DISSOLVE II
MELISSA SMITH
20 July - 18 August 2013

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DEVONPORT REGIONAL GALLERY
45 Stewart Street
PO Box 604
Devonport Tasmania
Australia 7310
artgallery@devonport.tas.gov.au
www.melissasmith.net.au

Dispel 2013
Digital animation
2min 30sec

Animator: Professor Tim Senden
Music: Thecosomata
Viola - Hannah Wolfhagen
Piano - Michelle Els
Creative Direction: Melissa Smith

Cover image: Peter Whyte

Adrift 2013, relief print on rice paper and organza, detail
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An X-Ray microCT scan of a shelled pteropod - *Limacina helicina antarctica* (sea butterfly) is animated by a scientist and inspires creative direction and an original music score.

*Slowly the shell falls into view and rotates to reveal its beautiful, delicate form. Just as we feel we could touch its fragile surface, it cascades away, the illusion dispelled.*

This work represents the threat faced by the pteropod due to ocean acidification. As the seas absorb more carbon dioxide, their chemistry changes. Carbonate ion levels decline and this element is an important building block for the pteropod’s shell. As a vital link in the marine food chain the demise of the pteropod will have a compounding effect on the web of life.

*Dispel* and the other works in this exhibition build on the *Dissolve* series, which advances earlier explorations into the tilt in our natural environmental balance. The catalyst for the production of this series was reading the paper, *Krill looks and feelers: a dialogue on expanding perceptions of climate change data* (Roberts & Nicol, 2011), which introduced me to the potential loss of the pteropod, commonly known as the sea butterfly, a species indicative of the ecosystem health of the Southern Ocean. Inspired to learn more about this creature I established contacts with scientists in Hobart and Canberra, Australia and Seattle, USA. These relationships have enabled an exchange of information and data allowing me to better understand the consequences of ocean acidification. Through these collaborations I have gleaned a greater insight to the work of the scientists, who in turn have embraced the opportunity for their research findings to be visually interpreted and communicated to a broader audience. Through our different research and expressive methods we contribute to making sense of climate change.

I have combined new technologies with traditional print methods, to visualise an empathic response to otherwise purely scientific observations. New technologies increasingly expand methods used in art and science to help decipher our changing environment.

*Midden* 2013
poly lactide and acrylonitrile butadiene styrene
20cm x 26cm x 26cm

*Listen* 2013
laser cut acrylic, ink
25cm x 25cm x 1cm

*Loss III* 2013
embossed relief print
76cm x 45cm