



Institute of Remote Sensing and Digital Earth
Chinese Academy of Sciences

The 2nd Huangshan Dialogue on UNESCO Sites and Sustainable Development

空间观武夷：独特地貌景观与岩茶生态系统研究 **Unique Landscape and Eco-system of Rock** **Tea in the Wuyi Mountain World Heritage Site** **Mapping from Space**

Fu Bihong
fubh@radi.ac.cn

Kashgar Research Center, RADI



Outline

- 1. Introduction of the Mt. Wuyi Heritage**
- 2. Geologic and Geomorphologic Features**
- 3. The Wuyi Rock Tea**
- 4. Challenges and Opportunities**

1. Introduction of the Mt. Wuyi Heritage



World Mixed Cultural and Natural Heritage: Mount Wuyi

Chinese name: Wu Yi Shan

English name: Mount Wuyi

Code: 200-022

Based on the standards N(III)(IV) and C(III)(VI) for selecting natural and cultural heritage, Mount Wuyi was listed on the World Heritage List in **1999**. The property was designated as a UNESCO (MAB) Biosphere Reserve in 1987, giving it additional international and national protection status.

Mount Wuyi is **the most outstanding area for biodiversity conservation** in SE China and a refuge for a large number of ancient, relict species. The serene beauty of the dramatic gorges of the Nine Bend River, with its numerous temples and monasteries, many now in ruins, provided the setting for the development and spread of neo-Confucianism, which has been influential in the cultures of East Asia since the 11th century. In the 1st century B.C. a large administrative capital was built at nearby Chengcun by the Han dynasty rulers. Its massive walls enclose an archaeological site of great significance.

Covering an area of 999.75 km², the Wuyi Mountain is a national 5A scenic area, famous for green water and red mountains and known as the "most wonderful mountain in southeast China".



**The diversity of the Subtropical Forest
& the South Chinese Rainforest.**

The dramatic gorges of Nine-Bend River &
smooth rock cliffs with clear, deep water

**Biodiversity
Conservation
Zone**

**Nine-Bend River
Eco-Conservation
Zone**

**Natural & Cultural
Scenic Protection
Zone**

Wuyishan City 27°45'N

27°35'N

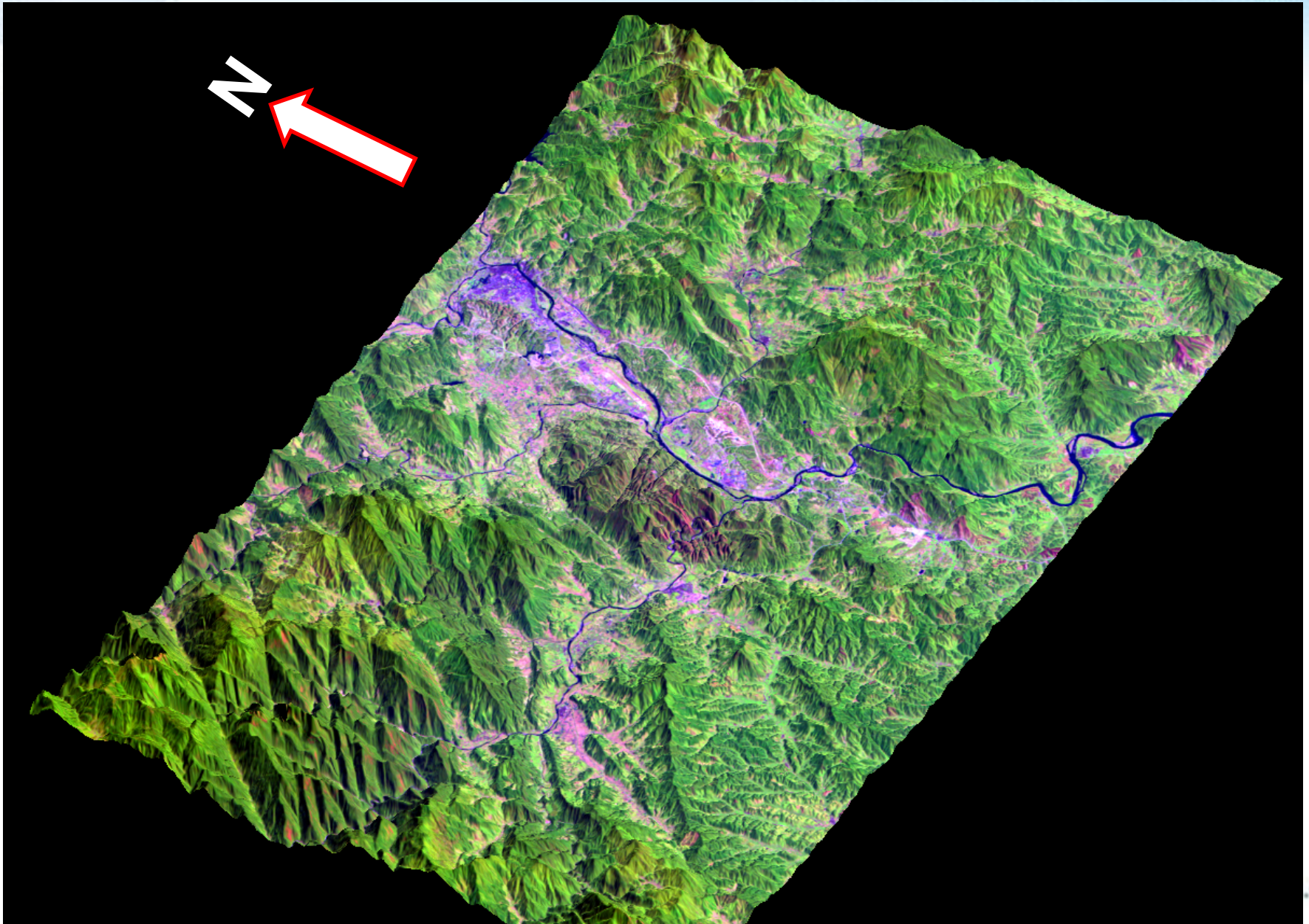
117°30'E

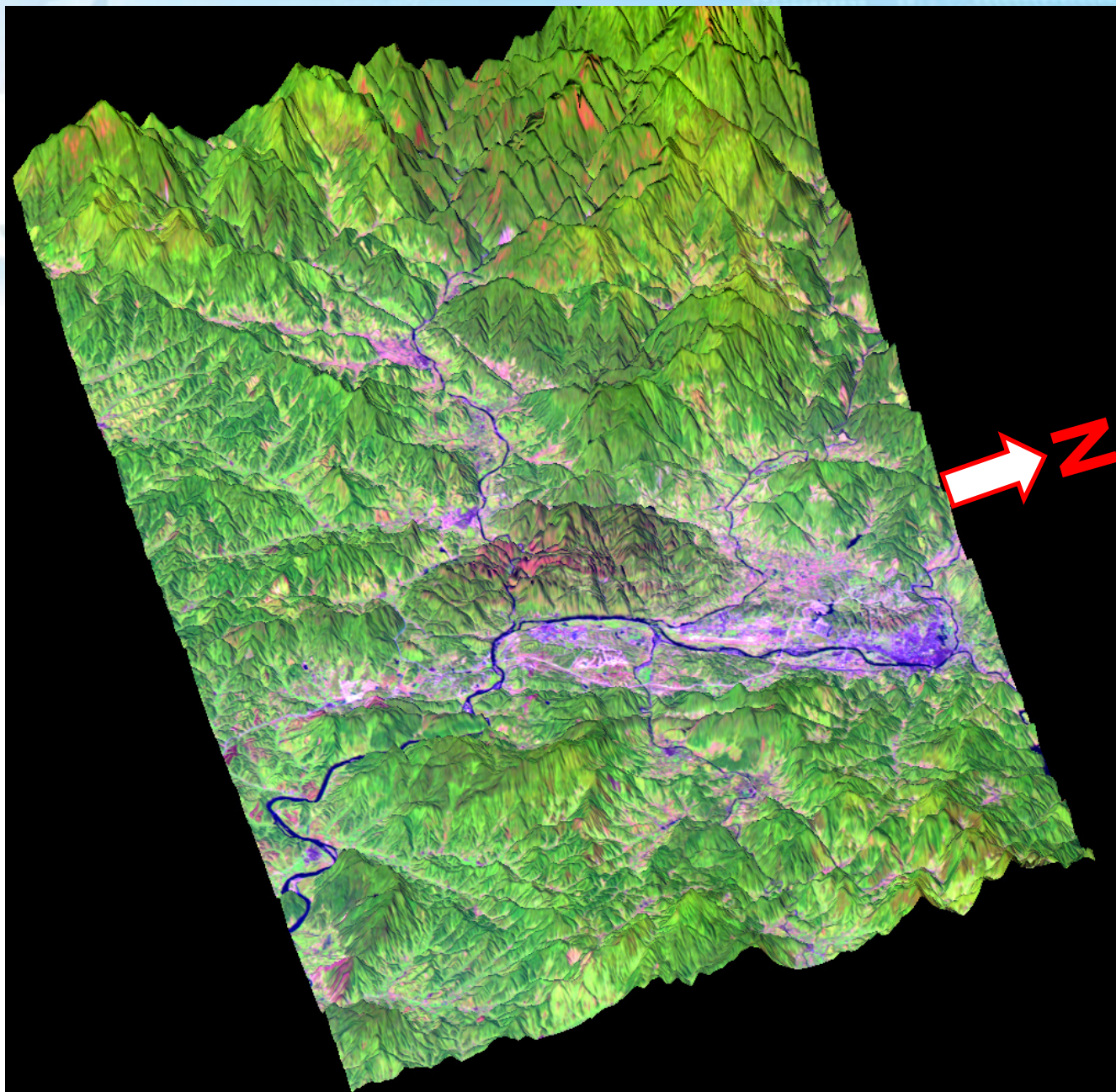
117°45'E

118°00'E

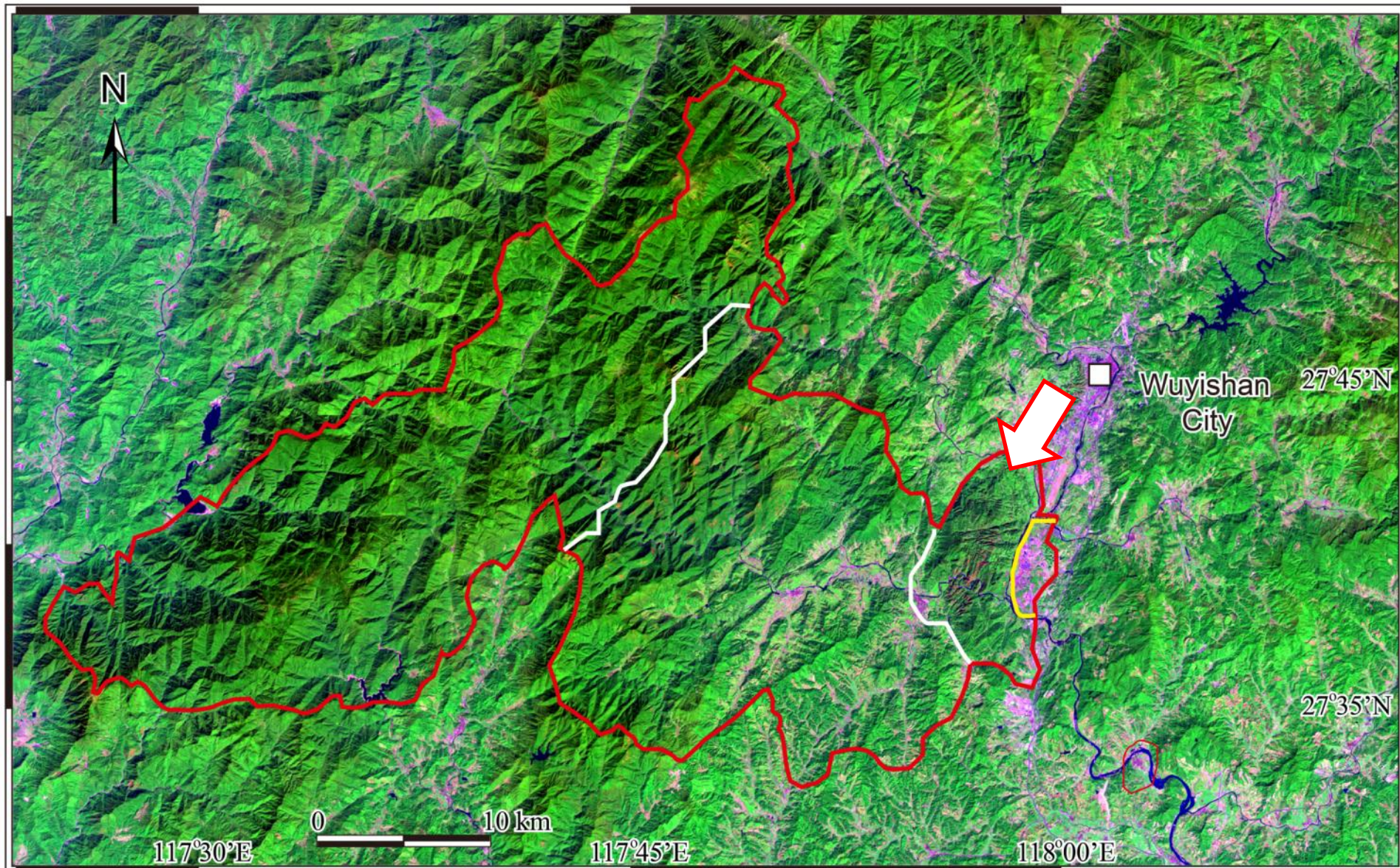
0 10 km

3D perspective-view image





2. Geologic and Geomorphologic Features



Typical Danxia Landform



Mount Wuyi has typical Danxia landforms and natural sceneries

Mount Wuyi's Danxia landform developed mainly between **the Jurassic Period and the Tertiary Period in the red horizontal or slightly declining strata**. After being weathered and eroded for countless years, the red sandstones formed upstanding peaks and steep rock formations, creating the beautiful natural landscapes of Mount Wuyi. Different from other natural landscapes, the landscapes of Mount Wuyi are fantastic, elegant, deep, quiet, delicate and exquisite. The key sceneries include the “crystal-clear and jade-green” Jiuqu Stream, the 36 green upstanding peaks and the 99 rocks. The source of the Jiuqu Stream is in the Sanbao Mountain, where the clear water flows surrounding many mountain peaks, forming the beautiful twisted Jiuqu (Nine-Twist) Stream. The most renowned mountain peaks of Mount Wuyi and the mysterious Hanging Coffins on the cliffs are all located on the two sides of the Jiuqu Stream. Connected by the stream, the colorful and fascinating sceneries along the stream have formed an amazing painting which is the essence of Mount Wuyi's landscapes and one of the best landscapes in the world.

Legend

- Scenic Spot
- 🏨 Hotel
- 🚉 Railway
- 🛣 Highway
- 🌉 Bridge
- 🛣 Road
- ⋯ Trails
- 🏔 Peak & Rock
- 🌊 River



To the Site of Minyue Kingdom of the Han Dynasty

Meandering River System



3. The Wuyi Rock Tea

Wuyi Rock Tea is a kind of oolong tea from the Wuyi Mountains, Fujian Province. Yancha means rock tea. It got its name because the plant grows in crack of rocks in Wuyi Mountains.

Wuyi Rock Tea enjoys a long history. Being one of the top tea in China, it is also the forefather of Oolong tea. It played an important role in the tea development in China. Wuyi Rock Tea, with its "special rock charm and fragrance" is well-known at home and abroad. The most famous is the Big Robe Tea for it is the King of Tea.

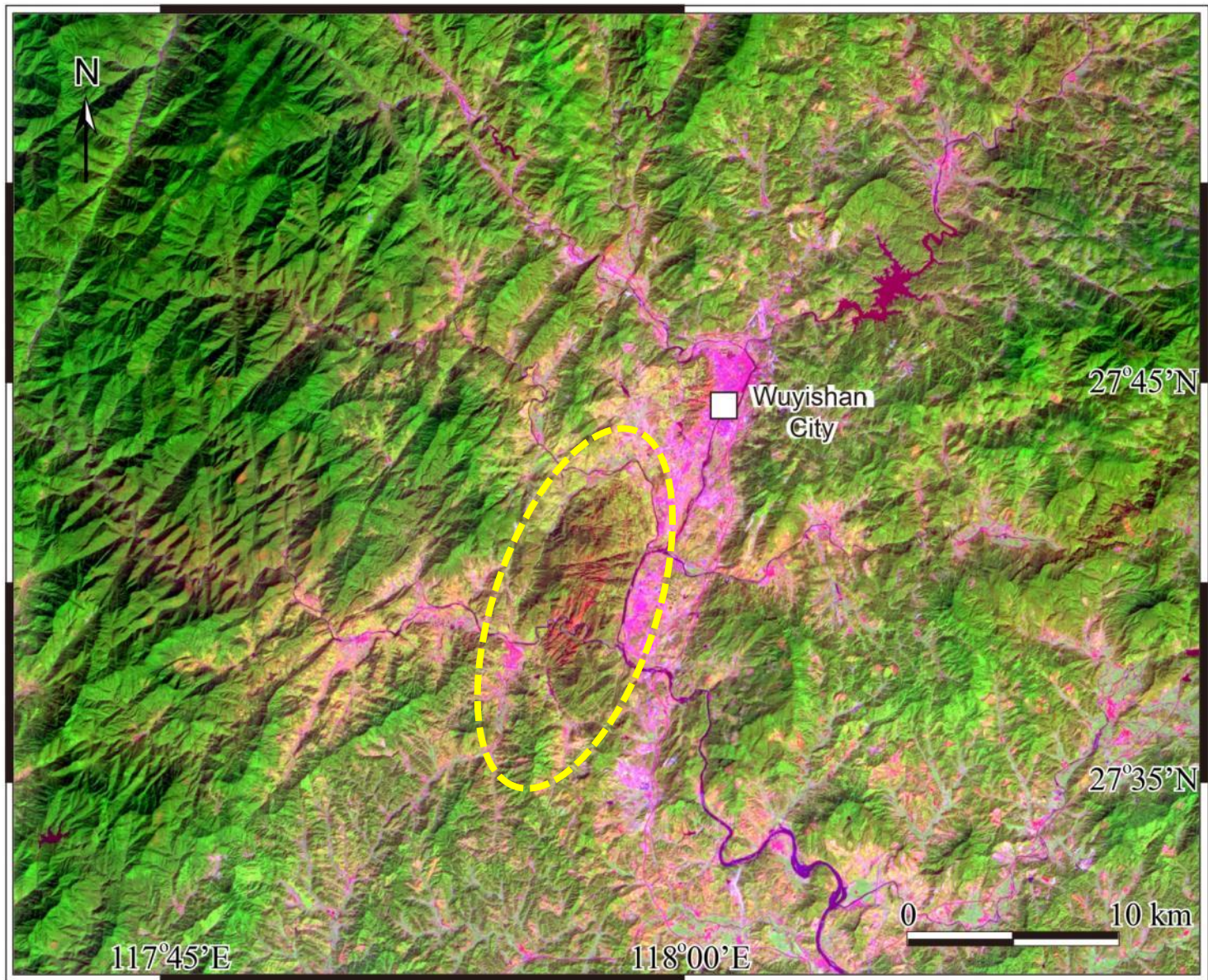
The Wuyi Rock Tea is especially noted for its high quality, **due to its natural environment of green mountains and clear waters, as well as its unique techniques.** Therefore when you drink the tea, you'll feel an everlasting fragrance in your mouth. The "rock charm" of the tea has always been a delight and a desire.

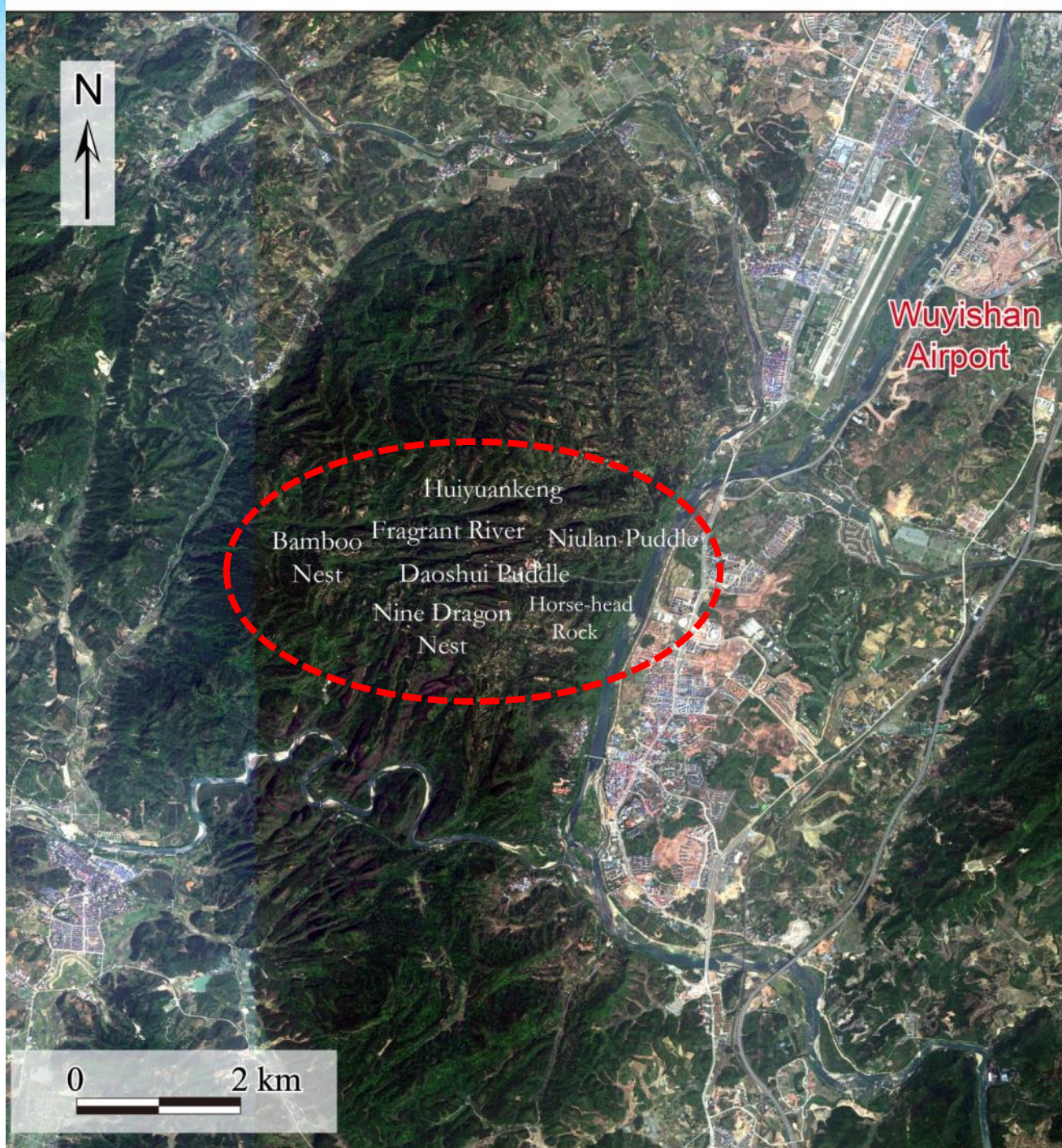
The main component of Wuyi Tea is middle-sized or small-sized leaves and tea made of these leaves is called Wuyi rock-essence tea, which is the earliest Oolong Tea and the treasure of Oolong Tea. It grows in the area governed by Wuyishan City.

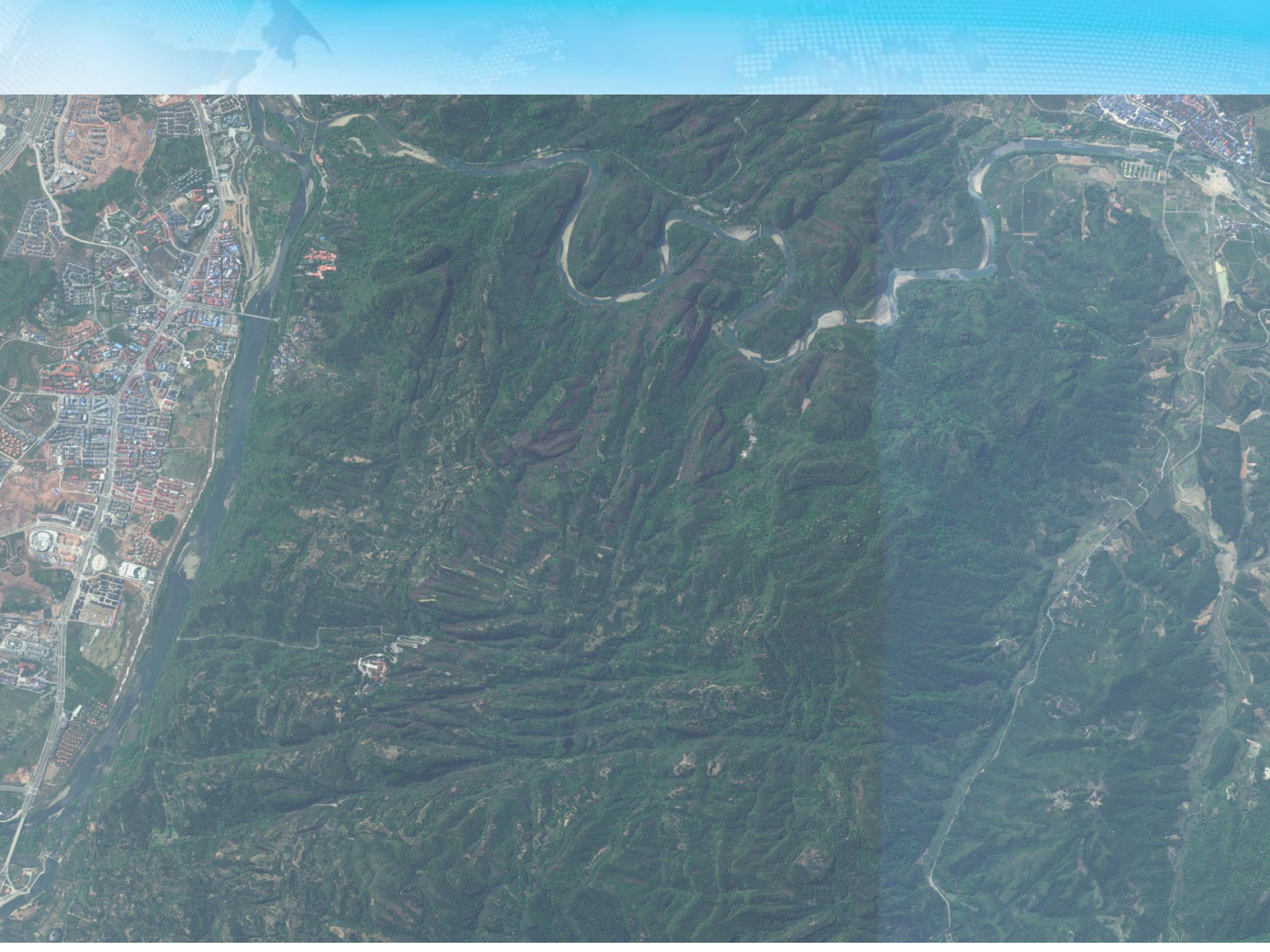




Mount Wuyi has typical Danxia landforms and natural sceneries





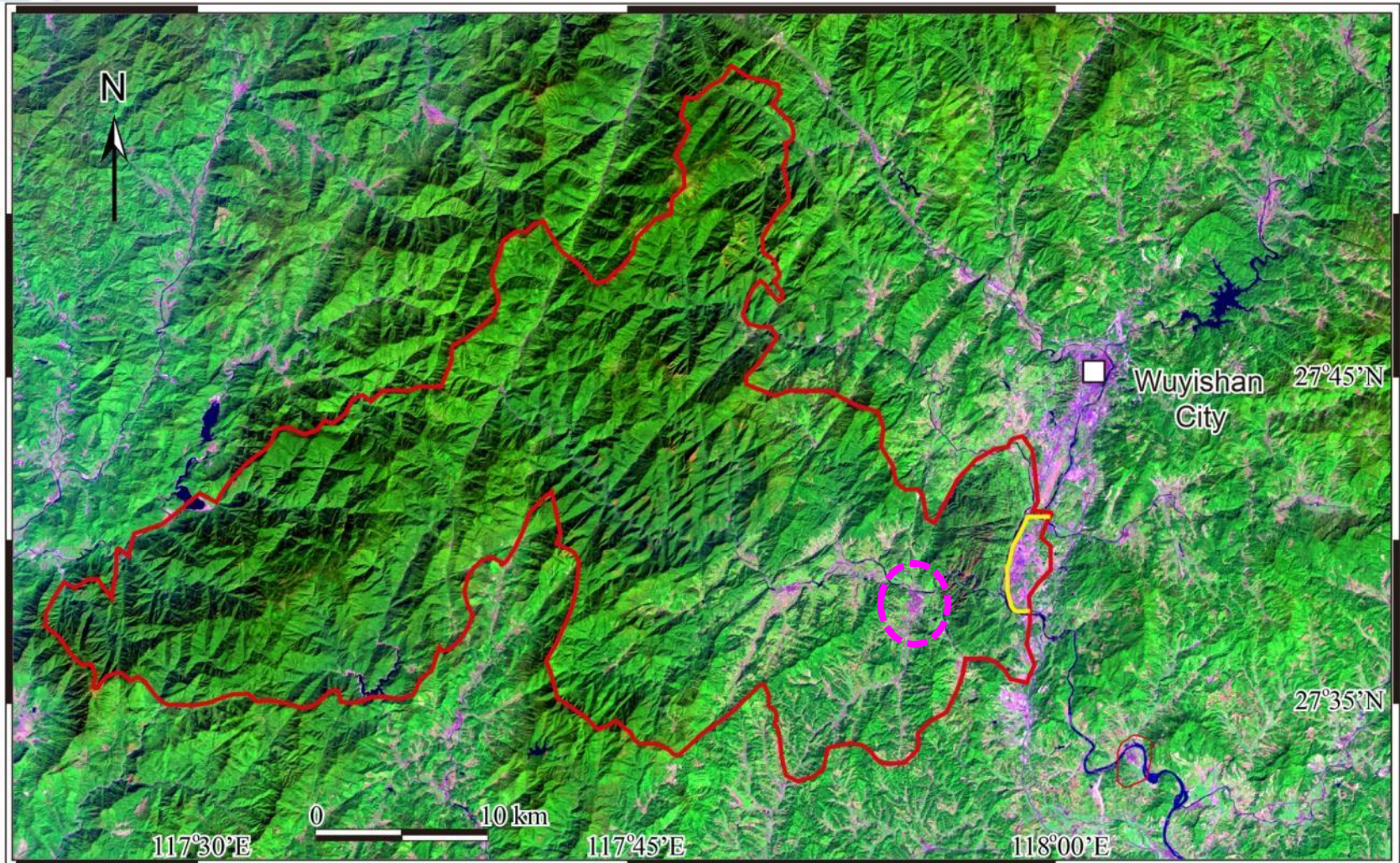






4. Challenges and Opportunities

Climate Change and Human Activities



High-resolution Image

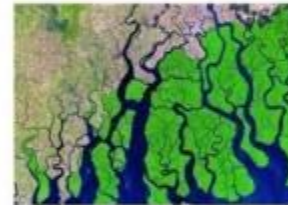


Future management priorities include:

- (1) reduction of the impacts from domestic sewage and solid waste on the water quality of the Nine-Bend River;
- (2) improved forest fire management taking advantage of GIS technology, improving fire control facilities and training professional staff;
- (3) reduction of the weathering of rock inscriptions; and measures to achieve sustainable development of the tea industry.



Thanks!



**Institute of Remote Sensing and Digital Earth
Chinese Academy of Sciences**

Add: No.9 Dengzhuang South Road, Haidian District, Beijing 100094, China

Tel: 86-10-82178008 Fax: 86-10-82178009

E-mail: office@radi.ac.cn

Web: www.radi.cas.cn