Precipitation (NW)

60
ERA5-Land: 0 -0 -1
ERA5-Crocus: 0 -0 -1
ERA5: -1
OBS: 3 2 1 2 0 -1 -1 -1

50
ERA5-Land: 2 1 -1 -2 -1
ERA5-Crocus: 2 1 -1 -2 -1
ERA5: -1 -2 -1
MESCAN-SURFEX: -3 -4 -4
OBS: 3 1 2 2 1 0 -2 -3 -1

40
ERA5-Land: 4 3 0 -2 -2 -3 -1
ERA5-Crocus: 3 3 0 -2 -2 -3 -1
ERA5: 0 -2 -2 -3 -1
MESCAN-SURFEX: -1 -2 -3 -6 -6
OBS: 0 3 2 1 2 -0 -3 -2 -5 -3

30
CNRM-ALADIN: -2 -2
CNRM-AROME: -4 -2
ERA5-Land: 7 6 1 -1 0 -4 -4 -1 2
ERA5-Crocus: 7 6 0 -1 -0 -5 -4 -1 2
ERA5: 0 -1 -0 -5 -3 -1 2
CERRA-Land: -7 -5
MESCAN-SURFEX: -3 -1 2 -3 -5 -7 -8
MTMSI: -7
OBS: 5 -0 2 3 -1 -0 2 -5 -5 -3 -0

20
CNRM-ALADIN: 3 -3 -2 -5
CNRM-AROME: -1 -4 -8 -2
ERA5-Land: 13 7 6 0 -1 -4 -2 -1 0 -4 2
ERA5-Crocus: 12 7 6 -0 -1 -4 -2 -1 0 -4 2
ERA5: 6 0 -1 -5 -2 -1 0 -3 2
CERRA-Land: -2 -6 -13 -9
MESCAN-SURFEX: -1 -6 -0 -1 5 -1 -8 -16 -14
MTMSI: 1 -10 -19
OBS: -2 6 1 3 -3 1 -3 -3 -3 -3 -8 -1

10
CNRM-ALADIN: -3 14 20 -16 -11 10
CNRM-AROME: 14 18 -12 -19 6 28
ERA5-Land: -10 18 17 -15 23 -9 -20 17 26 -16 -15 12 18
ERA5-Crocus: -10 18 16 -14 24 -9 -19 16 27 -17 -15 13 19
ERA5: 17 -15 24 -11 -19 15 27 -17 -14 12 18
CERRA-Land: 15 27 -19 -33 5 24
MESCAN-SURFEX: -7 -28 22 -17 -4 20 25 -23 -36 3 11
MTMSI: 26 34 -28 -41 1
OBS: -29 11 12 -36 33 -14 -24 16 22 -23 -21 9 22

1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015
Central year of the window trend

Precipitation trends (%/dec): 20 15 10 5 0 −5 −10 −15 −20

Precipitation (NE)

60
ERA5-Land: 2 1 0
ERA5-Crocus: 2 1 0
ERA5: -0
OBS: 1 1 1 0 -0 -0 -1 -1

50
ERA5-Land: 3 2 1 -1 -0
ERA5-Crocus: 3 2 1 -1 -0
ERA5: 0 -1 -0
MESCAN-SURFEX: -0 -3 -3
OBS: 1 -1 -0 -0 -0 0 -0 -2 -1

40
ERA5-Land: 3 3 1 0 1 -0 -1
ERA5-Crocus: 3 3 1 0 1 -1 -1
ERA5: 1 0 1 -0 -1
MESCAN-SURFEX: 2 1 -0 -4 -6
OBS: -0 -1 -3 -1 1 1 1 1 -3 -3

30
CNRM-ALADIN: -0 -2
CNRM-AROME: -4 -3
ERA5-Land: 5 2 1 0 2 1 0 -1 -1
ERA5-Crocus: 5 2 1 0 2 1 0 -1 -1
ERA5: -0 -0 2 1 0 -1 -1
CERRA-Land: -9 -8
MESCAN-SURFEX: 1 2 5 1 -2 -9 -11
MTMSI: -11
OBS: 1 -3 -3 -4 -1 1 4 2 -1 -6 -5

20
CNRM-ALADIN: 6 0 -1 -6
CNRM-AROME: -0 -1 -8 -7
ERA5-Land: 13 7 1 -6 1 3 3 1 1 -5 -4
ERA5-Crocus: 13 7 1 -6 1 3 3 1 1 -6 -4
ERA5: -1 -7 1 3 3 1 2 -5 -3
CERRA-Land: -2 -6 -17 -16
MESCAN-SURFEX: -4 -5 6 6 9 -2 -8 -18 -18
MTMSI: -3 -10 -20
OBS: -1 -1 -4 -5 -8 6 6 4 -0 -2 -13 -10

10
CNRM-ALADIN: 3 13 21 -13 -7 -1
CNRM-AROME: 5 22 -10 -11 2 13
ERA5-Land: 8 28 13 -19 1 -10 -2 13 23 -7 -12 -1 16
ERA5-Crocus: 7 28 13 -19 2 -10 -2 13 23 -7 -12 -2 17
ERA5: 10 -22 2 -10 -0 12 22 -9 -12 1 15
CERRA-Land: 4 28 -12 -33 -18 29
MESCAN-SURFEX: -3 -20 6 -10 19 13 24 -14 -32 -16 17
MTMSI: 12 24 -19 -37 -15
OBS: -15 12 -4 -29 11 -18 7 13 19 -9 -18 -19 27

1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015
Central year of the window trend

Precipitation trends (%/dec): 20 15 10 5 0 −5 −10 −15 −20

Precipitation (SW)

60
ERA5-Land: -2 -2 -2
ERA5-Crocus: -2 -2 -2
ERA5: -2
OBS: 1 1 0 0 -2 -3 -2 -2

50
ERA5-Land: -3 -5 -5 -1 -2
ERA5-Crocus: -3 -5 -5 -1 -2
ERA5: -5 -1 -2
MESCAN-SURFEX: -8 -5 -5
OBS: 4 2 2 -0 -4 -5 -5 -1 -1

40
ERA5-Land: -1 -4 -7 -6 -5 0 4
ERA5-Crocus: -1 -4 -8 -6 -5 0 4
ERA5: -8 -6 -5 0 4
MESCAN-SURFEX: -12 -10 -9 -3 3
OBS: 4 9 3 -3 -5 -7 -5 -5 0 6

30
CNRM-ALADIN: 1 5
CNRM-AROME: 7 9
ERA5-Land: 6 -1 -7 -6 -10 -8 2 6 7
ERA5-Crocus: 6 -1 -7 -6 -11 -8 2 6 7
ERA5: -7 -6 -11 -8 2 6 7
CERRA-Land: 5 9
MESCAN-SURFEX: -11 -13 -17 -11 1 4 7
MTMSI: 5
OBS: 9 7 4 -3 -8 -5 -10 -9 3 6 9

20
CNRM-ALADIN: -4 -4 7 12
CNRM-AROME: -4 9 14 14
ERA5-Land: 7 4 1 -1 -13 -12 -3 -5 7 13 10
ERA5-Crocus: 7 4 1 -1 -13 -12 -3 -4 8 13 10
ERA5: 1 -1 -13 -12 -3 -4 7 13 10
CERRA-Land: -4 8 10 11
MESCAN-SURFEX: 3 -8 -22 -22 -5 -6 8 10 8
MTMSI: -4 9 12
OBS: 12 0 0 3 -1 -15 -13 1 -8 6 15 15

10
CNRM-ALADIN: -8 -11 3 -13 21 44
CNRM-AROME: -11 0 -13 29 44 -3
ERA5-Land: 23 7 -13 21 -0 -18 0 -10 1 -10 23 45 -6
ERA5-Crocus: 23 7 -14 23 0 -19 -0 -11 2 -10 23 45 -6
ERA5: -14 22 -0 -21 2 -10 1 -10 22 45 -6
CERRA-Land: -10 9 -8 13 40 5
MESCAN-SURFEX: 10 16 -7 -35 4 -22 1 -4 17 40 -10
MTMSI: -23 3 0 13 41
OBS: 8 -4 -23 22 10 -27 9 -12 -2 -20 23 46 -6

1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015
Central year of the window trend

Precipitation trends (%/dec): 20 15 10 5 0 −5 −10 −15 −20

Precipitation (SE)

60
ERA5-Land: -2 -2 -2
ERA5-Crocus: -2 -2 -2
ERA5: -2
OBS: -1 -0 -1 -1 -4 -3 -2 -2

50
ERA5-Land: -4 -4 -4 -3 -1
ERA5-Crocus: -4 -4 -4 -3 -1
ERA5: -4 -3 -1
MESCAN-SURFEX: -2 -2 -1
OBS: 2 1 2 -2 -6 -6 -5 -2 0

40
ERA5-Land: -1 -3 -8 -8 -4 -1 4
ERA5-Crocus: -1 -4 -8 -8 -4 -0 4
ERA5: -9 -8 -3 -0 4
MESCAN-SURFEX: -4 -5 -2 -2 1
OBS: 2 7 1 -3 -5 -10 -9 -4 1 6

30
CNRM-ALADIN: 0 3
CNRM-AROME: 2 5
ERA5-Land: 6 -1 -7 -8 -10 -8 3 3 7
ERA5-Crocus: 6 -1 -7 -9 -11 -8 4 4 7
ERA5: -8 -9 -11 -8 4 4 7
CERRA-Land: 3 7
MESCAN-SURFEX: 1 -4 -5 -8 1 -0 4
MTMSI: -0
OBS: 11 3 1 -2 -7 -11 -12 -9 4 5 12

20
CNRM-ALADIN: -10 -10 10 12
CNRM-AROME: -11 8 11 6
ERA5-Land: 10 5 -1 -10 -10 -10 -5 -9 11 12 7
ERA5-Crocus: 11 5 -1 -10 -10 -10 -5 -9 11 13 7
ERA5: -1 -10 -10 -10 -5 -9 11 13 8
CERRA-Land: -8 8 11 10
MESCAN-SURFEX: 8 -3 2 -10 -5 -12 6 9 3
MTMSI: -12 6 9
OBS: 8 2 1 -2 -11 -11 -13 -8 -12 14 19 16

10
CNRM-ALADIN: -8 -25 1 -7 25 29
CNRM-AROME: -28 -7 -8 25 31 -17
ERA5-Land: 5 36 -1 -20 1 -20 13 -18 -13 -5 24 21 1
ERA5-Crocus: 7 35 -2 -21 1 -19 13 -20 -15 -9 28 22 -2
ERA5: -2 -20 3 -20 12 -19 -14 -4 27 24 -1
CERRA-Land: -29 -12 7 23 13 15
MESCAN-SURFEX: 19 -23 25 -14 19 -30 -11 -2 18 22 -7
MTMSI: -31 -11 -0 17 23
OBS: -12 22 -7 -27 3 -16 13 -34 -16 1 36 33 10

1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015
Central year of the window trend

Precipitation trends (%/dec): 20 15 10 5 0 −5 −10 −15 −20