Interactive comment on “Automated gas bubble imaging at sea floor – a new method of in situ gas flux quantification” by K. Thomanek et al.

Anonymous Referee #1

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This is a good well-written paper describing a novel method of bubble detection in the sea. The application is novel, innovative and timely. The authors have identified a gap in the range of instruments available and have tried to fill it. The paper seems rather long to me – is it policy to publish papers of this length? If so OK, if not it should be shortened.

Some minor comments that I would like authors to address are: 1. Fig 1 is not very informative. I would like see an optical layout for the instrument (even though this might be simple). 2. P298, L15 – to my mind a “notebook” will for ever be something with paper between covers!! And you can’t connect a camera to it. Please use term “notebook PC” or “laptop”. 3. p300, L17 and Fig 1 – as for note 7. 4. P299, L10 – L24 - Something about the wavelength of LEDs and bandwidth would be useful. 5. P300,
L 5 – how does transparent oil increase buoyancy? 6. P303, L22 – “bubbles oscillated during ascent causing..” should be replaced with “..bubbles oscillating during ascent produce a...” 7. Authors use fps instead of Hz throughout - SI recommends Hz