

Thesis looks into a problem of clustered planarity and has two ways. First way is question about computational complexity where we show how clustered planarity could be solved in linear nondeterministic time in consideration of number of vertices of input graph. Second way is characterization of bounded version of clustered planarity and so for clustered graphs where clusters have size two and graphs is cycle in first case and in second case it is path. We make a characterization using operation which reduce clustered graph and we show about them that they preserve clustered planarity. For this purpose I define a notion of clustered minor that it is help me to study minimal nonclustered planarity instances. We also mention known results about this problem.