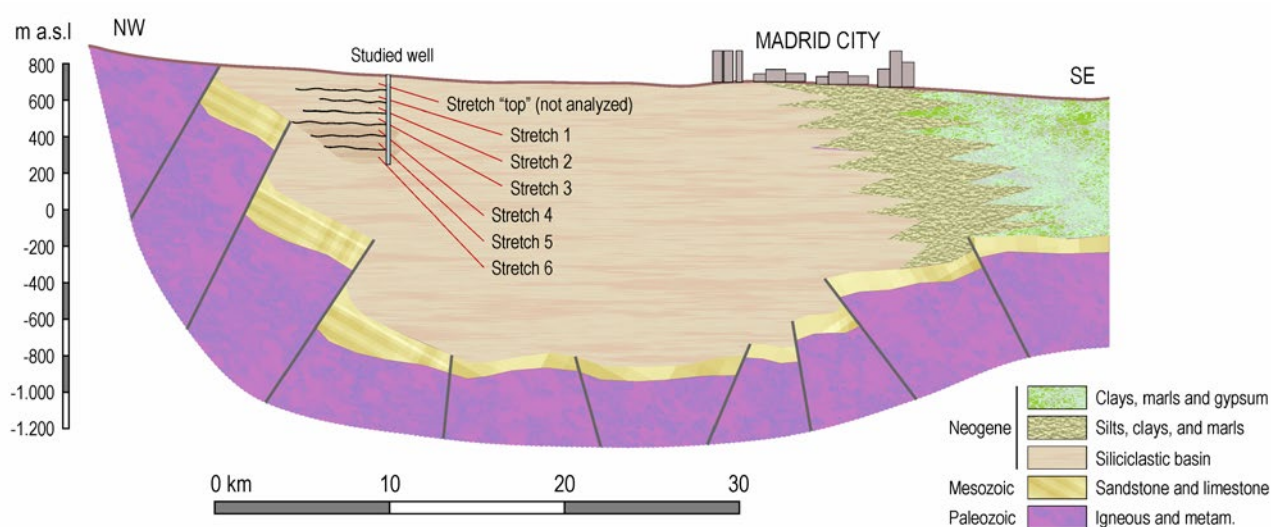
Dear Editor;

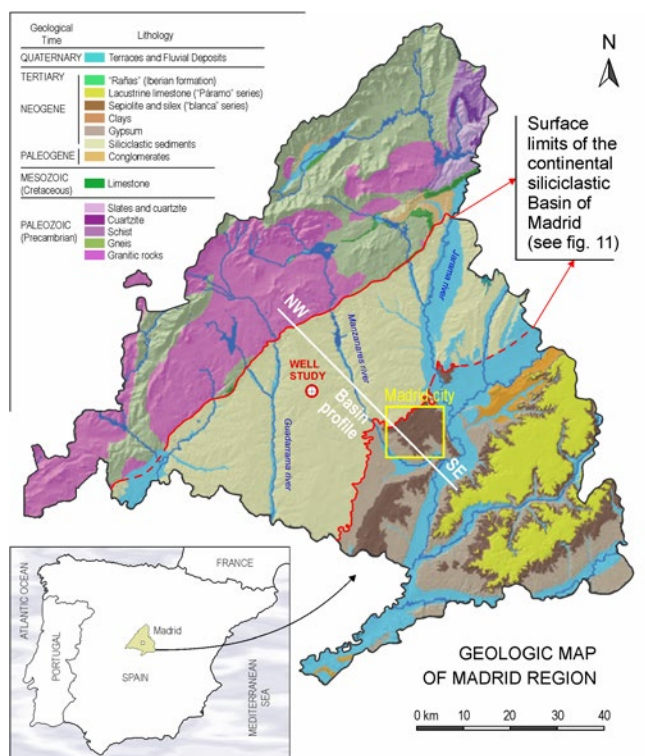
We thank you for your review and comments; We attach the response indicating the changes we have made. We are confident that we have given a satisfactory response.

The modifications and explanations are differentiated in red text.

Responses to the editor comments

In Figure 11, the drawing of the eastern boundary of the principal basin and of the south-eastern geological structures, including the transition facies and the lacustrine limestones (Paramo unit), remains very schematic and does not properly represent the typical geometries of such sedimentary environments. This region is of limited interest for the study, so that my personal opinion is that it is not necessary to extend the cross section so far from the studied well along the south-eastern direction.

Following the editor's recommendations, we have cropped figure 11.

The profile in Figure 4 has also been modified to be consistent with the new Figure 11.

Geologic Map of Madrid Region

The sentences added at lines 562 to 569 should be rewritten, as they are confusing and include some grammar errors.

Following the editor's recommendations, we have corrected the sentences between lines 562 to 569.

"The classical subdivision of this basin (a part of the Tajo river Basin) into the lower and upper formations, whose contact is "gradual and arbitrary" (IGME, Mapa Hidrogeologico de España, scale 1:200.000, de Madrid, second edition, 1991), does not report their depth. However, according to the correlation sections of well logs shown in Caparrini (2006), the bottom of the upper formation, of coarser grain size, seems to be located above the depths analysed in the studied well. It should be noted that the same occurs with the water models carried out in the Madrid Basin, in which the water table variations are far above the depth upper depth analysed in the well studied. In this sense, the hypothesis that can be put forward on the basis of the data from the well analysed is that within a radius of 10 km around the well, a hydraulic differentiation should be considered from a depth of ~200 m onwards."

By:

"The usual subdivision of this basin (which forms part of the Tajo Basin) is into the lower and upper formations, whose contact according to the hydrogeological map (scale 1:200.00, 1991) of the Spanish Geological Survey is "gradual and arbitrary", and therefore does not provide information on their depth. However, according to the correlation sections of the well logs shown in Caparrini (2006), the bottom of the coarser-grained upper formation is located above the depths analysed in the studied well. It should be noted that the same fact occurs with the hydrogeological models of the Madrid Basin, in which the variations in the water table are far above the upper depth analysed in the studied well. In this sense, the hypothesis that can be put forward on the basis of the data from the well analysed is that within a radius of 10 km around the well, a hydraulic differentiation must be considered from a depth of ~200 m onwards."