



Design for future



YACHIYO ENGINEERING CO., LTD.
Consulting Engineers & Architects



マレーシアにおける地下水管理に向けた 取り組み

2019年6月25日

JWFコミュニケーションラウンジ

会社概要



設立

1963年1月29日

資本金

4億5000万円

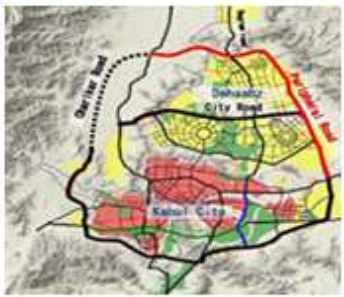
社員数

1,082人(2018年10月現在)



サービス内容

都市計画



- Urban Development
- Regional Development
- Smart Community
- Investment Plan

運輸



- Transportation Planning
- Road
- Railway
- Port

環境施設



- Solid Waste Management
- Sewerage
- Pollution Control
- EIA

水資源・防災



- Dam
- Groundwater
- Water Supply
- Flood Control
- Disaster Risk Management

ICT・建築



- Architecture
- Information & Communication System
- Broadcast System

電力



- Power Generation
- Electric Power Distribution
- Renewable Energy



マレーシアでの実績

| Project Title | Client | Contract Period | | Sector |
|---|--|-----------------|--------|---------------|
| | | From | Until | |
| CDM FS on Combined Systems with Waste Disposal and Methane Generation in Ipoh, Malaysia | GEC, Japan | Aug-10 | Mar-11 | SWM |
| The Preparatory Study for Integrated Flood Management with Adaptation of Climate Change in Malaysia | JICA | Aug-09 | Jan-11 | Flood Control |
| The Study on National Waste Minimization in Malaysia | JICA | Jul-04 | Aug-06 | SWM |
| The Study on Safety Closure and Rehabilitation of Landfill Sites in Malaysia | JICA | Jan-03 | Nov-04 | SWM |
| Consultancy Services for Design, Construction, Completion and Commissioning of Rawang Sanitary Landfill Project in Selangor, Malaysia | Ministry of Housing and Local Government | Jun-02 | Mar-06 | SWM |
| National Strategic Plan Study for Solid Waste Management | Ministry of Housing and Local Government | Nov-01 | Mar-06 | SWM |
| The Project for the Design, Construction, Completion and Commissioning of Solid Waste Transfer Station at Taman Beringin, Mukim Batu, Kuala Lumpur Malaysia | Ministry of Housing and Local Government | Oct-00 | Nov-03 | SWM |
| Feasibility Study on the Second Penang Strait Crossing Road Construction Project | Ministry of Works | Sep-00 | Aug-01 | Bridge |
| Project Management Consulting Services for the Project of Solid Waste Thermal Treatment Plant at Beroga, Mukim Semenyih, Daerah Hulu Langat, Selangor Darul Ehsan, Malaysia | Ministry of Housing and Local Government | Mar-00 | Oct-09 | SWM |



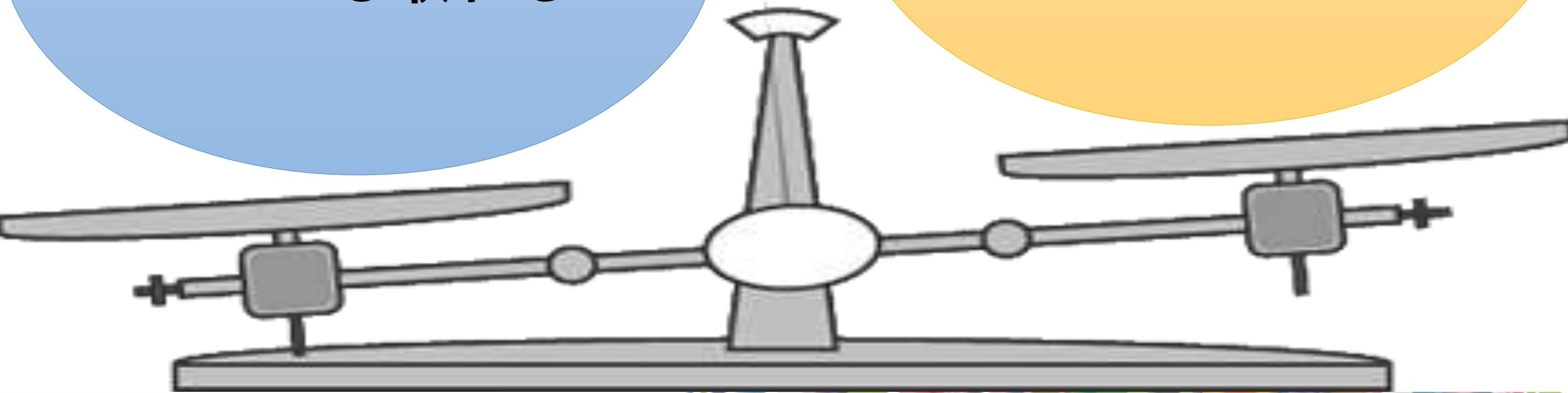
マレーシアにおける地下水管理 に向けた取り組み



なぜ地下水管理か

きれい
どこでも取れる

見えない
戻りにくい



熊本での事例

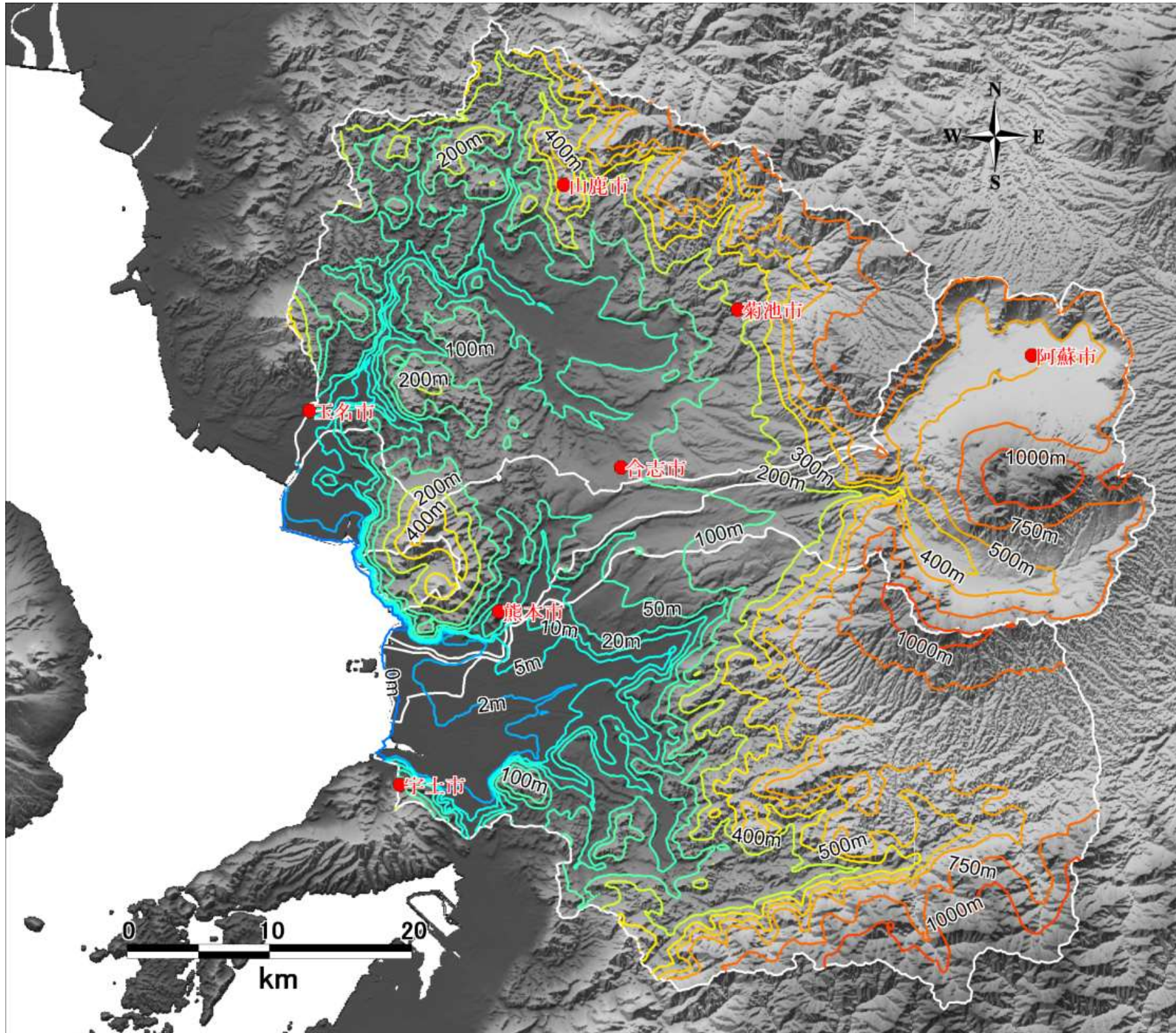


水循環モデルの概念

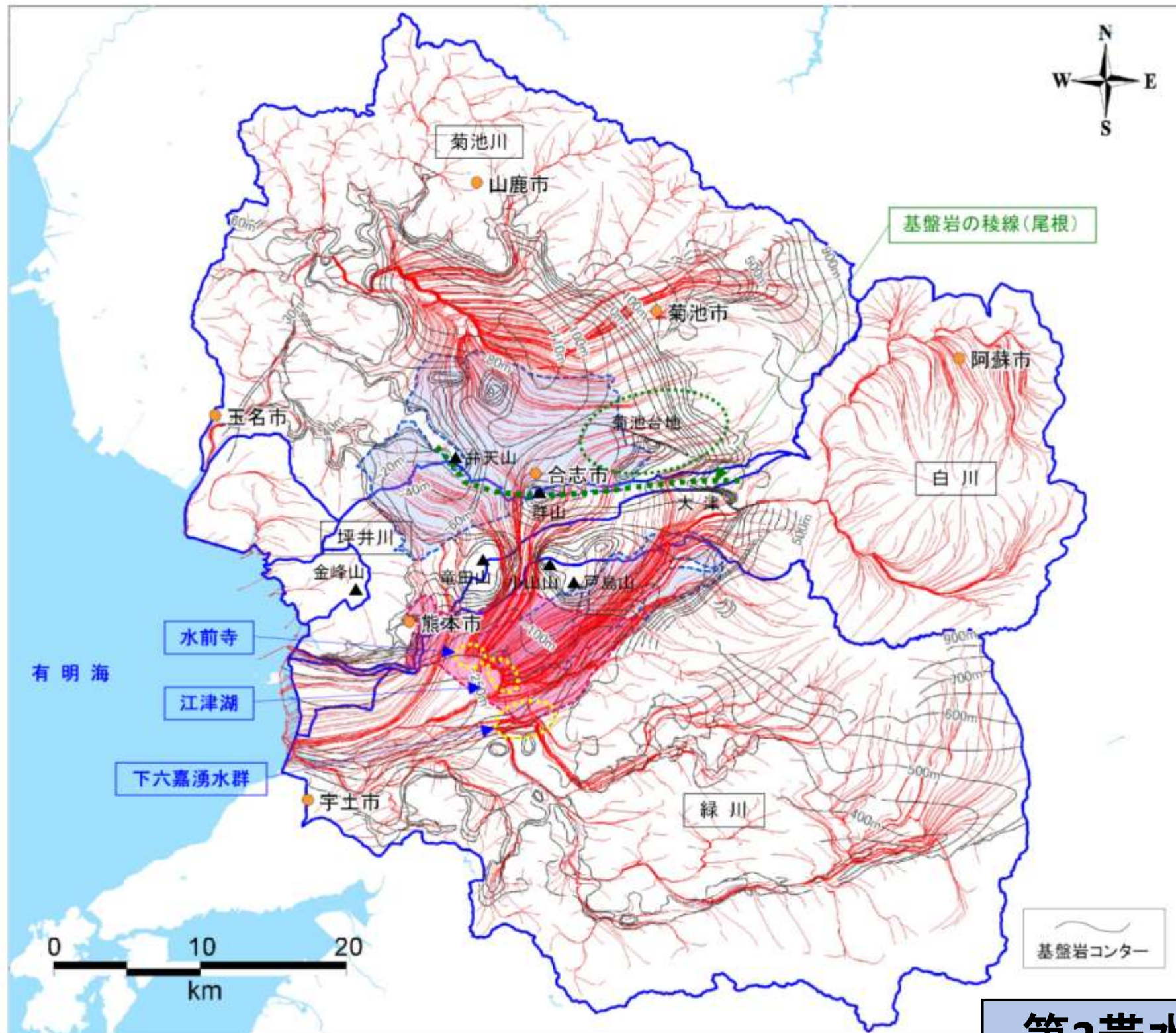
■モデル概念



等水位線(不圧地下水)

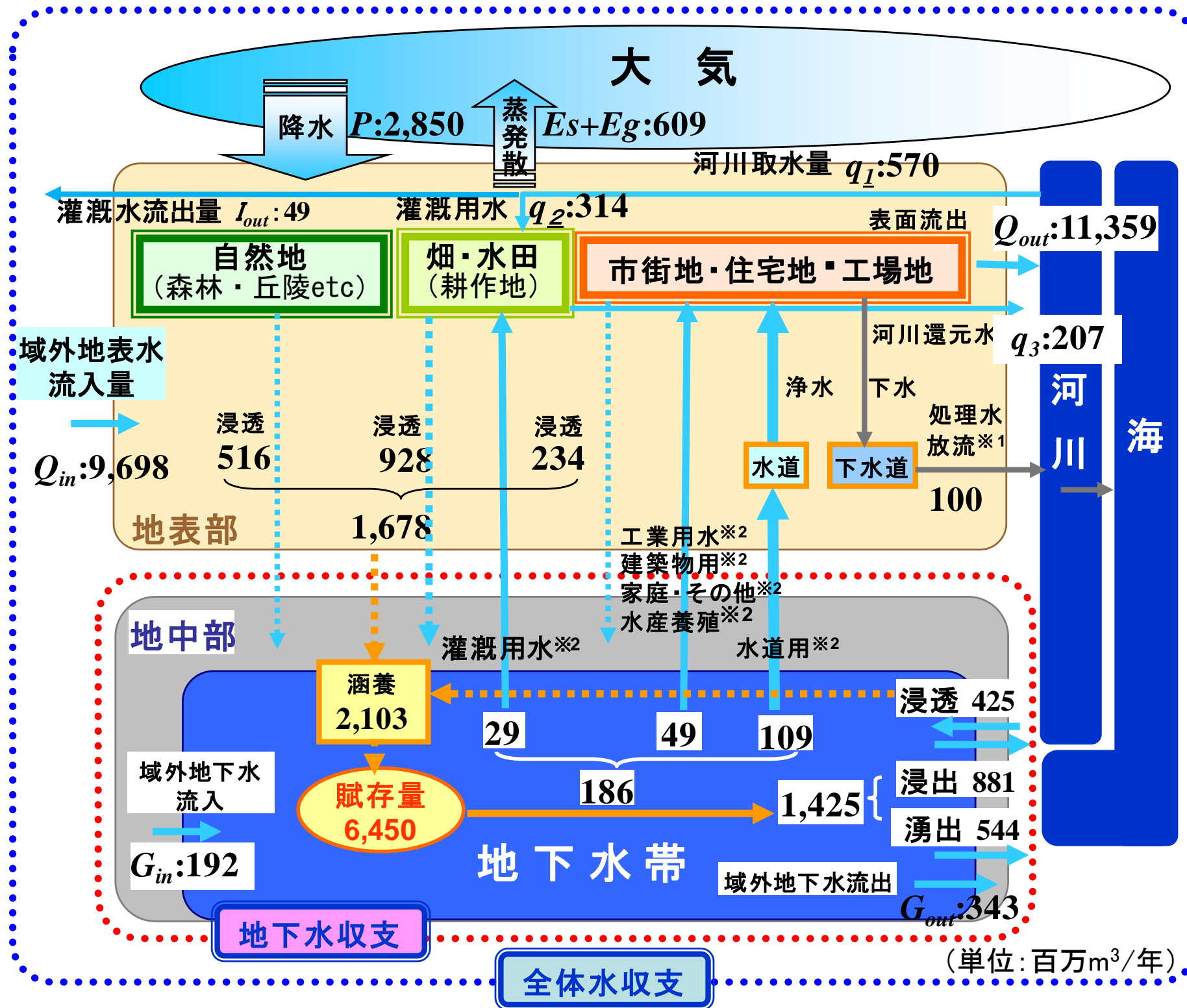


流域圏内の流動機構



第2帯水層流線軌跡図

水収支 (熊本地域：11市町内)

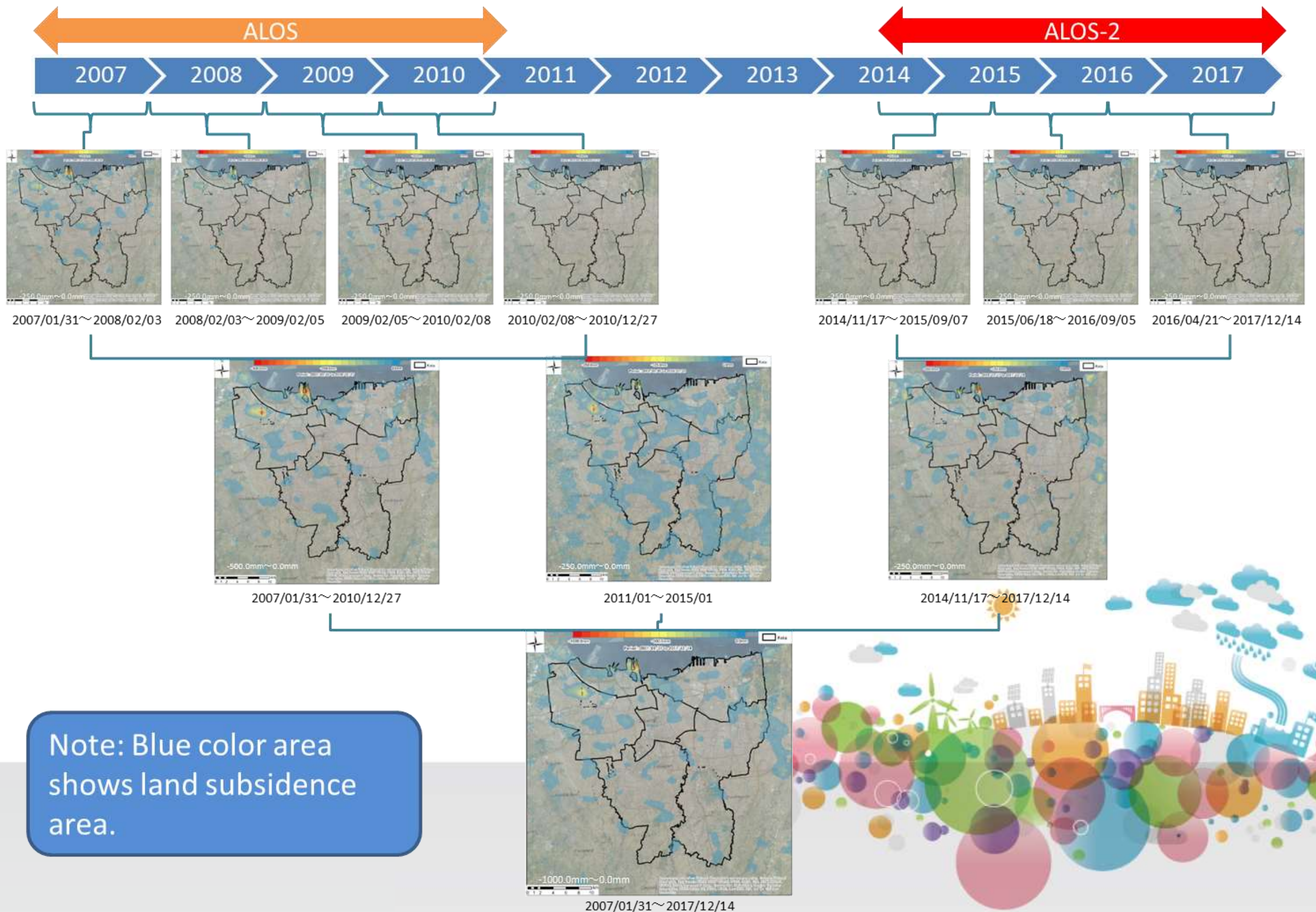


現況(H18)

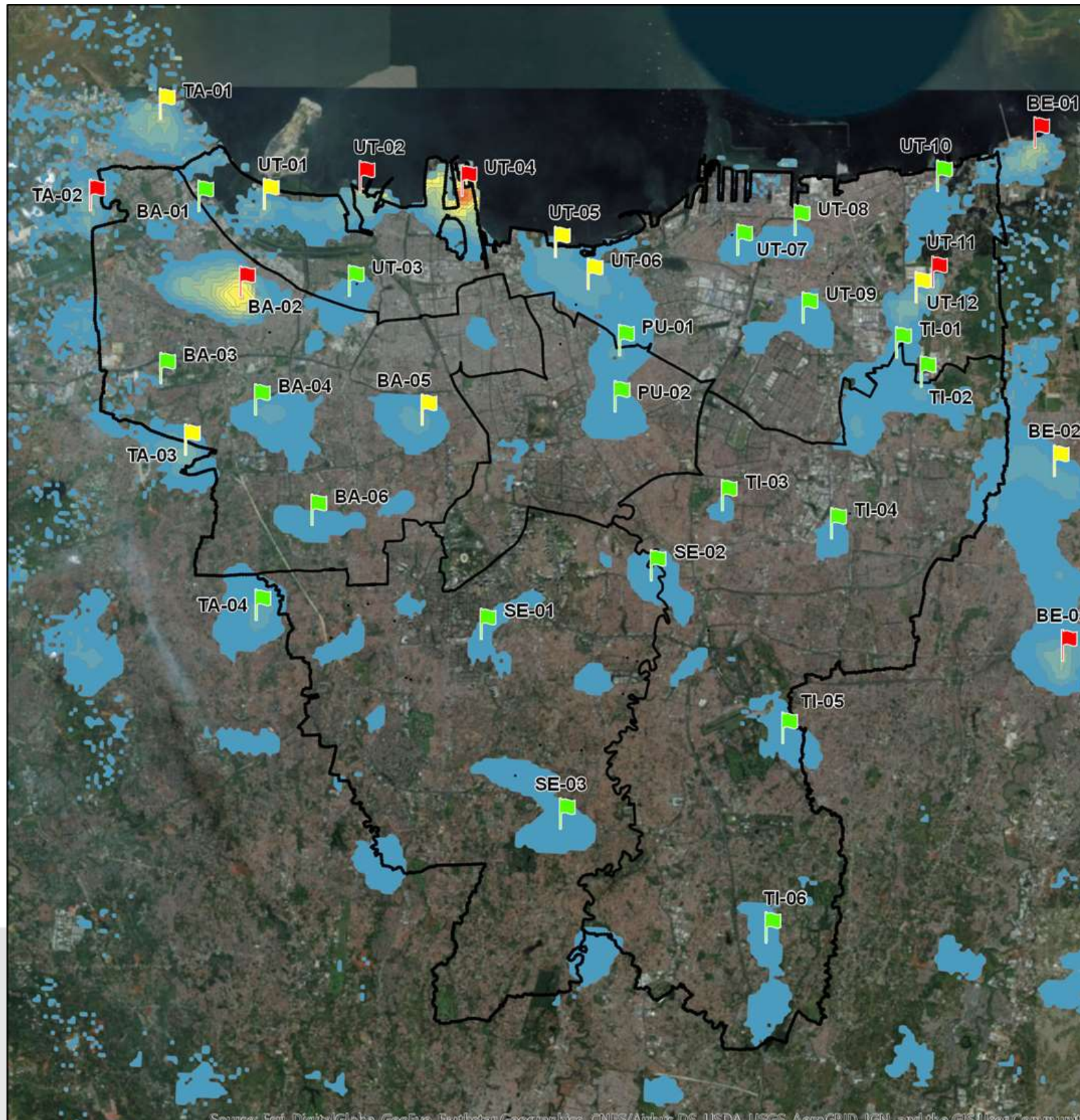
その他の事例 (1)



ジャカルタ地盤沈下プロジェクト



ジャカルタ地盤沈下プロジェクト



Classification of Critical Zones

A: Red

More than 50mm/year
or
More than 20mm/year in whole period and 2014-2017 (ALOS-2)

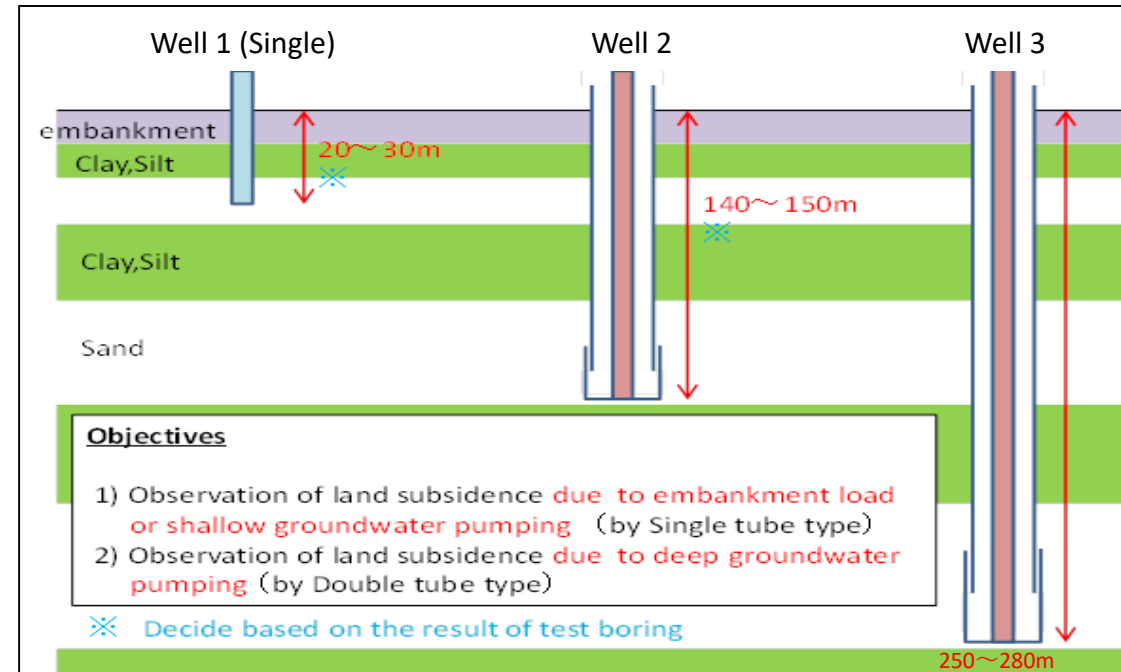
B: Yellow

More than 20mm/year in whole period
BUT
Less than 20mm/year in 2014-2017 (ALOS-2)

C: Green

Less than 20mm/year in whole period

ジャカルタ地盤沈下プロジェクト



Terima Kasih
Thank you

ありがとうございます

