Introduction to Group 7

How Can Space Technology Contribute to Improving the Accuracy of Prediction for Natural Disasters?

Moderator: Quentin Verspieren, The University of Tokyo

November 30, 2019
the 7th UNISEC Global Meeting
Personal introduction – Quentin Verspieren

- PhD Candidate, Graduate School of Public Policy
- Researcher, Intelligent Space Systems Laboratory
- Consultant for government, NGOs and private sector

Expertise: Space policy in developing countries; Space Traffic Management & Space Situational Awareness; Small satellites (astrodynamics); Space security, military uses of space
Consequences of disasters in Asia-Pacific

<table>
<thead>
<tr>
<th>Disaster type</th>
<th>Lives lost</th>
<th>People affected (millions)</th>
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</thead>
<tbody>
<tr>
<td>Earthquakes and Tsunamis</td>
<td>199,418</td>
<td>74</td>
</tr>
<tr>
<td>Storms</td>
<td>166,762</td>
<td>321</td>
</tr>
<tr>
<td>Floods</td>
<td>43,800</td>
<td>771</td>
</tr>
<tr>
<td>Others</td>
<td>73,772</td>
<td>199</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>483,752</strong></td>
<td><strong>1,366</strong></td>
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Direct economic damages worth **US$523 billions**!

*Source: UNESCAP Disaster Report 2015*
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Experts for natural disaster prediction such as drought, flood, and earthquake are invited to make a short presentation on the mechanism of prediction and possible ways to improve the accuracy for mitigation of the disasters. Also, experts of micro/nano satellites and companies that provide satellite data (SAR and optical) are invited to explain what they can provide to tackle mitigation of natural disasters.
Group discussion schedule

- Self introduction

- Experts’ presentations on natural disaster prediction
  - Yohei Sawada: Drought prediction
  - Kei Yoshimura: Flood prediction
  - Masahi Kamogawa: Earthquake prediction

- Inputs from companies – How can their technology help to mitigate natural disasters?
  - Shiori Kimura, Synspective
  - Alice Pellegrino, Canon Electronic, Inc.

- Inputs from small satellite expert
  - Shinichi Nakasuka