

# Drugs, Herbicides and Numerical Simulations

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Glyphosate is one of the herbicides used by the Colombian government to spray coca fields. Sprays took place for a number of years and were more frequent between 2000 and 2006. The spray drifts at the Ecuador-Colombia border had become a big issue for people living close to the border. Hence, in 2005 Ecuador and Colombia signed an agreement to stop the sprays along a 10 km stripe at the border. However, measurements on Ecuadorian territory indicated that significant amounts of Glyphosate spray had still drifted into Ecuador. The sprays stopped in 2007 and a trial in the International Court of Justice started. In September 2013 the case was settled with an agreement that sets out operational parameters for Colombia's spraying programme. In this talk, we present a model that takes into account the particular guidelines that aircrafts follow to perform the sprays. Numerical simulations in 2D and 3D are performed at sensitive zones along the Ecuador-Colombia border.