Paleointensities will be presented from about 50 lava flows from the island of Maui (Hawaii). All lava flows have been C-14 dated previously, and cover mainly the last 15,000 years. For most flows also mean directions have already been determined thus allowing to ultimately construct a full vector secular variation curve. Curie temperatures and hysteresis parameters were measured to characterize composition and magnetic grain sizes. Accordingly, most rocks contain two type of magnetic minerals in different proportions; low-Ti titanomagnetite with high Curie temperature, and high-Ti titanomagnetite with low Curie temperature. Upon heating the Curie curves are often irreversible. Magnetic grain sizes are within the pseudo single domain range, probably because of the presence of single and multi domain particles. PI were obtained using the multi-specimen parallel differential pTRM method [Dekkers and Böhnel, EPSL, 248, 508-517, 2006], mostly at temperatures between 170 and 250 °C, when high-Ti titanomagnetite was dominant. In a few cases of more magnetite near composition higher temperatures could be used. For part of the sites the recently proposed domain-state correction [Fabian and Leonhardt, EPSL, 297, 84-94, 2010] was applied as well. Results from both protocols will be compared to estimate the effect of that correction for natural samples.