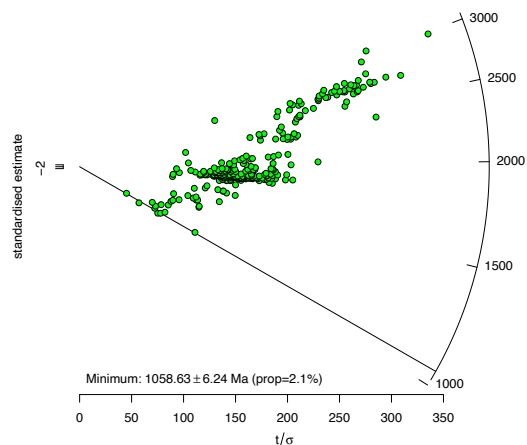


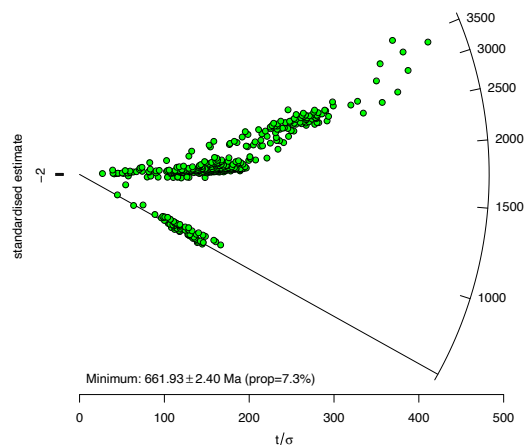
04MC155

central age = 1974.0 ± 24.4 (n=279)
 MSWD = 1200, $p(\chi^2) = 0$
 dispersion = $20.66 \pm 0.88\%$



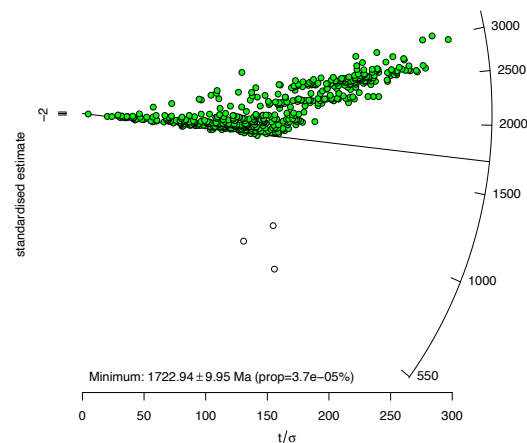
19MC025

central age = 1729.5 ± 73.4 (n=406)
 MSWD = 4200, $p(\chi^2) = 0$
 dispersion = $42.73 \pm 3.00\%$



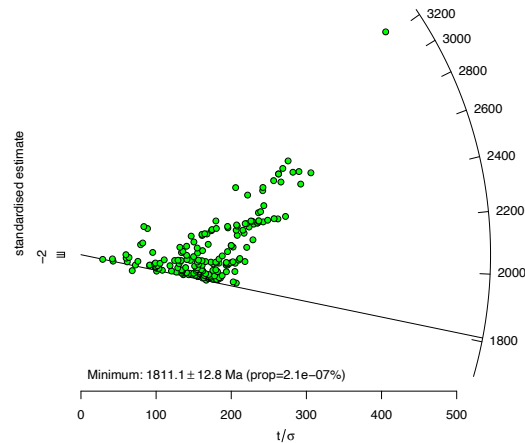
19MC027

central age = 2114.1 ± 29.6 (n=518)
 MSWD = 630, $p(\chi^2) = 0$
 dispersion = $15.87 \pm 0.99\%$



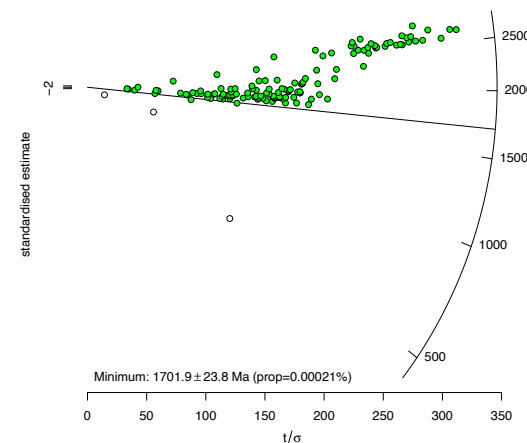
19MC030

central age = 2060.4 ± 35.4 (n=186)
 MSWD = 630, $p(\chi^2) = 0$
 dispersion = $11.70 \pm 1.22\%$



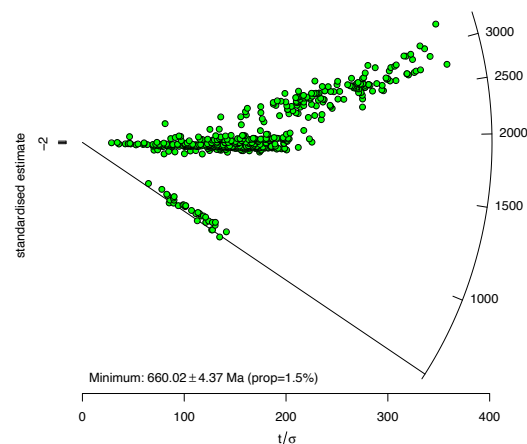
19MC051

central age = 2075.5 ± 54.7 (n=132)
 MSWD = 800, $p(\chi^2) = 0$
 dispersion = $15.10 \pm 1.87\%$



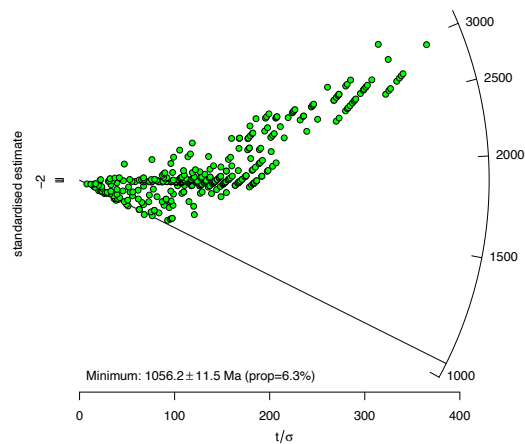
19MC023

central age = 1935.4 ± 50.3 (n=536)
 MSWD = 2000, $p(\chi^2) = 0$
 dispersion = $30.06 \pm 1.84\%$



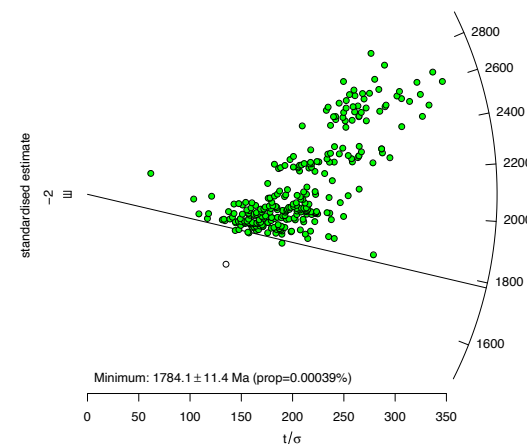
19MC035

central age = 1871.9 ± 48.3 (n=389)
 MSWD = 1000, $p(\chi^2) = 0$
 dispersion = $25.38 \pm 1.83\%$



00JN17-6

central age = 2094.6 ± 30.9 (n=285)
 MSWD = 800, $p(\chi^2) = 0$
 dispersion = $12.43 \pm 1.04\%$



*Recycled
Snowcap?*

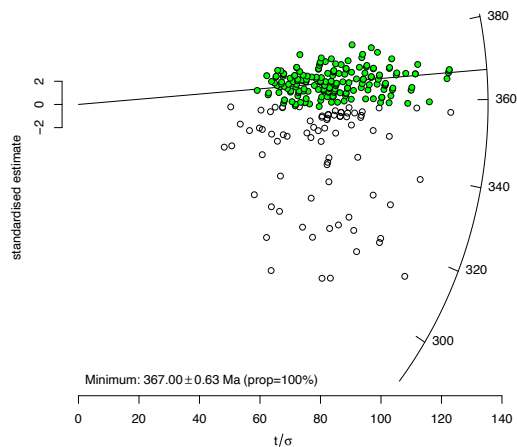
Figure S4 – part 1

Snowcap assemblage

Kroeger, E.D.L., McClelland, W.C., Colpron, M., Piercey, S.J., and Gehrels, G.E., 2023, Detrital zircon U-Pb and Hf isotope signature of Carboniferous and older strata of the Yukon-Tanana terrane in Yukon, Canadian Cordillera: Implications for terrane correlations and the onset of Late Devonian arc magmatism: *Geosphere*, v. 19, <https://doi.org/10.1130/GES02607.1>.

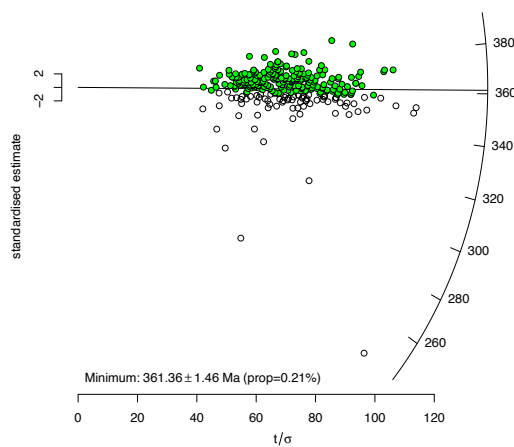
18MC016

central age = 367.00 ± 0.69 (n=187)
 MSWD = 1.2, $p(\chi^2) = 0.048$
 dispersion = $0.52 \pm 0.32\%$



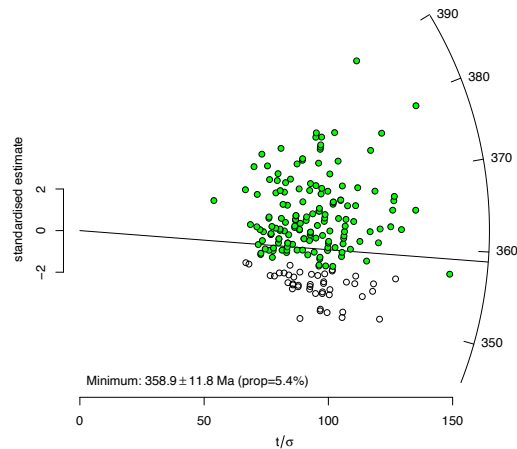
18MC018

central age = 368.29 ± 1.00 (n=221)
 MSWD = 2, $p(\chi^2) = 2.2e-16$
 dispersion = $1.40 \pm 0.27\%$

*North River formation*

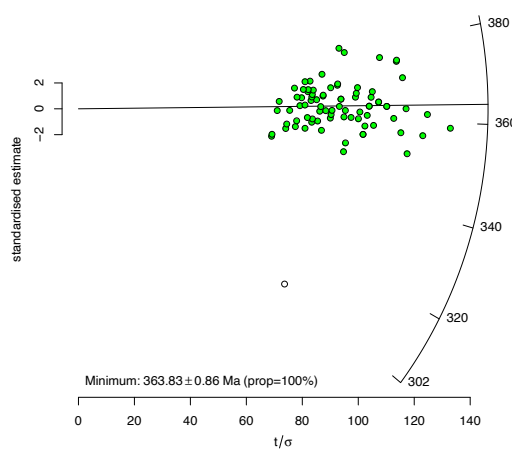
18MC013

central age = 365.29 ± 1.07 (n=154)
 MSWD = 3, $p(\chi^2) = 0$
 dispersion = $1.46 \pm 0.26\%$



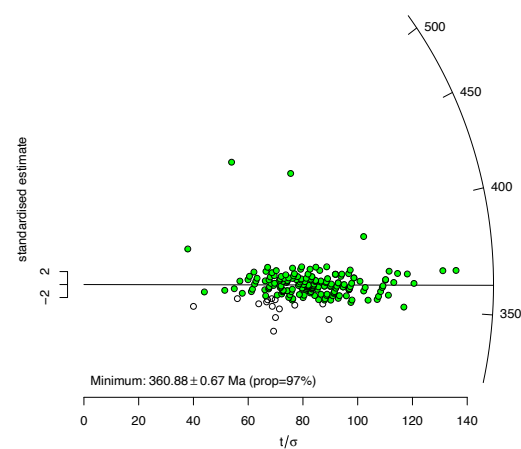
18MC019

central age = 363.83 ± 1.41 (n=81)
 MSWD = 2.7, $p(\chi^2) = 1.4e-14$
 dispersion = $1.36 \pm 0.35\%$



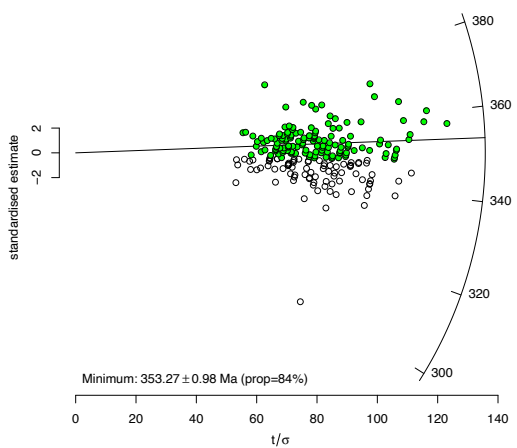
18MC020

central age = 362.38 ± 1.75 (n=183)
 MSWD = 5.7, $p(\chi^2) = 0$
 dispersion = $3.01 \pm 0.37\%$

*Wolverine Lake Gp*

99MC033

central age = 354.55 ± 0.90 (n=141)
 MSWD = 1.4, $p(\chi^2) = 0.00064$
 dispersion = $0.83 \pm 0.32\%$



01MC265

central age = 355.66 ± 1.14 (n=107)
 MSWD = 2.4, $p(\chi^2) = 2.6e-14$
 dispersion = $1.25 \pm 0.30\%$

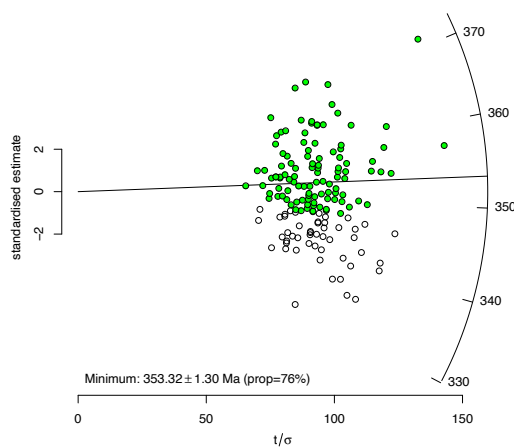
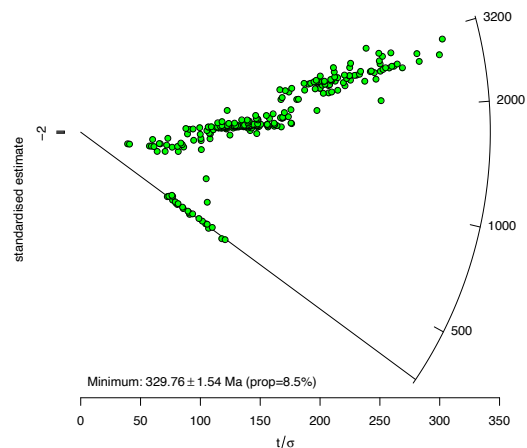
*Drury formation**Finlayson assemblage*

Figure S4 – part 3

Klinkit assemblage

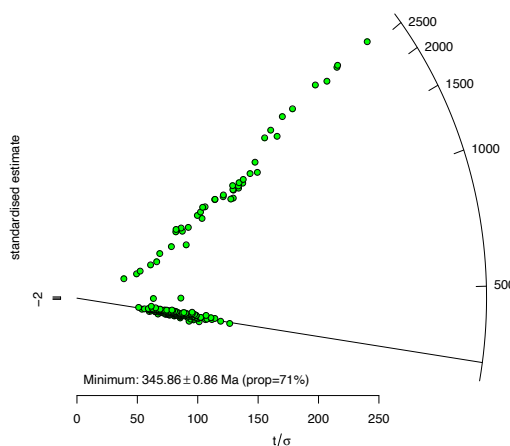
00JN1-1

central age = 1691 ± 125 (n=247)
 MSWD = 4100, $p(\chi^2) = 0$
 dispersion = $58.29 \pm 5.25\%$



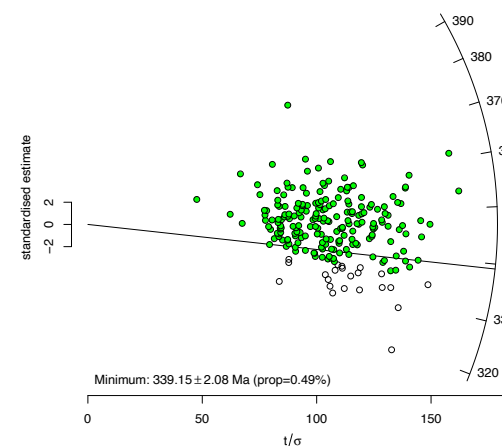
99MC079

central age = 472.2 ± 39.1 (n=247)
 MSWD = 6800, $p(\chi^2) = 0$
 dispersion = $65.01 \pm 5.85\%$



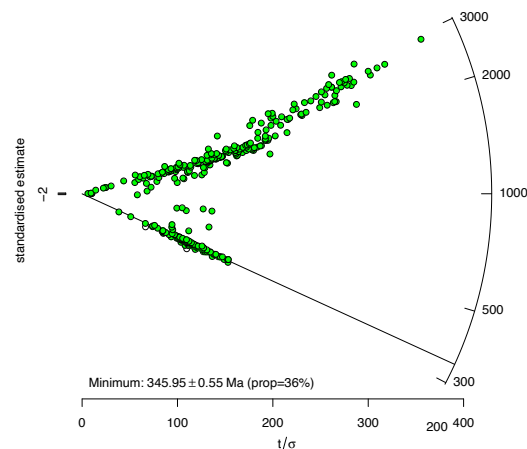
19MC029

central age = 348.44 ± 1.08 (n=204)
 MSWD = 5.3, $p(\chi^2) = 0$
 dispersion = $1.97 \pm 0.24\%$



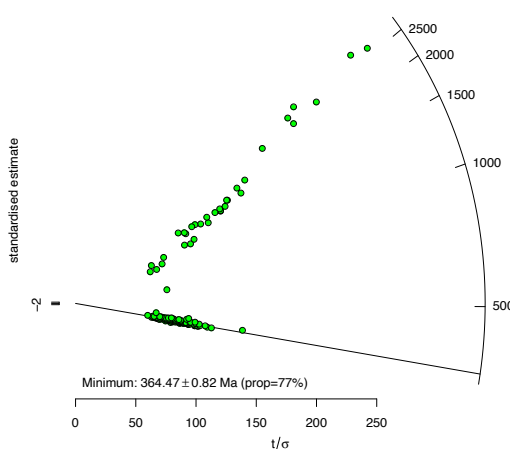
19MC008

central age = 1007.0 ± 94.8 (n=332)
 MSWD = 14000, $p(\chi^2) = 0$
 dispersion = $85.74 \pm 6.66\%$



04MC133

central age = 507.5 ± 52.0 (n=161)
 MSWD = 6700, $p(\chi^2) = 0$
 dispersion = $64.96 \pm 7.24\%$



18MC022

central age = 1927.4 ± 32.0 (n=282)
 MSWD = 1400, $p(\chi^2) = 0$
 dispersion = $27.89 \pm 1.18\%$

