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Equilibrium composition between liquid and clathrate reservoirs on Titan

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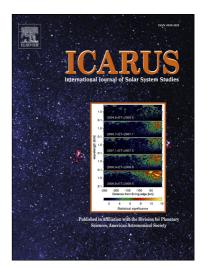
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Equilibrium composition between liquid and clathrate reservoirs on Titan

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Abstract

Hundreds of lakes and a few seas of liquid hydrocarbons have been observed by the Cassini spacecraft to cover the polar regions of Titan. A significant fraction of these lakes or seas could possibly be interconnected with subsurface liquid reservoirs of alkanes. In this paper, we investigate the interplay that would happen between a reservoir of liquid hydrocarbons located in Titan's subsurface and a hypothetical clathrate reservoir that progressively

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