

Theme: Fire Info Sources

(See the Online Schedule for Week 2 for links)

A. Group Case Studies:

1. Move to your assigned group. Rearrange table to enable better interactions. Introduce yourself to your teammates.
2. Use the Fire Cases tab on the course web page to learn more about the case study fires this term:
 - Fort McMurray Fire, AB
 - Camp Fire (Paradise), California, USA
 - Quebec Fire Complex, QC
 - Marshall Fire, Colorado, USA
 - Palisades Fire, California, USA
 - Jasper Fire, AB
3. Decide among your team the ranking of which fires are of most interest to you for your capstone project later this term, and notify the instructors.
4. The instructors will then assign a capstone case study to each group.

B. FIRMS (nfb 2.1) Hint: “nfb” refers to the new ID numbers on the Fire Basics webpage for this course.

1. The instructor plays the 20-minute video on FIRMS instructions.
2. Briefly summarize the general limitations of FIRMS.
3. Briefly explain how the VIIRS satellite sensor detects active fires/hot-spots.

Next: for YOUR group’s case study, do the following:

4. Did FIRMS find evidence of a pyrocumulonimbus (fire-initiated/enhanced thunderstorm) for your case? Explain.
5. Were there previously burned areas (burn scars) near your fire that affected its spread? Explain.
6. For your case, zoom into your fire, and collect a series of images showing the movement of the fire front (the active burning line).

C. GWIS (nfb 2.2)

Using the Current Situation Viewer:

1. What fire-related products are available from GWIS?
2. Can it show past data for various fire weather indices? Explain.
3. Also, what can be displayed?

Using the Current Statistics Portal:

4. For Canada, how does the burnt area and number-of-fires this year compare to last year?

Using the Long Term Forecasts:

5. For 3 weeks into the future, what temperature and precipitation anomalies can we expect in southwest British Columbia? What confidence to you have in this forecast?

D. CIFFC (nfb 2.3)

1. What is CIFFC?
2. What do National Preparedness Levels (NPL) mean? (Hint: see link for “Learn More About the NPL”)
3. What is the current value of the NPL as of today for Canada?
4. As of today, how many days this year was Canada at NPL 5 ?
5. What is the most recent Preparedness Level for BC?
6. Copy and paste a copy of the current fire danger map into your lab work.

E. NIFC (nfb 2.4)

1. What is the current Preparedness Level for the USA, and what does it mean?
2. For their National Fire News, what types of weather factors (i.e., which weather variables) are most frequently discussed in their weather forecast?