

# **WEATHER SOURCES**

FSS 1-800-WXBRIEF

ASOS / METARS – KSNT, KMYL, KLLJ, KSMN

AOPA/NOAA – Satellite, Radar, Surface, Winds, etc.

NIFC - TFR's

Noaa Automated Surface:METAR/ RAWS (Remote Automated WX Station)

BLM/USFS – ROMAN Real time Observat`ion and Monitoring and Analysis Network

Web Cam's: Johnson Cr. Flying B, Stanley, McCall, Bogus Basin,

Commercial Operators: McCall Air, Arnold Aviation
I have handouts, or email me and I'll send you the links.

## **GFS Model**

Select Model Guidance, then GFS, then NAMER (for N. America), and finally 850mb, temp, MSLP, Precip. 850mb model shows precip for the previous 6 hours, (from the UTC time stamp at the top of the page), at ~ 5000 ft, the blue contour lines showing where freezing temps begin. The 850mb model shows the upper air ~ 18000 ft) shows where major systems will be. <a href="http://mag.ncep.noaa.gov/NCOMAGWEB/appcontroller">http://mag.ncep.noaa.gov/NCOMAGWEB/appcontroller</a>

**NWS Area Forecast Discussion** map page to validate your assessment of the GFS model,. <a href="http://www.wrh.noaa.gov/zoa/cwa.php">http://www.wrh.noaa.gov/zoa/cwa.php</a>

# **Short-range tools**

NCEP Short Range Forecast

http://www.hpc.ncep.noaa.gov/discussions/pmdspd.html

# **Lifted Index**

Lifted Index maps will predict areas of unstable air.

http://www.emc.ncep.noaa.gov/mmb/namsvrfcst/

Idaho Forecast Tables <a href="http://www.wrh.noaa.gov/boi/forecast.php">http://www.wrh.noaa.gov/boi/forecast.php</a>

**NOAA Graphical Forecast** 

http://www.weather.gov/mdl/synop/gridded/sectors/conusWeek.php?expandweek=ON#tabs

Fog Sat for Western US (also shows cloud cover at METAR reporting stations)
<a href="http://adds.aviationweather.gov/satellite/">http://adds.aviationweather.gov/satellite/</a> Choose "Western US" under second bullet

NavMonster: <a href="http://www.navmonster.com/">http://www.navmonster.com/</a> - Very friendly and easy to use. Presents WX along the route you designate, in plain English. Graphical Airmets/Sigmets/Prog Charts, NOTAM's, TFR's also airport directory's/ Goggle Earth maps, fuel, lodging.

Good visual tools, especially radar and satellite looping

NOAA ADDS Aviation Digital Data Service: <a href="http://adds.aviationweather.noaa.gov/">http://adds.aviationweather.noaa.gov/</a>

NOAA Std Briefing: <a href="http://aviationweather.gov/std\_brief/">http://aviationweather.gov/std\_brief/</a> (a subset of ADDS)

http://www.eldoradocountyweather.com/current/usradar.html (Vivid Graphics)

http://weather.msfc.nasa.gov/GOES/goeswestpacusir.html (Infared/Visible/Water Vapor)

http://www.wrh.noaa.gov/zoa/mwmap3.php?map=usa (Entire US Metar/TAF status)

Direct User Access Terminal (DUAT) service for pilots. – Two service providers, also offers flight planning software and on-line filing of flight plans. Provides immediate on-line access to FAA approved information

DUAT: <a href="https://www.duat.com/">https://www.duat.com/</a>

DUATS: <a href="http://www.duats.com/duats.cgi#weather">http://www.duats.com/duats.cgi#weather</a>

AOPA: <a href="http://www.aopa.org/members/wx/">http://www.aopa.org/members/wx/</a> Requires membership, links to DUAT(S) for filing

flight plan.

Aviation WX links by Lester: <a href="http://metsun1.met.sjsu.edu/~lester/faq.html">http://metsun1.met.sjsu.edu/~lester/faq.html</a> - Good FAQ's on

weather

Scott Dennstaedt's Aviation Weather Workshop: <a href="http://avwxworkshops.com/">http://avwxworkshops.com/</a> -

Charlie's Wx Site <a href="http://www.avweather.com/">http://www.avweather.com/</a>

TFR-s NOTE: Flight service Briefer has the most current info – websites may not be up to date.

NIFC – TFR's: <a href="http://airspace.nifc.gov/mapping/nifc/index.cfm">http://airspace.nifc.gov/mapping/nifc/index.cfm</a> (Can print section of Sectional

with TFR)

FAA - TFR: <a href="http://tfr.faa.gov/tfr\_map\_ims/html/index.html">http://tfr.faa.gov/tfr\_map\_ims/html/index.html</a>

# Web Cam's:

ID State: Map with web cam links:

http://511.idaho.gov/default.asp?display=cams&area=&textOnly=

Johnson Cr: <a href="http://www.ruralnetwork.net/%7Eyellowpinecm/">http://www.ruralnetwork.net/%7Eyellowpinecm/</a>

Flying B: <a href="http://www.flyingresortranches.com/">http://www.flyingresortranches.com/</a>

Stanley: <a href="http://www.sawtoothcamera.com/">http://www.sawtoothcamera.com/</a>

McCall: <a href="http://www.mccall.id.us/government/departments/airport/airport.html">http://www.mccall.id.us/government/departments/airport/airport.html</a>

Idaho Web Cams: http://www.northwestwebcams.com/idaho-web-cams.shtm - Also

Oregon/Wash/Mont

Smiley Cr.: http://birice.vaisala.com/photos/03778B5F\_06013F28\_cam1.jpg

Bogus Basin: <a href="http://www.bogusbasin.org/web-cameras/index.aspx">http://www.bogusbasin.org/web-cameras/index.aspx</a> (good view of Mtn's North

of BOI)

Brundage Mtn: <a href="http://www.brundage.com/the-mountain/live-web-cams/">http://www.brundage.com/the-mountain/live-web-cams/</a>

Teton Mtn-Driggs: <a href="http://www.tetoncam.com/">http://www.tetoncam.com/</a>

# /www.wrh.noaa.gov/mso/newrgl.php Regonal Stations

**METAR** 

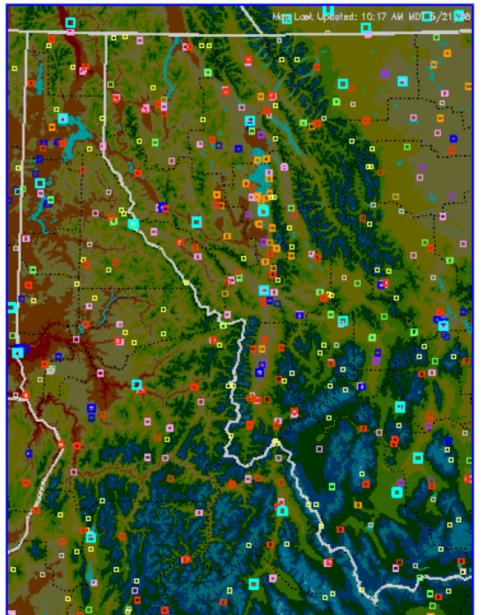
(click on a site for latest

**RAWS** 

SNOTEL HANDAR MISC

observations)

APRS/CWOP COOP AGRIMET HADS



Local Outlook **NOAAWatch** 

**Current Hazards** 

Warnings

**Current Conditions** Local Regional Satellite Imagery Radar Imagery Cameras Reports/Summaries Rivers & Lakes AHPS

Drought Info - MT

### Forecasts

**Activity Planner** Forecast Discussion **Current Montana Text Bulletins** Montana and Idaho Fire Weather Hydrology Avalanche Aviation Audio

### Climate

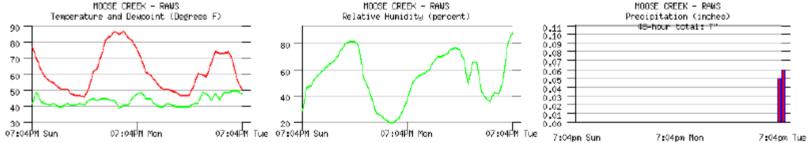
Local National More...

### Weather Safety

Preparedness StormReady Liahtnina

# Moose Cr Raws Data

Show 7 Days For Information Regarding the Accuracy of This Data: MesoWest Disclaimer



### Weather Conditions for:

MOOSE CREEK, ID (MOOI1)

Elev: 2460 ft; Latitude: 46.1283; Longitude: -114.9217

Current time: Tue, 20 May 20:01 pm (PDT) Most Recent Observation: Tue, 20 May 7:04 pm (PDT)

Time	Temp.	Dew	Relative	Wind	Wind	Fuel	Solar	Solar	Precip	Precip	Precip	Precip	Quality
		Point	Humidity	Direction	Speed	Temp	Radiation	Pct	Accumulated	1 hour	6 hour	24 hour	Control
(PDT)	(f)	(f)	(%)		(mph)	(f)	(W/m*m)	of psbl	(inches)	(inches)	(inches)	(inches)	
20 May 7:04 pm	51	48	89	NE	2G18	51	8	2%	10.65	0.06	0.11	0.11	OK
20 May 6:04 pm	56	50	80	NE	1G16	55	12	2%	10.59	0.05	0.05	0.05	OK
20 May 5:04 pm	68	50	52	S	5G18	66	257	28%	10.54				OK
20 May 4:04 pm	74	49	42	SSW	5 <b>G22</b>	76	595	53%	10.54				OK
20 May 3:04 pm	73	49	43	S	7G16	76	468	37%	10.54				OK
20 May 2:04 pm	73	44	36	N	5G16	75	654	48%	10.54				OK
20 May 1:04 pm	74	48	39	N	G06	72	459	33%	10.54				OK
20 May 12:04 pm	67	44	44	N	1G06	70	419	31%	10.54				OK
20 May 11:04 am	59	48	66	SE	G05	60	109	9%	10.54				OK
20 May 10:04 am	60	49	66	NNE	1G08	60	115	11%	10.54				OK
20 May 9:04 am	61	42	49	N	3G05	66	269	31%	10.54				OK
20 May 8:04 am	53	42	67	N	G06	51	107	17%	10.54				OK
20 May 7:04 am	47	40	76	NNE	2G06	46	37	10%	10.54				OK
20 May 6:04 am	47	40	77	NNE	G05	44	14	14%	10.54				OK
20 May 5:04 am	47	40	76	NE	G04	44	0		10.54				OK

# Johnson Creek Airport WebCam

Please note: This site is provided as a resource and for the viewing pleasure of our customers. It should not be used as the sole source of information when planning a flight into the Johnson Creek Airport.

Please verify the date and time stamp at the top of the photo.

Thank You RNS & MTE



# NOTAMs - N/A at this time.

McCall Airport Webcam (View from North ramp looking South/Southwest)











# **Mountain / Canyon Weather**

# Lift

- Orographic-Mechanical Lift as air flows over Mtns.
- Thermal Lift

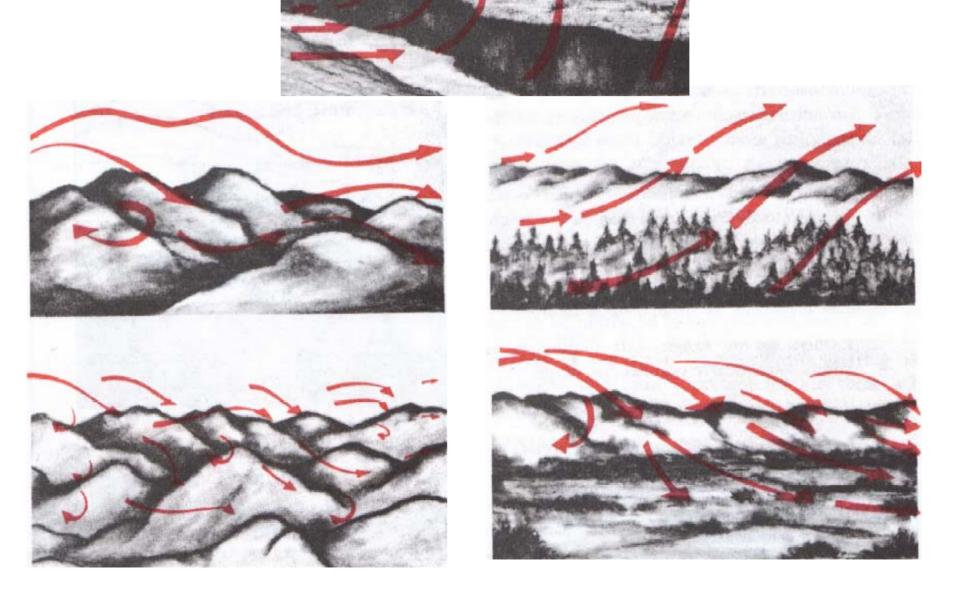
**Canyon Meteorology - Winds** 

- Diurnal Effect Flows Up in Day / Down in Evening (some exceptions)
- Convergence Effect areas of confluence
- Venturi Effect
- Turbulence

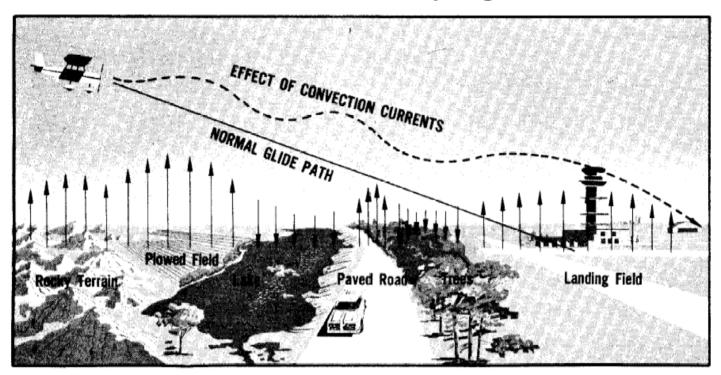
Fog (morning canyon fog common after a storm)

**Smoke** 

# Orographic Lift over Mountains/Canyons



# Thermal Lift over varying terrain





# Thermal and Orographic Collide

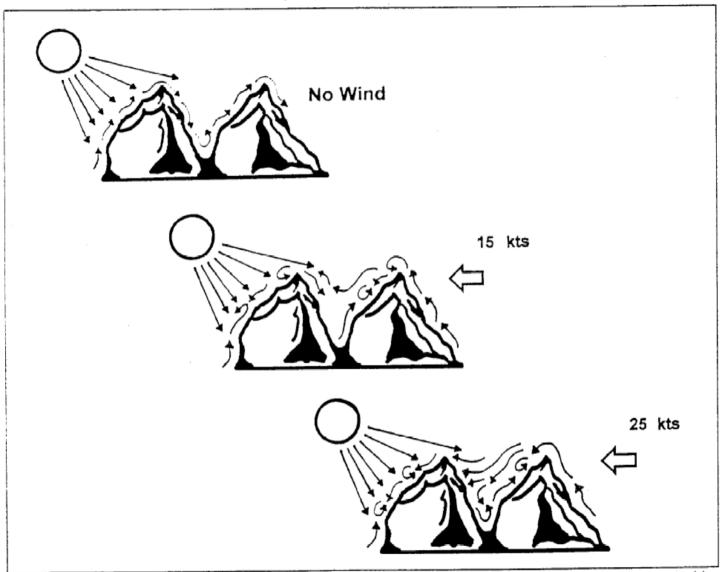
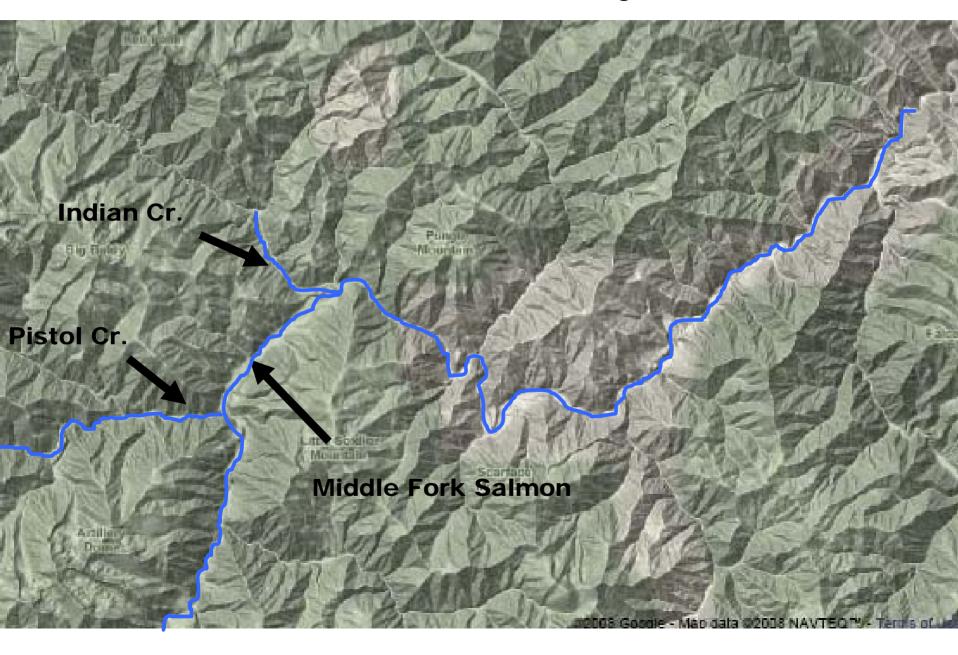
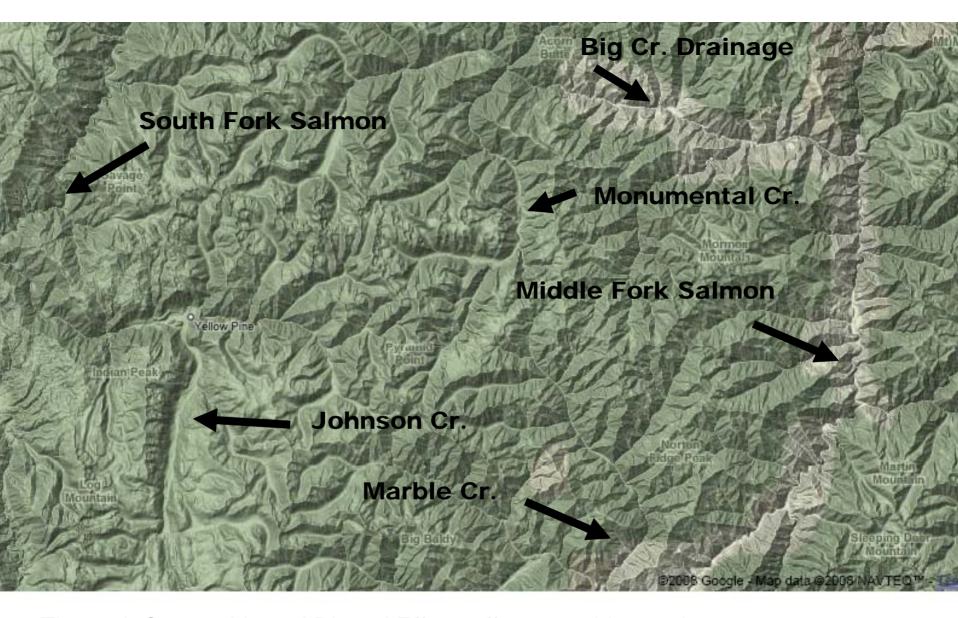


Figure 7: Effects of opposing thermal and orographic influence. When rising thermals created by solar heating encounter orographically produced downdrafts on the lee side of a ridge or in a canyon, expect to encounter a lot of turbulence. As the velocity of the wind increases, the turbulence increases.

# Diurnal Effect, Venturi, and Convergence





Thermal, Orographic and Diurnal Effect effects combine and are different depending on direction of drainages
We have a mixture N/S – E/W and combinations of major drainages

# **Turbulence**

# Slow Down to at or below Va

Remember it's less with less weight – Rule of Thumb  $\frac{1}{2}$  of % less gross weight). If at 10% less of max. gross weight, reduce Va 5%.

# Where to Expect it –

- Lee side down wind side of Ridges
- Convergence areas in canyons
- Venturi areas wide to narrow canyon
- Over Area's of Thermal differences (shade/sun, trees/rock)
- Near Rotor, Lenticular, or Thunder Clouds
- Windy Conditions Mountain wave over rugged mountains or canyons

# Different ways of measuring wind

Beaufort	Wind speed (mph)	Seaman's term	Effects at sea	Effects on land
0	Under 1	Calm	Sea like mirror.	Calm; smoke rises vertically.
1	1-3	Light air	Ripples with appearance of "fish scales"; no foam crests.	Smoke drift indicates wind direction; vanes do not move.
2	4-7	Light breeze	Small wavelets; crests of glassy appearance not breaking.	Wind felt on face; leaves rustle; vanes begin to move.
3	8-12	Gentle breeze	Large wavelets; crests begin to break; scattered whitecaps.	Leaves, small twigs in constant motion; light flags extended.
4	13-18	Moderate breeze	Small waves; becoming longer; numerous whitecaps.	Dust, leaves and loose paper raised up; small branches move.
5	19-24	Fresh breeze	Moderate waves; becoming longer; many whitecaps; some spray.	Small trees in leaf begin to sway.
6	25-31	Strong	Larger waves forming; whitecaps everywhere; more spray.	Large branches of trees in motion; whistling heard in wires.



# Valley / Canyon Fog Middle Fork Salmon









