Chaohui Liu, Guochun Zhao, Fulai Liu, Wang Xu, and Xun Sun, 2022, New geochronological results from late Mesoproterozoic to early Neoproterozoic successions in the eastern North China Craton and implications for the reconstruction of Rodinia: GSA Bulletin, https://doi.org/10.1130/B36645.1.

Supplemental Material

Figure S1. Cathodoluminescence images of all the analyzed detrital zircon grains from the Penglai Group in this study.

Figure S2. Cathodoluminescence images of all the analyzed detrital zircon grains from the Tumen Group in this study.

Figure S3. Cathodoluminescence images of all the analyzed detrital zircon grains from the Huaibei Group in this study.

Figure S4. Probability density plots of single sample of the Penglai Group in this study.

Figure S5. Probability density plots of single sample of the Tumen Group in this study.

Figure S6. Probability density plots of single sample of the Huaibei Group in this study.

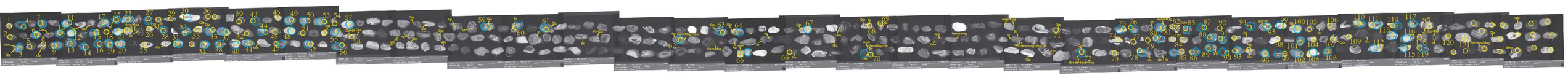
Figure S7. εHf(t) versus age for detrital zircon of the individual sample in this study.

Table S1. LA-ICPMS detrital zircon U–Pb dating results.

Table S2. MC-LA-ICPMS detrital zircon Lu-Hf isotopic results.

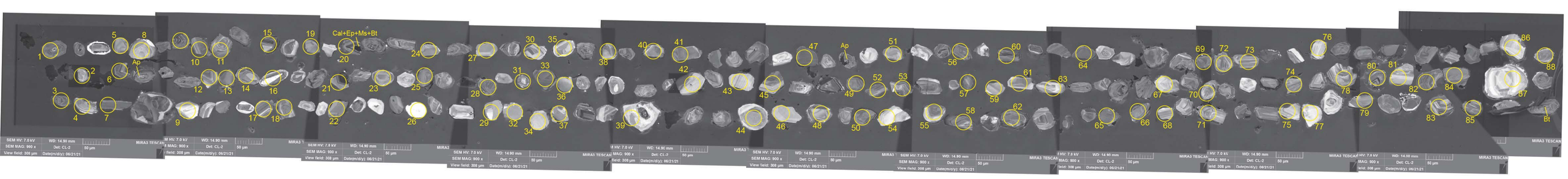
Table S3. Detrital zircon U-Pb age summary of the samples from the late Mesoproterozoic to early Neoproterozoic strta in the eastern North China Craton.

17JD002-1

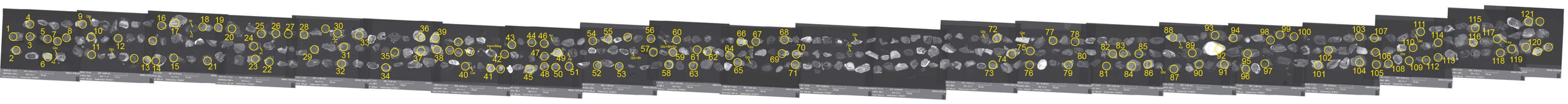


17JD009-1

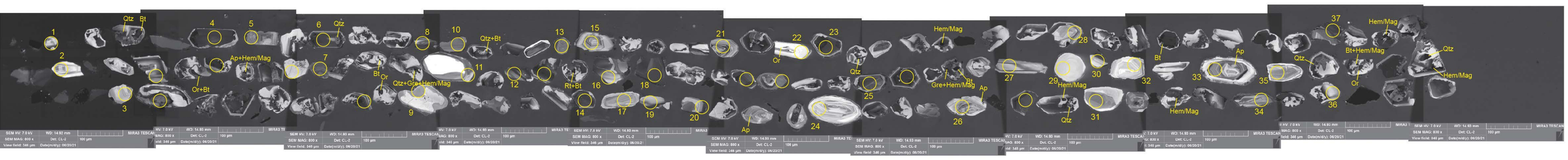
17JD017-1



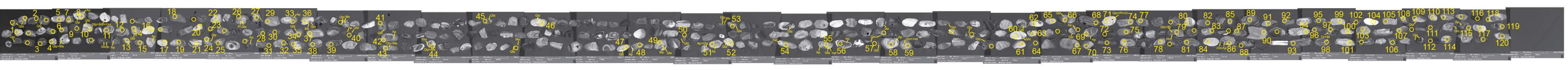
17JD018-1



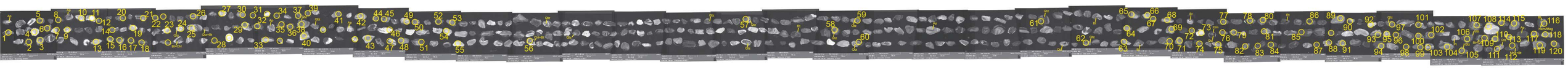
17JD031-1



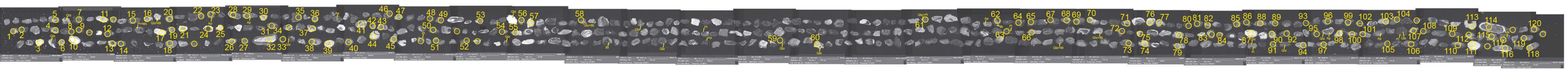
17JD033-1



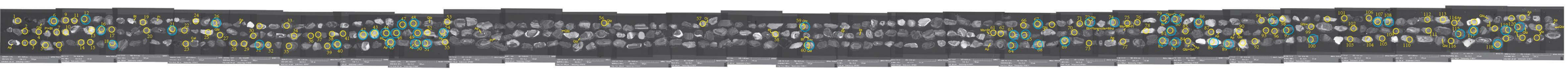
17JD034-1



17JD035-1



17JD037-1

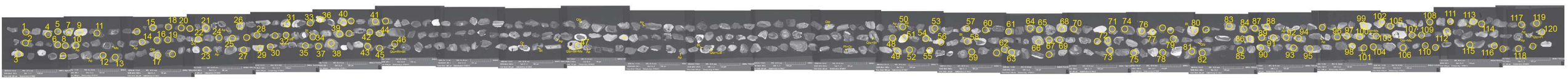


Yellow circle: U-Pb analyse spot Blue circle: Lu-Hf analyse spot

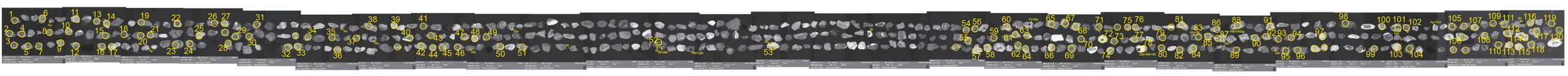
Qtz: quartz; Pl: Plagioclase; Bt: Biotite; Cal: calcite; Ap: apatite; Rt: rutile; Or: orthoclase; Ms: muscovite; Mzn: monazite; Grt: garnet; Chl: chlorite

Xtm: xenotime; Hem: hematite; Mag: magnetite

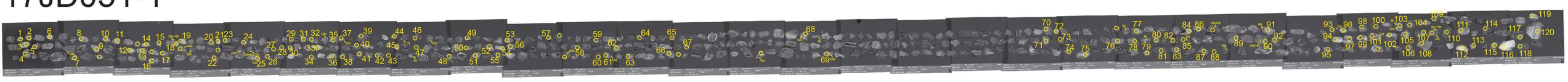
17LL045-1



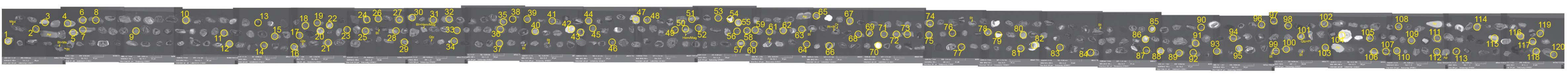
17LL049-1



17JD051-1

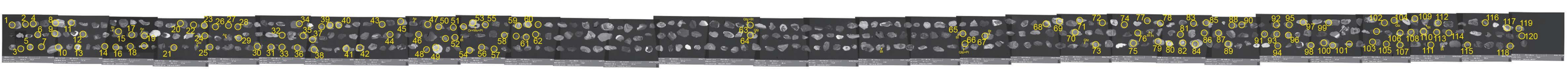


17JD062-1

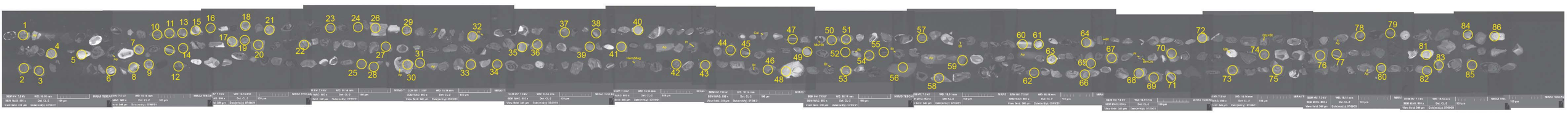


17JD067-1

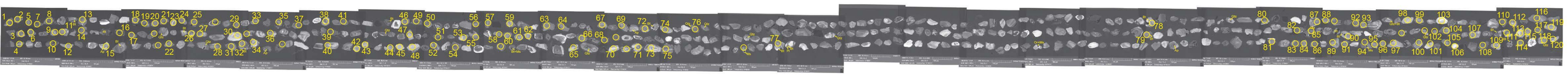
17JD068-1



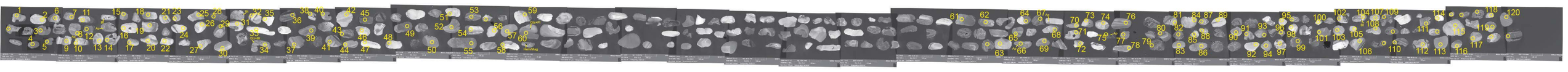
17LL077-1



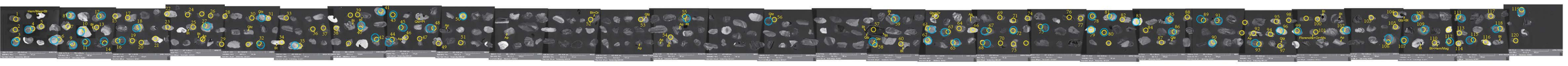
17LL081-1



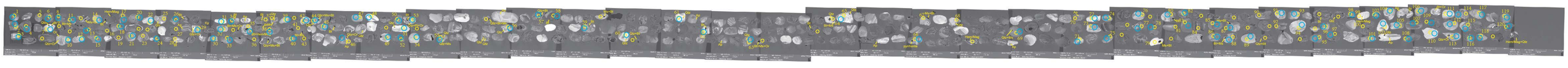
17JD099-1



17JD101-1



17JD102-1

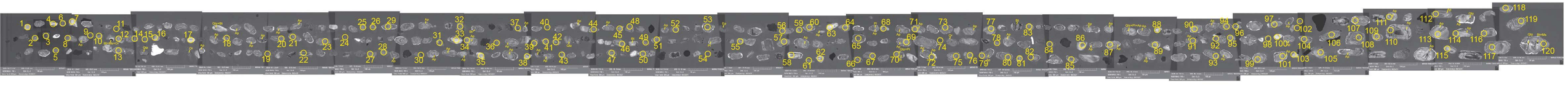


Yellow circle: U-Pb analyse spot Blue circle: Lu-Hf analyse spot

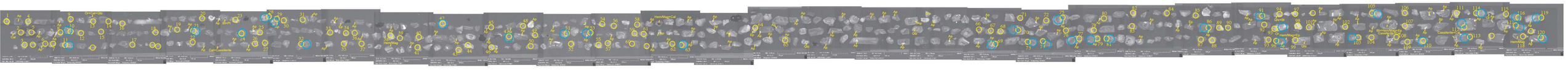
Qtz: quartz; Pl: Plagioclase; Bt: Biotite; Cal: calcite; Ap: apatite; Rt: rutile; Or: orthoclase; Ms: muscovite; Mzn: monazite; Grt: garnet; Chl: chlorite

Xtm: xenotime; Hem: hematite; Mag: magnetite

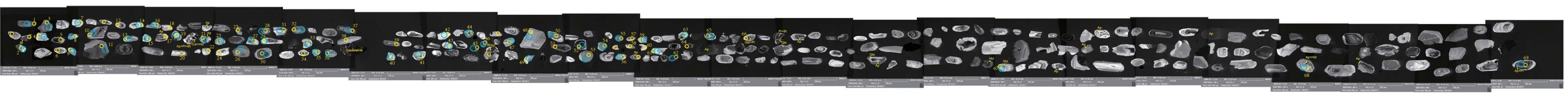
17SD063-1

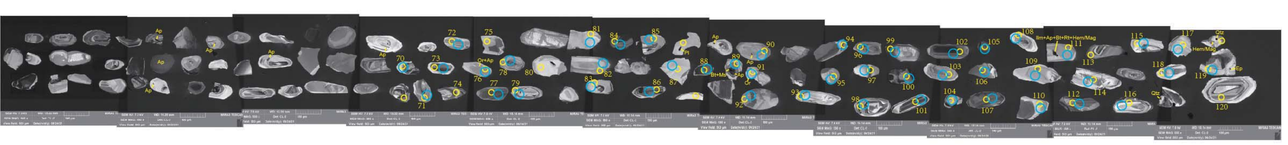


17SD064-2



17SD067-1

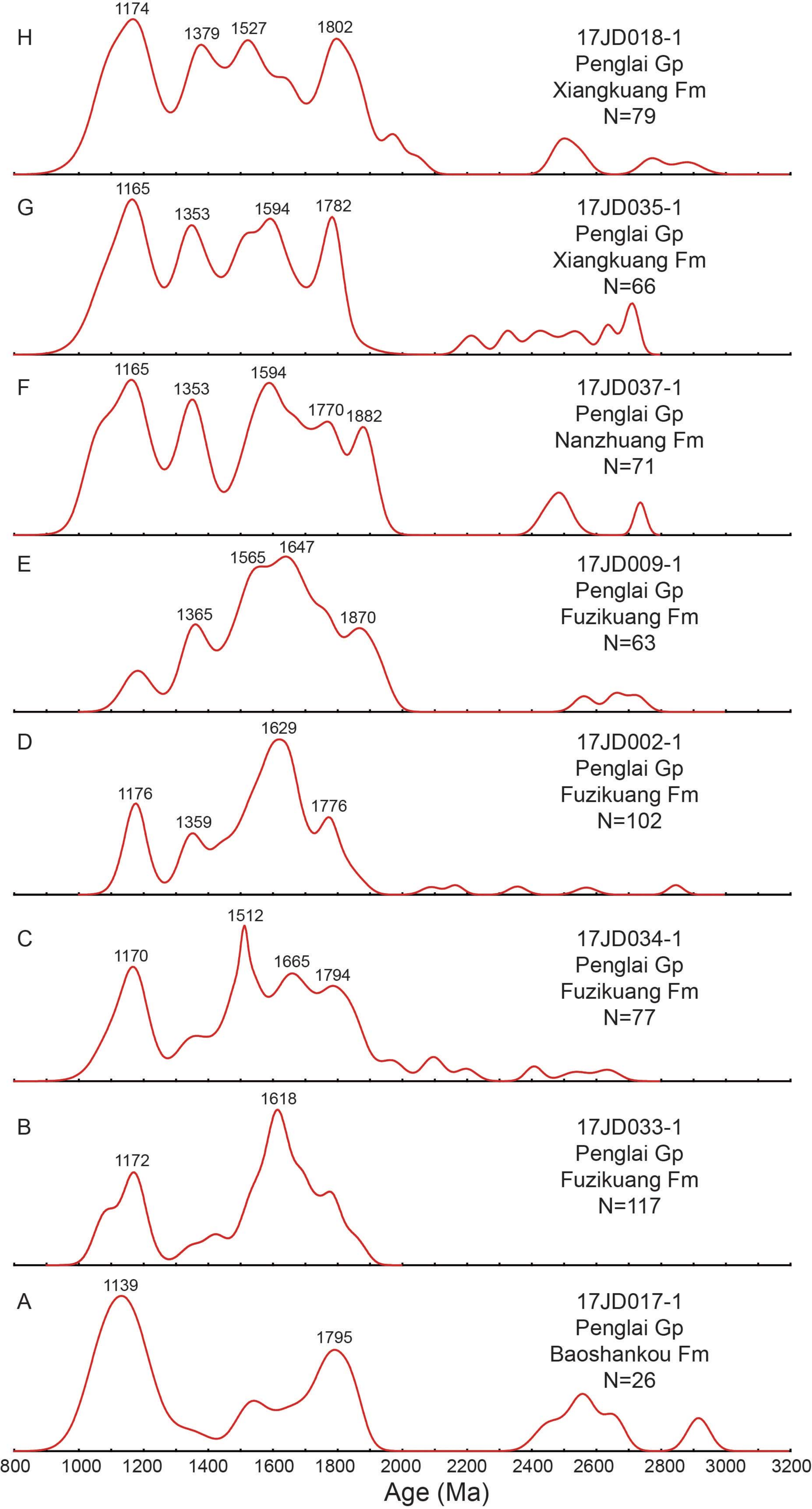


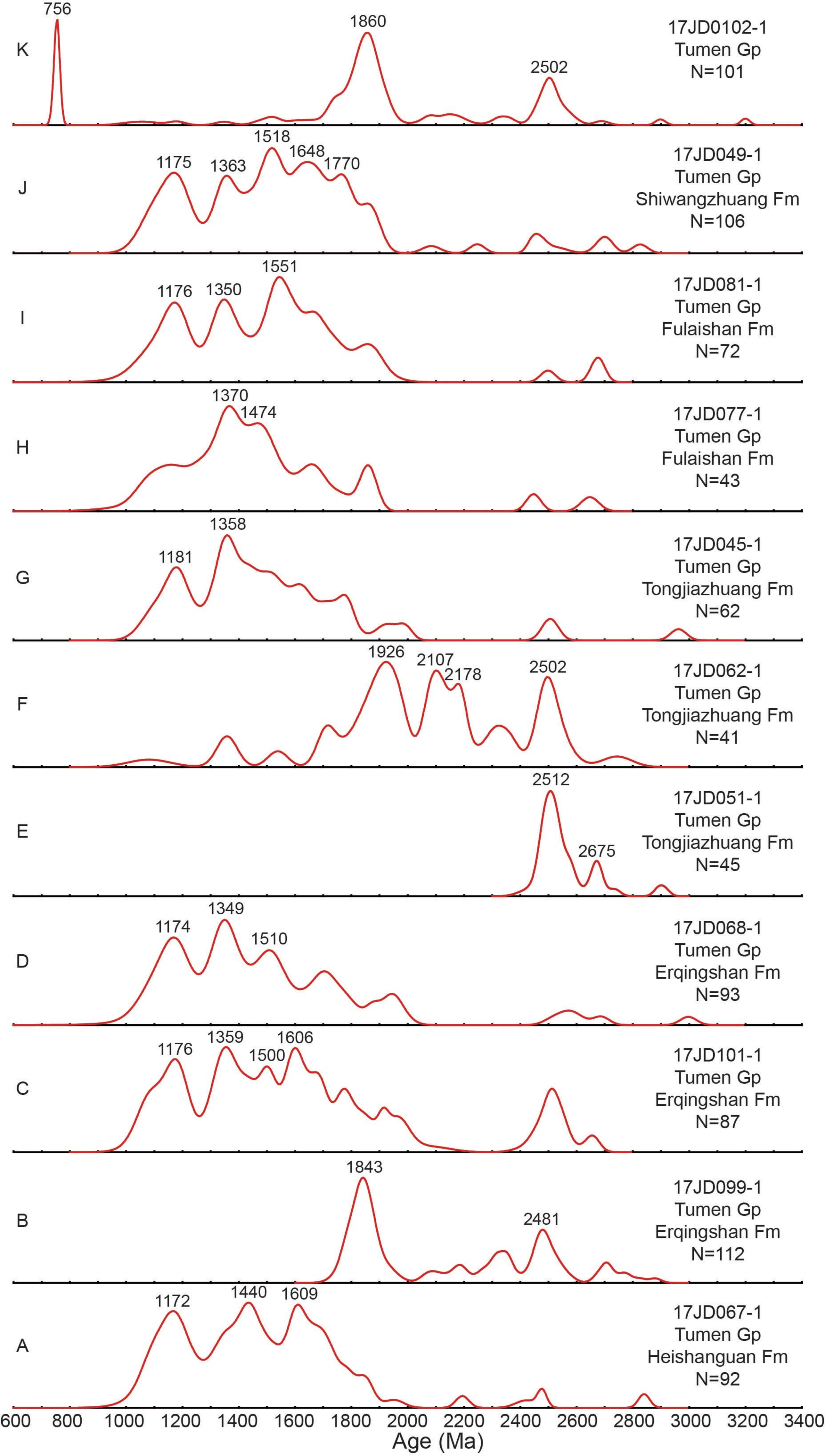


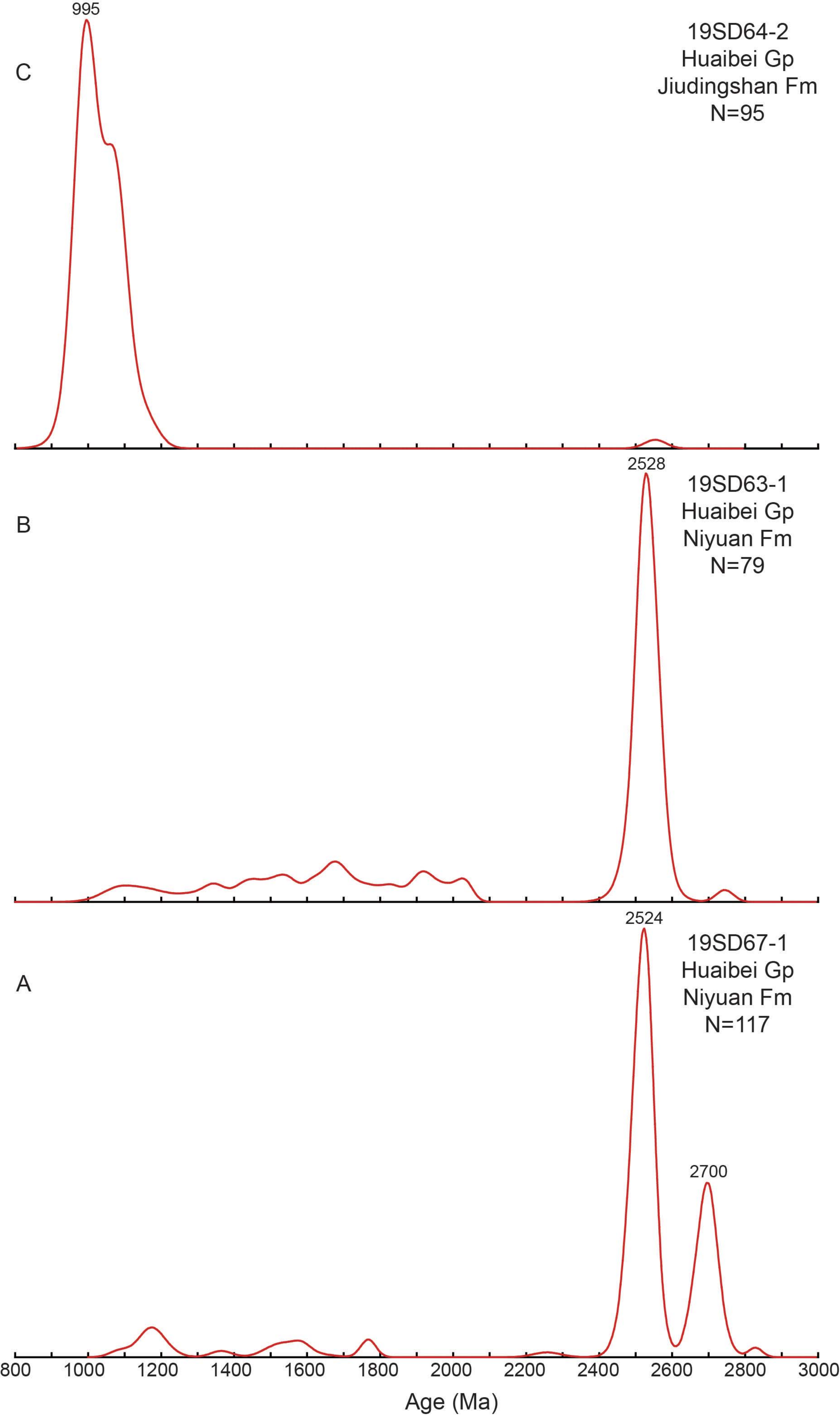
Yellow circle: U-Pb analyse spot Blue circle: Lu-Hf analyse spot

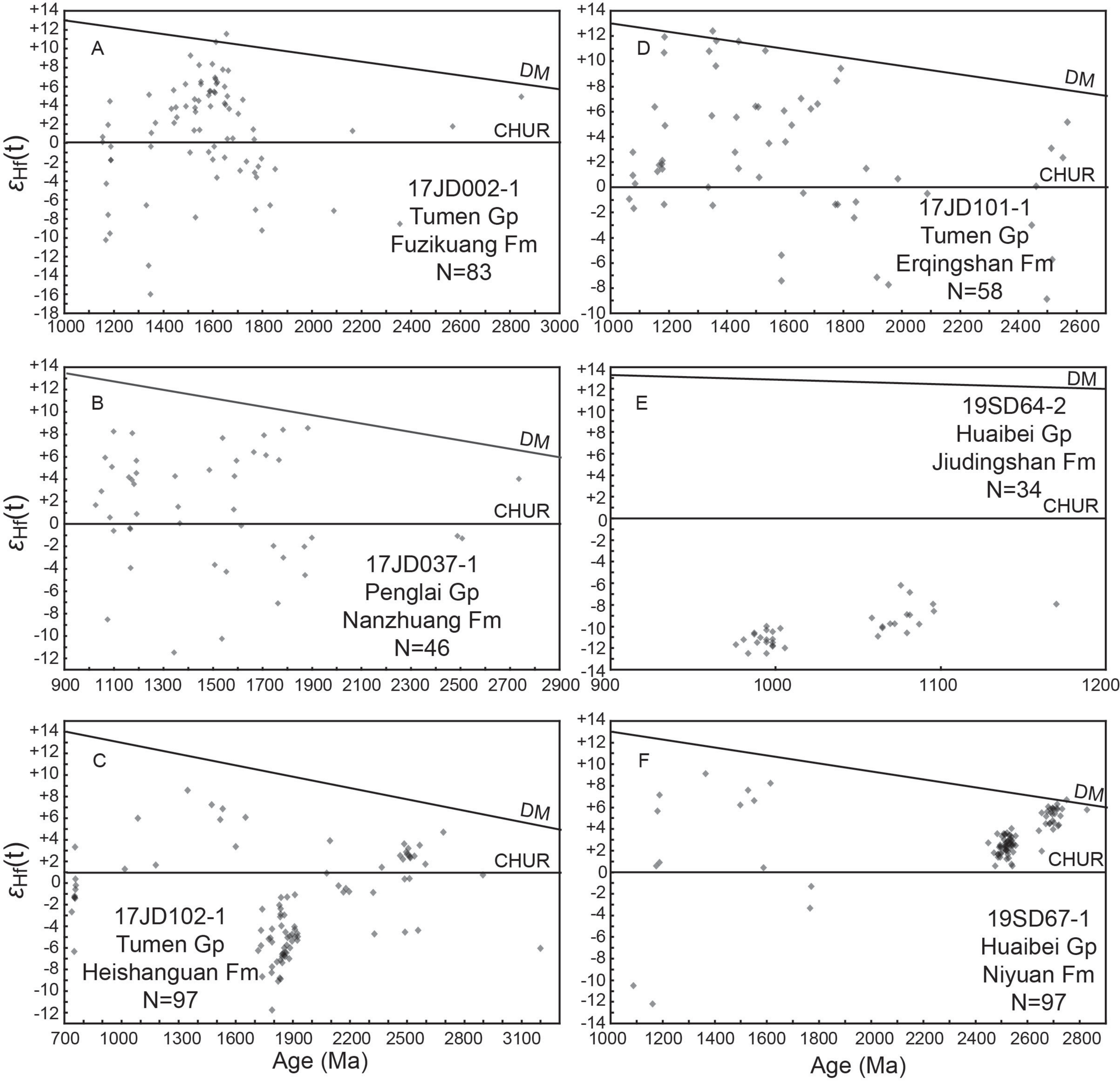
Qtz: quartz; Pl: Plagioclase; Bt: Biotite; Cal: calcite; Ap: apatite; Rt: rutile; Or: orthoclase; Ms: muscovite; Mzn: monazite; Grt: garnet; Chl: chlorite

Xtm: xenotime; Hem: hematite; Mag: magnetite


H
1174
1379
1527
1802
17JD018-1
Penglai Gp
Xiangkuang Fm
N=79
G
1165
1353
1594
1782
17JD035-1
Penglai Gp
Xiangkuang Fm
N=66
F
1165
1353
1594
1770
1882
17JD037-1
Penglai Gp
Nanzhuang Fm
N=71
E
1565
1647
1365
1870
17JD009-1
Penglai Gp
Fuzikuang Fm
N=63
D
1629
1176
1359
1776
17JD002-1
Penglai Gp
Fuzikuang Fm
N=102
C
1512
1170
1665
1794
17JD034-1
Penglai Gp
Fuzikuang Fm
N=77
B
1618
1172
17JD033-1
Penglai Gp
Fuzikuang Fm
N=117
A
1139
1795
17JD017-1
Penglai Gp
Baoshankou Fm
N=26
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
3000
3200
Age (Ma)


K
756
1860
2502
17JD0102-1
Tumen Gp
N=101
J
1175
1363
1518
1648
1770
17JD049-1
Tumen Gp
Shiwangzhuang Fm
N=106
I
1176
1350
1551
17JD081-1
Tumen Gp
Fulaishan Fm
N=72
H
1370
1474
17JD077-1
Tumen Gp
Fulaishan Fm
N=43
G
1181
1358
17JD045-1
Tumen Gp
Tongjiazhuang Fm
N=62
F
1926
2107
2178
2502
17JD062-1
Tumen Gp
Tongjiazhuang Fm
N=41
E
2512
2675
17JD051-1
Tumen Gp
Tongjiazhuang Fm
N=45
D
1174
1349
1510
17JD068-1
Tumen Gp
Erqingshan Fm
N=93
C
1176
1359
1500
1606
17JD101-1
Tumen Gp
Erqingshan Fm
N=87
B
1843
2481
17JD099-1
Tumen Gp
Erqingshan Fm
N=112
A
1172
1440
1609
17JD067-1
Tumen Gp
Heishanguan Fm
N=92
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
3000
3200
3400
Age (Ma)


995
C
19SD64-2
Huaibei Gp
Jiudingshan Fm
N=95
2528
B
19SD63-1
Huaibei Gp
Niyuan Fm
N=79
2524
A
19SD67-1
Huaibei Gp
Niyuan Fm
N=117
2700
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
3000
Age (Ma)


A
DM
CHUR
17JD002-1
Tumen Gp
Fuzikuang Fm
N=83
D
DM
CHUR
17JD101-1
Tumen Gp
Erqingshan Fm
N=58
B
DM
CHUR
17JD037-1
Penglai Gp
Nanzhuang Fm
N=46
E
DM
19SD64-2
Huaibei Gp
Jiudingshan Fm
N=34
CHUR
C
DM
CHUR
17JD102-1
Tumen Gp
Heishanguan Fm
N=97
F
DM
CHUR
19SD67-1
Huaibei Gp
Niyuan Fm
N=97
εHf(t)
Age (Ma)