Searching for high energy electromagnetic transients with ADWO

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The Automatized Detector Weight Optimization (ADWO) method is optimal for searching non-triggered, short-duration transients in the data-set of the space-borne detectors (e.g. Fermi's Gamma-ray Burst Monitor). ADWO combines the data of all available detectors and energy channels, when the time of the given astrophysical event is known but it's direction is uncertain. The method is useful for electromagnetic (EM) counterpart searches: I will present the possible EM counterparts of gravitational wave (GW) transients GW150914 and LVT151012, as well as other searches. ADWO analysis of the Fermi's triggered and non-triggered short GRBs is also discussed.