Reference	Potential source area	Data type	Sampling site	Type of samples	Number of samples	Method of source determination
Alastuey et al. 2005	PSA NAF-3	Chlorite/kaolinite ratio Carbonate content Ca/Al Fe/Al K/Al	Canary Islands	filter samples	2 samples	back trajectory analysis
Avila et al. 1997	PSA NAF-2	Illite/kaolinite ratio Chlorite/kaolinite ratio Carbonate content	NE Spain	red rain filter samples	5 samples	back trajectory analysis
Bergametti et al. 1989a	PSA NAF-2	Ca/Al Fe/Al K/Al	Canary Islands	filter samples	2 samples for NAF-2	back trajectory analysis
Bergametti et al. 1989b	PSA NAF-1 PSA NAF-2	Fe/Al	Corsica Island	filter samples	44 samples	back trajectory analysis
Caquineau et al. 1998, 2002	PSA NAF-1 PSA NAF-2 PSA NAF-6	Illite/kaolinite ratio	Sal Island, Cape Verde	filter samples	above 30 samples	combination of Infrared Difference Dust Index: IDDI, horizontal visibility, and back trajectory analysis
Chester et al. 1984	PSA NAF-1	Fe/Al	Tyrrhenian Sea (Mediterranean)	filter samples and meshes	4 samples	back trajectory analysis
Chiapello et al. 1997	PSA NAF-2 PSA NAF-3	Ca/Al Fe/A K/Al	Sal Island, Cape Verde	filter samples	about 100 samples	back trajectory analysis
Coudé-Gaussen 1991	PSA NAF-1	Illite/kaolinite ratio Carbonate content	Northern Algeria	filter samples	3 samples	local
Eltayeb et al. 1993	PSA NAF-6	Ca/Al Fe/Al K/Al	Sudan	filter samples	12 samples	local
Falkovich et al. 2001	PSA NAF-3	Carbonate content	Israel	filter samples	not given	back trajectory analysis
Formenti et al., 2008	PSA NAF-2 PSA NAF-5	Ca/Al Fe/Al	Niger, Mauritania	filter samples	76 samples	Local, back trajectory analysis

		K/Al				
Glaccum & Prospero 1980	PSA NAF-2	Chlorite/kaolinite ratio	Sal Island, Cape Verde	filter samples	Sample number not given, investigation of 3 different outbreaks	satellite photographs
Grousset et al. 1992	PSA NAF-1 PSA NAF-2	$^{87}Sr/^{86}Sr$ $\varepsilon_{Nd}(0)$	Morocco, Tunisia	sediment samples	2 samples	local
Grousset et al. 1998	PSA NAF-1 PSA NAF-2 PSA NAF-3	$^{87}Sr/^{86}Sr$ $\varepsilon_{Nd}(0)$	northwestern Africa	loess, fesh-fesh, and silt	Morocco (4), Mauritania (7), Algeria (5), Mali (1)	local
Grousset & Biscaye 2005	PSA NAF-1 PSA NAF-4 PSA NAF-5 PSA NAF-6	$^{87}Sr/^{86}Sr$ $\varepsilon_{Nd}(0)$	Northern Africa	mainly sediment samples, also aerosol and `red rain´ samples	review paper with over 30 sediment samples from Northern Africa	mainly local, in part back trajectory analysis for aerosol samples
Guieu et al. 2002b	PSA NAF-4	Fe/Al	Western Mediterranean	filter samples	2 samples for Saharan dust from Libya	back trajectory analysis
Kandler et al. 2009	PSA NAF-2	Illite/kaolinite ratio Chlorite/kaolinite ratio Carbonate content	Morocco	filter samples 4 m above ground	59 samples	mainly local
Khiri et al. 2004	PSA NAF-2	Carbonate content	Morocco (8 sampling sites)	dust traps (deposited samples)	28 samples	local and proximal
Mounkaila 2006	PSA NAF-4	Illite/kaolinite ratio Chlorite/kaolinite ratio Carbonate content	Bodélé depression, Chad	sediment samples	72 samples	local
O´Hara et al. 2006	PSA NAF-4	Illite/kaolinite ratio Chlorite/kaolinite ratio Carbonate content	Libya (here: central and southern region)	dust traps (deposited samples)	12 monthly samples from 9 different sites	wind intensity and wind direction
Paquet et al. 1984	PSA NAF-1 PSA-NAF-3	Illite/kaolinite ratio Chlorite/kaolinite ratio Carbonate content	Algeria (N-S transect)	filter samples 2m above ground	26 samples	local

Reference	Potential source area	Data type	Sampling site	Type of samples	Number of samples	Method of source determination
Alfaro et al. 2003	PSA EAS-5	Ca/Al Fe/Al K/Al	Zhenbaitai, central Northern China	aerosol filter samples	24 dust samples	wind direction and back trajectory analysis
Arimoto et al. 2004	PSA EAS-5	Ca/Al Fe/Al K/Al	Zhenbaitai, central Northern China	aerosol filter samples	73 samples (22 PM2.5 samples)	wind direction
Biscaye et al. 1997	PSA EAS-4	Illite/kaonite ratio Chlorite/kaolinite ratio $^{87}Sr/^{86}Sr$ $\varepsilon_{Nd}(0)$	Mongolia	sediments	3 samples	local
Bory et al. 2003, see also Bory et al. 2002			Northwestern and central Northern China, Mongolia	sediment samples (< 5 µm)	11 samples	local
Chen et al. 2007	PSA EAS-1 PSA EAS-2 PSA EAS-3 PSA EAS-5 PSA EAS-6	$^{87}Sr/^{86}Sr$ $\varepsilon_{Nd}(0)$	Northern China	sediment samples (sand)	52 samples < 75 µm and 16 samples < 5 µm	local
Cheng et al. 2005	PSA EAS-6	Ca/Al Fe/Al K/Al	Northeastern China	aerosol filter samples	39 samples at 3 sampling sites (sampling site Beijing was excluded)	here considered: dusty and heavy dusty conditions
Honda et al. 2004	PSA EAS-1 PSA EAS-2 PSA EAS-5 PSA EAS-6	$^{87}Sr/^{86}Sr$ $\varepsilon_{Nd}(0)$	Mainly Northwestern China	sediment samples (loess and dune sands)	25 samples (their Table 6)	local
Jeong 2008	PSA EAS-4 PSA-EAS 5 PSA EAS-6	Carbonate content	mainly central Northern China	sand and silt samples	8 analyses of 15 samples	local
Kanayama et al. 2005	PSA EAS-1 PSA EAS-3 PSA EAS-5	$^{87}Sr/^{86}Sr$ $\varepsilon_{Nd}(0)$	Northwestern and central Northern China	aerosol filter samples	15 TSP samples + 5 samples < 5 µm)	local
Li et al. (2007)	PSA EAS-1 PSA EAS-2	Carbonate content	different areas in Northern China	sand and sandy soils	122 samples	local

	PSA EAS-3 PSA EAS-5 PSA EAS-6					
Makra et al. 2002	PSA EAS-1	Ca/Al Fe/Al K/Al	durroundings of Taklamakan, China	aerosol filter samples	21 samples	local
Nakano et al. 2004	PSA EAS-1 PSA EAS-2 PSA EAS-3 PSA EAS-4 PSA EAS-5 PSA EAS-6	$^{87}Sr/^{86}Sr$ $\varepsilon_{Nd}(0)$	Northern China	sediment samples (loess and sand)	33 samples of their Table 1 (skipped samples 1-6, 16-19, 32, 33, 36) from data set	local
Shen et al. 2005	PSA EAS-1 PSA EAS-5 PSA EAS-6	Illite/kaonite ratio Chlorite/kaolinite ratio	5 different sites in Northern China	aerosol filter samples	236 samples at 5 different locations	mainly local, back trajectory analysis for 1 site
Shen et al. 2006	PSA EAS-3	Illite/kaonite ratio Chlorite/kaolinite ratio Carbonate content	Dunhuang, China	aerosol filter samples	11 dust events and non-dust samples	back trajectory analysis
Shen et al. 2007	PSA EAS-6	Ca/Al Fe/Al K/Al	Northeastern China	aerosol filter samples	here: 12 samples from 5 dust storm events	back trajectory analysis
Sun 2002a	PSA EAS-1 PSA EAS-2	$^{87}Sr/^{86}Sr$	Northwestern China	sediment samples (loess) (< 20 µm)	19 samples	local
Sun 2002b	PSA EAS-1 PSA EAS-2	$^{87}Sr/^{86}Sr$	Northwestern and central Northern China	sediment samples (loess) (< 20 µm)	17 samples	local
Sun et al. 2005	PSA EAS-4	Ca/Al Fe/Al	Beijing	aerosol filter samples	20 dust storm samples	back trajectory analysis
Svensson et al. 2000	PSA EAS-4	Illite/kaonite ratio Chlorite/kaolinite ratio	Mongolia	desert sand	3 samples	local
Wang et al. 2005	PSA EAS-1 PSA EAS-2 PSA EAS-3 PSA EAS-4 PSA EAS-5 PSA EAS-6	Carbonate content	different areas in Northern China	surface soil samples and aerosol filter samples	28 surface soil samples and 21 aerosol filters	local and back trajectory analysis
Wang et al. 2008	PSA EAS-1	Carbonate content	different areas in	surface samples	samples from 40	local

	PSA EAS-2 PSA EAS-3 PSA EAS-5		Northern China		different locations	
Xu et al. 2004	PSA EAS-5	Ca/Al Fe/Al K/Al	Zhenbaitai, central Northern China	aerosol filter samples	31 PM2.5 samples	only differentiation between dust events and local pollution
Yokoo et al. 2004	PSA EAS-5	$^{87}Sr/^{86}Sr$ $\varepsilon_{Nd}(0)$	Central Northern China	sediment samples (sand and loess)	3 sand and 1 loess samples	local
Zhang et al. 1996	PSA EAS-1 PSA EAS-2 PSA EAS-3 PSA EAS-5	Ca/Al Fe/Al K/Al	mainly central Northern China	aerosol filter samples	120 samples at 12 different sites	local
Zhang et al. 2003d	PSA EAS-1 PSA EAS-3 PSA EAS-5	Ca/Al Fe/Al K/Al	Aksu, Dunhuang, Zhenbaitai (Northern China)	aerosol filter samples	106 samples	local and wind direction
Zhang et al. 2003c	PSA EAS-3 PSA EAS-5	Ca/Al Fe/Al K/Al	Zhenbaitai, central Northern China	aerosol filter samples	58 samples	wind direction