Cubic以外の解析ＥＢＳＤデータから配向関数計算

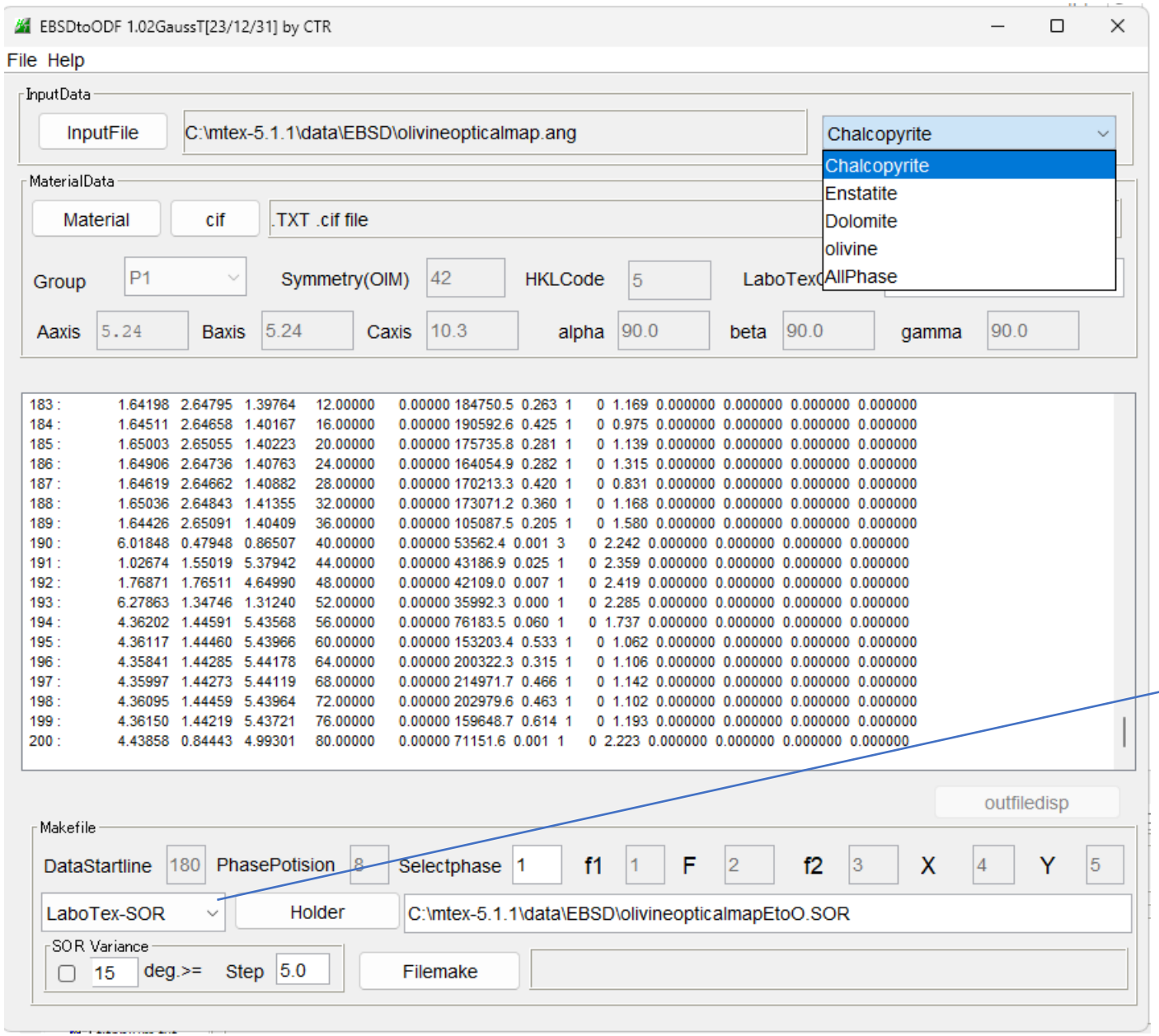
Ｔｅｔｏｒａｇｏｎａｌ　ＣｕＦｅＳ２

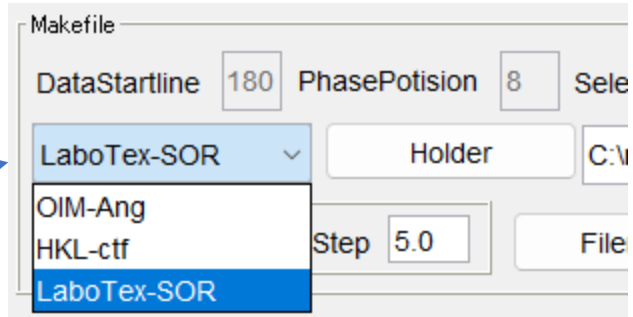
MTEX5.1.1/data/EBSD/olivineopticalmap.ang

２０２３年０３月２８日

ＨｅｌｐｅｒＴｅｘ　Ｏｆｆｉｃｅ

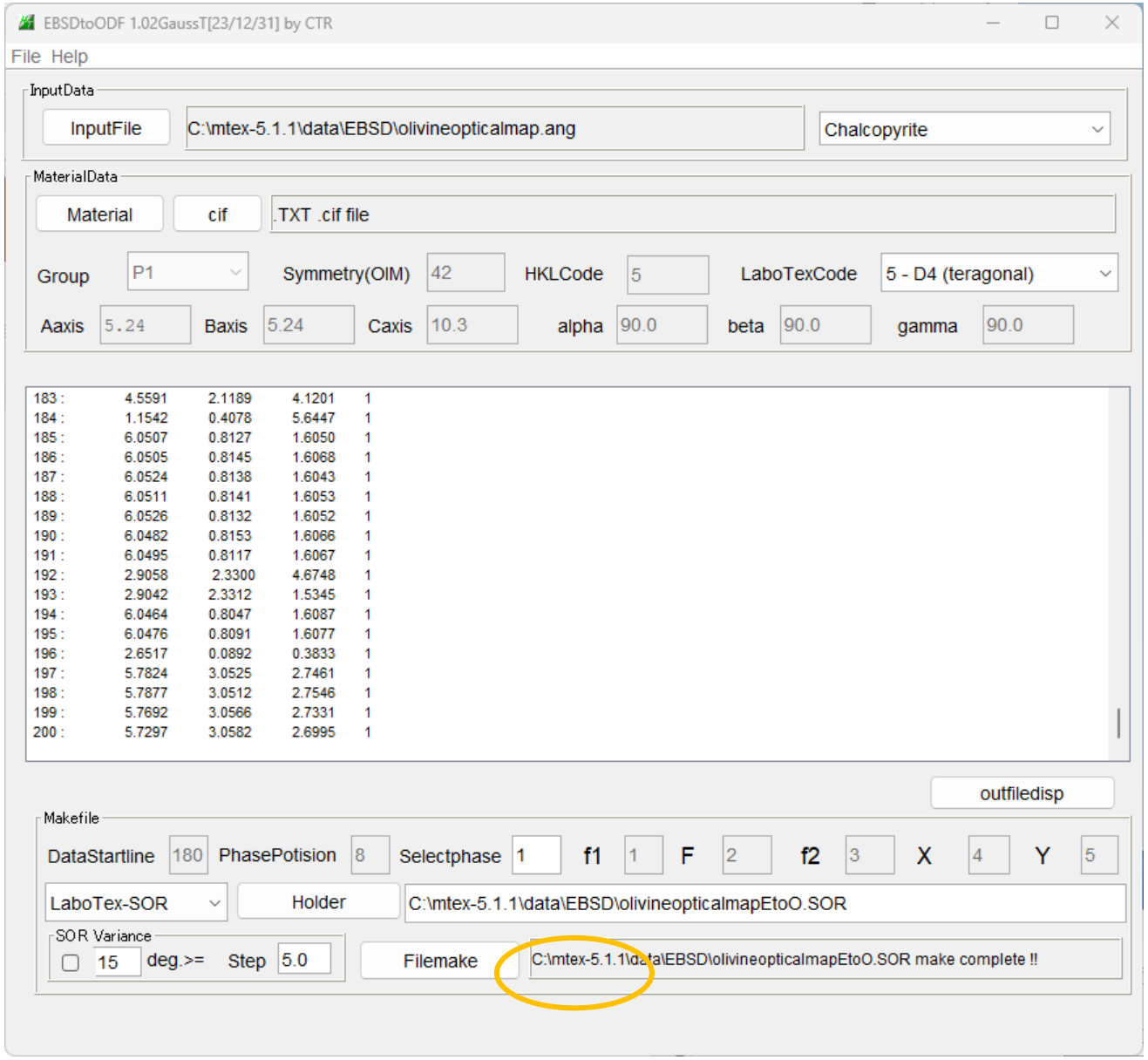
Angデータ変換(複数相からCuFeS2を選択)

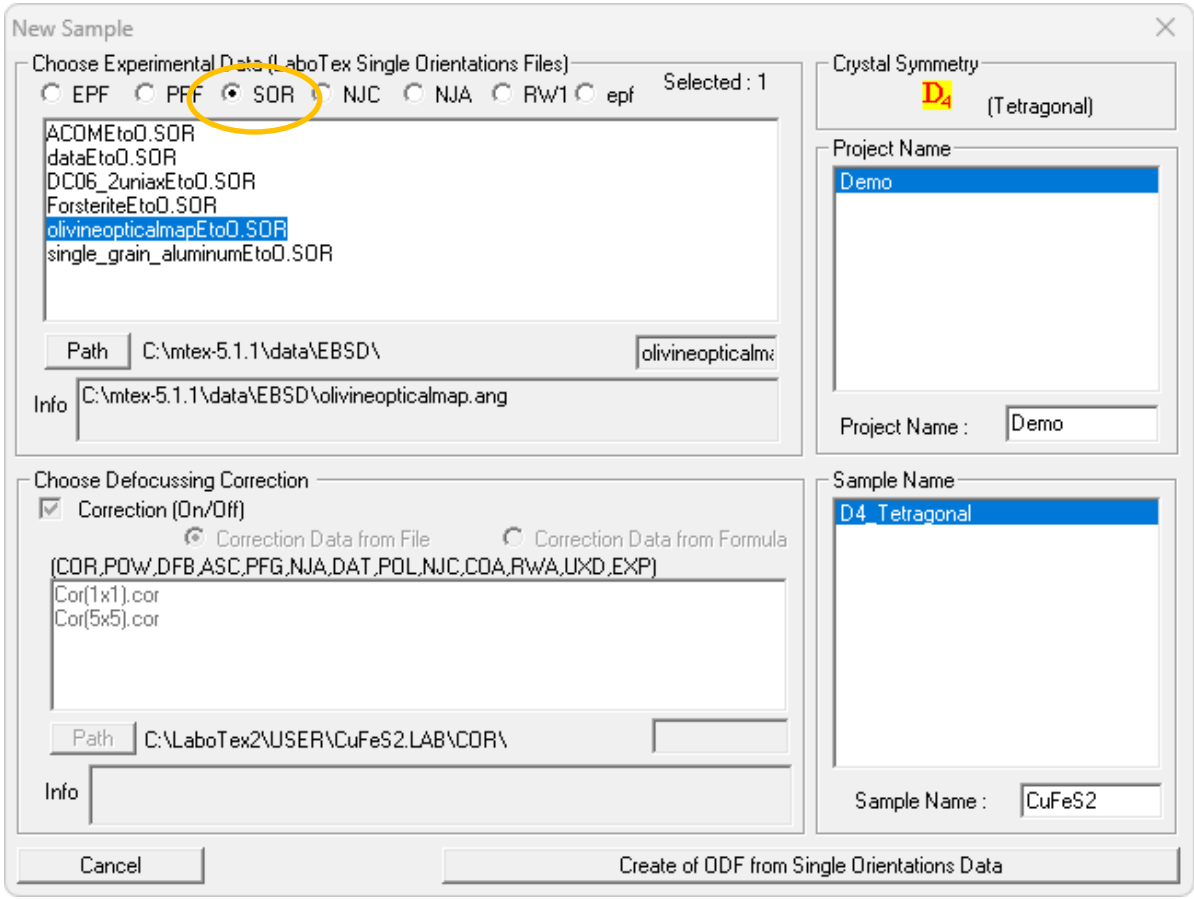




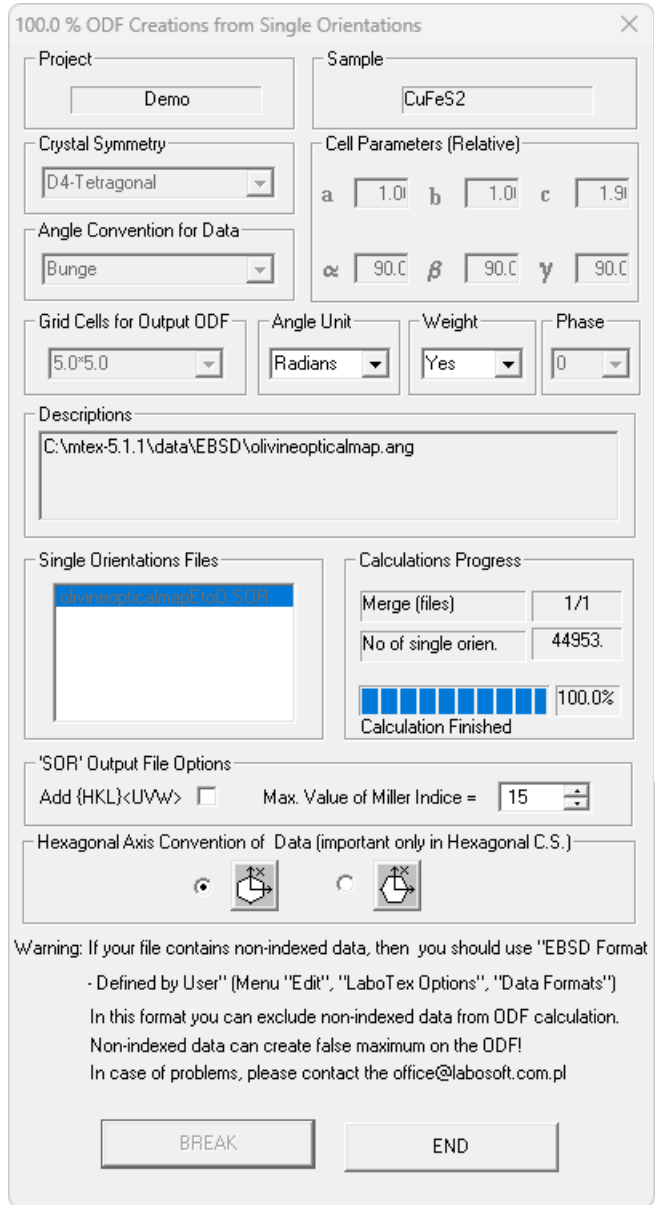
SOR:　LaboTex向け
Ctf:　　MTEX向け

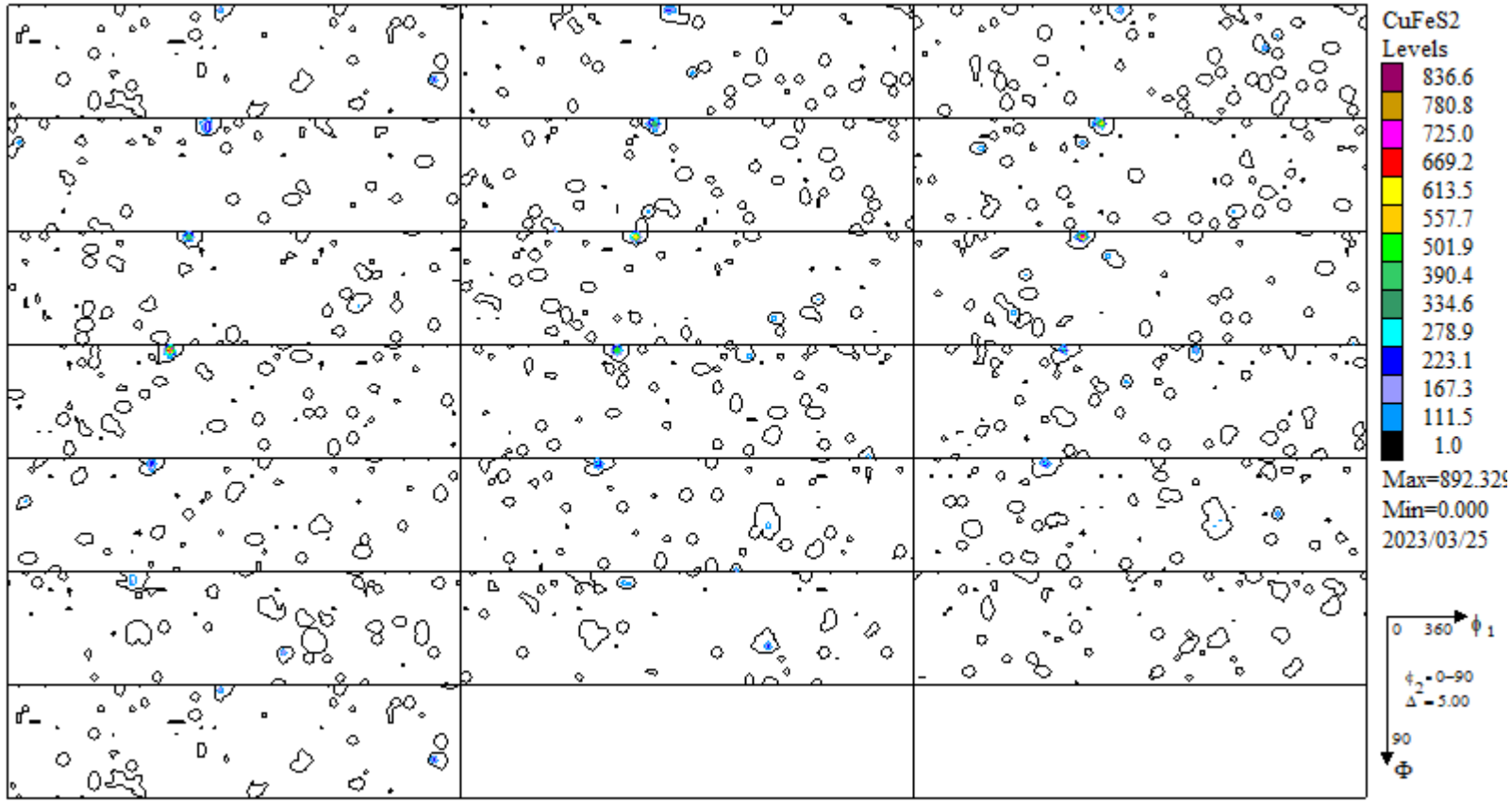
LaboTex　SORファイル作成,LaboTex読み込み



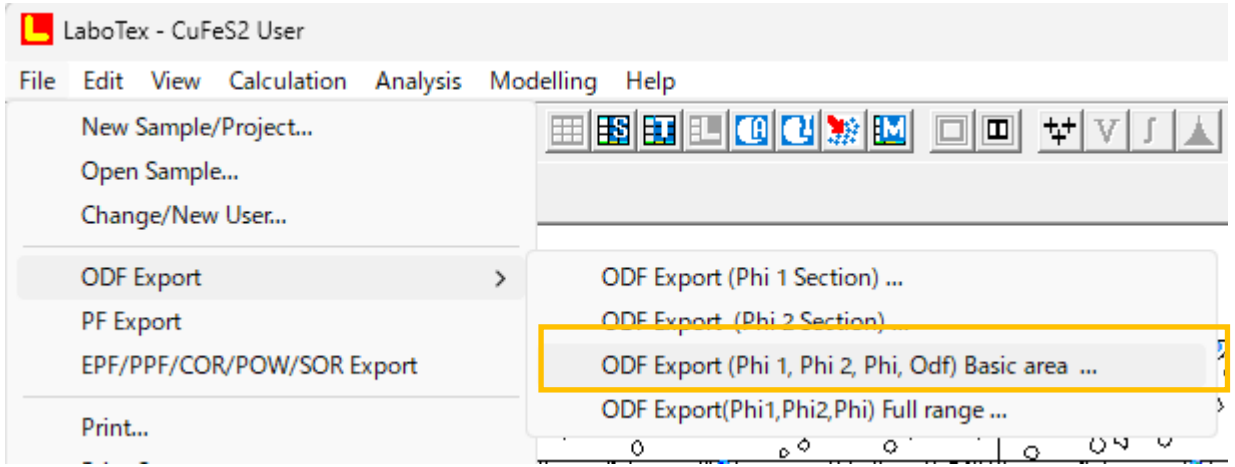


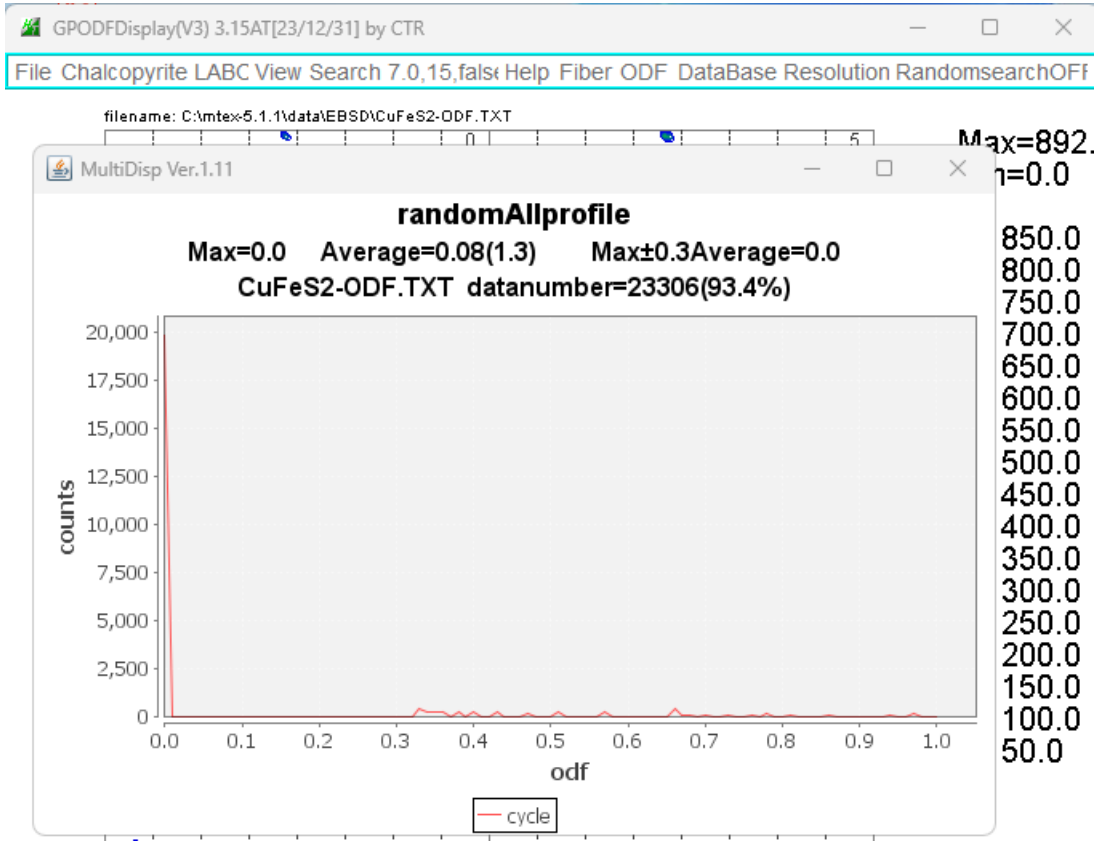
LaboTex


100.0 % ODF Creations from Single Orientations
Project
Demo
Sample
CuFeS2
Crystal Symmetry
D4-Tetragonal
Cell Parameters (Relative)
a 1.0 b 1.0 c 1.9
Angle Convention for Data
Bunge
α 90.0 β 90.0 γ 90.0
Grid Cells for Output ODF
5.0*5.0
Angle Unit
Radians
Weight
Yes
Phase
0
Descriptions
C:\mtex-5.1.1\data\EBSD\olivineopticalmap.ang
Single Orientations Files
olivineopticalmapEbsd.SOR
Calculations Progress
Merge (files) 1/1
No of single orien. 44953.
100.0%
Calculation Finished
'SOR' Output File Options
Add {HKL}<UVW>
Max. Value of Miller Indice = 15
Hexagonal Axis Convention of Data (important only in Hexagonal C.S.)
Warning: If your file contains non-indexed data, then you should use "EBSD Format
- Defined by User" (Menu "Edit", "LaboTex Options", "Data Formats")
In this format you can exclude non-indexed data from ODF calculation.
Non-indexed data can create false maximum on the ODF!
In case of problems, please contact the office@labosoft.com.pl
BREAK
END


CuFeS2
Levels
836.6
780.8
725.0
669.2
613.5
557.7
501.9
390.4
334.6
278.9
223.1
167.3
111.5
1.0
Max=892.32
Min=0.000
2023/03/25
0 360 ϕ1
ϕ2 = 0-90
Δ = 5.00
90
Φ

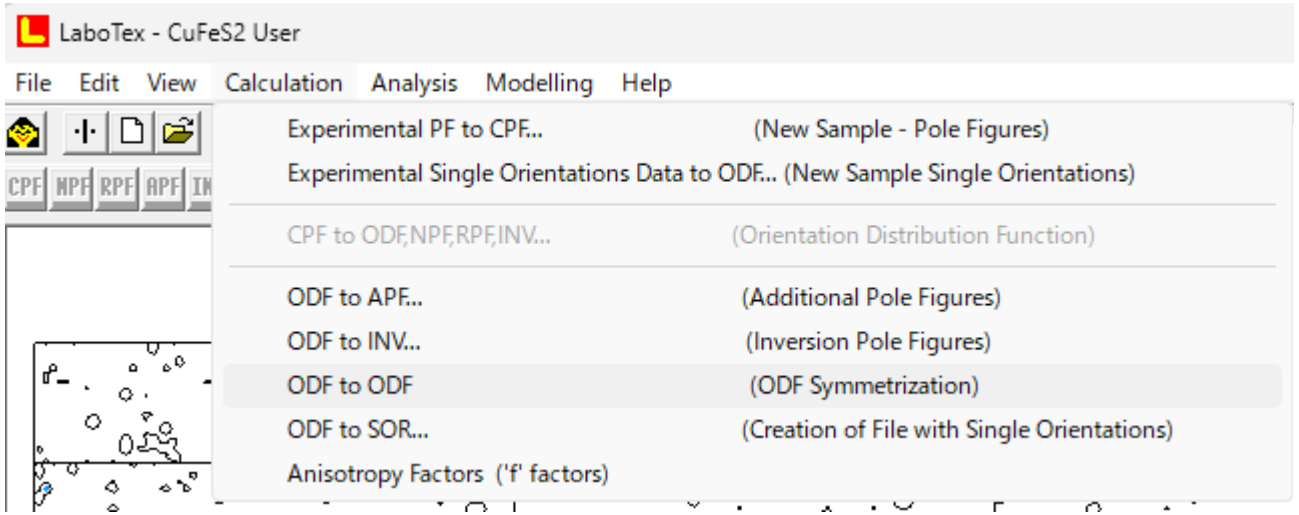
ODF図をExportし、random定量

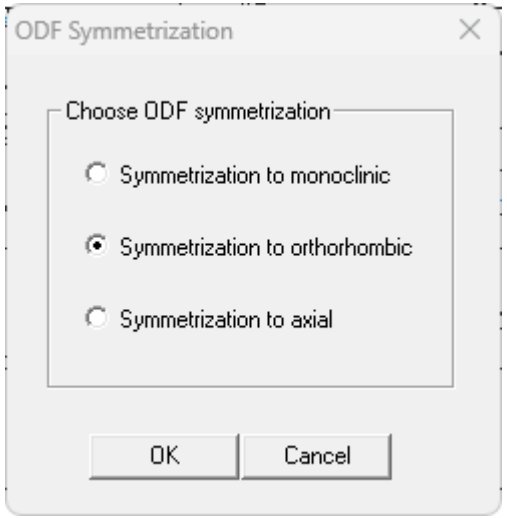


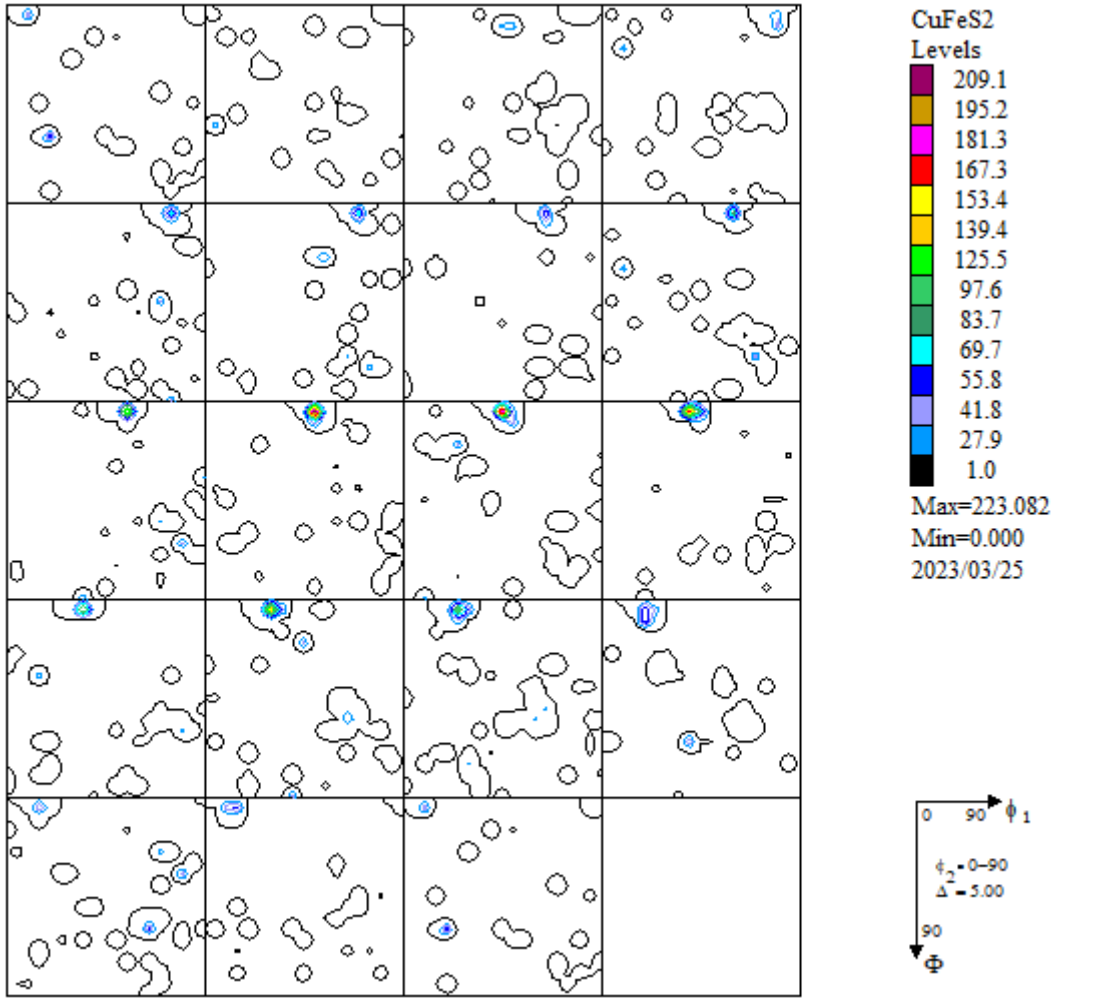


格子点の９３．４％が１．０以下でｒａｎｄｏｍ値は０％である。

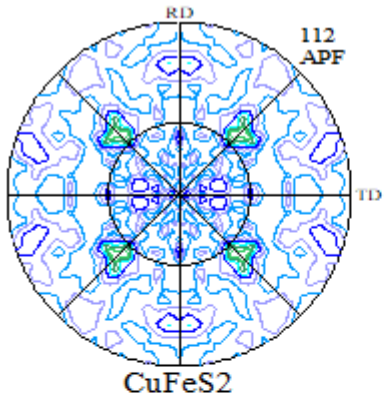
LaboTex Triclinic->Orthorhombic

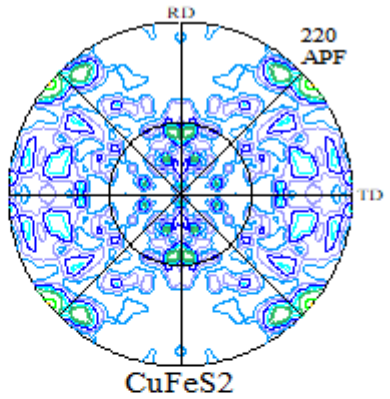


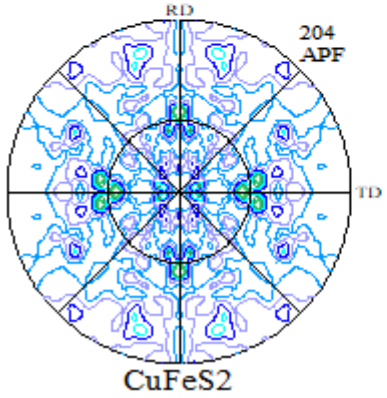


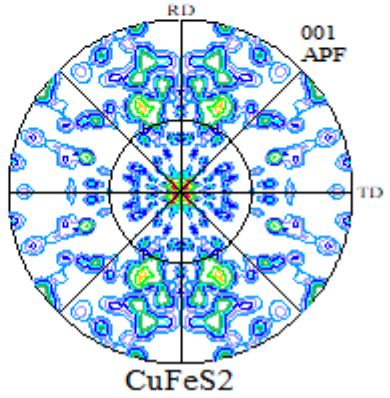


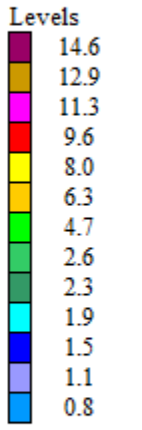
配向関数

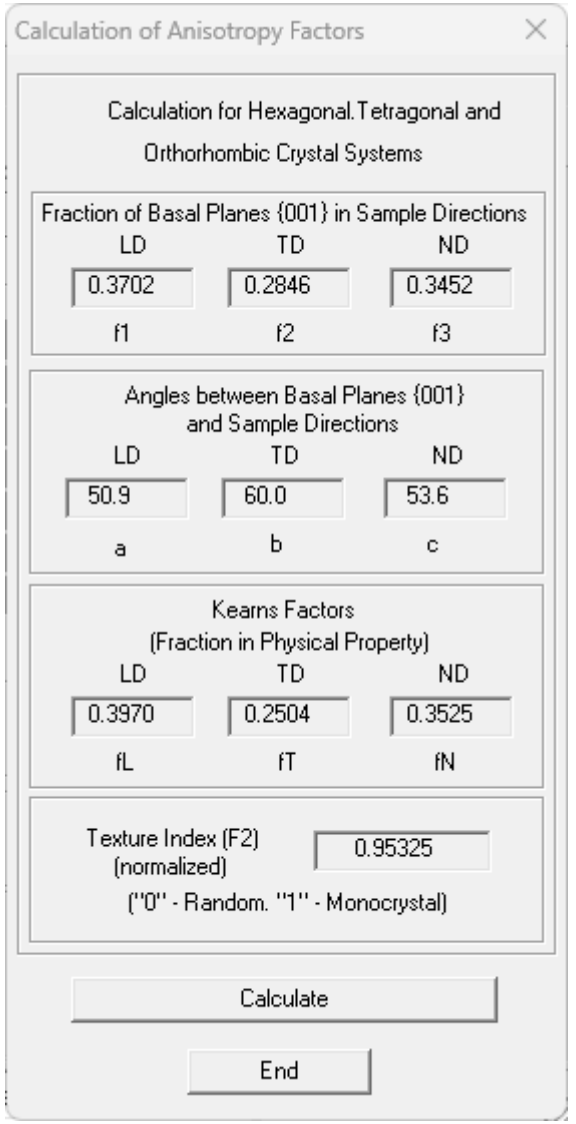

RD
112
APF
TD
CuFeS2


RD
220
APF
TD
CuFeS2


RD
204
APF
TD
CuFeS2


RD
001
APF
TD
CuFeS2


Levels
14.6
12.9
11.3
9.6
8.0
6.3
4.7
2.6
2.3
1.9
1.5
1.1
0.8
Min=0.014
Max=16.154
2023/03/25


Calculation of Anisotropy Factors
Calculation for Hexagonal.Tetragonal and
Orthorhombic Crystal Systems
Fraction of Basal Planes {001} in Sample Directions
LD
TD
ND
0.3702
0.2846
0.3452
f1
f2
f3
Angles between Basal Planes {001}
and Sample Directions
LD
TD
ND
50.9
60.0
53.6
a
b
c
Kearns Factors
(Fraction in Physical Property)
LD
TD
ND
0.3970
0.2504
0.3525
fL
fT
fN
Texture Index (F2)
(normalized)
0.95325
("0" - Random, "1" - Monocrystal)
Calculate
End

{001}極点図をExport