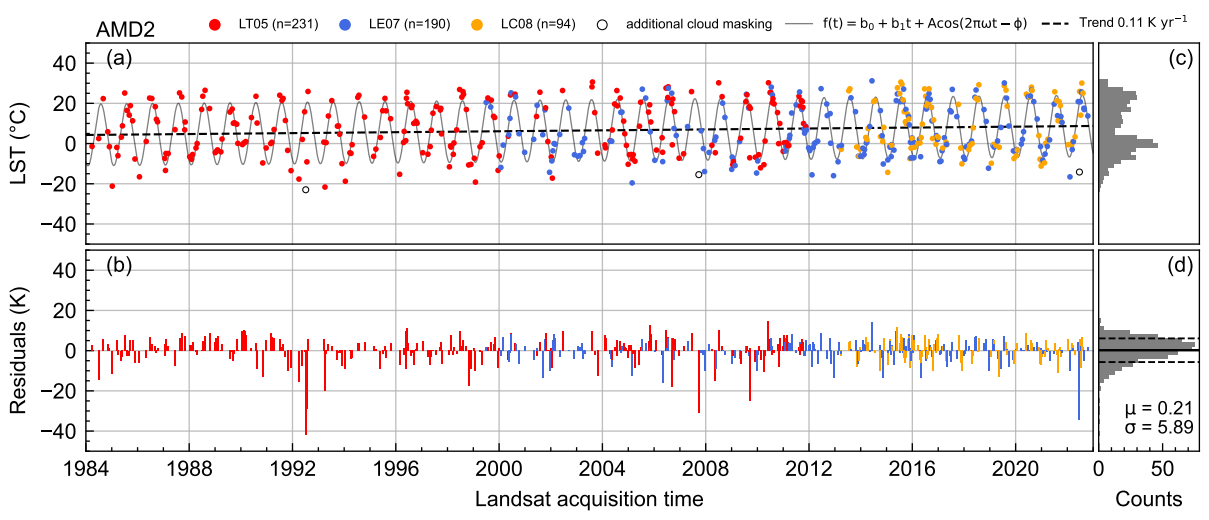
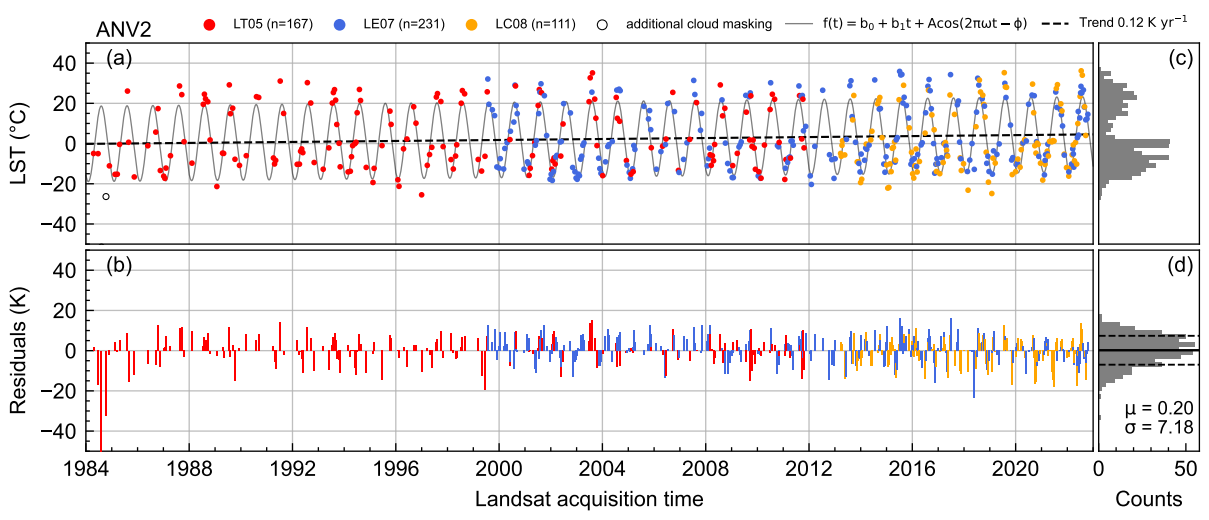
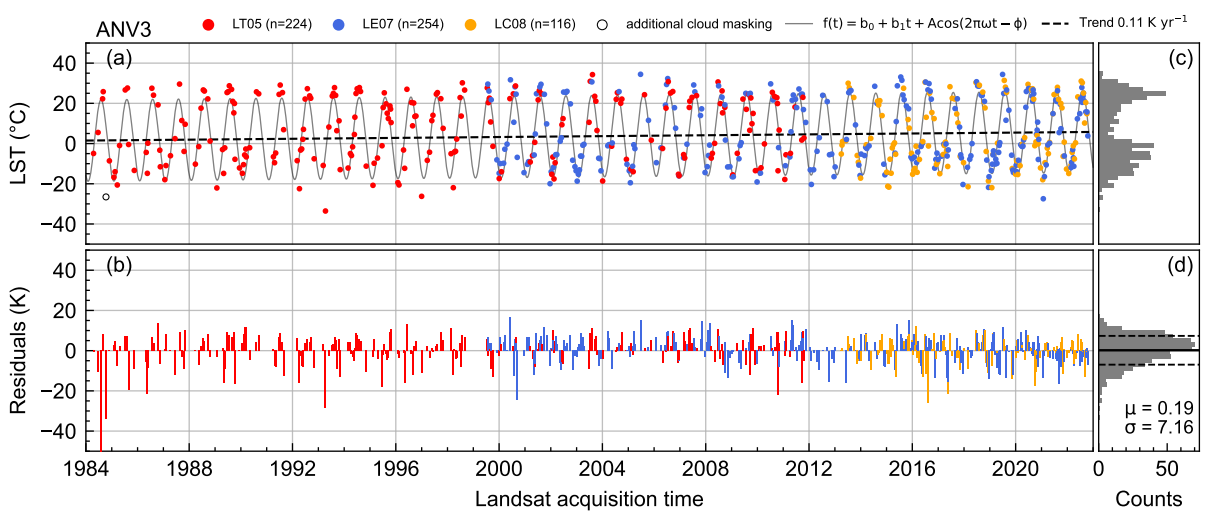
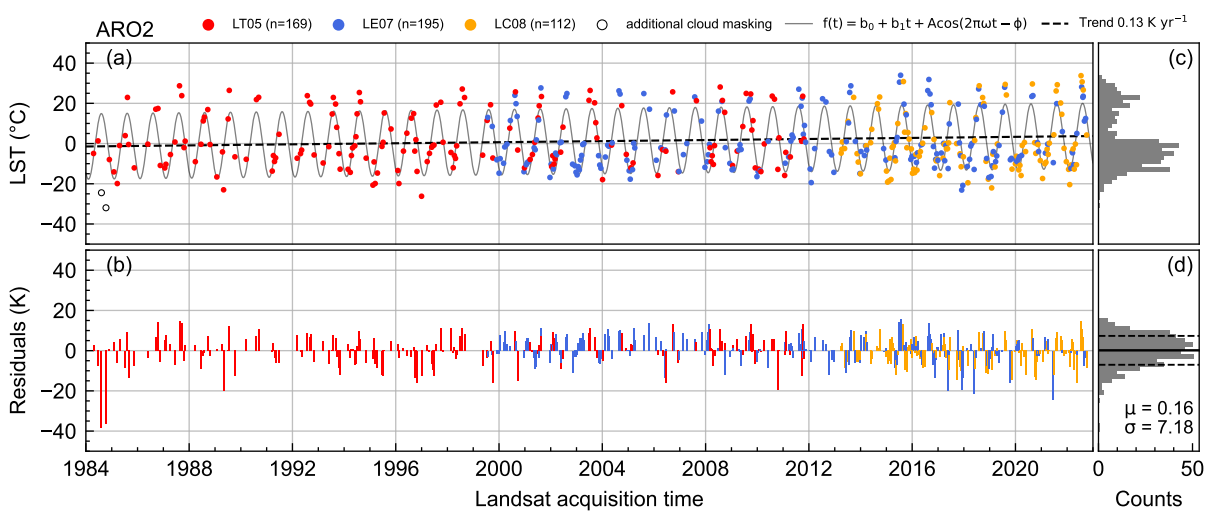
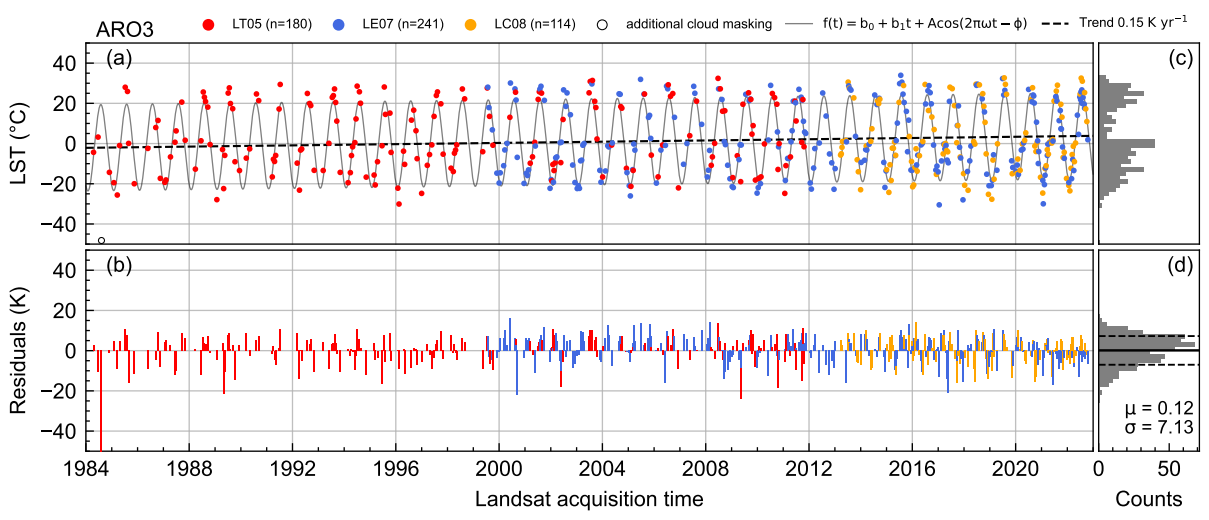

ALI2
LT05 (n=343)
LE07 (n=315)
LC08 (n=186)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.11 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.10
σ = 5.97
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
100
Counts

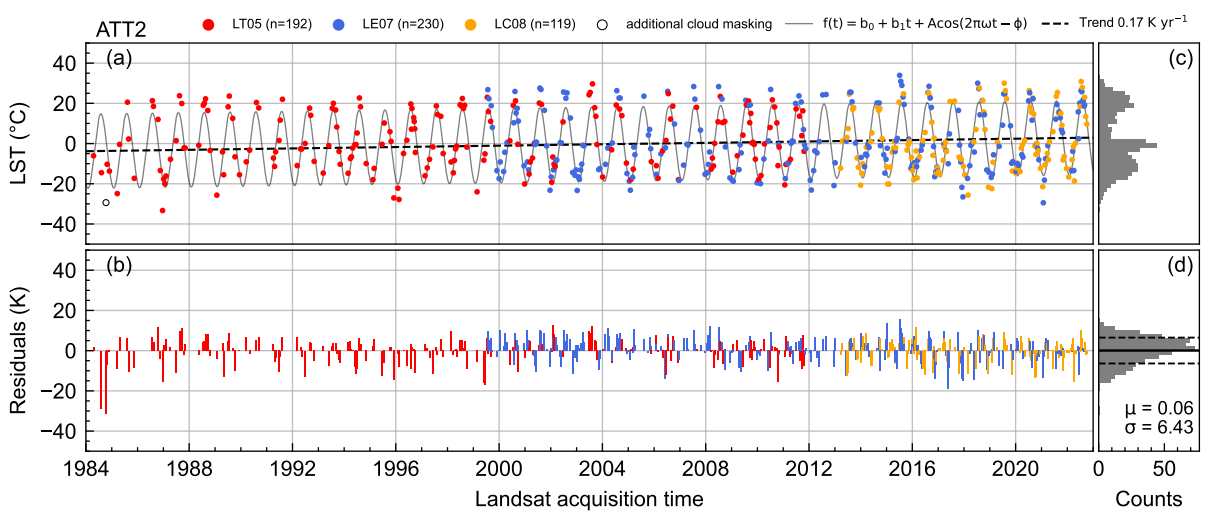

AMD2
LT05 (n=231)
LE07 (n=190)
LC08 (n=94)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.11 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.21
σ = 5.89
Landsat acquisition time
Counts

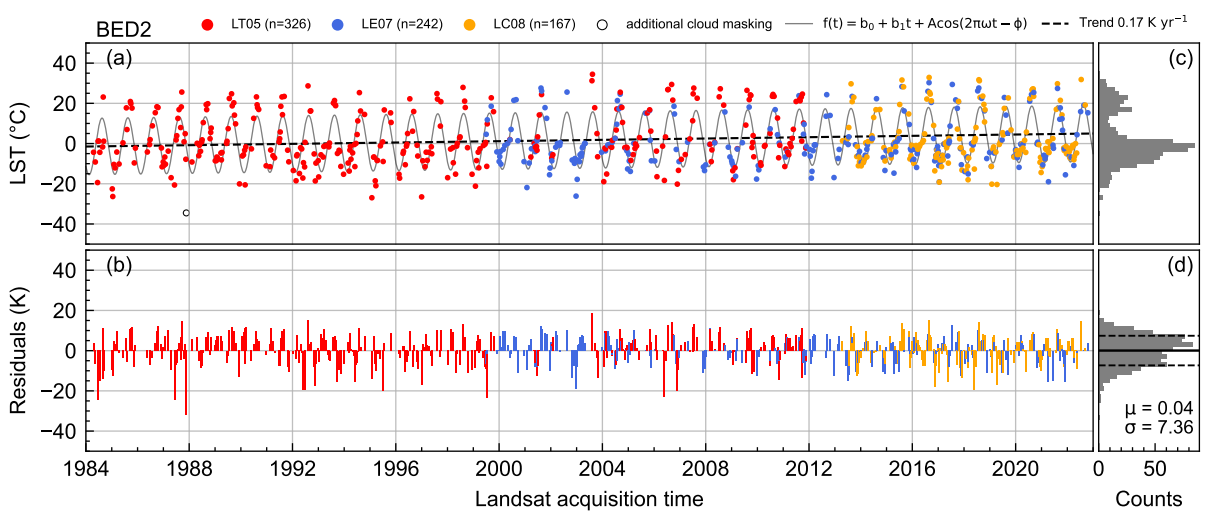

ANV2
LT05 (n=167)
LE07 (n=231)
LC08 (n=111)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.20
σ = 7.18
Landsat acquisition time
Counts

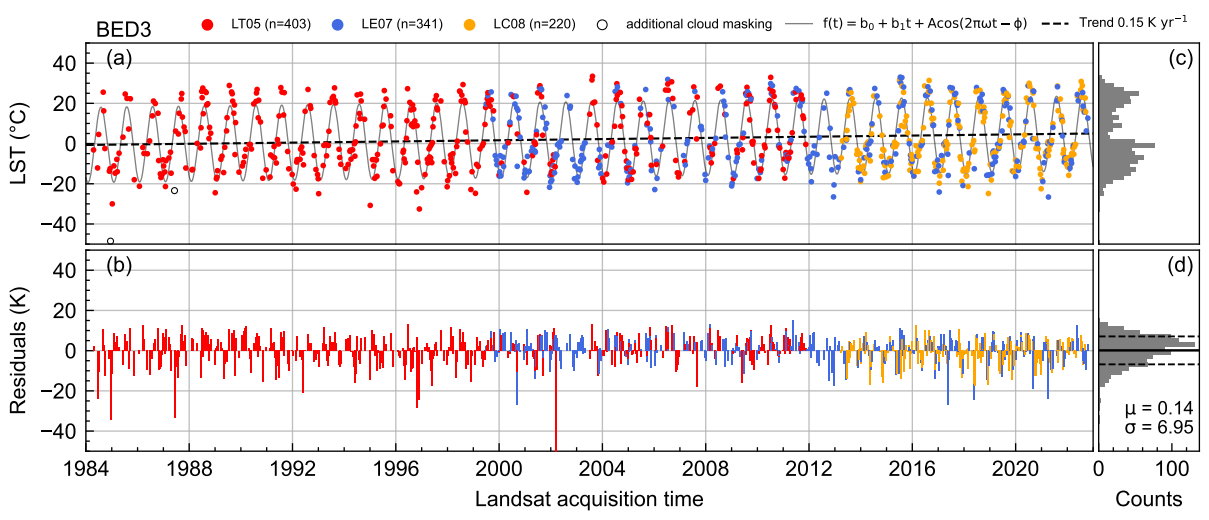

ANV3
LT05 (n=224)
LE07 (n=254)
LC08 (n=116)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.11 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.19
σ = 7.16
Landsat acquisition time
Counts

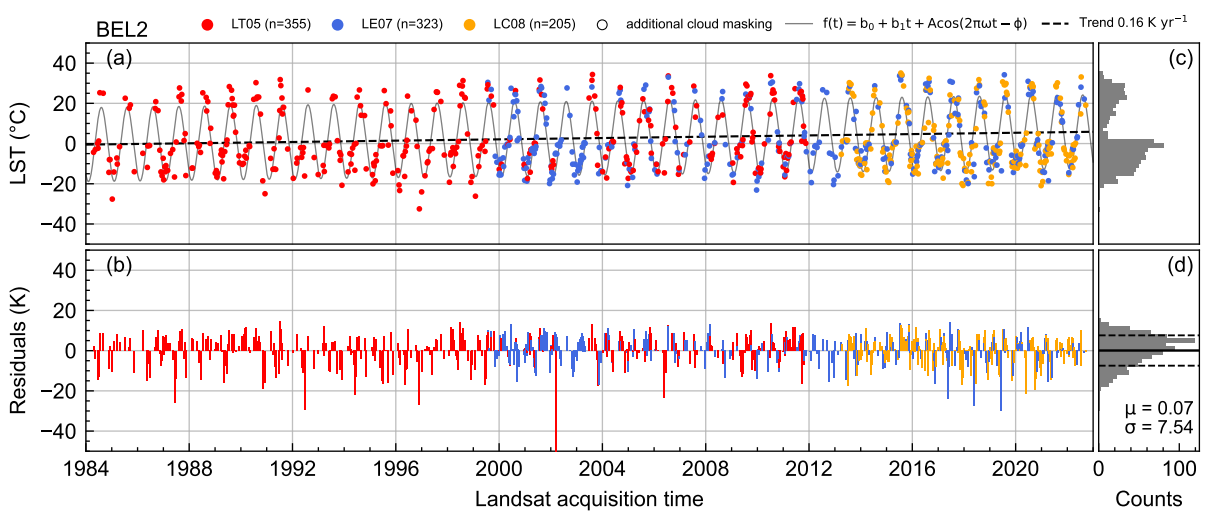

ARO2
LT05 (n=169)
LE07 (n=195)
LC08 (n=112)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.13 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.16
σ = 7.18
Landsat acquisition time
Counts

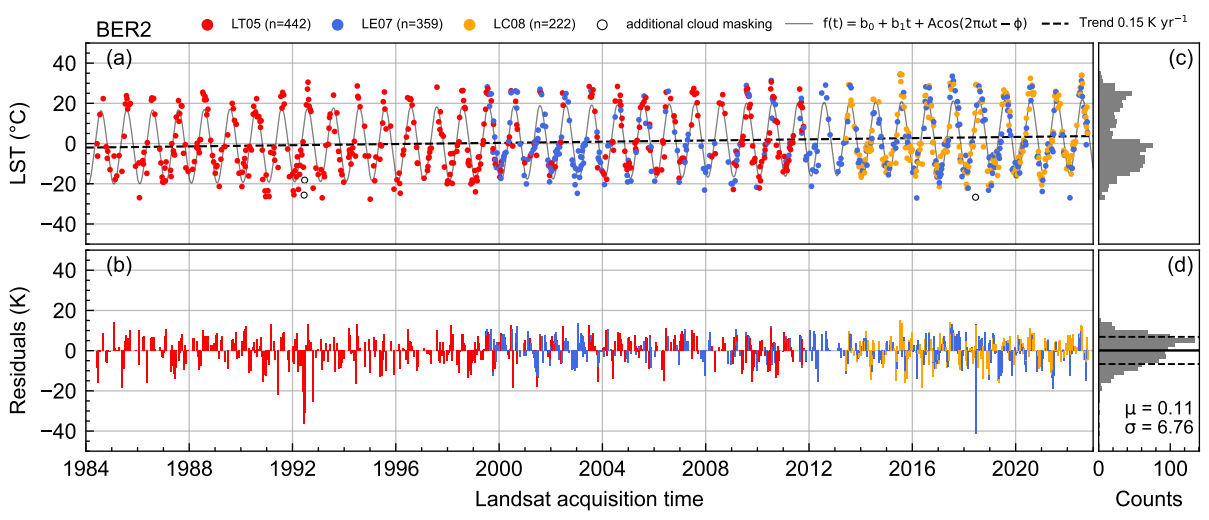

ARO3
LT05 (n=180)
LE07 (n=241)
LC08 (n=114)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.12
σ = 7.13
Landsat acquisition time
Counts

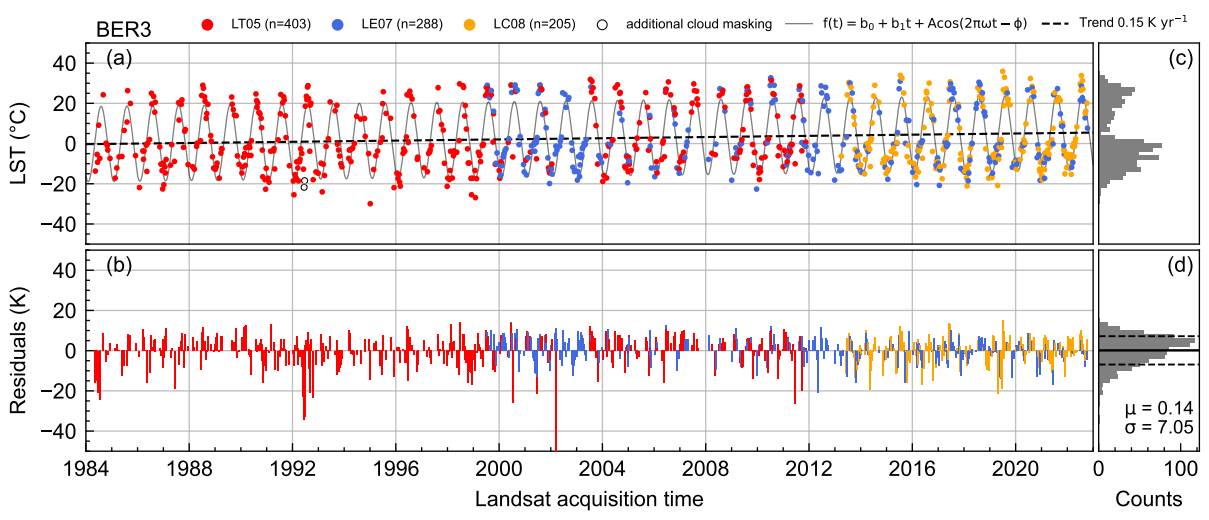

ATT2
LT05 (n=192)
LE07 (n=230)
LC08 (n=119)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.17 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.06
σ = 6.43
Landsat acquisition time
Counts

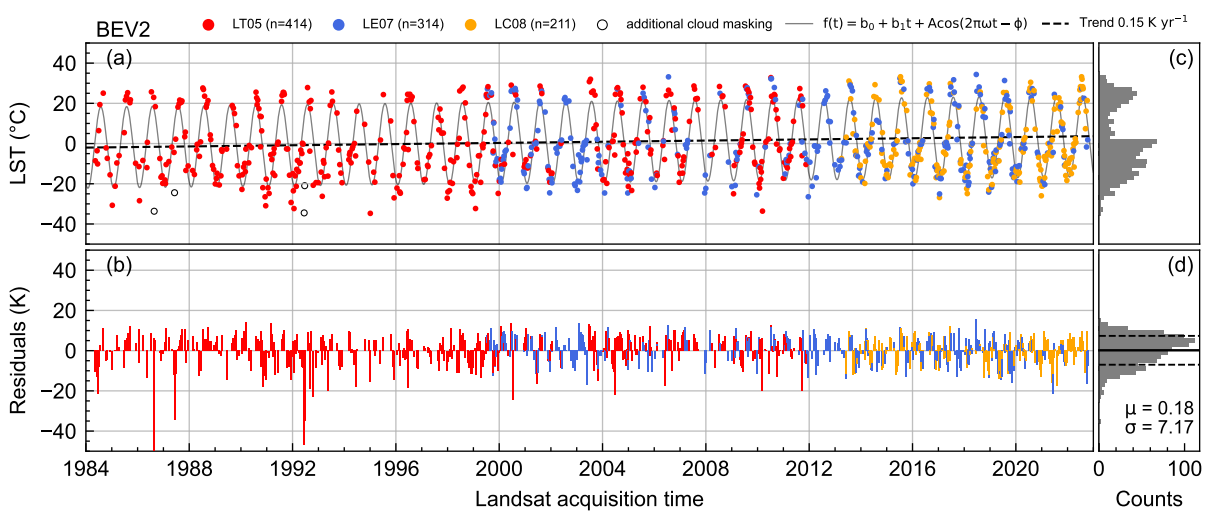

BED2
LT05 (n=326)
LE07 (n=242)
LC08 (n=167)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.17 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.04
σ = 7.36
Landsat acquisition time
Counts

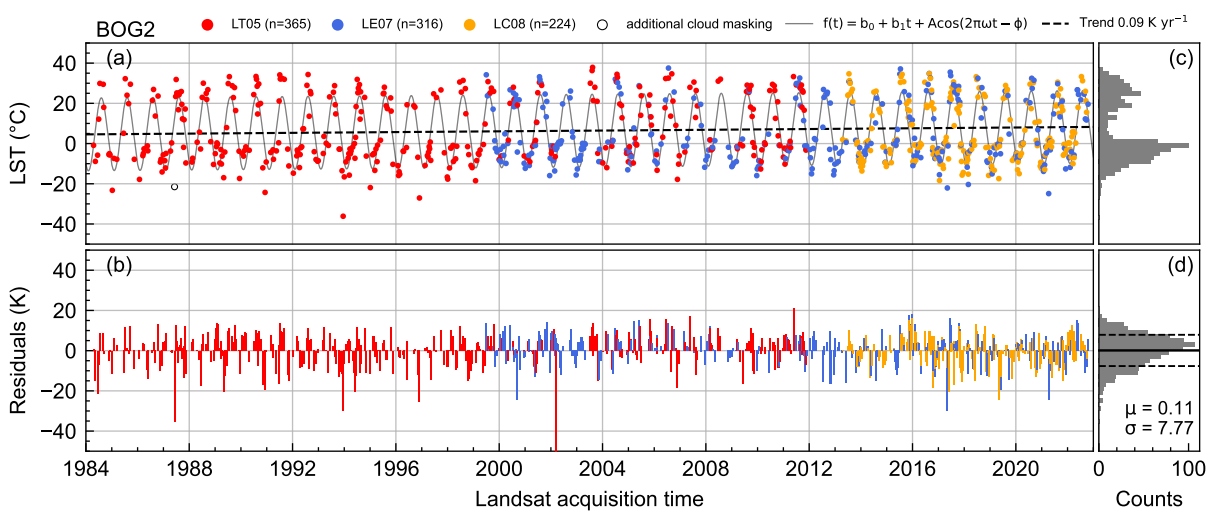

BED3
LT05 (n=403)
LE07 (n=341)
LC08 (n=220)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.14
σ = 6.95
Landsat acquisition time
Counts

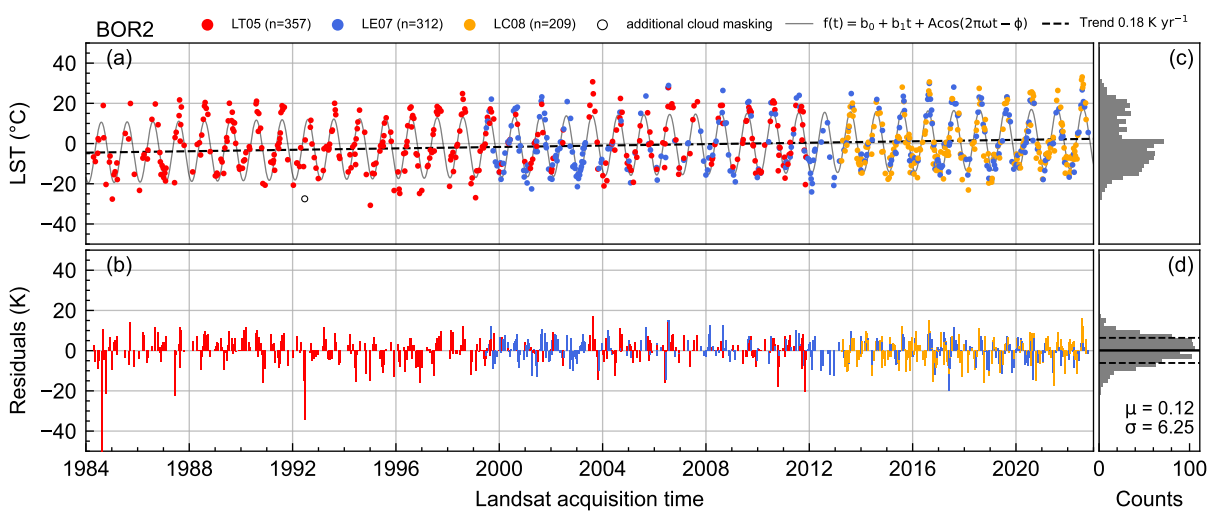

BEL2
LT05 (n=355)
LE07 (n=323)
LC08 (n=205)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.07
σ = 7.54
Landsat acquisition time
Counts

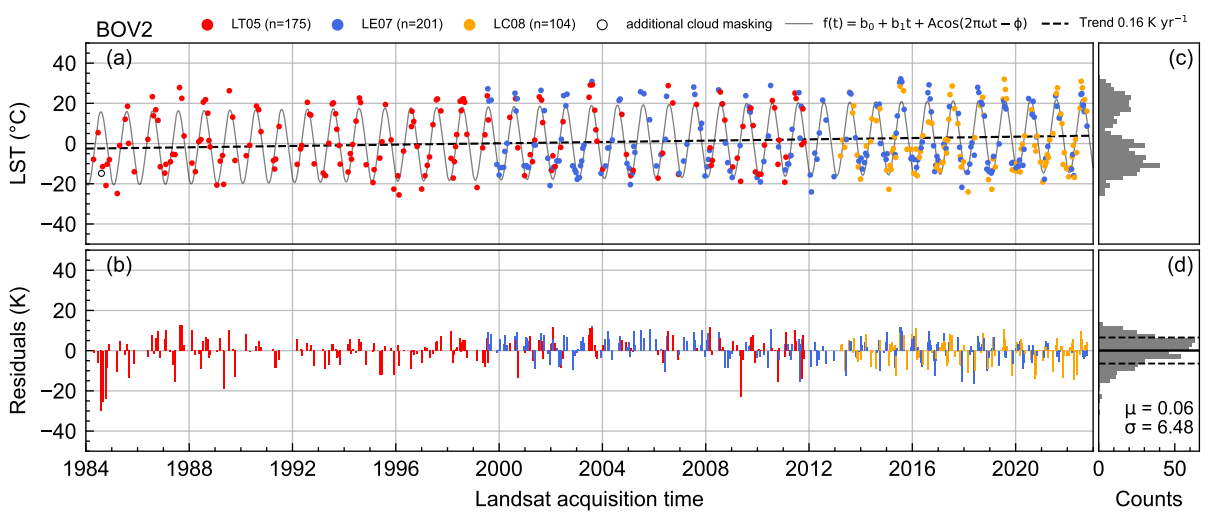

BER2
LT05 (n=442)
LE07 (n=359)
LC08 (n=222)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.11
σ = 6.76
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
100
Counts

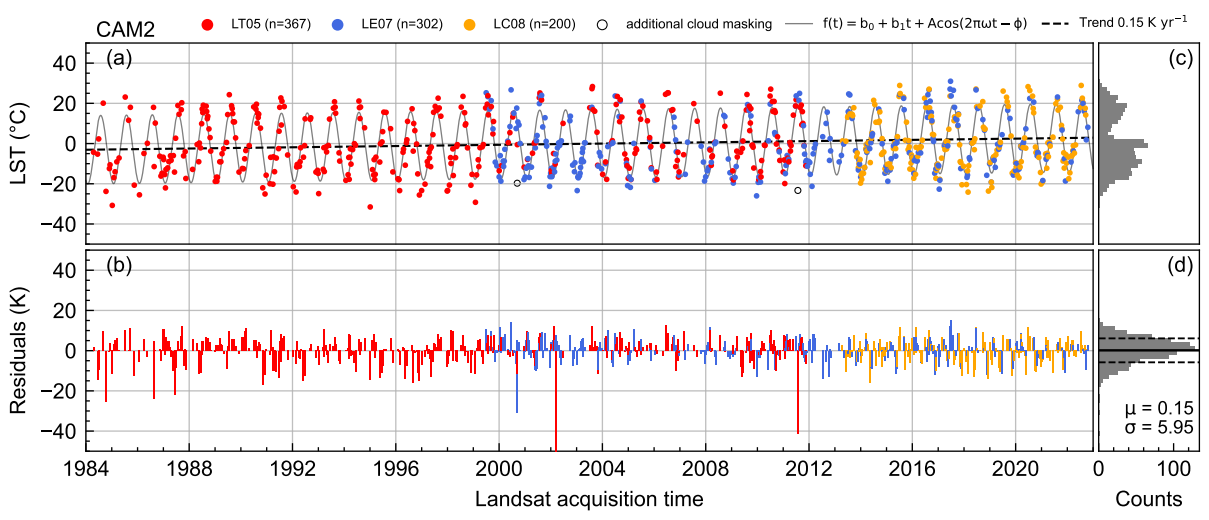

BER3
LT05 (n=403)
LE07 (n=288)
LC08 (n=205)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.14
σ = 0.05
Landsat acquisition time
Counts

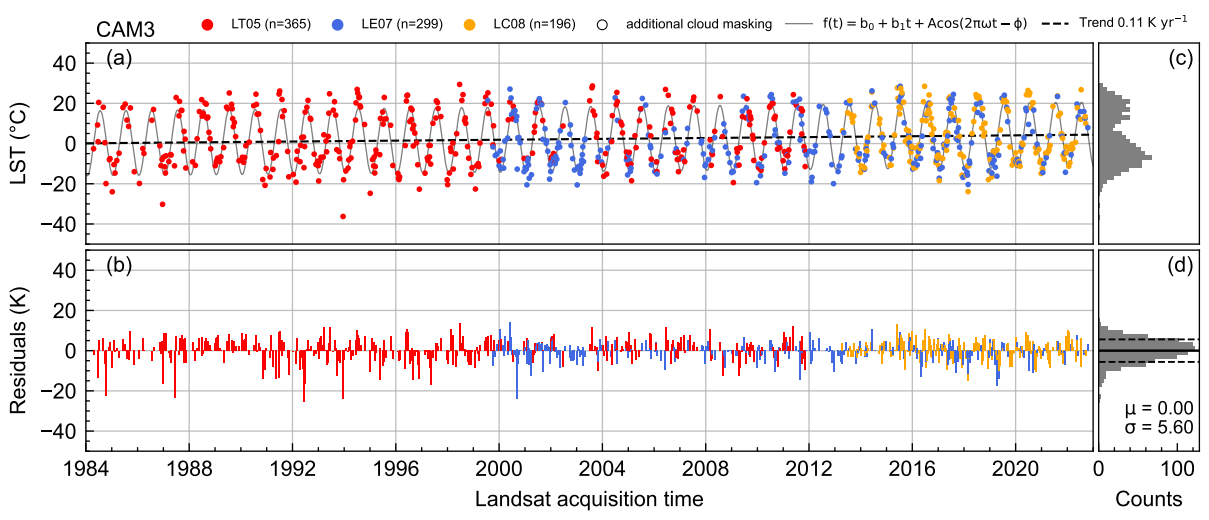

BEV2
LT05 (n=414)
LE07 (n=314)
LC08 (n=211)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.18
σ = 7.17
Landsat acquisition time
Counts

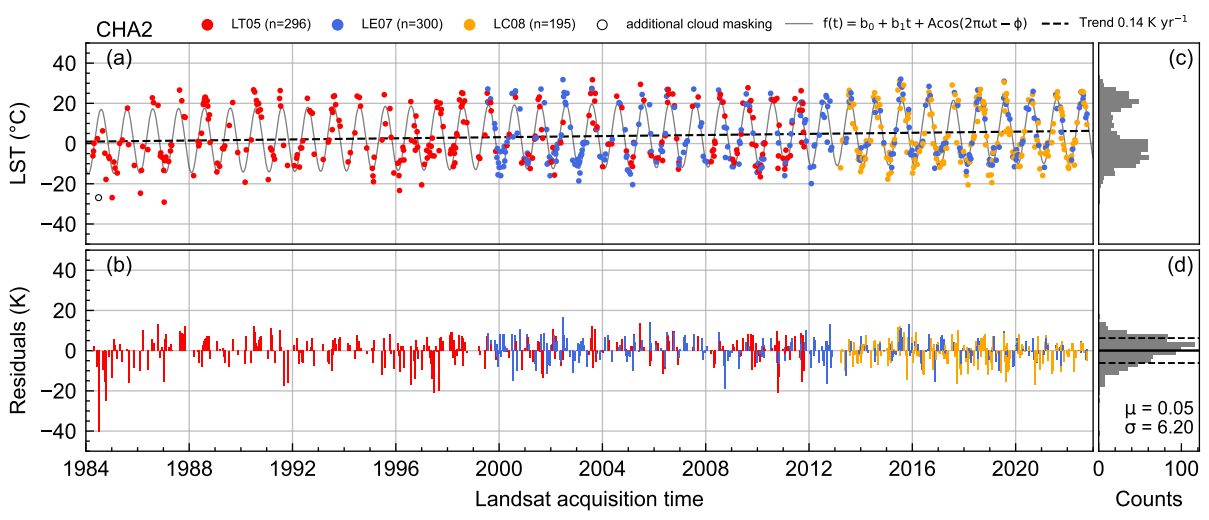

BOG2
LT05 (n=365)
LE07 (n=316)
LC08 (n=224)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.09 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.11
σ = 7.77
Landsat acquisition time
Counts

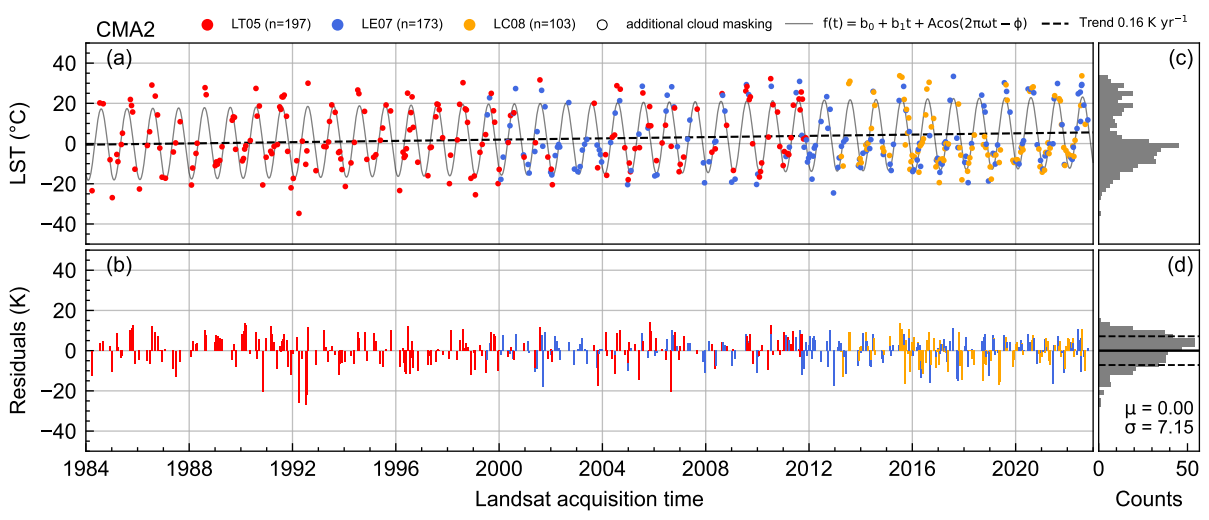

BOR2
LT05 (n=357)
LE07 (n=312)
LC08 (n=209)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.18 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.12
σ = 6.25
Landsat acquisition time
Counts

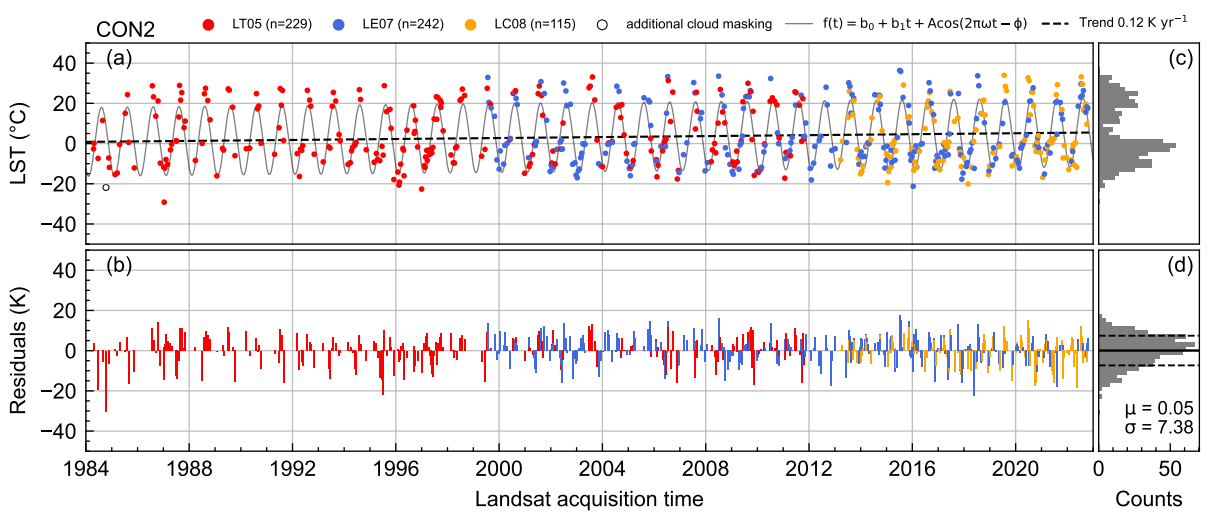

BOV2
LT05 (n=175)
LE07 (n=201)
LC08 (n=104)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.06
σ = 6.48
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
50
Counts

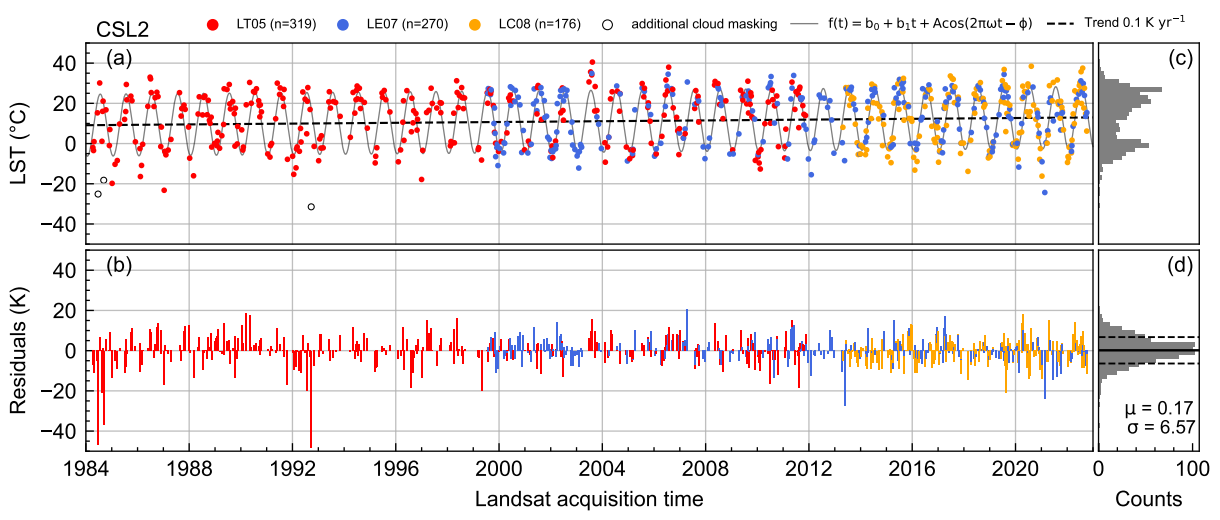

CAM2
LT05 (n=367)
LE07 (n=302)
LC08 (n=200)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.15
σ = 5.95
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
100
Counts

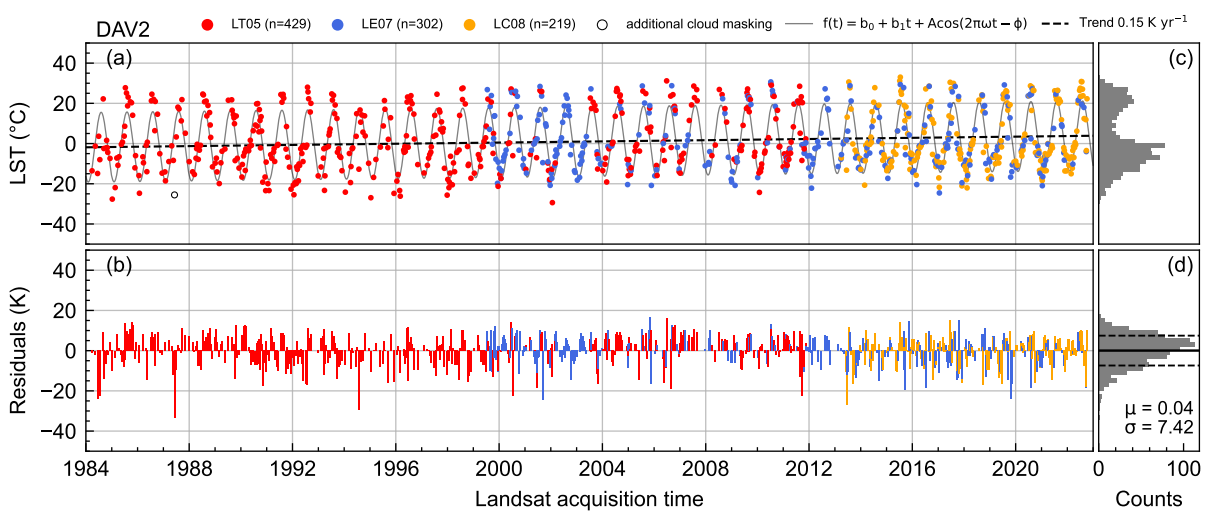

CAM3
LT05 (n=365)
LE07 (n=299)
LC08 (n=196)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.11 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.00
σ = 5.60
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
100
Counts

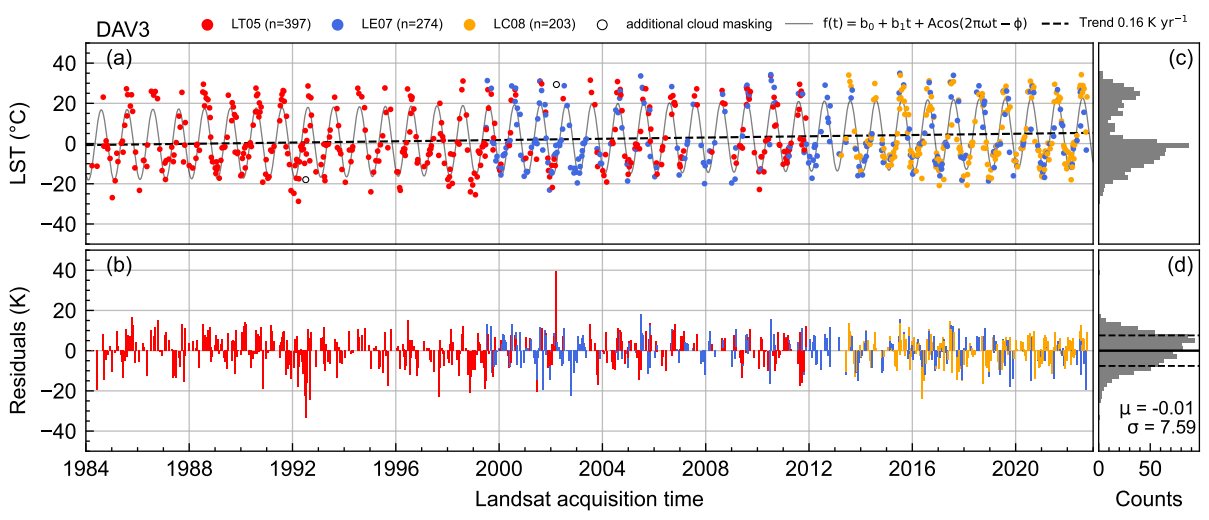

CHA2
LT05 (n=296)
LE07 (n=300)
LC08 (n=195)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.14 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.05
σ = 6.20
Landsat acquisition time
Counts

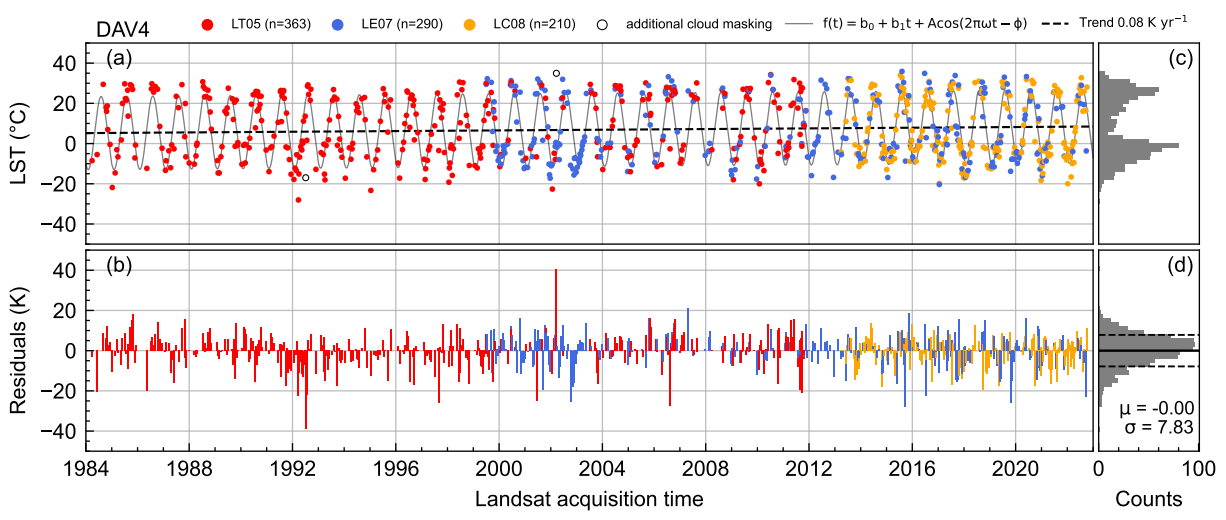

CMA2
LT05 (n=197)
LE07 (n=173)
LC08 (n=103)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.00
σ = 7.15
Landsat acquisition time
Counts

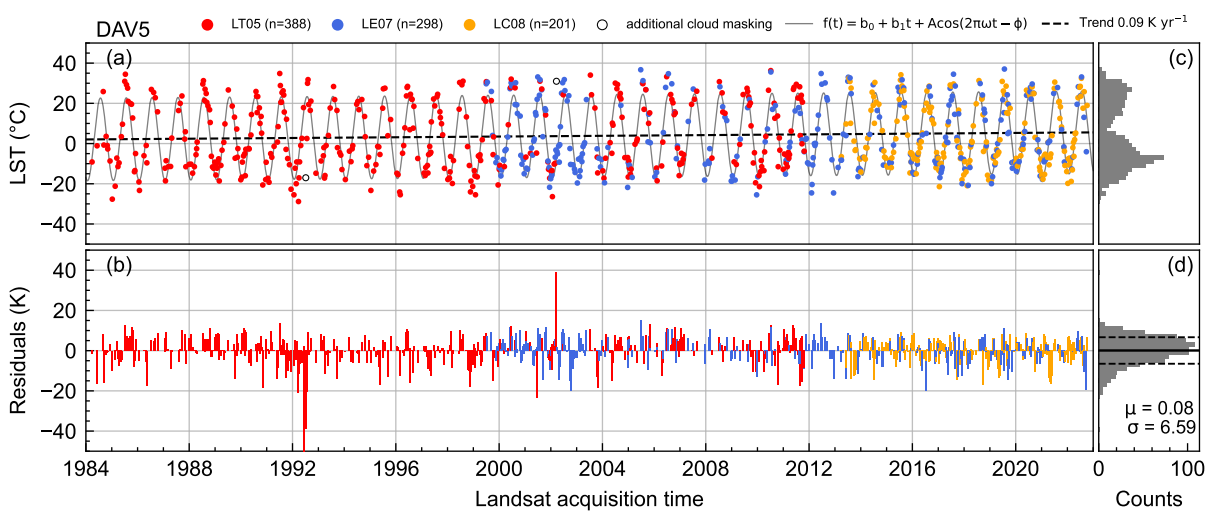

CON2
LT05 (n=229)
LE07 (n=242)
LC08 (n=115)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.05
σ = 7.38
Landsat acquisition time
Counts

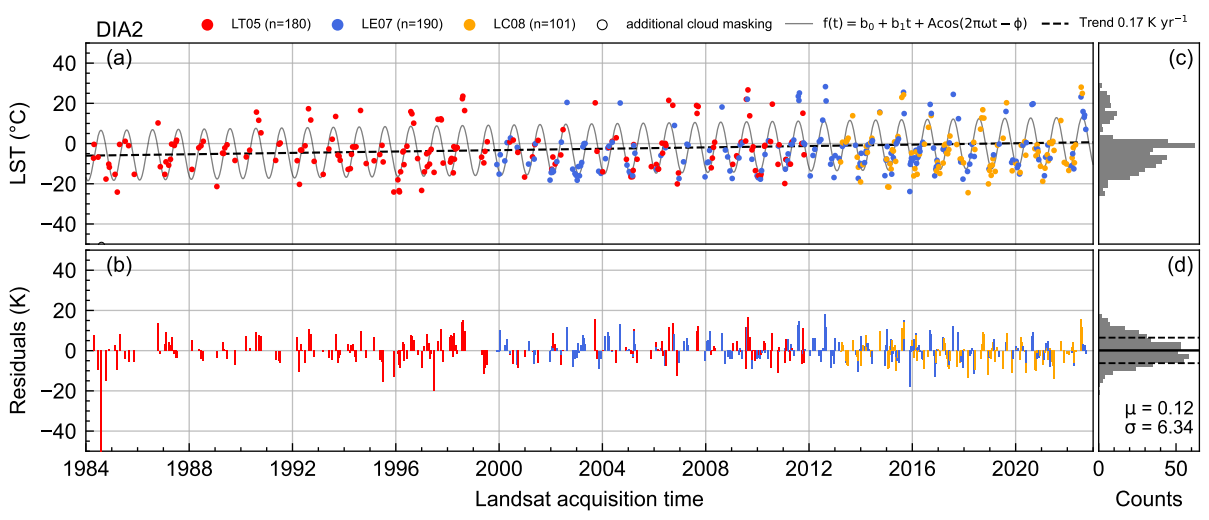

CSL2
LT05 (n=319)
LE07 (n=270)
LC08 (n=176)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.1 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.17
σ = 6.57
Landsat acquisition time
Counts

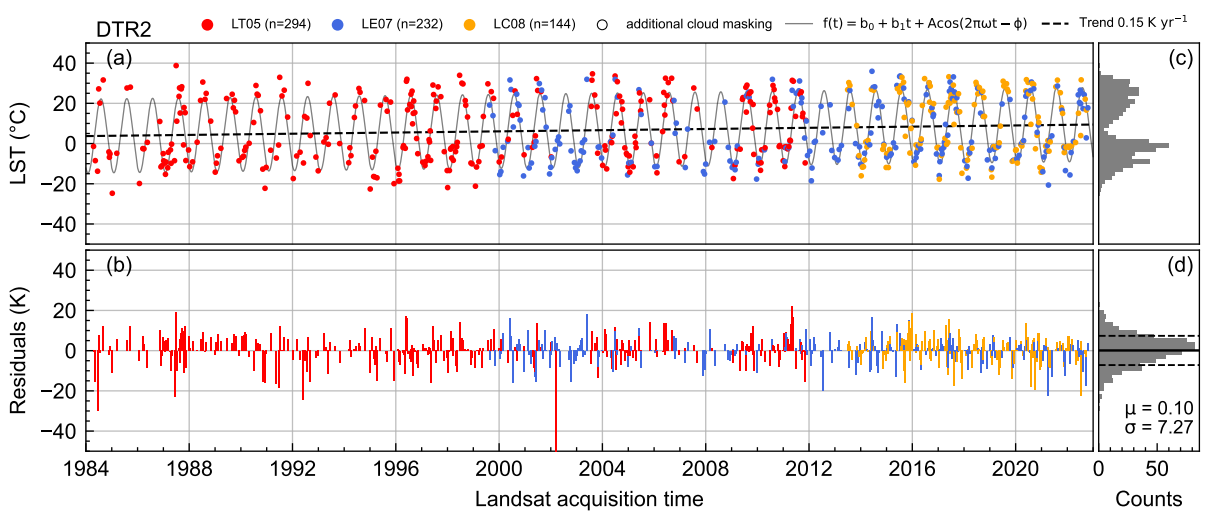

DAV2
LT05 (n=429)
LE07 (n=302)
LC08 (n=219)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.04
σ = 7.42
Landsat acquisition time
Counts

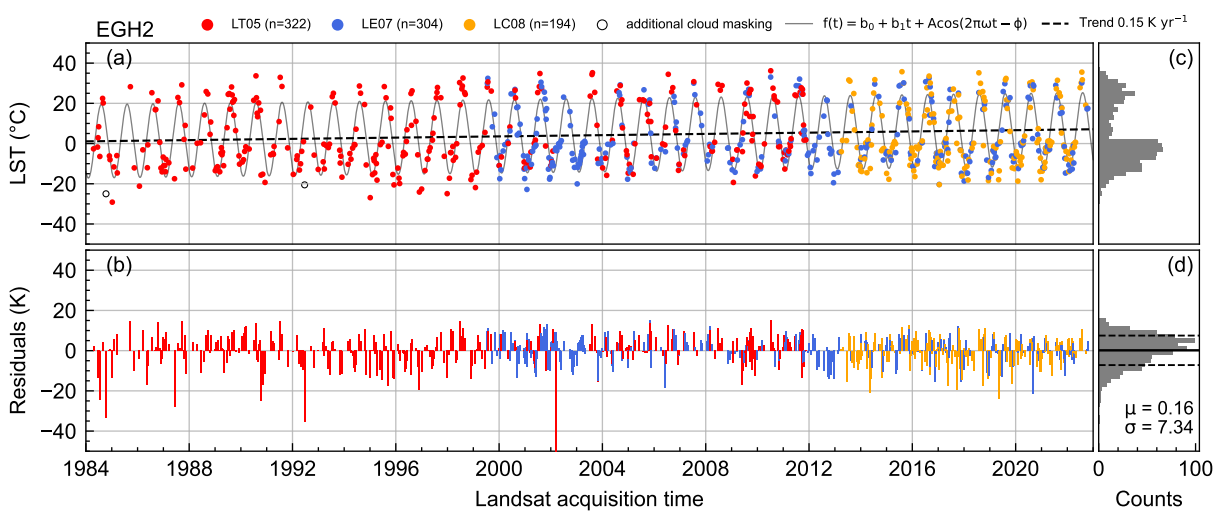

DAV3
LT05 (n=397)
LE07 (n=274)
LC08 (n=203)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = -0.01
σ = 7.59
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
50
Counts

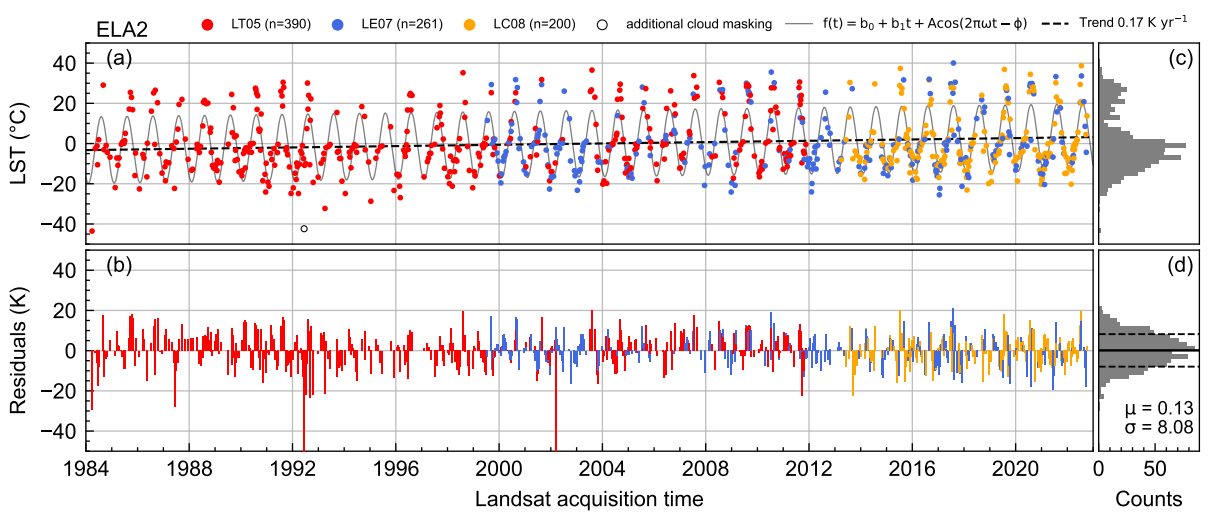

DAV4
LT05 (n=363)
LE07 (n=290)
LC08 (n=210)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.08 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = -0.00
σ = 7.83
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
100
Counts

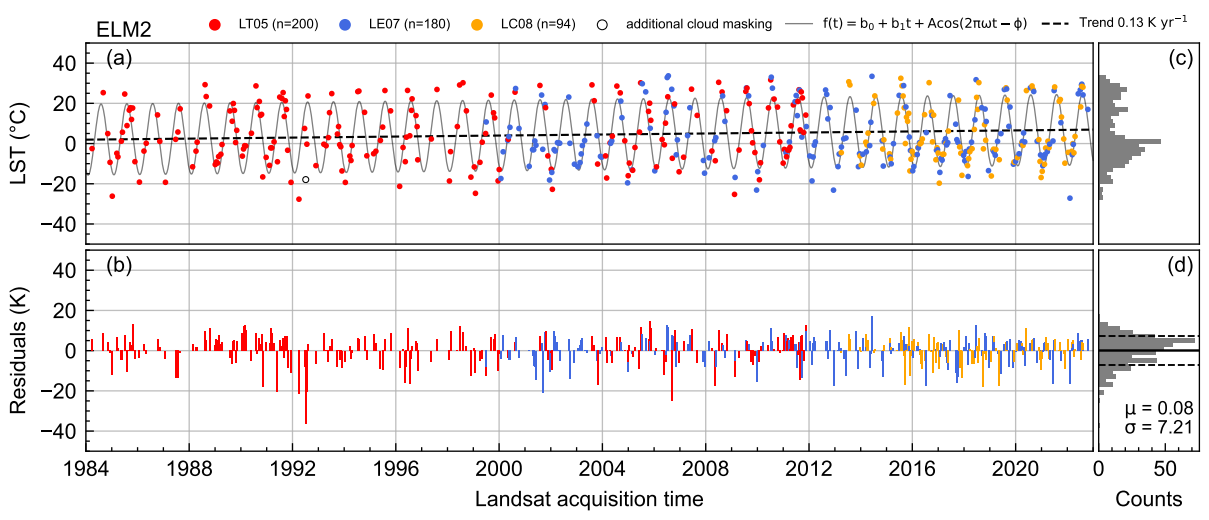

DAV5
LT05 (n=388)
LE07 (n=298)
LC08 (n=201)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.09 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.08
σ = 6.59
Landsat acquisition time
Counts

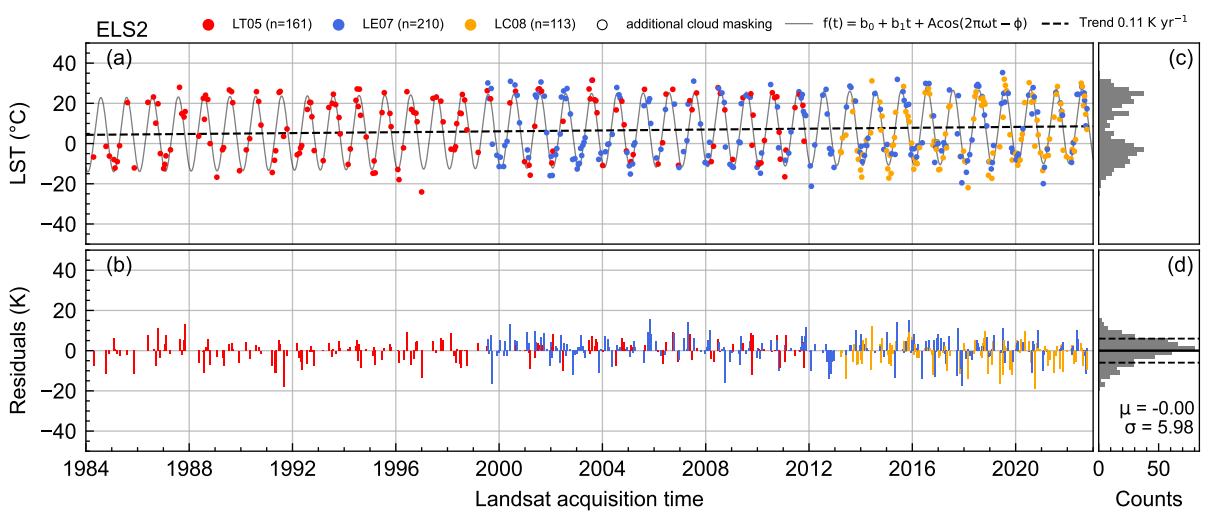

DIA2
LT05 (n=180)
LE07 (n=190)
LC08 (n=101)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.17 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.12
σ = 6.34
Landsat acquisition time
Counts

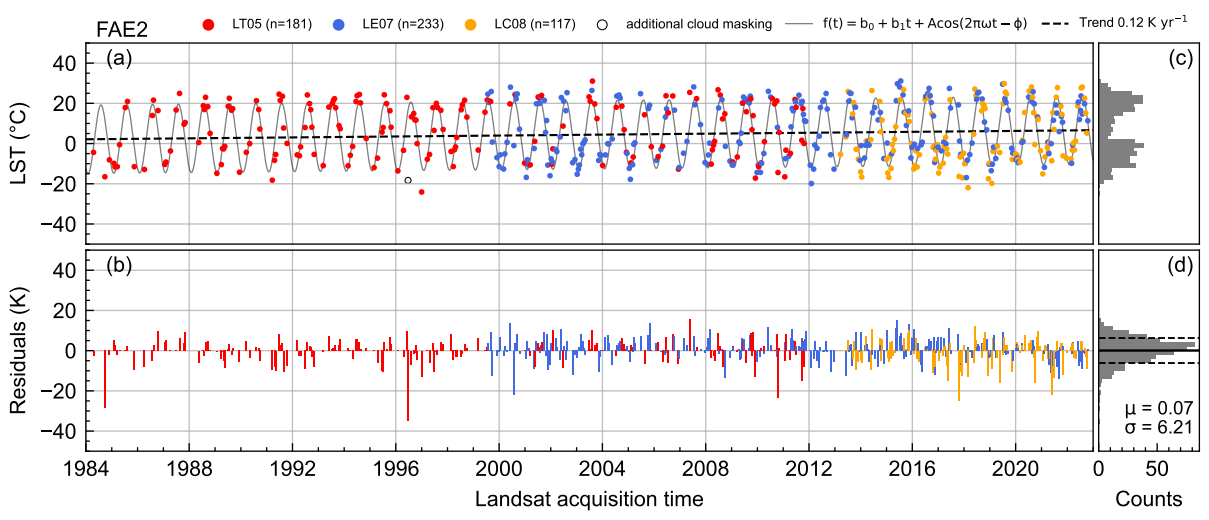

DTR2
LT05 (n=294)
LE07 (n=232)
LC08 (n=144)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.10
σ = 7.27
Landsat acquisition time
Counts

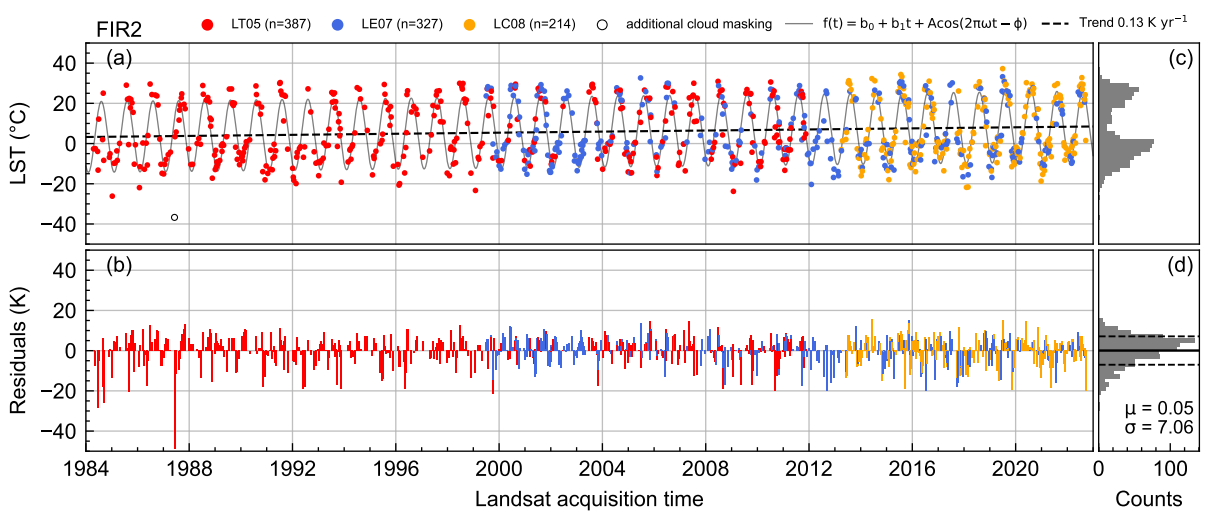

EGH2
LT05 (n=322)
LE07 (n=304)
LC08 (n=194)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.16
σ = 7.34
Landsat acquisition time
Counts

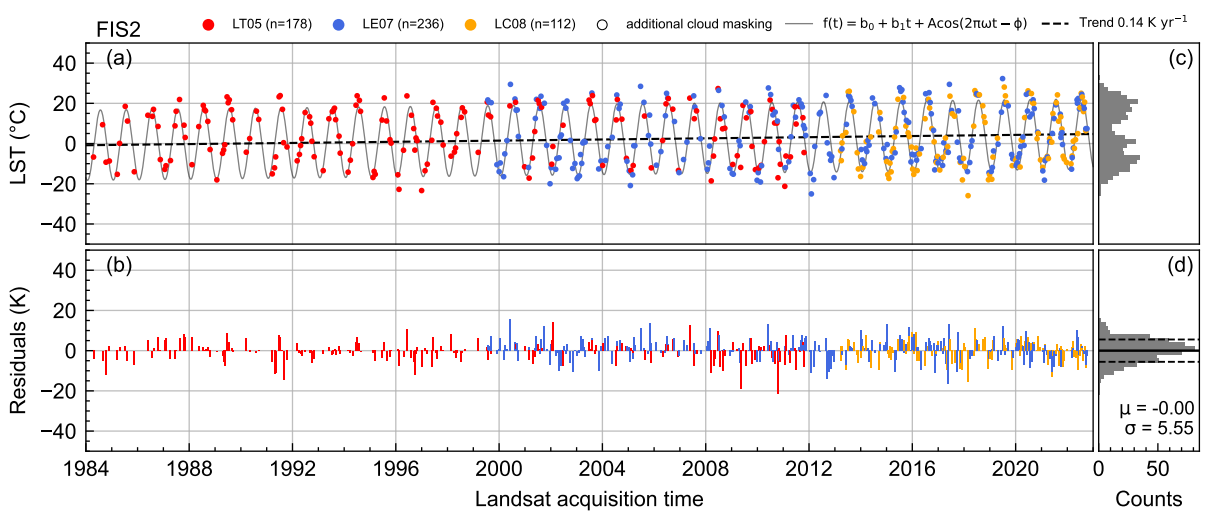

ELA2
LT05 (n=390)
LE07 (n=261)
LC08 (n=200)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.17 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.13
σ = 8.08
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
50
Counts

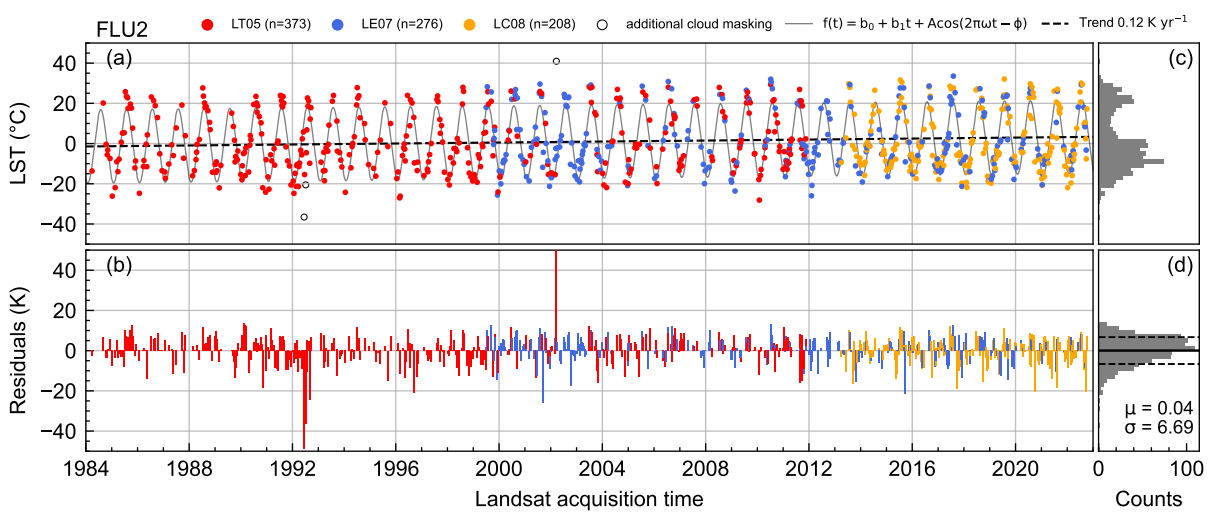

ELM2
LT05 (n=200)
LE07 (n=180)
LC08 (n=94)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.13 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.08
σ = 7.21
Landsat acquisition time
Counts

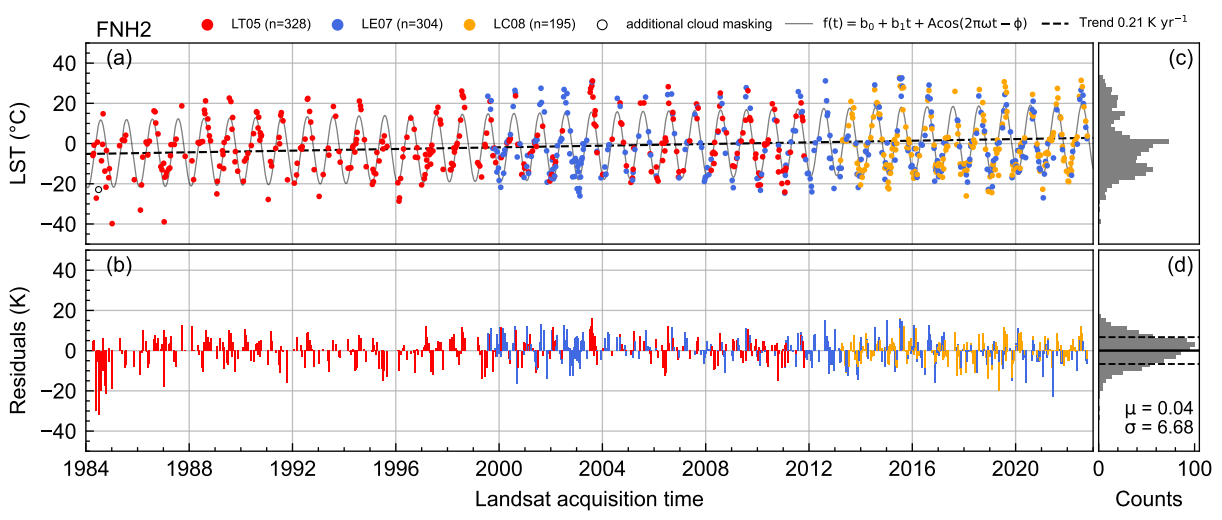

ELS2
LT05 (n=161)
LE07 (n=210)
LC08 (n=113)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.11 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = -0.00
σ = 5.98
Landsat acquisition time
Counts

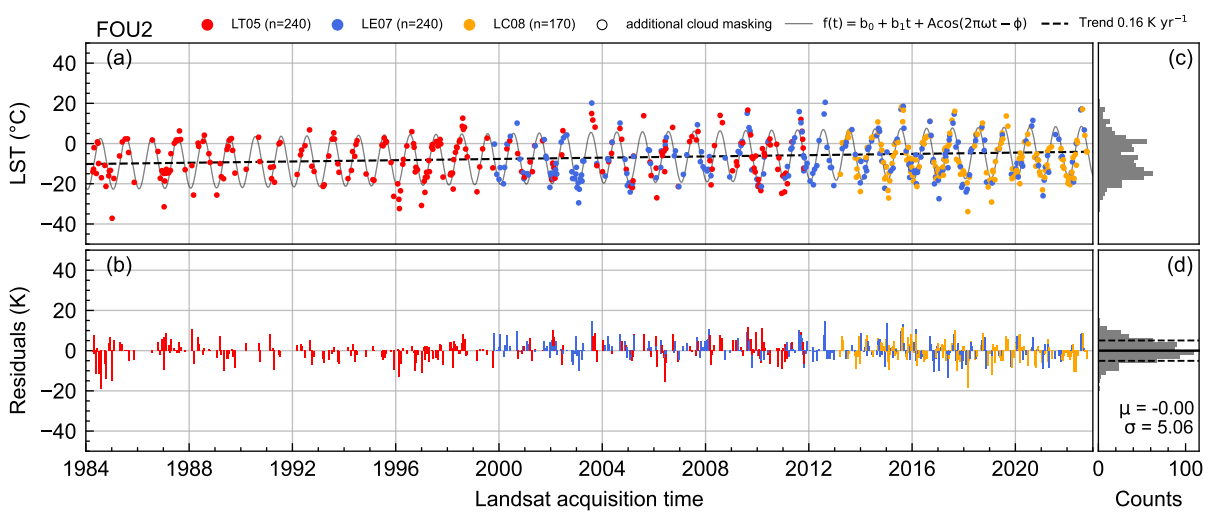

FAE2
LT05 (n=181)
LE07 (n=233)
LC08 (n=117)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.07
σ = 6.21
Landsat acquisition time
Counts

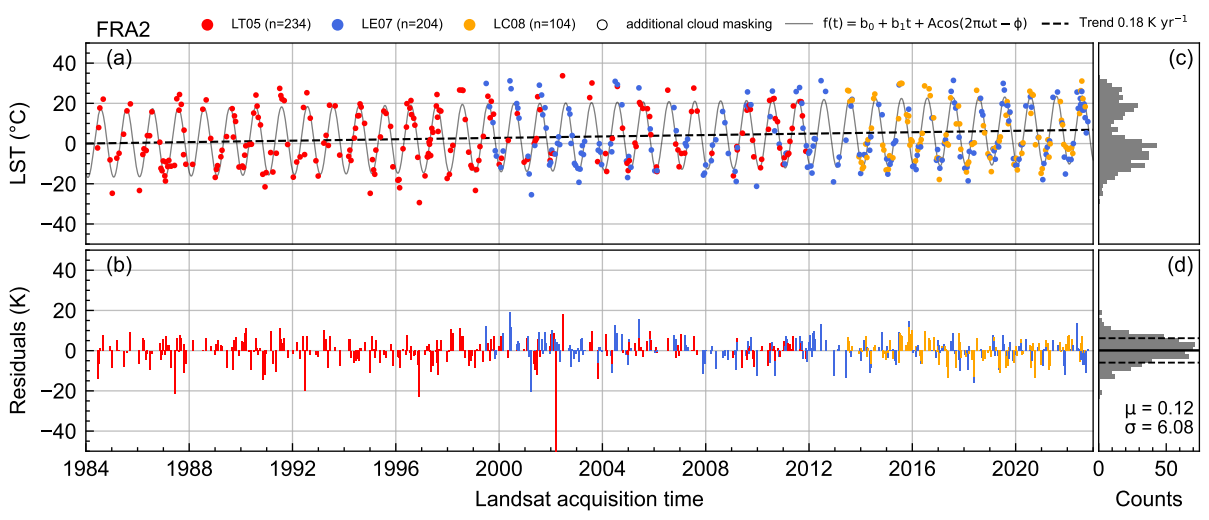

FIR2
LT05 (n=387)
LE07 (n=327)
LC08 (n=214)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.13 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.05
σ = 7.06
Landsat acquisition time
Counts

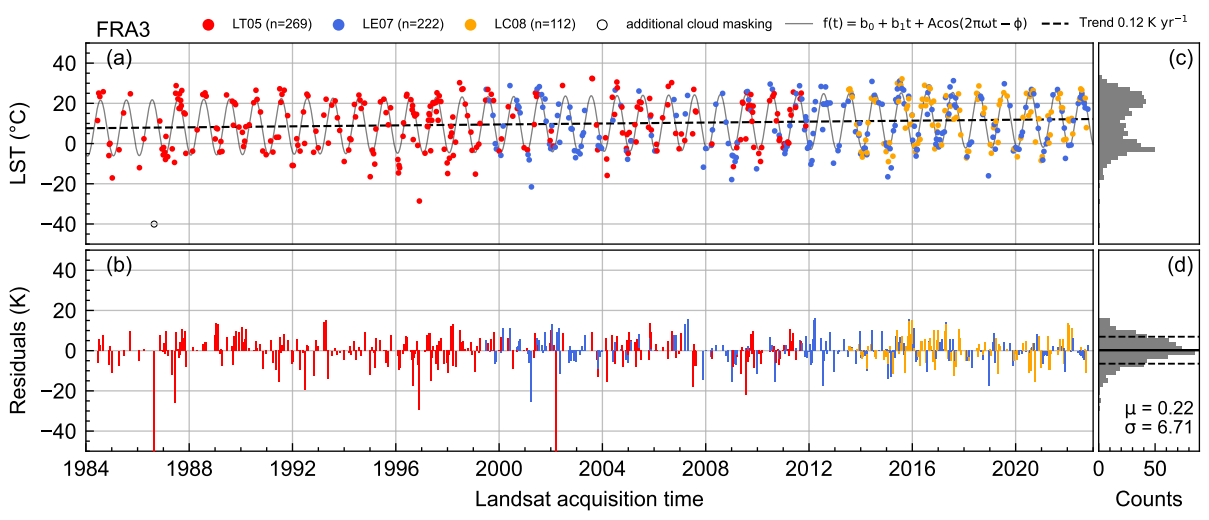

FIS2
LT05 (n=178)
LE07 (n=236)
LC08 (n=112)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.14 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = -0.00
σ = 5.55
Landsat acquisition time
Counts

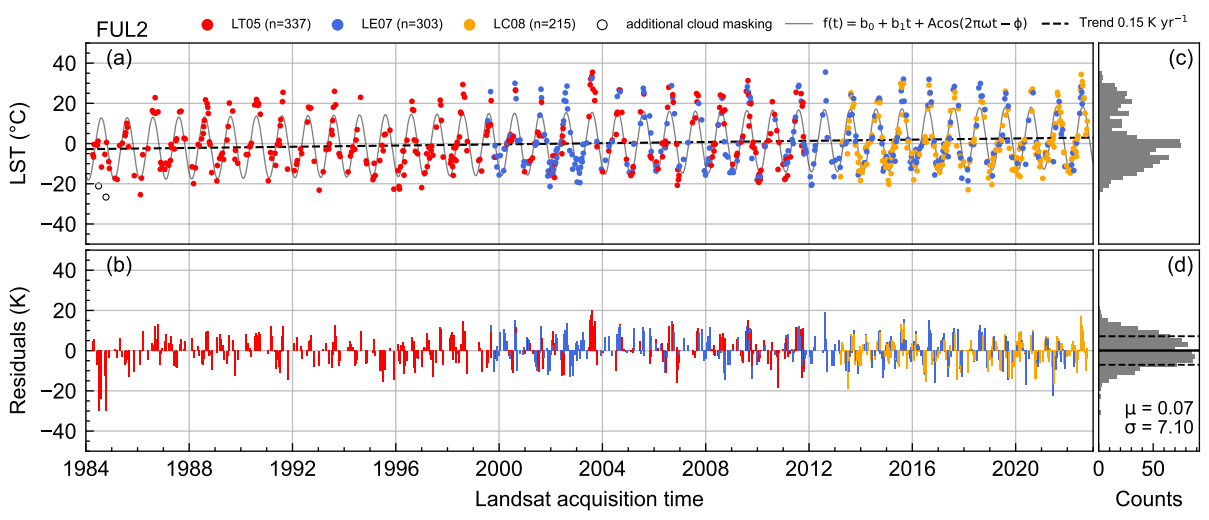

FLU2
LT05 (n=373)
LE07 (n=276)
LC08 (n=208)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.04
σ = 6.69
Landsat acquisition time
Counts

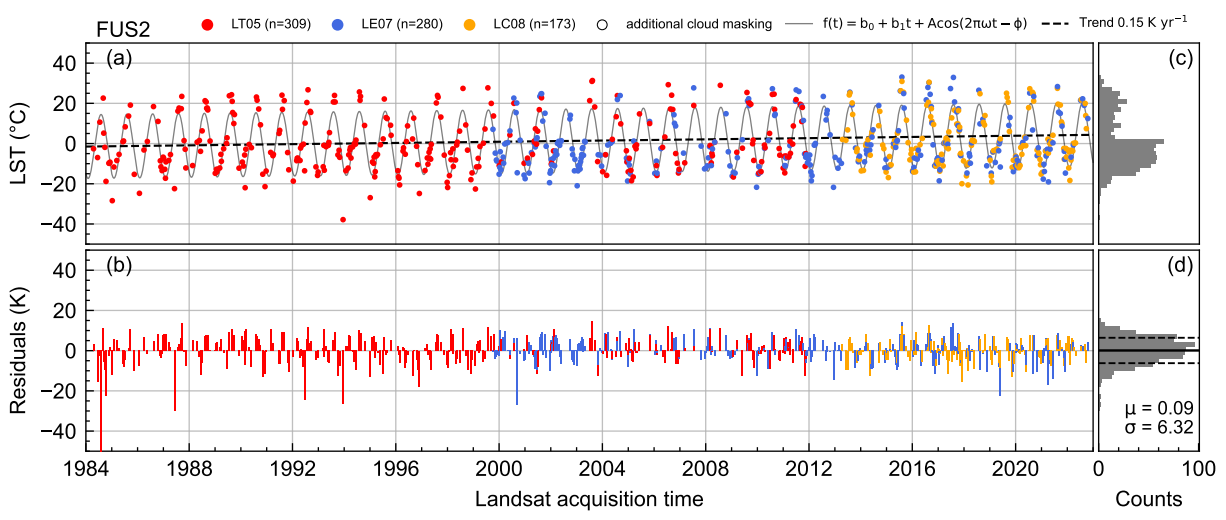

FNH2
LT05 (n=328)
LE07 (n=304)
LC08 (n=195)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.21 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.04
σ = 6.68
Landsat acquisition time
Counts

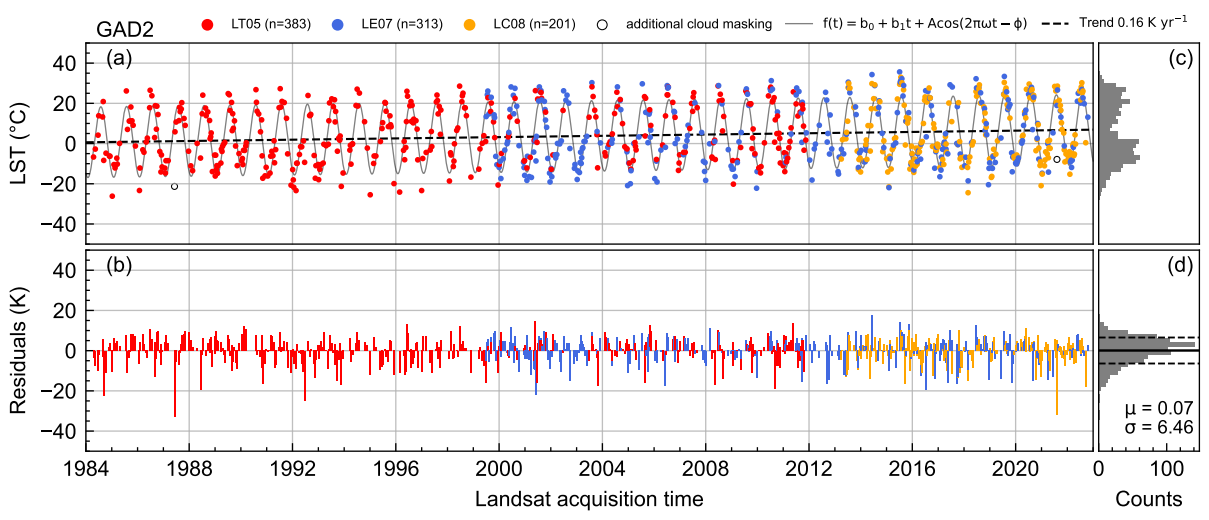

FOU2
LT05 (n=240)
LE07 (n=240)
LC08 (n=170)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = -0.00
σ = 5.06
Landsat acquisition time
Counts

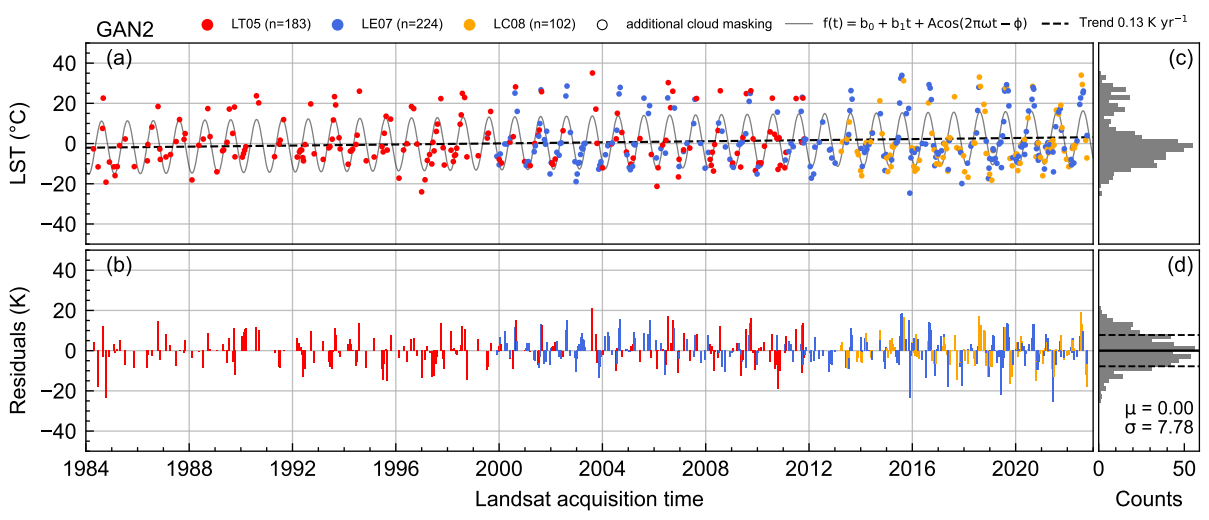

FRA2
LT05 (n=234)
LE07 (n=204)
LC08 (n=104)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.18 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.12
σ = 6.08
Landsat acquisition time
Counts

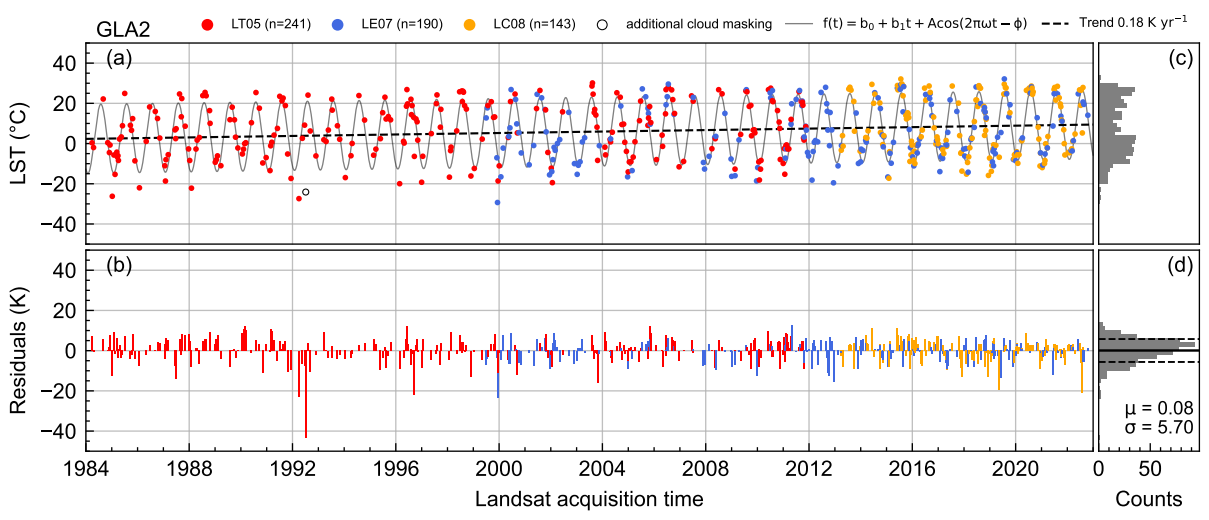

FRA3
LT05 (n=269)
LE07 (n=222)
LC08 (n=112)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.22
σ = 6.71
Landsat acquisition time
Counts

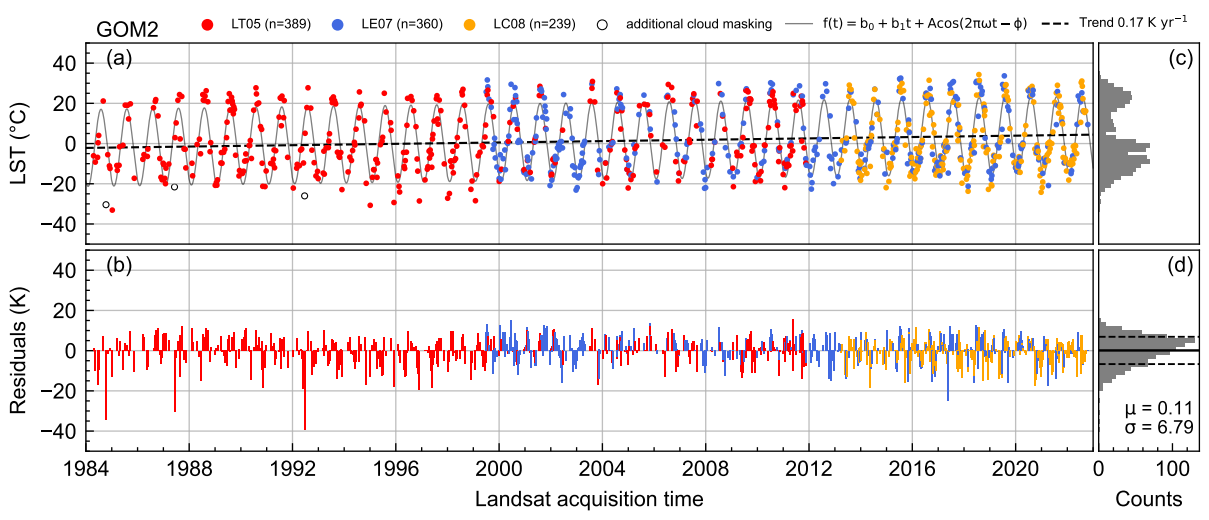

FUL2
LT05 (n=337)
LE07 (n=303)
LC08 (n=215)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.07
σ = 7.10
Landsat acquisition time
Counts

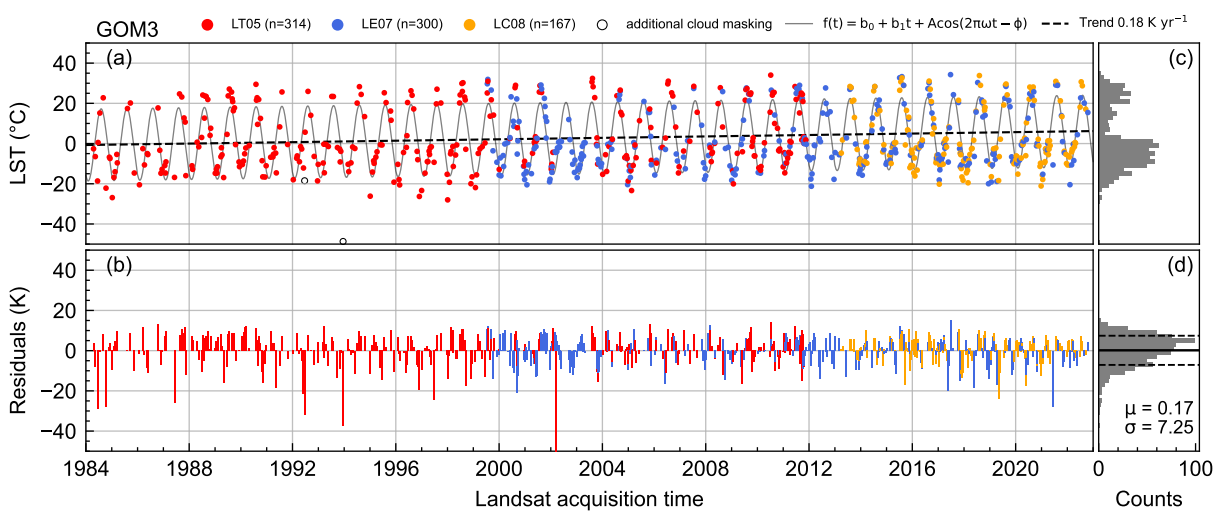

FUS2
LT05 (n=309)
LE07 (n=280)
LC08 (n=173)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.09
σ = 6.32
Landsat acquisition time
Counts

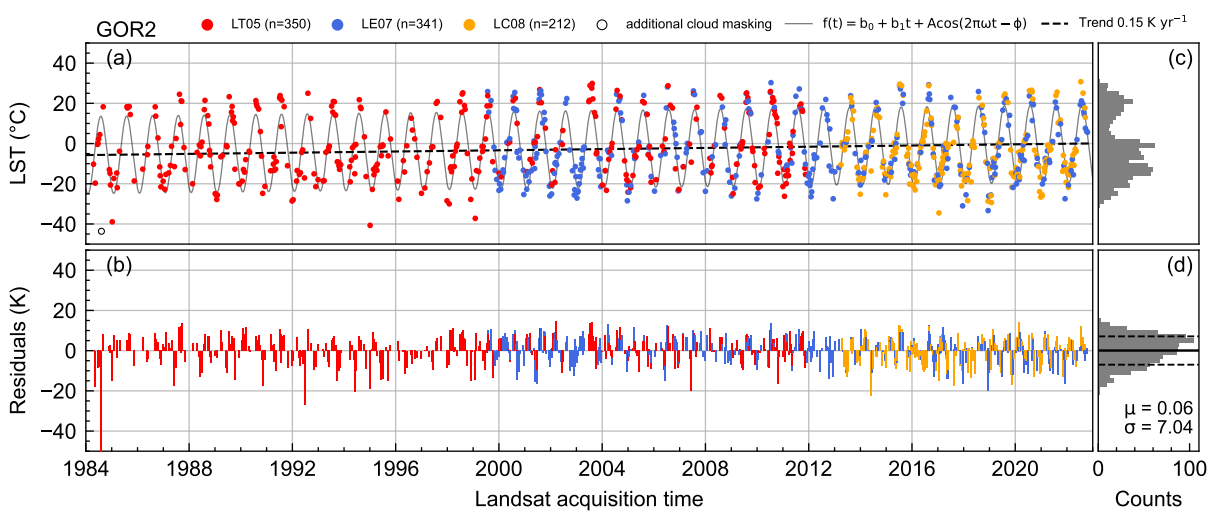

GAD2
LT05 (n=383)
LE07 (n=313)
LC08 (n=201)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.07
σ = 6.46
Landsat acquisition time
Counts

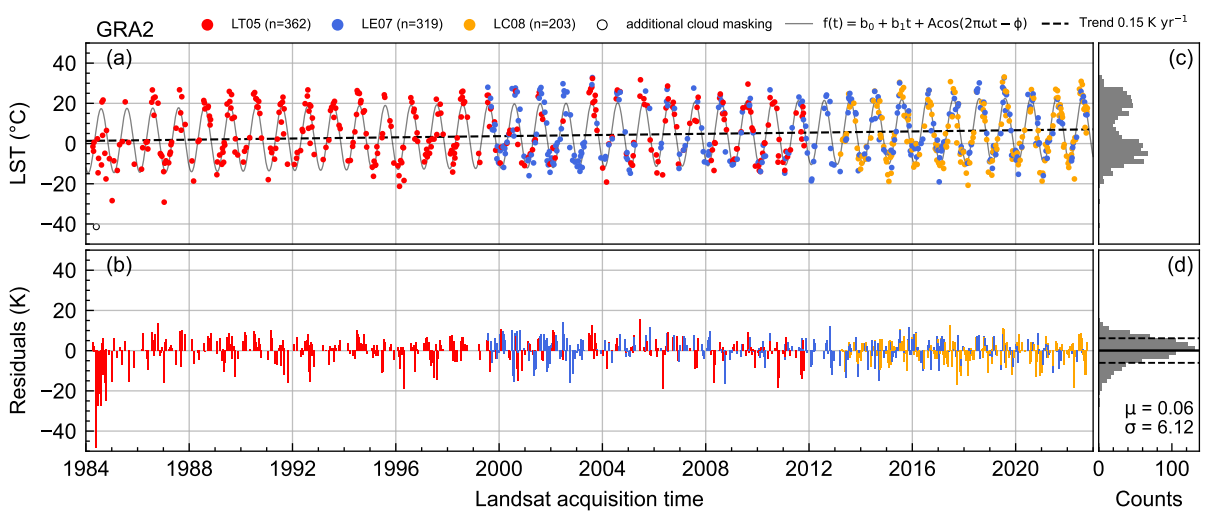

GAN2
LT05 (n=183)
LE07 (n=224)
LC08 (n=102)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.13 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
Landsat acquisition time
Counts
μ = 0.00
σ = 7.78
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020

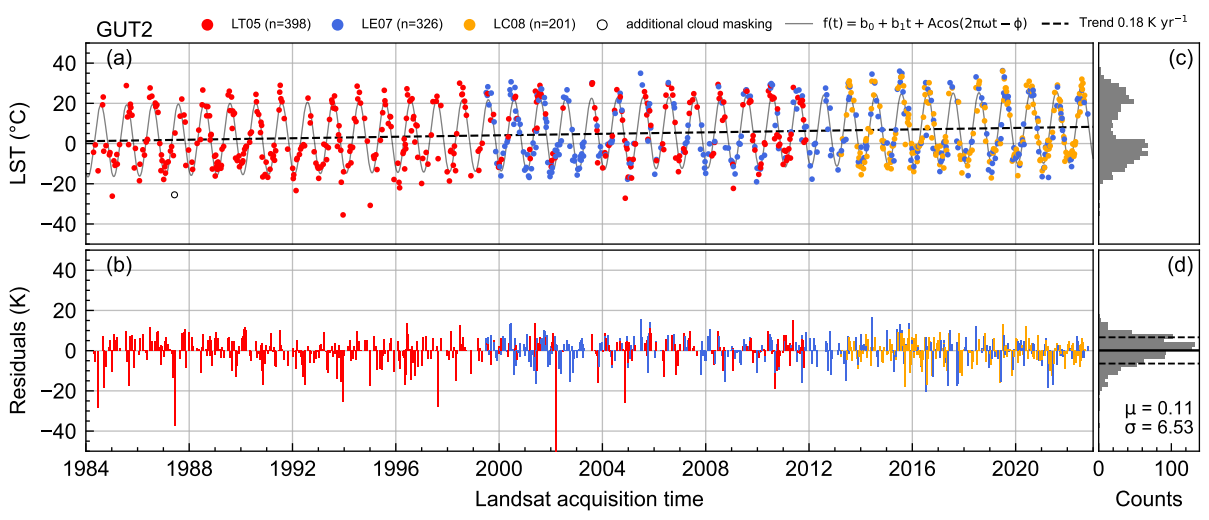

GLA2
LT05 (n=241)
LE07 (n=190)
LC08 (n=143)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.18 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.08
σ = 5.70
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
50
Counts

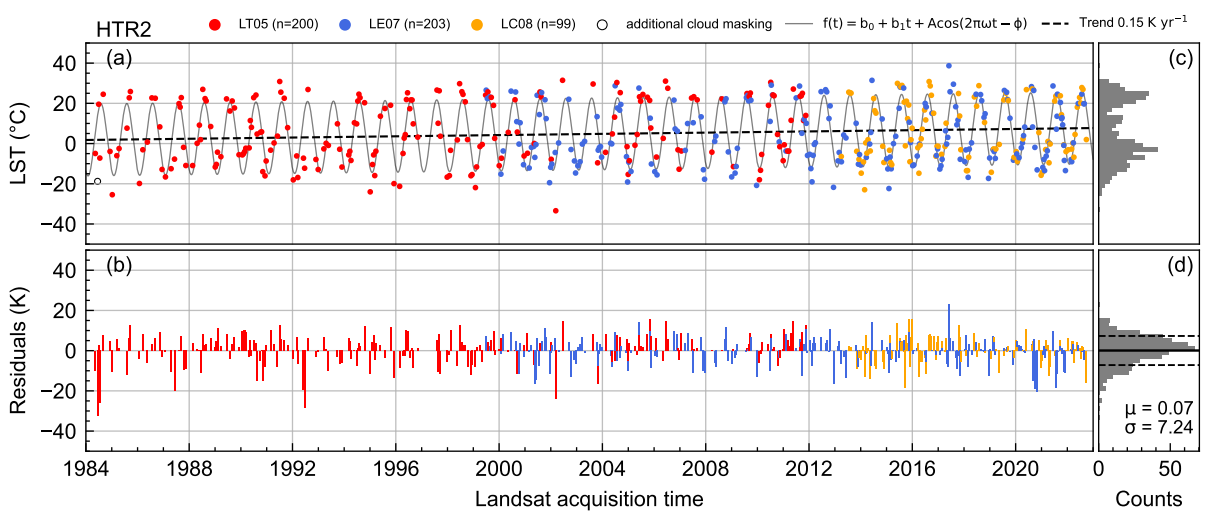

GOM2
LT05 (n=389)
LE07 (n=360)
LC08 (n=239)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.17 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.11
σ = 6.79
Landsat acquisition time
Counts

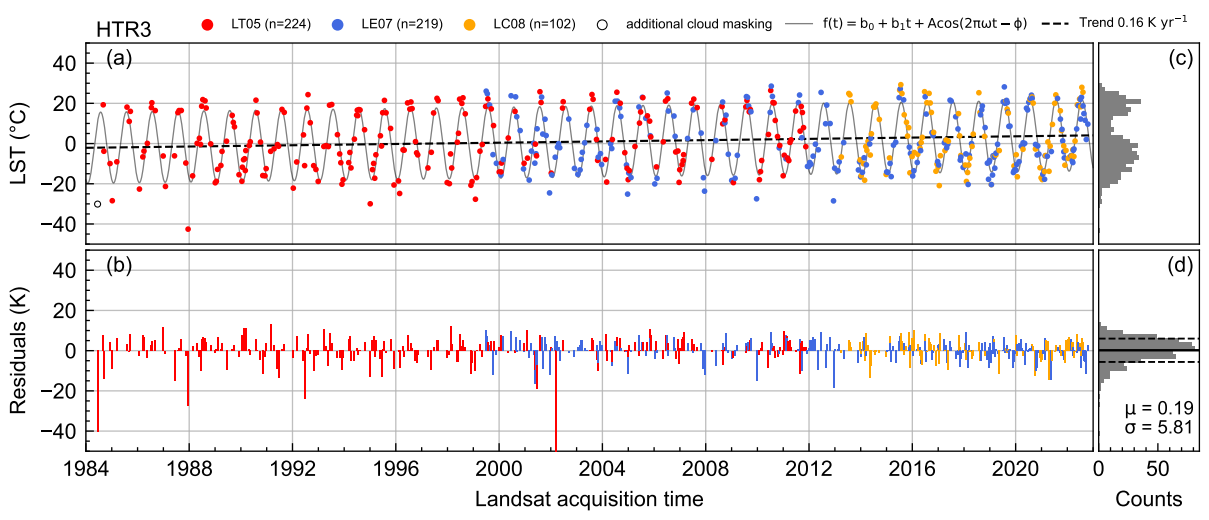

GOM3
LT05 (n=314)
LE07 (n=300)
LC08 (n=167)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.18 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.17
σ = 7.25
Landsat acquisition time
Counts

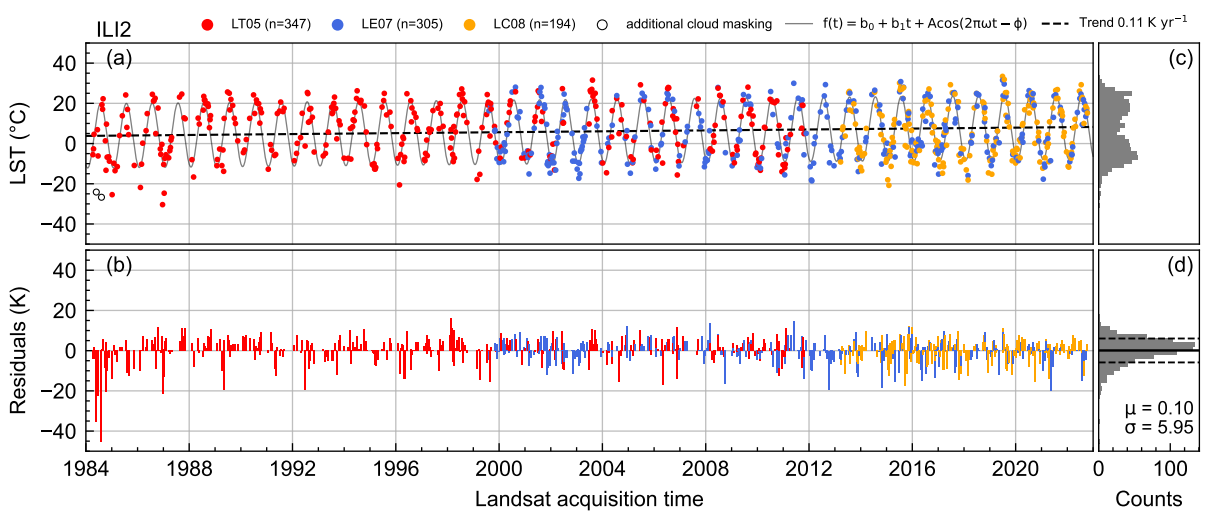

GOR2
LT05 (n=350)
LE07 (n=341)
LC08 (n=212)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.06
σ = 7.04
Landsat acquisition time
Counts

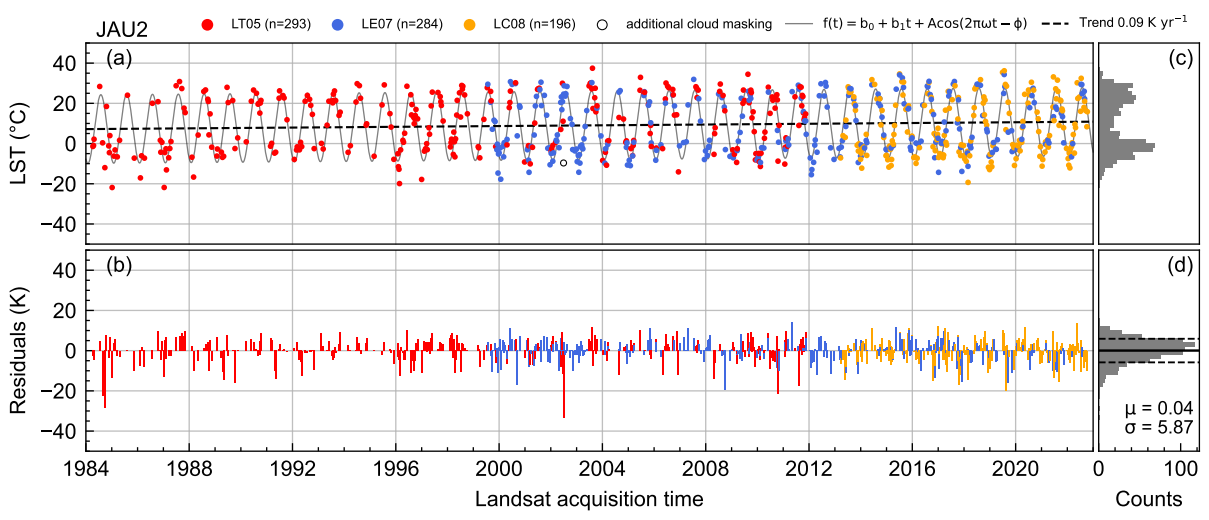

GRA2
LT05 (n=362)
LE07 (n=319)
LC08 (n=203)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.06
σ = 6.12
Landsat acquisition time
Counts

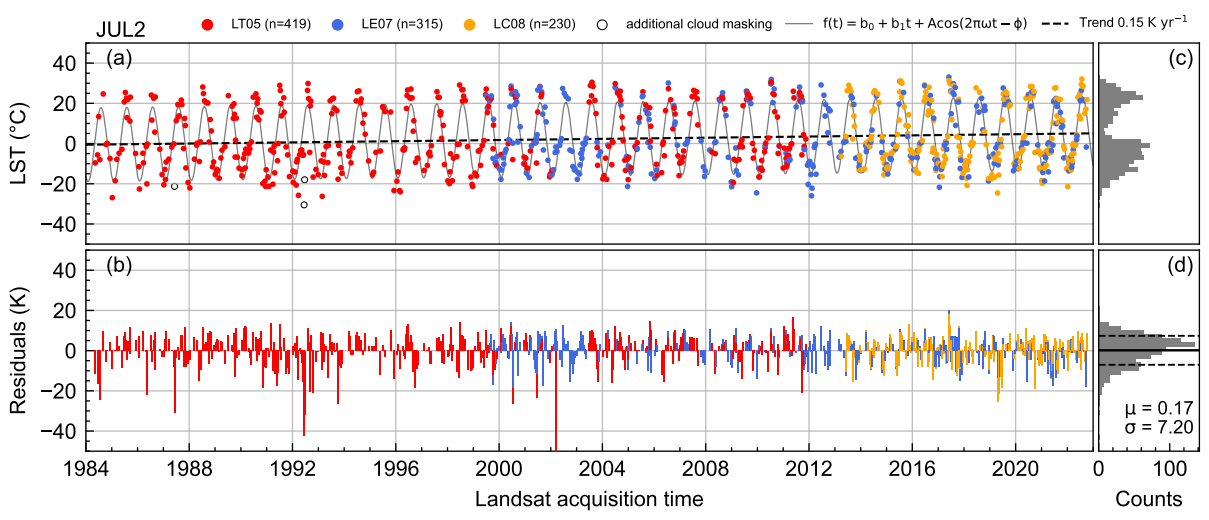

GUT2
LT05 (n=398)
LE07 (n=326)
LC08 (n=201)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.18 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.11
σ = 6.53
Landsat acquisition time
Counts

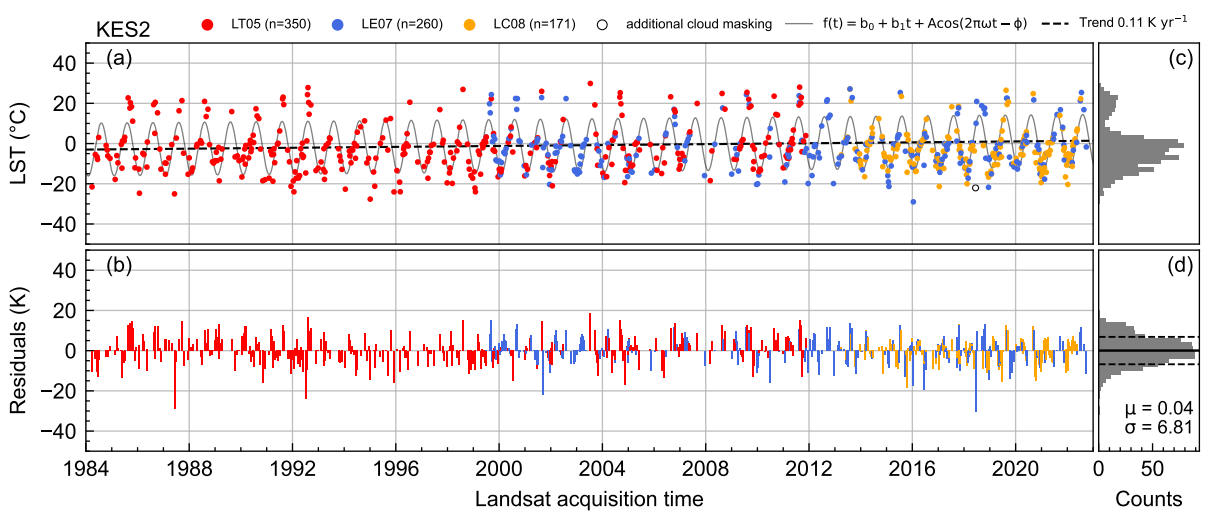

HTR2
LT05 (n=200)
LE07 (n=203)
LC08 (n=99)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.07
σ = 7.24
Landsat acquisition time
Counts

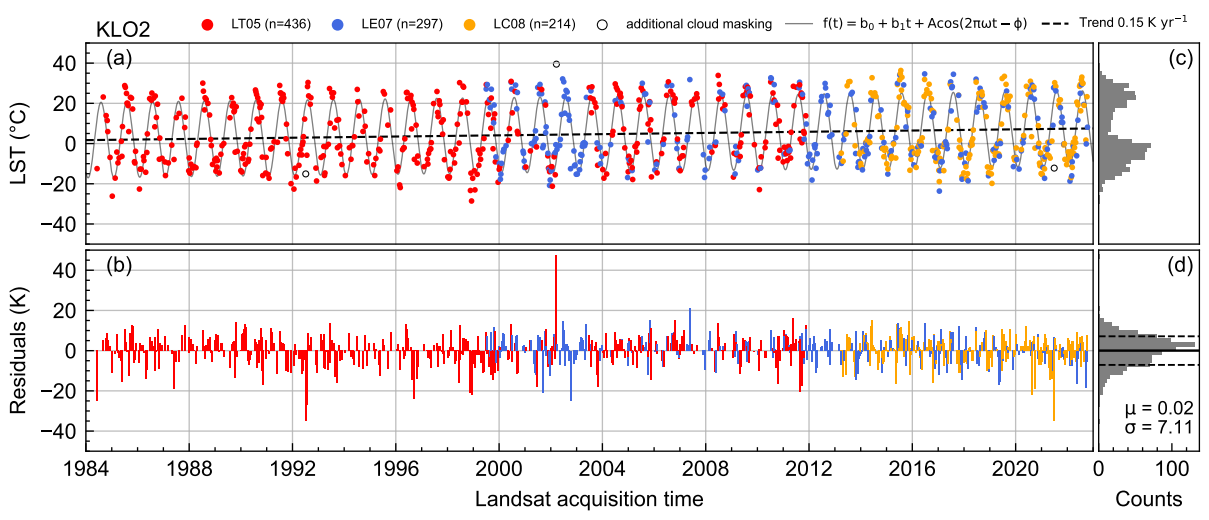

HTR3
LT05 (n=224)
LE07 (n=219)
LC08 (n=102)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.19
σ = 5.81
Landsat acquisition time
Counts

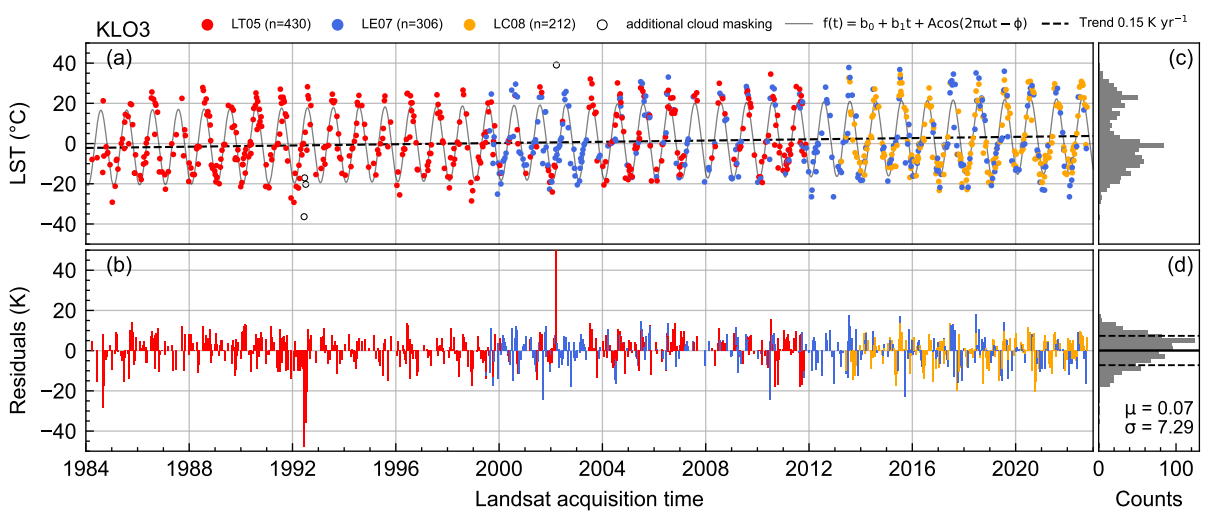

ILI2
LT05 (n=347)
LE07 (n=305)
LC08 (n=194)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.11 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.10
σ = 5.95
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
100
Counts

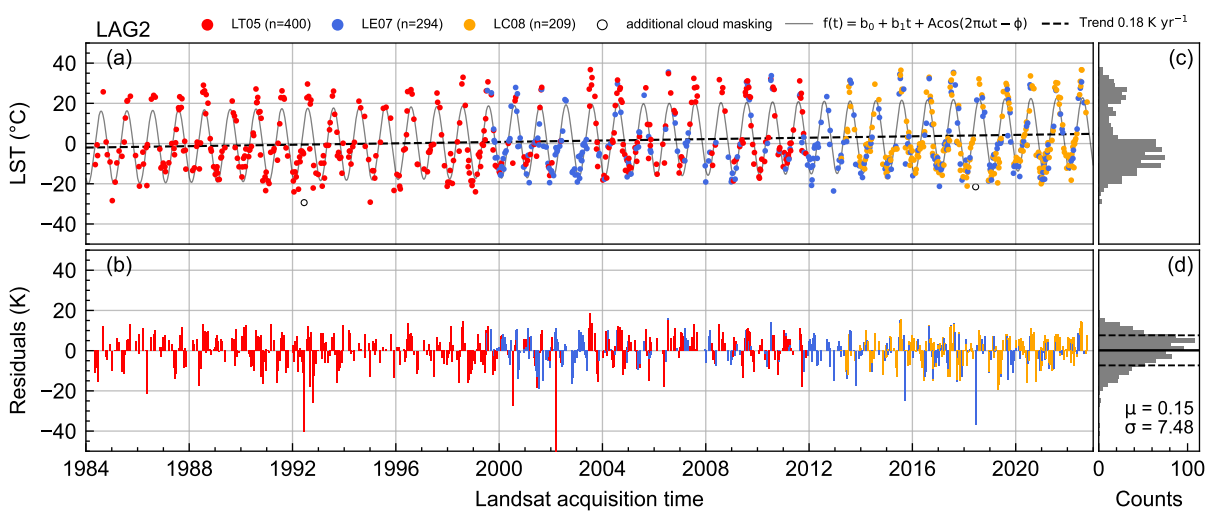

JAU2
LT05 (n=293)
LE07 (n=284)
LC08 (n=196)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.09 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
Landsat acquisition time
Counts
μ = 0.04
σ = 5.87

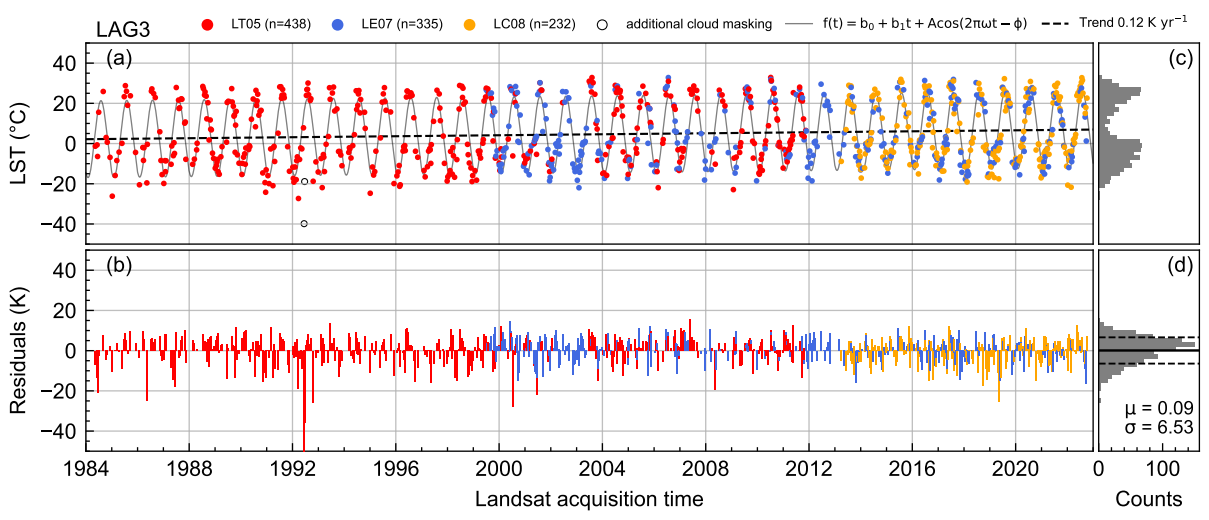

JUL2
LT05 (n=419)
LE07 (n=315)
LC08 (n=230)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.17
σ = 7.20
Landsat acquisition time
Counts

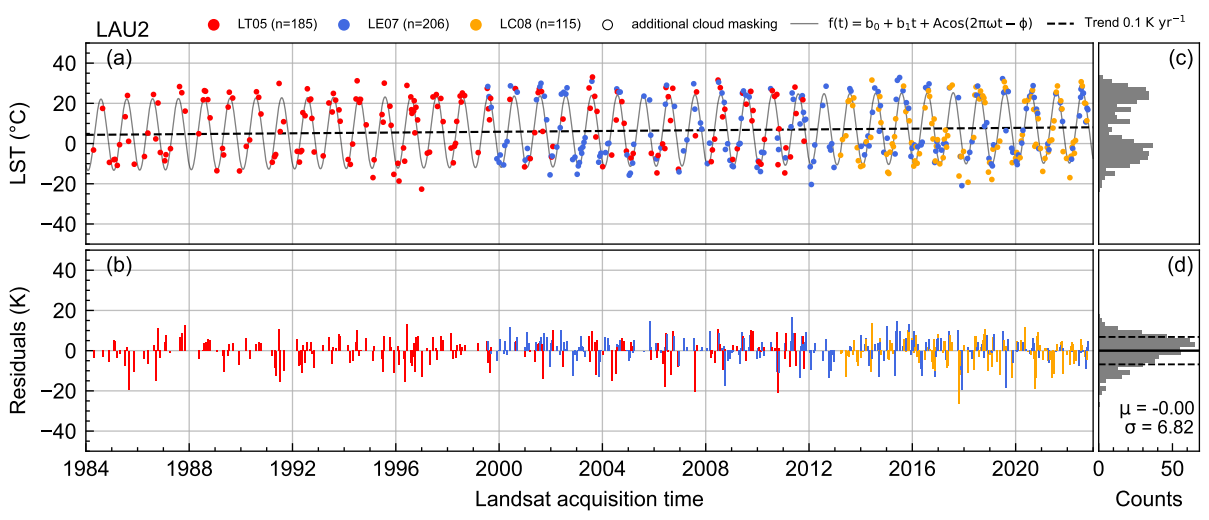

KES2
LT05 (n=350)
LE07 (n=260)
LC08 (n=171)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.11 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.04
σ = 6.81
Landsat acquisition time
Counts

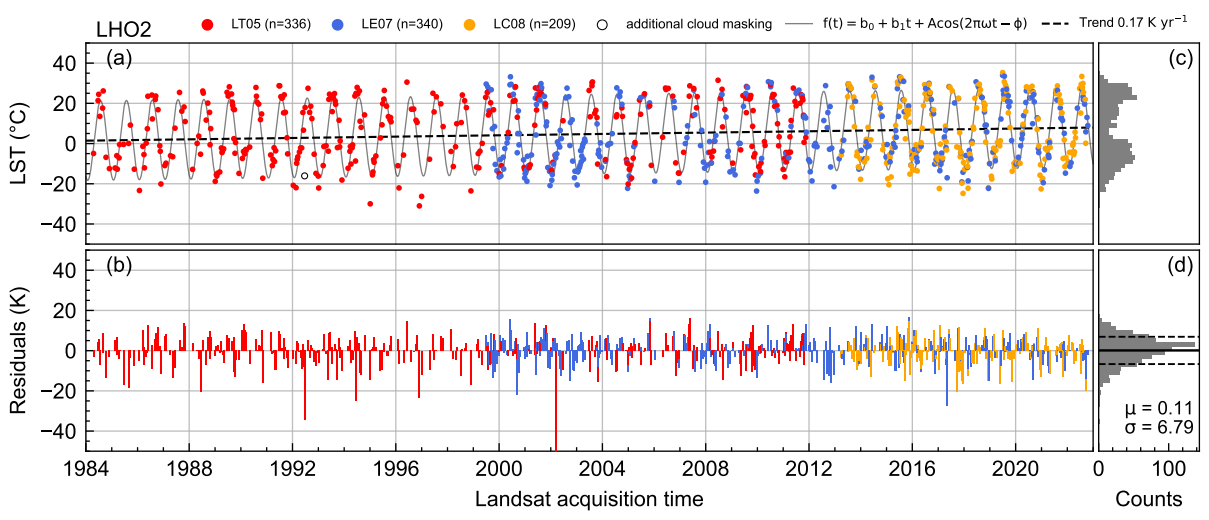

KLO2
LT05 (n=436)
LE07 (n=297)
LC08 (n=214)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.02
σ = 7.11
Landsat acquisition time
Counts

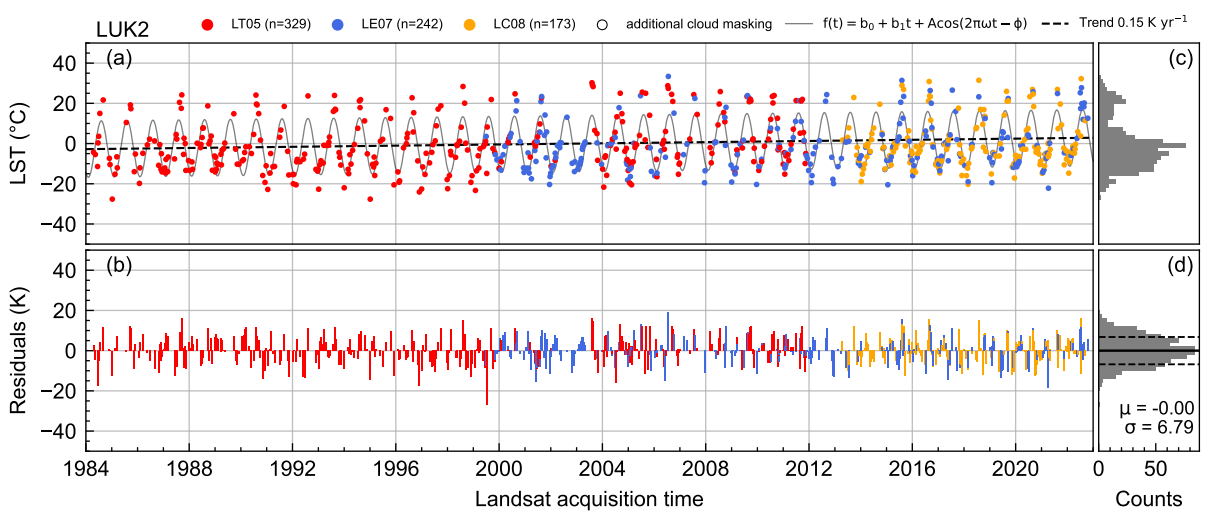

KLO3
LT05 (n=430)
LE07 (n=306)
LC08 (n=212)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.07
σ = 7.29
Landsat acquisition time
Counts

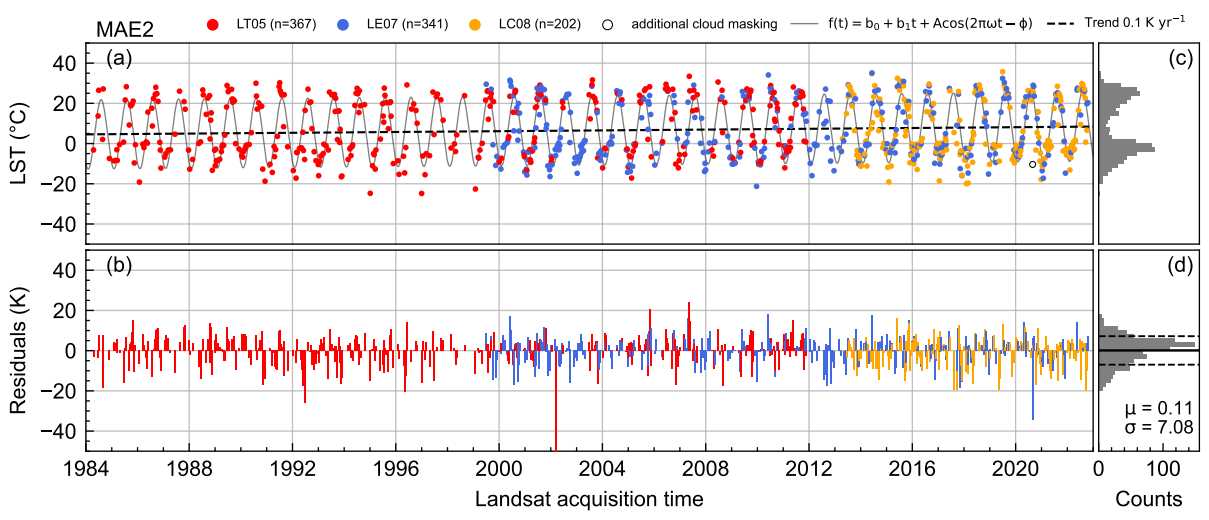

LAG2
LT05 (n=400)
LE07 (n=294)
LC08 (n=209)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.18 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.15
σ = 7.48
Landsat acquisition time
Counts

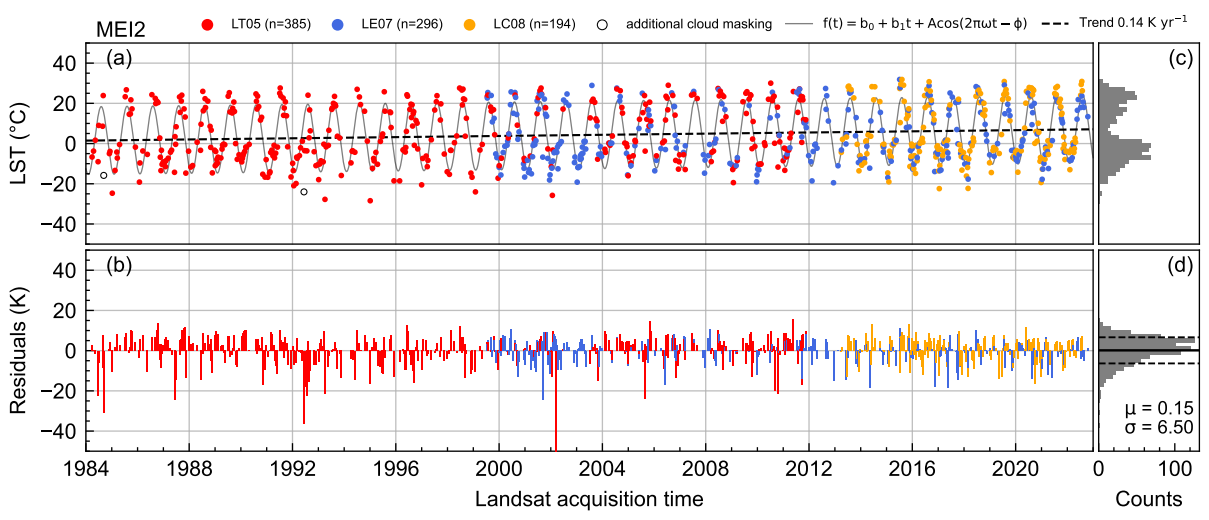

LAG3
LT05 (n=438)
LE07 (n=335)
LC08 (n=232)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.09
σ = 6.53
Landsat acquisition time
Counts

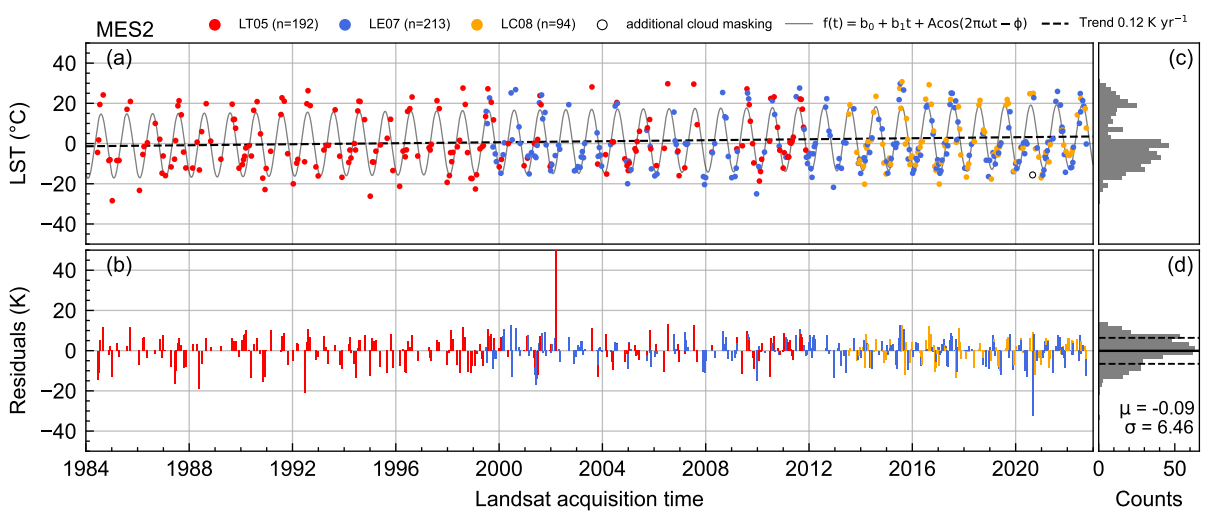

LAU2
LT05 (n=185)
LE07 (n=206)
LC08 (n=115)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.1 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = -0.00
σ = 6.82
Landsat acquisition time
Counts
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020

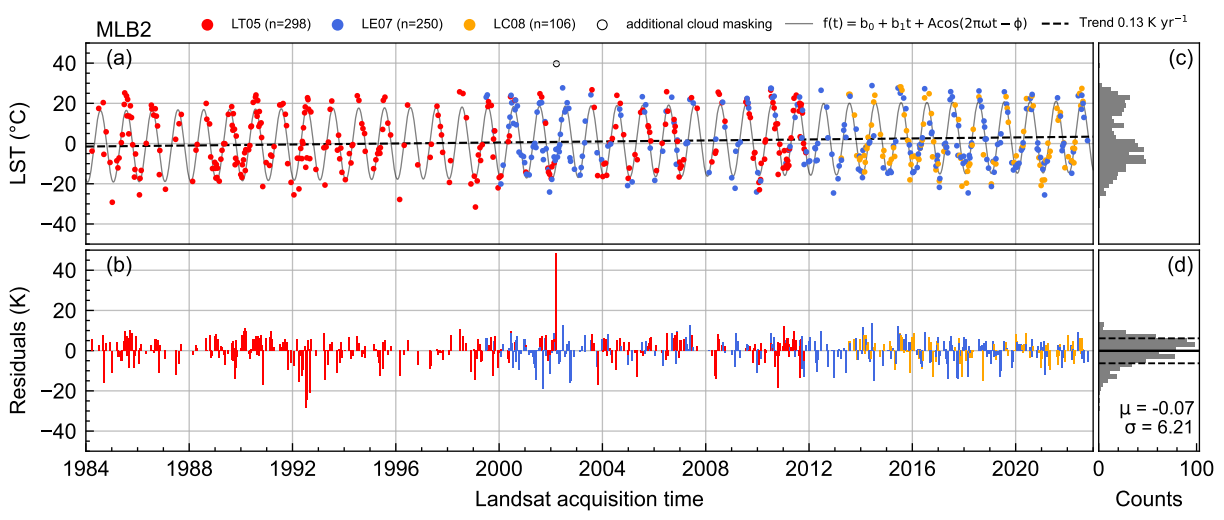

LHO2
LT05 (n=336)
LE07 (n=340)
LC08 (n=209)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.17 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.11
σ = 6.79
Landsat acquisition time
Counts

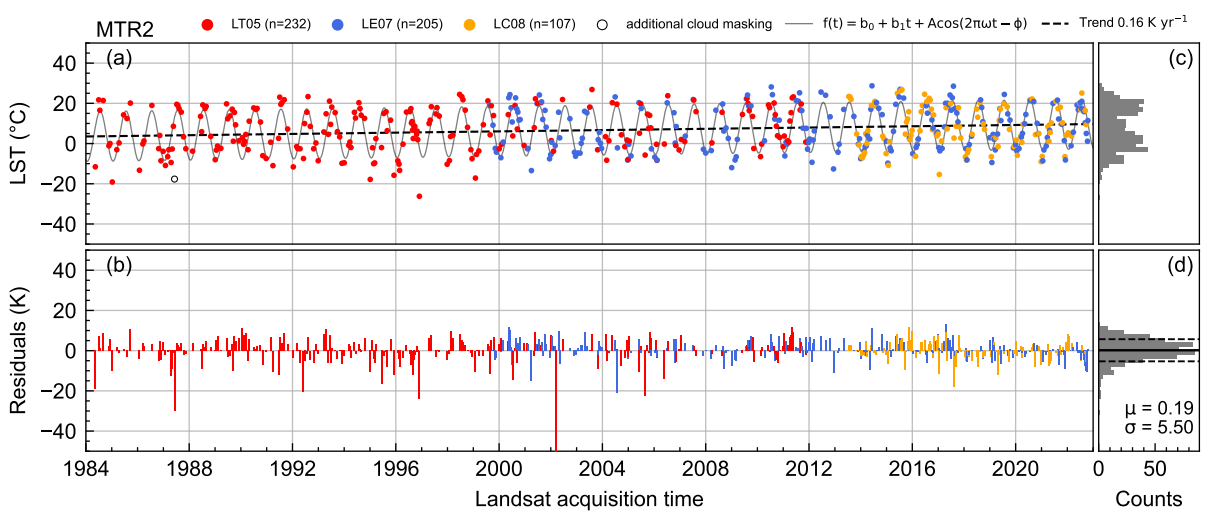

LUK2
LT05 (n=329)
LE07 (n=242)
LC08 (n=173)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = -0.00
σ = 6.79
Landsat acquisition time
Counts

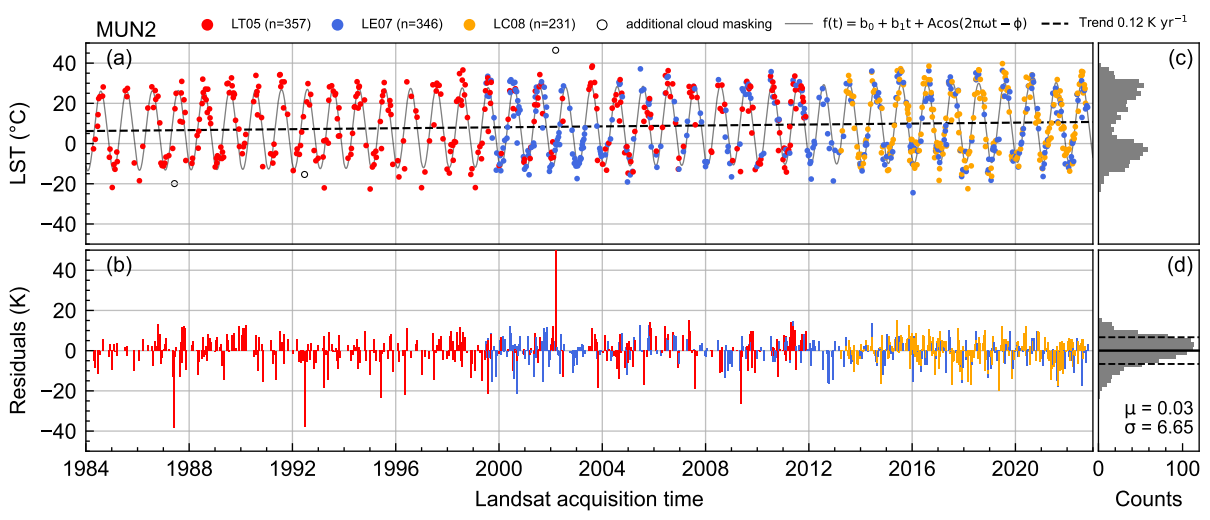

MAE2
LT05 (n=367)
LE07 (n=341)
LC08 (n=202)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.1 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.11
σ = 7.08
Landsat acquisition time
Counts

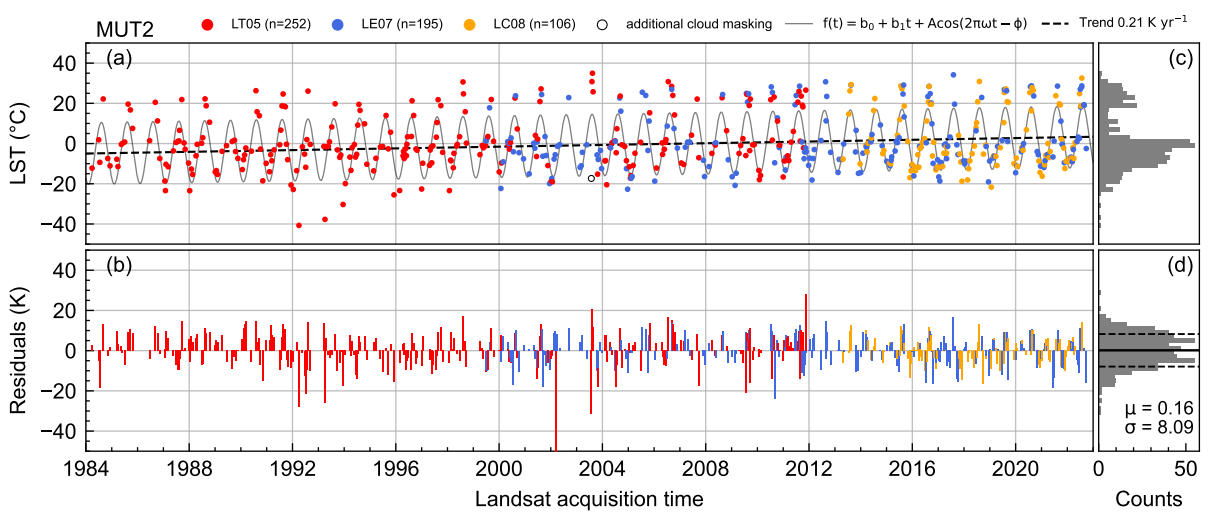

MEI2
LT05 (n=385)
LE07 (n=296)
LC08 (n=194)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.14 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.15
σ = 6.50
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
100
Counts

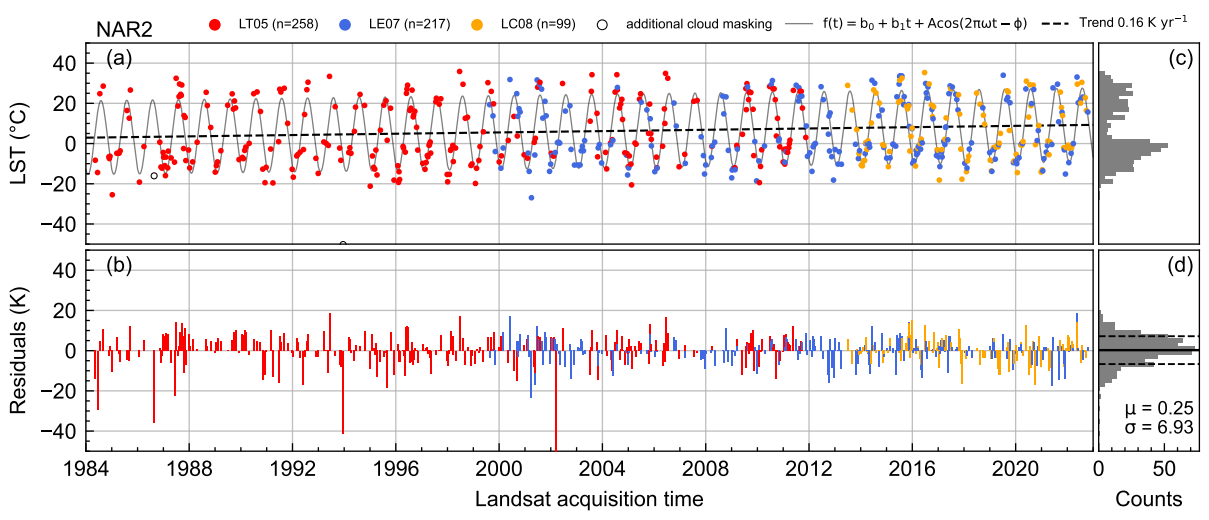

MES2
LT05 (n=192)
LE07 (n=213)
LC08 (n=94)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
Landsat acquisition time
Counts
μ = -0.09
σ = 6.46

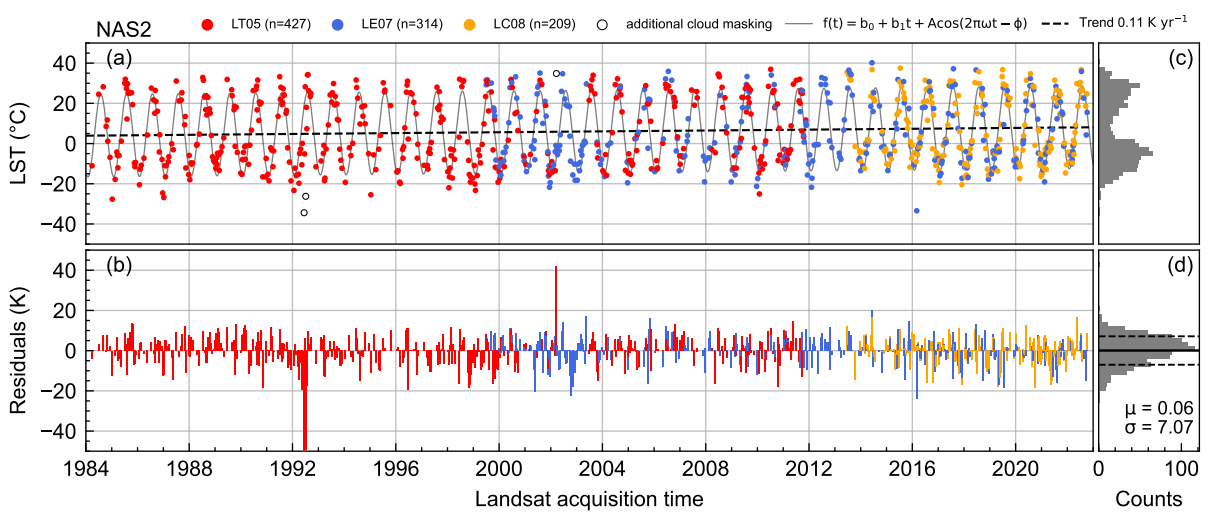

MLB2
LT05 (n=298)
LE07 (n=250)
LC08 (n=106)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.13 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = -0.07
σ = 6.21
Landsat acquisition time
Counts

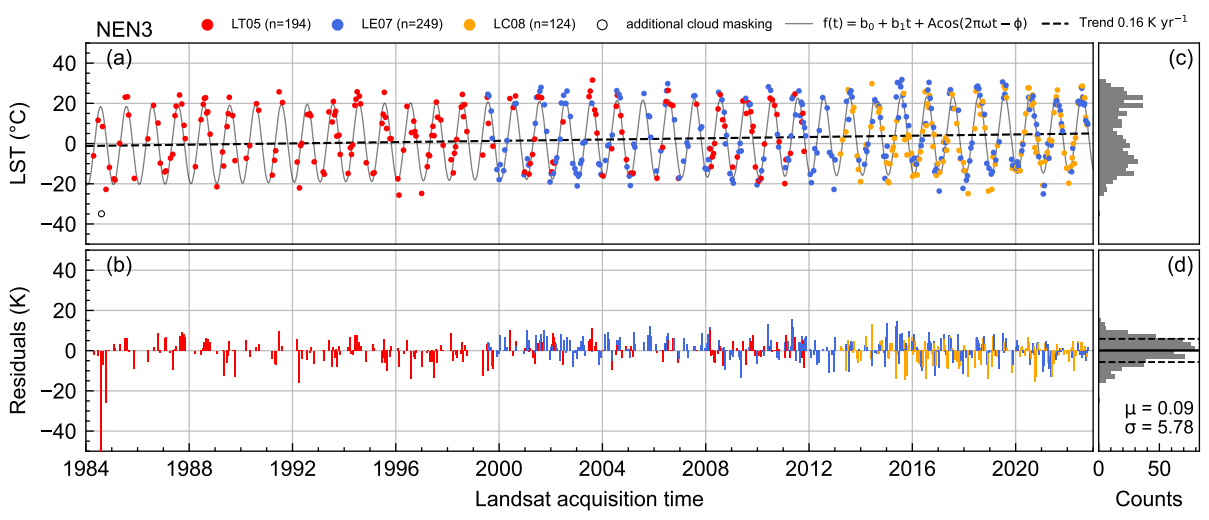

MTR2
LT05 (n=232)
LE07 (n=205)
LC08 (n=107)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.19
σ = 5.50
Landsat acquisition time
Counts

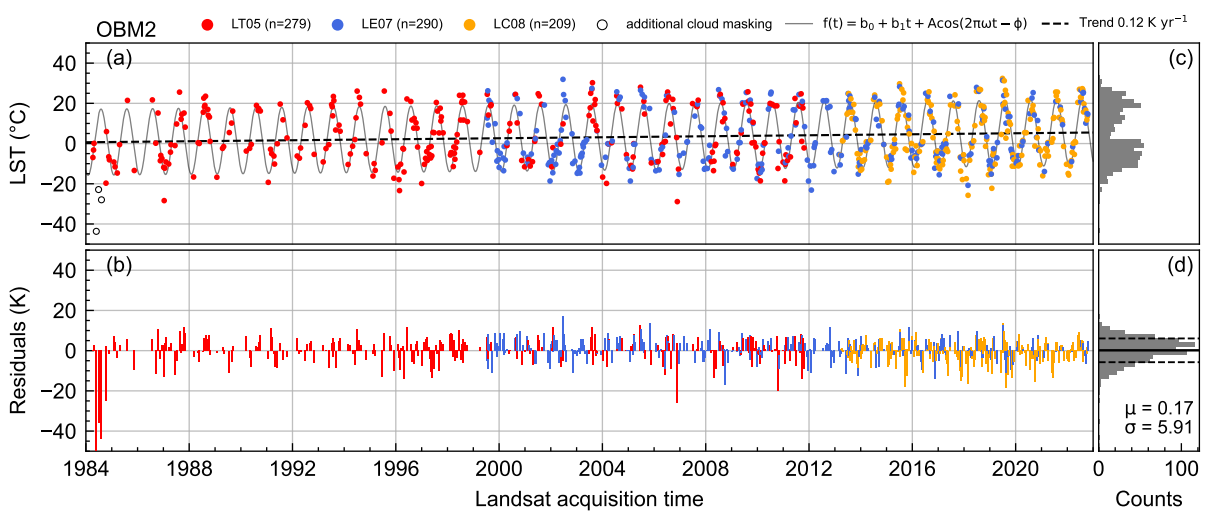

MUN2
LT05 (n=357)
LE07 (n=346)
LC08 (n=231)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.03
σ = 6.65
Landsat acquisition time
Counts

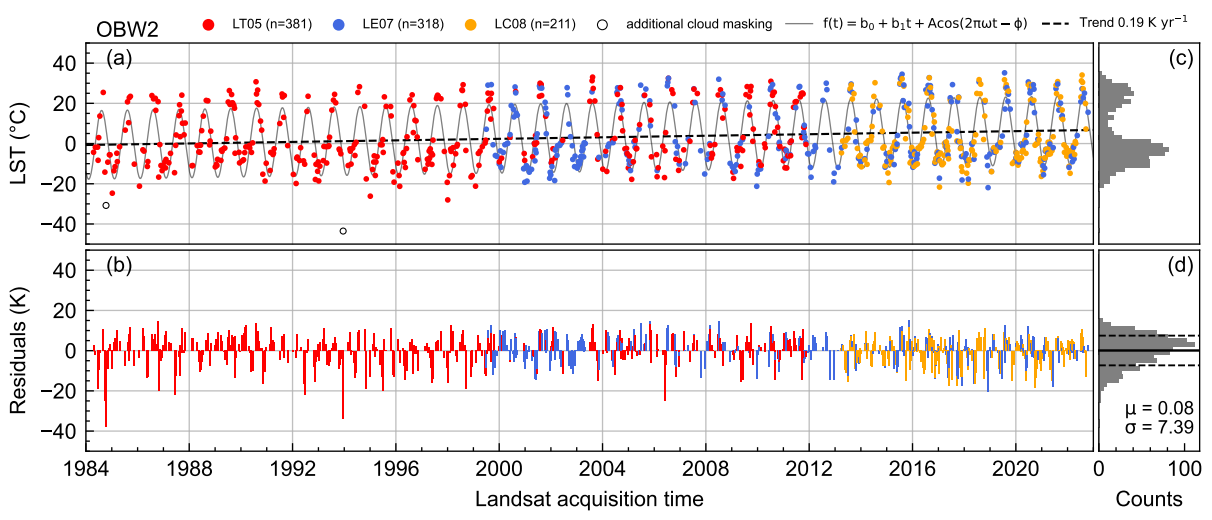

MUT2
LT05 (n=252)
LE07 (n=195)
LC08 (n=106)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.21 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.16
σ = 8.09
Landsat acquisition time
Counts

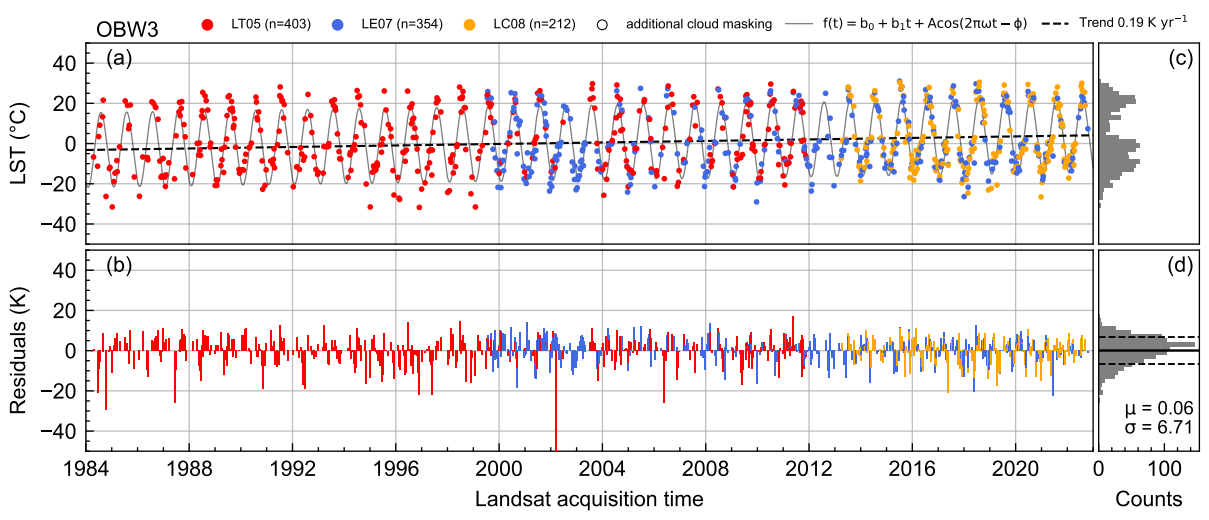

NAR2
LT05 (n=258)
LE07 (n=217)
LC08 (n=99)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.25
σ = 6.93
Landsat acquisition time
Counts

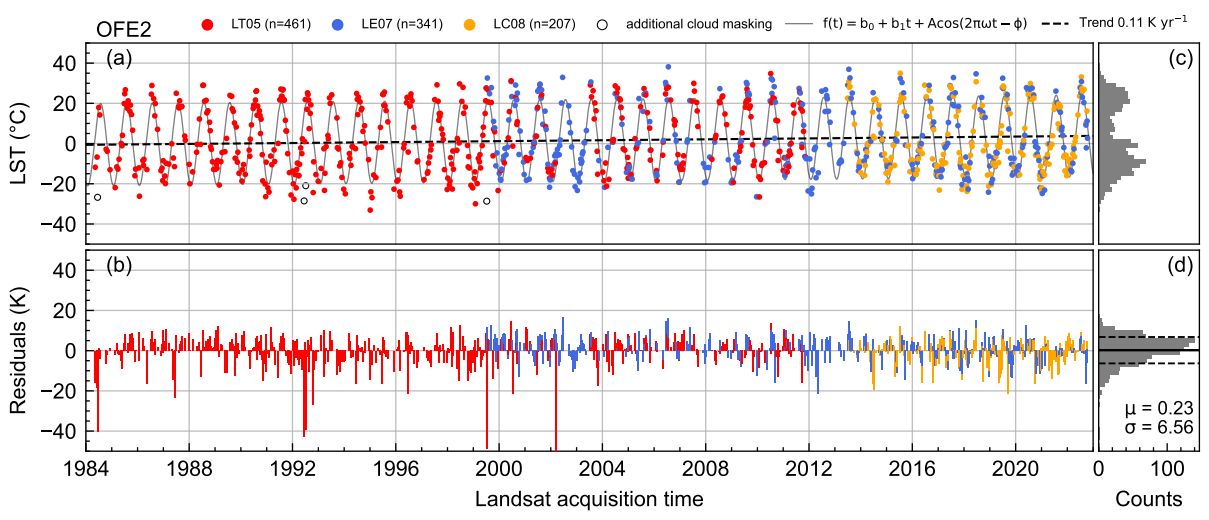

NAS2
LT05 (n=427)
LE07 (n=314)
LC08 (n=209)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.11 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.06
σ = 7.07
Landsat acquisition time
Counts

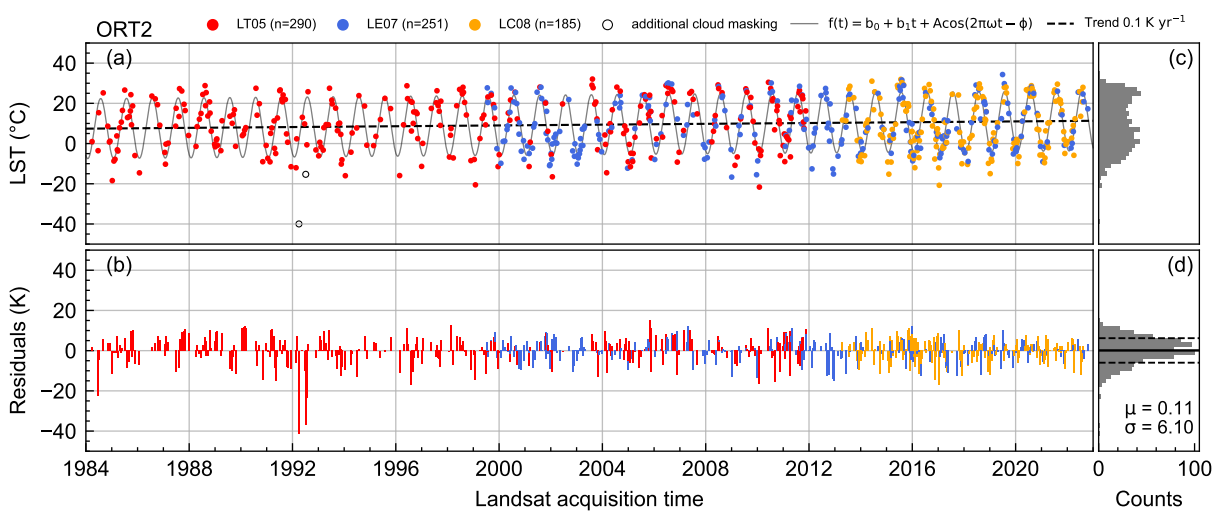

NEN3
LT05 (n=194)
LE07 (n=249)
LC08 (n=124)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.09
σ = 5.78
Landsat acquisition time
Counts

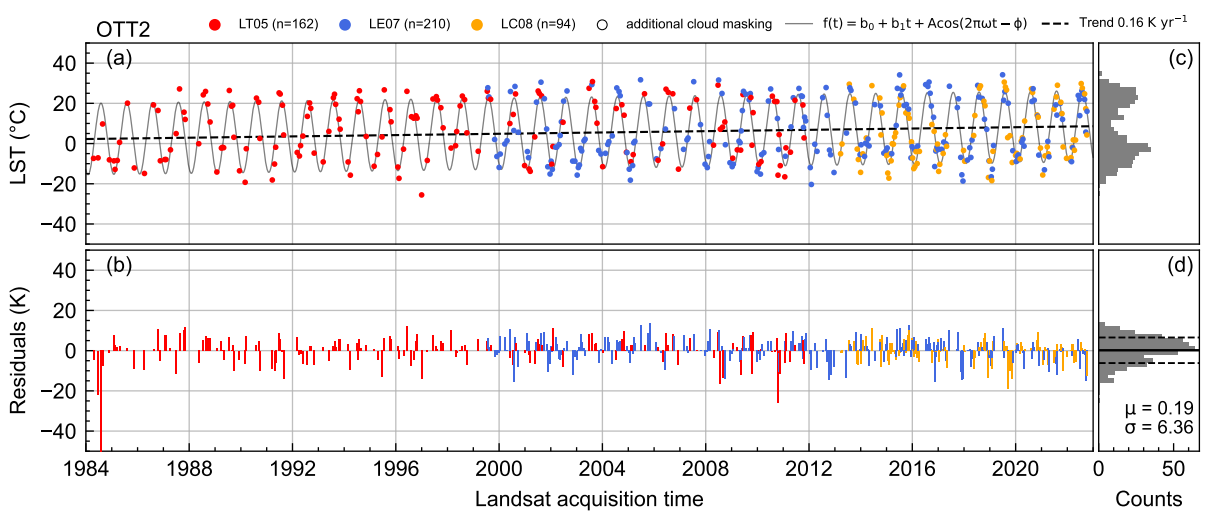

OBM2
LT05 (n=279)
LE07 (n=290)
LC08 (n=209)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.17
σ = 5.91
Landsat acquisition time
Counts

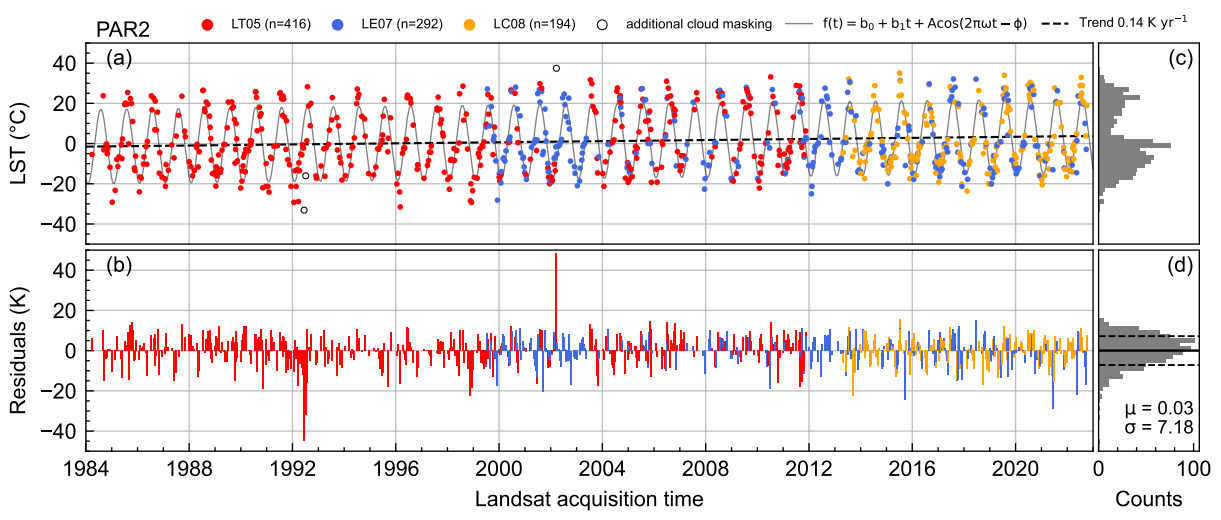

OBW2
LT05 (n=381)
LE07 (n=318)
LC08 (n=211)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.19 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
Landsat acquisition time
Counts
μ = 0.08
σ = 7.39
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020

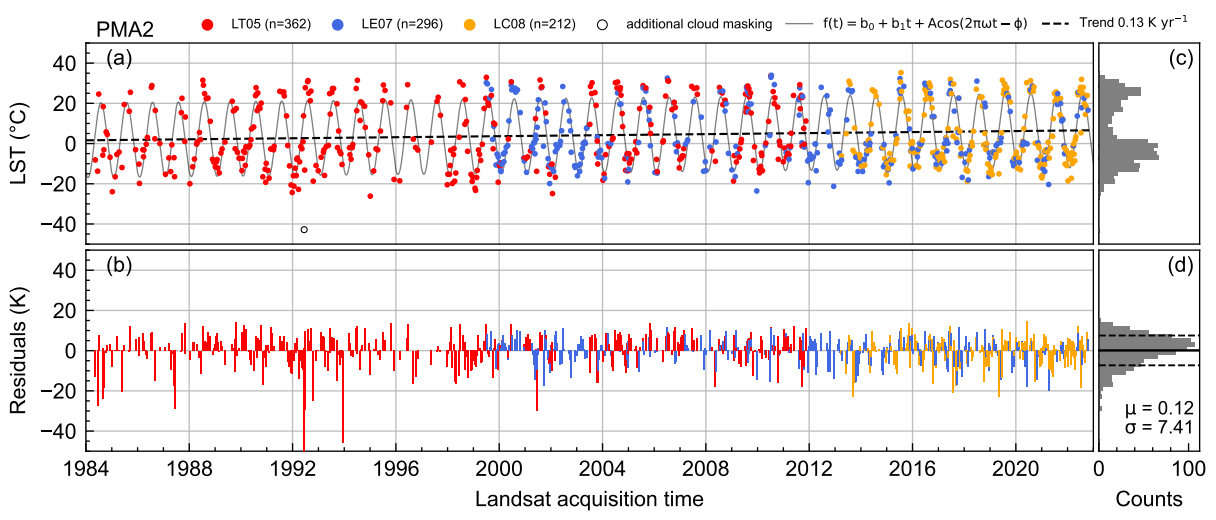

OBW3
LT05 (n=403)
LE07 (n=354)
LC08 (n=212)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.19 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.06
σ = 6.71
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
100
Counts

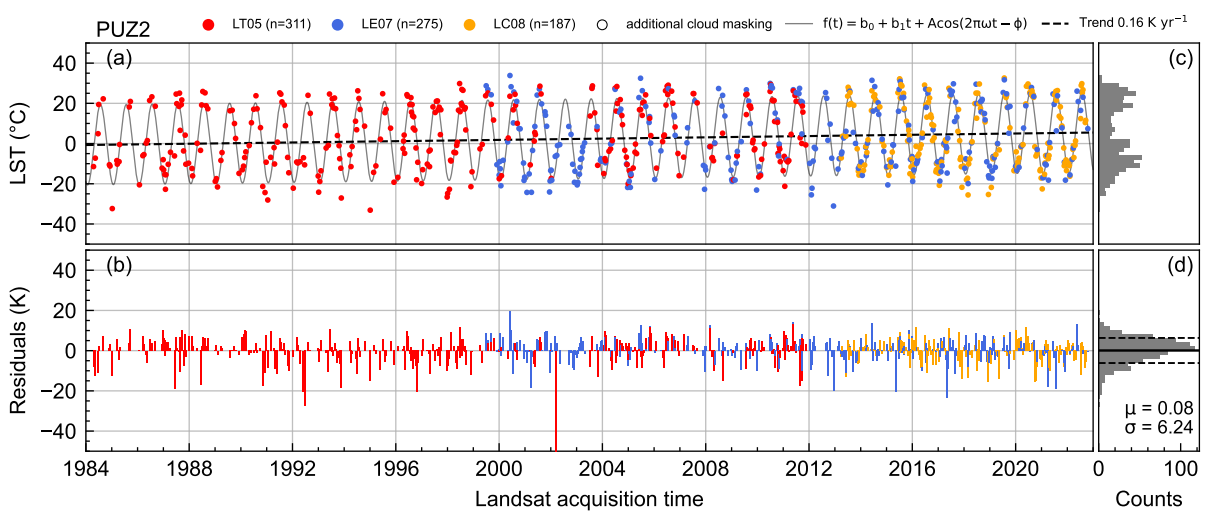

OFE2
LT05 (n=461)
LE07 (n=341)
LC08 (n=207)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.11 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.23
σ = 6.56
Landsat acquisition time
Counts

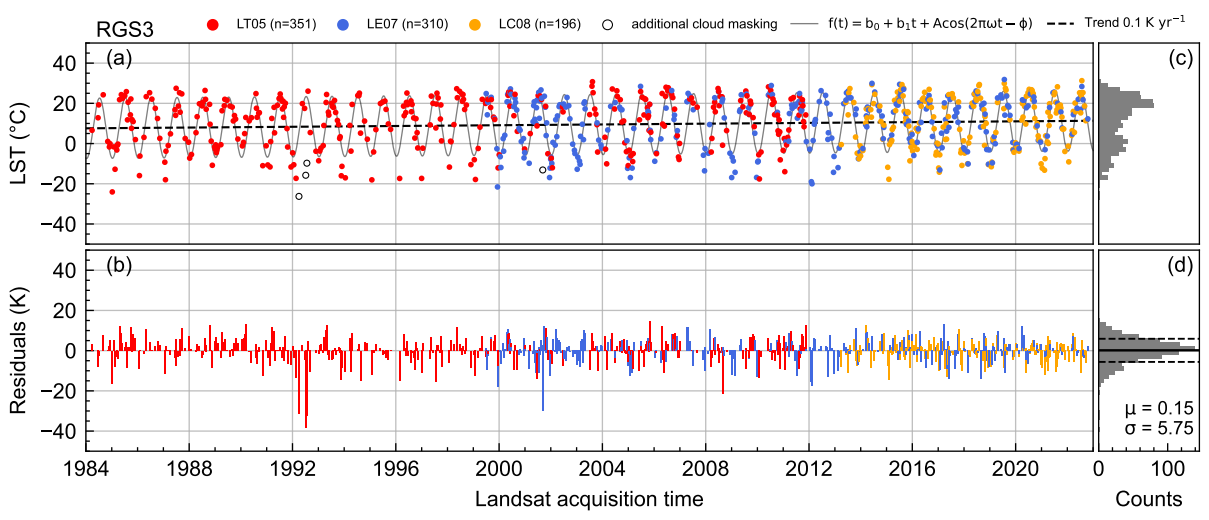

ORT2
LT05 (n=290)
LE07 (n=251)
LC08 (n=185)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.1 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
Landsat acquisition time
Counts
μ = 0.11
σ = 6.10
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020

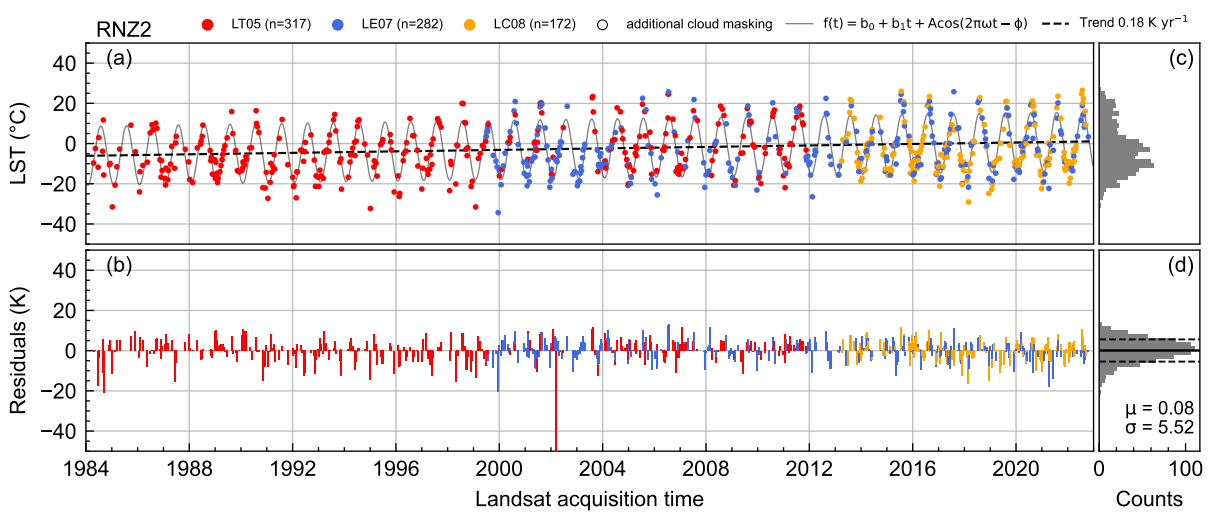

OTT2
LT05 (n=162)
LE07 (n=210)
LC08 (n=94)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.19
σ = 6.36
Landsat acquisition time
Counts

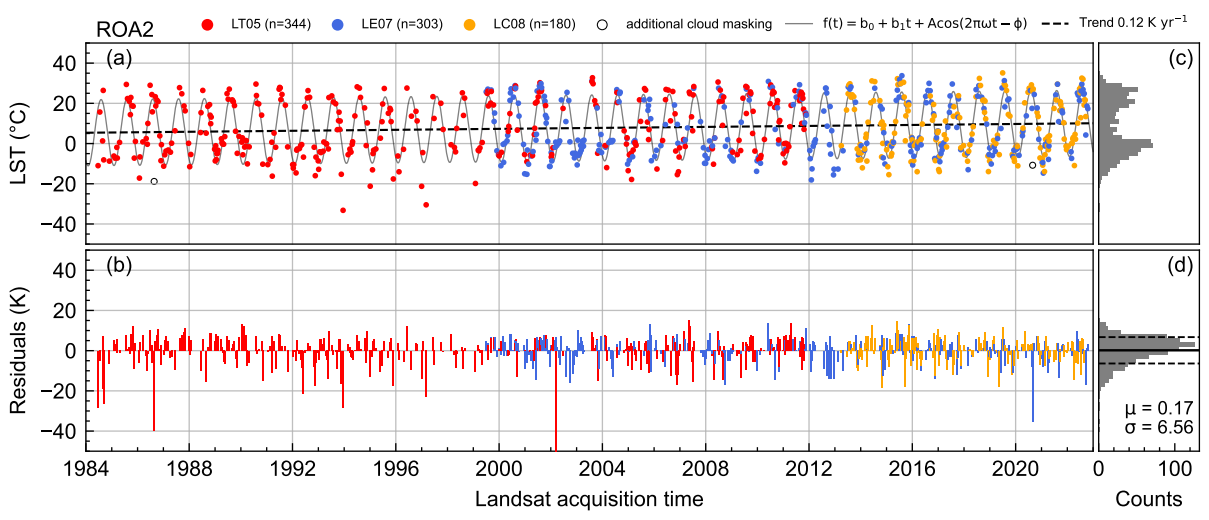

PAR2
LT05 (n=416)
LE07 (n=292)
LC08 (n=194)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.14 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.03
σ = 7.18
Landsat acquisition time
Counts

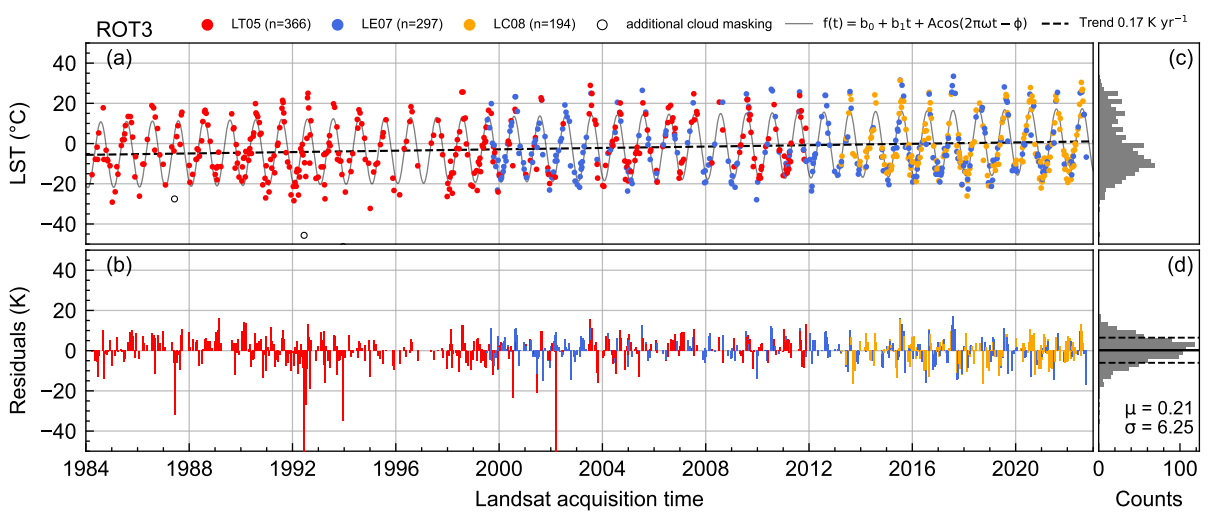

PMA2
LT05 (n=362)
LE07 (n=296)
LC08 (n=212)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.13 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.12
σ = 7.41
Landsat acquisition time
Counts

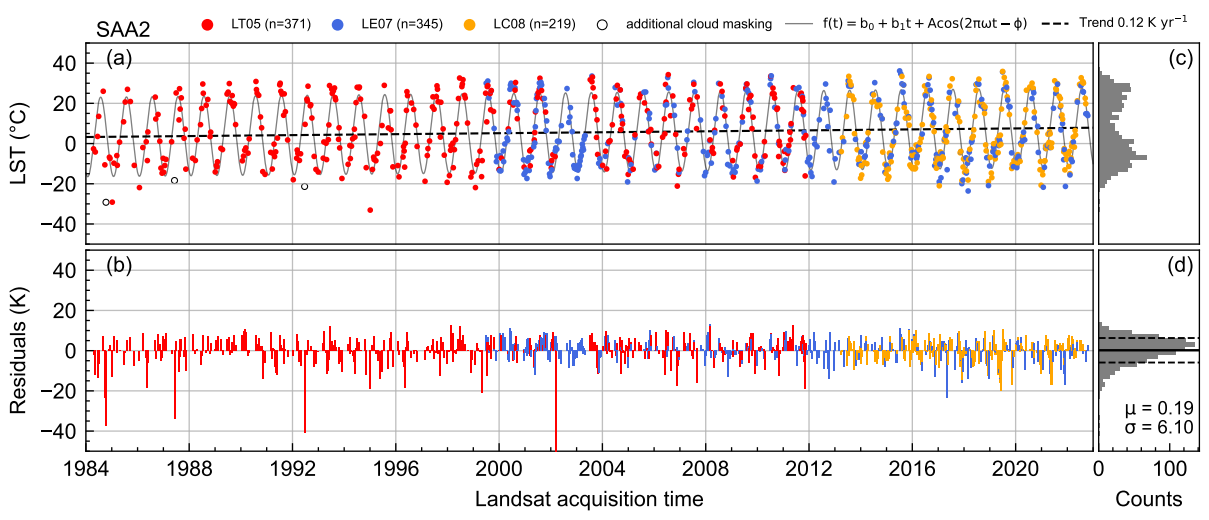

PUZ2
LT05 (n=311)
LE07 (n=275)
LC08 (n=187)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
Landsat acquisition time
Counts
μ = 0.08
σ = 6.24

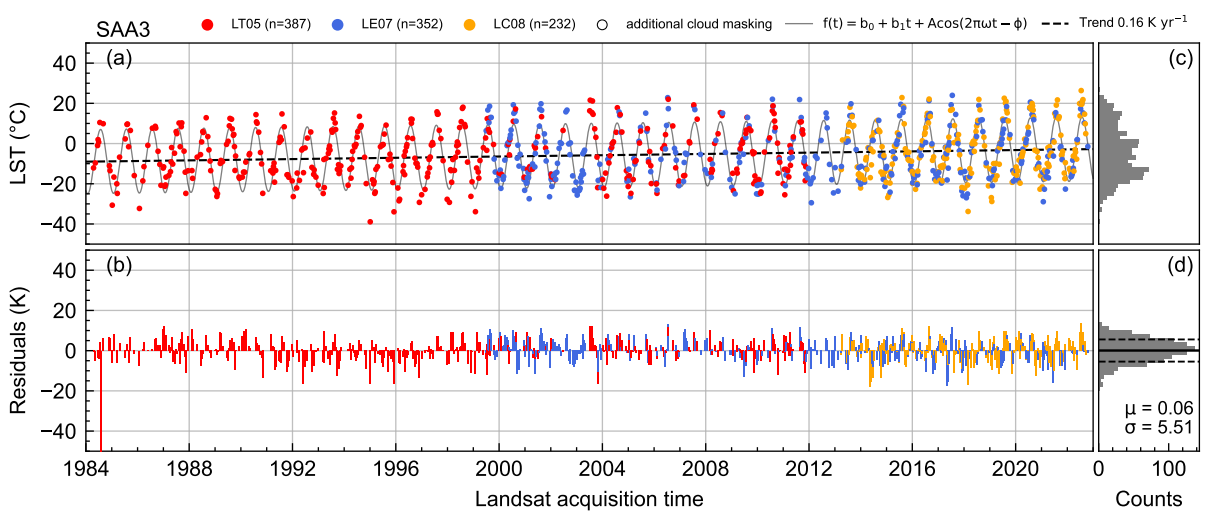

RGS3
LT05 (n=351)
LE07 (n=310)
LC08 (n=196)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.1 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
Landsat acquisition time
Counts
μ = 0.15
σ = 5.75
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020

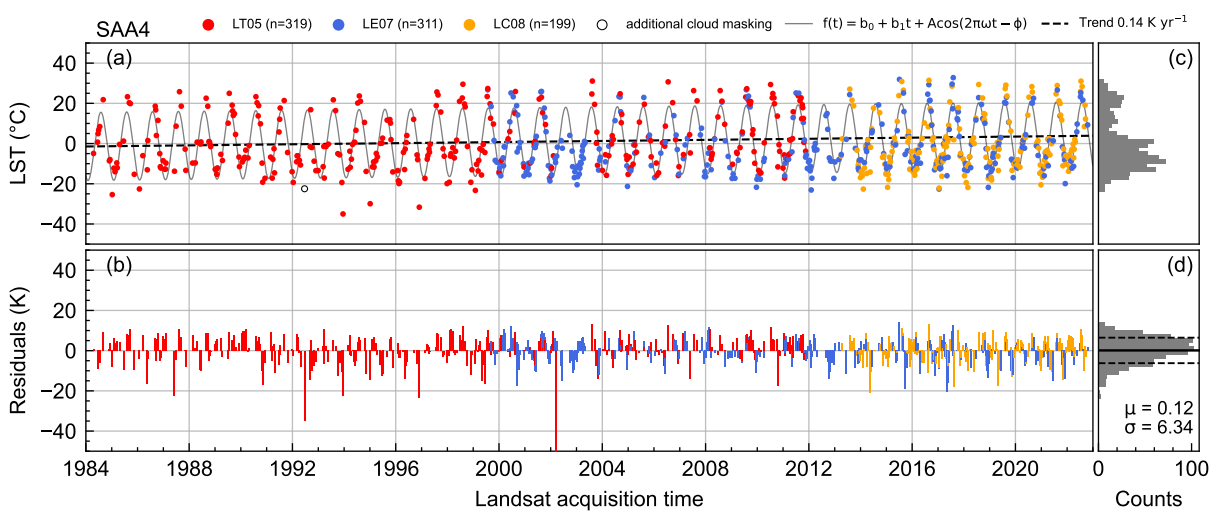

RNZ2
LT05 (n=317)
LE07 (n=282)
LC08 (n=172)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.18 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.08
σ = 5.52
Landsat acquisition time
Counts

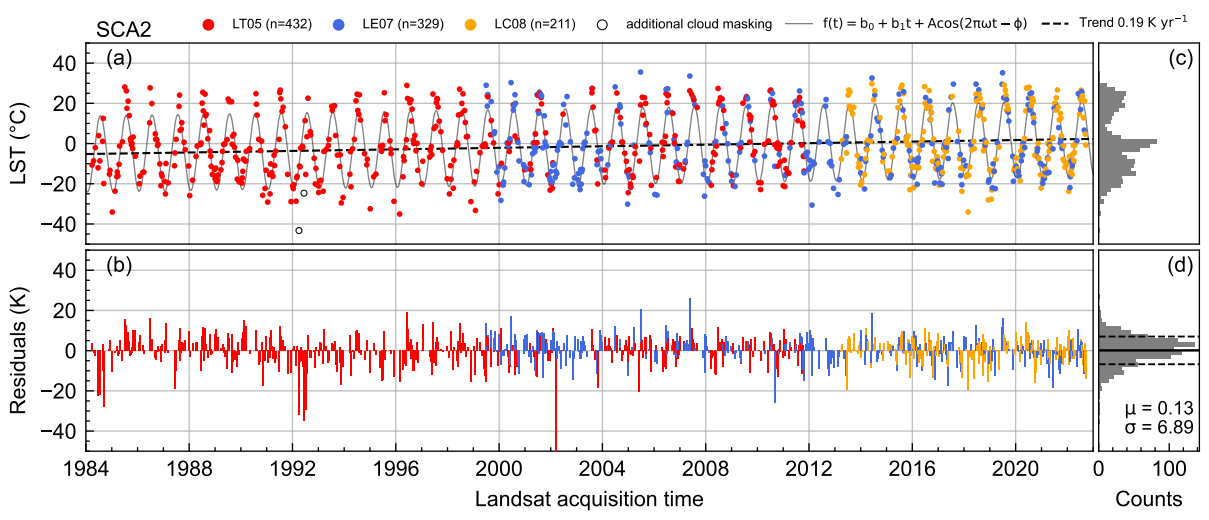

ROA2
LT05 (n=344)
LE07 (n=303)
LC08 (n=180)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.17
σ = 6.56
Landsat acquisition time
Counts

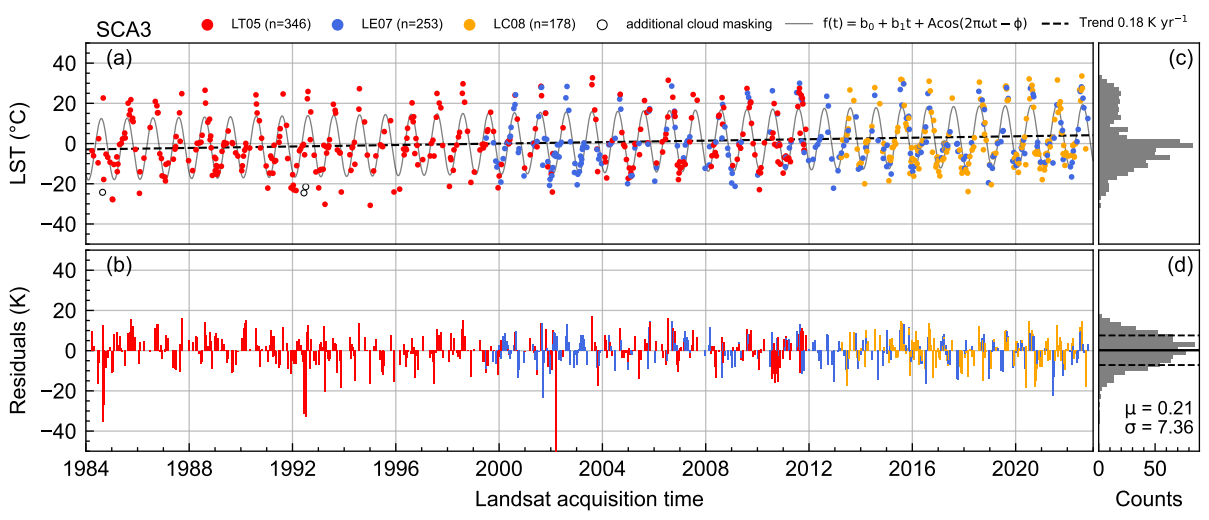

ROT3
LT05 (n=366)
LE07 (n=297)
LC08 (n=194)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.17 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.21
σ = 6.25
Landsat acquisition time
Counts

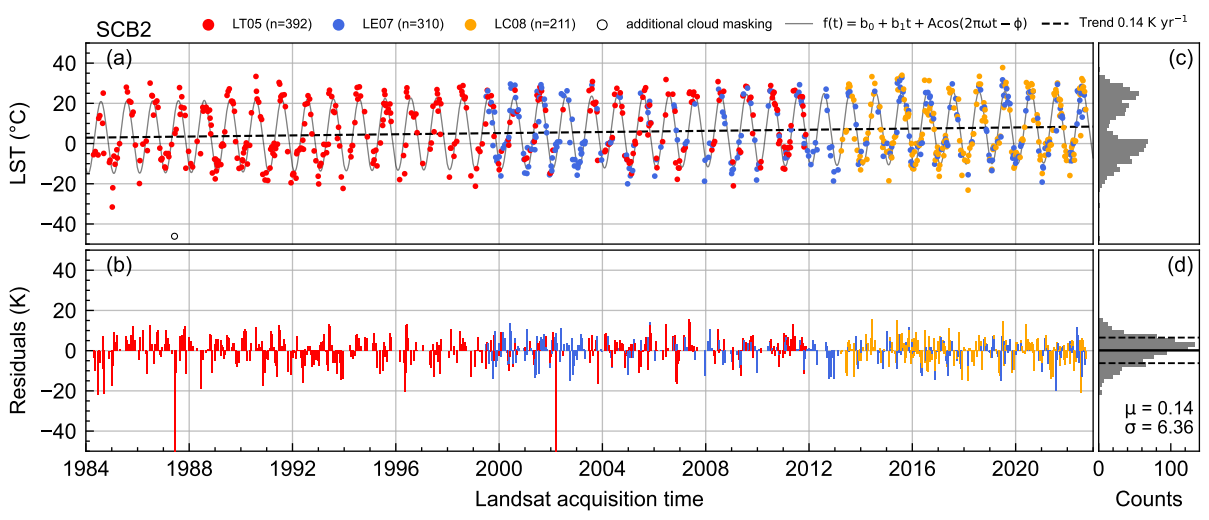

SAA2
LT05 (n=371)
LE07 (n=345)
LC08 (n=219)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.19
σ = 6.10
Landsat acquisition time
Counts

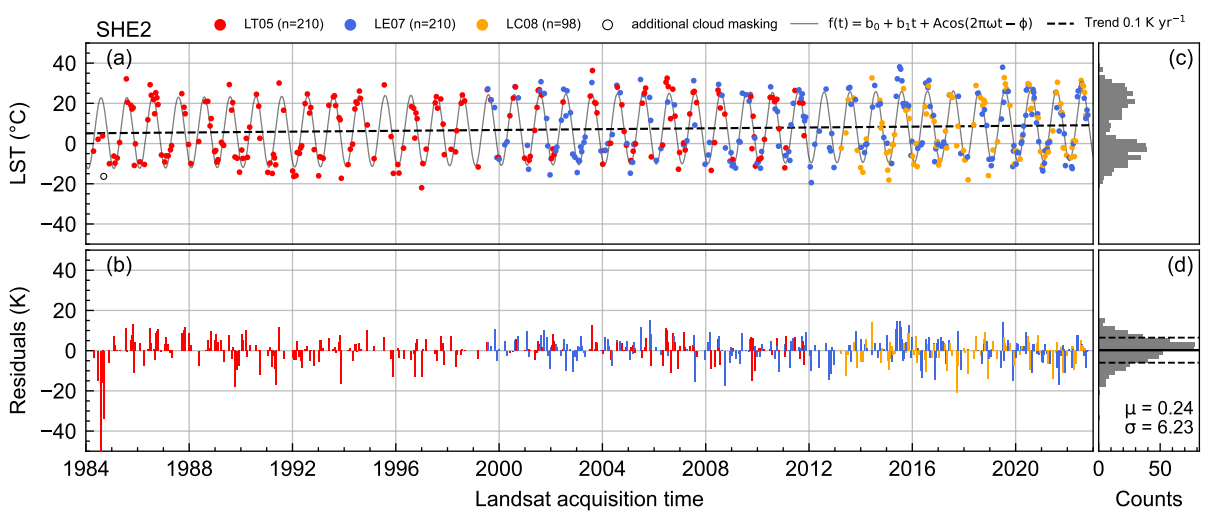

SAA3
LT05 (n=387)
LE07 (n=352)
LC08 (n=232)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.06
σ = 5.51
Landsat acquisition time
Counts

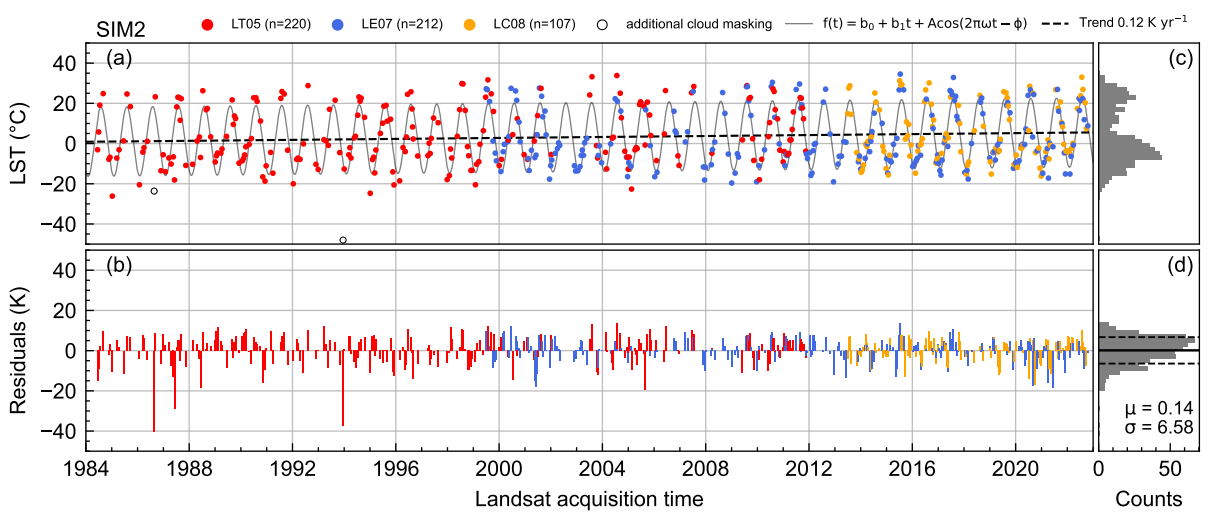

SAA4
LT05 (n=319)
LE07 (n=311)
LC08 (n=199)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.14 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.12
σ = 6.34
Landsat acquisition time
Counts

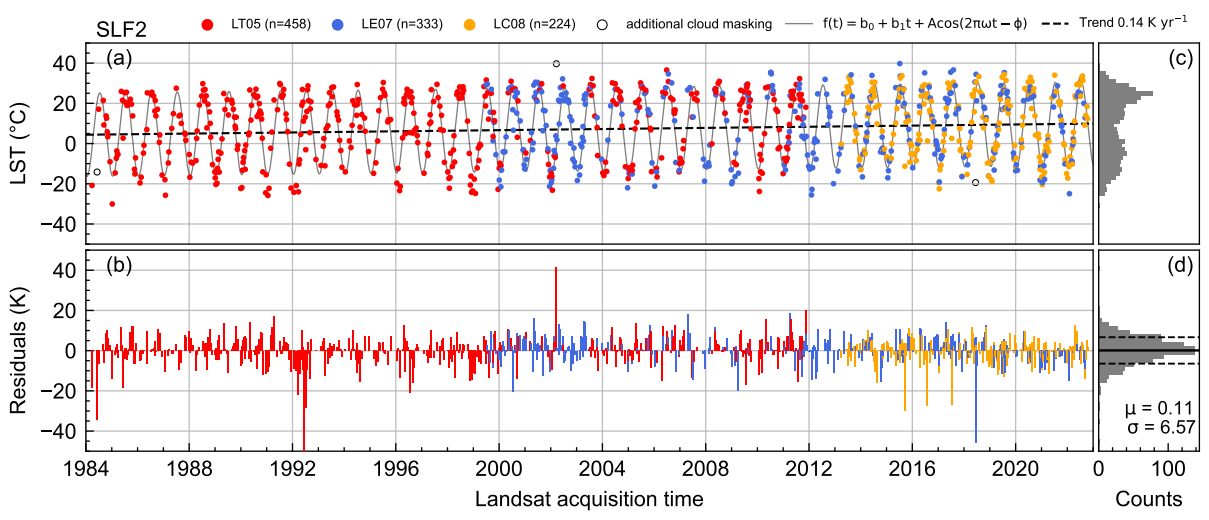

SCA2
LT05 (n=432)
LE07 (n=329)
LC08 (n=211)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.19 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.13
σ = 6.89
Landsat acquisition time
Counts

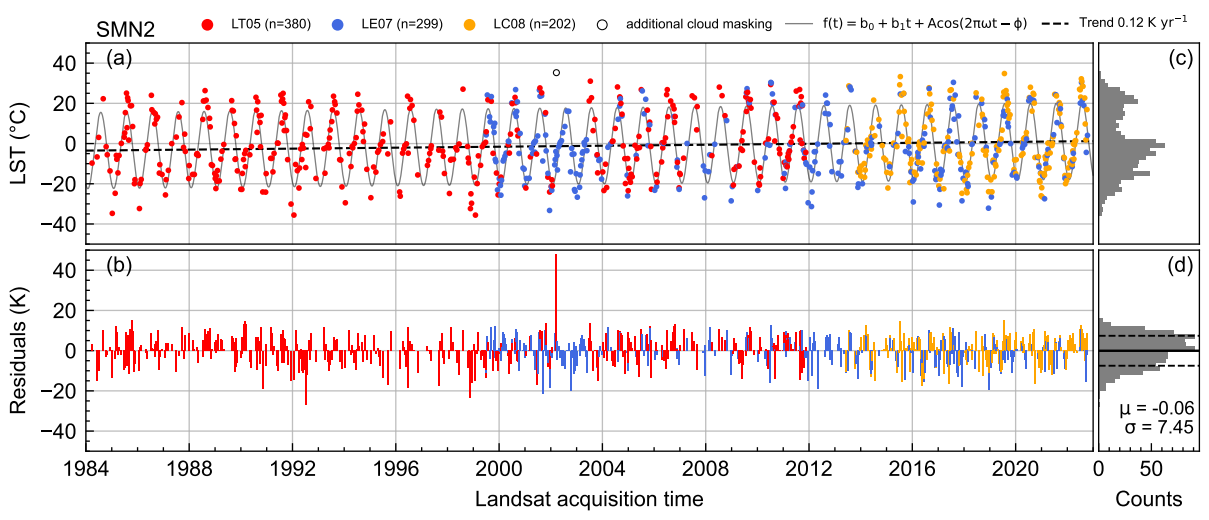

SCA3
LT05 (n=346)
LE07 (n=253)
LC08 (n=178)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.18 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.21
σ = 7.36
Landsat acquisition time
Counts

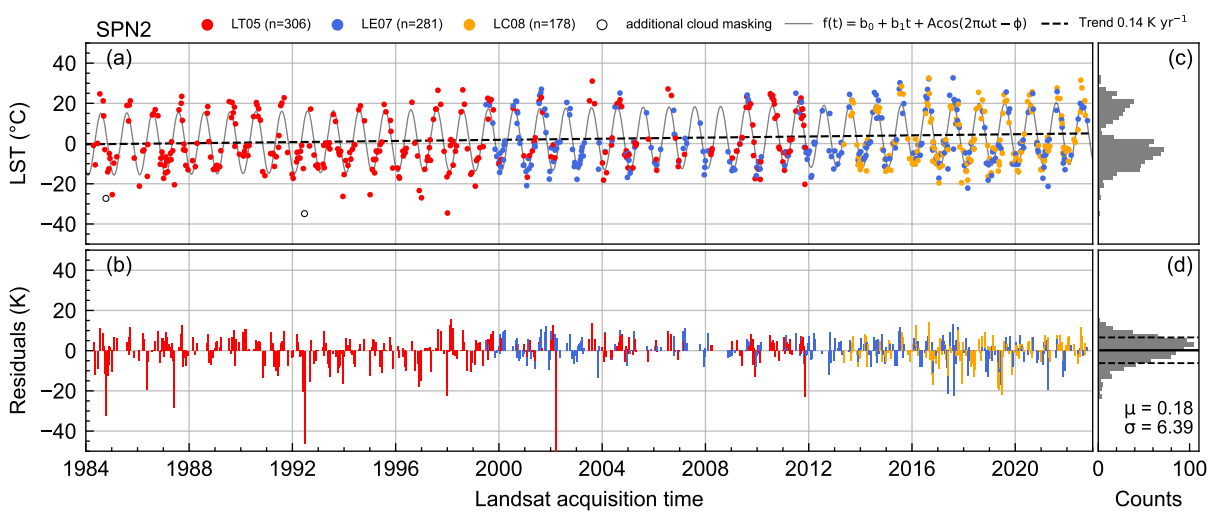

SCB2
LT05 (n=392)
LE07 (n=310)
LC08 (n=211)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.14 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.14
σ = 6.36
Landsat acquisition time
Counts

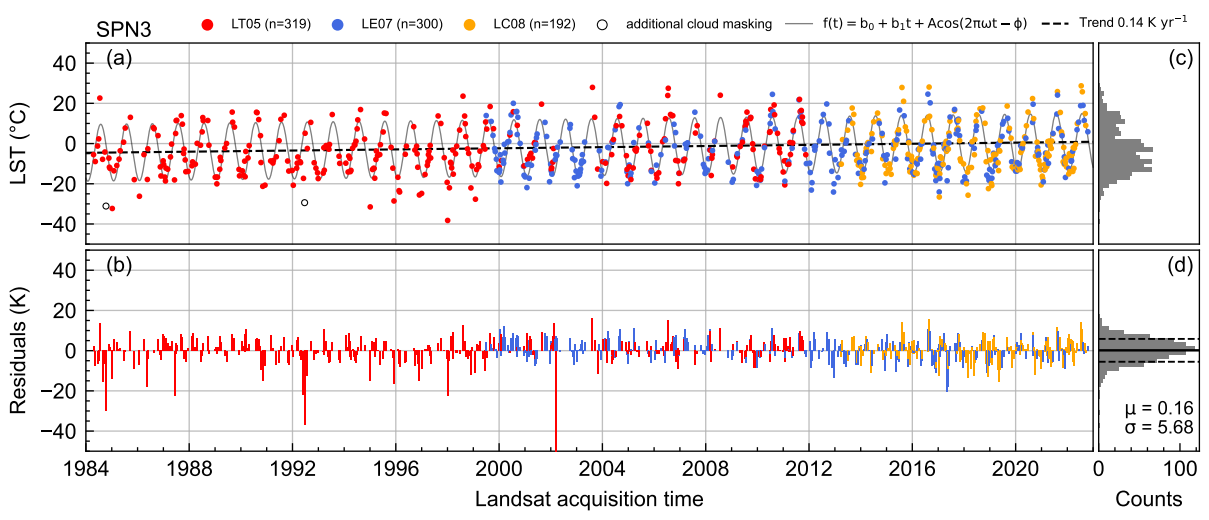

SHE2
LT05 (n=210)
LE07 (n=210)
LC08 (n=98)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.1 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.24
σ = 6.23
Landsat acquisition time
Counts

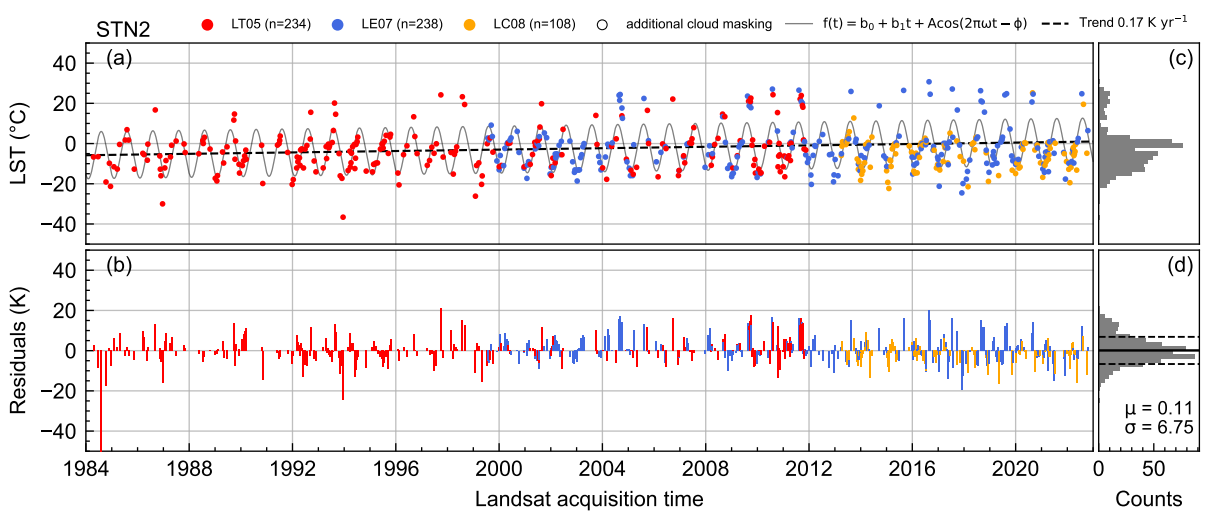

SIM2
LT05 (n=220)
LE07 (n=212)
LC08 (n=107)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.14
σ = 6.58
Landsat acquisition time
Counts

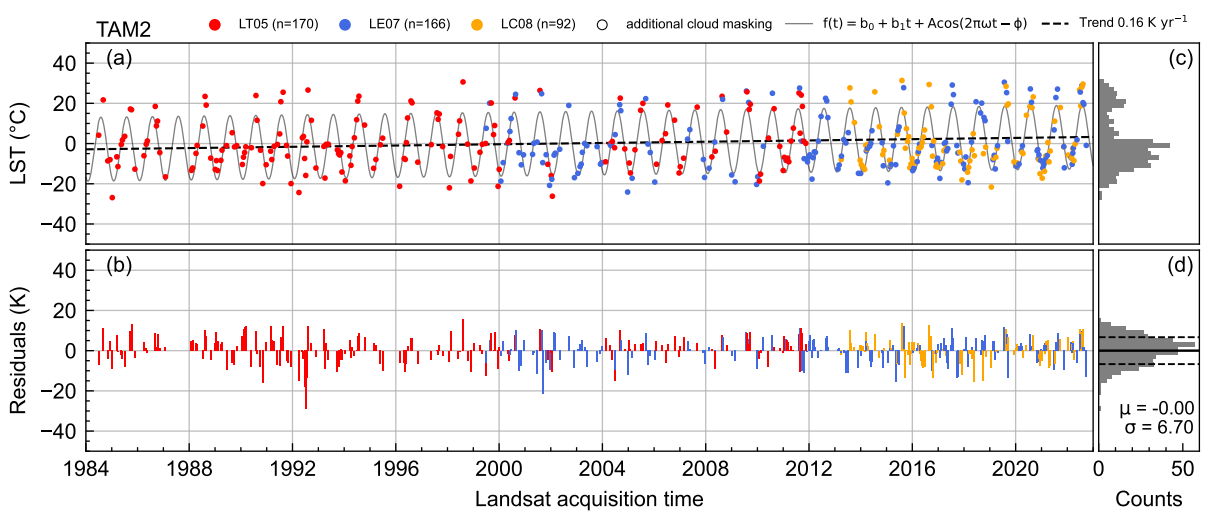

SLF2
LT05 (n=458)
LE07 (n=333)
LC08 (n=224)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.14 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
Landsat acquisition time
Counts
μ = 0.11
σ = 6.57
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020

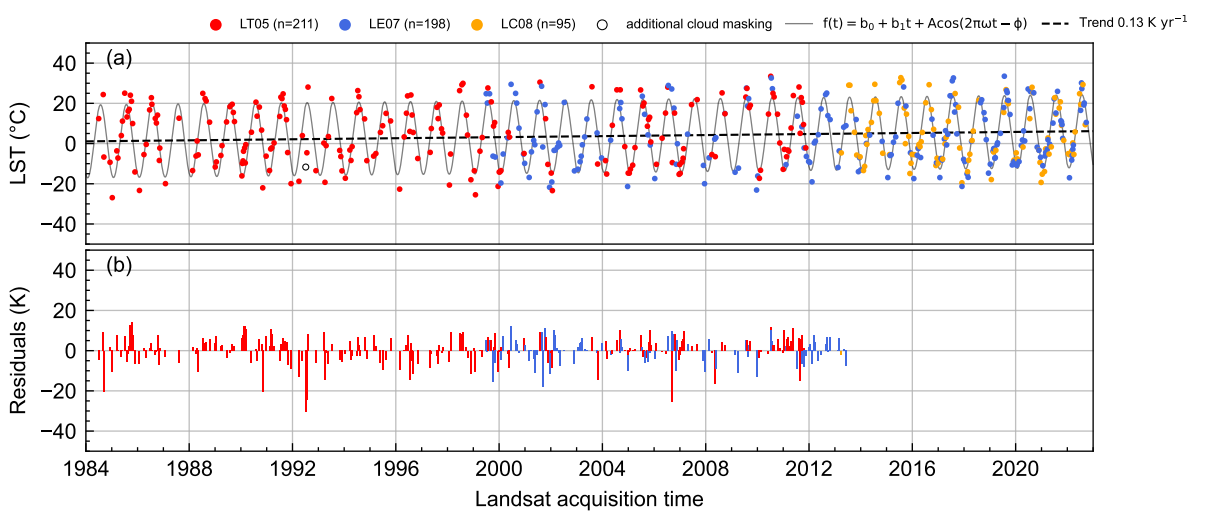

SMN2
LT05 (n=380)
LE07 (n=299)
LC08 (n=202)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = -0.06
σ = 7.45
Landsat acquisition time
Counts
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
0
50

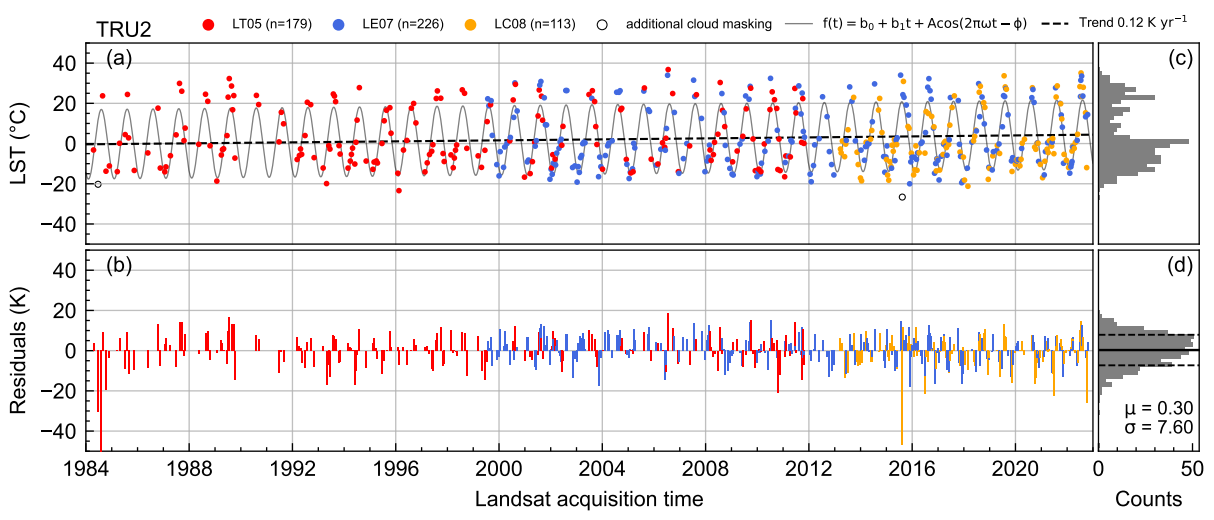

SPN2
LT05 (n=306)
LE07 (n=281)
LC08 (n=178)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.14 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.18
σ = 6.39
Landsat acquisition time
Counts

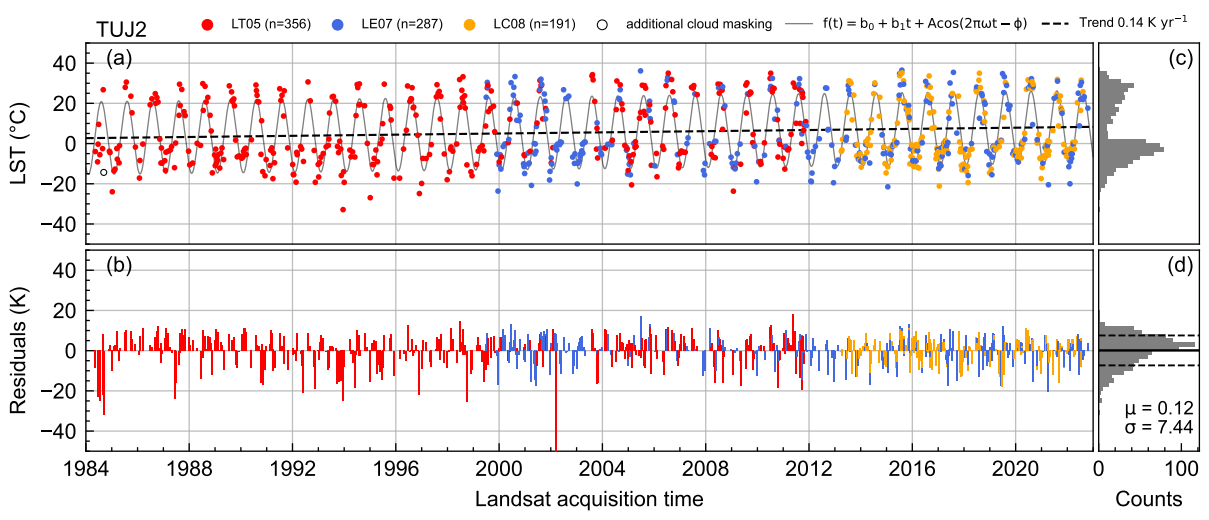

SPN3
LT05 (n=319)
LE07 (n=300)
LC08 (n=192)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.14 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.16
σ = 5.68
Landsat acquisition time
Counts

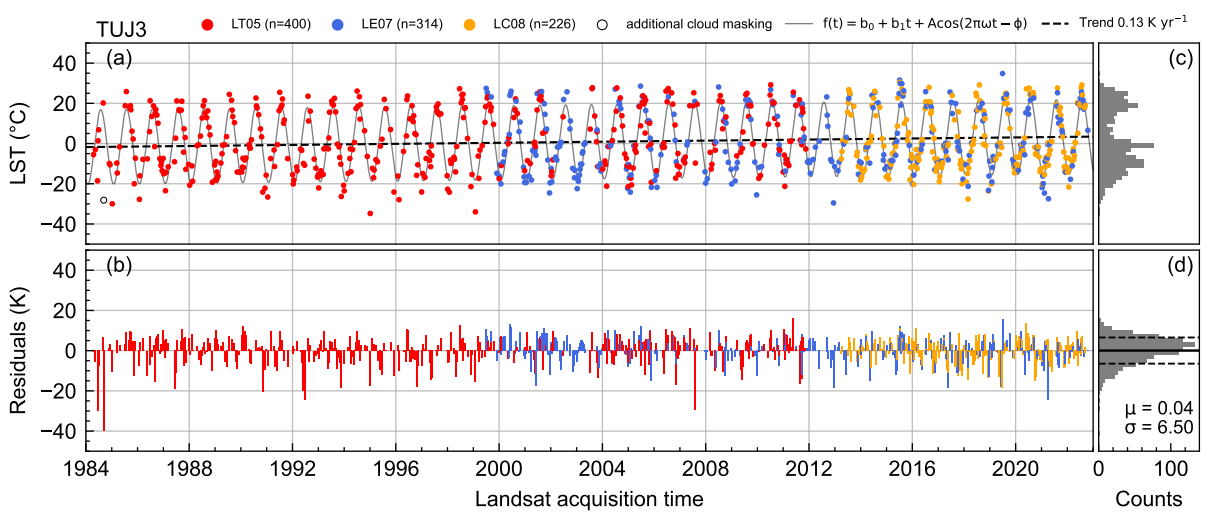

STN2
LT05 (n=234)
LE07 (n=238)
LC08 (n=108)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.17 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.11
σ = 6.75
Landsat acquisition time
Counts

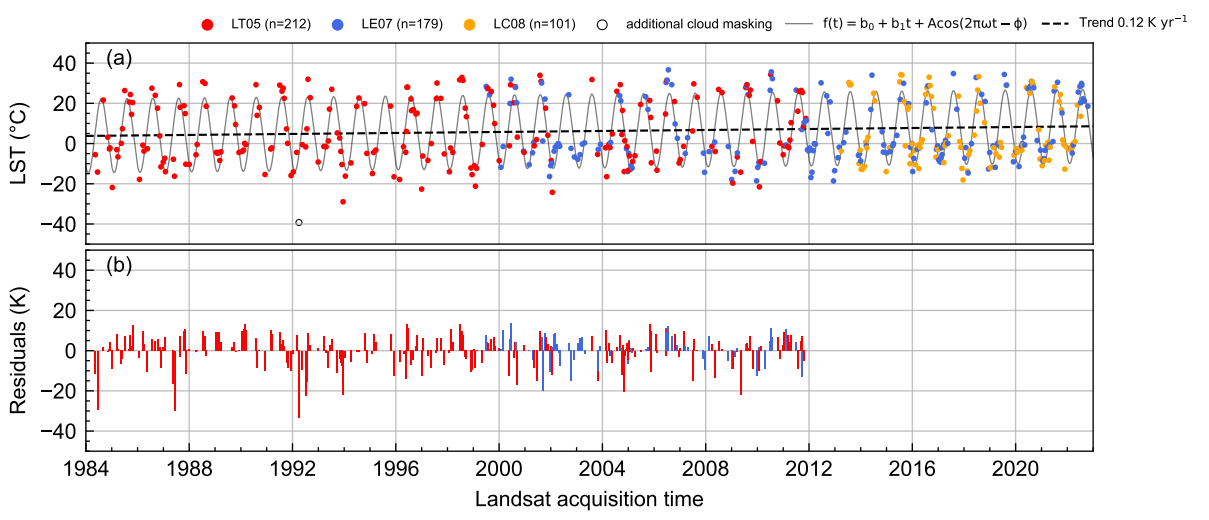

TAM2
LT05 (n=170)
LE07 (n=166)
LC08 (n=92)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = -0.00
σ = 6.70
Landsat acquisition time
Counts

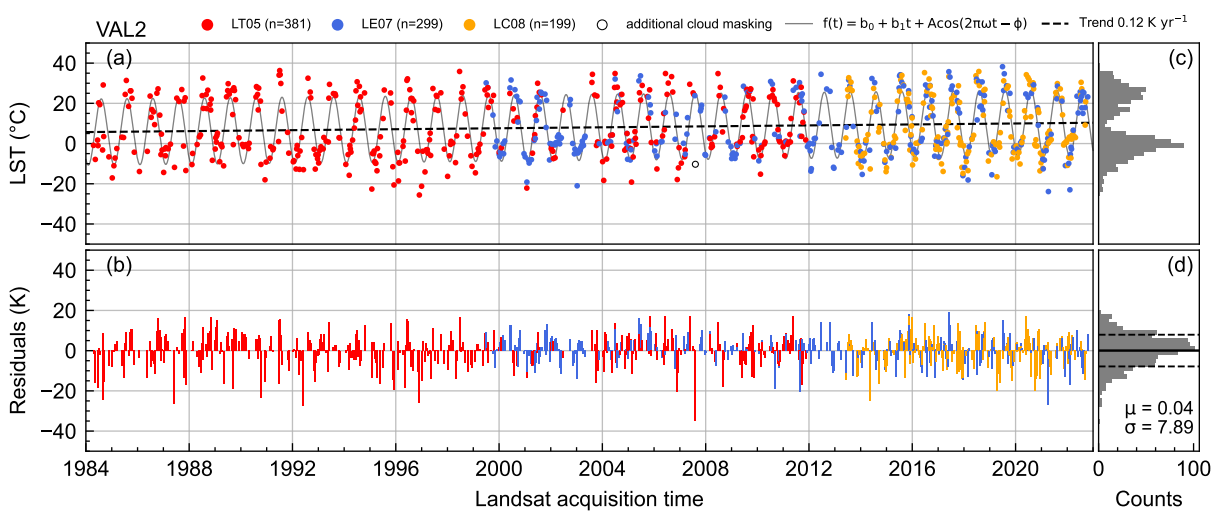

LT05 (n=211)
LE07 (n=198)
LC08 (n=95)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.13 K yr−1
(a)
(b)
LST (°C)
Residuals (K)
Landsat acquisition time
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020

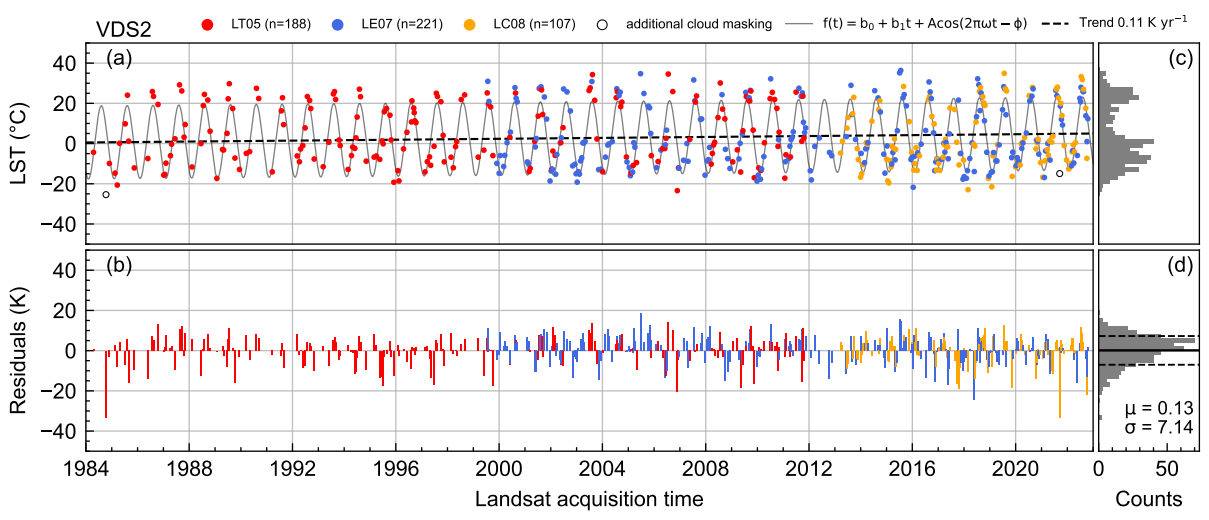

TRU2
LT05 (n=179)
LE07 (n=226)
LC08 (n=113)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.30
σ = 7.60
Landsat acquisition time
Counts

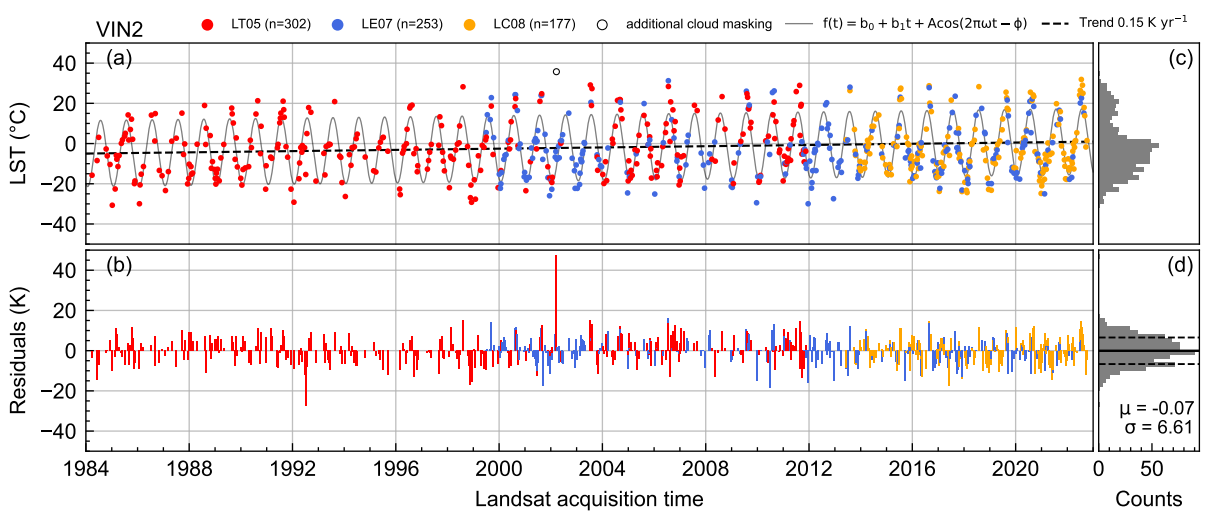

TUJ2
LT05 (n=356)
LE07 (n=287)
LC08 (n=191)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.14 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.12
σ = 7.44
Landsat acquisition time
Counts

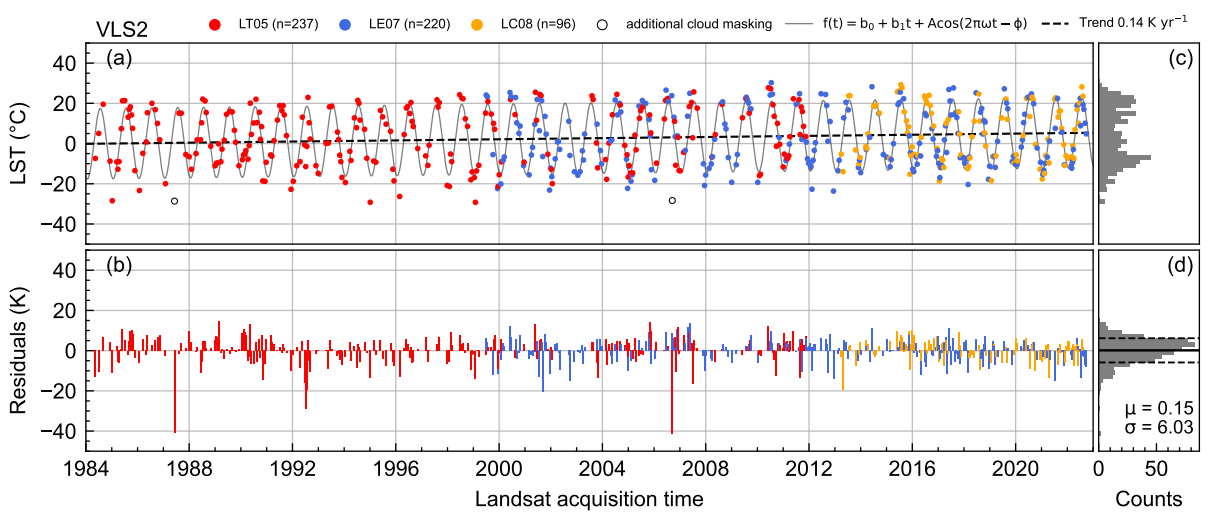

TUJ3
LT05 (n=400)
LE07 (n=314)
LC08 (n=226)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.13 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.04
σ = 6.50
Landsat acquisition time
Counts

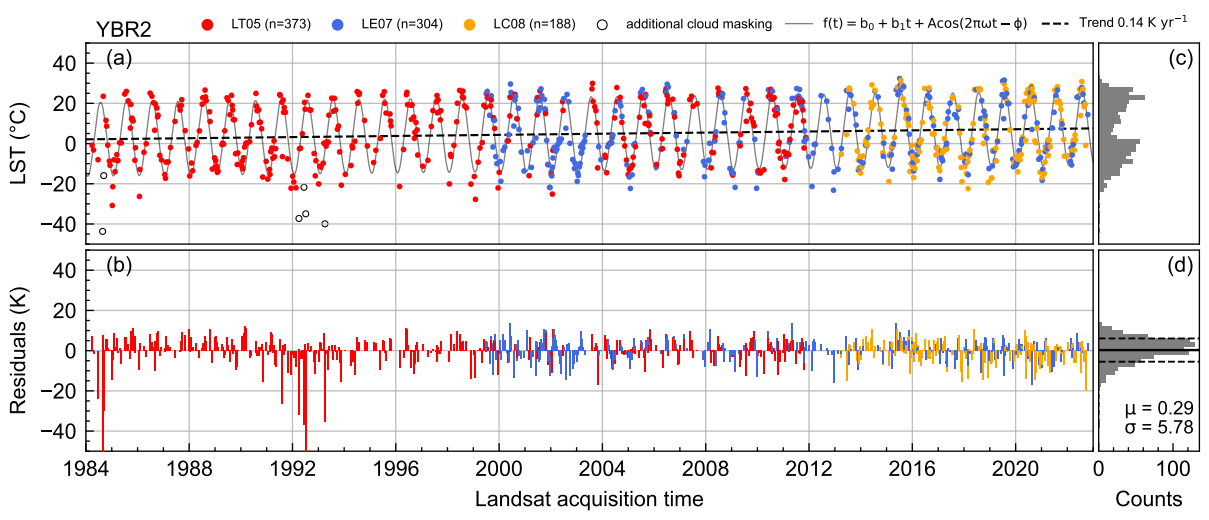

LT05 (n=212)
LE07 (n=179)
LC08 (n=101)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
LST (°C)
Residuals (K)
40
20
0
−20
−40
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time

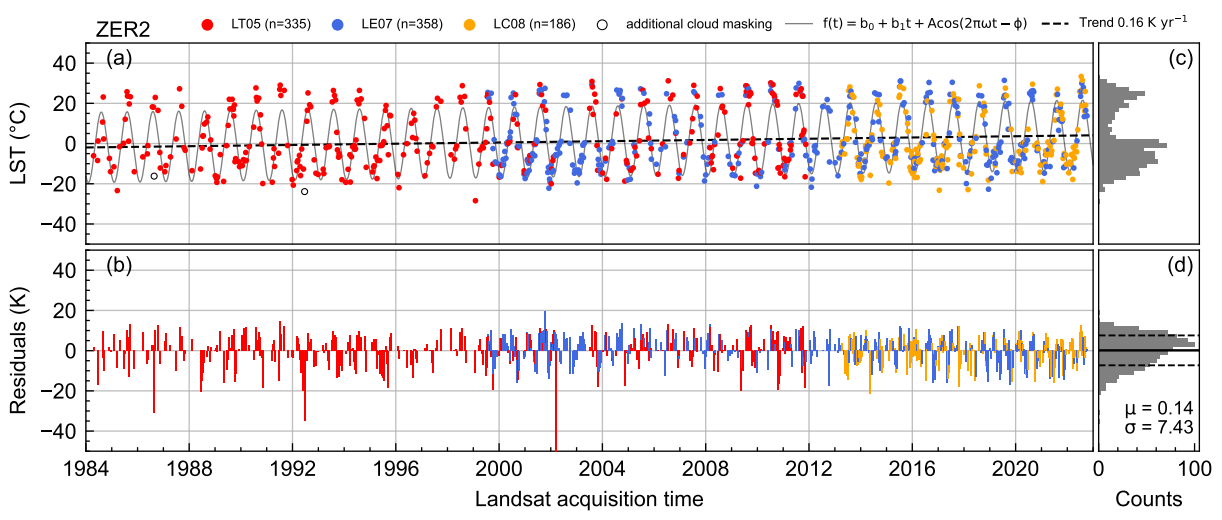

VAL2
LT05 (n=381)
LE07 (n=299)
LC08 (n=199)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.04
σ = 7.89
Landsat acquisition time
Counts

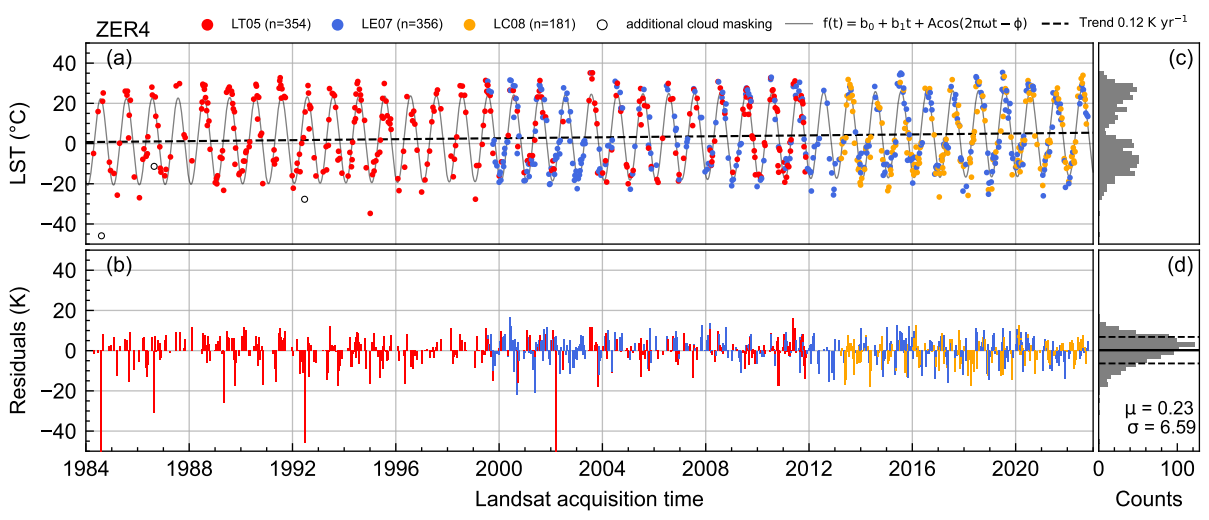

VDS2
LT05 (n=188)
LE07 (n=221)
LC08 (n=107)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.11 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.13
σ = 7.14
Landsat acquisition time
Counts

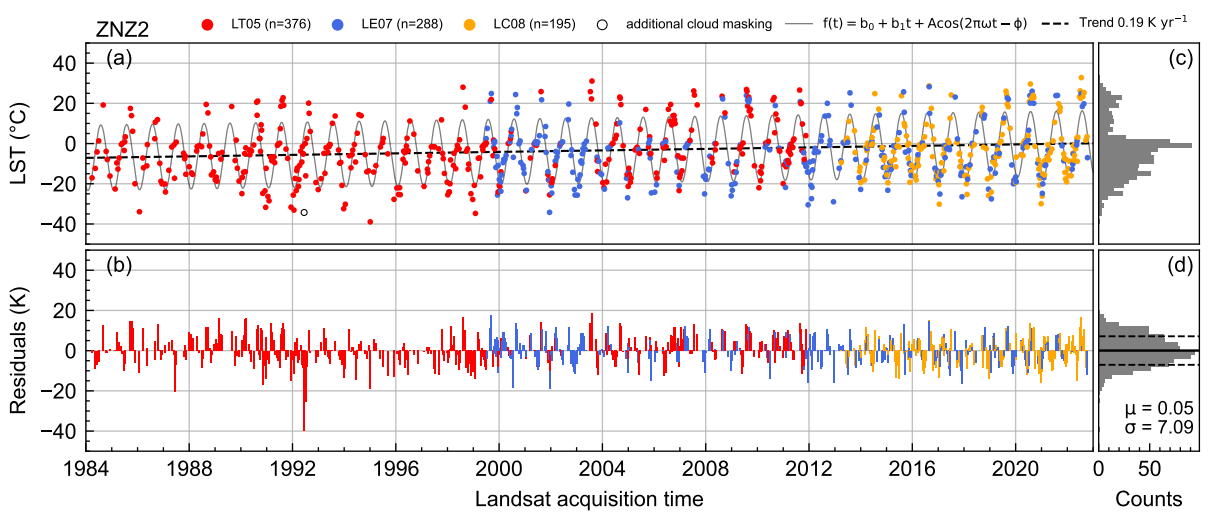

VIN2
LT05 (n=302)
LE07 (n=253)
LC08 (n=177)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.15 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = -0.07
σ = 6.61
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
50
Counts


VLS2
LT05 (n=237)
LE07 (n=220)
LC08 (n=96)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.14 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.15
σ = 6.03
Landsat acquisition time
Counts


YBR2
LT05 (n=373)
LE07 (n=304)
LC08 (n=188)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.14 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
Landsat acquisition time
Counts
μ = 0.29
σ = 5.78
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020


ZER2
LT05 (n=335)
LE07 (n=358)
LC08 (n=186)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.16 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.14
σ = 7.43
Landsat acquisition time
Counts


ZER4
LT05 (n=354)
LE07 (n=356)
LC08 (n=181)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.12 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.23
σ = 6.59
Landsat acquisition time
Counts


ZNZ2
LT05 (n=376)
LE07 (n=288)
LC08 (n=195)
additional cloud masking
f(t) = b0 + b1t + Acos(2πωt − ϕ)
Trend 0.19 K yr−1
(a)
(b)
(c)
(d)
LST (°C)
Residuals (K)
μ = 0.05
σ = 0.09
1984
1988
1992
1996
2000
2004
2008
2012
2016
2020
Landsat acquisition time
0
50
Counts