ＰｏｌｙｐｒｏｐｙｌｅｎのＯＤＦ解析例

Monoclinic の ODF 解析はＬａｂｏＴｅｘ、ＴｅｘＴｏｏｌｓで行えるが、基本軸の扱い、極点図の回転方向の考えが異なるため、ややこしくなっています。

ＴｅｘＴｏｏｌｓ

ＴＤ方向は極点図の左側（ＣＣＷ）

結晶系は、ｂａｘｉｓ－Ｓｅｔｔｉｎｇ

ＬａｂｏＴｅｘ

ＴＤ方向は極点図の左側（ＣＷ）

結晶系は、ｃａｘｉｓ－Ｓｅｔｔｉｎｇ

Ｂ－＞Ｃ－ａｘｉｓ変換の場合、｛ｌ－ｈｋ｝とすべきである。

２０１３年１２月１２日

HelperTex Office

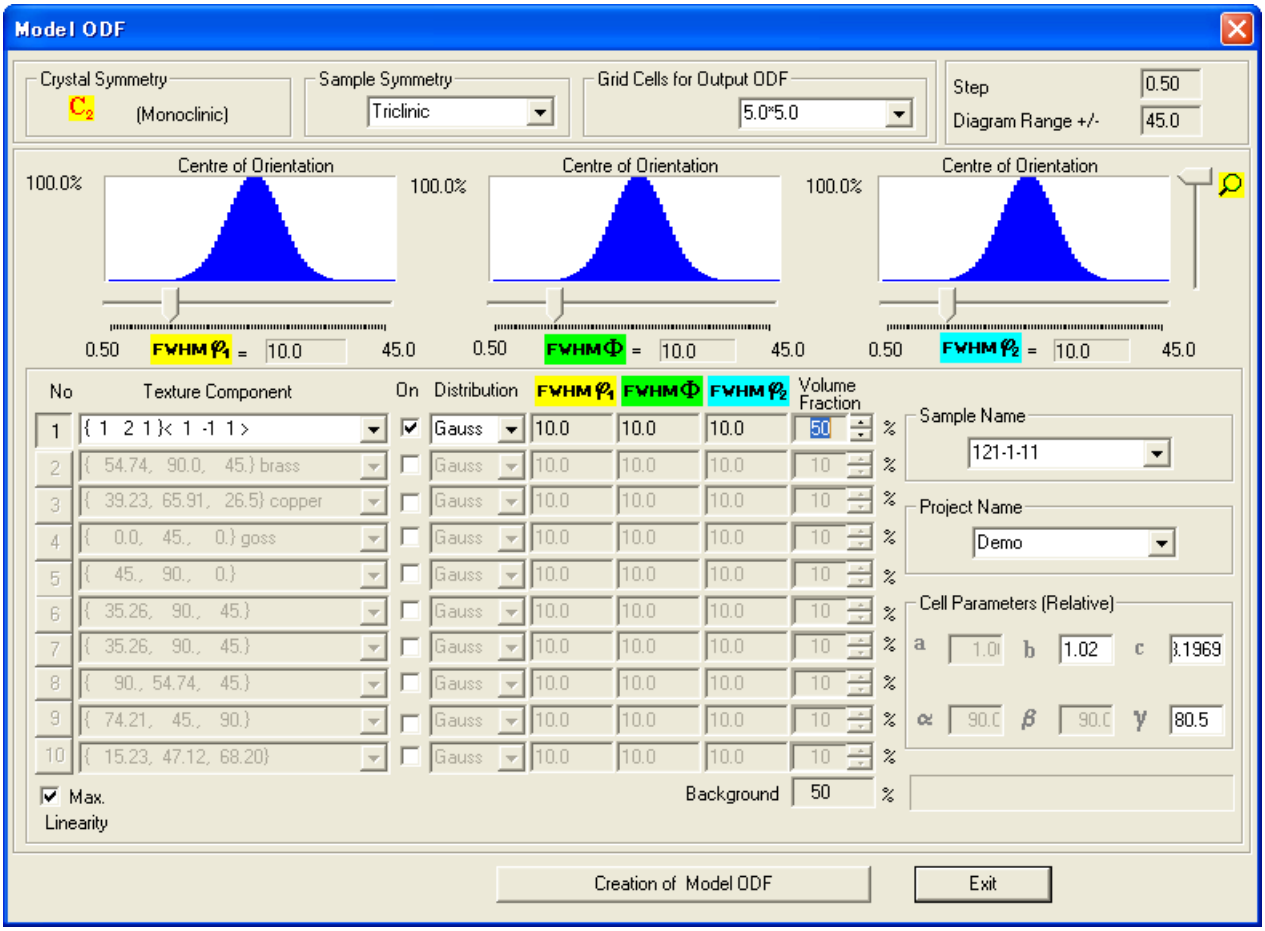
山田　義行

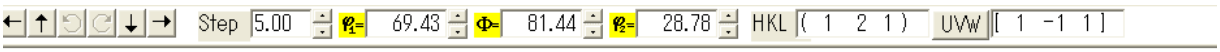
odftex@ybb.ne.jp

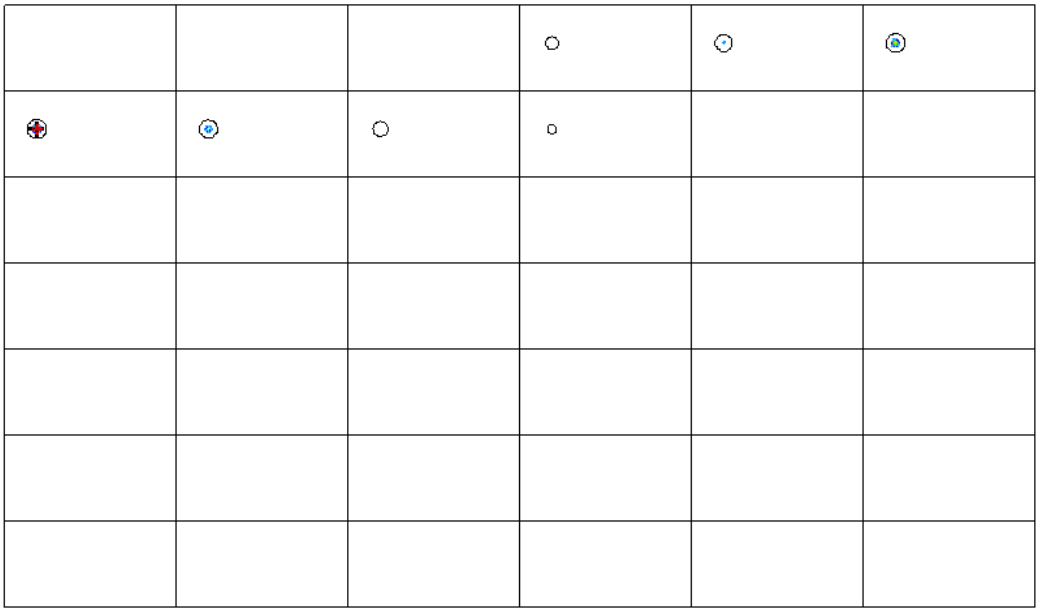
テストデータ

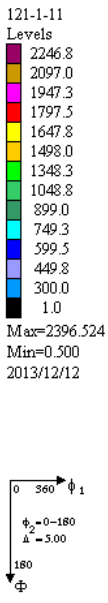
ＬａｂｏＴｅｘで｛１２１｝＜１－１１＞非対称ＯＤＦ図から

｛１２１｝、｛０－１１｝、｛１－１１｝極点図を作成する

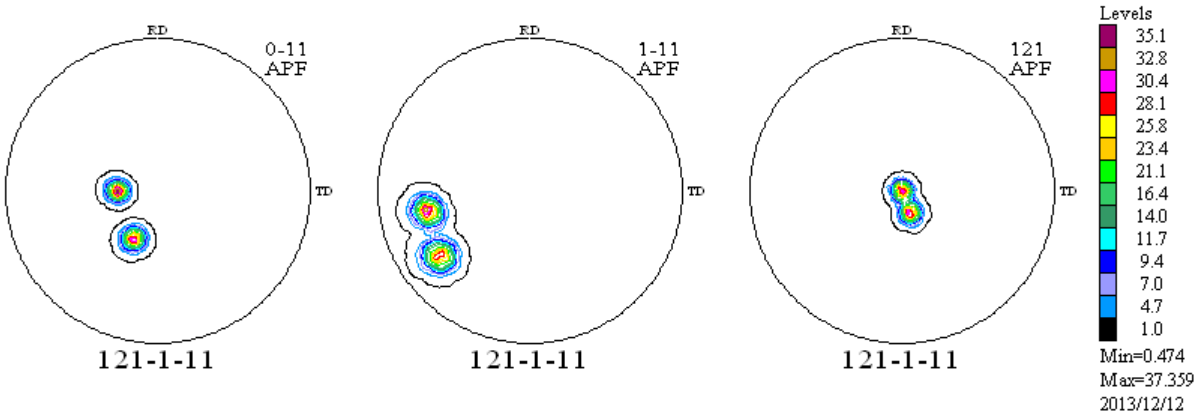




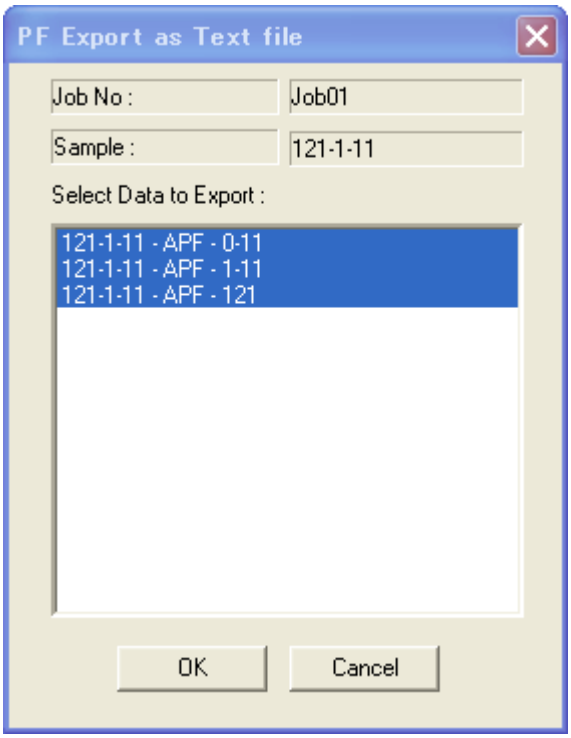




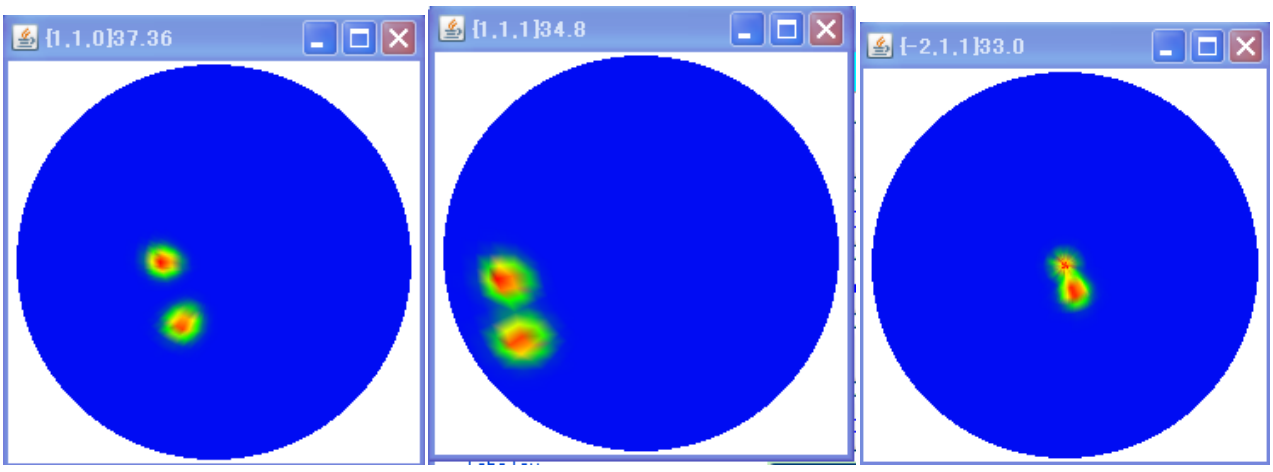
再計算極点図



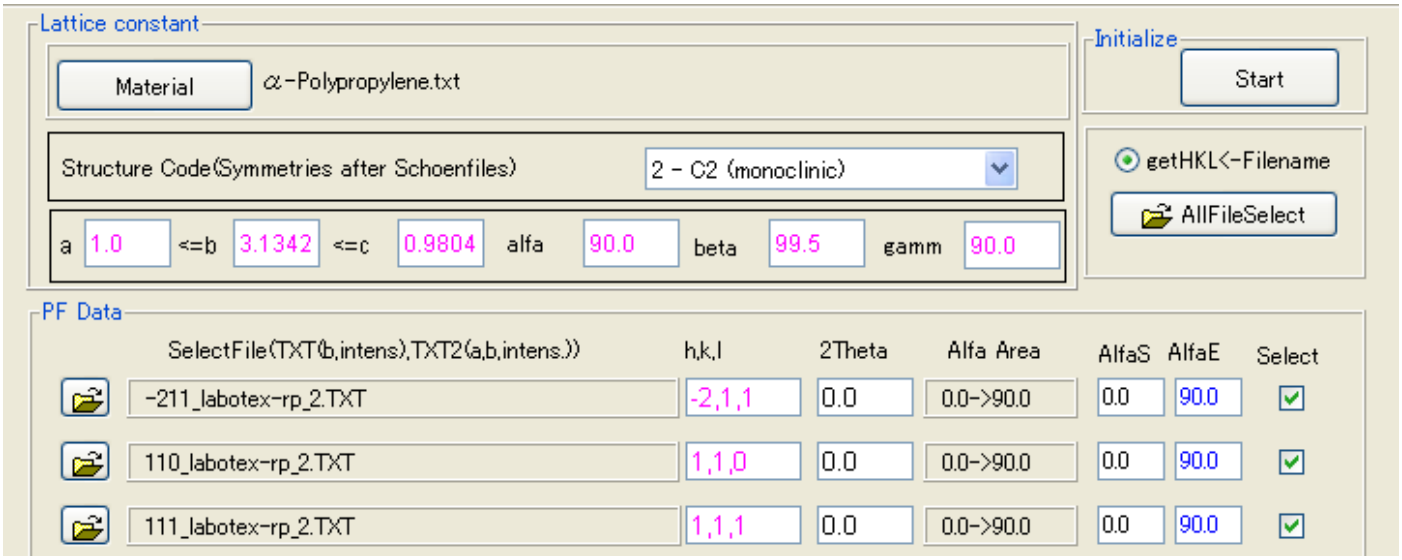
ＰＦ－Ｅｘｐｏｒｔ



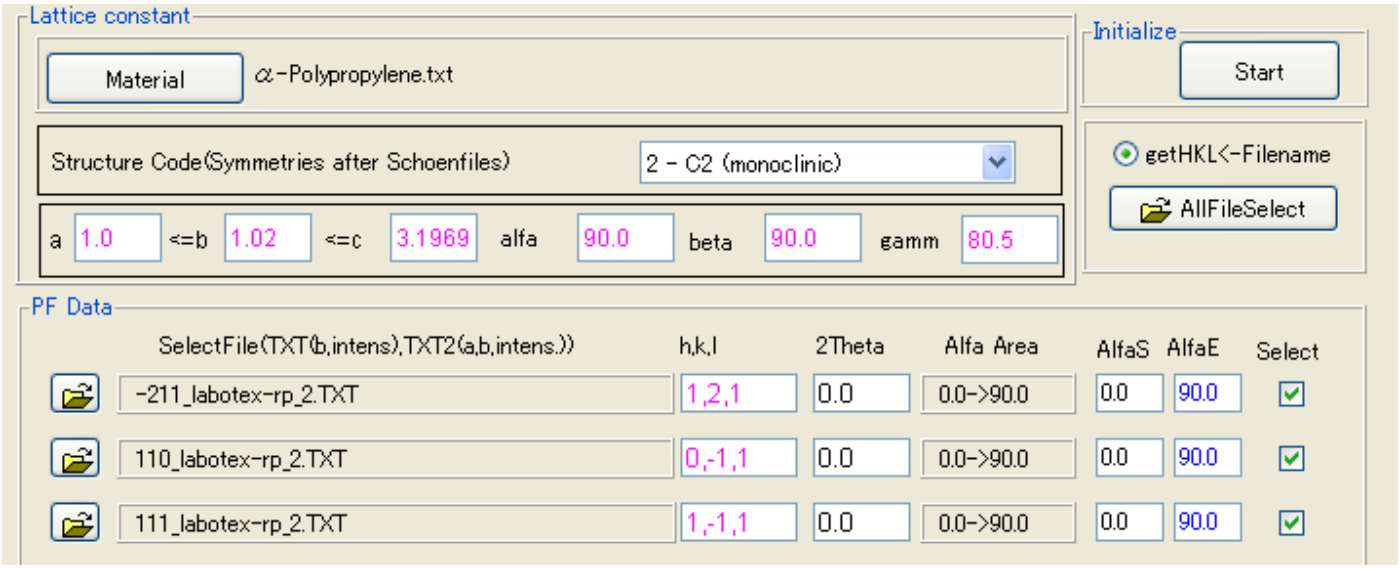
ｃ－Ａｘｉｓ－＞Ｂ－Ａｘｉｓ変換



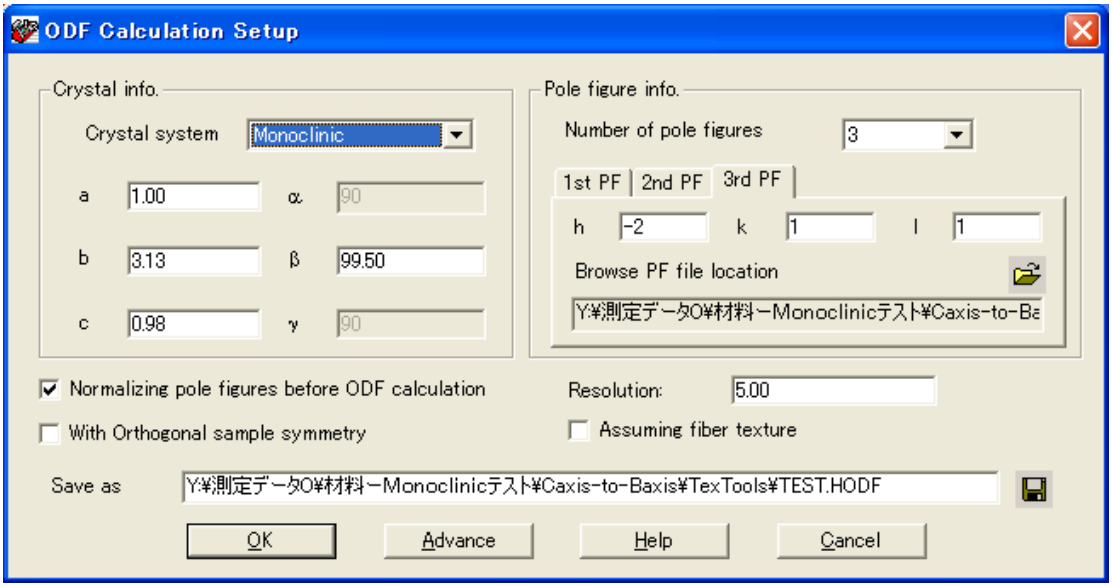
このＢ－ａｘｉｓ極点図からＴｅｘＴｏｏｌｓで解析を行う。

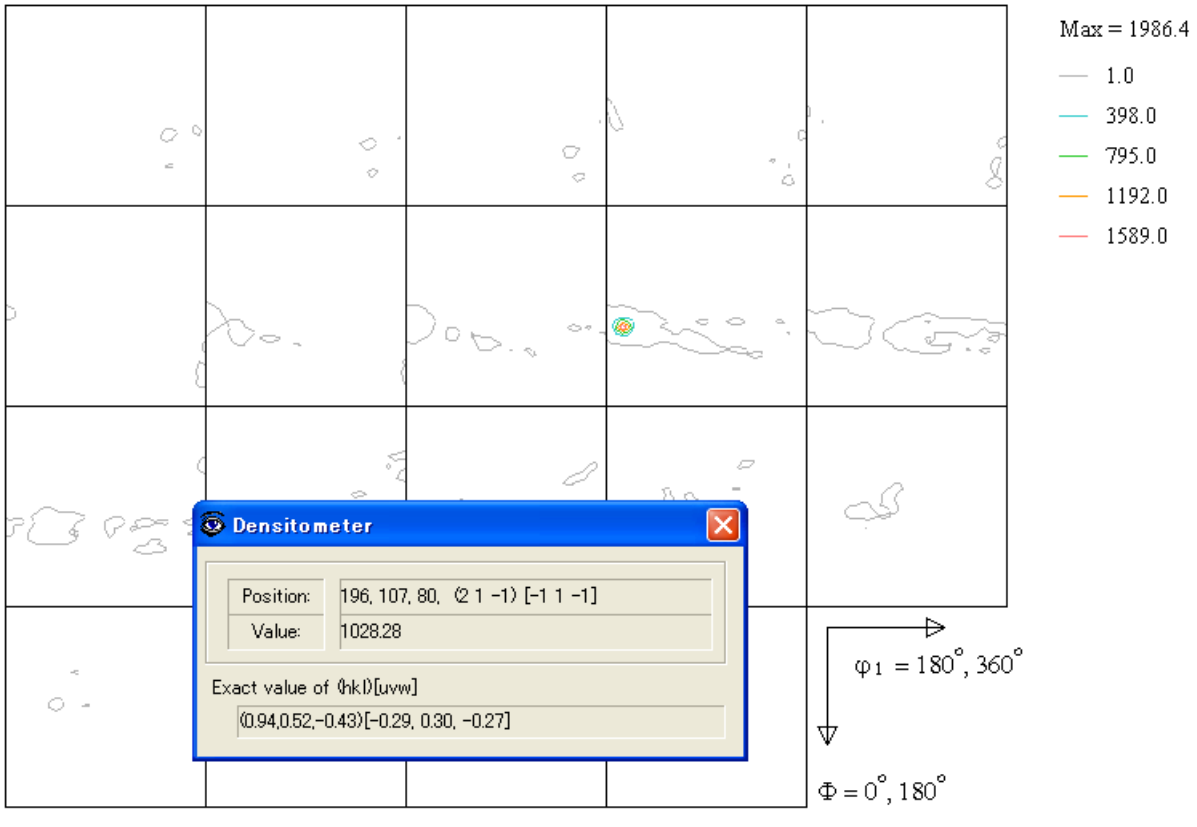


Ｌａｂｏｔｅｘの場合

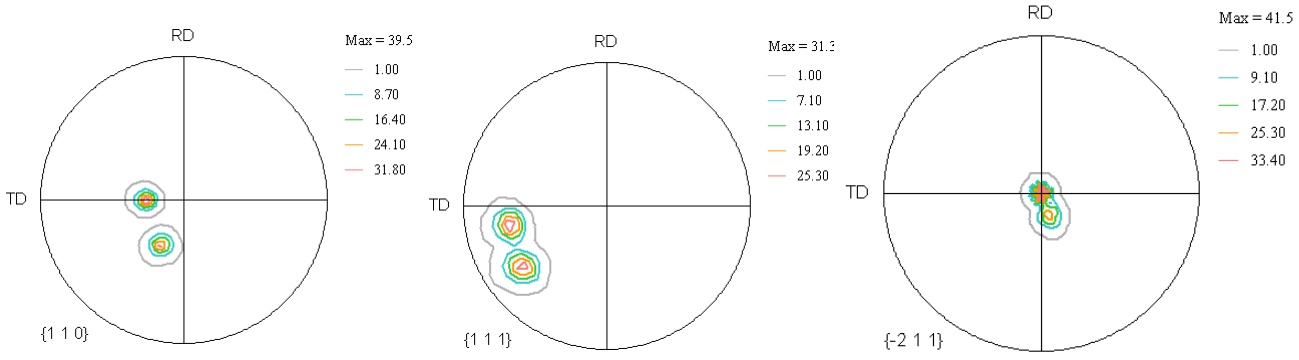


T e x T o o l s


ODF Calculation Setup
Crystal info.
Crystal system
Monoclinic
a
1.00
α
90
b
3.13
ß
99.50
c
0.98
γ
90
Pole figure info.
Number of pole figures
3
1st PF
2nd PF
3rd PF
h
-2
k
1
l
1
Browse PF file location
Y:¥測定データO¥材料ーMonoclinicテスト¥Caxis-to-Ba
Normalizing pole figures before ODF calculation
Resolution:
5.00
With Orthogonal sample symmetry
Assuming fiber texture
Save as
Y:¥測定データO¥材料ーMonoclinicテスト¥Caxis-to-Baxis¥TexTools¥TEST.HODF
OK
Advance
Help
Cancel

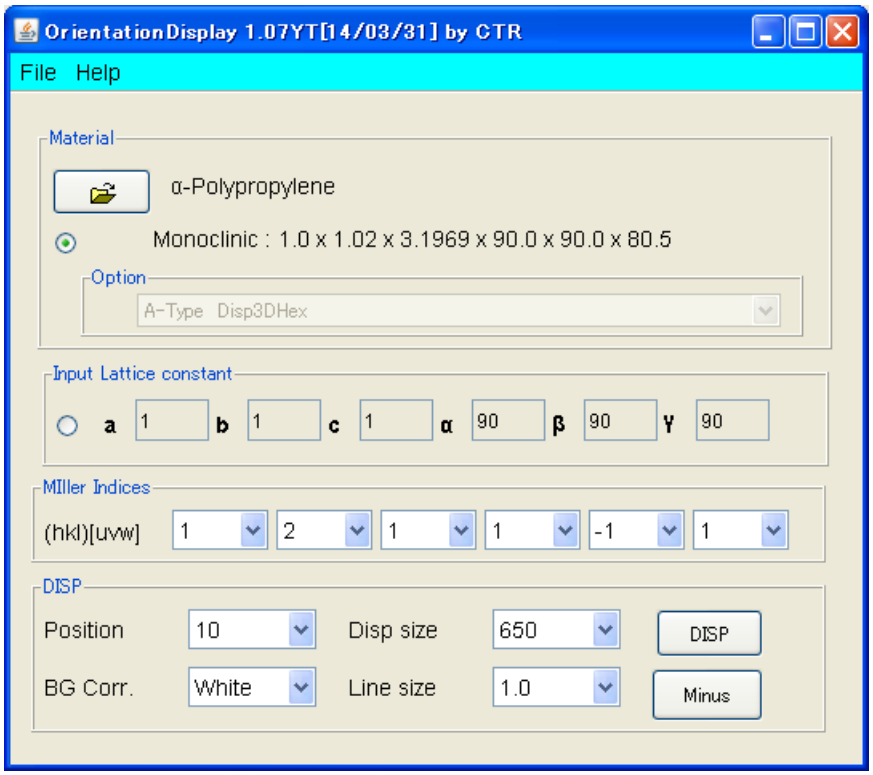

Max = 1986.4
1.0
398.0
795.0
1192.0
1589.0
Densitometer
Position:
196, 107, 80, (2 1 -1) [-1 1 -1]
Value:
1028.28
Exact value of (hkl)[uvw]
(0.94,0.52,-0.43)[-0.29, 0.30, -0.27]
φ1 = 180°, 360°
Φ = 0°, 180°

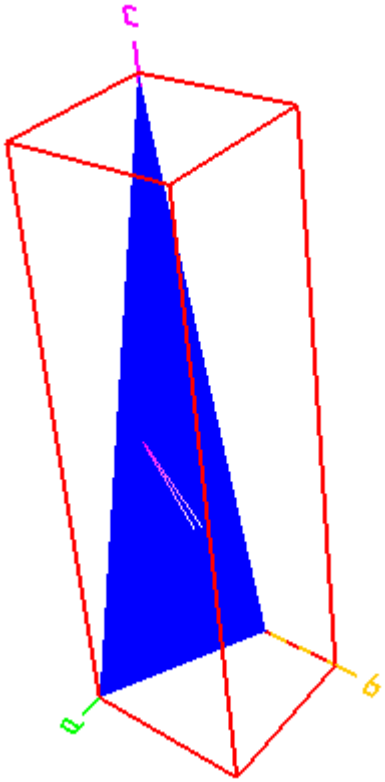
1


RD
TD
{1 1 0}
Max = 39.5
1.00
8.70
16.40
24.10
31.80
RD
TD
{1 1 1}
Max = 31.3
1.00
7.10
13.10
19.20
25.30
RD
TD
{-2 1 1}
Max = 41.5
1.00
9.10
17.20
25.30
33.40

ＬａｂｏＴｅｘでは

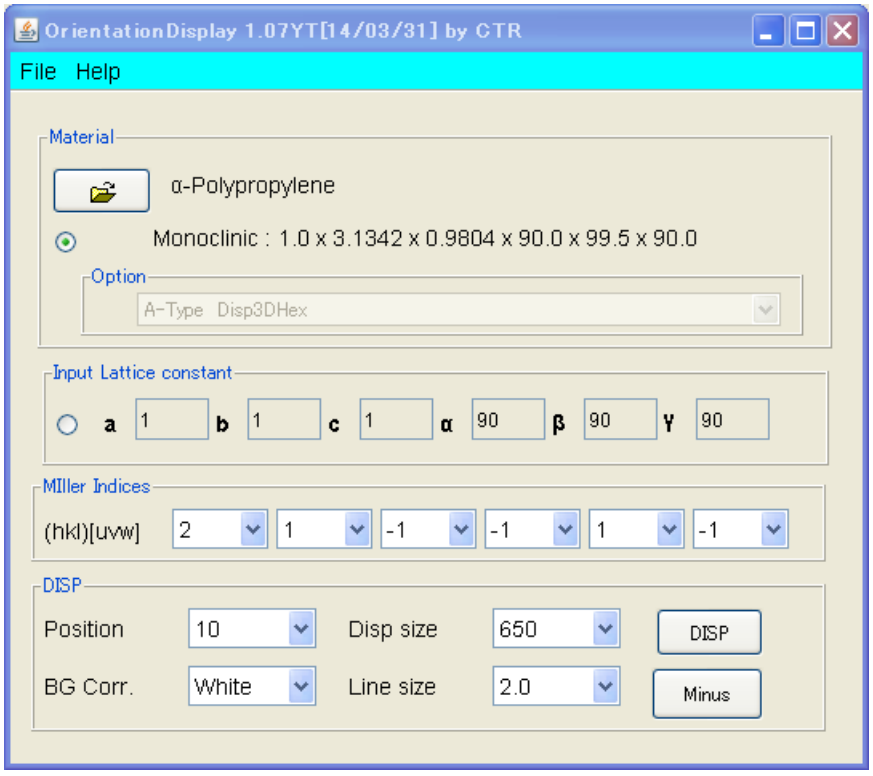
｛１２１｝＜１－１１＞

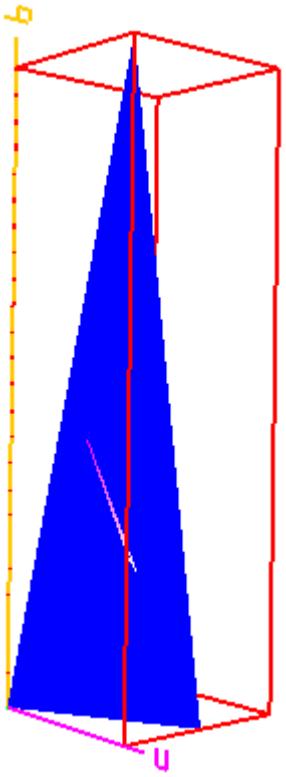




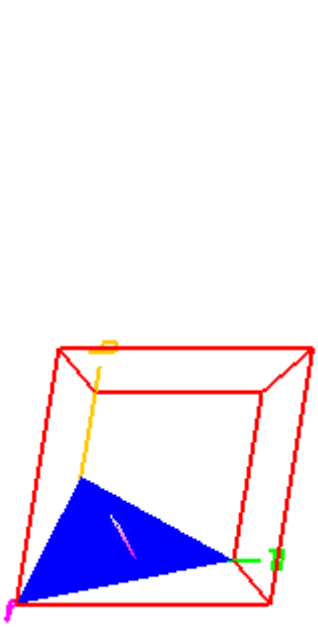
ＴｅｘＴｏｏｌｓでは

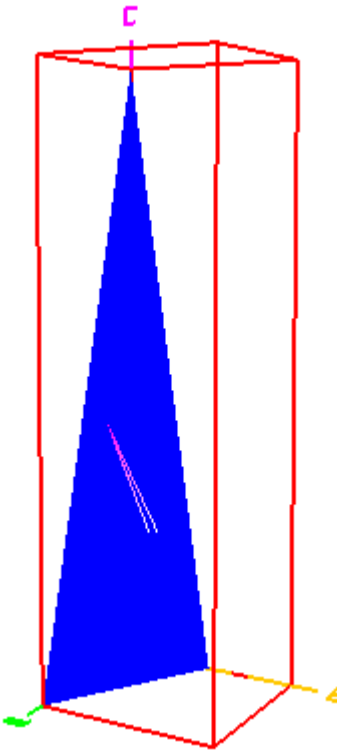
｛２１－１｝＜－１１－１＞



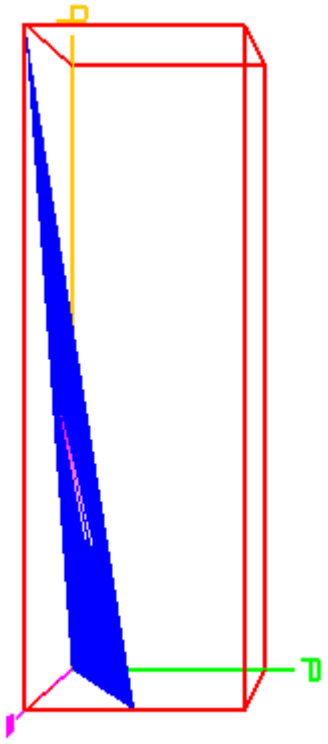


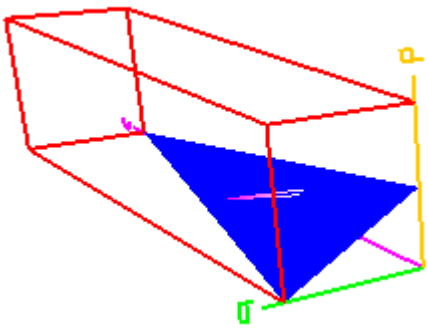
ＬａｂｏＴｅｘ表示

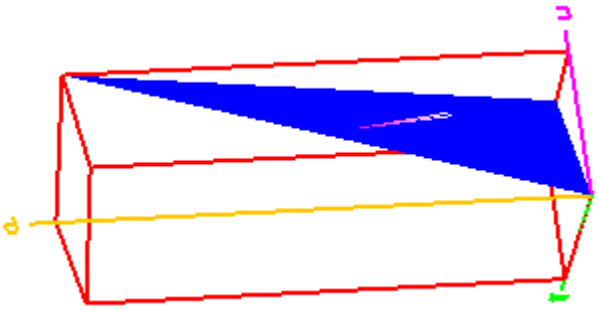




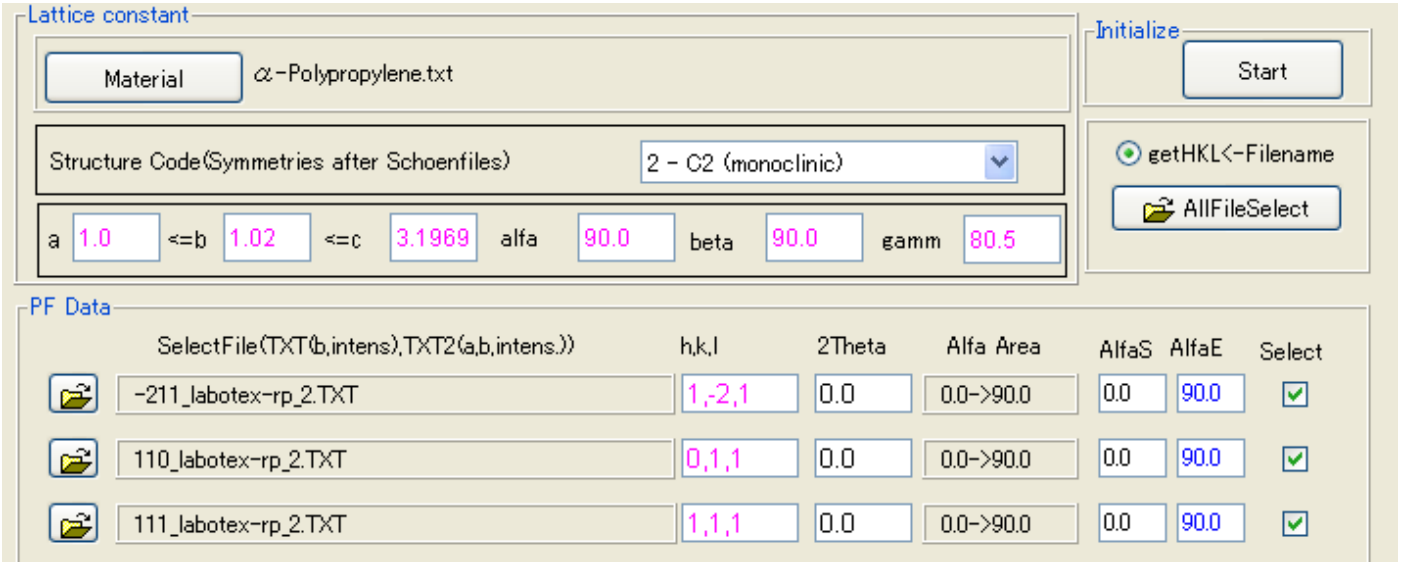
ＴｅｘＴｏｏｌｓ表示

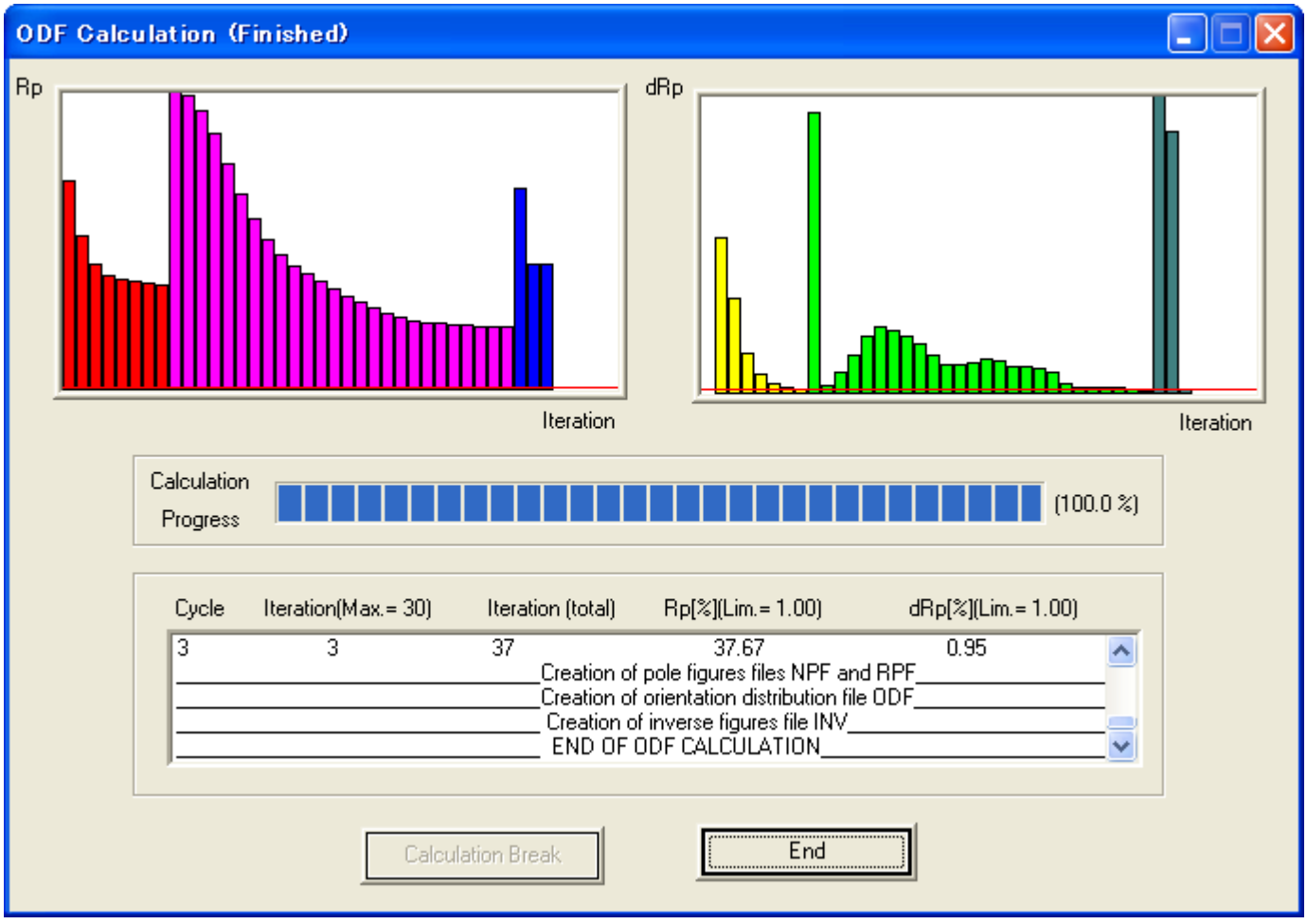






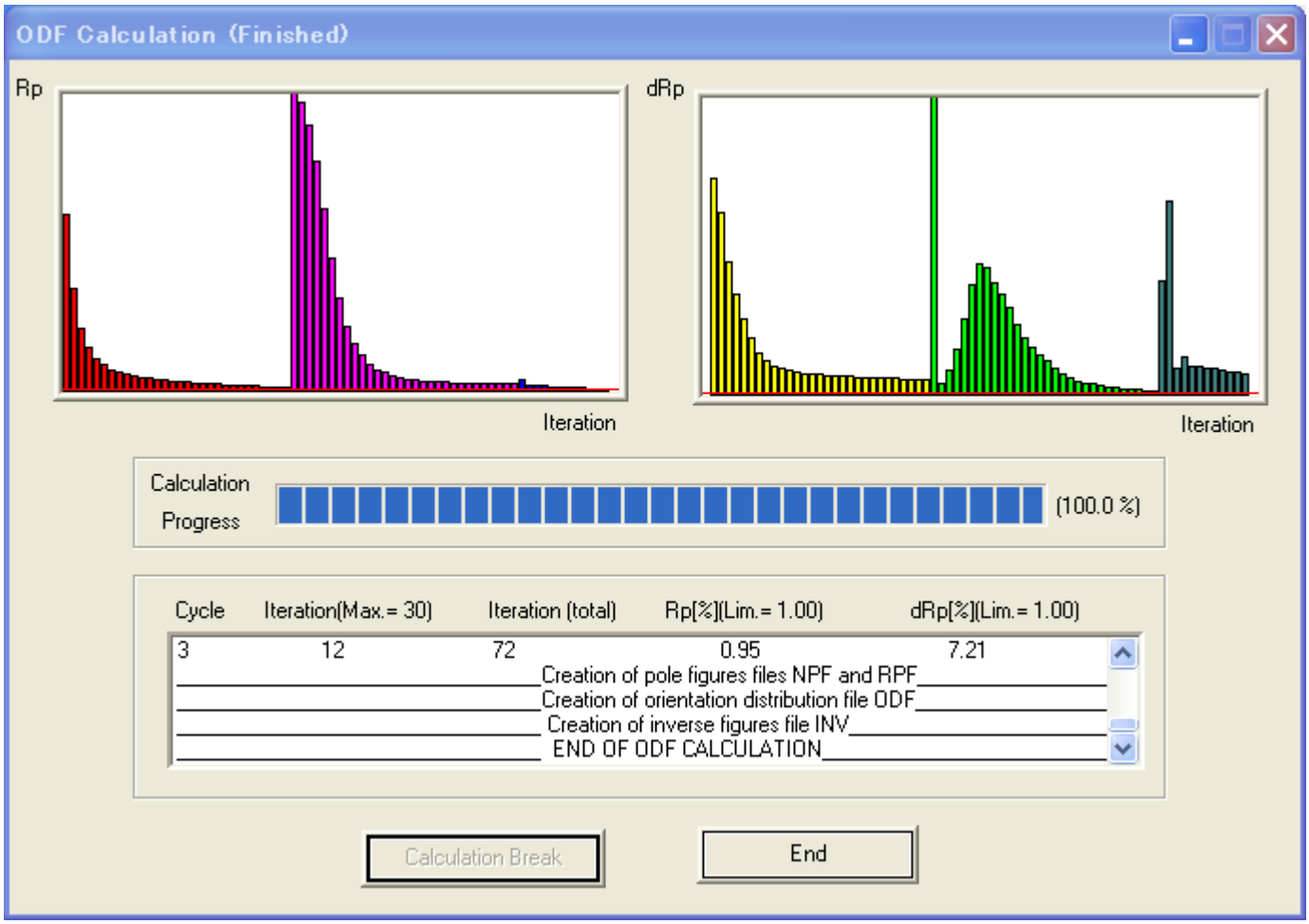
ＬａｂｏＴｅｘでは、｛ｈｋｌ｝――――＞｛ｌ－ｈｋ｝と変換するが、｛ｌｈｋ｝とした場合





Ｅｒｒｏｒが大きい

ＬａｂｏＴｅｘでは、｛ｈｋｌ｝――――＞｛ｌ－ｈｋ｝とした場合



Ｅｒｒｏｒは小さい

やはり、Ｃ－Ａｘｉｓの場合、｛ｌ－ｈｋ｝である。