

## E B S DデータをL a b o T e xで解析—O r t h o r h o m b i c

E B S Dデータはe u l e r角度で入力されている。

計算されるO D F図は同一であるが、指定格子定数が異なる入力を行うと

O D F図の方位計算  $\{h k l\} \langle u v w \rangle$ は異なる。

極点図、逆極点図も異なる。

他のO D Fソフトウェアと同じ格子定数指定が望ましい。

2021年01月05日

*HelperTex Office*

## 概要

L a b o T e x の O D F 解析の場合、格子定数は、最大値を C 軸に配置する。

例えば、o l i v i n e の場合

```
Structure Code      a      b      c      alfa      beta      gamma ↓
3      1.0      1.261  2.1587  90.0      90.0      90.0      5.0      1      0      0.
```

しかし、E B S D データの場合、O D F 図に関係するか調査を行う。

## 比較入力データ

### I C D D - T y p e

```
↓:¥2021-01-05-olivineopticalmap¥olivine-test¥olivine-edit.ang↓
↓
Structure Code      a      b      c      alfa      beta      gamma ↓
3      1.0      2.1587  1.261  90.0      90.0      90.0      5.0      1
0      0↓
179.99985      4.77045  179.99985      1↓
180.0      4.77      180.0      1↓
0.0      0.0      0.0      1↓
0.0      0.0      0.0      1↓
[EOF]
```

### L a b o T e x - T y p e

```
↓:¥2021-01-05-olivineopticalmap¥olivine-test¥olivine-edit.ang↓
↓
Structure Code      a      b      c      alfa      beta      gamma ↓
3      1.0      1.261  2.1587  90.0      90.0      90.0      5.0      1
0      0↓
179.99985      4.77045  179.99985      1↓
180.0      4.77      180.0      1↓
0.0      0.0      0.0      1↓
0.0      0.0      0.0      1↓
-----
```

ODF Calculations from a Set of Single Orientations

Project: Demo

Sample: ICDD

Crystal Symmetry: D2-Orthorhombic

Cell Parameters (Relative): a: 1.0, b: 2.1, c: 1.2

Angle Convention for Data: Bunge

Grid Cells for Output ODF: 5.0\*5.0

Angle Unit: Degrees

Weight: Yes

Phase: 0

Descriptions: U:\2021-01-05-olivineopticalmap\olivine-test\olivine-edit.ang

Single Orientations Files: olivine-edittoAngle-ICDD.SOR

Calculations Progress: Merge (files), No of single orien.

'SOR' Output File Options: Add {HKL}<UVW>  Max. Value of Miller Indices = 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

RUN END

ODF Calculations from a Set of Single Orientations

Project: Demo

Sample: Labo

Crystal Symmetry: D2-Orthorhombic

Cell Parameters (Relative): a: 1.0, b: 1.2, c: 2.1

Angle Convention for Data: Bunge

Grid Cells for Output ODF: 5.0\*5.0

Angle Unit: Degrees

Weight: Yes

Phase: 0

Descriptions: U:\2021-01-05-olivineopticalmap\olivine-test\olivine-edit.ang

Single Orientations Files: olivine-edittoAngle-Labo.SOR

Calculations Progress: Merge (files), No of single orien.

'SOR' Output File Options: Add {HKL}<UVW>  Max. Value of Miller Indices = 15

Hexagonal Axis Convention of Data (important only in Hexagonal C.S.):

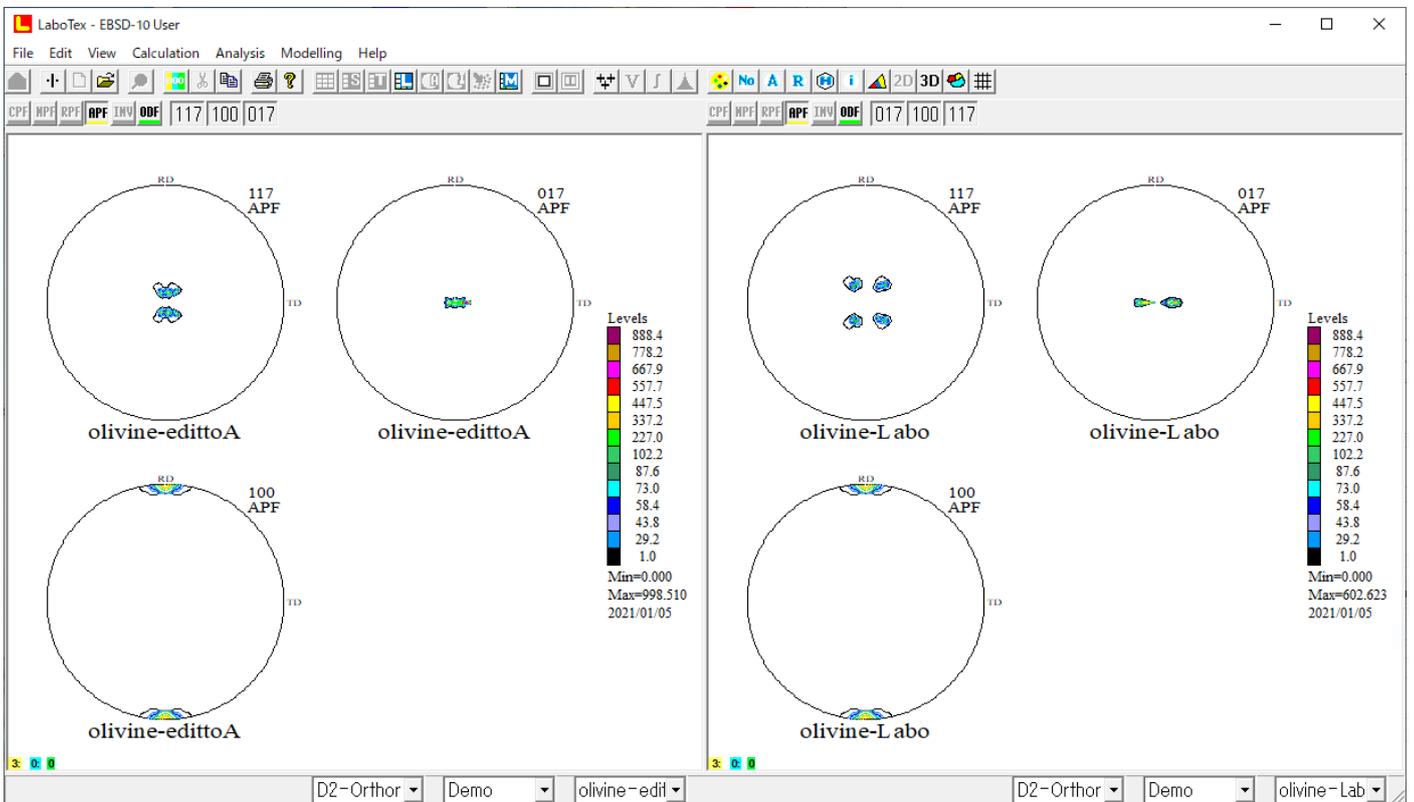
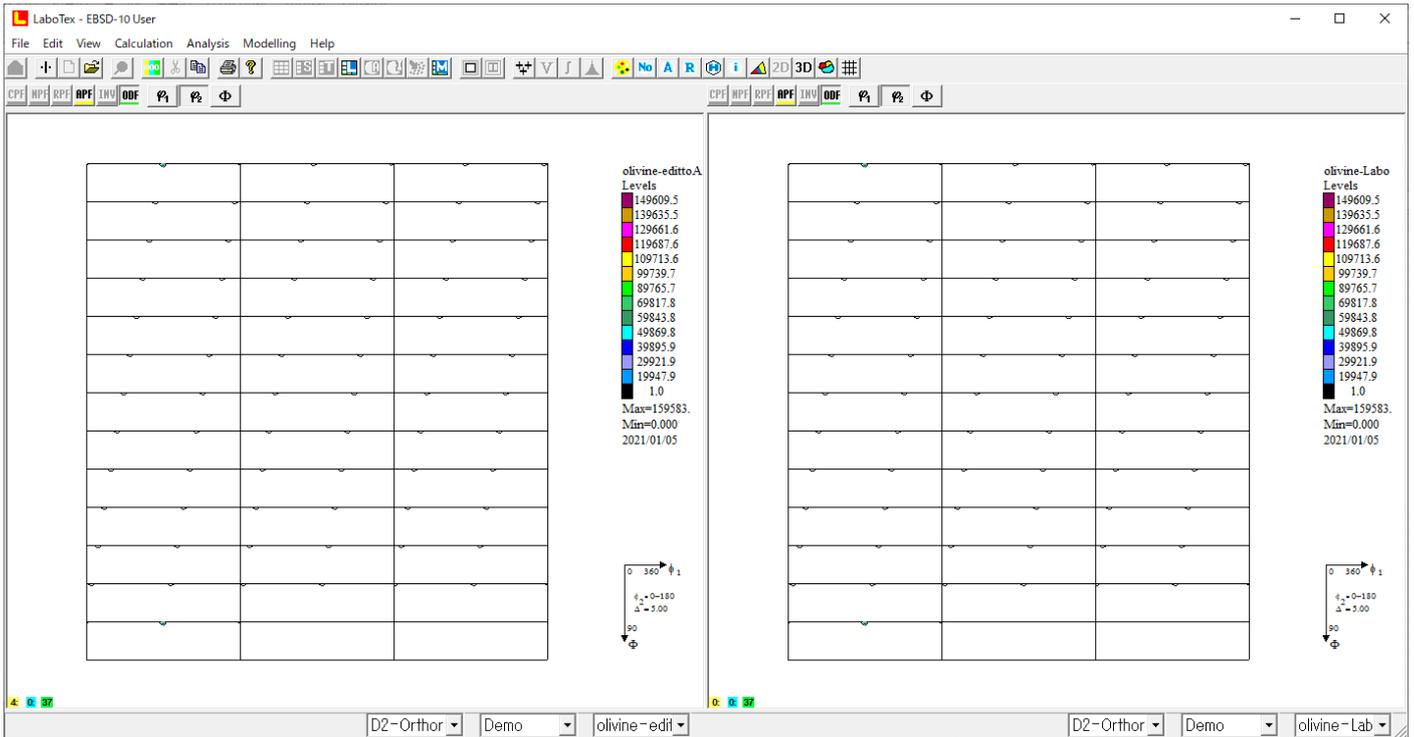
Warning: If your file contains non-indexed data, then you should use "EBSD Format - Defined by User" (Menu "Edit", "LaboTex Options", "Data Formats")  
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 Non-indexed data can create false maximum on the ODF!  
 In case of problems, please contact the office@labosoft.com.pl

RUN END

ODF

ICDD-Type

LaboTex-Type



ODF図は同一であるが極点図は異なる。

EBSD解析の場合、格子定数はICDD-Typeが適当と思われる。