

# **The creation of land use mesh data of Asian seven mega cities in three periods**

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Scope	Study area	Member	Achievement	etc
				<a href="#">Event &amp; info</a> <a href="#">Meeting</a> <a href="#">Link</a> <a href="#">English</a> <a href="#">Member page</a>

## What's new!

- |            |   |
|------------|---|
| 2009/11/12 | 地下環境プロジェクト・ニューレター(vol.8)の公開 <b>New!</b>                                     |
| 2009/11/12 | 都市地理Gグループミーティング議事録を「出張報告書」のページにUpしました。 <b>New!</b>                          |
| 2009/11/04 | 「Web Database」を更新・リニューアルしました。   |
| 2009/11/04 | 地下環境プロジェクト会議の議事録を「発表ファイル」にUpしました。   |
| 2009/10/26 | 釜石鉱山調査報告書(水班)を出張報告書のページにアップしました。  |
| 2009/7/18  | 社会経済班・物質班合同ワークショップ「Workshop on Water Management of Asian Megacity」が開催されました。 |
| 2009/6/1   | Google Earth データベースを「Web Database」にアップしました                                  |
| 2009/5/22  | Model-WGの議事録を「発表ファイル」にUpしました  |
| 2009/5/22  | 地下環境プロジェクト会議(幕張)の議事録と発表資料を「発表ファイル」にUpしました                                   |
| 2009/5/22  | 物質班-社会経済班連携会議の議事録を「発表ファイル」にUpしました   |
| 2009/5/19  | 地下環境プロジェクト会議(幕張)が開催されました  |
| 2009/4/27  | <a href="#">地下環境プロジェクト・ニューレター(vol.7)</a> の公開                                |
| 2009/4/27  | メンバーリストを更新しました  |
| 2009/4/15  | ソウル調査(都市地理班)の報告書を出張報告書のページにUpしました   |

# Purpose

Distribution of land use and its chronological changes are the mirrors that directly reflect the present situation and changes in the natural and socioeconomic environments in the region concerned.

In this study, land use mesh maps were made to be used as indexes to compare megacities in Asia.

This study examined seven cities in three periods.  
Tokyo, Osaka, Seoul, Taipei, Manila, Bangkok, and Jakarta  
early 20th century, mid 20th century, and present

# Methodology

In order to compare cities and periods regarding land use, it is necessary to prepare land use mesh maps using the same standards and procedures as much as possible.

Reduction scale of basemaps– 1 : 50,000  
(only Jakarta 2000s – 1 : 25,000)

Target area :  
the entire urban districts from respective city centers, and  
areas slightly larger than them

Mesh size – 1/2 subdivided mesh (it is called 500 m mesh)

# Methodology

This study classified nine items of land use.

1. "forest"		natural green land
2. "grassland, wasteland"		
3. "rice field"		agricultural land
4. "other agricultural lands"		
5. "industrial site"		urban area
6. "other urban area"		
7. "water area, wetland"		others
8. "others"		
9. "ocean"		

# How to get base maps

	Tokyo	Osaka	Seoul	Taipei	Manila	Bangkok	Jakarta
1920-30s	①	①	③	③	③	④	③
1950-60s	①	①	③	④	③	③	③
2000s	①	①	②	②	②	②	②

- ① from Geographical Survey Institute, Japan
- ② from local organization of each city
- ③ from other national organization in Japan
- ④ from local counterpart of each city



# Oh, my God !!



Jakarta: 1930s

The definition of map symbol differs among maps.

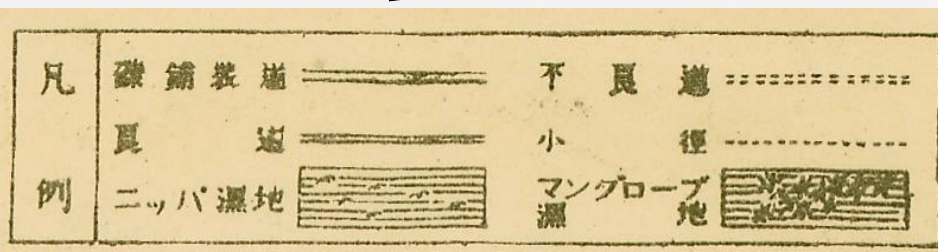
Seoul: 1920~30s

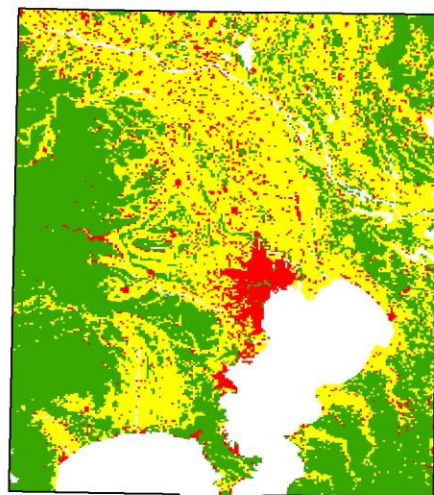
There are some “white” areas with no symbols.



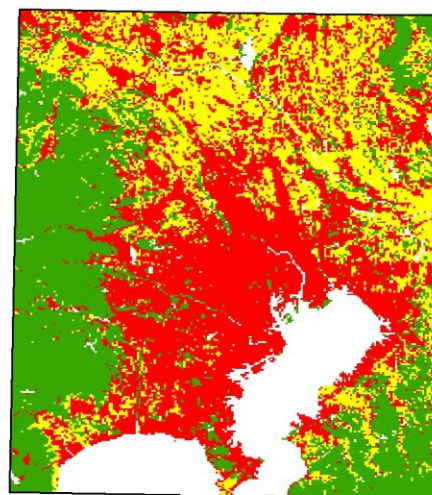
Manila: 1930s

There are many unlisted symbols.

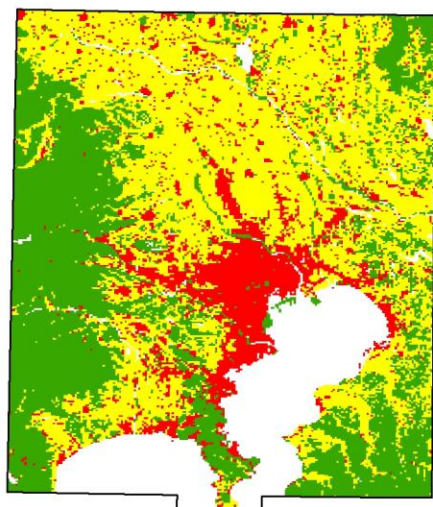
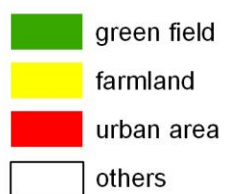




1927

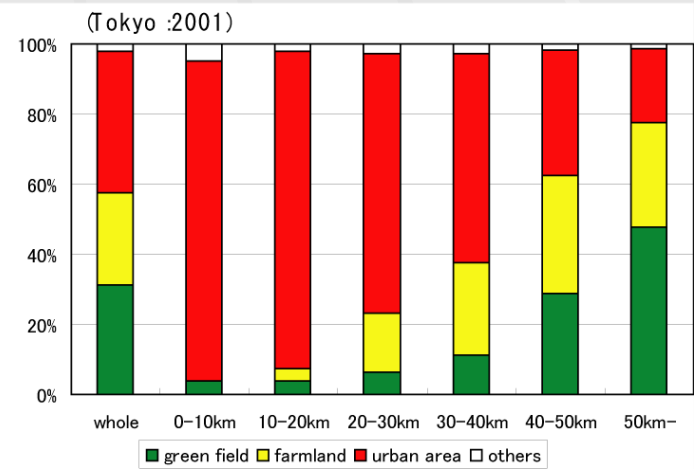
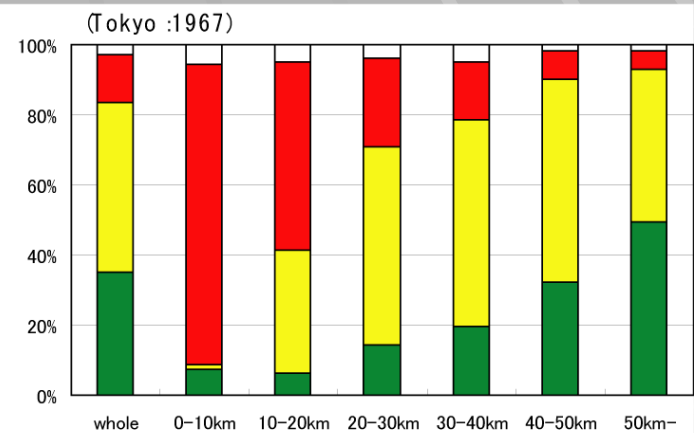
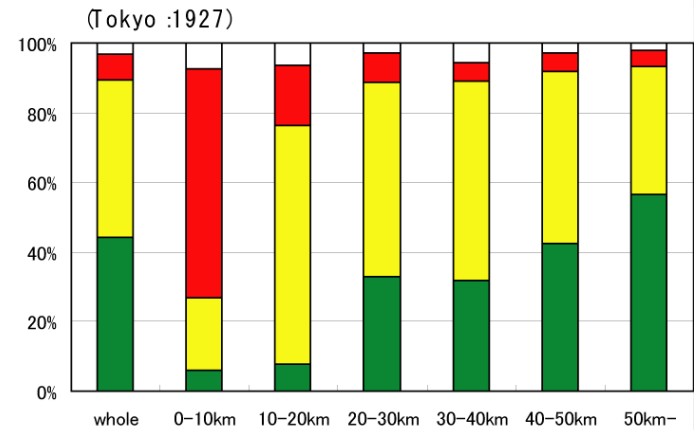
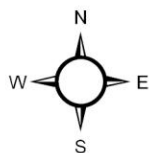


2001



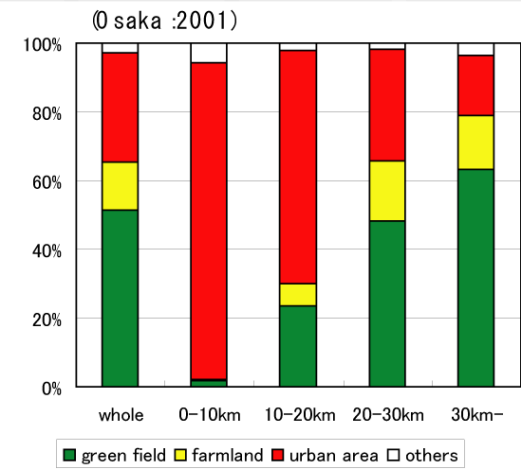
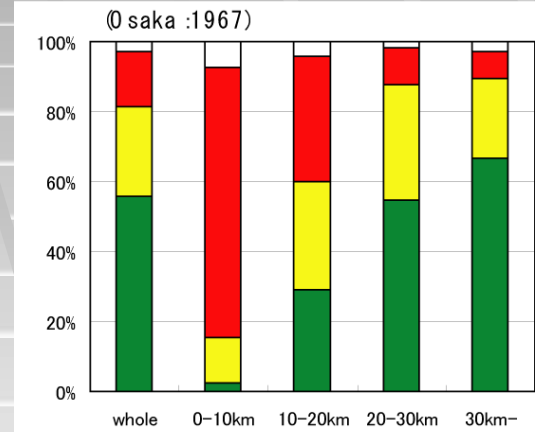
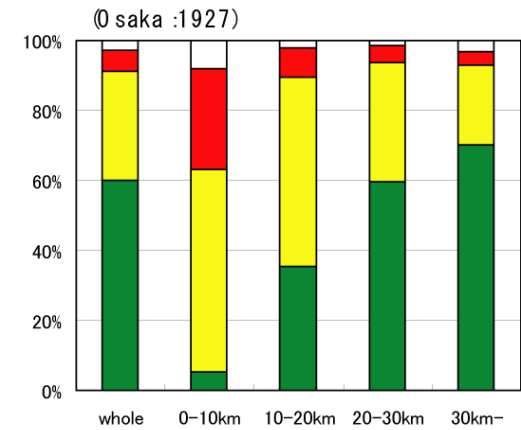
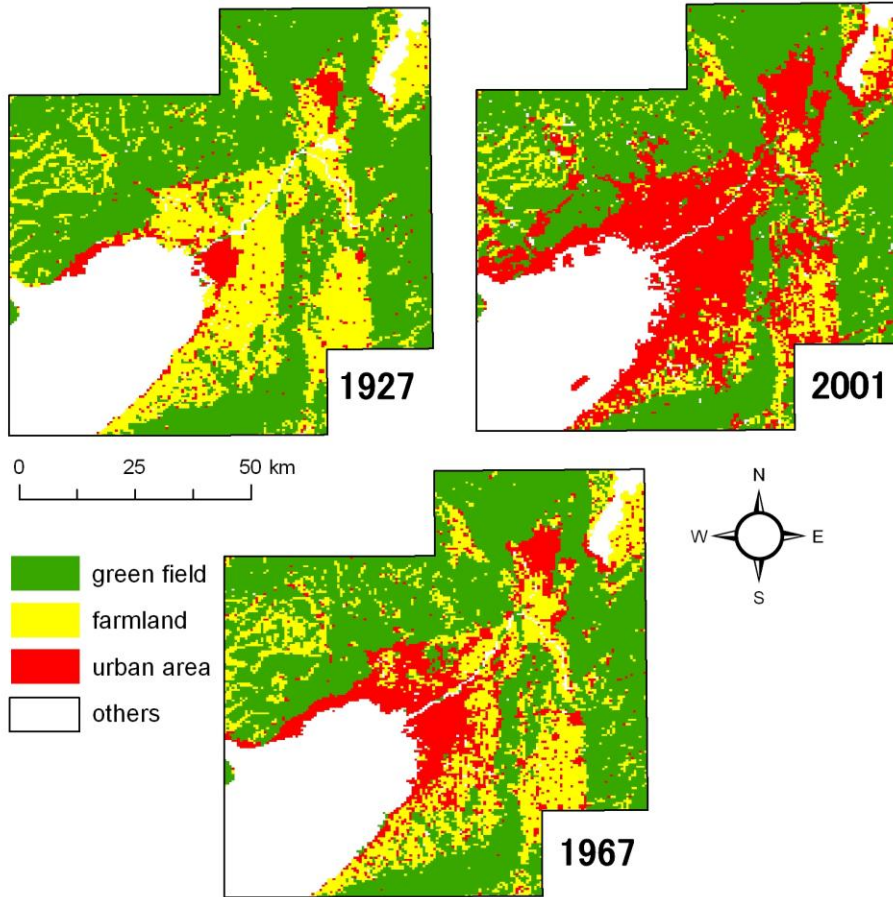
1967

0 25 50 km

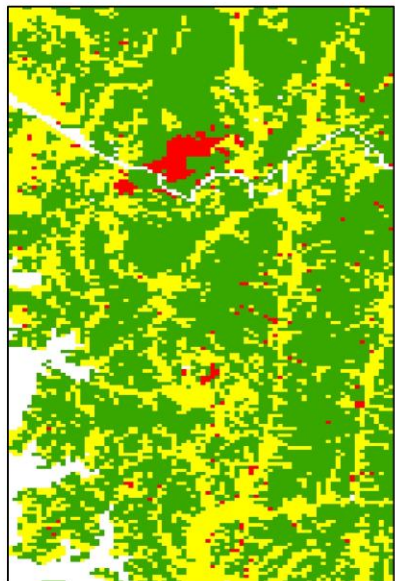


Tokyo

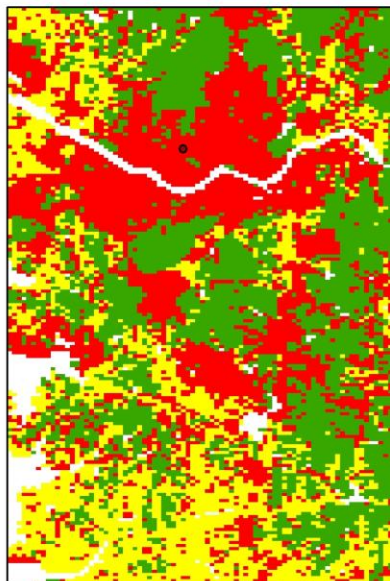




Osaka



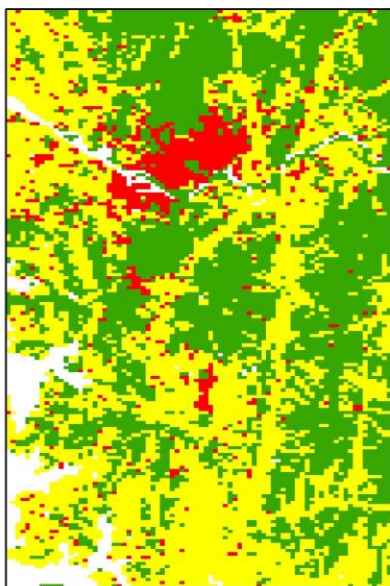
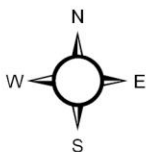
1920-30s



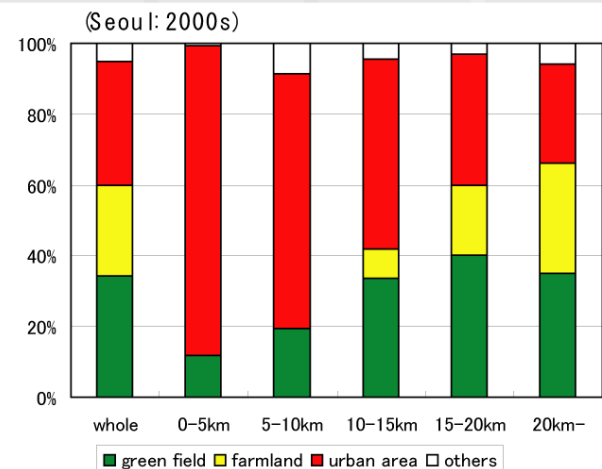
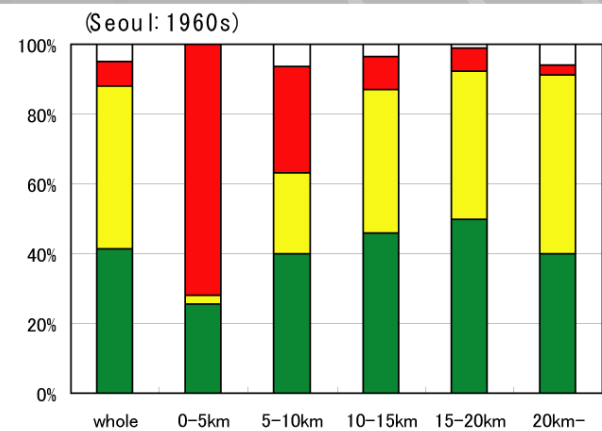
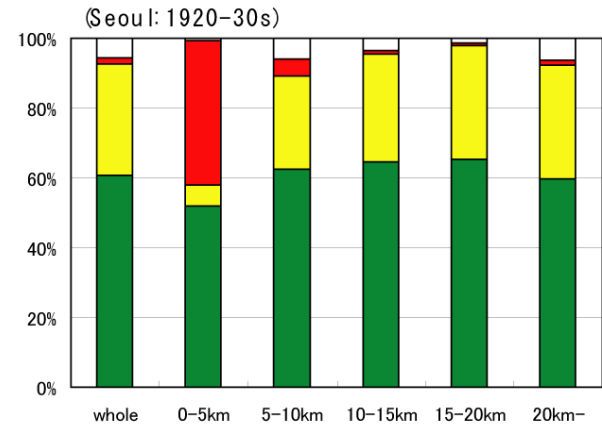
2000s



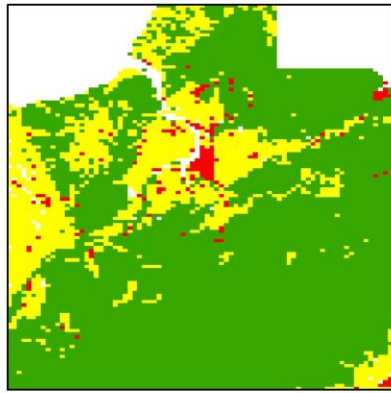
0 5 10 20 km



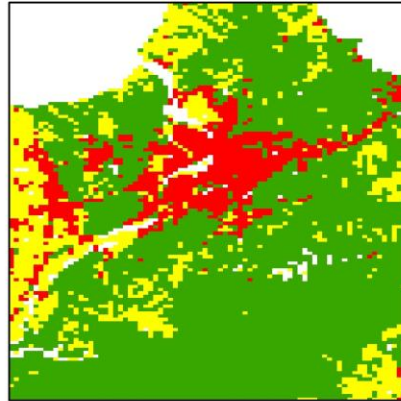
1960s



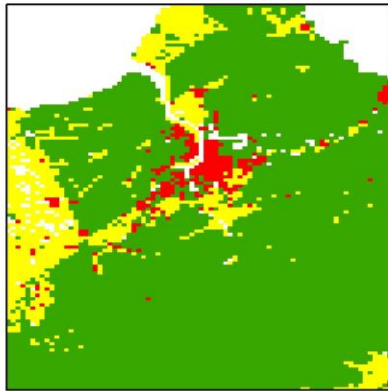
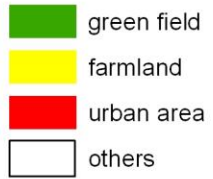
Seoul



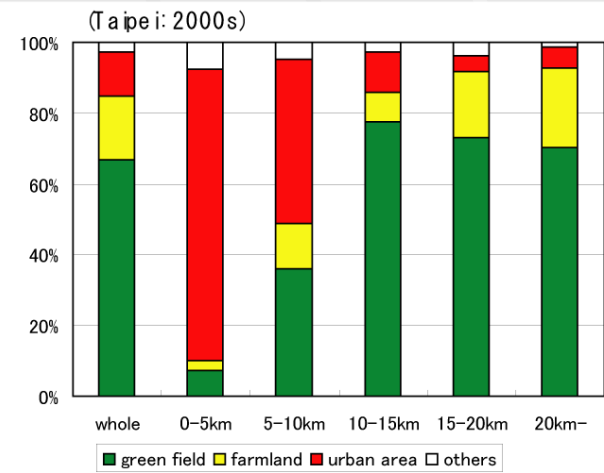
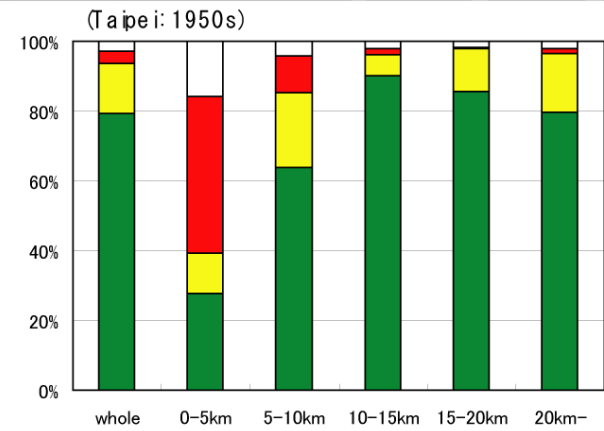
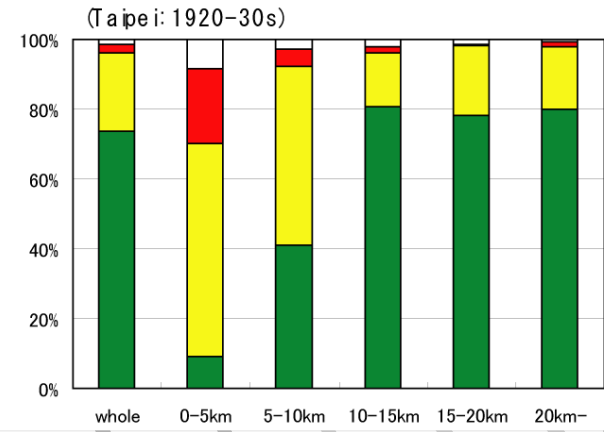
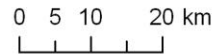
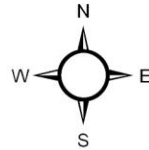
1920-30s



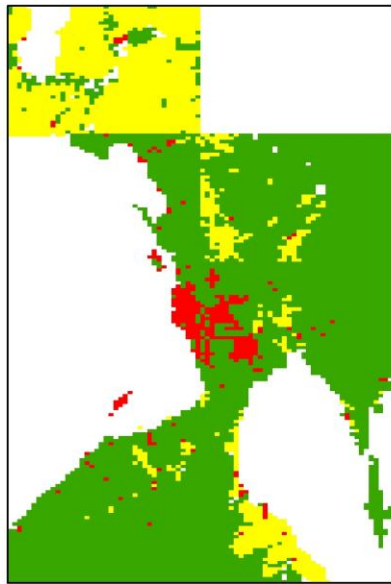
2000s



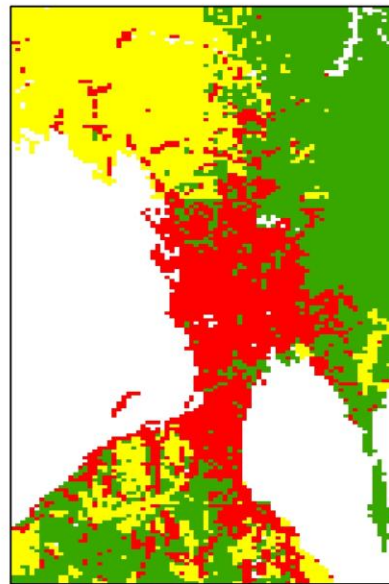
1950s



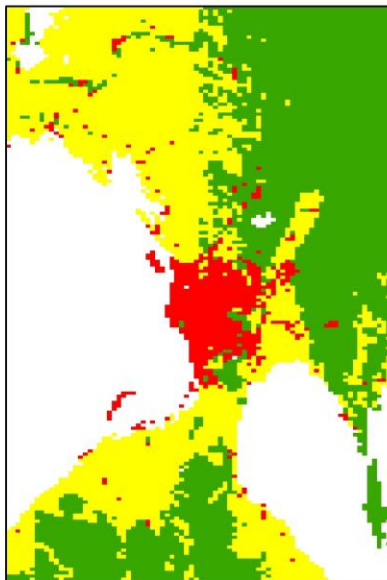
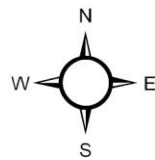
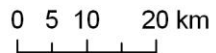
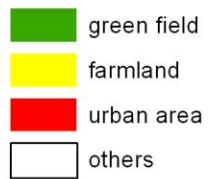
Taipei



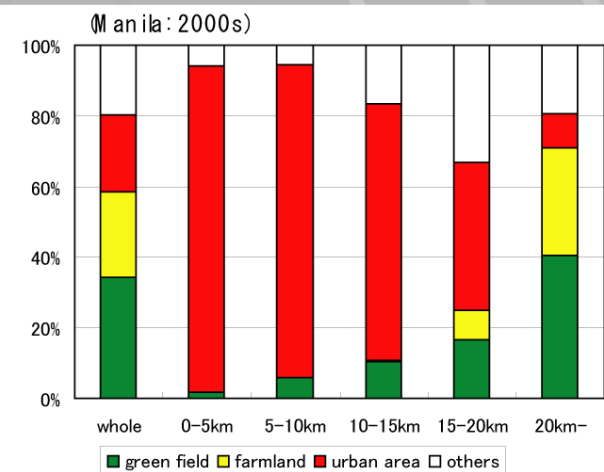
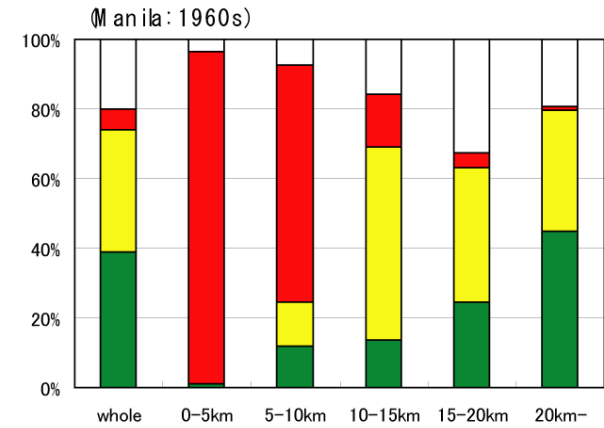
1930s



2000s



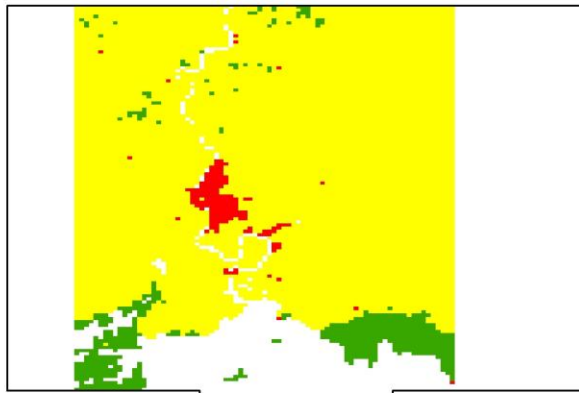
1960s



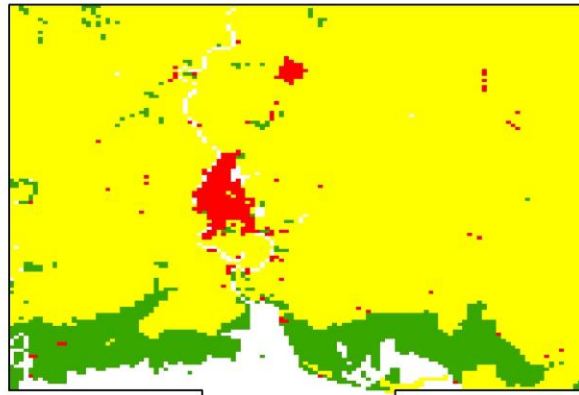
Manila



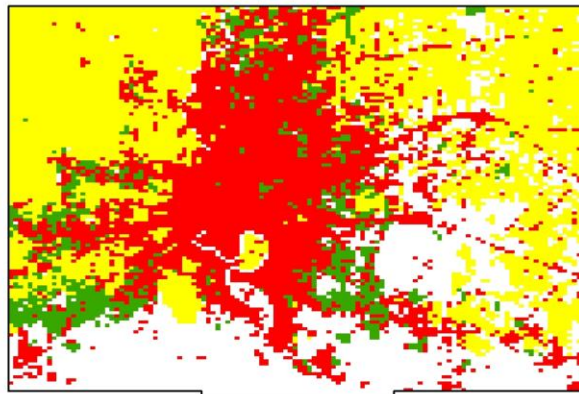
# Bangkok



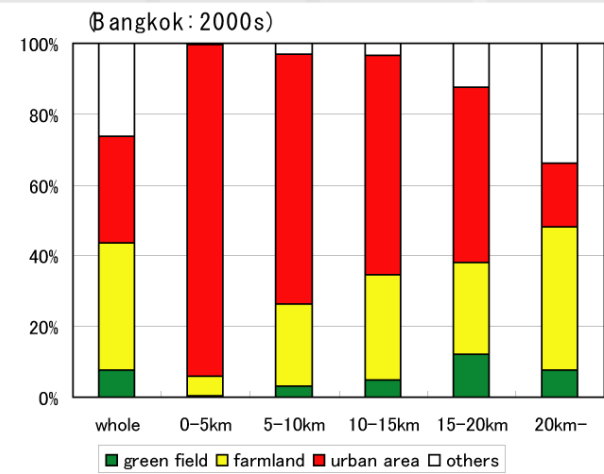
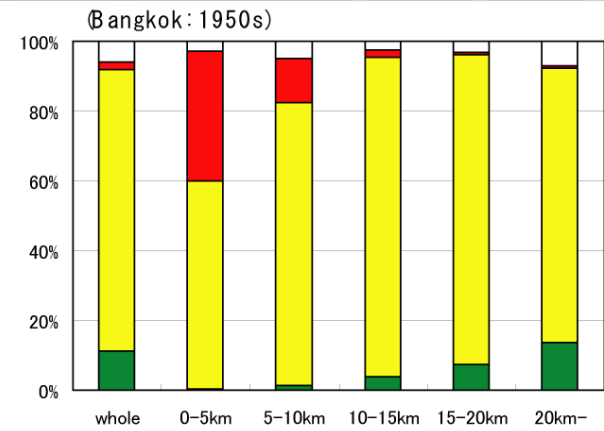
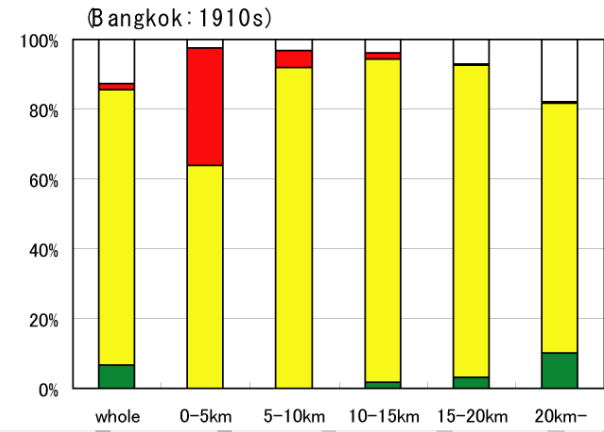
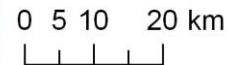
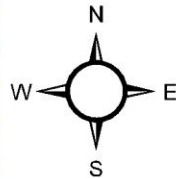
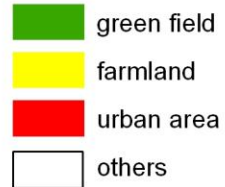
1910s



1950s

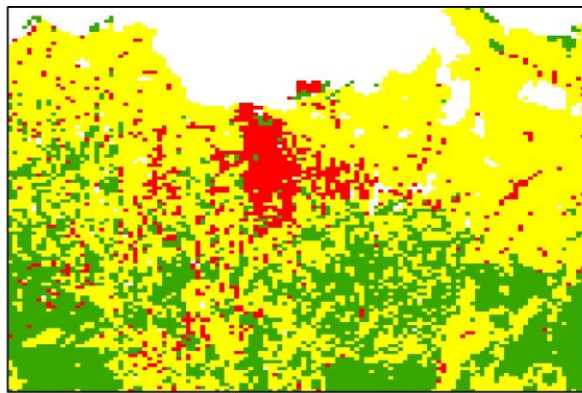


2000s

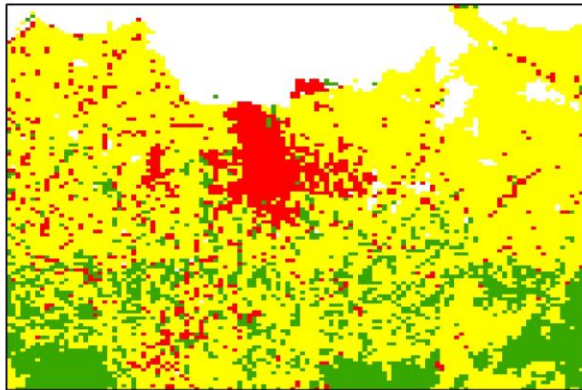




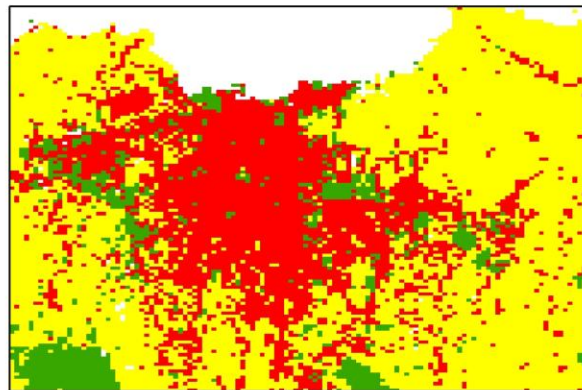
# Jakarta



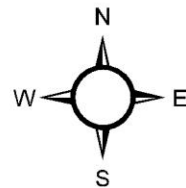
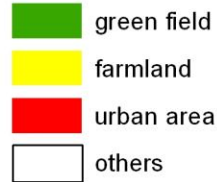
1930s



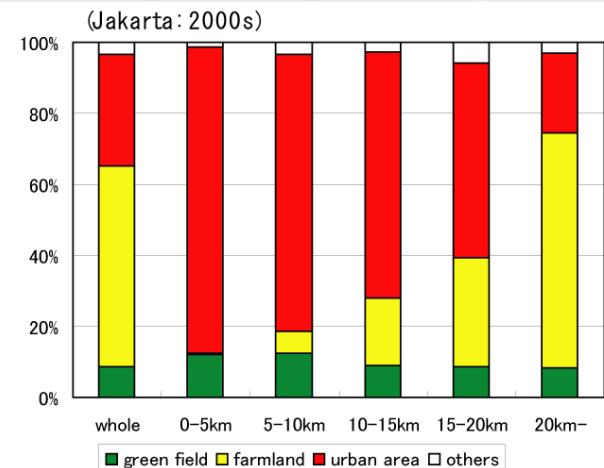
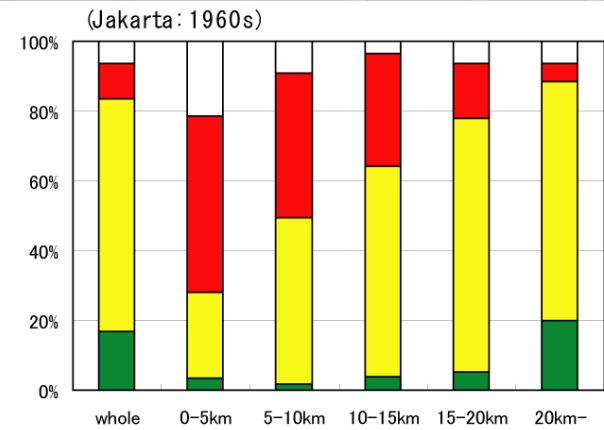
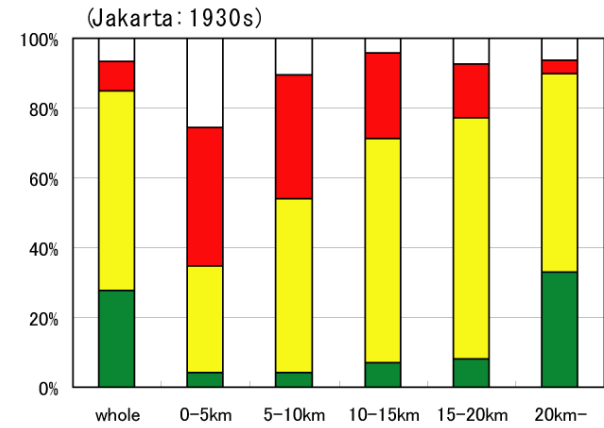
1960s



2000s



0 5 10 20 km



# Conclusion

This study could analyze and interpret the land use distribution patterns and changes in the past century in seven cities in Asia.

The method of this study is suitable for a comparative study that compares the past and present, and overseas cities and cities in Japan.

A priority for the future is to use the land use data for simulation models on the changes of subsurface heat, water and material environments.