

## IR SATELLITE ALERTS PROCESS (as of August12, 2017)

- IR Detections are clustered together based on overlapping footprints and scored for impact based on number of detections and time.
  - Only detections with a confidence >30.
    - MODIS – numerical scale from 0-100.
    - VIIRS – three classes mapped to 10, 90, 90 (Low, Nominal, High).
  - Recent IR Detections have a higher score than older ones.
    - 0-6 Hours: 1 X number of detections.
    - 6-12 Hours: ½ X number of detections.
    - 12-24 Hours: ¼ X number of detections.
  - Multiple Sources (VIIRS + MODIS) have a higher score than single source detects.
    - Single Sources: ½ X score.
    - Dual Source: 1 X score.
    - Triple Source: 2 X score.
- Alerts are tagged as 'Emerging Fires'
  - if IRWIN FireDiscoveryDate is within 2 days.
  - IRWIN Fire is within approx 800m at 23N, 600m at 45M.
  - Event Score is increased by
    - 2 X score if Wildcad < 24 hours.
    - 1.5 X score if Wildcad <36 hours.
- Alerts are tagged as 'Extended Attack' if
  - IRWIN FireDiscoveryDate is between 2 and 21 days.
  - IRWIN Fire is within approx 5km at 23N, 4km at 45M.
  - Event Score is increased by
    - 2 X score if ICS-209 Sitrep has been submitted.

NOTE: MODIS/VIIRS data updates every 30 minutes in SA.