



AIR CENTRE  
ATLANTIC INTERNATIONAL RESEARCH CENTRE

**Hackathon - Session One**  
**JuliaEO24 – Global Workshop on Earth Observation with**  
**Julia**  
**12.01.2024**

**Mariana Avila & Iga Szczesniak**



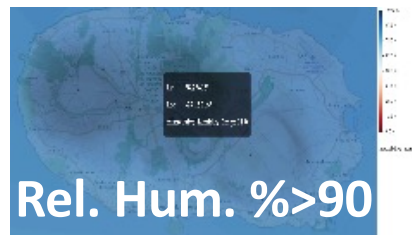
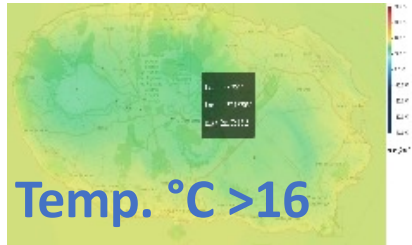
# CONTEXTUALIZATION

## Sistema de Alerta *Pithomyces chartarum*

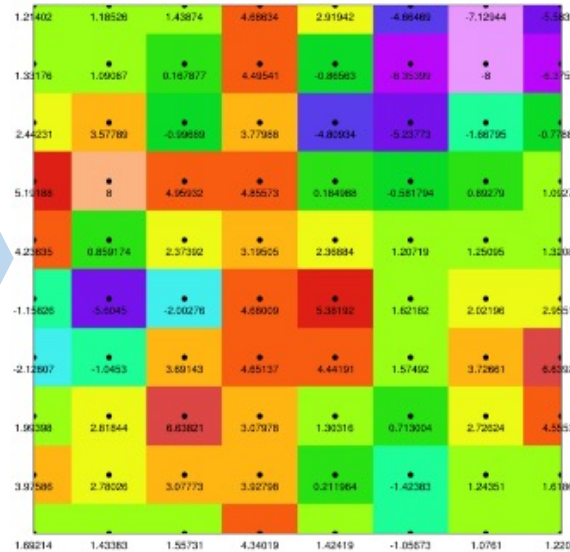


*Pithomyces chartarum*

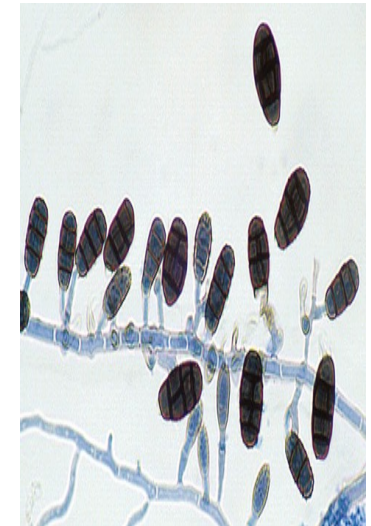
### Continuous Data Monitorization and Analysis



### Real-time Risk Map



### Spore Counts



Lab. Regional Veterinária

Validation

### Risk + Validated Contamination



Inform farmers of risk and effective contamination levels enabling toxicity prevention through effective avoidance, suppression and protection.

## Alertas de Risco de Esporulação

Mapa de Esporulação *Pithomyces chartarum*, baseado em valores atmosféricos de temperatura e humidade relativa. Atualização horária 10 minutos depois da hora.

Atualizado: 2024-01-10 11:00:00





# METEOROLOGICAL AND RADIATION SENSORS





# HACKATHON CHALLENGES

- **What are the the threshold values for T°C and RH% for sporulation?  
Really 16°C and 90% minimum?**
- **How many hours of conditions (T°C and HR%) are needed to have sporulation?  
Really 72 hours?**
- **What other parameters can play a role in sporulation? Let's see if the radiation plays a role.**