

Updated 9/9/2021

There are two program packages:

(a) DIFF-CLrev.ZIP:

The programs within this folder allow one to calculate the Figs. 4 and 5 in Ganguly and Tirone, EPSL, 170, 131-140 (1999). The calculations are done using the input values of the dimensionless variable  $M$ , as defined by Eq. 13 in the EPSL paper. In this equation,  $(dT/dt)_T$  in the denominator should be read as  $(dT/dt)_{@T}$ . This is the same temperature that appears in the numerator.

To get an idea of the range of input  $M$  values to deal with, one should first calculate these values from Eq. (13) using  $T_o$  for  $T$  in the numerator and, accordingly, the initial cooling rate in the denominator. The sign of the value of  $dT/dt$  in the denominator is negative so that  $M$  is a (dimensionless) positive quantity.

(b) DIFF-CLB:

This is a new program package created recently (2011) to enable calculations of radial variation of  $T_c$  and age within a single crystal, and also the average values of these parameters for a crystal, using the Initial Cooling Rates as input values.

The example of the Input and Output files are self explanatory.

**Note:** The time taken for the calculation is so little that it may seem that nothing has happened after the program was run. To ensure that the program is working, note the output values in the existing Output file, then change the input parameters in the existing Input file and see if the values in the Output file has changed. If it had, then the program is working in your computer.