

Rückblick Januar 2001 / Review January 2001

Abstract: Since the previous month, important regional changes in m.s.l. pressure led to considerable variations of the latitude means of the m.s.l.p. anomalies (Tab. 1). An increase of positive m.s.l.p. anomalies over the western and central tropical Pacific and a reduction of the anomalies of SST in the Niño-3 area indicated a renewed weakening of the La Niña/Southern Oscillation episode.

In the northern hemisphere sharp contrasts in air temperature anomalies continued to persist. While eastern Europe was still considerably too warm, wide parts of northern, central and eastern Asia experienced an unusual cold and snowy winter. Winter storms and extremely deep temperatures up to $-50\text{ }^{\circ}\text{C}$ claimed the life of more than 100 people in Siberia. In Mongolia approximately 500 000 animals died since November 2000. In South Korea, the worst snowstorms in 20 years caused the death of at least 10 people and 100 000 farm animals and destroyed thousands of greenhouses. In Afghanistan freezing weather was blamed for at least 110 deaths in refugee camps in the west. In North America the marked negative anomalies of the previous 2 months reduced significantly. Over Canada even much too warm conditions with deviations up to $11\text{ }^{\circ}\text{C}$ from normal came into being. Below-normal temperatures continued in parts of Mexico, where 19 people died due to frosty weather, and widened in north-western South America as well as in central, eastern and southern parts of Africa. In south-eastern Australia positive anomalies strengthened, while in the north the negative temperature anomalies reduced and the considerable rainfall surpluses of the previous 3 months stopped. Well above-normal precipitation amounts were recorded in parts of eastern and central Asia, where floodings were reported from the central Philippines and southern Thailand. In western Europe heavy rains triggered one of the worst floodings for 100 years in Portugal killing 6 people. In Africa downpours caused floods in north-western Mozambique and in the Kenyan capital Nairobi, which experienced its wettest January in 40 years, while western Sudan suffered due to a severe drought. In western Bolivia floodings after two weeks of heavy rains affected 13 500 families.

Monatsmittel und Anomalien des Luftdrucks in Meereshöhe Monthly means and anomalies of sea level pressure

Die globale Luftdruckverteilung änderte sich regional markant, was sich in der zonalen Verteilung der Druckanomalien in Tab. 1 deutlich abzeichnet. Auf beiden Halbkugeln näherte sich in den höheren und hohen Breiten das Luftdruckpotential wieder mittleren Verhältnissen an. Dabei war besonders der Abbau des zuvor hohen Luftdrucks über dem nordamerikanisch-grönländischen Raum beachtenswert. Sowohl die Entstehung positiver Luftdruckabweichungen über dem zentralen und west-

lichen tropischen Pazifik wie die Abnahme der Anomalien der Wasseroberflächentemperaturen auf $-0,35\text{ }^{\circ}\text{C}$ im Niño-3-Gebiet deuteten auf eine erneute Abschwächung der La Niña-Phase hin. Eingebettet in einen Bereich negativer Anomalien über dem Ostpazifik und dem westlichen Südamerika bestand - wie im vorausgegangenen Monat - ein Streifen positiver Anomalien entlang der südhemisphärischen Pazifikküste Südamerikas fort.

Tabelle 1 - Breitenkreismittel der Druckanomalien p_o' in 1/10 hPa
Latitude means of m.s.l. pressure anomalies p_o' in 1/10 hPa

December 2000																	
Breite	80°	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5	0°
p_o' (N)	101	106	76	38	2	-32	-37	-28	-13	-4	6	4	2	-2	-3	-2	-3
p_o' (S)			87	59	17	-17	-33	-26	-10	-2	-1	-4	-5	-5	-4	-3	-3
January 2001																	
Breite	80°	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5	0°
p_o' (N)	-13	-3	-7	-15	-18	-25	-25	-17	-11	-4	6	7	6	2	1	2	2
p_o' (S)			1	-1	-12	-7	4	18	17	16	14	10	8	4	2	3	2

Tabelle 2 - Extrema der meridionalen Mittel der Luftdruckanomalien in den Tropen (23.5°N bis 23.5°S) in 1/10 hPa
Extreme m.s.l. pressure anomalies in the tropics (23.5°N bis 23.5°S) in 1/10 hPa

Dec. '00	130° W/ -16	90° W/ -4	75° W/ -7	30° W/ 14	15° E/ 7	25° E/ 21	60° E/ -13	150° E/ 6
Jan. '01		105° W/ -7		30° W/ 19	0° / 11	25° E/ 25	70° E/ -26	140° E/ 19