2014/2015 WINTER (TENTATIVE) STORM #1

Storm Summary Statistics:
Storm precip began between 0100-0200 hrs MST Sunday, November 2 (DOY 306)
Storm precipitation ended: 0300 hrs MST Monday, November 3, 2014
Storm duration = 26 hrs
Storm total water content at SASP = 19 mm (0.75 inches)
Mean Precip intensity: 0.73 mm/hr
Max Precip intensity: 3 mm/hour between 0700-0800 on Sunday, Nov 2
Max gain in snow depth at SASP = 14 cm (5.5 inches) of snow
Max gain in snow depth at SBSP (wind affected) = 10 cm (4 inches) of snow

Storm Wind Rose (Putney Study Plot data):
Storm Summary Statistics:

Storm precip began between 0800-0900 hrs MST Thursday, November 13 (DOY 317)

Storm precipitation ended: 0500 hrs MST Sunday, November 16, 2014 (DOY 319)

Storm duration = 69 hrs

Storm total water content at SASP = 65 mm (2.56 inches)

Mean Precip intensity: 0.93 mm/hr

Max Precip intensity: 5 mm/hour between 0000-0100 on Friday, Nov 14

Max gain in snow depth at SASP = 65 cm (25.6 inches) of snow

Max gain in snow depth at SBSP (wind affected) = 50 cm (19.7 inches) of snow

Storm Wind Rose (Putney Study Plot data):
Storm Summary Statistics:

Storm precip began between 2000-2100 hrs MST Saturday, November 22 (DOY 326)

Storm precipitation ended: 2000 hrs MST Tuesday, November 25, 2014 (DOY 329)

Storm duration = 72 hrs

Storm total water content at SASP = 46 mm (1.81 inches)

Mean Precip intensity: 0.64 mm/hr

Max Precip intensity: 4 mm/hour between 0300-0400 on Sunday, Nov 23

Max gain in snow depth at SASP = 39 cm (15.4 inches) of snow

Max gain in snow depth at SBSP (wind affected) = 20 cm (7.9 inches) of snow

Storm Wind Rose (Putney Study Plot data):
2014/2015 WINTER STORM #4

2014-15 Winter Storm #4: December 13-14, 2014
Senator Beck Basin Study Area, at Red Mountain Pass, CO

Storm Summary Statistics:
Storm precip began between 1100-1200 hrs MST Saturday, December 13 (DOY 347)
Storm precipitation ended: 2200 hrs MST Sunday, December 14, 2014 (DOY 348)
Storm duration = 35 hrs
Storm total water content at SASP = 32 mm (1.26 inches)
Mean Precip intensity: 0.91 mm/hr
Max Precip intensity: 4 mm/hour for three consecutive hours between 1600-1800 on Saturday, Dec 13
Max gain in snow depth at SASP = 37 cm (14.6 inches) of snow
Max gain in snow depth at SBSP (wind affected) = 27 cm (10.6 inches) of snow
Peak Gust at PTSP at: 1251 hrs MST Saturday, Dec 13

Storm Wind Rose (Putney Study Plot data):

CSAS Putney Study Plot 12,323 ft.
No. of hours: 35
No. of missing hours: 0
From hour ending: Dec 13, 2014 1200 MST
To: Dec 14, 2014 2200 MST
Avg. wind dir: 334
Avg. wind spd: 12.0 mph
Peak gust: 42.8 mph

Average Hourly Wind Speed (mph)
2014/2015 WINTER STORM #5

Storm Summary Statistics:
Storm precip began between 0800-0900 hrs MST Sunday, December 2014 (DOY 355)
Storm precipitation ended: 1300 hrs MST Tuesday, December 23, 2014 (DOY 357)
Storm duration = 53 hrs
Storm total water content at SASP = 59 mm (2.32 inches)
Mean Precip intensity: 1.11 mm/hr
Max Precip intensity: 4 mm/hour for two consecutive hours between 1600-1800 on Monday, Dec 22
Max gain in snow depth at SASP = 42 cm (16.5 inches) of snow
Max gain in snow depth at SBSP (wind affected) = 19 cm (7.5 inches) of snow but net loss of 64 cm (25”) by wind stripping
Peak Gust at PTSP at: 1342 hrs MST Monday, Dec 22

Storm Wind Rose (Putney Study Plot data):

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Average Hourly Wind Speed (mph)
- >45
- 22-45
- 11-22
- 6-11
- 0-6
- calm
2014/2015 WINTER STORM #6

Storm Summary Statistics:
Storm precip began between 1800-1900 hrs MST Monday, January 12, 2015 (DOY 12)
Storm precipitation ended: 1300 hrs MST Tuesday, January 13, 2015 (DOY 13)
Storm duration = 19 hrs
Storm total water content at SASP = 12 mm (0.47 inches)
Mean Precip intensity: 0.63 mm/hr
Max Precip intensity: 2 mm/hour for two consecutive hours between 0600-0800 on Tuesday, January 13
Max gain in snow depth at SASP = 11 cm (4.3 inches) of snow
Max gain in snow depth at SBSP (unusually little wind affect) = 11 cm (4.3 inches) of snow
Peak Gust at PTSP at: 0120 hrs MST Tuesday, January 13

Storm Wind Rose (Putney Study Plot data):

Average Hourly
Wind Speed(mph)

N

0-6
6-11
11-22
22-45
>45

Average wind dir: 167°
Avg. wind spd: 11.2 mph
Peak gust: 25.3 mph

CSAS Putney Study Plot 12,323 ft.
No. of hours: 19
No. of missing hours: 0

From hour ending: Jan 12, 2015 1900 MST
To: Jan 13, 2015 1300 MST
**Storm Summary Statistics:**

Storm precip began between 1700-1800 hrs MST Sunday, February 15, 2015 (DOY 46)

Storm precipitation ended: 2000 hrs MST Monday, February 16, 2015 (DOY 47)

Storm duration = 27 hrs

Storm total water content at SASP = 13 mm (0.51 inches)

Mean Precip intensity: 0.48 mm/hr

Max Precip intensity: 2 mm/hour between 1300-1400 on Monday, February 16 (DOY 47)

Max gain in snow depth at SASP = 18 cm (7.1 inches) of snow

Max gain in snow depth at SBSP (wind affected) = 9 cm (3.5 inches) of snow

Peak Gust at PTSP at: 1227 hrs MST Monday, February 16 (DOY 47)

Storm Wind Rose (Putney Study Plot data):
Storm Summary Statistics:

Storm precip began: Between 0200-0300 hrs MST Sunday, February 22, 2015 (DOY 53)

Storm precipitation ended: 2000 hrs MST Monday, February 23, 2015 (DOY 54)

Storm duration: 42 hrs

Storm total water content at SASP = 55 mm (2.17 inches)

Mean Precip intensity: 1.31 mm/hr

Max Precip intensity: 3 mm/hour from 1100-1200 and 1800-2000 on Sunday, February 22 (DOY 53)

Max gain in snow depth at SASP = 64 cm (25.2 inches) of snow

Max gain in snow depth at SBSP (wind affected) = 55 cm (21.7 inches) of snow

Peak Gust at PTSP at: 2206 hrs MST Sunday, February 22 (DOY 53)

Storm Wind Rose (Putney Study Plot data):
2014/2015 WINTER STORM #9

Storm Summary Statistics:
Storm precip began between 1600-1700 hrs MST Wednesday, February 25, 2015 (DOY 56)
Storm precipitation ended: 1100 hrs MST Thursday, February 26, 2015 (DOY 57)
Storm duration = 19 hrs
Storm total water content at SASP = 12 mm (0.47 inches)
Mean Precip intensity: 0.63 mm/hr
Max Precip intensity: 4 mm/hour from 1800-1900 Wednesday, February 25 (DOY 56)
Max gain in snow depth at SASP = 16 cm (6.3 inches) of snow
Max gain in snow depth at SBSP (wind affected) = 9 cm (3.5 inches) of snow
Peak Gust at PTSP at: 1852 hrs MST Wednesday, February 25, 2015 (DOY 56)

Storm Wind Rose (Putney Study Plot data):

CSAS Putney Study Plot 12,323 ft.
No. of hours: 19 From hour ending: Feb 25, 2015 1700 MST
No. of missing hours: 0 To: Feb 26, 2015 1100 MST
Avg. wind dir: 343
Avg. wind spd: 14.5 mph
Peak gust: 45.3 mph

Average Hourly Wind Speed (mph)
**2014/2015 WINTER STORM #10**

**Storm Summary Statistics:**
- **Storm precip began** between 0900-1000 hrs MST Saturday, February 28, 2015 (DOY 59)
- **Storm precipitation ended:** 2100 hrs MST Monday, March 2, 2015 (DOY 61)
- **Storm duration** = 60 hrs
- **Storm total water content at SASP** = 61 mm (2.40 inches)
- **Mean Precip intensity:** 1.02 mm/hr
- **Max Precip intensity:** 3 mm/hour from 1700-1800 Monday, March 2 (DOY 61)
- **Max gain in snow depth at SASP** = 48 cm (18.9 inches) of snow
- **Max gain in snow depth at SBSP** (wind affected) = 41 cm (16.1 inches) of snow
- **Peak Gust at PTSP at:** 2058 hrs MST Monday, March 2 (DOY 61)

**Storm Wind Rose (Putney Study Plot data):**
**Storm Summary Statistics:**

- **Storm precip began** between 0200-0300 hrs MST Wednesday, March 25, 2015 (DOY 84)
- **Storm precipitation ended:** 1500 hrs MST Wednesday, March 25, 2015 (DOY 84)
- **Storm duration** = 13 hrs
- **Storm total water content at SASP** = 12 mm (0.47 inches)
- **Mean Precip intensity:** 0.92 mm/hr
- **Max Precip intensity:** 3 mm/hour twice, from 0400-0500 and from 1000-1100 Wednesday, March 25, 2015 (DOY 84)
- **Max gain in snow depth at SASP** = 14 cm (5.5 inches) of snow
- **Max gain in snow depth at SBSP** (wind affected) = 3 cm (1.2 inches) of snow
- **Peak Gust at PTSP at:** 0902 hrs MST Wednesday, March 25, 2015 (DOY 84)

**Storm Wind Rose (Putney Study Plot data):**

- Avg. wind dir: 338
- Avg. wind spd: 16.2 mph
- Peak gust: 37.3 mph

![Wind Rose Diagram](image-url)
2014/2015 WINTER STORM #12

Storm Summary Statistics:
Storm precip began between 1000-1100 hrs MST Saturday, April 18, 2015 (DOY 108)
Storm precipitation ended: 1900 hrs MST Saturday, April 18, 2015 (DOY 108)
Storm duration = 9 hrs
Storm total water content at SASP = 12 mm (0.47 inches)
Mean Precip intensity: 1.33 mm/hr
Max Precip intensity: 2 mm/hour, several hours
Max gain in snow depth at SASP = 20 cm (7.9 inches) of snow
Max gain in snow depth at SBSP (wind affected) = 13 cm (5.1 inches) of snow
Peak Gust at PTSP at: 1811 hrs MST Saturday, April 18, 2015 (DOY 108)

Storm Wind Rose (Putney Study Plot data):

Average Hourly Wind Speed (mph):
- >45
- 22-45
- 11-22
- 6-11
- 0-6
- calm

CSAS Putney Study Plot 12,323 ft.
No. of hours: 9 From hour ending: Apr 18, 2015 1100 MST
No. of missing hours: 0 To: Apr 18, 2015 1900 MST
Avg. wind dir: 329
Avg. wind spd: 22.5 mph
Peak gust: 59.8 mph
2014/2015 WINTER STORM #13

Storm Summary Statistics:
Storm precip began between 1200-1300 hrs MST Friday, April 24, 2015 (DOY 114)
Storm precipitation ended: 2100 hrs MST Sunday, April 26, 2015 (DOY 116)
Storm duration = 57 hrs
Storm total water content at SASP = 28 mm (1.10 inches)
Mean Precip intensity: 0.49 mm/hr
Max Precip intensity: 2 mm/hour, several hours on each day
Max gain in snow depth at SASP = 17 cm (6.7 inches) of snow
Max gain in snow depth at SBSP (wind affected) = 26 cm (10.2 inches) of snow
Peak Gust at PTSP at: 2117 hrs MST Saturday, April 25, 2015 (DOY 115)

Storm Wind Rose (Putney Study Plot data):
2014/2015 WINTER STORM #14

Storm Summary Statistics:
Storm precip began between 1500-1600 hrs MST Monday, May 4, 2015 (DOY 124)
Storm precipitation ended: 0300 hrs MST Thursday, May 7, 2015 (DOY 127)
Storm duration = 60 hrs
Storm total water content at SASP = 28 mm (1.10 inches), 21 mm (0.83”) as snow, 7 mm (0.27”) as rain
Mean Precip intensity: 0.47 mm/hr
Max Precip intensity: 2 mm/hour, three different hours
Max gain in snow depth at SASP = 10 cm (3.9 inches) of snow
Max gain in snow depth at SBSP (wind affected) = 21 cm (8.3 inches) of snow
Peak Gust at PTSP at: 1229 hrs MST Wednesday, May 6, 2015 (DOY 126)

Storm Wind Rose (Putney Study Plot data):

CSAS Putney Study Plot 12,323 ft.
No. of hours: 60
No. of missing hours: 0
Avg. wind dir: 220
Avg. wind spd: 9.6 mph
Peak gust: 30.3 mph
Storm Summary Statistics:

Storm precip began between 1800-1900 hrs MST Thursday, May 7, 2015 (DOY 127)
Storm precipitation ended: 0100 hrs MST Monday, May 11, 2015 (DOY 131)
Storm duration = 78 hrs
Storm total water content at SASP = 38 mm (1.50 inches), all as snow
Mean Precip intensity: 0.49 mm/hr
Max Precip intensity: 3 mm/hour, 0700-0800 Saturday, May 9
Max gain in snow depth at SASP = 27 cm (10.6 inches) of snow
Max gain in snow depth at SBSP (wind affected) = 21 cm (8.3 inches) of snow
Peak Gust at PTSP at: 2103 hrs MST Sunday, May 10, 2015 (DOY 130)

Storm Wind Rose (Putney Study Plot data):
2014/2015 WINTER STORM #16

Storm Summary Statistics:
Storm precip began between 0900-1000 hrs MST Thursday, May 14, 2015 (DOY 134)
Storm precipitation ended: 2300 hrs MST Saturday, May 16, 2015 (DOY 136)
Storm duration = 62 hrs
Storm total water content at SASP = 47 mm (1.85 inches), all as snow
Mean Precip intensity: 0.76 mm/hr
Max Precip intensity: 3 mm/hour during four different hours
Max gain in snow depth at SASP = 34 cm (13.4 inches) of snow
Max gain in snow depth at SBSP (wind affected) = 41 cm (16.1 inches) of snow
Peak Gust at PTSP at: 0754 hrs MST Friday, May 15, 2015 (DOY 135)

Storm Wind Rose (Putney Study Plot data):

CSAS Putney Study Plot 12,323 ft.
No. of hours: 62
No. of missing hours: 0
From hour ending: May 14, 2015 1000 MST
To: May 18, 2015 2300 MST
Avg. wind dir: 183
Avg. wind spd: 15.4 mph
Peak gust: 55.3 mph

Average Hourly Wind Speed (mph)
0-6 mph
6-11 mph
11-22 mph
22-45 mph
>45 mph

cals
2014/2015 WINTER STORM #17

**Storm Summary Statistics:**

**Storm precip began** between 1700-1800 hrs MST Monday, May 18, 2015 (DOY 138)

**Storm precipitation ended:** 2000 hrs MST Tuesday, May 19, 2015 (DOY 139)

**Storm duration** = 27 hrs

**Storm total water content at SASP** = 29 mm (1.14 inches), all as snow

**Mean Precip intensity**: 1.07 mm/hr

**Max Precip intensity**: 3 mm/hour during two different hours

**Max gain in snow depth at SASP** = 24 cm (9.5 inches) of snow

**Max gain in snow depth at SBSP** (wind affected) = 17 cm (6.7 inches) of snow

**Peak Gust at PTSP at**: 1542 hrs MST Tuesday, May 19, 2015 (DOY 139)

**Storm Wind Rose (Putney Study Plot data):**

![Storm Wind Rose](image)
2014/2015 WINTER STORM #18

Storm Summary Statistics:
Storm precip began between 1500-1600 hrs MST Friday, May 22, 2015 (DOY 142)
Storm precipitation ended: 2000 hrs MST Saturday, May 23, 2015 (DOY 143)
Storm duration = 29 hrs
Storm total water content at SASP = 24 mm (0.94 inches), all as snow
Mean Precip intensity: 0.83 mm/hr
Max Precip intensity: 4 mm/hour from 1600-1700 Friday, May 22 (DOY 142)
Max gain in snow depth at SASP = 18 cm (7.1 inches) of snow
Max gain in snow depth at SBSP (wind affected) = 20 cm (7.9 inches) of snow
Peak Gust at PTSP at: 1213 hrs MST Saturday, May 23, 2015 (DOY 143)

Storm Wind Rose (Putney Study Plot data):