

(For JSPS Fellow)

Form B-5

Date (日付)

09/12/2013

(Date/Month/Year: 日/月/年)

Activity Report -Science Dialogue Program-

(サイエンス・ダイアログ事業 実施報告書)

- Fellow's name (講師氏名): LIU Wen (ID No. P 13050)

- Participating school (学校名): Tsuru High School

- Date (実施日時): 06/12/2013 (Date/Month/Year: 日/月/年)

- Lecture title (講演題目): (in English) Remote Sensing

(in Japanese) リモートセンシング

- Lecture summary (講演概要): Please summary your lecture 200-500 words.

The concept of my presentation is giving the students a brief understanding of remote sensing, which is not a familiar field. The presentation was divided into three parts, personal introduction, basic course and advanced course.

During the personal introduction, I added my path from the birth to now in Google earth. By showing those, I hope the students could understand the importance of the geographic information. In the basic course, I explained the fundamentals of remote sensing. Optical and radar, two common types of sensors were introduced by comparing their pros and cons. Then I summarized the advantages of this technology, and showing several applications in the different fields.

A demonstration was carried out using the free software *Multispec* during the advanced course. Three simplest analysis methods were applied to a Landsat satellite image that covers Yamanashi Province. By comparing the images from the different bands and resolutions, the students could have a better comprehension of the characteristics of optical images. Finally, the ratio of old people in each municipality of Yamanashi Province according to the 2012 Census data was displayed by the icon size in Google earth. This performance could help them finding the relationship between the ratio and the geographic conditions via a Geographic Information System (GIS). After the lecture, the students showed high interest in satellite images and Google earth.

- Language used (使用言語): English and Japanese

- Lecture format (講演形式):

- ◆Lecture time (講演時間) 90 min (分), Q&A time (質疑応答時間) 10 min (分)
- ◆Lecture style (ex.: used projector, conducted experiments)
(講演方法 (例: プロジェクター使用による講演、実験・実習の有無など))
Power Point presentation, Google earth and Multispec
- ◆Interpretation (ex.: assistance by accompanied person, provided Japanese explanation by yourself) (通訳 (例: 同行者によるサポート、講師本人による日本語説明))
Provided by myself
- ◆Name and title of accompanied person (同行者 職・氏名)
- ◆Other note worthy information (その他特筆すべき事項):
Nothing

- Impressions and opinions from accompanied person (同行者の方から、本事業に対する意見・感想等がありましたら、お願いいたします。):