# Investigation Progress



# Members enrolled



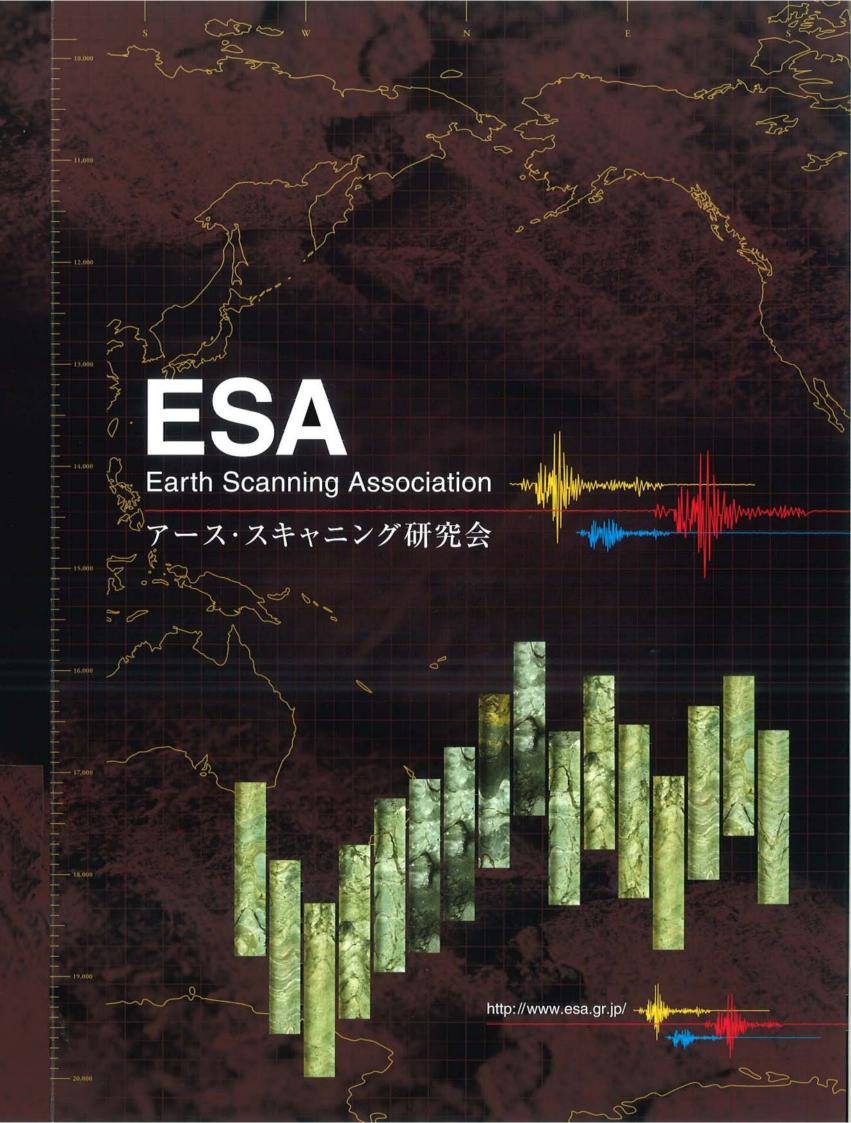
## Full members (Listed in order per Japanese syllabary)

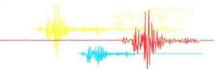
OYO Corporation	4-2-6 Kudankita, Chiyoda-ku, Tokyo	TEL.03-3234-0811	http://www.oyo.co.jp/
Kawasaki Geological Engineering Co. Ltd.	2-11-15 Mita, Minato-ku, Tokyo	TEL.03-5445-2071	http://www.kge.co.jp/
KISO-JIBAN CONSULTANTS CO., LTD. (KJC)	1-5-7 Kameido, Koto-ku, Tokyo	TEL.03-6861-8800	http://www.kiso.co.jp/
KOKUSAI KOGYO CO., LTD	2 Rokuban-cho, Chiyoda-ku, Tokyo	TEL.03-3262-6221	http://www.kkc.co.jp/
SUNCOH CONSULTANTS CO., Ltd.	1-8-9 Kameido, Kötö-ku, Tokyo	TEL.03-3683-7111	http://www.suncoh.co.jp/
DIA CONSULTANTS CO., Ltd.	1-7-4 Iwamoto-cho, Chiyoda-ku, Tokyo	TEL.03-5835-1711	http://www.diaconsult.co.jp/
Chuo Kaihatsu Corporation	3-13-5 Nishiwaseda, Shinjuku-ku, Tokyo	TEL.03-3208-3111	http://www.ckcnet.co.jp/
Token Geotec Co., Ltd.	3-13-10 Naka-Cho, Urawa-ku, Saitama-shi, Saitama-ken	TEL.048-822-0107	http://www.tokengeotec.co.jp/
Nippon Geophysical Prospecting Co., Ltd.	2-2-12 Nakamagome, Ōta-ku, Tokyo	TEL.03-3774-3211	http://www.n-buturi.co.jp/

## Partners

Raax Co., Ltd Manufacturer	17-1-12 Kita-24-jo-Higashi, Higashi-ku, Sapporo-shi, Hokkaido	TEL.011-780-2222	http://www.raax.co.jp/
BDM Service Co., Ltd Head Office	1412-10 Fukaya-cho, Totsuka-ku, Yokohama-shi, Kanagawa-ken	TEL.045-852-7500	http://www.bdm.jp/

ESA Earth Scanning Association アース・スキャニング研究会





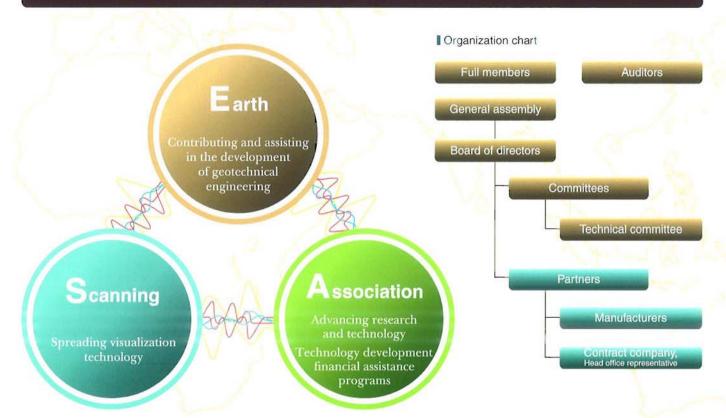




Our aim is to contribute to society by promoting activities relating to the development and dissemination of visualization techniques for geotechnical investigation.

# **Main Activities of Earth Scanning Association**

(Formerly Known as BIPS Technology Association)



## **■** Goal

Our goal includes furthering the spread of applied technology development with regard to advancing research and their applications for visualization technology of subsurface. In addition, it includes aiding the development of geotechnical engineering and contributing to subsurface maintenance and preservation for local communities. Furthermore, we strive to develop visualization technology even more through cooperation with the general company and universities, etc.

## ■ Corporate History

1993.6	Founding of BIPS Technology Association
2000.5	Establishment of BIPS Technology Association website
2007.9	Renamed Earth Scanning Association (Organization revision)

2007.11 Establishment of Earth Scanning Association's website

## Overview

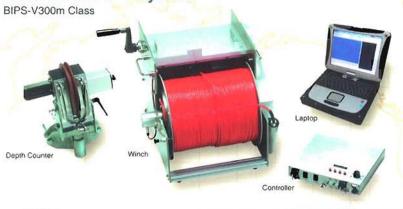
Name	Earth Scanning Association	
Established	June, 1993	
Number of Members	12 companies (Current as of October, 2010)	

Activities		
Management	of technical committees	
Technology deve	elopment assistance program for private associations	
Presentations	for technical forums, etc.	
Holding works	shops for members	
Making pamp	hlets and website	

BIP-V, a newly developed BIP analysis system, is the ultimate borehole wall imaging device, offering a revolutionary advancement from "being able to see" inside the hole to ushering in an age of "showing" what is inside.

BIP is a registered trademark of Rass Co., Ltd. \*The BIP witcm is a Rass Co., Ltd. technology protected under the Patent Act, The patent is already valid in Japan, the U.S.A. and Asstralia

# About the BIPS-V system





## ■ Internal imaging of boreholes using 2 methods



Digital Imaging [360° continuous]

Digital recording of oriented sequential development imaging in full color. It measures the strike and dip and the width of the fissures with analysis software

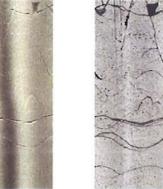
### Ultrasonic wave imaging [Based on the reflection intensity and reflection time]

It scans the borehole in the wall in a spiral fashion with beams of ultrasonic waves. Immeasurable muddy water can also be imaged using USS because the sequential measurement imaging is formed from the reflection intensity and reflection time of the borehole in the wall.

## ■ Comparison of measurement imaging samples



Photograph with an ODS probe



## Application Examples

- 1. Geological investigation for dams
- 2. Accident prevention inspections for roads
- 3. Geological investigation of underground storage stations
- 4. Geological investigation for nuclear
- 5. The damage investigation of the structure by the earthquake disaster
- 6. The front investigation of the tunnel .
- 7. Investigation of rivers and degree of obsolescence of bridges
- 8. Archaeological surveys



Measurements with BIP systems (The front investigation of the tunnel)

# Analysis Examples After measuring with BIP, the data, which is statistically processing from various angles, can be managed collectively on a computer

