

PV Module Reliability Workshop – Discussion Notes

Friday, February 27, 2015

Solar Resource Data and Models Discussion

- Q: If ground data is not available to compare with the satellite data, can satellite data identify errors?
 - We need the ground data to check quantitatively, but can look for other patterns in the satellite data that could identify errors.
 - The checking process (between ground and satellite data) should be automated.
 - Can use a ground based data network like Enphase.
 - There can be problems with shading, soiling, and snow.
- It's best to have two independent engineers produce an energy production estimate for the same project and then have them resolve the differences. For large projects, it is well worth the added cost.
- There may be more error for estimating performance on tracked surfaces.
- The albedo can be the biggest source of error. Understanding the ground reflection can be especially problematic within the many rows of an array.