

SUPPLEMENTAL DATA

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Dynamical Behavior and Stability Analysis of Hydromechanical Gates

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CAPTIONS FOR SUPPLEMENTAL DATA:

Figure S1.pdf (Fig7zoom.pdf)

Zoom on the one-parameter bifurcations for the control parameter $\tilde{c}_\omega$ based on figure 7, indicating the relative damping values used for the periodic orbits shown in figure 8.

Video S1.mov (BehavA_DSC_9191.mov)

Data S1.csv (BehavA_DSC_9191data.csv)

Video showing the oscillating behaviour of the EPFL gate and canal. The oscillations persist over ~30 seconds, after which a lateral outlet is opened and the oscillations decrease. At the end the gate gets stuck in the closed position.

Video S2.mov (BehavB_DSC_9183.mov)

Data S2.csv (BehavB_DSC_9183data.csv)

Video showing a transient response of the EPFL gate. The gate is initially stuck in closed position and the water level increases. When the gate is released it rises quickly above the equilibrium point and oscillates multiple times.