

# Major ion chemistry of the Son River, India: Weathering processes, dissolved fluxes and water quality assessment

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Supplementary data

Table 1. *Sampling locations on the Son River Basin.*

Location	Latitude	Longitude	Elevation	Sample code
1. Son River (Surface water)				
Amarkantak	N 22 39.582''	E 081 45.952''	1030 m	SW 1
Annupur	N 23 08.465''	E 081 42.965''	457 m	SW 2
Diapiper	N 23 25.674''	E 081 23.479''	375 m	SW 3
Jaisingh Nagar	N 23 45.986''	E 081 12.415''	348 m	SW 4
Khand	N 24 11.371''	E 081 17.843''	284 m	SW 5
Rampurnaikin	N 24 17.153'	E 081 27.269''	241 m	SW 7
Churhat	N 24 24.616''	E 081 41.939''	230 m	SW 8
Dherah	N 24 30.266''	E 082 07.822''	211 m	SW 9
Khairpur	N 24 33.703''	E 082 20.471''	192 m	SW 10
Kargara	N 24 33.127''	E 082 57.819''	158 m	SW 13
Chopan	N 24 31.877''	E 083 01.194''	152 m	SW 14
Japla	N 24 32.968''	E 083 57.488''	112 m	SW 16
Dehri on Son	N 24 54.131''	E 084 11.665''	89 m	SW 17
Koelwar	N 25 34.027''	E 084 47.634''	17 m	SW 18
2. Tributaries				
Gopad	N 24 25.494''	E 082 12.064''	222 m	SW 11
Rihand	N 24 26.956''	E 082 57.774''	165 m	SW 12
Koel	N 24 30.422''	E 083 52.036''	128 m	SW 15
3. Reservoir				
Bansagar	N 24 13.488''	E 081 19.798''	323 m	SW 6

Table 2. Unit of dissolved ions -  $\mu\text{M}$  (TDS - mg/l, EC -  $\mu\text{S}/\text{cm}$ ).

	Location	Code	pH	EC	TDS	F <sup>-</sup>	Cl <sup>-</sup>	HCO <sub>3</sub> <sup>-</sup>	SO <sub>4</sub> <sup>-</sup>	NO <sub>3</sub> <sup>-</sup>	Silica	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Na <sup>+</sup>	K <sup>+</sup>
	Koelwar	Monsoon 2013 (August)	7	146	126	15.8	66	1327	34.4	19.8	169.3	436.6	192.6	195.7	23.5
	Koelwar	Pre-Monsoon 2013 (April)	8	198	170	19.0	129	1655	69.2	11.8	223.7	640	307.8	364.9	34.3
	Koelwar	Post-Monsoon 2010 (November)	7.9	264	236	18.0	136	2589	56.0	14.0	251	724	342	470	73.0
Sarin <i>et al.</i> (1984)	Koelwar	Peak flow-Monsoon Sept 1982			129		71	1372	22		210	434	166	240	40
Rai <i>et al.</i> (2010)	Koelwar	October 2006			170			1833	50.0	11	161	537	253	431	43.0