CMIP6 Pressure Levels

The CMIP6 data request includes a range of specified pressure levels,

	Number of levels	**Levels**	**Comment**
		Pressure (rows with grey backgrounds are not to be included in the CMIP6 request).	
plev3	3	850, 500, 250,	3 levels spanning troposphere – used in CMIP5 for 6hrPlev data.
plev3h	3	100, 10, 1	HighResMIP
plev4s	*4*	*850, 500, 200, 50*	*SPECS, not used in CMIP5*
plev4	4	925, 850, 500, 250	HighResMIP (inst)
plev5	5	850, 500, 200, 100, 50	DCPP, priority 1 monthly
plev7h	7	925, 850, 700, 600, 500, 250, 50	HighResMIP (6hr time mean, 3hr synoptic)
plev7c	7	900, 740, 620, 500, 375, 245, 90	7 pressure layers defined by ISCCP simulator (CFMIP)
plev8	8	1000, 850, 700, 500, 250, 100, 50, 10	8 pressure levels spanning troposphere and stratosphere. Used in CMIP5 for daily data.
plev10	10	plev8 + 150, 70	DynVar Daily data, priority 1 (2 more levels wrt the 8 reported above, used for daily fields)
plev11	11	plev5 + 925, 700, 300, 30,20, 10	DCPP, priority 2 monthly
plev14	*14*	*plev7h + 1000, 150, 100, 20, 10, 5, 1 (plev8 + 925, 600, 150, 20, 5, 1)*	*HighResMIP .. for diagnosis of jet. (2 variables, daily)*
plev17	*17*	*plev10 + 925, 600, 400, 300, 200, 30, 20*	*Amon; DynVar Daily data, priority 2.*
plev19	19	plev10 + 925, 600, 400, 300, 200, 30, 20, 5, 1	Combines and replaces plev14 an 17: used by HighResMIP, DynVar and Amon.
plev23	23	plev19 + 7, 3, 2, and 0.4 hPa	DynVar Daily data, priority 3.
plev27	27	1000,975,950,925,900,875,850,825,800, 775,750,700,650,600,550,500,450,400,3 50,300,250,225,200,175,150,125,100	HighResMIP – enhanced resolution tropospheric pressure levels (6hr synoptic), priority 3.
plev39	39	1000 925 850 700 600 500 400 300 250 200 170 150 130 115 100 90 80 70 50 30 20 15 10 7 5 3 2 1.5 1 0.7 0.5 0.4 0.3 0.2 0.15 0.1 0.07 0.05 0.03	AerChemMip, DynVar and HighResMIP (zonal means)
		p1000, p840, p700, p560, p500, p220	220, 560 and 840 are 3 levels for the CALIPSO cloud simulator output. 1000: used for DCPP

				zg1000; 500: wap500, CFMIP; , 700: ta700 in CFMIP.

Could also achieve more re-use of levels by replacing 100,125,150,175,200 in plev27 (125 and 175 only used here) with 100,130,150,170,200 (all levels in plev39).
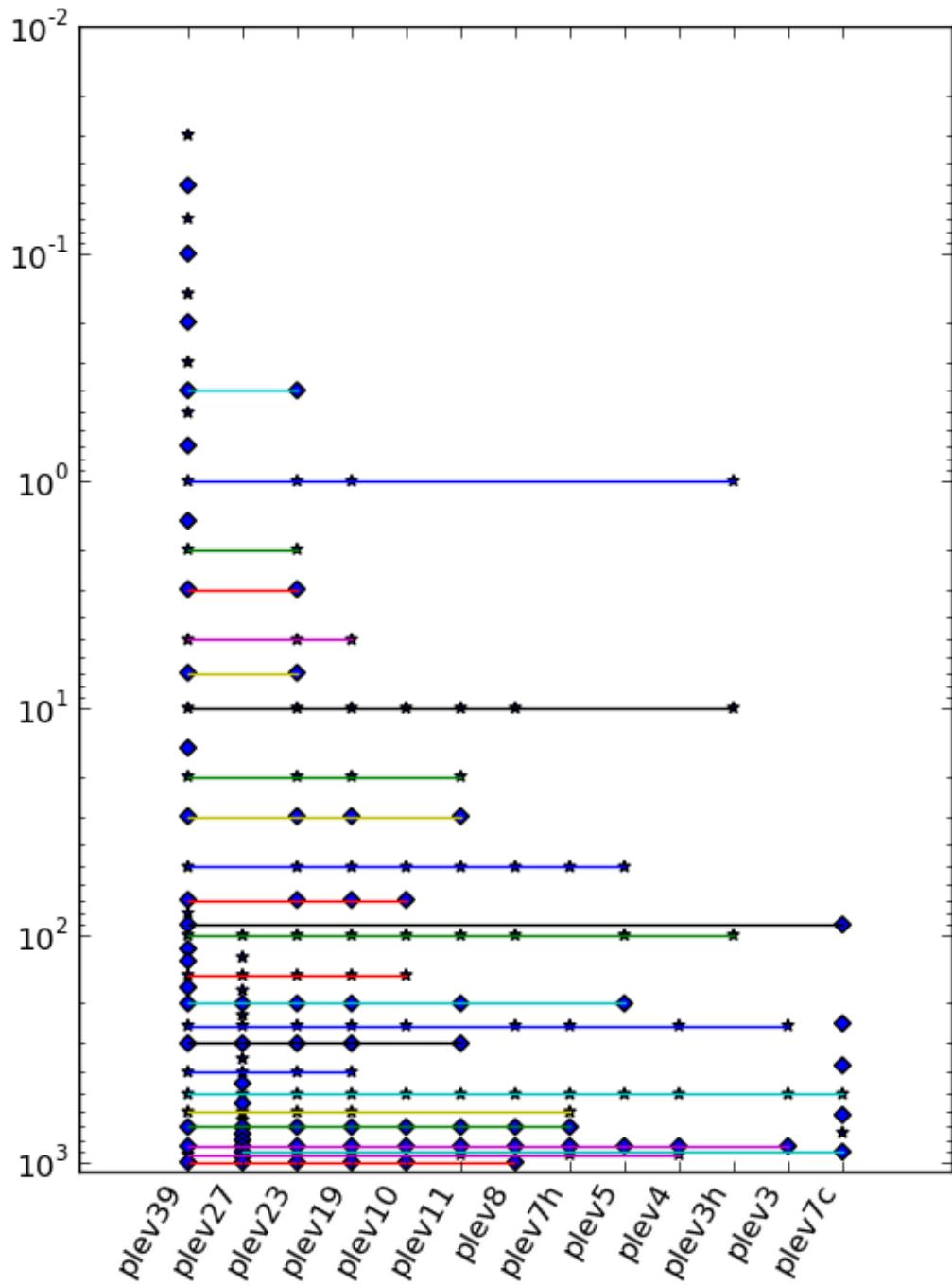

Figure 1: CMIP6 pressure levels. Horizontal bars link levels which are re-used.
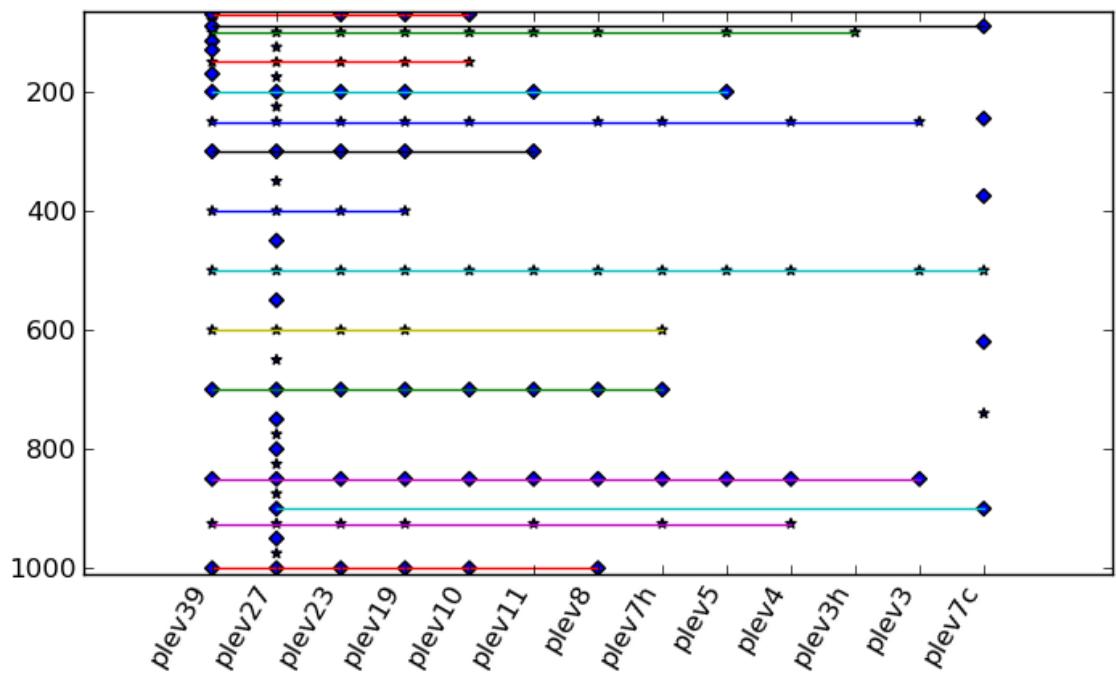
Figure 2: as figure 1, except with linear pressure scale and only showing below 65hPa.