In the theory of automorphic forms, lifts play a very important role. They map forms of different types onto other forms. Thus they help in understanding the considered forms and very often explicit examples can be constructed. I will present a regularized twisted theta lift of vector valued harmonic weak Maass forms with respect to the Weil representation of a certain lattice. In this way I construct automorphic forms whose singularities on the hyperbolic space can be explicitly specified. I will point out fundamental differences to the automorphic Green functions which were constructed by Jan Hendrik Bruinier and Ken Ono in a similar setting. Furthermore I relate the introduced regularized theta lift to the famous Shimura lift.