

A Preliminary Evaluation of the Latin American Observatory's Climate Services

Xandre Chourio¹, Á.G. Muñoz^{2,1}

¹Centro de Modelado Científico (CMC) - Universidad del Zulia. Venezuela

²International Research Institute for Climate and Society (IRI). Columbia University. USA

xchourio@cmc.org.ve



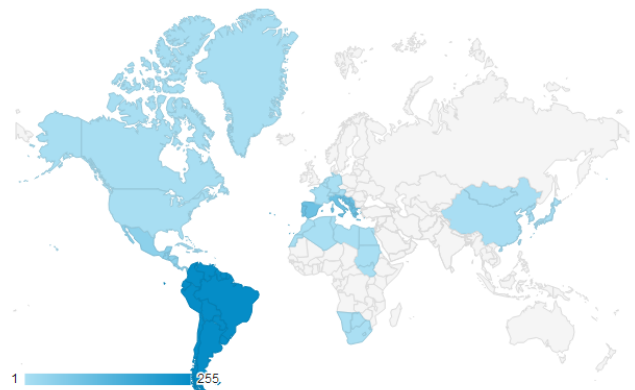
CENTRO DE MODELADO CIENTIFICO



- Regional informal partnership
- Since 2008, still growing
- No external funding
- Use of resources already in existence
- Boundary institutions
- Strong training component
- Tech and knowledge transference
- Tailored, impact-oriented products: risk maps (hazard and vulnerability)!
- Model validation, but NO climate service evaluation yet



15 countries, >100 actors



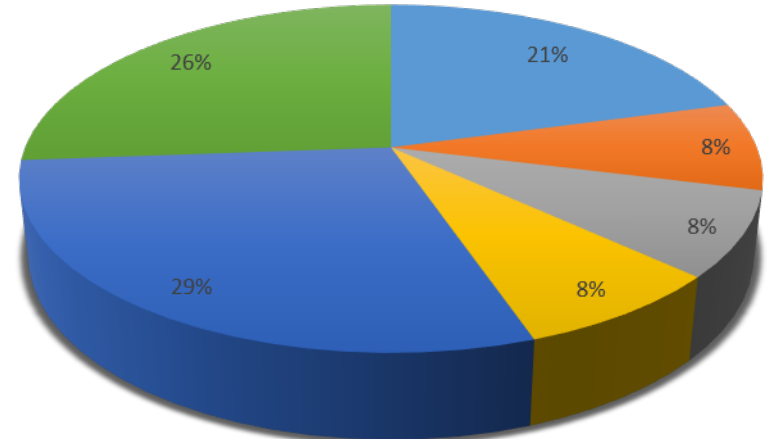
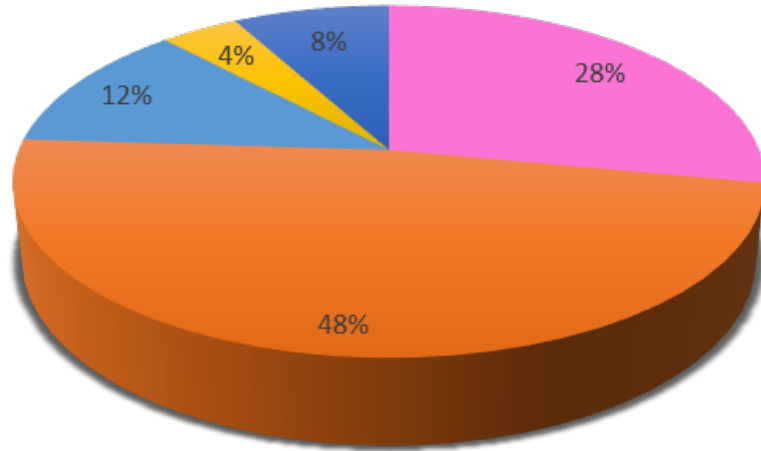
More info: <http://mediawiki.cmc.org.ve>; Muñoz *et al.*, 2010; Muñoz, Núñez and Cova, 2011; Muñoz *et al.*, 2012.; García, 2012a; García, 2012b; Recalde-Coronel *et al.*, 2014; Stewart *et al.*, 2014; Stewart *et al.*, accepted.



Methodology

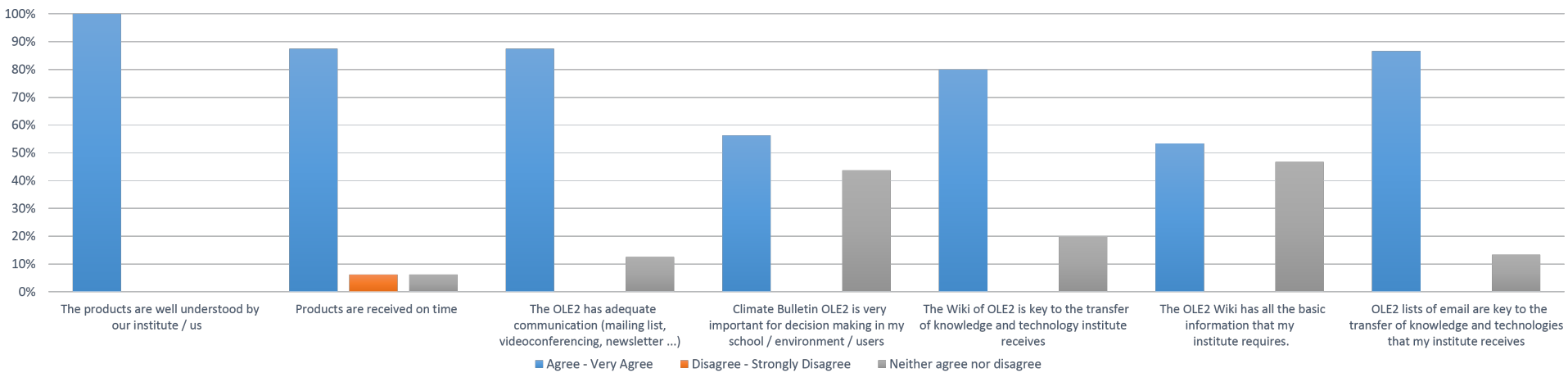
- Case-by-case analysis of OLE²'s climate services reported in the literature [Muñoz *et al.*, 2012; García, 2012a, 2012b].
- Analysis of the partner interactions (email list).
- Online surveys
- It was followed the approach suggested by Vaughan & Dessai [2014], which involves the following evaluation elements:
 - Structure, Governance and Decision-Making Context
 - Problem Identification, Characteristics and Tailoring of Services
 - Communication, and Technology-Knowledge Transfer

Diagnostics



- Research Center/University
- National Weather Service
- Border institute/Ministry
- Ag sector/Farmers
- Water Management

- Data quality, gridding
- Climate Change
- Climatology
- Meteorology
- Climate and Health
- Training and tools



Structure, Governance and Decision-Making Context

- Flexible structure, autonomous sharing policies (voluntary)
 - 15 countries, 100+ users
 - free interaction (peer2peer and community based, loosely moderated)
 - multiple channels of communication/transference of data, methodologies, tools, experiences



artículo discusión ver código fuente historial

OLE2

Portada

Observatorio Latinoamericano de Eventos Extraordinarios (OLE2)

El Centro de Modelado Científico (CMC) de La Universidad del Zulia presenta este Wiki, destinado a ofrecer información sobre aspectos técnicos relacionados con la instalación, configuración y trabajos afines del Observatorio Latinoamericano de Eventos Extraordinarios (OLE2). El proyecto está coordinado por el Centro de Modelado Científico (CMC) bajo la responsabilidad del Prof. Ángel G. Muñoz.

¿Quiénes Somos?

El Observatorio Latinoamericano de Eventos Extraordinarios (OLE2) es una red de colaboración informal conformada por múltiples instituciones (Servicios Meteorológicos Nacionales, universidades, centros de investigación y desarrollo) e individuos, destinado a la vigilancia de distintas variables ambientales, la mejora de las capacidades técnicas locales-regionales, y a la provisión de herramientas científicas propias para la toma de decisiones, generación de alertas tempranas y la gestión de riesgo. El equipo humano e instituciones asociadas al proyecto se listan en el apartado de [Integrantes](#).

Por "evento extraordinario" entendemos cualquier fenómeno que esté fuera de la normal. Lo "ordinario" es, así, el comportamiento "normal" de las variables en cuestión. De este modo, el Observatorio Latinoamericano tiene que ver, en principio, con cualquier evento climático, meteorológico, hidrológico, sísmico, etc. - que esté fuera de la normal. En ocasiones se piensa que sólo tiene que ver con eventos extremos. Estos también están incluidos en los objetivos del Observatorio Latinoamericano, pero el mismo no se limita únicamente a ellos.

Los productos del OLE2 involucran, pues, desde pronósticos meteorológicos a 72 horas hasta tendencias de precipitación y temperatura para los próximos 50 años, pasando por predicciones climáticas estacionales (de uno a tres meses), índices de inundaciones, incendios, pronósticos experimentales de ocurrencia de dengue y malaria, y predicción de eventos extremos. Estos y otros productos pueden encontrarse en el enlace del [ole2.org](#).

Ejes de Trabajo

El OLE2 está constituido por medio de una combinación lineal de Ejes de Trabajo (vectores base) no ortogonales, de modo que el espacio entre los Ejes caracteriza la multidisciplinariedad correspondiente.

El Eje de Climatología persigue una mejor comprensión de los fenómenos involucrados en la modulación y predicción estacional del Clima y sus subsistemas. Los productos pueden encontrarse directamente [aquí](#).

Observatorio Latinoamericano de Eventos Extraordinarios

Structure, Governance and Decision-Making Context

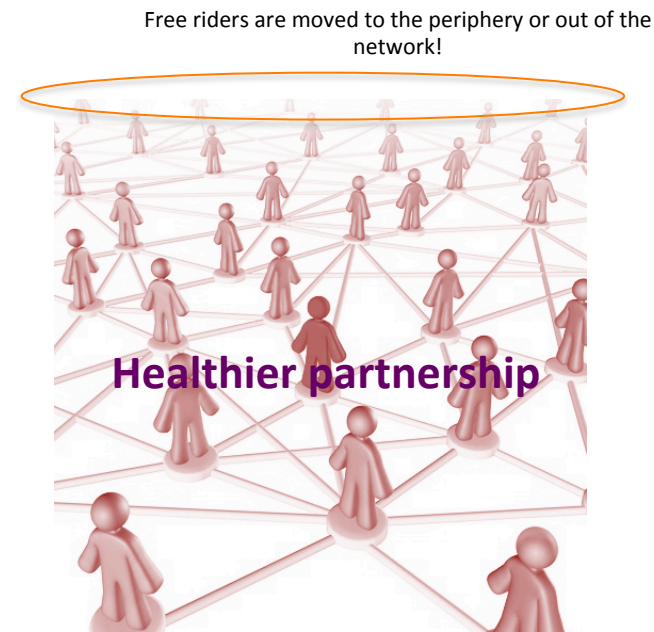
- No regional funding
 - Strong inter-dependence for co-production of services is identified as being the key element of sustainability of OLE²
 - Stable, but slow growth
 - Local funding-dependent growth dynamic: “service propagation” in the OLE² network



“Incentive” (e.g., funding) generates climate services



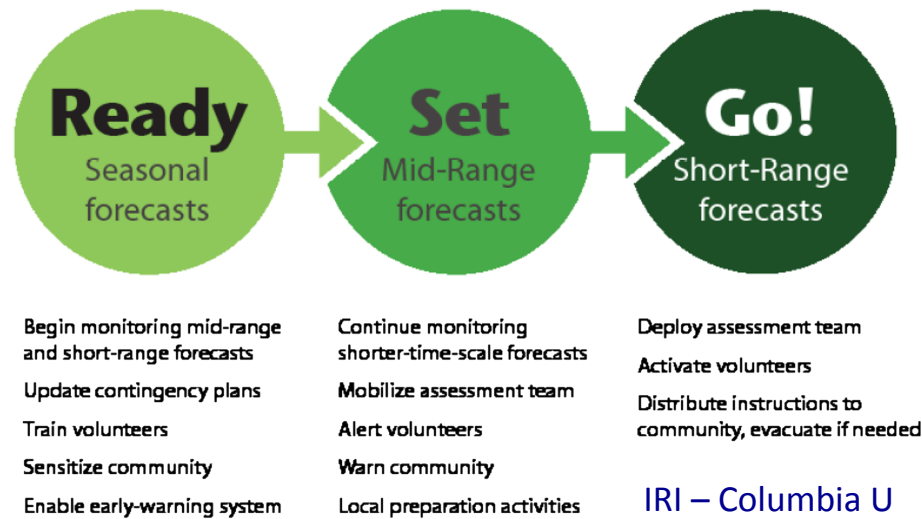
After a while service is assimilated by other partners, which also propagate the service



Service has propagated, and matured, in the OLE² network

Problem Identification, Characteristics and Tailoring of Services

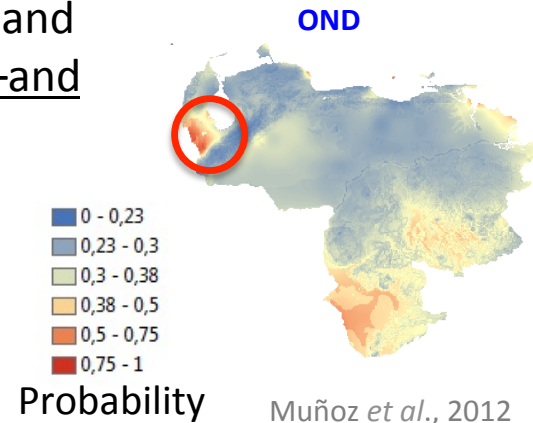
- Problems are in general **clearly identified** (user feedback), BUT
- Services **not necessarily defined in terms of the actual end-user's requirements**, but in terms of other institutional commitments and funding availability (international donors with specific agendas, e.g. climate change scenarios).
- OLE² is committed to follow IRI's "**Ready-Set-Go approach**", but there is still a huge inertia.



Problem Identification, Characteristics and Tailoring of Services

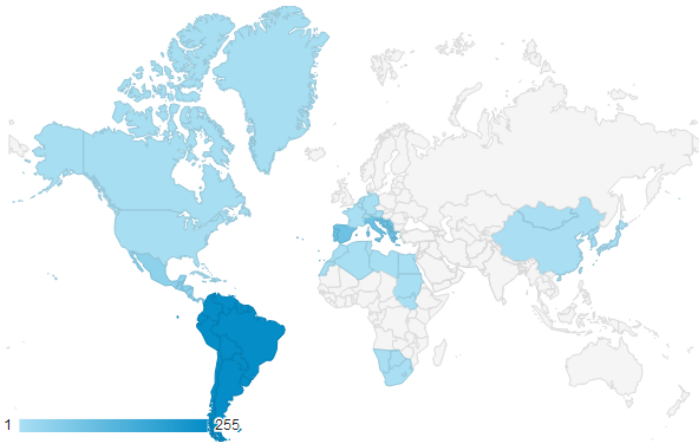
- Different partners focus on different **time scales** but typically the order of importance is
 - Weather (up to 48-72 hours)
 - Seasonal (next two seasons)
 - Historical (20-40 years)
 - Climate Change (end of the century)
 - Near-term Climate Change (next 20-30 years; only a few)
 - Sub-seasonal (interest)
- More work *with the user instead of for* the user is required.
- Partners recognize the importance of using both hazard and vulnerability products (e.g., **risk maps**), but more effort –and funding– is required to implement pilot projects.

Flood Risk
(Probabilities)



Communication, and Technology-Knowledge Transfer

- Strong training component (virtual and *in situ*).
- OLE² as a boundary institution between “providers” and “middle-users” (NWS, ministries, development project agents): better services for the end-user.
- Uncertainties are typically communicated in terms of probabilities, but some partners consider this insufficient.
- Unanimously, partners recognize the OLE²-Wiki as the most important reference for technology and knowledge transfer. It’s used outside the partnership too (in Spanish)!



The screenshot shows the homepage of the Observatorio Latinoamericano de Eventos Extraordinarios (OLE2) Wiki. The page is in Spanish and includes a navigation menu on the left, a search bar, and several sections of text. The main content area is titled 'Portada' and contains introductory text about the project, its goals, and the roles of its various working groups (Ejes de Trabajo). The right side of the page features a map of Latin America with various icons representing different institutions and research areas.



CENTRO DE MODELADO CIENTIFICO

Conclusions

- This is a preliminary, internal evaluation. An external one must be accomplished (partners provided a “too good” evaluation).
- With no external funding, the Observatory is stable and slowly growing; it is suggested that this is due to *inter-dependence and co-production*. The OLE² provide high quality training, project support and training in Spanish, basically for free.
- Two ways of supporting OLE²: fund the partnership or fund one or a few partners (the service will propagate).
- Several ways to advance, one is to increase the number of services considering both hazard and vulnerability (e.g., risk).

