## 0.1 Global mean budget

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

PRCP 48.005265770565494 W m-2, 80 80 48.00355712098905 W m-2, EvapU: SensA : 11.85526019134867 W m-2, 17 280.2751826792538 W m-2, 63 SLRA : -340.1339979604238 W m-2, SSRA -161 239 OLRA 340.2948459104771 W m-2, OSRA : -340.1339979604238 W m-2, -239

Heating: -0.160845083330276 W m-2

Water : -8.360958587982453e-09 kg m-2 s-1

## 0.2 Figures

Data from 1988 to 2007 are used for NCEP reanalysis, NOAA Interpolated OLR, and GPCP, and those from 1982 to 2001 are used for ECMWF reanalysis.

## 0.2.1 Annual and zonal mean latitudinal distribution

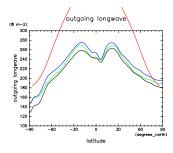


Figure 1: Annual average OLRA by DCPAM (red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)

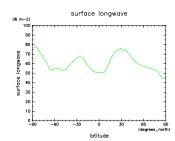
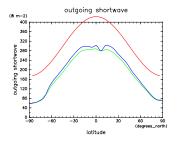


Figure 4: Annual average SLRA by DCPAM (red), NCEP (green)

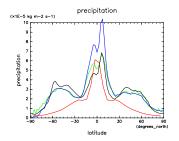
surface shortwave



latitude

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

Figure 2: Annual average OSRA by Figure 5: Annual average SSRA by



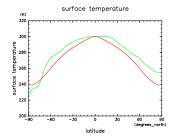
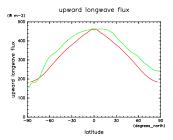


Figure 3: Annual average PRCP by DCPAM (red), NCEP (green), ECMWF (blue), and GPCP (black)

Figure 6: Annual average SurfTemp by DCPAM (red), NCEP (skt) (green)



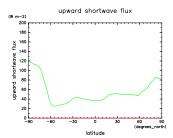
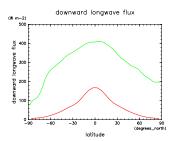


Figure 7: Annual average SLURA by Figure 9: Annual average SSURA by DCPAM (red), NCEP (green)



DCPAM (red), NCEP (green)

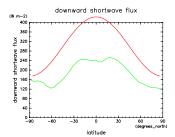


Figure 8: Annual average SLDRA by Figure 10: Annual average SSDRA by DCPAM (red), NCEP (green)

DCPAM (red), NCEP (green)

0.2.2 Annual mean longitude-latitude distribution

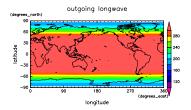


Figure 11: Annual mean OLR by DC-PAM  $\,$ 

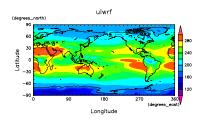


Figure 12: Annual mean OLR by NCEP  $\,$ 

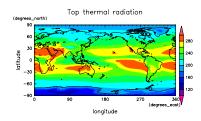


Figure 13: Annual mean OLR by ECMWF

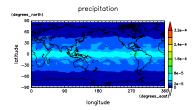


Figure 14: Annual mean Rain by DC-PAM  $\,$ 

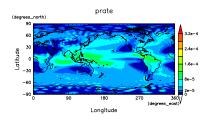


Figure 15: Annual mean Rain by NCEP  $\,$ 

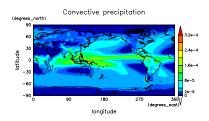


Figure 16: Annual mean Rain by ECMWF

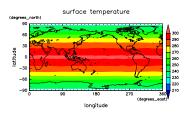


Figure 17: Annual mean SurfTemp by DCPAM  $\,$ 

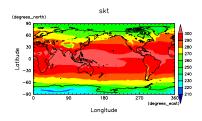


Figure 18: Annual mean skt by NCEP

0.2.3 Annual mean latitude-pressure (linear) distribution

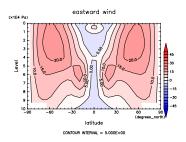


Figure 19: Annual mean U by DC-PAM

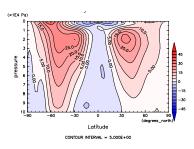


Figure 20: Annual mean U by NCEP

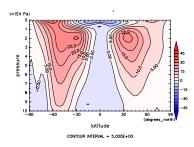


Figure 21: Annual mean U by ECMWF

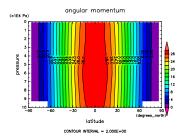


Figure 22: Annual mean ANGMOM by DCPAM  $\,$ 

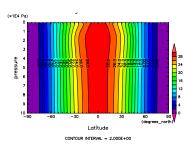


Figure 23: Annual mean ANGMOM by NCEP  $\,$ 

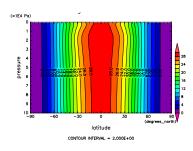


Figure 24: Annual mean ANGMOM by ECMWF

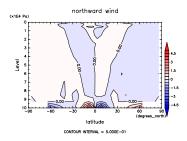


Figure 25: Annual mean V by DC-PAM  $\,$ 

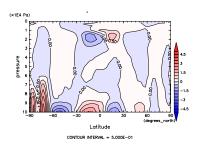


Figure 26: Annual mean V by NCEP

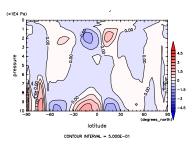


Figure 27: Annual mean V by ECMWF

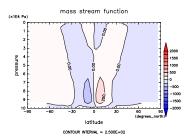


Figure 28: Annual mean MSF by DC-PAM  $\,$ 

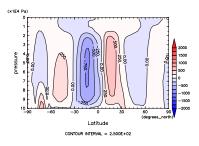


Figure 29: Annual mean MSF by NCEP

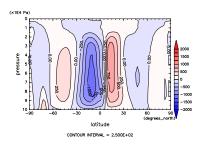


Figure 30: Annual mean MSF by ECMWF

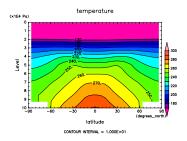


Figure 31: Annual mean T by DC-PAM  $\,$ 

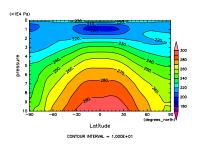


Figure 32: Annual mean T by NCEP

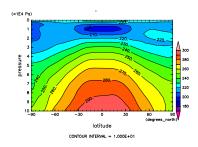


Figure 33: Annual mean T by ECMWF

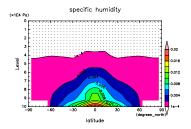


Figure 34: Annual mean q by DCPAM

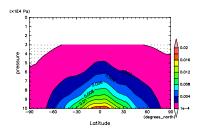


Figure 35: Annual mean q by NCEP

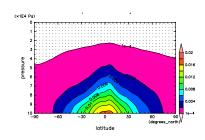


Figure 36: Annual mean q by ECMWF

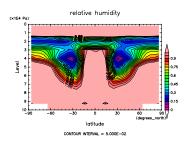


Figure 37: Annual mean RH by DC-PAM  $\,$ 

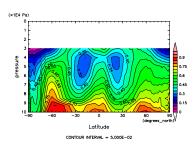


Figure 38: Annual mean RH by NCEP

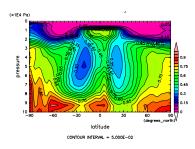


Figure 39: Annual mean RH by ECMWF

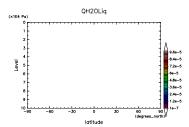


Figure 40: Annual mean  $q_l$  by DC-PAM

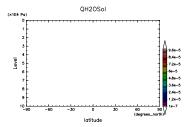


Figure 41: Annual mean  $q_i$  by DC-PAM

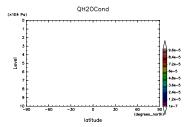


Figure 42: Annual mean  $q_l + q_i$  by DC-PAM

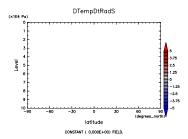


Figure 43: Annual mean  $(\partial T/\partial t)_{SW}$  by DCPAM

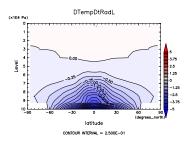


Figure 44: Annual mean  $(\partial T/\partial t)_{LW}$  by DCPAM

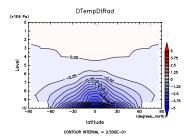


Figure 45: Annual mean  $(\partial T/\partial t)_{SW+LW}$  by DCPAM

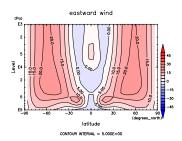


Figure 46: Annual mean U by DC-PAM

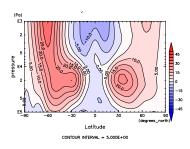


Figure 47: Annual mean U by NCEP

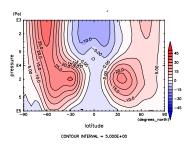


Figure 48: Annual mean U by ECMWF

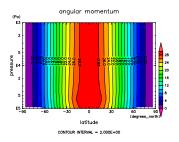


Figure 49: Annual mean ANGMOM by DCPAM  $\,$ 

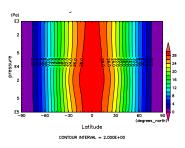


Figure 50: Annual mean ANGMOM by NCEP

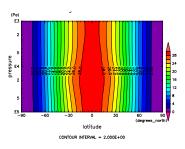


Figure 51: Annual mean ANGMOM by ECMWF

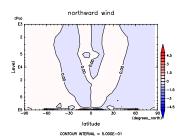


Figure 52: Annual mean V by DC-PAM

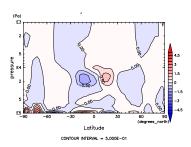


Figure 53: Annual mean V by NCEP

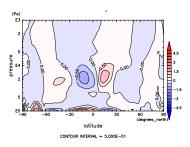


Figure 54: Annual mean V by ECMWF

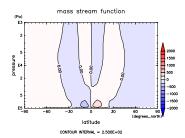


Figure 55: Annual mean MSF by DC-PAM  $\,$ 

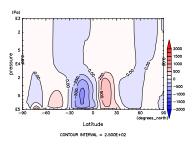


Figure 56: Annual mean MSF by NCEP  $\,$ 

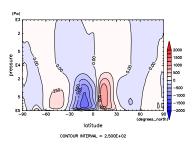


Figure 57: Annual mean MSF by ECMWF

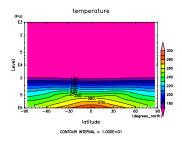


Figure 58: Annual mean T by DC-PAM  $\,$ 

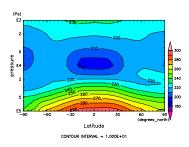


Figure 59: Annual mean T by NCEP

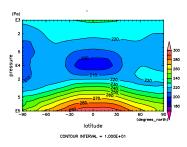


Figure 60: Annual mean T by ECMWF

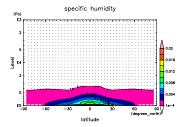


Figure 61: Annual mean q by DCPAM  $\,$ 

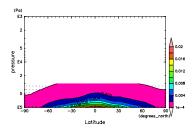


Figure 62: Annual mean q by NCEP

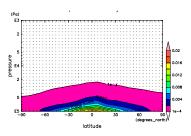


Figure 63: Annual mean q by ECMWF

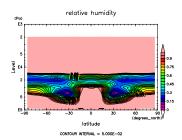


Figure 64: Annual mean RH by DC-PAM  $\,$ 

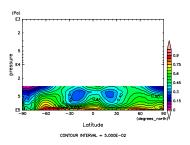


Figure 65: Annual mean RH by NCEP

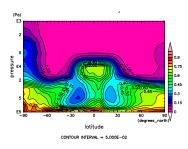


Figure 66: Annual mean RH by ECMWF

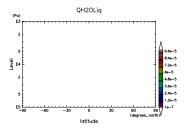


Figure 67: Annual mean  $q_l$  by DC-PAM

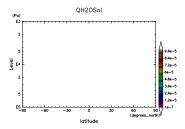


Figure 68: Annual mean  $q_i$  by DC-PAM

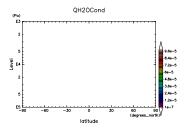


Figure 69: Annual mean  $q_l + q_i$  by DC-PAM

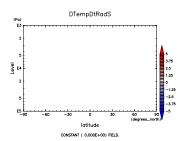


Figure 70: Annual mean  $(\partial T/\partial t)_{SW}$  by DCPAM

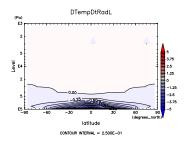


Figure 71: Annual mean  $(\partial T/\partial t)_{LW}$  by DCPAM

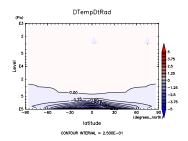
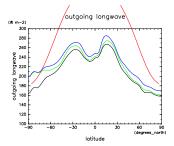


Figure 72: Annual mean  $(\partial T/\partial t)_{SW+LW}$  by DCPAM

0.2.5 Monthly and zonal mean latitudinal distribution



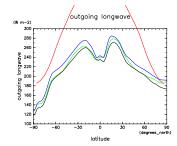
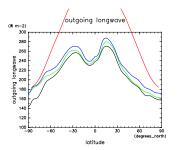


Figure 73: OLRA at Jan. by DCPAM (red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)

Figure 76: OLRA at Apr. by DCPAM (red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)



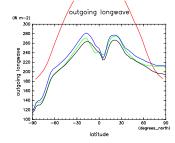
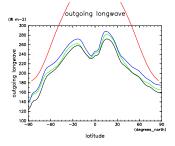


Figure 74: OLRA at Feb. by DCPAM (red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)

Figure 77: OLRA at May by DCPAM (red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)



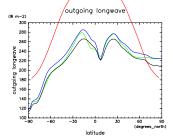
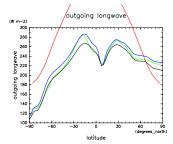


Figure 75: OLRA at Mar. by DCPAM (red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)

Figure 78: OLRA at Jun. by DCPAM (red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)



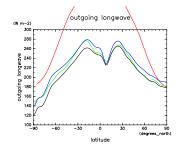
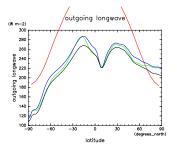


Figure 79: OLRA at Jul. by DCPAM (red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)

Figure 82: OLRA at Oct. by DCPAM (red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)



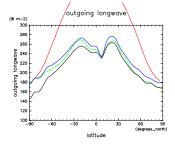
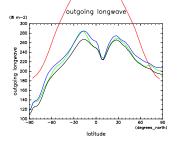


Figure 80: OLRA at Aug. by DCPAM Figure 83: OLRA at Nov. by DCPAM (red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)

(red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)



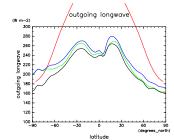
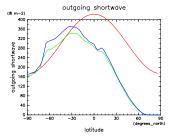


Figure 81: OLRA at Sep. by DCPAM (red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)

Figure 84: OLRA at Dec. by DCPAM (red), NCEP (green), ECMWF (blue), and NOAA Interpolated OLR (black)



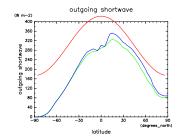
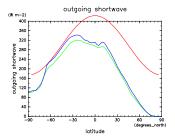
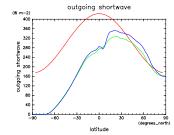


Figure 85: OSRA at Jan. by DCPAM (red), NCEP (green), and ECMWF (blue)

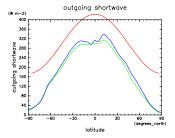
Figure 88: OSRA at Apr. by DCPAM (red), NCEP (green), and ECMWF (blue)





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

Figure 86: OSRA at Feb. by DCPAM Figure 89: OSRA at May by DCPAM (red), NCEP (green), and ECMWF (blue)



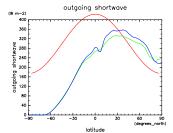
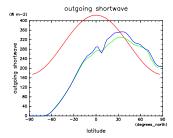


Figure 87: OSRA at Mar. by DCPAM (red), NCEP (green), and ECMWF (blue)

Figure 90: OSRA at Jun. by DCPAM (red), NCEP (green), and ECMWF (blue)



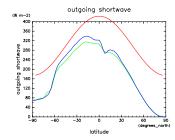
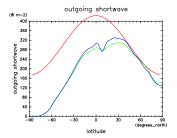
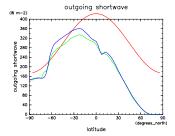


Figure 91: OSRA at Jul. by DCPAM (red), NCEP (green), and ECMWF (blue)

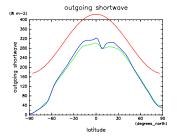
Figure 94: OSRA at Oct. by DCPAM (red), NCEP (green), and ECMWF (blue)





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

Figure 92: OSRA at Aug. by DCPAM Figure 95: OSRA at Nov. by DCPAM (red), NCEP (green), and ECMWF (blue)



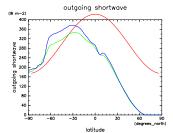
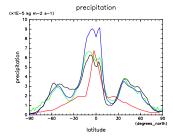


Figure 93: OSRA at Sep. by DCPAM (red), NCEP (green), and ECMWF (blue)

Figure 96: OSRA at Dec. by DCPAM (red), NCEP (green), and ECMWF (blue)



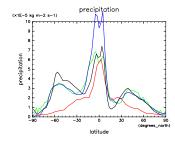
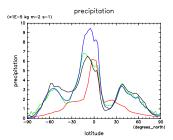
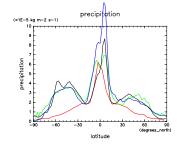


Figure 97: Rain at Jan. by DCPAM (red), NCEP (green), ECMWF (blue), and GPCP (black)

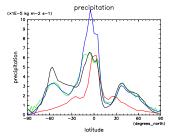
Figure 100: Rain at Apr. by DCPAM (red), NCEP (green), ECMWF (blue), and GPCP (black)





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

Figure 98: Rain at Feb. by DCPAM Figure 101: Rain at May by DCPAM (red), NCEP (green), ECMWF (blue), and GPCP (black)



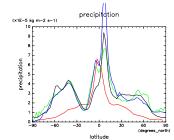
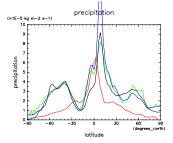


Figure 99: Rain at Mar. by DCPAM (red), NCEP (green), ECMWF (blue), and GPCP (black)

Figure 102: Rain at Jun. by DCPAM (red), NCEP (green), ECMWF (blue), and GPCP (black)



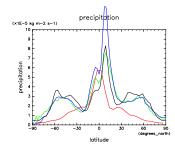
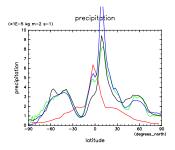
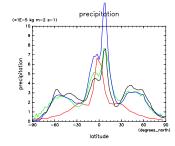


Figure 103: Rain at Jul. by DCPAM (red), NCEP (green), ECMWF (blue), and GPCP (black)

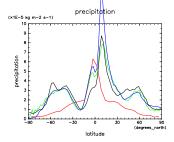
Figure 106: Rain at Oct. by DCPAM (red), NCEP (green), ECMWF (blue), and GPCP (black)





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

Figure 104: Rain at Aug. by DCPAM Figure 107: Rain at Nov. by DCPAM (red), NCEP (green), ECMWF (blue), and GPCP (black)



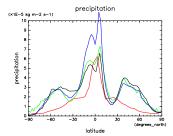
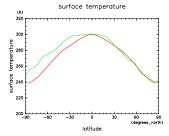


Figure 105: Rain at Sep. by DCPAM (red), NCEP (green), ECMWF (blue), and GPCP (black)

Figure 108: Rain at Dec. by DCPAM (red), NCEP (green), ECMWF (blue), and GPCP (black)



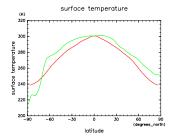
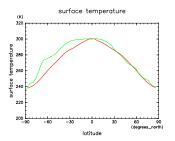
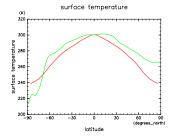


Figure 109: SurfTemp at Jan. by DC-PAM (red), NCEP (skt) (green)

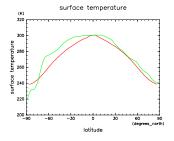
Figure 112: SurfTemp at Apr. by DC-PAM (red), NCEP (skt) (green)





PAM (red), NCEP (skt) (green)

Figure 110: SurfTemp at Feb. by DC- Figure 113: SurfTemp at May by DC- ${\rm PAM}~({\rm red}),~{\rm NCEP}~({\rm skt})~({\rm green})$ 



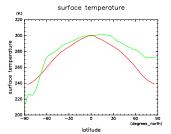
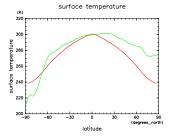


Figure 111: SurfTemp at Mar. by DC-PAM (red), NCEP (skt) (green)

Figure 114: SurfTemp at Jun. by DC-PAM (red), NCEP (skt) (green)



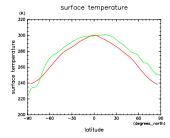
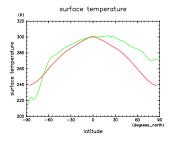
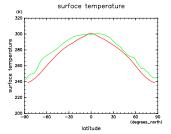


Figure 115: SurfTemp at Jul. by DC-PAM (red), NCEP (skt) (green)

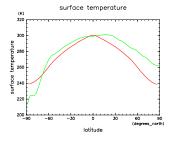
Figure 118: SurfTemp at Oct. by DC-PAM (red), NCEP (skt) (green)





PAM (red), NCEP (skt) (green)

Figure 116: SurfTemp at Aug. by DC- Figure 119: SurfTemp at Nov. by DC- ${\rm PAM}~({\rm red}),~{\rm NCEP}~({\rm skt})~({\rm green})$ 



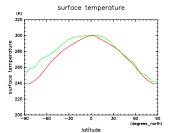
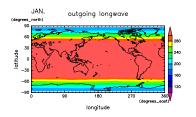


Figure 117: SurfTemp at Sep. by DC-PAM (red), NCEP (skt) (green)

Figure 120: SurfTemp at Dec. by DC-PAM (red), NCEP (skt) (green)

 ${\bf 0.2.6}\quad {\bf Monthly\ mean\ longitude-latitude\ distribution}$ 



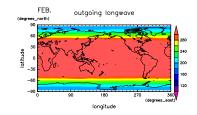
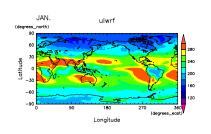


Figure 121: OLR at Jan. by DCPAM  $\,$  Figure 124: OLR at Feb. by DCPAM  $\,$ 



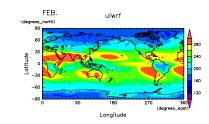
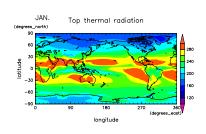


Figure 122: OLR at Jan. by NCEP



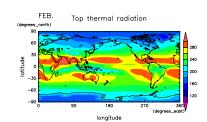
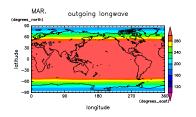


Figure 125: OLR at Feb. by NCEP

Figure 123: OLR at Jan. by ECMWF  $\,$  Figure 126: OLR at Feb. by ECMWF



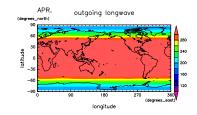
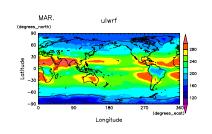


Figure 127: OLR at Mar. by DCPAM  $\,$  Figure 130: OLR at Apr. by DCPAM  $\,$ 



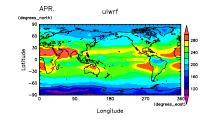
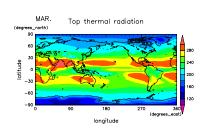


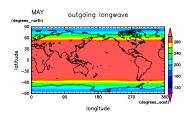
Figure 128: OLR at Mar. by NCEP



APR. Top thermal radiation

Figure 131: OLR at Apr. by NCEP

Figure 129: OLR at Mar. by ECMWF  $\,$  Figure 132: OLR at Apr. by ECMWF  $\,$ 



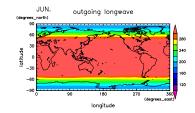
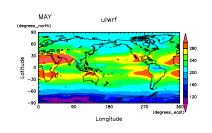


Figure 133: OLR at May by DCPAM Figure 136: OLR at Jun. by DCPAM



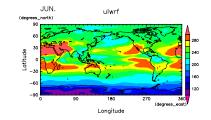
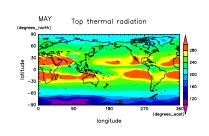


Figure 134: OLR at May by NCEP



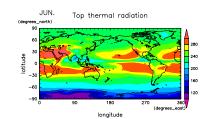
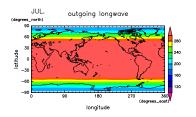


Figure 137: OLR at Jun. by NCEP

Figure 135: OLR at May by ECMWF  $\,$  Figure 138: OLR at Jun. by ECMWF  $\,$ 



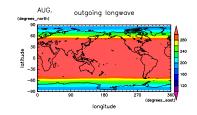
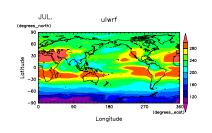


Figure 139: OLR at Jul. by DCPAM  $\,$  Figure 142: OLR at Aug. by DCPAM  $\,$ 



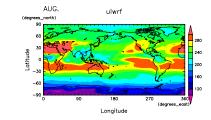
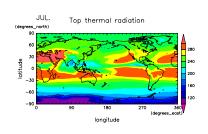


Figure 140: OLR at Jul. by NCEP  $\,$ 



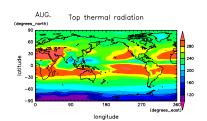
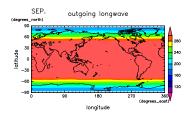


Figure 143: OLR at Aug. by NCEP

Figure 141: OLR at Jul. by ECMWF  $\,$  Figure 144: OLR at Aug. by ECMWF



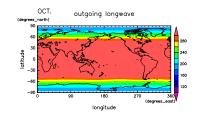
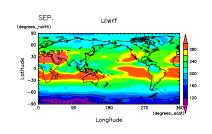


Figure 145: OLR at Sep. by DCPAM Figure 148: OLR at Oct. by DCPAM



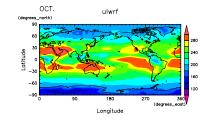


Figure 146: OLR at Sep. by NCEP

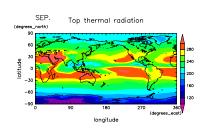


Figure 149: OLR at Oct. by NCEP  $\,$ 

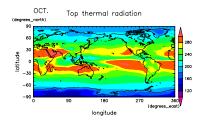
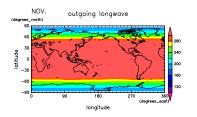


Figure 147: OLR at Sep. by ECMWF  $\,$  Figure 150: OLR at Oct. by ECMWF



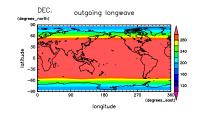
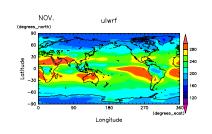


Figure 151: OLR at Nov. by DCPAM  $\,$  Figure 154: OLR at Dec. by DCPAM  $\,$ 



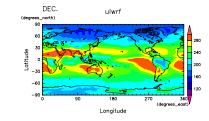
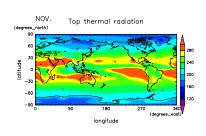


Figure 152: OLR at Nov. by NCEP



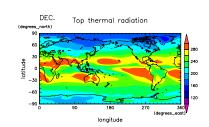
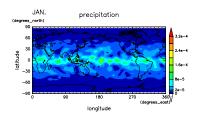


Figure 155: OLR at Dec. by NCEP  $\,$ 

Figure 153: OLR at Nov. by ECMWF  $\,$  Figure 156: OLR at Dec. by ECMWF  $\,$ 



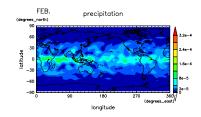
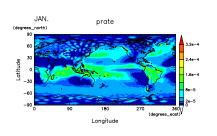


Figure 157: Rain at Jan. by DCPAM Figure 160: Rain at Feb. by DCPAM



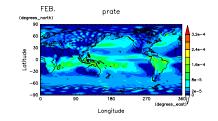
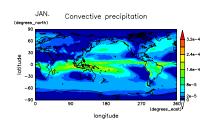


Figure 158: Rain at Jan. by NCEP



FEB. (degrees\_north)

90

60

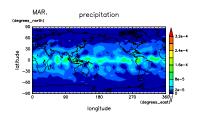
90

2.44-4

longitude

Figure 161: Rain at Feb. by NCEP

Figure 159: Rain at Jan. by ECMWF  $\,$  Figure 162: Rain at Feb. by ECMWF



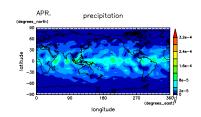
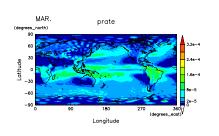


Figure 163: Rain at Mar. by DCPAM Figure 166: Rain at Apr. by DCPAM



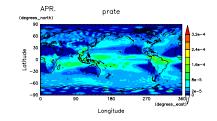


Figure 164: Rain at Mar. by NCEP

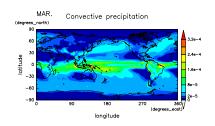


Figure 167: Rain at Apr. by NCEP

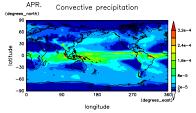
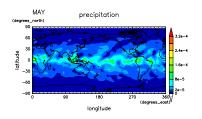


Figure 165: Rain at Mar. by ECMWF  $\,$  Figure 168: Rain at Apr. by ECMWF



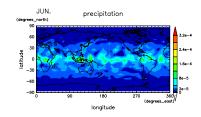
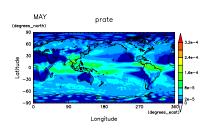


Figure 169: Rain at May by DCPAM Figure 172: Rain at Jun. by DCPAM



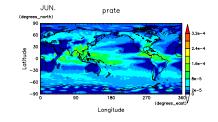


Figure 170: Rain at May by NCEP

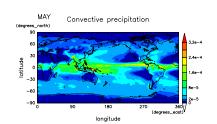


Figure 173: Rain at Jun. by NCEP

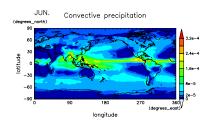
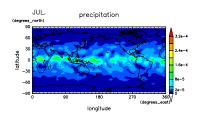


Figure 171: Rain at May by ECMWF  $\,$  Figure 174: Rain at Jun. by ECMWF



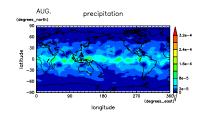
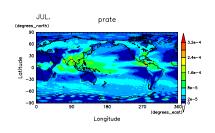


Figure 175: Rain at Jul. by DCPAM Figure 178: Rain at Aug. by DCPAM



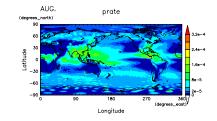


Figure 176: Rain at Jul. by NCEP

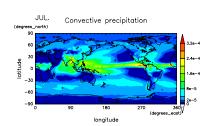


Figure 179: Rain at Aug. by NCEP  $\,$ 

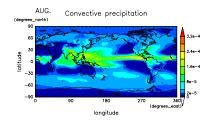
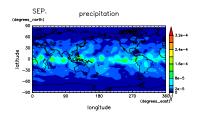


Figure 177: Rain at Jul. by ECMWF  $\,$  Figure 180: Rain at Aug. by ECMWF  $\,$ 



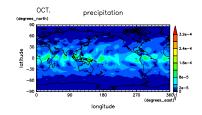
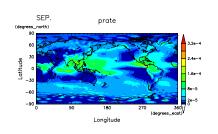


Figure 181: Rain at Sep. by DCPAM Figure 184: Rain at Oct. by DCPAM



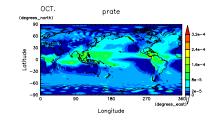


Figure 182: Rain at Sep. by NCEP

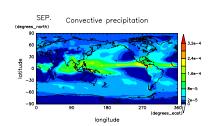


Figure 185: Rain at Oct. by NCEP

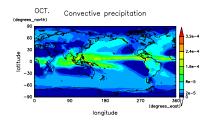
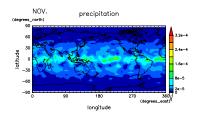


Figure 183: Rain at Sep. by ECMWF  $\,$  Figure 186: Rain at Oct. by ECMWF  $\,$ 



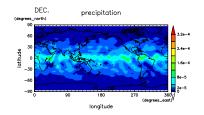
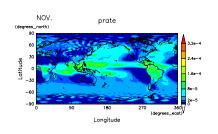


Figure 187: Rain at Nov. by DCPAM Figure 190: Rain at Dec. by DCPAM



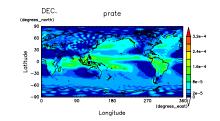


Figure 188: Rain at Nov. by NCEP

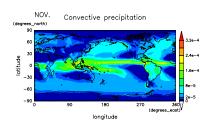


Figure 191: Rain at Dec. by NCEP

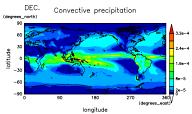
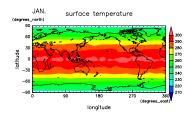


Figure 189: Rain at Nov. by ECMWF  $\,$  Figure 192: Rain at Dec. by ECMWF  $\,$ 



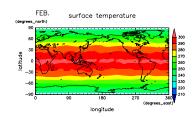
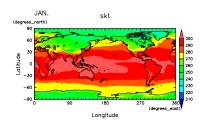


Figure 193: Surf<br/>Temp at Jan. by DC- $\,$  Figure 195: Surf<br/>Temp at Feb. by DC-PAM  $\,$  PAM  $\,$ 

FEB. (degrees\_north)



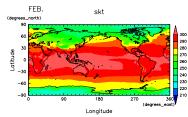
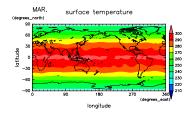


Figure 194: skt at Jan. by NCEP

Figure 196: skt at Feb. by NCEP



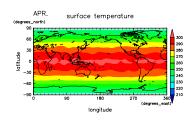


Figure 197: Surf<br/>Temp at Mar. by DC-PAM  $\,$ 

Figure 199: SurfTemp at Apr. by DC-PAM  $\,$ 

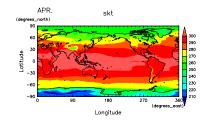
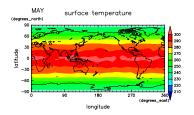


Figure 198: skt at Mar. by NCEP

Figure 200: skt at Apr. by NCEP



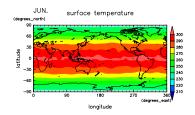
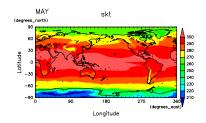


Figure 201: SurfTemp at May by DC-PAM  $\,$ 

Figure 203: SurfTemp at Jun. by DC-PAM

JUN. skt



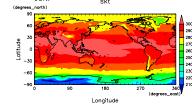
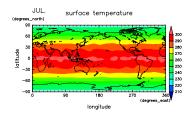


Figure 202: skt at May by NCEP

Figure 204: skt at Jun. by NCEP



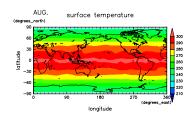


Figure 205: SurfTemp at Jul. by DC-PAM  $\,$ 

Figure 207: SurfTemp at Aug. by DC-PAM  $\,$ 

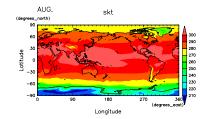
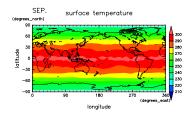


Figure 206: skt at Jul. by NCEP

Figure 208: skt at Aug. by NCEP



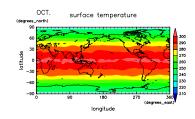


Figure 209: SurfTemp at Sep. by DC-PAM  $\,$ 

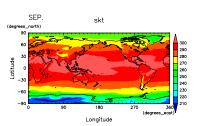


Figure 211: SurfTemp at Oct. by DC-PAM  $\,$ 

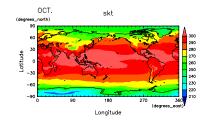
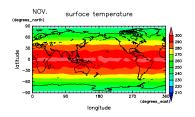


Figure 210: skt at Sep. by NCEP

Figure 212: skt at Oct. by NCEP



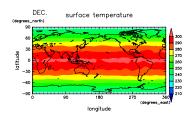


Figure 213: Surf<br/>Temp at Nov. by DC-PAM  $\,$ 

NOV. skt

(degrees\_north)

90

-00

-00

90

180

270

(degrees\_east)

Longitude

Figure 215: SurfTemp at Dec. by DC-PAM  $\,$ 

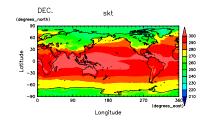
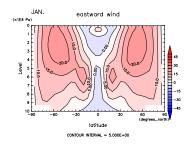


Figure 214: skt at Nov. by NCEP

Figure 216: skt at Dec. by NCEP

0.2.7 Monthly mean latitude-pressure (linear) distribution



FEB. eastward wind

Figure 217: U at Jan. by DCPAM  $\,$ 

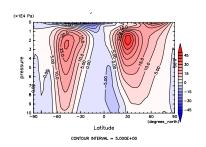


Figure 220: U at Feb. by DCPAM  $\,$ 

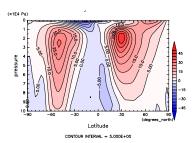


Figure 218: U at Jan. by NCEP

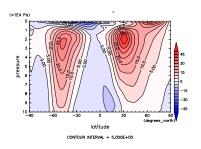


Figure 221: U at Feb. by NCEP

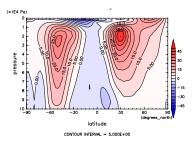
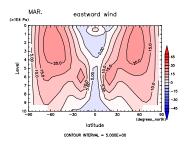


Figure 219: U at Jan. by ECMWF

Figure 222: U at Feb. by ECMWF



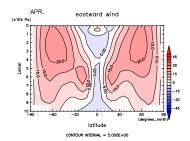


Figure 223: U at Mar. by DCPAM  $\,$ 

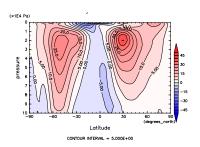


Figure 226: U at Apr. by DCPAM  $\,$ 

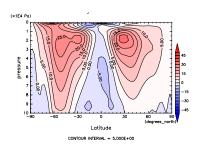


Figure 224: U at Mar. by NCEP

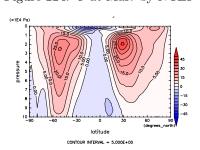


Figure 227: U at Apr. by NCEP

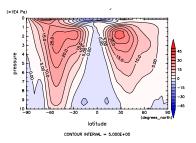
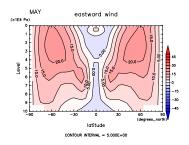


Figure 225: U at Mar. by ECMWF

Figure 228: U at Apr. by ECMWF



JUN. eastward wind

Figure 229: U at May by DCPAM  $\,$ 

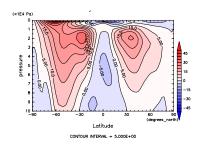


Figure 232: U at Jun. by DCPAM  $\,$ 

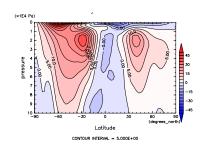


Figure 230: U at May by NCEP

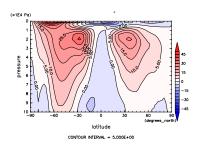


Figure 233: U at Jun. by NCEP

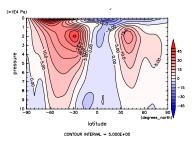
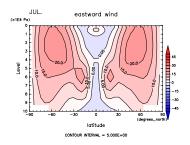


Figure 231: U at May by ECMWF

Figure 234: U at Jun. by ECMWF



AUG. eastward wind

Figure 235: U at Jul. by DCPAM  $\,$ 

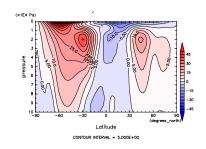


Figure 238: U at Aug. by DCPAM

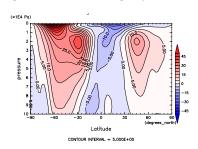


Figure 236: U at Jul. by NCEP

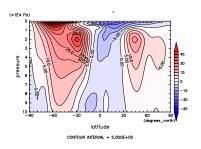


Figure 239: U at Aug. by NCEP

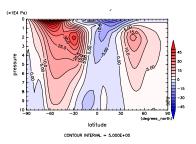
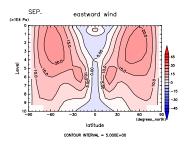


Figure 237: U at Jul. by ECMWF

Figure 240: U at Aug. by ECMWF



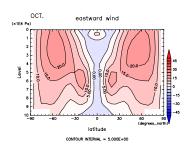


Figure 241: U at Sep. by DCPAM  $\,$ 

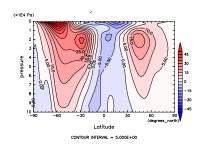


Figure 244: U at Oct. by DCPAM  $\,$ 

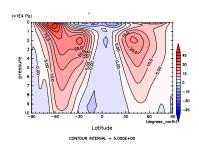


Figure 242: U at Sep. by NCEP

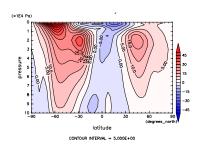


Figure 245: U at Oct. by NCEP

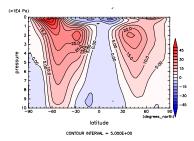
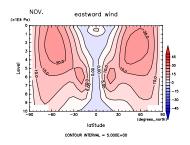


Figure 243: U at Sep. by ECMWF

Figure 246: U at Oct. by ECMWF



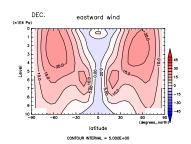


Figure 247: U at Nov. by DCPAM

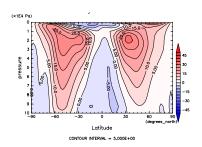


Figure 250: U at Dec. by DCPAM

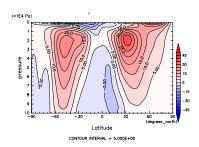


Figure 248: U at Nov. by NCEP

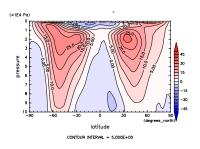


Figure 251: U at Dec. by NCEP  $\,$ 

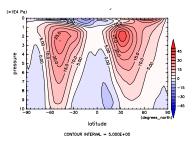
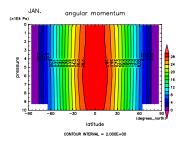


Figure 249: U at Nov. by ECMWF

Figure 252: U at Dec. by ECMWF



FEB. (×1E4 Pa) latitude CONTOUR INTERVAL = 2.000E+00

Figure 253: ANGMOM at Jan. by DCPAM

Latitude CONTOUR INTERVAL = 2.000E+00

Figure 256: ANGMOM at Feb. by  $\operatorname{DCPAM}$ 

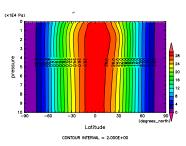


Figure 254: ANGMOM at Jan. by NCEP

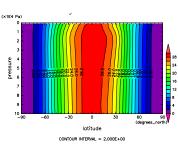


Figure 257: ANGMOM at Feb. by NCEP

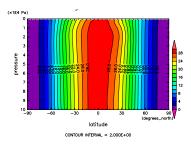
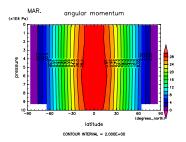


Figure 255: ANGMOM at Jan. by Figure 258: ANGMOM at Feb. by ECMWF

 $\operatorname{ECMWF}$ 



APR. (×164 Po) latitude CONTOUR INTERVAL = 2.000E+00

Figure 259: ANGMOM at Mar. by DCPAM

Latitude CONTOUR INTERVAL = 2.000E+00

Figure 262: ANGMOM at Apr. by  $\operatorname{DCPAM}$ 

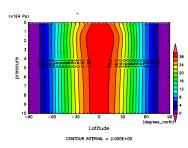


Figure 260: ANGMOM at Mar. by NCEP

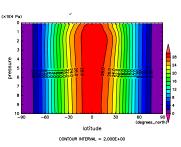


Figure 263: ANGMOM at Apr. by NCEP

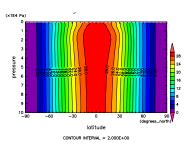
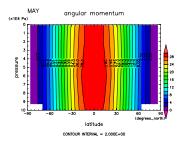


Figure 261: ANGMOM at Mar. by Figure 264: ANGMOM at Apr. by  $\operatorname{ECMWF}$ 

 $\operatorname{ECMWF}$ 



JUN. (×1E4 Pa) latitude CONTOUR INTERVAL = 2.000E+00

Figure 265: ANGMOM at May by DCPAM

Latitude CONTOUR INTERVAL = 2.000E+00

Figure 268: ANGMOM at Jun. by  $\operatorname{DCPAM}$ 

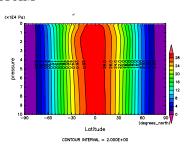


Figure 266: ANGMOM at May by NCEP

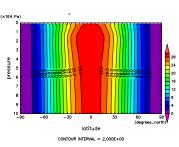
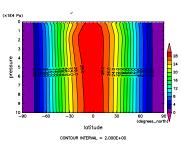
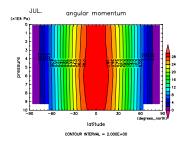


Figure 269: ANGMOM at Jun. by NCEP



 $\operatorname{ECMWF}$ 

Figure 267: ANGMOM at May by Figure 270: ANGMOM at Jun. by  $\operatorname{ECMWF}$ 

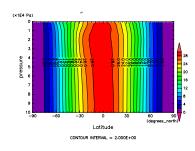


AUG. (x1E4 Pa) latitude CONTOUR INTERVAL = 2.000E+00

DCPAM

Latitude CONTOUR INTERVAL = 2.000E+00

Figure 271: ANGMOM at Jul. by Figure 274: ANGMOM at Aug. by  $\operatorname{DCPAM}$ 



NCEP

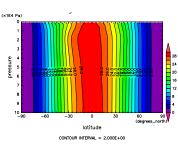
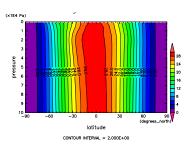
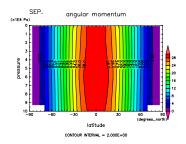


Figure 272: ANGMOM at Jul. by Figure 275: ANGMOM at Aug. by NCEP



 $\operatorname{ECMWF}$ 

Figure 273: ANGMOM at Jul. by Figure 276: ANGMOM at Aug. by  $\operatorname{ECMWF}$ 



OCT. (×1E4 Pa) latitude CONTOUR INTERVAL = 2.000E+00

Figure 277: ANGMOM at Sep. by DCPAM

Latitude CONTOUR INTERVAL = 2.000E+00

Figure 280: ANGMOM at Oct. by  $\operatorname{DCPAM}$ 

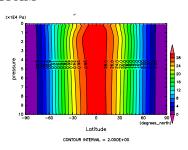


Figure 278: ANGMOM at Sep. by NCEP

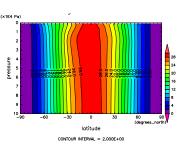


Figure 281: ANGMOM at Oct. by NCEP

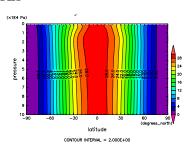
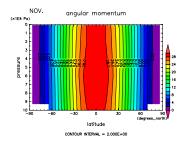


Figure 279: ANGMOM at Sep. by Figure 282: ANGMOM at Oct. by ECMWF

 $\operatorname{ECMWF}$ 



DEC. (×1E4 Pa) latitude CONTOUR INTERVAL = 2.000E+00

DCPAM

Latitude CONTOUR INTERVAL = 2.000E+00

Figure 283: ANGMOM at Nov. by Figure 286: ANGMOM at Dec. by  $\operatorname{DCPAM}$ 

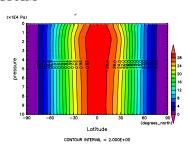


Figure 284: ANGMOM at Nov. by NCEP

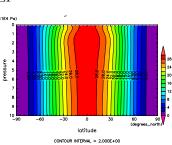
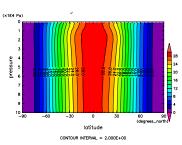
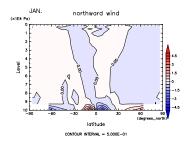


Figure 287: ANGMOM at Dec. by NCEP



ECMWF

Figure 285: ANGMOM at Nov. by Figure 288: ANGMOM at Dec. by  $\operatorname{ECMWF}$ 



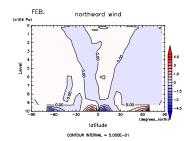


Figure 289: V at Jan. by DCPAM  $\,$ 

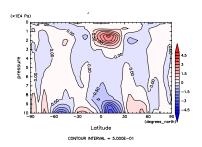


Figure 292: V at Feb. by DCPAM

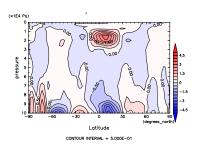


Figure 290: V at Jan. by NCEP

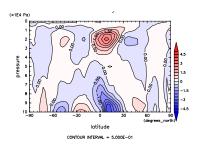


Figure 293: V at Feb. by NCEP

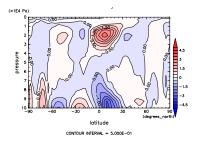
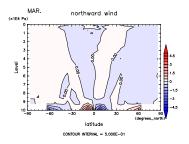


Figure 291: V at Jan. by ECMWF

Figure 294: V at Feb. by ECMWF



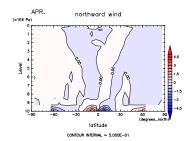


Figure 295: V at Mar. by DCPAM  $\,$ 

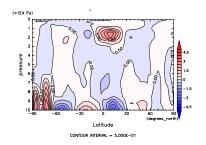


Figure 298: V at Apr. by DCPAM  $\,$ 

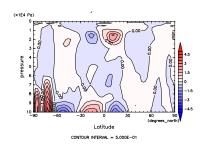


Figure 296: V at Mar. by NCEP

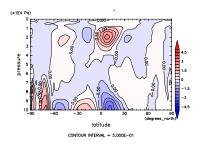


Figure 299: V at Apr. by NCEP

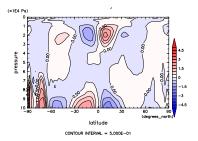
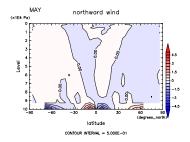


Figure 297: V at Mar. by ECMWF

Figure 300: V at Apr. by ECMWF



JUN. northward wind

Figure 301: V at May by DCPAM  $\,$ 

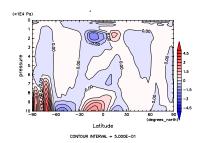


Figure 304: V at Jun. by DCPAM

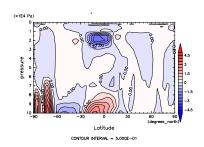


Figure 302: V at May by NCEP

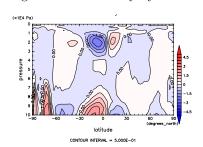


Figure 305: V at Jun. by NCEP

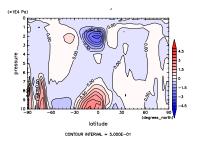
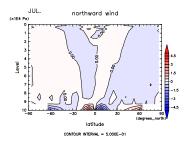


Figure 303: V at May by ECMWF

Figure 306: V at Jun. by ECMWF



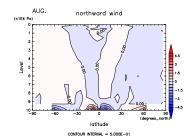


Figure 307: V at Jul. by DCPAM  $\,$ 

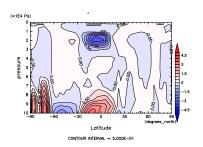


Figure 310: V at Aug. by DCPAM  $\,$ 

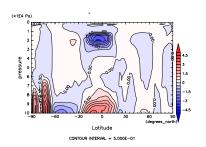


Figure 308: V at Jul. by NCEP

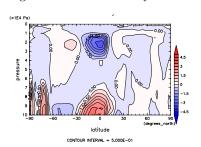


Figure 311: V at Aug. by NCEP

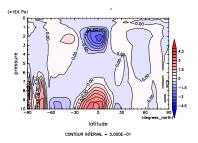
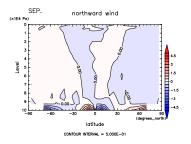


Figure 309: V at Jul. by ECMWF

Figure 312: V at Aug. by ECMWF



OCT. northward wind

Figure 313: V at Sep. by DCPAM  $\,$ 

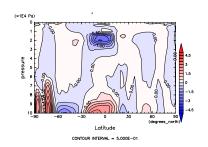


Figure 316: V at Oct. by DCPAM

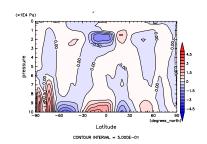


Figure 314: V at Sep. by NCEP

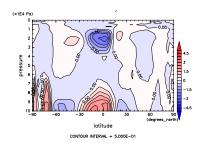


Figure 317: V at Oct. by NCEP

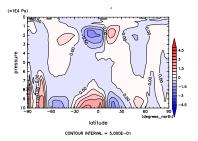
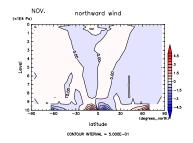


Figure 315: V at Sep. by ECMWF

Figure 318: V at Oct. by ECMWF



DEC. northward wind

Figure 319: V at Nov. by DCPAM  $\,$ 

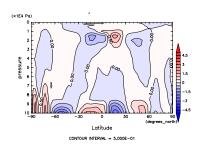


Figure 322: V at Dec. by DCPAM

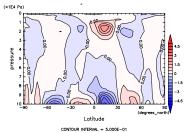


Figure 320: V at Nov. by NCEP

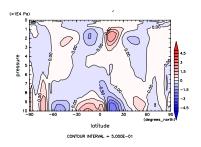


Figure 323: V at Dec. by NCEP

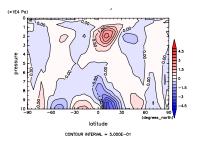
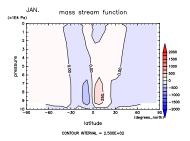


Figure 321: V at Nov. by ECMWF

Figure 324: V at Dec. by ECMWF



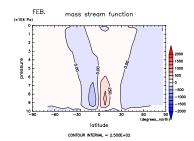
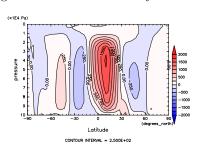


Figure 325: MSF at Jan. by DCPAM  $\,$  Figure 328: MSF at Feb. by DCPAM  $\,$ 



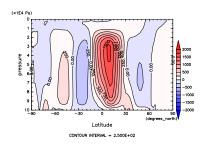


Figure 326: MSF at Jan. by NCEP

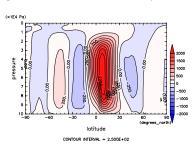


Figure 329: MSF at Feb. by NCEP

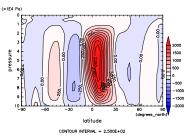
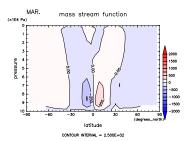


Figure 327: MSF at Jan. by ECMWF  $\,$  Figure 330: MSF at Feb. by ECMWF  $\,$ 



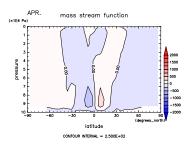
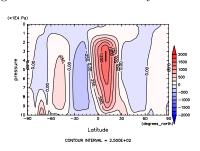


Figure 331: MSF at Mar. by DCPAM  $\,$  Figure 334: MSF at Apr. by DCPAM  $\,$ 



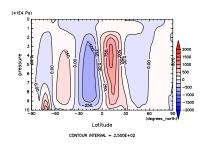


Figure 332: MSF at Mar. by NCEP

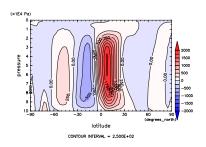


Figure 335: MSF at Apr. by NCEP

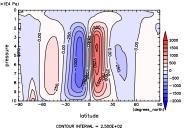
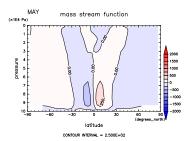


Figure 333: MSF at Mar. by ECMWF  $\,$  Figure 336: MSF at Apr. by ECMWF



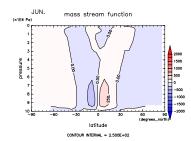
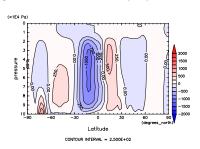


Figure 337: MSF at May by DCPAM  $\,$  Figure 340: MSF at Jun. by DCPAM  $\,$ 



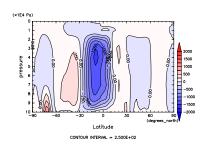
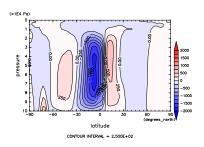


Figure 338: MSF at May by NCEP



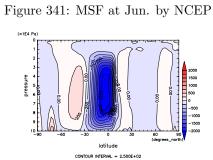
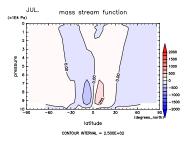


Figure 339: MSF at May by ECMWF  $\,$  Figure 342: MSF at Jun. by ECMWF



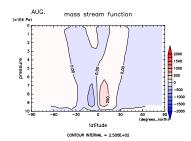
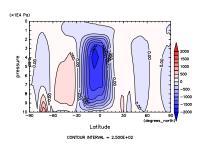


Figure 343: MSF at Jul. by DCPAM Figure 346: MSF at Aug. by DCPAM



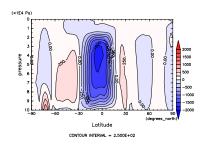


Figure 344: MSF at Jul. by NCEP

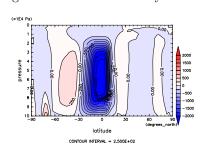


Figure 347: MSF at Aug. by NCEP

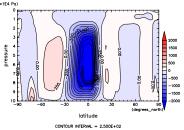
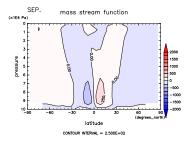


Figure 345: MSF at Jul. by ECMWF  $\,$  Figure 348: MSF at Aug. by ECMWF



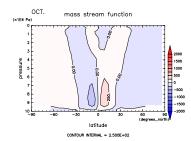
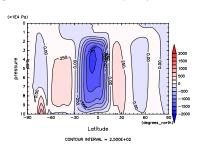


Figure 349: MSF at Sep. by DCPAM  $\,$  Figure 352: MSF at Oct. by DCPAM  $\,$ 



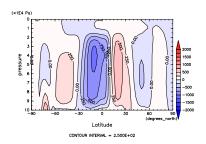


Figure 350: MSF at Sep. by NCEP

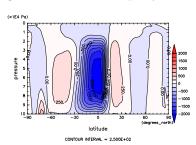


Figure 353: MSF at Oct. by NCEP  $_{\mbox{\tiny (MIE4 PD)}}$ 

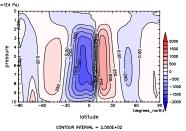
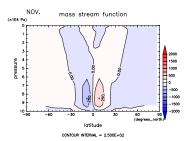


Figure 351: MSF at Sep. by ECMWF  $\,$  Figure 354: MSF at Oct. by ECMWF



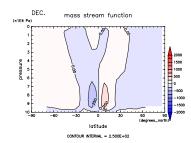
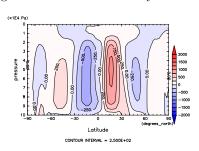


Figure 355: MSF at Nov. by DCPAM  $\,$  Figure 358: MSF at Dec. by DCPAM  $\,$ 



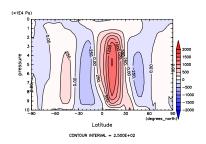
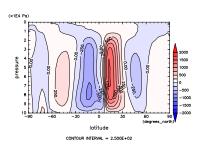
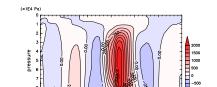


Figure 356: MSF at Nov. by NCEP

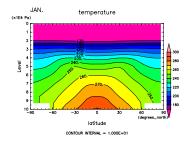




CONTOUR INTERVAL = 2.500E+02

Figure 359: MSF at Dec. by NCEP

Figure 357: MSF at Nov. by ECMWF  $\,$  Figure 360: MSF at Dec. by ECMWF  $\,$ 



FEB. temperature

Figure 361: T at Jan. by DCPAM

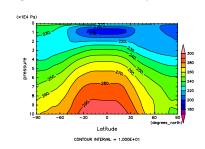


Figure 364: T at Feb. by DCPAM

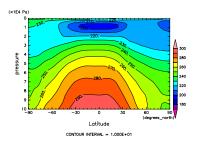


Figure 362: T at Jan. by NCEP

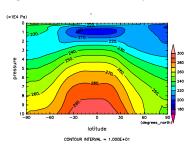


Figure 365: T at Feb. by NCEP

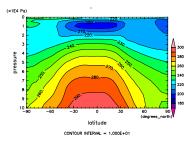
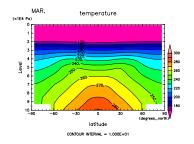


Figure 363: T at Jan. by ECMWF

Figure 366: T at Feb. by ECMWF



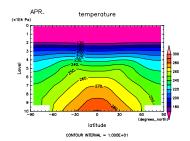


Figure 367: T at Mar. by DCPAM  $\,$ 

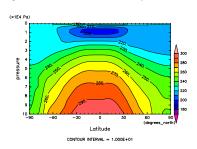


Figure 370: T at Apr. by DCPAM  $\,$ 

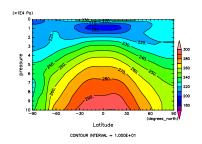


Figure 368: T at Mar. by NCEP

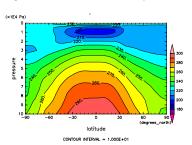


Figure 371: T at Apr. by NCEP

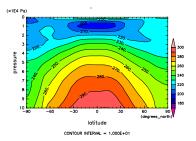
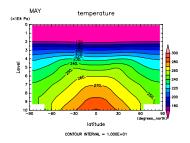


Figure 369: T at Mar. by ECMWF

Figure 372: T at Apr. by ECMWF



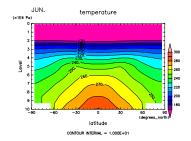


Figure 373: T at May by DCPAM  $\,$ 

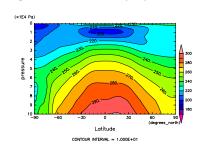


Figure 376: T at Jun. by DCPAM  $\,$ 

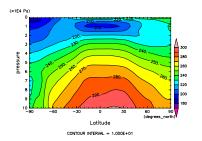


Figure 374: T at May by NCEP

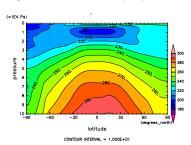


Figure 377: T at Jun. by NCEP

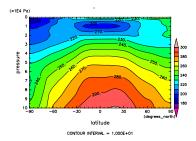
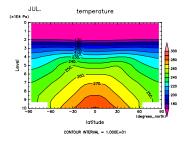


Figure 375: T at May by ECMWF

Figure 378: T at Jun. by ECMWF



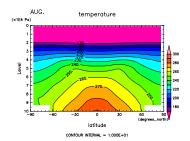


Figure 379: T at Jul. by DCPAM  $\,$ 

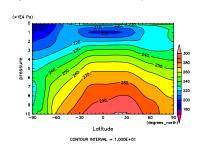


Figure 382: T at Aug. by DCPAM

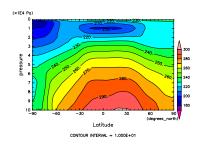


Figure 380: T at Jul. by NCEP  $\,$ 

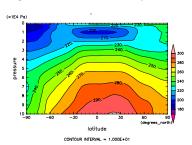


Figure 383: T at Aug. by NCEP

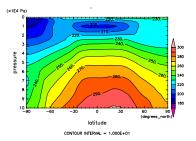
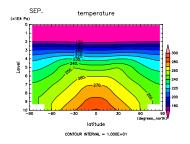


Figure 381: T at Jul. by ECMWF

Figure 384: T at Aug. by ECMWF



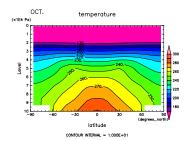


Figure 385: T at Sep. by DCPAM  $\,$ 

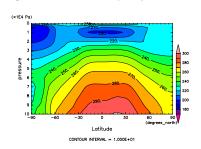


Figure 388: T at Oct. by DCPAM  $\,$ 

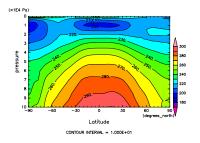


Figure 386: T at Sep. by NCEP

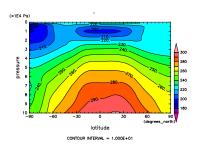


Figure 389: T at Oct. by NCEP

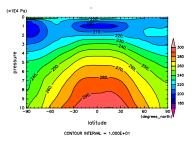
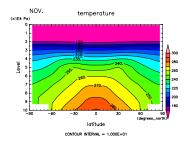


Figure 387: T at Sep. by ECMWF

Figure 390: T at Oct. by ECMWF



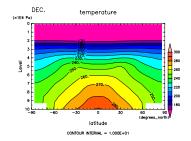


Figure 391: T at Nov. by DCPAM  $\,$ 

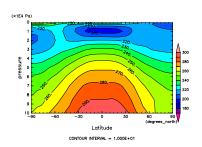


Figure 394: T at Dec. by DCPAM

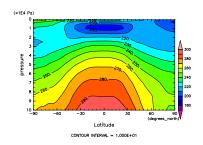


Figure 392: T at Nov. by NCEP

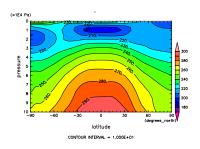


Figure 395: T at Dec. by NCEP

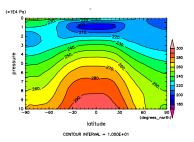
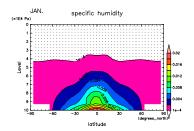


Figure 393: T at Nov. by ECMWF

Figure 396: T at Dec. by ECMWF



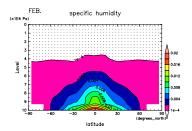


Figure 397: q at Jan. by DCPAM

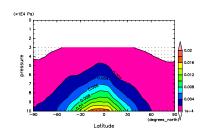


Figure 400: q at Feb. by DCPAM

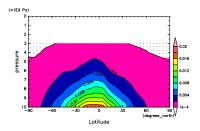


Figure 398: q at Jan. by NCEP

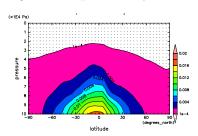


Figure 401: q at Feb. by NCEP

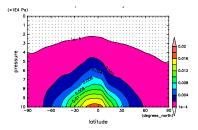
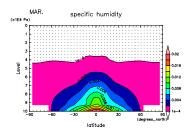


Figure 399: q at Jan. by ECMWF

Figure 402: q at Feb. by ECMWF



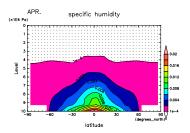


Figure 403: q at Mar. by DCPAM

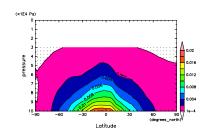


Figure 406: q at Apr. by DCPAM

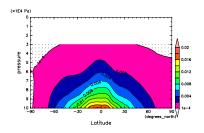


Figure 404: q at Mar. by NCEP

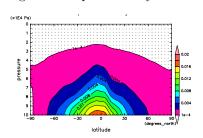


Figure 407: q at Apr. by NCEP

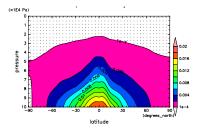
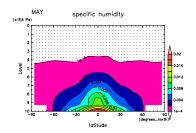


Figure 405: q at Mar. by ECMWF

Figure 408: q at Apr. by ECMWF



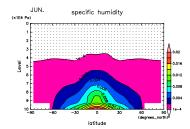


Figure 409: q at May by DCPAM

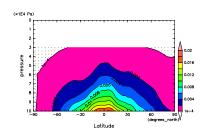


Figure 412: q at Jun. by DCPAM  $\,$ 

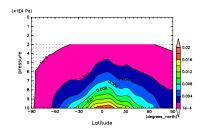


Figure 410: q at May by NCEP

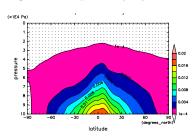


Figure 413: q at Jun. by NCEP

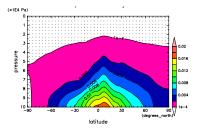
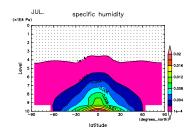


Figure 411: q at May by ECMWF

Figure 414: q at Jun. by ECMWF



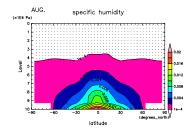


Figure 415: q at Jul. by DCPAM

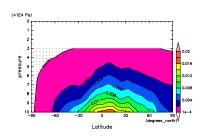


Figure 418: q at Aug. by DCPAM

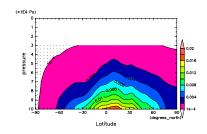


Figure 416: q at Jul. by NCEP

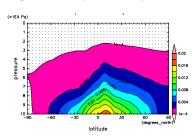


Figure 419: q at Aug. by NCEP

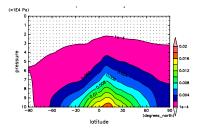
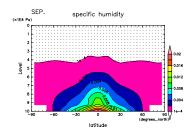


Figure 417: q at Jul. by ECMWF

Figure 420: q at Aug. by ECMWF



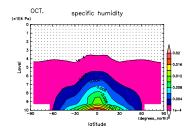


Figure 421: q at Sep. by DCPAM

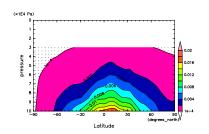


Figure 424: q at Oct. by DCPAM  $\,$ 

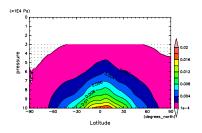


Figure 422: q at Sep. by NCEP

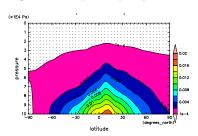


Figure 425: q at Oct. by NCEP

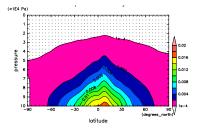
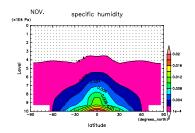


Figure 423: q at Sep. by ECMWF

Figure 426: q at Oct. by ECMWF



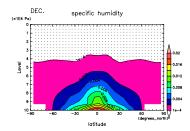


Figure 427: q at Nov. by DCPAM  $\,$ 

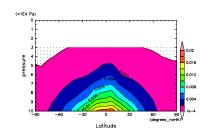


Figure 430: q at Dec. by DCPAM  $\,$ 

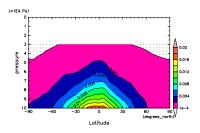


Figure 428: q at Nov. by NCEP

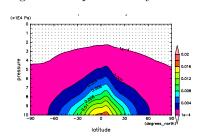


Figure 431: q at Dec. by NCEP

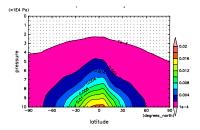
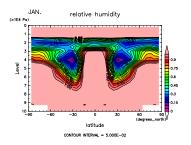


Figure 429: q at Nov. by ECMWF

Figure 432: q at Dec. by ECMWF



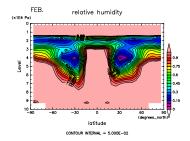


Figure 433: RH at Jan. by DCPAM  $\,$ 

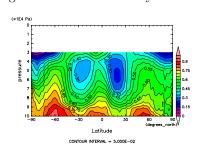


Figure 436: RH at Feb. by DCPAM

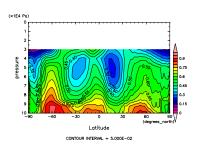


Figure 434: RH at Jan. by NCEP

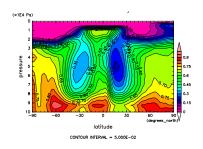


Figure 437: RH at Feb. by NCEP

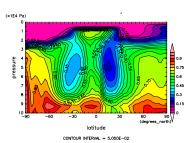
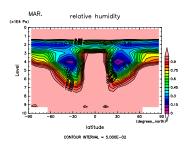


Figure 435: RH at Jan. by ECMWF

Figure 438: RH at Feb. by ECMWF



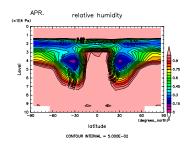


Figure 439: RH at Mar. by DCPAM  $\,$ 

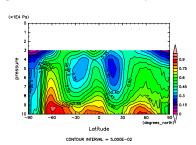


Figure 442: RH at Apr. by DCPAM

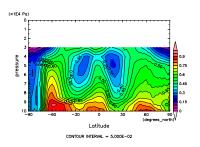


Figure 440: RH at Mar. by NCEP

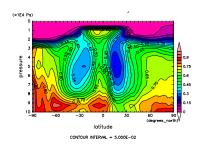


Figure 443: RH at Apr. by NCEP

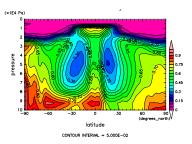
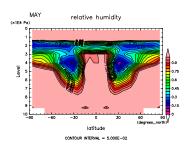


Figure 441: RH at Mar. by ECMWF  $\,\,$  Figure 444: RH at Apr. by ECMWF



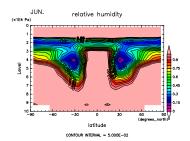


Figure 445: RH at May by DCPAM

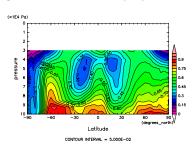


Figure 448: RH at Jun. by DCPAM

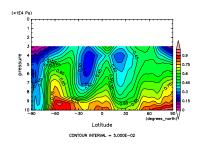


Figure 446: RH at May by NCEP

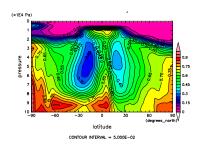


Figure 449: RH at Jun. by NCEP

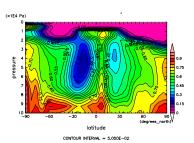
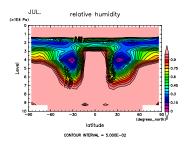


Figure 447: RH at May by ECMWF

Figure 450: RH at Jun. by ECMWF



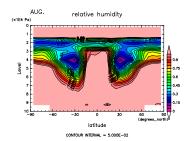


Figure 451: RH at Jul. by DCPAM

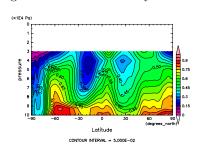


Figure 454: RH at Aug. by DCPAM  $\,$ 

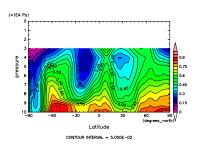


Figure 452: RH at Jul. by NCEP  $\,$ 

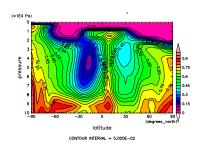


Figure 455: RH at Aug. by NCEP

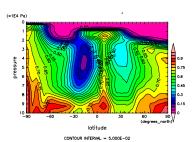
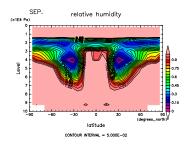


Figure 453: RH at Jul. by ECMWF

Figure 456: RH at Aug. by ECMWF



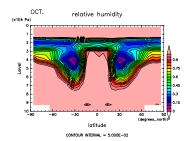


Figure 457: RH at Sep. by DCPAM  $\,$ 

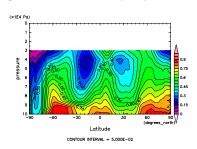


Figure 460: RH at Oct. by DCPAM

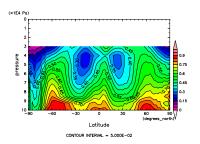


Figure 458: RH at Sep. by NCEP

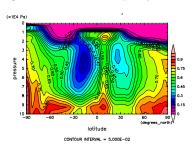


Figure 461: RH at Oct. by NCEP

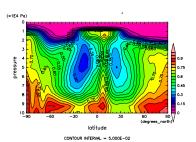
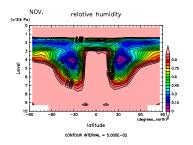


Figure 459: RH at Sep. by ECMWF

Figure 462: RH at Oct. by ECMWF



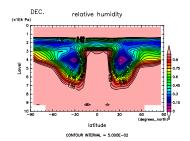


Figure 463: RH at Nov. by DCPAM

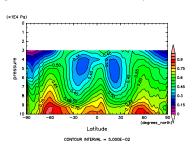


Figure 466: RH at Dec. by DCPAM

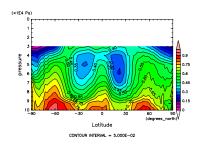


Figure 464: RH at Nov. by NCEP

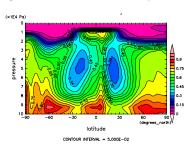


Figure 467: RH at Dec. by NCEP

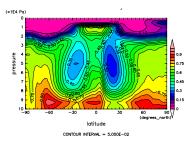
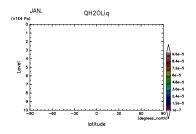


Figure 465: RH at Nov. by ECMWF

Figure 468: RH at Dec. by ECMWF



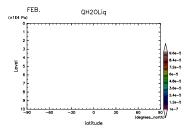
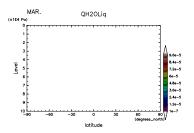


Figure 469:  $q_l$  at Jan. by DCPAM  $\,$ 

Figure 470:  $q_l$  at Feb. by DCPAM  $\,$ 



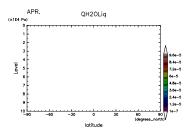
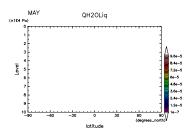


Figure 471:  $q_l$  at Mar. by DCPAM  $\,$ 

Figure 472:  $q_l$  at Apr. by DCPAM  $\,$ 



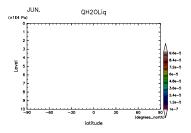
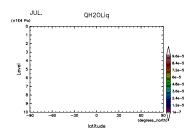


Figure 473:  $q_l$  at May by DCPAM  $\,$ 

Figure 474:  $q_l$  at Jun. by DCPAM  $\,$ 



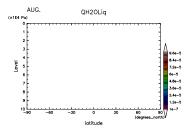
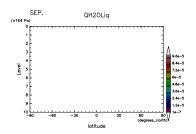


Figure 475:  $q_l$  at Jul. by DCPAM  $\,$ 

Figure 476:  $q_l$  at Aug. by DCPAM  $\,$ 



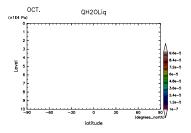
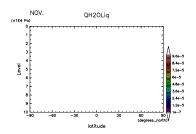


Figure 477:  $q_l$  at Sep. by DCPAM

Figure 478:  $q_l$  at Oct. by DCPAM  $\,$ 



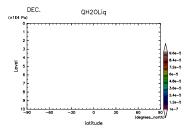
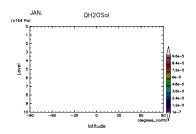


Figure 479:  $q_l$  at Nov. by DCPAM

Figure 480:  $q_l$  at Dec. by DCPAM  $\,$ 



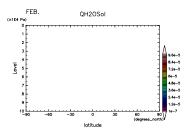
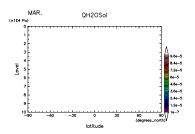


Figure 481:  $q_i$  at Jan. by DCPAM

Figure 482:  $q_i$  at Feb. by DCPAM



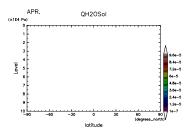
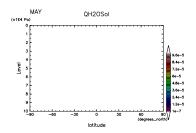


Figure 483:  $q_i$  at Mar. by DCPAM

Figure 484:  $q_i$  at Apr. by DCPAM



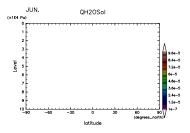
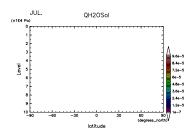


Figure 485:  $q_i$  at May by DCPAM

Figure 486:  $q_i$  at Jun. by DCPAM



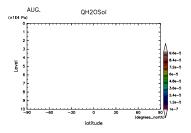
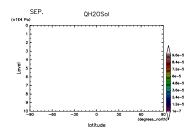


Figure 487:  $q_i$  at Jul. by DCPAM

Figure 488:  $q_i$  at Aug. by DCPAM



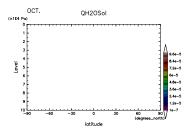
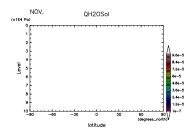


Figure 489:  $q_i$  at Sep. by DCPAM

Figure 490:  $q_i$  at Oct. by DCPAM



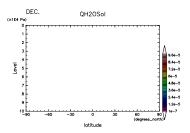
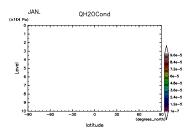


Figure 491:  $q_i$  at Nov. by DCPAM

Figure 492:  $q_i$  at Dec. by DCPAM



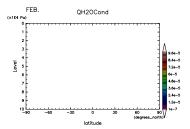
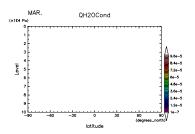


Figure 493:  $q_l + q_i$  at Jan. by DCPAM Figure 494:  $q_l + q_i$  at Feb. by DCPAM



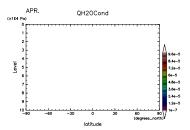
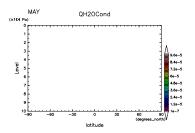


Figure 495:  $q_l\!+\!q_i$  at Mar. by DCPAM Figure 496:  $q_l\!+\!q_i$  at Apr. by DCPAM



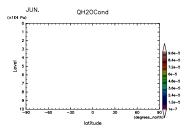
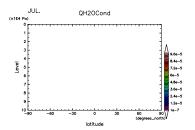


Figure 497:  $q_l+q_i$  at May by DCPAM Figure 498:  $q_l+q_i$  at Jun. by DCPAM



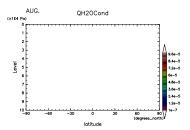
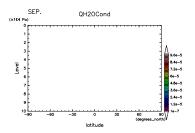


Figure 499:  $q_l + q_i$  at Jul. by DCPAM Figure 500:  $q_l + q_i$  at Aug. by DCPAM



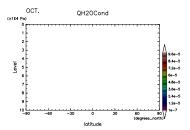
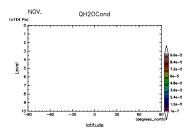


Figure 501:  $q_l + q_i$  at Sep. by DCPAM – Figure 502:  $q_l + q_i$  at Oct. by DCPAM



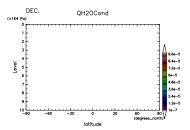
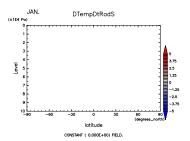


Figure 503:  $q_l + q_i$  at Nov. by DCPAM Figure 504:  $q_l + q_i$  at Dec. by DCPAM



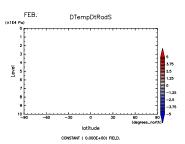
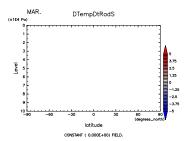


Figure 505:  $(\partial T/\partial t)_{SW}$  at Jan. by Figure 506:  $(\partial T/\partial t)_{SW}$  at Feb. by DCPAM



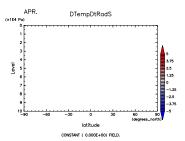
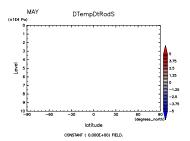


Figure 507:  $(\partial T/\partial t)_{SW}$  at Mar. by Figure 508:  $(\partial T/\partial t)_{SW}$  at Apr. by DCPAM



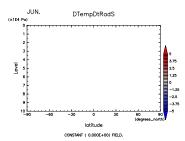
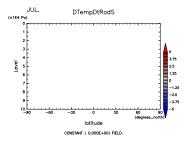


Figure 509:  $(\partial T/\partial t)_{SW}$  at May by Figure 510:  $(\partial T/\partial t)_{SW}$  at Jun. by DCPAM



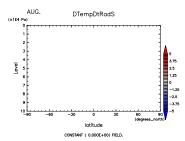
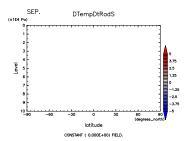


Figure 511:  $(\partial T/\partial t)_{SW}$  at Jul. by Figure 512:  $(\partial T/\partial t)_{SW}$  at Aug. by DCPAM



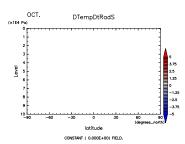
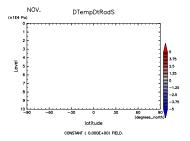


Figure 513:  $(\partial T/\partial t)_{SW}$  at Sep. by Figure 514:  $(\partial T/\partial t)_{SW}$  at Oct. by DCPAM



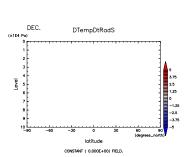
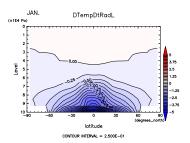


Figure 515:  $(\partial T/\partial t)_{SW}$  at Nov. by Figure 516:  $(\partial T/\partial t)_{SW}$  at Dec. by DCPAM



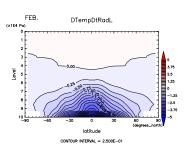
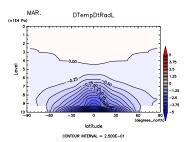


Figure 517:  $(\partial T/\partial t)_{LW}$  at Jan. by Figure 518:  $(\partial T/\partial t)_{LW}$  at Feb. by DCPAM



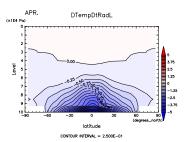
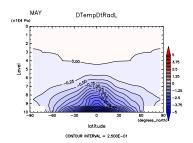


Figure 519:  $(\partial T/\partial t)_{LW}$  at Mar. by Figure 520:  $(\partial T/\partial t)_{LW}$  at Apr. by DCPAM



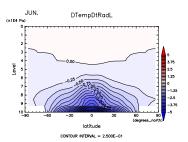
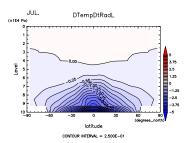


Figure 521:  $(\partial T/\partial t)_{LW}$  at May by Figure 522:  $(\partial T/\partial t)_{LW}$  at Jun. by DCPAM



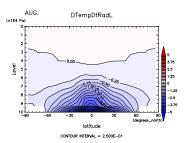
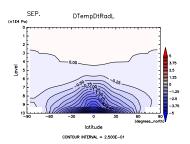


Figure 523:  $(\partial T/\partial t)_{LW}$  at Jul. by Figure 524:  $(\partial T/\partial t)_{LW}$  at Aug. by DCPAM



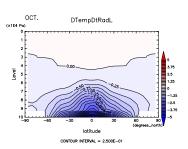
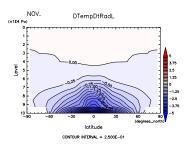


Figure 525:  $(\partial T/\partial t)_{LW}$  at Sep. by Figure 526:  $(\partial T/\partial t)_{LW}$  at Oct. by DCPAM



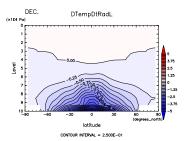
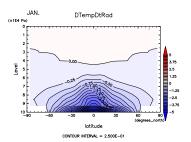


Figure 527:  $(\partial T/\partial t)_{LW}$  at Nov. by Figure 528:  $(\partial T/\partial t)_{LW}$  at Dec. by DCPAM



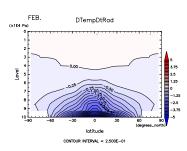
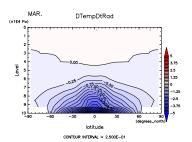


Figure 529:  $(\partial T/\partial t)_{SW+LW}$  at Jan. Figure 530:  $(\partial T/\partial t)_{SW+LW}$  at Feb. by DCPAM by DCPAM



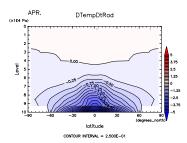
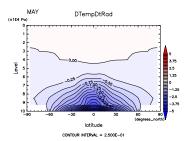


Figure 531:  $(\partial T/\partial t)_{SW+LW}$  at Mar. Figure 532:  $(\partial T/\partial t)_{SW+LW}$  at Apr. by DCPAM by DCPAM



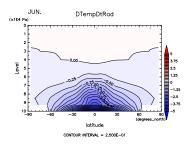
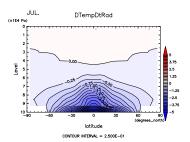


Figure 533:  $(\partial T/\partial t)_{SW+LW}$  at May Figure 534:  $(\partial T/\partial t)_{SW+LW}$  at Jun. by DCPAM by DCPAM



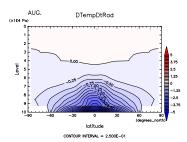
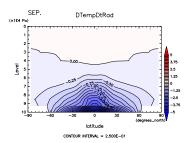


Figure 535:  $(\partial T/\partial t)_{SW+LW}$  at Jul. Figure 536:  $(\partial T/\partial t)_{SW+LW}$  at Aug. by DCPAM by DCPAM



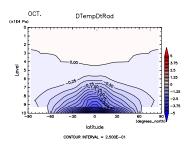
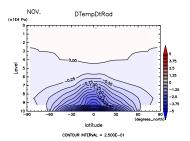


Figure 537:  $(\partial T/\partial t)_{SW+LW}$  at Sep. Figure 538:  $(\partial T/\partial t)_{SW+LW}$  at Oct. by DCPAM by DCPAM



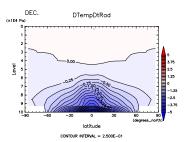


Figure 539:  $(\partial T/\partial t)_{SW+LW}$  at Nov. Figure 540:  $(\partial T/\partial t)_{SW+LW}$  at Dec. by DCPAM by DCPAM

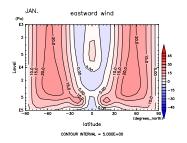


Figure 541: U at Jan. by DCPAM  $\,$ 

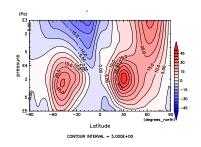


Figure 544: U at Feb. by DCPAM

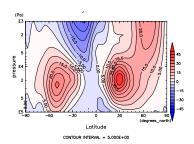


Figure 542: U at Jan. by NCEP

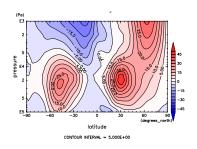


Figure 545: U at Feb. by NCEP

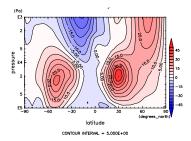
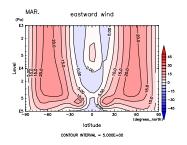


Figure 543: U at Jan. by ECMWF

Figure 546: U at Feb. by ECMWF



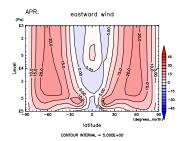


Figure 547: U at Mar. by DCPAM  $\,$ 

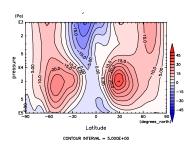


Figure 550: U at Apr. by DCPAM  $\,$ 

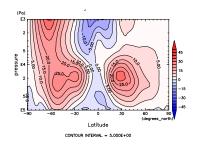


Figure 548: U at Mar. by NCEP

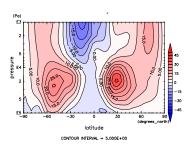


Figure 551: U at Apr. by NCEP

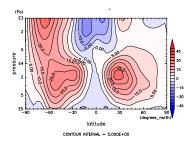
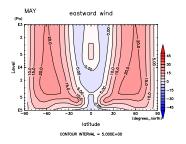


Figure 549: U at Mar. by ECMWF

Figure 552: U at Apr. by ECMWF



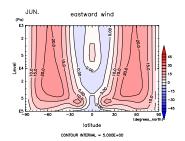


Figure 553: U at May by DCPAM  $\,$ 

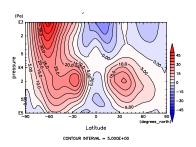


Figure 556: U at Jun. by DCPAM  $\,$ 

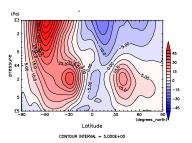


Figure 554: U at May by NCEP

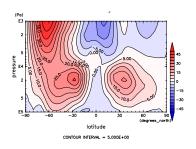


Figure 557: U at Jun. by NCEP

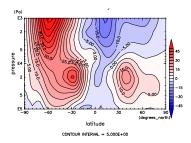
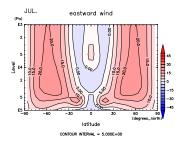


Figure 555: U at May by ECMWF

Figure 558: U at Jun. by ECMWF



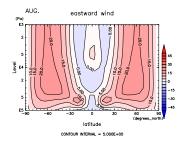


Figure 559: U at Jul. by DCPAM  $\,$ 

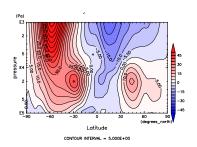


Figure 562: U at Aug. by DCPAM  $\,$ 

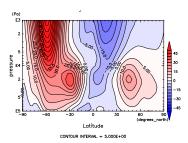


Figure 560: U at Jul. by NCEP

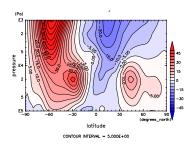


Figure 563: U at Aug. by NCEP

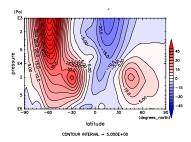
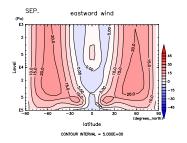


Figure 561: U at Jul. by ECMWF

Figure 564: U at Aug. by ECMWF



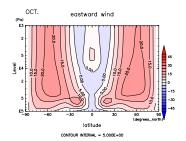


Figure 565: U at Sep. by DCPAM  $\,$ 

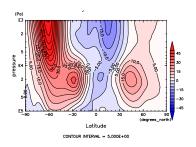


Figure 568: U at Oct. by DCPAM  $\,$ 

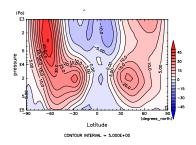


Figure 566: U at Sep. by NCEP

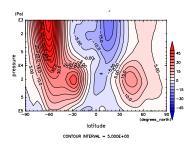


Figure 569: U at Oct. by NCEP

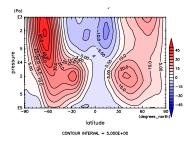
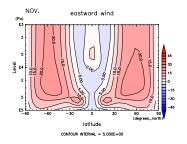


Figure 567: U at Sep. by ECMWF

Figure 570: U at Oct. by ECMWF



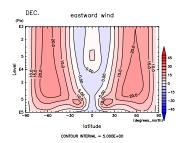


Figure 571: U at Nov. by DCPAM

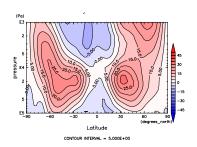


Figure 574: U at Dec. by DCPAM

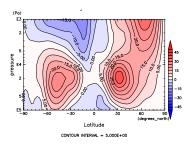


Figure 572: U at Nov. by NCEP

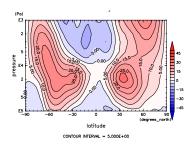


Figure 575: U at Dec. by NCEP

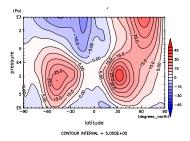
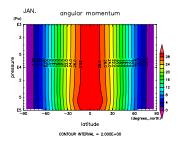


Figure 573: U at Nov. by ECMWF

Figure 576: U at Dec. by ECMWF

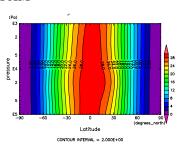


FEB. latitude CONTOUR INTERVAL = 2.000E+00

DCPAM

Latitude CONTOUR INTERVAL = 2.000E+00

Figure 577: ANGMOM at Jan. by Figure 580: ANGMOM at Feb. by  $\operatorname{DCPAM}$ 



NCEP

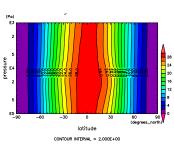
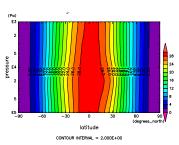
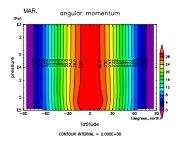


Figure 578: ANGMOM at Jan. by Figure 581: ANGMOM at Feb. by NCEP



ECMWF

Figure 579: ANGMOM at Jan. by Figure 582: ANGMOM at Feb. by ECMWF



APR. latitude CONTOUR INTERVAL = 2.000E+00

DCPAM

Latitude CONTOUR INTERVAL = 2.000E+00

Figure 583: ANGMOM at Mar. by Figure 586: ANGMOM at Apr. by  $\operatorname{DCPAM}$ 

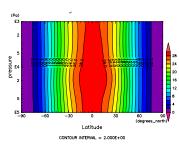


Figure 584: ANGMOM at Mar. by NCEP

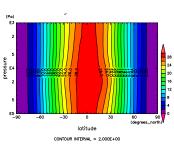
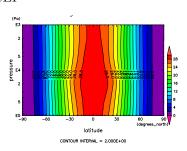
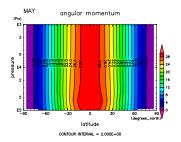


Figure 587: ANGMOM at Apr. by NCEP



 $\operatorname{ECMWF}$ 

Figure 585: ANGMOM at Mar. by Figure 588: ANGMOM at Apr. by ECMWF



JUN. latitude CONTOUR INTERVAL = 2.000E+00

Figure 589: ANGMOM at May by Figure 592: ANGMOM at Jun. by DCPAM

Latitude CONTOUR INTERVAL = 2.000E+00

 $\operatorname{DCPAM}$ 

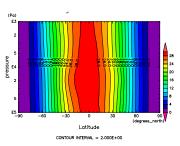


Figure 590: ANGMOM at May by NCEP

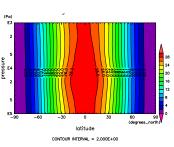


Figure 593: ANGMOM at Jun. by NCEP

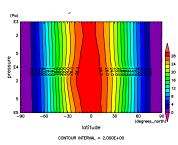
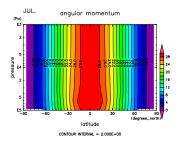


Figure 591: ANGMOM at May by Figure 594: ANGMOM at Jun. by  $\operatorname{ECMWF}$ 

ECMWF

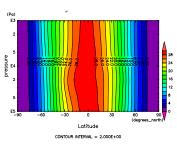


AUG. latitude CONTOUR INTERVAL = 2.000E+00

DCPAM

Latitude CONTOUR INTERVAL = 2.000E+00

Figure 595: ANGMOM at Jul. by Figure 598: ANGMOM at Aug. by  $\operatorname{DCPAM}$ 



NCEP

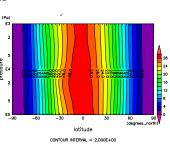
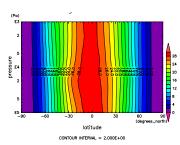
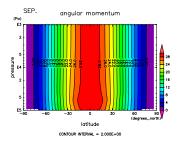


Figure 596: ANGMOM at Jul. by Figure 599: ANGMOM at Aug. by NCEP



 $\operatorname{ECMWF}$ 

Figure 597: ANGMOM at Jul. by Figure 600: ANGMOM at Aug. by ECMWF



OCT. latitude CONTOUR INTERVAL = 2.000E+00

Figure 601: ANGMOM at Sep. by  $\operatorname{DCPAM}$ 

Latitude CONTOUR INTERVAL = 2.000E+00

Figure 604: ANGMOM at Oct. by  $\operatorname{DCPAM}$ 

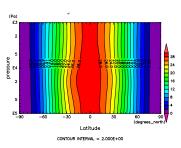


Figure 602: ANGMOM at Sep. by NCEP

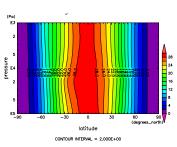


Figure 605: ANGMOM at Oct. by NCEP

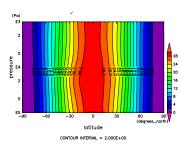
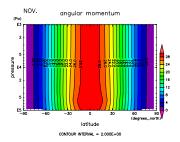


Figure 603: ANGMOM at Sep. by Figure 606: ANGMOM at Oct. by ECMWF

ECMWF



DEC. latitude CONTOUR INTERVAL = 2.000E+00

Figure 607: ANGMOM at Nov. by Figure 610: ANGMOM at Dec. by  $\operatorname{DCPAM}$ 

Latitude CONTOUR INTERVAL = 2.000E+00

 $\operatorname{DCPAM}$ 

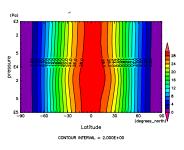


Figure 608: ANGMOM at Nov. by NCEP

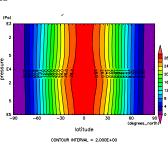
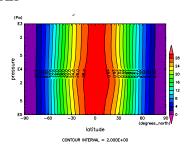
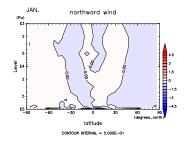


Figure 611: ANGMOM at Dec. by NCEP



ECMWF

Figure 609: ANGMOM at Nov. by Figure 612: ANGMOM at Dec. by ECMWF



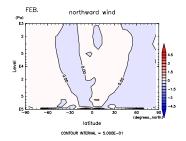


Figure 613: V at Jan. by DCPAM  $\,$ 

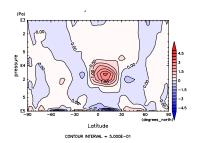


Figure 616: V at Feb. by DCPAM  $\,$ 

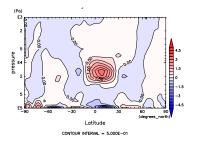


Figure 614: V at Jan. by NCEP

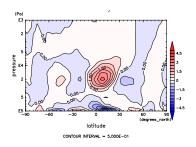


Figure 617: V at Feb. by NCEP

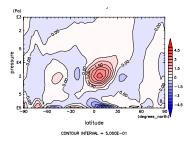
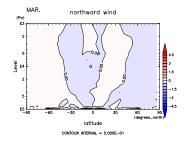


Figure 615: V at Jan. by ECMWF

Figure 618: V at Feb. by ECMWF



APR. northward wind

Figure 619: V at Mar. by DCPAM  $\,$ 

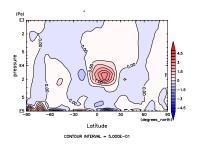


Figure 622: V at Apr. by DCPAM  $\,$ 

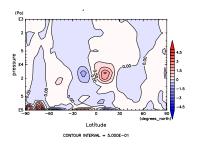


Figure 620: V at Mar. by NCEP

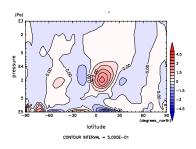


Figure 623: V at Apr. by NCEP

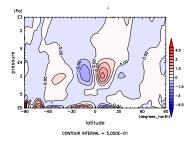
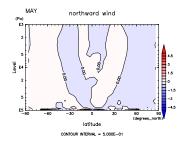


Figure 621: V at Mar. by ECMWF

Figure 624: V at Apr. by ECMWF



JUN. northward wind

Figure 625: V at May by DCPAM  $\,$ 

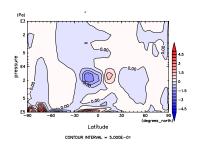


Figure 628: V at Jun. by DCPAM  $\,$ 

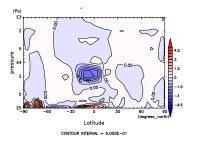


Figure 626: V at May by NCEP

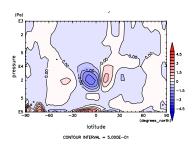


Figure 629: V at Jun. by NCEP

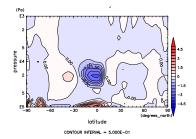
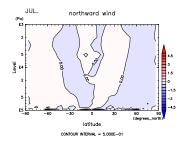


Figure 627: V at May by ECMWF

Figure 630: V at Jun. by ECMWF



AUG. northward wind

Figure 631: V at Jul. by DCPAM  $\,$ 

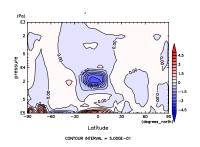


Figure 634: V at Aug. by DCPAM

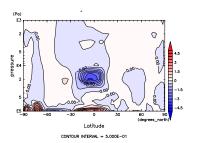


Figure 632: V at Jul. by NCEP

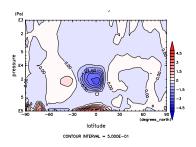


Figure 635: V at Aug. by NCEP

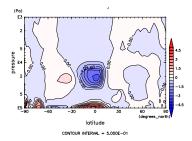
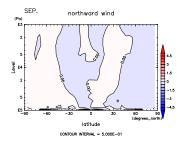


Figure 633: V at Jul. by ECMWF

Figure 636: V at Aug. by ECMWF



OCT. northward wind

Figure 637: V at Sep. by DCPAM  $\,$ 

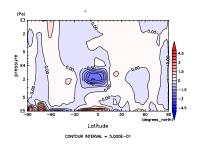


Figure 640: V at Oct. by DCPAM

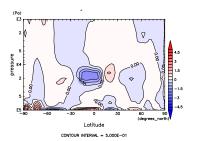


Figure 638: V at Sep. by NCEP

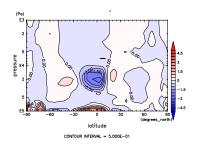


Figure 641: V at Oct. by NCEP

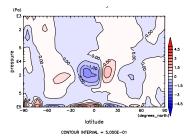
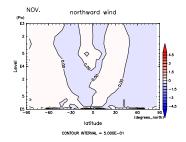


Figure 639: V at Sep. by ECMWF

Figure 642: V at Oct. by ECMWF



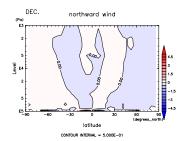


Figure 643: V at Nov. by DCPAM

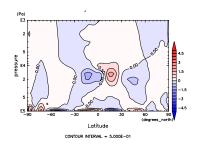


Figure 646: V at Dec. by DCPAM

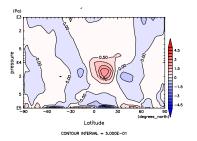


Figure 644: V at Nov. by NCEP

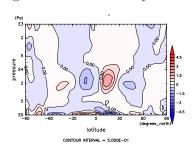


Figure 647: V at Dec. by NCEP  $\,$ 

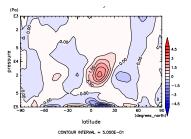
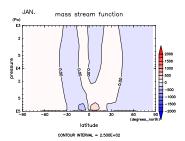


Figure 645: V at Nov. by ECMWF

Figure 648: V at Dec. by ECMWF



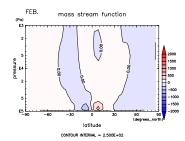
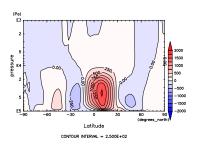


Figure 649: MSF at Jan. by DCPAM  $\,$  Figure 652: MSF at Feb. by DCPAM  $\,$ 



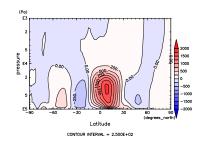


Figure 650: MSF at Jan. by NCEP

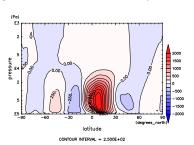


Figure 653: MSF at Feb. by NCEP

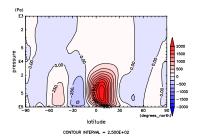
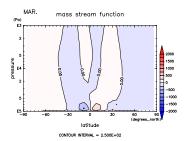


Figure 651: MSF at Jan. by ECMWF  $\,$  Figure 654: MSF at Feb. by ECMWF



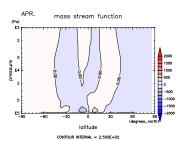
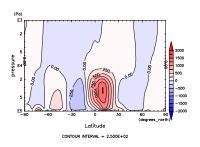


Figure 655: MSF at Mar. by DCPAM  $\,$  Figure 658: MSF at Apr. by DCPAM  $\,$ 



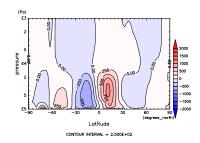


Figure 656: MSF at Mar. by NCEP

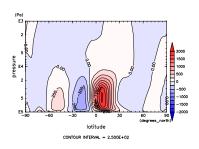


Figure 659: MSF at Apr. by NCEP

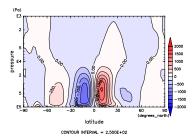
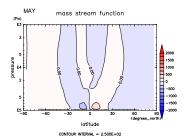


Figure 657: MSF at Mar. by ECMWF  $\,$  Figure 660: MSF at Apr. by ECMWF



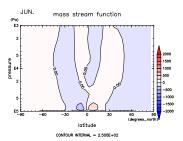
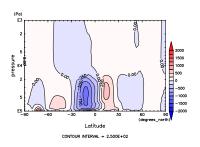


Figure 661: MSF at May by DCPAM Figure 664: MSF at Jun. by DCPAM



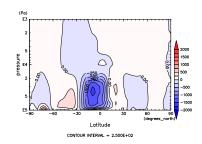


Figure 662: MSF at May by NCEP

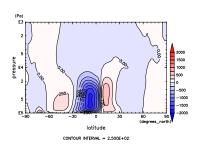


Figure 665: MSF at Jun. by NCEP  $\,$ 

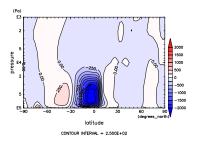
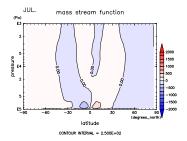


Figure 663: MSF at May by ECMWF  $\,$  Figure 666: MSF at Jun. by ECMWF  $\,$ 



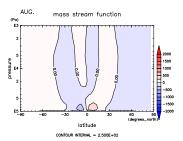
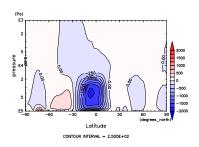


Figure 667: MSF at Jul. by DCPAM Figure 670: MSF at Aug. by DCPAM



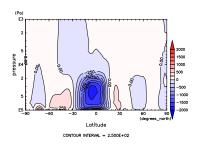


Figure 668: MSF at Jul. by NCEP

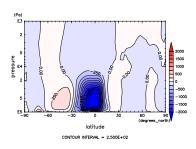


Figure 671: MSF at Aug. by NCEP

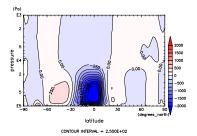
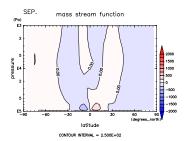


Figure 669: MSF at Jul. by ECMWF  $\,$  Figure 672: MSF at Aug. by ECMWF  $\,$ 



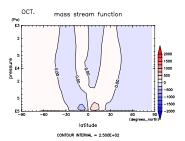
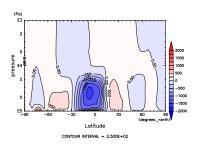


Figure 673: MSF at Sep. by DCPAM  $\,$  Figure 676: MSF at Oct. by DCPAM  $\,$ 



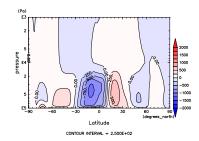


Figure 674: MSF at Sep. by NCEP

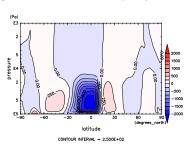


Figure 677: MSF at Oct. by NCEP

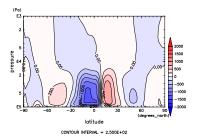
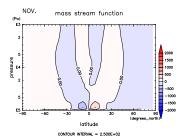


Figure 675: MSF at Sep. by ECMWF  $\,$  Figure 678: MSF at Oct. by ECMWF



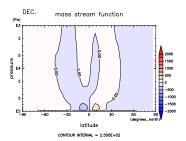
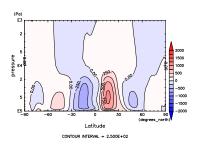


Figure 679: MSF at Nov. by DCPAM Figure 682: MSF at Dec. by DCPAM



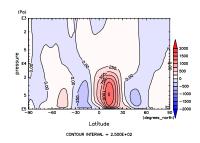


Figure 680: MSF at Nov. by NCEP

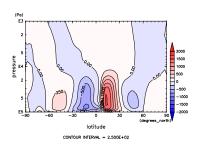


Figure 683: MSF at Dec. by NCEP

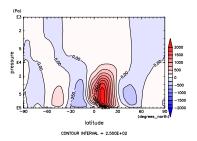
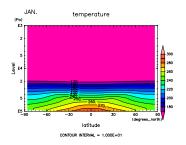


Figure 681: MSF at Nov. by ECMWF  $\,$  Figure 684: MSF at Dec. by ECMWF



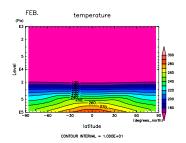


Figure 685: T at Jan. by DCPAM  $\,$ 

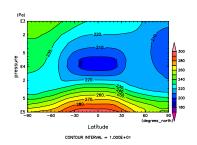


Figure 688: T at Feb. by DCPAM  $\,$ 

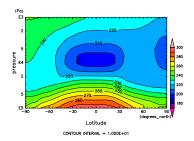


Figure 686: T at Jan. by NCEP

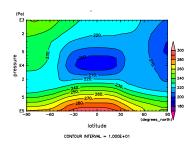


Figure 689: T at Feb. by NCEP

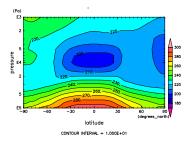
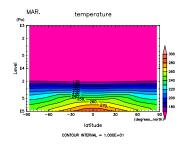


Figure 687: T at Jan. by ECMWF

Figure 690: T at Feb. by ECMWF



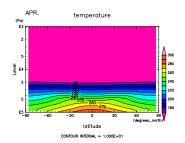


Figure 691: T at Mar. by DCPAM

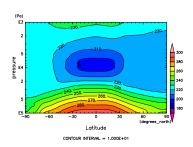


Figure 694: T at Apr. by DCPAM

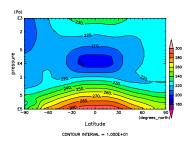


Figure 692: T at Mar. by NCEP

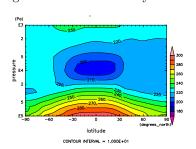


Figure 695: T at Apr. by NCEP

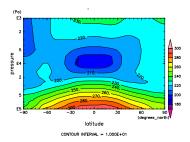
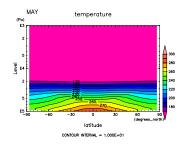


Figure 693: T at Mar. by ECMWF

Figure 696: T at Apr. by ECMWF



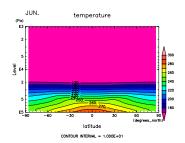


Figure 697: T at May by DCPAM  $\,$ 

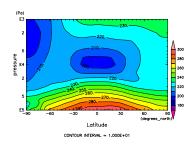


Figure 700: T at Jun. by DCPAM  $\,$ 

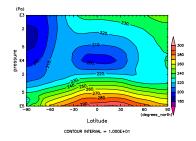


Figure 698: T at May by NCEP

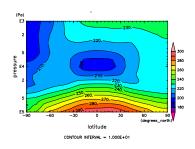


Figure 701: T at Jun. by NCEP

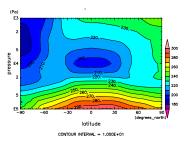
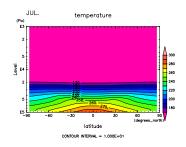


Figure 699: T at May by ECMWF

Figure 702: T at Jun. by ECMWF



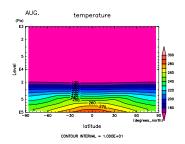


Figure 703: T at Jul. by DCPAM  $\,$ 

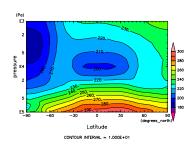


Figure 706: T at Aug. by DCPAM

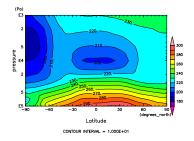


Figure 704: T at Jul. by NCEP

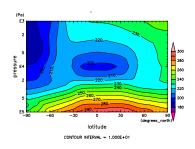


Figure 707: T at Aug. by NCEP

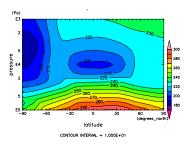
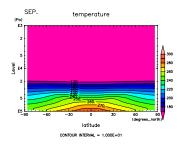


Figure 705: T at Jul. by ECMWF

Figure 708: T at Aug. by ECMWF



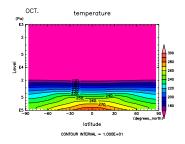


Figure 709: T at Sep. by DCPAM  $\,$ 

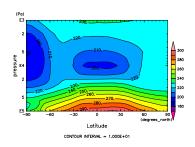


Figure 712: T at Oct. by DCPAM  $\,$ 

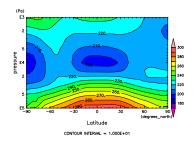


Figure 710: T at Sep. by NCEP

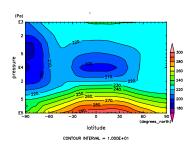


Figure 713: T at Oct. by NCEP

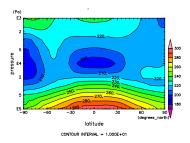
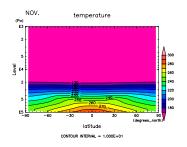


Figure 711: T at Sep. by ECMWF

Figure 714: T at Oct. by ECMWF



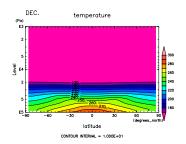


Figure 715: T at Nov. by DCPAM  $\,$ 

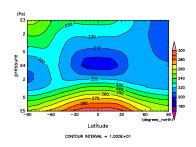


Figure 718: T at Dec. by DCPAM

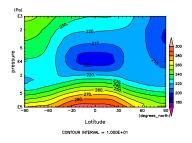


Figure 716: T at Nov. by NCEP

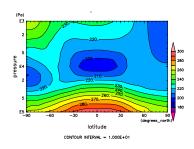


Figure 719: T at Dec. by NCEP

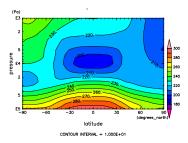
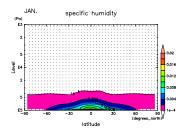


Figure 717: T at Nov. by ECMWF

Figure 720: T at Dec. by ECMWF



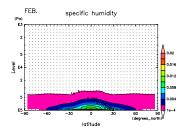


Figure 721: q at Jan. by DCPAM

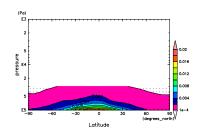


Figure 724: q at Feb. by DCPAM

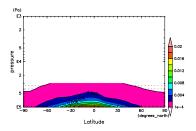


Figure 722: q at Jan. by NCEP

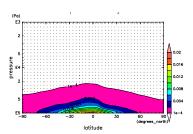


Figure 725: q at Feb. by NCEP

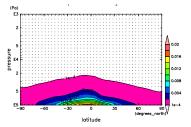
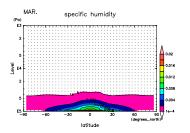


Figure 723: q at Jan. by ECMWF

Figure 726: q at Feb. by ECMWF



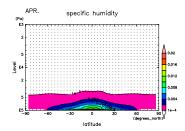


Figure 727: q at Mar. by DCPAM

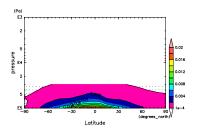


Figure 730: q at Apr. by DCPAM

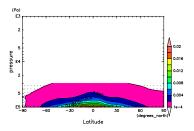


Figure 728: q at Mar. by NCEP

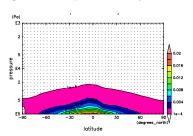


Figure 731: q at Apr. by NCEP

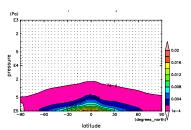
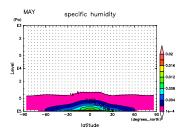


Figure 729: q at Mar. by ECMWF

Figure 732: q at Apr. by ECMWF



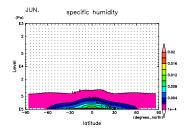


Figure 733: q at May by DCPAM  $\,$ 

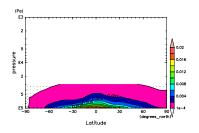


Figure 736: q at Jun. by DCPAM

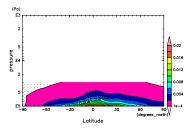


Figure 734: q at May by NCEP

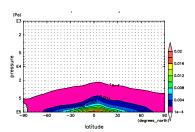


Figure 737: q at Jun. by NCEP

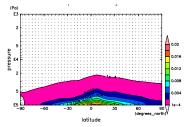
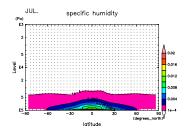


Figure 735: q at May by ECMWF

Figure 738: q at Jun. by ECMWF



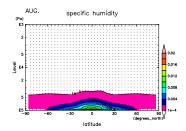


Figure 739: q at Jul. by DCPAM

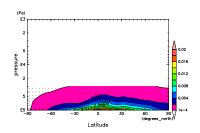


Figure 742: q at Aug. by DCPAM

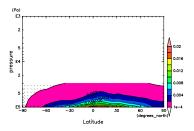


Figure 740: q at Jul. by NCEP

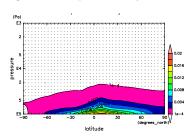


Figure 743: q at Aug. by NCEP

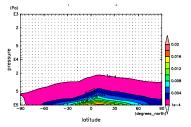
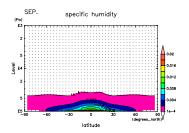


Figure 741: q at Jul. by ECMWF

Figure 744: q at Aug. by ECMWF



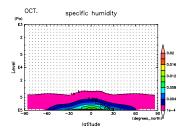


Figure 745: q at Sep. by DCPAM  $\,$ 

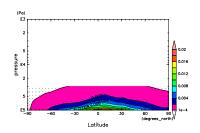


Figure 748: q at Oct. by DCPAM

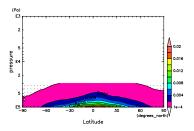


Figure 746: q at Sep. by NCEP

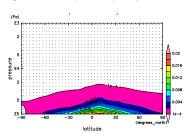


Figure 749: q at Oct. by NCEP

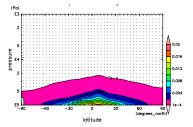
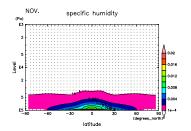


Figure 747: q at Sep. by ECMWF

Figure 750: q at Oct. by ECMWF



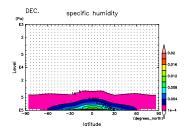


Figure 751: q at Nov. by DCPAM

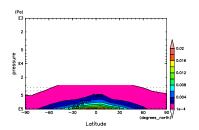


Figure 754: q at Dec. by DCPAM

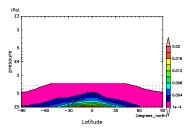


Figure 752: q at Nov. by NCEP

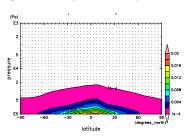


Figure 755: q at Dec. by NCEP

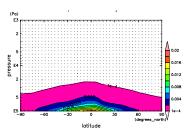
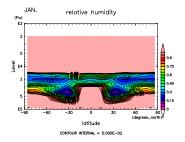


Figure 753: q at Nov. by ECMWF

Figure 756: q at Dec. by ECMWF



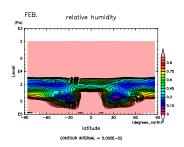


Figure 757: RH at Jan. by DCPAM  $\,$ 

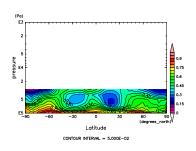


Figure 760: RH at Feb. by DCPAM

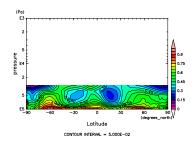


Figure 758: RH at Jan. by NCEP

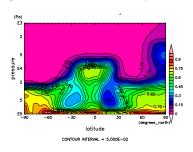


Figure 761: RH at Feb. by NCEP

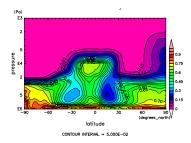
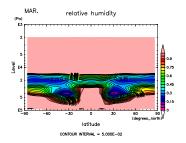


Figure 759: RH at Jan. by ECMWF

Figure 762: RH at Feb. by ECMWF



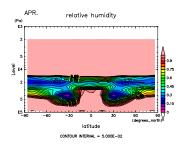


Figure 763: RH at Mar. by DCPAM

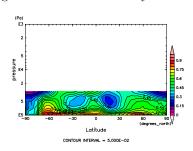


Figure 766: RH at Apr. by DCPAM

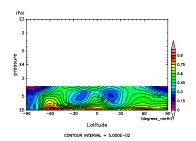


Figure 764: RH at Mar. by NCEP

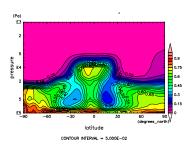


Figure 767: RH at Apr. by NCEP

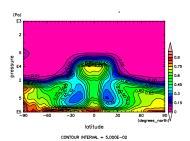
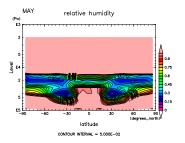


Figure 765: RH at Mar. by ECMWF Figure 768: RH at Apr. by ECMWF



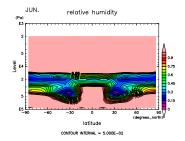


Figure 769: RH at May by DCPAM

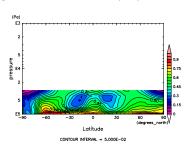


Figure 772: RH at Jun. by DCPAM  $\,$ 

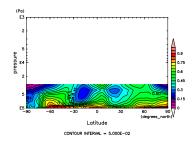


Figure 770: RH at May by NCEP

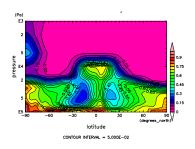


Figure 773: RH at Jun. by NCEP

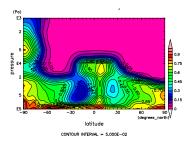
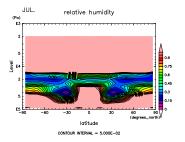


Figure 771: RH at May by ECMWF

Figure 774: RH at Jun. by ECMWF



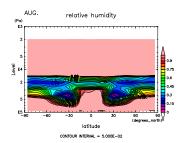


Figure 775: RH at Jul. by DCPAM  $\,$ 

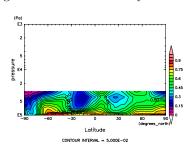


Figure 778: RH at Aug. by DCPAM

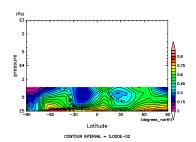


Figure 776: RH at Jul. by NCEP

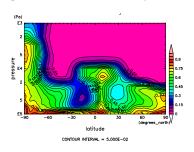


Figure 779: RH at Aug. by NCEP

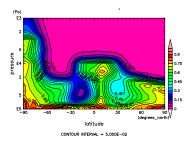
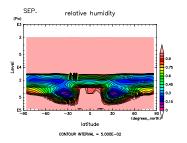


Figure 777: RH at Jul. by ECMWF

Figure 780: RH at Aug. by ECMWF



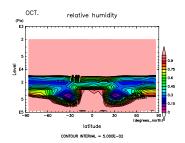


Figure 781: RH at Sep. by DCPAM  $\,$ 

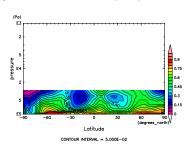


Figure 784: RH at Oct. by DCPAM

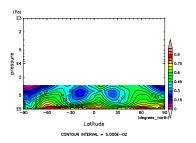


Figure 782: RH at Sep. by NCEP

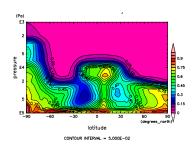


Figure 785: RH at Oct. by NCEP

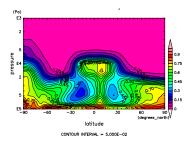
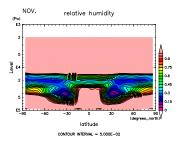


Figure 783: RH at Sep. by ECMWF

Figure 786: RH at Oct. by ECMWF



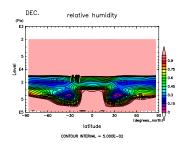


Figure 787: RH at Nov. by DCPAM

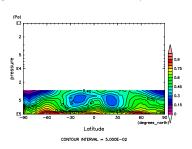


Figure 790: RH at Dec. by DCPAM

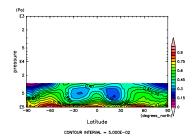


Figure 788: RH at Nov. by NCEP

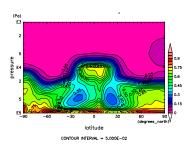


Figure 791: RH at Dec. by NCEP

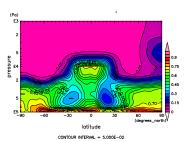
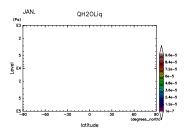


Figure 789: RH at Nov. by ECMWF

Figure 792: RH at Dec. by ECMWF



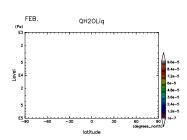
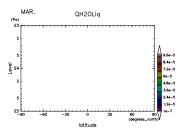


Figure 793:  $q_l$  at Jan. by DCPAM  $\,$ 

Figure 794:  $q_l$  at Feb. by DCPAM  $\,$ 



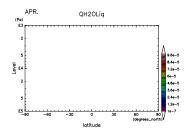
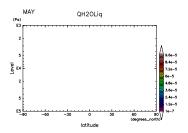


Figure 795:  $q_l$  at Mar. by DCPAM  $\,$ 

Figure 796:  $q_l$  at Apr. by DCPAM



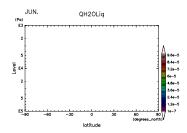
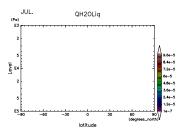


Figure 797:  $q_l$  at May by DCPAM

Figure 798:  $q_l$  at Jun. by DCPAM  $\,$ 



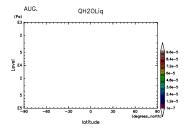
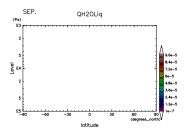


Figure 799:  $q_l$  at Jul. by DCPAM  $\,$ 

Figure 800:  $q_l$  at Aug. by DCPAM  $\,$ 



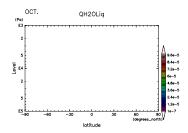
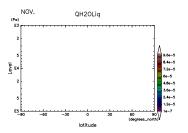


Figure 801:  $q_l$  at Sep. by DCPAM  $\,$ 

Figure 802:  $q_l$  at Oct. by DCPAM  $\,$ 



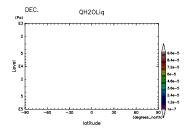
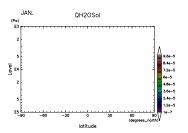


Figure 803:  $q_l$  at Nov. by DCPAM

Figure 804:  $q_l$  at Dec. by DCPAM  $\,$ 



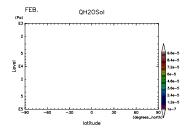
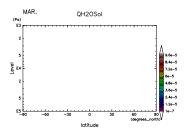


Figure 805:  $q_i$  at Jan. by DCPAM

Figure 806:  $q_i$  at Feb. by DCPAM



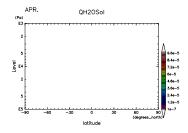
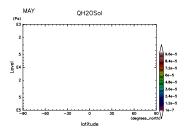


Figure 807:  $q_i$  at Mar. by DCPAM

Figure 808:  $q_i$  at Apr. by DCPAM



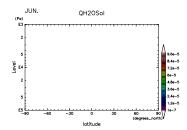
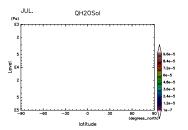


Figure 809:  $q_i$  at May by DCPAM

Figure 810:  $q_i$  at Jun. by DCPAM



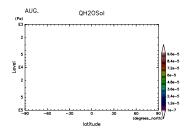
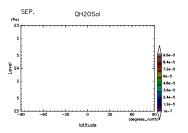


Figure 811:  $q_i$  at Jul. by DCPAM

Figure 812:  $q_i$  at Aug. by DCPAM



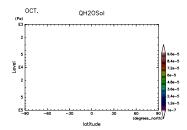
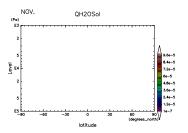


Figure 813:  $q_i$  at Sep. by DCPAM

Figure 814:  $q_i$  at Oct. by DCPAM



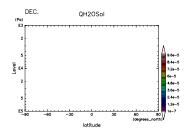
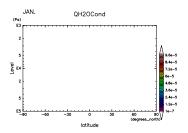


Figure 815:  $q_i$  at Nov. by DCPAM

Figure 816:  $q_i$  at Dec. by DCPAM



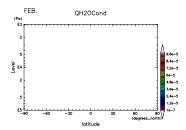
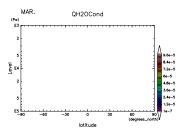


Figure 817:  $q_l + q_i$  at Jan. by DCPAM Figure 818:  $q_l + q_i$  at Feb. by DCPAM



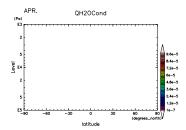
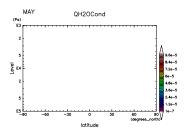


Figure 819:  $q_l + q_i$  at Mar. by DCPAM – Figure 820:  $q_l + q_i$  at Apr. by DCPAM



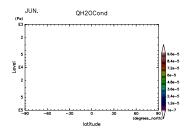
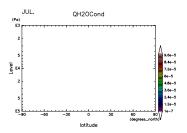


Figure 821:  $q_l + q_i$  at May by DCPAM – Figure 822:  $q_l + q_i$  at Jun. by DCPAM



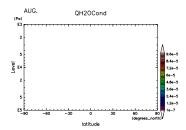
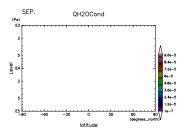


Figure 823:  $q_l + q_i$  at Jul. by DCPAM  $\,$  Figure 824:  $q_l + q_i$  at Aug. by DCPAM



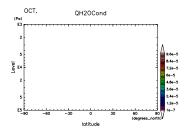
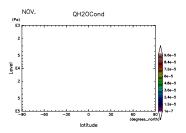


Figure 825:  $q_l + q_i$  at Sep. by DCPAM Figure 826:  $q_l + q_i$  at Oct. by DCPAM



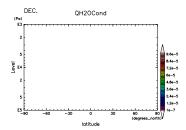
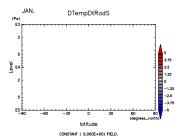


Figure 827:  $q_l + q_i$  at Nov. by DCPAM Figure 828:  $q_l + q_i$  at Dec. by DCPAM



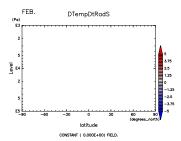
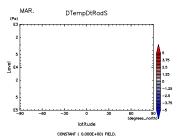


Figure 829:  $(\partial T/\partial t)_{SW}$  at Jan. by Figure 830:  $(\partial T/\partial t)_{SW}$  at Feb. by DCPAM



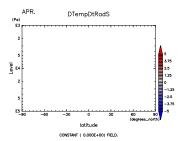
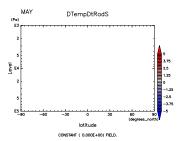


Figure 831:  $(\partial T/\partial t)_{SW}$  at Mar. by Figure 832:  $(\partial T/\partial t)_{SW}$  at Apr. by DCPAM



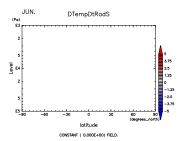
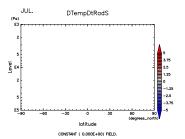


Figure 833:  $(\partial T/\partial t)_{SW}$  at May by Figure 834:  $(\partial T/\partial t)_{SW}$  at Jun. by DCPAM



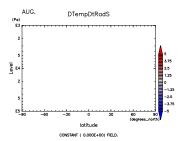
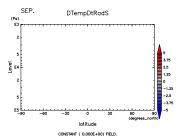


Figure 835:  $(\partial T/\partial t)_{SW}$  at Jul. by Figure 836:  $(\partial T/\partial t)_{SW}$  at Aug. by DCPAM



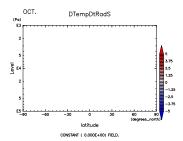
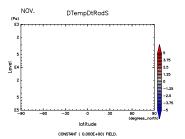


Figure 837:  $(\partial T/\partial t)_{SW}$  at Sep. by Figure 838:  $(\partial T/\partial t)_{SW}$  at Oct. by DCPAM



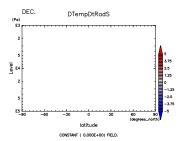
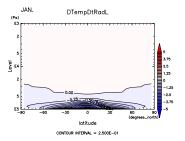


Figure 839:  $(\partial T/\partial t)_{SW}$  at Nov. by Figure 840:  $(\partial T/\partial t)_{SW}$  at Dec. by DCPAM



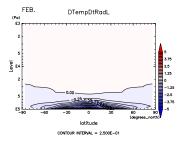
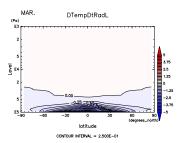


Figure 841:  $(\partial T/\partial t)_{LW}$  at Jan. by Figure 842:  $(\partial T/\partial t)_{LW}$  at Feb. by DCPAM



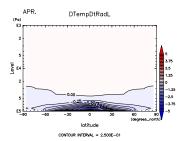
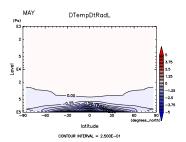


Figure 843:  $(\partial T/\partial t)_{LW}$  at Mar. by Figure 844:  $(\partial T/\partial t)_{LW}$  at Apr. by DCPAM



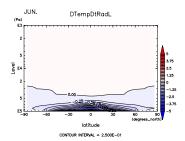
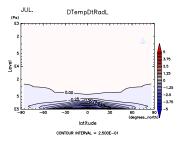


Figure 845:  $(\partial T/\partial t)_{LW}$  at May by Figure 846:  $(\partial T/\partial t)_{LW}$  at Jun. by DCPAM



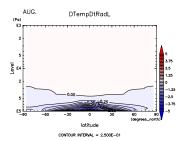
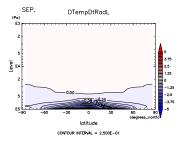


Figure 847:  $(\partial T/\partial t)_{LW}$  at Jul. by Figure 848:  $(\partial T/\partial t)_{LW}$  at Aug. by DCPAM



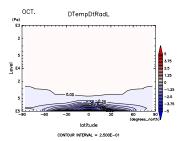
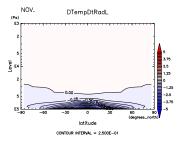


Figure 849:  $(\partial T/\partial t)_{LW}$  at Sep. by Figure 850:  $(\partial T/\partial t)_{LW}$  at Oct. by DCPAM



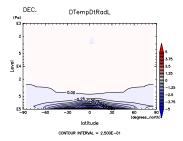
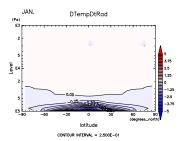


Figure 851:  $(\partial T/\partial t)_{LW}$  at Nov. by Figure 852:  $(\partial T/\partial t)_{LW}$  at Dec. by DCPAM



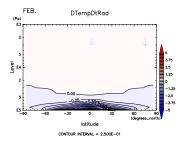
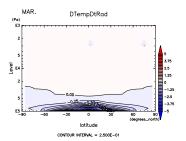


Figure 853:  $(\partial T/\partial t)_{SW+LW}$  at Jan. Figure 854:  $(\partial T/\partial t)_{SW+LW}$  at Feb. by DCPAM by DCPAM



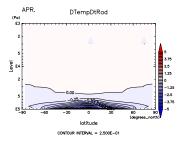
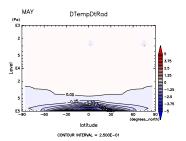


Figure 855:  $(\partial T/\partial t)_{SW+LW}$  at Mar. Figure 856:  $(\partial T/\partial t)_{SW+LW}$  at Apr. by DCPAM by DCPAM



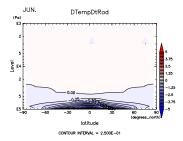
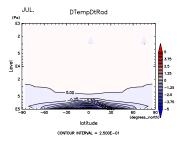


Figure 857:  $(\partial T/\partial t)_{SW+LW}$  at May Figure 858:  $(\partial T/\partial t)_{SW+LW}$  at Jun. by DCPAM by DCPAM



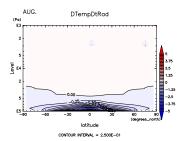
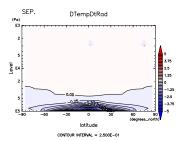


Figure 859:  $(\partial T/\partial t)_{SW+LW}$  at Jul. Figure 860:  $(\partial T/\partial t)_{SW+LW}$  at Aug. by DCPAM by DCPAM



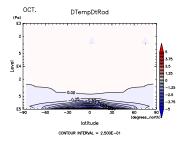
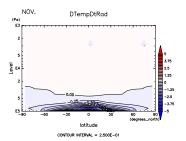


Figure 861:  $(\partial T/\partial t)_{SW+LW}$  at Sep. Figure 862:  $(\partial T/\partial t)_{SW+LW}$  at Oct. by DCPAM by DCPAM



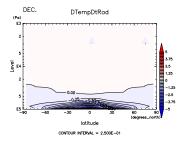


Figure 863:  $(\partial T/\partial t)_{SW+LW}$  at Nov. Figure 864:  $(\partial T/\partial t)_{SW+LW}$  at Dec. by DCPAM by DCPAM