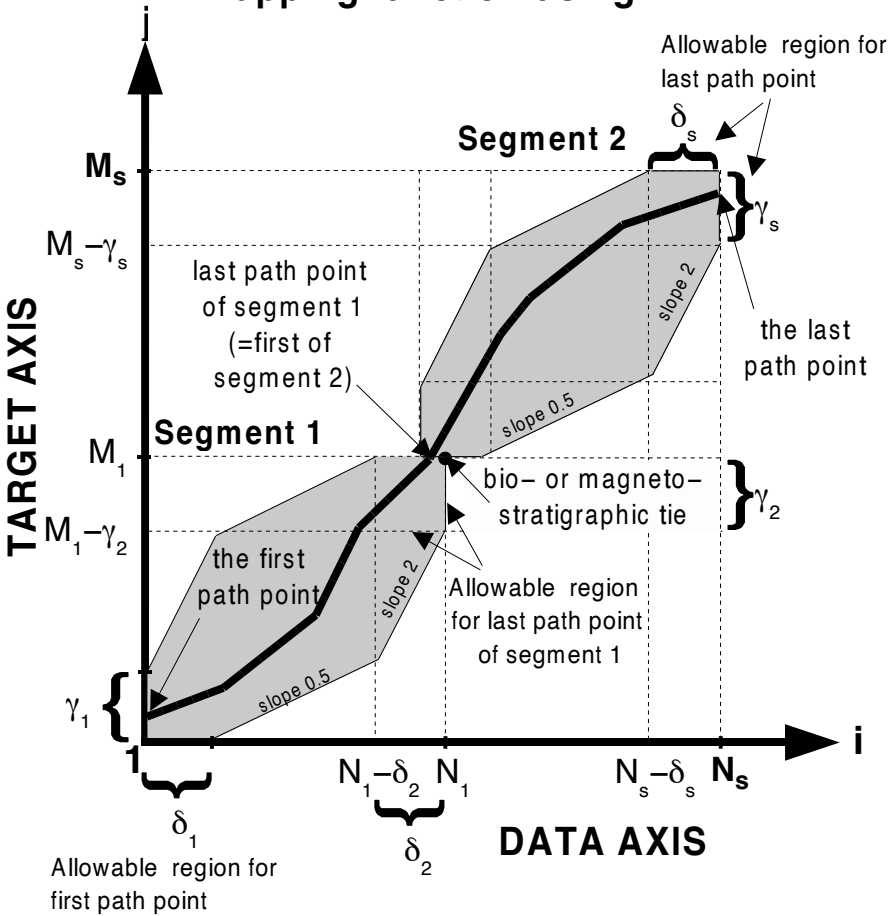Extended constraints for the mapping function using DTW