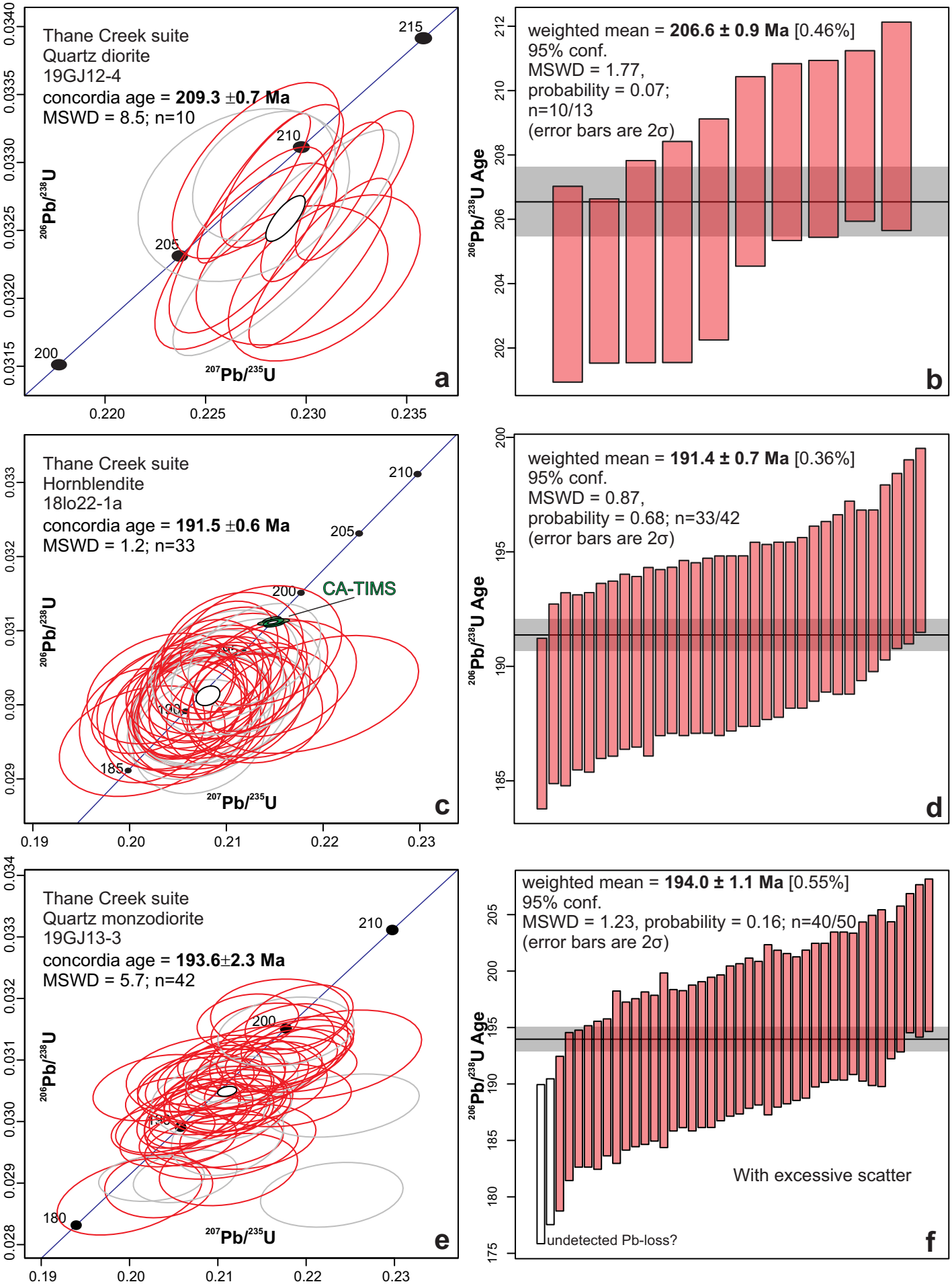
Thane Creek suite
Quartz diorite
19GJ12-4
concordia age = 209.3 ±0.7 Ma
MSWD = 8.5; n=10
a
weighted mean = 206.6 ± 0.9 Ma [0.46%]
95% conf.
MSWD = 1.77,
probability = 0.07;
n=10/13
(error bars are 2σ)
b
Thane Creek suite
Hornblendite
18lo22-1a
concordia age = 191.5 ±0.6 Ma
MSWD = 1.2; n=33
CA-TIMS
c
weighted mean = 191.4 ± 0.7 Ma [0.36%]
95% conf.
MSWD = 0.87,
probability = 0.68; n=33/42
(error bars are 2σ)
d
Thane Creek suite
Quartz monzodiorite
19GJ13-3
concordia age = 193.6±2.3 Ma
MSWD = 5.7; n=42
e
weighted mean = 194.0 ± 1.1 Ma [0.55%]
95% conf.
MSWD = 1.23, probability = 0.16; n=40/50
(error bars are 2σ)
With excessive scatter
undetected Pb-loss?
f
206Pb/238U
207Pb/235U
206Pb/238U Age

Figure 5

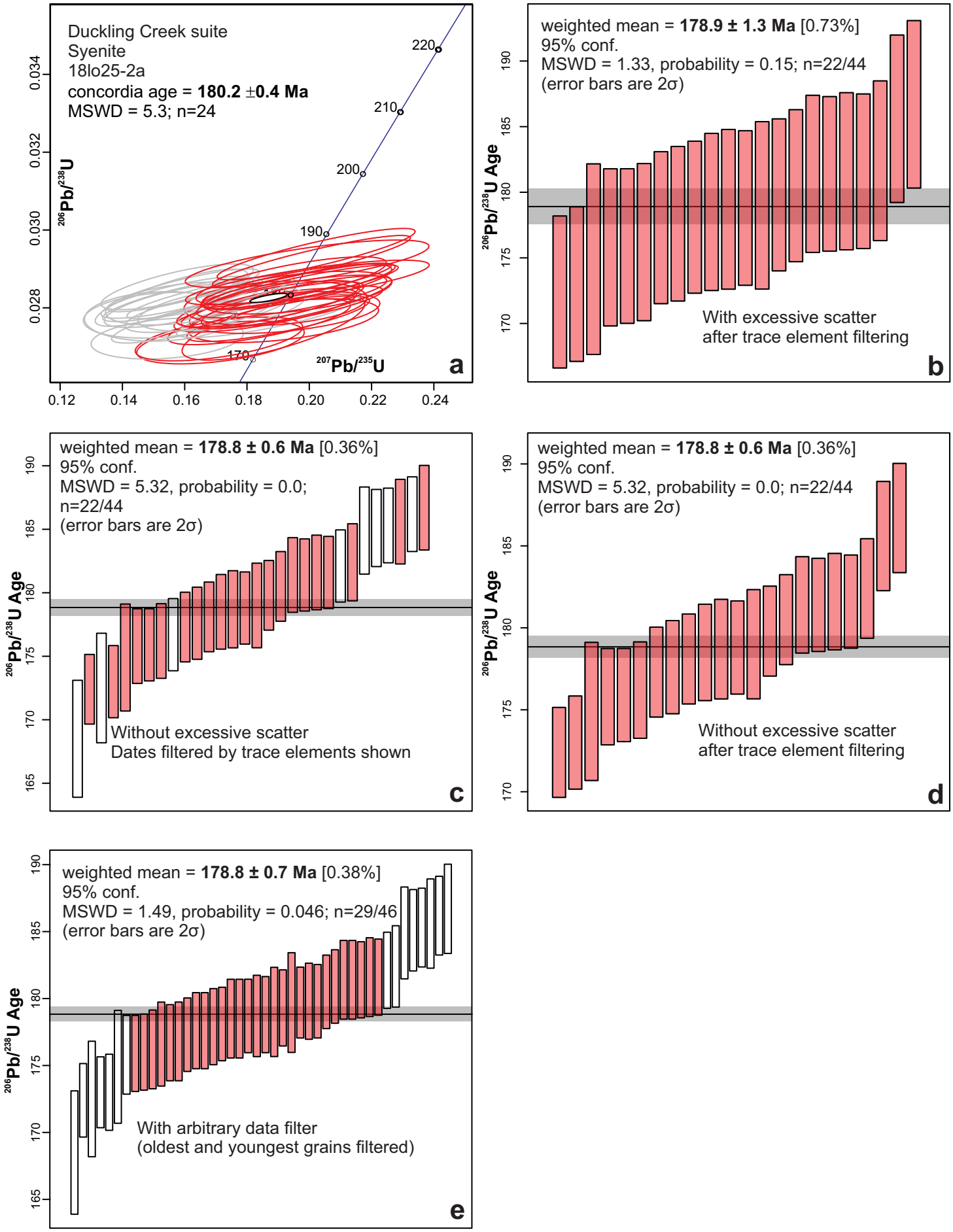
Duckling Creek suite
Syenite
18lo25-2a
concordia age = 180.2 ±0.4 Ma
MSWD = 5.3; n=24
220
210
200
190
170
206Pb/238U
207Pb/235U
a
weighted mean = 178.9 ± 1.3 Ma [0.73%]
95% conf.
MSWD = 1.33, probability = 0.15; n=22/44
(error bars are 2σ)
With excessive scatter
after trace element filtering
b
weighted mean = 178.8 ± 0.6 Ma [0.36%]
95% conf.
MSWD = 5.32, probability = 0.0;
n=22/44
(error bars are 2σ)
Without excessive scatter
Dates filtered by trace elements shown
c
weighted mean = 178.8 ± 0.6 Ma [0.36%]
95% conf.
MSWD = 5.32, probability = 0.0; n=22/44
(error bars are 2σ)
Without excessive scatter
after trace element filtering
d
weighted mean = 178.8 ± 0.7 Ma [0.38%]
95% conf.
MSWD = 1.49, probability = 0.046; n=29/46
(error bars are 2σ)
With arbitrary data filter
(oldest and youngest grains filtered)
e
206Pb/238U Age

Figure 7

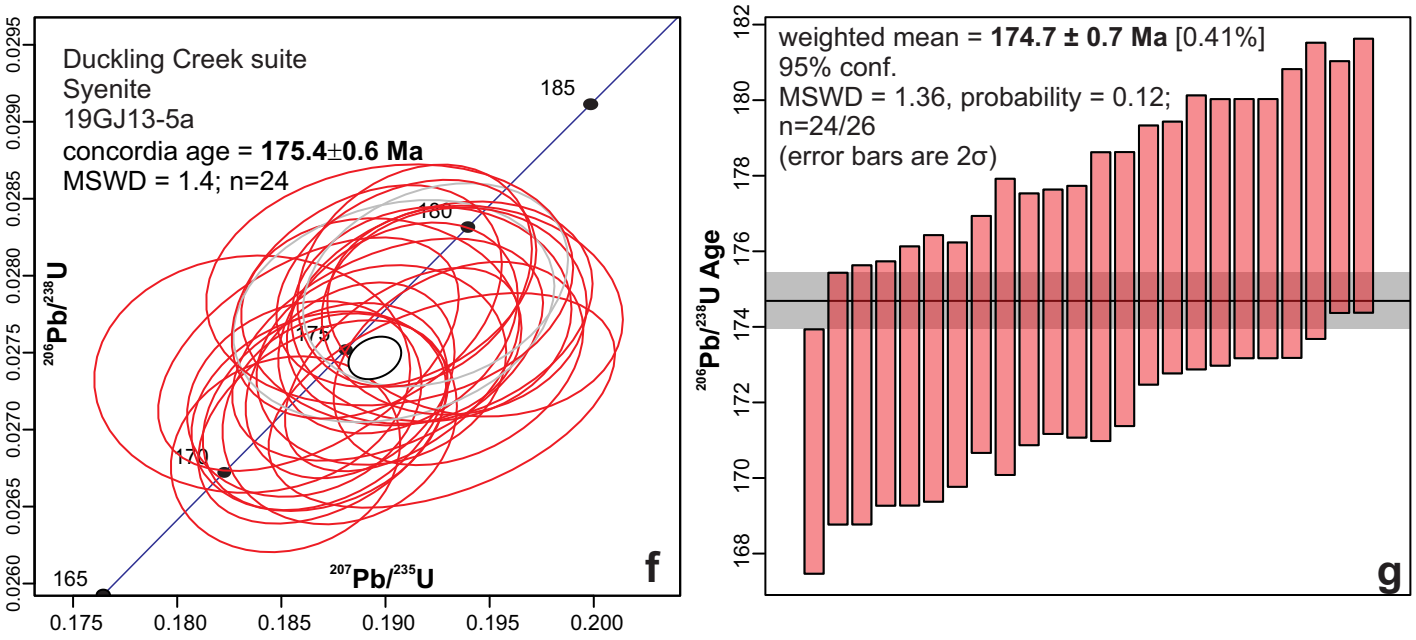

Figure 7 continued

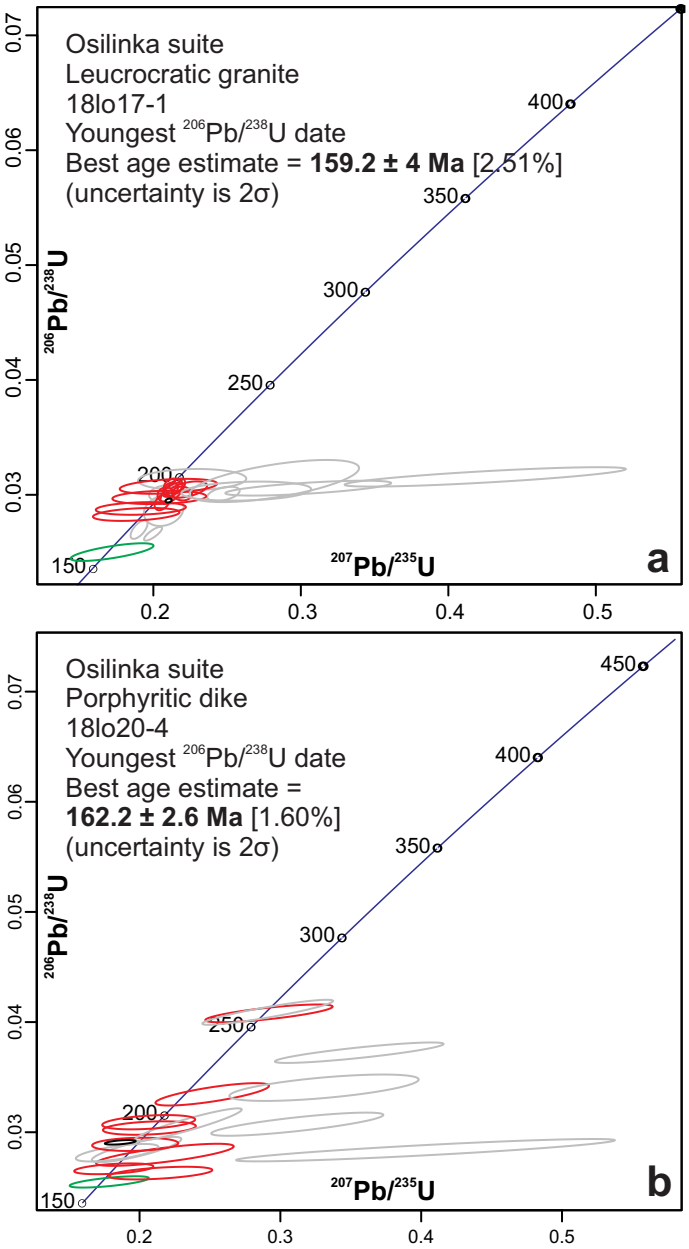
Osilinka suite
Leucrocratic granite
18lo17-1
Youngest 206Pb/238U date
Best age estimate = 159.2 ± 4 Ma [2.51%]
(uncertainty is 2σ)
400
350
300
250
200
150
206Pb/238U
207Pb/235U
a
Osilinka suite
Porphyritic dike
18lo20-4
Youngest 206Pb/238U date
Best age estimate =
162.2 ± 2.6 Ma [1.60%]
(uncertainty is 2σ)
450
400
350
300
250
200
150
206Pb/238U
207Pb/235U
b

Figure 9

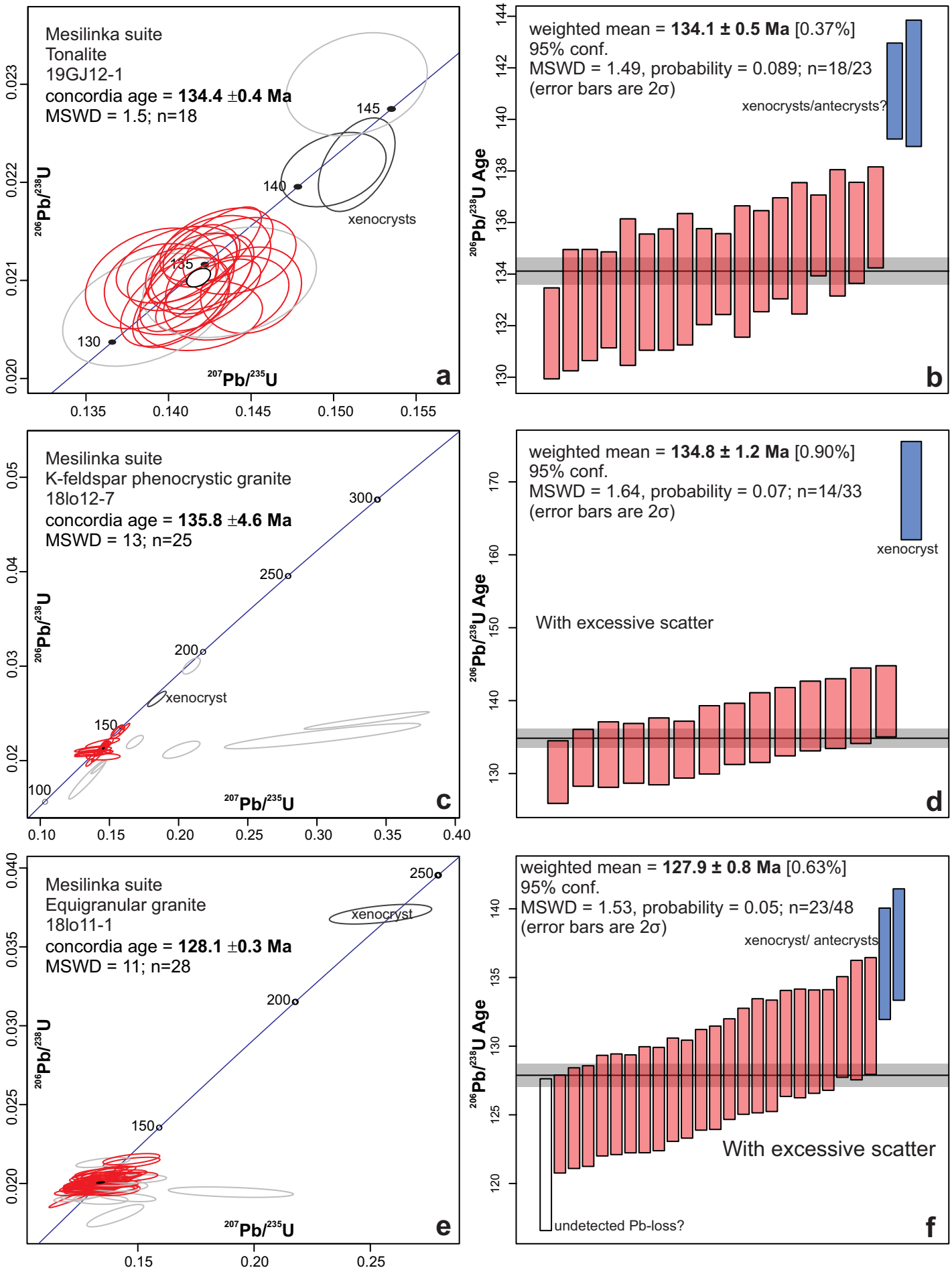
Mesilinka suite
Tonalite
19GJ12-1
concordia age = 134.4 ±0.4 Ma
MSWD = 1.5; n=18
145
140
135
130
xenocrysts
206Pb/238U
207Pb/235U
a
weighted mean = 134.1 ± 0.5 Ma [0.37%]
95% conf.
MSWD = 1.49, probability = 0.089; n=18/23
(error bars are 2σ)
xenocrysts/antecrysts?
206Pb/238U Age
b
Mesilinka suite
K-feldspar phenocrystic granite
18lo12-7
concordia age = 135.8 ±4.6 Ma
MSWD = 13; n=25
300
250
200
150
100
xenocryst
206Pb/238U
207Pb/235U
c
weighted mean = 134.8 ± 1.2 Ma [0.90%]
95% conf.
MSWD = 1.64, probability = 0.07; n=14/33
(error bars are 2σ)
xenocryst
With excessive scatter
206Pb/238U Age
d
Mesilinka suite
Equigranular granite
18lo11-1
concordia age = 128.1 ±0.3 Ma
MSWD = 11; n=28
250
200
150
xenocryst
206Pb/238U
207Pb/235U
e
weighted mean = 127.9 ± 0.8 Ma [0.63%]
95% conf.
MSWD = 1.53, probability = 0.05; n=23/48
(error bars are 2σ)
xenocryst/ antecrysts
With excessive scatter
undetected Pb-loss?
206Pb/238U Age
f

Figure 11