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Title: Visualización de un flujo de convección mediante un arreglo tipo Schlieren

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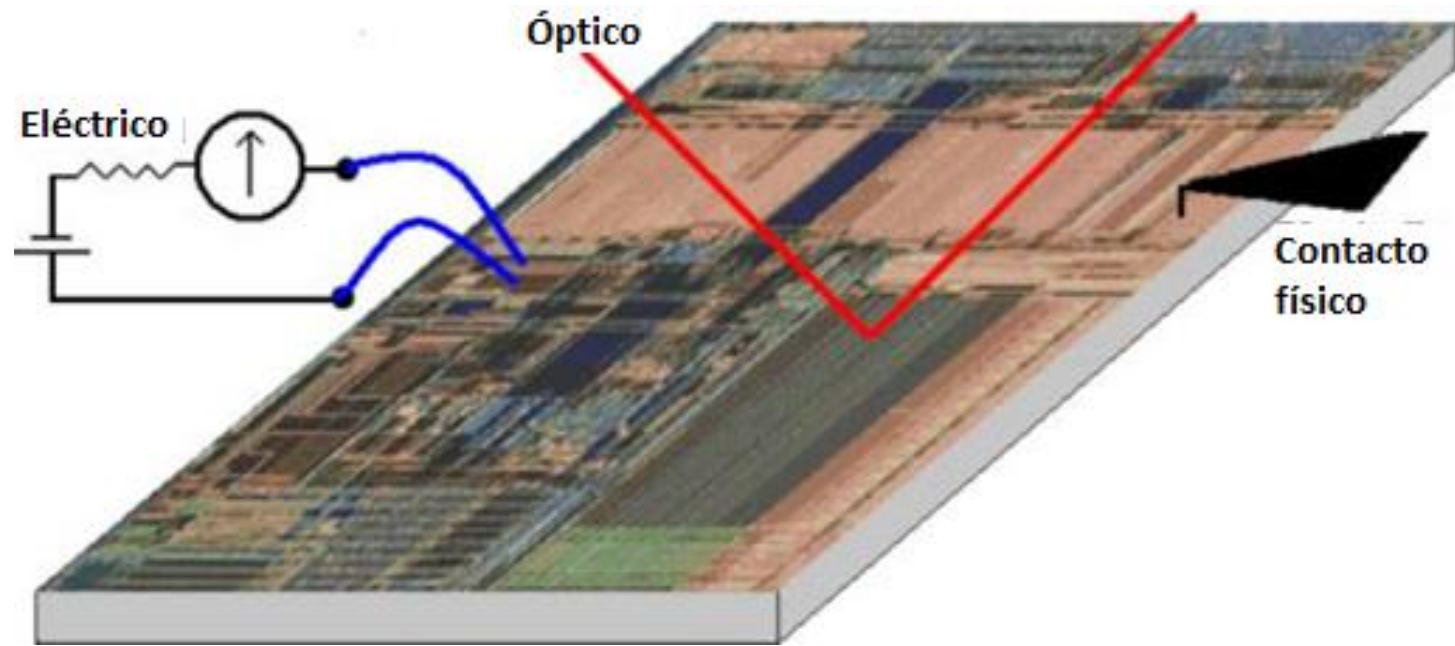
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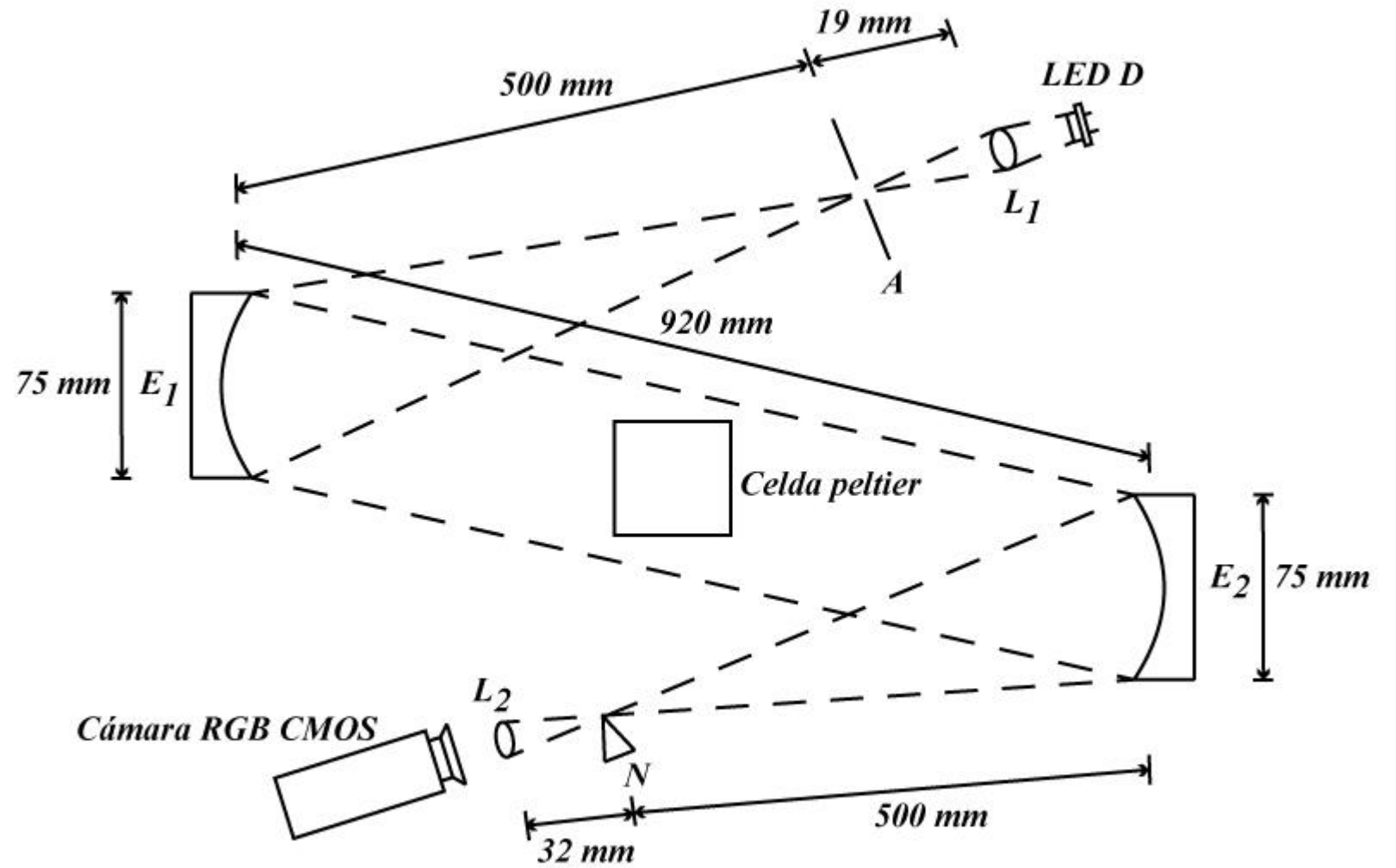
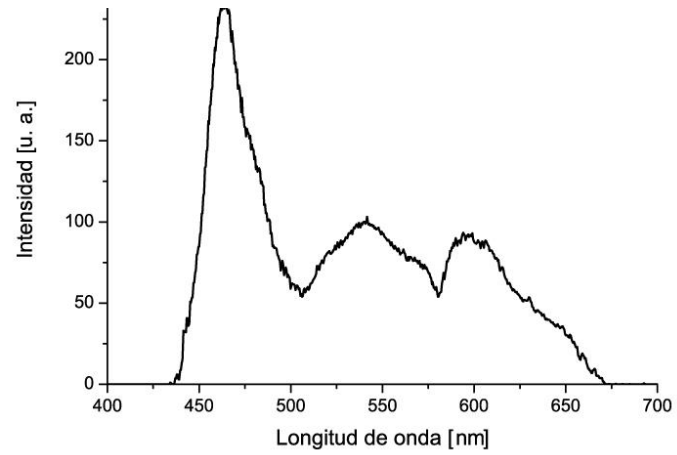
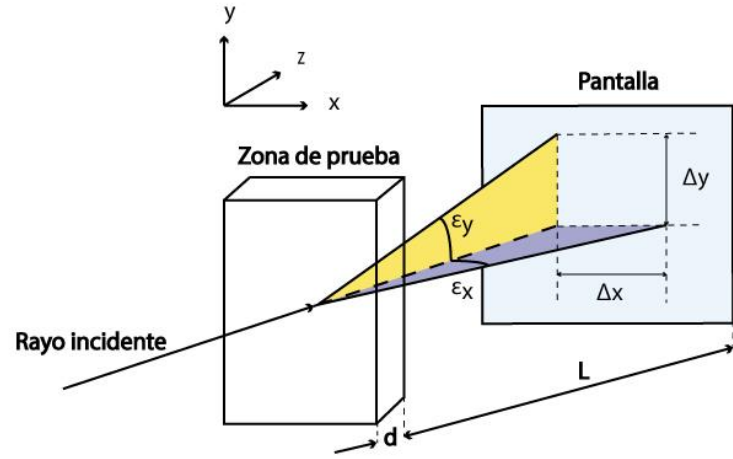
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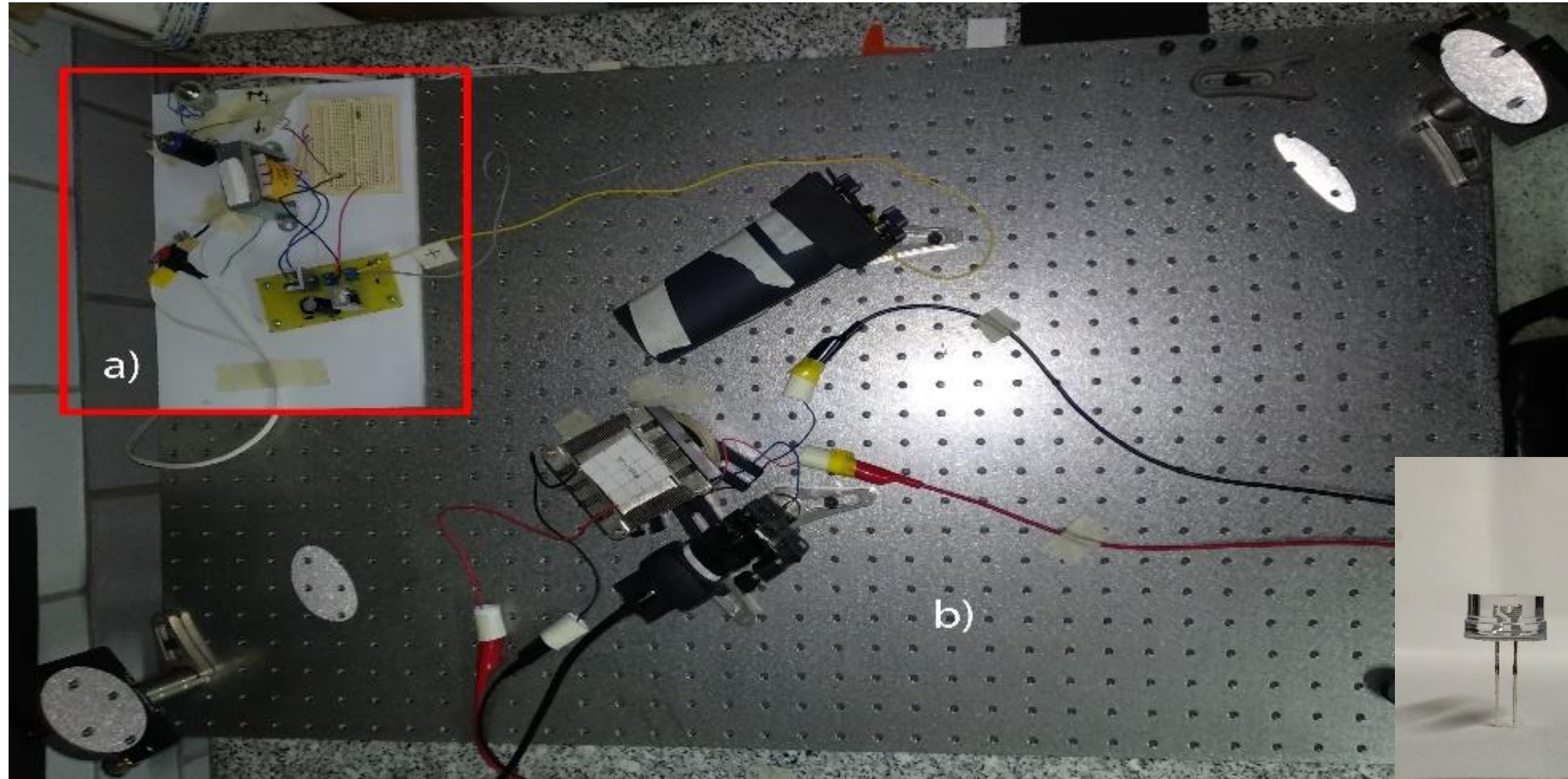
Introducción



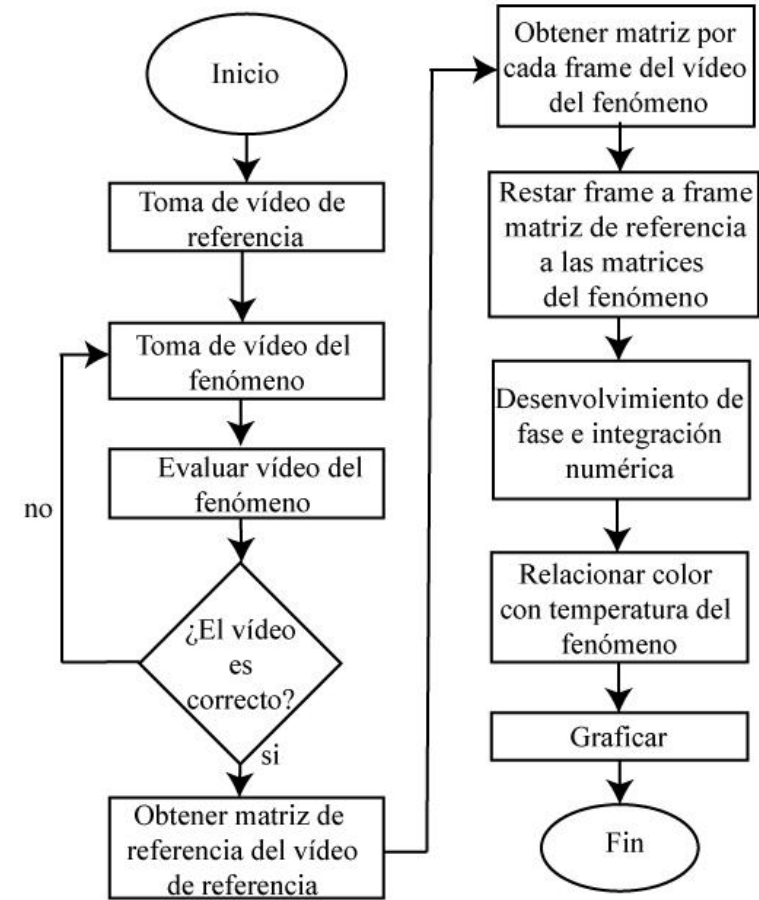
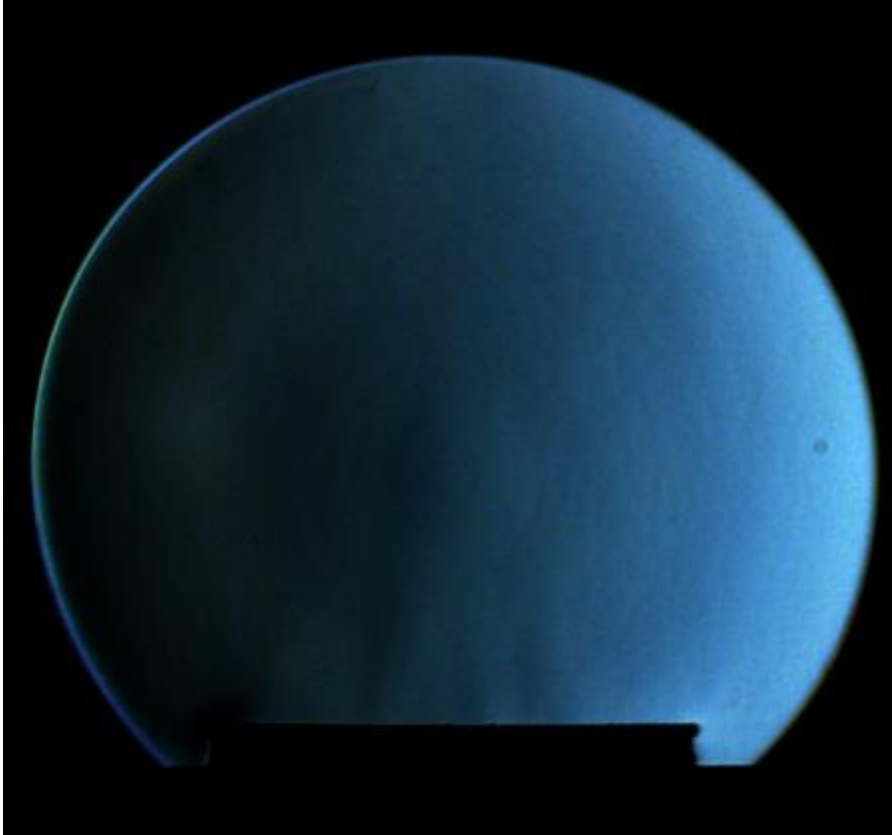
Arreglo experimental



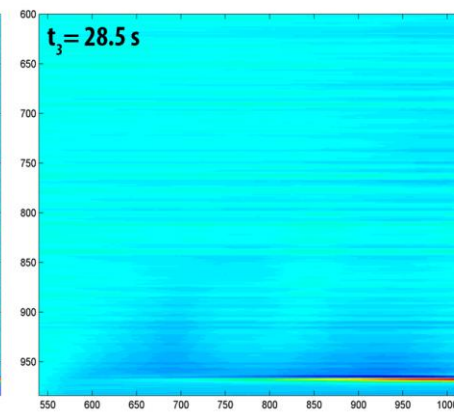
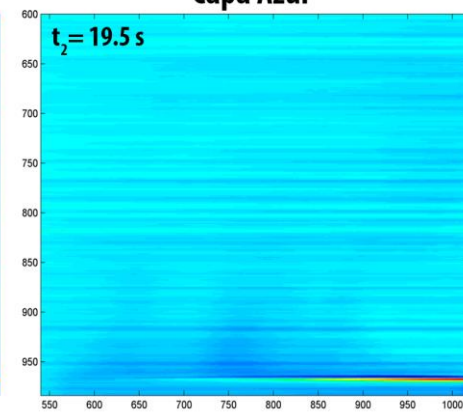
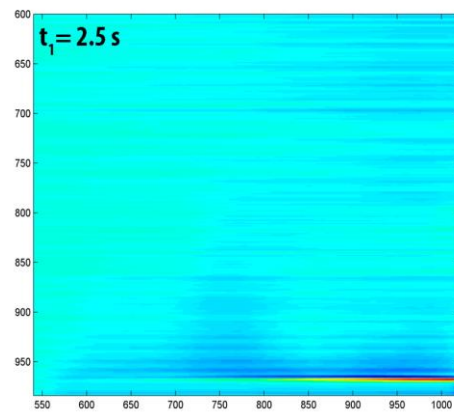
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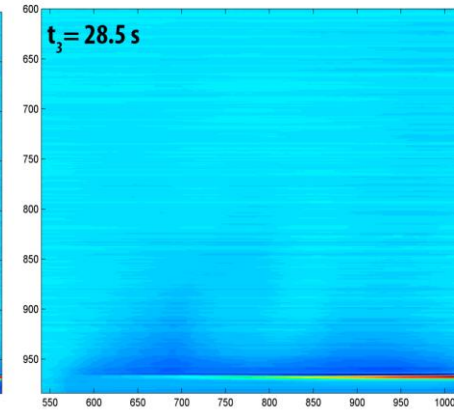
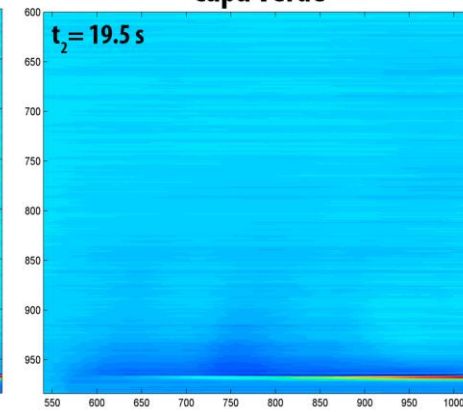
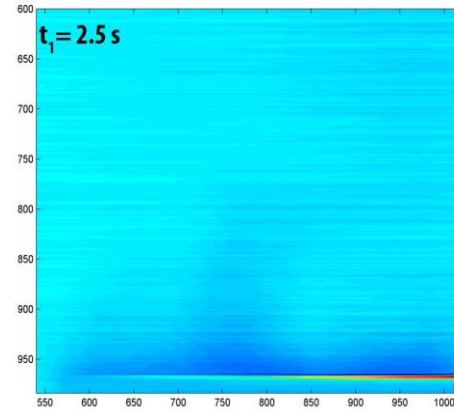
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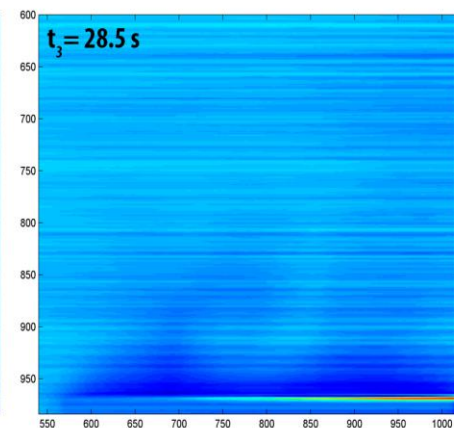
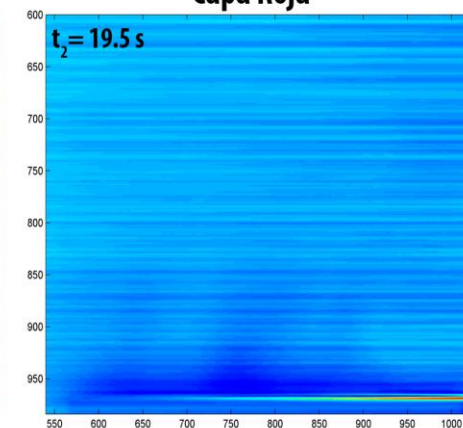
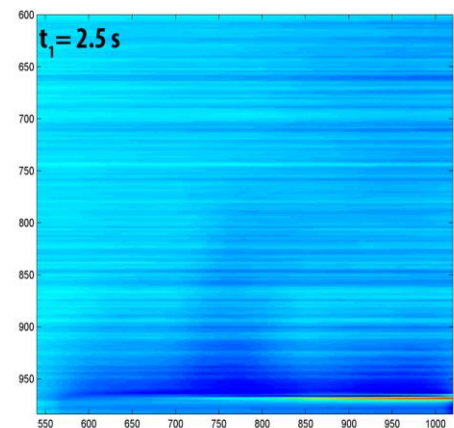
Capa Azul



Capa Verde

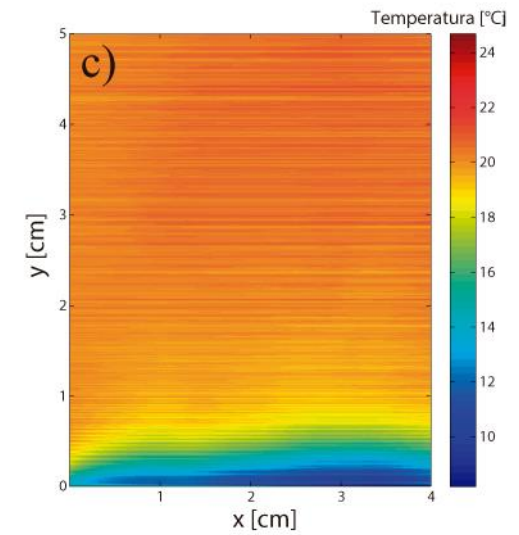
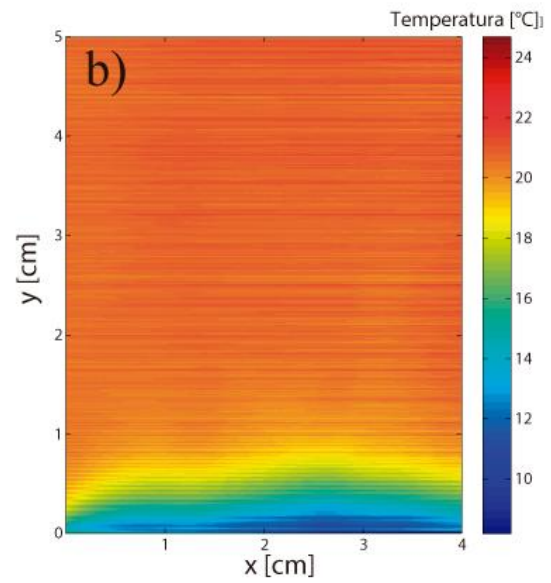
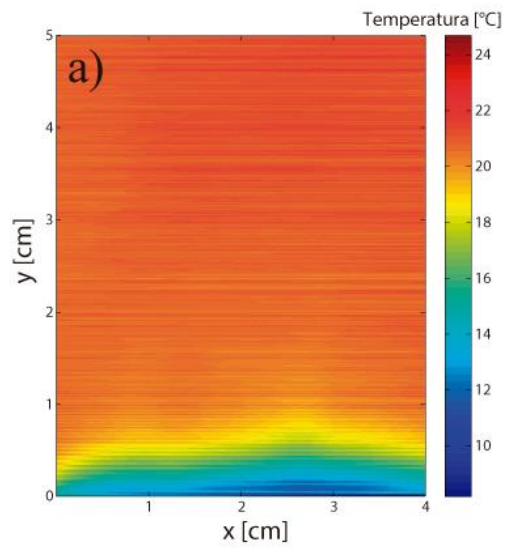
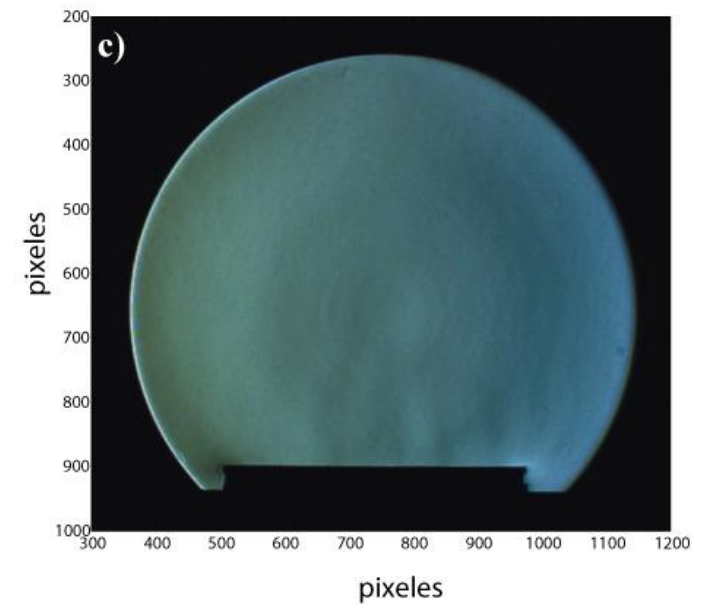
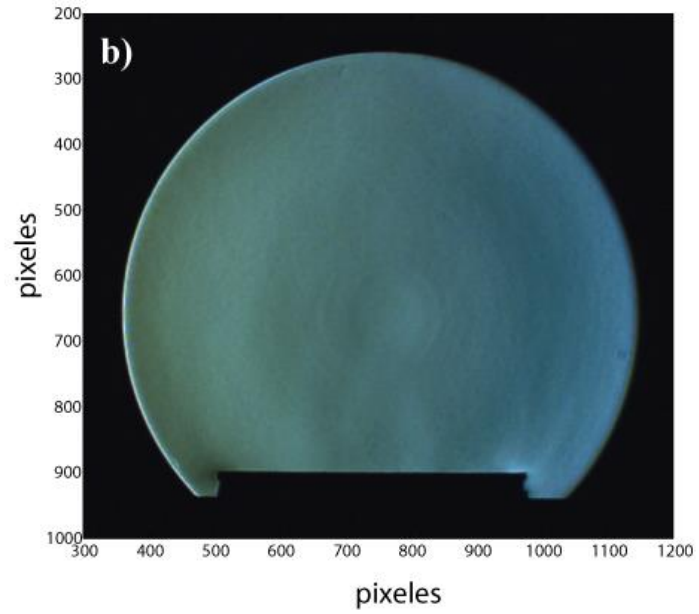
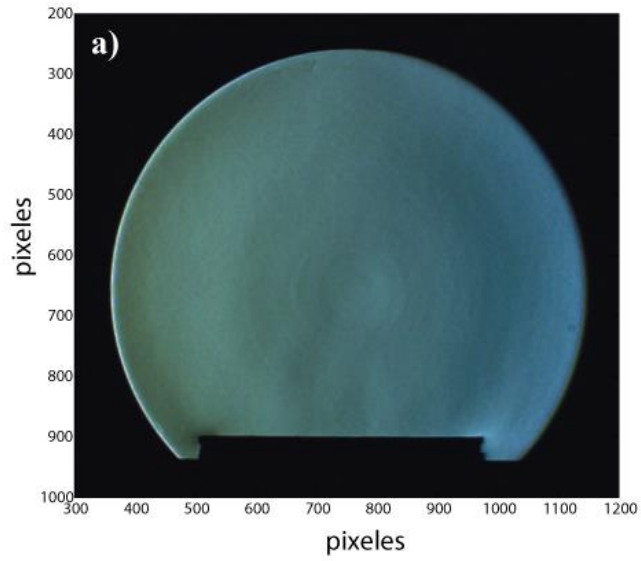


Capa Roja



Capa azul, verde y roja del fenómeno al tiempo $t_1 = 2.5$ s, $t_2 = 19.5$ s y $t_3 = 28.5$ s

Resultados



Conclusiones

- El sistema óptico de Schlieren comprobó que es sensible a detectar alteraciones en el medio por pequeñas que estas sean y sin importar la región en que estas sucedan.
- Se pudo visualizar por medio del sistema óptico, el flujo de convección causado por la superficie de enfriamiento de la celda Peltier, el cual es un fenómeno en el que el gradiente de temperatura tiene cambios en una región muy pequeña.
- Se puede recomendar otra aplicación de esta técnica que normalmente se asocia con la visualización de fenómenos con altas temperaturas, como turbinas, flamas y en balística.

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