

CYLINDER IN THE VICINITY OF A BLUFF BODY LEADING EDGE

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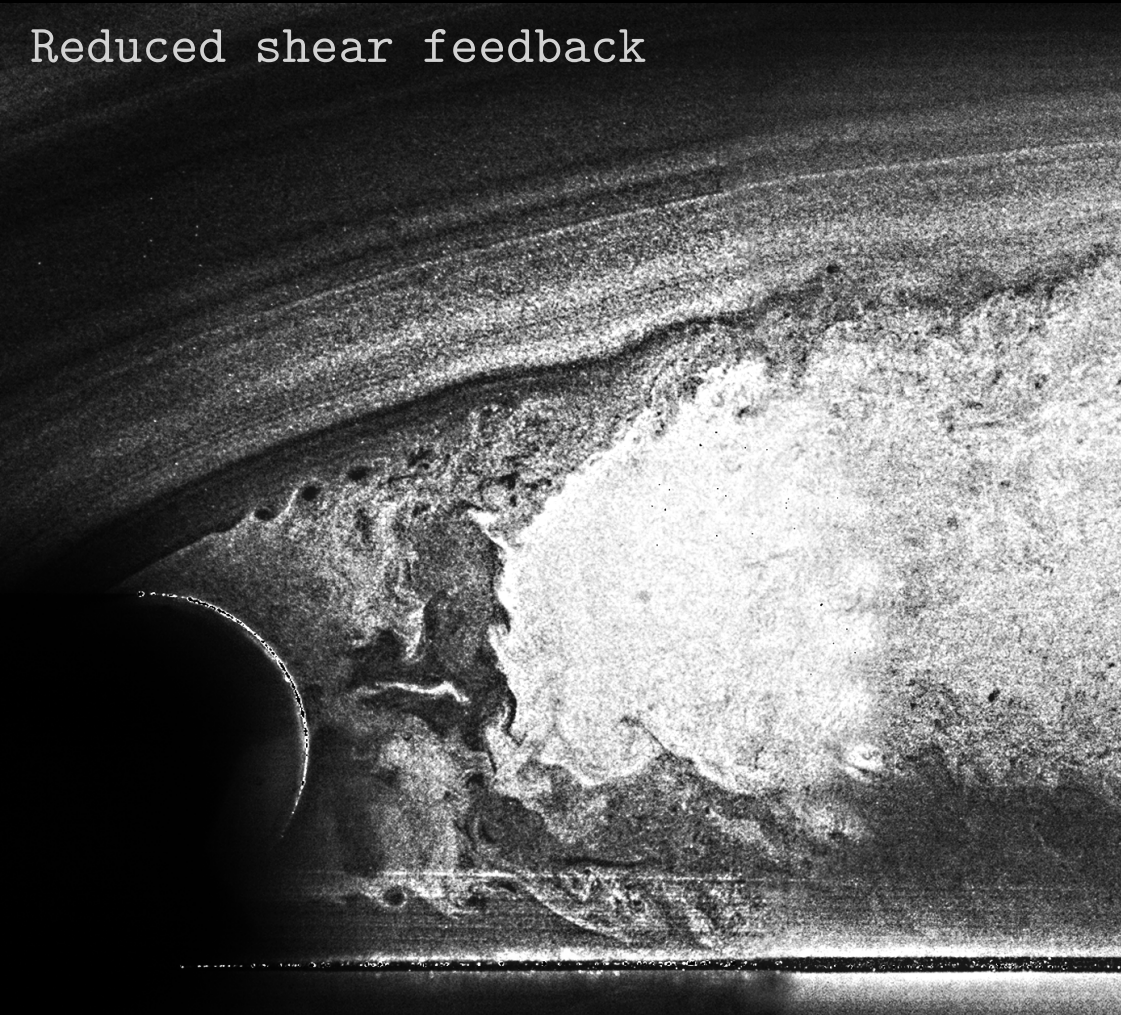
The flow topology in the region of the leading edge of an elongated bluff body is altered by the introduction of an off-surface cylinder. The pressure gradient changes imposed by the latter, either eliminate or promote the development of a separation bubble and affect the global vortex dynamics.

These images were obtained during an experimental campaign using the Particle Image Velocimetry (PIV) technique.

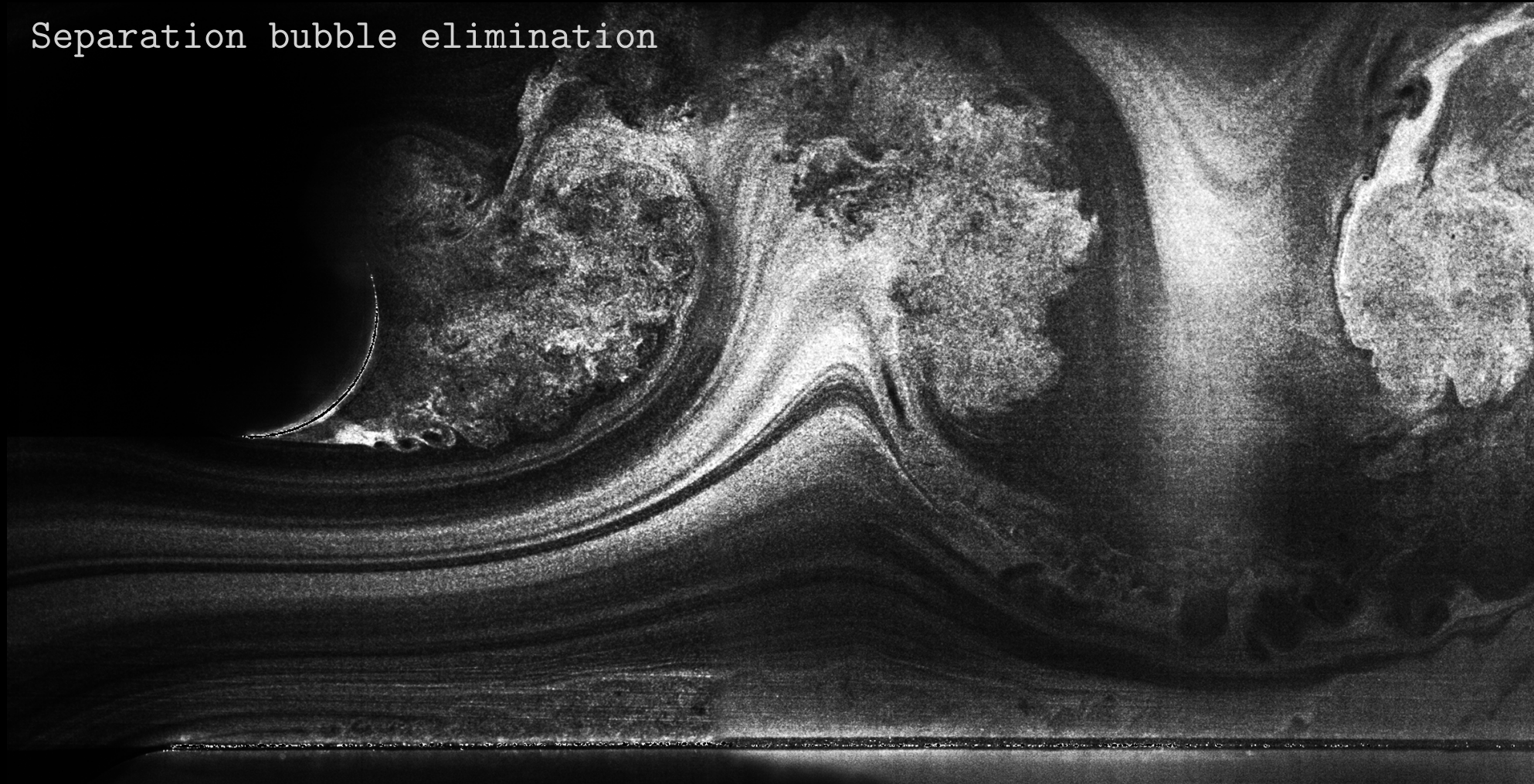
Isolated bluff body separation bubble



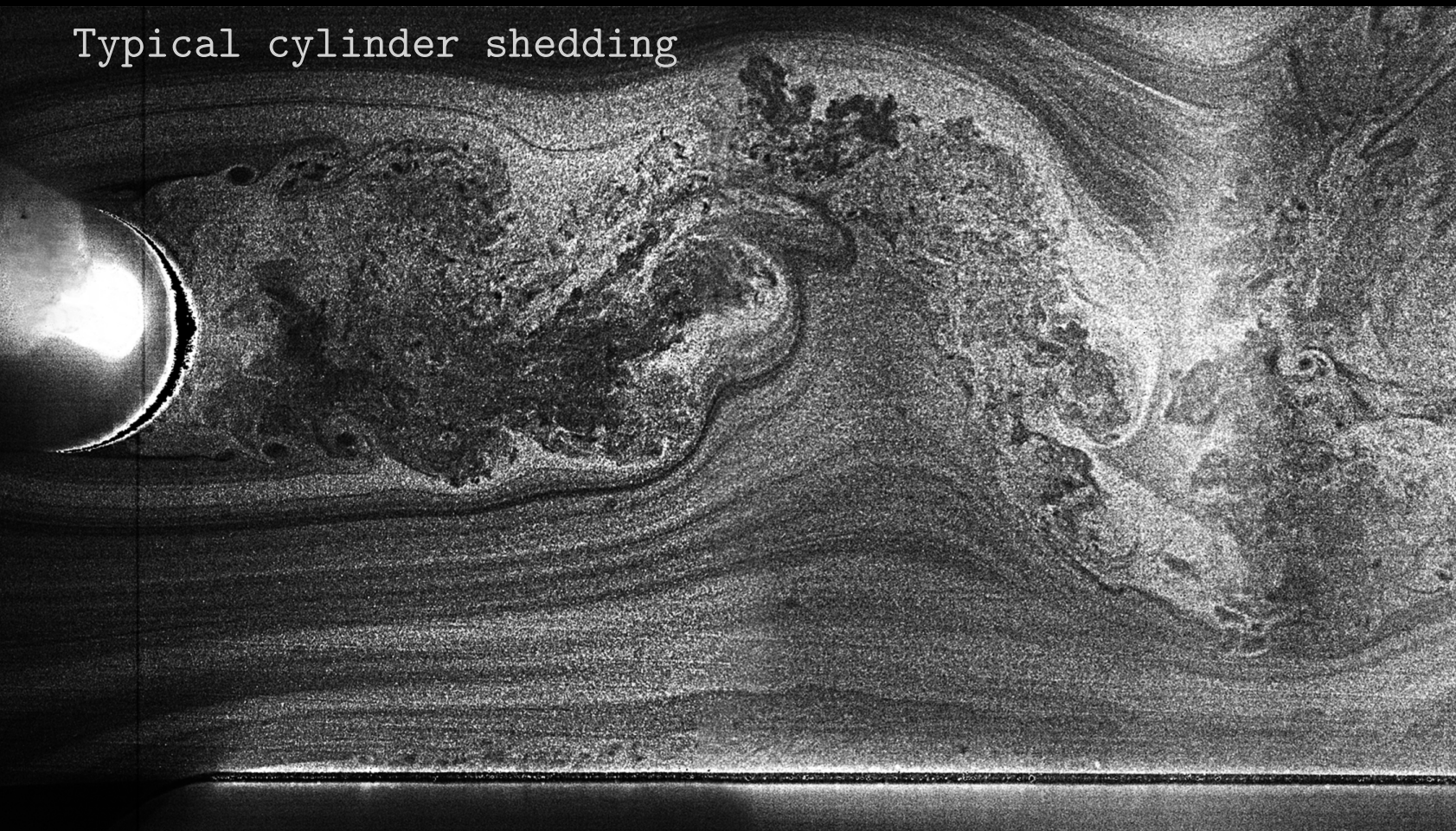
Reduced shear feedback



Separation bubble elimination



Typical cylinder shedding



Separation bubble promotion

