0.1 Global mean budget

Left column shows global mean fluxes by dcpam, and right column shows those by Trenberth et al. (2009).

PRCP 96.8384355314066 W m-2, 80 EvapU 96.9004362462724 W m-2, 80 21.8615849523937 W m-2, 17 SensA 79.6783222823328 W m-2, 63 SLRA : -194.626562345088 W m-2, SSRA -161 OLRA 251.540555997013 W m-2, 239 OSRA : -250.37640321851 W m-2, -239

Heating: 2.64962836176298 W m-2

Water : 5.91050857237403e-10 kg m-2 s-1

0.2 Figures

Data from 1979 to 2008 are used for NCEP reanalysis, and those from 1979 to 2001 are used for ECMWF reanalysis. Version of ECMWF reanalysis used here is ERA40. NCEP reanalysis data were downloaded from http://www.esrl.noaa.gov/psd/data/reanalysis/reanalysis.shtml. ECMWF ERA40 data were downloaded from http://database.rish.kyoto-u.ac.jp/arch/era40/.

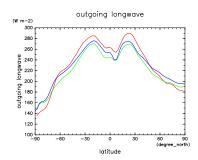


Figure 1: Annual average OLRA by dcpam (red), NCEP (green), and ECMWF (blue)

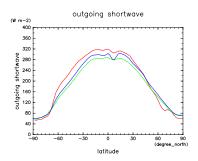


Figure 2: Annual average OSRA by dcpam (red), NCEP (green), and ECMWF (blue)

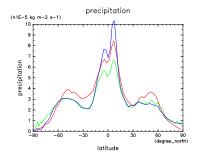


Figure 3: Annual average PRCP by dcpam (red), NCEP (green), and ECMWF (blue)

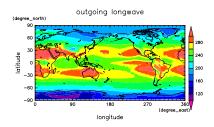


Figure 4: Annual mean OLR by dc-pam $\,$

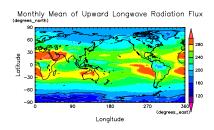


Figure 5: Annual mean OLR by NCEP

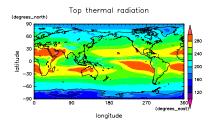


Figure 6: Annual mean OLR by ECMWF

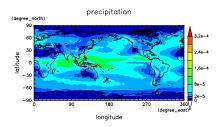


Figure 7: Annual mean Rain by dc-pam

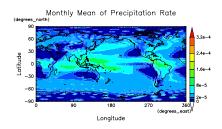


Figure 8: Annual mean Rain by NCEP

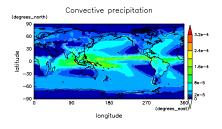


Figure 9: Annual mean Rain by ECMWF

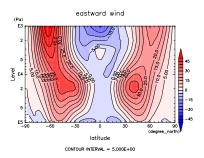


Figure 10: Annual mean U by dcpam

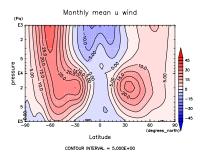


Figure 11: Annual mean U by NCEP

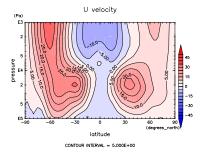


Figure 12: Annual mean U by ECMWF

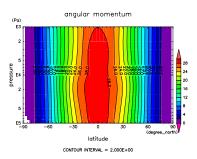


Figure 13: Annual mean ANGMOM by dcpam

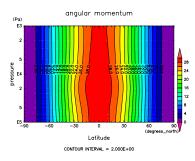


Figure 14: Annual mean ANGMOM by NCEP

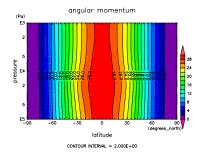


Figure 15: Annual mean ANGMOM by ECMWF

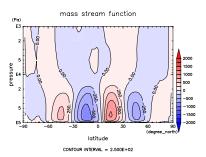


Figure 16: Annual mean MSF by dc-pam $\,$

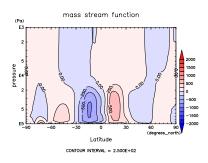


Figure 17: Annual mean MSF by NCEP

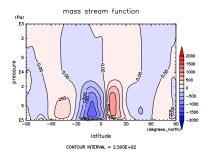


Figure 18: Annual mean MSF by ECMWF

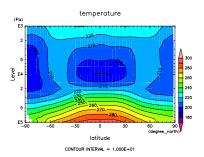


Figure 19: Annual mean T by dcpam

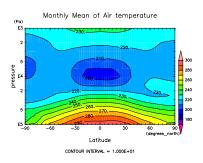


Figure 20: Annual mean T by NCEP

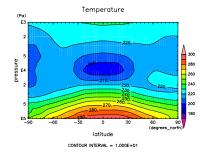


Figure 21: Annual mean T by ECMWF

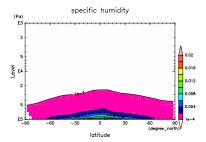


Figure 22: Annual mean q by dcpam

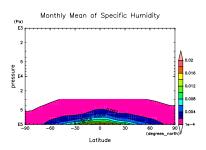


Figure 23: Annual mean q by NCEP

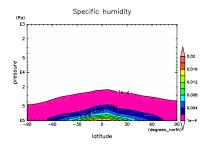


Figure 24: Annual mean q by ECMWF

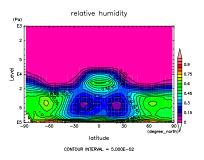


Figure 25: Annual mean RH by dc-pam $\,$

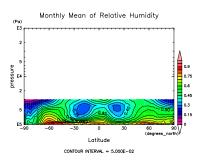


Figure 26: Annual mean RH by NCEP

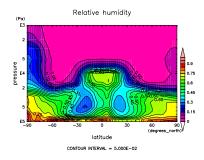
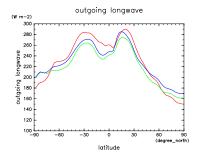


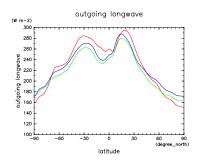
Figure 27: Annual mean RH by ECMWF



outgoing longwave

Figure 28: OLRA at Jan. by dcpam (red), NCEP (green), and ECMWF (blue)

Figure 31: OLRA at Apr. by dcpam (red), NCEP (green), and ECMWF (blue)



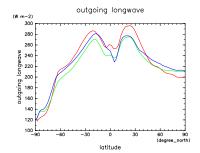
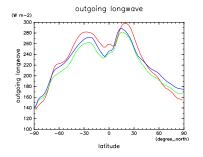


Figure 29: OLRA at Feb. by dcpam (red), NCEP (green), and ECMWF (blue)

Figure 32: OLRA at May by dcpam (red), NCEP (green), and ECMWF (blue)



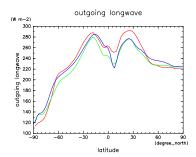
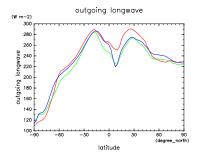


Figure 30: OLRA at Mar. by dcpam (red), NCEP (green), and ECMWF (blue)

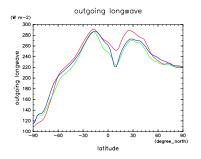
Figure 33: OLRA at Jun. by dcpam (red), NCEP (green), and ECMWF (blue)



outgoing longwave

Figure 34: OLRA at Jul. by dcpam (red), NCEP (green), and ECMWF (blue)

Figure 37: OLRA at Oct. by dcpam (red), NCEP (green), and ECMWF (blue)



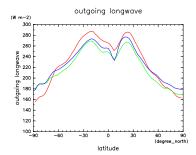
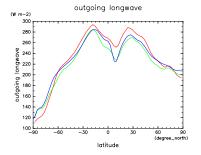


Figure 35: OLRA at Aug. by dcpam (red), NCEP (green), and ECMWF (blue)

Figure 38: OLRA at Nov. by dcpam (red), NCEP (green), and ECMWF (blue)



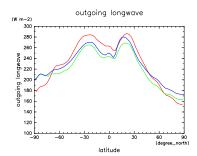
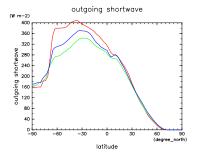


Figure 36: OLRA at Sep. by dcpam (red), NCEP (green), and ECMWF (blue)

Figure 39: OLRA at Dec. by dcpam (red), NCEP (green), and ECMWF (blue)



outgoing shortwave 320 latitude

Figure 40: OSRA at Jan. by dcpam (red), NCEP (green), and ECMWF (blue)

Figure 43: OSRA at Apr. by dcpam (red), NCEP (green), and ECMWF (blue)

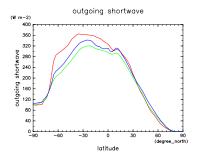
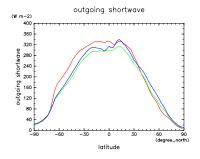




Figure 41: OSRA at Feb. by dcpam (red), NCEP (green), and ECMWF (blue)

Figure 44: OSRA at May by dcpam (red), NCEP (green), and ECMWF (blue)



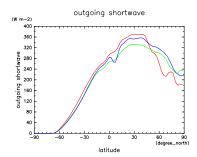
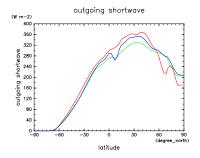


Figure 42: OSRA at Mar. by dcpam Figure 45: OSRA at Jun. by dcpam (red), NCEP (green), and ECMWF (blue)

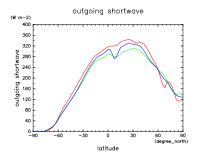
(red), NCEP (green), and ECMWF (blue)



outgoing shortwave 320 280 240 240 200 latitude

Figure 46: OSRA at Jul. by dcpam (red), NCEP (green), and ECMWF (blue)

Figure 49: OSRA at Oct. by dcpam (red), NCEP (green), and ECMWF (blue)



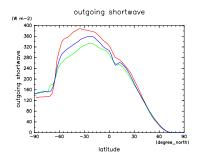
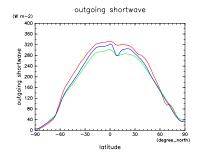


Figure 47: OSRA at Aug. by dcpam (red), NCEP (green), and ECMWF (blue)

Figure 50: OSRA at Nov. by dcpam (red), NCEP (green), and ECMWF (blue)



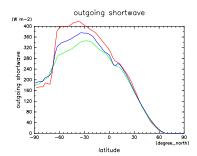
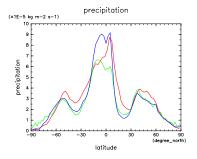


Figure 48: OSRA at Sep. by dcpam Figure 51: OSRA at Dec. by dcpam (red), NCEP (green), and ECMWF (blue)

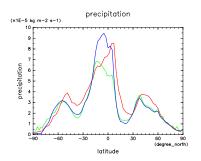
(red), NCEP (green), and ECMWF (blue)

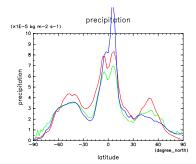


precipitation latitude

Figure 52: Rain at Jan. by dcpam (red), NCEP (green), and ECMWF (blue)

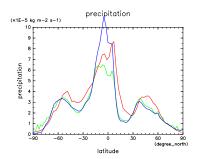
Figure 55: Rain at Apr. by dcpam (red), NCEP (green), and ECMWF (blue)





(red), NCEP (green), and ECMWF (blue)

Figure 53: Rain at Feb. by dcpam Figure 56: Rain at May by dcpam (red), NCEP (green), and ECMWF (blue)



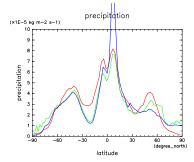
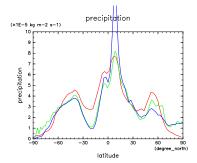


Figure 54: Rain at Mar. by dcpam Figure 57: Rain at Jun. by dcpam (red), NCEP (green), and ECMWF (blue)

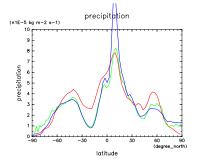
(red), NCEP (green), and ECMWF (blue)

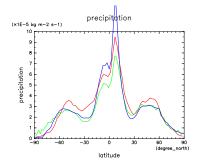


precipitation latitude

Figure 58: Rain at Jul. by dcpam (red), NCEP (green), and ECMWF (blue)

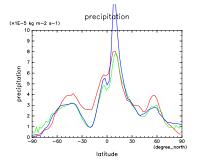
Figure 61: Rain at Oct. by dcpam (red), NCEP (green), and ECMWF (blue)

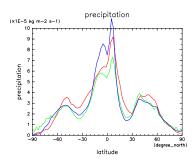




(red), NCEP (green), and ECMWF (blue)

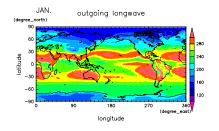
Figure 59: Rain at Aug. by dcpam Figure 62: Rain at Nov. by dcpam (red), NCEP (green), and ECMWF (blue)





(red), NCEP (green), and ECMWF (blue)

Figure 60: Rain at Sep. by dcpam Figure 63: Rain at Dec. by dcpam (red), NCEP (green), and ECMWF (blue)



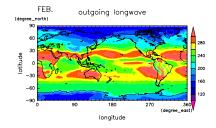
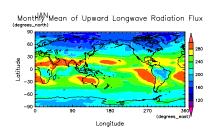


Figure 64: OLR at Jan. by dcpam

Figure 67: OLR at Feb. by dcpam



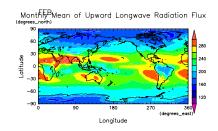
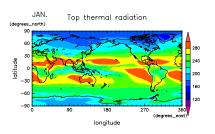


Figure 65: OLR at Jan. by NCEP

Figure 68: OLR at Feb. by NCEP



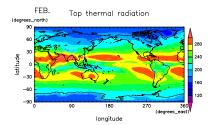
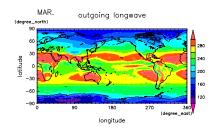


Figure 66: OLR at Jan. by ECMWF Figure 69: OLR at Feb. by ECMWF



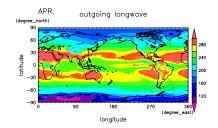
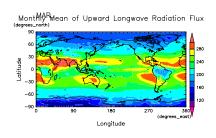


Figure 70: OLR at Mar. by dcpam

Figure 73: OLR at Apr. by dcpam



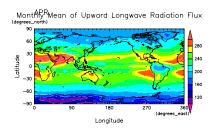
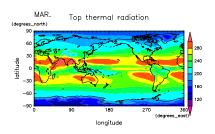


Figure 71: OLR at Mar. by NCEP

Figure 74: OLR at Apr. by NCEP



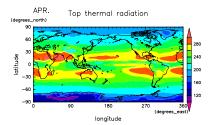
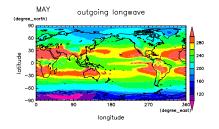


Figure 72: OLR at Mar. by ECMWF $\,$ Figure 75: OLR at Apr. by ECMWF



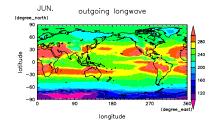
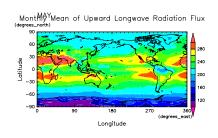


Figure 76: OLR at May by dcpam

Figure 79: OLR at Jun. by dcpam



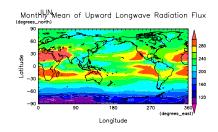
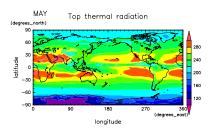


Figure 77: OLR at May by NCEP

Figure 80: OLR at Jun. by NCEP



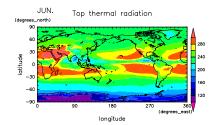
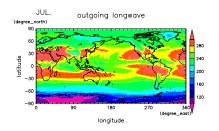


Figure 78: OLR at May by ECMWF Figure 81: OLR at Jun. by ECMWF



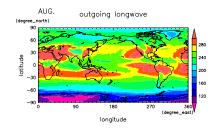
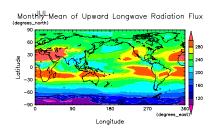


Figure 82: OLR at Jul. by dcpam

Figure 85: OLR at Aug. by dcpam



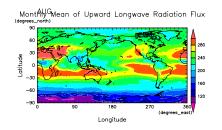
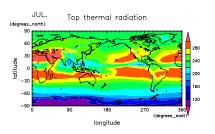


Figure 83: OLR at Jul. by NCEP

Figure 86: OLR at Aug. by NCEP



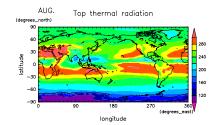
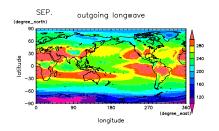


Figure 84: OLR at Jul. by ECMWF Figure 87: OLR at Aug. by ECMWF



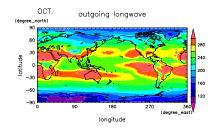
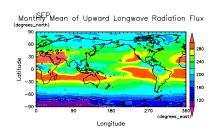


Figure 88: OLR at Sep. by dcpam

Figure 91: OLR at Oct. by dcpam



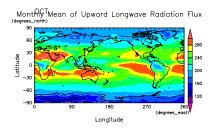
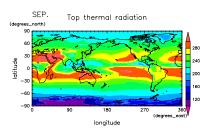


Figure 89: OLR at Sep. by NCEP

Figure 92: OLR at Oct. by NCEP



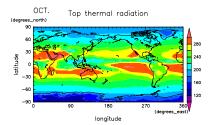
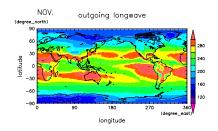


Figure 90: OLR at Sep. by ECMWF Figure 93: OLR at Oct. by ECMWF



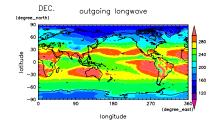
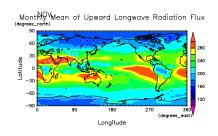


Figure 94: OLR at Nov. by dcpam

Figure 97: OLR at Dec. by dcpam



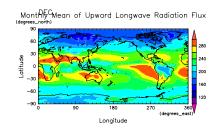
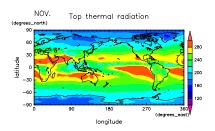


Figure 95: OLR at Nov. by NCEP

Figure 98: OLR at Dec. by NCEP



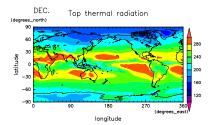
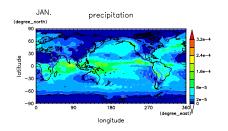


Figure 96: OLR at Nov. by ECMWF Figure 99: OLR at Dec. by ECMWF



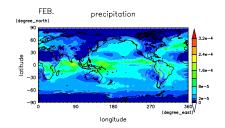
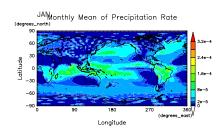


Figure 100: Rain at Jan. by dcpam

Figure 103: Rain at Feb. by dcpam



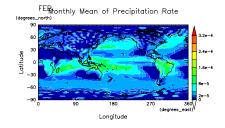
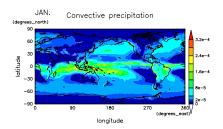


Figure 101: Rain at Jan. by NCEP

Figure 104: Rain at Feb. by NCEP



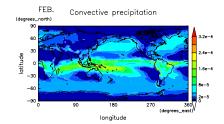
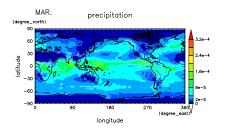


Figure 102: Rain at Jan. by ECMWF Figure 105: Rain at Feb. by ECMWF



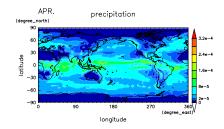
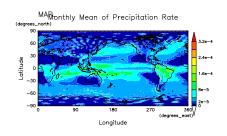


Figure 106: Rain at Mar. by dcpam

Figure 109: Rain at Apr. by dcpam



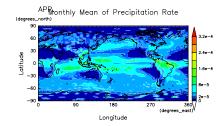
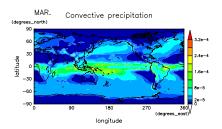


Figure 107: Rain at Mar. by NCEP

Figure 110: Rain at Apr. by NCEP



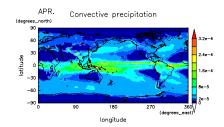
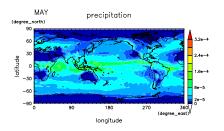


Figure 108: Rain at Mar. by ECMWF $\,$ Figure 111: Rain at Apr. by ECMWF



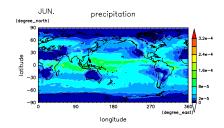
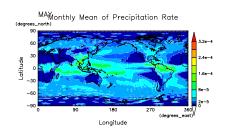


Figure 112: Rain at May by dcpam

Figure 115: Rain at Jun. by dcpam



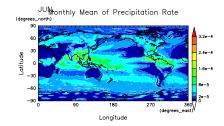
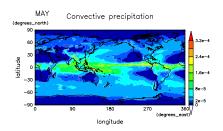


Figure 113: Rain at May by NCEP

Figure 116: Rain at Jun. by NCEP



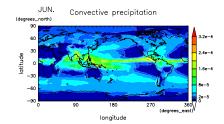
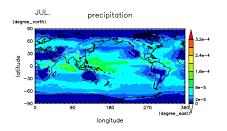


Figure 114: Rain at May by ECMWF Figure 117: Rain at Jun. by ECMWF



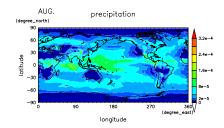
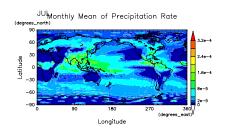


Figure 118: Rain at Jul. by dcpam

Figure 121: Rain at Aug. by dcpam



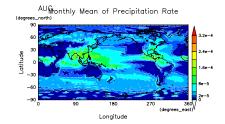
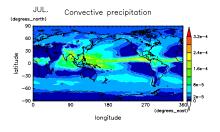


Figure 119: Rain at Jul. by NCEP

Figure 122: Rain at Aug. by NCEP



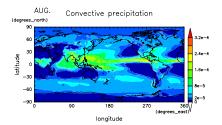
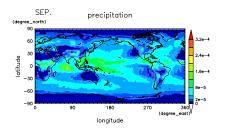


Figure 120: Rain at Jul. by ECMWF Figure 123: Rain at Aug. by ECMWF



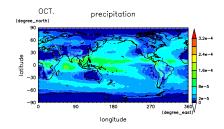
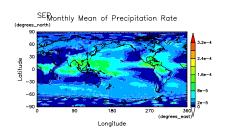


Figure 124: Rain at Sep. by dcpam

Figure 127: Rain at Oct. by dcpam



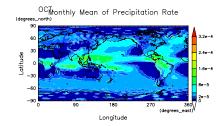
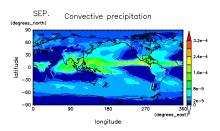


Figure 125: Rain at Sep. by NCEP

Figure 128: Rain at Oct. by NCEP



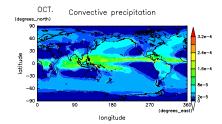
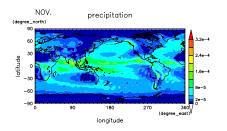


Figure 126: Rain at Sep. by ECMWF Figure 129: Rain at Oct. by ECMWF



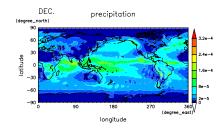
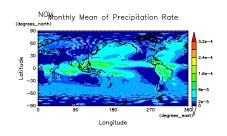


Figure 130: Rain at Nov. by dcpam

Figure 133: Rain at Dec. by dcpam



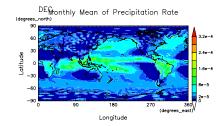
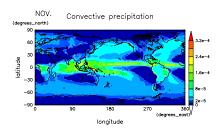


Figure 131: Rain at Nov. by NCEP

Figure 134: Rain at Dec. by NCEP



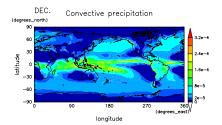
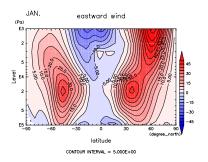


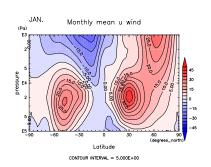
Figure 132: Rain at Nov. by ECMWF $\,$ Figure 135: Rain at Dec. by ECMWF



FEB. eastward wind

Figure 136: U at Jan. by dcpam

Figure 139: U at Feb. by dcpam



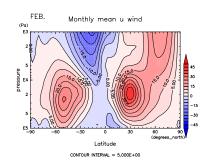
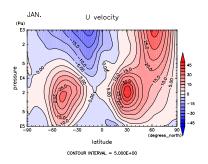


Figure 137: U at Jan. by NCEP

Figure 140: U at Feb. by NCEP



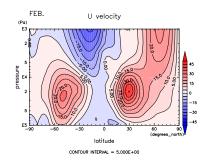
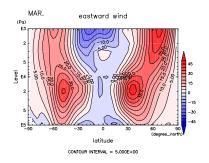


Figure 138: U at Jan. by ECMWF

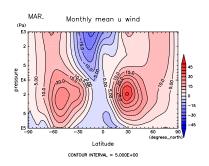
Figure 141: U at Feb. by ECMWF



APR. eastward wind

Figure 142: U at Mar. by dcpam $\,$

Figure 145: U at Apr. by dcpam



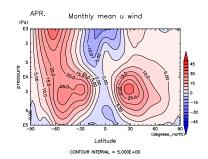
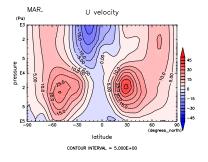


Figure 143: U at Mar. by NCEP $\,$

Figure 146: U at Apr. by NCEP



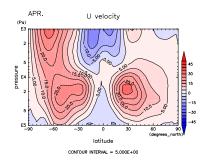


Figure 144: U at Mar. by ECMWF

Figure 147: U at Apr. by ECMWF

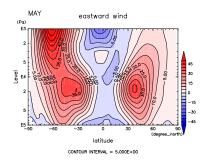
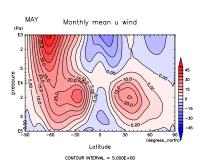


Figure 148: U at May by dcpam

Figure 151: U at Jun. by dcpam



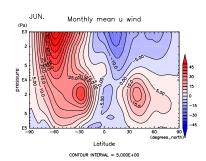
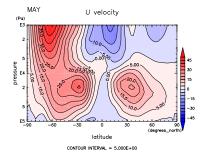


Figure 149: U at May by NCEP

Figure 152: U at Jun. by NCEP



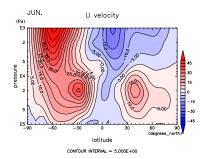


Figure 150: U at May by ECMWF

Figure 153: U at Jun. by ECMWF

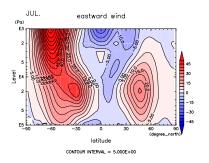
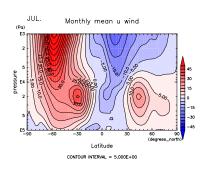


Figure 154: U at Jul. by dcpam

Figure 157: U at Aug. by dcpam



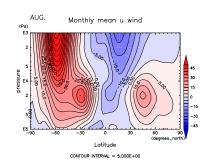
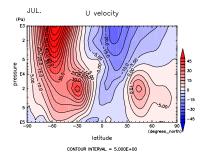


Figure 155: U at Jul. by NCEP

Figure 158: U at Aug. by NCEP



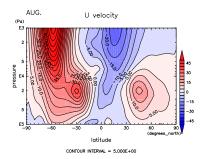
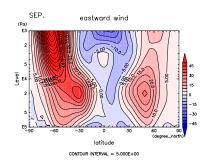


Figure 156: U at Jul. by ECMWF

Figure 159: U at Aug. by ECMWF



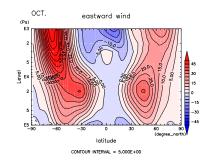
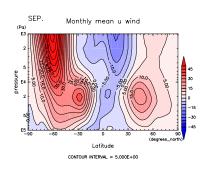


Figure 160: U at Sep. by dcpam

Figure 163: U at Oct. by dcpam



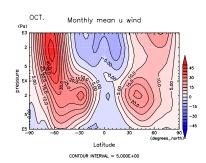
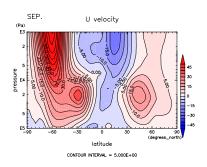


Figure 161: U at Sep. by NCEP

Figure 164: U at Oct. by NCEP



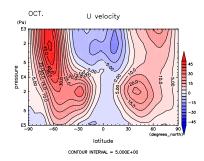
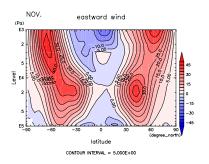


Figure 162: U at Sep. by ECMWF

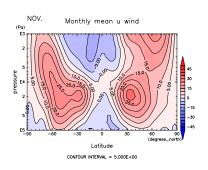
Figure 165: U at Oct. by ECMWF



DEC. eastward wind

Figure 166: U at Nov. by dcpam

Figure 169: U at Dec. by dcpam



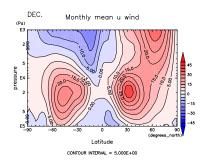
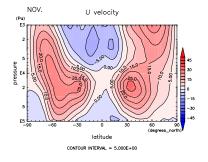


Figure 167: U at Nov. by NCEP

Figure 170: U at Dec. by NCEP



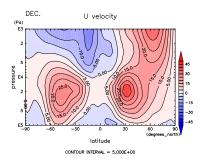
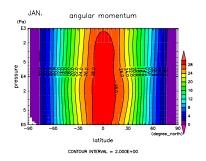


Figure 168: U at Nov. by ECMWF

Figure 171: U at Dec. by ECMWF



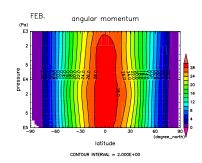
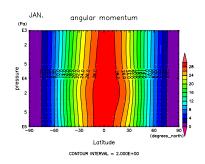


Figure 172: ANGMOM at Jan. by dcpam

Figure 175: ANGMOM at Feb. by dcpam



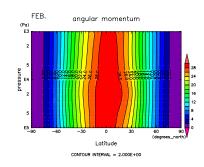
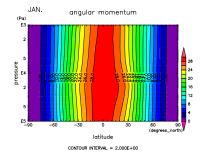
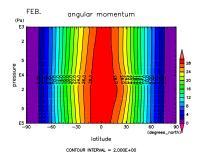


Figure 173: ANGMOM at Jan. by NCEP

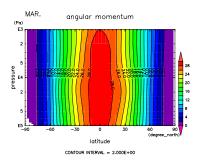
Figure 176: ANGMOM at Feb. by NCEP

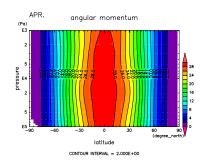




ECMWF

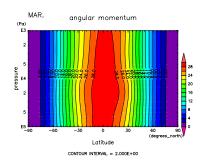
Figure 174: ANGMOM at Jan. by Figure 177: ANGMOM at Feb. by ECMWF





 dcpam

Figure 178: ANGMOM at Mar. by Figure 181: ANGMOM at Apr. by dcpam



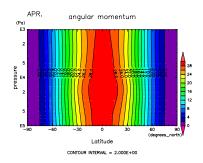
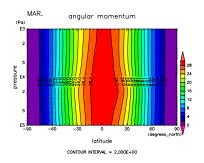
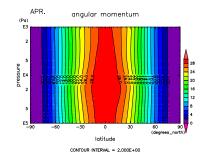


Figure 179: ANGMOM at Mar. by NCEP

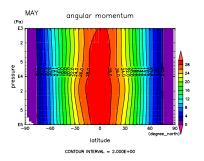
Figure 182: ANGMOM at Apr. by NCEP





ECMWF

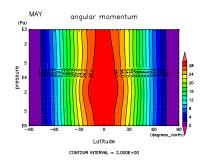
Figure 180: ANGMOM at Mar. by Figure 183: ANGMOM at Apr. by ECMWF



JUN. angular momentum latitude CONTOUR INTERVAL = 2.000E+00

Figure 184: ANGMOM at May by dcpam

Figure 187: ANGMOM at Jun. by dcpam



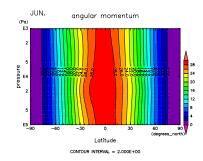
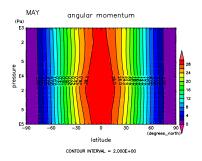


Figure 185: ANGMOM at May by NCEP

Figure 188: ANGMOM at Jun. by NCEP



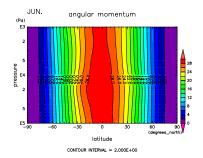
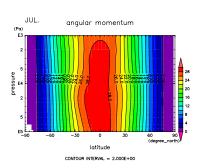


Figure 186: ANGMOM at May by Figure 189: ANGMOM at Jun. by ECMWF

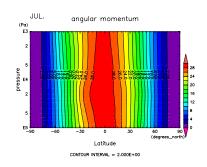
ECMWF



AUG. angular momentum latitude CONTOUR INTERVAL = 2.000E+00

Figure 190: ANGMOM at Jul. by dcpam

Figure 193: ANGMOM at Aug. by dcpam



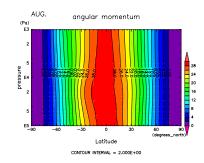
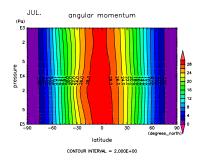
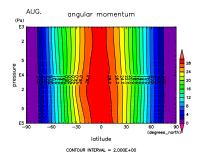


Figure 191: ANGMOM at Jul. by NCEP

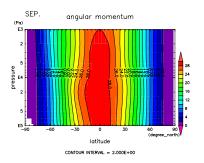
Figure 194: ANGMOM at Aug. by NCEP





ECMWF

Figure 192: ANGMOM at Jul. by Figure 195: ANGMOM at Aug. by ECMWF



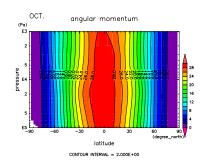
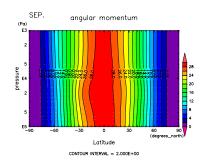


Figure 196: ANGMOM at Sep. by dcpam

Figure 199: ANGMOM at Oct. by dcpam



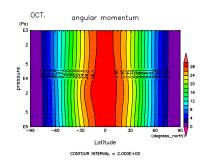
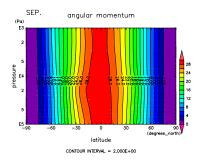
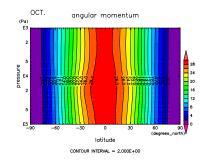


Figure 197: ANGMOM at Sep. by NCEP

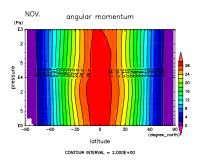
Figure 200: ANGMOM at Oct. by NCEP

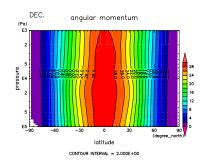




ECMWF

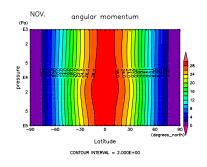
Figure 198: ANGMOM at Sep. by Figure 201: ANGMOM at Oct. by ECMWF





 dcpam

Figure 202: ANGMOM at Nov. by Figure 205: ANGMOM at Dec. by dcpam



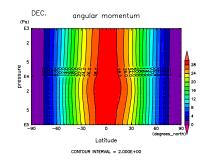
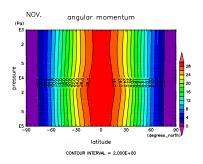


Figure 203: ANGMOM at Nov. by NCEP

Figure 206: ANGMOM at Dec. by NCEP



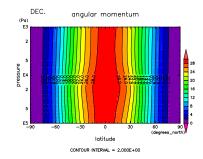
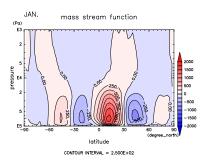


Figure 204: ANGMOM at Nov. by Figure 207: ANGMOM at Dec. by ECMWF

ECMWF



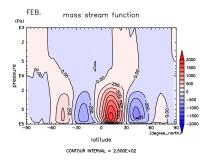
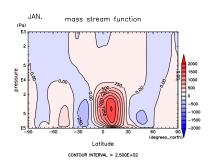


Figure 208: MSF at Jan. by dcpam

Figure 211: MSF at Feb. by dcpam $\,$



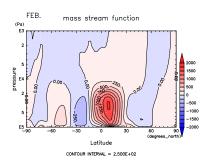
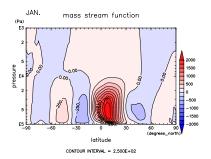


Figure 209: MSF at Jan. by NCEP

Figure 212: MSF at Feb. by NCEP



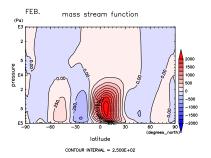
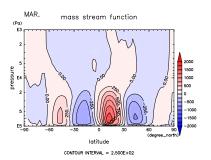


Figure 210: MSF at Jan. by ECMWF Figure 213: MSF at Feb. by ECMWF



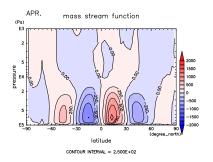
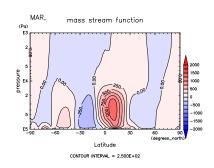


Figure 214: MSF at Mar. by dcpam

Figure 217: MSF at Apr. by dcpam



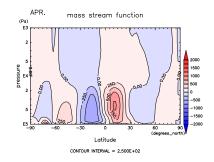
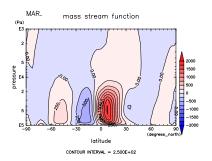


Figure 215: MSF at Mar. by NCEP $\,$

Figure 218: MSF at Apr. by NCEP



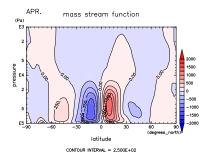
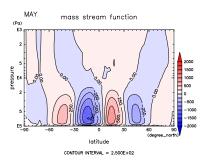


Figure 216: MSF at Mar. by ECMWF $\,$ Figure 219: MSF at Apr. by ECMWF



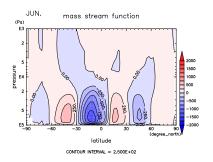
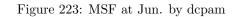
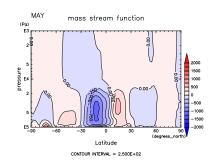


Figure 220: MSF at May by dcpam $\,$





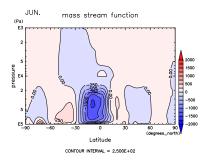
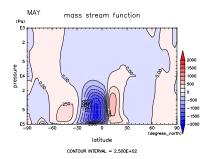


Figure 221: MSF at May by NCEP

Figure 224: MSF at Jun. by NCEP



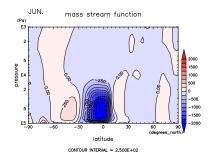
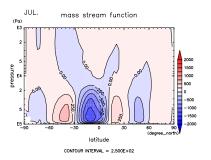


Figure 222: MSF at May by ECMWF $\,$ Figure 225: MSF at Jun. by ECMWF



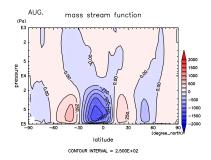
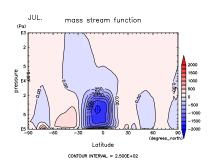


Figure 226: MSF at Jul. by dcpam

Figure 229: MSF at Aug. by dcpam



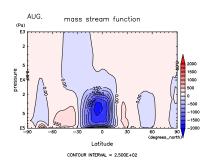
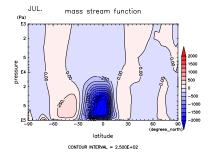


Figure 227: MSF at Jul. by NCEP $\,$

Figure 230: MSF at Aug. by NCEP



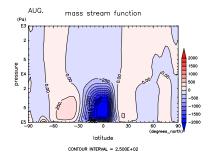
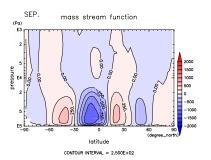


Figure 228: MSF at Jul. by ECMWF Figure 231: MSF at Aug. by ECMWF



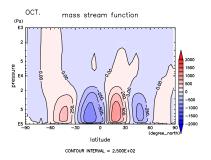
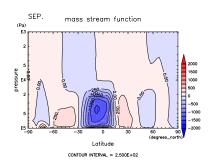


Figure 232: MSF at Sep. by dcpam $\,$

Figure 235: MSF at Oct. by dcpam



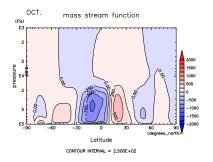
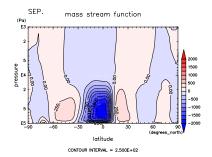


Figure 233: MSF at Sep. by NCEP

Figure 236: MSF at Oct. by NCEP $\,$



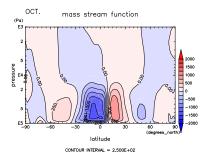
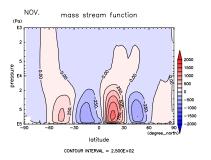


Figure 234: MSF at Sep. by ECMWF Figure 237: MSF at Oct. by ECMWF



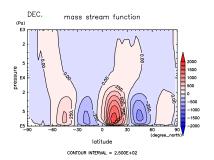
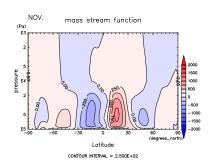


Figure 238: MSF at Nov. by dcpam

Figure 241: MSF at Dec. by dcpam



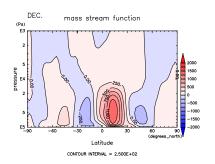
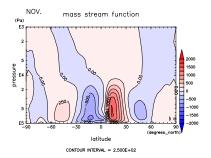


Figure 239: MSF at Nov. by NCEP

Figure 242: MSF at Dec. by NCEP



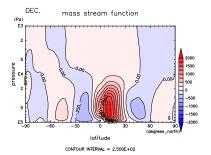


Figure 240: MSF at Nov. by ECMWF $\,$ Figure 243: MSF at Dec. by ECMWF

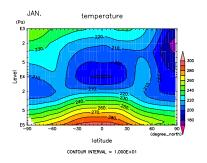
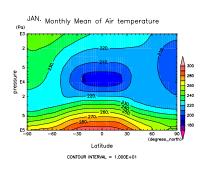


Figure 244: T at Jan. by dcpam

Figure 247: T at Feb. by dcpam



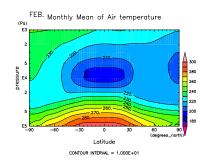
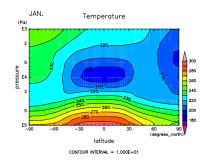


Figure 245: T at Jan. by NCEP

Figure 248: T at Feb. by NCEP



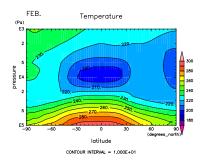


Figure 246: T at Jan. by ECMWF

Figure 249: T at Feb. by ECMWF

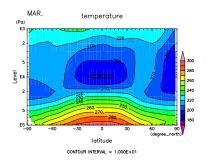
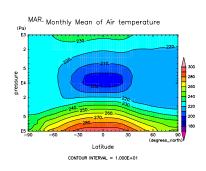


Figure 250: T at Mar. by dcpam

Figure 253: T at Apr. by dcpam $\,$



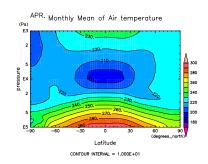
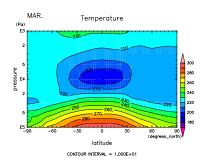


Figure 251: T at Mar. by NCEP

Figure 254: T at Apr. by NCEP



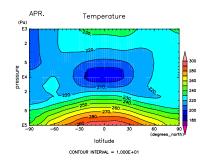


Figure 252: T at Mar. by ECMWF

Figure 255: T at Apr. by ECMWF

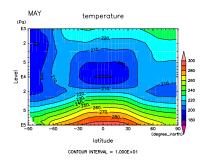
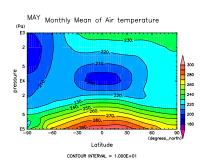


Figure 256: T at May by dcpam

Figure 259: T at Jun. by dcpam



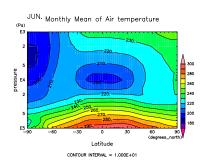
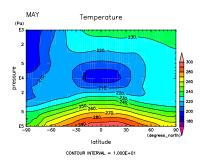


Figure 257: T at May by NCEP

Figure 260: T at Jun. by NCEP



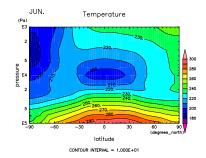


Figure 258: T at May by ECMWF

Figure 261: T at Jun. by ECMWF

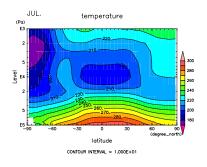
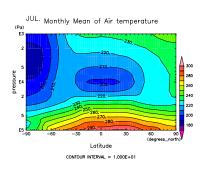


Figure 262: T at Jul. by dcpam

Figure 265: T at Aug. by dcpam



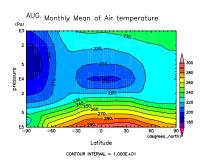
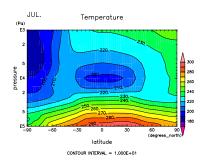


Figure 263: T at Jul. by NCEP

Figure 266: T at Aug. by NCEP



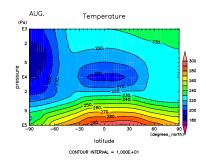
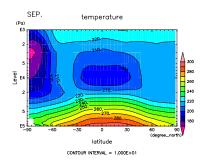


Figure 264: T at Jul. by ECMWF

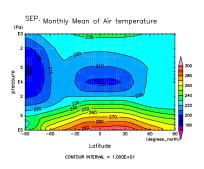
Figure 267: T at Aug. by ECMWF



OCT. temperature

Figure 268: T at Sep. by dcpam

Figure 271: T at Oct. by dcpam



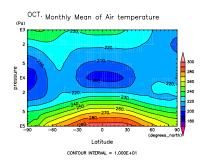
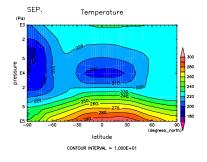


Figure 269: T at Sep. by NCEP

Figure 272: T at Oct. by NCEP



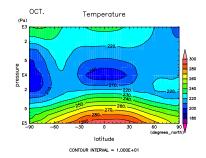


Figure 270: T at Sep. by ECMWF

Figure 273: T at Oct. by ECMWF

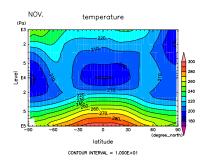
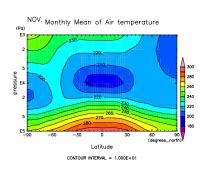


Figure 274: T at Nov. by dcpam

Figure 277: T at Dec. by dcpam $\,$



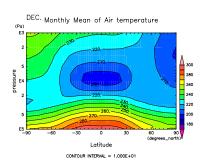
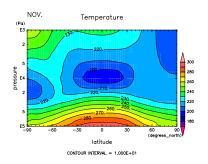


Figure 275: T at Nov. by NCEP

Figure 278: T at Dec. by NCEP



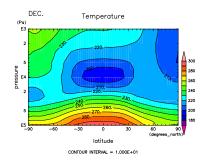
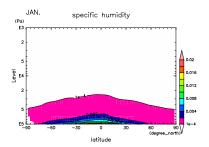


Figure 276: T at Nov. by ECMWF

Figure 279: T at Dec. by ECMWF



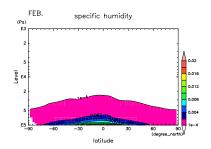


Figure 280: q at Jan. by dcpam

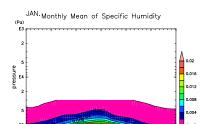


Figure 283: q at Feb. by dcpam

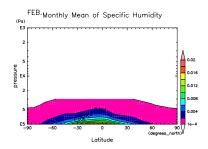


Figure 281: q at Jan. by NCEP

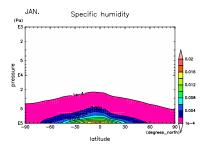


Figure 284: q at Feb. by NCEP

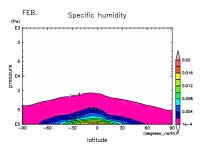
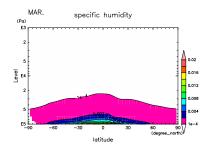


Figure 282: q at Jan. by ECMWF

Figure 285: q at Feb. by ECMWF



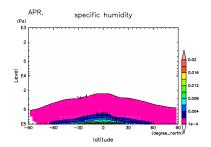


Figure 286: q at Mar. by dcpam

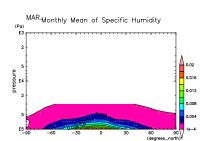


Figure 289: q at Apr. by dcpam

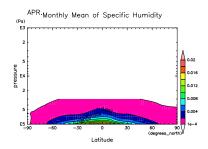


Figure 287: q at Mar. by NCEP

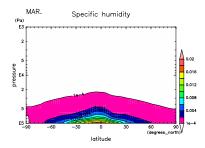


Figure 290: q at Apr. by NCEP

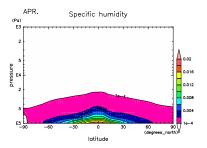
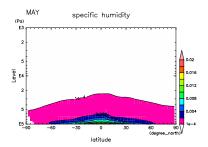


Figure 288: q at Mar. by ECMWF

Figure 291: q at Apr. by ECMWF



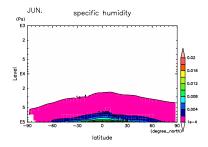


Figure 292: q at May by dcpam



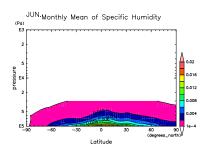


Figure 295: q at Jun. by dcpam

0.002 5 0.016 0.016 0.016 0.008

Figure 293: q at May by NCEP

Figure 296: q at Jun. by NCEP

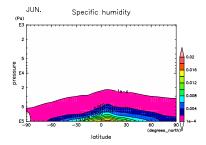
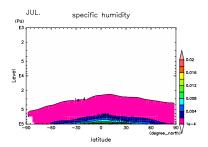


Figure 294: q at May by ECMWF

Figure 297: q at Jun. by ECMWF



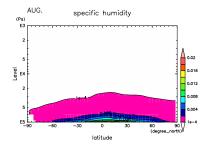


Figure 298: q at Jul. by dcpam

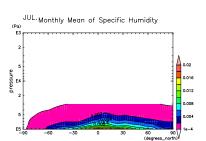


Figure 301: q at Aug. by dcpam

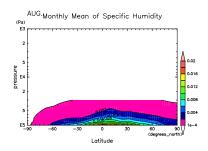


Figure 299: q at Jul. by NCEP

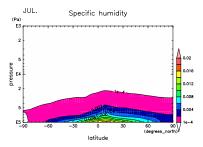


Figure 302: q at Aug. by NCEP

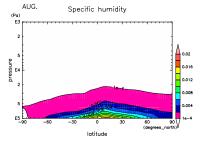
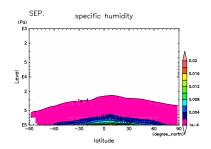


Figure 300: q at Jul. by ECMWF

Figure 303: q at Aug. by ECMWF



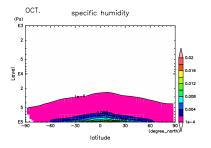


Figure 304: q at Sep. by dcpam

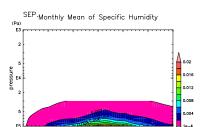


Figure 307: q at Oct. by dcpam

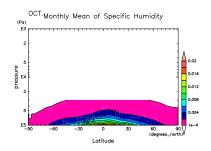


Figure 305: q at Sep. by NCEP

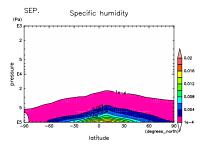


Figure 308: q at Oct. by NCEP

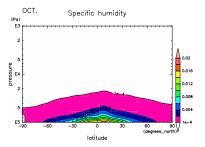
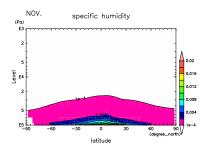


Figure 306: q at Sep. by ECMWF

Figure 309: q at Oct. by ECMWF



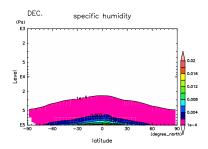


Figure 310: q at Nov. by dcpam

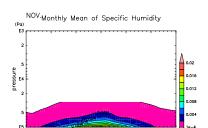


Figure 313: q at Dec. by dcpam

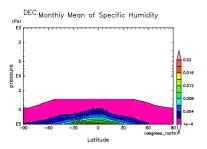


Figure 311: q at Nov. by NCEP

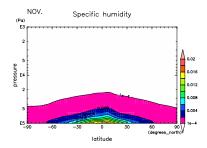


Figure 314: q at Dec. by NCEP

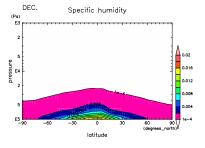


Figure 312: q at Nov. by ECMWF

Figure 315: q at Dec. by ECMWF

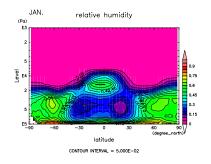
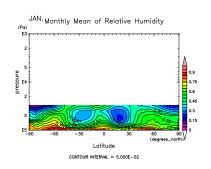


Figure 316: RH at Jan. by dcpam

Figure 319: RH at Feb. by dcpam



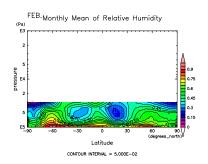
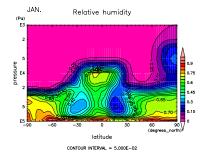


Figure 317: RH at Jan. by NCEP

Figure 320: RH at Feb. by NCEP



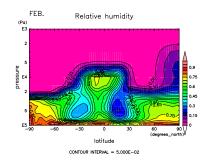


Figure 318: RH at Jan. by ECMWF

Figure 321: RH at Feb. by ECMWF

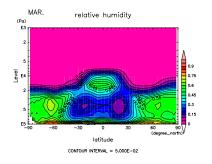
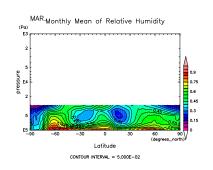


Figure 322: RH at Mar. by dcpam

Figure 325: RH at Apr. by dcpam



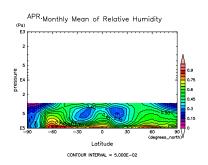
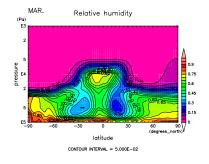


Figure 323: RH at Mar. by NCEP

Figure 326: RH at Apr. by NCEP



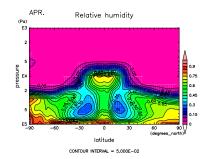


Figure 324: RH at Mar. by ECMWF $\,\,$ Figure 327: RH at Apr. by ECMWF

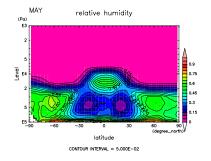
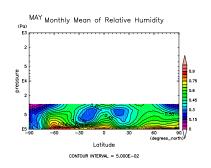


Figure 328: RH at May by dcpam

Figure 331: RH at Jun. by dcpam



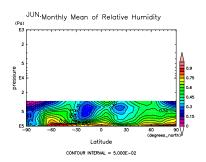
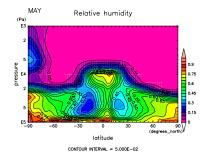


Figure 329: RH at May by NCEP

Figure 332: RH at Jun. by NCEP



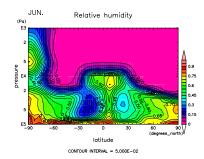


Figure 330: RH at May by ECMWF

Figure 333: RH at Jun. by ECMWF

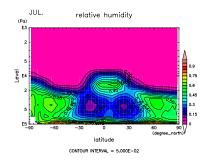
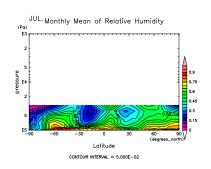


Figure 334: RH at Jul. by dcpam

Figure 337: RH at Aug. by dcpam



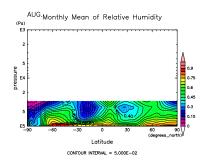
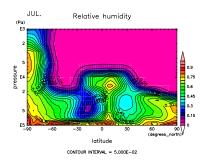


Figure 335: RH at Jul. by NCEP $\,$

Figure 338: RH at Aug. by NCEP



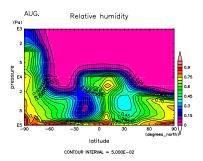
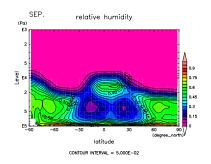


Figure 336: RH at Jul. by ECMWF

Figure 339: RH at Aug. by ECMWF



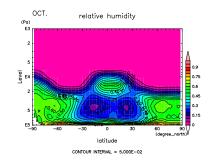
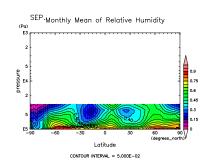


Figure 340: RH at Sep. by dcpam

Figure 343: RH at Oct. by dcpam



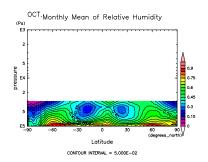
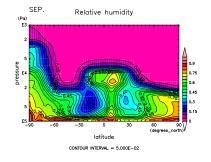


Figure 341: RH at Sep. by NCEP

Figure 344: RH at Oct. by NCEP



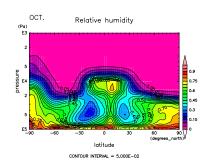
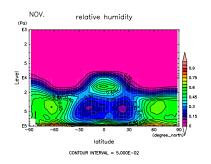


Figure 342: RH at Sep. by ECMWF

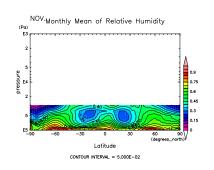
Figure 345: RH at Oct. by ECMWF



DEC. relative humidity le vel latitude CONTOUR INTERVAL = 5.000E-02

Figure 346: RH at Nov. by dcpam

Figure 349: RH at Dec. by dcpam



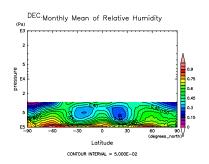
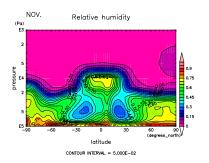


Figure 347: RH at Nov. by NCEP

Figure 350: RH at Dec. by NCEP



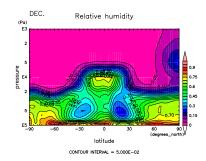


Figure 348: RH at Nov. by ECMWF Figure 351: RH at Dec. by ECMWF