

# **Earth Observation in Epidemiology Workshop**

**8-10 March 2006, ESA/ESRIN, Frascati, Italy**

## **AGENDA**

### **Wednesday 8th March, 16:00 - 17:30**

[15:30 - 16:00 Registration and Coffee]

#### **Introduction**

*"Welcome", Simon Pinnock, ESA-ESRIN, Italy*

*"Introduction / Overview and Status of the EPIDEMIO project", Kathrin Weise, Jena-Optronik, Germany*

*"ESA Earth Observation Programme and How to get Data", Simon Pinnock, ESA/ESRIN, Italy*

### **Thursday 9th March, 09:30 - 18:30**

[09:00 - 09:30 Registration]

#### **Earth Observation supporting Human Health (Part I)**

##### **Cartography and Urban Mapping**

*"SPOT5 data for Urban Mapping - Methods and results for cities in Africa" Sherry McHugh, C-Core, Canada*

*"Vulnerability Assessment of the Megacity Istanbul with Remote Sensing and GIS", Achim Roth, DLR, Germany*

*"Digital Elevation Maps – Stereo and Interferometrical height maps for test sites in Africa" Andreas Wiesmann, Gamma Remote Sensing, Switzerland*

*"Projection of in field data on satellite images", J.-P. Meert, WHO Geneva, Switzerland [tbc]*

*"Respond: Cartography and Mapping in the ESA GMES Service Element for Humanitarian Aid", Nick Veck, Infoterra Ltd., UK [tbc]*

##### **Land Cover**

*"Water body maps – mapping water bodies in Africa, methodology and results", Andreas Wiesmann, Gamma Remote Sensing, Switzerland*

*"Land cover change mapping for test sites in Ethiopia", Florian Siegert, RSS, Germany*

*"Early Detection of Malaria Epidemics in East Shoa", Amir Said, Ethiopia*

*"Land cover mapping and monitoring, potential and limitations of MERIS, Landsat and ENVISAT data in tropical rainforest areas", Florian Siegert, RSS, Germany*

*"Radar data for land cover applications in Africa", Jean Paul Rudant, University La Valle, France [tbc]*

*"Remote Sensing data contribution for epidemiological studies in rural and urban areas: Examples of Lagdo Lake (North Cameroon) and Niamey city (Niger)", Jacob Kouamé, University LaValle, France / Cote d'Ivoire*

*"Characterization of environmental conditions of Ebola outbreaks in Gabon and Congo : remote sensing data provide clues information", Ghislain Moussavou, CIRMF, Gabon*

### **Disease and Environmental Factors**

*"Increase in incidence of Mycobacterium ulcerans infection ('Buruli ulcer') and environmental changes", Gerd Pluschke, Swiss Tropical Institute, Switzerland*

*"Malaria parasite cycle and its correlation to environmental factors", STI Switzerland [tbc]*

*"Schistosomiasis and its relation to environmental factors", STI, Switzerland [tbc]*

*"Environmental risk factors and Schistosomiasis: application in Ihosy district, Madagascar", Rindra Randremanana, Pasteur, Madagascar*

*"Temporo-spatial clustering and infection dynamics of malaria parasites in the Ashanti Region, Ghana", Jürgen May, Bernhardt Nocht Institute Hamburg, Germany*

*"Linking remote sensing and disease data using spatial statistical methods - an application for mapping malaria risk in West and Central Africa", Laura Gosoni, Swiss Tropical Institute, Switzerland*

*"Stationary and non-stationary models for mapping disease risk data", Penelope Vernatsou, Swiss Tropical Institute, Switzerland*

## **Friday 10th March, 09:30 - 13:00**

### **Earth Observation supporting Human Health (Part II)**

#### **Meteorology and Climate**

*"Wind Blown Dust Map for Meningitis risk areas in Africa", Christelle Barbey, Silogic, France*

*"Use of dust maps for meningitis surveillance and factor analysis: preliminary results", Isabelle Jeanne, CERMES, Niger*

*"Mapping Land Surface Temperature for Malaria epidemics in Africa", Christelle Barbey, Silogic, France*

*"Use of Remote Sensing for Monitoring Climate Variability for Integrated Malaria Early Warning Systems", Pietro Ceccato, Columbia University International Research Institute for Climate and Society, USA*

*"Climate and meningitis outbreaks in West Africa", Pascal Yaka, CNRS, Paris / Burkina Faso"*

## **Outlook**

*"Remote sensing products - future needs for application at CNRS", Bernhard Lacaze, CNRS, France [tbc]*

*"GEOSS", Guy Duchossois, GEO Secretariat, WMO, Switzerland [tbc]*

*"Future ESA Earth Observation Satellites" Simon Pinnock, ESA/ESRIN, Italy*

## **4. Discussion and Conclusions**

Round-table and wrap-up

[End of Meeting]

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