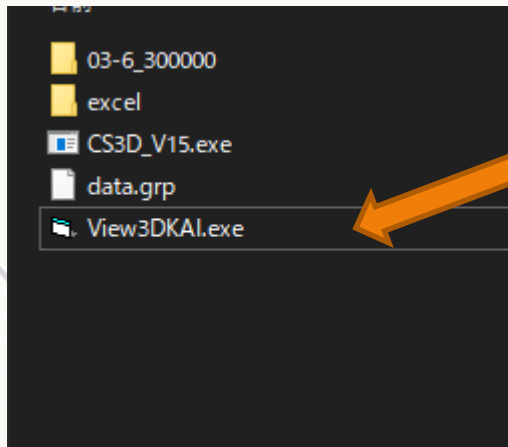


# View3DKai Instruction

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## Opening VIEWKAI



After you have joined your grp files,  
Execute “View3DKAI.exe”

You will have a window like this,



To install your grp file, click “ファイル指定(Select file)” and you will have the following message window.





Choose a surface you want to check in “断面制御(Cross-section control)”, you will have a overall view of your CADMAS area.

\*in this example the cross-section is X-Z surface

# Functions in VIEWKAI

## Cross section control

\*you can also change the layer in the cross-section, by typing in the num. of layer

The screenshot displays the VIEWKAI software interface with several control panels. At the top is the 'ファイル制御' (File Control) panel with a text field showing '0.000000E+00' and buttons for '次の時刻へ' (Next time step) and '前の時刻へ' (Previous time step). Below this is the '断面制御' (Cross-section Control) panel, which has radio buttons for 'x-y', 'x-z' (selected), and 'y-z', and three input fields, each containing the number '1'. The '物理量制御' (Physical quantity control) panel follows, with radio buttons for '各種' (selected), '流速' (Velocity), '等値' (Equal value), and '数値' (Value). It includes a '自由表面' (Free surface) section with a 'VOF関数Fの値' (VOF function F value) of '0.5' and a '塗り潰し' (Fill) checkbox. Below that is the 'その他の描画' (Other drawing) section with checkboxes for '計算格子' (Calculation grid) and '透過構造' (Transparent structure). The '画面制御' (Screen control) panel is next, with buttons for '画面内へ' (Inside screen) and 'デフォルトへ' (Default), a '描画比(横/縦)' (Drawing ratio (width/height)) of '1', and checkboxes for '白黒反転' (Black and white inversion), '時刻等' (Time step), '等値線' (Isogram), and 'ベクトル' (Vector). It also shows two numerical values: '2.036007E+00' and '5.719085E-01'. Below the panels is a preview window showing a green rectangle on a black background. At the bottom is the '解析' (Analysis) panel with radio buttons for 'x-y' (selected), 'x-z', and 'y-z', and another preview window showing a green line on a black background.

Go to 1 step after

Back to 1 step before

Physical quantity control \*details in next slides

"Various" → Free surface (F value), grids, porous structure

"Velocity" → velocity vector

"Equal value" → Isogram

"Value" → Numerical Depiction

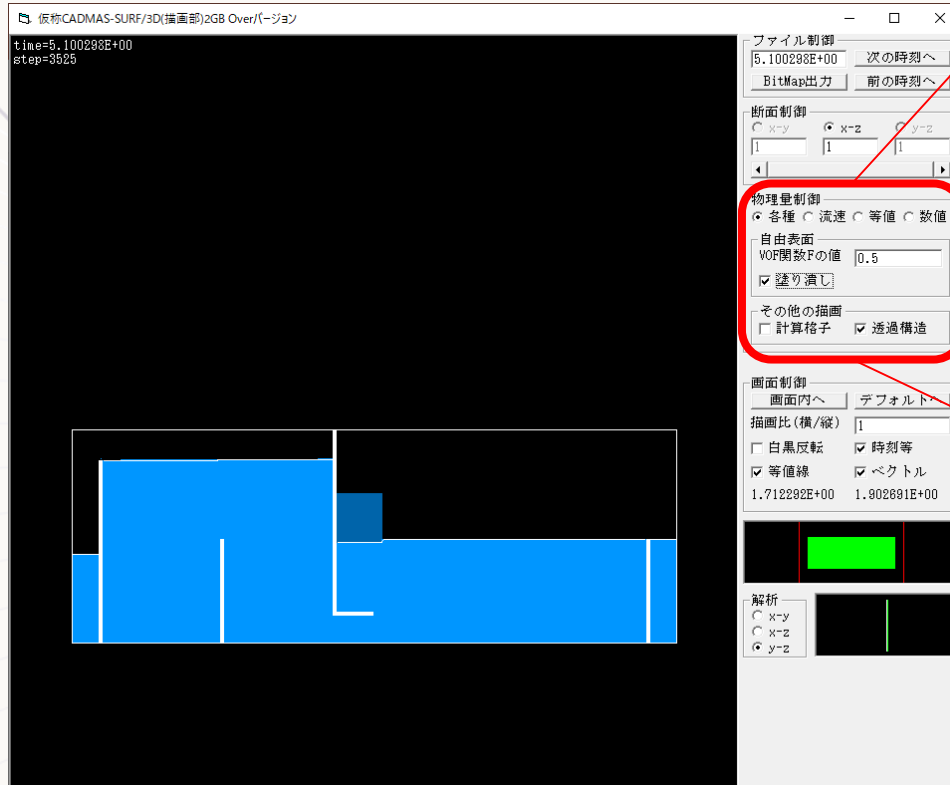
## Screen control

"Inside screen", "default"

\*black & white inversion, time(step), etc.

# Physical quantity control

## 1. Various



### 物理量制御

☒ 各種 ☐ 流速 ☐ 等値 ☐ 数値

自由表面 Free surface

VOF関数Fの値 0.5

Type in a certain F value

☒ 塗り潰し

Blotting out the area

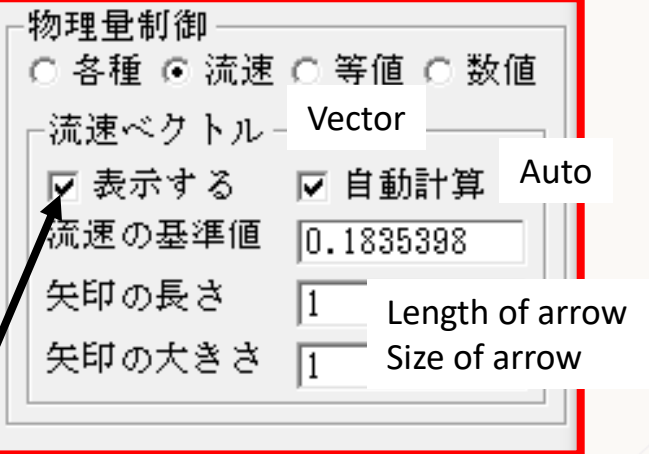
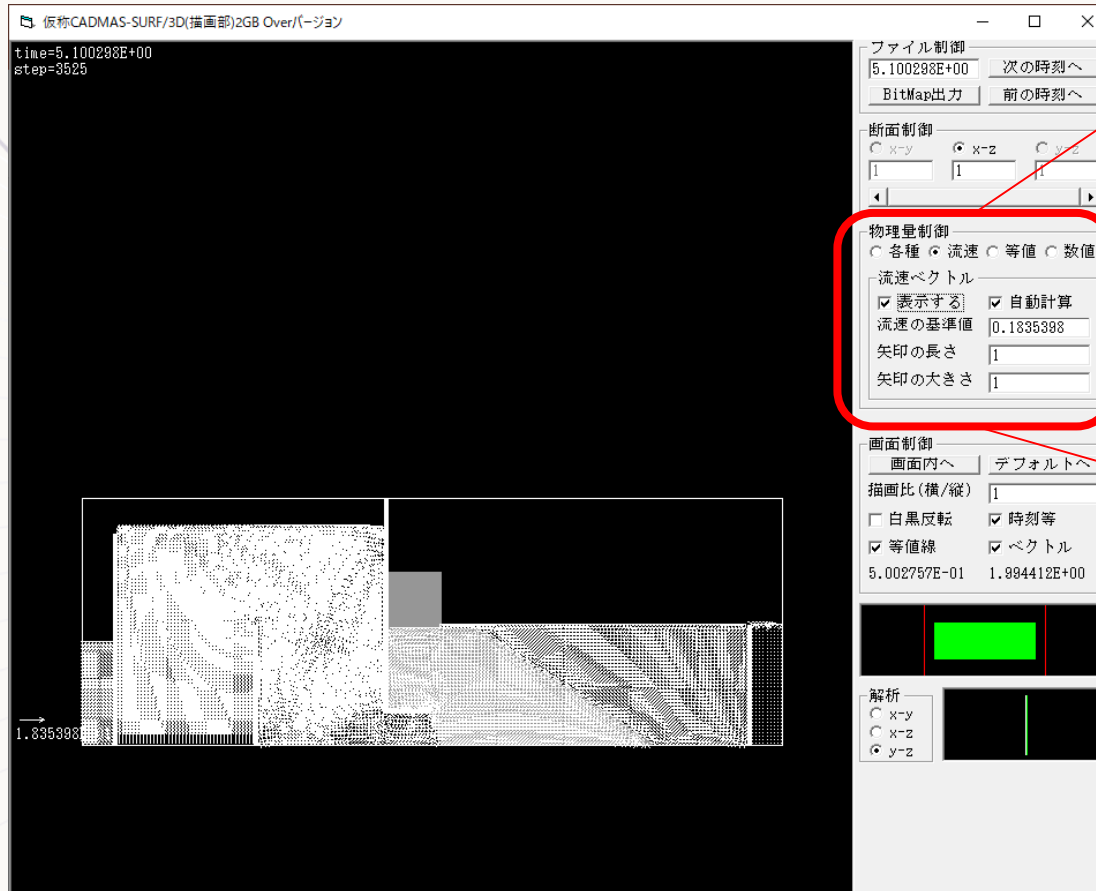
その他の描画

☐ 計算格子

☒ 透過構造

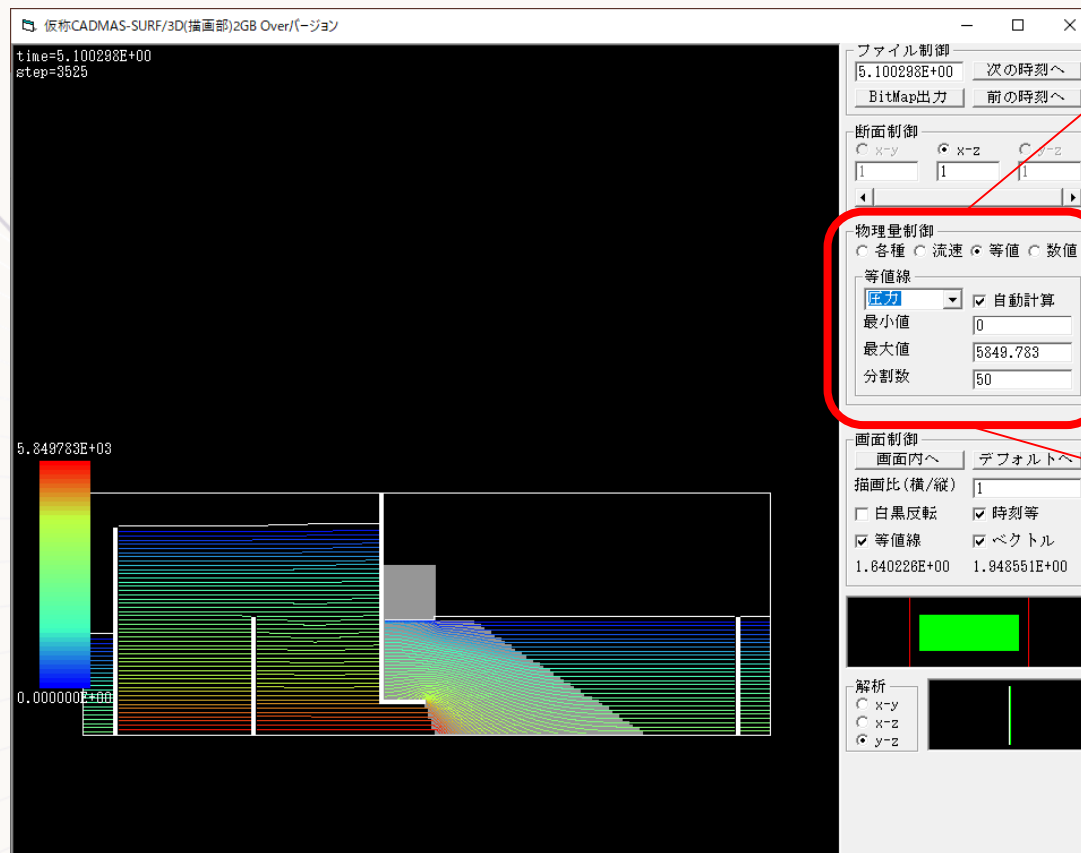
Grid depiction Porous depiction

## 2. Velocity



Check “表示する(Show)” in order to see the vector of velocity

### 3. Isogram



#### 物理量制御

☐ 各種 ☐ 流速 ☒ 等値 ☐ 数値

等値線 Isoline

圧力 ☒ 自動計算

Auto

最小値

MAX

0

最大値

MIN

5849.783

分割数

Division

50

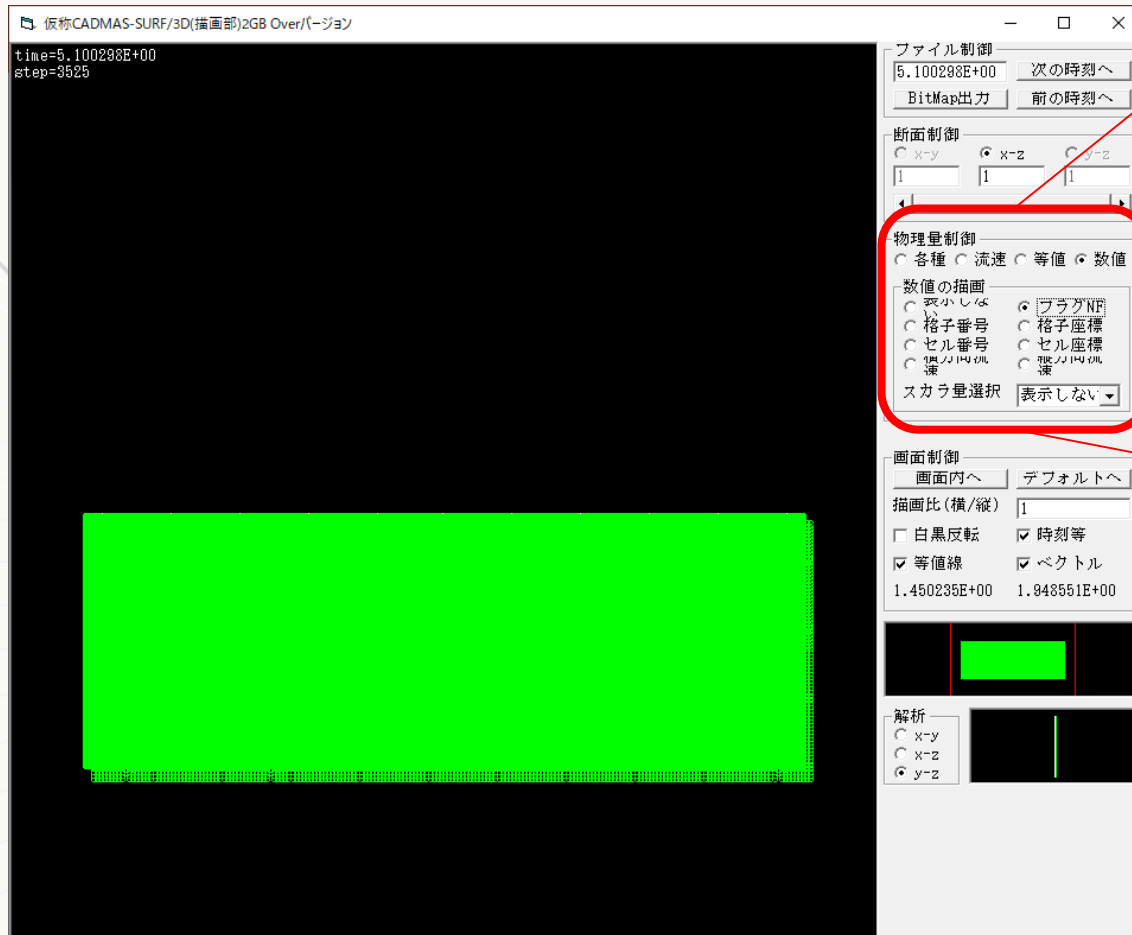
#### 等値線

圧力  
表示しない  
水位  
圧力  
VOF関数F  
空隙率

Other than  
“Pressure”,  
“water level”, “F  
value”, and  
“porosity” can be  
seen



## 4. values



### 物理量制御

☐ 各種 ☐ 流速 ☐ 等値 ☒ 数値

### 数値の描画

☐ 表示しない ☒ フラグNF  
☐ 格子番号 ☐ 格子座標  
☐ セル番号 ☐ セル座標  
☐ 速度 ☐ 速度

スカラー量選択

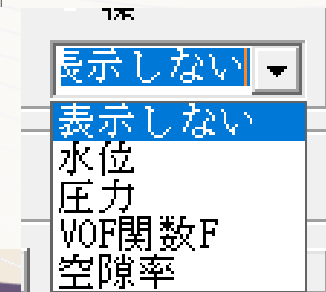
表示しない

Value of grid(cell)

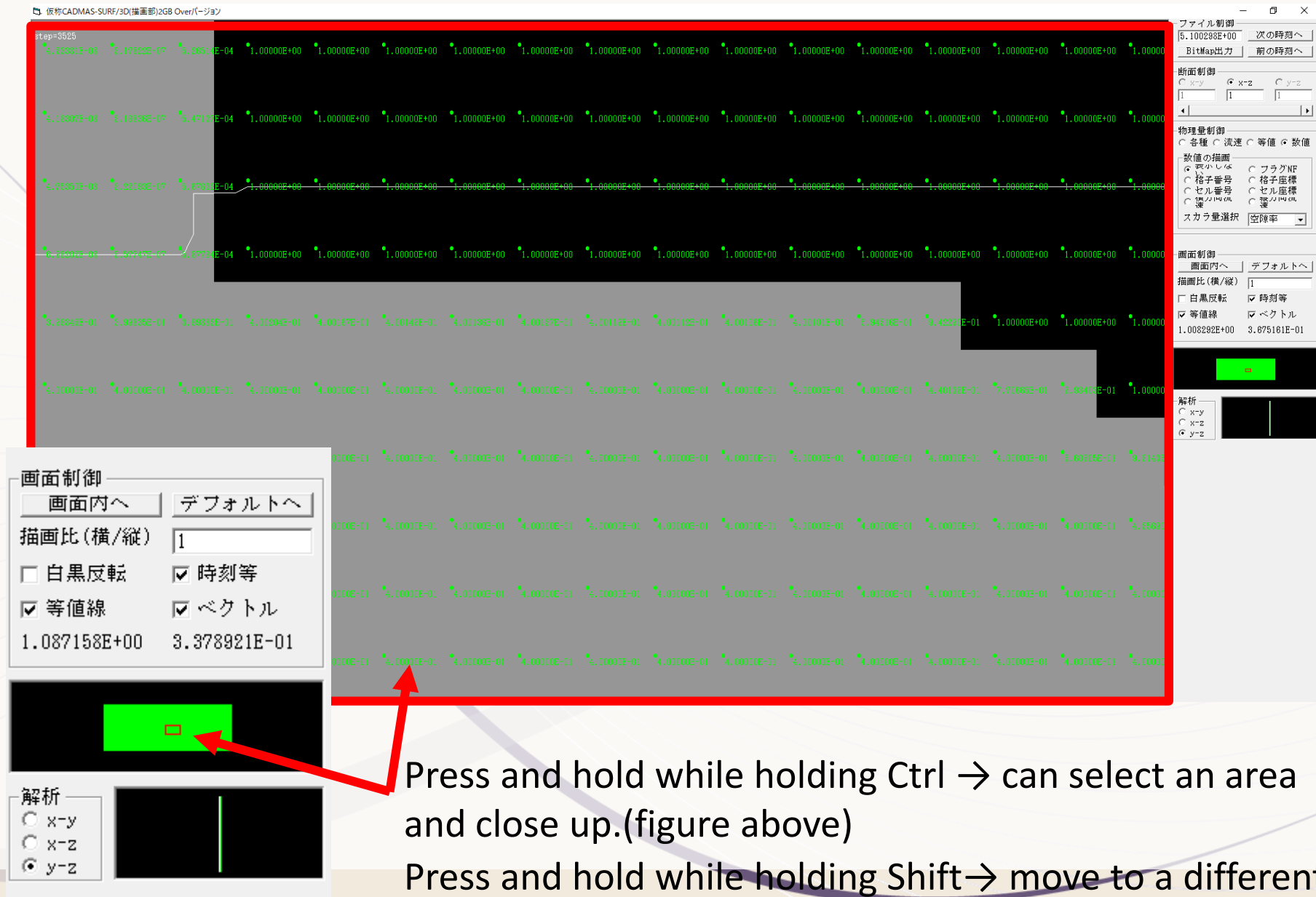
FLG NF, grid num., cell num.,  
grid(cell) coordinate,  
velocity(horizontal & vertical)

Scalar value

Water level, pressure, F value,  
porosity (figure below)



# using screen control



画面制御

画面内へ デフォルトへ

描画比(横/縦) 1

☐ 白黒反転 ☒ 時刻等

☒ 等値線 ☒ ベクトル

1.087158E+00 3.378921E-01

解析

☐ x-y

☐ x-z

☒ y-z

Press and hold while holding Ctrl → can select an area and close up.(figure above)

Press and hold while holding Shift → move to a different area

Press default to go back to overview


## How GRP Whether to connect data

| 名前            | 更新日時             | 種類            | サイズ        |
|---------------|------------------|---------------|------------|
| data.grp00000 | 2020/09/13 8:29  | GRP00000 ファイル | 109,257 KB |
| data.grp00001 | 2020/09/13 8:29  | GRP00001 ファイル | 105,001 KB |
| data.grp00002 | 2020/09/13 8:29  | GRP00002 ファイル | 105,001 KB |
| data.grp00003 | 2020/09/13 8:29  | GRP00003 ファイル | 105,001 KB |
| data.grp00004 | 2020/09/13 8:29  | GRP00004 ファイル | 105,001 KB |
| data.grp00005 | 2020/09/13 8:29  | GRP00005 ファイル | 105,001 KB |
| data.grp00006 | 2020/09/13 8:29  | GRP00006 ファイル | 105,001 KB |
| data.grp00007 | 2020/09/13 8:29  | GRP00007 ファイル | 104,837 KB |
| GFconv.exe    | 2020/09/13 20:34 | アプリケーション      | 540 KB     |



```
C:\Users\boyonagi\Desktop\ViewKAI\test\GFconv.exe
data.grp00001 15615 15.2039532798048
data.grp00002 15615 15.2039532798048
data.grp00003 15615 15.2039532798048
data.grp00004 15615 15.2039532798048
data.grp00005 15615 15.2039532798048
data.grp00006 15615 15.2039532798048
data.grp00007 15615 15.2039532798048
data.grp00000 15624 15.2050601003509
data.grp00001 15624 15.2050601003509
data.grp00002 15624 15.2050601003509
data.grp00003 15624 15.2050601003509
data.grp00004 15624 15.2050601003509
data.grp00005 15624 15.2050601003509
data.grp00006 15624 15.2050601003509
data.grp00007 15624 15.2050601003509
data.grp00000 15632 15.2060453752204
data.grp00001 15632 15.2060453752204
data.grp00002 15632 15.2060453752204
data.grp00003 15632 15.2060453752204
data.grp00004 15632 15.2060453752204
data.grp00005 15632 15.2060453752204
data.grp00006 15632 15.2060453752204
data.grp00007 15632 15.2060453752204
```

Put this executable file in the same folder as the GRP file to be combined and execute it.



| 名前            | 更新日時             | 種類                | サイズ        |
|---------------|------------------|-------------------|------------|
| data.grp      | 2020/09/17 1:33  | Microsoft プログラ... | 740,521 KB |
| data.grp00000 | 2020/09/13 8:29  | GRP00000 ファイル     | 109,257 KB |
| data.grp00001 | 2020/09/13 8:29  | GRP00001 ファイル     | 105,001 KB |
| data.grp00002 | 2020/09/13 8:29  | GRP00002 ファイル     | 105,001 KB |
| data.grp00003 | 2020/09/13 8:29  | GRP00003 ファイル     | 105,001 KB |
| data.grp00004 | 2020/09/13 8:29  | GRP00004 ファイル     | 105,001 KB |
| data.grp00005 | 2020/09/13 8:29  | GRP00005 ファイル     | 105,001 KB |
| data.grp00006 | 2020/09/13 8:29  | GRP00006 ファイル     | 105,001 KB |
| data.grp00007 | 2020/09/13 8:29  | GRP00007 ファイル     | 104,837 KB |
| GFconv.exe    | 2020/09/13 20:34 | アプリケーション          | 540 KB     |

The combined **data.grp** comes out.