

Hitachi 2017
Think Outside the Lab
Hitachi High Technologies
America, Inc.

Hitachi map 3D Overview
Surface Imaging and Analysis Software

HITACHI
Inspire the Next

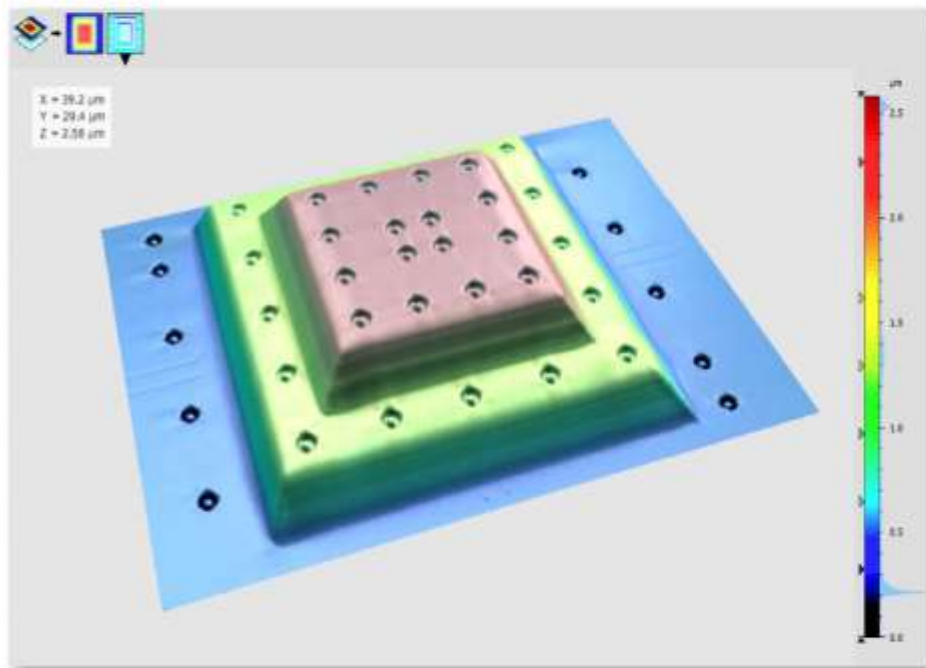
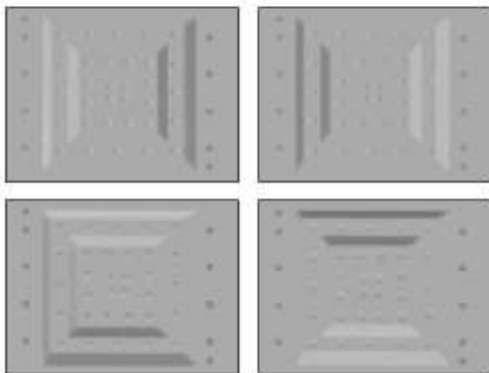


Hitachi map 3D

- Digital Surf for **SURFACES!**
- Based off Mountains 7 Software
 - If customers are familiar with Mountains software, they can handle Hitachi map 3D
 - Easy to use/learn
 - 8 add-on modules for all kinds of heavy duty applications
- MAIN FEATRES TO HIGHLIGHT
 - 3D surface reconstruction
 - Single Image
 - Stereo Pairs (Lite)
 - Quad-BSE Images
 - Calibration

Hi quality 3D reconstruction of SEM images

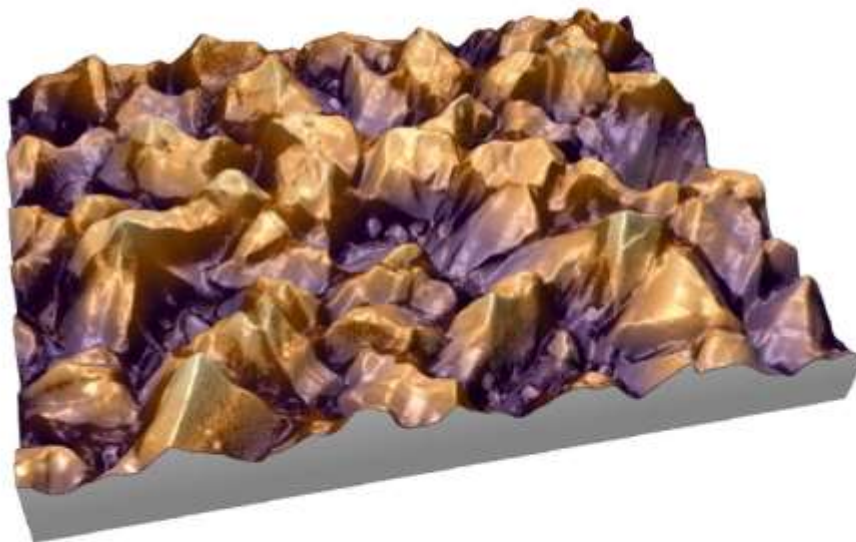
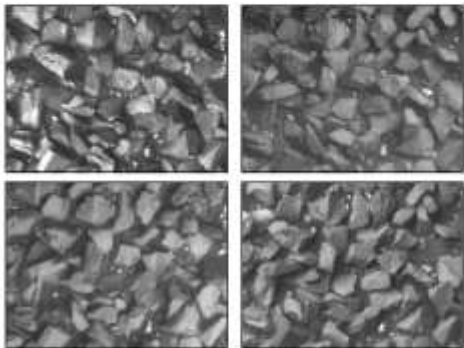
Reconstruction from a quadrant of images



**UNIQUE TO HITACHI
MAP 3D**

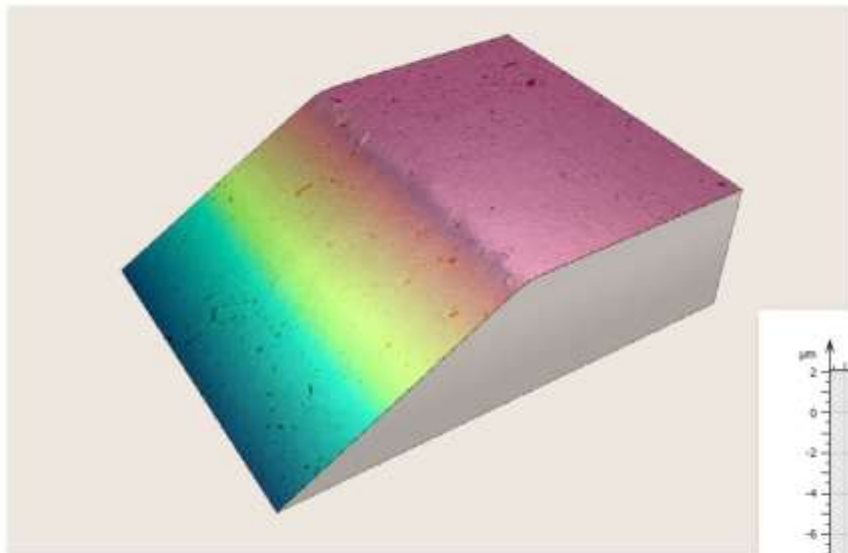
Hi quality 3D reconstruction of SEM images

UNIQUE TO HITACHI MAP 3D

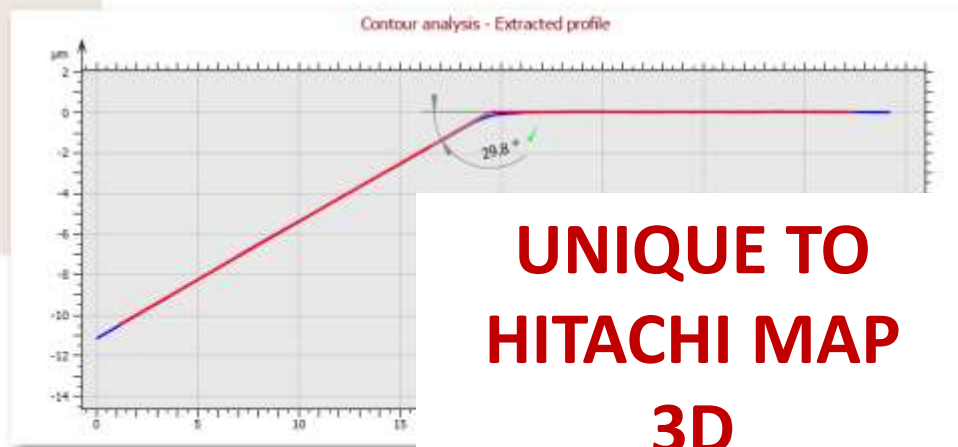
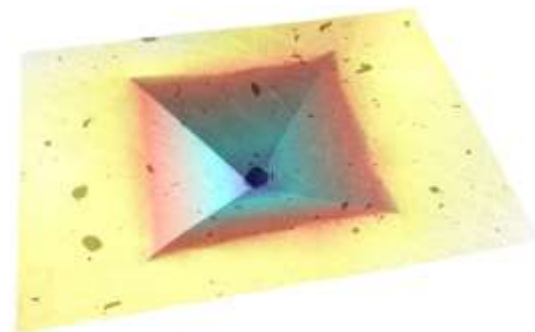


3D view optimized by user settings
(color, contract, shinning effect,...)

Flat and Height Calibration : surfaces of reference



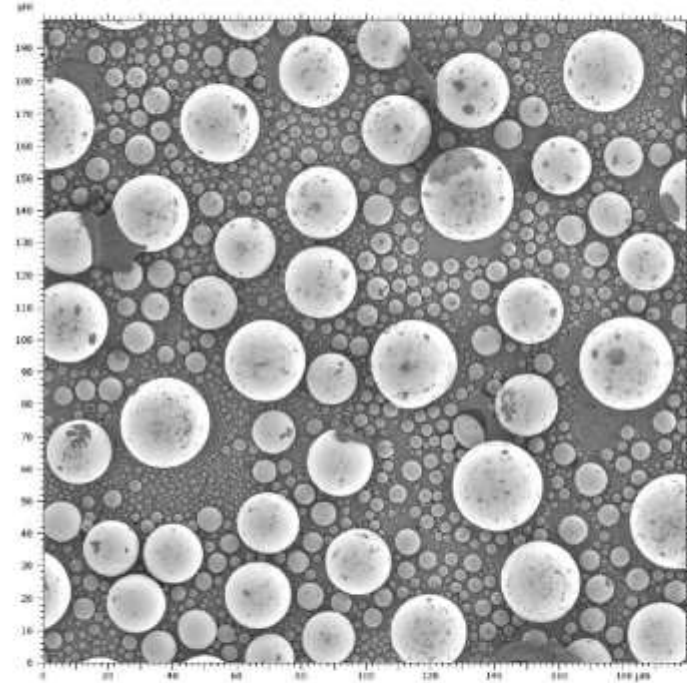
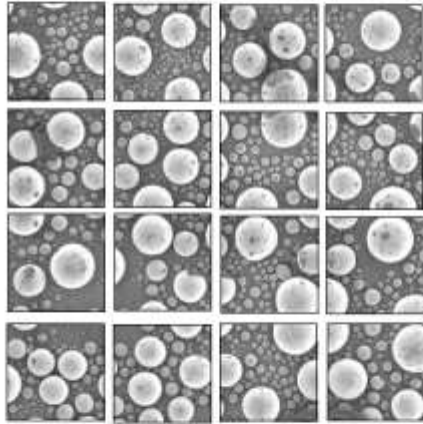
30° calibration slope, Wickers indent



**UNIQUE TO
HITACHI MAP
3D**

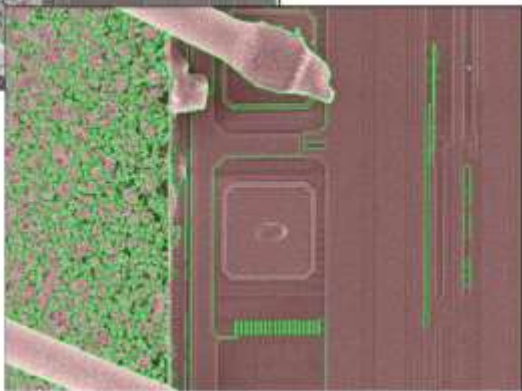
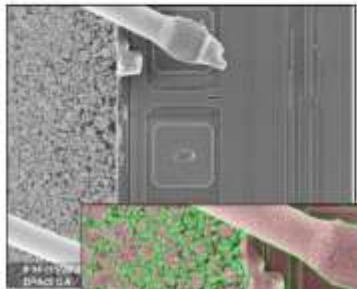
Hi quality Stitching of SEM images

from an images patchwork



By using the Zig-Zag function on your Hitachi microscope, several hundred images can be automatically collected and then imported into Hitachi map 3D for accurate stitching.

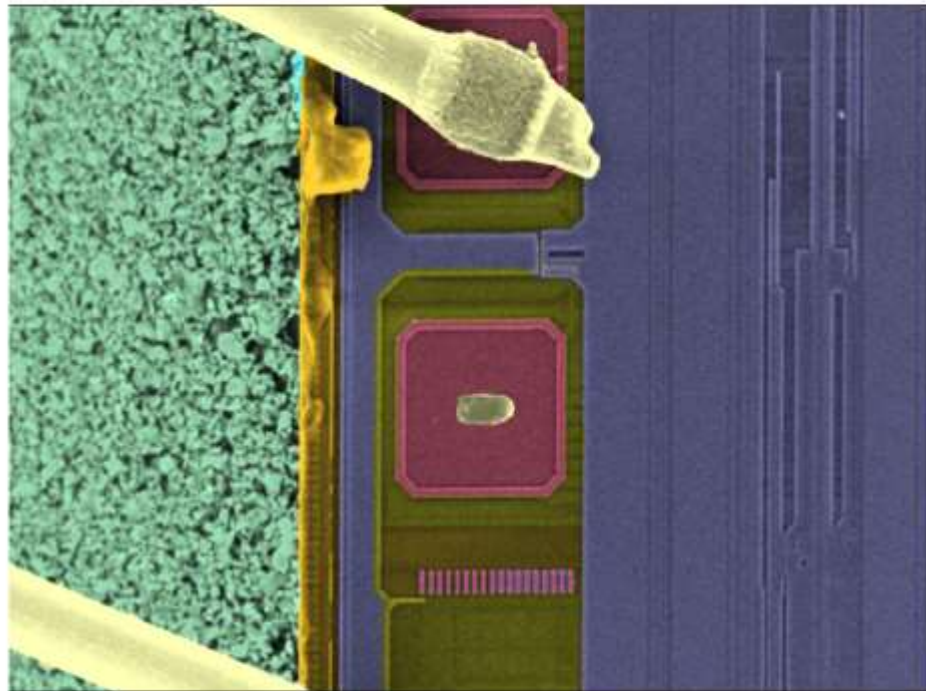
SEM images Colorization



Automatic boundaries detection

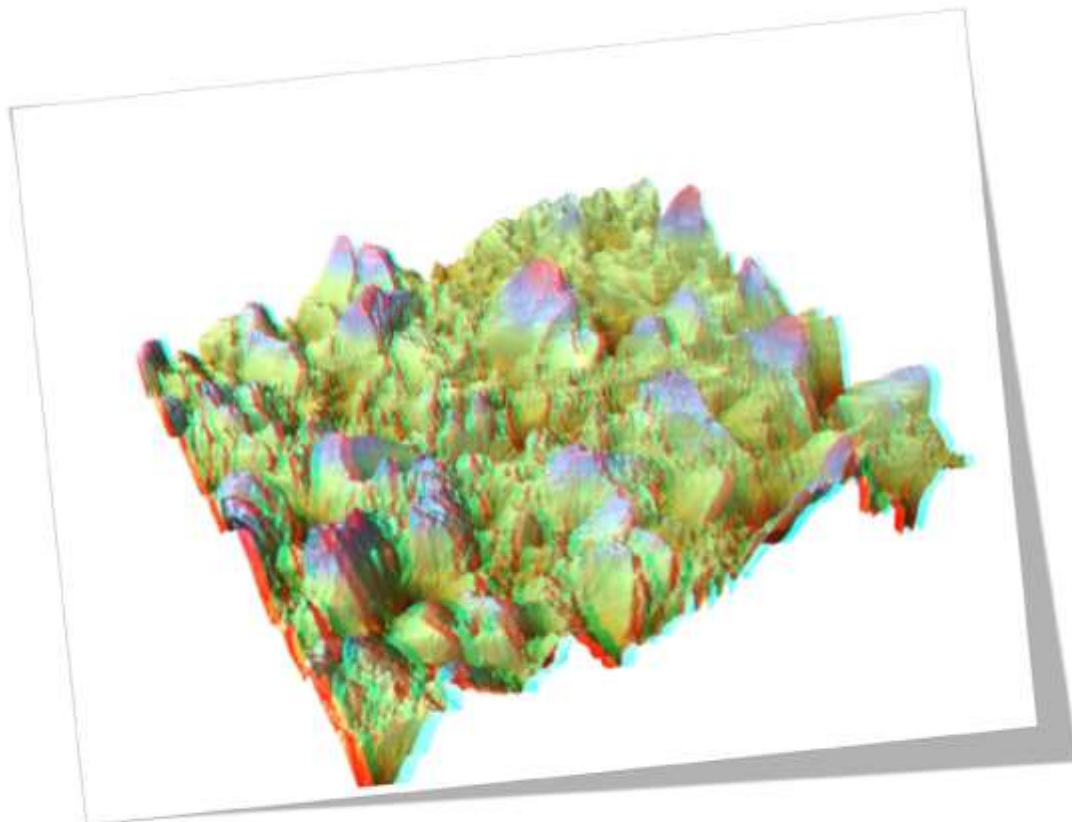


Image
colorization



Using the automatic boundary detection function allows you to quickly and easily fill selected areas with color, making an otherwise tedious and time-consuming task a breeze.

Create animated views of any 3D surface



Fly over features of interest on a surface

Save your flight as a video

Visualize in real 3D with glasses

Hitachi map 3D specification

light

Standard

Advanced

desktop publishing and template document

Y

Y

Y

video tutorial and reference guide

Y

Y

Y

Contextual help resources

Y

Y

Y

User interface language

11 languages available : EN, FR, DE, SP, IT, BR, PL, JP, CN, KR, RU

image enhancement and Colorization

Y

Y

Y

Compatible with a series of images

NA

Y

Y

Topography reconstruction from 2 images

NA

Y

Y

Topography reconstruction from 4 images

Y

Y

Y

Surface texture analysis

Basic

Partial

Standard

Profile analysis

Basic

Partial

Standard

Volume analysis

Basic

Partial

Standard

Advanced surface texture options

NA

Y

Y

Grains and Particles detection and analysis

Option

Option

Included

Advanced filters

NA

Option

Included

AFM and other output map Colocalization

NA

Included

Included

Stitching

NA

Included

Included

Contour analysis

NA

Included

Included

Other options

NA

Y

Y

A scanning electron microscope (SEM) image showing a complex, layered, and fibrous structure, possibly a biological or synthetic material. The structure consists of numerous overlapping, wavy layers with a rough, textured surface. Some layers appear more distinct and parallel, while others are more intertwined. The overall appearance is that of a highly porous, multi-layered material. The image is in grayscale, highlighting the intricate details of the material's morphology.

End

Hitachi High Technologies America, Inc.
Nanotechnology Systems Division

microscopy@hitachi-hta.com

<http://www.hitachi-hightech.com/us/>