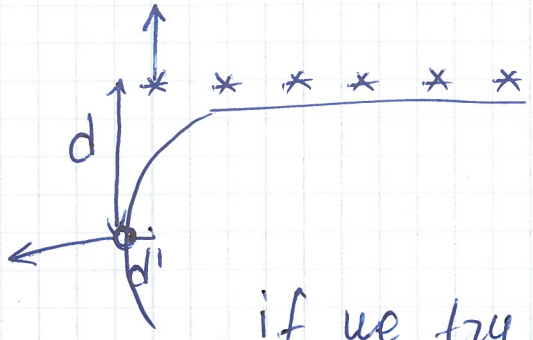
Model - data energy

if we choose data normals to measure the distance along them there is an issue if the data is "open"

* - data point
∘ - model point



if we are trying to optimize d, the model grows uncontroulably

if we try to optimize d' instead, this particular issue doesn't arrise.

However, we already have data-model term, where the distance is measured along the model normal.

here we optimize model to data distance

Solution discard the correspondences with angle between the normals > threshold

Discussion

Maybe there is a way to take into account both data-model and model-data normal