

Procesos de Sequía

UNIVERSITY OF BIRMINGHAM





Programa curso

Lunes, 09 de noviembre

08:30-09:00	Registración de participantes Palabras de bienvenida oficial
Sesión 1 09:00 - 11:00	Presentación del programa GRAPHIC del UNESCO Introducción al programa del entrenamiento Introducción de los participantes Presentación "Procesos de Sequía des Aguas Subterráneas"
11:00-11:30	Café
Sesión 2 11:30 - 13:00	Discusión en grupos "Procesos de Sequía des Aguas Subterráneas" Discusión plenaria "Procesos de Sequía des Aguas Subterráneas"
13:00-14:30	Almuerzo
Sesión 3 14:30-15:00	Presentación "Monitoreo de Sequía des Aguas Subterráneas - Datos"
15:00-16:00	Trabajo en la computadora en grupos "Monitoreo de Sequía des Aguas Subterráneas - Datos"
16:00-16:30	Café
Sesión 3 cont... 16:30 - 17:30	Discusión plenaria "Monitoreo de Sequía des Aguas Subterráneas - Datos"

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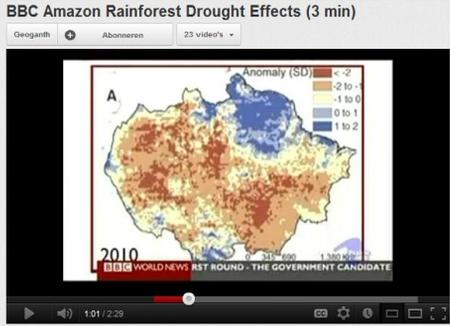
¿La Sequía, qué es?

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Amazonia 2010



Chile 2007 - ??



Drought definitions

DROUGHT =

"a sustained period of below-normal water availability"
(Tallaksen and Van Lanen, 2004)

"a deficit of water compared to normal conditions"
(Sheffield and Wood, 2011)



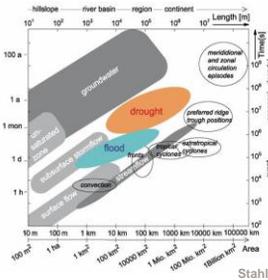
Drought definitions

Do not confuse drought with:

- aridity
- water scarcity
- low flows



Drought definitions



Difference with flood?

- DROUGHT:**
- has longer time and spatial scales than flood
 - develops slowly

Stahl & Hisdal (2004)

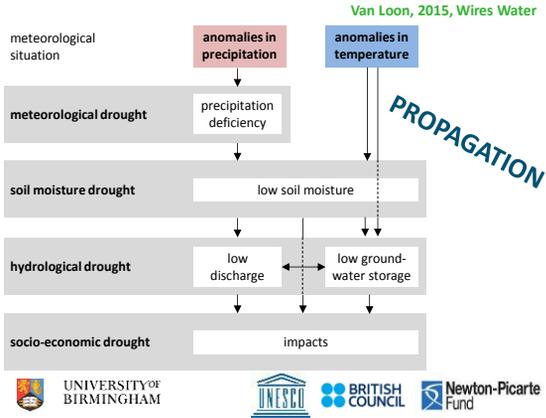


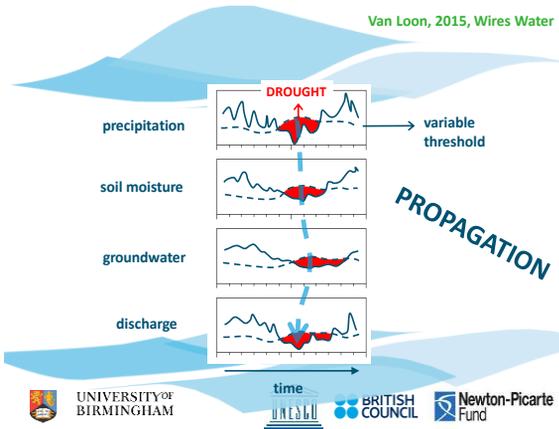
Drought definition

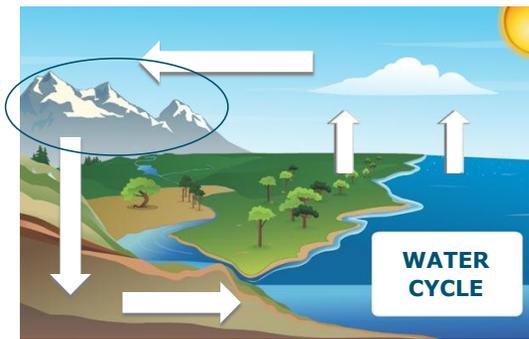
Different types of drought:

- meteorological drought
- soil moisture drought
- hydrological drought



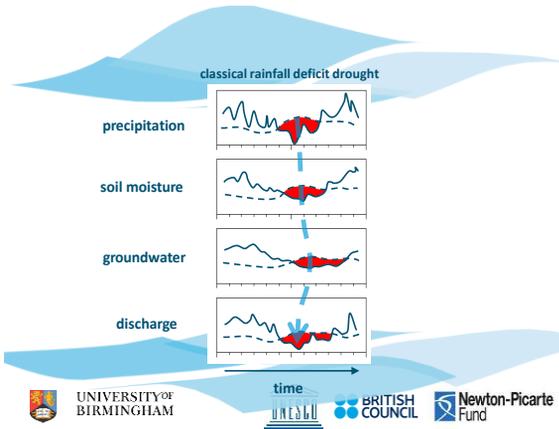
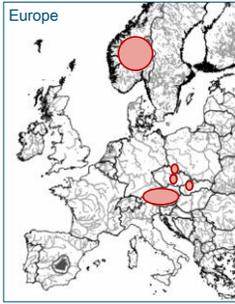






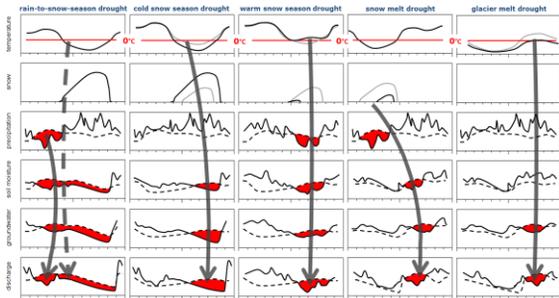
snow & ice

Van Loon & Van Lanen, 2012, HESS
Van Loon et al., 2014, HESS



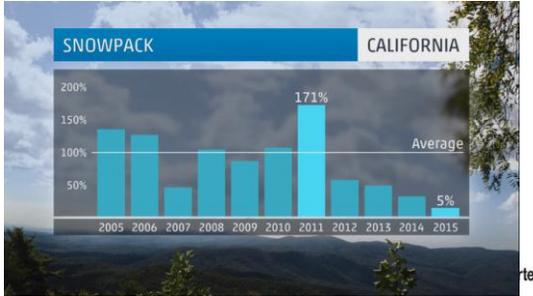
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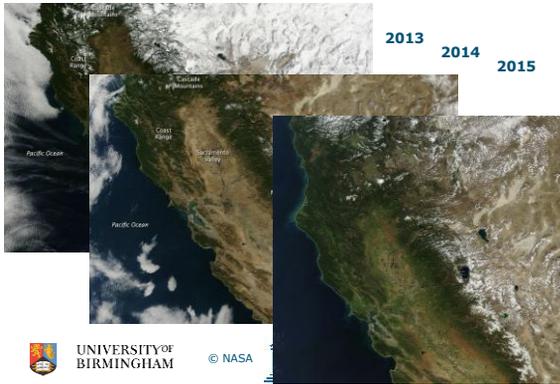


California 2012-15

www.weather.com/climate-weather/drought/news/california-sierra-snowpack-record-low-april-2015



California 2012-15



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Chile



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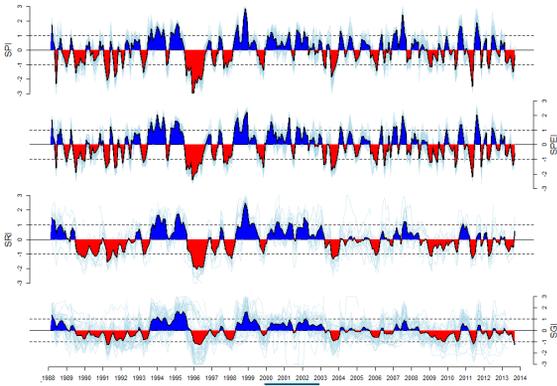
storage in the subsurface

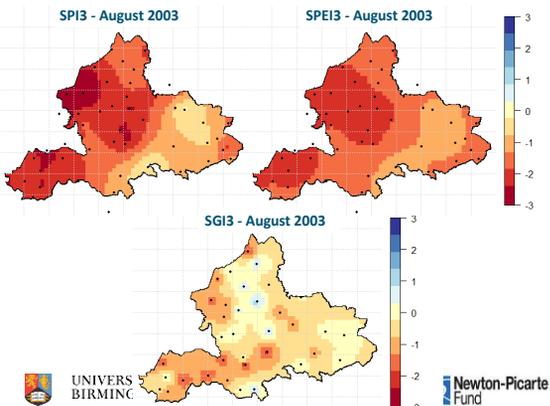
Kumar et al., 2015, HESSD



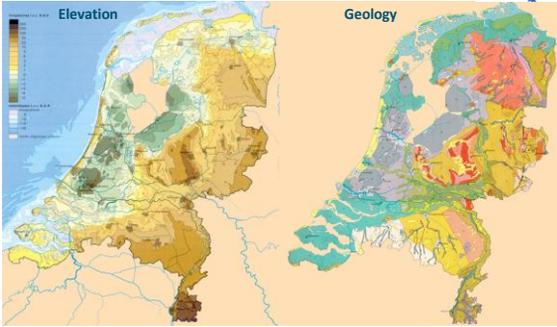
storage in the subsurface

Kumar et al., 2015, HESSD





storage in the subsurface



storage in the subsurface





storage in the subsurface

Bloomfield & Marchant, 2013, HESS





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