



## OUR BENCHMARK: THE HUMAN BEING

Developing, simulating, testing and analyzing for visions of the future.  
From the first idea to the finished product.

imat-uve, an expert in the field of engineering development, is a service provider with many years of experience in design, development, design engineering and testing of materials, parts, components and systems. We support our customers along the process chain, from the first idea to the finished product or component part. As provider of all kinds of environmental simulations and outdoor weathering, constant and alternating climatic tests, exposure to light, ageing and endurance tests, imat-uve provides a wide test range for material, components and whole vehicles. imat-uve has been continually accredited according to ISO 17025 since 1994, and is a member of the GUS - Gesellschaft für Umweltsimulation (Association for Environmental Simulation). Intensive cooperation in various standardization groups and committees keeps our know-how up to date and enables us to further develop our testing methods.

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Further information can be found  
at [www.imat-uve.com](http://www.imat-uve.com)



## OUTDOOR WEATHERING

Combined dry-hot and humid-hot weathering  
in the Kalahari desert, South Africa



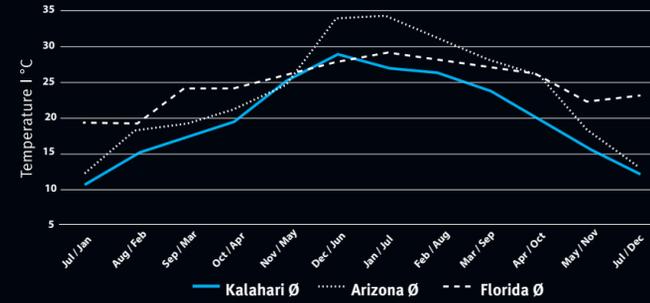


## BENEFITS OF THE KALAHARI WEATHERING

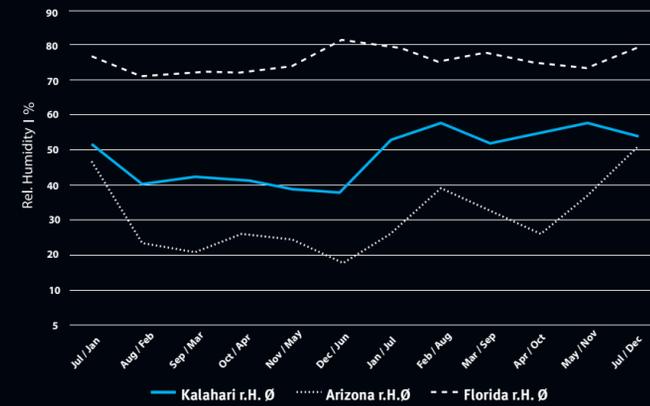
Weathering in the South African Kalahari desert offers many benefits. Ideal conditions of location and climate help to simplify and shorten processes, saving costs and time.

- High temperature range allows accelerated stress on components and material.
- High annual irradiation dose causes heavy stress on components and material.
- Material and component tests as well as whole vehicle tests at one location lead to the same damage and the same evaluation.
- There is no danger to the samples due to hurricanes or tornadoes.
- There is a higher humidity exchange compared to known reference climates.
- There is no time difference to Europe, travel for sample examination is easy.

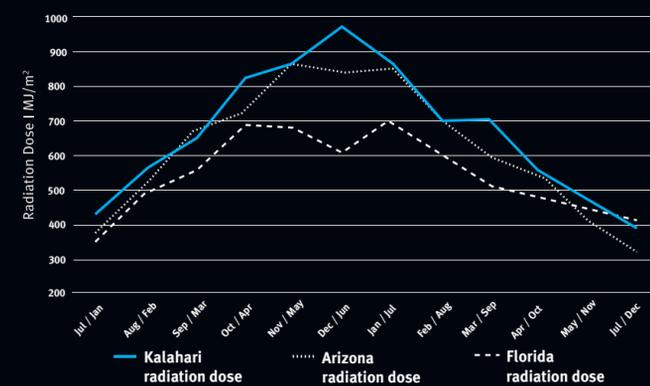
## COMPARISON OF METEOROLOGICAL DATA TO ARIZONA AND FLORIDA



Average temperatures in the Kalahari are slightly lower, but much wider ranges of temperature.



Average humidity is in between the conditions of Florida and Arizona. Maximum humidity similar to Arizona.



Higher radiation dose than in Florida and Arizona.

## LOCATION OF THE TEST AREA



South Africa  
→ Kalahari

- Near to Upington airport
- Close to Oranje River



More extreme climatic features  
= accelerated damages

- Higher radiation dose along with higher humidity
- Wide temperature range during run of the day

