Abstract: We produce congruences between certain Saito-Kurokawa forms and certain stable holomorphic automorphic forms on GSp(4). The idea is to descend to a compact inner form G by theta correspondence, apply an analogue of Ribet's level-raising result for G, and then transfer back to GSp(4) using the stable trace formula. We then discuss an application to the Bloch-Kato conjecture for classical modular forms.