

# Avia-GIS

Software Technologies for a Healthier World

[www.avia-gis.com](http://www.avia-gis.com)





# Who are we?



BE SME established in 2001  
 75% Europe – 25% Overseas  
 17 + 3 collaborators, 7 nationalities  
 International networks  
 Second investment round



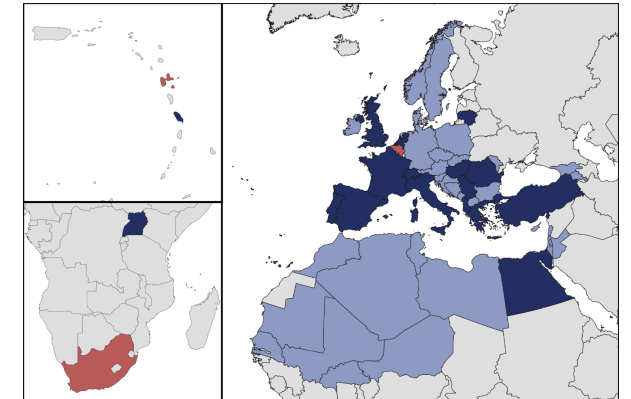
100%

Avia-GIS  
RSA



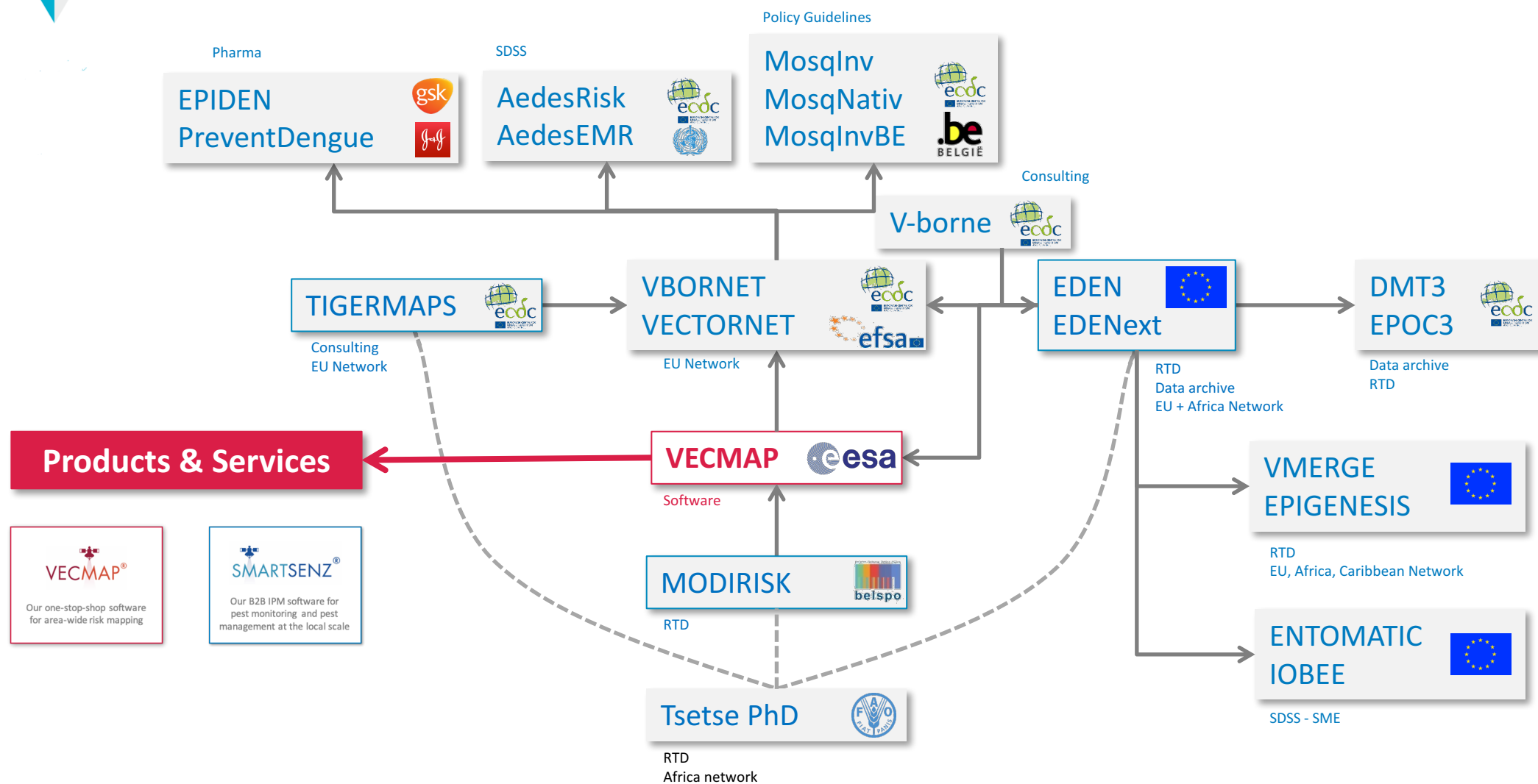
16%

ID MAPPS





# International networks

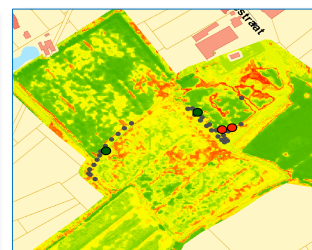
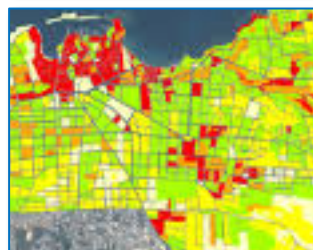
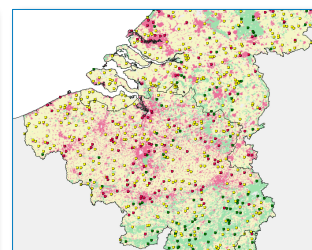
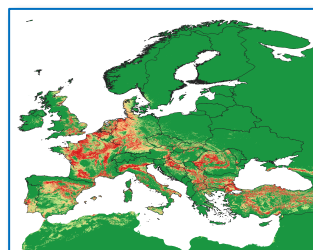
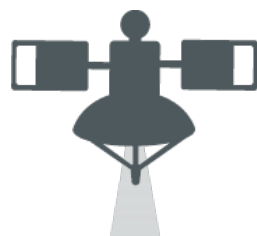


# What is our expertise?

## Spatial and Temporal Risk Assessment



X



010001000  
**BIG  
DATA**  
101011010



# What are our domains of activity?



**Vector-borne  
diseases**



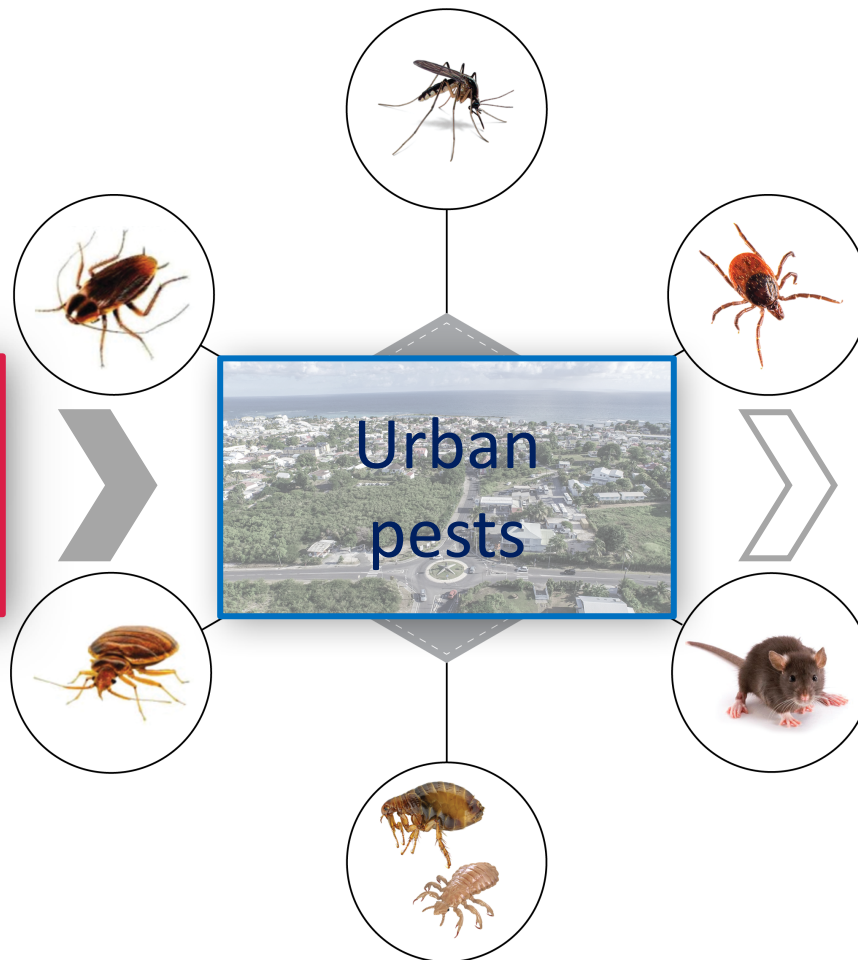
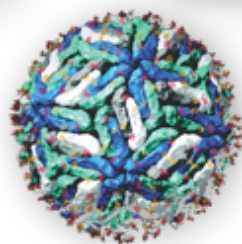
**Integrated disease  
management**



**Urban  
pests**



**Crop  
agriculture**





# Who are our clients?

We increase the capacity of our clients to deal with spatial risk

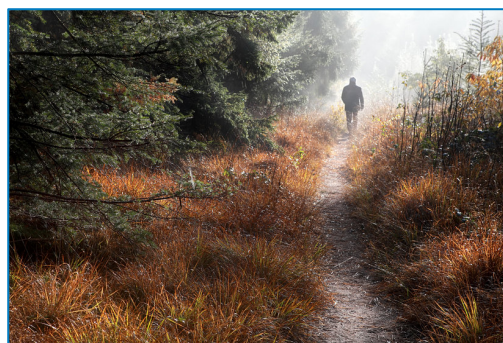
With our software and dedicated tools our clients:

Researchers



understand risk:  
where, why, when?

Policy Makers



protect the public  
against risk

Pest control



implement IPM  
approaches

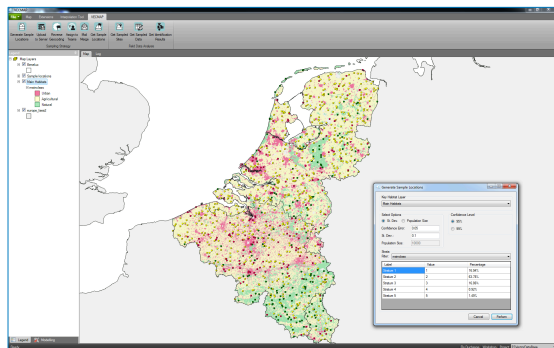
Industry



improve their products  
& services



# What is our Unique Solution?



VECMAP®

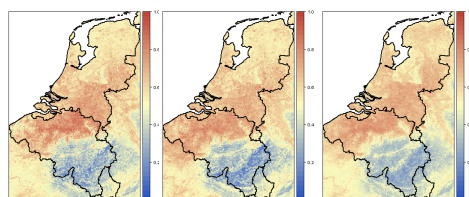
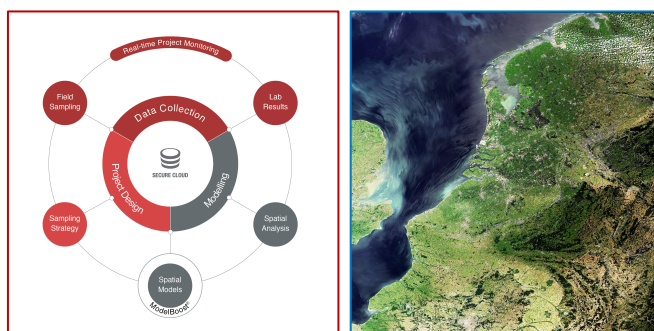
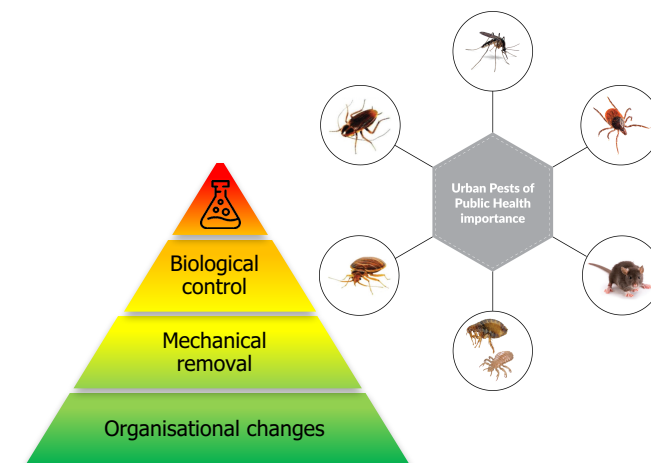
Area-wide  
risk mapping  
of pathogens,  
vectors and hosts

from area-wide  
to LOCAL



from vectors  
to all URBAN PESTS

from mapping  
to IPM



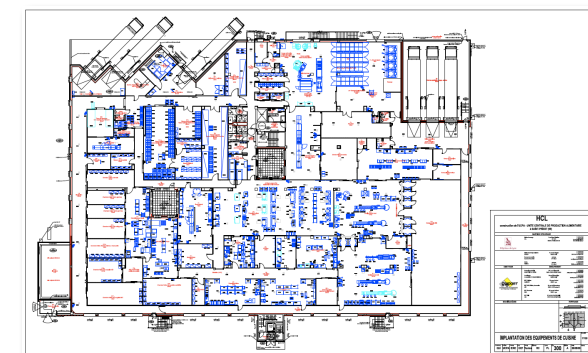
900

600

300

SMARTSENZ®

from outdoors  
to INDOORS





# How was VECMAP developed?

IT staff: red/1 orange/2 yellow/3 y-green/4 d-green/5 blue/6

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
VECMAP V1.0 Feasibility		VECMAP V1.0 Demo		SMARTVEC Demo CCN		SMARTSENZ Demo CCN		VECMAP V2.0 / SMARTSENZ-IPM Commercial upscaling				

ESA Business Applications Program

H2020 SME Instrument Grant



esa



European  
Commission  
Horizon 2020  
European Union funding  
for Research & Innovation



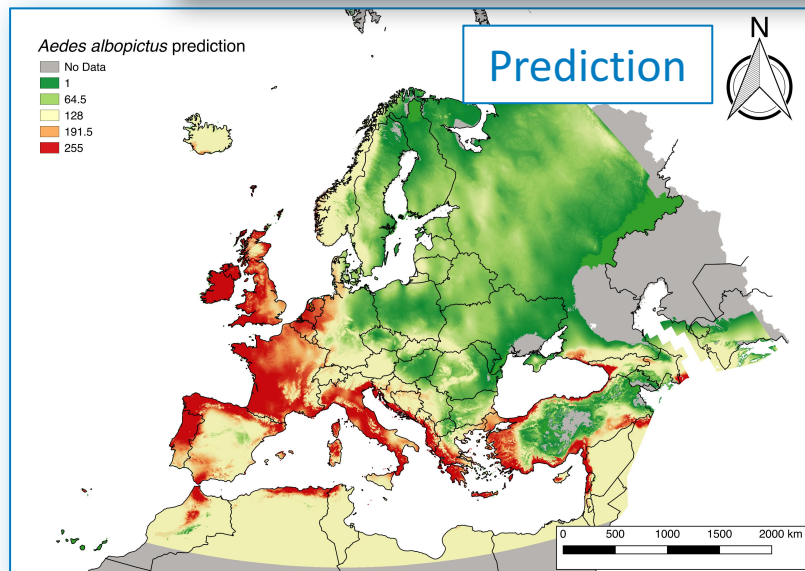
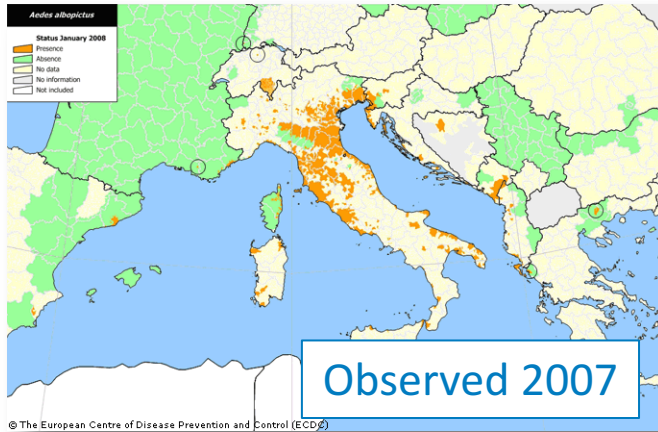
# Contract Research outputs



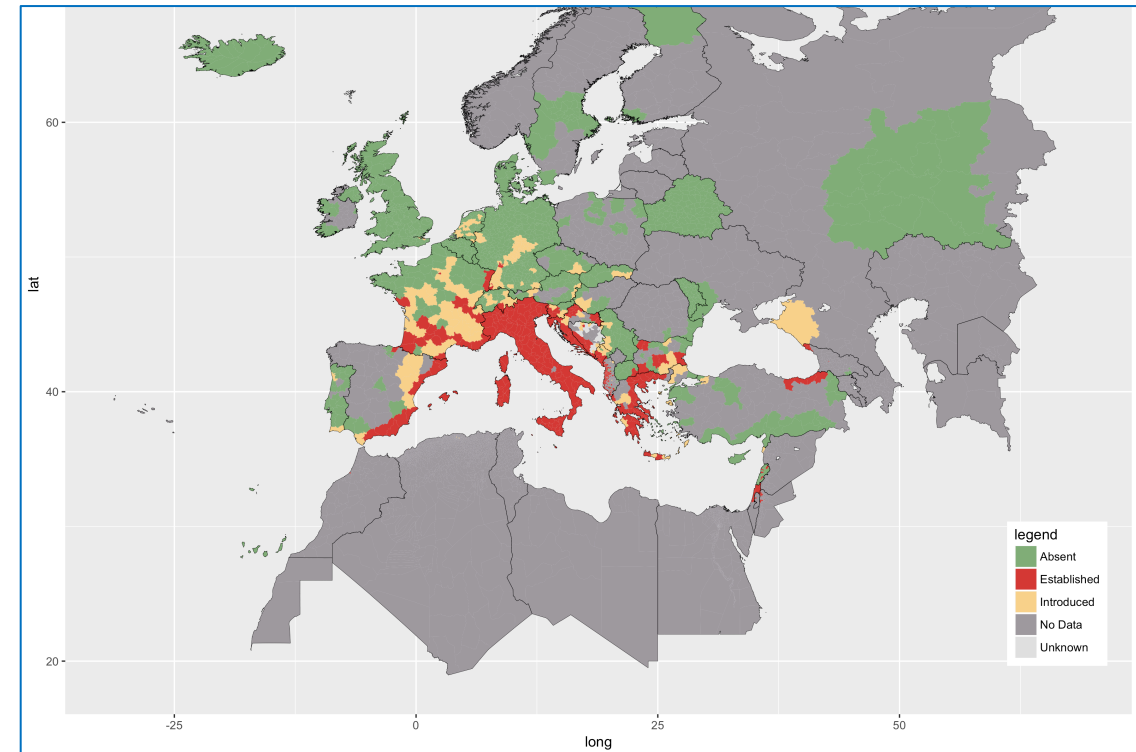


# Mosquitoes (1/3)

## Predicting the spread of the Tiger Mosquito



Current vector situation

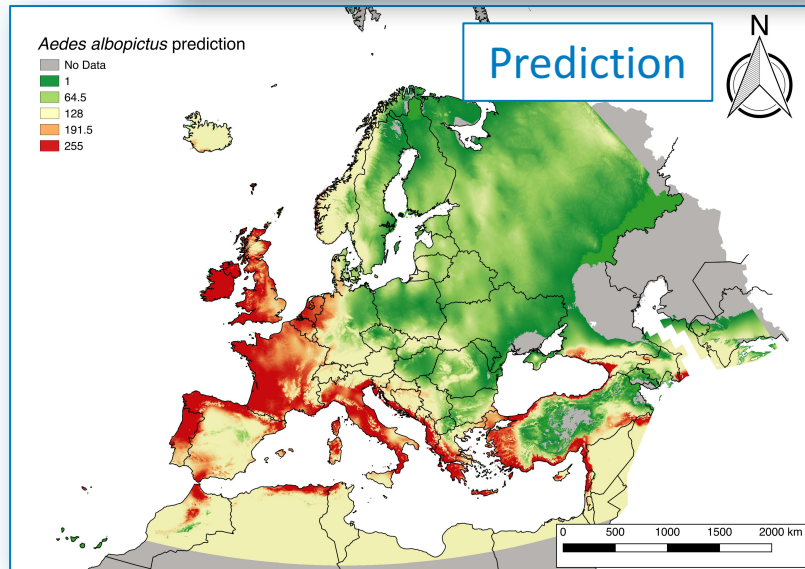
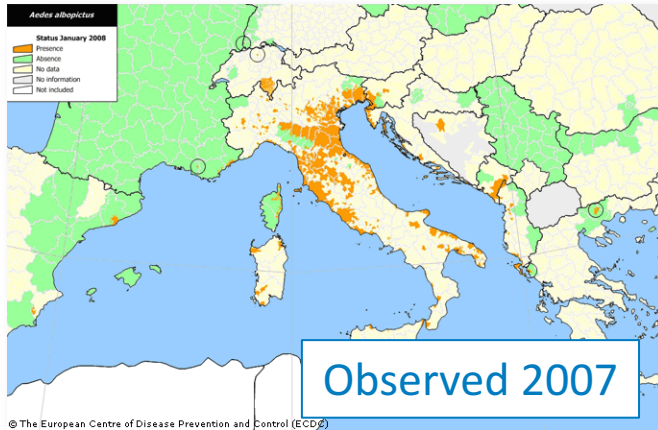


Refs. TigerMaps 2009 and VectorNet 2019

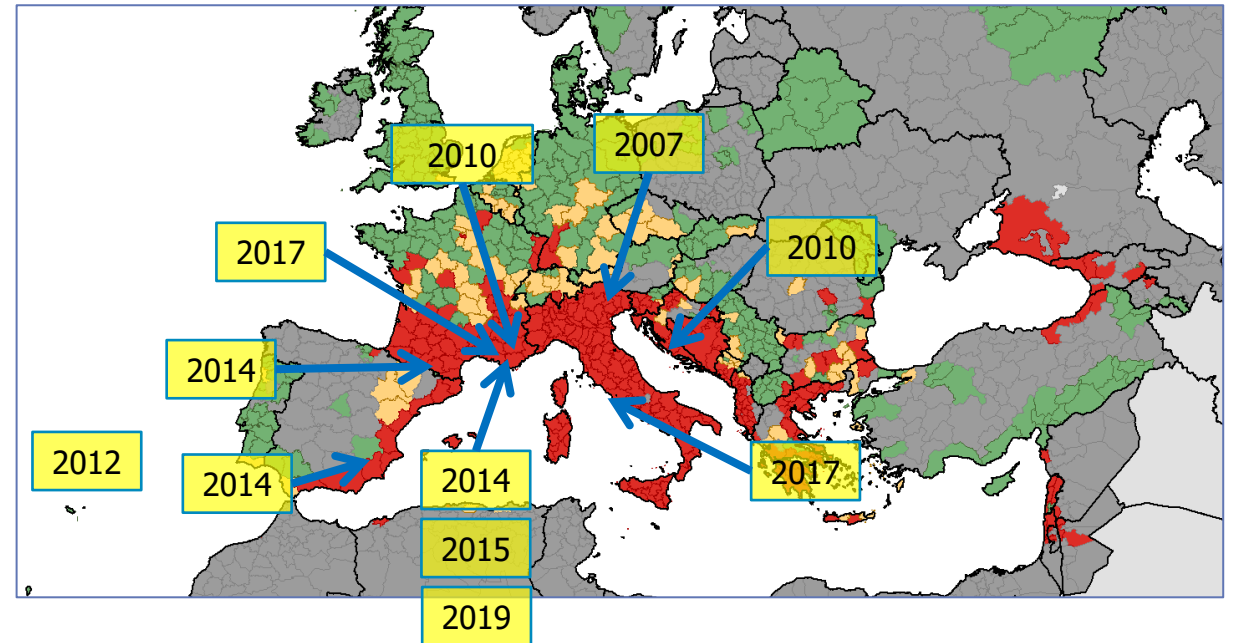
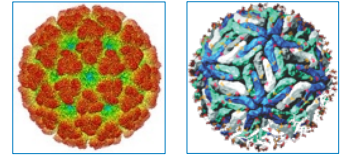


# Mosquitoes (2/3)

The Tiger paved the way to introduce new VBDs



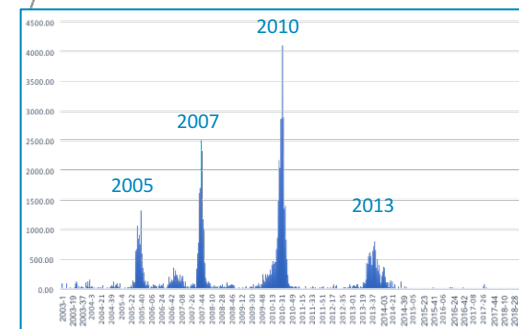
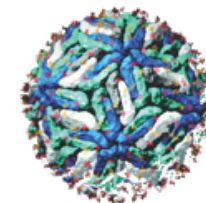
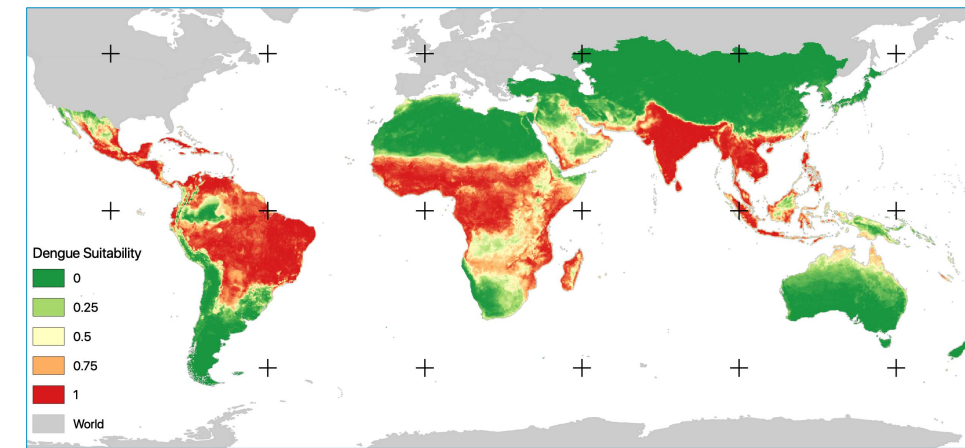
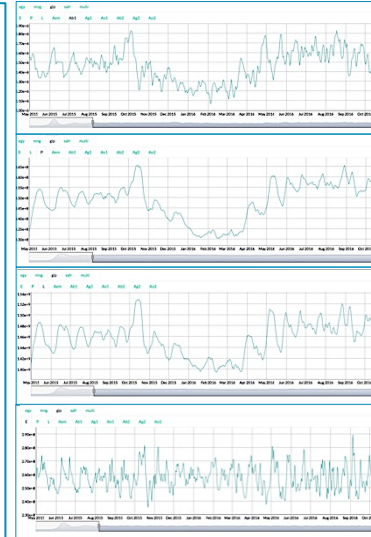
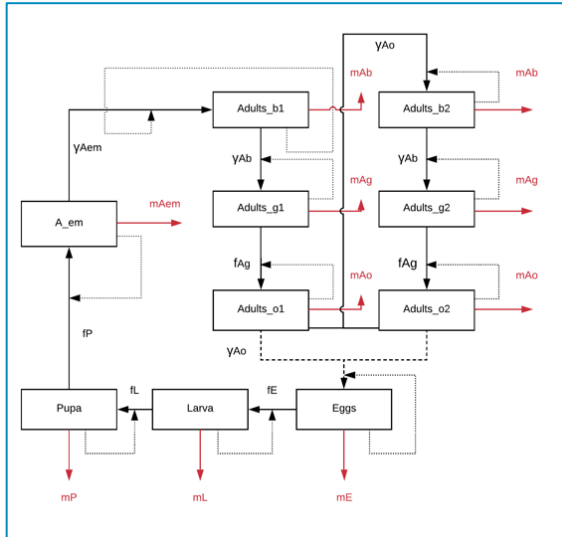
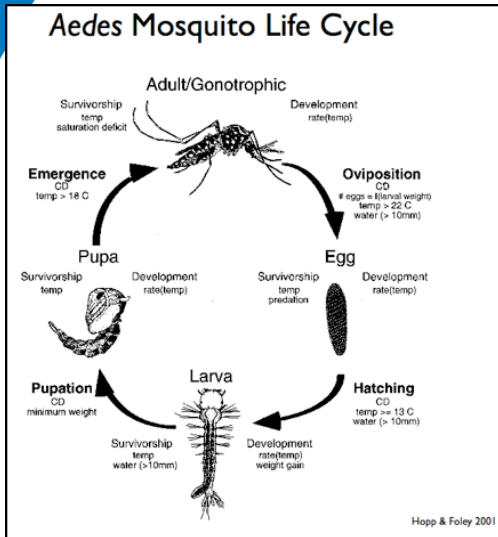
Current disease outbreak situation



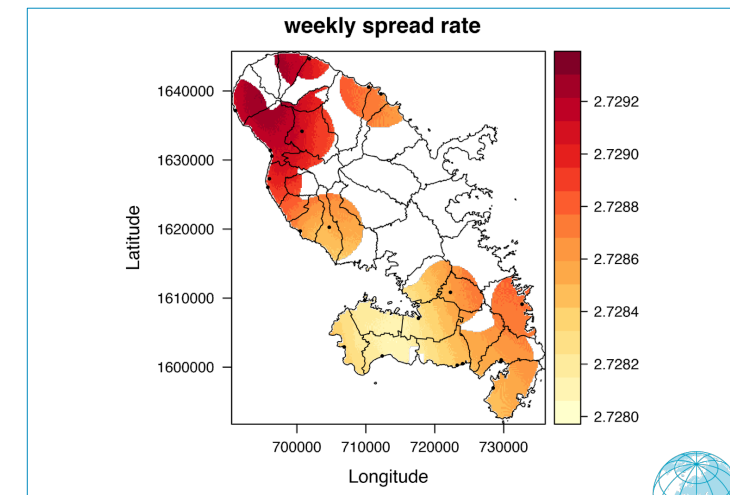
# Mosquitoes (3/3)

## Clinical trial support for pharma industry

Global dengue hotspots



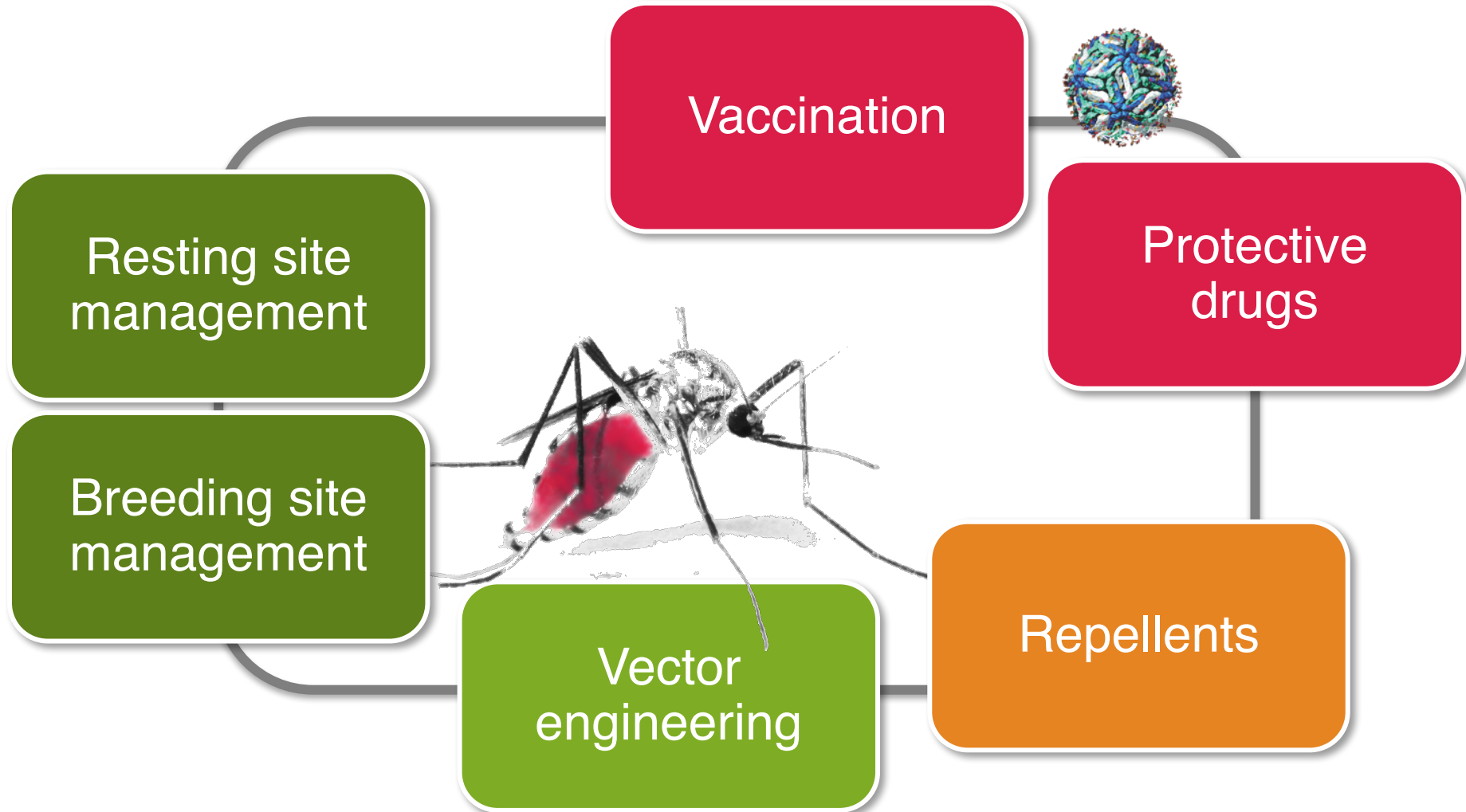
Historical outbreaks (Guadeloupe)



SIR Model: Spread (Martinique)



# Integrated Vector-borne Disease Management





Thank you for your questions

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[www.avia-gis.com](http://www.avia-gis.com)