FLUXPYR

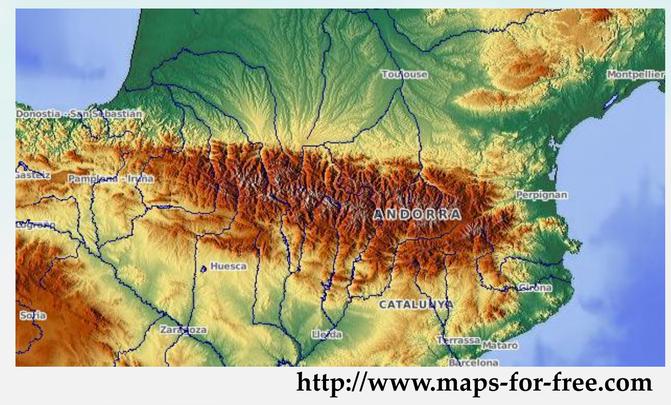
Global Change in the Pyrenees

CENTRE TECNOLÒGIC FORESTAL DE CATALUNYA

FLUXPYR, what is it?

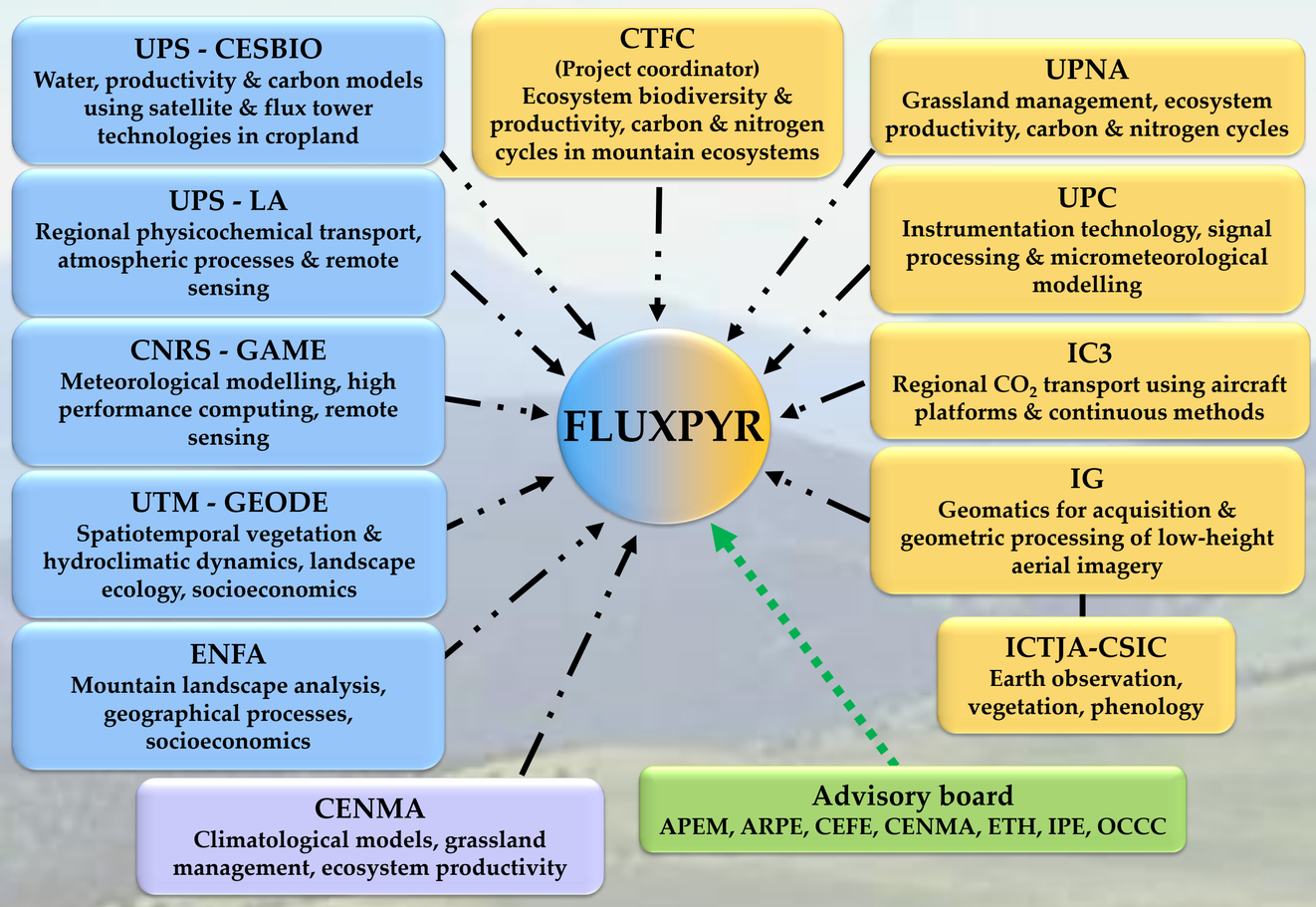
FLUXPYR (www.fluxpyr.eu) is a cross-border network of instruments and multidisciplinary experts for the determination and management of water, carbon and energy fluxes in Pyrenean agricultural and pastoral ecosystems, in the context of climate and land use changes.

INTERREG IV-A – POCTEFA Programme - Duration: 2009-2012 - Budget: 2.2 M. euros
Co-financing: European Union (EU) - ERDF, Generalitat de Catalunya, Conseil Régional Midi-Pyrénées
11 partners from France, Spain, Andorra + External collaborators - Coordination: Forest Sciences Center of Catalonia (CTFC, Solsona)
Contacts: Maria Teresa Sebastià (teresa.sebastia@ctfc.cat) (Coordinator) - Fabrice Gouriveau (fabrice.gouriveau@ctfc.es) (Manager)



http://www.maps-for-free.com

What do FLUXPYR's partners do?



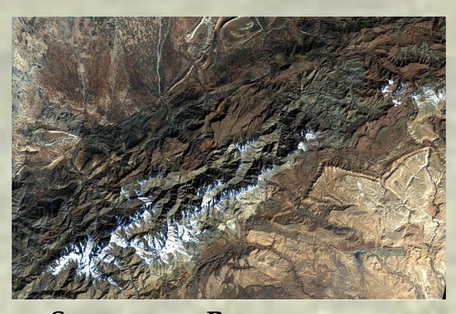
What are FLUXPYR's objectives?

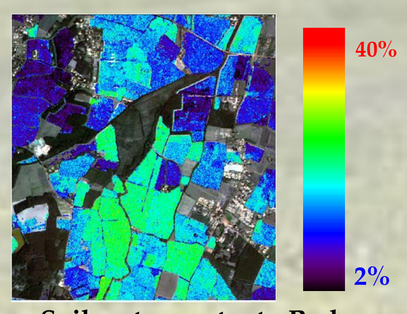
1. To evaluate and manage water, carbon and energy fluxes and stocks in Pyrenean agroecosystems, and better understand ecosystem processes and functions.
2. To assess the impacts of climate and land use changes in the Pyrenees and propose suitable mitigation and adaptation strategies.
3. To promote the exchange of knowledge and experiences, multidisciplinarity, and to train researchers and students.
4. To advise local actors for the sustainable use of natural resources.
5. To sensibilise the society to the causes and consequences of climate change and ways to face it.

What about FLUXPYR's activities and applications?

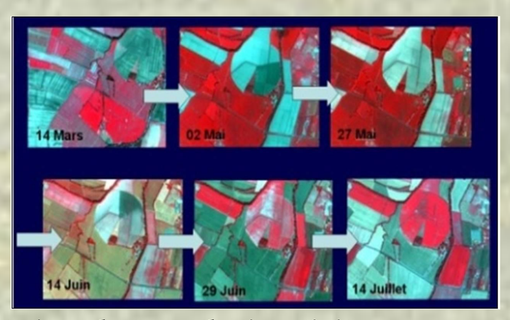
FLUXPYR combines ecosystem, atmospheric and satellite studies to investigate the impacts of climate and land use changes in the Pyrenees at different scales.
It allows the creation of greenhouse gas balances, as well as maps and models of climate, soil water and carbon content, land and snow cover, etc.
It also offers workshops and internships and promotes multidisciplinary research, and the exchange of knowledge, experience and innovative ideas.

Satellite studies
(Local to regional scale)

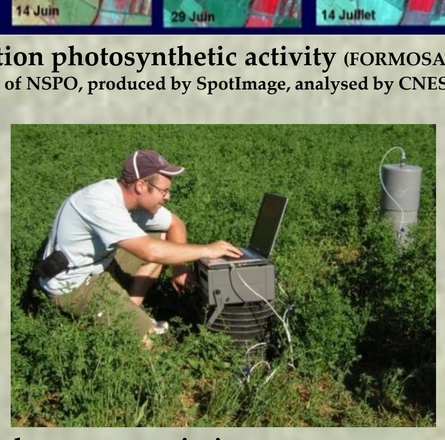

Snow cover, Pyrenees (CESBIO)

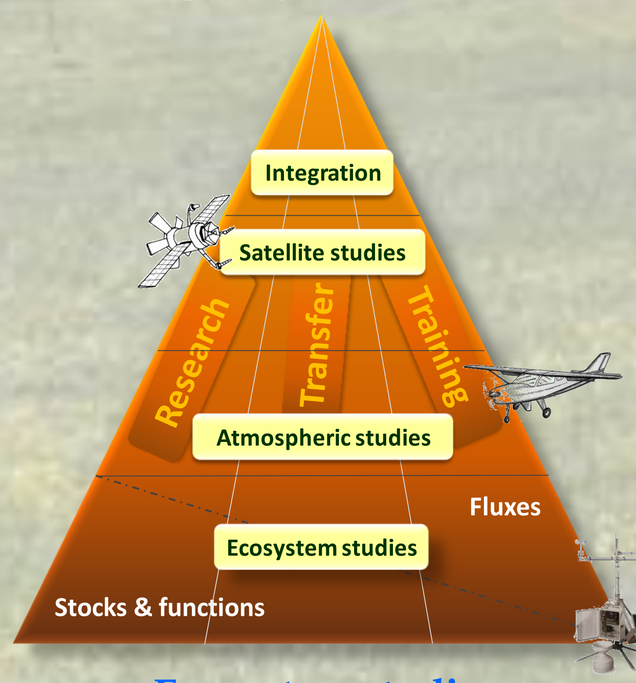


Soil water content - Radar TERRASAR X data (F. Baup, CESBIO)

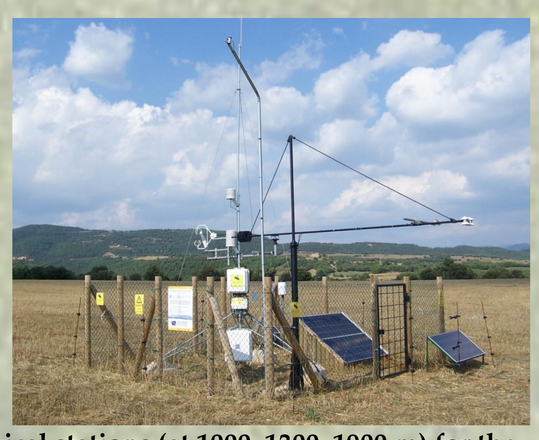


Vegetation photosynthetic activity (FORMOSAT 2 Images, copyright of NSPO, produced by SpotImage, analysed by CNES/CESBIO)


Greenhouse gas emission measurements in an agricultural plot with a photoacoustic gas-monitor



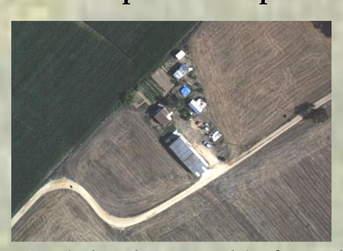
Ecosystem studies
(Local scale)



Three newly established micrometeorological stations (at 1000, 1300, 1900 m) for the monitoring of carbon, water and energy fluxes between the land and the atmosphere

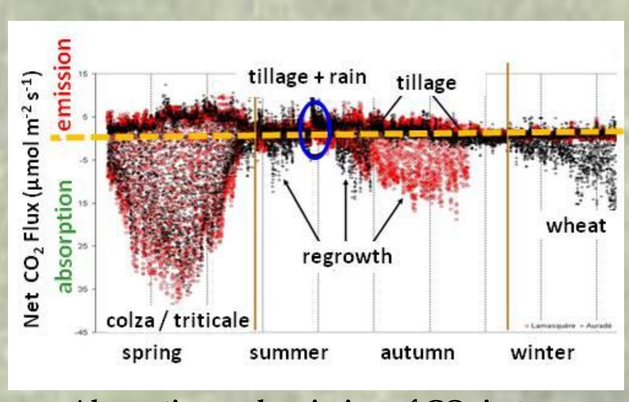
Atmospheric studies
(Local to regional scale)


Aircraft equipped to take photographs and monitor the atmospheric composition


Colour and infrared cameras



Aerial colour and infrared photographs (IG-ICTJA)



Absorption and emission of CO_2 in two agricultural plots (Béziat *et al.*, CESBIO)

UE FEDER
COOPERACIÓN COOPÉRATION TERRITORIAL TERRITORIALE 2007-2013
Invirtiendo en nuestro futuro
Investir dans notre avenir