UNESCO-IUGS. IGCP PROJECT Nº 96 MESSINIAN CORRELATION
MESSINIAN SEMINAR Nº 3.- FIELD TRIP Nº 2 (Sorbas)
SEMINARIO SOBRE EL MESSINENSE Nº 3.- EXCURSION Nº 2 (Sorbas)

AN EXCURSION TO COASTAL AND FLUVIAL SEDIMENTS OF MESSINIAN -PLIOCENE AGE (SORBAS MEMBER AND ZORRERAS MEMBER) IN THE SORBAS BASIN, SE SPAIN

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GENERAL

In the Sorbas basin a succession of three members together called the Caños Formation rests on top of Messinian reef deposits, on shallow marine sandstone or on deeper marine marls (DRONKERT, 1976)(see Fig. 1). The lowermost of these members, consisting largely of selenitic gypsum deposits, is called Yesares Member. The Yesares Member is overlain by coastal and basinal sediments of the Sorbas Member, deposited during continued hypersaline conditions. Finally on top of the Sorbas Member pink coloured silty and sandy clays were deposited with fluvial and lagoonal intercalations near the base and a marine intercalation at the top (Zorreras Member). The base of the Zorreras Member is of Messinian age (ostracods; pers. comm., D. van Harten), whereas the top probably is Pliocene in age (normal marine fauna).

THE SORBAS MEMBER

The Sorbas Member is 75 m thick at the most. The Member consists in the lower part mainly of laminated limestone, marl and clay. These laminites are identical to intercalated laminites between the gypsum layers of the Yesares Member and are laid down in a quiet water environment below wave base. The upper part of the Sorbas Member mainly consists of calcareous sandstones deposited in a beach barrier environment. Around the town of Sorbas the upper part of the Sorbas Member can be divided into three subunits (A-B-C);(see fig. 2,4 and 5). Subunits A and B comprise two phases of regressive coastal outbuilding, whereas subunit C comprises