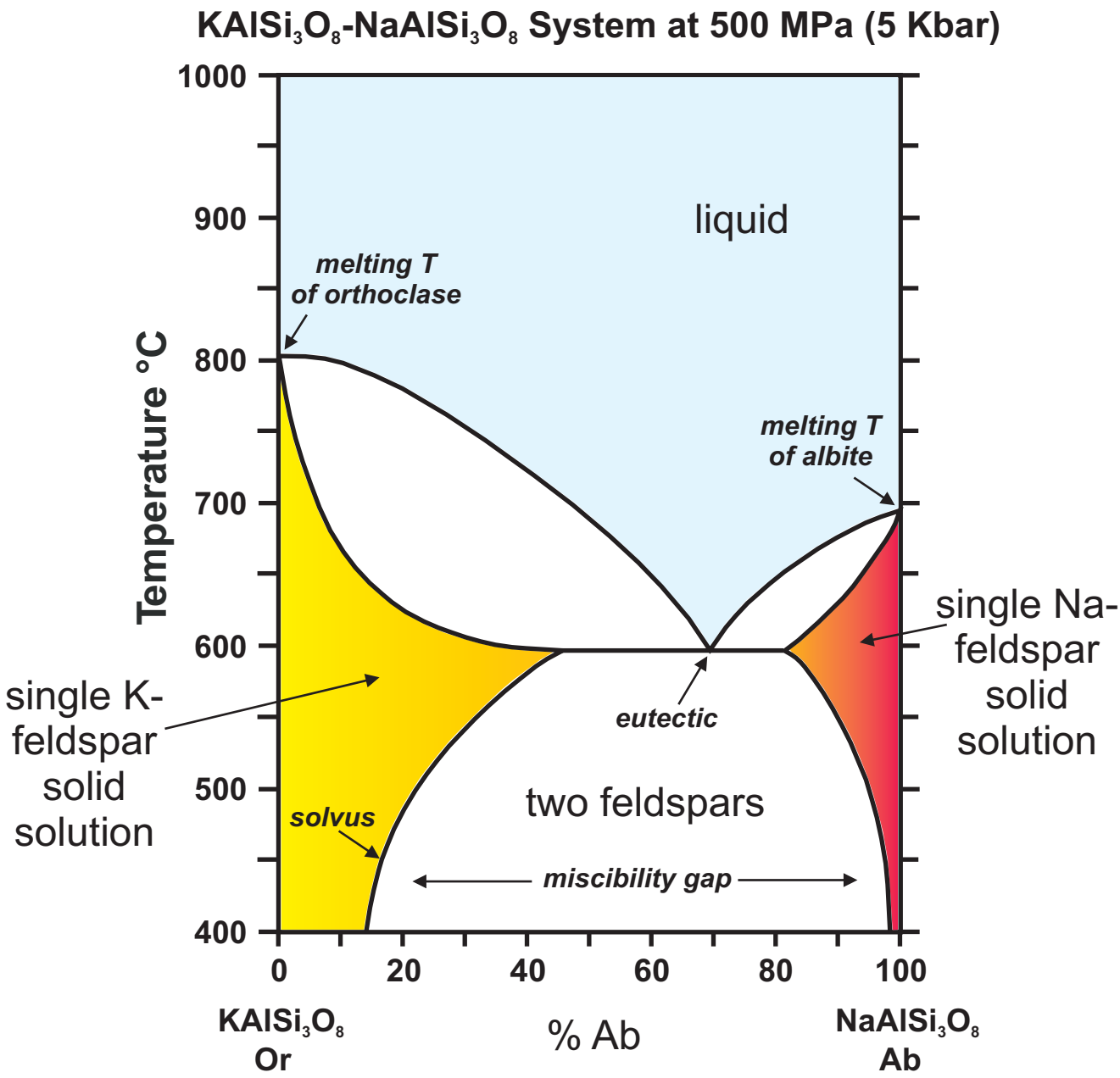
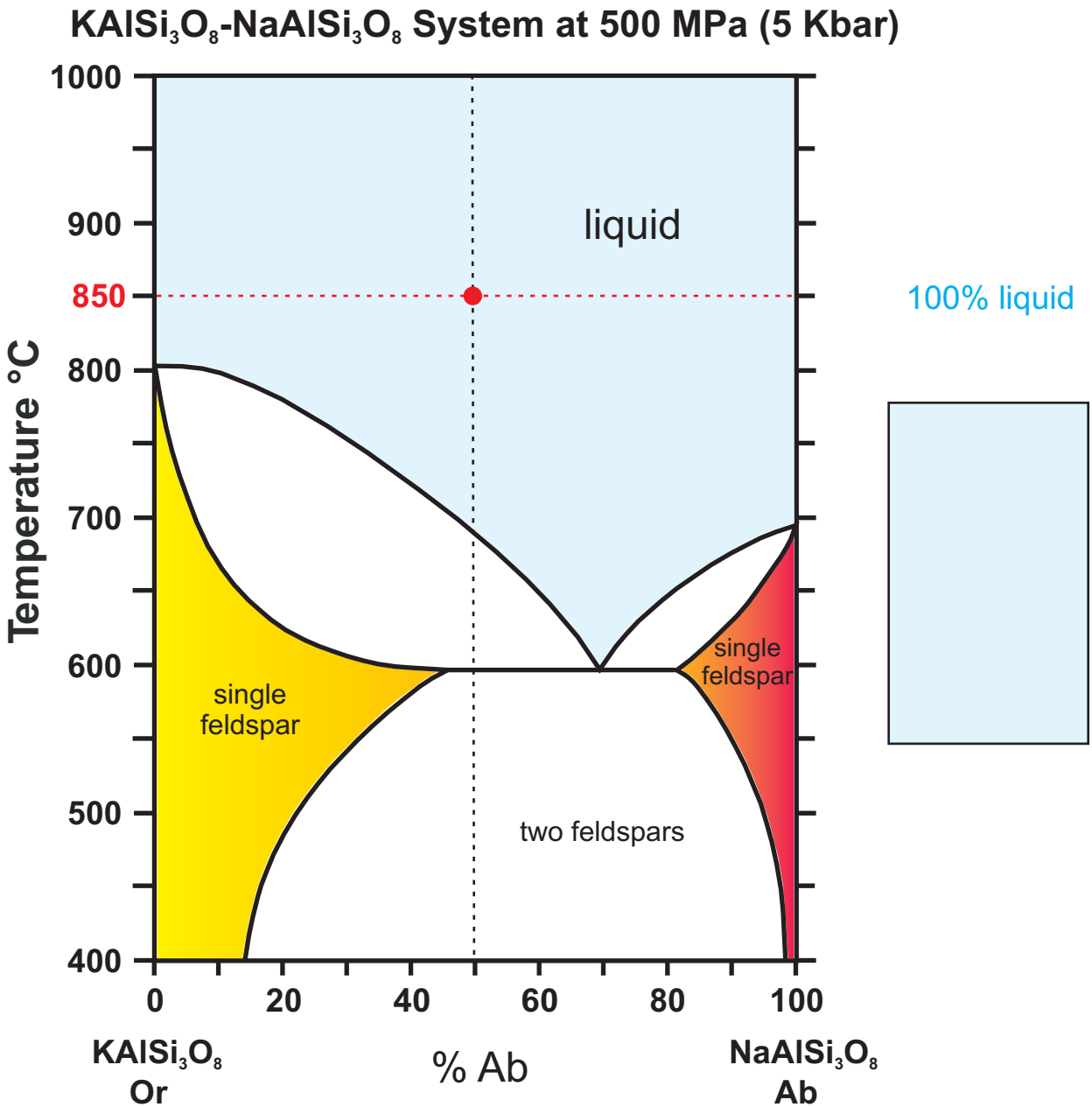
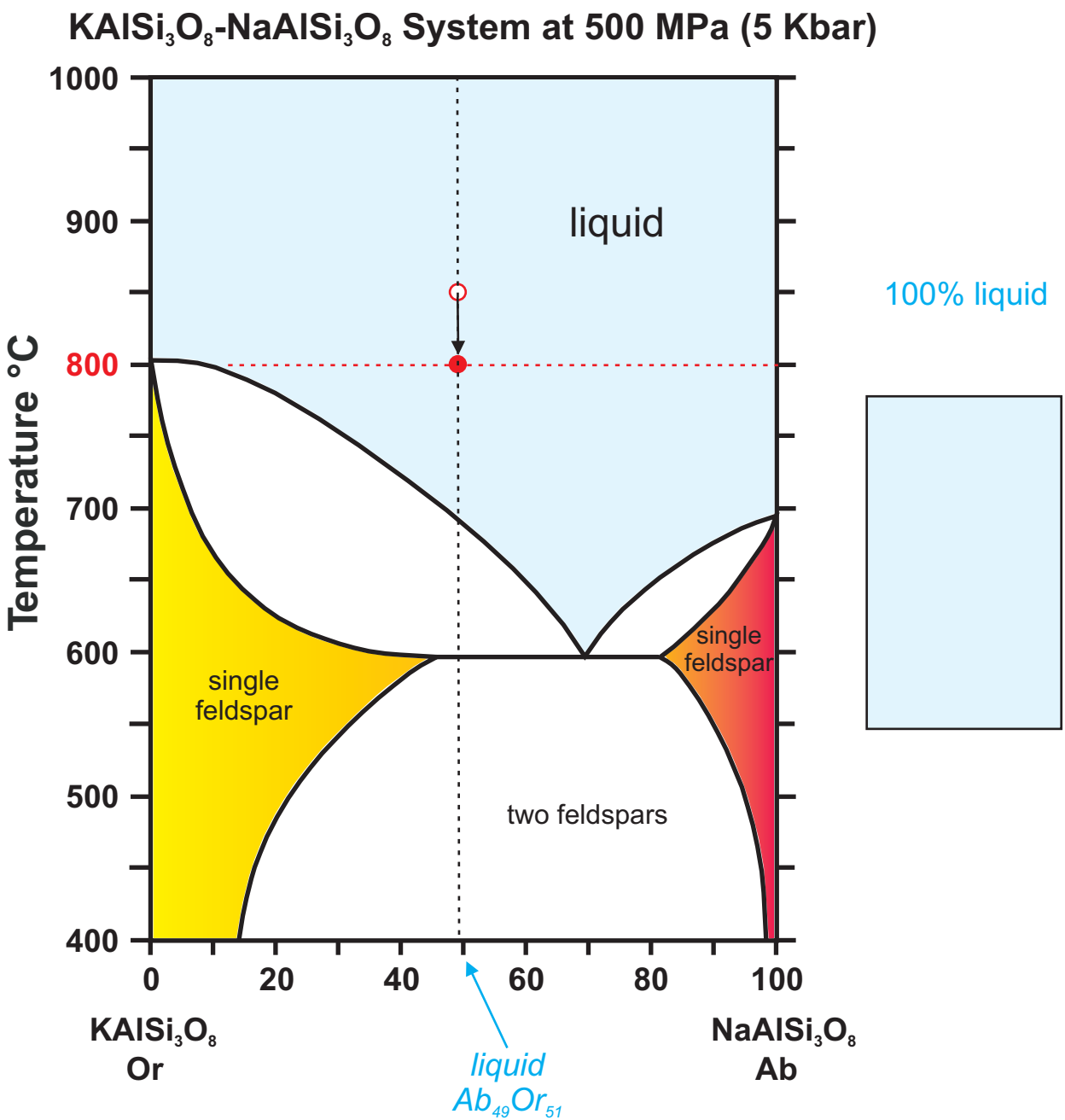
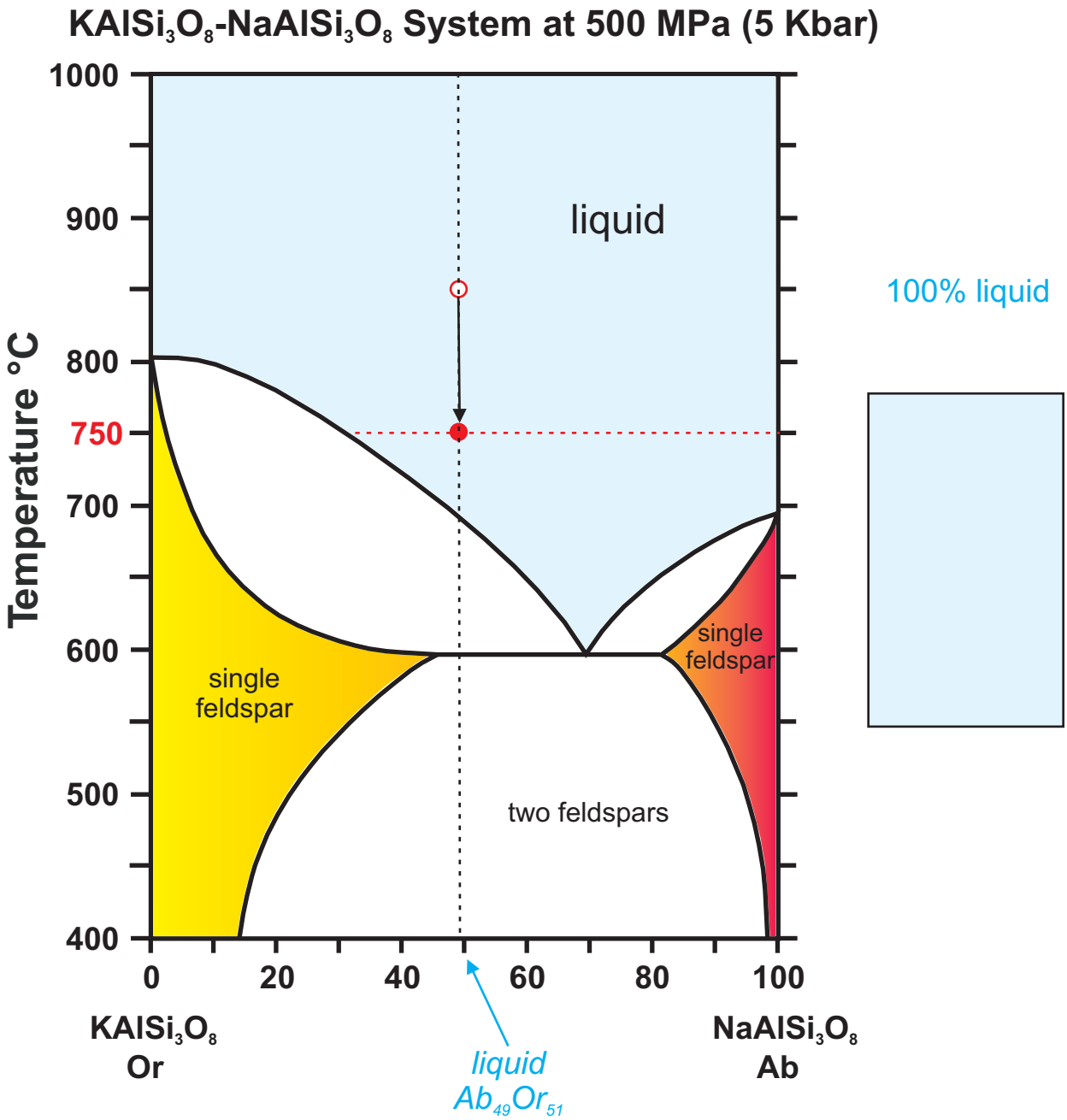
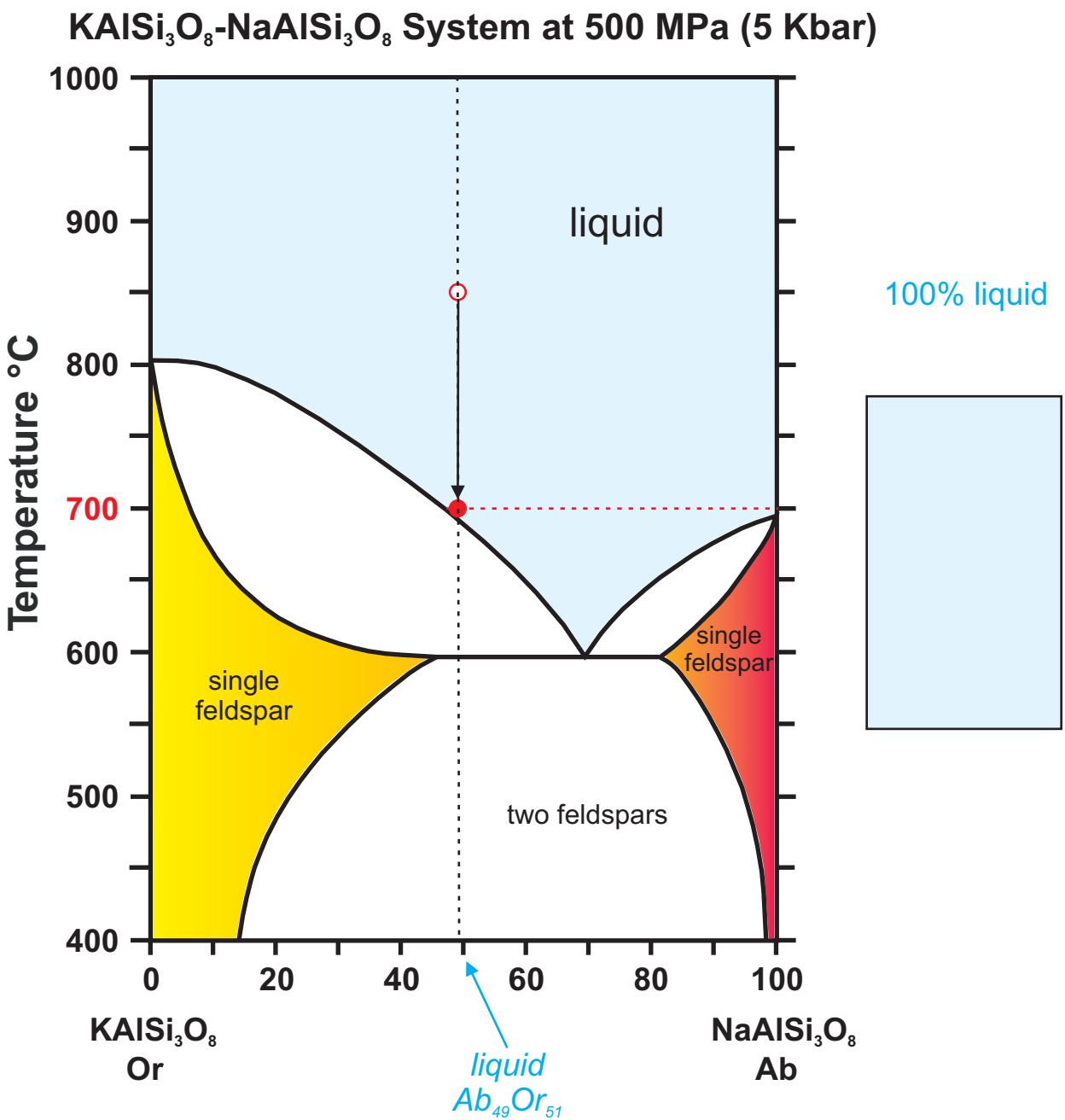
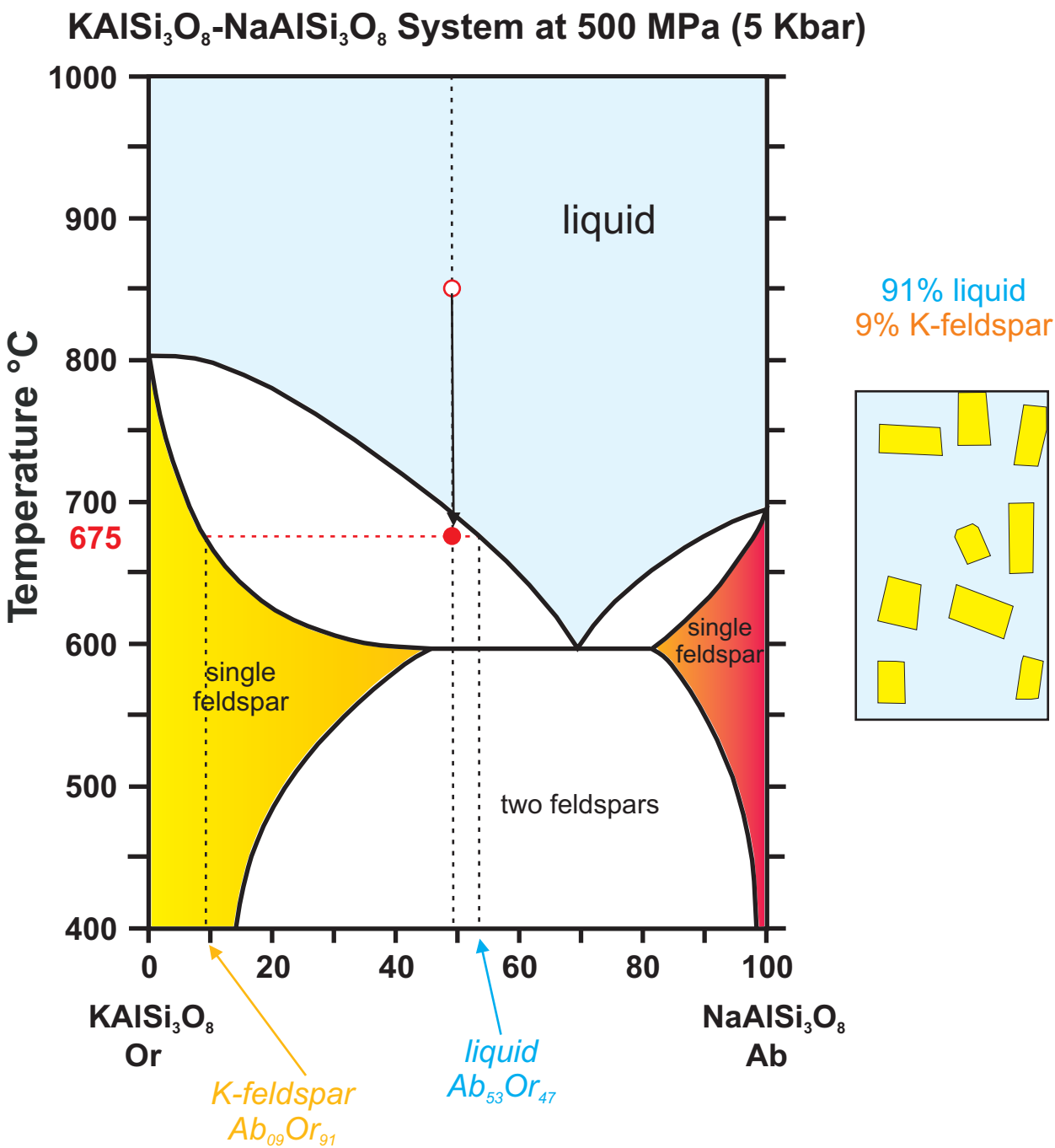

KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
1000
900
800
700
600
500
400
Temperature °C
liquid
melting T
of orthoclase
melting T
of albite
single K-
feldspar
solid
solution
single Na-
feldspar
solid
solution
eutectic
two feldspars
solvus
miscibility gap
0
20
40
60
80
100
KAlSi3O8
Or
% Ab
NaAlSi3O8
Ab

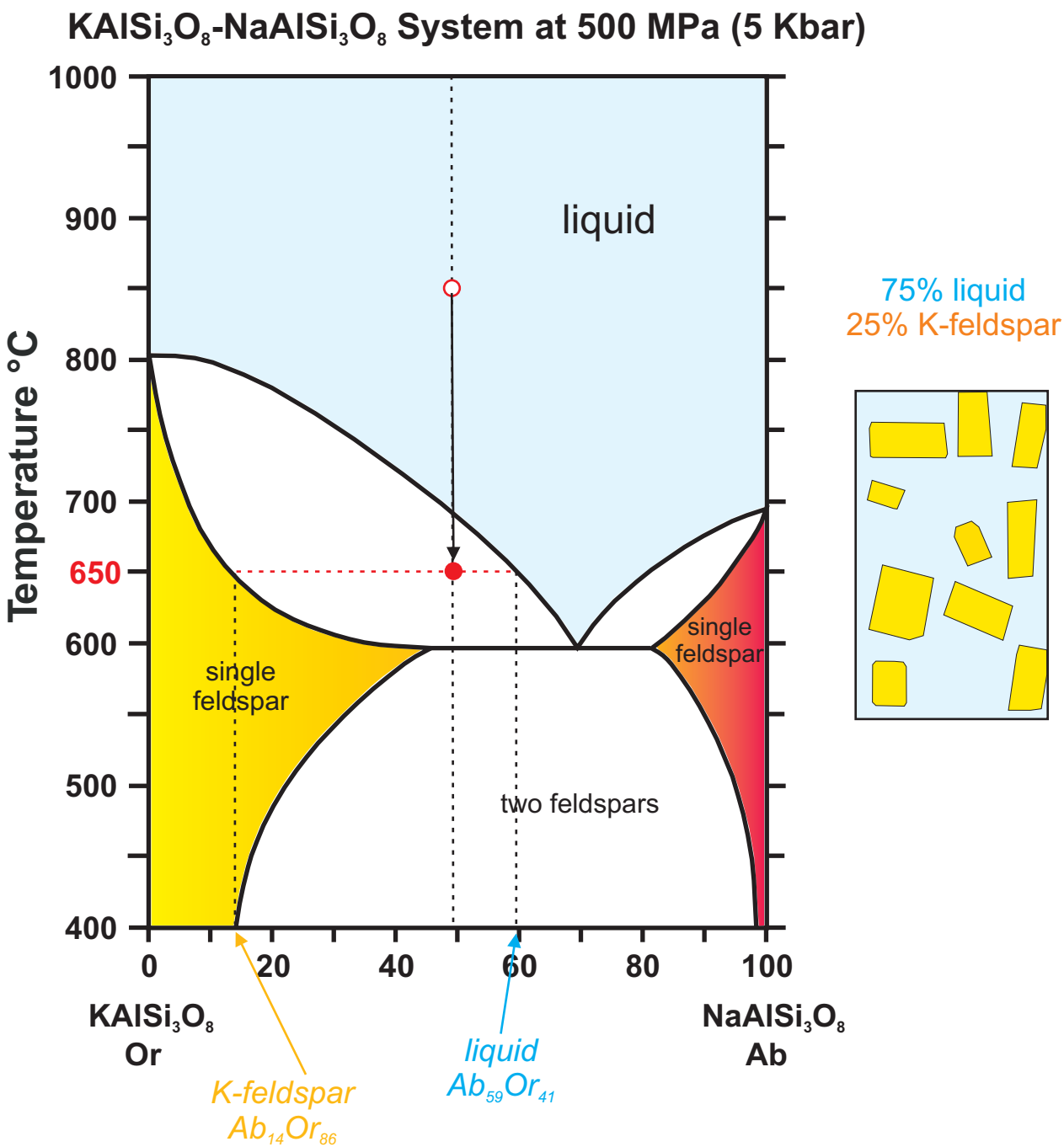

KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
1000
900
850
800
700
600
500
400
Temperature °C
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
% Ab
NaAlSi3O8
Ab
100% liquid

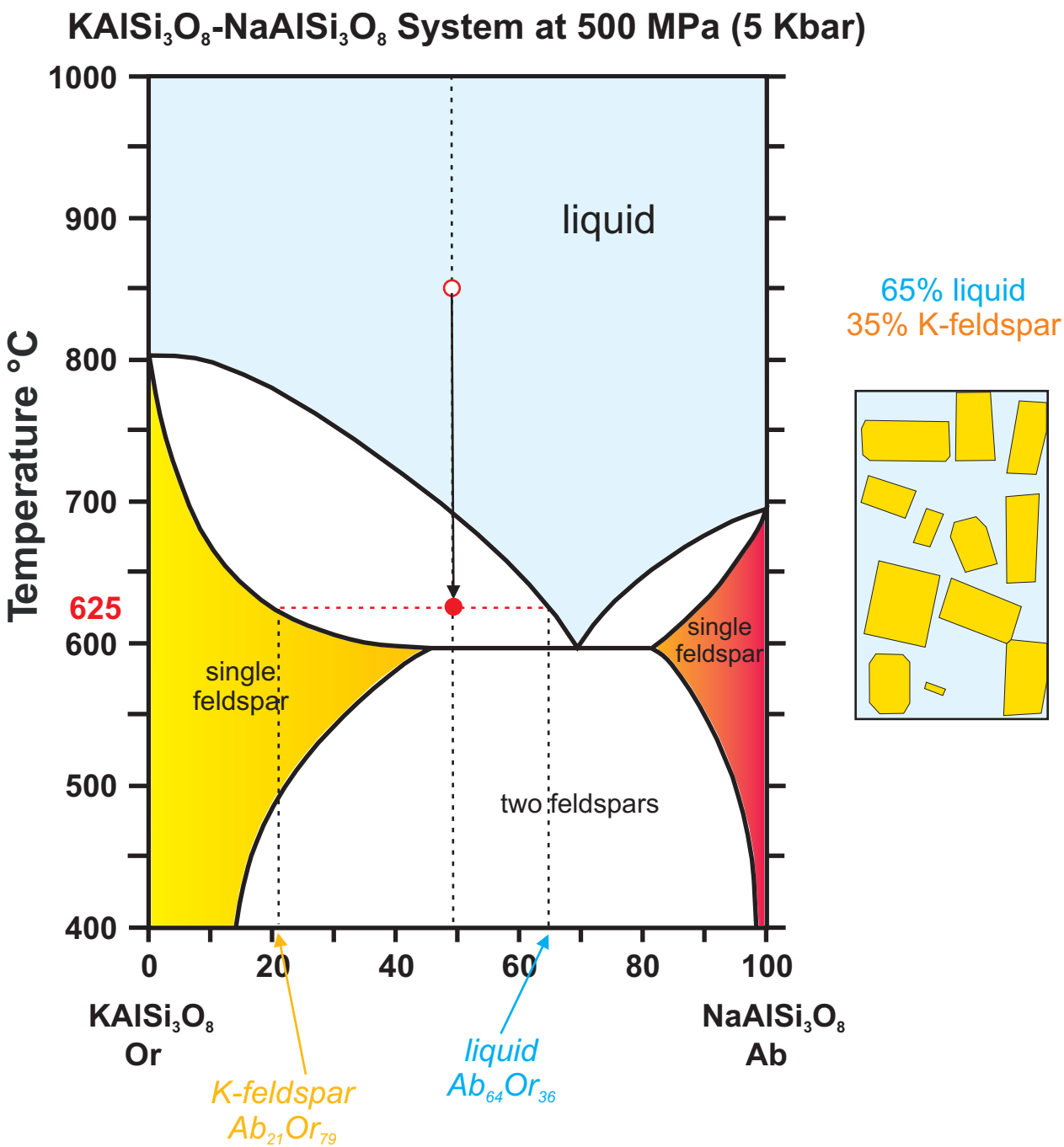

KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
700
600
500
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
Ab
liquid
Ab49Or51
100% liquid

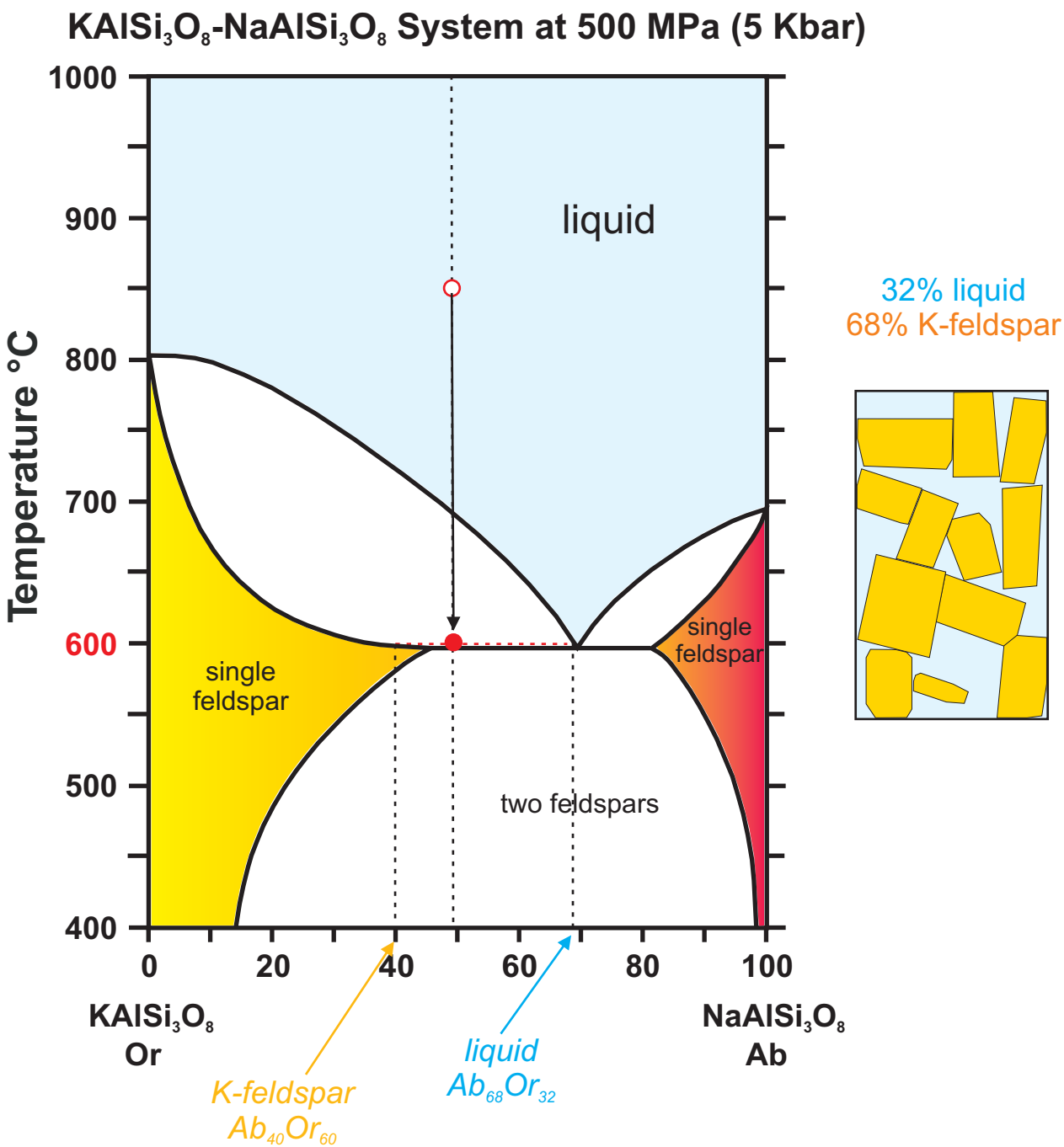

KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
750
700
600
500
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
Ab
liquid
Ab49Or51
100% liquid

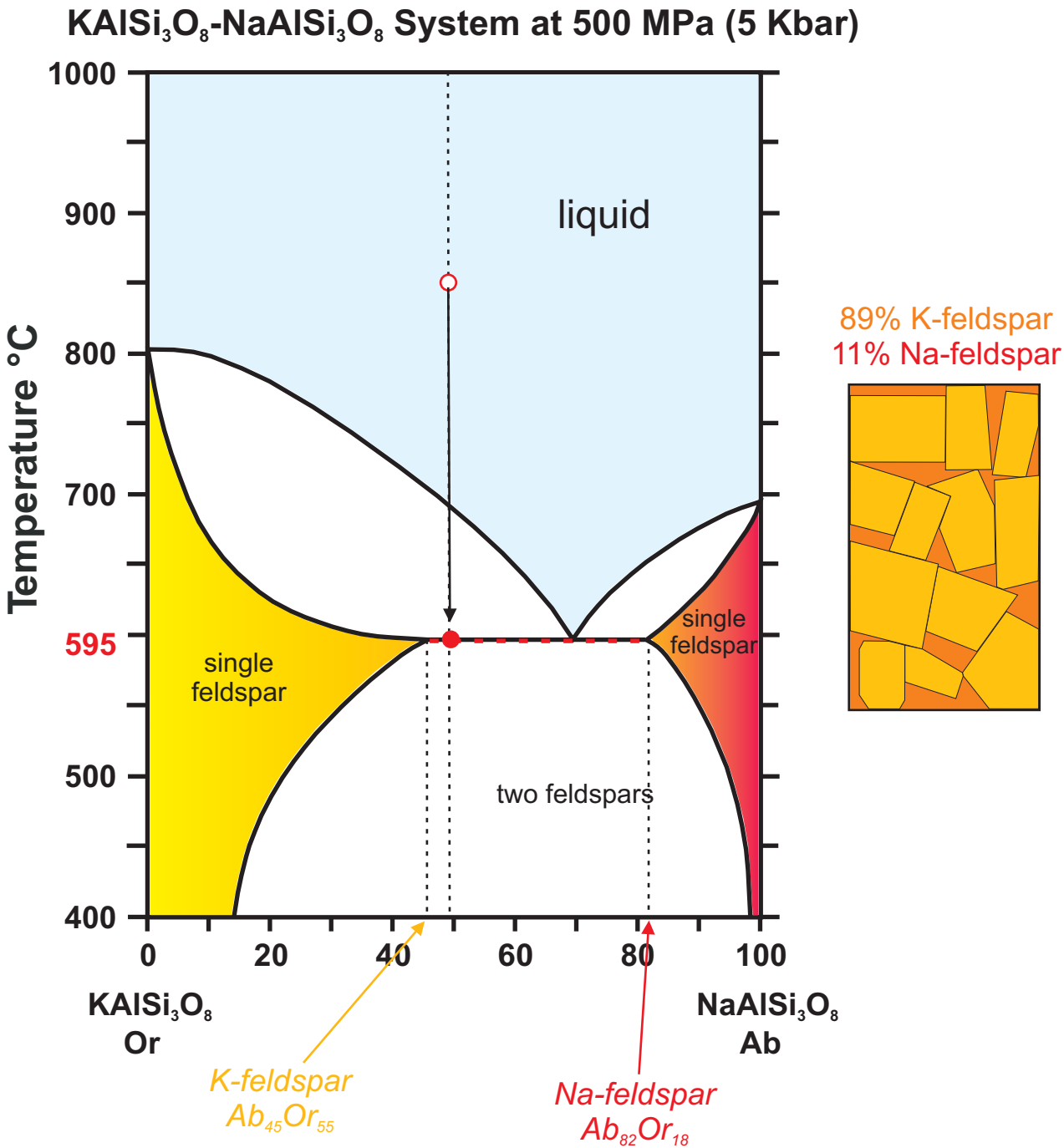

KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
700
600
500
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
Ab
liquid
Ab49Or51
100% liquid

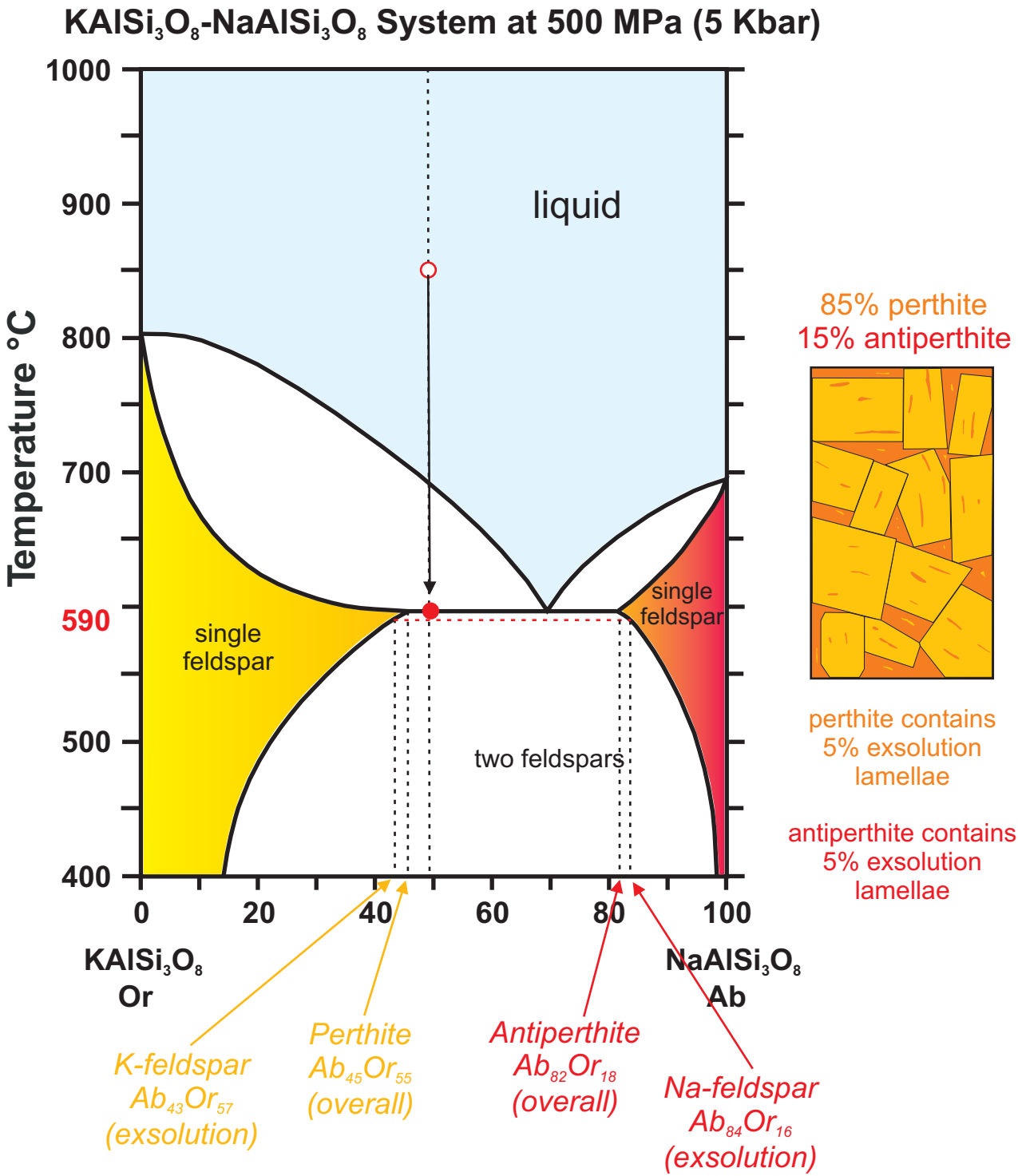

KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
700
675
600
500
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
Ab
K-feldspar
Ab09Or91
liquid
Ab53Or47
91% liquid
9% K-feldspar

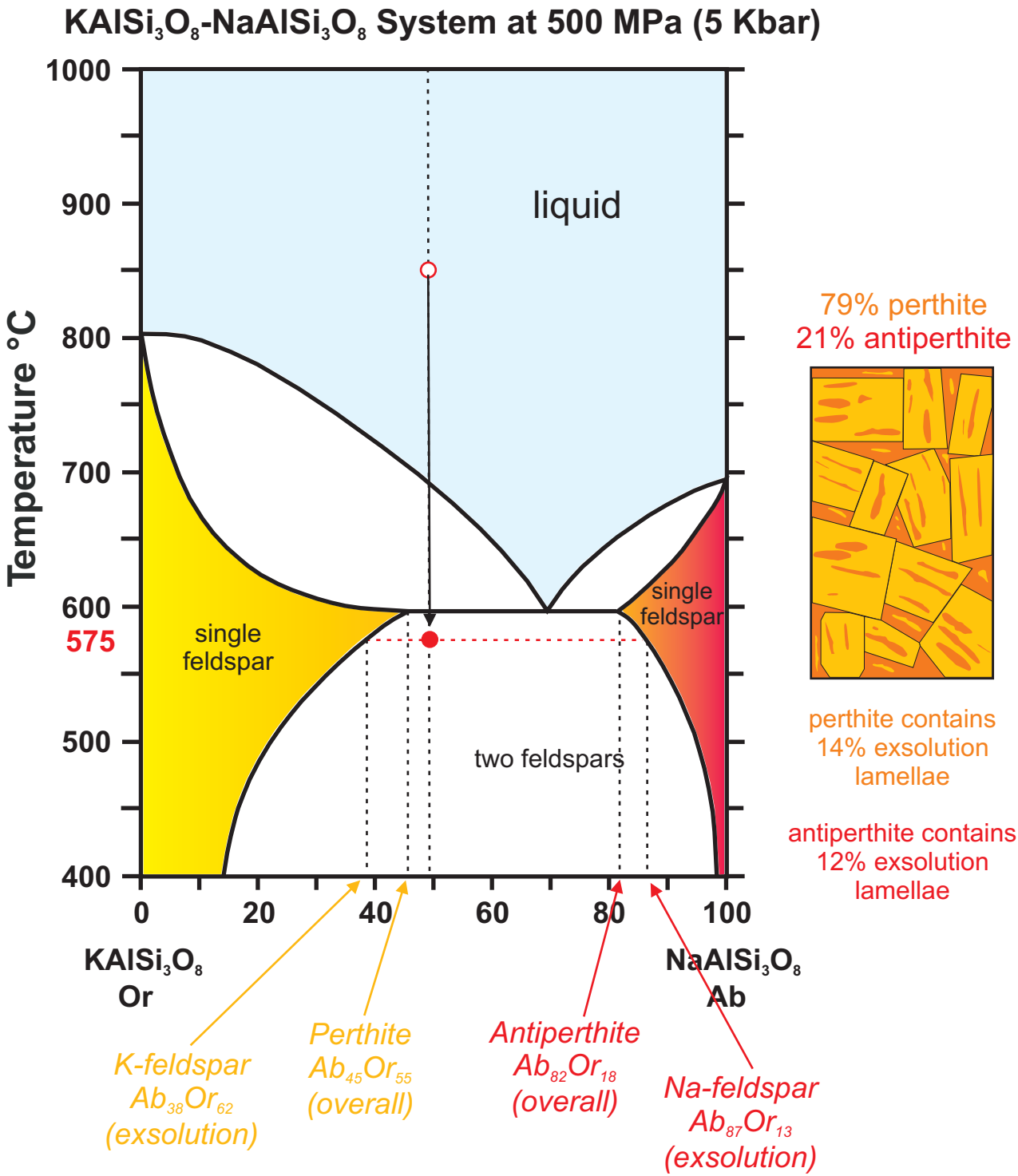

KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
700
650
600
500
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
Ab
K-feldspar
Ab14Or86
liquid
Ab59Or41
75% liquid
25% K-feldspar


KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
700
625
600
500
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
Ab
K-feldspar
Ab21Or79
liquid
Ab64Or36
65% liquid
35% K-feldspar

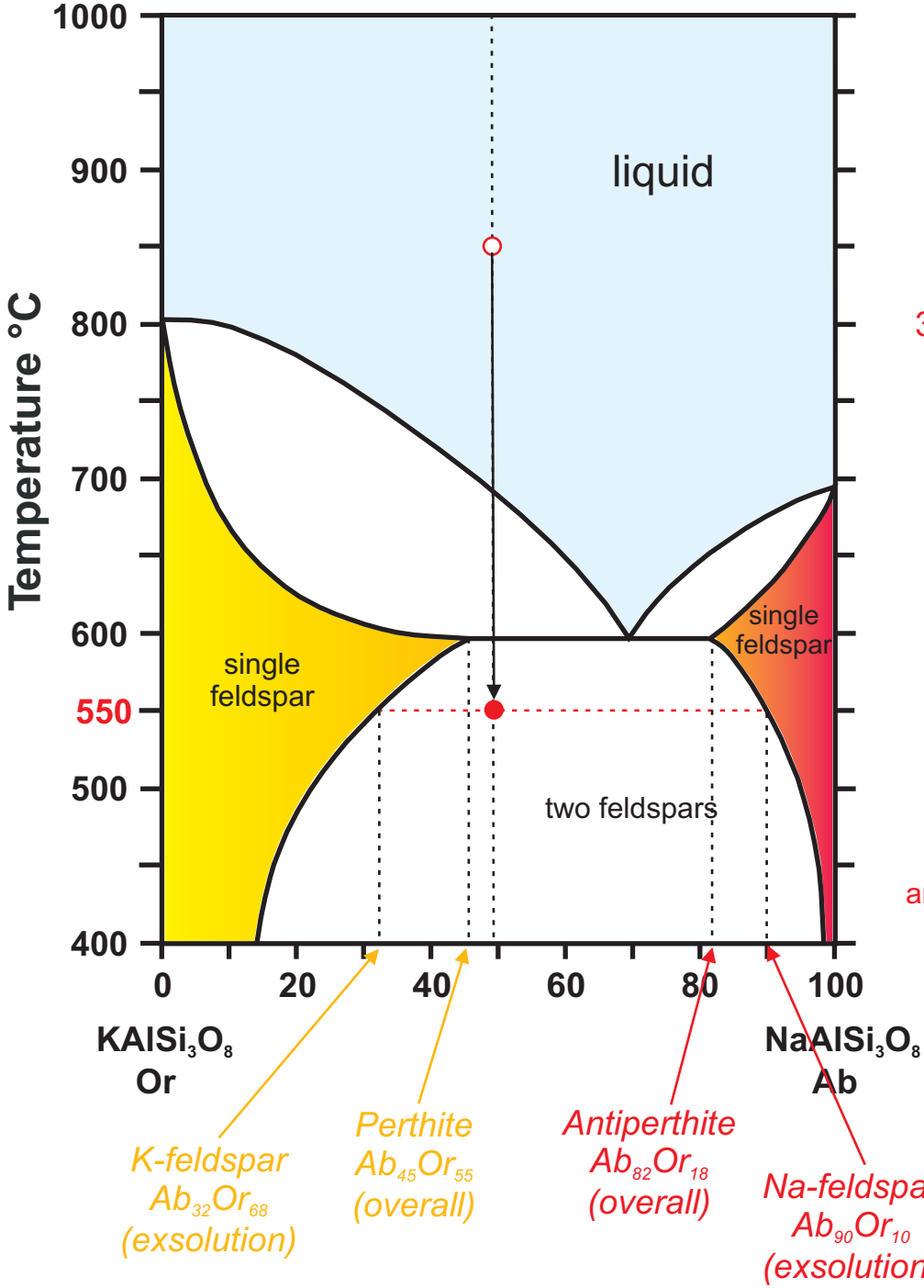

KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
700
600
500
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
Ab
K-feldspar
Ab40Or60
liquid
Ab68Or32
32% liquid
68% K-feldspar


KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
700
595
500
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
Ab
K-feldspar
Ab45Or55
Na-feldspar
Ab82Or18
89% K-feldspar
11% Na-feldspar

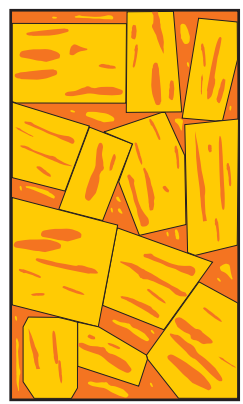

KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
700
590
500
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
Ab
K-feldspar
Ab43Or57
(exsolution)
Perthite
Ab45Or55
(overall)
Antiperthite
Ab82Or18
(overall)
Na-feldspar
Ab84Or16
(exsolution)
85% perthite
15% antiperthite
perthite contains
5% exsolution
lamellae
antiperthite contains
5% exsolution
lamellae


KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
700
600
575
500
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
Ab
K-feldspar
Ab38Or62
(exsolution)
Perthite
Ab45Or55
(overall)
Antiperthite
Ab82Or18
(overall)
Na-feldspar
Ab87Or13
(exsolution)
79% perthite
21% antiperthite
perthite contains
14% exsolution
lamellae
antiperthite contains
12% exsolution
lamellae

# $KAlSi_3O_8$-$NaAlSi_3O_8$ System at 500 MPa (5 Kbar)

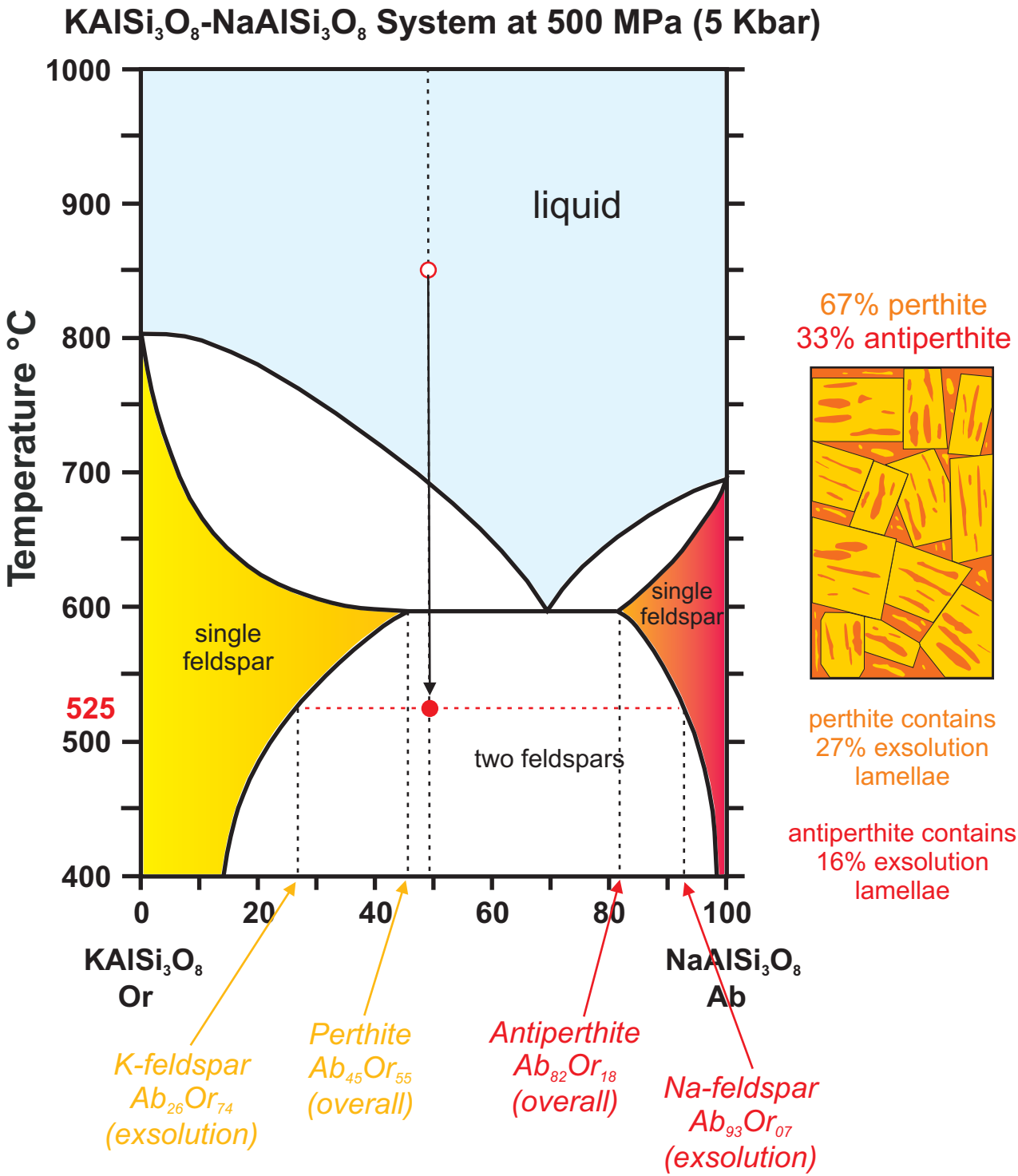


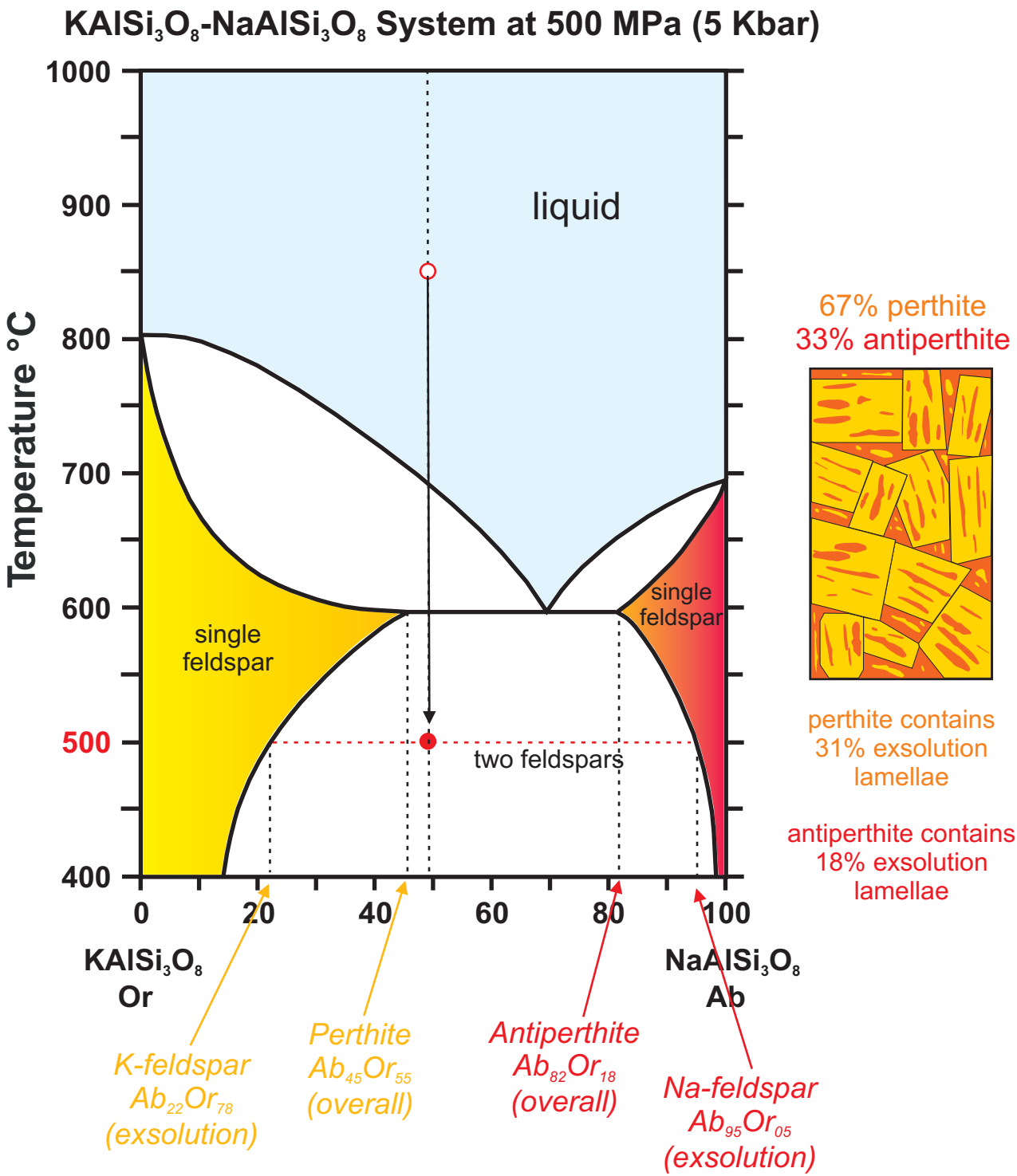

70% perthite
30% antiperthite



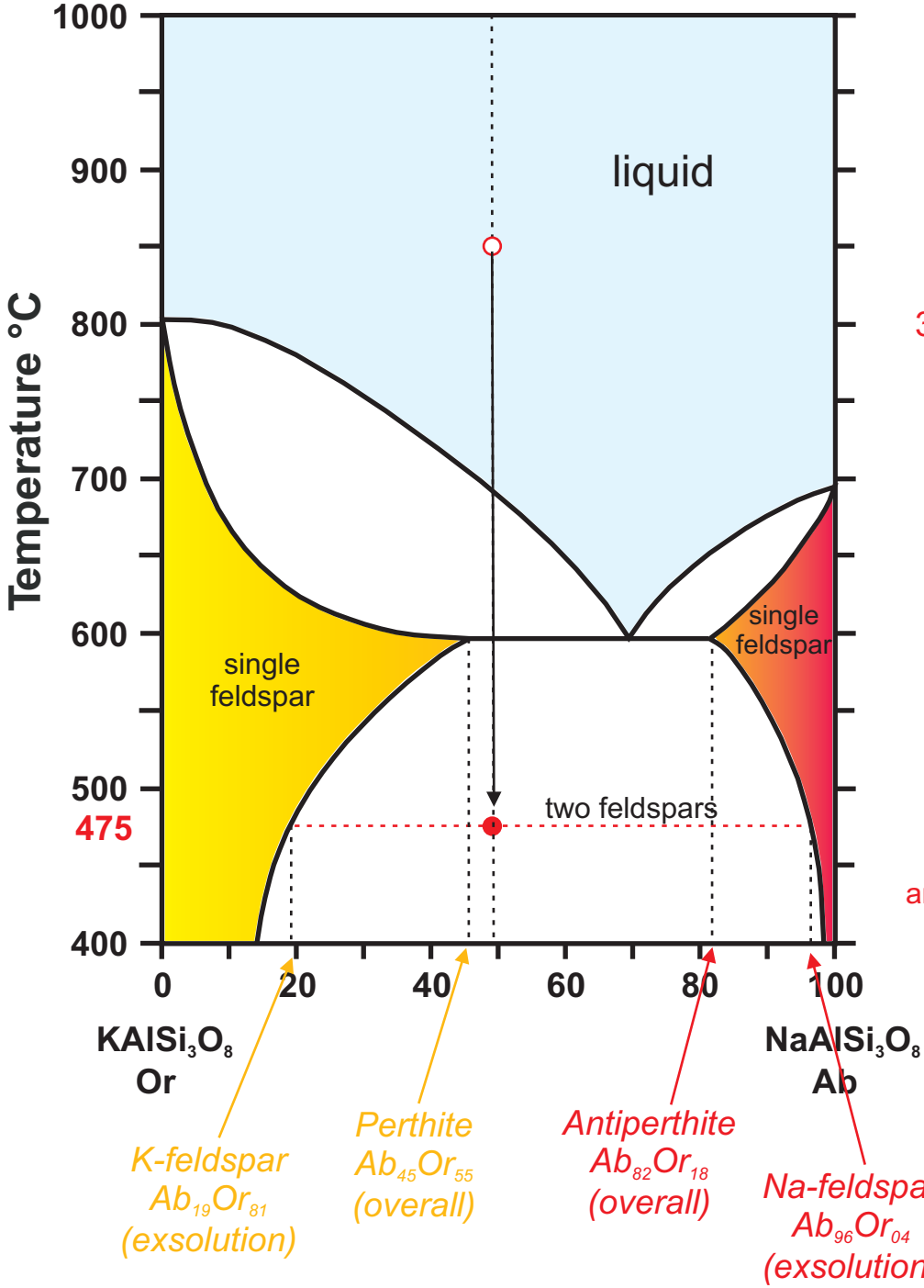
perthite contains 22% exsolution lamellae

antiperthite contains 14% exsolution lamellae

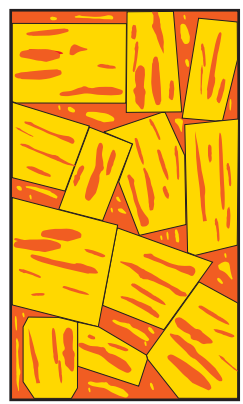

KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
700
600
525
500
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
Ab
K-feldspar
Ab26Or74
(exsolution)
Perthite
Ab45Or55
(overall)
Antiperthite
Ab82Or18
(overall)
Na-feldspar
Ab93Or07
(exsolution)
67% perthite
33% antiperthite
perthite contains
27% exsolution
lamellae
antiperthite contains
16% exsolution
lamellae


KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
700
600
500
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
Ab
K-feldspar
Ab22Or78
(exsolution)
Perthite
Ab45Or55
(overall)
Antiperthite
Ab82Or18
(overall)
Na-feldspar
Ab95Or05
(exsolution)
67% perthite
33% antiperthite
perthite contains
31% exsolution
lamellae
antiperthite contains
18% exsolution
lamellae

# $KAlSi_3O_8$-$NaAlSi_3O_8$ System at 500 MPa (5 Kbar)

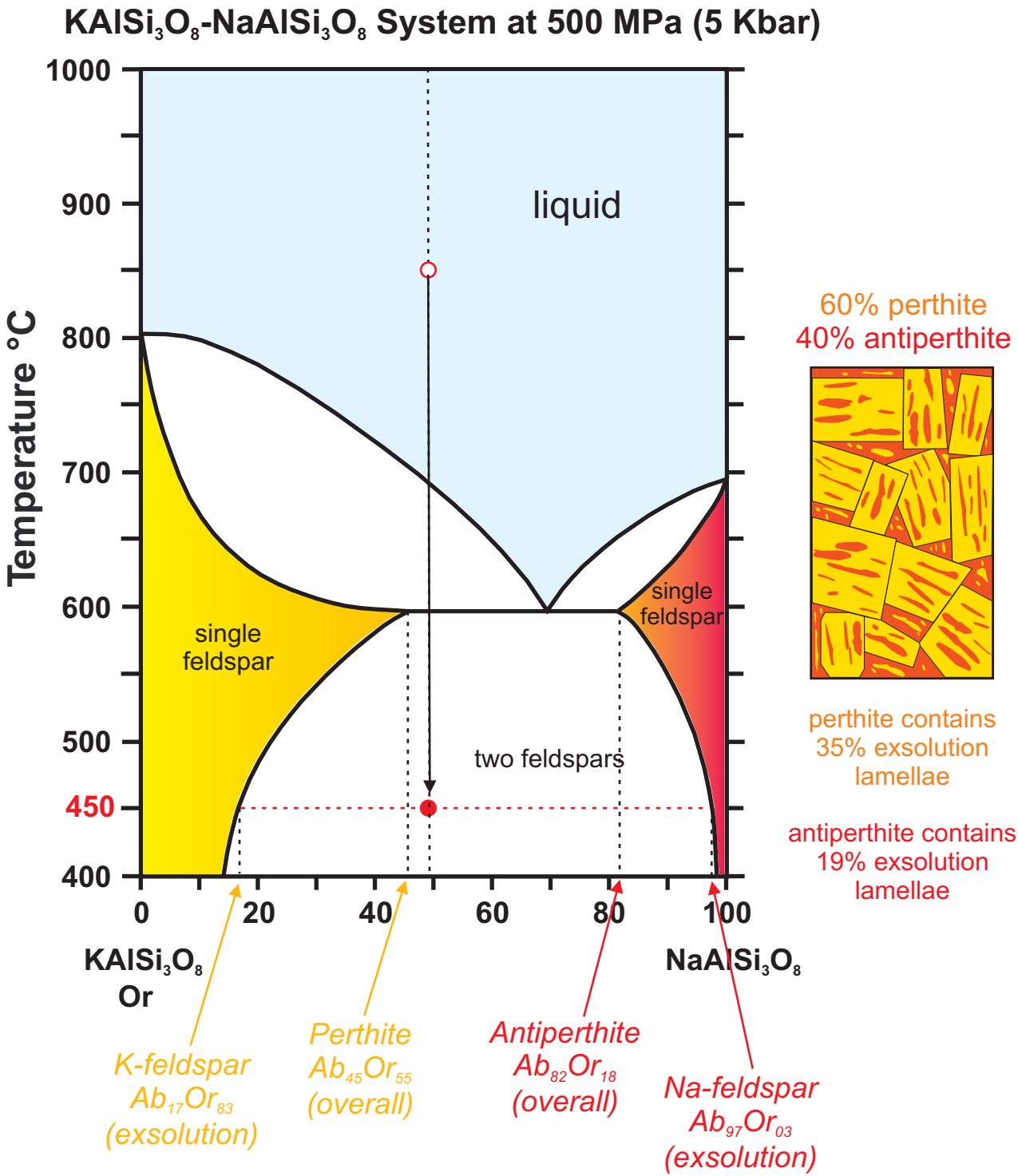



61% perthite
39% antiperthite

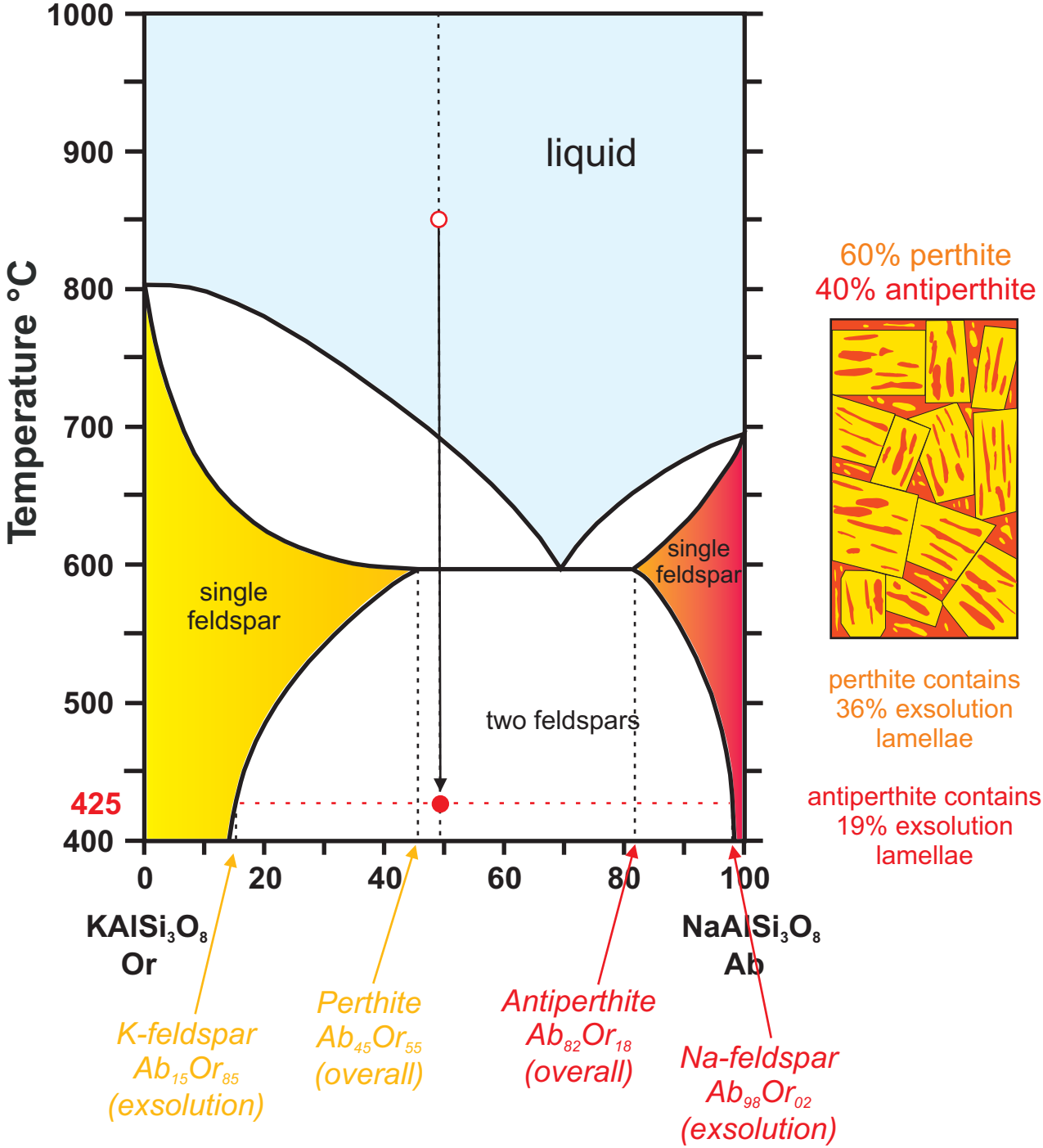


perthite contains 32% exsolution lamellae

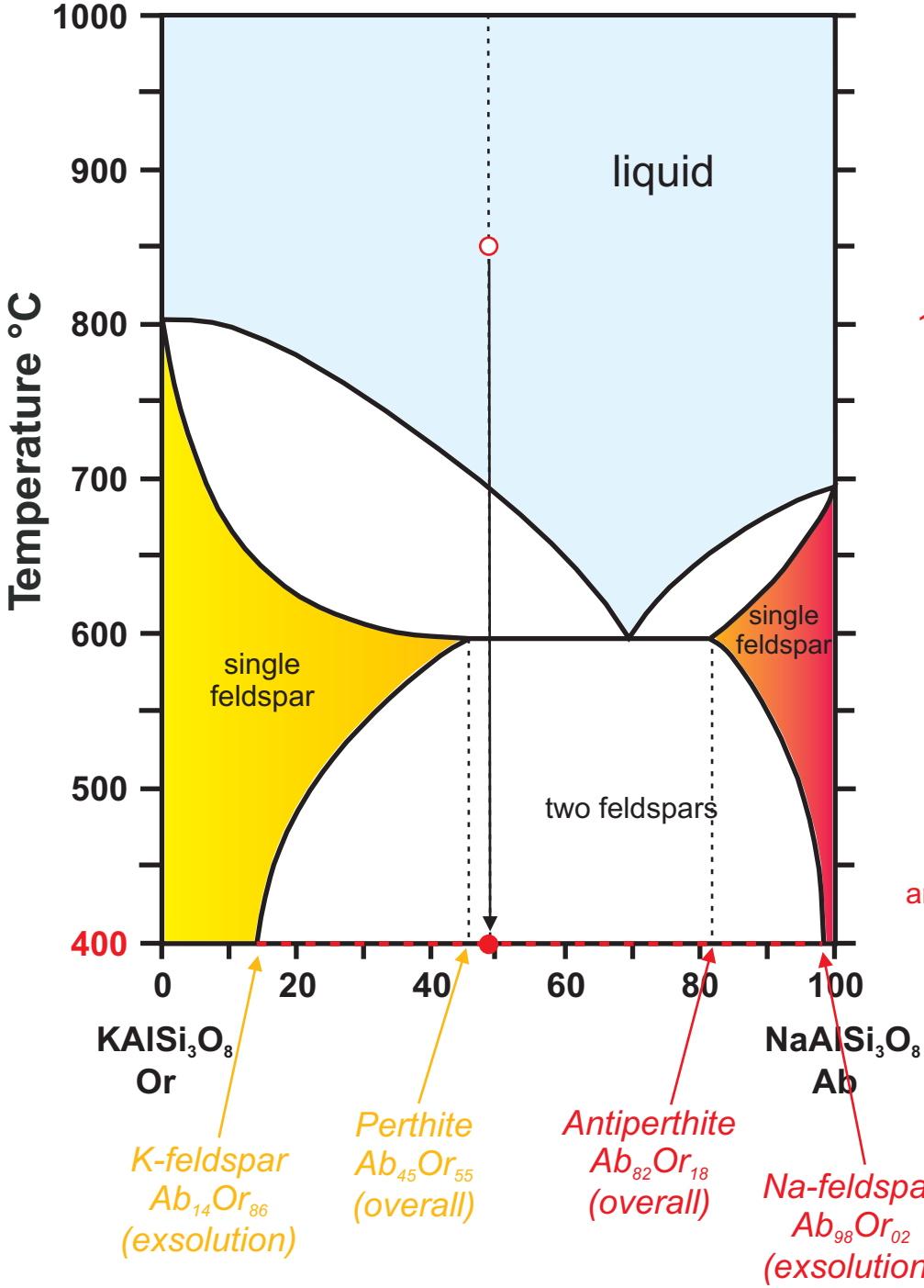
antiperthite contains 18% exsolution lamellae


KAlSi3O8-NaAlSi3O8 System at 500 MPa (5 Kbar)
Temperature °C
1000
900
800
700
600
500
450
400
liquid
single feldspar
single feldspar
two feldspars
0
20
40
60
80
100
KAlSi3O8
Or
NaAlSi3O8
K-feldspar
Ab17Or83
(exsolution)
Perthite
Ab45Or55
(overall)
Antiperthite
Ab82Or18
(overall)
Na-feldspar
Ab97Or03
(exsolution)
60% perthite
40% antiperthite
perthite contains
35% exsolution
lamellae
antiperthite contains
19% exsolution
lamellae

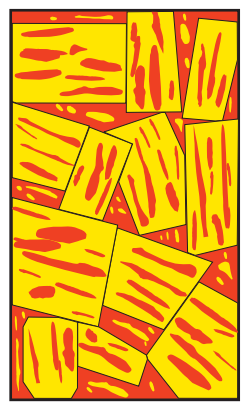
# $KAlSi_3O_8$-$NaAlSi_3O_8$ System at 500 MPa (5 Kbar)



# $KAlSi_3O_8$-$NaAlSi_3O_8$ System at 500 MPa (5 Kbar)




89% perthite
11% antiperthite



perthite contains 37% exsolution lamellae

antiperthite contains 20% exsolution lamellae