

These files contain data from magnetic tracer experiments by J.S. Halow; corresponding to the publication by Daw & Halow, DOI: 10.1021/acs.iecr.7b03547, Ind. Eng. Chem. Res. 2018, 57, 361–370.

- Bed: 5.5 cm diameter with porous polyethylene grid, 50 micron pore size
- Bed solids: 107 to 177 μ glass beads; 142 microns weight mean diameter, 2.5 g/cc density; 8.5 cm static height; U_{mf} = 0.029m/s
- Tracer particle: 5 mm basswood sphere with imbedded 1.6 mm diameter \times 1.6 mm long cylindrical neodymium magnet; 1.12 g/cc density
- Fluidizing gas is ambient air

4 files are included, with each data file in csv (text) format with time (s) in the first column and axial position (cm) in the second. The first 20 seconds of the experimental measurements have been removed to eliminate initial transients.

File designations and fluidizing conditions:

- 16-04-11_1356: U/U_{mf} =3.0;
- 160411_1403: U/U_{mf} =2.5;
- 160411-1410: U/U_{mf} =2.1;
- 160411-1416: U/U_{mf} =1.7