2010. Brian Winkel. Modelling the spread of an oil-slick with irregular information. *International Journal of Mathematical Education in Science and Technology*, 41(8): 1085-1096.

An oil-slick spreads at sea. From time to time, but irregularly, a helicopter is dispatched. On each trip, it arrives over the slick, the pilot takes a picture, waits 10 minutes, takes another, and heads home. On each of seven trips the size (in area) of the slick is measured from both photographs. Build a model for the growth of the oil-slick.

https://www.tandfonline.com/doi/abs/10.1080/0020739X.2010.500693 . All *IJMEST* articles are freely available to members of the Mathematical Association of America.

These activities form the core of the 1-005-OilSlick-ModelingScenario doi:10.25334/HHF9-GM75. Accessed 10 March 2023.

Keywords: differential equation, difference equation, first order, simulation, parameter estimation, classroom activity