I STEEL GIRDER WITH TIMBER

Reinforce I STEEL GIRDER by using timber for buckling

PRESENT STATE

The web and the girder stiffener must be welded together

Large amount of steel need to make STEEL GIRDER, therefore CO2 emission is incresing

Girder stiffeners are made from steel

The reason why cost is very high

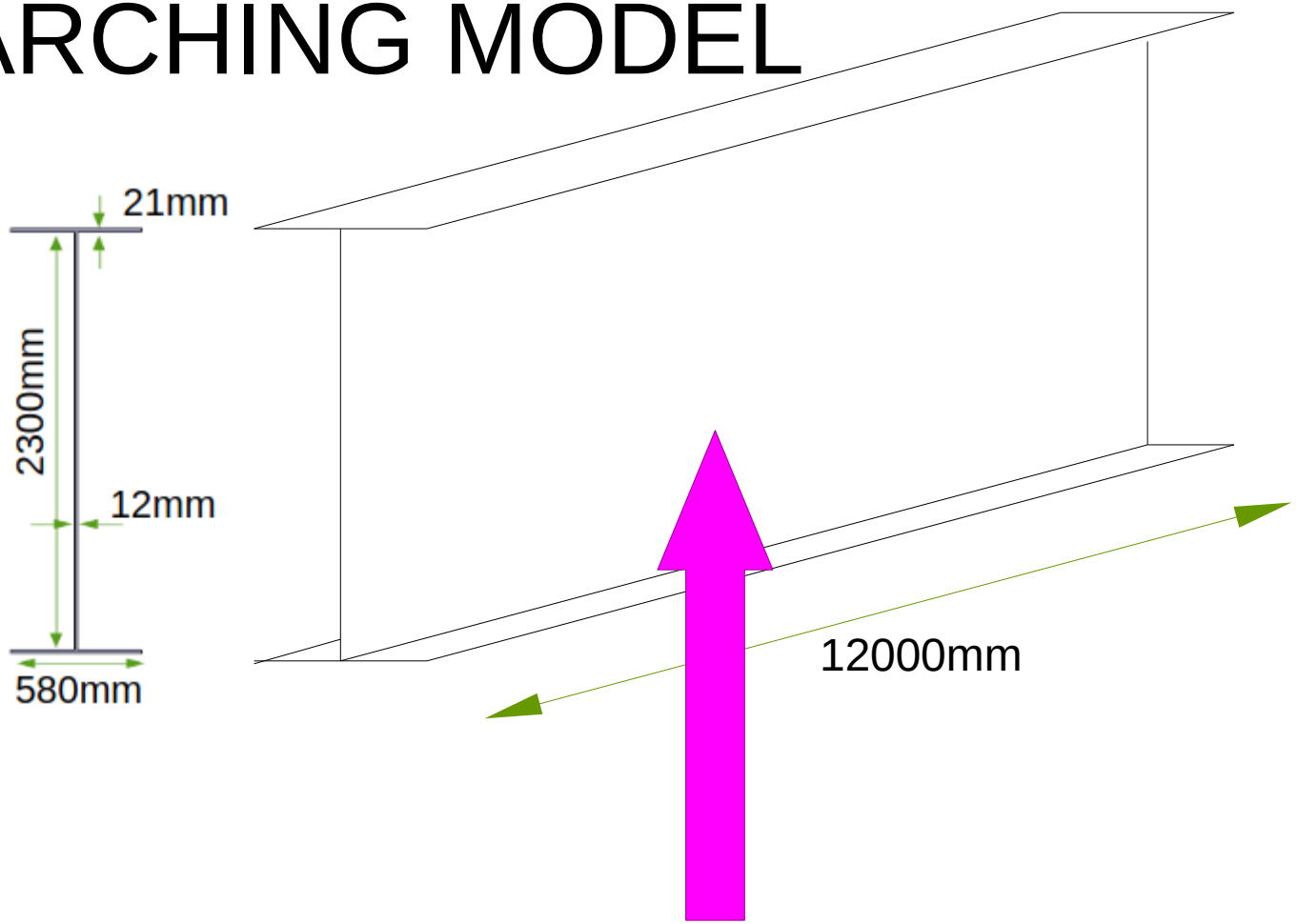
GOOD POINT OF RESEARCH

The girder stiffener is made from steel, We can reduce welded points by using timber and STEEl GIRDAR resistant to buckling

We can reduce CO2 emission

Maybe we can construct bridge low cost

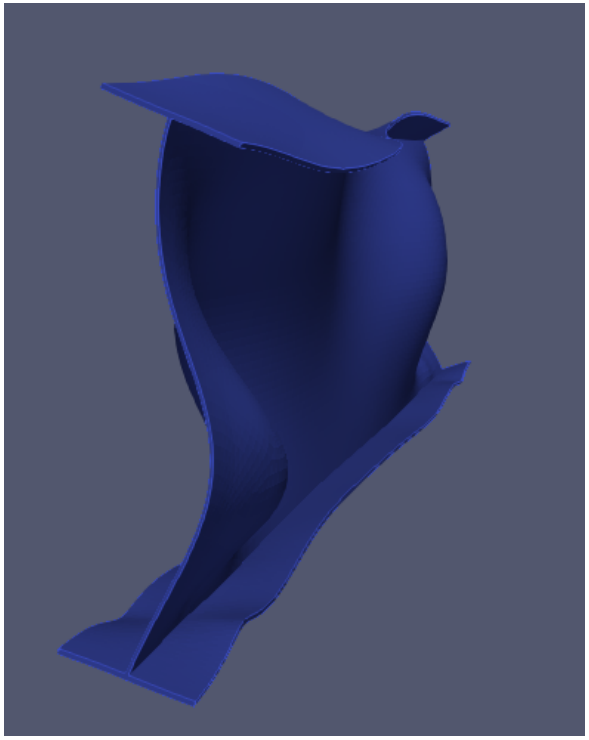
RESARCHING MODEL

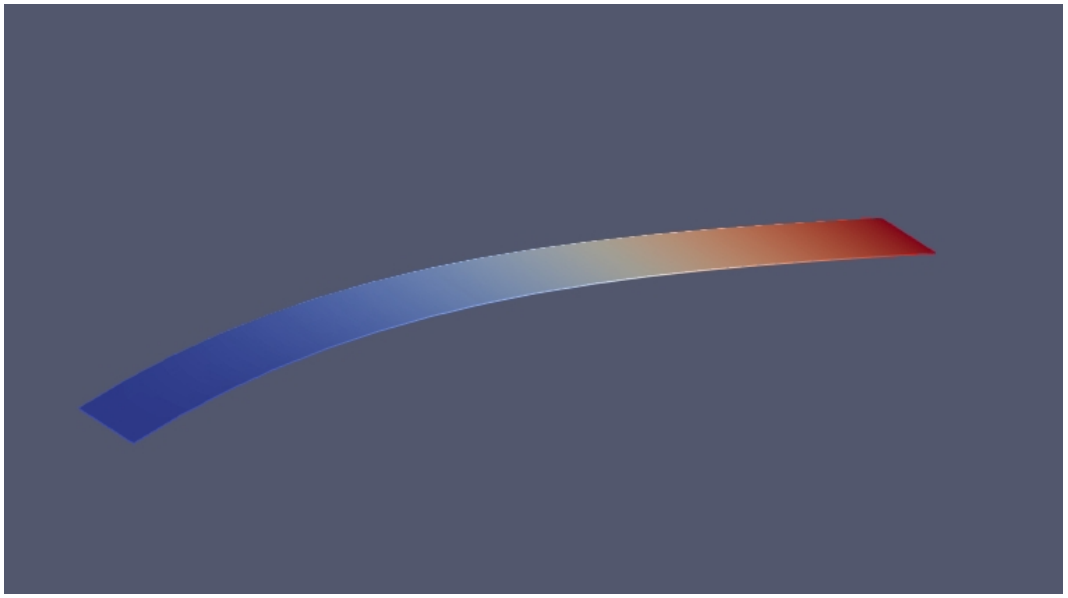


Use timber instead of girder stiffener

PROGRESS OF MY ANALYSIS

Now checking theoretical values about the web and flange of the Marumori bridge





WHAT TO DO NEXT

More buckling analysis for many models of I steel girder

Check overall buckling and local buckling point

Compare which models are suitable