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On the syn-orogenic basins of the Alps-Apennines tectonic system in NW Italy

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The Alps and the westernmost part of Apennines physically join in NW Italy (Piemonte), where the Apennine thrusts interfered, since Late Oligocene, with both the inner boundary faults of the uplifting Alps axial belt and the outer fronts of the Alpine antithetic retrobelt (the Southern Alps). As the two orogenic belts had been intergrowing since the late Oligocene, coeval syn-orogenic basins developed on both, either as separate depocenters or, more frequently, to form a continuous sedimentary domain, strongly controlled by the tectonic evolution of the Alps-Apennines orogenic system. These syn-orogenic basins both recorded the main stages of the Alps (neoAlpine events) and Apennines tectonic evolution, whose evidence (mostly represented by regional-scale unconformities) can be correlated within each basin and across them. Correlations (in terms of sharing common geologic events) can be found also with the middle Eocene to lower Oligocene basal part of the Alpine foreland basin succession, which extended continuously on the external side of the Western Alps. This contribution will briefly discuss this complex matter in an integrated Alpine-Apennines perspective and in the frame of the post-Eocene evolution of the Western Mediterranean area.