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# Gas–Liquid Interfractial Distribution in Inclined Downward Pipe Flow

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Two-phase air-water flow experiments for a wide range of pipe inclinations and flow rates are reported. Digitial video camera connected to a boroscope is used to visualize phase distribution in the pipe cross-section illuminated by a laser light sheet. Advantages and limitations of the boroscope technique applied for two-phase flow are discussed. Simultaneously, wave gauges are used to measure the instantaneous surface changes. The main goal of this work is to investigate the transition from stratified to annular and to slug flow. Simultaneous video images and wave gauge records provide extensive information on the instantaneous and statistical properties of the phase distributions in the pipe.

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