Realization of the spectral irradiance Scale in the UV range

Report

Regular Reporting on Subproject Progress
Reporting period: 1st Semester 2018
Report No: 6

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Abbreviations

INTI: Instituto Nacional de Tecnología Industrial
LES: Laboratorio de Energía Solar
LATU: Laboratorio Tecnológico del Uruguay
CENAM: Centro Nacional de Metrología
IBMÉTRO: Instituto Boliviano de Metrología
INMETRO: Instituto Nacional de Metrologia, Qualidade e Tecnologia
INACAL: Instituto Nacional de Calidad
PTB: Physikalisch-Technische Bundesanstalt
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1. INTRODUCTION

In Latin America the current situation in UV radiation measurements is dissimilar. Only Argentina, Brasil and Mexico have Calibration and Measurement Capabilities (CMCs) in Photometry and Radiometry in the appendix C of the BIPM. Countries such as Peru, Bolivia, Uruguay and Argentina need to develop measurements in photometry and radiometry for the development of new and innovative services in the field of biodiversity and climate protection.

The main objective of this project is acquiring knowledge and expertise, in order to achieve CMC’s in UV radiometry in the region. In Argentina, for example, it will facilitate the possibility to transfer the optical power scale from the cryogenic radiometer to spectral irradiance detectors, obtaining this way the traceability chain to national standards in radiometry.

In this projects are involved the following institutions:

INTI (Argentina)
LES (Uruguay)
LATU (Uruguay)
IBMETRO (Bolivia)
INMETRO (Brasil)
CENAM (Mexico)
INACAL (Peru)
PTB (Germany)

2. PERFORMED ACTIVITIES

1) It was carried out a survey between the members about the necessity of modifications in the action plan (contents and dates of future steps).

2) Each member continued with the equipment characterization, waiting for the next activities.

3. IMPLEMENTATION PROGRESS

INTI, as the coordinator of the project, committed to buy a new equipment. The purchase process of our new spectroradiometer of high quality is almost finished. It will arrive in the following months. As soon as it does, we will proceed to characterize and calibrate it using our standards provided by PTB, as well as all the knowledge acquired in the workshop.

4. ADJUSTMENT REQUIRED

Due to the delay in the equipment purchase (new spectroradiometer for INTI, for example) action plan dates for the next activities will be reconsidered in a virtual meeting.
5. NEXT STEPS

Table 1:

<table>
<thead>
<tr>
<th>What?</th>
<th>Who?</th>
<th>When?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual meeting</td>
<td>All participants.</td>
<td>July, 2018.</td>
</tr>
<tr>
<td>FEL standard lamps and solar spectrometers intercomparison at INTI.</td>
<td>Members of INTI, INMETRO and CENAM (and LATU?). PTB experts.</td>
<td>2018?</td>
</tr>
<tr>
<td>Training for INACAL, LATU, IBMETRO and Bolivian university members by INTI experts, at INTI.</td>
<td>Members of INTI, INACAL, LATU and IBMETRO. Two Bolivian university members</td>
<td>2018?</td>
</tr>
</tbody>
</table>

ANNEX

The action plan of the subproject is attached. It did not suffer any change.