

THE LANDSLIDE FAN OF MIGIONDO CREEK

Observation point: from the Sommacologna limit before the climb to Bolladore

You are moving now on the edge of a steep cliff, which delimits the distinctly sloping surface of Sommacologna; beyond the gorge of Migiondo creek, to the south, it continues under the omonymous hamlet. Once, for a certain time the valley bottom has been at this altitude, then Adda river deeply carved todays valley, up to 100 m below this point.

The surface on which Sommacologna hamlet lies, outlines a sort of wide fan, that is to say a low half cone, its apex being well inside the Migiondo valley, as you can see from here. At its head, the valley itself splits into many narrow precipitous ravines, lacking an actual, well developed idrographic basin.

All these elements are typical of a so-called landslide fan, that is to say, a bulk of debris of eterogeneous size, from silt and sands to gravels and, embedded into them, boulders up to ten meters in size, originated during an unexpected catastrophic event: between 9000 and 8000 years ago, the deeply fractured mountain slope collapsed,filling the valley of Adda river. The materials spread over a large area, assuming the shape of a low half cone, whose surface has been smoothed by sucessive mud flow; it temporarily dammed the stream, until Adda cut it abruptly, restoring its regular course.

Perhaps this phenomenon took place several times, so that it built up a vast imposing landslide fan. Whose deposits can be seen from the outcroppings along the scarp: you willl notice a sort of rough layering into the sedimentary mass, each stratum being connected with a single avalanche episode.

This kind of landslide fans is common along this section of Adda valley, because of the presence of elevated steep slopes, with fractured rocks and high instability; others examples of landslide fans are, those of Ponte in Valtellina, Sernio and Talamona.