

極点図の対称操作

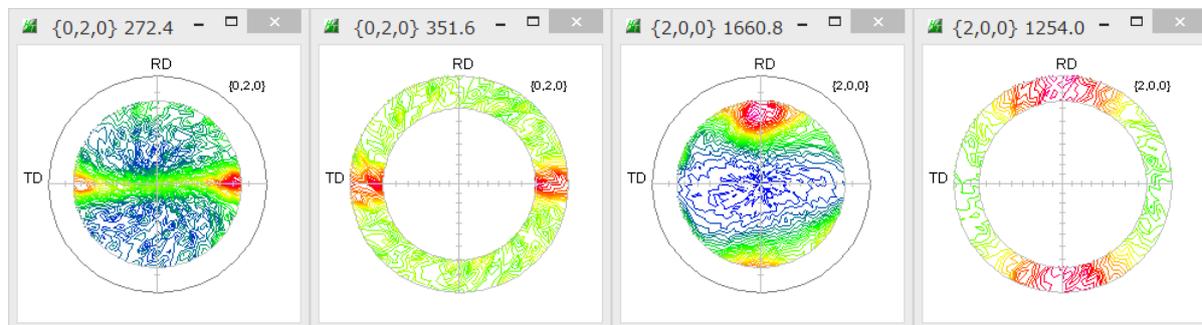
概要

高分子材料などでは、透過極点図、反射極点図を測定し、極点処理を行い、データの接続を行い完全極点図を作成し、極点図の解析を行う事があります。

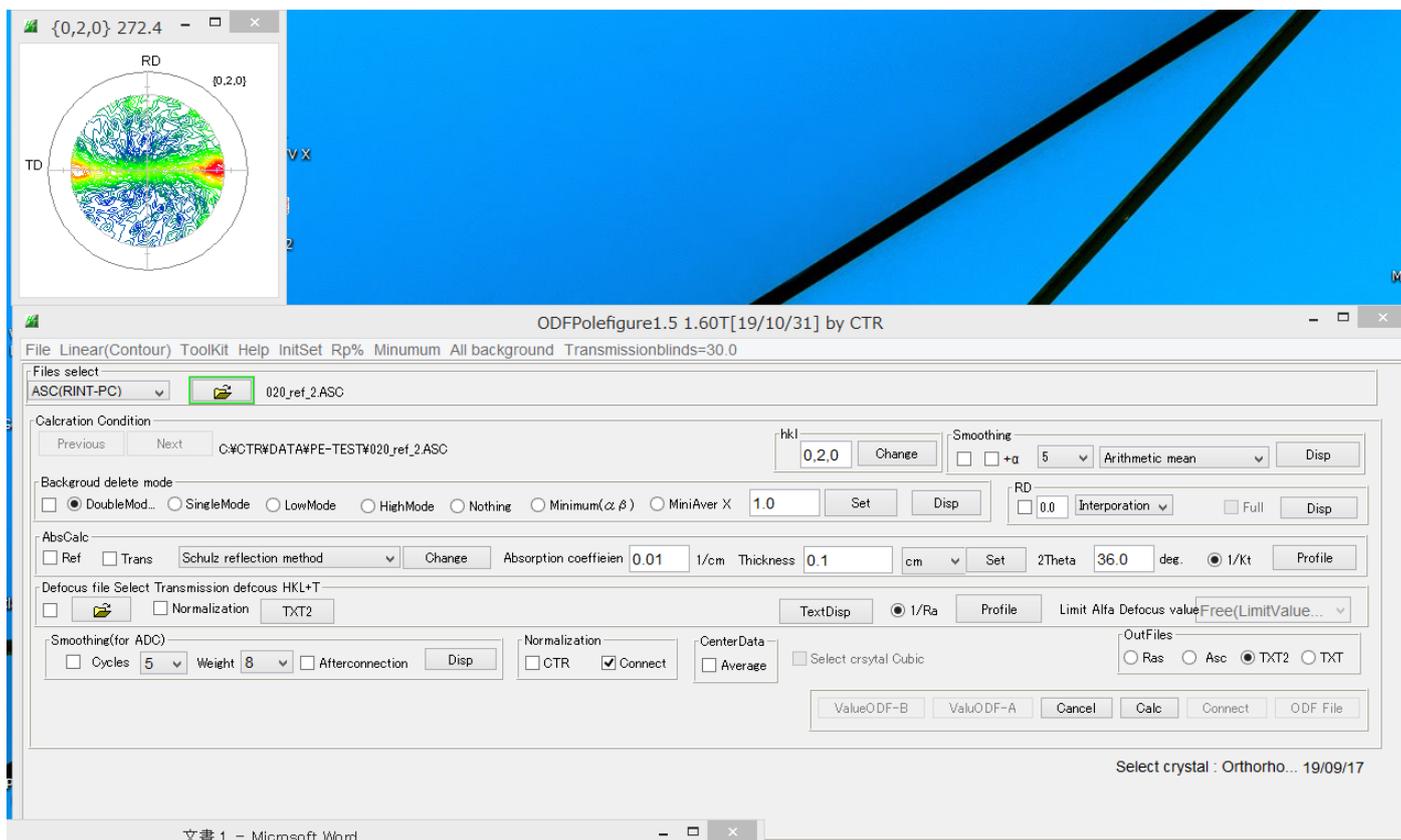
この時、極点図の対称操作（1/2対称、1/4対称）を行う事があります。

CTRソフトウェアで高分子材料の対称極点図を得る手順を説明します。

入力データ

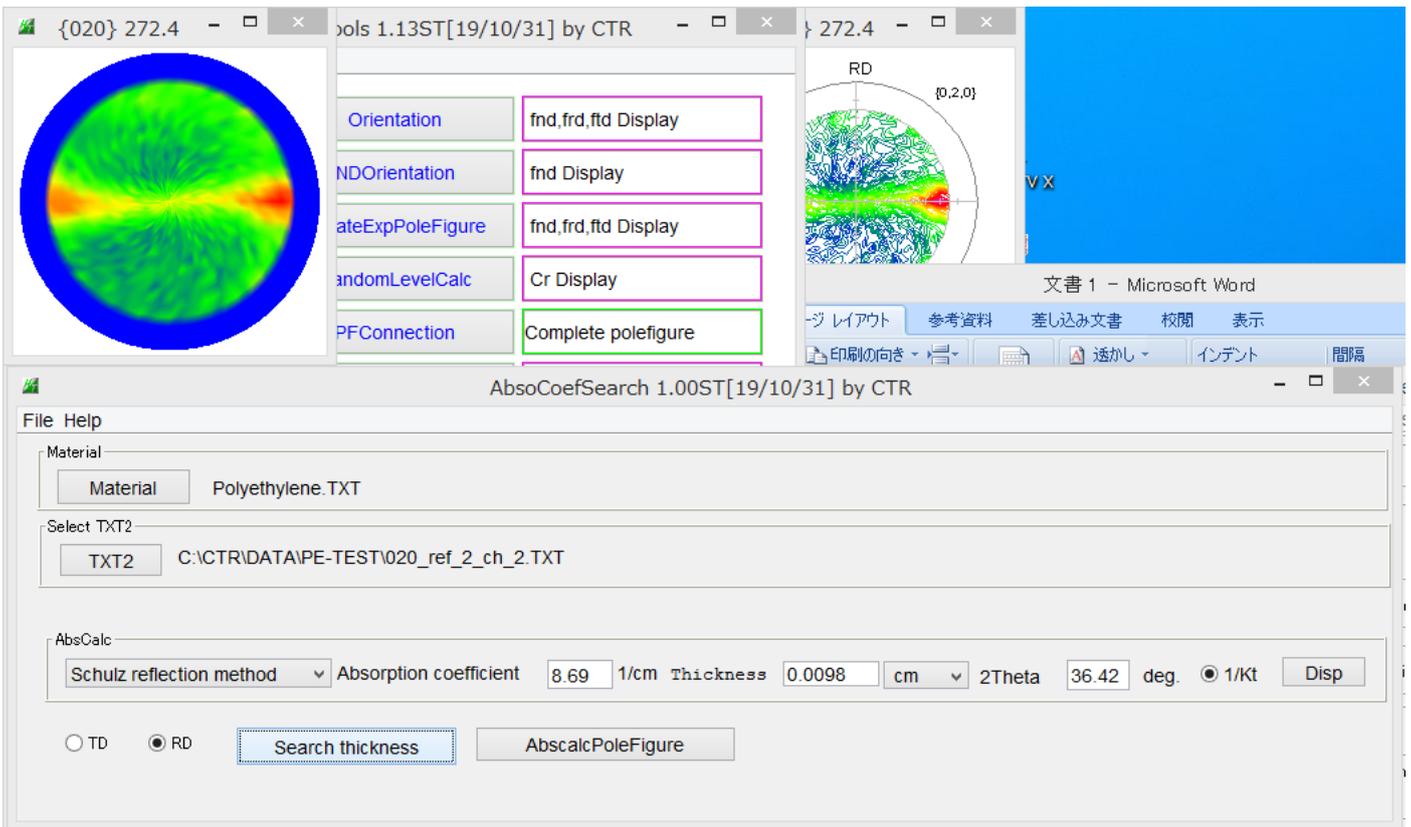


材料の厚さを得るために $\{0\ 2\ 0\}$ 極点図を TXT2 に変換

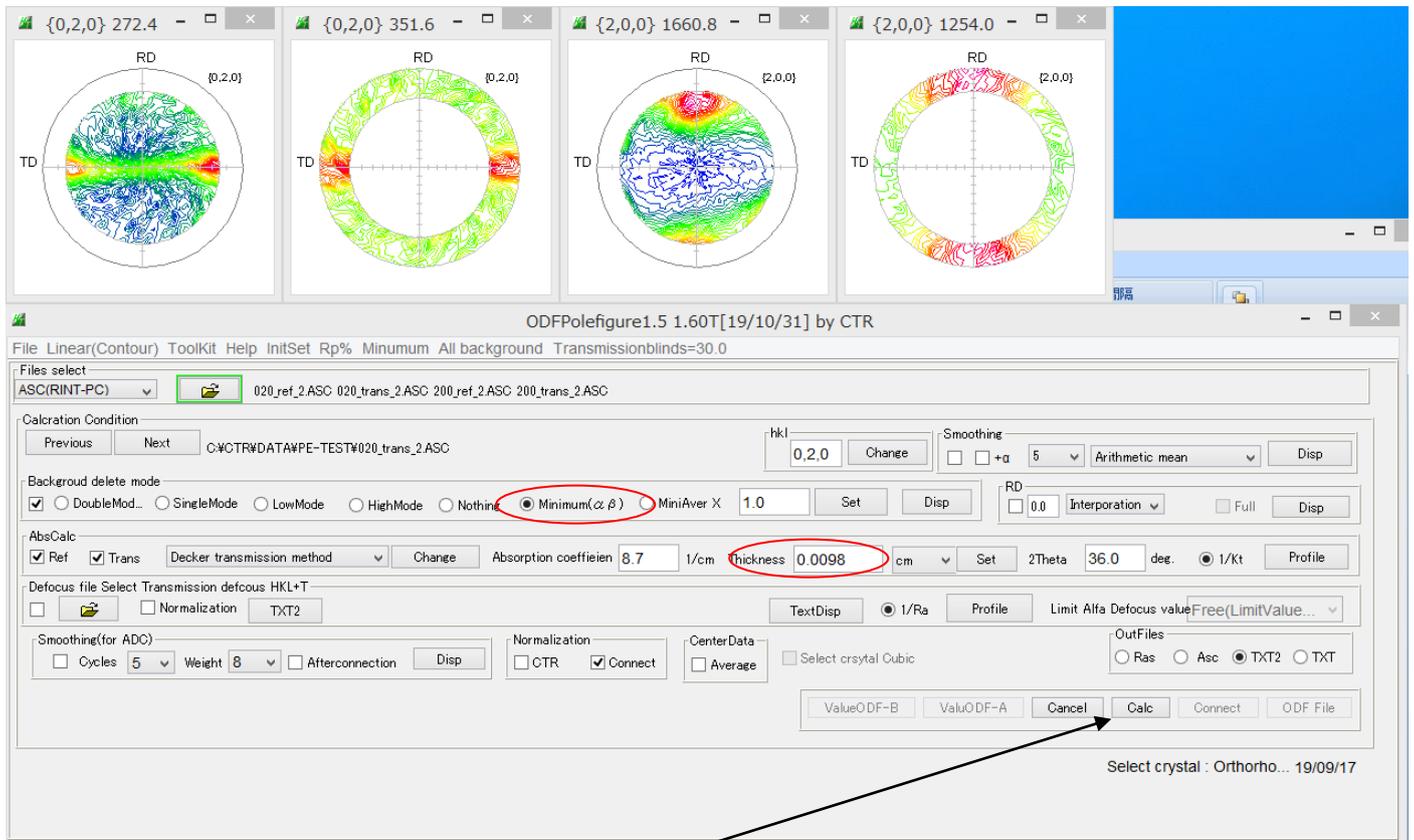


The screenshot shows the ODFPolefigure1.5 software interface. The main window displays a circular pole figure for the $\{0,2,0\}$ reflection. The software interface includes a menu bar (File, Linear(Contour), ToolKit, Help, InitSet, Rp%, Minumum, All background, Transmissionblinds=30.0) and a toolbar. The main panel contains various settings for calculation and data processing. The "Files select" section shows the input file "020_ref_2.ASC". The "Calculation Condition" section includes "hkl" (0,2,0) and "Smoothing" (5, Arithmetic mean). The "Background delete mode" section has "DoubleMod.." selected. The "AbsCalc" section includes "Schulz reflection method" and "Absorption coefficient" (0.01). The "Defocus file" section has "Normalization" and "TXT2" selected. The "Smoothing(for ADC)" section has "Cycles" (5) and "Weight" (8). The "Normalization" section has "CTR" and "Connect" selected. The "CenterData" section has "Average" selected. The "OutFiles" section has "TXT2" selected. The "ValueODF-B" and "ValueODF-A" buttons are visible. The status bar at the bottom shows "Select crystal : Orthorho... 19/09/17".

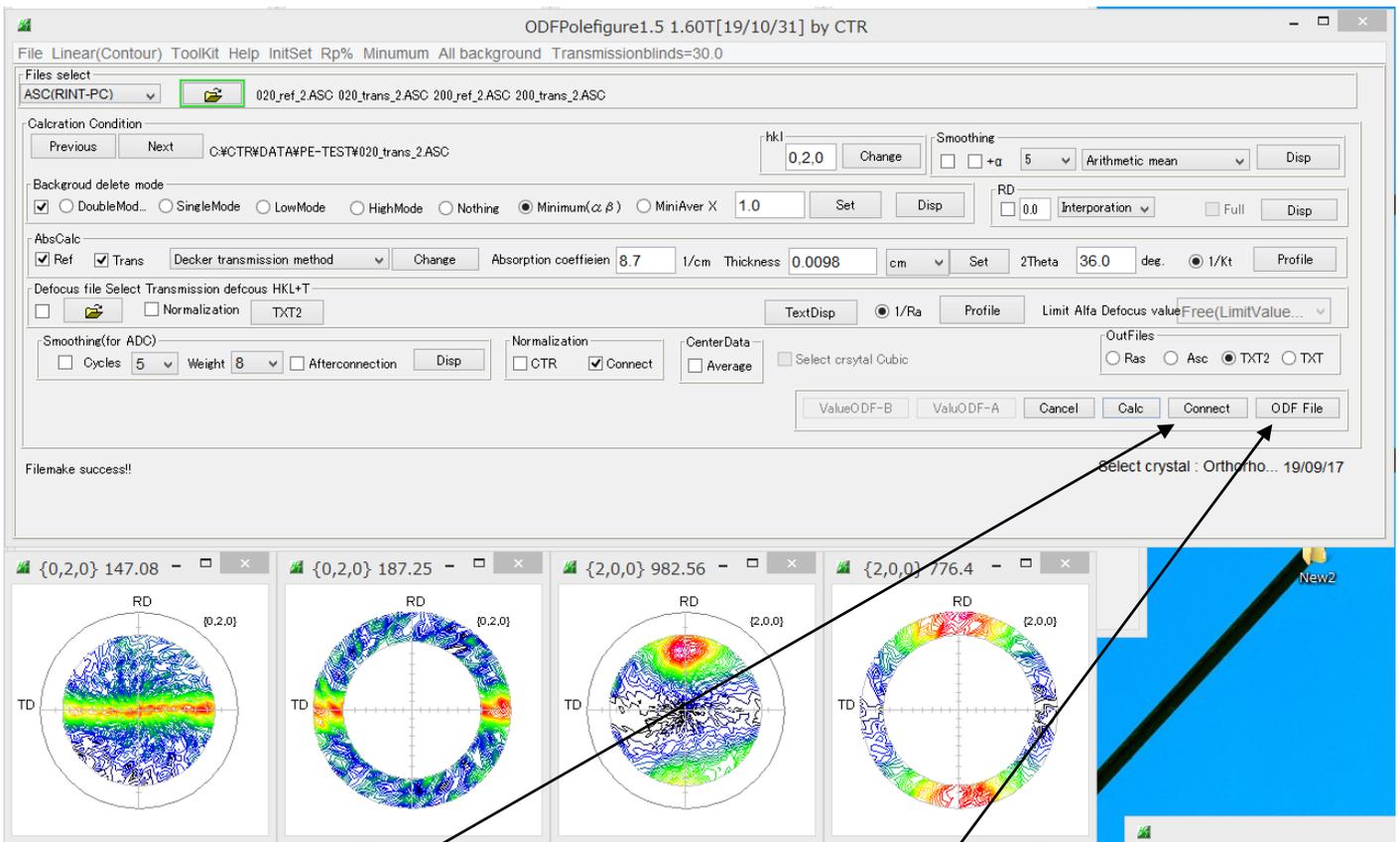
{0 2 0} 極点図から材料の厚さを計算 0.0098 cmを得る。



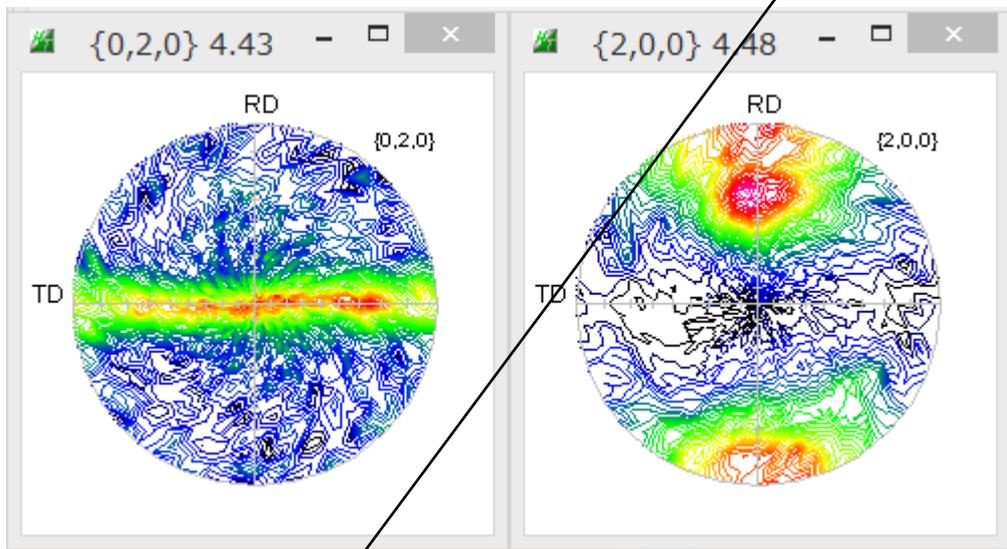
厚さ 0.0098 cm で計算



補正を行う。

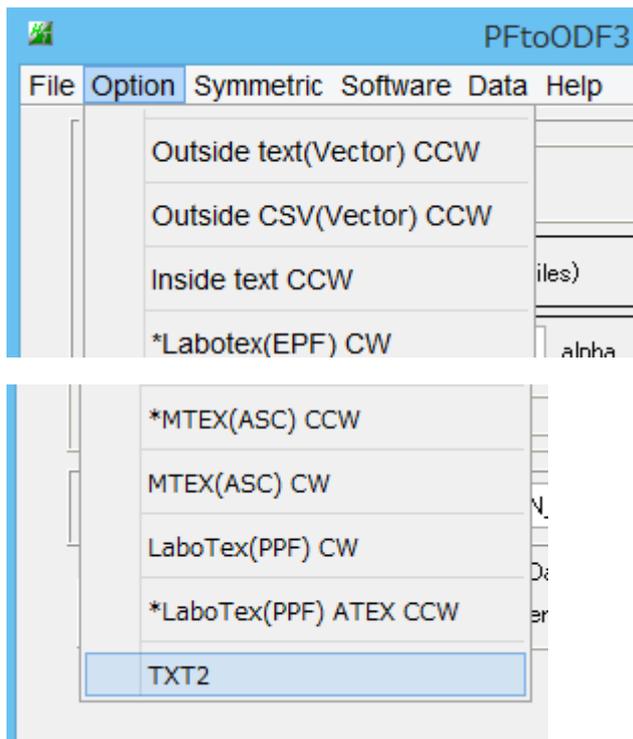


データの接続を行う。

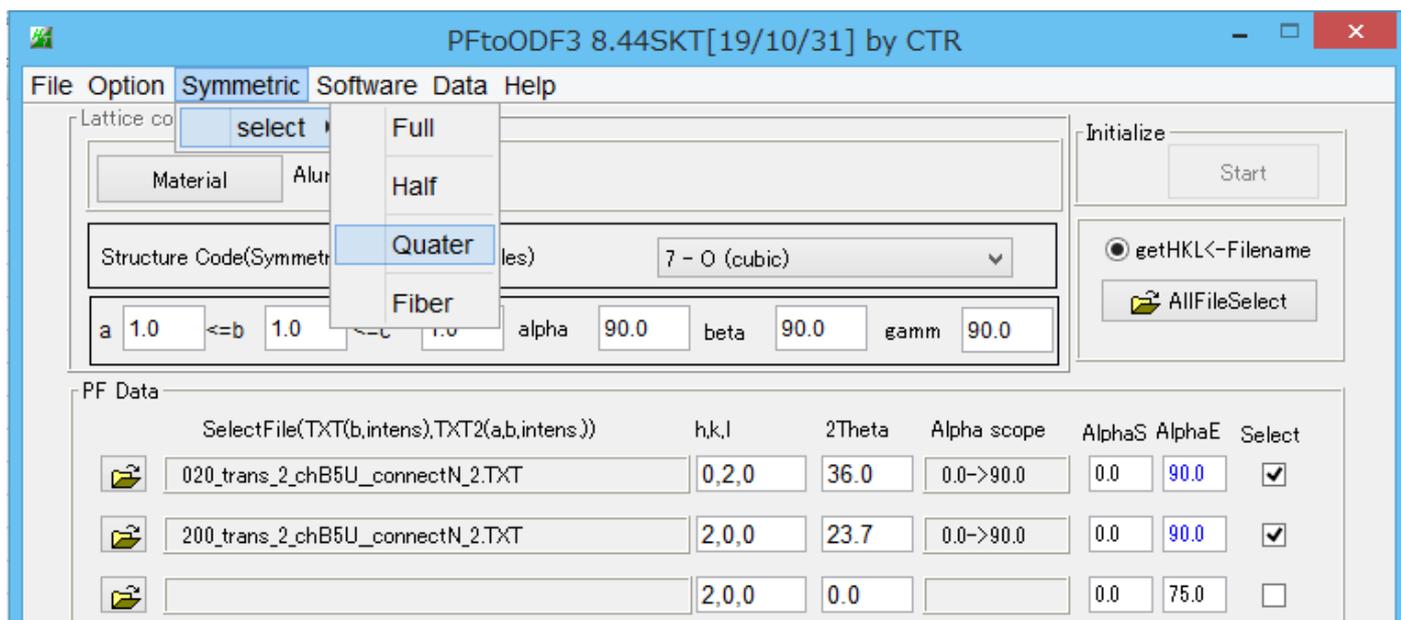


PFtoODF3 にデータを渡す。

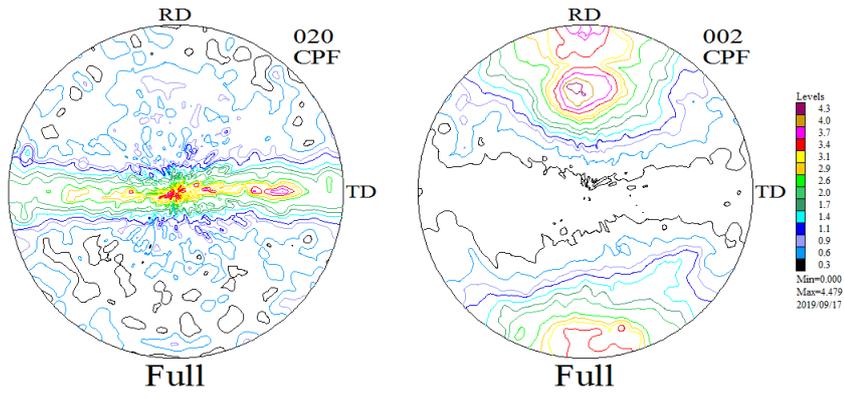
P F t o O D F 3 ソフトウェアで極点図の対称操作
作成するファイルは TXT2



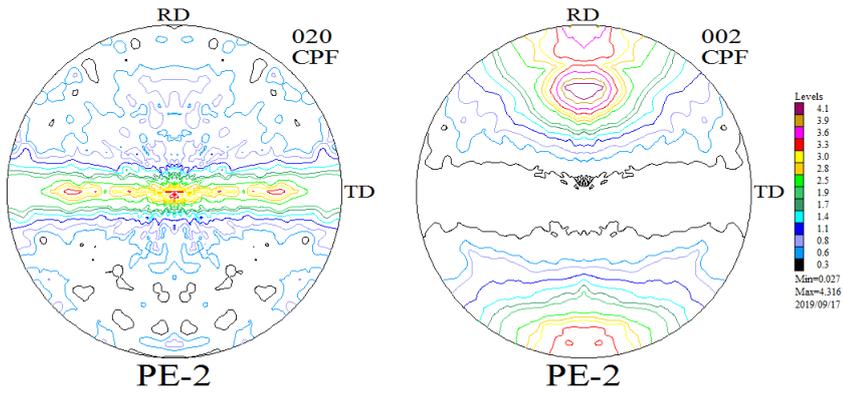
対称操作を選択



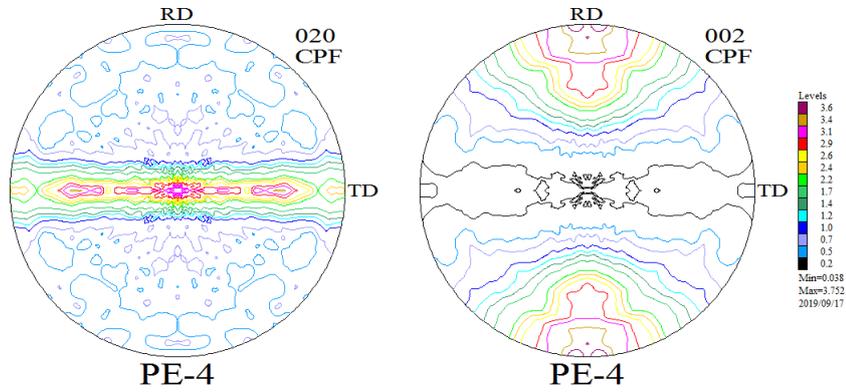
Full (Triclinic)



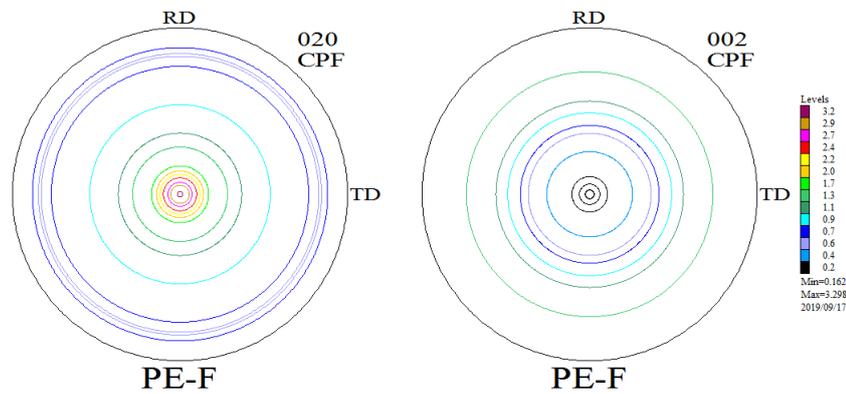
Half (Monoclinic) {CTRではRD軸対称としています}



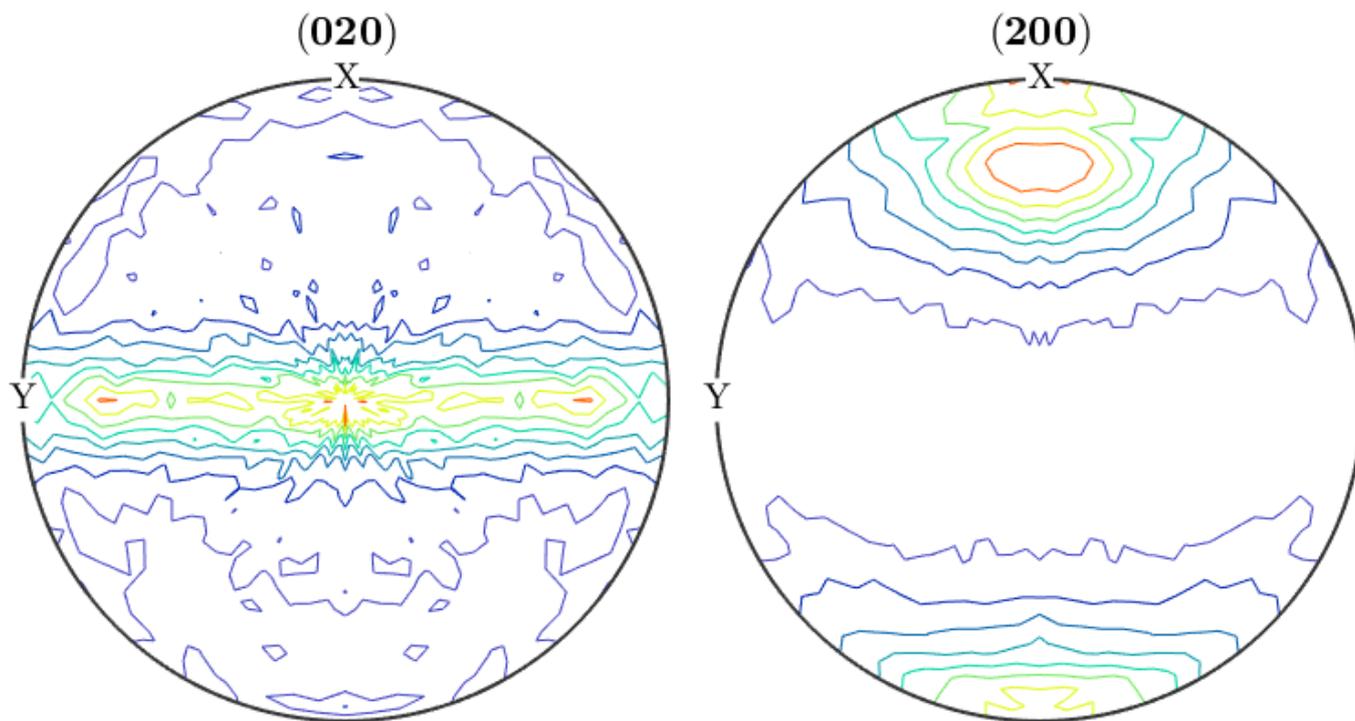
Quarter (Orthorhombic)



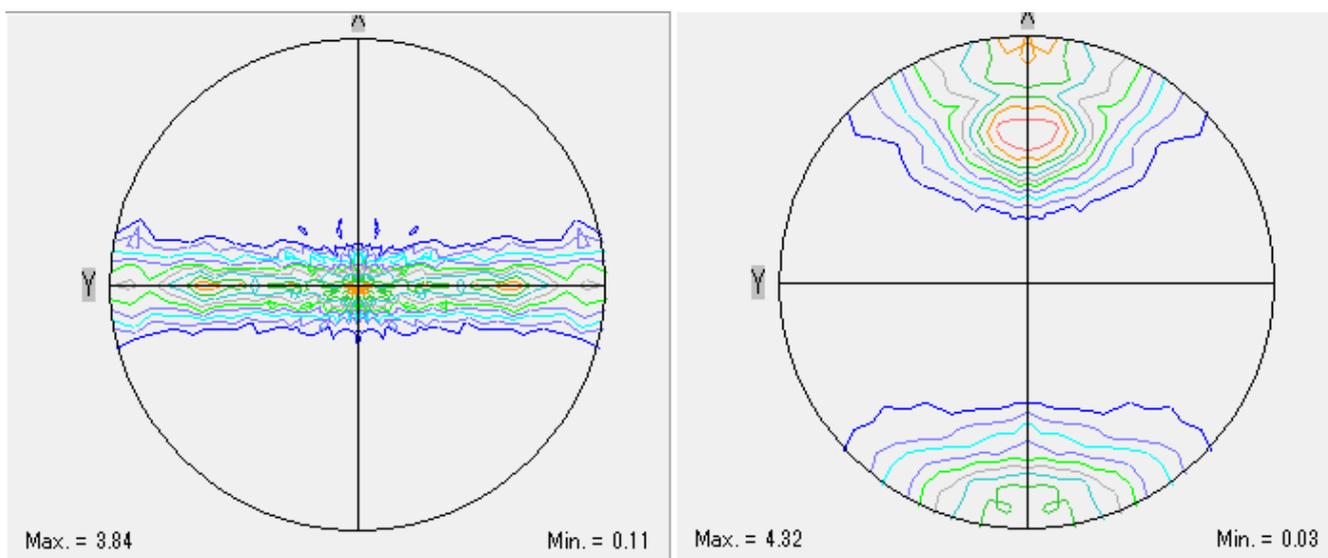
Fiber (Axial)



MTEXでHalfを表示

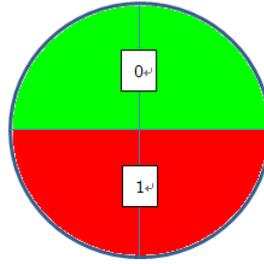
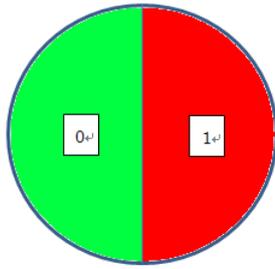


TexToolsでHalfを表示

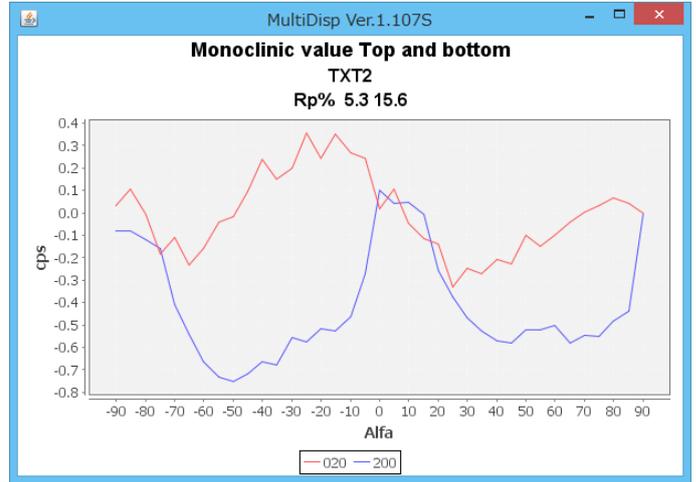
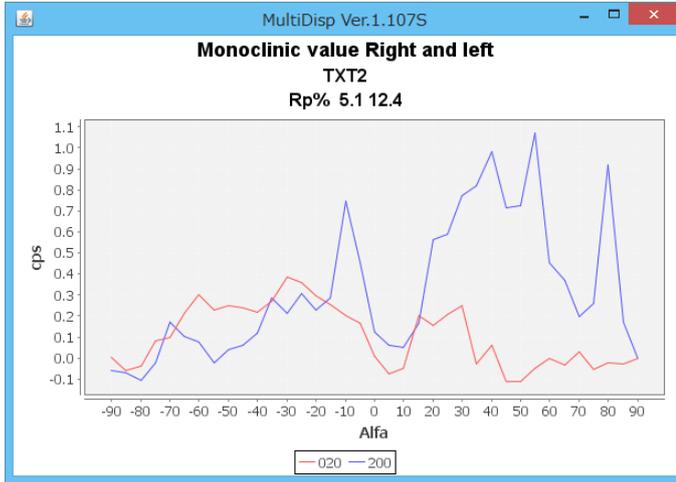


MTEX表示では、等角度表示されている事が分かります。
オプションで等面積（ポーラネット）表示出来るかもしれません。

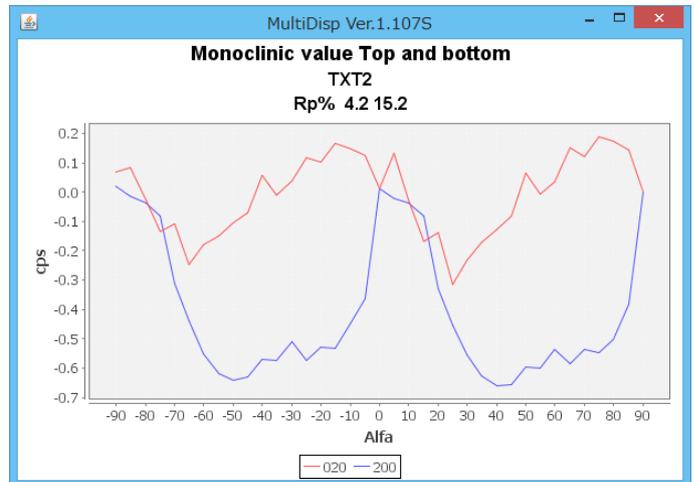
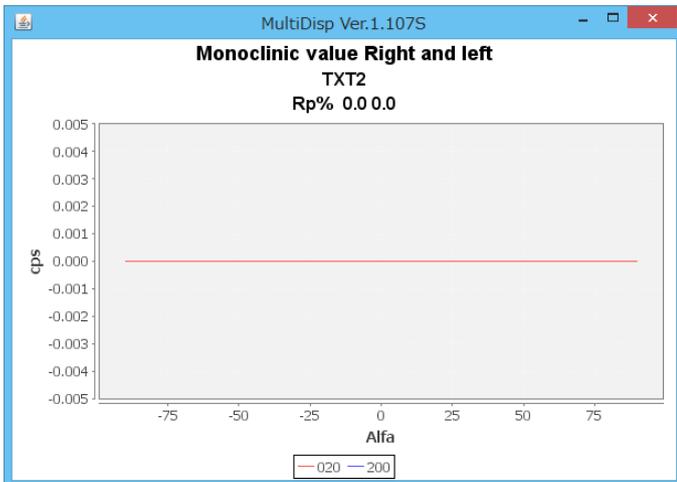
对称性 check



Full



Half



Quarter

