

1:25.000 GEOLOGICAL MAP OF THE COTIELLA THRUST SHEET

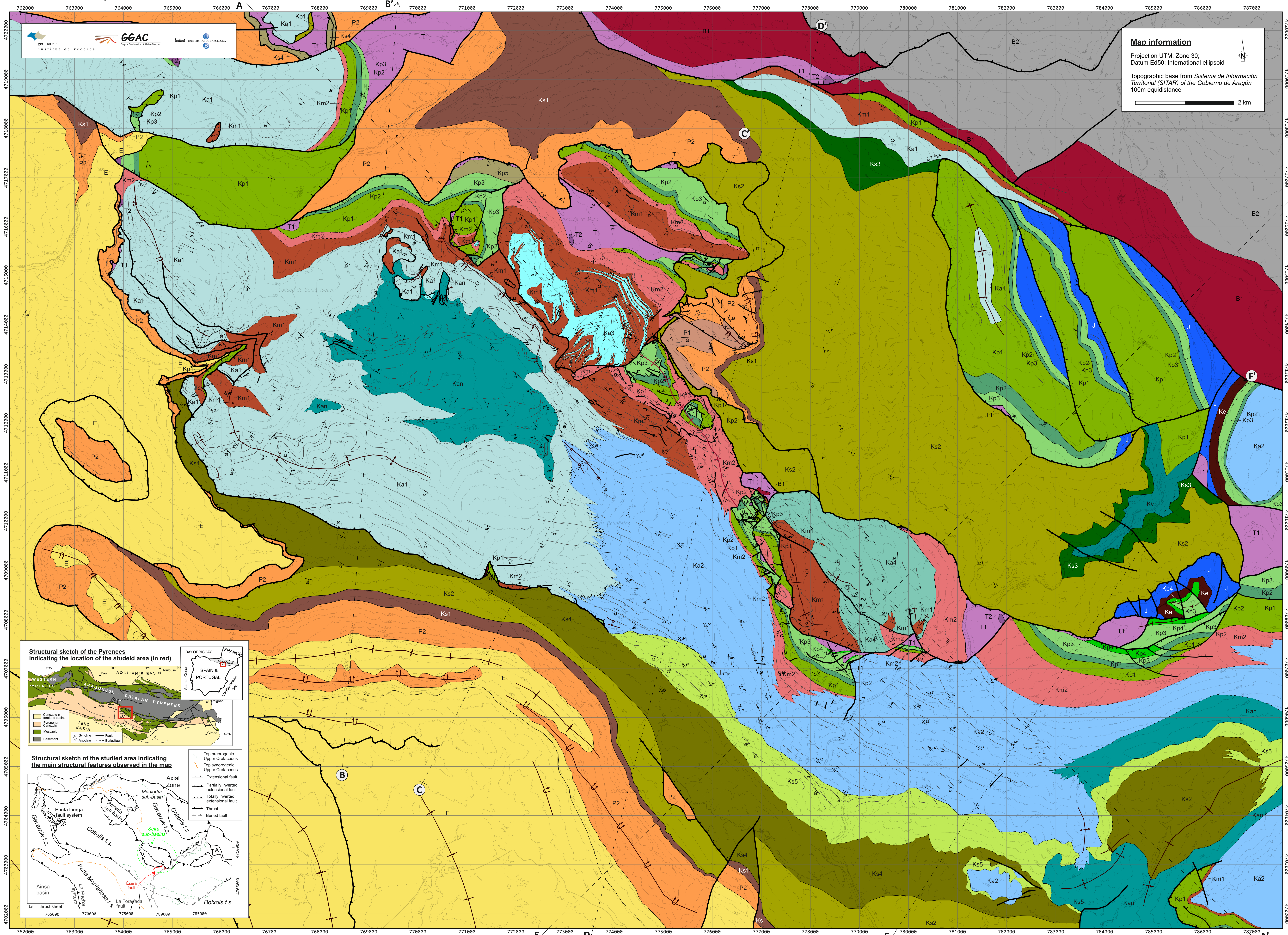
Berta Lopez-Mir^{1,2}, Josep Anton Muñoz² and Jesús García-Senz³

1 - CASP
West Building
181A Huntingdon Road
CB3 0DH Cambridge, United Kingdom
berta.lopez-mir@casp.cam.ac.uk

2 - Institut de Recerca Geomodels
Facultat de Geologia, Universitat de Barcelona
Zona Universitària de Pedralbes
08028 Barcelona, Spain.
jamunoz@ub.edu

3 - Instituto Geológico y Minero de España (IGME)
La Calera 1
28760 Tres Cantos, Madrid, Spain
jesus.garcia@igme.es

© Journal of Maps, 2016



Colour key

SYN-OROGENIC

Eocene

E Limestones, marine detritics and marls (undiff.)

Palaeocene - Late Eocene

P1 Sandy limestones with cross-bedding (undiff.)

P2 Massive grey limestones (undiff.)

Late Santonian - Maastrichtian

Ks1 Quartz-arenites and sandy limestones (Areny Fm)

Ks2 Turbidites and marls (Barbarus Fm)

Ks3 Sandy limestones (undiff.)

Ks4 Turbidites and marls (Mascarell Mb)

Ks5 Heterolithic carbonate breccia (Campo Breccia Mb)

POST-RIFT (Cotiella Basin)

Syn-extensional salt tectonics

Middle Coniacian - early Santonian

Kv Massive limestones with Lacazina (Ventamillo Fm)

Kan Grey marls and marly limestones (Anserola Fm)

Ka1 Massive light grey limestones with rudists, Lacazina and chert nodules (Gallines Ut)

Ka2 Micritic to granular dark grey limestones with sponge spicules (Aguasalenz Ut)

Ka3 Marly limestones with flint nodules and sponge spicula (Arneria Ut)

Ka4 Limestones and marly limestones with some echinoderms, sponges, rudists and coral debris (Seira Ut)

Km1 Red-orange sandy grainstones with quartz gravel, bioclasts, rudists and cross-stratification (Maciños Ut)

Km2 Grey sandy grainstones with quartz gravel (Angón Ut)

Pre-extensional salt tectonics

Late Albian - early Coniacian

Kp1 Packstone, with miliolids (Congost Fm)

Kp2 Limestones with *Philonella* (Pardina Limestone)

Kp3 Limestones with *Praevalvolina* (Santa Fe Limestone)

Kp4 Quartz-arenites and limestones with *Orbitolina* (Turbon Sandstone)

Kp5 Sandy limestones with *Ovoalvolina* (undifferentiated limestones)

SYN-RIFT

Early Cretaceous

Ke Limestones (undiff.)

PRE-RIFT

Jurassic

J Dolomites and limestones

Main detachment

Middle - Late Triassic

T1 Gypsiferous shales and gypsum (Keuper facies)

T2 Dolerites (Keuper facies)

T3 Limestones (Muschelkalk facies)

Basement

Paleozoic - Early Triassic

B1 Permian - Lower Triassic red beds (Buntsandstein facies)

B2 Paleozoic metasedimentary rocks

Sign key

Normal dip

Overturned dip

Geological contact

Unconformity

Transitional contact

Syncline

Anticline

Overturned syncline

Overturned anticline

Downward-facing anticline

Undifferentiated fault

Extensional fault (young over old*)

Thrust (old over young*)

* The fault symbols depicted in this map reflect the stratigraphical relationship of hangingwall to footwall (i.e. thrust: older over younger; normal: younger over older). The sense of displacement (i.e. movement of the hangingwall relative to the footwall) is not straightforward as many faults have been deformed during tectonic inversion and the current sense of displacement might be apparent.