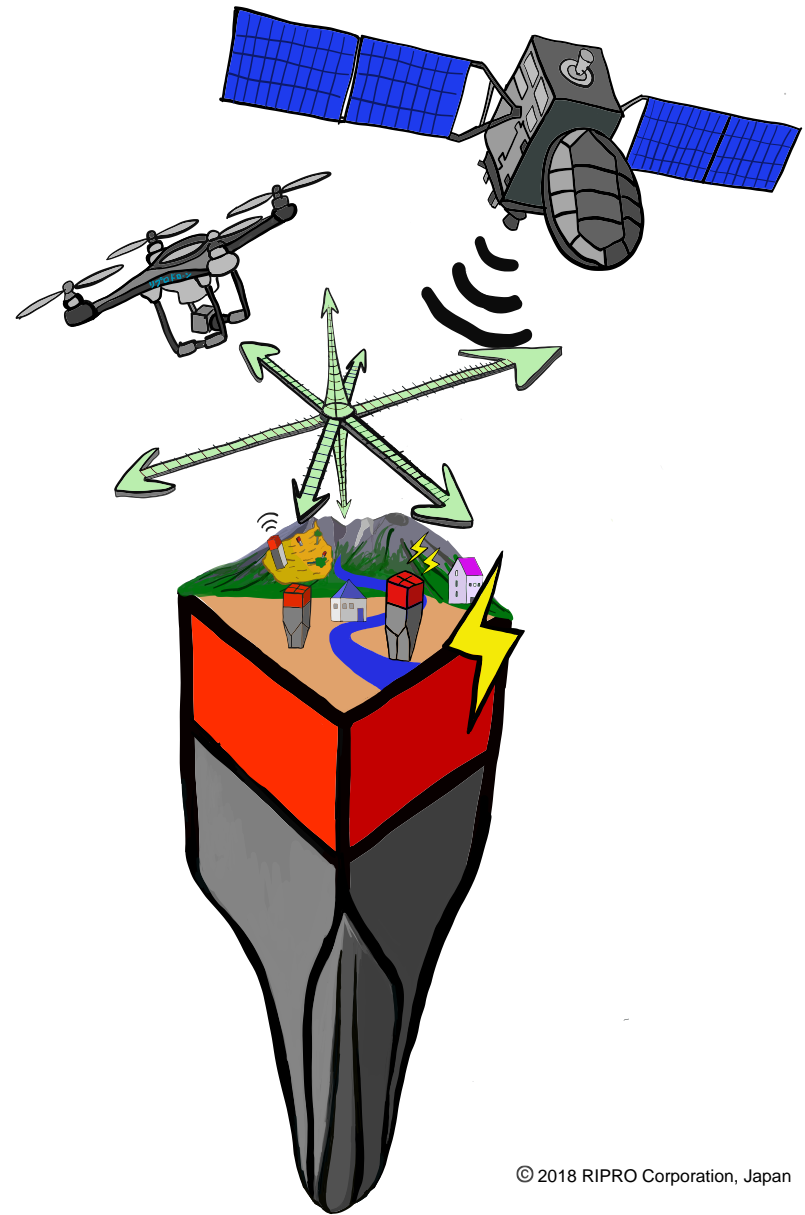


# Eco + Resilience Marker



## 1) RIPRO is....

Ripro Corporation is a major **Japanese survey marker manufacturer** supplying approximately **60% share of the land survey markers** in Japanese survey market. A leader in recycled products, Ripro has been producing survey markers from recycled plastic materials for **48 years**.

Located in **Okayama** (metro population: 1.9 million), 730 km southwest of Tokyo, with sales of 1.3 billion Japanese Yen (\$13,007,000), Ripro is the world's largest manufacturer of Recycled plastic survey markers producing and sales **5 million survey markers** a year (using over 4.5 ton of recycled material).



**RIPRO**  
Corporation, Japan



### 1. Recycle products



### 2. Plastic Material trading



### 3. Packaging plastic Film



### 4. R&D IT products and survey equipment



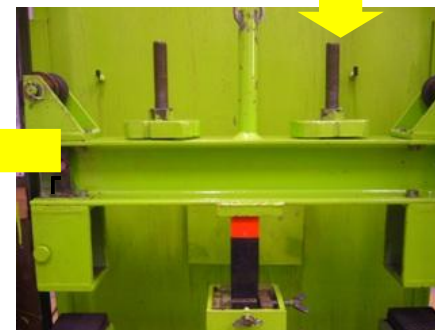
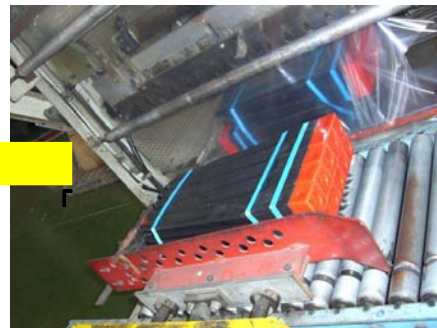
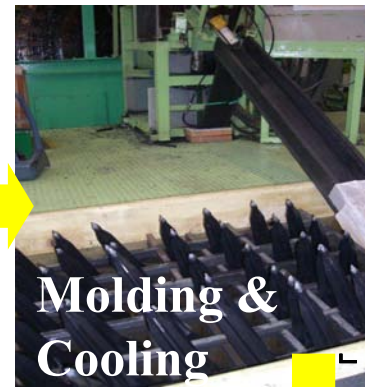
# WORLD Marker



In World land, so many types of survey marker,  
In Surveying ,survey marker is most largest equipment. No world standard now.

2) Japan No.1 Ecostake Manufacture company  
Original Eco Plastic manufacturing system

Receiving → Crushing → Molding & Cooling → Quality Control → Packing → Delivery



# NFC Passive Marker

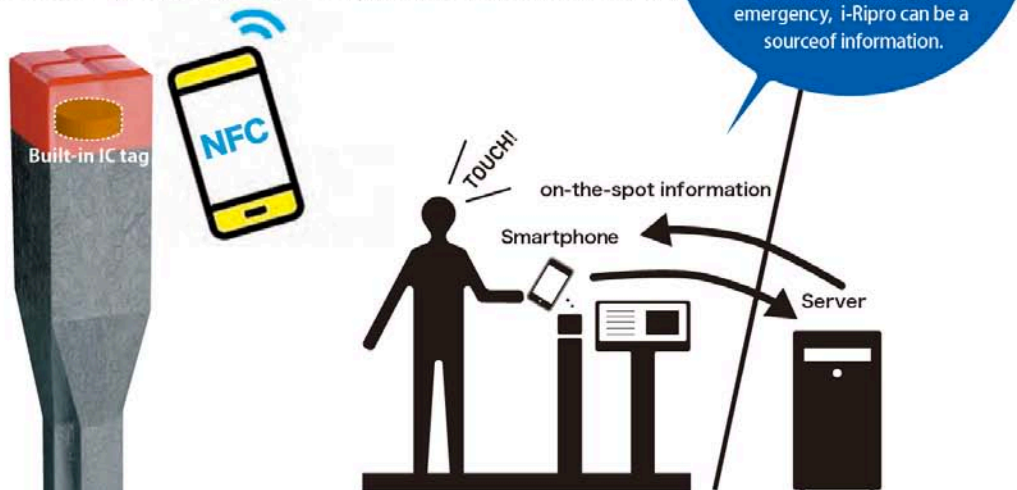
3, Smart Stake

Passive iRIPRO RFID stake can store information collected on the point. Archives can be used for the maintenance of underground utilities and to promote tourism.

## PASSIVE

### Ripro's idea "getting information from stake"

An information storage (IC tag) is clearly marked with the over ground label to easily get prompt information.



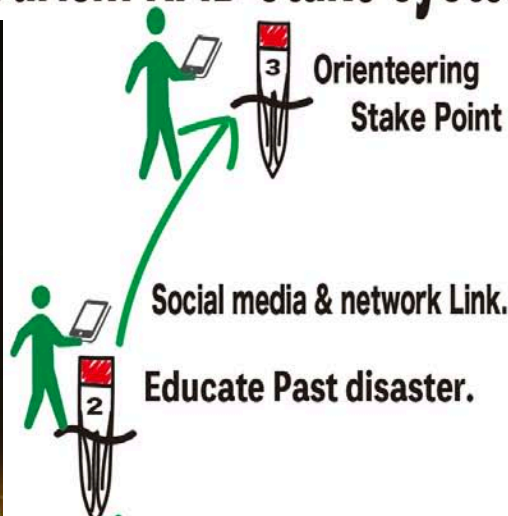
**Useful Information**  
If you want to be informed on the best spot for "Ohanami," weather forecast, assembly points or resting area in case of emergency, i-Ripro can be a source of information.

- Advantage #1 **Maintenance free: no battery** and/or external power supply, required.
- Advantage #2 Information in the server can be obtained **"on the spot"** through **IC tag** by reading ID code.
- Advantage #3 **Easy installation** of recycled plastic, cost efficient and **environmentally friendly**.
- Advantage #4 **Information can be monitored and analyzed** by ID management server.
- Advantage #5 Stored information can be read by **NFC compatible smartphones**.
- Advantage #6 Stored **information can be managed** on site.

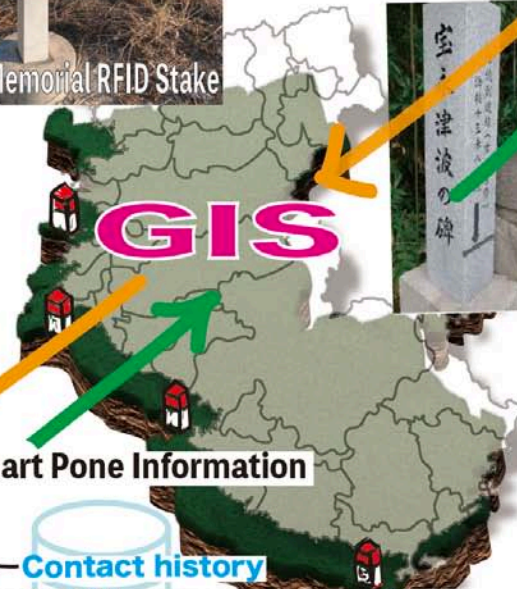
## How to use RFID stakes



# Local Tourism RFID Stake system



一等三角点の記	
点番号	111
点名	...
緯度	...
経度	...
標高	...
設置年	...
設置場所	...
設置者	...
備考	...



Use past tsunami information.

Display each stake EX point information.

- Position information on the map.
- Tsunami archive information.
- Use Japan GIS information code.
- Attach photos.
- Information for evacuation Route.

## IoT Stake

JustTouch the head of stake.

Stake size:90mmX900mm

NFC Technology use.

Analog Stake Can Visible in the Field

Ucode Location information code.  
[www.ieco-stake/0000](http://www.ieco-stake/0000)



NFC Reading  
Google Android Automatical  
iPhone (7series : APP Use)  
(8series~: Automatical)

Smart Pone Information

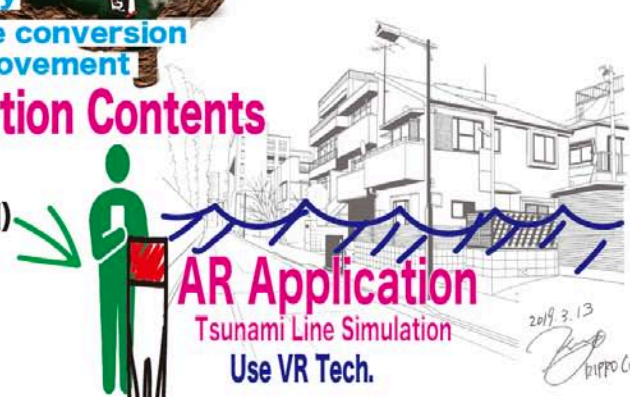
- Contact history
- Multi-language conversion
- Monitrorring Movement

## Option Contents

Environmental Activites  
**100% recycling!!**  
Marine Litter problem solving.

**SDGS**

**AR Application**  
Tsunami Line Simulation  
Use VR Tech.

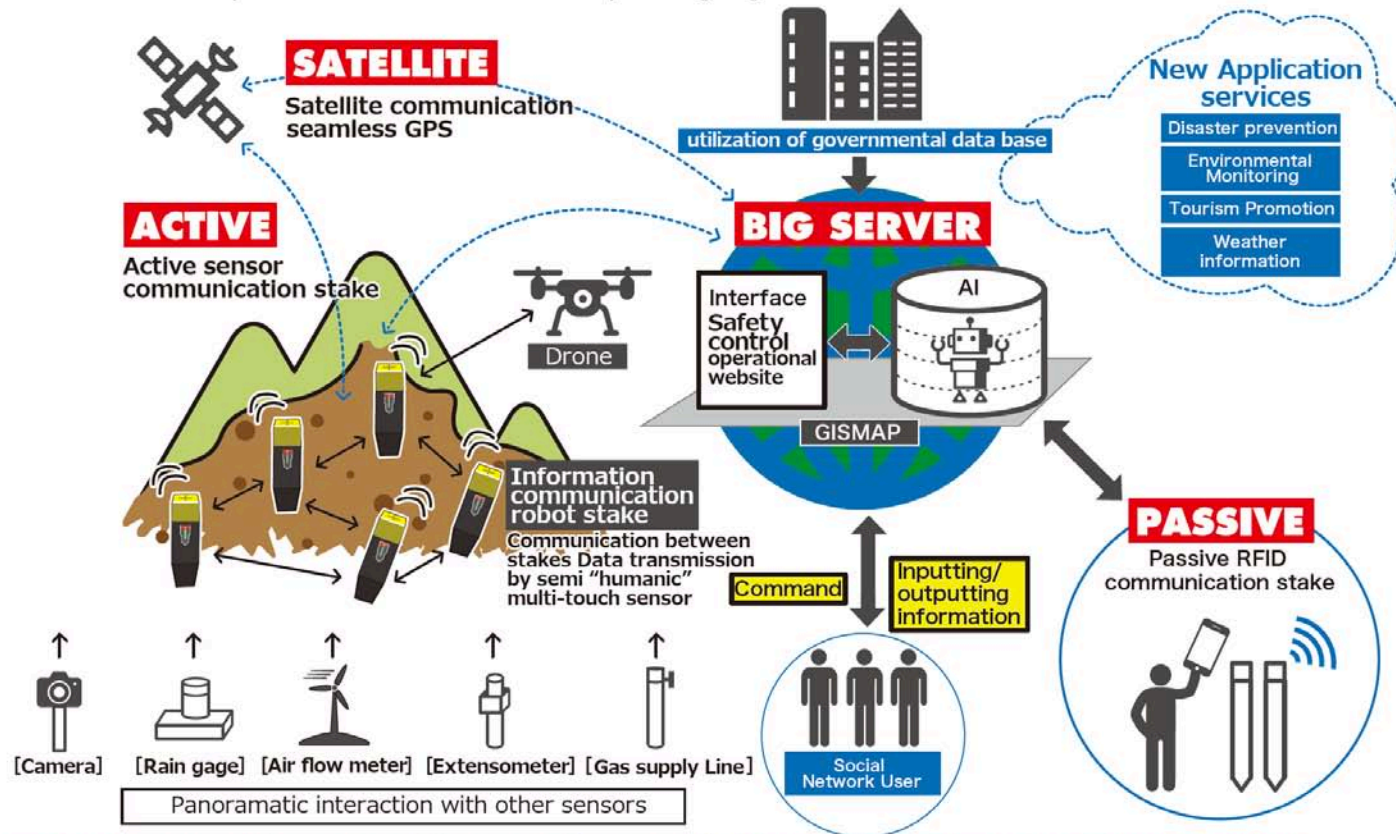


2019.3.13  
RIPRO Corporation  
Japan

# Resilience ACTIVE Marker

## Geographic informatization by "iRIPRO" =Intelligence Recycled Products

iRIPRO project is developed from the combination of boundary markers made from ecological material derived from recycled plastics and IoT communication technology to provide solutions for monitoring and gathering varied geographic information. It can be used for real time monitoring of slope protection condition to prevent landslide and/or warn people in the area to prevent disaster. Promotion iRIPRO can also be used to provide information in multiple languages for tourism.



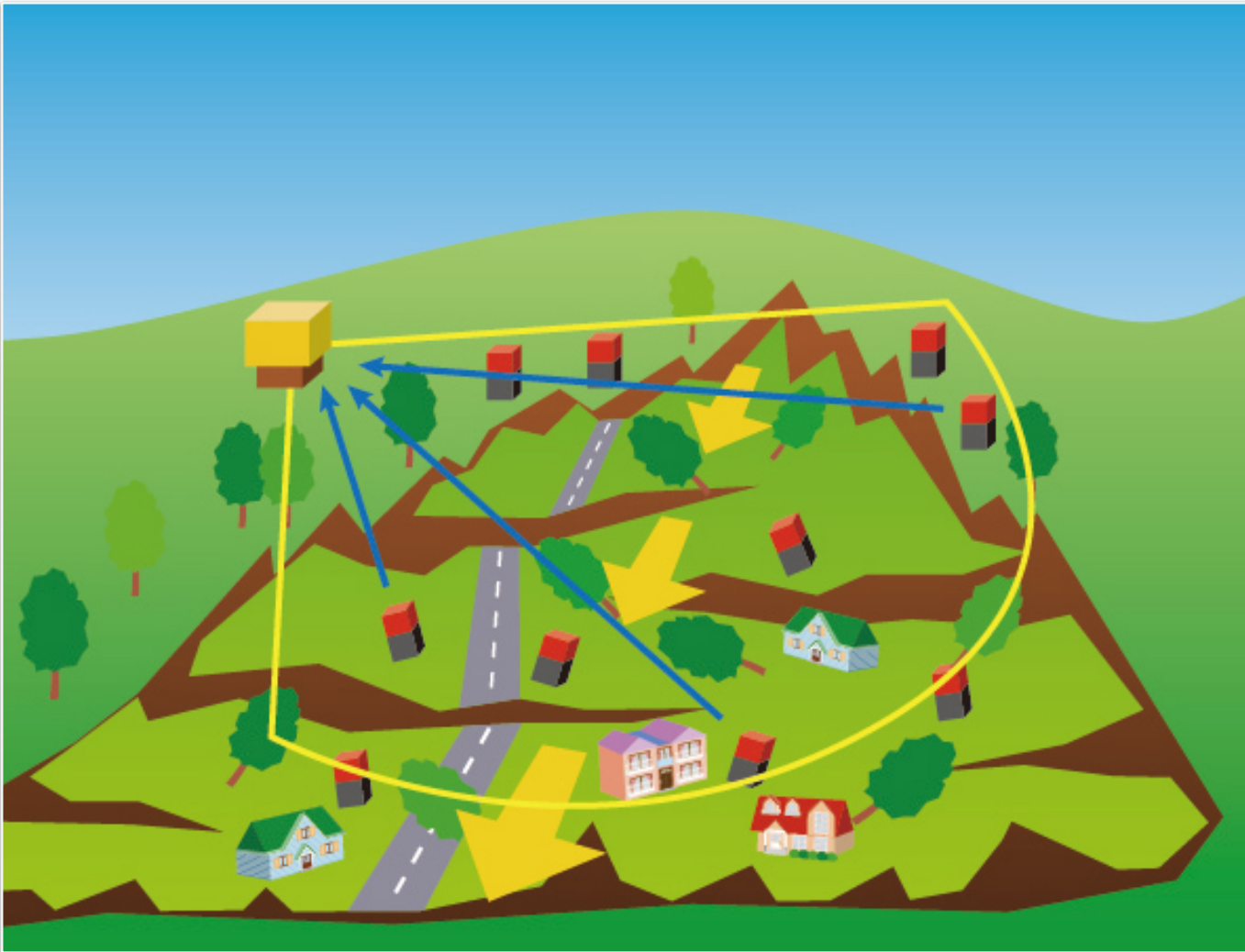
■ Panoramatic operation system solutions for Disaster Prevention and/or Tourism Promotion



# Sensor Ecostakes Idea!



**RIPRO**  
Corporation, Japan





**Flood Disaster in Okayama 2018**

# New Water Level detect stakes.

**“MIZUP Sensor stakes”**  
**Easy detect!**  
**Economic Tel communication cost!**  
**Multi Point Solution!**  
**Scatter in GIS!**



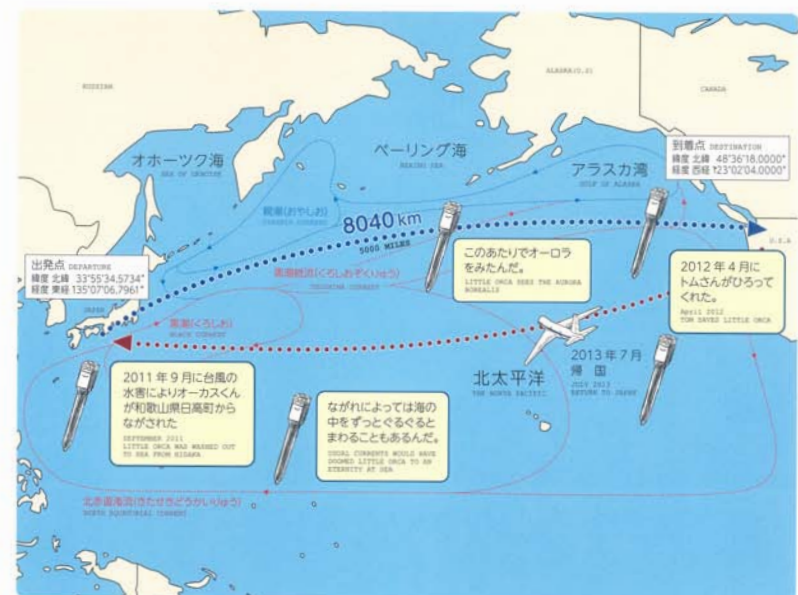
# 8000キロを わた 渡った杭

オーカスくん

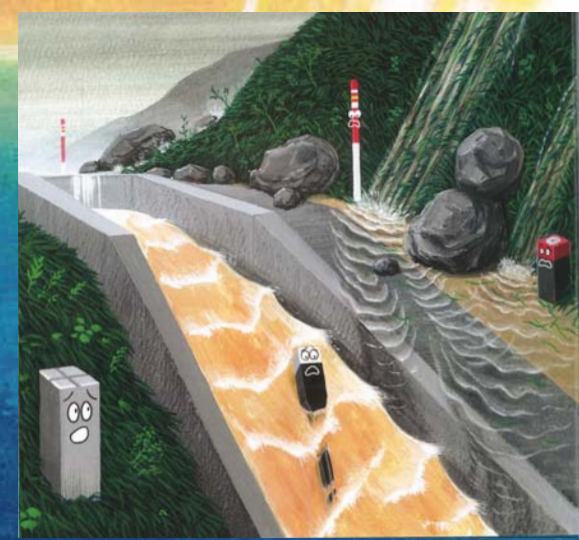


## オーカスくんの冒険想定図

僕の旅路は、きっとこんなルートだったと思うよ。  
MY ROUTE WAS CIRCUITOUS INDEED.



1年半をかけて僕はゆっくりとゆっくりと寒へとながされて行ったんだ。途中、暑かったり寒かったり、荒波にもおそわれたけど、シャチさんたちが励ましてくれたので、シアトルまでたどりつけたんだ。  
FOR OVER ONE-HALF OF A YEAR I WAS WANDERING THE OCEAN AND I WAS FORTUNATE ENOUGH TO LAND IN SEATTLE.



Suggestion:

What purpose can solve by Resilience Maker in your country?

What can you do for Ocean debris in survey market and FIG?

We wish,  
One Eco Stake save  
the beautiful planet and people..



# RIPRO Support FIG Young Surveyor meeting from Japan!

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**Kengo OKADA**

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RIPRO Corporation, Japan

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When you interesting to work in Japanese survey market, Feel free to contact us!