Interactive comment on “A new tracking algorithm for sea ice age distribution estimation” by Anton Andreevich Korosov et al.

Anonymous Referee #1
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This paper introduces a new method to calculate ice age. It is well-written, sound in its approach and produces scientifically interesting results.

Specific comments:

p.2, line 30* The Szanyi et al. 2016 paper identified a known problem with buoy influence on drift speed, which has since been fixed in the current sea ice motion and age Version 3 datasets at NSIDC, rendering their paper invalid, other than as a historical look at an outdated dataset.

P. 7, L 18 Of course, postulating that all observed ice is 2nd-year is erroneous. The NSIDC ice age algorithm initiates ice as first-year, then increments by one year after the minimum extent is reached. But the dataset is not considered mature until 5 years out, using a 5+ age maximum category. Granted, AMSR-2 began in 2012, but it’s probably not too informative to compute ice age with it until 2017.

P.17, L 2 Yes, a distribution of ice age fraction within a cell is a sound improvement, more accurately representing the ice age within that cell.

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