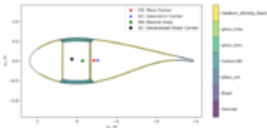


NEWS RELEASE

May 12, 2021

NREL Projects Leverage VABS Software for Complex Wind Turbine Rotor Blade Simulation

Project explores advantages of large-scale rotor with innovative, highly flexible blades



2D blade cross section alignment with center. (Source: NREL)

West Lafayette, Indiana (USA) - [AnalySwift, LLC](#), a provider of efficient high-fidelity modeling software for composites and other advanced materials, announced today the U.S. Department of Energy's [National Renewable Energy Laboratory \(NREL\)](#) is using its VABS blade simulation tool in two recent projects. The software is used to generate accurate blade properties, a key piece in the overall success of renewable energy projects.

From a distance, the typical observer may have little appreciation for the complexity that comprises a modern wind turbine blade. Each blade can be more than 100 meters long, with dozens of separate layers of advanced composite materials. Increased complexity, however, does not come without its challenges. For instance, representing these blades in a complete model would require billions of degrees of freedom to accurately capture all the engineering properties, overwhelming available computing resources.