Water, water, everywhere

Flooding is a double wedged weapon, but to avoid the disadvantages of flooding, we should be always ready.

In this challenge we based our solution on combination among remote sensing, geographic information system and Piezo-electric sensor.

1. **Introduction**

This research aims to facilitate the ease of prediction of flooding hazards and make an early warning.

1. **Remote sensing and geographic information system (GIS)**

By using remote sensing techniques and GiS tool, we manage to make a good modeling data for the flooding zonations.

By combining these data, we can make a risk flooding map for any area of interest.

1. **Pizo-elecrtric sensor**

We set sensor on the bottom of the river and this sensor depend on the pressure difference of water column in the river, e.g. When the water pressure increases, the piezoelectric pulses received by the operation control unit. These received pulses combined with modeled data to make an up-to date risk map .warning depend on the rate of pressure difference.