

Sunnyside deposit, Derbyshire.

3D images

To be viewed through red-cyan spectacles
with red filter to left eye.

View from about 16" (40 cm) distance.

Figure 8

Baryte BaSO_4

Colourless tabular crystals lining cavity in pinkish pisoidal matrix, some crystals having a frosting along one edge.

Sunnyside deposit, Whitwell, Derbyshire.

Specimen: found by Ray Richardson in 1968-9 and now in David Green collection, No. SSV20e.
Photography: John Chapman.

Canon EOS 5DSr camera with Carl Zeiss Luminar 63 mm objective lens on 40 mm bellows extension, with Schott fibre optic illumination. Left + right stacks of 62 and 65 120-micrometre steps at 6 degrees via Stackshot rail, with Luminar at aperture 2, combined in CombineZM.

5 mm

Field height 26 mm

1 mm
Field width 17.0 mm

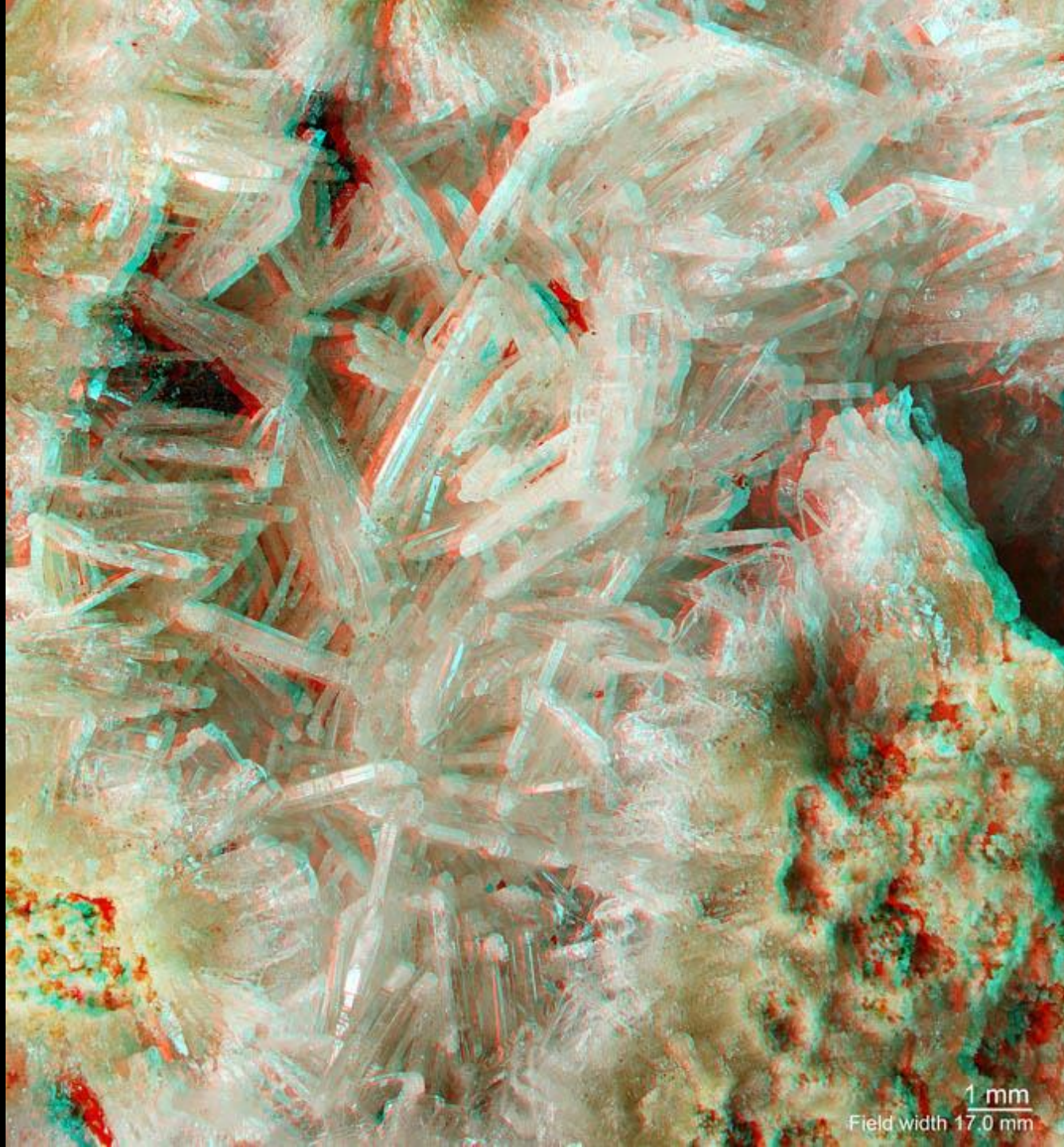


Figure 11



1 mm

Baryte BaSO_4

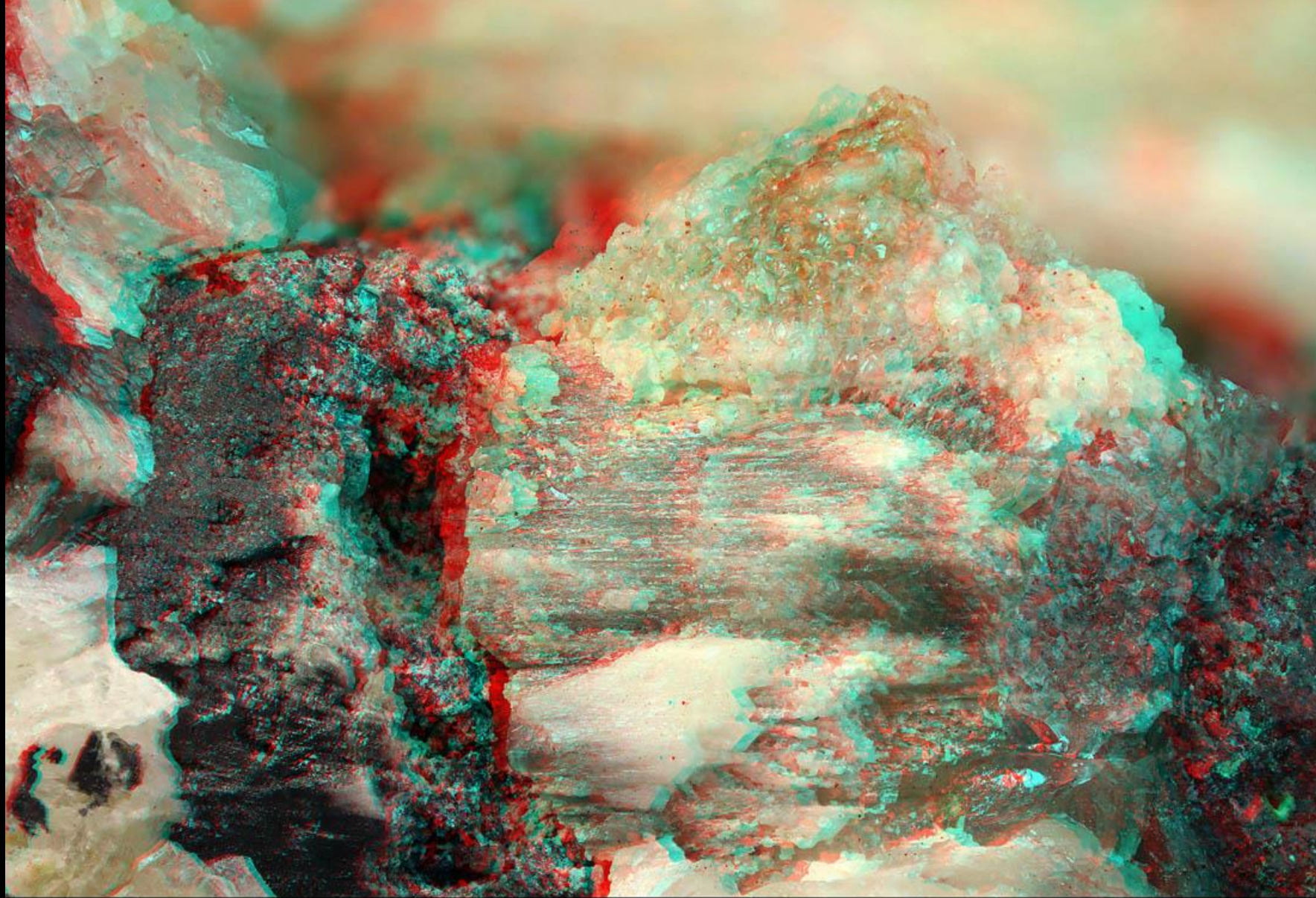
Field width 4.3 mm

Colourless tabular crystals lining cavity in pinkish pisoidal matrix showing a preferential 'frosting' along crystal edges.

Sunnyside deposit, Whitwell, Derbyshire.

Specimen: found 1968-9 by Ray Richardson and now in David Green collection, No. SSV20e. Photography: John Chapman.
Canon EOS 5DSR camera with Carl Zeiss (West Germany) 40 mm Luminar objective lens on 175 mm bellows extension, with Schott fibre optic illumination.
Left + right stacks of 50 and 56 35-micrometre steps at 6 degrees via Stackshot rail, with Luminar at fully open aperture, combined in CombineZM cropped..

Figure 13



1 mm

Cerussite PbCO_3

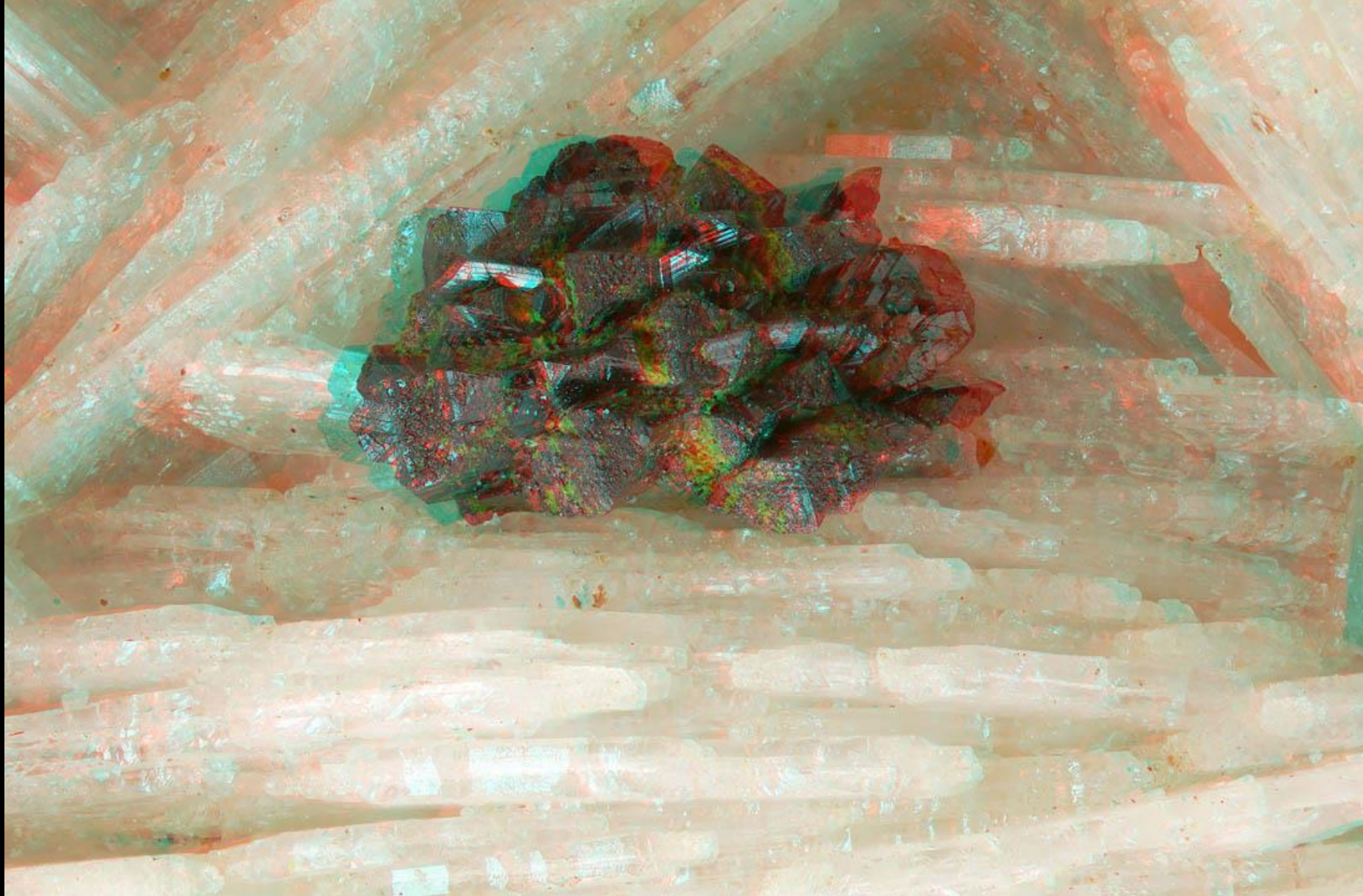
Field width 9.1 mm

Striated blocky crystal in partly oxidised galena overgrown by pink-tinged translucent smithsonite, within pink baryte.

Sunnyside deposit, Whitwell, Derbyshire.

Specimen: found 1968-9 by Ray Richardson and now in David Green collection, No. SSV10a. Photography: John Chapman.
Canon EOS 5DSR camera with Carl Zeiss (West Germany) Luminar 40 mm objective lens on 120 mm bellows extension, with Schott fibre optic illumination.
Left + right stacks of 111 and 95 40-micrometre steps at 4 degrees via Stackshot rail, with Luminar at fully open aperture, combined in CombineZM.

Figure 14



Baryte BaSO_4 with goethite $\text{Fe}^{3+}\text{O}(\text{OH})$ pseudomorphs after marcasite

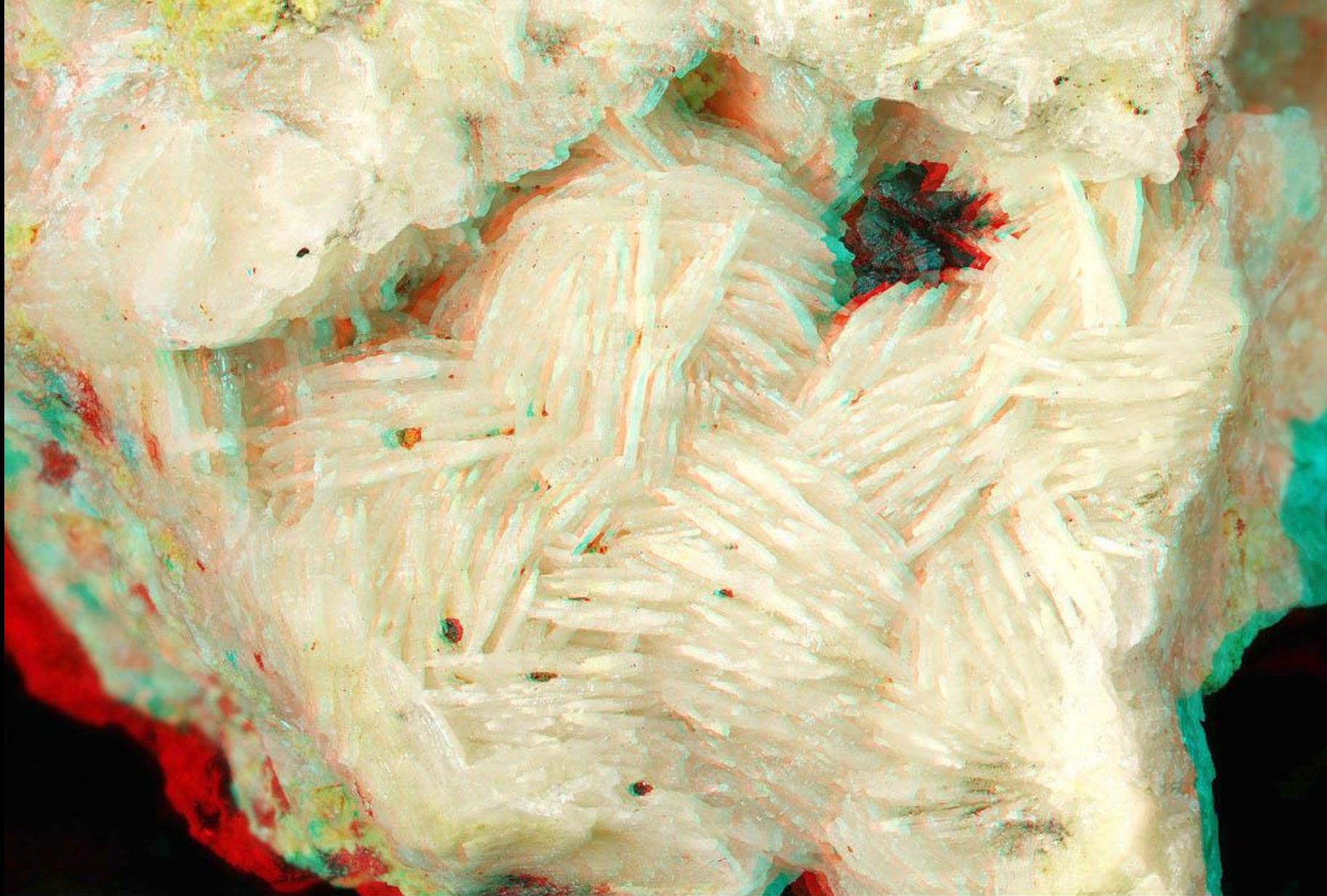
1 mm

Sunnyside deposit, Whitwell, Derbyshire.

Field width 3.65 mm

Specimen: found 1968-9 by Ray Richardson and now in David Green collection, No. SSV05b. Photography: John Chapman.
Canon EOS 5DSR camera with Carl Zeiss (West Germany) Luminar 25 mm objective lens on 175 mm bellows extension, with Schott fibre optic illumination.
Left + right stacks of 135 and 137 steps at 4 degrees, with Luminar at fully open aperture, combined in CombineZM.

Not figured



1 mm

Baryte BaSO_4 with goethite $\text{Fe}^{3+}\text{O}(\text{OH})$ pseudomorphs after marcasite

Sunnyside deposit, Whitwell, Derbyshire.

Field width 16.7 mm

Specimen: found 1968-9 by Ray Richardson and now in David Green collection, No. SSV05b. Photography: John Chapman.
Canon EOS 5DSR camera with Carl Zeiss (West Germany) Luminar 63 mm objective lens on 110 mm bellows extension, with Schott fibre optic illumination.
Left + right stacks of 106 and 104 steps at 6 degrees via Stackshot rail, with Luminar at aperture 2, combined in CombineZM.

Not figured



Baryte BaSO_4 with goethite $\text{Fe}^{3+}\text{O}(\text{OH})$ pseudomorphs after marcasite

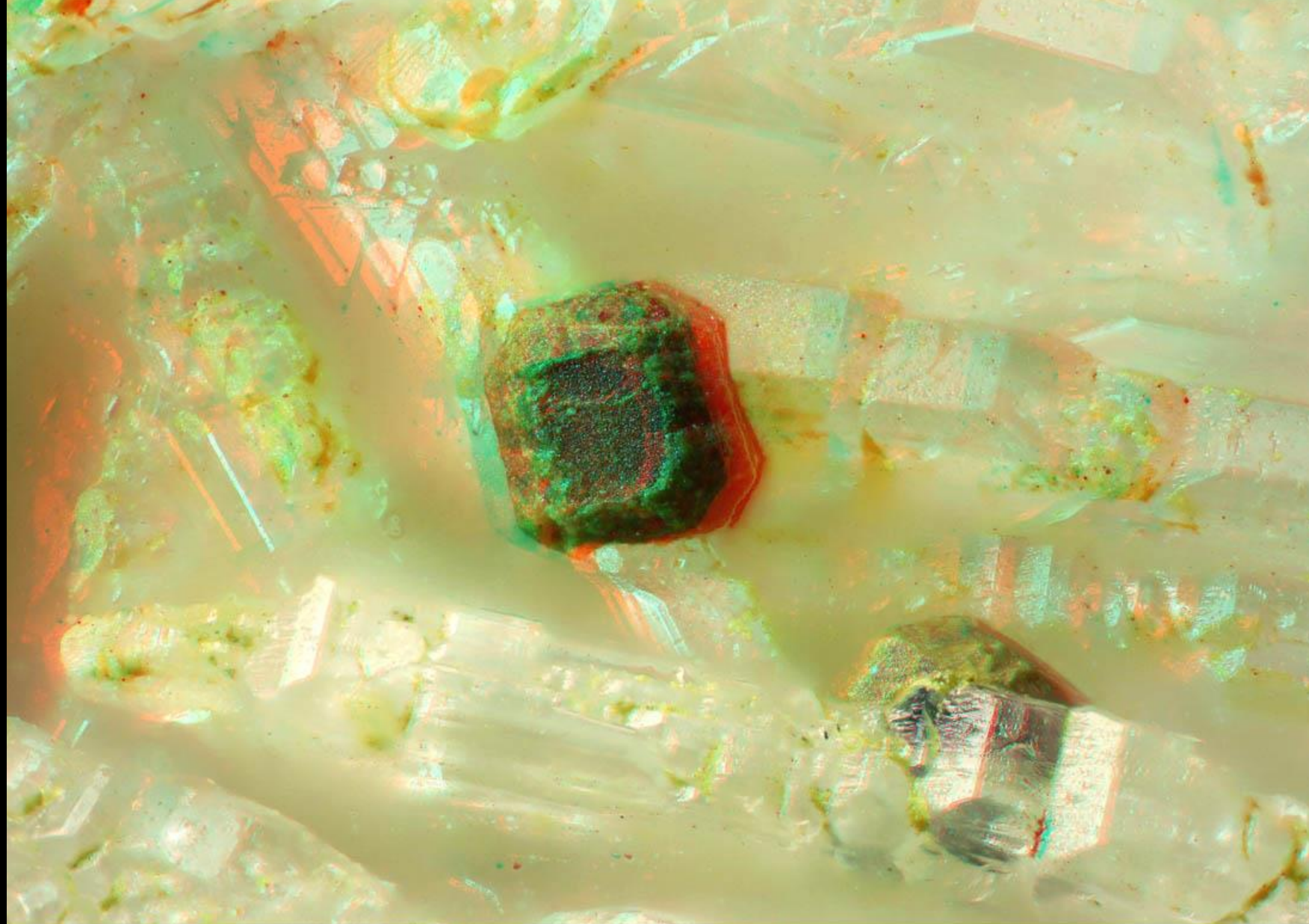
1 mm

Sunnyside deposit, Whitwell, Derbyshire.

Field width 3.65 mm

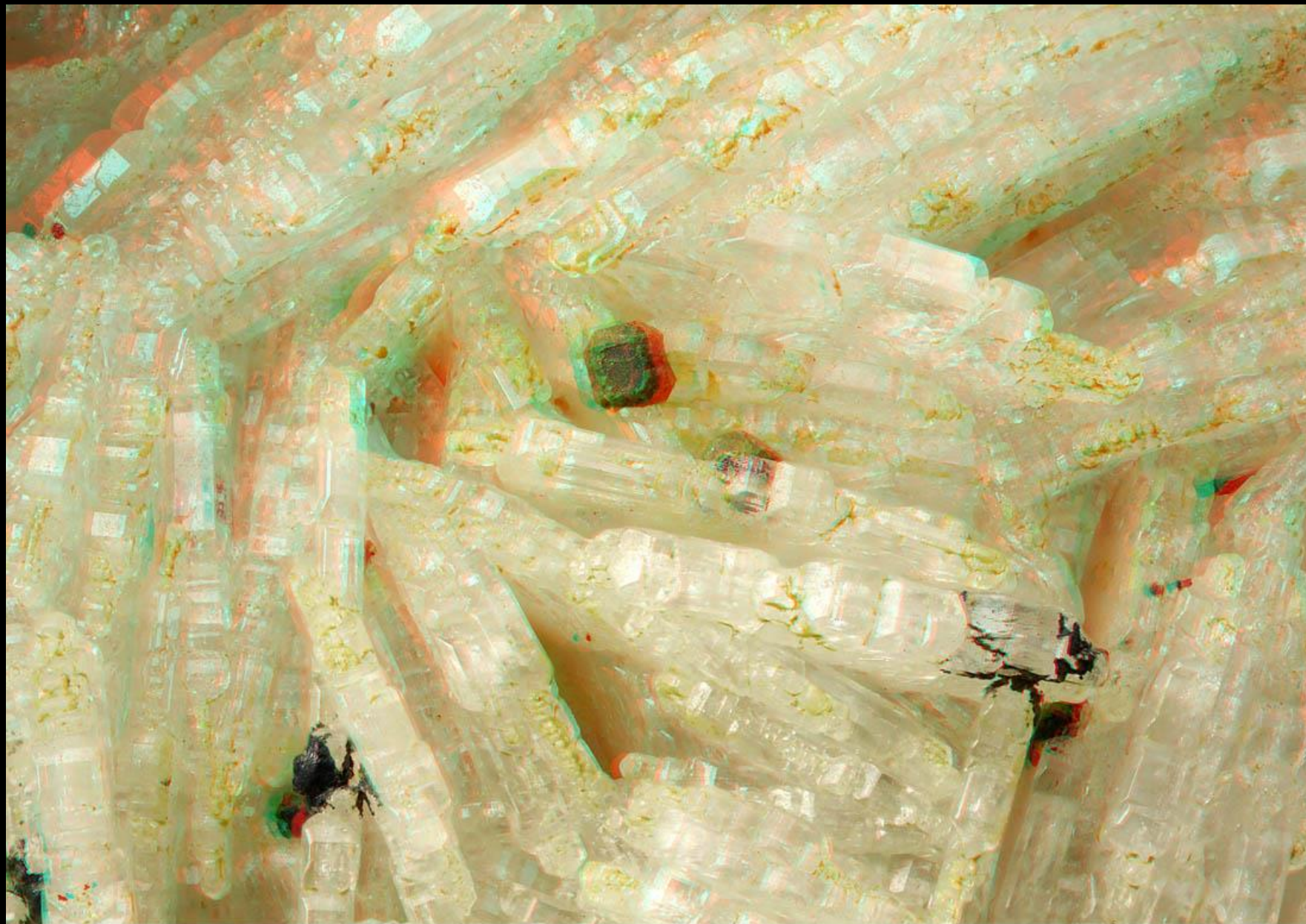
Specimen: found 1968-9 by Ray Richardson and now in David Green collection, No. SSV05a. Photography: John Chapman.
Canon EOS 5DSR camera with Carl Zeiss (West Germany) Luminar 25 mm objective lens on 175 mm bellows extension, with Schott fibre optic illumination.
Left + right stacks of 110 and 105 20-micrometre steps at 6 degrees via Stackshot rail, with Luminar at fully open aperture, combined in CombineZM.

Figure 15



Goethite $\text{Fe}^{3+}\text{O}(\text{OH})$ pseudomorph after cubooctahedral pyrite in tabular pink baryte.
0.1 mm Sunnyside deposit, Whitwell, Derbyshire. Field width 1.25 mm
Specimen: found 1968-9 by Ray Richardson and now in David Green collection, No. SSV21a. Photography: John Chapman.
Canon EOS 5DSR camera with Leica 140x/0.40 objective lens on 175 mm bellows extension, with Schott fibre optic illumination.
Left + right stacks of 111 and 125 10- and 4-micrometre steps at 6 degrees via Stackshot rail combined in CombineZM, processed in Stereophotomaker.

Figure 15



Goethite $\text{Fe}^{3+}\text{O}(\text{OH})$ pseudomorph after cuboctahedral pyrite in tabular pink baryte.

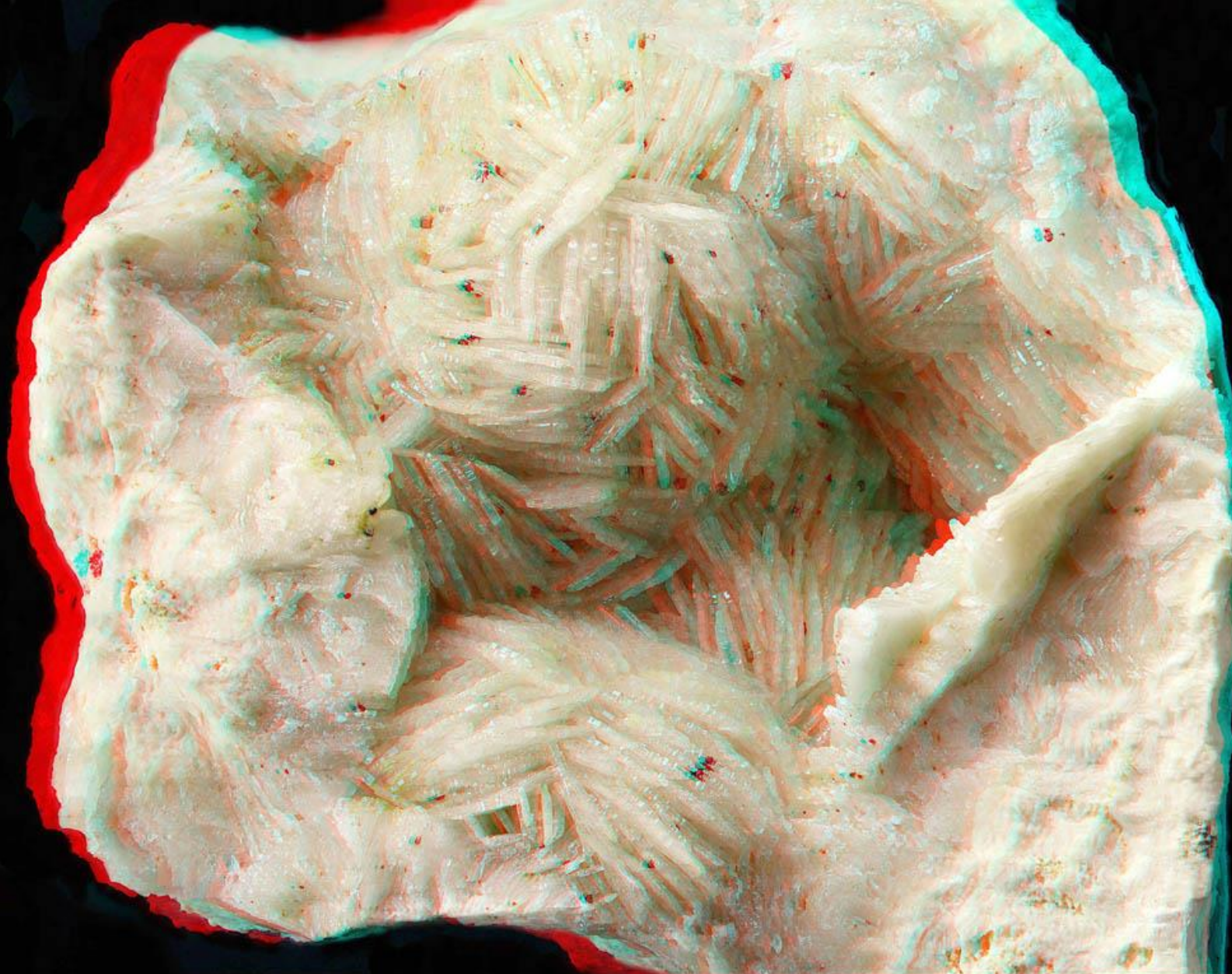
1 mm

Sunnyside deposit, Whitwell, Derbyshire.

Field width 3.65 mm

Specimen: found 1968-9 by Ray Richardson and now in David Green collection, No. SSV21a. Photography: John Chapman.
Canon EOS 5DSR camera with Carl Zeiss (West Germany) Luminar 25 mm objective lens on 175 mm bellows extension, with Schott fibre optic illumination.
Left + right stacks of 81 and 71 15-micrometre steps at 6 degrees via Stackshot rail, with Luminar at fully open aperture, combined in CombineZM.

Figure 15



Baryte tabular crystals in 'cockscomb' formation with minute goetite pseudomorphs after cuboctahedral pyrite.
1 mm 5 mm Sunnyside deposit, Whitwell, Derbyshire. Field width 26 mm
Specimen: found 1968-9 by Ray Richardson and now in David Green collection, No. SSV21a. Photography: John Chapman.
Canon EOS 5DSR camera with Carl Zeiss (West Germany) Luminar 63 mm on 60 mm bellows extension, with Schott fibre optic illumination.
Left + right stacks of 72 and 65 120-micrometre steps at 6 degrees via Stackshot rail, with Luminar at aperture 2, combined in CombineZM.

Not figured



Baryte BaSO_4

Golden tabular crystals in criss-cross formation superficially resembling cockscomb variety.

Sunnyside deposit, Whitwell, Derbyshire.

Specimen: found by Ray Richardson, date not recorded, now in David Green collection, No. SSV25. Photography: John Chapman.

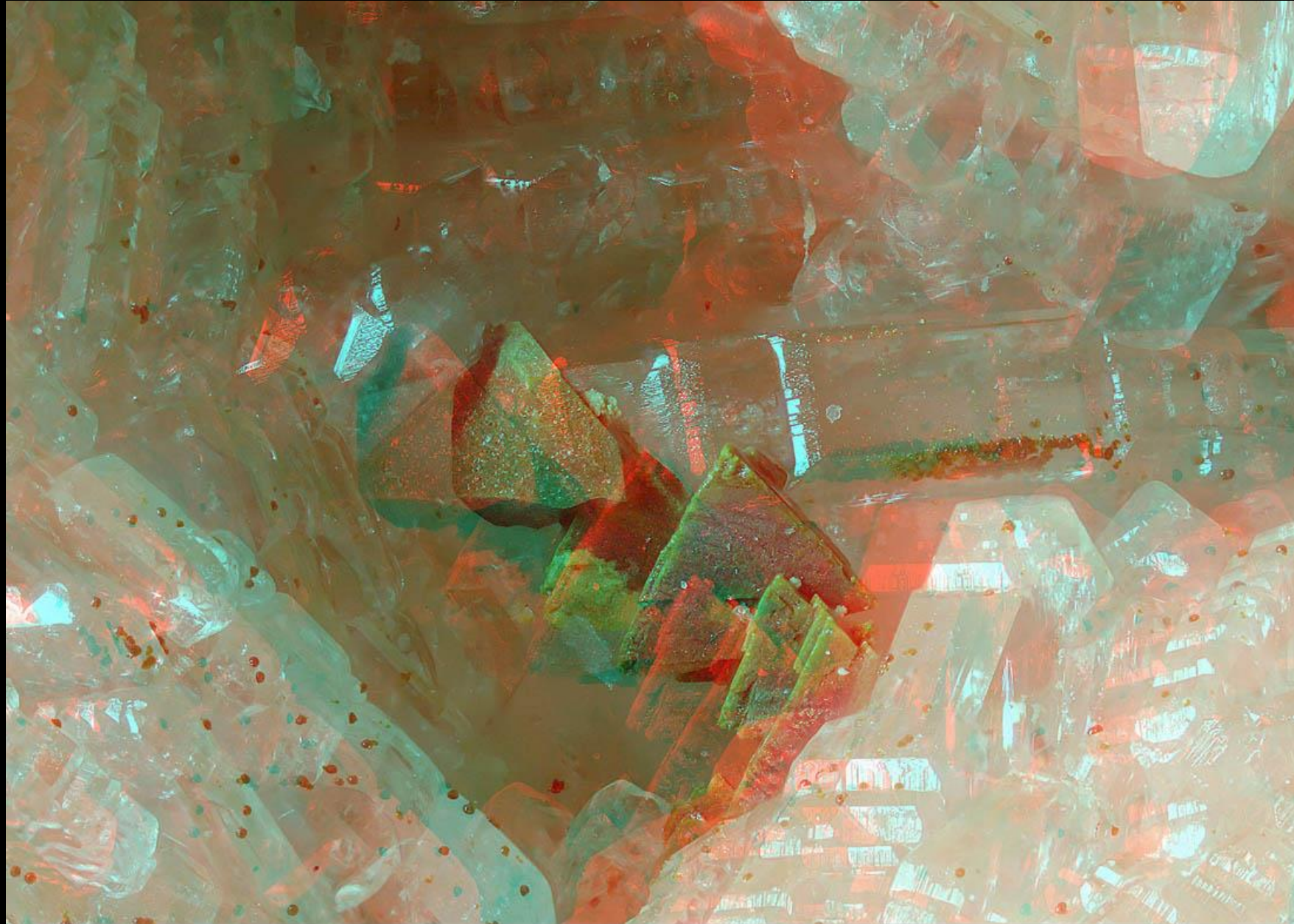
Canon EOS 5DSR camera with Carl Zeiss (West Germany) Luminar 63 mm objective lens on 60 mm bellows extension, with Schott fibre optic illumination. Left + right stacks of 88 and 80 100-micrometre steps via Stackshot rail at 6 degrees, with Luminar at aperture 2,

combined in CombineZM and processed in Stereophotomaker.

1 mm 5 mm

Field height 26 mm

Figure 16

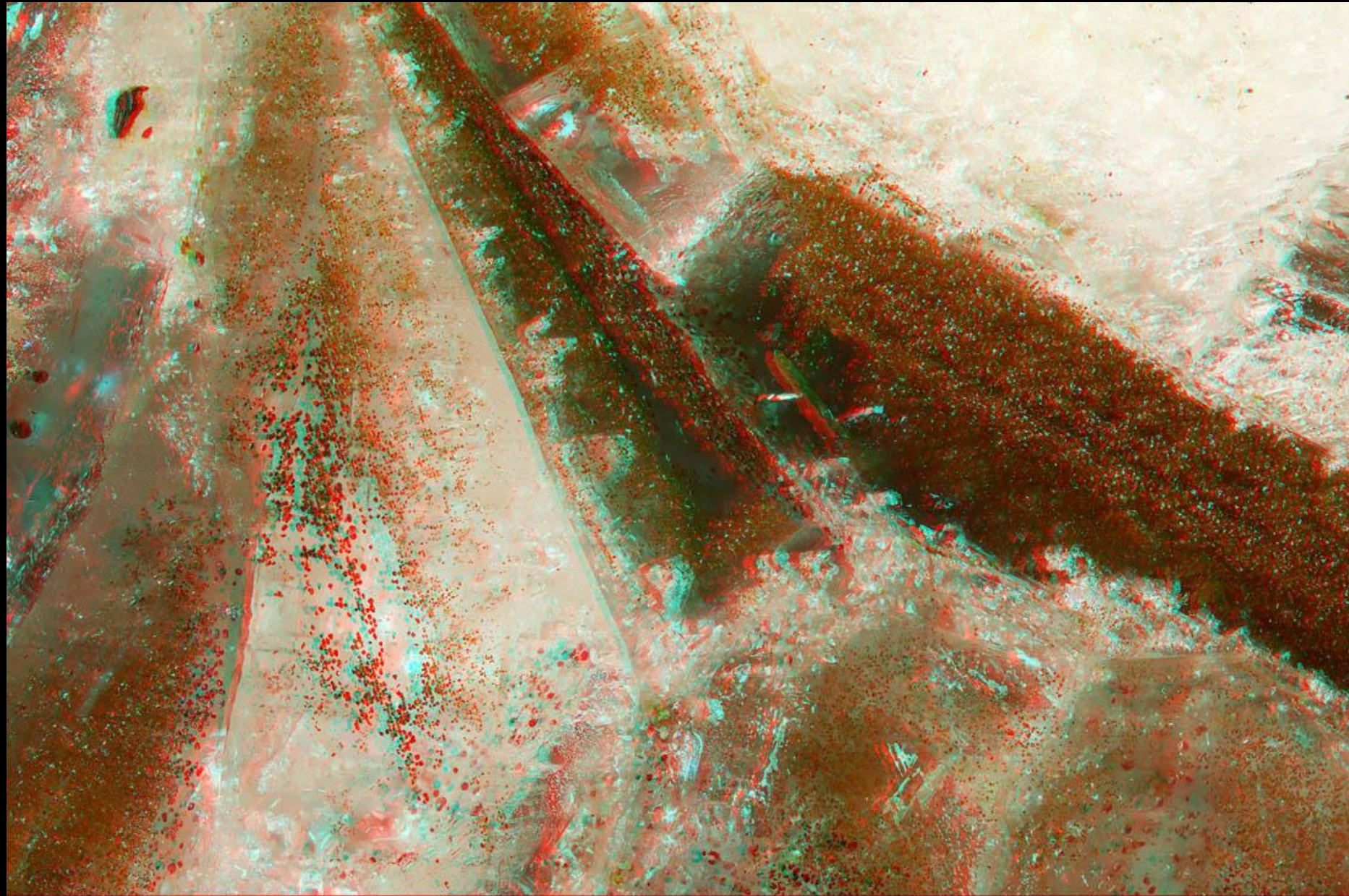


0.1 mm

Goethite pseudomorphs after sphenoidal chalcopyrite Field width 2.2 mm

In cavity in tabular baryte forming vein within Permian Cadeby Formation dolostone at Sunnyside deposit, Whitwell, Derbyshire.
Specimen: found 1968-9 by Ray Richardson and now in David Green collection No. SSV20a. Photography: John Chapman.
Canon EOS 5DSR camera with Carl Zeiss (West Germany) 25 mm Luminar objective lens on 175 mm bellows extension, with Schott fibre optic illumination.
Left + right stacks of 119 and 129 steps at 6 degrees via Stackshot rail, with Luminar at fully open aperture, combined in CombineZM (cropped image).

Figure 17



1 mm

Baryte BaSO₄

Field width 4.5 mm

Colourless tabular baryte crystals forming layer within vein baryte. By eye, these appear to have a purplish-copper colour. Here, it can be seen that they are filled with zoned minute hematite crystals, often formed along crystal growth planes. Sunnyside deposit, Whitwell, Derbyshire. Specimen: found 1968-9 by Ray Richardson, now in David Green collection, No. SSV01. Photography: JC. Cut and polished specimen. Canon 5DSR with Carl Zeiss Luminar 25 mm objective lens on 130 mm bellows extension, with Schott fibre optic illumination.

Figure 17



Figure 17a



0.1 mm

Baryte BaSO_4 with inclusions of hematite Fe_2O_3

Field width 1.15 mm

Cut and polished slab from Sunnyside deposit, Whitwell, Derbyshire.

Specimen: found 1968-9 by Ray Richardson and now in David Green collection, No. SSV01. Photography: John Chapman.

Canon EOS 5DSR camera with Leica 140x/0.40 objective lens on 175 mm bellows extension, with Schott fibre optic illumination.

Left + right stacks of 78 and 57 4-micrometre steps at 6 degrees via Stackshot rail combined in Combine ZM and processed in Stereophotomaker.

Not figured

0.1 mm

Field width 0.50 mm

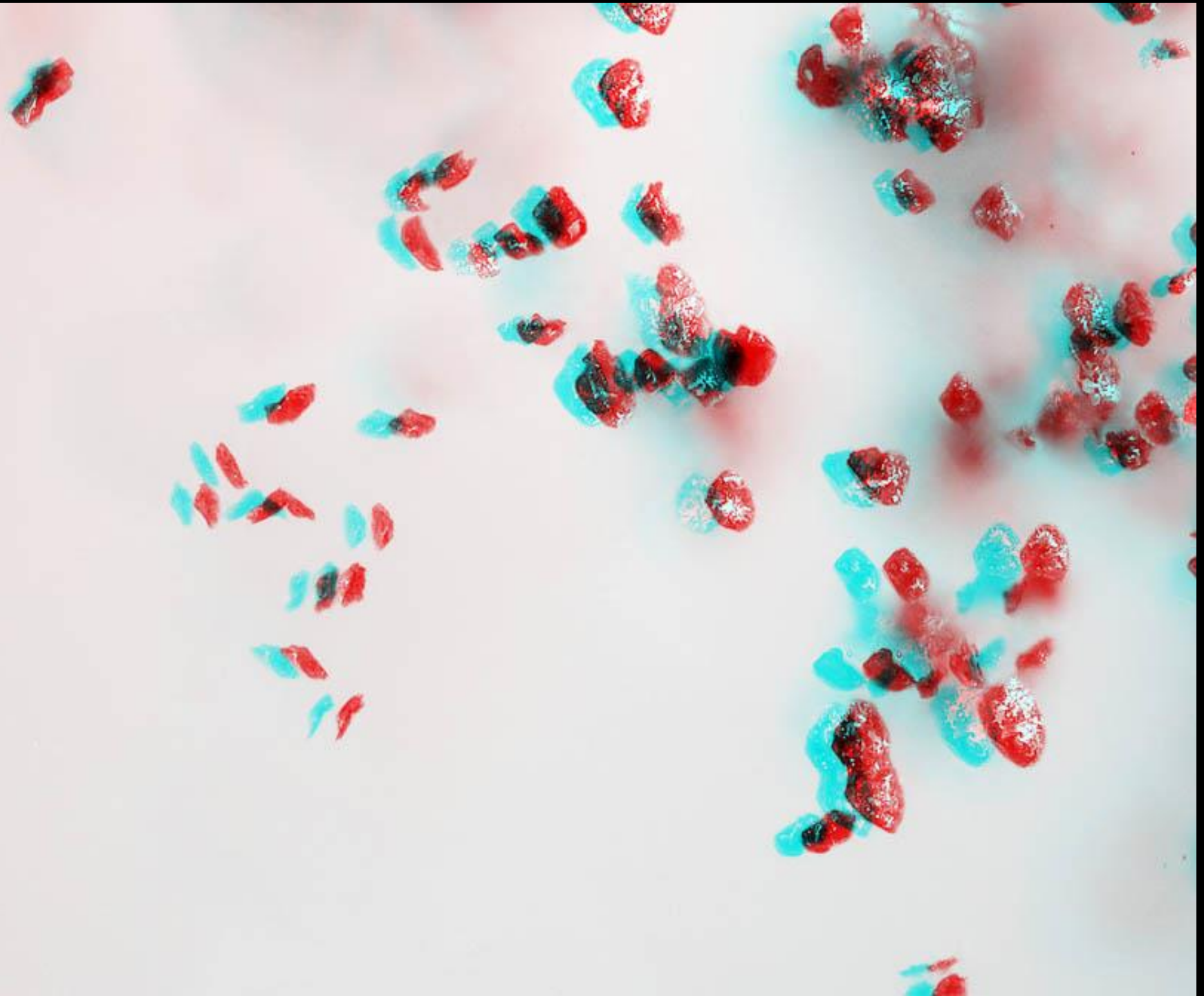
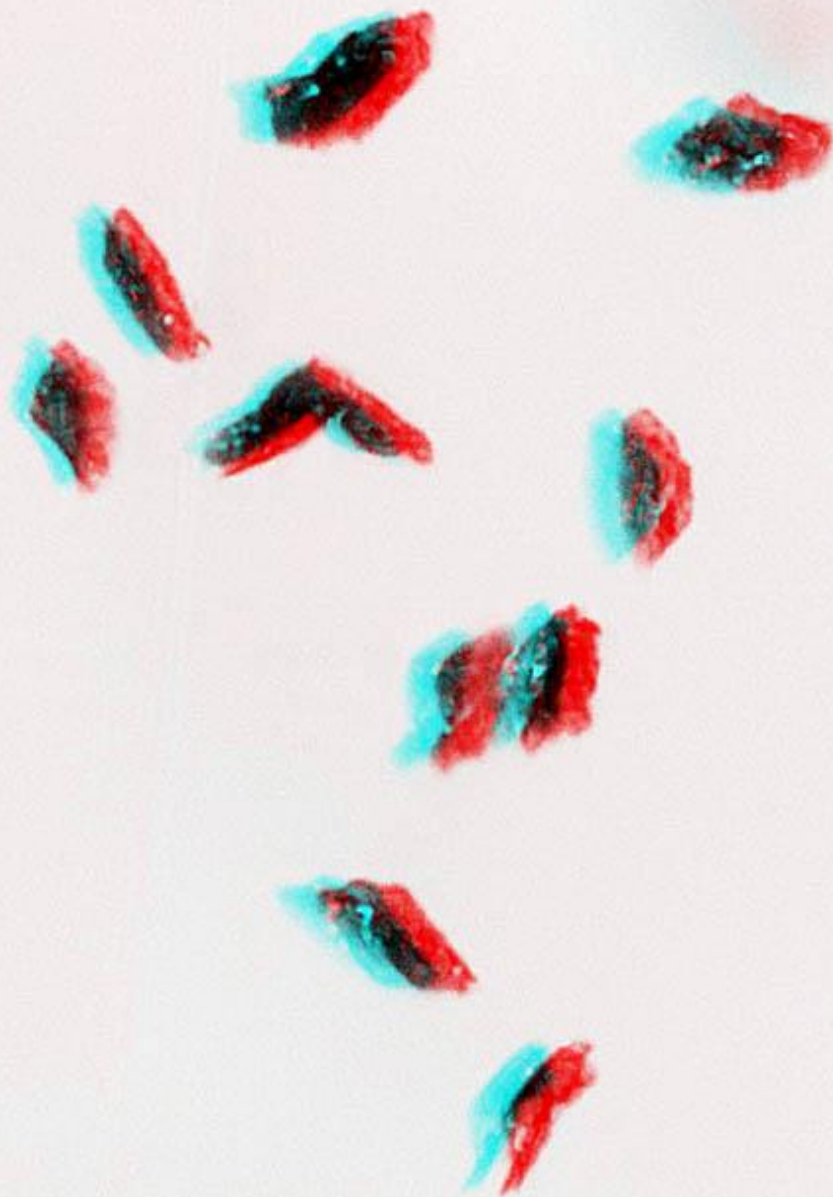
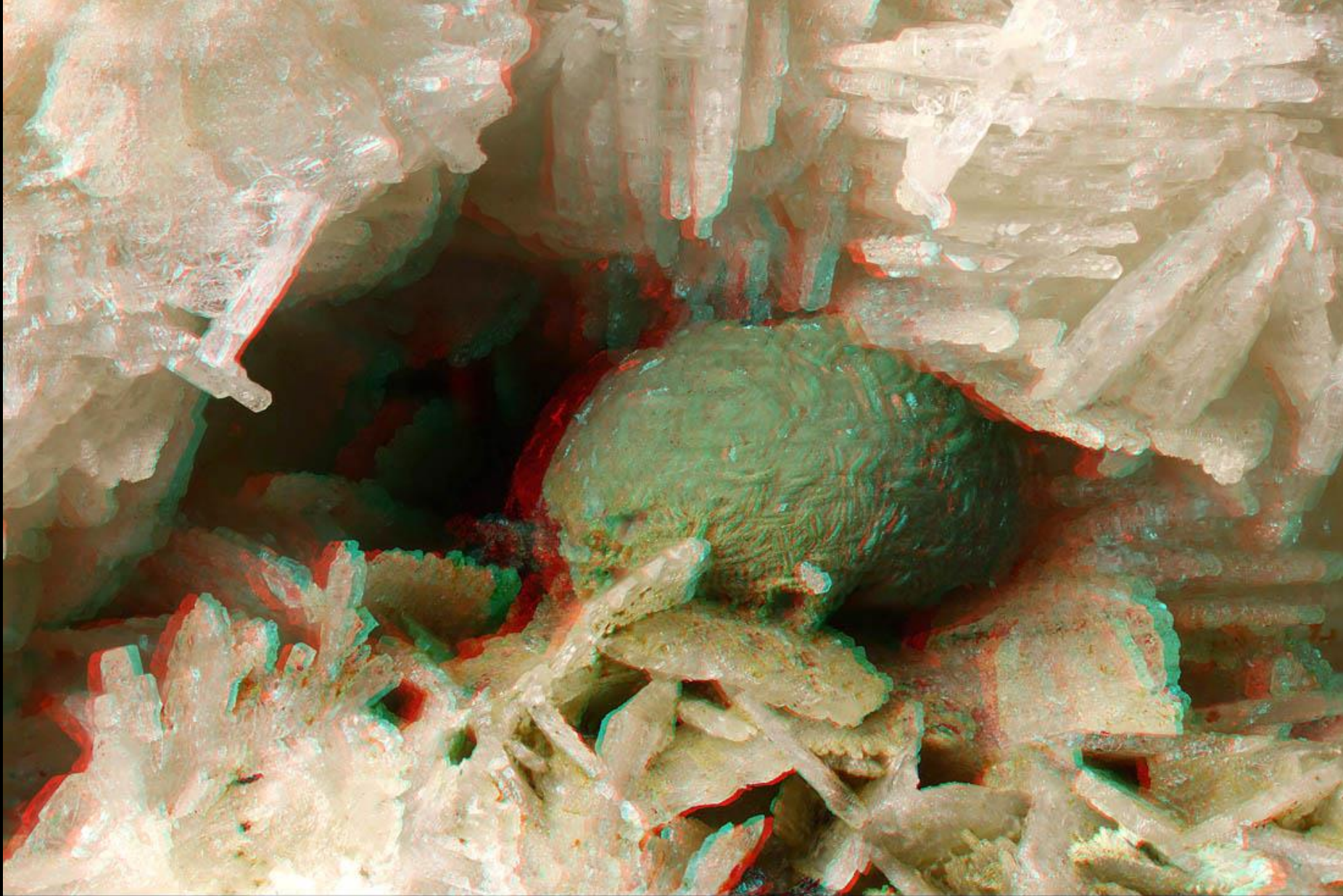


Figure 18



10 micrometres
Field width 0.14 mm

Figure 20



1 mm

Malachite $\text{Cu}_2(\text{CO}_3)(\text{OH})_2$

Field width 5.0 mm

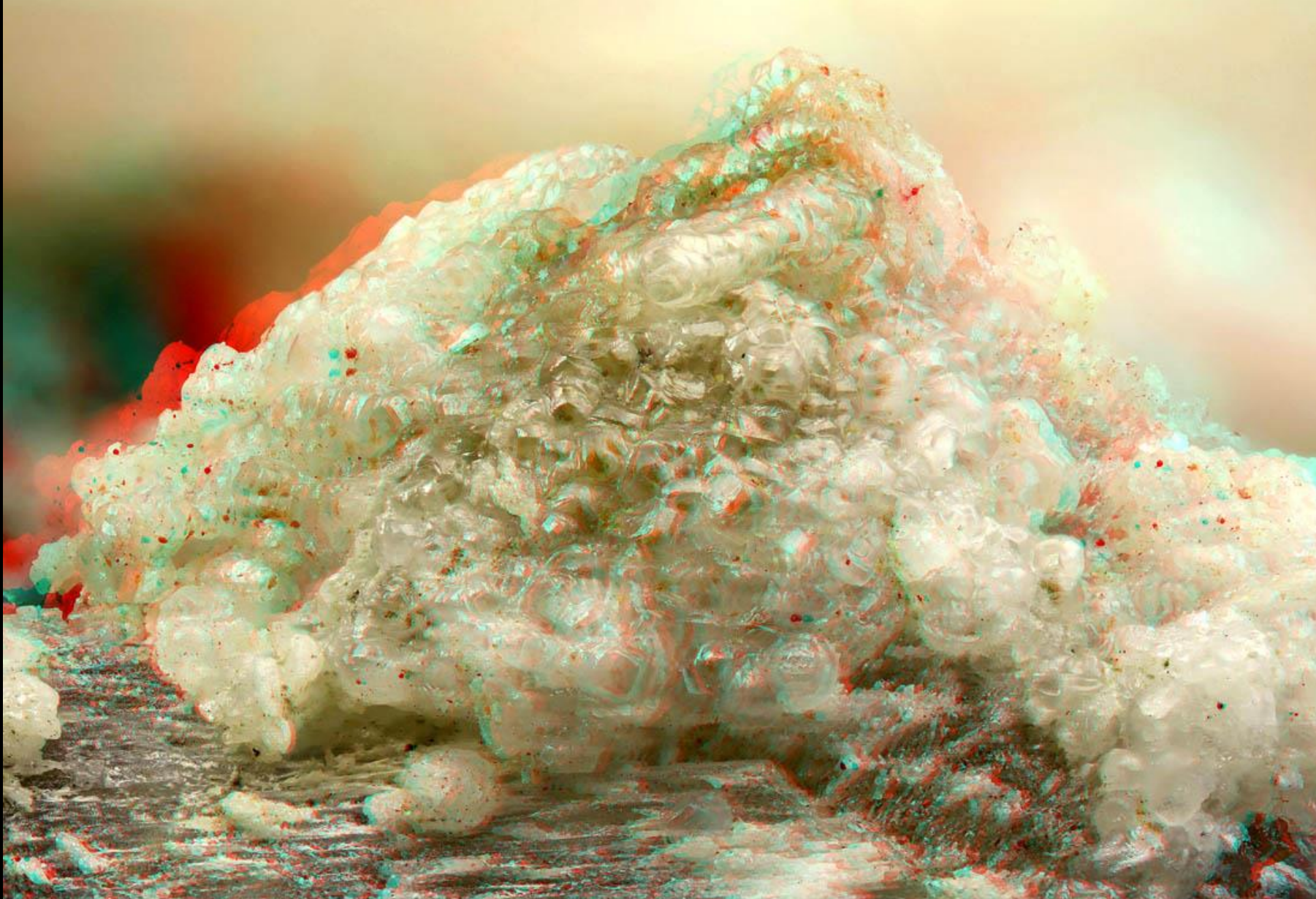
Spherical aggregate in cavity within pink baryte. Sunnyside deposit, Whitwell, Derbyshire.

Specimen: found 1968-9 by Ray Richardson and now in David Green collection. Photography: John Chapman.

Canon EOS 5DSR camera with Carl Zeiss (West Germany) 25 mm Luminar objective lens on 110 mm bellows extension, with Schott fibre optic illumination.

Left + right stacks of 83 and 88 steps at 4 degrees via Stackshot rail, with Luminar at fully open aperture, combined in CombineZM

Figure 22



1 mm

Smithsonite ZnCO_3

Field width 3.9 mm

Pale grey translucent crystals overgrowing a striated cerussite crystal. Sunnyside deposit, Whitwell, Derbyshire.

Specimen: found 1968-9 by Ray Richardson and now in David Green collection, No. SSV10a. Photography: John Chapman.

Canon EOS 5DSR camera with Carl Zeiss (West Germany) Luminar 25 mm on 160 mm bellows extension, with Schott fibre optic illumination.

Left + right stacks of 125 and 136 15-micrometre steps at 6 degrees via Stackshot rail, with Luminar at fully open aperture, combined in Combine ZM.

End of the Sunnyside Deposit 3D images.

A selection of 3D images for Steetley Quarry
and for Whitwell Quarry
is also available on the Russell Society website.