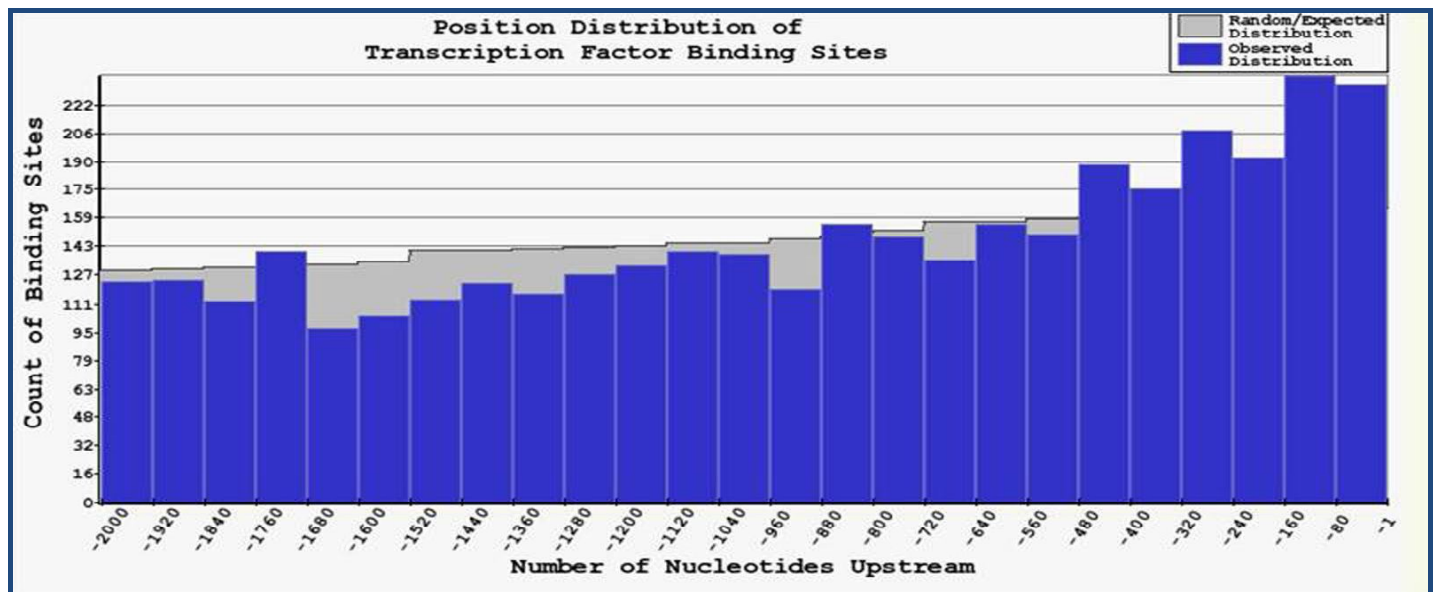


## Supplementary material:



**Supplementary Figure 1:** Position distribution of transcription factor binding sites on the 2000bp upstream in promoter sequences of coordinated upregulated genes across tissues and developmental stages under drought in rice.

**Table 1:** Gene Ontology (biological process) enrichment analysis for differentially expressed genes in all tissues under drought stress.

GO_ID	Description	Number of genes	p-value
GO:0006950	response to stress	10	0.00535
GO:0050896	response to stimulus	10	0.0791
GO:0009415	response to water stimulus	5	1.41E-07
GO:0009628	response to abiotic stimulus	5	0.000632
GO:0010035	response to inorganic substance	5	0.000109
GO:0042221	response to chemical stimulus	5	0.0298
GO:0006470	protein dephosphorylation	5	0.000223
GO:0016311	dephosphorylation	5	0.00029
GO:0006108	malate metabolic process	2	0.0718
GO:0009790	embryo development	3	2.71E-05
GO:0048856	anatomical structure development	3	0.0402

**Table 2:** Enriched conserved *cis*-regulatory elements within 2kb upstream sequences of coordinated upregulated genes across tissues and developmental stages under drought in rice.

TFBS	Promoters	Predicted TFBS	Description	P value
ABADES11	5	5	Responsive to ABA and desiccation	10 <sup>-3</sup>
ABRE OsRAB21	31	41	ABA responsive element (ABRE)" of wheat Em and rice (O.s.) rab21 genes	10 <sup>-6</sup>
ABRE ZmRAB28	11	28	ABA and water-stress responses; Found in maize	10 <sup>-3</sup>
ACGT ABRE	55	130	Experimentally determined sequence requirement of ACGT-core of motif	10 <sup>-10</sup>
MOTIF A2OSEM			A in ABRE of the rice gene	
ACGT OsGLUB1	28	40	ACGT motif" found in GluB-1 gene in rice (O.s.)	10 <sup>-8</sup>
BP5 OsWX	18	18	OsBP-5 (a MYC protein) binding site in Wx promoter	10 <sup>-4</sup>
CE3 OsOSEM	2	2	CE3 (Coupling Element 3)" found in the promoter of the rice (O.s.) Osem gene; Required for ABA-responsiveness and VP1 activation	10 <sup>-3</sup>
CGACG OsAMY3	66	205	CGACG element" found in the GC-rich regions of the rice (O.s.) Amy3D and Amy3E amylase genes, but not in Amy3E gene; May function as a coupling element for the G box element	10 <sup>-4</sup>
G-box-like	41	136	G-box sequences ; Required for high-level constitutive expression in seed, leaf, root, axillary bud, almost all parts of flower buds and pollen;	10 <sup>-7</sup>
GBOX RELOSAMY3	2	2	G box-related element found in Amy3D (amylase) promoter of rice (O.s.); Similar to ABRE;	10 <sup>-3</sup>
GC rich repeat II	18	25	GC-rich repeat in the phosphoenolpyruvate carboxylase gene	10 <sup>-4</sup>
Motif A	12	12	Found in Osem gene promoter. ACGTG containing motifs, similar to ABRE element	10 <sup>-6</sup>
Motif B	12	14	Found in Osem gene promoter. ACGTG containing motifs, similar to ABRE element	10 <sup>-7</sup>
Motif I	10	10	Found in promoter region of cereal storage proteins	10 <sup>-4</sup>