

BlueSky Canada Wildfire Smoke Dispersion Daily Run Schedule

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The operations shown here are repeated every day during the Canadian wildfire season.

Legend:

- H Fetch fire **hotspot** satellite data from NRCan & reconcile into SmartFire2 data stream
- G Fetch fire **ground-report** data from NRCan & reconcile into SmartFire2 data stream
- C Carry-over smoke from the previous BlueSky run.
- ➔ Get updated fire data from SmartFire2, then pre-process thru BlueSky to get **emissions**. Light tan means not used.
- The 5-day output range (2 past, 1 current, 3 future), repeating the same time profile and same daily emissions.
- ➔ Get weather initialization (NAM) valid at 00 and 18 UTC, and **run weather model** (WRF-ARW) on 224-processor cluster.
- The 60 hr range of weather forecast horizons available as input to BlueSky and its dispersion model (Hysplit).
- ➔ Convert weather model (WRF) output to the **format (ARL)** that BlueSky/Hysplit needs.
- ➔ **Run BlueSky/Hysplit** on 8-processor BlueSky server (average run time). Otherwise, single processor takes 2.5x run time.
- ⏏ Range of finish times for BlueSky/Hysplit, depending on the number of fires and amount of smoke.
- When BlueSky is **finished**, smoke forecasts posted into archive and on firesmoke.ca, available now to view or download.
- The 36 to 48 hr range of smoke forecast horizons that are posted.
- - - ➔ Dotted lines show how output from one computer run feeds into a different computer run.

