

UV, temperature and humidity

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Needs and Approaches

- How much UV-stress should be expected under operation ?
 - ⇒ Different typical climatic locations
 - ⇒ Different typical installations (free, roof-top, BIPV)
 - ⇒ Different components (back-sheets, encapsulants, glazing)

- Are there degradation processes caused by combined UV and humidity?
 - ⇒ Collect info about observed failure mechanisms
 - ⇒ Find appropriate models for Accelerated Life Testing (ALT) procedures



Needs and Approaches

❑ What suitable artificial UV radiation sources are available for ALT?

⇒ Collect info about available equipment

⇒ Set-up procedure for the evaluation of spectral irradiation

⇒ Establish a procedure for qualification of the equipment

❑ Proposal for Accelerated Life Testing procedure

⇒ For testing components, model modules (when proven to be appropriate), complete modules

⇒ Combination humidity/UV or sequential testing ?