NUMERICAL SIMULATION OF AERIAL SPRAY DRIFT:

THE ECUADOR-COLOMBIA BORDER AS A CASE OF STUDY

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To my son, Anthony

H. Mena

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Notation

$\mathbb{R}$:	set of real numbers
$\mathbb{R}^2$:	bi-dimensional plane
	$\mathbb{R}^2 = \mathbb{R} \times \mathbb{R}$
$\mathbb{R}^3$:	tri-dimensional plane
	$\mathbb{R}^3 = \mathbb{R} \times \mathbb{R} \times \mathbb{R}$
b^T:	transposted of the vector b
$A \backslash B$:	differece of the set A and B
$\forall$:	for all the elements
$\exists$:	there exist at least one element
Ω:	domain of the model
Γ:	boundary of the domain
$\mathrm{cov}(.)$:	covariance
$\|\| \cdot \|\|$:	norm
$\langle \cdot, \cdot \rangle$:	scalar product
$\mathrm{dom}(A)$:	domain of A
$exp(\cdot)$	exponential function
$\frac{\partial}{\partial x}$:	partial derivative with respect to x
$\frac{d}{dx}$:	derivative with respect to x
∇:	nabla operator
	$\nabla f = (\frac{\partial f}{\partial x_1}, \ldots, \frac{\partial f}{\partial x_n})$
Δ:	laplace operator
	$\Delta f = \nabla.(\nabla f) = \sum_{i=1}^n \frac{\partial^2 f}{\partial x_i^2}$
∇^2:	Δ