Abstract Submitted
for the DFD17 Meeting of
The American Physical Society

Time-resolved observations of shock waves in cavitating jet NOBUYUKI FUJISAWA, YASUAKI FUJITA, KEI FUJISAWA, TAKAYUKI FUJISAWA, Niigata University — The mechanism of erosion in a cavitating jet is studied experimentally using the time-resolved observations of the shock wave formation. The experiments were carried out by the time-resolved laser schlieren combined with shadowgraph. The results indicated that the cavitation cloud collapsed in a periodic growth of cloud near the wall, which is followed by the generation of shock waves and the pits on the wall. Most of the shock waves were generated near the wall and they induced the pits on the wall. The occurrence points of shock waves were in close agreement with the pits pattern on the wall.

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Date submitted: 31 Jul 2017 Electronic form version 1.4