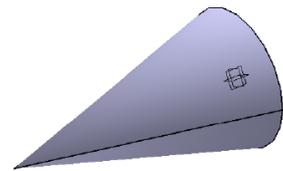


# VISUALIZACIONES: CILINDRO CON ROTACIÓN

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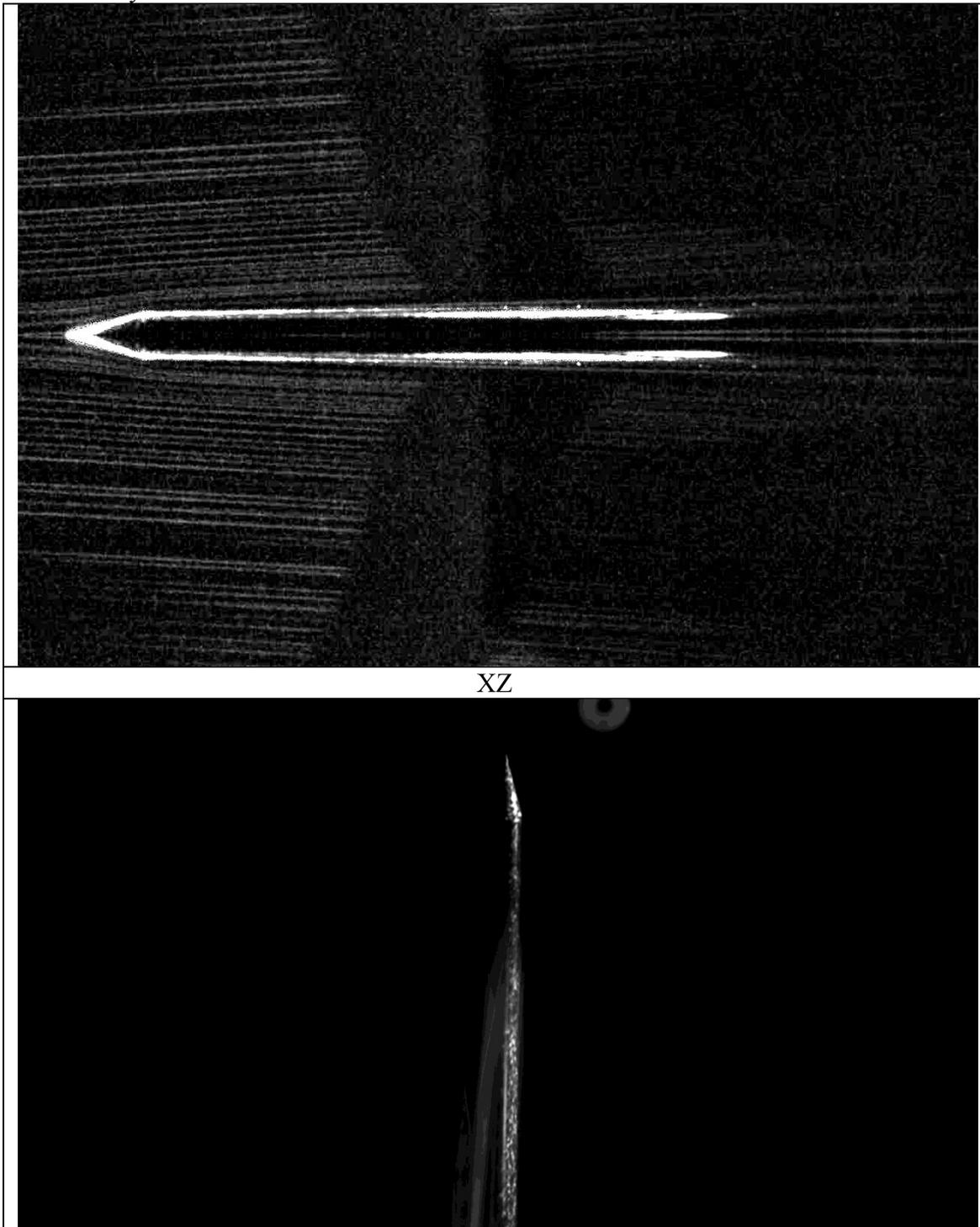


• **Introducción:**

El siguiente documento trata de componer un resumen de los resultados experimentales más relevantes obtenidos en el Túnel de Viento del Laboratorio de Aerodinámica de Vehículos de la Universidad de Málaga dentro del marco del Proyecto de Excelencia " Estudio Experimental de la Estabilidad del flujo a lo largo de cuerpos cilíndricos esbeltos en rotación".

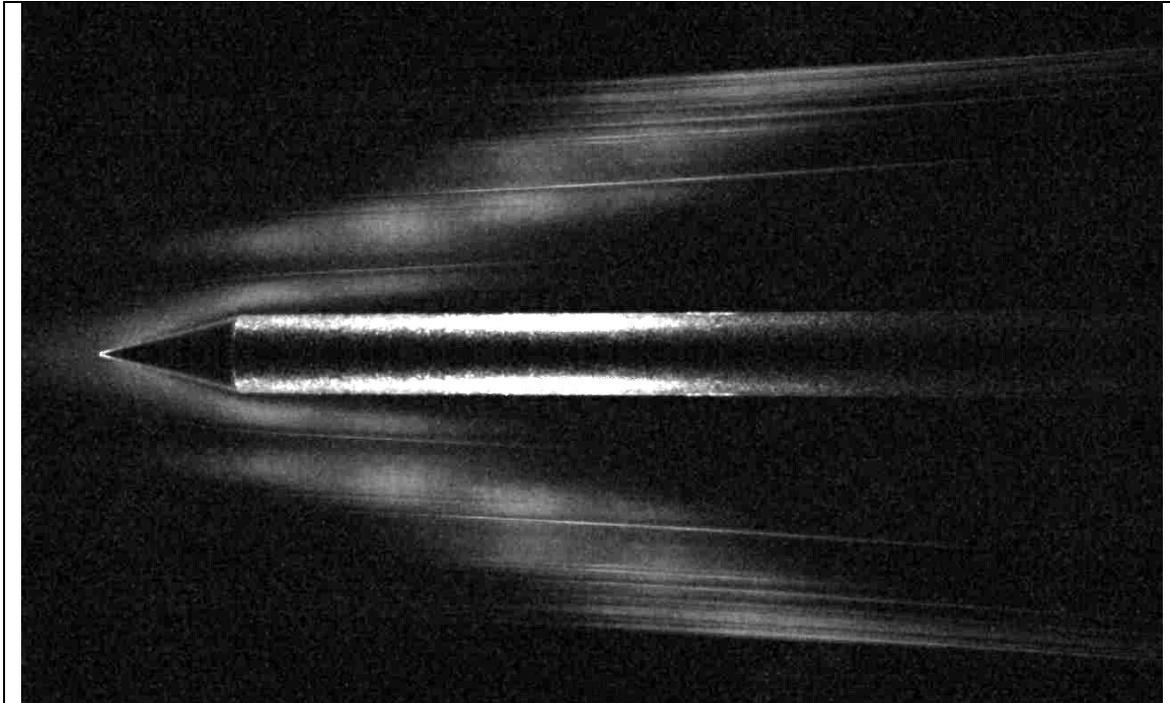
• **Tipo de Cabeza: CONO**

- Re 1000 y  $\alpha = 0^\circ$ :

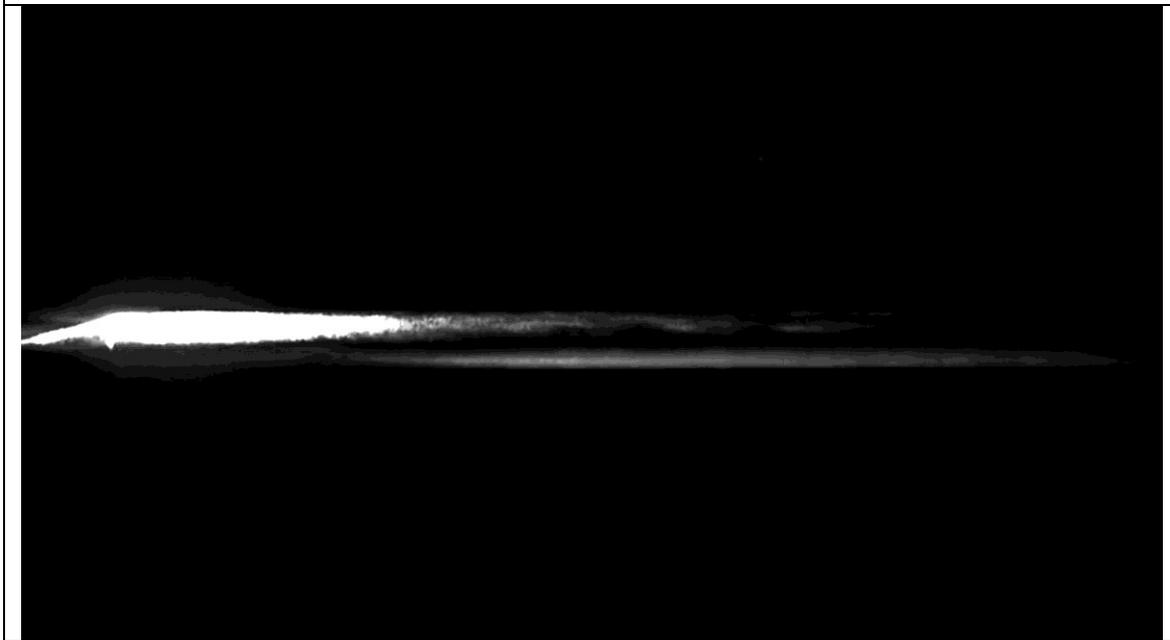


XY

- Re 1630 y  $s_0$

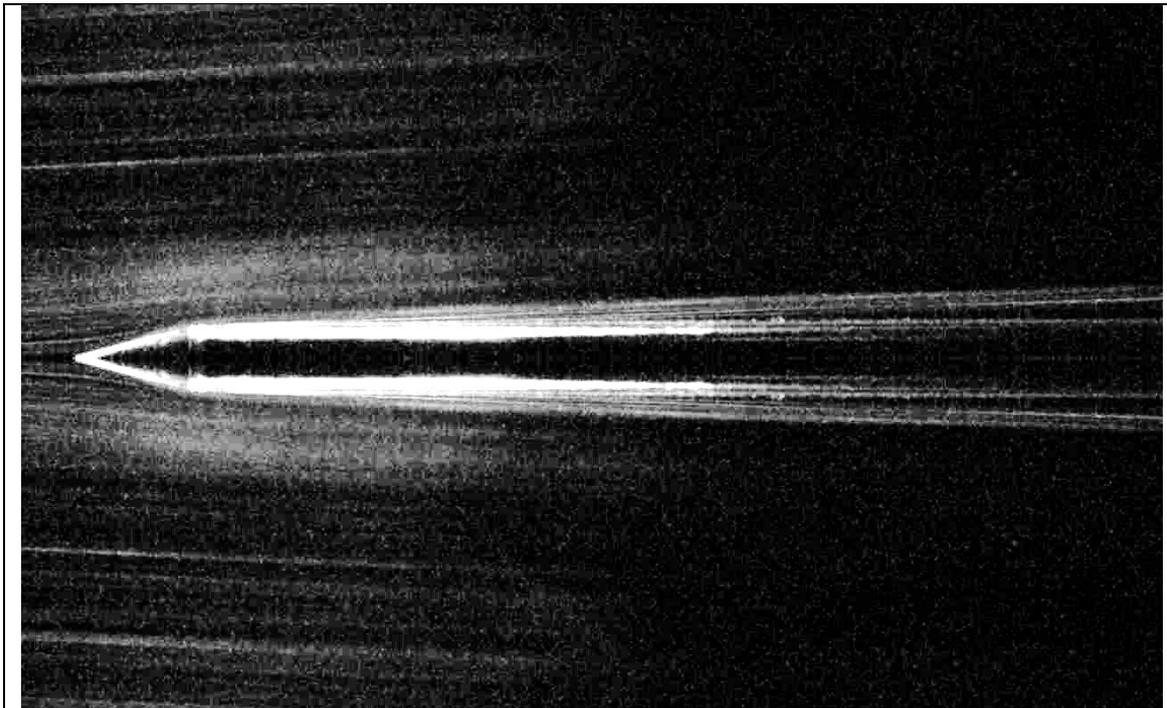


XZ

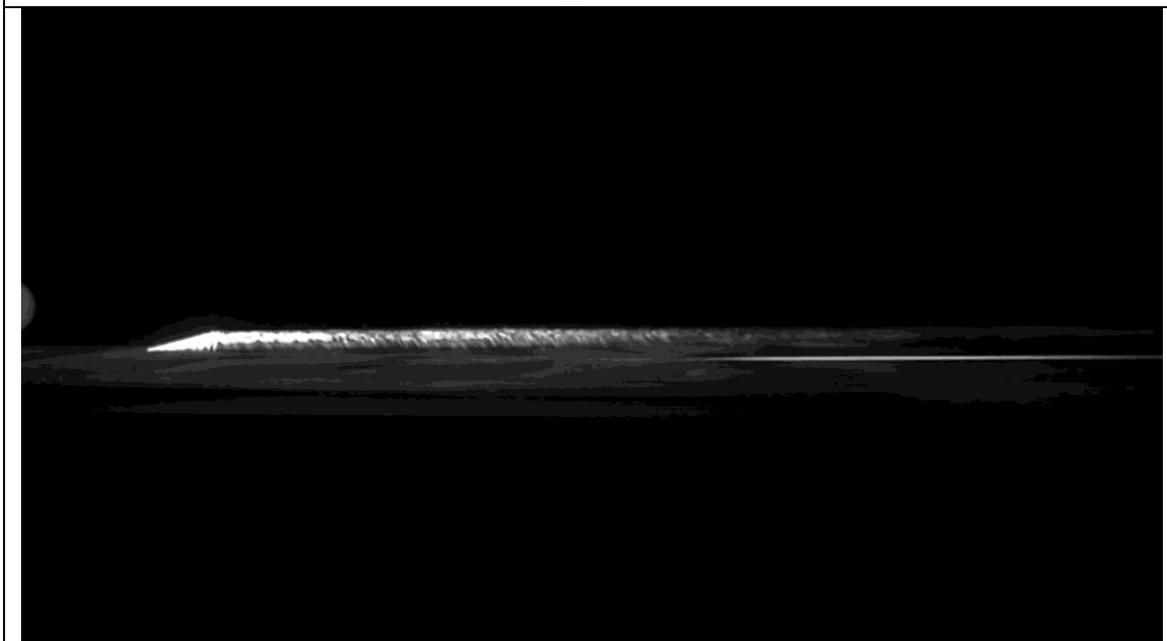


XY

- Re 920 y s 0.07:

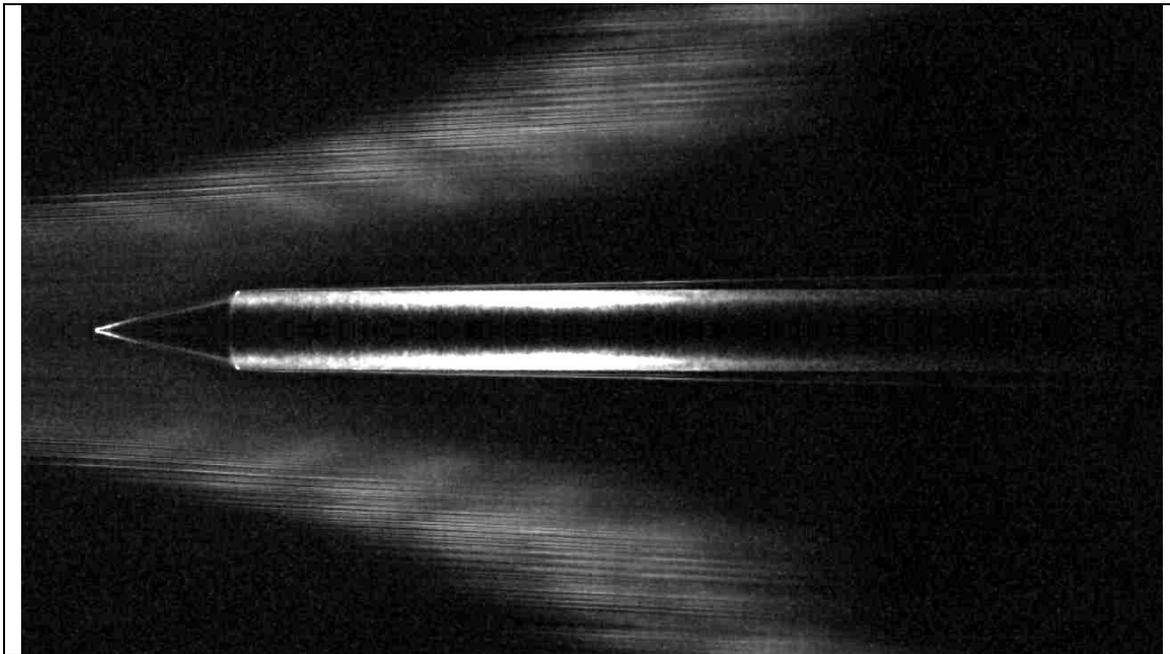


XZ

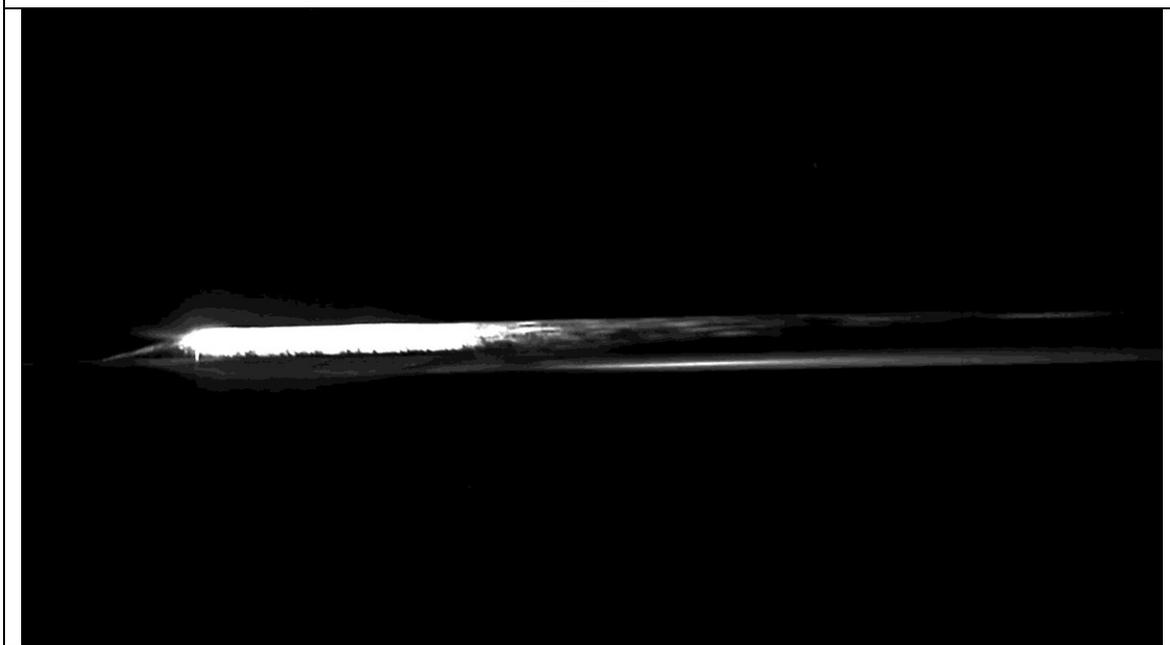


XY

- Re 1620 y  $\alpha$  0.22:

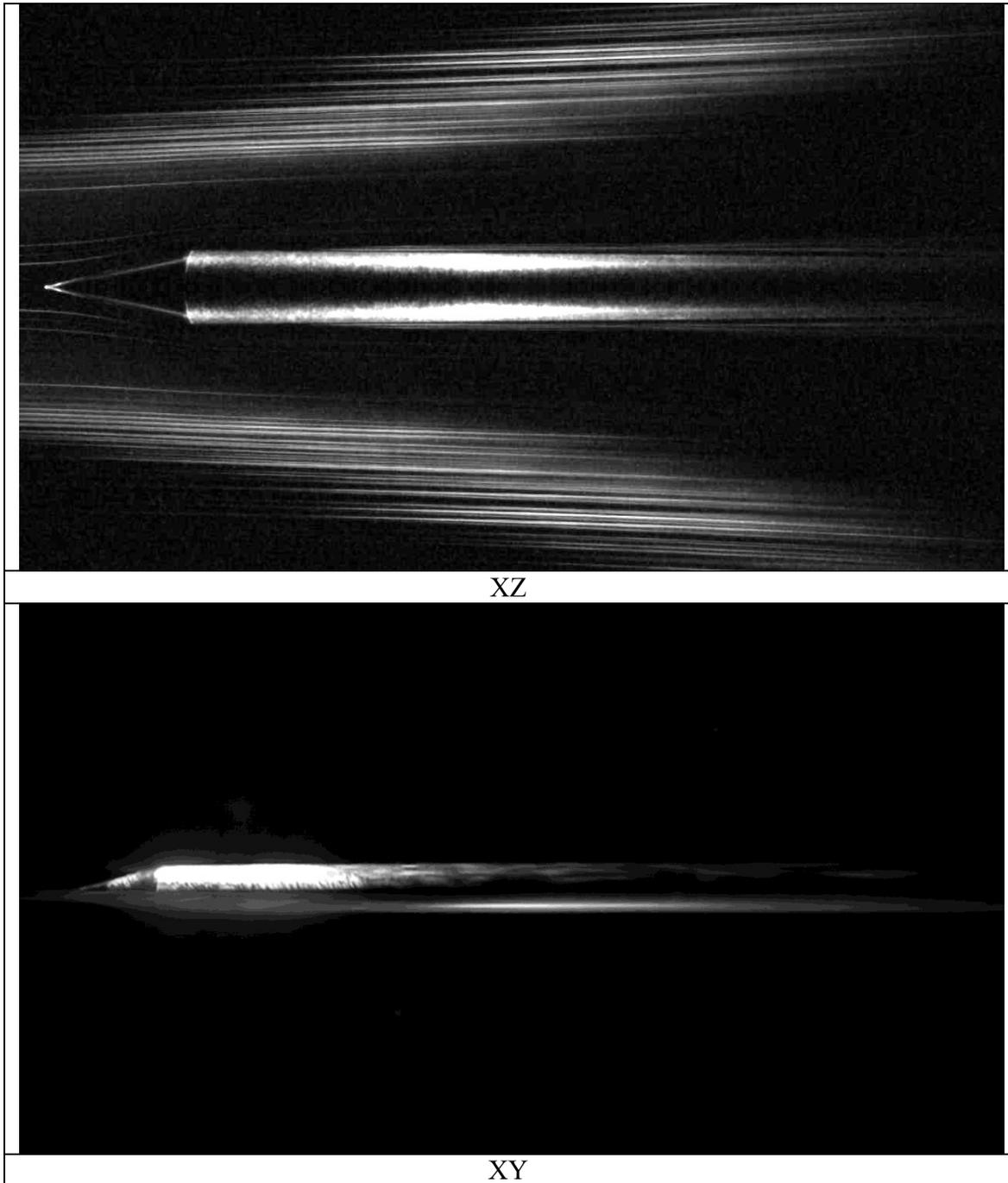


XZ



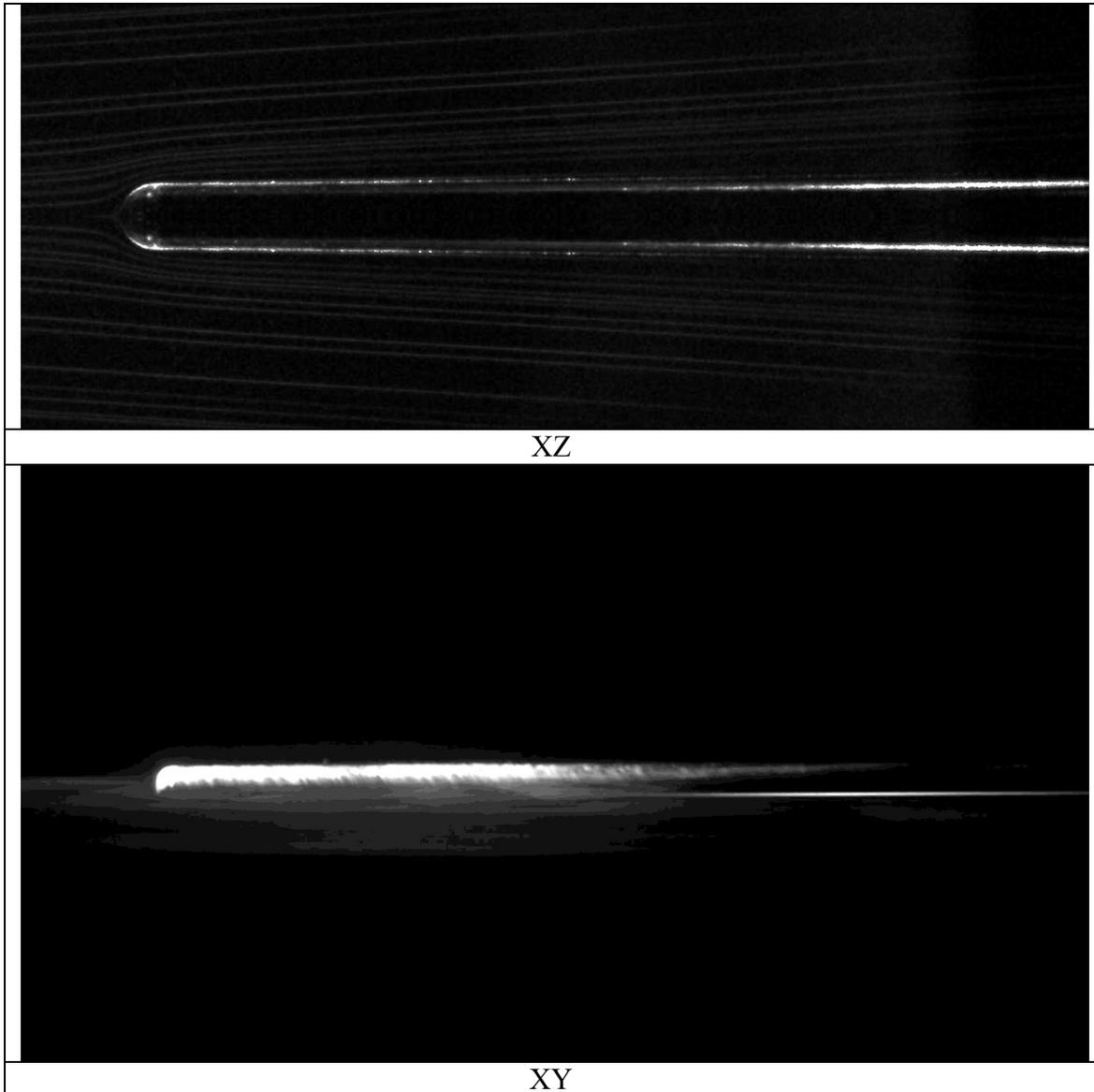
XY

- Re 1650 y s 0.33:

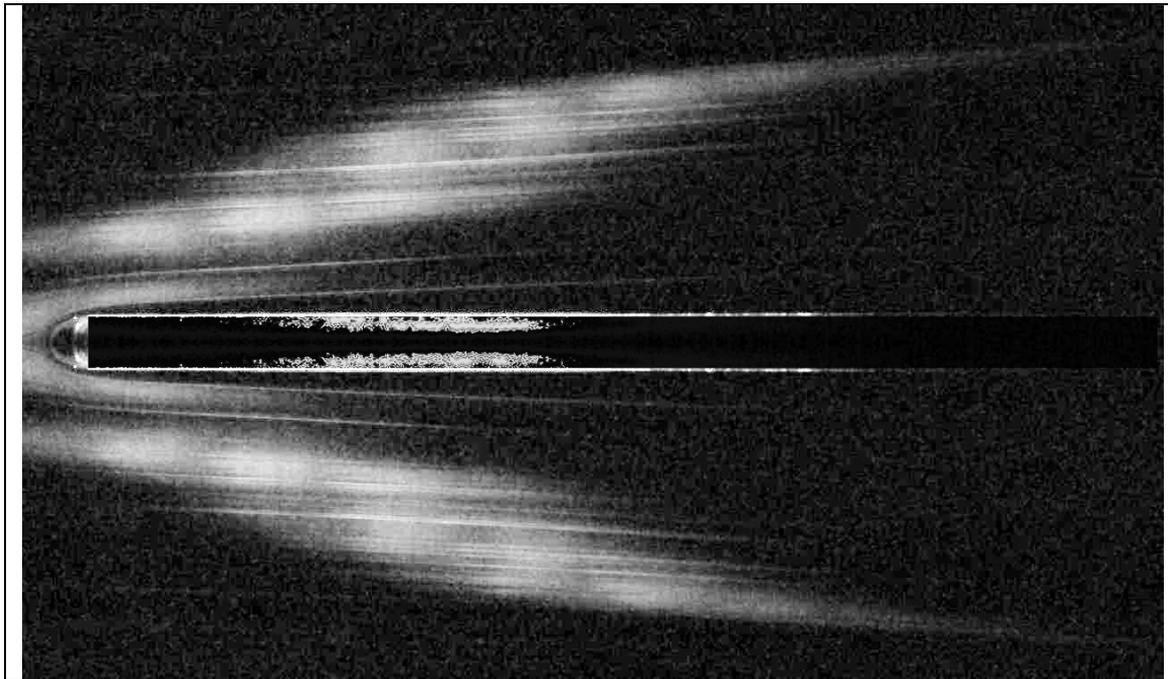


• *Tipo de Cabeza:* ESFERA

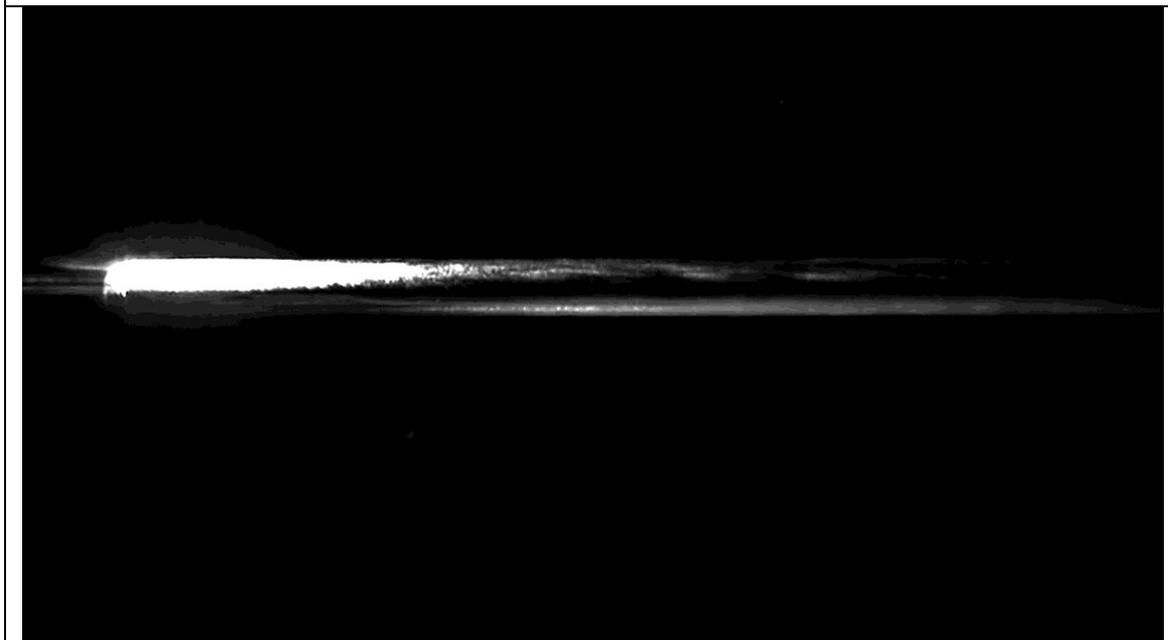
- Re 960 y s 0:



- Re 1620 y  $\alpha = 0^\circ$ :

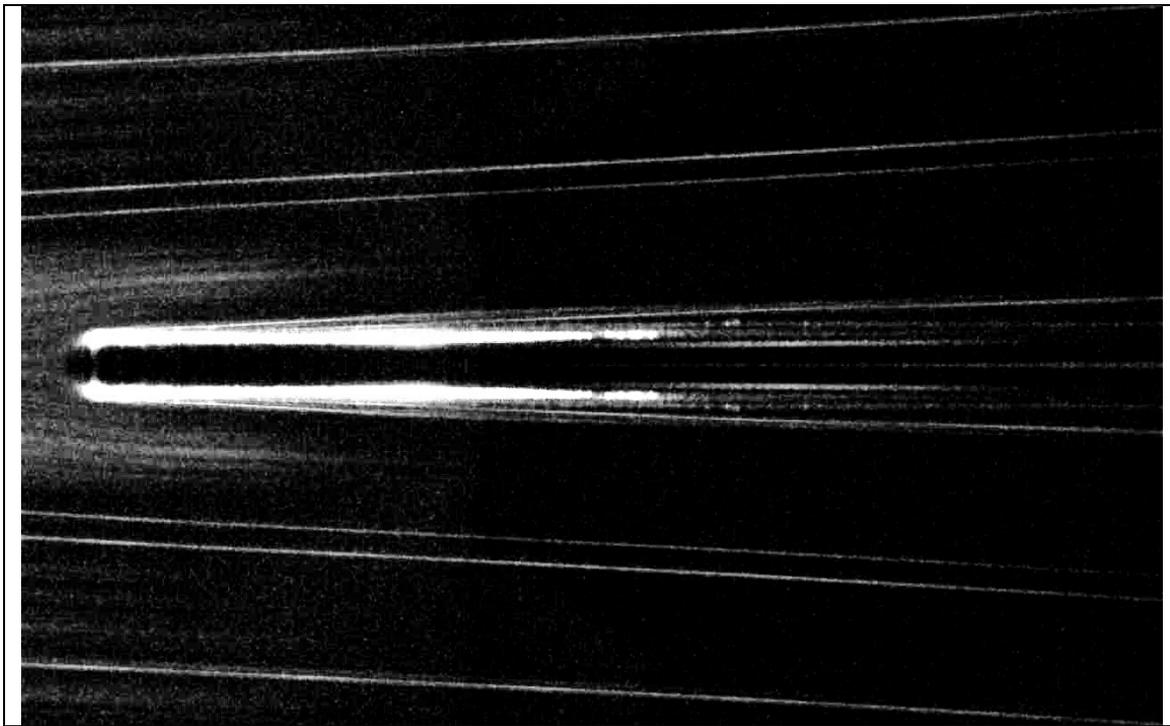


XZ

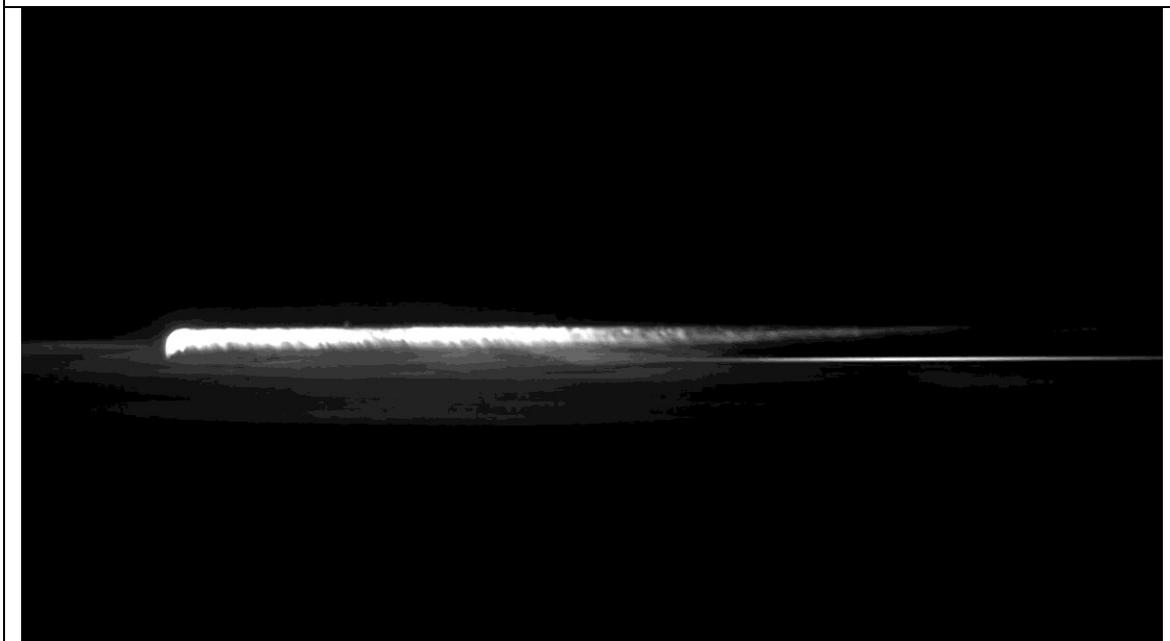


XY

- Re 900 y s 0.07:

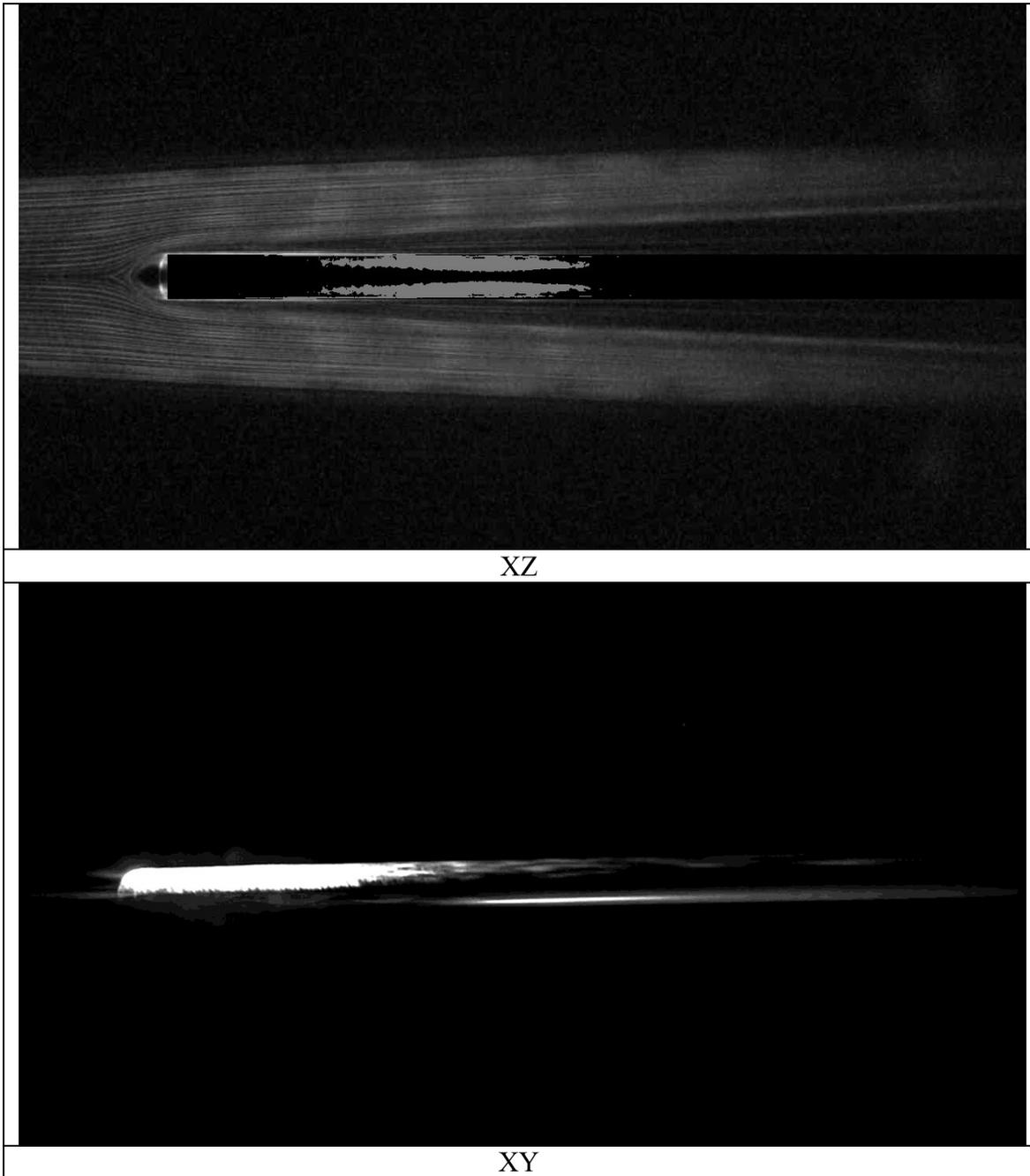


XZ

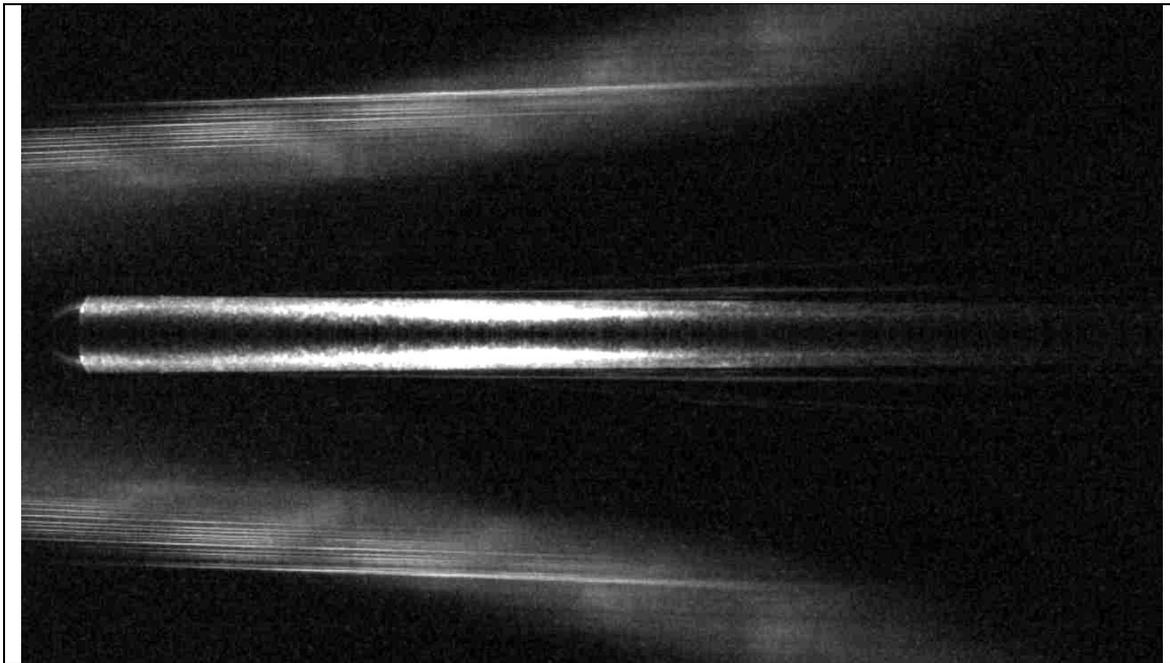


XY

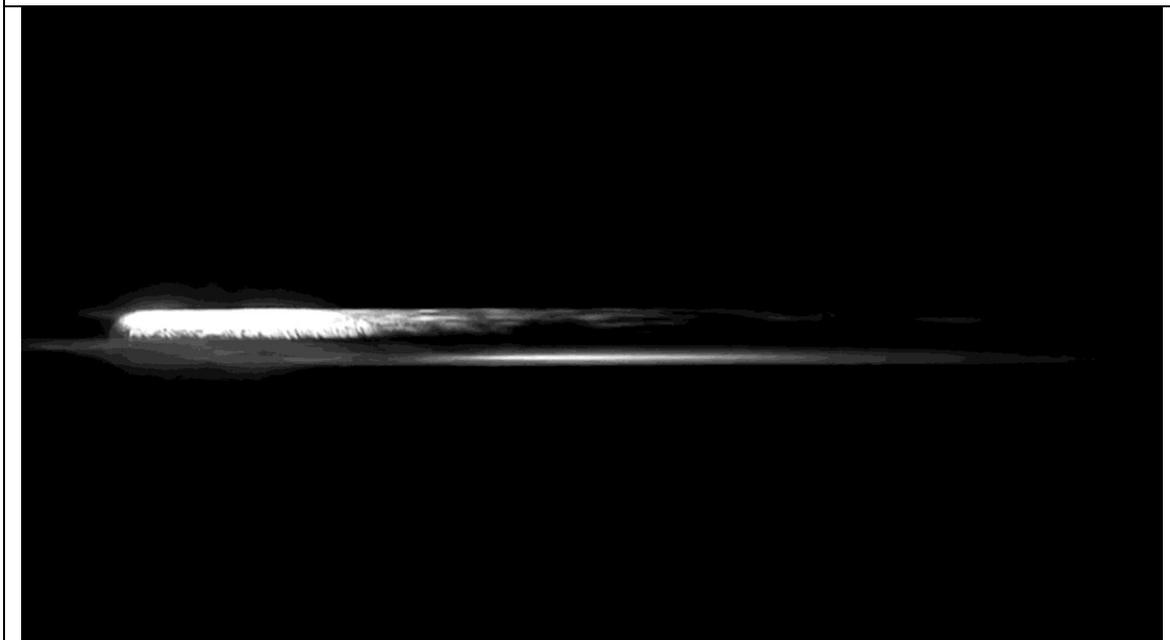
- Re 1960 y s 0.22:



- Re 1950 y s 0.33:



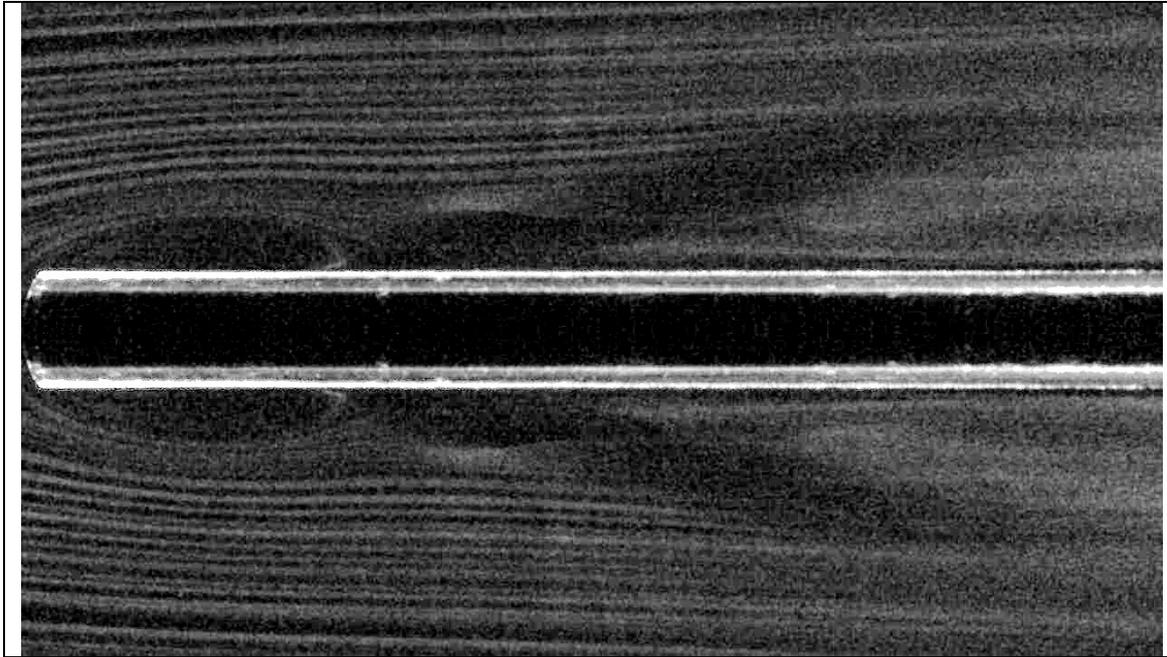
XZ



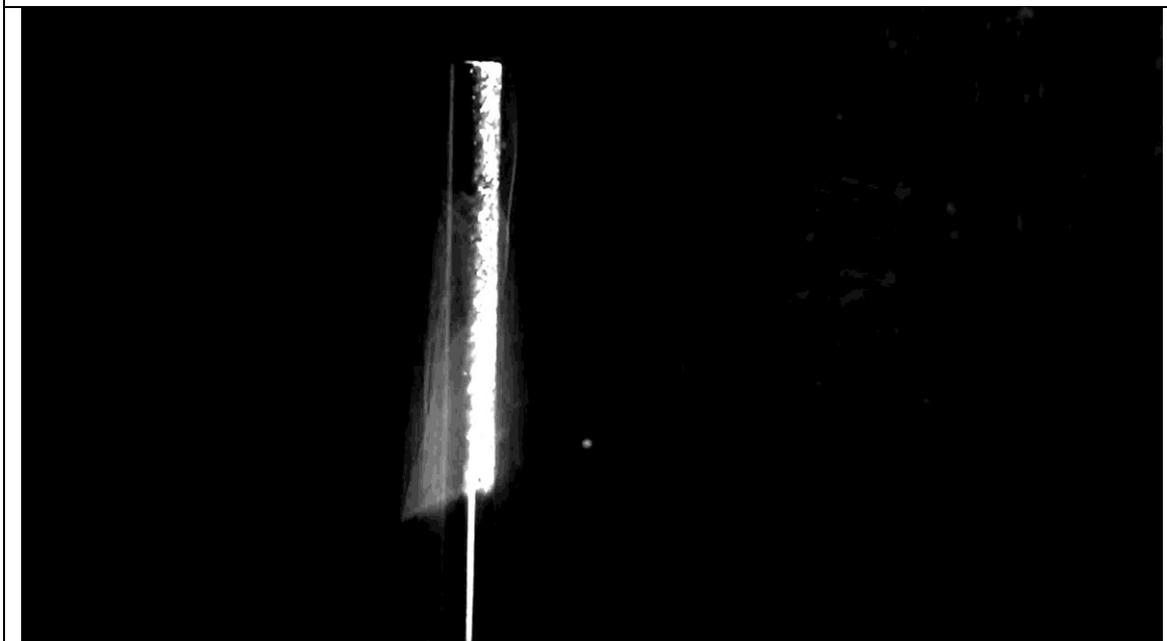
XY

• *Tipo de Cabeza:* PLANA

- Re 960 y s 0:

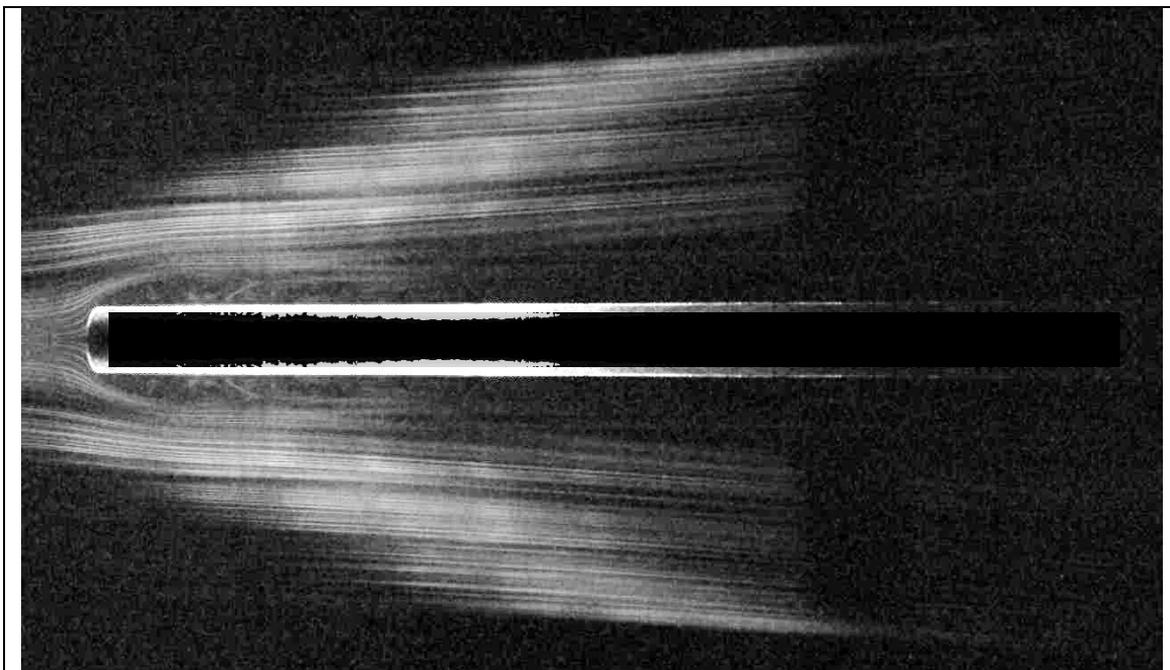


XZ

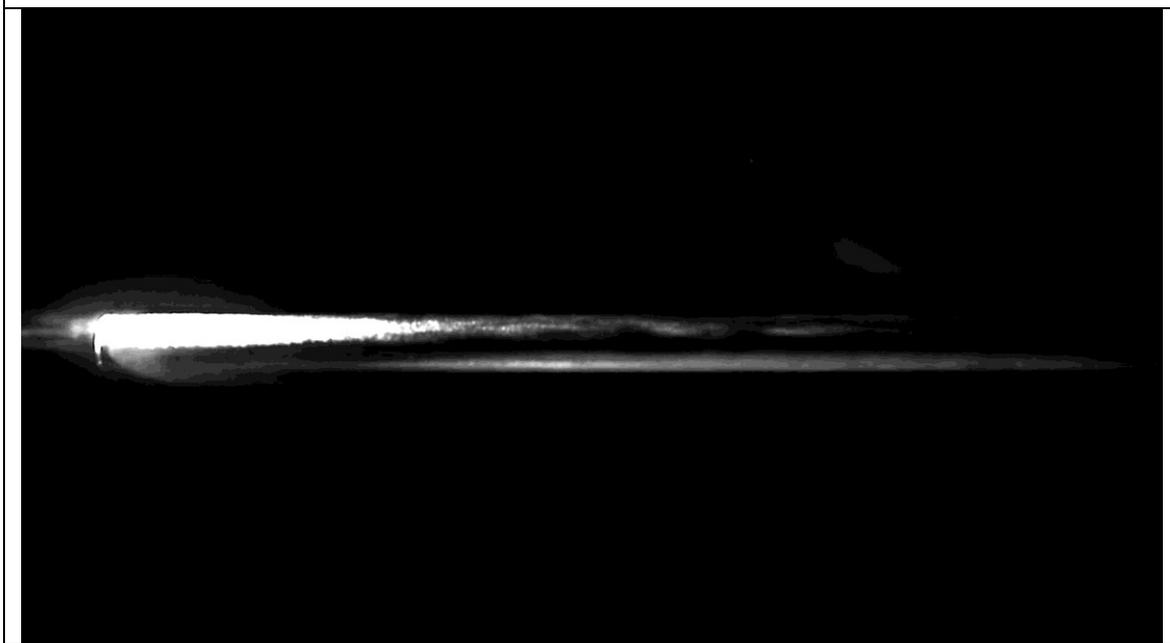


XY

- Re 1630 y  $\alpha = 0^\circ$ :

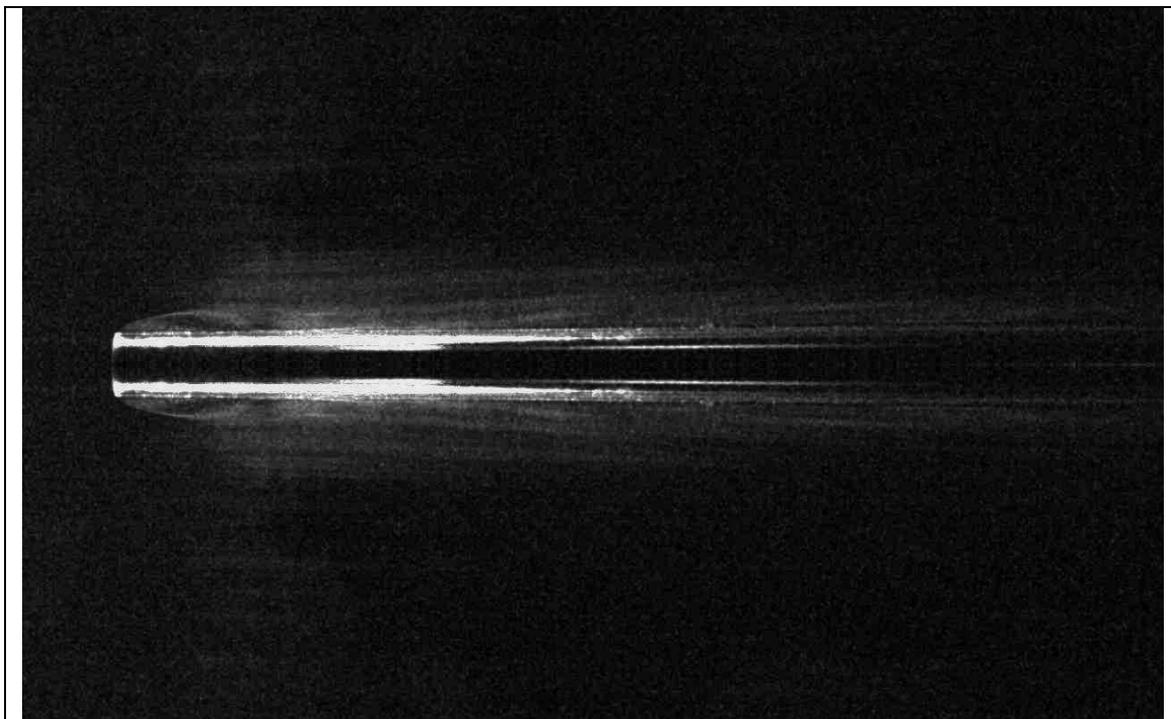


XZ

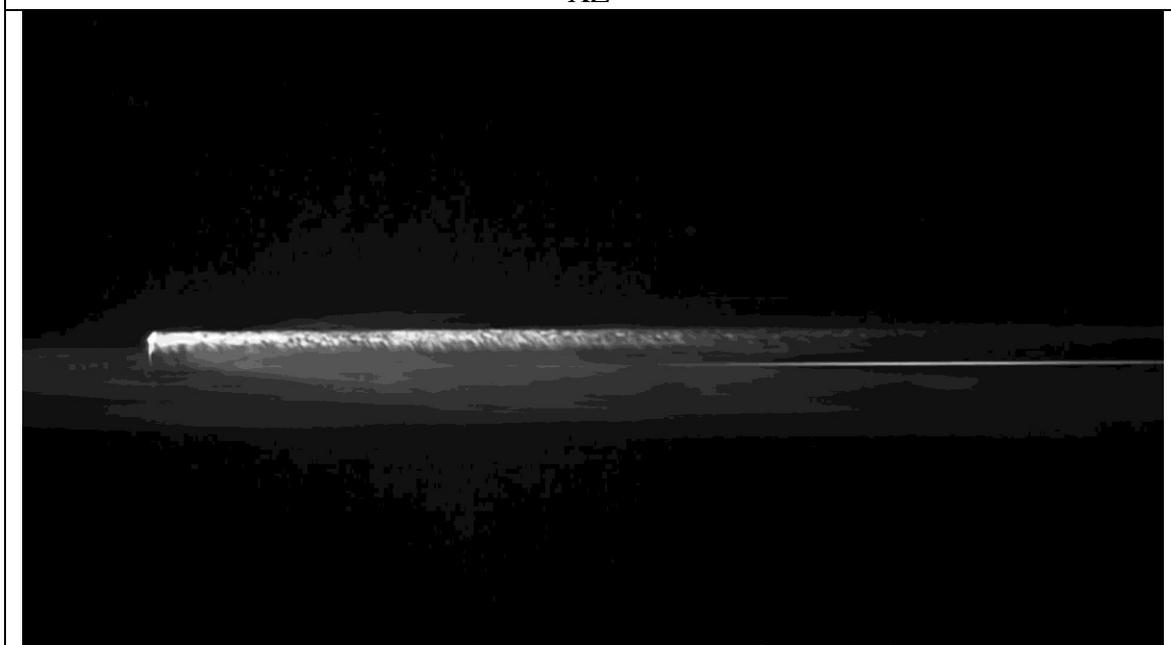


XY

- Re 900 y s 0.07:

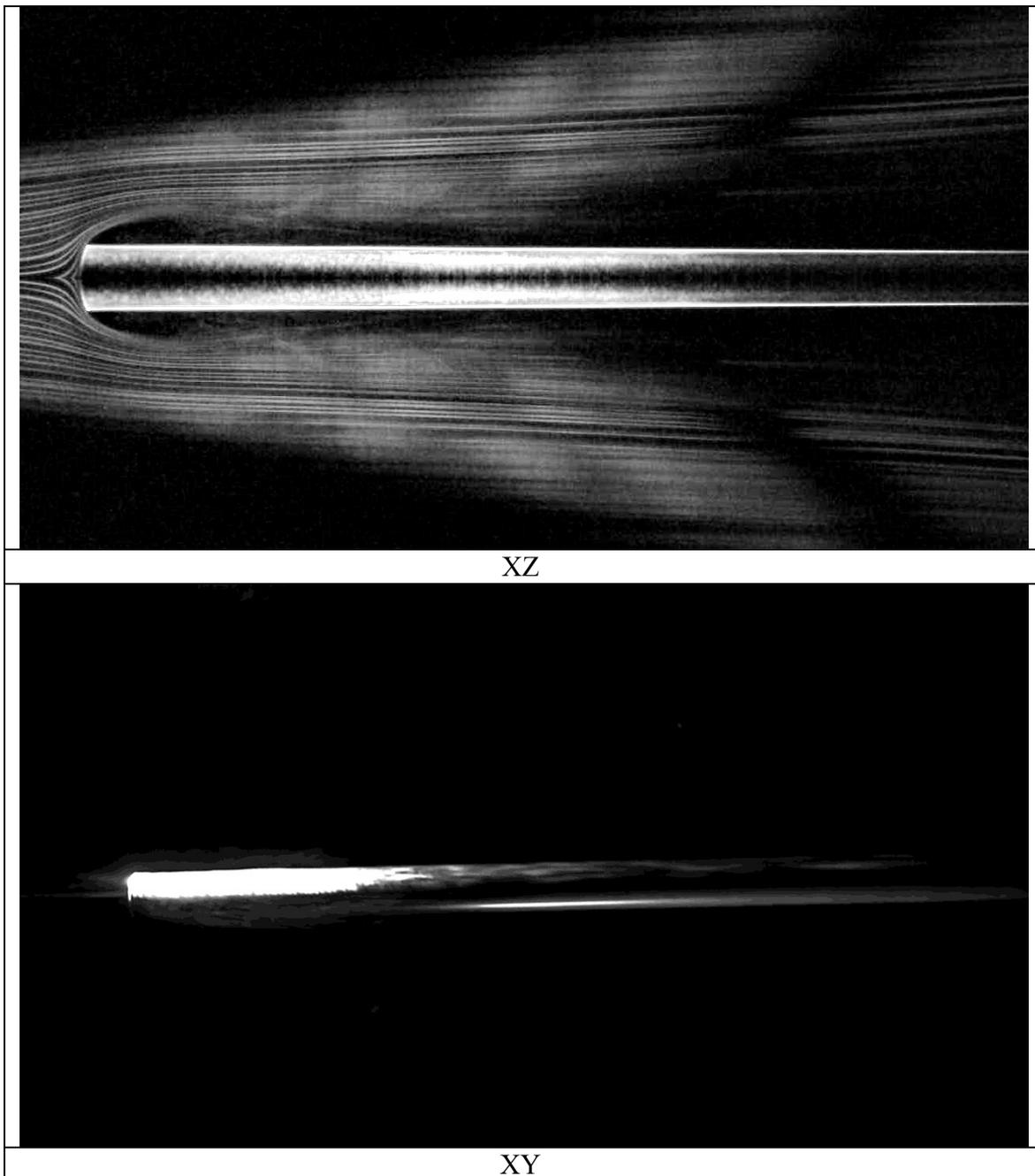


XZ

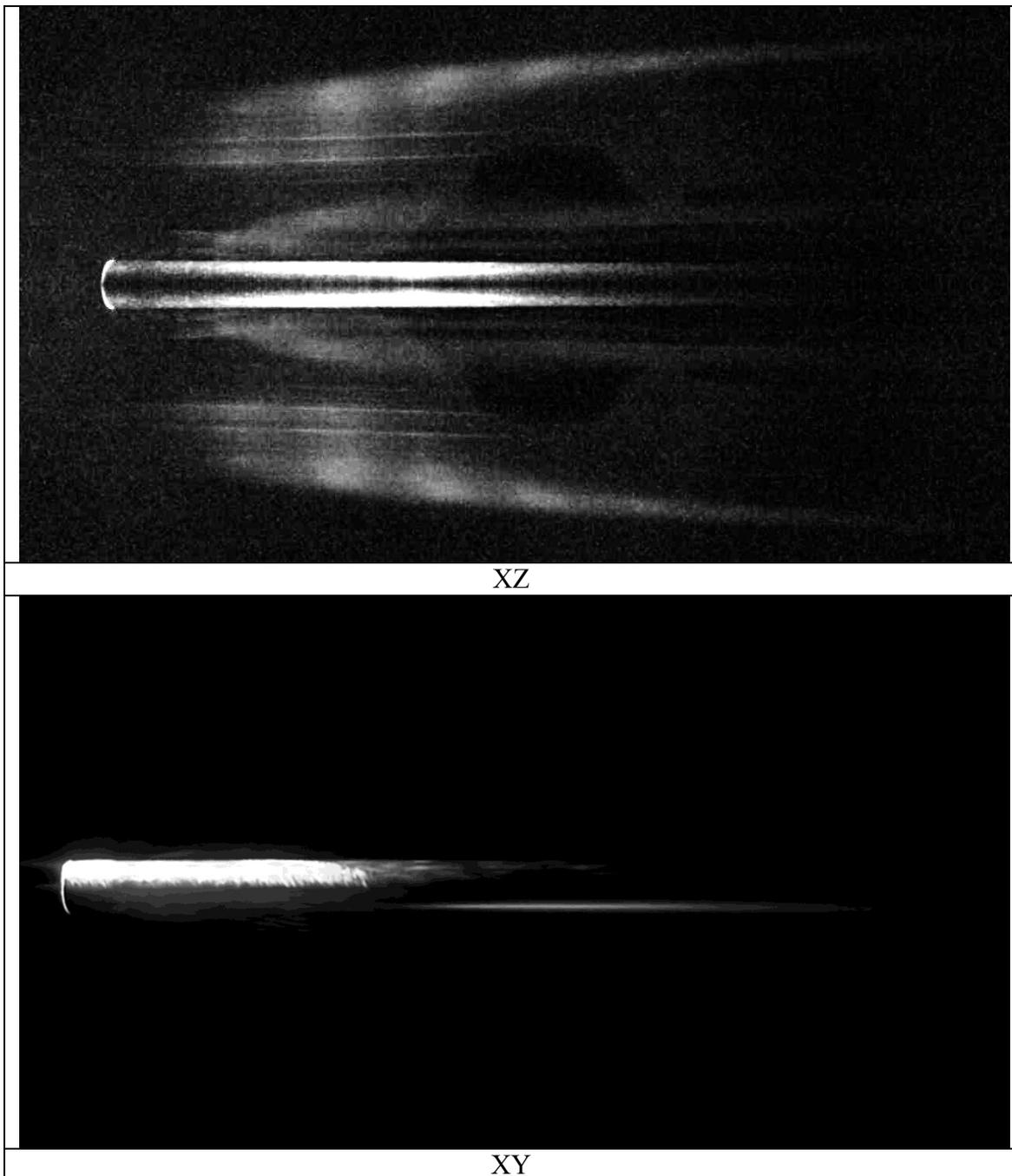


XY

- Re 1630 y s0.22:



- Re 1680 y s0.33:



• NOTA:

Los parámetros adimensionales mencionados son el número de Reynolds (Re) y el parámetro de giro (s), cuyas definiciones vienen dadas por las siguientes expresiones:

$$\text{Re} = \frac{U_{\infty} D}{\nu} = \frac{\text{Fuerzas de Inercia}}{\text{Fuerzas Viscosas}}$$

$$s = \frac{\Omega D}{2U_{\infty}} = \frac{\text{Velocidad de Rotación}}{\text{Velocidad de la Corriente}}$$